

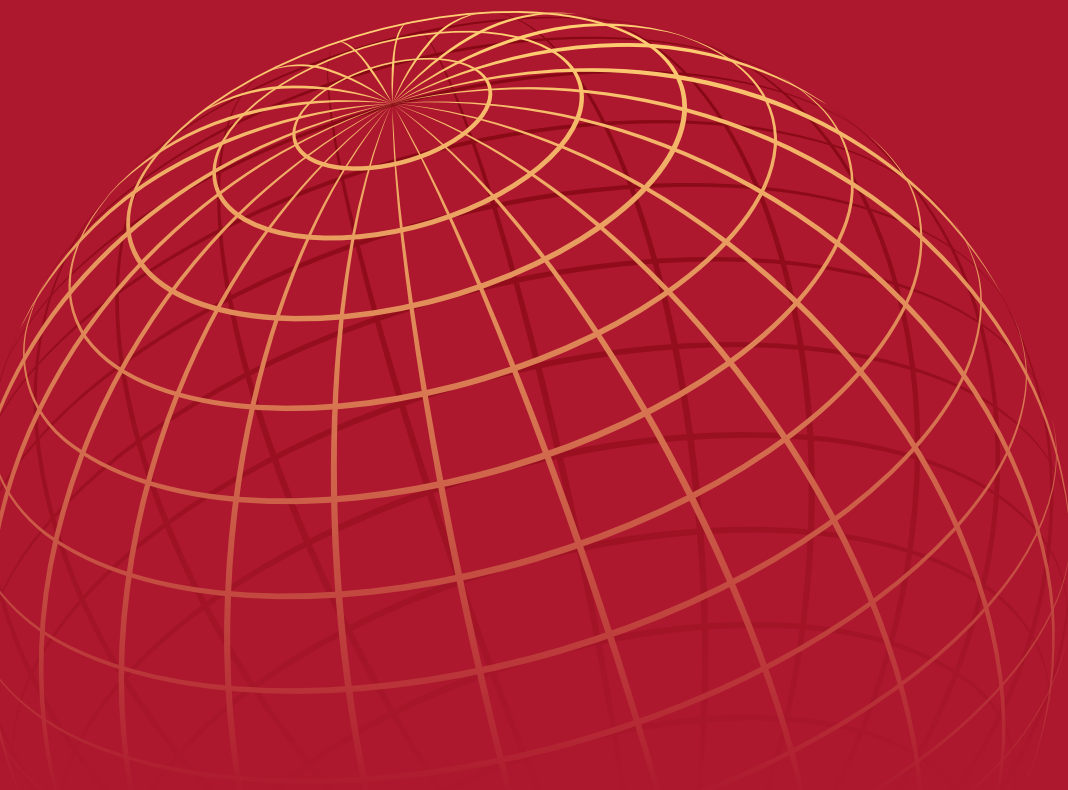
25th
anniversary
edition

A World Bank Group
Flagship Report

JUNE 2016

Global Economic Prospects

Divergences and Risks



A World Bank Group
Flagship Report

JUNE 2016

Global Economic Prospects

Divergences and Risks

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Global Economic Prospects at 25

This year marks the 25th anniversary of the Global Economic Prospects, a World Bank Group flagship report prepared by the Prospects Group in the Development Economics Vice Presidency.

In the early 1970s, the World Bank started producing notes on “Prospects for Developing Countries.” These began to be made public in the late 1970s. In 1991, the outlook section of the World Development Report was converted into a stand-alone report. In May 1991, the first Global Economic Prospects report—called “Global Economic Prospects and the Developing Countries”—was launched as a formal publication for wide dissemination.

Since its inception in 1991, the Global Economic Prospects report has examined international economic developments and the outlook for growth, with a special focus on emerging market and developing economies. It has analyzed a wide range of topical macroeconomic, financial, and structural policy challenges these economies face.

Emerging markets and developing economies had an extremely challenging period in the early 1990s. Unfortunately, many of today’s difficulties appear to be echoes of the 1991 edition:

“Today, rising uncertainties from different, yet related, directions portend difficulties to come... Individually, none of these dark economic clouds would be sufficient to dampen the short-term prospects for the world economy. But together they present compelling evidence that the world economy is in for a turbulent period in the short term.”

“... The impact of external circumstances on developing countries will depend crucially on how individual countries manage these contingencies. Policies in industrial countries will need to be sensitive to the concerns of “emerging and developing countries” and make it easier for them to restore momentum to the growth process. This would be especially important for low-income countries that have relatively few strategic options open to them for sustained development.”

Global Economic Prospects, May 1991

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Foreword

Although the global financial crisis is now seven years behind us, the world's economy is still struggling to regain momentum. Growth continues to falter in advanced economies and, while there is considerable divergence of performance across emerging market and developing economies, their overall growth remains below potential.

Looking ahead, the prospects of global growth remain muted. Emerging market and developing economies face challenges, including the fall-out of sluggish advanced economy growth, tighter financial conditions, and stubbornly low commodity prices, though the latter impacts economies differently, depending on their nature of trade. Exporters of oil and other key commodities have been particularly hard hit, while their importers have been more resistant to economic headwinds. Overall, the global outlook faces pronounced risks of another stretch of muted growth. This is the somber message that underlies the June 2016 issue of the World Bank Group's *Global Economic Prospects*.

In addition to presenting detailed outlooks for the global economy and for each of the world's emerging market and developing regions, this report analyses two topical policy challenges for policymakers to navigate.

The first charts an important vulnerability that risks sidetracking economic recovery in emerging and developing economies: the rapid increase in private-sector credit since 2010. This buildup has been greatest among commodity exporting countries, where credit levels had been modest. In contrast, credit has been stagnant or shrinking among commodity importing countries, where previously it had been considerably higher than in commodity exporters.

The second has to do with tools for assessing the risks surrounding prospects for the world economy and concludes that forecast uncertainty has increased since January 2016, while the balance of risks for global growth has further tilted to the downside.

The world economy is projected to expand at 2.4 percent in 2016, roughly at the same insipid pace we experienced last year. On the plus side, commodity importers will maintain their relatively high growth, as the low prices become stable. On the other hand, commodity exporters will continue to face challenges, though even in these economies there should be a slow positive upturn, as commodity prices stabilize and they slowly begin to diversify their economy.

Although global growth is projected to accelerate gradually, a wide range of risks threaten to derail the recovery, including a sharper-than-expected slowdown in major emerging markets, sudden escalation of financial market volatility, heightened geopolitical tensions, slowing activity in advanced economies, and diminished confidence in the effectiveness of policies to spur growth. These risks are compounded by the fact that for many countries policy buffers have eroded substantially, particularly in commodity exporting emerging and developing countries.

Against this backdrop of weak growth, pronounced risks, and limited policy space, policymakers in emerging and developing economies should put a premium on enacting reforms, which, even if they seem difficult in the short run, foster stronger growth in the medium and the long run.

Among these measures, efforts to invest in infrastructure and education, health and other human skills and wellbeing, as well as initiatives to promote economic diversification and liberalize trade, will boost growth prospects and improve standards of living. The international community has an important role to play in the pursuit of these goals.

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Chief Economist and Senior Vice President
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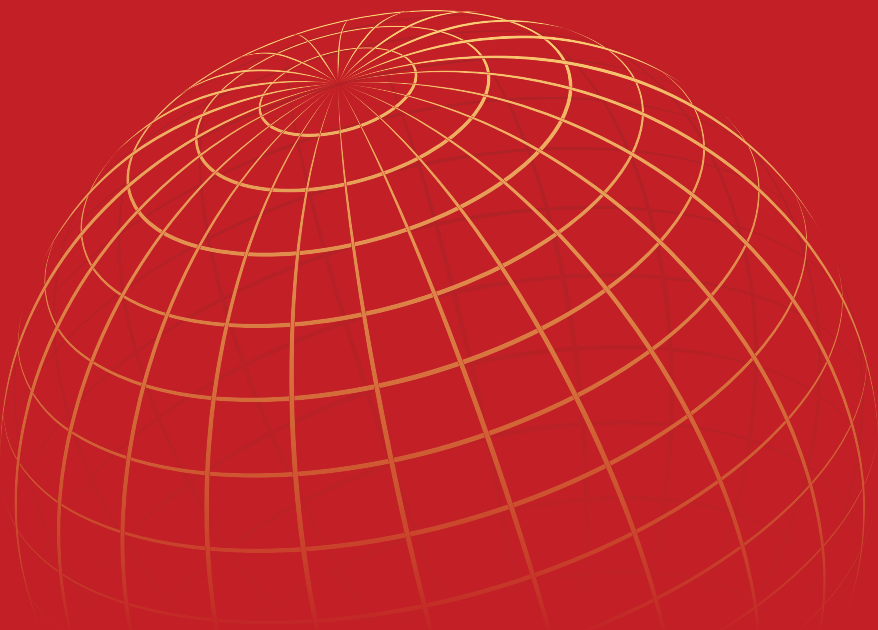
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Abbreviations

AE	advanced economies
ASEAN	Association of Southeast Asian Nations
bbf	barrel
BRICS	Brazil, Russian Federation, India, China, and South Africa
BVAR	Bayesian vector autoregression
CDS	credit default swap
CY	calendar year
DSGE	dynamic stochastic general equilibrium
EAP	East Asia and Pacific
ECA	Europe and Central Asia
ECB	European Central Bank
EM	emerging market economies
EMBI	Emerging Markets Bond Index
EMDE	emerging markets and developing economies
EU	European Union
FDI	foreign direct investment
FOMC	Federal Reserve Open Market Committee
FY	fiscal year
GCC	Gulf Cooperation Council
GDP	gross domestic product
GEP	Global Economic Prospects
GST	goods and services tax
ICT	information and communications technology
IMF	International Monetary Fund
LAC	Latin America and Caribbean
LIC	low-income country
MNA	Middle East and North Africa
NPLs	nonperforming loans
OECD	Organisation for Economic Co-operation and Development
OLS	ordinary least squares
OPEC	Organization of the Petroleum Exporting Countries
PMI	purchasing manager's index
PPP	purchasing power parity
RHS	right-hand side (in figures)
SAR	South Asia Region
SOE	state-owned enterprise
SSA	Sub-Saharan Africa

TFP	total factor productivity
TPP	Trans-Pacific Partnership
VAR	Vector Autoregression
WEO	World Economic Outlook
WTI	West Texas Intermediate
WTO	World Trade Organization



CHAPTER 1

GLOBAL OUTLOOK

Divergences and Risks

Growth prospects have weakened throughout the world economy. Global growth for 2016 is projected at 2.4 percent, unchanged from the disappointing pace of 2015, and 0.5 percentage point below the January forecast. Emerging market and developing economies (EMDEs) are facing stronger headwinds, including weaker growth among advanced economies and persistently low commodity prices, as well as lackluster global trade and capital flows. Divergences between commodity exporters and importers persist. Conditions remain markedly challenging for commodity exporters, which continue to struggle to adjust to the new era of depressed prices. In contrast, commodity importers are showing greater resilience to headwinds, although the expected growth windfall from low energy prices has been surprisingly modest. Global growth is projected to pick up slowly to 3.0 percent by 2018, as stabilizing commodity prices provide support to commodity exporting EMDEs. Downside risks have become more pronounced. These include deteriorating conditions among key commodity exporters, softer-than-expected activity in advanced economies, rising private sector debt in some large emerging markets, and heightened policy and geopolitical uncertainties. While policy space for monetary and fiscal stimulus is narrow, structural reforms could boost growth both in the short and the long term.

Summary and key messages

Since the publication of the January 2016 *Global Economic Prospects*, weakness in the global economy has persisted and risks have become more pronounced. Among emerging market and developing economies (EMDEs), the divergence in economic conditions between commodity exporters and importers has widened. Some of the downside risks identified in January have materialized, including softer-than-expected growth in advanced economies and further declines in commodity prices that have only partially reversed in recent months. These developments have been accompanied by heightened political uncertainties, concerns about the effectiveness of monetary policy stimulus in some advanced economies, the pace of monetary policy normalization in the United States, and policy makers' ability or willingness to use expansionary fiscal policy if needed. In addition, for oil importers, the sizable positive terms of trade shock represented by falling prices has not translated into the large boost to growth initially expected, as other headwinds and uncertainties have held back activity.

Global growth this year is likely to remain unchanged relative to the disappointing pace of

2015. Growth for 2016 is now forecast at 2.4 percent, down 0.5 percentage point from January projections (Figure 1.1). EMDEs account for about half of this downward revision, in large part due to a significant downgrade to the growth forecasts for commodity exporters, amid heightened domestic uncertainties and a more challenging external environment.

Advanced economies are expected to expand by 1.7 percent in 2016, 0.5 percentage point below January projections. Investment continues to be soft amid weaker growth prospects and elevated policy uncertainty, while export growth has slowed reflecting subdued external demand. Despite an expected boost from lower energy prices, and the ongoing improvement in labor markets, growth is projected to level off in 2016 rather than accelerate.

EMDEs started 2016 with weaker manufacturing activity. Investment growth has also slowed substantially, especially in commodity exporters, partly reflecting tightened domestic policies and weak capital inflows. In China, a gradual domestic rebalancing is under way, with robust growth in services and policy support measures mitigating the slowdown in industrial activity. Brazil and the Russian Federation are still mired in recession. Global merchandise trade remains subdued, reflecting rebalancing in China and weaker demand from commodity exporters, which together contributed to an outright contraction in overall EMDE merchandise imports in 2015.

For 2016, EMDE growth is forecast at 3.5 percent, 0.6 percentage point below previous

Note: This chapter was prepared by Carlos Arteta and Marc Stocker, with contributions from John Baffes, Vandana Chandra, Christian Eigen-Zucchi, Eung Ju Kim, Boaz Nandwa, Ekaterine Vashakmadze, and Dana Vorisek. Research assistance was provided by Xinghao Gong, Qian Li, Liwei Liu, Trang Thi Thuy Nguyen, Shituo Sun, and Peter Davis Williams.

TABLE 1.1 Real GDP¹

(percent change from previous year)

							Percentage point differences from January 2016 projections			
	2013	2014	2015e	2016f	2017f	2018f	2015e	2016f	2017f	2018f
World	2.4	2.6	2.4	2.4	2.8	3.0	0.0	-0.5	-0.3	-0.1
Advanced economies	1.1	1.7	1.8	1.7	1.9	1.9	-0.1	-0.5	-0.2	-0.1
United States	1.5	2.4	2.4	1.9	2.2	2.1	-0.1	-0.8	-0.2	-0.1
Euro Area	-0.3	0.9	1.6	1.6	1.6	1.5	0.1	-0.1	-0.1	-0.1
Japan	1.4	-0.1	0.6	0.5	0.5	0.7	-0.2	-0.8	-0.4	-0.6
Emerging and developing economies (EMDEs)	4.7	4.2	3.4	3.5	4.4	4.7	0.0	-0.6	-0.3	-0.2
Commodity exporting EMDEs	3.2	2.1	0.2	0.4	2.4	3.0	0.1	-1.2	-0.8	-0.3
Other EMDEs	5.9	5.9	5.9	5.8	5.7	5.8	0.0	-0.1	-0.1	-0.1
Other EMDEs excluding China	3.9	4.3	4.7	4.7	4.9	5.0	0.0	-0.2	-0.2	-0.2
East Asia and Pacific	7.1	6.8	6.5	6.3	6.2	6.1	0.1	0.0	0.0	-0.1
China	7.7	7.3	6.9	6.7	6.5	6.3	0.0	0.0	0.0	-0.2
Indonesia	5.6	5.0	4.8	5.1	5.3	5.5	0.1	-0.2	-0.2	0.0
Thailand	2.7	0.8	2.8	2.5	2.6	3.0	0.3	0.5	0.2	0.3
Europe and Central Asia	2.3	1.8	-0.1	1.2	2.5	2.8	0.0	-0.4	-0.1	0.0
Russia	1.3	0.7	-3.7	-1.2	1.4	1.8	0.1	-0.5	0.1	0.3
Turkey	4.2	3.0	4.0	3.5	3.5	3.6	-0.2	0.0	0.0	0.2
Poland	1.3	3.3	3.6	3.7	3.5	3.5	0.1	0.0	-0.4	-0.4
Latin America and the Caribbean	2.9	1.0	-0.7	-1.3	1.2	2.1	0.2	-1.3	-0.9	-0.3
Brazil	3.0	0.1	-3.8	-4.0	-0.2	0.8	-0.1	-1.5	-1.6	-0.7
Mexico	1.4	2.3	2.5	2.5	2.8	3.0	0.0	-0.3	-0.2	-0.2
Argentina	2.9	0.5	2.1	-0.5	3.1	3.0	0.4	-1.2	1.2	0.0
Middle East and North Africa	2.0	2.9	2.6	2.9	3.5	3.6	-0.2	-1.1	-1.0	-0.5
Saudi Arabia	2.7	3.6	3.4	1.9	2.0	2.3	0.6	-0.5	-0.9	-0.6
Iran, Islamic Rep.	-1.9	4.3	1.6	4.4	4.9	4.7	-0.3	-1.4	-1.8	-1.3
Egypt, Arab Rep ²	2.1	2.2	4.2	3.3	4.2	4.6	0.0	-0.5	-0.2	-0.2
South Asia	6.1	6.8	7.0	7.1	7.2	7.3	0.0	-0.2	-0.3	-0.2
India ²	6.6	7.2	7.6	7.6	7.7	7.7	0.3	-0.2	-0.2	-0.2
Pakistan ²	3.7	4.0	4.2	4.5	4.8	5.1	0.0	0.0	0.0	0.3
Bangladesh ²	6.0	6.1	6.5	6.3	6.8	6.0	0.0	-0.4	0.0	-0.8
Sub-Saharan Africa	4.8	4.5	3.0	2.5	3.9	4.4	-0.3	-1.7	-0.7	-0.3
South Africa	2.2	1.5	1.3	0.6	1.1	2.0	0.0	-0.8	-0.5	0.4
Nigeria	5.4	6.3	2.7	0.8	3.5	4.0	-0.6	-3.8	-1.8	-1.3
Angola	6.8	3.9	2.8	0.9	3.1	3.4	-0.2	-2.4	-0.7	-0.4
Memorandum items:										
Real GDP¹										
High-income countries	1.2	1.7	1.6	1.5	1.9	1.9	0.0	-0.6	-0.2	-0.2
Developing countries	5.3	4.9	4.3	4.3	4.9	5.1	0.0	-0.5	-0.4	-0.2
Low-income countries	6.5	6.1	4.5	5.3	6.3	6.6	-0.6	-0.9	-0.3	0.0
BRICS	5.7	5.1	3.8	4.2	5.1	5.3	-0.1	-0.4	-0.2	-0.1
World (2010 PPP weights)	3.2	3.4	3.1	3.1	3.6	3.7	0.0	-0.5	-0.2	-0.2
World trade volume³	3.3	3.8	3.1	3.1	3.9	4.1	-0.5	-0.7	-0.4	-0.4
Commodity prices										
Oil price ⁴	-0.9	-7.5	-47.3	-25.7	32.5	6.5	-0.8	-17.2	25.3	-0.7
Non-energy commodity price index	-7.2	-4.6	-15.0	-12.2	10.5	2.3	-0.2	-10.4	8.6	0.4
Capital inflows to EMDEs (percent of GDP)⁵	5.4	4.3	1.8	3.2	3.8	4.2	-0.5	-0.1	-0.4	-0.2

Source: World Bank.

Notes: PPP = purchasing power parity; e = estimate; f = forecast. World Bank forecasts are frequently updated based on new information. 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 Annex Table 1. BRICS include: Brazil, Russia, India, China and South Africa.

1. Aggregate growth rates calculated using constant 2010 U.S. dollars 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.

3. World trade volume for goods and non-factor services.

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

5. Balance of payments data for net capital inflows of foreign direct investment, portfolio investment, and other investment (BPM6).

projections. However, these numbers mask ongoing divergences between commodity exporters and importers. Commodity exporting EMDEs—in particular energy exporters—are struggling to adjust to persistently low commodity prices. In 2015, this group grew at a 0.2 percent pace—the slowest since the global financial crisis—and, for 2016, their growth forecast has been reduced to 0.4 percent, 1.2 percentage points below January projections. In contrast, commodity importing EMDEs have shown resilience to headwinds, reflecting solid domestic demand. For this group, growth is expected to remain steady at 5.8 percent throughout the forecast period, a rate close to its long-run average.¹ Activity in commodity importing EMDEs excluding China has picked up and is expected to continue to accelerate.

In low-income countries (LICs), growth slowed to 4.5 percent in 2015, the weakest pace since 2009. Although growth is projected to pick up to 5.3 percent this year, lower commodity prices and persistent security and political challenges have trimmed 0.9 percentage point from the previous forecast. While the difficult external environment confronting LICs will likely continue, projected growth is supported by resilience of domestic investment and the expected implementation of reforms.

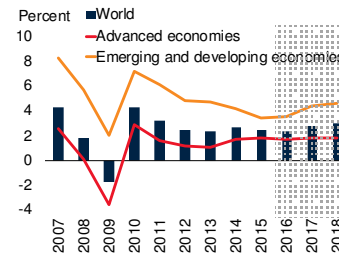
Downside risks to the outlook have become more pronounced. Rising policy related and political uncertainties, geopolitical risks and eroding confidence in policy effectiveness could set back global growth and trigger financial market turbulence. A synchronous slowdown in major advanced or key emerging market economies could have large negative spillover effects across EMDEs (Figure 1.2), while the impact of financial market stress could be acute among EMDEs with elevated private sector debt. Prolonged stagnation in advanced economies and weaker growth potential in EMDEs could exacerbate protectionist sentiments. The materialization of some of these risks could slow the catch-up of EMDE income per capita relative to advanced economy levels and set back poverty alleviation.

¹Annex Table 1 presents the list of commodity exporting and commodity importing EMDEs.

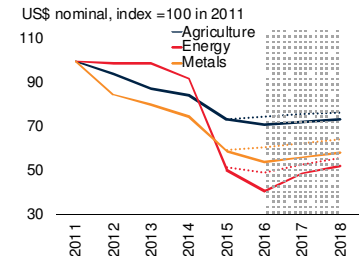
FIGURE 1.1 Global prospects

Weak global growth is persisting in 2016. The recovery in major advanced economies has stalled. Further commodity price declines have worsened the prospects for commodity exporting emerging and developing economies (EMDEs). These factors have contributed to downgrades of global growth forecasts since January, and continue to dampen global trade. In contrast, commodity importing EMDEs are showing greater resilience and steady growth. A large proportion of low-income countries (LICs) register slower growth than their long-term average as they face a combination of external and domestic headwinds.

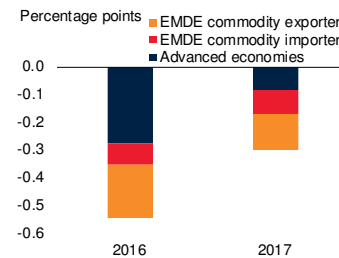
A. Global growth



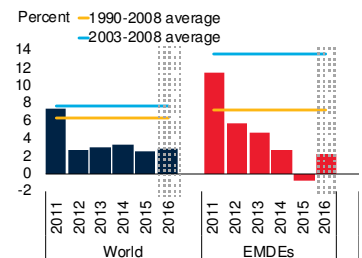
B. Commodity price forecasts



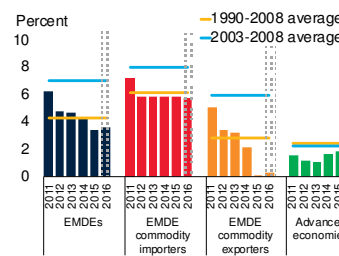
C. Contributions to global growth revisions



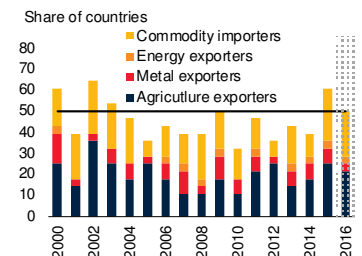
D. Import volume growth



E. Growth by country group



F. LICs with growth below long-term average



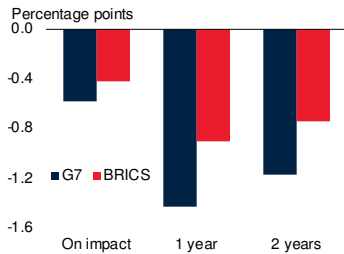
Sources: World Bank, Haver Analytics.
 A. B. Shaded area indicate forecasts.
 B. Solid lines show the current forecasts, dotted lines show the World Bank January 2016 GEP assumptions.
 C. Contribution to global growth revisions measured in constant 2010 U.S. dollars. Cumulative contributions from individual country revisions can differ from global growth revisions reported in Table 1.1 due to decimal rounding.
 D. 2016 is a forecast.
 F. Long-term growth averages calculated over the period 1996-2008. Sample includes 28 low-income countries.

Slow growth is eroding policy buffers to counteract shocks, leaving the global economy less prepared to confront these downside risks. There is also a degree of divergence in policy buffers between commodity exporters and importers.

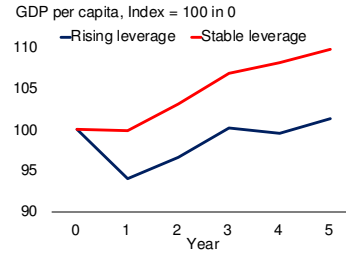
FIGURE 1.2 Global prospects (cont.)

An unexpected growth decline in advanced or key emerging economies could have substantial negative spillovers to EMDEs. Financial market stress could be associated with a significant slowing of activity in those countries, particularly where the private sector is highly leveraged. Such shocks could slow the catch-up of EMDEs' income per capita toward advanced economy levels. Amid weak growth, monetary and fiscal buffers are eroding, particularly among commodity exporting EMDEs, while space for further monetary policy accommodation in advanced economies has narrowed.

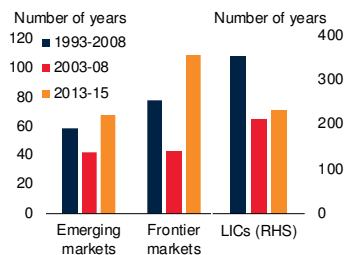
A. Impact of 1ppt decline in G7 and BRICS growth on other emerging markets



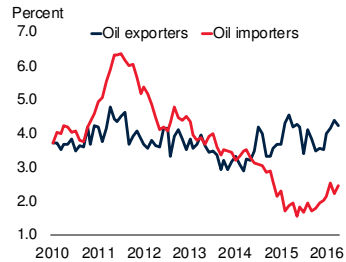
B. Leverage and growth around previous financial stress episodes



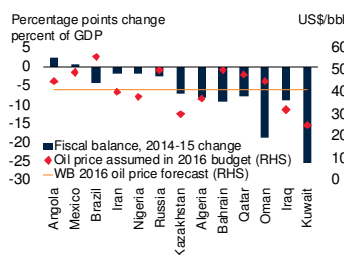
C. Years to catch-up to 2015 U.S. GDP per capita



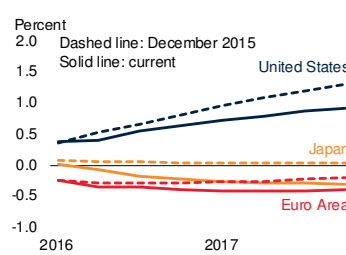
D. Median EMDE inflation



E. Fiscal balances among oil producers



F. Policy interest rate expectations



Sources: World Bank, Conference Board, Haver Analytics, International Monetary Fund, Bank for International Settlements.
 A. Cumulative impulse responses of emerging market growth (excluding BRICS) to a 1 percentage point decline in G7 and BRICS growth (World Bank 2016b).
 B. GDP per capita relative to the base year of two crisis episodes: the 1997 Asian crisis and the 2008 global financial crisis. Countries with "rising leverage" are defined as those having experienced an increase in private sector non-financial debt to GDP ratios of more than 15 percentage points during the three years preceding the crisis episode. Sample includes 14 EMDEs and 24 advanced economies. Unweighted average across countries.
 C. Real GDP per capita. Figure shows the number of years needed to catch-up with 2015 real per capita GDP level in the United States, assuming average growth rates over each period denoted for each group. Excludes Qatar and Serbia due to data availability. LICs include 25 economies.
 D. Last observation is April 2016. Sample includes 104 oil importers and 29 oil exporters.
 F. Policy rate expectations derived from forward swap rates. Last observation is May 25, 2016.

Rapidly diminishing foreign reserves and fiscal buffers have already forced many commodity exporting EMDEs to tighten policy. In commodity importing EMDEs, even though low commodity prices have reduced fiscal and external vulnerabilities as well as inflation, the scope for expansionary fiscal policy remains limited because of weak starting positions. In advanced economies, actual and expected inflation remain below policy objectives. Scope for further cuts to policy interest rates is limited. Large-scale unconventional monetary policy accommodation by major central banks has succeeded to some extent in bolstering demand, through its positive impact on financial markets and lending conditions. However, these tools may over time have diminishing returns and raise financial stability risks. Expansionary fiscal policy could provide support to activity in a number of advanced economies in the event of adverse shocks.

In an environment of weak growth, rising risks, and limited policy buffers, growth-sustaining structural policies are urgently needed. These measures would boost medium- and long-term growth, reduce vulnerabilities, and signal to investors that authorities are committed to reinforcing long-term prospects. If well targeted, they could also support short-term aggregate demand. Greater investment—in infrastructure, productivity enhancing technology, and human capital—could lay the foundation for stronger growth. Policies should aim to fill public infrastructure gaps, encourage foreign direct investment, strengthen human capital, foster diversification, and reduce barriers to trade. However, countries with diminishing fiscal space may have a limited ability to finance investments in infrastructure and human capital. International cooperation efforts could include commitments to implement expansionary fiscal policy if large downside risks materialize, channel pooled global resources into infrastructure, and strengthen international safety nets for the most fragile countries. In a context mediocre global demand and limited fiscal space across EMDEs, and amid extremely low global interest rates, multilateral organizations have an important role to play in the financing of infrastructure and human capital investment.

Major economies: Recent developments and outlook

Prospects for major advanced economies have deteriorated, amid weak global trade and manufacturing activity. Growth is now generally expected to level off in 2016, rather than strengthen, despite the positive effects on real incomes from lower oil prices and improving labor market conditions. With increasing downside risks to growth, and inflation persistently below target, the European Central Bank (ECB) and Bank of Japan are pursuing further policy accommodation, while the U.S. Federal Reserve will normalize policy interest rates more slowly than expected in January. China continues its gradual slowdown and rebalancing, as reforms are implemented and their impact is calibrated by policy easing.

Major advanced economies are at different stages of their post-crisis recovery but are expected to stabilize around a weak growth trajectory (Figure 1.3). Rising or high public debt and monetary policy rates at or near the zero lower bound could reduce the effectiveness of counter-cyclical policies, leaving these economies more vulnerable to domestic and external shocks. At the same time, declining productivity growth and aging populations exert a more fundamental drag on potential growth.

United States: Growth stabilizing

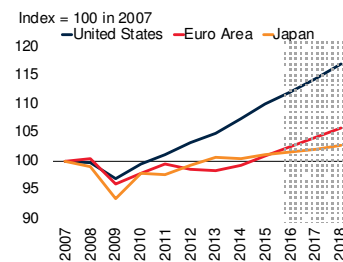
Softer-than-expected activity since the start of 2016 has led to downward revisions to growth projections. Sectors that rely on oil-related activities or exports, have faced increasing headwinds. Low oil prices, and associated financial stress, has led to a collapse of capital expenditure in the energy sector (Figure 1.4). As for external trade, a strong U.S. dollar and weakening demand from emerging markets contributed to stalling exports.

In contrast, above-trend gains in real disposable income, on the back of robust job creation and falling energy prices, continue to support private consumption as the main engine of growth. Labor market slack is diminishing, but a cyclical recovery

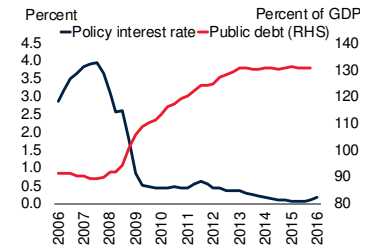
FIGURE 1.3 Activity and policy space in major advanced economies

Major advanced economies are at different stages in their post-crisis recovery. Record-low interest rates limit the room for additional monetary policy accommodation, and put greater emphasis on counter-cyclical fiscal policy. However, large public debt stocks could constrain the effectiveness of fiscal expansion.

A. GDP level



B. Public debt and nominal policy rates in G3 countries



Sources: World Bank, Haver Analytics.

A. GDP in constant 2010 U.S. dollar. Shaded area indicates forecast.

B. Public debt to GDP ratios and policy rates are GDP-weighted averages of the United States, Japan, and Euro Area. Last observation is 2016Q1 for policy rates and 2015Q4 for public debt.

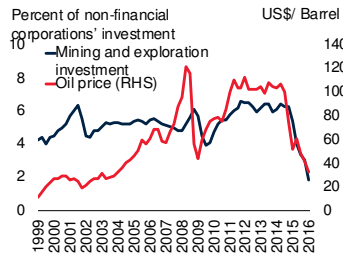
in labor participation and a still elevated number of discouraged and involuntary part-time workers suggests a persistent and sizable pool of underutilized labor. Wage growth is expected to gradually strengthen, in line with evidence of a relatively flat slope of the Phillips curve in the post-crisis period (Blanchard, Cerutti and Summers 2015; Kiley 2015). Evidence of an increasingly entrenched slowdown in productivity growth contributed to downward revisions to growth projections. Labor productivity was recently dampened by a deceleration in the capital-intensive manufacturing and energy-producing industries (Van Zandweghe 2016), but around an already weak post-crisis trend. This trend is unlikely to reverse in the short-term, as corporate investment remains low, employment growth has mainly concentrated in services, and the benefits of IT-related boost of the mid-1990s has faded. In all, U.S. GDP growth is expected to step back to 1.9 percent in 2016, 0.8 percentage point lower than projected in January, and to remain only slightly above 2 percent for the rest of the forecast period, providing modest support to global growth.

Over the last two years, members of the Federal Reserve Open Market Committee (FOMC) have revised down their projections for the federal

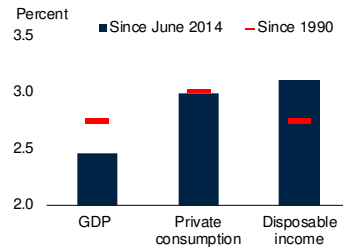
FIGURE 1.4 United States

Declining oil prices have led to a collapse of capital expenditure in the energy sector, but supported resilient consumer spending, which will remain the main engine of growth this year. Labor market slack continues to diminish, pointing to a gradual strengthening of wage inflation. The U.S. Federal Reserve revised the projected path of policy interest rates further down, reflecting in part growing external risks.

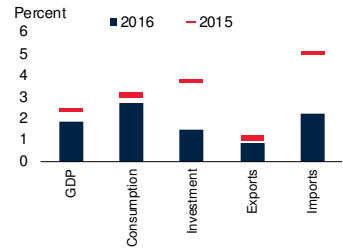
A. Mining and exploration investment



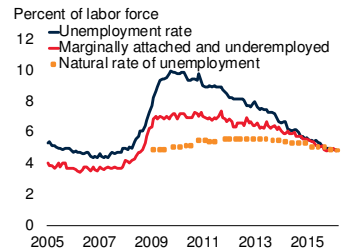
B. Private consumption and household income growth



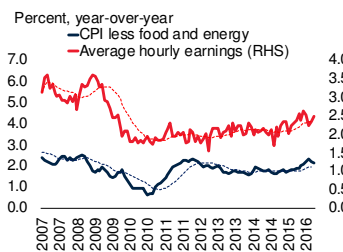
C. GDP growth and components



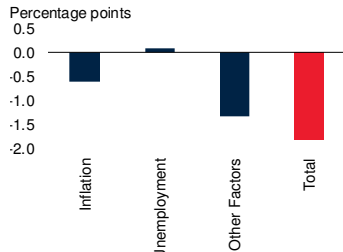
D. Unemployment



E. Core inflation and wage growth



F. Contribution to FOMC's Federal Funds rate forecast revisions since June 2014



Sources: World Bank, Haver Analytics, Bureau of Labor Statistics, Federal Reserve Economic Data (FRED).

- A. Last observation is 2016Q1.
- B. Average since 1990 exclude recession periods (1990Q3-91Q1, 2001Q1-04, 2007Q4-2009Q2). Last observation is 2016Q1.
- D. "Marginally attached and underemployed" includes people currently not in the labor force but wanting a full time job and having actively looked for work sometime in the past 12 months, as well as those employed part-time for economic reasons (defined as the difference between the U6 and U3 rates of unemployment). The natural rate unemployment is the mid-point of the central tendency of the FOMC's forecast of the unemployment rate in the longer run in the Summary of Economic Projections. Last observation is April 2016.
- E. Last observation is April 2016. Dotted line indicates 12-month moving average.
- F. Forecast revisions for end-2016 Federal Funds rate levels from June 2014 to March 2016. Decomposition is derived from the Taylor rule described in Yellen (2015) and the median of Federal Open Market Committee (FOMC) forecasts for unemployment and core inflation. The Taylor Rule is defined as $R = RR^* + p + 0.5(p - 2) - (U - U^*)$, where R denotes the Taylor Rule federal funds rate, RR^* is the estimated value of the real natural rate of interest, p is inflation (core PCE forecast in this case), U is the unemployment rate, and U^* is the equilibrium unemployment rate (longer-run FOMC forecast of the unemployment rate in this case). RR^* can also be considered the time varying residual as it is done here, labeling it "Other Factors."

funds rate expected at the end-2016 by an average of more than 180 basis points. Revisions to FOMC projections for core inflation and unemployment are estimated to account for about a 50-basis point reduction in the appropriate level of the federal funds rate over the same period. This reinforces the view that rising external risks and downward revisions to long-run projections of the policy rate have been major drivers of the delayed tightening cycle in the United States (Yellen 2016). While monetary policy should remain accommodative well into 2017, fiscal policy has eased to a broadly neutral stance, but uncertainty over the medium-term fiscal outlook remains (Congressional Budget Office 2016). A persistently low rate of potential growth is likely over the medium term. Investment growth remains modest, demographic pressures are intensifying, and a significant turnaround in productivity growth is unlikely in the short-term (Gordon 2016; Byrne, Fernald, and Reinsdorf 2016).

Euro Area: Modest momentum

The recovery in the Euro Area is proceeding at a moderate pace, supported by an exceptional level of monetary policy accommodation, low oil prices, and slightly expansionary fiscal policies. However, weak external demand, renewed domestic uncertainties and broader geopolitical risks continue to weigh on confidence and activity. Private consumption has been resilient, and persistently low oil prices and improved labor market conditions should help consolidate gains in 2016 (Figure 1.5).

Despite aggressive unconventional monetary policy measures, bank lending to non-financial corporations is only recovering slowly, particularly among peripheral economies, where deleveraging pressures and asset quality issues have kept borrowing costs at higher levels. In addition, inflation projections have continued to be downgraded, complicating further deleveraging efforts. Overall, a 1 percentage point undershooting of inflation from target over a five-year period has been estimated to raise private debt by around 6 percentage points of GDP (Draghi 2016). The ECB announced additional

monetary policy easing measures in March, including cuts in its deposit rate further into negative territory, and long-term refinancing operations for banks at below-zero interest rates. Overall, growth is expected to stabilize at 1.6 percent over the period 2016-18, broadly unchanged from its pace in 2015.

Notwithstanding some progress since 2015, the ongoing recovery in the Euro Area is subdued in comparison with the recoveries following systemic banking crises in other advanced economies, such as the United States, the United Kingdom, and Sweden in 2008-09 (Ruscher and Vašíček 2015). Problems associated with structural rigidities and persistent imbalances, although being gradually addressed, are still significant. After a long period of consolidation that dampened activity, fiscal policy is also expected to be slightly expansionary this year, reflecting in part additional public spending associated with the refugee crisis, which is projected to add about 0.2 percentage point to 2016 GDP growth. Rising flows of migrants to the European Union are creating notable challenges. E.U. countries have agreed to a relocation plan to help countries most affected by the influx, but implementation has been very slow (Merler 2016).

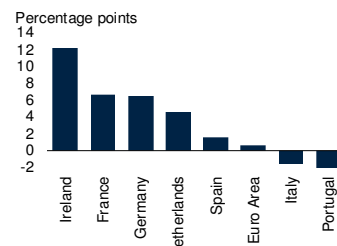
Japan: Continued stagnation

Japan continues to fluctuate between periods of modest growth and contraction. Private consumption remains weak, falling short of the gains in real income, which have themselves been modest (Figure 1.6). Exports are also subdued, dampened by weak external demand and limited benefits of past yen depreciation. Despite weak growth, labor market conditions continue to show signs of tightening against the backdrop of an aging population. The unemployment rate remains slightly above 3 percent, the active job openings-to-applicants ratio has risen steadily, and the perception of labor shortages has heightened. Jobs creation continues at a moderate pace, supported by gains in the services sector, as manufacturing employment continues to decline. A shrinking and aging labor force remains a key factor weighing on growth, investment and savings patterns (Sher 2014, Kang 2014). Amid weak

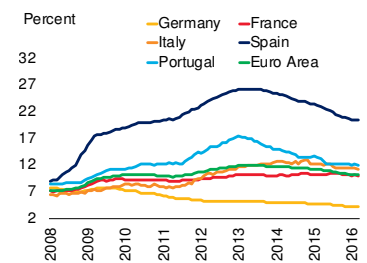
FIGURE 1.5 Euro Area

The recovery in the Euro Area is proceeding at a moderate but uneven pace, with persistent differences in output growth and unemployment rates across countries. Export growth is expected to moderate this year, but domestic demand should help stabilize growth at 1.6 percent. Declining unemployment is being accompanied by improved consumer confidence and spending. A large stock of non-performing loans continues to keep borrowing costs at higher levels in some countries. Inflation projections have been further downgraded, and are below target, despite extraordinary monetary policy accommodation.

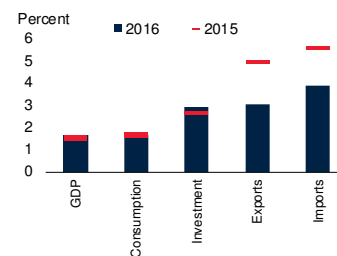
A. GDP change since 2008Q2



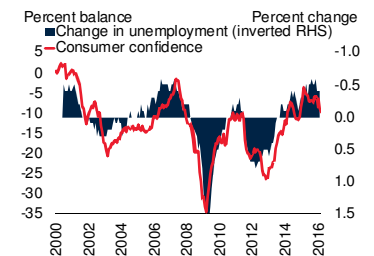
B. Unemployment rate



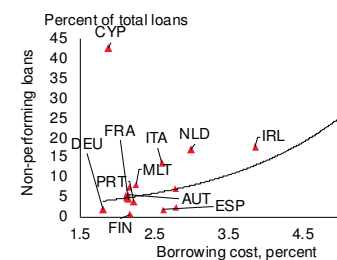
C. GDP growth and components



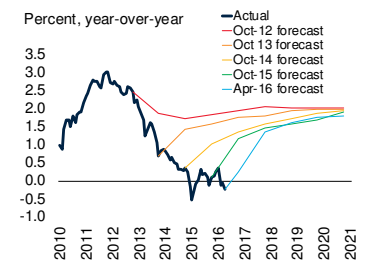
D. Unemployment and consumer confidence



E. Non-performing loans and average borrowing costs



F. Inflation and Consensus inflation forecasts



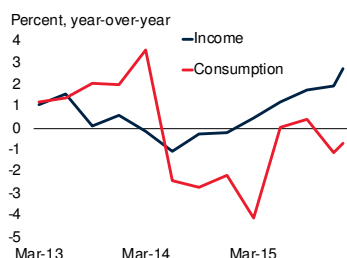
Sources: World Bank, Haver Analytics, European Central Bank, Consensus Economics.
 A. GDP level is measured in 2010 US\$.
 B. Last observation is March 2016.
 D. Blue area shows 6-month changes in the Euro Area unemployment rate with an inverted scale. Last observation is April 2016 for consumer confidence and March 2016 of unemployment rate.
 E. Last observation for non-performing loans is 2014H1, and for borrowing costs is March 2016.
 F. Last observation is April 2016.

business sentiment, a strengthened yen and disruptions associated with the April earthquake in Kumamoto, growth is expected to be 0.5 percent in 2016, broadly unchanged from 2015 but significantly weaker than previously envisaged.

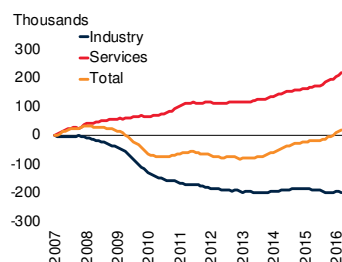
FIGURE 1.6 Japan

Private consumption remains subdued, falling short of modest real income gains, while jobs continue to shift from industry to services. A shrinking and aging labor force has been an important factor weighing on aggregate investment and savings. Growth in GDP per capita has been closer to advanced economy averages. Ongoing policy stimulus and falling energy prices should help a gradual recovery in 2016, albeit at a subdued pace. The recent appreciation of the yen, despite negative interest rates, represents an additional headwind.

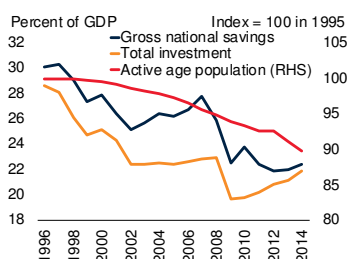
A. Consumption and income growth



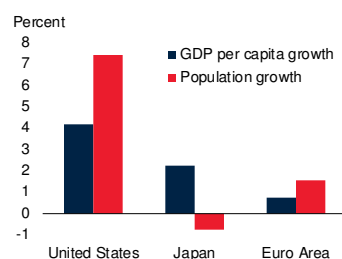
B. Job creation since 2007 by sector



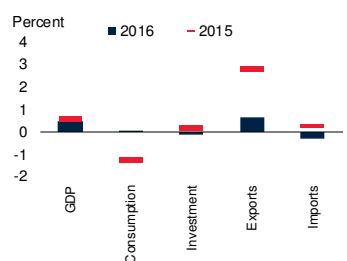
C. Demographics, savings and investment



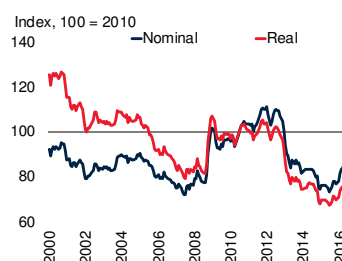
D. Average GDP per capita and population growth since 2007



E. GDP growth and components



F. Nominal and real effective exchange rates



Sources: World Bank, Haver Analytics, Consensus Economics.

A. Real income is defined as compensations of employee in constant 2005 yen. Last observation is 2016Q1.

B. Cumulative change in employment levels since January 2007. Industry includes construction. Last observation is March 2016.

D. GDP per capita in constant 2010 U.S. Dollar.

F. Real effective exchange rate calculated on the basis of relative consumer prices. Last observation is May 2016.

Because of growth disappointments and persistently low consumer price and wage inflation, the Bank of Japan continued to ease in 2016, introducing a negative interest rate policy in January. Market yields dropped, but measures of inflation expectations remained low, and the Japanese yen appreciated. This has raised concerns

about the effectiveness of monetary policy measures. On the fiscal side, a supplementary budget with additional stimulus measures is expected to provide some support in 2016, although further delaying a planned return to a balanced primary budget. A decision by the government to postpone the consumption tax hike to 10 percent, scheduled for April 2017, could lead to stronger growth in the short term but slow fiscal consolidation.

China: Ongoing rebalancing

Growth in China decelerated further, to 6.9 percent in 2015, and to 6.7 percent in the first quarter of 2016, reflecting weak exports and slowing investment. Gradual domestic rebalancing is under way. A sharp slowdown in industrial activity has thus far been mitigated by steady growth in the services sector (Figure 1.7). In 2015, the services sector accounted for half of GDP and the majority of new urban jobs. This helped to offset layoffs in shrinking industrial sectors and kept urban labor markets tight (Lardy 2016). In addition, consumption growth continued to be robust, contributing 4.6 percentage points to GDP growth in 2015, compared to a contribution of 2.5 percentage points from investment.

As a response to the pronounced slowdown in the industrial sectors and in real estate, a range of expansionary policy measures were implemented in the second half of 2015. These included cuts in reserve requirements and interest rates, increased public spending on infrastructure projects, and tax cuts for small businesses. Further policy easing in 2016 has been increasingly focused on fiscal measures. Policy accommodation has contributed to a rebound in investment and a significant turnaround in house prices, raising renewed concerns about overvaluation in some market segments (Chivakul et al. 2015). Fiscal support measures and tax cuts widened the central government deficit to a six-year high of 2.3 percent of GDP in 2015, and to an expected 3 percent of GDP in 2016.

China's slowdown has been unfolding against the backdrop of weak exports and increased financial market volatility (World Bank 2016a). The

deterioration in global growth prospects, a shift in policy focus away from the bilateral exchange rate with the U.S. dollar towards a basket of currencies in December 2015, the expected expiration of temporary market stabilization measures taken in summer 2015, and the introduction of circuit breakers, contributed to renewed stock market turbulence in January 2016. Improved communications on exchange rate policy (World Bank 2016a), combined with the strong commitment to the new, lower growth target approved in early 2016 (6.5-7 percent in 2016 and at least 6.5 percent average growth for 2016-20), helped calm financial markets. The pressure on the renminbi subsided and the difference between onshore and offshore renminbi valuation narrowed. The currency has remained broadly stable against the dollar and in real trade-weighted terms since the start of 2016.

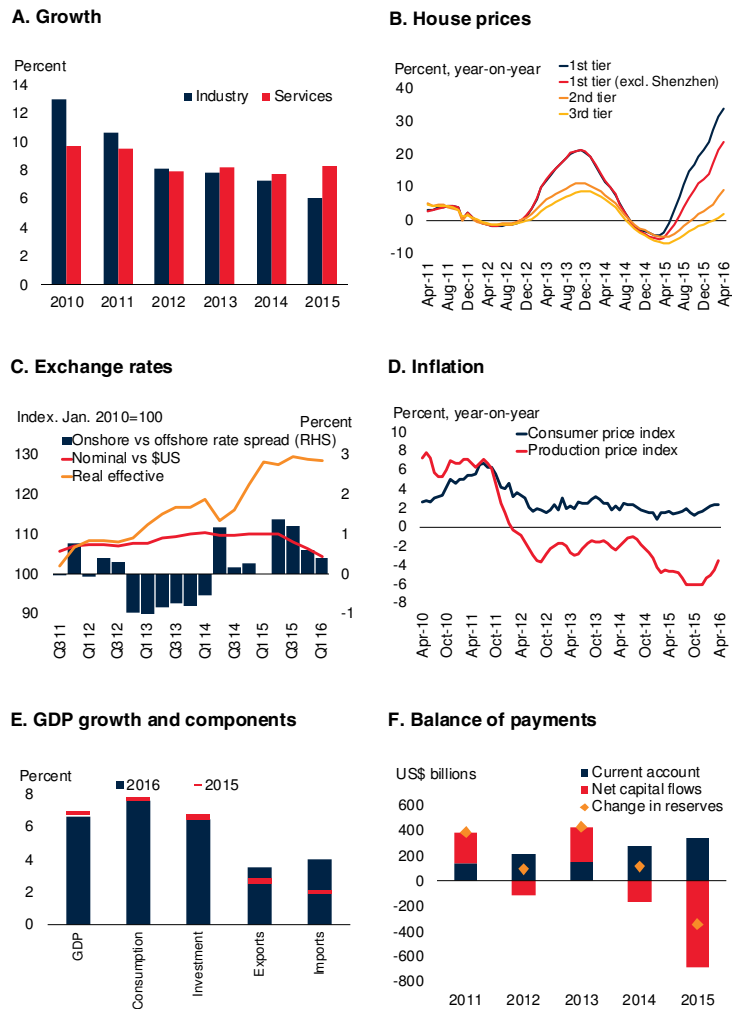
The pace of decline of foreign reserves slowed as capital outflows, which had reached record levels in 2015 (US\$500 billion), eased in early 2016. About 40 percent of capital outflows in 2015 reflected repayment of short-term external debt, partly replaced by domestic debt, in an effort by corporates to reduce net foreign currency exposures. Some 10 percent of the outflows reflected a continued increase in foreign direct investment abroad as a result of new policy initiatives.

Baseline projections envisage that growth in China will continue to slow moderately, to 6.7 percent in 2016 and to an average of 6.4 percent in 2017-18, assuming reforms proceed as expected and their impact is smoothed by additional policy action. Positive tailwinds from lower oil prices and policy stimulus will continue to offset further declines of output in overcapacity sectors. Producer price deflation, underway since 2012, showed signs of bottoming out at the start of 2016, while industrial profits recovered. The labor market is expected to remain robust and support private consumption growth. The shift toward services will continue, facilitated by policies to ease business regulations.

Although somewhat eroded, policy buffers remain substantial and provide space to support growth.

FIGURE 1.7 China

A slowdown in industrial activity has thus far been mitigated by steady growth in the services sector. Fueled by policy support, house price inflation increased in some market segments. The renminbi has remained broadly stable against the dollar and in real trade-weighted terms since the start of 2016. Consumer price inflation picked-up at the start of 2016, while producer price deflation showed signs of bottoming out. Reflecting gradual rebalancing, consumption has become a major driver of growth. Capital outflows in 2015 contributed to a depletion of about 20 percent of foreign reserves, but these have stabilized in 2016.



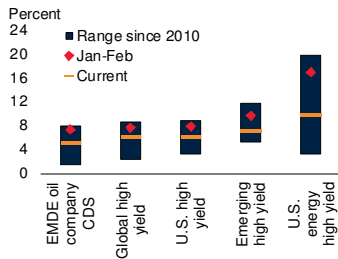
Sources: Haver Analytics, World Bank, International Monetary Fund.
 B. The numeric system of tiered cities in China was classified by the government. 1st tier cities indicate the most densely populated with significant economic, cultural and political influence. Last observation is April 2016.
 C. Last observation is 2016Q1. Real effective is the trade-weighted exchange rate deflated by relative consumer prices. An increase denotes an appreciation.
 D. Last observation is April 2016.

General government debt, including off-budget liabilities, is estimated at around 60 percent of GDP and is predominantly held domestically. The net foreign asset position amounts to 14 percent of GDP, at the end of the third quarter of 2015 (Prasad 2016). International reserves (\$3.2 trillion,

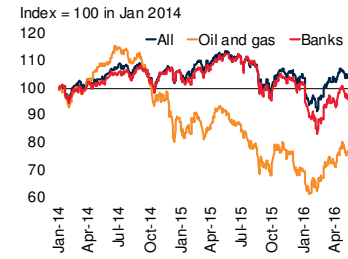
FIGURE 1.8 Financial markets

A worsened outlook for the global economy, and concerns about balance sheet exposure and profitability of highly leveraged energy companies and banks, led to a sudden re-pricing of credit risks, and a sharp stock market sell-off at the start of 2016. Subordinated bank debt came under pressure in the Euro Area, where the stock of legacy assets and non-performing loans is still elevated.

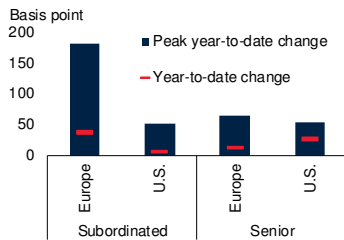
A. Bonds and CDS spreads



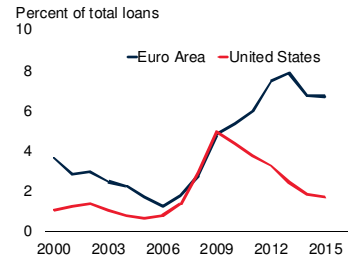
B. Global equity indexes



C. Change in bank CDS spreads in 2016



D. Nonperforming loans in the United States and Euro Area



Sources: World Bank, Bloomberg, JP Morgan, Bank for International Settlements, Merrill Lynch, ITraxx, Markit.

A. Bond spreads during January 2010 - May 2016. Global high yield includes both corporate and sovereign debt rated below investment grade and is capitalization weighted. Emerging high yield includes high yield corporate debt of issuers with primarily emerging market exposures. EMDE Oil Companies is a 2013 total assets weighted average of the CDS spreads for Petroleos Mexicanos SA, Petroleo Brasileiro SA, and Rosneft Oil Company. Current value is May 25, 2016.

B. Last observation is May 23, 2016.

C. Last observation is May 25, 2016.

D. Last observation is 2015.

or 30 percent of GDP) are still ample to meet a spike in demand for foreign currency in case of renewed financial market volatility. Capital controls on portfolio investment and bank lending, as well as a largely state-owned financial system, limit the risk of financial instability arising from disorderly capital outflows. However, they are gradually being loosened in line with external liberalization objectives.

Global trends

Following bouts of volatility at the start of 2016, financial market conditions have improved, but capital flows to emerging and developing economies remain vulnerable to sudden changes in investors' risk appetite. Oil and, to a lesser degree, other

commodity prices fell significantly in early 2016 and, although they have retraced some of their declines, are generally lower than anticipated at the start of the year. Global trade prospects have been significantly downgraded for 2016 and 2017, reflecting a combination of cyclical and structural factors.

Bouts of volatility amid tightening financing conditions

Financial markets had a turbulent start of the year, reflecting concerns for the global economic outlook, amplified by a sudden re-pricing of credit risks (Figure 1.8). The market sell-off was short-lived but abrupt, affecting in particular highly leveraged energy firms and banks.

Energy companies. A further sharp slide in oil prices in early 2016 led to a notable increase in credit spreads for companies in the oil and gas industry, which briefly escalated to levels last seen in 2008-09 on heightened concerns about default risks. Energy sector companies are among the most leveraged in EMDEs, with the build-up driven by earlier expectations of high oil prices and continued strong demand growth (IMF 2015a, Bank for International Settlements 2016). Bond issuance from major state-run oil companies in Latin America has surged 80 percent since 2010, and the share of bond issuance by energy companies worldwide jumped from 16 percent to 32 percent over the same period. As plunging oil prices have led to sharply lower revenues and reduced collateral values, weakened balance sheets could lead to a rise in default rates in the sector (Caruana 2016). Creditor losses would be most pronounced in bond markets where EMDE oil and gas companies raised most of their external funding. Exposures of banks' balance sheets to the energy sector remain on the whole limited. In the United States, for example, the claims on the energy industry account for up to 6 percent of assets among the largest banks.

Banks. Beyond their exposure to credit risks in the energy sector, concerns about bank balance sheets at the start of the year mainly reflected fear of slowing growth in advanced economies and prospects of persistently low or negative interest rates hurting profitability. For now, many

international banks have been able to offset declining interest revenues with higher lending volumes, lower risk provisioning, increased fees, and capital gains. But sustained low or negative policy rates may begin to cut more deeply into bank profits, particularly in the Euro Area and Japan. Low interest rates account for a significant proportion of the reduction in net interest margins across advanced economies (Claessens, Coleman, and Donnelly 2016). Stress at the start of 2016 was concentrated in bank equity and subordinated debt markets. Concerns about Euro Area banks were heightened by a large stock of legacy assets and non-performing loans, whereas banks in the United States implemented a more thorough post-crisis balance sheet restructuring. Among EMDEs, bank profitability may be affected by the impact of low growth and tighter financing conditions.

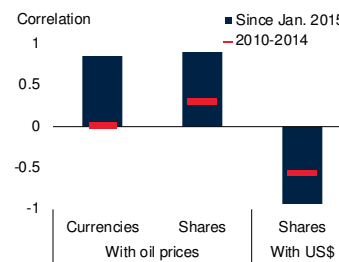
Emerging market assets and capital flows. Following a period of intense volatility at the start of the year, financing conditions and capital flows to EMDEs have improved, as major central banks committed to keep interest rates low for longer, and commodity prices and the U.S. dollar stabilized. The correlations of EMDE asset valuation with oil prices and the U.S. dollar have been particularly elevated since the start of 2015 (Figure 1.9). A recovery of the former and weakening of the latter have coincided with a rebound in EMDE equity, bond, and currency markets. Additional monetary policy accommodation in Europe and Japan has also helped reduce pressures from the anticipated normalization of U.S. monetary policy, and provided additional funding opportunities through euro-denominated credit markets. Improved market conditions, which also reflected a stabilization in China’s activity indicators, led to a resurgence of international bond issuance by both sovereign and corporate borrowers in EMDEs, clearing a backlog accumulated in previous months.

However, a sustained recovery in portfolio and bank capital flows might prove elusive in the absence of improving economic fundamentals. Rating agencies are continuing to reassess credit risks of EMDE borrowers, particularly of commodity exporters, several of which have been

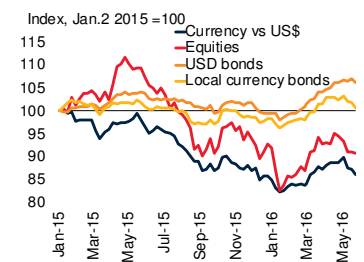
FIGURE 1.9 Financial markets (cont.)

The correlation of EMDE assets with oil prices and the U.S. dollar has been particularly high since the start of 2015. A stabilization in commodity prices and the U.S. dollar have triggered a renewed appetite for EMDE assets and supported a rebound in capital inflows since February. However, risk premia have been trending upwards, and the rebound in capital flows could prove short-lived in the absence of improved economic fundamentals, particularly for commodity exporters.

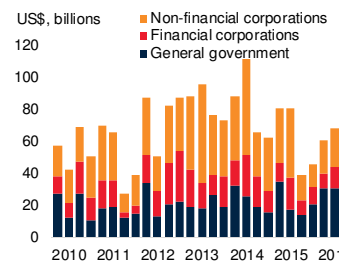
A. Correlation of EMDE assets with oil prices and US\$



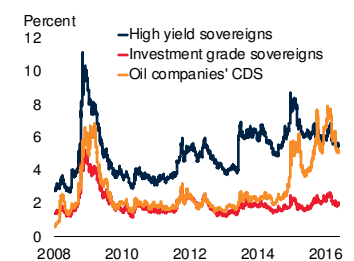
B. Emerging markets financial assets



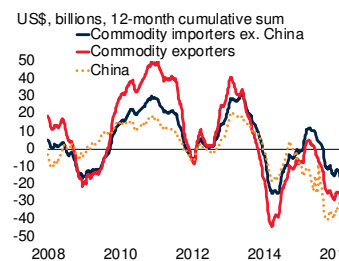
C. Bond issuance by EM borrowers



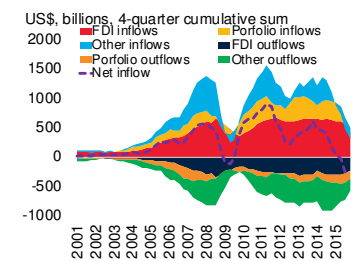
D. EMDE bond and energy company CDS spreads



E. Fund flows in EMDE commodity importers and exporters



F. Net capital flows to EMDEs



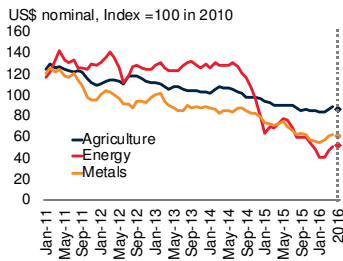
Sources: World Bank, Dealogic, Bloomberg, Emerging Portfolio Fund Research.
 A. "Currencies" is the J.P. Morgan EMCI and "Shares" is the MSCI Emerging Markets Index.
 B. Last observation is May 23, 2016
 C. Last observation is 2016Q1. 2016Q2 is estimated based on pipeline issuances.
 D. CDS stands for Credit Default Swap. Emerging Market Bond Index spreads. "Oil companies' CDS" is the 2013 total assets weighted average of the CDS spreads for Petroleo Mexicanos SA, Petroleo Brasileiro SA, and Rosneft Oil Company. Last observation is May 25, 2016.
 E. Sample include 24 commodity exporters and 19 commodity importers. Last observation is May 18, 2016.
 F. Sample includes 23 emerging market economies. Last observation is 2015Q4.

downgraded since the start of the year (including Bahrain, Brazil, Kazakhstan, Oman, and Saudi Arabia). Liquidity conditions in global financial markets, including major advanced economies, remain fragile, and leave markets prone to sudden reversals (World Bank 2015a). Foreign direct

FIGURE 1.10 Commodity markets

Commodity prices recovered from January lows but remain low on the back of abundant supply and weak demand. U.S. oil production declined for the first time in more than four years. Oil prices are expected to recover slowly as supply is gradually cut back and demand strengthens later in the year. Average oil production costs have been declining in recent years and are currently below \$40 per barrel across most producing countries.

A. Industrial commodity prices



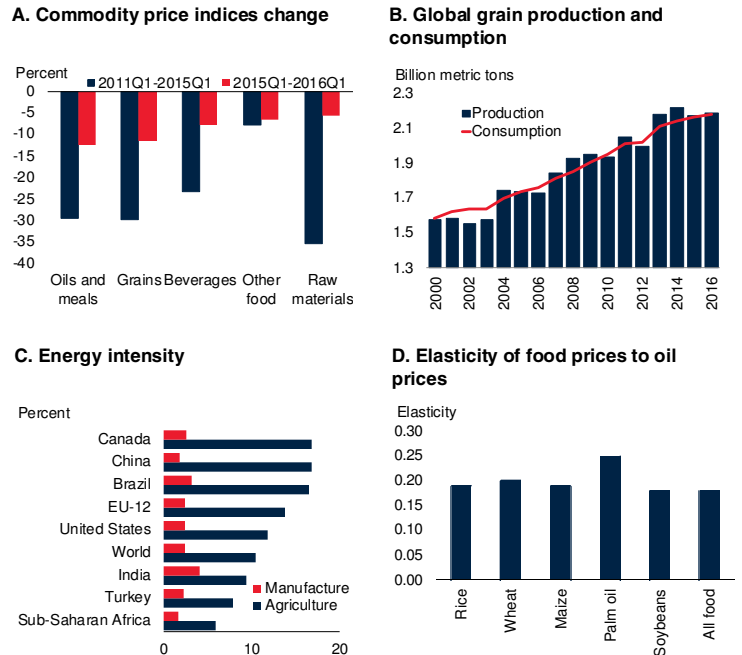
Natural gas prices continue to decline due to ample supply, with exports from new liquefied natural gas capacity in the United States and Australia expected to keep prices low in the three main markets (United States, Europe, and Asia). Excess production is encouraging buyers to increasingly import low-priced spot gas, to replace gas delivered through pipelines on higher-priced long-term contractual agreements.

Metals markets. Metal prices have also rallied from January lows on expectations of stronger demand, and ongoing supply rebalancing from production cuts and lower investment in new capacity. As with crude oil, production of metals has held up better than expected because of lower input costs and depreciating currencies in producing countries. Iron ore and steel prices increased on restocking at Chinese mills ahead of the construction season. The government’s added stimulus measures and revival of construction activity could continue to provide support despite the unwinding of seasonal demand. However, markets remain oversupplied, with large stocks and prospects for continued increases in capacity resulting from earlier large investments, notably for iron ore (Australia), copper (Peru) and aluminum (China). The closure of large zinc mines in 2015 (Australia and Ireland) is expected to support zinc prices. Metal prices are projected to decline 15 percent in 2016 and to rise moderately in the medium term as the expansion of capacity slows, but the timing will vary by individual metals.

Agricultural commodity markets. Agricultural prices continued their downward trend during the first quarter of 2016, the seventh consecutive quarterly decline. Ample supplies during the current and past two seasons have kept most grain and oilseed markets well-supplied (Figure 1.11). Local supply disruptions due to El Niño (especially in South America and East Asia) were not strong enough to have a material impact on global markets. Since agriculture is an energy-intensive sector, weakness in agricultural prices has also reflected the pass-through from lower energy prices (Baffes and Hanjotis 2016). A 10 percent decline in energy prices is associated with a 1.5 to

FIGURE 1.11 Commodity markets (cont.)

Ample production during the current and past two seasons have kept most grain and oilseed markets well-supplied. Since agriculture is an energy-intensive sector, weakness in agricultural prices also reflect the pass-through from lower energy prices.



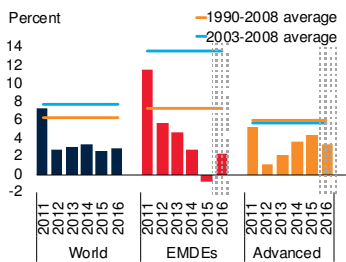
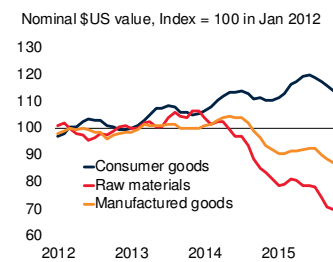
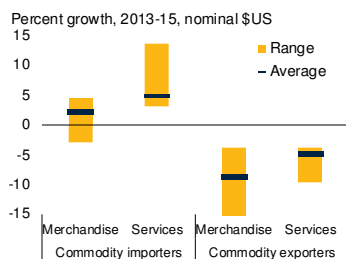
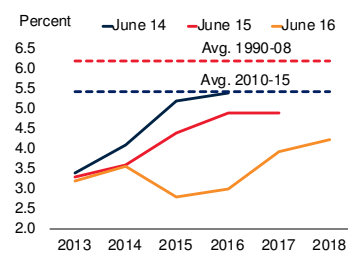
Sources: World Bank, International Energy Agency, U.S. Department of Agriculture, GTAP database, Baffes and Hanjotis (2016), Rystad Energy.
 A. Price changes are based on quarterly averages.
 B. Grain includes maize, wheat and rice. 2016 based on May 2016 USDA forecasts.
 C. Calculations based on the GTAP database. The energy intensity reflects the share of energy in the cost of agriculture and manufacturing industries and accounts for both direct and indirect use of energy. Data are of 2007.
 D. Elasticities are derived from a panel regression based on annual data (1960-2015) of real prices which are regressed on stocks-to-use ratio (a measure of crop conditions), real GDP (as measure of income), macroeconomic fundamentals (U.S. 3-month T-bill and the US\$ against a broad index of currencies) and energy prices. All variables (except interest rate) are expressed in logarithms (Baffes and Hanjotis 2016).

2 percent decline in agricultural commodity prices. Input costs for agricultural commodities have also eased because policy-driven demand for biofuels, crops that compete with agricultural commodities for land, has leveled off. Prices of agricultural commodities are expected to decline marginally in 2016, with favorable weather conditions in the Southern Hemisphere for most grains and oilseeds—except for rice, which has been subjected to some El Niño-related disruptions in East Asia. Upside risks arise from La Niña, which may affect crop conditions later in 2016.²

²La Niña is characterized by unusually cold ocean temperatures in the Equatorial Pacific, compared to El Niño, which is characterized by unusually warm ocean temperatures in the same region. La Niña often follows El Niño.

FIGURE 1.12 Global trade

Global trade growth reached a post-crisis low in 2015, reflecting a marked deceleration in import demand from EMDEs. Consumer goods and services trade showed greater resilience, but global trade forecasts continued to be downgraded, reflecting expectations of weak investment worldwide, and a slower pace of supply chain integration and trade liberalization.

A. Import volume growth**B. Goods import value from major commodity importers****C. Services and merchandise export value growth****D. Global trade growth forecasts**

Sources: World Bank, World Trade Organization, CPB Netherlands Bureau for Economic Policy Analysis, UN Comtrade.

A. Goods and non-factor services import volume. 2016 is a forecast.

B. Major commodity importers are United States, China, and Euro Area. Consumer goods are defined as Foods, Tobacco, Beverages, and Automobile Vehicles. Raw materials are defined as Crude Materials, Mineral Fuels, Animals and Vegetable Oils, Chemical and Related Products. Industrial goods are defined as Industrial Supplies and Materials, Manufactured Goods, Machinery and Transport Equipment, Miscellaneous Manufacturing Articles, Commodities and Transactions. Last observation is March 2016.

C. Selected emerging and developing economies are 6 commodity importers (Mexico, Turkey, Philippines, Thailand, India, and China) and 5 commodity exporters (Russia, Brazil, Indonesia, South Africa, and Malaysia). Average of growth for the period of 2013Q1-2015Q4.

D. Global trade measured as the sum of import and export volumes of goods and non-factor services.

Weak global trade

Following years of weak performance, global merchandise trade growth reached a post-crisis low in 2015, largely reflecting a marked deceleration in import demand from commodity exporters and slowing activity and economic rebalancing in China (Figure 1.12). The slowdown reflected a combination of structural and cyclical headwinds, with the latter accounting for about two thirds of the observed deceleration in global trade last year (Constantinescu, Mattoo, and Ruta 2016). Many of the factors underpinning the recent slowdown are expected to persist in 2016.

Weak intermediate and industrial goods trade. Declining commodity prices; China's shift towards a slower, more sustainable, growth path; and soft activity in advanced economies appear to have been mutually reinforcing drivers for weaker merchandise trade growth. Lower commodity prices have reduced real incomes and led to sharply depreciating currencies in commodity exporters, which contributed to notably lower imports. The import contraction was particularly pronounced in Brazil and the Russian Federation, but a broad-based slowdown was also observed across most commodity exporters. Since commodity exporters attract about 20 percent of other EMDEs' exports, this has had an adverse impact on other emerging economies. The gradual shift from investment to consumption and slowing industrial activity in China lowered its import demand for industrial commodities and intermediate goods. This was compounded by subdued industrial activity and capital expenditure in the manufacturing sector in the United States and the Euro Area. Feeble global investment—reflecting mediocre growth, deleveraging pressures in advanced economies, and a maturing credit cycle in EMDEs—could continue to cap the growth of goods trade throughout 2016.

More resilient services trade. Global services trade appears to be more resilient than goods trade, supported by strengthening consumer spending and income growth among major oil importing economies. Services trade now accounts for one-fifth of global trade volumes and half of global trade value-added (Hollweg et al. 2015). While barriers to service sector trade have fallen globally, they have remained stable across smaller economies (Anderson et al. 2015). Over time, the share of services trade should continue to increase, especially in sectors related to information technologies and data transfer (Freund 2016, Manyika et al. 2016).

Despite the resilience of services, global trade is expected to remain weak in 2016. Following a pattern of repeated and significant downward revisions, global trade forecasts for 2016-17 have been downgraded again, consistent with evidence of a persistent deterioration in the relationship between global trade and activity. After growing

roughly in line with GDP in 2015, global trade is expected to marginally outperform global growth over the forecast period. In the medium-term, maturing supply chains, a slower pace of trade liberalization, and persistent weakness in global investment are expected to hold back global trade growth. Lingering weakness in global merchandise trade diminishes the scope for productivity gains through increasing specialization and diffusion of technologies in global value chains (Melitz 2003, Ahn et al. 2016). As global value chains grow at a slower pace, global trade is expected to expand more in line with global output. A shortening of global supply chains towards regional ones could accentuate this process (Srinivasan et al. 2014).

Emerging market and developing economies: Recent developments and outlook

The weakness in emerging market and developing economies in 2015 has extended into 2016. Aggregate growth for EMDEs is projected at 3.5 percent for 2016, marginally above the disappointing pace of 3.4 percent in 2015. However, this forecast masks a marked difference between commodity exporters and importers. After stagnating last year, growth in commodity exporting EMDEs for 2016 is expected to be 0.4 percent—substantially below the 1.6 percent envisaged in January, reflecting further downward revisions to commodity price forecasts, weak global trade, volatile capital flows, and persistent domestic challenges. In contrast, growth projections for commodity importing EMDEs are little changed, at 5.8 percent for 2016, and are expected to be broadly stable at that level through 2018. In low-income countries, growth in 2016 is projected at 5.3 percent. Policy buffers continue to erode in commodity exporting EMDEs, especially in oil exporting countries, reducing their ability to withstand further downside shocks.

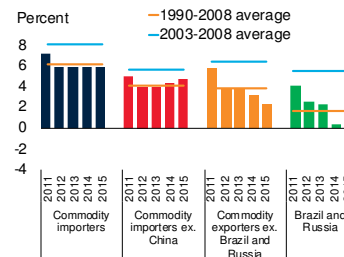
Recent developments

Growth in EMDEs decelerated to 3.4 percent in 2015—about half of the pre-crisis average growth rate, and in line with the rate expected in January

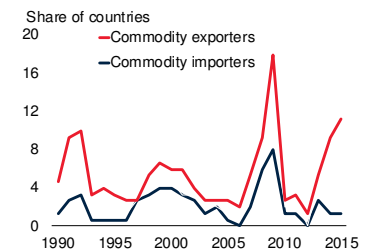
FIGURE 1.13 Activity in EMDEs

The weakness in EMDEs in 2015 was mainly accounted for by the growing difficulties of commodity exporters. Brazil and Russia continue to face a combination of external and domestic headwinds, which have resulted in deep recessions. In contrast, commodity importing EMDEs have shown resilience and steady growth. Excluding China, growth in commodity importers has picked up, reflecting robust domestic demand growth.

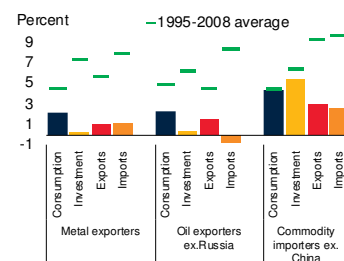
A. GDP growth



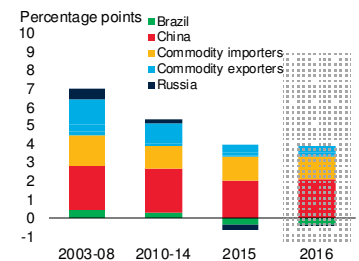
B. Countries with three consecutive years of declining growth



C. GDP growth components, 2015



D. Contribution to EMDEs growth



Sources: Haver Analytics, World Bank.
 B. Share of commodity exporters and importers out of 151 countries in sample.
 D. Commodity exporters exclude Brazil and Russia; Commodity importers exclude China.

(Figure 1.13). Overall, 2015 marked the fifth consecutive year of declining growth for EMDEs, which now account for about half of global growth compared to more than 60 percent in 2010-14. About 90 percent of the countries that have experienced this protracted slowdown were commodity exporters, especially oil exporters. Growth in commodity exporting EMDEs in 2015 was 0.2 percent—the slowest pace since the global financial crisis—reflecting the persistent impact of negative terms of trade shocks and, in many cases, domestic challenges.

In contrast, growth in commodity importing EMDEs in 2015 remained resilient to headwinds, at 5.9 percent—close to its long-term average of 6.1 percent. Moreover, growth in commodity importing EMDEs excluding China—a group that accounts for about a third of EMDE output—actually picked up in 2015 to 4.7 percent

from 4.3 percent the previous year, above its long-term average of 4.1 percent, reflecting generally robust domestic demand. The difference between the sharp slowdown in commodity exporters and the muted growth pickup in importers partly reflects the greater magnitude of the terms of trade shock as a proportion of commodity exporting economies (World Bank 2016f).

Following last year's disappointing performance, aggregate activity in EMDEs has been tepid thus far in 2016. The external environment at the start of the year continued to be challenging, with subdued global trade and rising borrowing costs. Manufacturing activity diverged, with commodity importing EMDEs performing better than commodity exporters. Brazil and Russia, which together account for about two-fifths of commodity exporting EMDE output, are expected to contract again in 2016. External headwinds these two economies face, particularly low commodity prices, have combined with persistent domestic challenges. In addition, República Bolivariana de Venezuela is experiencing a deep and worsening contraction.

Tighter policies put forward to adjust to lower commodity prices are weighing on domestic demand in commodity exporting economies, especially in oil exporting economies, which have come under significant pressure since mid-2014, when oil prices began to collapse (World Bank 2016b). Investment in extractive industries declined sharply in 2015 and continues to ease in 2016 amid tighter financing conditions. Many oil exporters (Angola, Azerbaijan, Colombia, Ecuador, Kazakhstan, Nigeria, República Bolivariana de Venezuela) struggle with sharply deteriorating current accounts, exchange rate pressures, and falling fiscal revenues. Persistent high inflation prompted several central banks in oil exporting countries to continue hiking rates or tightening foreign exchange restrictions (Angola, Azerbaijan, Nigeria) in the first months of 2016.

Non-energy commodity exporters, whose terms of trade have deteriorated more gradually since mid-2011, are showing some signs of stabilization. Growth remains broadly stable in this group as adjustment to lower non-energy commodity prices

seems to be well advanced, including for some metal exporters (Indonesia, Peru) and agriculture exporters (Tanzania, Senegal, Uganda). However, performance varied considerably among the countries reflecting country-specific vulnerabilities and policy responses. Headwinds included sharply falling remittances (Armenia, Moldova, Tajikistan), conflict (Burundi), unwinding financial vulnerabilities (Mongolia), drought damage to agricultural production (Botswana, South Africa, Zambia), electricity shortages (South Africa, Zambia), and natural disasters (Pacific Islands).

Among commodity importing EMDEs, low energy prices and modest but ongoing growth in advanced economies are supporting activity, particularly in parts of Europe and Central Asia (Poland, Romania, Turkey), East Asia (the Philippines, Vietnam), Middle East and North Africa (Morocco), South Asia (Bhutan, India, Pakistan), and Sub-Saharan Africa (Rwanda, Senegal, Uganda). However, the sizable positive terms of trade shock has been partly offset by other headwinds, reducing some of the expected windfall gains. These headwinds included political instability in the region (Haiti, Lebanon, Moldova), policy uncertainty (Maldives, Turkey), spillovers from large oil exporting trading partners (Georgia, Moldova), drought (Eritrea, Morocco), and natural disasters (Dominica, Nepal).

The recent slowdown in EMDE growth partly reflects an unwinding of cyclically strong, policy-supported, post-crisis growth and the end of the latest commodity super cycle (World Bank 2015a). However, it also has a considerable structural component (World Bank 2016b; Didier et al. 2015; Asian Development Bank 2016). In addition to external factors, the slowdown reflects adverse domestic factors—slowing productivity growth related to supply side constraints, demographic pressures, especially in parts of EAP, ECA, and LAC, and several years of underinvestment (European Bank for Reconstruction and Development 2016; World Bank 2015b). Moreover, sharply lower oil prices have contributed to a notable reduction in investment in the oil and gas industry. More generally, declining corporate profitability and

return on equity has weakened investor sentiment and capital inflows.

Within the EMDE group, growth in low-income countries (LICs) slowed in 2015, averaging 4.5 percent, down from 6.1 percent in 2014 and the lowest since 2009 (see Box 1.1). The slowdown has been especially pronounced in commodity exporters (Chad, Eritrea, Sierra Leone, Zimbabwe). In many of these countries, the adverse impact of low commodity prices was exacerbated by a severe drought, which curtailed agricultural production (Haiti, Zimbabwe). In a number of LICs, political tensions or electoral uncertainties (Burundi, Haiti, Nepal), security challenges (Afghanistan, Chad, Niger) and terrorist attacks (Burkina Faso, Mali) have weighed on activity. However, growth has remained robust in some commodity exporters with a diverse export base (Democratic Republic of Congo, Mozambique, Uganda). Among net oil importers, growth was strong in Ethiopia, Rwanda and Tanzania, supported by public infrastructure investment, construction, and a growing services sector, while activity in Cambodia continued to expand at a steady pace driven by garments exports and construction.

Mounting vulnerabilities

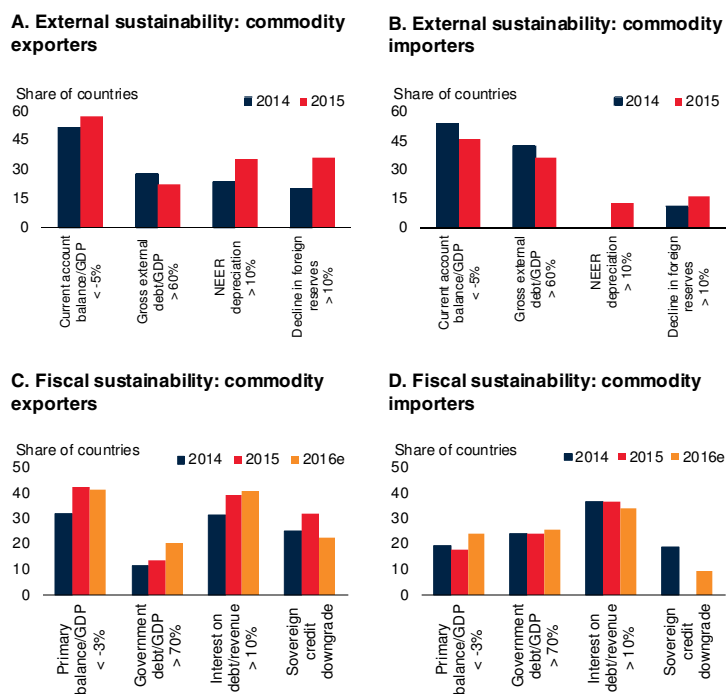
Persistent weakness in activity has widened vulnerabilities in commodity exporting EMDEs (Figure 1.14). In 2015, current account and fiscal balances deteriorated and government debt rose, while inflation increased—in many cases to above target levels. Investor concerns about growth prospects and rising vulnerabilities have been reflected in numerous recent sovereign rating downgrades, as well as depreciations earlier in the year despite foreign reserve interventions and use of sovereign wealth fund assets.³

In contrast, in several large commodity importing EMDEs, fiscal and current account deficits narrowed in 2015 (Turkey, India, Pakistan).

³Sovereign rating downgrades in 2016 include Angola, Armenia, Azerbaijan, Bahrain, Barbados, Brazil, Republic of Congo, Costa Rica, Croatia, Gabon, Kazakhstan, Mozambique, Oman, Poland, Saudi Arabia, Sri Lanka, and Surinam.

FIGURE 1.14 External and fiscal buffers in EMDEs

Weak growth in commodity exporting countries contributed to a deterioration of external and fiscal buffers in 2015. Current account and fiscal deficits widened and government debt and debt service costs rose in many countries. In contrast, deficits and debt levels were declining or stable in commodity importing countries. A spate of sovereign credit downgrades was reflected in waning investor confidence.



Sources: International Monetary Fund, Haver Analytics, Bloomberg, Standard & Poor's, World Bank. Note: Bars for current account balance, external debt, primary balance, government debt, and interest on debt reflect data as of year-end 2014 and 2015. Bars for NEER (nominal effective exchange rate) depreciation, foreign reserves, and sovereign credit ratings reflect the share of countries that experienced changes of more than the indicated percentages during the course of the year. Based on data for 44-87 commodity exporters and 21-62 commodity importers depending upon the data series. C. D. For sovereign credit downgrades, 2016e refers to year-to-date downgrades.

Foreign exchange reserves are broadly stable or increasing, and inflation below target levels, in most commodity importers. These improvements notwithstanding, corporate borrowing continued to grow rapidly in some major oil importing countries. While government debt to GDP and inflation in commodity importers are well below median levels in the mid-1990s, credit growth is above the median of that period.

In many commodity exporting and importing countries alike, high and rising credit to the private sector has become an increasingly important vulnerability (see Special Focus 1). Fueled by low post-crisis borrowing costs and rising financing needs, credit to the nonfinancial private sector increased by 14 percentage points of GDP, to 85 percent of GDP in the five years to

BOX 1.1 Low-income countries: Recent developments and outlook

Growth in low-income countries (LICs) slowed sharply to 4.5 percent in 2015 as a result of persistently low commodity prices, a severe drought in parts of Sub-Saharan Africa, and security and political challenges. Average growth in LICs is projected to rise to 5.3 percent in 2016 and above 6 percent in 2017-18. This forecast is predicated on strengthening global activity and successful implementation of growth-sustaining reforms in LICs. Risks are heavily tilted to the downside.

Growth setbacks. Growth in low-income countries (LICs) slowed sharply to 4.5 percent in 2015, down from 6.1 percent in 2014. Persistently low commodity prices, a severe drought in parts of Sub-Saharan Africa, natural disasters, and security and political challenges are major factors that took a toll on activity in low-income countries.

The slowdown has been pronounced in oil and metals exporters (Figure 1.1.1). Growth in 2015 more than halved in Chad, while GDP is estimated to have contracted by more than 5 percent in South Sudan, as low oil prices reduced government revenues. Several metal-exporting countries (Niger, Sierra Leone, Zimbabwe) also saw a sharp slowdown in economic activity. Sierra Leone, emerging from the Ebola crisis, contracted by a fifth as low commodity prices led to the closure of iron ore mining operations. In several countries, the adverse impact of low commodity prices was exacerbated by a severe drought (Chad, Haiti, Niger, and Zimbabwe), which curtailed agricultural production growth. In Guinea and Liberia, activity was further affected by the Ebola crisis, which began to recede in late 2015.

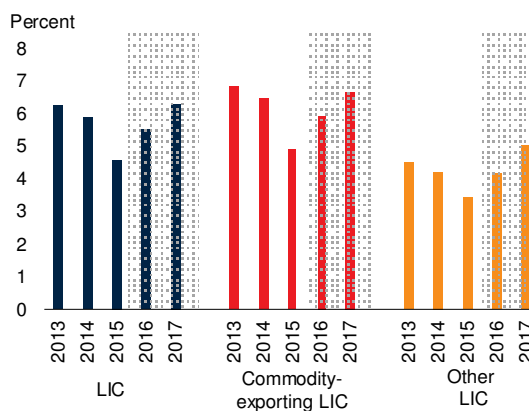
In a number of LICs, political and security related uncertainties held back activity. Afghanistan's economy continued to face headwinds from the gradual pullout of NATO troops and decline in foreign aid. Sustained insurgent attacks complicated the implementation of reforms and undermined the government's efforts to develop the mining sector, a potential source of growth, and improve regional trade linkages. In Nepal, despite the passing of two constitutional amendments aimed at reducing political inequalities, large-scale political protests by minority ethnic groups continued to weigh on economic growth, as did the closure of land trading routes through India. In Haiti, activity slowed amid rising political risk, with the indefinite postponement of the second-round presidential election. Political tensions and security threats intensified in several Sub-Saharan Africa LICs, on account of electoral disputes (Burundi, Democratic Republic of Congo), Boko Haram insurgencies (Chad, Niger) and terrorist attacks (Burkina Faso, Mali), with the resulting increase in uncertainty adversely impacting activity.

This box was prepared by Gerard Kambou.

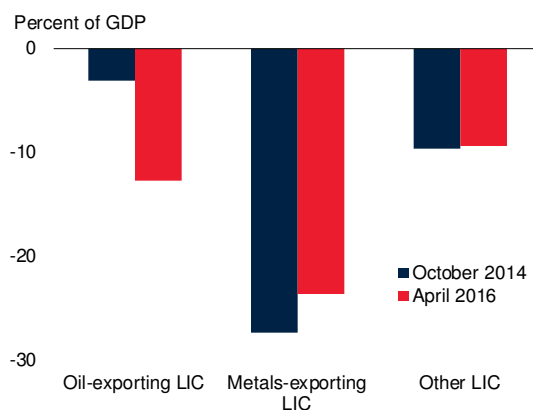
FIGURE 1.1.1 Recent developments and outlook in LICs

Growth has slowed sharply in low-income countries (LICs), to 4.5 percent in 2015 down from 6.1 percent in 2014. Persistently low commodity prices, a severe drought in parts of Sub-Saharan Africa, and security and political challenges took a toll on activity in low-income countries. Current account positions weakened among oil exporters, and deficits remain large among some metal exporters.

A. Growth forecast, 2016



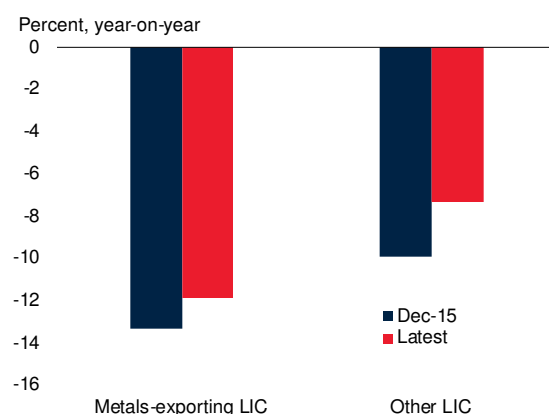
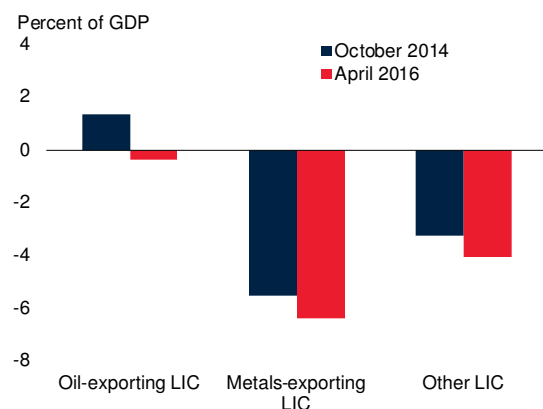
B. Current account balance, 2015



Sources: World Bank, International Monetary Fund.
 B. Metals exporting LIC includes Central African Republic, Guinea, Mozambique, and Niger. For Central African Republic and Guinea current account balances deteriorated. Oil exporting LIC includes Chad and South Sudan. Other LIC includes 22 low-income countries for which data are available.

BOX 1.1 Low-income countries: Recent developments and outlook (continued)**FIGURE 1.1.2 Recent developments and outlook in LICs (cont.)**

Currencies have depreciated and fiscal positions have weakened in many countries. Oil exporters and other resource-rich countries faced a substantial decrease in commodity revenues. In a number of countries, spending increased, causing fiscal deficits to widen.

A. Exchange rate depreciation**B. Fiscal balance, 2015**

Sources: World Bank, International Monetary Fund.
 B. Metals exporting LIC includes Central African Republic, Guinea, Mozambique, and Niger. For Central African Republic and Guinea current account balances deteriorated. Oil exporting LIC includes Chad and South Sudan. Other LIC includes 22 low-income countries for which data are available.

In contrast, the slowdown has been less pronounced in commodity exporters with relatively diverse export bases, as well as in agricultural-exporting countries (Democratic Republic of Congo, Mozambique, Uganda). Compared to the LIC average, growth has remained robust in these countries, helped in part by lower oil prices. Among net oil importers, growth was strong in Ethiopia and Rwanda,

supported by public infrastructure investment, private consumption and a growing services sector. Elsewhere, activity continued to expand at a steady pace, driven by garments exports (Cambodia), agriculture (Guinea-Bissau), and construction (Tanzania, Togo).

Deteriorating current account balances. External positions have weakened across LICs. The current account deficit widened significantly among oil exporters, with oil price declines compounded by production cuts. The current account deficit also widened across non-energy exporters (Democratic Republic of Congo, Ethiopia, Niger), in part because of exports weakness but also due to stronger import growth on the back of large public investment projects. However, in many of these countries, the current account deficit has remained well funded by FDI. In Nepal, goods and services imports increased as a result of post-earthquake reconstruction efforts. On average, external debt levels increased moderately across LICs, reflecting continued access to concessional financing. However, external debt levels rose significantly in a number of countries (The Gambia, Mozambique, Tanzania, Uganda), driven in part by large currency depreciations.

Reserve drawdowns and currency depreciations. Increased external pressures were met with reserves drawdowns and currency depreciations in many countries (Figure 1.1.2). Reserve drawdowns were most pronounced among some mineral exporters (Niger, Sierra Leone) and in countries facing sharp currency depreciations (Burundi, The Gambia, Rwanda). Monetary authorities in countries with a flexible exchange rate regime responded to external pressures by allowing depreciations (Haiti, Mozambique, Tanzania, and Uganda), and by tightening monetary policy through an increase in reserve requirements (Cambodia) and policy rates (Mozambique). The currencies of several LICs, including the Mozambican metical and Ugandan shilling, sustained large depreciations against the U.S. dollar. The pass-through of nominal exchange rate depreciation contributed to a sharp rise in inflation in some countries (Haiti, Madagascar, Mozambique). However, reflecting strong external disinflationary pressures from lower food and oil prices, inflation has eased in many countries (Cambodia, Malawi, Tanzania, Uganda), or turned negative in some (Afghanistan). In the CFA zone, where the pegged CFA franc remained broadly stable, inflation remained in single low digits.

Weakening fiscal positions. Fiscal positions weakened in many countries. Oil exporters and other resource-rich

BOX 1.1 Low-income countries: Recent developments and outlook (*continued*)

countries faced a substantial decrease in commodity revenues. Some countries (Chad, Mozambique, and Rwanda) cut expenditures in response. However, the cuts matched the reduction in revenues in only a few countries (Chad, Rwanda). In a number of countries, spending was increased even as revenues slowed or fell (Burundi, Cambodia, Ethiopia, Madagascar, Malawi, Tanzania), causing fiscal deficits to widen. In Guinea and Liberia, which struggled with the Ebola crisis, fiscal deficits have increased sharply. As a result, public debt burdens have risen, most significantly in Malawi, Mozambique, Togo, and Zimbabwe. In some countries (Mozambique, Niger), the increase in government debt reflected rising infrastructure spending or the construction of mining projects that should support potential growth over the medium term.

Softening outlook. The external environment confronting low-income countries is expected to remain difficult in the near-term. Commodity prices are expected to remain low despite a gradual pickup in global activity. Against this backdrop, average growth in LICs is projected to rise to 5.3 percent in 2016 and above 6 percent in 2017-18. This forecast is predicated on strengthening global activity and successful implementation of growth-sustaining reforms in LICs. The implications for individual LICs will vary:

- Oil and other commodity exporters are expected to see a modest pickup in growth in 2016 as they continue to adjust to low commodity prices. Growth is expected to remain low in Chad as oil production falls. In Mozambique, delayed investment into the LNG sector and rising inflation will weigh on growth in 2016. Growth is also expected to slow in the Democratic Republic of Congo as the copper sector continues to struggle and political uncertainty weighs on investor sentiment.
- Growth in countries emerging from the Ebola crisis (Guinea, Liberia, and Sierra Leone) and natural disasters (Haiti, Nepal) is expected to remain modest in 2016. Aid-driven infrastructure investment and some limited growth in iron ore exports should help boost real GDP growth in Guinea, Liberia, and Sierra Leone. Growth is expected to remain subdued in Haiti in 2016 as the country's elevated political risk keeps investment growth low despite large post-earthquake reconstruction needs. Activity is expected

to weaken further in Nepal as disruptions of cross-border traffic restrict access to critical inputs, the tourism industry struggles to recover from the earthquakes, and sub-optimal monsoon rainfalls hamper agricultural production.

- Political and security uncertainties and drought are expected to remain a drag on economic activity in a number of countries. In Afghanistan, growth in 2016 is expected to be marginally higher than that of 2015, as attacks by insurgents continue to delay the implementation of government's reforms and undermine private sector confidence. Political uncertainty and threats of terrorist attacks will hold back activity in Burundi, Burkina Faso, Mali, and Niger. Drought is expected to weigh on growth in Ethiopia.
- For most other countries, growth is projected to remain robust, supported by strong domestic investment and lower oil prices. In some oil importing countries – notably Cambodia, and Tanzania – growth is projected to average 7 percent in 2016.

Risks tilted heavily to the downside. The balance of risks to the outlook remains firmly tilted to the downside, with both external and domestic risks.

- *External risks.* A sharper-than-expected slowdown in China, and rebalancing toward consumption and services, would weigh against commodity prices and investment in resource sectors and further weaken activity in commodity exporters. Weaker-than-expected growth in the Euro Area could further weaken external demand for LIC exports, especially in Sub-Saharan Africa, and reduce investment flows as well as official aid.
- *Domestic risks.* Delays in adjustment to external shocks in affected countries would create policy uncertainties that could weigh on investor sentiment and weaken the recovery. A worsening of drought conditions would dampen growth in agriculture, increase food insecurity, and accentuate inflationary pressures. Militant insurgencies and terrorist attacks remain a concern in West Africa, while political risks are high in Afghanistan, Burundi, Democratic Republic of Congo, Haiti, and Nepal.

BOX 1.1 Low-income countries: Recent developments and outlook (continued)**TABLE 1.1.1 Low-income countries: Real GDP^a**

(Annual percent change unless indicated otherwise)

	2013	2014	2015e	2016f	2017f	2018f	Percentage point differences from January 2016 projections			
							2015e	2016f	2017f	2018f
Low Income Country, GDP^b	6.5	6.1	4.5	5.3	6.3	6.6	-0.6	-0.9	-0.3	0.0
Afghanistan	2.0	1.3	1.5	1.9	2.9	3.6	-0.4	-1.2	-1.0	-1.4
Benin	5.6	5.4	5.2	5.5	5.8	6.1	-0.5	0.2	0.7	1.0
Burkina Faso	6.7	4.0	4.0	5.2	5.5	6.0	-0.4	-0.8	-1.5	-1.0
Burundi	4.6	4.7	-2.5	3.0	3.5	4.0	-0.2	-0.5	-1.3	-0.8
Cambodia	7.4	7.1	7.0	6.9	6.8	6.8	0.1	0.0	0.0	0.0
Chad	5.7	6.9	1.8	-0.4	1.6	5.2	-2.3	-5.3	-4.5	-1.3
Comoros	3.5	3.0	2.3	2.4	3.0	3.1	0.0	-0.1	-0.1	0.0
Congo, Dem. Rep.	8.5	9.0	7.7	6.3	7.7	8.5	-0.3	-2.3	-1.3	-0.5
Eritrea	1.3	1.7	3.0	4.0	4.3	4.3	2.1	2.0	2.1	2.1
Ethiopia ^c	10.5	9.9	9.6	7.1	9.4	8.6	-0.6	-3.1	0.4	-0.4
Gambia, The	4.8	0.9	-2.5	-4.0	4.5	5.5	-6.5	-8.5	-0.8	0.2
Guinea	2.3	-0.3	0.1	4.0	5.0	6.0	-0.3	0.5	1.0	1.8
Guinea-Bissau	0.8	2.9	5.1	5.7	6.0	6.0	0.7	0.8	0.7	0.7
Haiti ^c	4.2	2.8	1.2	0.9	1.9	2.2	-0.5	-1.6	-0.9	-0.8
Liberia	8.7	0.7	0.3	3.8	5.3	5.6	-2.7	-1.9	-1.5	-1.2
Madagascar	2.4	3.0	3.0	3.7	3.7	3.7	-0.2	0.3	0.1	0.1
Malawi	5.2	5.7	2.8	3.0	4.1	5.4	0.0	-2.0	-1.7	-0.4
Mali	1.7	7.2	5.5	5.3	5.1	5.0	0.5	0.3	0.1	0.0
Mozambique	7.3	7.4	6.3	5.8	7.7	8.3	0.0	-0.7	0.5	1.1
Nepal ^c	3.8	6.0	2.7	0.6	4.7	4.4	-0.7	-1.1	-1.1	-0.1
Niger	4.6	6.9	4.2	5.4	6.3	7.0	-0.2	0.1	-3.0	1.3
Rwanda	4.7	7.0	7.1	6.8	7.2	7.1	-0.3	-0.8	-0.4	-0.5
Sierra Leone	20.1	7.0	-21.5	6.5	5.3	5.4	-1.5	-0.1	0.0	0.1
South Sudan	13.1	3.4	-6.3	3.5	6.9	7.4	-1.0	0.0	-0.1	0.4
Tanzania	7.3	6.8	7.0	7.2	7.1	7.1	-0.2	0.0	0.0	0.0
Togo	5.1	5.7	5.5	5.6	5.0	5.5	0.4	0.7	0.3	0.8
Uganda ^c	4.4	4.7	5.0	5.0	5.9	6.8	0.0	0.0	0.1	1.0
Zimbabwe	4.5	3.8	1.1	1.4	5.6	3.5	0.1	-1.4	2.6	0.5

Source: World Bank.

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 significantly differ at any given moment in time.

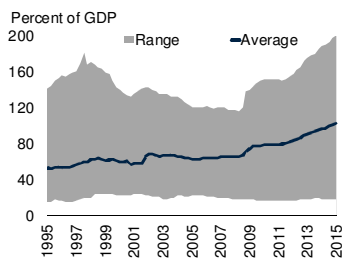
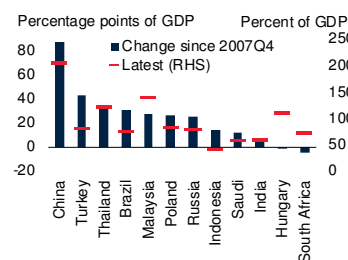
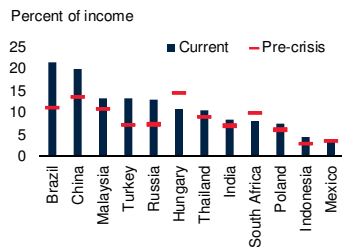
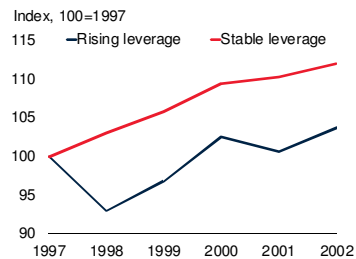
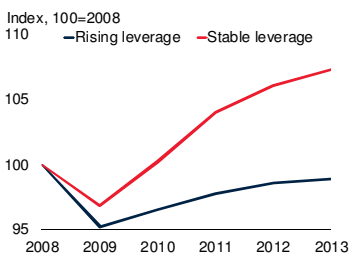
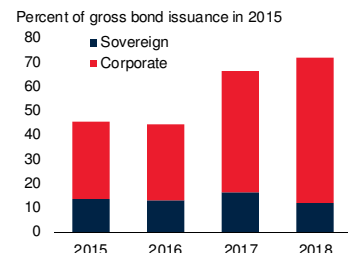
a. Central African Rep., Democratic People's Republic of Korea, and Somalia are not forecast due to data limitations.

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

c. GDP growth based on fiscal year data.

FIGURE 1.15 Private indebtedness in EMDEs

Rising private sector indebtedness has become a major source of vulnerability in some EMDEs. Historically, countries with rapidly rising leverage in the years leading up to a period of financial stress have experienced a more protracted slowdown or a deeper recession in its aftermath. Current debt rollover risks remain limited in the short term but could increase in 2017 as a greater stock of debt is due for refinancing.

A. Private sector credit in EMDEs**B. Private sector credit in selected EMDEs****C. Debt service burden of private non-financial sector****D. GDP per capita around the 1997-98 Asian crisis****E. GDP per capita around the global financial crisis****F. Stock of EMDE bonds maturing**

Sources: World Bank, Haver Analytics, Bloomberg, Bank for International Settlements.
 A. Sample includes 14 emerging economies. Data are the market value of private sector non-financial credit to GDP. Last observation is 2015Q3. Average data are GDP-weighted.
 B. Last observation is 2015Q3.
 C. Debt service burden is calculated as the ratio of interest payments plus amortizations to income. Gross disposable income (income after interest payments and, for non-financial corporations, dividends) is the default measure of income. Last observation is 2015Q3.
 D., E. "Rising leverage" countries are defined as those that experienced an increase in private non-financial corporate credit to GDP ratios of more than 15 percentage points over the previous three years. Countries with "stable leverage" are defined as those having experienced an increase in private sector non-financial debt to GDP ratios of more than 15 percentage points during the three years preceding the crisis episode. Sample includes 14 emerging and developing economies and 24 advanced economies. Unweighted average across countries.

September 2015 in the 14 largest EMDEs—and, in some cases, by 30 percentage points of GDP or more (Figure 1.15). In addition to rising private sector debt, exchange rate depreciations and rising risk spreads have increased debt service costs in a number of countries (Hofmann et al. 2016). In

some sectors (energy, metals and mining, construction), increased indebtedness has partly reflected rapid foreign currency borrowing in recent years (Chui, Kuruc, and Turner 2016). A broad-based decline in corporate profitability would accentuate balance sheet vulnerabilities, and might aggravate the impact of market volatility on investment and growth.

In the past, credit booms over a sustained period were sometimes followed by slowing growth and, in the presence of financial stress, increased the severity of the subsequent recession (Claessens, Kose, and Terrones 2012; Jordà, Schularick, and Taylor 2013). During both the Asian crisis in 1997-98 and the global financial crisis in 2008-09, emerging economies with more rapid credit growth in preceding years suffered larger GDP declines. When external financing conditions tightened and global trade slowed, capital flows reversed, asset prices collapsed, non-performing loans surged, and activity dropped (Kose and Terrones 2015).

Current debt rollover risks appear limited in the short term, given the modest stock of debt maturing in 2016, but could increase in 2017 as refinancing pressures intensify. In sectors where state ownership is pervasive (e.g. energy), deteriorating creditworthiness or financial stress could weaken sovereign balance sheets and propagate credit risks (Claessens, and Kose 2014; Bachmair 2016; Jordà, Schularick, and Taylor 2016). This—combined with weak institutions, shallow markets and under-developed debt resolution mechanisms—could amplify the impact of corporate deleveraging on growth.

Widening external, fiscal, and corporate vulnerabilities are increasingly eroding EMDE policy makers' ability to support output should one or more risks materialize. For commodity exporters, rising inflation, weak exchange rates, and financial stability risks would oblige their monetary policy makers to adopt tighter stances. Even if government debt currently remains manageable in most countries, widening fiscal deficits will constrain governments' ability to implement effective and sustained fiscal stimulus (World Bank 2015c).

Outlook

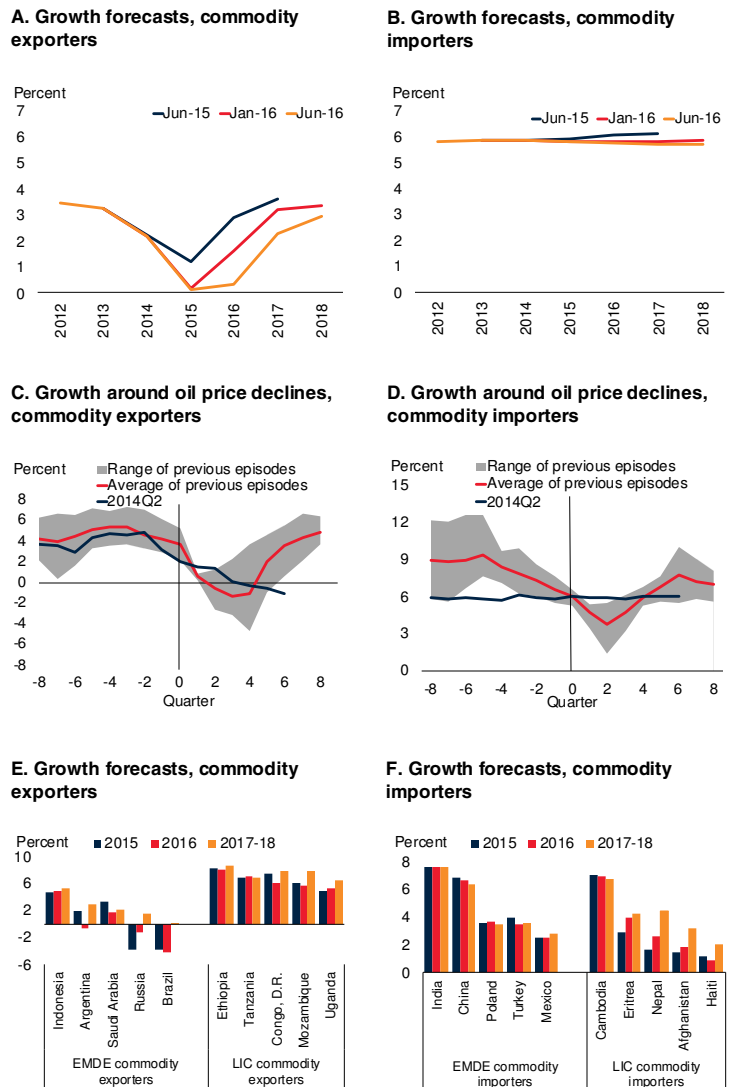
Activity in EMDEs will likely remain subdued in the short term, with growth expected to be 3.5 percent in 2016, down 0.6 percentage point from January. Going forward, growth is projected to firm to 4.4 percent in 2017 and 4.7 percent in 2018, reflecting an expected recovery in commodity exporting countries, predicated on a modest upturn in oil prices and the end of recessions in Russia in 2017 and Brazil in 2018.

Among commodity exporting EMDEs, the outlook has once again been downgraded (Figure 1.16). This reflects the sharp decline in oil and other commodity prices, as well as weak investment, soft global manufacturing trade, and tightening financing conditions. At 0.4 percent, growth in these countries will be well below the 1.6 percent projected in January. The expectation of a further decline in the average price of oil, to \$41 per barrel for this year (versus \$51 projected in the January GEP) will weigh on growth in 2016. Although the slowdown in commodity exporters has been less sharp so far than during past episodes of steep oil price declines, a quick rebound is unlikely. In contrast, the outlook for commodity importing countries has been broadly unchanged over the past two years, and the expected pace of growth in these countries of 5.8 percent in 2016 is not much below their 1990-2008 average of 6.1 percent. The divergence in the prospects for commodity exporters and importers is also reflected in notable differences across regional outlooks (see Box 1.2). While 2016 projections for EMDE regions with a large number of importers (East Asia and Pacific, South Asia) are broadly unchanged from January, those for regions with a sizable number of exporters (Latin America and the Caribbean, the Middle East and North Africa, Sub-Saharan Africa) were significantly revised down.

The external environment confronting low-income countries is expected to remain challenging in the near term, with lower commodity prices and a more subdued recovery in global activity than previously projected, but it will be somewhat offset by sustained investment growth and falling oil prices that benefit the

FIGURE 1.16 Growth outlook for EMDEs

The outlook for commodity exporting and commodity importing EMDEs has diverged appreciably over the past three forecasting cycles. Growth expectations have deteriorated for exporters, but remained more stable for importers. Compared to historical episodes of sharp declines in oil prices, the current episode has seen a shallower decline in growth, which is likely to be followed by a relatively weak recovery.



Sources: World Bank, Haver Analytics.
 A. B. Forecasts are preliminary for June 2016.
 C. D. GDP growth is quarterly year-on-year growth. Gray areas show range of growth outcomes during previous episodes. For all episodes, t=0 in the quarter prior to the start of the decline: 1997Q4, 2001Q3, 2008Q3, and 2014Q2. Sample includes 12 (1997Q4), 15 (2001Q3), 19 (2008Q3), and 22 (2014Q2) oil exporting countries, and 9 (1997Q4), 14 (2001Q3), 16 (2008Q3), and 17 (2014Q2) oil importing countries.
 E. F. Figures show five largest country members of each group in terms of GDP in 2010 U.S. dollar.

majority of LICs that are oil importers. Against this backdrop, growth in LICs is projected to pick up to 5.3 percent in 2016, 0.9 percentage point below January projections. Growth is expected to accelerate to an average of about 6.5 percent in

BOX 1.2 Regional perspectives: Recent developments and outlook

Differences in recent developments and prospects across EMDE regions reflect in part the divergences between commodity exporters and importers. Broadly speaking, the 2016 growth forecasts for East Asia and Pacific and South Asia are little changed from the start of the year. In contrast, baseline 2016 forecasts for regions with major commodity exporting economies—Europe and Central Asia, Latin America and the Caribbean, the Middle East and North Africa, and Sub-Saharan Africa—have been downgraded since January.

East Asia and Pacific. Growth is estimated to have slowed to 6.5 percent in 2015 from 6.8 percent in 2014, broadly in line with January projections. This reflects the gradual slowdown in China. This offset a very modest pickup in the rest of the region, which showed signs of bottoming out in 2015. The moderation of growth in commodity exporters was offset by solid performance in commodity importers, especially Vietnam and the Philippines, and a modest recovery in Thailand on the back of robust domestic consumption. While Chinese growth is expected to continue to gradually slow down, growth in the rest of the region is expected to pick up to 5 percent on average in 2016-18, as commodity prices stabilize and reforms are implemented to spur investment. Downside risks include a sharper-than-expected slowdown in China and tighter global financing conditions against the backdrop of high corporate and household leverage in the region. Key policy challenges include strengthening medium-term fiscal and macroprudential frameworks and structural reforms to support long-term growth (World Bank 2016b).

Europe and Central Asia. Activity in EMDEs in the region contracted by 0.1 percent in 2015 (as estimated in January) from a 1.8 percent expansion in 2014, driven by the deep recession in the Russian Federation. Excluding Russia, regional growth in 2015 was 2.5 percent, broadly unchanged from the rate of expansion in 2014, as continued economic dynamism in Turkey and several large oil importers in Western Europe and Central Asia (Bulgaria, Poland, Romania) offset a contraction in Ukraine and slowing growth among commodity exporters. Oil exporters (Azerbaijan, Kazakhstan, Russia) continue to adjust to low oil prices as fiscal buffers erode (World Bank 2016c). Subdued growth in the Euro

Area and continued weakness of external demand pose further headwinds. While low commodity prices are helping importers in the western part of the region, the benefits have yet to translate fully into robust consumption and investment. Growth is expected to pickup modestly to 1.2 percent in 2016, as the Russian economy bottoms out. With a return to positive growth in Russia and the Ukraine, regional growth is expected to increase to an average of 2.6 percent in 2017-18. Downside risks include geopolitical flare-ups, lower oil prices, a deeper recession in Russia, less favorable external financing conditions as substantial bond repayments come due, and political tension.

Latin America and the Caribbean. Regional output shrank 0.7 percent in 2015, broadly in line with January estimates, after expanding 1.0 percent in 2014. GDP was dragged down by depressed commodity prices, tighter regional monetary conditions, and domestic challenges among the region's largest economies. Brazil and, particularly, República Bolivariana de Venezuela are both mired in deep recessions, while Argentina has embarked on macroeconomic policy reforms aimed at more sustainable growth (World Bank 2016d). Mexico, Central America, and the Caribbean expanded steadily in 2015, boosted by robust growth in exports and tourism. As regional weakness carries over to 2016, and with Brazil expected to experience another year of severe contraction, economic activity in Latin America and the Caribbean is expected to shrink 1.3 percent (excluding Brazil, regional growth in 2016 is projected at 0.5 percent). A gradual recovery in 2017-18 will be supported by strengthening net exports and an easing of substantial domestic obstacles. Significant domestic and external downside risks persist, as the South American economy has yet to bottom out and commodity prices could continue to decline.

This box was prepared by Derek Chen, Allen Dennis, Christian Eigen-Zucchi, Gerard Kambou, Ekaterine Vashakmadze, and Dana Vorisek.

BOX 1.2 Regional perspectives: Recent developments and outlook (continued)

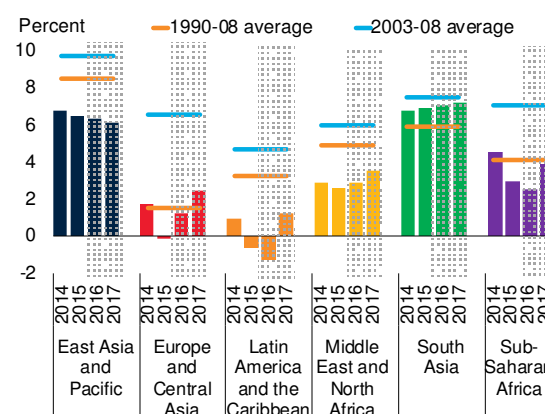
Middle East and North Africa. Growth in the region was an estimated 2.6 percent in 2015, slightly down from 2.9 percent in 2014 and broadly in line with January estimates. The sharp slide in oil prices over the past two years has contributed to a deterioration of buffers and a growth slowdown in most oil exporting countries. The impacts of low oil prices are necessitating significant policy adjustment that got underway in 2015. Performance in oil importing countries in 2015 was mixed. Growth in the Arab Republic of Egypt and Morocco gathered pace but was not expected to be sustained in 2016 and activity slowed in most other countries. Conflicts in the region have resulted in significant output losses in domestic and neighboring economies (Devarajan and Mottaghi 2016). Regional growth is projected to rise slightly in 2016, to 2.9 percent, before recovering to an average of 3.6 percent in 2017–18. The improvement reflects an expected economic growth spurt in the Islamic Republic of Iran following the removal of sanctions in January, rapidly rising oil sector activity in Iraq, and a recovery of oil prices in 2017. Risks to the outlook are mainly to the downside and include a further slide in oil prices and additional negative impacts of poor security conditions.

South Asia. Growth in the region rose to 7.0 percent in 2015, in line with previous projections. Thus far in 2016, economic activity—led by India—has remained robust, supported mainly by domestic demand. Inflation remains benign, even if picking up in some countries. Net exports continue to exert a drag on activity due to sluggish global growth; however, remittance inflows to the region have held steady. GDP growth is expected to be roughly stable at 7.1 percent in 2016, and to pick up to 7.3 percent by 2018, with strengthening global activity. Domestic demand will continue to be the main driver of growth. In the near term, consumption spending will continue to benefit from low oil prices, although this will wane over the medium term. Further, an accommodative monetary stance, public investments in infrastructure, and progress on structural reforms, including new bankruptcy laws in India, should support a pickup in private investment. Risks to the forecast are weighted to the downside.

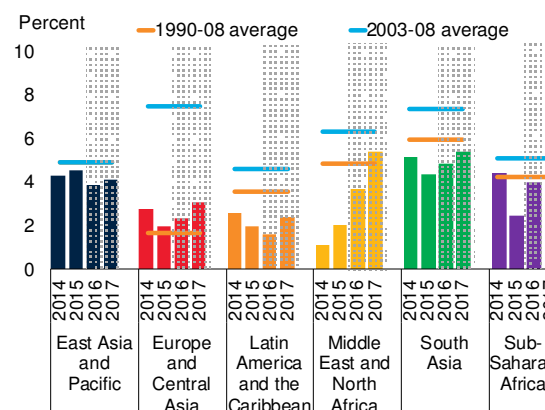
FIGURE 1.2.1 Regional Growth

Differences in recent developments and prospects across EMDE regions reflect in part the divergences between commodity exporters and importers.

A. Regional growth (weighted average)



B. Regional growth (unweighted average)



Source: World Bank

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

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

External risks include volatility in global financial markets and significant declines in remittance inflows. Domestic risks include slow progress in the structural reform agenda (e.g., power sector reforms, tax reforms, and land reforms), vulnerabilities in corporate and banking sector balance sheets, and fiscal challenges in some of the region's economies.

BOX 1.2 Regional perspectives: Recent developments and outlook (continued)

Sub-Saharan Africa. Regional growth slowed noticeably to 3.0 percent in 2015, down from 4.5 percent in 2014, and 0.3 percentage point lower than January estimates. The slowdown was most severe in oil exporters (Angola, Nigeria), where low oil prices sharply slowed activity (World Bank 2016f). The decline in metal prices led to a substantial fall in revenues and exports in non-energy mineral exporting countries. Other adverse developments included drought (South Africa, Zambia), electricity shortages (Nigeria, South Africa, Zambia), the Ebola crisis (Guinea, Liberia, Sierra Leone), and conflict (Burundi, South Sudan). Growth remained robust in other oil importing countries, supported by ongoing infrastructure investments, private consumption, and increased agricultural production. Regional growth is expected to slow further to 2.5 percent in 2016, amid depressed commodity prices, rising to an average of 4.1 percent in 2017-18, reflecting a gradual improvement in the region's largest economies—Angola, Nigeria, and South Africa. Domestic downside risks include delays in implementing the necessary adjustment to deteriorating terms of trade or in the realization of reforms, and worsening drought conditions. Political and security-related risks remain high in several countries. On the external side, a further decline in commodity prices, weaker-than-expected growth in advanced economies, and tighter global financing conditions could intensify pressures on fiscal and current account positions and affect foreign direct investment, aid, and other external flows.

2017–18, assuming global activity strengthens and scheduled domestic reforms are successfully implemented. Growth in countries emerging from the Ebola epidemic (Guinea, Liberia, Sierra Leone) and natural disasters (Haiti, Nepal) is projected to remain modest. Political and security uncertainties are expected to continue to weigh on growth in Afghanistan, Burundi, Burkina Faso, Mali, and Niger.

Risks to the outlook

In a weak growth environment, the global economy is facing increasingly pronounced downside risks. These are associated with deteriorating conditions among key commodity exporters, disappointing activity in advanced economies, rising private sector debt in large emerging markets, and heightened policy and geopolitical uncertainties. Other major downside risks over the medium term include increased protectionism and slower catch-up of large emerging markets toward advanced economy income levels. The possibility of delayed benefits from lower energy prices remains an upside risk.

Global headwinds have been consistently underestimated in recent years, reflecting the faster-than-expected slowdown in major emerging markets and weaker-than-expected recovery of advanced economies (Figure 1.17). Since the start of 2016, some of the previously identified risks have materialized, including additional headwinds among commodity exporters and deteriorating prospects among major advanced economies. The terms of trade shock from low energy prices among net exporters has been amplified by domestic uncertainties and tightened policy. Furthermore, incomplete deleveraging and weak productivity growth continue to hamper aggregate demand prospects in both exporters and importers. With growth moderating in China, stabilizing around a weak trajectory in advanced economies, and stagnating in major commodity exporters amid lingering vulnerabilities, the expected global recovery could be weaker. Global trade growth, which reached a post-crisis low in 2015, could remain depressed, further hampering prospects across emerging and developing economies. In this weak growth environment and amid rising vulnerabilities, even an incremental deterioration in economic conditions could lead to sudden market adjustments and heightened risk aversion.

Current uncertainty about global growth forecasts is estimated to be slightly above the historical median, having increased since the January GEP (see Special Focus 2). The balance of risks is tilting increasingly to the downside, as upside risks

(especially from lower oil prices) have receded. That said, the probability that growth falls 1 percentage point below the baseline remains broadly in line with the average over the past decade.

The realization of downside risks could set back growth in EMDEs for a prolonged period, slowing the pace of catch-up in GDP per capita to advanced economies. About 85 percent of the world’s population live in EMDEs, of which a number are at risk of stalling progress or even reversing in the case of some commodity exporters (Eichengreen, Park, and Shin 2013; Gill and Kharas 2015; Didier et al. 2015). Already since 2013, there has been a notable decline in the share of EMDEs where GDP per capita continued to catch up to U.S. levels—i.e. countries where the gap in GDP per capita narrowed from last year (Figure 1.18). Whereas, pre-crisis, the average EMDE could expect to reach advanced country income levels within a generation, the low growth of recent years has extended this catch-up period by several decades.

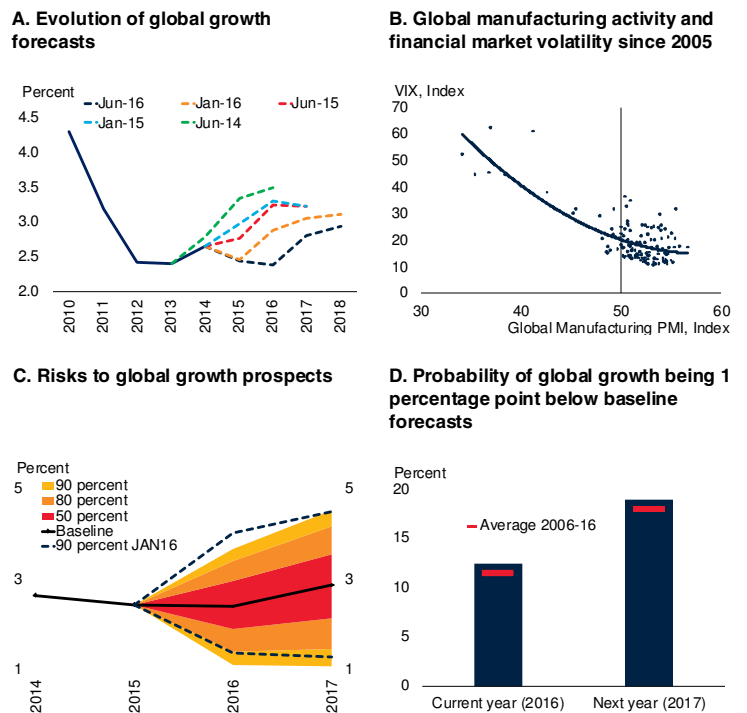
Further slowdown in major emerging markets

Commodity exporters remain particularly exposed to risks of further growth setbacks and credit rating downgrades (Figure 1.19). The adverse impact of deteriorating terms of trade and pro-cyclical policy tightening is amplified in some cases by rising political uncertainty, which tends to diminish confidence and increase financial market volatility (Julio and Yook 2013). High leverage of major energy companies has increased their vulnerability to rising borrowing costs and, to the extent it is foreign-currency denominated, exchange rate depreciations. Acute financial stress in one or more of the major emerging markets could increase global risk aversion, with wider repercussions for capital flows to EMDEs.

A continued deterioration in growth prospects across major emerging markets and declining commodity prices could be mutually reinforcing. A further deterioration in growth prospects for key commodity exporting EMDEs would negatively affect regional trading partners. For instance, a 1

FIGURE 1.17 Risks to global growth prospects

The outlook for global growth has been consistently overestimated in recent years. A further deterioration in economic conditions could increase financial market volatility. Uncertainty surrounding global growth forecasts has increased since the January 2016 Global Economic Prospects and is slightly above the historical median, while downside risks have increased.



Sources: World Bank, Haver Analytics, Bloomberg.
 B. Monthly data from 2005 to April 2016.
 C, D. See Special Focus 1 “Quantifying Uncertainties in Global Growth Forecasts” for details on methodology. “90 percent in January 2016” stands for the 90 percent confidence interval of the fan chart based on information available at the cut-off date of the January 2016 *Global Economic Prospects* report.

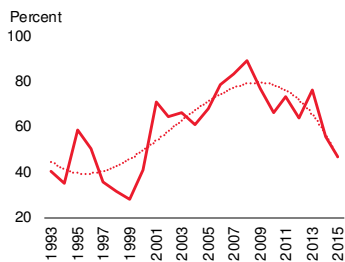
percentage point decline in growth in Brazil or Russia could reduce growth in neighboring countries by up to ½ percentage point on average over two years (World Bank 2016b).

In the short-term, a sharper-than-expected slowdown or more pronounced rebalancing in China (although a low-probability scenario) could have significant implications for both EMDE and advanced economy prospects. China’s corporate debt increased to new highs in early 2016, reaching levels that surpassed those of most advanced economies. Corporate indebtedness is highly concentrated among state-owned enterprises, particularly those in industries that have significant overcapacity and deteriorating profitability (IMF 2015a). Financial distress among highly-leveraged entities could cause rising corporate defaults, and a sharper-than-expected

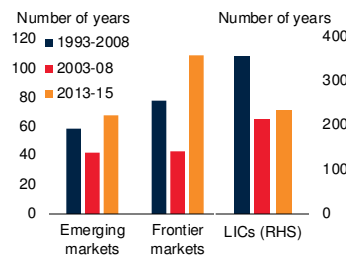
FIGURE 1.18 Catch-up of EMDE income to advanced economies

The materialization of downside risks to growth in EMDEs could setback the catch-up of EMDE income per capita toward advanced economy levels. The share of EMDEs where GDP per capita advanced relative to 2015 U.S. levels has already declined and the number of years needed to close the gap lengthened.

A. Share of EMDEs catching-up with U.S. GDP-per-capita levels



B. Years to catch-up with 2015 U.S. GDP per capita levels



Source: World Bank.

A. Real GDP per capita. Figure shows the share of EMDEs with the gap in GDP per capita with the United States narrowing from the previous year. Sample includes 114 EMDEs for which data are available from 1993 to 2015. Dotted line is the third order polynomial trend.

B. Real GDP per capita. Figure shows the number of years needed to catch-up with 2015 real per capita GDP level in the United States, assuming average growth rates over each period defined for each group. Excludes Qatar and Serbia due to data availability. LICs include 25 economies.

slowdown in investment. For now, policymakers have room to stem an undesirably sharp growth slowdown by loosening monetary and fiscal policy, but financial stability risks could render stimulus measures less effective over time. Renewed capital outflows could continue to erode reserve buffers.

A synchronous slowdown in major emerging markets could sharply set back global prospects, particularly if combined with rising global risk aversion and bouts of financial market volatility. For example, a 1 percentage point growth slowdown across the BRICS countries (Brazil, Russia, India, China, and South Africa) as a whole, combined with a 100 basis points increase in emerging market bond spreads, could result in a reduction of global growth of 0.9 to 1.2 percentage points after two years (World Bank 2016b). The effect on other emerging and frontier markets would be particularly pronounced, reducing growth by 1.3-1.5 percentage points over the same period.

Potential spillovers associated with weakening prospects in major EMDEs could be larger than previously estimated (World Bank 2016b).

Emerging markets where prospects have deteriorated the most over the last two years had previously made a sizable contribution to global growth. In particular, BRICS countries accounted for about 40 percent of global growth from 2010 to 2015, up from about 10 percent during the 1990s. They together now account for more than one-fifth of global activity—as much as the United States, and more than the Euro Area.

Rising policy uncertainty

Sustained policy related and political uncertainties could significantly weigh on activity and investment decisions in both advanced economies and EMDEs (Figure 1.20). The debate surrounding the U.K. referendum on European Union membership has been accompanied by softening activity in the United Kingdom, lower confidence and pressure on the pound sterling. The economic losses associated with leaving the European Union have been estimated by the U.K. government to amount to 6 percent of GDP after two years in a scenario of severe financial disruption, and up to 9.5 percent of GDP after 15 years in the absence of a negotiated bilateral trade agreement with the European Union (H.M. Treasury 2016). The United Kingdom represents more than 15 percent of E.U.'s GDP, 25 percent of the E.U.'s financial services activity, and 30 percent of the E.U.'s stock market capitalization. The European Union, in turn, is a key export market and source of FDI for many EMDEs. International trade and financial market spillovers could be significant, particularly for countries in Europe and Central Asia and Sub-Saharan Africa (OECD 2016, World Bank 2015a). Financial market volatility around a decision to leave the European Union could lead to heightened global risk aversion, hampering already weak capital flows to EMDEs. A build-up of protectionist rhetoric during the U.S. general election, and concerns about the effectiveness of Abenomics in Japan, could also weigh on sentiment.

In large emerging markets, attention to policy-related economic uncertainty increased or remains elevated (Baker, Bloom, and Davis 2016). Across EMDEs, domestic policy uncertainty increased in 2015 as a result of elections or political unrest,

rising terrorist threats, and displacement of population. In Brazil, political uncertainty might delay the approval of key policy initiatives needed to regain investors' confidence. Counter-cyclical fiscal and monetary policies may be harder to implement when investors focus on rising uncertainty and the potential for political tensions to block structural reforms.

Persistent geopolitical risks

The terrorist attacks in Brussels in March 2016, following similar events in Paris in November 2015, have heightened security concerns. Experience from past terrorist attacks in major advanced economies suggests that isolated events are unlikely to have lasting economic consequences (World Bank 2016b). Repeated threats, however, could undermine confidence in an already-weak recovery and generate larger growth setbacks.

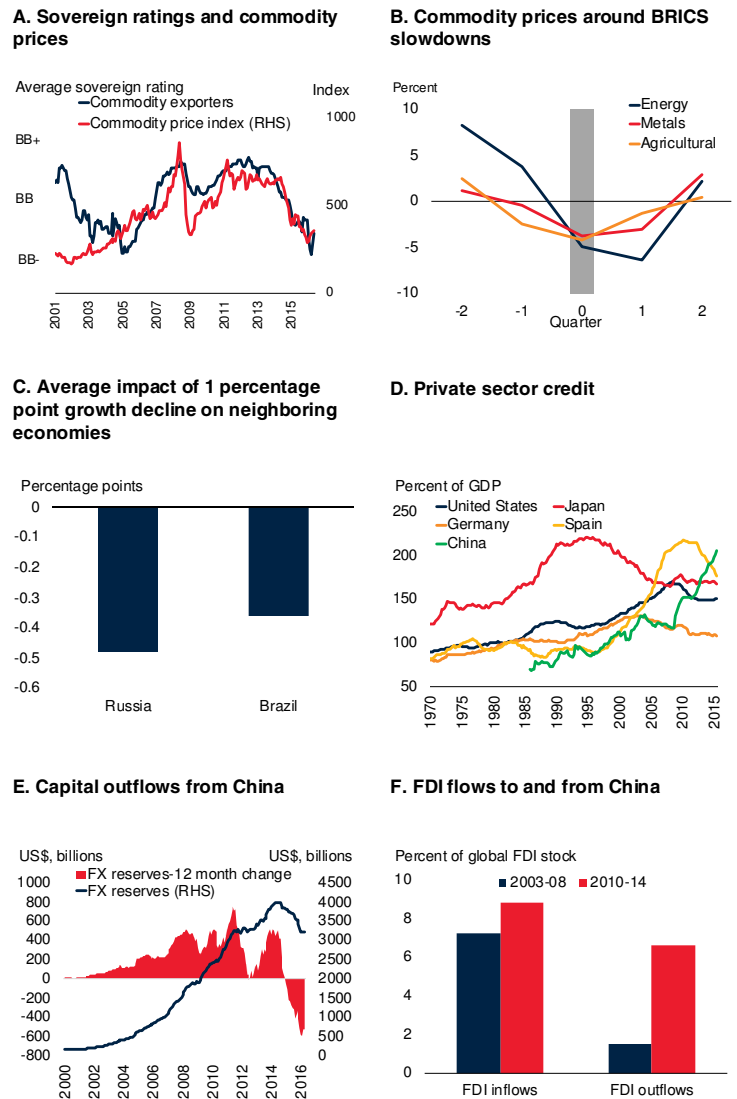
A flaring up of geopolitical risks in the Middle East is possible, as tensions have increased and non-conflict countries have been affected by terrorist activity (Egypt, Tunisia). Security concerns also remain prominent in some Sub-Saharan countries (Cameroon, Chad, Kenya, Mali, Niger, Nigeria) as well as in Europe and Central Asia (Armenia, Azerbaijan, Ukraine) and South Asia, where Afghanistan remains afflicted by domestic security and insurgency challenges. Waves of migration generated by fragile security situations could be a source of political tension in host countries (Adhikari 2013; Davenport, Moore, and Poe 2003; Melander and Öberg 2006).

Financial market fragility

An unusual degree of uncertainty surrounding the effectiveness of expansionary monetary policy measures in major economies could contribute to sudden adjustments in expectations and bouts of financial market volatility. In Europe and Japan, central banks have continued to implement unconventional policies, complementing expanded asset purchase programs with negative interest rate policies. Some of these measures have been met with mixed market reactions. In particular, negative interest rates have raised

FIGURE 1.19 Risks: commodity exporters and China

Commodity exporters remain exposed to risks of further growth and credit rating downgrades, with potential adverse trade and financial spillover effects for other EMDEs. In China, high corporate indebtedness in sectors with declining profitability heightens the risk of defaults, and of a sharper slowdown in growth and investment. Capital outflows could continue to erode reserve buffers in China, while a retrenchment of outward FDI could affect many EMDEs.

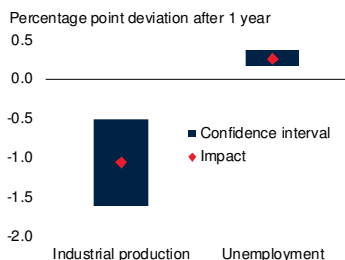


Sources: World Bank, Bank for International Settlements, Bloomberg, United Nations.
 A. Sample includes 44 EMDE commodity exporters. Unweighted average. Last observation is May 2016.
 B. Time 0 = 1998Q1, 2000Q4, 2003Q1, 2004Q4, 2006Q2, 2008Q4, 2011Q3. The events are seven slowdowns over the period 1997 to 2015.
 C. Based on estimates of a structural VAR. Average cumulative impulse response after two years of neighboring country's real GDP growth to a 1 percentage point decline in Russia's or Brazil's growth. For Russia, list of affected neighboring countries are Armenia, Kazakhstan, Romania, Slovak Republic, Turkey, Poland and Ukraine. For Brazil, they are 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. Last observation is 2015Q3.
 E. Last observation is April 2016.

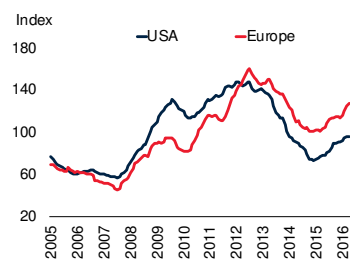
FIGURE 1.20 Geopolitical risks and policy uncertainty

Bouts of policy or geopolitical uncertainty could weigh on prospects. Among advanced economies, policy uncertainty has increased, and is particularly elevated in Europe, reflecting challenges associated with large flows of refugees, security concerns after the recent terrorist attacks, and the referendum on U.K.'s European Union membership. In large emerging markets, policy uncertainty increased in China and remains elevated in Russia, despite the recent decline. In a number of EMDEs, conflict and political unrest continue to affect confidence.

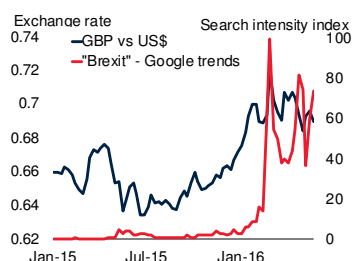
A. Impact of policy uncertainty



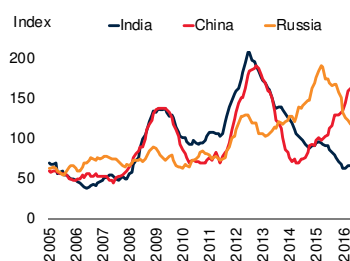
B. Policy uncertainty in the United States and Europe



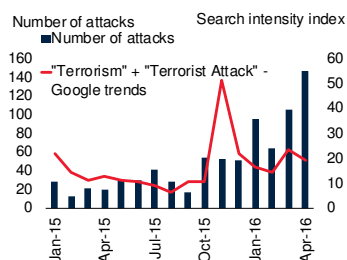
C. U.K. "Brexit" and Pound Sterling



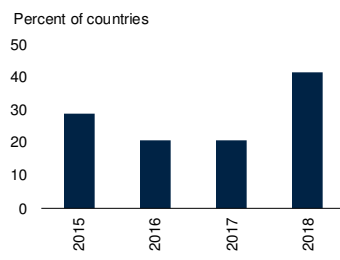
D. Policy uncertainty in large EMDEs



E. Terrorist attacks



F. Share of EM with presidential and parliamentary elections



Sources: World Bank, Bloom et al. (2015), Haver Analytics, Bloomberg, Wikipedia.

A. Estimates from Bloom et al. (2015) for 12 countries. Impulse response functions for industrial production and unemployment to a policy uncertainty innovation with 90 percent confidence bands.

B. Data are a 12-month moving average of the underlying indices. Last observation is April 2016

C. Last observation is May 21, 2016.

D. Data are a 12-month moving average of the underlying indices. Last observation is April 2016

E. Data do not include state-sponsored terrorist attacks or what are believed to be targeted assassination. Google Trends search for "Terrorism" and "Terrorist Attacks." Last observation is April 2016.

F. Sample includes 24 emerging market economies.

concerns about detrimental effects on banks' profitability and financial stability (Genay and Podjasek 2014, Hannoun 2015, World Bank 2015a, Cliffe 2016, BIS 2016). On such concerns, bank equity valuations dropped sharply in early 2016 (Figure 1.21). Uncertainty about banks'

earnings have been heightened by the expectation that negative rates may prevail for longer, squeezing interest margins if banks are not able to pass on negative rates to depositors. A prolonged period of very low, or negative, interest rates might eventually reduce the effectiveness of monetary policy and distort asset valuation in ways that could breed future financial turbulence (World Bank 2015a).

In the United States, the gap between policy interest rate expectations by market participants and members of the Federal Reserve Open Market Committee remains significant. Investors could abruptly revise their policy rate projections, and require increased inflation risk premia over the medium-term (World Bank 2016b, Abrahams et al. 2015). This could trigger a sudden increase in long-term interest rates and financial market volatility, affecting in particular riskier assets, including emerging market debt and currencies (Arteta et al. 2015).

In addition, divergent monetary policies between the United States, Europe, and Japan could contribute to further volatility in currency markets and lead to renewed upward pressure on the U.S. dollar, with significant repercussions for borrowing costs. The broad-based appreciation of the U.S. dollar since 2014 has already contributed to higher cost of debt refinancing and balance sheet pressures across EMDEs. Over the last two years, countries that have experienced relatively larger depreciations against the U.S. dollar have faced rising credit default risks, which have contributed to tighter credit conditions (Hofmann, Shim, and Shin 2016). Continued depreciation against the dollar might expose balance sheet vulnerabilities in emerging market banking sectors, particularly where the stock of non-performing loans is already elevated. Considering the inverse correlation between commodity prices and the dollar, this effect could be reinforced by a negative income effect for raw materials exporters (Druck, Magud, and Mariscal 2015). In emerging markets, heightened uncertainty could contribute to a greater sensitivity to economic news, and fragile liquidity conditions could amplify volatility in periods of market stress.

Stagnation in advanced economies

The causes and risks associated with a prolonged period of weak growth, low inflation, and low interest rates in advanced economies are a source of debate. The two interpretations put forward in the debate have starkly different policy implications (Kose and Terrones 2015).

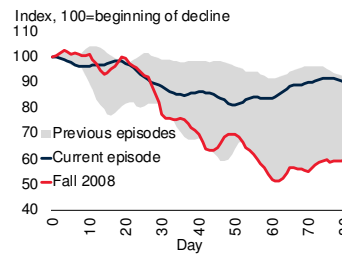
One view suggests that advanced economies still face the lasting consequences of the global financial crisis, with ongoing deleveraging pressures dampening investment and real interest rates. This process could be protracted, as private debt remains above pre-crisis levels in most advanced economies (Figure 1.22). But the deleveraging pressures could eventually subside, implying a return to higher growth than that extrapolated from recent performance (Lo and Rogoff 2015). In this interpretation, aggressive monetary policy should help the transition toward more balanced growth, eventually stabilizing output around potential, inflation around target, and real interest rates close to pre-crisis levels (Yellen 2015). This view implies a modest likelihood of long-term stagnation. In the presence of hysteresis in output and employment, a shortfall in aggregate demand could potentially inflict permanent damage to activity, reinforcing the need for aggressive monetary and fiscal policy in a downturn (Summers 2015).

An alternative view suggests that low growth mainly reflects deteriorating supply-side conditions, which might have become more apparent in the post-crisis period. The anticipation of lower future growth may lead to a decrease in current consumption and investment, hence depressing aggregate demand (Blanchard, L’Huillier, and Lorenzoni 2013). Adverse supply-side factors include increased demographic headwinds, which weigh on labor supply and could also contribute to a lower rate of return on capital and thus reduce productivity growth (Baker, Delong, and Krugman 2005; Rachel and Smith 2015). Declining returns on innovation also raise the possibility that the widespread slowdown in productivity growth over the last decade could persist for a considerable period (Gordon 2016). This second interpretation of sub

FIGURE 1.21 Financial market fragilities

Rising credit risks and very low or negative interest rates have contributed to renewed concerns about bank balance sheets in the Euro Area. A sizable gap in U.S. policy rate expectations between market participants and Fed policy makers could cause a sudden increase in bond yields and a retrenchment of capital flows from EMDEs. Fragile liquidity conditions could amplify volatility in periods of market stress.

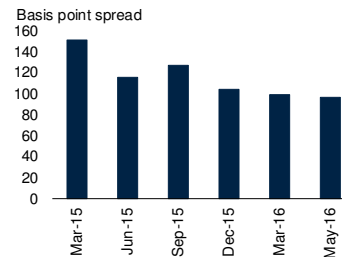
A. Bank equity prices around episodes of financial stress



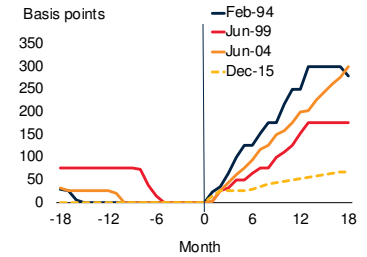
B. Interest margins of Euro Area banks



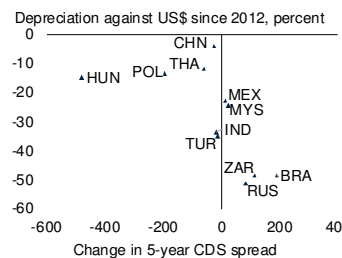
C. Gap between market and FOMC expectations for policy rates at end 2017



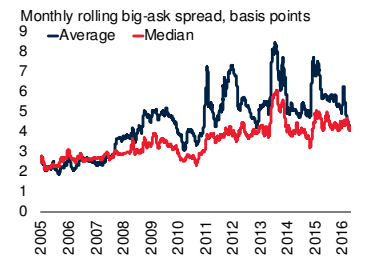
D. U.S. Federal Funds rates during tightening cycles



E. Currency pressures and credit default spreads in EMDEs



F. Liquidity conditions in EMDE sovereign bond markets

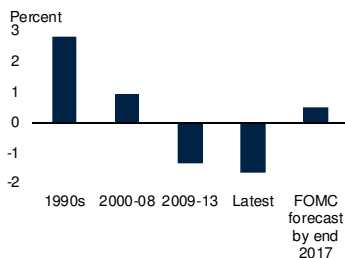


Sources: World Bank, Bloomberg, U.S. Federal Reserve Board, European Central Bank, Standard and Poor’s.
 A. Episodes are defined as any sustained period of a 15 percent or more decline in the Standard and Poor’s Global Financials Index, plotted from its local maximum. The 10 identified episodes begin on: 7/20/1998, 6/25/2001, 5/17/2002, 8/22/2002, 5/2/2008, 8/29/2008, 1/2/2009, 4/15/2010, 6/21/2011, and 12/4/2015.
 B. Net interest margin is proxied by net interest spread, without compensating for the fact that the earning assets and the borrowed funds may be different instruments and differ in volume. Last observation is May 25, 2016.
 C. FOMC is the Federal Reserve Open Market Committee. Median expectation of individual FOMC members. Policy rate expectations derived from forward swap rates. Last observation for FOMC expectations is March 2016. Last observation for market expectations is May 25, 2016.
 D. Basis points difference in federal funds rate levels from the start of the tightening cycle (0) in: February 1994, June 1999, June 2004, and December 2015. The forecast for the current tightening cycle is implied by overnight indexed swap rate forwards. Last observation is May 25, 2016.
 E. Last observation is May 25, 2016.
 F. Bid-ask is defined as the difference between the bid yield to maturity and the ask yield to maturity for the given country’s five-year government bonds. This spread can be seen as a measure of the cost of transacting in the sovereign debt markets for these countries. The sample begins with 7 EMDEs and ends with 15 EMDEs. Last observation is May 25, 2016.

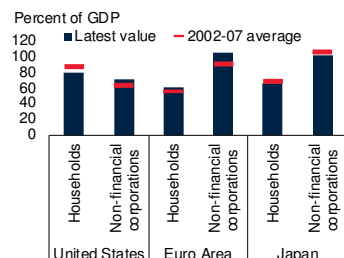
FIGURE 1.22 Stagnation in advanced economies

Persistently low interest rates are a symptom of a weak post-crisis recovery in advanced economies. The ongoing process of deleveraging could continue to cap aggregate demand in the short term. Demographic pressures and weak productivity growth will increasingly weigh on prospects over the medium term. A further decline in growth across advanced economies would have pronounced negative effects for EMDE growth.

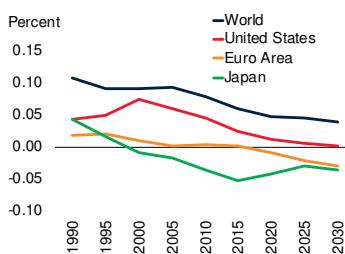
A. Real U.S. policy interest rates



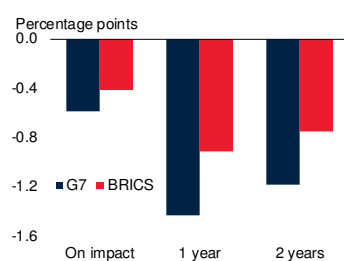
B. Private non-financial sector credit



C. Active age population growth



D. Impact of 1 percentage point decline in G7 and BRICS growth on other emerging market economies



Sources: World Bank, U.S. Federal Reserve Board, Bank for International Settlements, United Nations.

A. FOMC forecast is the median expectation of individual members of the FOMC in March 2016.

B. Latest value is 2015Q3.

D. Cumulative impulse responses of emerging market growth (excluding BRICS) to 1 percentage point decline in G7 and BRICS growth (World Bank 2016b).

-par growth in advanced economies puts greater emphasis on structural reforms and their likely benefits for aggregate demand, while pointing to the risk of excessively accommodative macroeconomic policies.

Persistent stagnation in major advanced economies could have broad-ranging consequences for EMDEs. Advanced economies constitute about 60 percent of global import demand and remain a substantial source of global financial spillovers. Continued disappointments in those economies could lead to significantly weaker outcomes for EMDEs, further setting back global trade and investment prospects.

Increased protectionism and slower globalization

Persistently low growth could intensify protectionist tendencies that would further weaken growth prospects. Although there is no clear evidence of an acceleration in trade restrictions in 2015, past trade barriers are being removed only slowly, and efforts to further reduce trade costs are facing increasing opposition (Figure 1.23; Evenett and Fritz 2015, WTO 2015). Since the global financial crisis, highly visible tariff barriers have not been erected on a large scale, but more subtle micro-restrictions such as local content requirements, public procurement discrimination against foreign firms, export taxes and quotas, and trade distorting subsidies have proliferated (Hufbauer and Jung 2016). New discriminatory measures were most frequently imposed on manufactured goods whose trade fell most rapidly. Emerging markets are frequently targeted by temporary trade barriers and import protection measures (Bown 2014). The foregone benefits of trade liberalization appear to be significant, particularly for emerging and developing countries. During the 1990s, GDP per capita grew more than three times faster in developing countries that lowered trade barriers than in those that did not (World Bank 2010).

In the post-crisis period, financial globalization also stalled, contributing to a growing “home bias” in investment, as gauged by the correlation between domestic investment and domestic savings, which should be low with high capital mobility. By 2007, home bias had fallen to historic lows, but it increased significantly during the crisis, and has thereafter remained near mid-1990s levels. This has mainly reflected a retrenchment of inter-bank lending across different jurisdictions (Forbes 2014). Shrinking cross-border bank flows may limit the propagation of global financial stress. But it may also reduce avenues for consumption smoothing during country-specific stress, and may weaken the efficiency of capital allocation and economic specialization (World Bank 2016b; Islamaj and Kose forthcoming).

Upside risk: Unrealized gains from low oil prices

The expected positive effects of falling oil prices on global activity has been surprisingly muted so far, but could still become more visible over time, as prices stabilize at a low level. This would represent an upside risk to current projections.

There are two main reasons why the benefits of lower oil prices to growth may yet materialize. First, the abrupt decline in oil prices has put severe strains on oil exporting countries, as investor confidence worsened and fiscal or monetary policies tightened (Figure 1.24; Baffes et al. 2015). While adjustments to the negative terms of trade shock will continue, the acute financial stress associated with sharply declining prices might diminish if some stability in oil prices is restored. Second, consumers across major oil importers have reacted to the positive terms of trade shock with caution, increasing both spending and precautionary savings. As uncertainties about growth prospects are resolved, a delayed boost to private consumption remains a possibility.

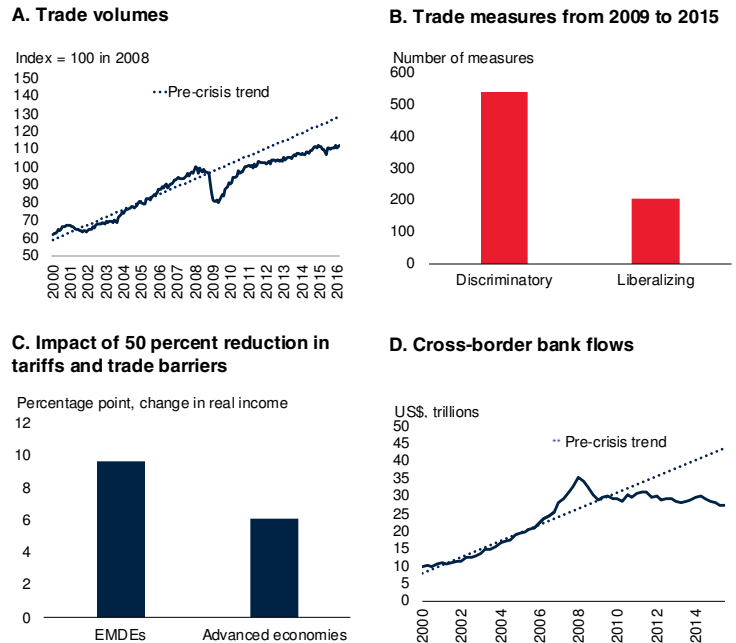
Policy challenges

Challenges in major economies

In advanced economies, monetary policy accommodation will be needed until economic slack has been absorbed and inflation moves back in line with policy objectives. However, policy interest rates are close to their lower bound, and unconventional measures might yield diminishing returns. Limited room for additional monetary policy accommodation means that, in the event of a further negative shock, fiscal stimulus would be appropriate for countries that have the fiscal space. Redirecting public spending toward infrastructure investment, and implementing growth-enhancing tax, product, and labor market reforms, could help raise income and restore fiscal and monetary policy space. In China, policymakers need to strike a balance between reducing high leverage and other financial vulnerabilities and promoting the reforms needed for sustainable and balanced medium-term growth.

FIGURE 1.23 Slower globalization and risk of protectionism

Past trade barriers are being removed only slowly, and efforts to further reduce trade costs are facing increasing opposition. The cost of new restrictions and the foregone benefits of trade liberalization can be significant, particularly for EMDEs. Cross-border banking flows have also diminished since the crisis, limiting the propagation of global financial stress, but reducing avenues for smoothing country-specific stress.



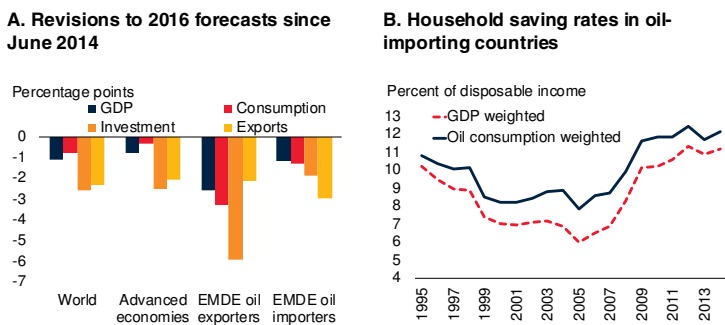
Sources: World Trade Organization, Bank for International Settlements, United Nations High Commissioner for Refugees, World Bank, International Monetary Fund, United Nations Commission on Trade and Development, CPB Netherlands Bureau for Economic Policy Analysis.
A. Pre-crisis trend is extrapolated from 2000-06 period. Last observation is March 2016.
B. Number of measures implemented through October 31, 2015.
C. Weighted averages taken using 2014 GDP in US\$. Estimates from World Bank (2010).
D. Bank external liabilities. Pre-crisis trend is extrapolated from 2000-06 period. Last observation is 2015Q3.

Monetary and financial policy in advanced economies

Monetary policies in major advanced economies should remain accommodative. In the United States, inflation and employment continue to converge towards the Federal Reserve's objectives, justifying a gradual withdrawal of stimulus. However, external risks and continued downward revisions to the level of policy interest rates expected to prevail over the medium term point to a very gradual tightening cycle ahead (Figure 1.25). This could leave limited space for policy accommodation during the next downturn. In Europe and Japan, negative interest rates and expanding asset purchase programs have been implemented, contributing to a record-high share

FIGURE 1.24 Unrealized gains from low oil prices

The speed of the decline in oil prices has put severe strains on major oil exporting countries, where domestic demand, particularly investment, has plummeted. Stress could wane as oil prices stabilize. In large oil importing countries, consumers have been increasing their spending cautiously, accumulating precautionary savings. Pent-up demand could support stronger growth if uncertainty diminishes.



Sources: World Bank, Organization for Economic Cooperation and Development, International Energy Agency.

A. Revisions to forecasts from June 2014 to June 2016 for GDP, consumption, investment, and export growth in 2016.

of government debt trading at negative yields. Large-scale unconventional interventions—quantitative easing, negative policy interest rates, and other credit easing measures—have helped improve borrowing conditions, and have provided needed support to demand (Draghi 2016; Engen, Laubach, and Reifschneider 2015). However, the benefit of these unconventional policies might diminish over time, and financial stability risks could emerge from prolonged use of such policies.

Banks in advanced economies have strengthened their capital base and liquidity buffers, but their profitability is generally low and they remain vulnerable to market pressures—particularly in the Euro Area, where an elevated stock of nonperforming loans warrants close supervision. Increased loss-absorbing capacities, reinforced counter-cyclical buffers, and improved macro-prudential supervision could enhance resilience, and help a better transmission of monetary policy accommodation to credit conditions and to the real economy (IMF 2016b).

Fiscal policy in advanced economies

Low inflation and weak growth have adversely affected debt dynamics in most advanced economies, despite past consolidation efforts. The average ratio of government debt to GDP remains above 100 percent and is expected to remain

broadly unchanged in coming years (Figure 1.26). Over the coming decade, slowing or shrinking population growth and rising dependency ratios will put pressure on fiscal revenues and social spending. Nevertheless, in the event of adverse shocks, the use of counter-cyclical measures to confront slowing growth would remain appropriate for a number of advanced economies, in view of the environment of persistently low interest rates and increasingly constrained monetary policy. Some countries (Canada, Germany, United States) retain fiscal room to maneuver (European Commission 2016, U.S. Congressional Budget Office 2016). Others (France, Ireland, Spain) have more limited space while some have exhausted it altogether (Greece, Portugal).⁴

Irrespective of the available space for counter-cyclical policy, a more growth-enhancing mix of spending and tax reforms is possible in virtually all countries. Public investment has been on a secular downward trend and suffered disproportionately from fiscal consolidation plans after 2010. The combination of low interest rates; positive returns on public investment; and possible crowding in of private investment in infrastructure, education, and research makes the case for a significant reorientation of public expenditure in that direction (Ball, De Long, and Summers 2014).

Structural policy in advanced economies

Supportive macroeconomic policies and structural reforms are mutually reinforcing and should be implemented in tandem to maximize their respective effects on growth (Bordon, Ebeke, and Shirono 2016). However, following an initial post-crisis uptick, structural reform efforts in advanced economies have stalled recently, including in countries facing important crisis legacies and where unemployment is high (Figure 1.27). In the current fragile environment, reforms that can bolster long-term growth while supporting aggregate demand in the short term should be

⁴Fiscal room is lacking particularly among economies where demand support is most needed. In the context of the Euro Area, this emphasizes the need for effective policy coordination and appropriate use of European financial instruments to support countries with more binding fiscal constraints (European Commission 2016; IMF 2016a).

more actively pursued. Such measures include filling public infrastructure gaps, reducing barriers to entry in protected services, freeing up fiscal space through entitlement reforms, facilitating labor mobility through housing and labor market reforms, and reducing skill mismatches and barriers to business entry.

Challenges in China

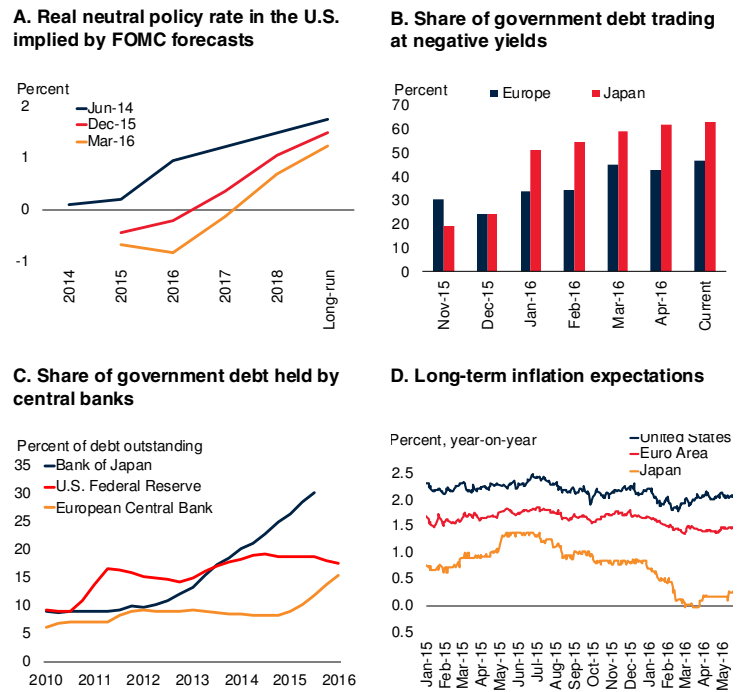
The key policy challenges in China are to ensure a gradual slowdown and sectoral rebalancing, and to reduce the financial vulnerabilities arising from high debt. The reallocation of resources associated with rebalancing creates risks of a sharper-than-expected slowdown in overall activity. The stepwise liberalization of financial and currency markets might be accompanied by bouts of investor uncertainty over prospects and policy direction. Eroding repayment capacity in highly leveraged and stagnating industrial sectors generates financial stability risks (IMF 2015b).

Monetary and financial policy. While China still has the policy buffers and tools to support growth, additional credit-based policy easing would further raise corporate debt, and possibly delay the unwinding of financial vulnerabilities (Figure 1.28). A focus on strengthening the financial sector via prudential measures would help buttress financial stability. Recent turmoil in domestic equity and currency markets suggests that accelerated financial market reforms could be accompanied by volatility. Clear communication of policy objectives and actions by the authorities will help reduce policy uncertainty and foster confidence.

Fiscal policy. Short-term fiscal stimulus measures to avoid a sharp slowdown in growth remain adequate, provided they are undertaken within the overall medium-term fiscal framework (World Bank 2016a). Going forward, the planned three-pronged approach will help reduce fiscal risks. First, the prospect of persistent revenue weakness may warrant accelerated tax reforms. The extension of VAT to remaining services was implemented in May 2016 (The State Council of the People’s Republic of China 2016a), and the government is planning to revise tax-sharing

FIGURE 1.25 Monetary policy in advanced economies

The trajectory of future policy rates continued to be revised down by the Federal Reserve, reflecting a number of factors including a reassessment of the level of interest rates expected to prevail over the long run. In Europe and Japan, negative interest rates and expanding asset purchase programs have led to a rising share of government debt traded at negative yields and held by central banks. Despite the extraordinary monetary policy easing, inflation expectations generally remain below central banks inflation objectives.



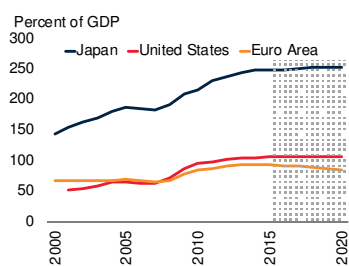
Sources: World Bank, Bloomberg, U.S. Federal Reserve Board, European Central Bank, JP Morgan. A. Real neutral policy rates are derived from the Taylor Rule: $R = RR^* + p + 0.5(p - 2) - (U - U^*)$, where R denotes the Taylor Rule federal funds rate, RR^* is the estimated value of the real natural rate of interest, p is expected inflation, U is the unemployment rate, and U^* is the equilibrium unemployment rate (longer-run FOMC forecast of the unemployment rate in this case). B. Europe aggregate includes bonds from Belgium, Denmark, France, Germany, Netherlands, Spain, and Sweden. Current data reflects May 25, 2016. C. Latest observation is 2015Q4 for Bank of Japan, 2015Q1 for U.S. Federal Reserve and the European Central Bank. D. Inflation expectations are the market implied five-year forward five-year level of inflation compensation, derived from the inflation swaps market in the respective countries. Last observation is May 25, 2016.

mechanisms with local governments. Second, a shift in fiscal expenditure from public infrastructure investment toward education, health, and social assistance can help with economic rebalancing, and reform of the social security system should boost its sustainability (Li and Lin 2016). Third, the pace of the government-related debt buildup may be slowed through the implementation of the new budget law and the limitation of the use of local government financing vehicles (LGFV). Efforts to restructure LGFV debt to local government bonds (World Bank 2015d) and to better align local revenues with expenditures should also continue.

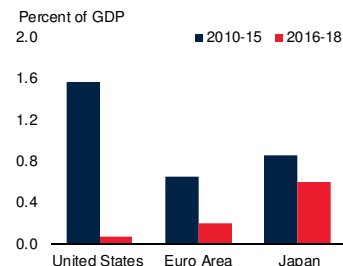
FIGURE 1.26 Fiscal policy in advanced economies

Weak growth and low inflation have adversely affected debt dynamics in advanced economies, despite past consolidation efforts. Over the coming decades, slowing population growth and rising dependency ratios will put pressure on fiscal revenues and social spending. The combination of low interest rates and well-planned public infrastructure spending could support growth.

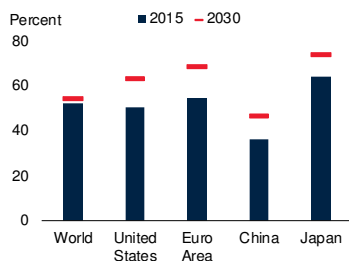
A. Public debt



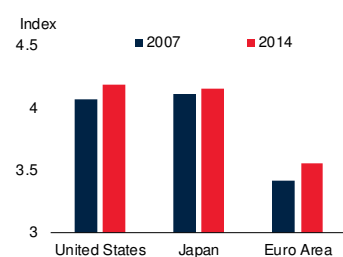
B. Change in structural fiscal balance



C. Share of dependent population



D. Infrastructural Quality Index



Sources: World Bank, International Monetary Fund, United Nations.

D. Quality of trade and transport-related infrastructure. Survey conducted by the World Bank in partnership with academic and international institutions and private companies and individuals engaged in international logistics. Respondents evaluate eight markets on six core dimensions on a scale from 1 (lowest quality) to 5 (highest quality). The markets are chosen based on the most important export and import markets of the respondent's country, random selection, and, for landlocked countries, neighboring countries that connect them with international markets.

Structural policy. In 2013, the government announced a comprehensive structural reform agenda to support a sustainable long-term growth path. Subsequent policy statements, including the 13th Five-Year plan adopted in 2016, have reaffirmed the commitment to the main tenets of the agenda—increased market mechanisms and greater transparency to encourage reallocation of credit, land and labor toward more productive sectors.⁵ Cautious progress continues to be made in implementing the planned reforms. For instance, the government envisages opening sectors dominated by state-owned enterprises (SOEs) to competition, leveling the playing field for SOEs, and encouraging the exit of inefficient

⁵The 13th Five-Year Plan for 2016-2020 envisages supply-side reforms to encourage growth, restructure state-owned enterprises, to reduce overcapacity in key sectors such as steel and coal, to create new urban jobs, and to liberalize interest rates.

SOEs (Leutert 2016; Peng, Shi and Xu 2016). Some recent reforms aim to increase market entry for private and international investors.⁶ Also, in 2016, the state will further deepen the reform of key industries, such as electricity, and promote the mixed-ownership reform of SOEs (The State Council of PRC 2016b). Barriers to production have also been lowered to stimulate private sector activity, particularly through tax reforms.⁷ A series of reforms have been implemented to cut red tape and make operation easier for private companies. This resulted in a boom in the registration of private firms: in 2015, 3.6 million firms were created, almost double the number in 2013. Going forward, better corporate governance, enhanced auditing and accounting standards, and stronger regulatory frameworks will encourage a more efficient reallocation of resources. Delays in implementing the planned reform agenda could set back growth, worsen the debt overhang, and heighten risks to the financial system (Prasad 2016, Ross 2016).

Challenges in emerging and developing economies

Many EMDEs face reduced monetary policy space to support growth, with substantial variation between commodity importers and commodity exporters. Commodity exporters are generally struggling to maintain an accommodative monetary policy stance amid weakening currencies and inflationary pressures. In contrast, declining inflation is providing central banks in some commodity importers scope to ease. Similarly, fiscal policy challenges vary across commodity importers and exporters; however, in most countries the scope for expansionary fiscal policy remains limited. Structural policies are needed to lift growth prospects and rebuild policy buffers. In particular, investment in infrastructure and human capital would boost long-term growth, although

⁶For example, the People's Bank of China issued new rules to make it easier for international investors to access China's interbank bond market, which was a step toward opening its capital markets and making the renminbi an international currency. The oil and gas industry has seen moderate market-access openings for private capital (and foreign investors through joint ventures) in exploration as well as crude oil processing (Klein and Weill 2016).

⁷Preliminary evidence from pilot areas suggests that the transition to VAT has led to a decrease in the tax burden of small- and medium-sized enterprises (Lam and Wingender 2015).

additional spending to that end may be challenging amid eroding fiscal buffers. Efforts to pursue diversification would improve resilience to large commodity price fluctuations.

Monetary and financial policy

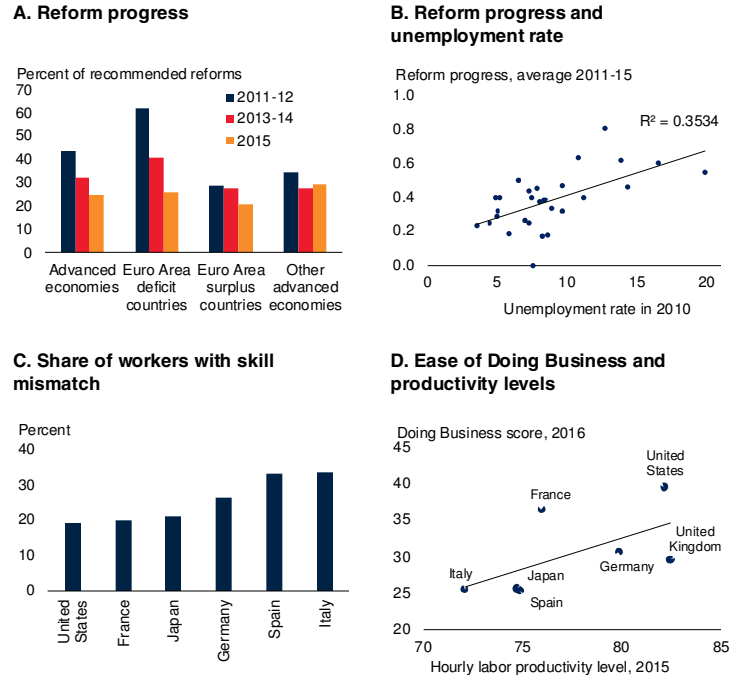
Monetary policy has been diverging between commodity importers and exporters, but most are struggling to maintain a policy stance that allows for counter-cyclical action. In commodity importing EMDEs, low commodity prices are putting downward pressure on inflation (Figure 1.29), as well as relieving pressure on the balance of payments (Bangladesh, India, Turkey). This has provided some scope for more accommodative monetary policy, if needed (Baffes et al. 2015). However, central banks face the risk that disinflation might be transient, once the pass-through from lower commodity prices has dissipated.

In commodity exporting EMDEs, numerous national currencies have come under intermittent pressure, depreciating sharply in early 2016 before recouping some of their losses. Currency pressures have been accompanied by rising inflation, growing debt service obligations of corporates, and weak capital inflows, despite the recent rebound. Several central banks (Angola, Azerbaijan, Colombia, Nigeria, South Africa) responded by raising interest rates in early 2016. Nevertheless, inflation remains well above target in many commodity exporters, while policy rates seem to be below levels that would stabilize inflation. While high interest rates might relieve some of the inflation and depreciation pressures, they further weigh on activity. Thus, policymakers in these countries face difficult trade-offs between monetary accommodation to support growth on the one hand, and tightening to maintain stable inflation, ease currency and capital account pressures, and boost investor confidence on the other. Going forward, the adoption of monetary policy frameworks that enhance policy credibility could help anchor inflation expectations (Svensson 2010; Carneiro et al. 2008).

Macroprudential policies can contain financial vulnerabilities arising from the sharp rise in

FIGURE 1.27 Structural reforms in advanced economies

A post-crisis uptick in structural reform implementation, particularly in economies more severely affected by the crisis, has stalled recently. Reducing skill mismatches and barriers to business entry raises the promise of significant growth and productivity windfalls.



Sources: World Bank; Organisation for Economic Cooperation and Development.
 A. The reform progress indicator is based on a scoring system in which each priority set in the previous edition of the OECD's *Going for Growth* takes a value of one if "significant" action is taken the following year, and zero if not. Euro Area deficit countries are: Estonia, France, Greece, Italy, Ireland, Portugal, the Slovak Republic, Slovenia and Spain.
 C. Percentage of workers either over or under-skilled in 2012. Definition of skill mismatch as in Pellizzari and Fichen (2013).
 D. Ease of Doing Business score is relative to the best performance observed in each of the indicators across all economies in the Doing Business survey.

corporate indebtedness in both commodity exporters and importers (Claessens 2014). Macroprudential measures can enforce greater capital and liquidity buffers in financial institutions exposed to leveraged corporates. Strengthened governance practices in state-owned enterprises can help contain the further buildup of corporate debt. Reforms to solvency and bankruptcy laws, such as the one recently enacted in India, could help a more rapid and orderly resolution of distressed companies.

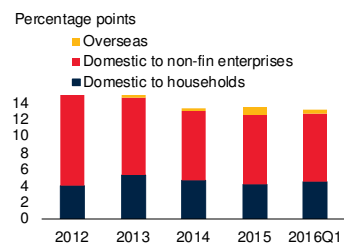
Fiscal policy

Commodity importers and exporters are facing increasingly divergent fiscal policy challenges but both groups have limited fiscal buffers for accommodative fiscal policy (IMF 2016c). The lack of fiscal space—high debt, wide deficits, and

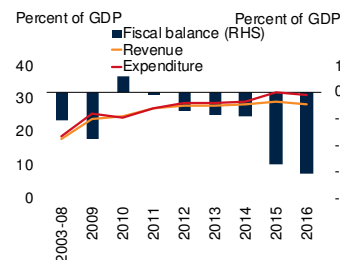
FIGURE 1.28 China's macroeconomic and structural policies

While China still has policy buffers and tools to support growth, additional credit-based policy easing would further raise corporate debt or delay the unwinding of financial vulnerabilities. Short-term counter-cyclical fiscal measures have helped avoid a sharper slowdown in growth. Better corporate governance, enhanced auditing and accounting standards, and stronger regulatory frameworks will encourage a more efficient reallocation of resources.

A. Contributions to loan growth



B. General government's revenue, expenditure, and structural balance



Sources: World Bank, Haver Analytics, World Economic Forum, Heritage Foundation, Transparency International.

A. Last observation is 2016 Q1. Overseas loans are loans extended by nonresidents to Chinese residents.

unsustainable fiscal paths—undermines the scope for fiscal policy to stimulate the economy (World Bank 2015c). In particular, the erosion of fiscal space in commodity exporters has resulted in much smaller fiscal multipliers relative to commodity exporters (Figure 1.30).

For commodity importing EMDEs, smaller outlays on fuel subsidies have reduced fiscal pressures, though consistent implementation remains a challenge (Kojima 2016). However, given that many were starting from a position of higher government debt and wider deficits, the scope for expansionary fiscal policy is constrained. Unless severe downside risks materialize, the priority in many countries is therefore likely to be the rebuilding of policy buffers and the implementation of fiscal reforms. Efforts could include actions to broaden tax bases and improve the efficiency and transparency of tax collection, as well as measures to improve in the quality of public spending consistent with medium-term expenditure frameworks.

Many commodity exporting EMDEs are facing severe revenue shortfalls. While starting from a position of stronger buffers (low public debt, substantial sovereign wealth funds, and budget surpluses), these buffers are swiftly eroding as

commodity prices fail to rebound. Policymakers are recognizing the need for substantial adjustment, especially in oil exporters that are facing ratings downgrades or negative outlooks (Hanusch and Vaaler 2015). Some countries have room to borrow or draw down the fiscal savings previously accumulated, while others might need to frontload fiscal adjustments amid depleted buffers and rising sovereign risk premia. The need to reduce spending is also reflected in widespread reforms of fuel subsidies among major oil producers (Mottaghi 2016). Resource-rich countries that heavily depend on commodity based revenues need to improve their non-resource tax system, broaden their tax base, and strengthen their tax administration.

Several institutional arrangements can facilitate the use of expansionary policy in commodity exporting EMDEs (Budina et al. 2012, World Bank 2015c). Many commodity exporting countries operate sovereign wealth funds which have helped reduce pro-cyclicality of fiscal policy (Bleaney and Halland 2016, World Bank 2016d). However, their current fiscal pressures suggest that the rules governing these funds could be strengthened to ensure greater counter-cyclicality in the presence of temporary shocks. Chile has been cited as an example of a success in insulating commodity revenues from political considerations in its practices related to copper mining (World Bank 2015c). Stronger fiscal rules, to set and govern procedures on revenues and spending over a multi-year horizon would help establish fiscal sustainability in commodity exporting EMDEs.

Structural policy

While expansionary macroeconomic policies are useful in narrowing negative output gaps, they do not ensure higher potential growth. Structural policies and reforms are needed to lift medium- and long-term growth, reduce vulnerabilities, and signal to investors that the authorities are committed to strengthening long-term growth prospects. If adequately targeted and implemented, they can also support short-term aggregate demand. Efforts to invest in infrastructure, human capital, and productivity enhancing new technologies, as well as actions to

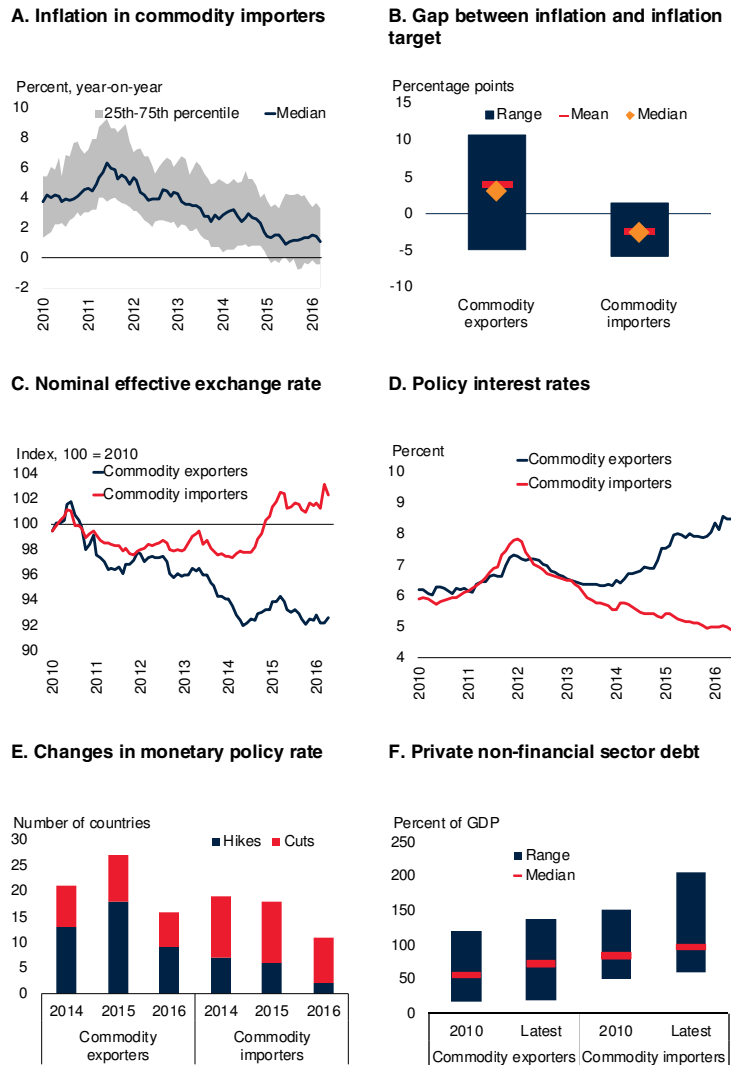
pursue greater diversification and foster trade, can lay the foundation for stronger and more equitable future growth. Such efforts include well-designed government spending (which can also provide stimulus in the short run), as well as policies to reduce the cost of doing business and attract foreign investment.

Infrastructure investment. The ongoing weakness in investment across EMDEs highlights the need to close infrastructure gaps (Figure 1.31). Closing these gaps could help ease constraints that deter capital formation and reduce bottlenecks that impede trade (Kohli and Basil 2011, Bourguignon and Pleskovic 2008, Calderon and Serven 2004). However, in the current environment of diminishing fiscal space, the financing of infrastructure investment is an increasing challenge, and attempts to close infrastructure gaps have occasionally led to widening deficits and increasing debt levels, particularly in low-income countries. A thorough expenditure review may reveal current expenditures that can be more productively reallocated towards infrastructure investment targeted to meet well-identified needs (IMF 2016c). Fostering public-private partnerships and creating incentives for the private sector, such as institutional investors, to provide longer maturity investment in investable infrastructure projects (toll roads, power generation and supply, water) could help ease budgetary pressures (World Bank, 2015e). Public infrastructure investment could be complemented by renewed efforts to attract foreign direct investment. As long as it is carefully managed, FDI can bring productivity enhancing technology, knowledge transfer, and better jobs (Echandi, Krajcovicova and Qiang 2015).

Investment in human capital. Improved education and skills training can facilitate reallocation of labor into the most productive sectors, boosting productivity and long-term growth, and contributing to economic diversification (de la Torre et al. 2015). In many EMDEs, government spending on education is well below that in advanced economies, and international testing outcomes are weak. Even within existing resource envelopes, better quality education and closer alignment with employers’

FIGURE 1.29 Monetary policy in EMDEs

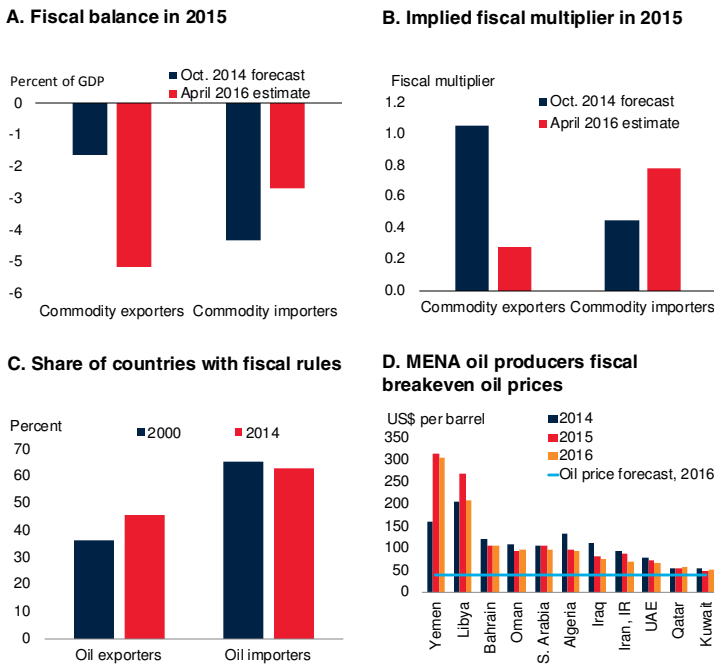
The fall in commodity prices has helped lower inflationary pressures in commodity importers, providing some scope for monetary policy accommodation. For commodity exporters, exchange rate depreciations have contributed to keeping inflation above target, and have been met with pro-cyclical monetary tightening in some cases. Macroprudential policies could help manage vulnerabilities associated with elevated private sector debt.



Sources: Haver Analytics, World Bank, Bank for International Settlements, Consensus Economics, Central Bank Rates, International Monetary Fund.
 A. Last observation is March 2016. Sample includes 56 EMDE commodity importers.
 B. Figure shows data for all 22 EMDEs with formal or informal inflation target and with a gap between actual inflation and inflation target of more than 1.5 percentage points; excludes Ukraine, where inflation of 41 percent as of January 2016 was 32 percentage points above the target rate.
 C. Last observation is April 2016. Simple average. Sample includes 42 commodity exporters and 25 commodity importers.
 D. Last observation is May 2016. Simple average. Sample includes 29 commodity exporters and 21 commodity importers.
 E. Number of countries adjusting rates at least once. The data for 2014 cover 21 commodity exporters and 19 commodity importers. The data for 2015 cover 27 commodity exporters and 18 commodity importers. The data for 2016 cover 13 commodity exporters and 9 commodity importers. Last observation is may 25, 2016.
 F. Latest observation is 2015Q3. Commodity exporters include Argentina, Brazil, Indonesia, Malaysia, Russia, Saudi Arabia, and South Africa. Commodity importers include China, Hungary, India, Poland, Thailand, and Turkey.

FIGURE 1.30 Fiscal policy in EMDEs

Counter-cyclical fiscal policy has been constrained by a decline in fiscal space. Commodity exporting EMDEs, especially oil exporters, have experienced rising fiscal deficits. Measures to improve fiscal buffers include establishing fiscal rules that encourage surpluses during boom years.



Sources: World Bank, International Monetary Fund.

A. Oct. 2014 forecast from the October 2014 *World Economic Outlook*. April 2016 estimate from the April 2016 *World Economic Outlook*.

B. Based on estimates from an Interactive Panel VAR model where fiscal multipliers depend on fiscal balances (World Bank 2015c). Bars represent the fiscal multiplier at the two-year horizon implied by the level of fiscal balances shown in A.

C. The data for 2000 cover 12 oil exporters and 88 oil importers, while the data for 2014 cover 15 oil exporters and 85 oil importers.

D. Fiscal breakeven prices are oil prices associated with balanced budget.

needs can remove skill mismatches that contribute to underemployment (Sondergaard and Murthi 2012). Despite some narrowing, gender gaps in school enrollment persist in many EMDEs. Efforts targeted at removing these gaps could simultaneously make growth more equitable and make available a new source of better-skilled labor supply amid population aging (World Bank 2012). Such initiatives are especially critical in late - and post-demographic-dividend countries where the share of the working age population has peaked and is now falling (World Bank 2015b).

Diversification. Amid persistently depressed commodity prices, diminishing the over-dependence on the production and export of particular commodities is a major challenge in resource-based economies. Diversification would also help alleviate the over-reliance on volatile

commodity-based revenues. Encouraging high-value added activities, promoting exports from non-resource intensive sectors, and bolstering education and worker training to boost private-sector employment are important steps toward economic diversification (Gill et al. 2014). Other policy actions include improvements of the business climate, infrastructure, and trade logistics to facilitate the entry of young, efficient domestic and foreign firms in the non-resource-based sector; and encouraging labor flows from traditional, mostly nontradable, to modern parts of the economy (Jaud and Freund 2015; Hausmann, Hwang, and Rodrik 2007; McMillan, Rodrik, and Verduzco-Gallo 2014; IMF 2016d). The successful diversification experience of some oil exporters (Malaysia, Mexico) points to the importance of technological upgrading for increased competitiveness (Callen et al. 2014).

Trade liberalization. In a context of subdued global trade, it is critical for both advanced economies and EMDEs to resist protectionism and take additional steps to reduce harmful trade barriers. This is particularly important given the potential for increasing trade among EMDEs. The empirical literature suggests that trade liberalization generally has positive effects on growth and poverty alleviation (Kis-Katos and Sparrow 2015; McCaig, 2011; Viet 2014; Winters, McCulloch, and McKay 2004; Winters and Martuscelli 2014; Zhu et al. 2016).⁸ A renewed commitment to trade liberalization should help promote production efficiency, exploitation of economies of scales, technology transfer, and competition (OECD, ILO, World Bank, and WTO 2010). In particular, the resilience of services trade and the available room for further liberalization imply significant growth opportunities for EMDEs (Mattoo, Rathindran, and Subramanian 2006). Additional gains from service trade liberalization for emerging and developing economies include rising FDI and transfers of technology and skills (Hodge 2002). More generally, the pursuit of comprehensive

⁸However, empirical evidence on the impact of trade liberalization on income inequality is more ambiguous (Lederman 2013; Goldberg and Pavcnik 2007; Harrison, McLaren, and McMillan 2011), suggesting that additional steps to ensure an adequate distribution of the gains from trade are needed.

regional trade agreements, such as the Trans-Pacific Partnership, is a concrete policy step that could potentially imply substantial economic benefits for EMDEs, and foster other domestic reforms (World Bank 2016b, Hoekman and Javorcik 2006, Baccini and Urpelainen 2014a,b).⁹ Given the expected net gains from these trade agreements, efforts should be made to identify and support individuals who can be adversely affected (Hornok and Koren 2016, Petri and Plummer 2016).

Poverty alleviation. These policy challenges come in a context where the indirect impact of the sharp growth slowdown in energy- and metal-exporting EMDEs may outweigh the direct benefits from lower consumer prices due to depressed commodity prices. The commodity price slide since 2010 has affected a wide range of EMDEs: 62 percent of EMDEs and 73 percent of LICs are commodity exporters. Commodity exporting economies are especially prevalent in Sub-Saharan Africa and Latin America and the Caribbean (Figure 1.32) whereas in South Asia, for example, only two countries (Bhutan and Sri Lanka) are commodity exporters. Although commodity exporting EMDEs account for less than a third of the global population, they are home to more than half of the global poor. Growth remains the most important source of poverty reduction. For example, almost two-thirds of the cross-country variation in incomes of the poorest 20 percent of the population is due to growth in average incomes (Dollar, Kleineberg, and Kraay 2013). Thus, the pronounced deceleration in commodity exporting EMDEs, if sustained, represents a notable challenge to the objective of reducing extreme poverty to below 3 percent by 2030 (World Bank 2015c). This underpins the critical role of growth-enhancing policies and structural reforms—and of appropriate pro-poor safety nets.

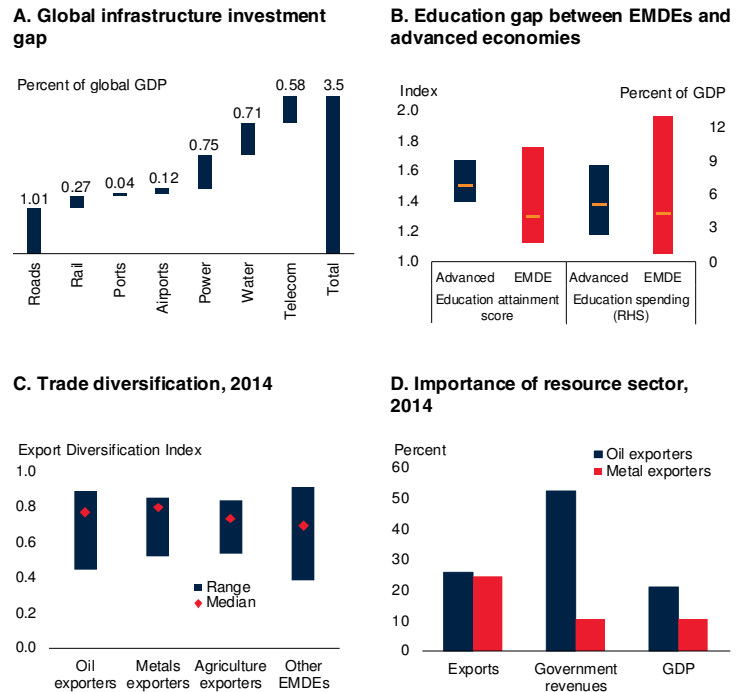
International policy coordination

In an environment of sluggish growth, reduced policy buffers, and rising risks, there is scope for international policy cooperation and coordination

⁹Other potentially beneficial integration initiatives include the ASEAN Economic Community and the Regional Comprehensive Economic Partnership.

FIGURE 1.31 Structural reforms in EMDEs

Infrastructure investment gaps in EMDEs are sizable. In many EMDEs, government spending on education is well below that in advanced economies, international testing outcomes are weak, and education enrollment gender gaps are large. Many EMDEs are overly dependent on commodity exports. Structural reforms to boost infrastructure and human capital and to pursue greater economic diversification are key to support EMDE growth.



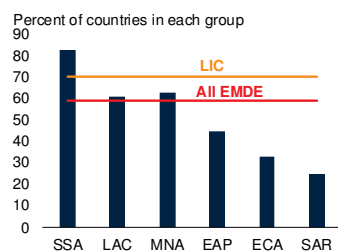
Sources: World Bank, International Monetary Fund, Organisation for Economic Cooperation and Development, McKinsey Global Institute.
 A. This depicts global investment in infrastructure (share of GDP) required over 2015-30, as projected by McKinsey Global Institute (2015).
 B. Education gender gap index defined as the ratio of girls to boys in primary and second school enrolment rates. A higher index denotes a narrower gap between girls' and boys' educational enrolment. Educational score is unweighted country average of PISA scores for math. A higher score indicates higher average test performance. Education spending indicates government spending on education in percent of GDP. The orange markers are the median of each subgrouping.
 C. The Export Diversification Index (DX) for a country is defined as: $DX_j = (\sum h_{ij} - h_j) / 2$ where h_{ij} is the share of commodity i in the total exports of country j , and h_j is the share of the commodity in world exports. A higher index denotes lower diversification.
 D. Sample includes Algeria, Angola, Azerbaijan, Bahrain, Colombia, Ecuador, Egypt, Gabon, Ghana, Indonesia, Islamic Rep. of Iran, Iraq, Kazakhstan, Kuwait, Libya, Malaysia, Nigeria, Oman, Qatar, Russia, Saudi Arabia, Turkmenistan, Uzbekistan, United Arab Emirates, and Venezuela, RB.

to respond to adverse shocks. This is particularly important in a context of limited policy space that limit individual countries' ability to invest in infrastructure and human capital. In the short term, concerted actions could include increased fiscal spending in countries that have fiscal space to boost global aggregate demand (Furman and Shambaugh 2016). They could also include strengthened international safety nets for the most fragile countries—particularly those with elevated poverty rates—that are vulnerable to additional growth setbacks or financial stress.

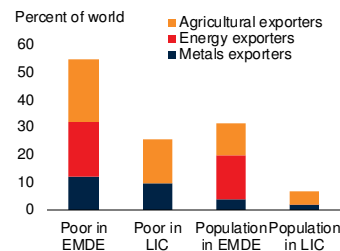
FIGURE 1.32 Poverty in commodity exporting countries

Almost two-thirds of EMDEs—especially LIC countries and countries in Sub-Saharan Africa, and Latin America and the Caribbean—are commodity-exporters. Although commodity exporting EMDEs account for less than a third of the global population, they are home to more than half the global poor, with commodity exporting LICs accounting for a significant share.

A. Share of commodity exporting countries among EMDEs



B. Share of world population and world poor living in commodity exporting EMDEs



Sources: World Bank PovcalNet, United Nations, World Bank (2015c, 2016b).

A. Sample includes 87 energy, metals, and agricultural commodity exporting EMDEs. Commodity exporters are countries for which commodity exports account for at least 30 percent of exports or individual commodities account for at least 10 percent of exports.

B. Latest available data for the number of poor (typically 2012-2013); data for 2015 for population. World Bank definition of LICs.

In the medium term, policy coordination could include the mobilization of pooled resources—for example, through international financial institutions—to catalyze additional investment in infrastructure and human capital, and the decisive support of free trade of goods and services. In a context of extremely low global interest rates (and, in some cases, negative yields), which limits global borrowing costs, multilateral organizations could have an important role to play in the coordination and financing of infrastructure and human capital

investment, especially in EMDEs with narrow fiscal space and deteriorating creditworthiness.

Policy makers representing the G20 countries have recognized that the weak global growth environment represents a shared challenge. They have repeatedly affirmed their commitment to inclusive and sustainable growth-enhancing policies—to be implemented in a cooperative manner (G20, 2016). This does not constitute the type of urgent “internationally coordinated action” seen at the height of the global financial crisis, but it does communicate a fundamental message that each country should do its share to support global growth, and that coordination can support improved outcomes (Frankel 2015). That said, since countries are at different stages in their business cycles, the appropriate policies to lift growth will vary—and, as in the past, the challenge lies in the effective implementation of these policies at the national level.

The historically high number of refugees suggests the need for a more coordinated response. While large inflows of refugees are creating significant challenges in Europe, host countries in Africa and the Middle East are shouldering a heavy burden (Aiyar et al. 2016). Supporting the welfare of refugees constitutes a global public good. A more effective development response will require innovative approaches and close coordination between humanitarian, development, and global partners, including governments.

ANNEX TABLE 1 List of emerging market and developing economies¹

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

1 Emerging Market and Developing Economies (EMDEs) includes all those that are not classified as advanced economies. Advanced economies include Australia; Austria; Belgium; Canada; Cyprus; Czech Republic; Denmark; Estonia; Finland; France; Germany; Greece; Hong Kong SAR, China; Iceland; Ireland; Israel; Italy; Japan; Korea; Latvia; Lithuania; Luxembourg; Malta; Netherlands; New Zealand; Norway; Portugal; San Marino; Singapore; Slovak Republic; Slovenia; Spain; Sweden; Switzerland; United Kingdom; and 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 was not available, judgment was used. Energy exporters are denoted by an asterisk. 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 EMDE economies that are not classified as commodity exporters.

References

- Abrahams, M., T. Adrian, R. K. Crump, and E. Moench. 2015. "Decomposing Real and Nominal Yield Curves." Federal Reserve Bank of New York Staff Reports No. 570, Federal Reserve Bank of New York.
- Adhikari, P. 2013. "Conflict-Induced Displacement, Understanding the Causes of Flight." *American Journal of Political Science* 57 (1): 82–89.
- Ahn, J., E. Dabla-Norris, R. Duval, B. Hu, and L. Njie. 2016. "Reassessing the Productivity Gains from Trade Liberalization." IMF Working Paper 16/77, International Monetary Fund, Washington, DC.
- Aiyar, S., B. Barkbu, N. Batini, H. Berger, E. Detragiache, A. Dizioli, C. Ebeke, et al. 2016. "The Refugee Surge in Europe: Economic Challenges." IMF Staff Discussion Note SDN/16/02, International Monetary Fund, Washington, DC.
- Anderson, J., I. Borchert, A. Mattoo, and Y. Yotov. 2015. "Dark Costs, Missing Data: Shedding Some Light on Services Trade." NBER Working Paper 21546, National Bureau of Economic Research.
- Arteta, C., A. Kose, F. Ohnsorge, and M. Stocker. 2015. "The Coming U.S. Interest Rate Tightening Cycle: Smooth Sailing or Stormy Waters?" Policy Research Note No. 2, World Bank, Washington, DC.
- Baccini, L., and J. Urpelainen. 2014a. "Before Ratification: Understanding the Timing of International Treaty Effects on Domestic Policies." *International Studies Quarterly* 58 (1): 29–43.
- _____. 2014b. "International Institutions and Domestic Politics: Can Preferential Trading Agreements Help Leaders Promote Economic Reform?" *The Journal of Politics* 76 (1): 195–214.
- Bachmair, F. 2016. "Contingent Liabilities Risk Management: A Credit Risk Analysis Framework for Sovereign Guarantees and On-Lending—Country Experiences from Colombia, Indonesia, Sweden, and Turkey." Policy Research Working Paper 7538, World Bank, Washington, DC.
- Baffes, J., and T. Haniotis. 2016. "What Explains Agricultural Price Movements?" Policy Research Working Paper 7589, World Bank, Washington, DC.
- Baffes, J., A. Kose, F. Ohnsorge, and M. Stocker. 2015. "The Great Plunge in Oil Prices: Causes, Consequences, and Policy Response." Policy Research Note 15/01, World Bank, Washington, DC.
- Baker, D., B. DeLong, and P. Krugman. 2005. "Asset Returns and Economic Growth." Brookings Papers on Economic Activity 2005.
- Baker, S., N. Bloom, and S. Davis. 2016. "Measuring Economic Policy Uncertainty" (March 10). Unpublished paper.
- Ball, L., B. DeLong, and L. Summers. 2014. "Fiscal Policy and Full Employment." Center on Budget and Policy Priorities, April 2014.
- Bank for International Settlements. 2016. "Uneasy Calm Gives Way to Turbulence." *BIS Quarterly Review* (March): 1–14
- Blanchard, O., J. P. L'Huillier, and G. Lorenzoni. 2013. "News, Noise, and Fluctuations: An Empirical Exploration." *American Economic Review* 103 (7): 3045–3070.
- Blanchard, O., E. Cerutti, and L. Summers. 2015. "Inflation and Activity – Two Explorations and their Monetary Policy Implications." NBER Working Paper 21726, National Bureau of Economic Research.
- Bleaney, M., and H. Halland. 2016. "Do Resource-Rich Countries Suffer from a Lack of Fiscal Discipline?" Policy Research Working Paper 7552, World Bank, Washington, DC.

- Bordon, A., C. Ebeke, and K. Shirono. 2016. "When Do Structural Reforms Work? On the Role of the Business Cycle and Macroeconomic Policies." IMF Working Paper WP/16/62, International Monetary Fund, Washington, DC.
- Bourguignon, F., and B. Meskovic. 2007. "Rethinking Infrastructure for Development." Annual World Bank Conference on Development Economics – Global 2007, World Bank, Washington, DC.
- Bown, C. 2014. "Temporary Trade Barriers Database: Update through 2013." World Bank, Washington, DC.
- Budina, N., T. Kinda, A. Schaechter, and A. Weber. 2012. "Fiscal Rules in Response to the Crisis. Toward the "Next Generation" Rules." IMF Working Paper 12/187, International Monetary Fund, Washington, DC.
- Byrne, D., J. Fernald, and M. Reinsdorf. 2016. "Does the United States have a Productivity Slowdown or a Measurement Problem?" Finance and Economics Discussion Series, Divisions of Research & Statistics and Monetary Affairs, Federal Reserve Board, Washington, D.C.
- Calderon, C., and L. Serven. 2004. "The Effects of Infrastructure Development on Growth and Income Distribution." Policy Research Working Paper 3400, World Bank, Washington, DC.
- Callen, T., R. Cherif, F. Hasanov, A. Hegazy, and P. Khandelwal. 2014. "Economic Diversification in the GCC; Past, Present, and Future." IMF Staff Discussion Note 14/12, International Monetary Fund, Washington, DC.
- Carneiro, F., A. V. Mollick, and R. Torres. 2008. "Does Inflation Targeting Matter for Output Growth? Evidence from Industrial and Emerging Economies." Policy Research Working Paper 4791, World Bank, Washington, DC.
- Caruana, J. 2016. "Credit, Commodities and Currencies." Lecture at the London School of Economics and Political Science, London, February 5.
- Chivakul, M. W., R. Lam., X. Liu, W. Maliszewski, and A. Schipke. 2015. "Understanding Residential Real Estate in China." IMF Working Paper WP/15/84, International Monetary Fund, Washington, DC.
- Chui, M., E. Kuruc, and P. Turner. 2016. "A New Dimension to Currency Mismatches in the Emerging Markets: Nonfinancial Companies." BIS Working Papers 550, Bank for International Settlements, Basel, Switzerland.
- Claessens, S. 2014. "An Overview of Macroprudential Policy Tools." IMF Working Paper 14/214, International Monetary Fund, Washington, DC.
- Claessens, S., N. Coleman, and M. Donnelly. 2016. "'Low-for-long' Interest Rates and Net Interest Margins of Banks in Advanced Foreign Economies." IFDP Notes, April 11. Federal Reserve Board, Washington, DC.
- Claessens, S., and M. A. Kose. 2014. "Financial Crises: Explanations, Types, and Implications." In *Financial Crises: Causes, Consequences, and Policy Responses*, edited by S. Claessens, M. Kose, L. Laeven, and F. Valencia, 3–60. Washington, DC: International Monetary Fund.
- Claessens, S., M. A. Kose and M. E. Terrones. 2012. "How Do Business and Financial Cycles Interact?" *Journal of International Economics* 87 (1): 178–190.
- Cliffe, M. 2016. "Negative Rates, Negative Reactions." VOX, February 26. <http://voxeu.org/article/negative-rates-negative-reactions>.
- Congressional Budget Office. 2016. "The Budget and Economic Outlook: 2016 to 2026." Congressional Budget Office, Washington, DC.
- Constantinescu, C., A. Mattoo, and M. Ruta. 2016. "Global Trade Watch: Trade Developments in 2015." World Bank, Washington, DC.
- Davenport, C., W. Moore, and S. Poe. 2003. "Sometimes You Just Have to Leave: Domestic Threats and Forced Migration, 1964–1989." *International Interaction* 29 (1): 27–55.

- De la Torre, A., T. Didier, A. Ize, D. Lederman, and S. Schmukler. 2015. *Latin America and the Rising South: Changing World, Changing Priorities*. Washington, DC: World Bank.
- Devarajan, S., and L. Mottaghi. 2016. "The Economic Effects of War and Peace." MENA Quarterly Economic Brief, World Bank, Washington, DC.
- Didier, T., A. Kose, F. Ohnsorge, and L. S. Ye. 2015. "Slowdown in Emerging Markets: A Rough Patch or Hard Landing?" Policy Research Note 15/04, World Bank, Washington, DC.
- Dollar, D., T. Kleineberg, and A. Kraay. 2013. "Growth is Still Good for the Poor." World Bank Policy Research Working Paper 6568, World Bank, Washington, DC.
- Draghi, M. 2016. "How Domestic Economic Strength can Prevail Over Global Weakness." Keynote Speech at the Deutsche Börse Group New Year's Reception 2016, Eschborn, January 25, 2016.
- Druck, P., N. Magud, and R. Mariscal-Paredes. 2015. "Collateral Damage: Dollar Strength and Emerging Markets' Growth." IMF Working Paper WP/15/179, International Monetary Fund, Washington, DC.
- EBRD (European Bank for Reconstruction and Development). 2016. *Transition Report 2015–16: Rebalancing Finance*. London.
- Echandi, R., J. Krajcovicova, and Z. C. Qiang. 2015. "The Impact of Investment Policy in a Changing Global Economy: A Review of the Literature." Policy Research Working Paper 7437, World Bank, Washington, DC.
- Edelstein, P., and L. Kilian. 2007. "How Sensitive are Consumer Expenditures to Retail Energy Prices?" *Journal of Monetary Economics* 56 (6): 766–779.
- Eichengreen, B., D. Park, and K. Shin. 2013. "Growth Slowdowns Redux: New Evidence on the Middle-Income Trap." NBER Working Paper 18673, National Bureau of Economic Research, January.
- Engen, E., T. Laubach, and D. Reifschneider. 2015. "The Macroeconomic Effects of the Federal Reserve's Unconventional Monetary Policies." Finance and Economic Discussion Series 2015–005, Federal Reserve Board, Washington, DC.
- European Commission. 2016. "Winter 2016 Economic Forecast." Directorate-General for Economic and Financial Affairs, European Economy, Institutional Paper 020, Brussels.
- Evenett, S., and J. Fritz. 2015. "The Tide Turns? Trade, Protectionism, and Slowing Global Growth." Global Trade Alert. Center for Economic Policy Research, London.
- Forbes, K. 2014. "Financial Deglobalization? Capital Flows, Banks, and the Beatles." Speech at Queen Mary University, London, November 18.
- Frankel, J. 2015. "International Macroeconomic Policy Coordination." VOX, December 9th. <http://voxeu.org/article/international-macroeconomic-policy-coordination>.
- Freund, C. 2016. "Global Trade Growth: Slow but Steady." In *Reality Check for the Global Economy*, edited by O. Blanchard and A. S. Posen, 19–22. Peterson Institute for International Economics, Washington, DC.
- Furman, J., and J. Shambaugh. 2016. "Fiscal Policy Remains Critical for Much of the World Economy." VOX, April 29. <http://voxeu.org/article/fiscal-policy-remains-critical-much-world-economy>.
- G20. 2015. "G20 Leaders' Communiqué Antalya Summit, 15–16 November 2015." <http://g20.org.tr/g20-leaders-commenced-the-antalya-summit>.
- _____. 2016. "G20 Finance Ministers and Central Bank Governors Meeting Communiqué Shanghai, 27 February 2016." http://www.g20.org/English/Documents/Current/201603/t20160302_2182.html

- Genay, H., and R. Podjasek. 2014. "What is the Impact of a Low Interest Rate Environment on Bank Profitability?" Chicago Fed Letter 324 (July), Federal Reserve Bank of Chicago, Chicago.
- Gill, I., I. Izvorski, W. van Eeghen, and D. De Rosa. 2014. "Diversified Development: Making the Most of Natural Resources in Eurasia." World Bank, Washington, DC.
- Gill, I., and H. Kharas. 2015. "The Middle-Income Trap Turns Ten." Policy Research Working Paper 7403, World Bank, Washington, DC.
- Goldberg, P., and N. Pavcnik. 2006. "Distributional Effects of Globalization in Developing Countries." *Journal of Economic Literature* 45 (1): 39–82.
- Gordon, R. 2014. "The Demise of U.S. Economic Growth: Restatement, Rebuttal, and Reflections." NBER Working Paper 19895, National Bureau of Economic Research, February.
- _____. 2016. *The Rise and Fall of American Growth: The U.S. Standard of Living since the Civil War*. Princeton, NJ: Princeton University Press.
- H. M. Treasury. 2016. "The Long-Term Economic Impact of EU Membership and the Alternatives" (April). H. M. Treasury, London.
- Hannoun, H. 2015. "Ultra-Low or Negative Interest Rates: What they Mean for Financial Stability and Growth." Remarks at the Eurofi High-Level Seminar, Riga, April 22.
- Hanusch, M., and P. Vaaler. 2015. "Credit Ratings and Fiscal Responsibility." MFM Global Practice Discussion Paper No. 4, World Bank, Washington, DC.
- Harrison, A., J. McClaren, and M. McMillan. 2011. "Recent Perspectives on Trade and Inequality." Policy Research Working Paper 5754, World Bank, Washington, DC.
- Hausmann, R., J. Hwang, and D. Rodrik. 2007. "What You Export Matters." *Journal of Economic Growth* 12 (1): 1–25.
- Hodge, J. 2002. "Liberalization of Trade in Services in Developing Countries." In *Development, Trade, and the WTO, A Handbook*, edited by B. Hoekman, A. Mattoo, and P. English, 221–234. Washington, DC: World Bank.
- Hoekman, B. M., and B. K. S. Javorcik, eds. 2006. *Global Integration and Technology Transfer*. Washington, DC: World Bank.
- Hofmann, B., I. Shim, and H. Shin. 2016. "Sovereign Yields and the Risk-Taking Channel of Currency Appreciation." Working Paper 538, January, Bank for International Settlements, Basel, Switzerland.
- Hollweg, C. H., E. L. Van Der Marel, J. S. Saez, D. Taglioni, and V. Zavacka. 2015. "Valuing Services in Trade: A Toolkit for Competitiveness Diagnostics." World Bank, Washington, DC.
- Hornok, C., and M. Koren. 2016. "The Case for Free Trade." VOX, May 7. <http://voxeu.org/article/case-free-trade>.
- Hufbauer, G., and E. Jung. 2016. "Why Has Trade Stopped Growing? Not Much Liberalization and Lots of Micro-Protection." Trade and Investment Policy Watch, Peterson Institute for International Economics, Washington, DC.
- Husain, A., K. Tazhibayeva, and A. Ter-Martirosyan. 2008. "Fiscal Policy and Economic Cycles in Oil-Exporting Economies." IMF Working Paper 08/253, International Monetary Fund, Washington, DC.
- IMF (International Monetary Fund). 2015a. *Global Financial Stability Report: Vulnerabilities, Legacies, and Policy Challenges – Risks Rotating to Emerging Markets*. Washington, DC: International Monetary Fund.
- _____. 2015b. *Fiscal Monitor: The Commodities Roller Coaster – A Fiscal Framework for Uncertain Times*. Washington, DC: International Monetary Fund.

- _____. 2015c. "People's Republic of China 2015 Article IV Consultation—Staff Report." International Monetary Fund, Washington, DC.
- _____. 2016a. *World Economic Outlook: Too Slow for Too Long*. Washington, DC: International Monetary Fund.
- _____. 2016b. *Global Financial Stability Report: Potent Policies for a Successful Normalization*. Washington, DC: International Monetary Fund.
- _____. 2016c. *Fiscal Monitor: Acting Now, Acting Together*. Washington, DC: International Monetary Fund.
- _____. 2016d. "Economic Diversification in Oil-Exporting Arab Countries." Staff Report from Annual Meeting of Arab Ministers of Finance in Manama, Bahrain. International Monetary Fund, Washington, DC.
- International Energy Agency. 2015. *World Energy Outlook 2015*. Paris: International Energy Agency.
- Islamaj, E., and M. A. Kose. Forthcoming. "How Does the Sensitivity of Consumption to Income Vary Over Time? International Evidence." *Journal of Economic Dynamics and Control*.
- Jaud, M., and C. Freund. 2015. "Champions Wanted: Promoting Exports in the Middle East and North Africa." World Bank, Washington, DC.
- Jordà, Ò., M. Schularick, and A. Taylor. 2013. "When Credit Bites Back." *Journal of Money, Credit and Banking* 45 (s2): 3–28.
- _____. 2016. "Sovereign versus Banks: Credit, Crisis, and Consequences." *Journal of the European Economic Association* 1: 45–79.
- _____. 2016. "Sovereign versus Banks: Credit, Crisis, and Consequences." *Journal of the European Economic Association* 14 (1): 45–79.
- Kang, J. 2014. "How to Raise Private Non-Residential Investment in Japan?" IMF Working Paper 14/141, International Monetary Fund, Washington, DC.
- Kiley, M. 2015. "Low Inflation in the United States: A Summary of Recent Research." FEDS Notes, Federal Reserve Board, Washington, DC.
- Kis-Katos, K., and R. Sparrow. 2015. "Poverty, Labor Markets and Trade Liberalization in Indonesia." *Journal of Development Economics* 117 (November): 94–106.
- Klein, P. O., and L. Weill. 2015. "Is it Worth Issuing Bonds in China? Evidence from Stock Market Reactions." BOFIT Discussion Papers 33/2015, Bank of Finland, Helsinki.
- Kohli, H. L., and P. Basil. 2011. "Requirements for Infrastructure Investment in Latin America under Alternate Growth Scenarios 2011–2040." *Global Journal of Emerging Market Economies* 3(1): 59–110.
- Kojima, M. 2016. "Fossil Fuel Subsidy and Pricing Policies: Recent Developing Country Experience." Policy Research Working Paper 7531, World Bank, Washington, DC.
- Kose, M. A., and M. E. Terrones. 2015. *Collapse and Revival: Understanding Global Recessions and Recoveries*. Washington, DC: International Monetary Fund.
- Lam, R. W., and P. Wingender. 2015. "China: How Can Revenue Reforms Contribute to Inclusive and Sustainable Growth?" IMF Working Paper 15/66, International Monetary Fund, Washington, DC.
- Lardy, N. R. 2016. "Reality Check on China." In *Reality Check for the Global Economy*, edited by O. Blanchard and A. Posen, 16–18. Washington, DC: Peterson Institute for International Economics.
- Lederman, D. 2013. "International Trade and Inclusive Growth: A Primer." *Indian Growth and Development Review* 6 (1): 88–112.
- Leutert, W. 2016. "Challenges Ahead in China Reform of State-Owned Enterprises." *Asia Policy* 21 (January): 83–99.

- Li, S., and S. Lin. 2016. "Population Aging and China's Social Security Reforms." *Journal of Policy Modeling* 38 (1): 65–95.
- Lo, S., and K. Rogoff. 2015. "Secular Stagnation, Debt Overhang and Other Rationales for Sluggish Growth, Six Years On." BIS Working Paper No. 482, Bank for International Settlements, Basel, Switzerland.
- Manyika, J., S. Lund, J. Bughin, J. Woetzel, K. Stamenov, and D. Dhingra. 2016. "Digital Globalization: The New Era of Global Flows." McKinsey Global Institute.
- Mattoo, A., R. Rathindran, and A. Subramanian. 2006. "Measuring Services Trade Liberalization and Its Impact on Economic Growth: An Illustration." *Journal of Economic Integration* 21 (1): 64–98.
- McCaig, B. 2011. "Exporting Out of Poverty: Provincial Poverty in Vietnam and U.S. Market Access." *Journal of International Economics* 85 (1): 102–113.
- McMillan, M., D. Rodrik, and Í. Verduzco-Gallo. 2014. "Globalization, Structural Change, and Productivity Growth, with an Update on Africa." *World Development* 63 (1): 11–32.
- Melander, E., and M. Oberg. 2006. "Time to Go? Duration Dependence in Forced Migration." *International Interactions* 32 (2): 129–152.
- Melitz, M. 2003. "The Impact of Trade on Intra-Industry Reallocations and Aggregate Industry Productivity." *Econometrica* 71 (6): 1695–1725.
- Merler, S. 2016. "EU Migration Crisis: Facts, Figures and Disappointments." *Bruegel* (blog), Brussels, February 12. <http://bruegel.org/2016/02/eu-migration-crisis-facts-figures-and-disappointments/>.
- Mottaghi, L. 2016. "The Economic Effects of War and Peace." MENA Quarterly Economic Brief, World Bank, Washington, DC.
- OECD, ILO, World Bank, and WTO. 2010. "Seizing the Benefits of Trade for Employment and Growth." Prepared for submission to the G-20 Summit meeting Seoul (Korea), November 11–12.
- Pellizzari, M., and A. Fichen. 2013. "A New Measure of Skills Mismatch: Theory and Evidence from the Survey of Adult Skills." OECD Social, Employment, and Migration Working Paper No. 153. OECD, Paris.
- Peng, D., K. Shi, and J. Xu. 2016. "SOE and Chinese Real Business Cycle." HKIMR Working Paper No. 02/2016, Hong Kong Institute of Monetary Research.
- Petri, P., and M. Plummer. 2016. "Economics of the Trans-Pacific Partnership: Distributional Impact." VOX, April 30. <http://voxeu.org/article/economics-tpp-winners-and-losers>.
- Prasad, E. 2016. "China's Efforts to Expand the International Use of the Renminbi." Report prepared for the U.S.-China Economic and Security Review Commission.
- Rachel, L., and T. Smith. 2015. "Secular Drivers of the Global Real Interest Rate." Bank of England Staff Working Paper No. 571, London.
- Ross, W. 2016. "Does Governance Cause Growth? Evidence from China." *World Development* 79 (March): 138–151.
- Ruscher, E., and B. Vašíček. 2015. "The Euro Area Recovery in Perspective." In *Quarterly Report on the Euro Area* 14 (3).
- Sher, G. 2014. "Cashing in for Growth: Corporate Cash Holdings as an Opportunity for Investment in Japan." IMF Working Paper 14/221, International Monetary Fund, Washington, DC.
- Sondergaard, L., and M. Murthi. 2012a. *Skills, Not Just Diplomas: Managing Education for Results in Eastern Europe and Central Asia*. Washington, DC: World Bank.
- Srinivasan, M., T. Stank, P. Dornier, and K.

- Petersen. 2014. *Global Supply Chains: Evaluating Regions on an EPIC Framework – Economy, Politics, Infrastructure, and Competence*. New York: McGraw Hill.
- The State Council of the People's Republic of China. 2015. "2015 Economy in Review." Policy Briefing.
- The State Council of the People's Republic of China. 2016a. "State Council to Expand Economic Reform in 2016." Policy Briefing.
- _____. 2016b. "China Clarifies New Five-Year Plan at Key Forum." Policy Briefing.
- Summers, L. 2015. "Demand Side Secular Stagnation." *American Economic Review: Papers & Proceedings* 105 (5): 60–65.
- Svensson, L. 2010. "Inflation Targeting." NBER Working Paper Series 16654, National Bureau of Economic Research, December.
- UNHCR (UN High Commissioner for Refugees). 2016. "Regional Refugee and Migrant Response Plan for Europe – Eastern Mediterranean and Western Balkans Route (January – December 2016)." UN High Commissioner for Refugees, January.
- Van Zandweghe, W. 2016. "The Drag of Energy and Manufacturing on Productivity Growth." *The Macro Bulletin*, Federal Reserve Bank of 42 (1): 72–115.
- Viet, C. N. 2014. "The Impact of Trade Facilitation on Poverty and Inequality: Evidence from Low- and Middle-Income Countries." *The Journal of International Trade and Economic Development* 24 (3): 315–340.
- Winters, A., N. McCulloch, and A. McKay. 2004. "Trade Liberalization and Poverty: The Evidence so Far." *Journal of Economic Literature* 42 (1): 72–115.
- Winters, A., and A. Martuscelli. 2014. "Trade Liberalization and Poverty: What Have We Learned in a Decade?" *Annual Review of Resource Economics* 6 (1): 493–512.
- World Bank. 2010. "Seizing the Benefits of Trade for Employment and Growth." OECD, ILO, World Bank and WTO Report to the G-20 Summit Meeting in Korea, November.
- _____. 2012. *World Development Report: Gender Equality and Development*. Washington, DC: World Bank.
- _____. 2015a. *Global Economic Prospects: The Global Economy in Transition*. Washington, DC: World Bank.
- _____. 2015b. *Global Monitoring Report 2015/2016: Development Goals in an Era of Demographic Change*. Washington, DC: World Bank.
- _____. 2015c. *Global Economic Prospects: Having Space and Using It*. Washington, DC: World Bank.
- _____. 2015d. "China Economic Update, June." World Bank, Washington, DC.
- _____. 2015e. "Public Debt Vulnerabilities in Low-Income Countries: The Evolving Landscape." World Bank, Washington, DC.
- _____. 2016a. "Growing Challenges: East Asia and the Pacific Region." Economic Update, April. World Bank, Washington, DC.
- _____. 2016b. *Global Economic Prospects: Spillovers amid Weak Growth*. Washington, DC: World Bank.
- _____. 2016c. "The Impact of China on Europe and Central Asia. Europe and Central Asia Economic Update." April. World Bank, Washington, DC.
- _____. 2016d. *The Commodity Cycle in Latin America: Mirages and Dilemmas*. Washington, DC: World Bank.
- _____. 2016e. "Commodity Markets Outlook, January 2016: Weak Growth in Emerging Economies and Commodity Markets." World Bank, Washington, DC.

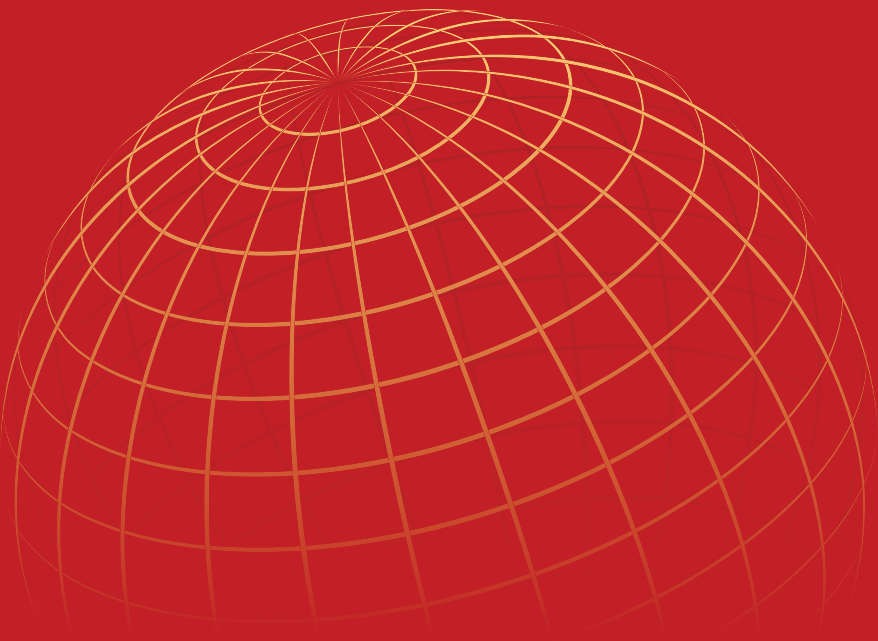
_____. 2016f. “Africa’s Pulse.” Volume 13, World Bank, Washington, DC.

WTO (World Trade Organization). 2015. “Annual Report 2015.” World Trade Organization, Geneva.

Yellen, J. 2015. “Normalizing Monetary Policy: Prospects and Perspectives.” Speech at “The New Normal Monetary Policy,” Research Conference Sponsored by the Federal Reserve Bank of San Francisco, March 27.

_____. 2016. “The Outlook, Uncertainty, and Monetary Policy.” Speech at the “Economic Club of New York,” New York, March 29.

Zhu, J., W. Yu, J. Wang, and C. Elleby. 2016. “Tariff Liberalization, Price Transmission and Rural Welfare in China.” *Journal of Agricultural Economics* 67 (1): 24–46.



SPECIAL FOCUS 1

Recent Credit Surge in
Historical Context

Special Focus 1: Recent Credit Surge in Historical Context

Benign financing conditions since the global financial crisis and, more recently, rising financing needs have fueled a rapid increase in credit to the nonfinancial private sector, especially to the corporate sector, in emerging markets and developing economies. Credit growth has been most pronounced, and nearing the pace associated with past credit booms, in commodity exporting countries. In contrast, in commodity importers, credit-to-GDP ratios are elevated but have been stable or shrinking over the past few years. That said, in a few, mostly energy exporting, emerging and developing countries, credit to the private sector is now near levels that have in the past been associated with episodes of financial stress.

Introduction

Since the global financial crisis, credit to the nonfinancial private sector has risen rapidly in several emerging markets and developing economies (EMDEs, Figure SF 1.1). This post-crisis credit growth has reflected a rotation in borrowing from households to corporates: in contrast to 2006-10, most of the post-crisis increase in EMDE private sector credit has been to nonfinancial corporates. Credit growth has been accompanied by rapidly rising corporate bond issuance since the crisis, especially for oil and gas companies (until 2014) and metals and mining companies. Some of the most indebted corporates include energy and construction companies.

A large literature has identified credit booms as an early warning indicator of macroeconomic or financial stress (e.g. Dell’Ariccia et al. 2014; Eichengreen and Arteta 2002; Gourinchas and Obstfeld 2012; Schularick and Taylor 2012; Claessens, Kose, and Terrones, 2012; Annex Table 1). In the past, such credit booms have often been accompanied by an accumulation of non-performing bank loans that were revealed once the boom subsided. A typical credit boom raised non-performing loans from 2.5 percent to 10 percent of gross loans (Mendoza and Terrones 2008).¹

Note: This Special Focus was prepared by Franziska Ohnsorge and Shu Yu, with contributions from Lei Sandy Ye.

¹Similarly Elekdag and Wu (2011) found that the ratio of non-performing loans over total assets exceeds its trend by 2 percentage points during credit booms.

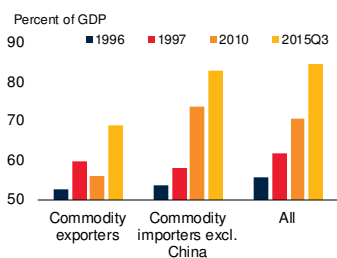
Several factors have encouraged post-crisis private sector credit growth in EMDEs. Exceptionally accommodative monetary policy by major central banks has fostered benign borrowing conditions for EMDEs, notwithstanding bouts of volatility. Rising financing needs have increased demand for borrowing, especially among energy and metals exporters since the sharp decline in metals and oil prices in 2011 and 2014, respectively. Post-crisis credit growth was partly also a continuation of a trend increase in the scale of EMDE corporates’ business operations and international reach. As EMDE corporates have become increasingly globally active and expand their international sales, production, and supply chains, borrowing needs have risen with more sophisticated liquidity management, centralized treasury operations and larger working capital needs, including in foreign currency (Acharya et al. 2015).

There is a concern that, once again, financial vulnerabilities may be revealed as borrowing costs rise further. This could be triggered by a sharp increase in domestic or global interest rates or by depreciation, including in the wake of, or in anticipation of, diverging monetary policy decisions in major advanced economies. The debt service burden would rise, especially on unhedged, floating-rate, short-term, or foreign currency denominated debt. Corporates (and households) with stretched balance sheets could struggle to service debt at rising cost. The subsequent deleveraging process would impair growth at a time when EMDEs are already struggling to adjust to a difficult external environment.

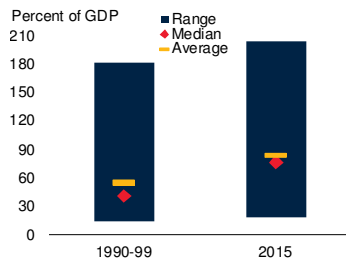
FIGURE SF1.1 Credit growth in EMDEs

Rapid private sector credit growth in emerging markets and developing economies since the global financial crisis has been fueled by benign borrowing conditions and rising financing needs. On average, private sector credit growth is well above historical averages—especially in commodity exporters—and has raised credit-to-GDP ratios above those in the 1990s. Among several commodity importers, credit growth has begun to slow from high levels.

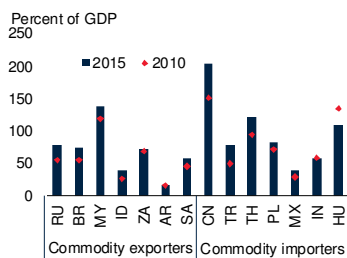
A. Credit to the nonfinancial private sector



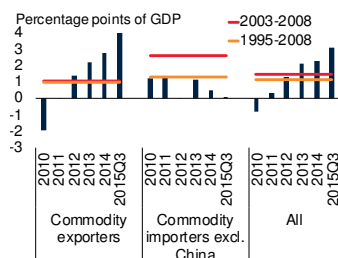
B. Credit to the nonfinancial private sector



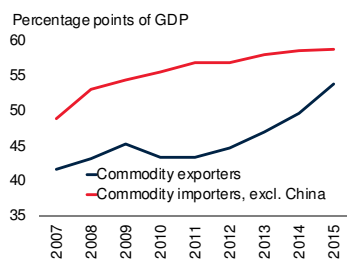
C. Credit to the nonfinancial private sector in 14 EMDEs



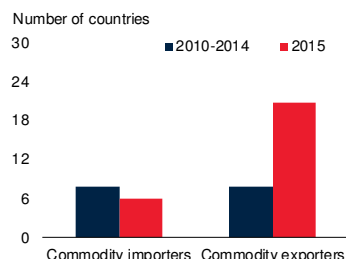
D. Credit growth (broader sample)



E. Credit-to-GDP (broader sample)



F. Number of EMDEs with post-crisis peak in credit (broader sample)



Sources: Bank for International Settlements, International Monetary Fund's International Financial Statistics, World Bank.

A. Unweighted average of claims (from residents and nonresidents) on the nonfinancial private sector in 14 emerging markets and developing economies. Commodity exporters include Argentina, Brazil, Indonesia, Malaysia, Russia, Saudi Arabia, and South Africa. Commodity importers include China, Hungary, India, Mexico, Poland, Thailand, and Turkey.

B. 1990s denotes average for 1990-1999. Data availability as in A. Data for Brazil is only available from 1994Q1, Saudi Arabia only from 1993Q1, and for Russia only from 1993Q4. 2015 data are for 2015Q3.

C. 7 commodity exporters (AR = Argentina, BR = Brazil, ID = Indonesia, MY = Malaysia, RU = Russia, SA = Saudi Arabia, and ZA = South Africa) and 7 commodity importers (CN = China, HU = Hungary, IN = India, MX = Mexico, PL = Poland, TH = Thailand, and TR = Turkey).

D. Unweighted averages for broader sample. Credit growth is the average annual change in the credit-to-GDP ratio (in percentage points of GDP). Broader sample includes 55 EMDEs. Please see the main text for a detailed description of the sample and the classification of commodity importers and exporters. Data for 2015 are unavailable for Bahrain, Cote d'Ivoire, Gabon, Nigeria, Peru, Senegal, Sri Lanka, Venezuela, RB, Croatia, Jordan, Mauritius, and Tunisia.

E. Unweighted averages. Data availability as in D.

F. Data availability as in D.

Financing conditions have already begun to tighten. Broadly favorable financing conditions for EMDEs have tightened sharply as capital inflows shrank by 18 percent and bond issuance dropped by 22 percent between 2014 and 2015. This has especially affected oil and gas companies and metals and mining companies, which are struggling to adjust to sharply lower oil and metals prices, and highly cyclical industrial companies such as in the construction industry. For EMDE industrial companies and metals and mining corporates, average bond maturities have shortened by 2½ years between 2014 and 2015, and equity prices have undergone double-digit declines since mid-2014. Pressures may increase with the sharp rise in redemption obligations anticipated for 2017.

Against the current background, this Special Focus essay addresses the following questions:

- How has credit to the nonfinancial private sector—and, specifically, the corporate sector—evolved in EMDEs?
- How does recent credit growth compare with past episodes of credit booms?
- How near are current credit-to-GDP ratios to thresholds identified in the literature as early warning indicators?

Evolution of private sector credit

Database. Credit to the nonfinancial private sector consists of claims—including loans and debt securities—on households and nonfinancial corporates by the domestic financial system as well as external creditors. From 1980, data for this broad definition of credit are available from the Bank for International Settlements for 14 EMDEs, including seven commodity exporters (Argentina, Brazil, Indonesia, Malaysia, the Russian Federation, Saudi Arabia, South Africa) and seven commodity importers (China, Hungary,

India, Mexico, Poland, Thailand, Turkey).² These countries account for the bulk of emerging market and developing country debt (McCauley, McGuire and Sushko 2015) and have an established history of international financial market access. Other EMDEs typically access international financial markets to a lesser extent and typically have less developed domestic bond markets. For these countries, credit from the domestic banking system remains the main source of credit. For them, annual data on claims by banks on private sector, provided by the IMF's International Financial Statistics, are used as proxies for missing data for credit to the nonfinancial private sector. This extends the sample by another 41 countries, mainly from 2000 onwards.³ The combined sample, of 55 countries, consists of 37 commodity exporters and 18 commodity importers.

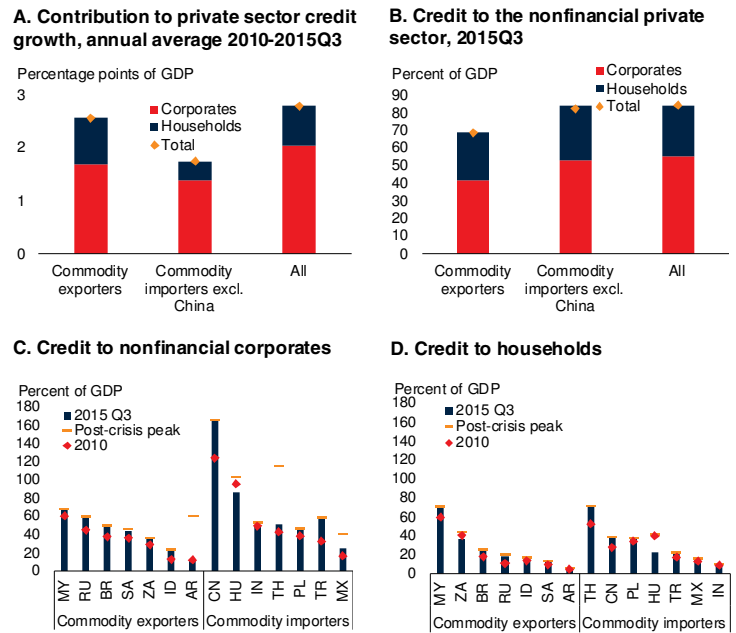
Private sector credit growth. Private sector credit growth is measured as the change in the ratio of credit to the nonfinancial private sector to GDP (in percentage points of GDP). Fueled by low post-crisis borrowing cost and rising financing needs, credit to the nonfinancial private sector increased by 14 percentage points of GDP, to 84.5 percent of GDP, in the five years to the third quarter of 2015 in the 14 EMDEs, for which such comprehensive data are available and in some cases by about 30 percentage points of GDP or more. On average among these countries, credit to the nonfinancial private sector now exceeds levels of the 1990s (Figure SF 1.1). Credit growth was particularly pronounced in commodity exporting economies, where it has been well above the long-term average. As a result, in almost all these EMDEs, credit to the nonfinancial private sector reached post-crisis peaks by 2015.

²Data from Bank for International Settlement is not available for Argentina until 1994, Brazil until 1993, China until 1984, Hungary until 1989, Poland until 1992, Russia until 1995, Saudi Arabia until 1993 and Turkey until 1986.

³This includes eleven commodity importers (Bangladesh, Bulgaria, Croatia, Egypt, Georgia, Jordan, Mauritius, Pakistan, Philippines, Serbia, Tunisia) and thirty commodity exporters (Azerbaijan, Bahrain, Bolivia, Botswana, Colombia, Chile, Costa Rica, Cote d'Ivoire, Gabon, Ghana, Guatemala, Honduras, Jamaica, Kazakhstan, Kenya, Kuwait, Mongolia, Namibia, Nigeria, Oman, Panama, Paraguay, Peru, Qatar, Senegal, Sri Lanka, Ukraine, Uruguay, República Bolivariana de Venezuela, Zambia).

FIGURE SF1.2 Credit to corporates and households

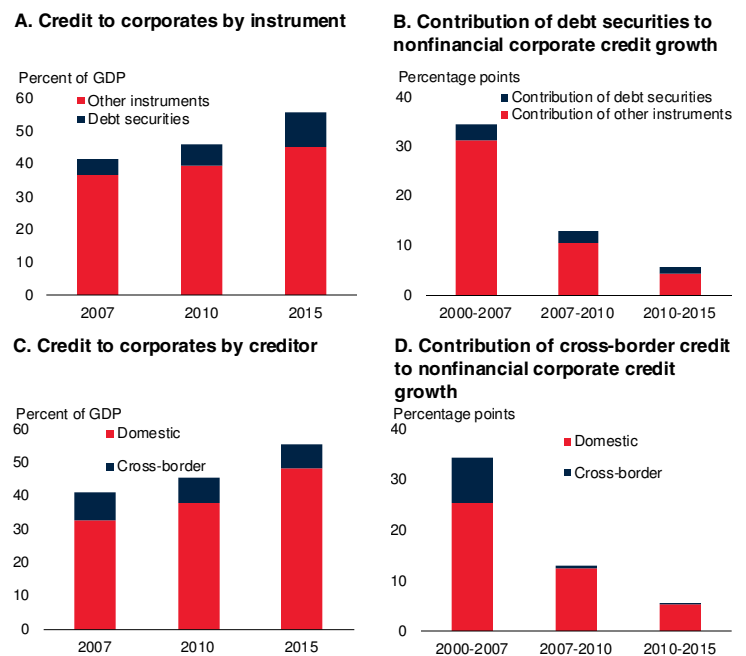
Two thirds or more of private sector credit growth since 2010 has been to corporates. Credit to corporates now accounts for almost two-thirds of credit to the nonfinancial private sector.



Source: Bank for International Settlements. Note: Unweighted average credit (from residents and nonresidents) to nonfinancial corporates and households in 7 commodity exporters (AR = Argentina, BR = Brazil, ID = Indonesia, MY = Malaysia, RU = Russia, SA = Saudi Arabia, and ZA = South Africa) and 7 commodity importers (CN = China, HU = Hungary, IN = India, MX = Mexico, PL = Poland, TH = Thailand, and TR = Turkey).

FIGURE SF1.3 Composition of credit to corporates

Despite a post-crisis rise, debt securities and cross-border credit remain a modest fraction of credit to EMDE corporates.

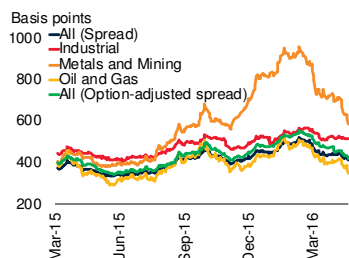


Sources: Bank for International Settlements, World Bank. Notes: Same sample as in Figure SF 1.2. Unweighted averages. B, D. Contributions to average annual corporate sector credit growth. C, D. Data are not available for China, India, Indonesia in 2000 and South Africa before 2010.

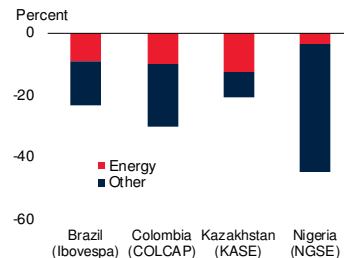
FIGURE SF1.4 Corporate bond and equity markets

Emerging markets corporate bond spreads surged during the second half of 2015, especially in the metals and mining sector, but started to ease in the beginning of 2016. While corporate bond issuance started to drop from 2013, redemptions are estimated to surge in 2017 and stay at historically high levels through 2020. About two-thirds of bond issuance was placed in international debt markets, almost entirely in foreign currency denominations.

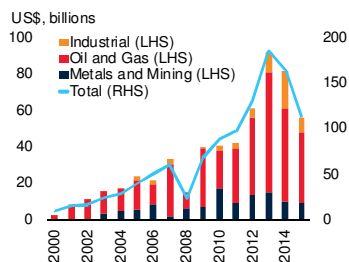
A. Corporate bond spreads



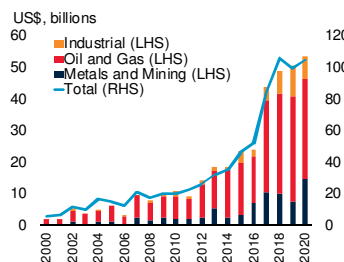
B. Contributions to cumulative equity market change since end-June 2014



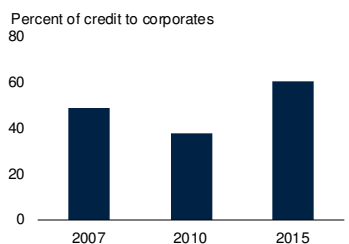
C. Corporate bond issuance



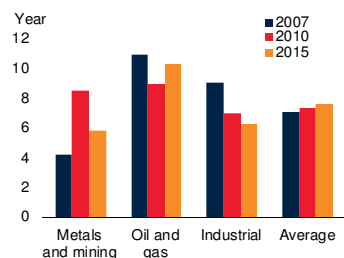
D. Corporate bond redemption



E. Corporate bond in the international market



F. Average corporate bond maturity



Sources: Bloomberg, Institute of International Finance, Bank for International Settlements.
 Note: Figures A, C, D, E and F refer to bond in the international market.
 A. Option-adjusted spread (OAS) is the spread relative to a risk-free interest rate that equates the theoretical present value of a series of uncertain cash flows of an instrument to its current market price. Due to the limited amount of data on credit default swaps (CDS) for corporate debt, OAS is used as a model-based proxy for credit risk among corporates.
 E. Data are available for Argentina, Brazil, China, Hungary, Indonesia, Malaysia, Mexico, Poland, Russia, South Africa, Thailand, and Turkey. Unweighted averages.

Similar private sector credit growth is evident in a broader sample of 55 EMDEs. Among these EMDEs, credit to the nonfinancial private sector increased by about 10 percentage points since 2010, to 60 percent of GDP in the third quarter

of 2015. The divergence between commodity exporters and importers is even more pronounced among this group. By the third quarter of 2015, as financing needs expanded following the sharp oil price decline since mid-2014, credit to the nonfinancial private sector rose by more than 20 percentage points in some oil exporters. In other countries, credit to the nonfinancial private sector has begun to ease from 2013-14 peaks, especially in oil and metals exporters adjusting to lower commodity prices and in commodity importers tightening policies after the Taper Tantrum of 2013. At the firm level, this build-up of debt has also been reflected in deteriorating firm solvency (Alfaro et al. 2016).

Increase in credit to corporates. Since 2010, most of the increase in credit to the nonfinancial private sector has reflected credit to corporates, as corporates in both commodity exporters and importers have taken advantage of low financing costs. Credit to corporates has accounted for more than three quarters of the increase in credit to the nonfinancial private sector since 2010 in commodity-exporting EMDEs, where financing needs have risen sharply, and more than half in commodity-importing EMDEs (Figure SF 1.2). As a result, credit to the corporate sector now accounts for about two-thirds of credit to the nonfinancial private sector, and somewhat more in commodity-exporting EMDEs. While, on average, credit to corporates rose at a similar pace in commodity importers and exporters alike, the pace of credit growth to households in commodity importers (excluding China) was less than half the pace in commodity exporters. This more muted rise in credit to households in commodity importers may reflect the anemic post-crisis recovery in some countries or policy tightening in others.

Shifting composition of credit to EMDE corporates. The composition of credit to EMDE corporates has gradually shifted (Financial Stability Board 2015, Figure SF 1.3).

Foreign currency. In contrast to sovereign (and aggregate) debt, which is gradually shifting towards local currency, the share of foreign

currency-denominated credit in credit to non-financial corporates has increased (McCauley, McGuire and Sushko 2015; Chui, Kuruc and Turner 2016). Foreign currency-denominated debt raises exchange rate risk. In addition, nonresident portfolio asset funds holding correlated portfolios amplify any impact of exchange rates on corporate balance sheets (Miyajima and Shin 2014). That said, in most countries, and on average, the share of credit (loans or securities) denominated in foreign currency remains moderate around 20 percent, and the bulk of the corporate credit growth is accounted for by domestic currency denominated credit.⁴

Bond issuance. Since 2004, credit to nonfinancial corporates has shifted from bank loans to bond issuance (Chui, Fender, and Sushko 2014; Cortina, Didier, and Schmukler forthcoming; Feyen et al. 2015; Ayala, Nedeljkovic, and Saborowski 2015). Although bond maturities may shorten, bond market activity has been less procyclical and more resilient during the global financial crisis than bank lending (Cortina, Didier, and Schmukler forthcoming; Contessi, Li, and Russ 2013; Adrian, Colla, and Chin 2013, Figure SF1.4). However, despite strong corporate bond issuance since 2010, the bulk of corporate credit growth continued to be contributed by non-securities credit. Debt securities accounted for only 19 percent of credit to the corporate sector in 2015 (compared with 16 percent in 2007). The predominance of bank lending may reflect limited access for smaller EMDE corporates to bond markets. For EMDE corporates, access to bond markets tends to be restricted to a few large corporates that have been able to shift towards bond finance, often at longer maturities and lower cost (Didier, Levine, and Schmukler forthcoming).

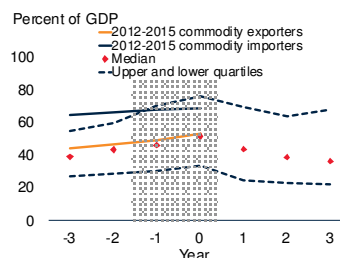
Cross-border credit. Cross-border credit from a foreign bank could be considerably more volatile than credit from a domestic bank if the foreign

⁴Turkey, Poland, and Hungary are exceptions among the 14 EMDEs in the sample, with foreign currency-denominated credit accounting for more than 25 percent of credit from domestic banks.

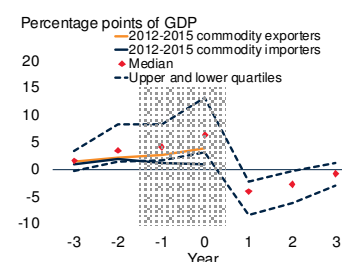
FIGURE SF1.5 Characteristics of credit booms

During a typical credit boom, credit to the nonfinancial private sector grows by more than 6 percentage points of GDP. On average, credit booms last less than two years and about one-third are followed by at least mild, deleveraging over the next three years. On average, recent private sector credit growth has been nearing levels associated with past credit booms in commodity exporters. In commodity importers, credit-to-GDP ratios have been considerably higher than in past credit booms but have been stagnant or declining.

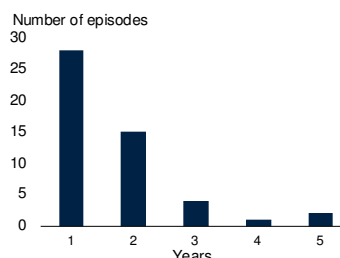
A. Evolution of credit



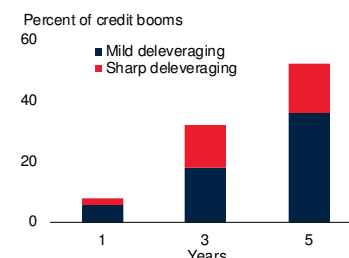
B. Evolution of credit growth



C. Duration of credit booms



D. Deleveraging after credit booms



Sources: Bank for International Settlements, Haver Analytics, International Monetary Fund International Financial Statistics and World Economic Outlook.

Notes: A credit boom is defined as an episode during which the cyclical component of the nonfinancial private sector credit-to-GDP ratio (derived using a Hodrick-Prescott filter) is larger than 1.65 times its standard deviation in at least one year. The episode starts when the cyclical component exceeds one standard deviation and ends in a peak year when the nonfinancial private sector credit-to-GDP ratio declines in the following year. "0" is the peak of the credit boom event. To address the end-point problem of a Hodrick-Prescott filter, the dataset is expanded by setting the data for 2016-18 to be equal to the data in 2015. Figures show the medians of credit to the nonfinancial private sector and of its change (red diamond) and their corresponding upper and lower quartiles during a boom episode (dashed blue line). The solid orange (commodity exporters) and blue (for commodity importers) lines for 2012-15 show the sample means for $t=0$ at 2015Q3. For 2012-2015, the sample is restricted to countries where the data are available in 2015. Data are not available in 2015 for Bahrain, Cote d'Ivoire, Croatia, Gabon, Jordan, Mauritius, Nigeria, Peru, Senegal, Sri Lanka, Tunisia, Venezuela, RB. Data are not available for Argentina until 1994, Brazil until 1993, China until 1984, Hungary until 1989, Poland until 1992, Russia until 1995, Saudi Arabia until 1993 and Turkey until 1986. Please see the main text for a detailed description of the sample.

A. Credit to the private non-financial sector in percent of GDP.

B. The annual change in credit to the nonfinancial private sector as a percent of GDP.

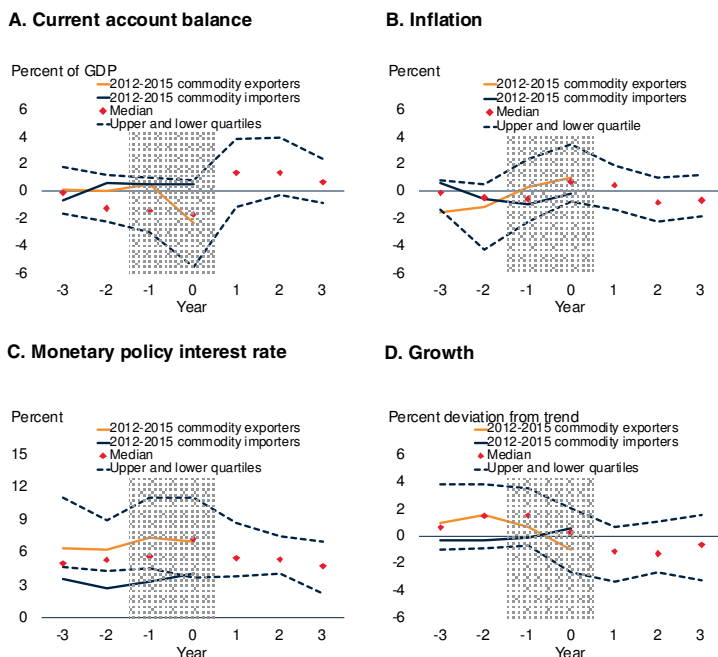
C. Blue bars denote the number of credit boom episodes that lasted for 1-5 years. Events that are still developing in 2015 are dropped.

D. The (cumulative) percent of credit boom episodes followed by mild deleveraging (defined as private sector credit-to-GDP ratio falling 1 standard deviation below the HP-filtered trend) or sharp deleveraging (defined as private sector credit-to-GDP ratio falling 1.65 standard deviations below trend) over 1, 3, and 5 years. The horizontal axis shows the number of years after a credit boom. Events that are still developing in 2015 are dropped.

bank does not consider the EMDE a core market with long-established lending relationships (de Haas and van Lelyveld 2012; Cetorelli and Goldberg 2009 and 2012; de Haas and van Horen 2012; Claessens and van Horen 2012). Despite a modest increase since 2010, the share of cross-

FIGURE SF1.6 Macroeconomic developments during credit booms

Credit booms in the EMDEs were accompanied by widening current account deficits and faster real GDP growth.



Sources: Bank for International Settlements, Haver Analytics, International Monetary Fund International Financial Statistics and World Economic Outlook.

Notes: See note in Figure SF 1.5 for the definition of credit booms. Data availability as in Figure SF 1.5.

A. The cyclical component of the current account in percent of GDP (derived using a Hodrick-Prescott filter). Data not available for China until 1997.

B. The cyclical component of the inflation rate (derived using a Hodrick-Prescott filter). Hyper-inflation episodes are dropped. Data are not available for Argentina until 1991, Mexico until 1987, Russia until 1996, Thailand until 1984, and Turkey until 1995.

C. Data are available for Bahrain (2007), Brazil (1999), Georgia (2008), Guatemala (2005), Honduras (2005), Indonesia (1990), Jordan (2004), Kazakhstan (2005), Kenya (2006), Malaysia (2004), Mauritius (2006), Mexico (2008), Mongolia (2007), Paraguay (2011), Peru (2003), Philippines (2001), Qatar (2002), Russia (2011), Saudi Arabia (1999), South Africa (1980), Thailand (2000), Turkey (1999), and Uruguay (2008).

D. The cyclical component of real GDP (in millions of U.S. dollars) in percent of its trend (derived using a Hodrick-Prescott filter).

border credit remains modest at less than 20 percent in the third quarter 2015, well below the 2000-07 average. Since 2010, credit from the domestic banking system has continued to be the main source of corporate credit growth.

Lending to commodity companies. Corporate borrowing has been fastest in the oil and gas sector and mining sector (Didier et al forthcoming; Domanski et al. 2015), and cyclical industries (e.g. construction; IMF 2015a). Since 2006, the outstanding syndicated loans and debt securities of state-owned energy corporates grew at double-digit average annual rates and the stock of debt of oil and gas firms has more than tripled (Domanski et al. 2015).

The shifting composition of credit to the corporate sector may have reduced vulnerabilities to bank funding shocks and to foreign bank funding shocks through cross-border credit but has increased vulnerabilities to exchange rate risk and liquidity risk in capital markets. Notwithstanding these gradual shifts, the bulk of credit to EMDE corporates remains from the domestic banking system (more than 80 percent) and, on average, denominated in domestic currency (80 percent). Similarly, the bulk of the credit growth has been accounted for by credit from the domestic banking system and in domestic currency.

Recent credit growth in light of past episodes

Event study. A rich literature has documented that credit booms are sometimes followed by sharp deleveraging episodes in subsequent years (e.g. Barajas et al. 2010; Elekdag and Wu 2011). Both the credit booms and the subsequent sharp or gradual deleveraging cycles have been accompanied by considerable macroeconomic volatility. To illustrate the developments during credit cycles in EMDEs, an event-study is used. As in Mendoza and Terrones (2008 and 2012), a credit boom is defined as an episode during which the private sector credit-to-GDP ratio is more than 1.65 standard deviations above its Hodrick-Prescott filtered trend (i.e. outside the 90 percent confidence interval) in at least one year. An episode starts when the deviation exceeds one standard deviation and ends when the credit-to-GDP ratio begins to fall. Conversely, a deleveraging episode is defined as an episode during which the private sector credit-to-GDP ratio is more than 1.65 standard deviations below trend in at least one year. The deleveraging episode starts when the ratio falls more than one standard deviation below trend and ends when the credit-to-GDP ratio begins to climb.⁵ Credit booms and deleveraging episodes are studied

⁵The results are robust to using thresholds of 1.75 or 1.55 standard deviations.

within a 7-year event window that covers their peak or trough years ($t=0$), the three prior years, and the three following years. Since 1980 (2000 for the broader sample), there have been 56 credit booms and 28 deleveraging episodes in EMDEs.⁶

Characteristics of credit booms. In a credit boom, private sector credit grows, on average, by more than 6 percentage points of GDP per annum and private sector credit peaked at 52 percent of GDP, on average (Figure SF 1.5).⁷ The average credit boom lasted 1.7 years, with the longest episode lasting five years.⁸ Until the credit boom peaked, current account deficits rose by almost 2 percentage points of GDP above their long-run trend but subsequently narrowed sharply (Figure SF 1.6). Real GDP rose by 1-2 percent above trend in the two years before the credit boom peaked but, within two years, fell below trend.⁹

Characteristics of deleveraging episodes. Within three years of the end of the credit boom, about one-third of booms were followed by at least a mild deleveraging episode (in which the private sector credit-to-GDP ratio fell more than 1 standard deviation below trend). During a deleveraging episode, private sector credit contracted by almost 2 percentage points of GDP per year and private sector credit fell to 35 percent

⁶The event study uses the broader sample that covers the 14 EMDEs, for which comprehensive data on credit to the nonfinancial private sector are available from Bank of International Settlements, and another 41 EMDEs where data on claims on the private sector is available from IMF's International Financial Statistics. The resulting frequency of credit boom (5 percent), as defined as the average number of booms per country per year. It is somewhat higher than previous studies partially because the sample has been expanded to cover recent credit booms. Using a looser boom identification strategy, Elekdag and Wu (2011) found the ratio to be about 3 percent. Arena et al. (2015), Dell' Ariccia et al. (2014), and Mendoza and Terrones (2008) found the frequency of credit booms to be about 2 percent.

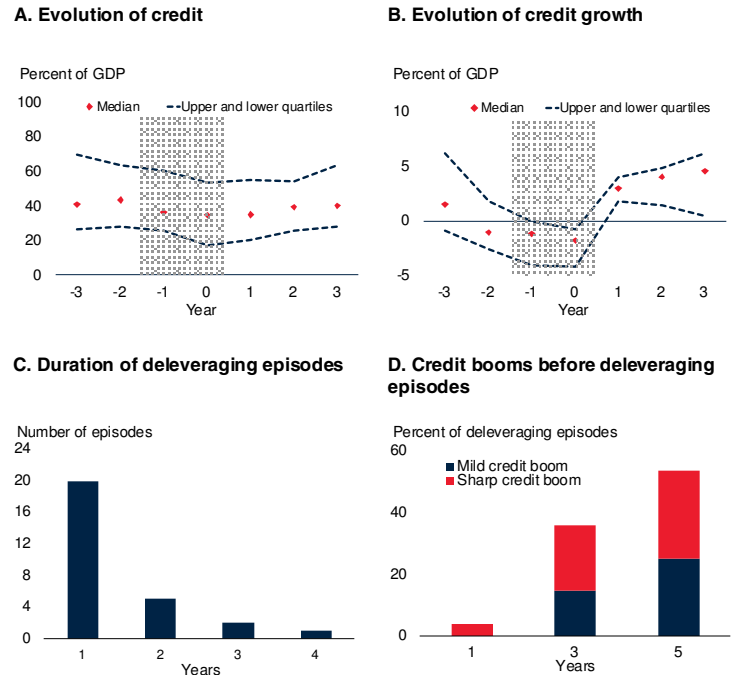
⁷ Annex SF1.1 discusses statistically significant differences between event and non-event years.

⁸This is within the range found by other authors. Using growth in real claims on the private sector and different thresholds to identifying boom episodes, Elekdag and Wu (2011) show that the typical boom lasts about two years. Mendoza and Terrones (2008) find a considerably longer duration (about 7 years) using more smoothed data and a lower threshold for the starting and ending points for a boom.

⁹Mendoza and Terrones (2008), Elekdag and Wu (2011), and Arena et al. (2015), also found that growth tends to rise before booms and decline towards the end of it. Jorda et al. (2013) further suggest that faster credit growth tends to be followed by deeper recessions and slower recoveries.

FIGURE SF1.7 Characteristics of deleveraging episodes

Deleveraging episodes are associated with a period of mild declines in private debt. On average, deleveraging episodes last about 1.5 years. About one-third of deleveraging episodes are preceded by credit booms in the preceding three years.



Sources: Bank for International Settlements, Haver Analytics, International Monetary Fund International Financial Statistics and World Economic Outlook.
Notes: A deleveraging episode is defined as an episode during which the nonfinancial private sector credit-to-GDP ratio (derived using a Hodrick-Prescott filter) is more than 1.65 standard deviations below its Hodrick-Prescott-filtered trend in at least one year. The episode starts when the ratio falls more than 1 standard deviation below trend and ends in a trough year when the private sector credit-to-GDP ratio starts to rise in the following year. "0" is the end (trough) year of the deleveraging episode. To address the end-point problem of a Hodrick-Prescott filter, the dataset is expanded by setting the data for 2016-18 to be equal to the data in 2015. Figures show the medians of credit-to-GDP ratio and of its increase (red diamonds) and their upper and lower quartiles (dashed blue lines) during a deleveraging episode. The solid orange (commodity exporters) and blue (for commodity importers) lines for 2012-15 show the sample means for $t=0$ at 2015Q3. For 2012-2015, the sample is restricted to countries where the data are available in 2015. Data are not available in 2015 for Bahrain, Cote d'Ivoire, Croatia, Gabon, Jordan, Mauritius, Nigeria, Peru, Senegal, Sri Lanka, Tunisia, Venezuela RB. Data are not available for Argentina until 1994, Brazil until 1993, China until 1984, Hungary until 1989, Poland until 1992, Russia until 1995, Saudi Arabia until 1993 and Turkey until 1986. Please see the main text for a detailed description of the sample.
A. Credit to the nonfinancial private sector as a percent of GDP.
B. The annual change in credit to the nonfinancial private sector as a percent of GDP.
C. Blue bars denote the number of deleveraging episodes that lasted for 1-3 years. Events that are still developing in 2015 are dropped.
D. The (cumulative) percent of deleveraging episodes preceded by mild credit booms (defined as private credit-to-GDP ratio more than 1 standard deviation above the Hodrick-Prescott-filtered trend) or sharp credit booms (defined as private credit-to-GDP ratios rising more than 1.65 standard deviations above the trend) over 1, 3, and 5 years. The horizontal axis shows the number of years before the deleveraging event. Events that are still developing in 2015 are dropped.

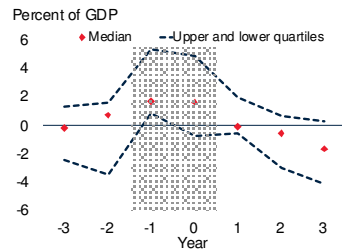
of GDP, on average (Figure SF 1.7). The average deleveraging episode lasted over 1.4 years, with the longest episode lasting four years.¹⁰ Only one-third of deleveraging episodes were preceded by, at least mild, credit booms in the previous three years. Deleveraging episodes were associated with

¹⁰This is broadly in line with findings of other authors (Barajas et al. 2010).

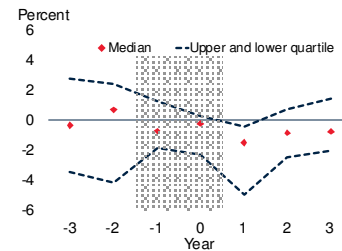
FIGURE SF1.8 Macroeconomic developments during deleveraging episodes

Deleveraging episodes were associated with improved current accounts but, weaker growth. As deleveraging episodes ended, inflation began to ease.

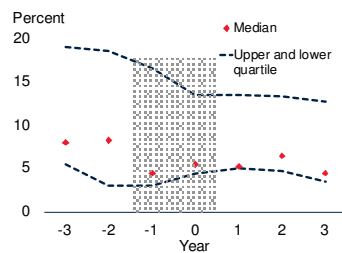
A. Current account balance



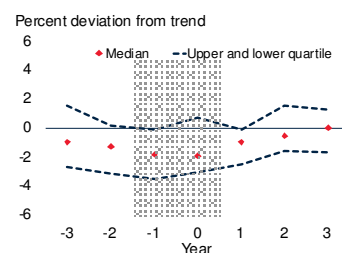
B. Inflation



C. Monetary policy interest rate



D. Growth



Sources: Bank for International Settlements, Haver Analytics, International Monetary Fund International Financial Statistics and World Economic Outlook.

Notes: See note in Figure SF 1.7 for the definition of deleveraging episodes. Data availability as in Figure SF 1.7.

A. The cyclical component of the current account in percent of GDP (derived using a Hodrick-Prescott filter). Data not available for China until 1997.

B. The cyclical component of the inflation rate (derived using a Hodrick-Prescott filter). Hyper-inflation episodes are dropped. Data are not available for Argentina until 1991, Mexico until 1987, Russia until 1996, Thailand until 1984, and Turkey until 1995.

C. See Note C of Figure SF 1.6 for data availability.

D. The cyclical component of real GDP (in millions of U.S. dollars) in percent of its trend (derived using a Hodrick-Prescott filter).

considerable current account improvements (about 2 percentage points of GDP, Figure SF 1.8). Real GDP fell, on average, by almost 2 percent below trend during the deleveraging episode.

Recent developments in historical comparison. Since 2012, levels of credit in *commodity-importing* EMDEs have been considerably higher than during previous credit booms but credit growth has been well below levels associated with past booms. In contrast, *commodity-exporting* countries' credit and credit growth have been near levels associated with past credit booms (Figure SF 1.5).

By the third quarter of 2015, private sector credit exceeded levels associated with past booms in only a few countries.

Current credit levels: Warning signs?

Early warning indicators. A large literature examines potential thresholds for private sector credit growth that may be an early warning indicator of impending macroeconomic and financial stress. For example, credit to the private sector was typically about 10 percentage points of GDP above its long-run trend before a financial crisis (Drehman 2013). In Central and Eastern European EMDEs, most past banking crises were preceded by about 9 percentage points of GDP deviation of credit to the private sector from its long-term trend (Gourinchas and Obstfeld 2012). When applied to 1996 or 1997 data, these early warning indicators correctly highlighted heightened vulnerabilities in Indonesia, Thailand, and Malaysia (Figure SF 1.9).

Most EMDEs are still some distance away from the thresholds identified by these studies (Figure SF 1.9). The few EMDEs where private sector credit exceeded these thresholds in the third quarter of 2015, were mostly energy exporting countries. Microdata for EMDE corporates suggest similarly that median firm leverage in many EMDEs is near or above levels that preceded the 1997-98 crisis in some East Asian countries (Alfaro et al. 2016).

Long-term debt overhang. Even if a credit boom does not end in a crisis, a debt overhang can weigh on long-term growth as the necessary balance sheets repair proceeds gradually (Lo and Rogoff 2015, Buttiglione et al. 2014). Private sector credit above 80-100 percent of GDP has been found to be no longer growth-enhancing (Arcand et al. 2012; Cecchetti, Mohanty, and Zampolli 2011). Again, credit-to-GDP ratios in most EMDEs are still well below these thresholds, with few exceptions in which credit to the private, or corporate, sector exceeds 80 percent of GDP.

Conclusion

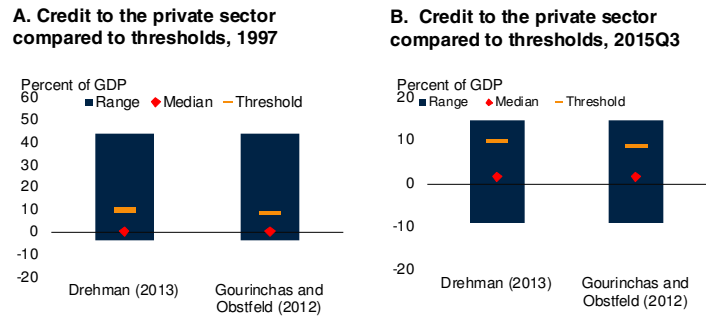
The main findings of this Special Focus are as follows.

- How has credit to the private sector—and, specifically, the corporate sector—evolved in EMDEs? Credit to the nonfinancial private sector and, especially, the corporates has grown rapidly since the global financial crisis, fueled by benign borrowing conditions and, in commodity exporters, by rising financing needs. Credit growth was most rapid in commodity exporting EMDEs, although from a starting point of modest credit-to-GDP levels. In contrast, in commodity importing EMDEs, average credit-to-GDP ratios are considerably higher than in commodity exporting countries but are now stagnant or shrinking. On average, private sector credit-to-GDP ratios have risen above 1990s averages.

- How does credit growth compare with past episodes of credit booms? Since 2012, credit to the nonfinancial private sector in commodity-importing EMDEs has been considerably higher (in percent of GDP) than in previous credit booms but its growth has been subdued. In contrast, credit growth in commodity-exporting EMDE has been rapid, near the pace and levels of

FIGURE SF1.9 Comparison: Credit and early warning indicators

In most EMDEs, private sector credit is still some distance away from the thresholds identified by previous studies as being associated with financial stress.



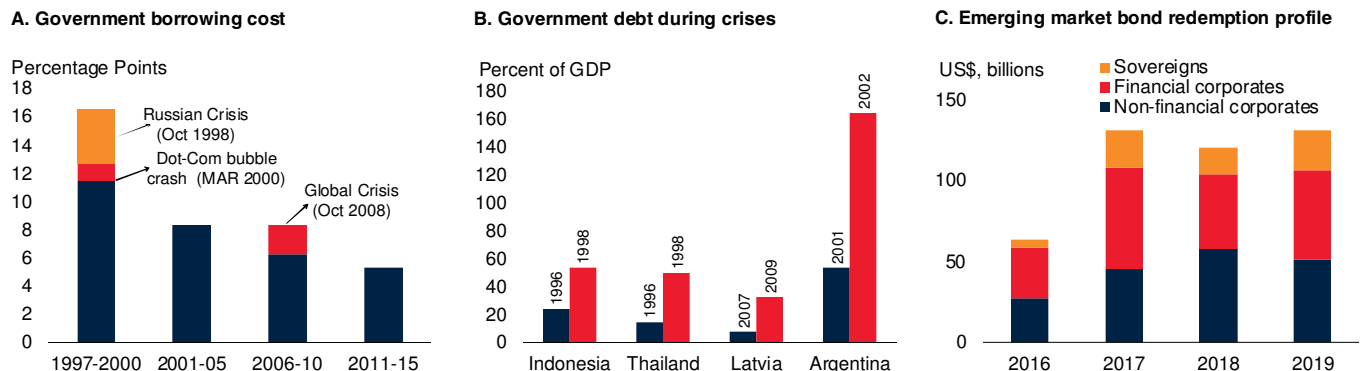
Sources: Bank for International Settlements, Haver Analytics, International Monetary Fund International Financial Statistics and World Economic Outlook.
 Notes: Orange lines show the thresholds identified by previous studies for deviation of the private sector credit-to-GDP ratio from its trend (derived using a Hodrick-Prescott filter, Drehman 2013, Gourinchas and Obstfeld 2012). Blue bars indicate the ranges of these measures; red diamonds show medians.
 A. Data are available for 14 EMDEs (Argentina, Brazil, Indonesia, Malaysia, Russia, Saudi Arabia, and South Africa, China, Hungary, India, Mexico, Poland, Thailand, and Turkey).
 B. Broader sample (55 EMDEs) is used here. Data are not available for Bahrain, Côte d'Ivoire, Croatia, Gabon, Jordan, Mauritius, Nigeria, Peru, Senegal, Sri Lanka, Tunisia, Venezuela.

credit-to-GDP ratios associated with past credit booms.

- How near are current credit-to-GDP ratios to thresholds identified in the literature as early warning indicators? Most EMDEs are still some distance away from the thresholds identified by these studies.

FIGURE SF1.10 Risks

Private debt stress, perhaps triggered by a sharp increase in borrowing costs, can eventually result in banking sector losses which, in turn, could require fiscal support to banks as it happened in some previous episodes. In several emerging markets, credit to nonfinancial private sector has risen rapidly at the same time as fiscal buffers have eroded and as government debt has been set on or neared unsustainable paths.



Sources: Bloomberg, Bank for International Settlements, Haver Analytics, International Monetary Fund International Financial Statistics and World Economic Outlook.
 C. Data are available for Argentina, Brazil, China, Hungary, India, Indonesia, Malaysia, Mexico, Poland, Russia, Saudi Arabia, South Africa, Thailand, and Turkey.

In general, policy buffers to respond to financial stress are considerably higher than in the 1990s. On average in EMDEs, reserves (in percent of GDP) are now more than 60 percent higher than in the 1990s; government debt is 10 percentage points of GDP and external debt is 16 percentage points of GDP below 1990s levels.

These buffers notwithstanding, fiscal risks could compound a growth slowdown that would accompany a post-boom deleveraging. Deteriorating corporate balance sheets may weaken the balance sheets of exposed domestic banks. In a tail risk scenario, large private sector losses could require governments to provide substantial financial support. In past episodes of financial stress, such outlays markedly increased public debt above and beyond the increases attributable to the fiscal deficit (Laeven and Valencia 2012; Claessens et al. 2014; Bova et al. 2016; World Bank 2015b). As in previous episodes, fiscal space can shrink rapidly and borrowing cost can rise steeply during periods of elevated financial stress (Figure SF 1.10). This

could force governments to tighten fiscal policy in the midst of a growth slowdown.

Various policy options could help contain risks from rapid credit growth while maintaining a broadly accommodative monetary policy stance (World Bank 2011, 2013, 2014; Arteta et al. 2015). Measures commonly considered to slow household credit growth include tighter ceilings on debt service-to-income ratios of lower-income households; more pronounced risk-based pricing of household lending; and differential loan-to-value ceilings on first and second mortgages. Other measures can help contain risks from the corporate credit growth, for example, increased stress testing of listed corporates' balance sheets; and pre-emptive legislative and regulatory steps to facilitate restructuring of nonperforming loans and corporate resolution. Measures to contain foreign currency risks in lending to corporates include more intensive stress tests; more intrusive monitoring of liquidity ratios in foreign currencies; and additional hedging requirements.

ANNEX SF1.1 Robustness exercises

This technical annex presents a detailed analysis of the difference between event and non-event episodes discussed in the main text of the Special Focus.

A credit boom is defined as an episode during which the cyclical component of the private sector credit-to-GDP ratio (derived using a Hodrick-Prescott filter) is larger than 1.65 times its standard deviation (i.e. outside the 90 percent confidence interval). The episode starts when the cyclical component of private sector credit-to-GDP exceeds one standard deviation and it ends in a peak year when the credit-to-GDP ratio begins to fall. “0” is the peak year of the credit boom. To address the end-point problem in estimating a Hodrick-Prescott filter, the dataset is expanded by setting the data for 2016-18 to be equal to the data in 2015.

An ordinary least squares regression is estimated for the private sector credit-to-GDP ratio (in percent of GDP), real GDP, current account balances (in percent of GDP), the monetary policy rate, and inflation on dummy variables for each of the 3 years before the peak of a boom or trough of a deleveraging episode, the peak or trough year, and each of the 3 years after the peak or trough. All variables except monetary policy rates are expressed as deviations from their long-term trend. Country fixed effects are included to control for other country-specific factors.

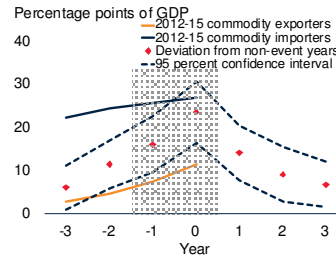
The coefficient estimates for each of the dummy variables (red diamonds in Annex Figures SF 1.1–SF1.2) indicate the deviation in each of these variables during an event from a non-event. The 95 percent confidence intervals are shown in dotted blue lines.

During a credit boom, credit-to-GDP ratios are statistically significantly, and about 25-30 percentage points of GDP, higher; current account deficits are about 3 percentage points of GDP wider; and inflation is about 5 percentage points more elevated than during non-event years. In the run-up to the peak of the boom, real GDP growth is statistically significantly (2-3 percentage

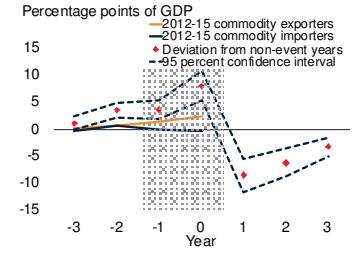
ANNEX FIGURE SF1.1 Developments during credit booms

During credit booms, credit-to-GDP ratios rise significantly above non-events. Current account balances widen, inflation rises, and growth increases significantly more than in non-events.

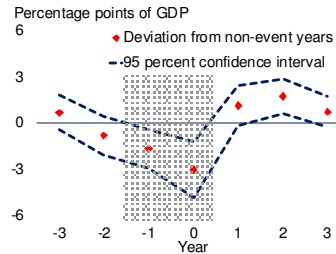
A. Evolution of credit



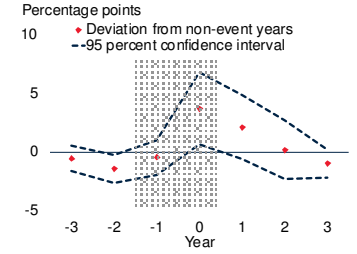
B. Evolution of credit growth



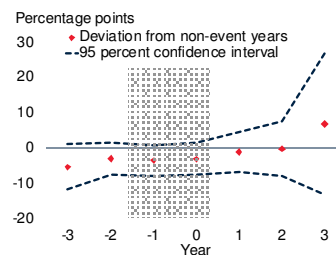
C. Current account balance



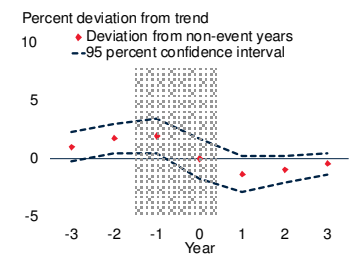
D. Inflation



E. Monetary policy interest rate



F. Growth



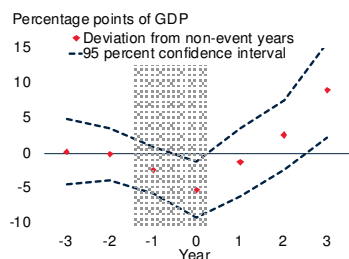
Sources: World Bank, IMF International Financial Statistics, Bank for International Settlements. Notes: Credit booms and their peak years are defined as the same as in Figure SF 1.5. “0” is the peak year of a credit boom. Data availability as in Figure SF1.5. Figures show the estimated deviation (red diamond) of each variable (their cyclical components derived using a Hodrick-Prescott filter except monetary policy interest rate) and its corresponding 95 percent confidence intervals (blue dotted line) from non-event years during the event window (three years before the peak, the peak year, and the three years after the peak).

- A. Credit to the nonfinancial private sector in percent of GDP. The solid orange (commodity exporters) and blue (for commodity importers) lines for 2012-15 show the differences between the sample means for t=0 at 2015Q3 and those during non-event years.
- B. The annual change in credit to the nonfinancial private sector in percentage points of GDP. The solid orange (commodity exporters) and blue (for commodity importers) lines for 2012-15 show the differences between the sample means for t=0 at 2015Q3 and those during non-event years.
- C. The cyclical component of the current account in percent of GDP (derived using a Hodrick-Prescott filter). Data are not available for China until 1997.
- D. The cyclical component of the inflation rate (derived using a Hodrick-Prescott filter). Hyper-inflation episodes are dropped. Data are not available for Argentina until 1991, Mexico until 1987, Russia until 1996, Thailand until 1984, and Turkey until 1995.
- E. Data are available for Bahrain (2007), Brazil (1999), Georgia (2008), Guatemala (2005), Honduras (2005), Indonesia (1990), Jordan (2004), Kazakhstan (2005), Kenya (2006), Malaysia (2004), Mauritius (2006), Mexico (2008), Mongolia (2007), Paraguay (2011), Peru (2003), Philippines (2001), Qatar (2002), Russia (2011), Saudi Arabia (1999), South Africa (1980), Thailand (2000), Turkey (1999), and Uruguay (2008).
- F. The cyclical component of real GDP (in millions of USD dollars) in percent of its trend (derived using a Hodrick-Prescott filter).

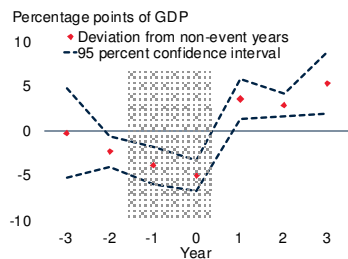
ANNEX FIGURE SF1.2 Developments during deleveraging episodes

During deleveraging episodes, the credit contractions, narrowing of current account deficits and growth slowdowns are statistically significantly larger than during non-events.

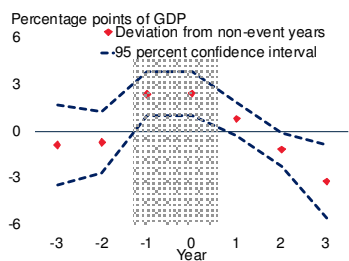
A. Evolution of credit



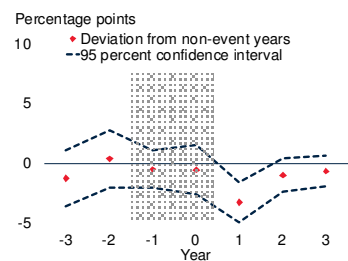
B. Evolution of credit growth



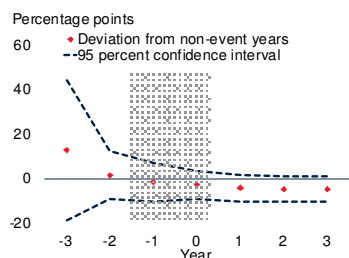
C. Current account balance



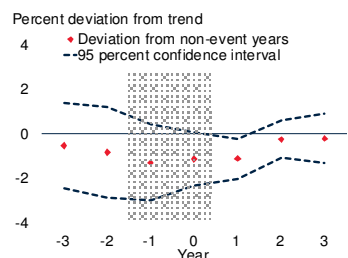
D. Inflation



E. Monetary policy rate



F. Growth



Sources: Bank for International Settlements, Haver Analytics, International Monetary Fund International Financial Statistics and World Economic Outlook.

Notes: Deleveraging episodes and their trough years are defined as the same as in Figure SF 1.7. "0" is the trough year of a credit deleveraging episode. Data availability as in Figure SF1.7. Figures show the estimated deviation (red diamond) of each variable (their cyclical components derived using a Hodrick-Prescott filter except monetary policy interest rate) and its corresponding 95 percent confidence intervals (blue dotted line) during the event window (three years before the trough, the trough year, and the three years after the trough) from non-event years.

A. Credit to the private nonfinancial sector as a percent of GDP.

B. The annual change in credit to the nonfinancial sector as a percent of GDP.

C. The cyclical component of the current account in percent of GDP (derived using a Hodrick-Prescott filter). Data are not available for China until 1997.

D. The cyclical component of the inflation rate (derived using a Hodrick-Prescott filter). Hyper-inflation episodes are dropped. Data are not available for Argentina until 1991, Mexico until 1987, Russia until 1996, Thailand until 1984, and Turkey until 1995.

E. Data are available for Bahrain (2007), Brazil (1999), Georgia (2008), Guatemala (2005), Honduras (2005), Indonesia (1990), Jordan (2004), Kazakhstan (2005), Kenya (2006), Malaysia (2004), Mauritius (2006), Mexico (2008), Mongolia (2007), Paraguay (2011), Peru (2003), Philippines (2001), Qatar (2002), Russia (2011), Saudi Arabia (1999), South Africa (1980), Thailand (2000), Turkey (1999), and Uruguay (2008).

F. The cyclical component of real GDP (in millions of U.S. dollars) in percent of its trend (derived using a Hodrick-Prescott filter).

points) higher than during non-events. However, at the very peak of the credit boom, growth slows towards the pace during non-event years.

In contrast, during deleveraging episodes, private sector credit falls statistically significantly (by over 5 percentage points of GDP) below that in non-events. Current account deficits turn into surpluses and growth falls statistically significantly (although only at the 10 percent confidence level) below growth in non-events.

ANNEX TABLE SF1.1 Review of selected literature: Vulnerabilities arising from credit surges

Authors	Data Coverage	Methodology	Results
Abiad et al. (2011)	23 OECD countries and 25 EM, 1970-2009	Panel data analysis, probit analysis and difference-in-difference method	Creditless recoveries—defined as episodes where real credit growth is negative in the first three years following a recession—follow about one in five recessions. While they seem to be more common in developing countries and emerging markets, they also occur in advanced economies. On average, income growth during credit-less recoveries is about 3.9 percent, as opposed to 4.3 percent for recoveries with credit.
Adrian et al. (2013)	U.S. corporations, 1998-2010	Descriptive analyses and DSGE	While loans show the typical procyclical pattern of rising during a boom and contracting sharply in a downturn, bond financing surges during downturns. During the 2007-09 crisis, the total amount of new issuances of loans and bonds decreased by 50 percent. Loans decreased 75 percent, but bond issuance rose two-fold. The cost of both types of financing increase steeply (four-fold increase for new loans, and threefold increase for bonds).
Alfaro et al. (2016)	21 EM, 1992-1997 and 2009-2014	Descriptive statistics	While corporate vulnerability levels are not as severe as the run-up to the East Asian crisis, corporates in a broader spectrum of emerging markets display weaker liquidity and solvency indicators after 2008-2009.
Amri et al. (2014)	31 EM and 5 troubled eurozone economies, 1981-2010	Descriptive statistics	Two methods identify credit booms: (1) 1.75 standard deviations away from the country specific trend in real credit-to-population; and 2) 1.55 standard deviations away from the country specific trend in log real credit. The unconditional probabilities that a credit boom is preceded by a capital flow surge range from 40 to 71 percent. Meanwhile, the unconditional probabilities that a capital flow surge will be followed by a credit boom range from 11 to 38 percent.
Arcand et al. (2012)	108 countries, 1970-2000	Cross-country and panel analysis	Finance starts having a negative effect on output growth when credit to the private sector reaches 100 percent of GDP. The true relationship between financial depth and economic growth is non-monotone. Findings are not driven by output volatility, banking crises, low institutional quality, or by differences in bank regulation and supervision.
Arena et al. (2015)	135 developing countries, 1960-2011	Descriptive analysis, stylized facts	Credit booms in developing countries, defined as episodes when the cyclical component of real credit is larger than 1.65 times its standard deviation, are similar in their duration and magnitude but differ in their macro-economic implications. Surges in capital inflows precede credit booms, especially in middle-income countries. Credit booms followed by banking crises are associated with depreciations (by 2 percent on average), drops in investment, consumption, and GDP (by 10 percent, 3-4 percent, and 3 percent, respectively, on average) and current account surpluses (by 1.5 percentage points of GDP, on average).
Ayala et al. (2015)	47 EM, 2000-2013	Censored panel regressions with fixed effects	Institutions and macro fundamentals (e.g. current account ratio) create an enabling environment for bond market development. During the recent boom, however, global cyclical factors accounted for most of the variation of bond shares in total corporate debt. The sensitivity to global factors varies with relative bond market size rather than local fundamentals. Foreign bank linkages help explain why bond markets increasingly substituted for banks in providing liquidity to EMs.
Barajas et al. (2010)	18 MENA economies, 1983-2008	Panel data analysis	Credit booms defined by a country-year in which the credit-to-GDP ratio exceeds its trend by 1.5 times the country-specific historical standard deviation, or an absolute increase of 5 percentage points of GDP. Credit slowdowns are often preceded by credit booms. Credit booms account for 3.5 percent of the sample, (country-year pairs). Factors driving lower credit growth are bank funding position deterioration, lending capacity and loan quality tightening; and poor macroeconomic conditions. Expansionary monetary policy helps cushion these negative effects.

ANNEX TABLE SF1.1 Review of selected literature (continued)

Authors	Data Coverage	Methodology	Results
Bech et al. (2012)	24 AE, 1960-2016	Panel data analysis	Deleveraging during financial crisis-led recessions is associated with stronger subsequent recoveries. A decline in private debt by 10 percentage points of GDP during the recession is associated with a 0.6 percentage point increase in average output growth during the recovery phase.
Cecchetti, Mohanty, and Zampolli (2011)	18 OECD economies, 1980-2010	Panel data analysis	Government, corporate, and household debt above 85 percent, 90 percent, and 85 percent of GDP, respectively, reduces growth. Higher financial fragility and higher probability of credit booms and busts are potential channels.
Cetorelli and Goldberg (2009)	U.S. Banks, 2000-2008	Descriptive analysis	Global banks played a significant role in the transmission of the current crisis to emerging-market economies. Adverse liquidity shocks to developed-country banking, such as those that occurred in the United States in 2007-08, have reduced lending in local markets through contractions in cross-border lending to banks and private agents and also through contractions in parent banks' support of foreign affiliates.
Cetorelli and Goldberg (2012)	50 U.S. banks with foreign affiliates, 2006Q1-2010Q1	Panel regression	During the 2008-09 crisis, U.S. banks experiencing funding shocks reduced their internal funding more to peripheral than to core (i.e. large) foreign affiliates.
Chen et al. (2015)	12 EM and 24 AE, 1960-2013	Descriptive analysis; OLS analysis	A decline in the private sector leverage ratio by 10 percentage points over the 5 years of the typical deleveraging episode is associated with an increase in annual growth of about 0.4 percentage points over the subsequent 5 years. Deleveraging episodes tend to last about five years, during which debt falls by about 15 percentage points of GDP. An annual decline in private sector debt ratio by one percentage point during the deleveraging episode is associated with higher annual average real growth rate in the next 5 years by 13-24 basis points.
Claessens, Kose and Terrones (2012)	44 countries, 1960Q1-2010Q4	Descriptive statistics; Duration analysis	By analyzing the interactions between business and financial cycles, it is found that there are strong linkages between the different phases of business and financial cycles. In particular, recessions associated with financial disruptions, notably house and equity price busts, tend to be longer and deeper than other recessions. Conversely, while recoveries following asset price busts tend to be weaker, recoveries associated with rapid credit growth and house prices are stronger.
Claessens and van Horen (2012)	Bank balance sheets in 129 countries, 1995-2009	Descriptive statistics	Bank loans behaved in a markedly procyclical manner (with a lag) during the recent financial crisis, while bond markets did not.
Contessi, Li, and Russ (2013)	U.S., 1952Q1-2013Q1	Descriptive statistics	Bank loans behaved in a markedly procyclical manner (with a lag) during the recent financial crisis, while bond markets did not.
De Haas et al. (2012)	1294 banks, 1999-2009	Panel regression	During the 2008-09 crisis, both domestic and foreign banks cut lending but banks participating in the Vienna Initiative were more stable lenders.
De Haas and van Horen (2013)	Individual syndicated loans, 2000-09	Panel regression	International banks cut cross-border lending sharply during the 2008-09 crisis. However, they continued to lend more to countries in which they maintained close relations with borrower (e.g. because they operated a local subsidiary, they were geographically close, or they had built up more lending experience).

ANNEX TABLE SF1.1 Review of selected literature (continued)

Authors	Data Coverage	Methodology	Results
De Haas and van Lelyveld (2014)	48 international banks and 2,020 domestic banks, 1992-2009	Panel regression	During the 2008-09 crisis, multinational bank subsidiaries had to slow lending almost three times as fast as domestic banks.
Dell'Ariccia et al. (2014)	170 economies, 1960-2010	Panel data analysis	Bank credit booms are episodes when the credit-to-GDP ratio is more than 1.5 times its standard deviation above its trend and the annual average credit growth exceeds 10 percentage points of GDP; or when the annual growth rate of the credit-to-GDP ratio exceeds 20 percent. During boom years, in comparison to non-boom years, growth improves by two percentage points, current account deteriorates by one percentage points and investment growth is 100 percent higher. About 60 percent of credit booms are followed by economic underperformance. About one-third of credit booms are followed by banking crises.
Demirguc-Kunt and Detragiache (2005)	N/A	Literature/methodology survey	Credit growth (defined as the rate of growth of real domestic credit to the private sector) is a statistically significant determinant of banking crises in a multinomial logit approach. Estimated banking crisis probabilities from the multivariate logit approach are higher than those derived from professional forecasts by 2-12 percentage points.
Didier et al. (forthcoming)	Firm-level data for EM, 2008-2015	Descriptive analysis.	Leverage increased more in energy sector firms than in other firms.
Drehmann (2013)	39 EM and AE, 1970-2010	Descriptive analysis.	The credit-to-GDP gap is defined as the difference between the credit-to-GDP ratio and its long-term trend. Compared to the bank credit-to-GDP gap, using the total credit-to-GDP gap (including securitized credits held by the non-bank financial sector and cross-border lending), increases the prediction precision on incidence of banking crises by 5-30 percent.
Edison (2000)	20 EM and AE, 1970-2009	Signals approach; Case study	In an extension of the basic signals approach used to predict crises, vulnerability to crisis is signaled when one or more "indicator variables" (on current account, capital account, real sector and financial sector) deviate significantly (more than 2.5 standard deviations) from their behavior during non-crisis periods. Short-term debt to reserve ratio is found to be the best predictor while the change in domestic credit to GDP ratio is one of the best predictors of financial crises in Asia. Measures such as declines in reserves by more than 50 percent were moderately successful in predicting financial crises in Mexico.
Elektdag and Wu (2011)	21 AE and 43 EM, 1960-2010	Descriptive analysis, stylized facts	Credit booms, defined as episodes when the cyclical component of real credit is larger than 1.55 times its standard deviation, are associated with worsening bank and corporate balance sheets. While corporates' leverage ratio increases by 7-16 percent, banks' credit to total assets ratio and non-performing loan ratios grow by about 5 percentage points. Credit boom are also associated with higher capital inflows (by 1-6 percent), current account deficits (about 2-4 percent of GDP), higher asset prices (by 7-10 percent) and stronger domestic demand (about 2-7 percent). Booms typically last for three years.
Financial Stability Board(2015)	15 AE and 12 EM, 1999-2014	Descriptive analysis	Against the backdrop of ample global liquidity and prolonged low global interest rates, nonfinancial corporate bond issuance in major EMDEs has risen sharply.

ANNEX TABLE SF1.1 Review of selected literature (continued)

Authors	Data Coverage	Methodology	Results
Feyen et al. (2015)	71 emerging and developing countries and 7 industrial sectors, 2000-2014	Panel regression	Global factors are important drivers of emerging and developing economies bond issuance. A decrease in U.S. expected equity market (or interest rate) volatility, U.S. corporate credit spreads, and U.S. interbank funding costs and an increase in the Federal Reserve's balance sheet (1) raise the odds that the monthly issuance volume of a country-industry is above its historical average; (2) decrease individual bond yields and spreads; and (3) raise bond maturities, after controlling for country pull factors, bond characteristics.
Gourinchas and Obstfeld (2012)	22 AEs and 57 Ems, 1973-2010	Discrete panel data analysis	For EM, domestic credit growth and real currency appreciation are the most effective predictors of financial crises. A 9 percentage point increase in the credit to GDP ratio increases the probability of banking crisis in the next three years by 6.4 percent. For emerging markets, a 4 percentage point increase in the reserves to GDP ratio are associated with a lower likelihood of banking crisis by 5.2 percent.
IMF (2015a)	40 EM, 2004-13	Descriptive and panel data analysis	Global factors, such as the inverse of the U.S. shadow rate and the global oil prices, have become more important drivers of EM corporate leverage, as opposed to domestic and firm-specific factors. The share of variation in leverage explained by global factors increased from 6 percentage points in 2007 to 45 percentage points in 2011 (30 percentage points in 2013).
IMF (2015b)	China, 2007-14	Descriptive and panel data analysis	The post-global-financial-crisis credit boom in China resulted in a large credit gap that is around 15 percent of GDP. Corporate debt, the main driver for the credit boom, has risen from 78.9 percent of GDP in 2007 to 111.5 percent of GDP in 2014. The rise in corporate debt has been driven by SOEs, real estate firms, and sectors with overcapacity.
IMF (2015c)	128 countries, 1980-2013	Panel data analysis	The effect of financial development on economic growth is bell-shaped: it weakens at higher levels of financial development (between 0.4 and 0.7 with 1 being the maximum). When financial development proceeds too fast, deepening financial institutions can encourage greater risk-taking and high leverage, which leads to economic and financial instability.
Jassaud and Kang (2015)	Italy, 2007-14	Descriptive analysis	The buildup of nonperforming loans (NPLs) in Italy since the global financial crisis reflects both the prolonged recession as well as structural factors that have held back NPL write-offs by banks. The impediments to NPL resolution in Italy and fostering a market for restructuring distressed assets could support corporate and financial restructuring.
Jorda, Schularick, and Taylor (2013)	14 advanced countries, 1870-2008	Local projection method	Financial-crisis recessions are more painful than normal recessions, and the credit intensity of the expansion phase is closely associated with the severity of the recession phase for both types of recessions. After five years, the financial-crisis recession path of real GDP per capita is about 5 percent lower than the normal-recession path.
Kaminsky, Lizondo, and Reinhart (1998)	5 industrial, 15 developing economies, 1970-95	Signals approach, OLS analysis	A "signals" approach helps predict currency crises. Among all, the real exchange rate serves as the most effective predictor of currency crises: 57 percent of crises were signaled. For credit growth (defined as the change in the ratio of domestic credit to GDP), the average lead time for the domestic credit to GDP ratio to signal a crisis is 12 months.
Lo and Rogoff (2015)	Canada, Japan, UK, U.S., and Euro Area, 2000-15	OLS analysis	Literature survey on persistently slow growth across advanced economies six years after the onset of the financial crisis.

ANNEX TABLE SF1.1 Review of selected literature (continued)

Authors	Data Coverage	Methodology	Results
Mendoza and Terrones (2008)	27 AEs and 22 Ems, 1960-2006	Trend decomposition, Panel data analysis	Credit booms, as defined by 1.75 times the standard deviations from the trend (1 standard deviation for starting and ending dates), are associated with economic expansion (2-4 percent), increasing housing (15 percent) and equity prices (10-30 percent), real appreciation (about 9 percent above trend), and larger current account deficits (around 2 percentage point of GDP); and vice versa for credit contractions. Credit booms tend to last about 6-7 years.
Mendoza and Terrones (2012)	61 emerging and industrial countries, 1960-2010	Trend decomposition, Panel data analyses	Credit booms, as defined by 1.65 times the standard deviations from the trend (1 standard deviation for starting and ending dates), often lasts for 4-5 years. Credit booms show three similarities in industrial and emerging economies: (1) booms are similar in duration and magnitude; (2) banking crises, currency crises or sudden stops often follow credit booms (at similar frequencies in industrial and emerging economies); and (3) credit booms often follow surges in capital inflows, TFP gains, and financial reforms, and are far more common with managed exchange rates.
Milesi-Ferretti and Tille (2010)	75 countries	Panel regression	During the 2008-09 crisis, international banking activity contracted both in terms of cross-border lending and operations through foreign affiliates, with magnitude being more pronounced for cross-border operations.
Reinhart, Reinhart, and Rogoff (2012)	14 AEs 1800-2011	Descriptive analysis	The major public debt overhang episodes in the advanced economies since the early 1800s, characterized by public debt to GDP levels exceeding 90% for at least five years, are associated with growth over one percent lower than during other periods. The growth effects are significant even in the many episodes where debtor countries were able to secure continual access to capital markets at relatively low real interest rates.
Schularick and Taylor (2012)	14 AEs 1870-2008	Panel data analysis	In the pre-war era (1870-1939), credit and money growth are tightly linked. Both the credit-to-GDP ratio and the money-to-GDP ratios are about 0.5. During the post-war era (1945-2008), credit growth was not backed by monetary growth. While the credit-to-GDP ratio is around 1, the money-to-GDP ratio stays below 0.65. High credit growth serve as an early warning indicator of financial crises: an increase in average real loan growth over 5 years by one standard deviation (7 percent) increases the probability of crisis by 2.45-2.8 percentage points.
Shin (2014)	NA	Descriptive analysis	Global bank financing has increasingly given way to asset managers and other "buy side" investors who have global reach.

References

- Abiad, A., G. Dell’Ariccia, and B. Li. 2011. “Creditless Recoveries.” Working Paper 11/58, International Monetary Fund, Washington, DC.
- Acharya, V., S. Cecchetti, J. Gregorio, Ş. Kalemli-Özcan, P. Lane, and U. Panizza. 2015. “Corporate Debt in Emerging Economies: A Threat to Financial Stability?” *Brookings Institution Report*, Brookings Institution, Washington, DC.
- Adrian, T., P. Colla, and H. Shin. 2013. “Which Financial Frictions? Parsing the Evidence from the Financial Crisis of 2007 to 2009” in *NBER Macroeconomics Annual 2012 (27)*, edited by D. Acemoglu, J. Parker, and M. Woodford. University of Chicago Press: 159-214.
- Alfaro, L., G. Asis, C. Anusha, and U. Panizza. Forthcoming. “Lessons Unlearned? Corporate Debt in Emerging Markets.” Policy Research Working Paper. World Bank, Washington, DC.
- Amri, P., S. Kim, W. Nugroho, A. Ouyang, and T.D. Willett. 2014. “Capital Surges and Credit Booms: How Tight is the Relationship?” Paper presented at the Western Economics Association International Conference.
- Arcand, J-L, E. Berkes, and U. Panizza. 2012. “Too Much Finance?” Working Paper 12/161, International Monetary Fund, Washington, DC.
- Arena, M., S. Bouza, E. Dabla-Norris, K. Gerling, and L. Njie. 2015. “Credit Booms and Macroeconomic Dynamics: Stylized Facts and Lessons for Low-Income Countries.” Working Paper 15/11, International Monetary Fund, Washington, DC.
- Arteta, C., M. A. Kose, F. Ohnsorge, and M. Stocker. 2015. “The Coming U.S. Interest Rate Tightening Cycle: Smooth Sailing or Stormy Waters?” Policy Research Note No. 2, World Bank, Washington, DC.
- Ayala, D., M. Nedeljkovic, and C. Saborowski. 2015. “What Slice of the Pie? The Corporate Bond Market Boom in Emerging Economies.” Working Paper 15/148, International Monetary Fund, Washington, DC.
- Barajas, A., R. Chami, R. Espinoza, and H. Hesse. 2010. “Recent Credit Stagnation in the MENA Region: What to Expect? What can be Done?” Working Paper 10/219, International Monetary Fund, Washington, DC.
- Bech, M., L. Gambacorta, and E. Kharroubi. 2012. “Monetary Policy in a Downturn: Are Financial Crises Special?” Working Paper 388, Bank for International Settlements, Geneva.
- Bova, E., M. Ruiz-Arranz, F. Toscani, and H. E. Ture. 2016. “The Fiscal Costs of Contingent Liabilities: A New Dataset” Working Paper 16/14, International Monetary Fund, Washington, DC.
- Buttiglione, L, P. Lane, L. Reichlin, and V. Reinhart. 2014. “Deleveraging? What Deleveraging?” *Geneva Reports on the World Economy 16*, International Center for Monetary and Banking Studies, Geneva.
- Cetorelli, N., and L. Goldberg. 2009. “Globalized Banks: Lending to Emerging Markets in the Crisis.” Staff Report 377, Federal Reserve Bank of New York.
- Cetorelli, N., and L. Goldberg. 2012. “Liquidity Management of U.S. Global Banks: Internal Capital Markets in the Great Recession.” *Journal of International Economics* 88 (2): 299-311.
- Cecchetti, S., M. Mohanty and F. Zampolli. 2011. “The Real Effects of Debt.” Working Paper 352, Bank for International Settlements, Geneva.
- Chen, S., M. Kim, M. Otte, K. Wiseman, and A. Zdzienicka. 2015. “Private Sector Deleveraging and Growth Following Busts.” Working Paper 15/35, International Monetary Fund, Washington, DC.
- Chui, M., I. Fender, and V. Sushko. 2014. “Risks Related to EME Corporate Balance Sheets: The Role of Leverage and Currency Mismatch.” *BIS Quarterly Review* (September): 35-47, Bank for International Settlements, Geneva.

- Chui, M.K., E. Kuruc and P. Turner. 2016. "A New Dimension to Currency Mismatches in the Emerging Markets Nonfinancial Companies." Working Paper 550. Bank for International Settlements, Basel.
- Claessens, S., M. A. Kose, and M. Terrones. 2012. "How do Business and Financial Cycles Interact?" *Journal of International Economics* 87(1): 178-90.
- Claessens, S., and N. van Horen. 2012. "Impact of Foreign Banks." Working Paper 370. De Nederlandsche Bank, Amsterdam.
- Claessens, S., M. A. Kose, L. Laeven, and F. Valencia. 2014. *Financial Crises: Causes, Consequences, and Policy Responses*. Washington DC: International Monetary Fund.
- Contessi, S., L. Li, and K. Russ. 2013. "Bank vs. Bond Financing Over the Business Cycle." *Economic Synopses* 31.
- Cortina, J., T. Didier, and S. Schmukler. Forthcoming. "How Long Do Corporates Borrow? Evidence from Capital Raising Activity." Policy Research Working Paper, World Bank, Washington, DC.
- De Haas, R., Y. Korniyenko, E. Loukoianova, and A. Pivovarsky. 2012. "Foreign Banks and the Vienna Initiative: Turning Sinners into Saints?" Working Paper 12/117, International Monetary Fund, Washington, DC.
- De Haas, R., and N. van Horen. 2013. "Running for the Exit? International Bank Lending During a Financial Crisis." *The Review of Financial Studies* 26(1): 244-85.
- De Haas, R., and I. van Lelyveld. 2014. "Multinational Banks and the Global Financial Crisis: Weathering the Perfect Storm." *Journal of Money, Credit and Banking* 46(1): 333-64.
- Dell'Ariccia, G., et al. 2014. "Policies for Macro-Financial Stability: Dealing with Credit Booms and Busts." in *Financial Crises: Causes, Consequences, and Policy Responses*, edited by Claessens, S., Kose. A., L. Laeven, and F. Valencia. International Monetary Fund, Washington, DC.
- Demirguc-Kunt, A., and E. Detragiache. 2005. "Cross-Country Empirical Studies of Systemic Bank Distress: A Survey." *National Institute Economic Review* 192 (1) : 68-80.
- Didier, T., E. Feyen, S. Ghosh, and I. Zuccardi. Forthcoming. "Corporate Debt Vulnerabilities of Listed Non-Financial Corporations in Emerging and Developing Economies." Policy Research Working Paper, World Bank, Washington, DC.
- Domanski, D., J. Kearns, M. Lombardy, and H. Shin. 2015. "Oil and Debt." *BIS Quarterly Review* (March): 55-65, Bank for International Settlements, Geneva.
- Drehmann, M. 2013. "Total Credit as an Early Warning Indicator for Systemic Banking Crises." *BIS Quarterly Review* (June): 41-45, Bank for International Settlements, Geneva.
- Edison, H. J. 2000. "Do Indicators of Financial Crises Work? An Evaluation of an Early Warning System." Discussion Paper 675, Board of Governors of the Federal Reserve System, Washington, DC.
- Eichengreen, B. and C. Arteta. 2002. "Banking Crises in Emerging Markets: Presumptions and Evidence," in *Financial Policies in Emerging Markets*, edited by M. Blejer and M. Skreb. Cambridge and London, MIT Press: 47-94.
- Elekdag, S., and Y. Wu. 2011. "Rapid Credit Growth: Boon or Boom-Bust?" Working Paper 11/241, International Monetary Fund, Washington, DC.
- Financial Stability Board. 2015. "Corporate Funding Structures and Incentives." Financial Stability Board, Basel.
- Feyen, E., S. Ghosh, K. Kibuuka, and S. Farazi. 2015." Global Liquidity and External Bond Issuance in Emerging Markets and Developing Economies." Policy Research Working Paper

7363, Washington, DC, World Bank.

Gourinchas, P-O., and M. Obstfeld. 2012. "Stories of the Twentieth Century for the Twenty-First," *American Economic Journal: Macroeconomics* 4(1): 226-65.

International Monetary Fund. 2015a. "Corporate Leverage in Emerging Markets – A Concern?" *Global Financial Stability Report*, Chapter 3, Washington DC: International Monetary Fund.

International Monetary Fund. 2015b. "Article IV Consultation with the People's Republic of China." Washington, DC: International Monetary Fund.

Jassaud, N., and K. Kang. 2015. "A Strategy for Developing a Market for Nonperforming Loans in Italy." Working Paper 15/24, International Monetary Fund, Washington, DC.

Jorda, O., Schularick, M., and A. Taylor. 2013. "When Credit Bites Back" *Journal of Money, Credit and Banking* 45(2):3-28.

Kaminsky, G., S. Lizondo, and C. Reinhart. 1998. "Leading Indicators of Currency Crises." *IMF Staff Papers* 45(1): 1-48.

Lo, S., and K. Rogoff. 2015. "Secular Stagnation, Debt Overhang and Other Rationales for Sluggish Growth, Six Years on." Working Papers 482, Bank of International Settlement.

Laeven, L., and F. Valencia. 2012. "Systemic Banking Crises Database: An Update." Working Paper 12/163, International Monetary Fund, Washington, DC.

McCauley, R.N., P. McGuire and V. Sushko 2015. "Dollar Credit to Emerging Market Economies." *BIS Quarterly Review* (December): 27-41. Bank for International Settlements, Geneva.

Mendoza, E., and M. Terrones. 2008. "An Anatomy of Credit Booms: Evidence from Macro Aggregates and Micro Data." Working Paper 14049, National Bureau of Economic Research, Cambridge.

Mendoza, E., and M. Terrones. 2012. "An Anatomy of Credit Booms and their Demise" Working Paper 18379, National Bureau of Economic Research, Cambridge.

Milesi-Ferretti, G., and T. Cédric. 2011. "The Great Retrenchment: International Capital Flows during the Global Financial Crisis." *Economic Policy* 26 (66): 285-342.

Reinhart, C.M., V. R. Reinhart and K. S. Rogoff. 2012. "Debt Overhangs: Past and Present" Working Paper 18015, National Bureau of Economic Research, Cambridge.

Schularick, M., and A. Taylor. 2012. "Credit Booms Gone Bust: Monetary Policy, Leverage Cycles and Financial Crises, 1870–2008." *American Economic Review* 102(2): 1029-61.

Shin, H. S. 2014. "The Second Phase of Global Liquidity and Its Impact on Emerging Economies." in *Volatile Capital Flows in Korea*, edited by K. Chung, S. Kim, H. Park, C. Choi, and H.S.Shin. Springer: 247-57.

Takáts, E. and C. Upper. 2013. "Credit and Growth after Financial Crises." Working Paper 416, Bank for International Settlements, Geneva.

World Bank. 2011. Republic of Indonesia: Financial Sector Assessment. Washington, DC: World Bank.

_____. 2013. Malaysia: Financial Sector Assessment. Washington, DC: World Bank.

_____. 2014. Poland: Financial Sector Assessment. Washington, DC: World Bank.

_____. 2015a. Global Economy in Transition: June 2015 Global Economic Prospects. Washington, DC: World Bank.

_____. 2015b. Using Fiscal Space and Having It: January 2015 Global Economic Prospects. Washington, DC: World Bank.



SPECIAL FOCUS 2

Quantifying Uncertainties
in Global Growth Forecasts

Special Focus 2: Quantifying Uncertainties in Global Growth Forecasts

An assessment of forecast uncertainty and the balance of risks is critical to support effective policy making. This Special Focus presents the approach used in the Global Economic Prospects to quantify risks to baseline global growth forecasts in a fan chart, using information extracted from option pricing and survey-based data. Forecast uncertainty has increased since January 2016 while the balance of risks to global growth forecasts has tilted further to the downside.

Global and regional growth projections have an important bearing on the assessment of individual country prospects and policy choices. However, these projections are subject to a range of uncertainties that could also influence policy decisions. Such uncertainties around baseline forecasts could be caused by low-probability but high-impact events, persistent forecast errors in models or expert judgment, or heightened volatility around economic turning points or during episodes of financial stress. The likelihood of actual outcomes deviating from projections is therefore significant, and might vary over time. Policy makers need to be informed about risks prevailing at the time of the forecast, and how these risks translate into confidence intervals around baseline projections.

A quantification of risks around global growth forecasts can be achieved in different ways. A first approach is to look at past prediction errors as a rough guide to likely future forecast deviations. This provides an objective but static and unconditional measure of uncertainty, which does not reflect current circumstances that might affect forecast errors. A second approach to partly address this shortcoming is to undertake scenario analysis. In this case, results will be largely dependent on the properties of the specific model used for simulations whereas most institutions derive their baseline forecasts from a variety of models and expert judgment. Measures of uncertainty should reflect this process, linking

actual forecast errors with uncertainty regarding underlying assumptions.

This Special Focus essay derives confidence intervals around global growth projections by mapping the distribution of forecast errors to that of selected risk factors; including option prices on equities and oil prices as well as consensus forecasts for term spreads, i.e., the difference between long- term and short- term interest rates), across G20 economies (which account for 64 percent of global GDP). Signals from the market-implied or consensus forecast distribution of these forward-looking indicators are extracted and weighted to derive a fan-chart around global growth projections.

This Special Focus describes the fan chart approach, answering the following three questions:

1. What are the selected risk indicators used to assess forecast uncertainty?
2. How can different risk factors be combined in a single fan chart?
3. What is the current balance of risks to global growth?

Selected risk indicators

Various market— and survey-based indicators have been suggested as useful measures of forecast uncertainty. In particular, the pricing of options used by investors to hedge can provide information on market perception of underlying risks (Moschini and Lapan 1995; Carter 1999) and has predictive power in forecasting future uncertainty of the underlying assets (Christensen and Prabhala 1998; Andersen and Bondarenko

Note: This Special Focus was prepared by Franziska Ohnsorge, Yirbehogre Modeste Some and Marc Stocker, with research assistance from Peter Williams. Going forward, the fan chart developed in this analysis will be updated on a semi-annual basis, maintaining fixed weights over three-year windows.

2007; and Busch, Christensen and Nielsen 2011). The degree of disagreement among private sector forecasters can also capture diverging signals on the outlook, and is particularly large around cyclical turning points (Geraats 2008; Siklos 2014). The evolution of such disagreements has been shown to affect the probability distribution of forecast errors (Bachman, Elstner and Sims 2012; Patton and Timmerman 2010). Three risk indicators are used in this exercise:

- *Equity prices.* Equity prices futures—especially the Standard and Poor’s S&P500 Index—are positively correlated with prospects for the U.S. and global economy.
- *Term spreads.* Term spreads (difference between long and short-term nominal interest rates) embed both inflation and real equilibrium interest rate expectations, both of which are tightly connected to growth prospects. A global term spread is proxied by GDP-weighted term spreads across G20 economies.
- *Average of Brent and WTI crude oil forward prices.* Abrupt changes in oil prices make growth prospects more uncertain. A supply-driven decline in oil prices tends to improve global growth prospects.

For each risk factor, its forecast distribution captures both the degree of uncertainty and the balance of risks:

- The degree of uncertainty surrounding each risk factor is captured by the dispersion of its forecast distribution. The dispersions for the Brent and WTI prices and S&P 500 returns risk factors are measured by the implied volatility of at-the-money forward option prices.¹ For the June GEP forecast vintages, the 6-month maturity implied volatility is used for current year forecast whereas 18-month maturity implied volatility is used for next year forecast.² For global term spread, the

dispersion is computed from the monthly Consensus Economics survey for each country of the G20 and aggregated using real GDP weights.³

- The balance of risks for each factor is captured by the skewness of its forecast distribution. A negative skewness indicates a balance of risks that is tilted to the downside. The skewness of the risk-neutral probability distributions of option price on S&P 500 returns as well as on Brent and WTI prices are approximated from the slope of their respective implied volatility curves, following the methodology of Mixon (2011).⁴ For the term spread, the skewness is computed from the monthly Consensus Economics survey for each country of the G20 and aggregated using real GDP weights.

Several episodes of heightened uncertainty stand out from the analysis of these risk factors (Figure SF 2.1). The first one is the global financial crisis of 2008-09. Its unexpected severity was associated with financial market disruptions and a broad-based increase in volatility and risk aversion (Stock and Watson 2012; Allen, Bali, and Tang 2012). This was also reflected in the rising degree of uncertainty of all three risk factors. The second and third, albeit milder, episodes were around intensifications in the Euro Area sovereign debt crisis in 2011 and 2012, when financial market indicators also pointed towards a greater level of uncertainty surrounding global growth forecasts. Recent episodes of market stress, such as those associated with the Taper Tantrum in 2013,

³Only countries with available data on interest rates are used in the aggregations. These include: Australia, Canada, France, Germany, India, Indonesia, Italy, Japan, Netherlands, Republic of Korea, Sweden, Spain, Switzerland, the United Kingdom, and the United States.

⁴The skewness is approximated based on the following measure of implied volatility skew: $(25 \text{ percent Delta Call implied volatility} - 25 \text{ percent Delta Put implied volatility}) / 50 \text{ percent Delta implied volatility}$ where Delta is the degree to which an option is exposed to shifts in the price of the underlying asset. The framework assumes that the option-implied distribution generates a volatility curve that is linear in delta. This model is considered as more empirically plausible than one assuming linearity in the percentage strike model (Mixon 2011). Among measures based on the slope of the implied volatility curve, this measure is the least correlated with the level of implied volatility. Robustness checks are undertaken with alternative skew measures such as the widely used $(90 \text{ percent moneyness implied volatility} - 110 \text{ percent moneyness implied volatility}) / 100 \text{ percent moneyness implied volatility}$ measure, with largely similar results.

¹The data sample is from January 2006 to April 2016.

²Ideally, the fan chart would extend into 2018. However, reliable market-based indicators derived from liquid option markets are not available at this horizon.

sharply declining oil prices since mid-2014 and the ongoing emerging market slowdown have also raised forecast uncertainty. Around these episodes, downside risks to growth have been more prevalent.

Risk indicators and global growth

To characterize the evolution of uncertainty around global growth forecasts, a similar approach to that proposed by Blix and Sellin (1998) and Kannan and Elekdag (2009) is used. More specifically, changes in the degree of uncertainty (dispersion) and balance of risks (skewness) of underlying risk factors are used to assess the potential size and direction of forecast errors at any point in time.

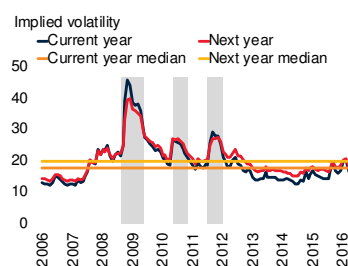
In order to calculate the degree of uncertainty and balance of risks of global growth forecasts from the selected risk factors, a number of assumptions are needed regarding the functional form of their respective distributions, as well as the weight given to individual risk factors. In line with other authors (Blix and Sellin 1998 and Kannan and Elekdag 2009), a two-piece normal distribution is used to characterize both global growth forecasts and individual risk factors. The uncertainty and balance of risks (measured by the dispersion and skewness) of global growth forecasts is recovered from the corresponding statistics of the distribution of the three risk factors, assuming a linear relationship between them.

To aggregate risk factors into a measure of global risk, weights of each risk factor need to be estimated. A first option is to use model simulations to estimate the risk weights (Österholm 2009; Michal et al 2014; Alvaro and Maximiano 2003). This consists of simulating the forecast distribution under alternative scenarios and then minimizing the distance between the baseline forecast distribution and a weighted average of the distributions under each scenario. This approach provides a useful illustration to discuss forecast uncertainty, but depends heavily on individual model properties and scenario assumptions.

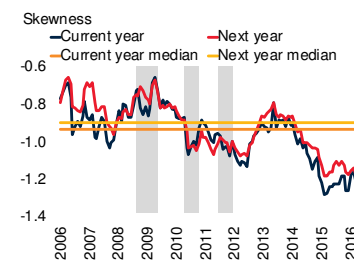
FIGURE SF2.1 Uncertainty and balance of risks for risk factors

Uncertainty. The implied current-year volatility of equity price options and next-year volatility of term-spread forecasts have edged up since the second half of 2015 but remain near their historical medians. In contrast, the implied volatility of oil price futures widened to post-crisis highs, pointing to increased uncertainty. **Balance of risks.** The distribution of future equity prices is increasingly tilted to the downside while that of oil price futures is tilted to the upside. Movements in the skewness of term spread forecasts are mixed. Together, these developments suggest higher uncertainty and rising downside risk to global growth for 2016 and 2017.

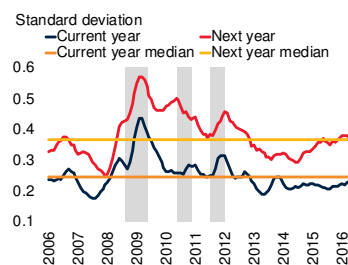
A. S&P500: Degree of uncertainty



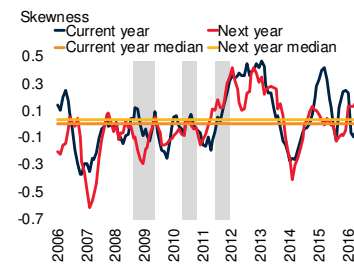
B. S&P500: Balance of risks



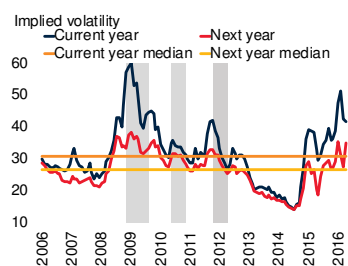
C. Term spread: Degree of uncertainty



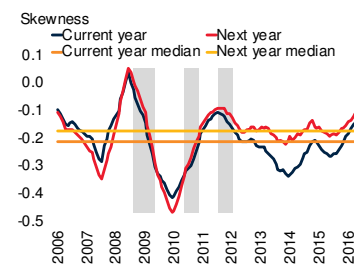
D. Term spread: Balance of risks



E. Oil price: Degree of uncertainty



F. Oil price: Balance of risks



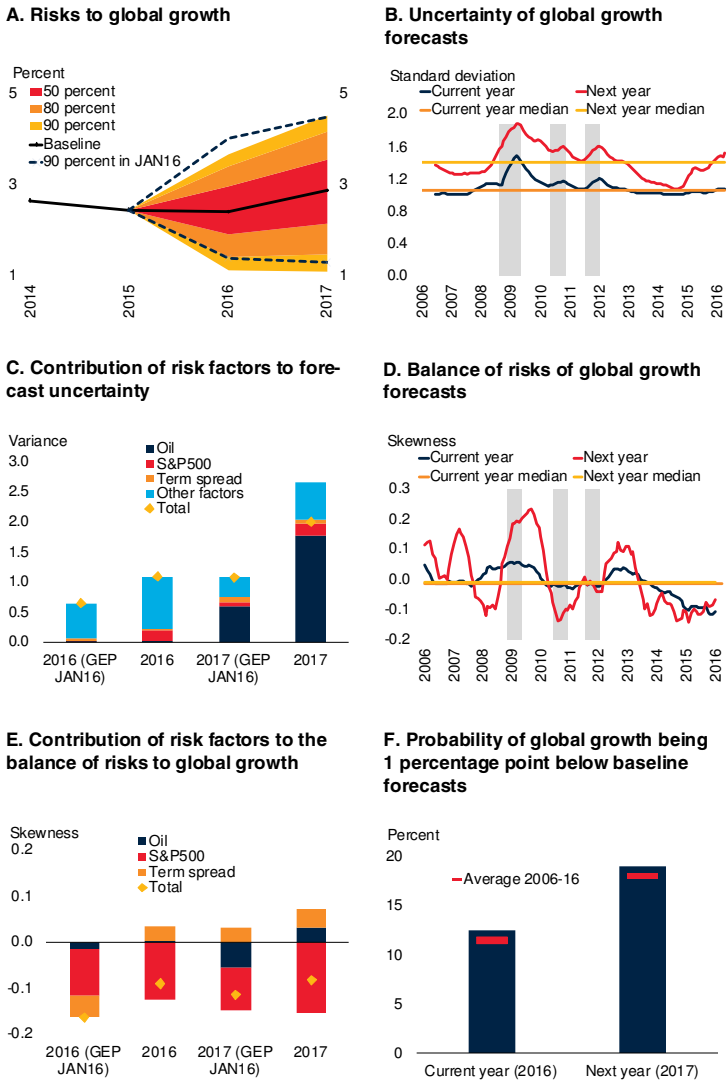
Sources: World Bank, Bloomberg, Consensus Economics.

Note: Gray areas represent the global financial crisis of 2008-09, the intensifications of the Euro area debt crisis in 2010 and 2012.

A. The implied volatility of option prices on the S&P 500 is recovered using the Black-Scholes formula from 6- and 18-month-ahead put and call option contracts. B. The skewness of option prices on the S&P 500 is approximated using $(25 \text{ Delta Put volatility} - 25 \text{ Delta Call volatility}) / 50 \text{ Delta volatility}$ where Delta stands for the degree to which an option is exposed to shifts in the price of the underlying asset. This skewness measure is scaled down by a factor of 3 to match the equivalent skewness parameter of the risk neutral density function (Mixon 2011). C.D. The degree of uncertainty (proxied by dispersion) and balance of risks (proxied by skewness) of current and next-year term spread forecasts are compiled from monthly surveys of professional forecasters.

FIGURE SF2.2 Risks to global growth

Uncertainty surrounding global growth forecasts has increased since the January 2016 Global Economic Prospects and is slightly above the historical median. Upside risks have decreased while downside risks for the current year have reached post-crisis highs. The probability of a 1 percentage point decline below current global growth projections in 2016 is estimated at 12.5 percent.



Sources: World Bank, Bloomberg, Consensus Economics.
 Notes: The methodology is discussed in detail in Annex SF2.1. "GEP JAN16" stands for Global Economic Prospects in January 2016.
 A. "90 percent in JAN16" is the 90 percent confidence interval of a fan chart based on data available for the January 2016 Global Economic Prospects report.
 B. Dispersion is measured by the standard deviation. Gray areas represent the global financial crisis of 2008-09 and the intensification of the Euro area debt crisis in 2010 and 2012.
 C. "Other factors" denotes the contribution of own shocks of global growth forecast error in VAR variance decomposition.
 D. The balance of risk is measured by the skewness. Gray areas represent the global financial crisis of 2008-09 and the intensification of the Euro area debt crisis in 2010 and 2012.

Kannan and Elekdag (2009) and Blix and Sellin (1998) use a simpler approach, estimating elasticities of global growth with respect to risk factors by running an OLS regression on each risk factor individually. The same OLS coefficients are used as weights for the skewness and variance at all forecast horizons, ignoring any lag structure and potential interactions between risk factors.⁵

However, the lag structure and interactions may matter. For example, the performance of the yield curve predictor of future growth depends on the forecast horizon (Ang et al. 2006; Wheelock and Wohar 2009). More refined approaches to estimating the risk weights include Bayesian methods (Cogley et al. 2005) and Vector Autoregressive analysis (Novo and Pinheiro 2003, Smets and Wouters 2004).

The baseline approach adopted here departs from the OLS-based approach proposed by Kannan and Elekdag (2009) in two ways: in the selection of the risk factors and in the estimation of the weight parameters used in the aggregation of risk factors. In the approach used here, the weights assigned to each risk factor in the aggregation into global risks are different and vary over the forecast horizon. The weights for the computation of the global growth forecast *uncertainty* are estimated as the share of the variance of the global growth forecast error explained by each risk factor at various forecast horizons (see technical discussion in Annex SF2.1).

Instead of using the same weights for uncertainty and balance of risks (as in the OLS-based approach), the weights to aggregate the *balance of risks* of individual risk factors into a global balance of risks are the impulse responses of global growth to each risk factor at different forecast horizon. This approach allows individual risk factors to tilt the global balance of risks differently at different forecast horizons. The variance decomposition and impulse responses are derived from the recursive identification also used in the analysis of

⁵In Kannan and Elekdag (2009) the risk factors selected include inflation, term spread, S&P500 and oil prices. Inflation is excluded here for two reasons: first, changes in oil prices will eventually feed into inflation and, second, monetary policy tightening risk in response to increases in inflation is captured by the term spread.

spillovers (World Bank 2016a).⁶ Using this weighted average global uncertainty and balance of risks, a fan chart can be drawn around the baseline global growth forecast (Figure SF 2.2).⁷

Balance of risks to global growth

The resulting fan chart shows confidence intervals at 50, 80 and 90 percent probability around the growth projections in the June 2016 *Global Economic Prospects* (Figure SF 2.2). The fan chart uses information available up to May 2016. It illustrates that the uncertainty surrounding global growth forecasts has risen marginally above the long-term average and increasingly tilted to the downside.

The period around the global financial crisis in late 2008–early 2009 illustrates the risks captured in the fan chart. After sharp corrections in most asset prices (financial, housing, or commodities), the balance of risks may have been on the upside. However, this bias was negligible compared to the record-high uncertainty that opened up.

Uncertainty about growth forecasts for 2016 and 2017 is estimated to be near the historical median but has increased since early January 2016, especially for 2017. This reflects heightened volatility in oil prices, term spreads and equity prices since the start of 2016. That said, forecast uncertainty remains significantly below levels observed during the Euro Area crisis in late 2011, let alone the global financial crisis of 2008-09. The balance of risks is tilting increasingly to the downside for 2016. Rising downside risks reflect, especially, growth concerns captured in falling equity price futures.

Compared to the January 2016 projection, upside risks to the baseline forecast have decreased, with equity markets suggesting a lower probability of

strengthening growth. For 2017, risks may be turning more balanced. Downside risks to oil prices could boost global growth in 2017 and expectations for rising term spreads may signal receding recession risks. Similarly, a sharp deterioration in investor sentiment could disrupt financial markets and present a downside risk to global growth.

Some of the downside risks have materialized since the January forecasts, resulting in forecast downgrades for 2016 and 2017. That said, the probability of global growth being 1 percentage point lower than currently projected in 2017 remains around the average for the decade (19 percent as of May 2016), still well below the probability in 2008 on the eve of the global financial crisis (26 percent).⁸ The probability of growth falling to or below 1 percent (the growth rate likely associated with global recession) is somewhat above the 10-year average for 2006-16.⁹

Conclusion

A complete assessment of global economic prospects requires baselines forecasts as well as an assessment of risks. The latter conveys to policy makers a sense of the uncertainty prevailing at the time of forecasting, which might vary with incoming data, past forecast performance, and changing expectations. In this special focus three questions have been addressed:

- What are the selected risk indicators used to assess forecast uncertainty? Three risk factors were chosen for their tight connection with global growth prospects: equity prices, term spreads, oil prices. Changes in the distribution of forecasts for these underlying risk factors are mapped into a distribution of risks for global growth.
- How can different risk factors be combined in a single fan chart? Signals extracted from the distribution of individual risk factors are

⁶The ordering of the variables used in the Cholesky decomposition is as follows: global term spread, stock-market returns (S&P500), oil prices, and global growth. The variance decomposition results show that, historically, other factors not included in the analysis explain more the variance of global growth forecast errors than the three selected risk factors in the short-run (see Annex Table SF2.1)

⁷The risk weights can be adjusted to reflect judgment when there are significant divergences between market perceptions and World Bank Group assessments of risks (Blix and Sellin 1997).

⁸The probability of global growth being 1 percent lower than currently projected for next year averaged 18 percent during 2006 and 2015, peaking at 26 percent in 2008.

⁹The probability of growth falling below 1 percent is 5 percent, just above the 2006-16 average (excluding the global recession 2009) of 3.5 percent for the current year and 10 percent for the next year.

aggregated using weights estimated from a vector autoregression model of global growth on the risk indicators. This approach allows individual risk factors to impact forecast uncertainty and the balance of risks differently at different forecast horizons.

- What is the current balance of risks to global growth? Uncertainty about growth forecasts for 2016 and 2017 is estimated to be near the historical median but has increased since early January 2016, especially for 2017. The balance of risks to global growth forecasts for

2016-17 has tilted further to the downside since January 2016.

Some downside risks have materialized since the January 2016 forecasts. As a result, a forecast downgrade has accompanied rising uncertainty around global growth forecasts and a balance of risks that is increasingly tilted to the downside. Given the already-weak global growth prospects in 2016, the probability of global growth falling to or below 1 percent in 2016 is above its historical average.

ANNEX SF2.1 Estimating the distribution of the global growth forecast

This annex provides the technical details of assessing the uncertainty surrounding the GEP global growth forecast. For computational tractability and in line with previous authors, a two-piece normal distribution is used to characterize both global growth forecasts and individual risk factors.¹⁰ The assumption of a two-piece normal distribution for global growth allows asymmetry to be captured by a combination of the mode and standard deviation of two individual normal distributions. The skewness and standard deviations of the risk factors are directly computed from the distributions of the market-based and survey-based data.

Assessing uncertainty in the global growth forecast

The degree of uncertainty surrounding the forecast points relative to historical levels of uncertainty is measured by the mean square errors of historical forecast. As in Kannan and Elekdag (2009) and Blix and Sellin (1998) global growth risk is assumed to be based on an assessment of the selected risk factors.

Broadly in line with Kannan and Elekdag (2009), the selected global risk factors include risks to oil prices, global stock markets (as proxied by the S&P500 index) and a GDP-weighted average of term spreads in G20 countries (see more extensive discussion in the main text of this Special Focus).¹¹

- Equity prices. Equity prices futures—especially the Standard and Poor’s S&P500 index—are positively correlated with prospects for the U.S. and global economy. Their implied volatility signals changes in

global investors’ risk aversion (Adrian and Shin 2014, Bekaert, Hoerova and Lo Duca 2013). The implied volatility of the S&P 500 returns at 6- and 18-months-ahead option contracts at 100 percent moneyness is obtained from Bloomberg and used as a proxy for equity market uncertainty.

- Term spreads. Term spreads (difference between long and short-term nominal interest rates) embed both inflation and real equilibrium interest rate expectations, which are tightly connected to growth prospects (Cieslak and Povala 2014). A rapid decline in term spreads is seen as a predictor of increased recession risks.¹² The dispersion of term spread forecasts therefore captures uncertainty surrounding growth prospects while a left hand shift in their distribution signals a predominance of downside risks. Current and next-year term spread forecasts are compiled from monthly surveys published by Consensus Economics from January 2006 to May 2016. A global term spread is proxied by GDP-weighted (at 2010 prices and exchange rates) term spreads across G20 economies.
- Average of Brent and WTI crude oil forward prices. Abrupt changes in oil prices make growth prospects more uncertain. A supply-driven decline in oil prices raises global growth prospects (Baffes et al 2015; Kilian 2014). As in the case of the S&P 500, the implied volatility at 100 percent moneyness of Brent and WTI crude oil prices at 6- and 18-months-ahead option contracts are obtained from Bloomberg and used as a proxy for crude oil market uncertainty. Crude oil prices implied volatility is obtained by taking a simple average of that of Brent and WTI.

¹⁰For more properties of the two-piece normal distribution, see Kannan and Elekdag (2009).

¹¹Kannan and Elekdag (2009) also include U.S. inflation as a risk factor to proxy the risks to U.S. monetary policy. However, for most countries, especially emerging markets and developing countries (EMDE), the most immediate risks to monetary policy are already captured by equity prices and term spreads.

¹²Harvey (1989), Estrella and Hardouvelis (1991), Estrella and Mishkin (1996), Haubrich and Dombrosky (1996), Dueker (1997); Kozicki (1997), Dotsey (1998), Stock and Watson (2003), and Kao et al. (2013).

Changes in risk stemming from these risk factors signal a change in the distribution of global growth forecast. The current measure of the h -period ahead global growth forecast uncertainty $\sigma^2(h)$ is assumed to be linearly related to its historical level as:

$$\sigma^2(h) = \varphi(h)\sigma_{hist}^2(h) \quad (1),$$

where $\sigma_{hist}^2(h)$ is the mean square errors of the historical global growth forecast and $\varphi(h)$ is a scaling parameter for a given forecast horizon h calculated as:

$$\varphi(h) = \beta_\varepsilon(h) + \sum_j \beta_j(h) \frac{\sigma_j^2(h)}{\sigma_{j,hist}^2(h)} \quad (2),$$

where $\sigma_j^2(h)$ is the current measure of h -period ahead forecast uncertainty extracted from risk factor j and $\sigma_{j,hist}^2(h)$ the corresponding historical measures and $\beta_j(h)$ is the weight (defined to be positive) of factor j in explaining the forecast errors variance of global growth. $\beta_\varepsilon(h)$ is the weight of other factors not included in the analysis. By construction, the weight parameters for a given forecast horizon h are constrained to add up to 1:

$$\beta_\varepsilon(h) + \sum_j \beta_j(h) = 1 \quad (3)$$

The parameter φ amplifies or dampens historical uncertainty by the uncertainty surrounding individual risk factors. A φ responsive to variations in uncertainty of the risk factors adds objectivity to the assessment of global growth uncertainty. Notice that subjective judgements can be allowed in the computation of the parameter φ to reflect the forecaster's view of the current state of uncertainty (Blix and Sellin 1997). For example, if for any reason the forecaster view is different from the market predictions, the parameter φ can be modified to allow the forecaster to discount the signals extracted from the market.

A starting point (baseline) of the analysis would be the case where $\varphi = 1$. In this case global growth forecast uncertainty is equal to its historical level.

When $\varphi > 1$, current information on risk factors (market- and survey-based) signals that global growth forecast uncertainty is larger than

historical uncertainty and vice versa when $\varphi < 1$. The φ intuition behind the expression of is that an increase in uncertainty of the risk factors relative to their historical levels will increase φ and thus signal an increase in uncertainty of global growth. For example, if there is no change in uncertainty of all risk factors relative to their historical levels—that is $\sigma_j^2 = \sigma_{j,hist}^2$ —this would imply that $\varphi = 1$ and that the global growth forecast uncertainty remains unchanged relative to historical levels.

The weight parameters β_j are estimated as the shares of the variance of global growth forecast errors explained by forecast error of risk factor j . This is calculated in the variance decomposition at a given horizon h of global growth forecast error in a vector autoregression (VAR) with orthogonalized error terms:

$$\sigma^2(h) = \sigma_\varepsilon^2(h) + \sum_j \sigma_j^2(h) \quad (4),$$

where $\sigma_\varepsilon^2(h)$ is the variance of global growth own h -period ahead forecast error, that is, the forecast errors due to other factors of global growth not included in the analysis.

Both sides of equation (4) are divided by the historical uncertainty of global growth σ_{hist}^2 for a given forecast horizon:

$$\frac{\sigma^2(h)}{\sigma_{hist}^2} = \frac{\sigma_\varepsilon^2(h)}{\sigma_{hist}^2} + \sum_j \left(\frac{\sigma_{j,hist}^2}{\sigma_{hist}^2} \right) \frac{\sigma_j^2(h)}{\sigma_{j,hist}^2} \quad (5),$$

Equations (5) and (1) – (2) are equivalent with the

terms $\beta_j = \frac{\sigma_{j,hist}^2}{\sigma_{hist}^2}$ and $\beta_\varepsilon = \frac{\sigma_\varepsilon^2(h)}{\sigma_{hist}^2}$ as the shares

of variance of the global growth forecast errors at a given horizon explained by risk factor j and by global growth's own forecast error, respectively. Estimates of these parameters can be obtained by a variance decomposition analysis in a VAR including global growth and the selected risk factors. Notice that in the analysis, the contribution of other factors to the uncertainty of global growth forecast at a given horizon h —that

is, $\frac{\sigma_\varepsilon^2(h)}{\sigma_{hist}^2}$ —is kept constant at its historical average.

Assessing the balance of risk to global growth

It is assumed that the skewness of the global growth distribution can be approximated as a linear combination of the skewness of the selected risk factors as in Blix and Sellin (1998). Denote by $\gamma(h)$ and $\gamma_j(h)$ the skewness of h -period ahead forecast of global growth and risk factor j respectively:

$$\gamma(h) = \sum_j \alpha_j(h) \gamma_j(h) \quad (6)$$

where $\alpha_j(h)$ is the weight associated with the risk factor j at the forecast horizon h .¹³ Equation (6) is an approximation of the true forecast error skewness. The parameter $\alpha_j(h)$ can be thought of as the elasticity of h -period ahead global growth with respect to risk factor j . Notice that the contribution of each risk factor to the skewness of global growth depends on both its skewness and weight. The weight parameters are thus as important as the skewness of the risk factors in the estimation of the balance of risk of global growth.

Estimating risk weights

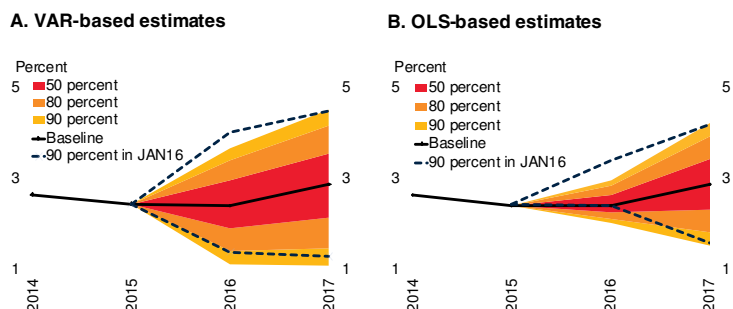
As baseline, a vector autoregression (VAR) approach is used. The VAR includes the global term spread, the first difference in the log S&P500 Index, the log of crude oil prices (de-trended), and global growth. Two lags are selected based on one or more information criteria. Impulse responses and variance decompositions are evaluated at the forecast horizons of 2, 4, 6, and 8 quarters (Annex Table SF2.1). Quarterly data from 1991Q1-2015Q3 are used in the estimation.

- **Estimating weights for dispersion.** The weight assigned to each risk factor is estimated as the share of the global growth forecast error variance explained by each of the risk factors. The variance decomposition is derived from a recursive identification based on the assumption that oil prices are mostly driven by supply factors as in the analysis of spillovers

¹³To ensure that risks are not perpetually skewed in one direction, over the full horizon of historically available data, the skewness of each risk factor is adjusted for its mean over the full time series.

ANNEX FIGURE SF2.1 Risks to growth: January and June 2016

OLS-based risk weights suggest lower risks to growth and a smaller downside bias than VAR-based risk weights, especially in 2016. This reflects the failure of OLS estimates to take into account the persistence of growth shocks.



Source: World Bank Staff estimates.
Note: "90 percent in JAN16" is the 90 percent confidence interval of a fan chart based on data available for the January 2016 *Global Economic Prospects* report.

(World Bank 2016a). The ordering of the variables used in the Cholesky decomposition is as follows: global term spread, S&P500, oil prices, and global growth. The derived dispersion of the forecast error distribution is scaled to match the mean square root of past forecast errors since 2010.

- **Estimating weights for skewness.** The weight assigned to each risk factor in the estimation of global growth skewness is estimated using the impulse responses of global growth at the forecast horizons of interest (2, 4, 6, and 18 quarters) from the same VAR. The Cholesky ordering is the same as for the estimation of weights for dispersion.

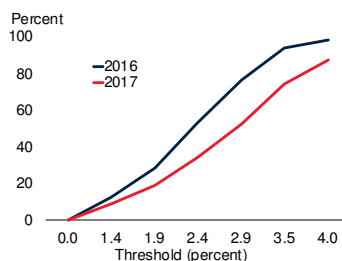
As a result, each of these recovered statistics characterizing the shape of the global growth forecast distribution is time-varying, reflecting shifts in the distribution of the underlying risk factors.

As a robustness check, the constant OLS-derived weights proposed by Kannan and Elekdag (2009) are estimated (Annex Figure SF2.1). The OLS-based approach produces a smaller variance of global growth forecast than the VAR approach. This reflects the presence of other risk factors that are not captured in the OLS estimates of Kannan and Elekdag (2009) but are important residual terms in the VAR estimates.

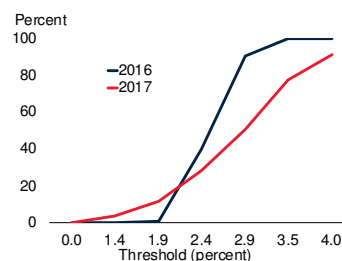
ANNEX FIGURE SF2.2 Probability of growth outcomes

The probability of global growth falling below the baseline forecast of 2.4 percent in 2016 and 2.9 percent in 2017 is 54 and 52 percent, respectively and, based on OLS estimates, 40 and 51 percent, respectively.

A. Probability of global growth below threshold: VAR-based estimates



B. Probability of global growth below threshold: OLS-based estimates



Source: World Bank Staff estimates.

The methodology described above yields the moments of the two-piece normal distribution of global growth: dispersion, mode (the June 2016 Global Economic Prospects forecasts), and skewness. The corresponding cumulative density function of global growth can be derived. Based on this, the probability of growth falling below any threshold can be calculated (Annex Figure SF2.2).

ANNEX TABLE SF2.1 Global growth dispersion weights: VAR estimates

	VAR-based weights				OLS-based weights
	6-months ahead	12-months ahead	18-months ahead	24-months ahead	(All horizons)
S&P500 (β_1)	0.25	0.22	0.14	0.11	0.23
Term spread (β_2)	0.01	0.03	0.06	0.15	0.48
Oil price (β_3)	0.01	0.17	0.40	0.42	0.27
Other factors (β_ϵ)	0.73	0.58	0.40	0.30	-

Source: World Bank staff estimates.

Note: VAR-based results are variance decomposition weights derived from a VAR of oil prices, S&P500, term spread and global growth—they are calculated as the share of variance of global growth explained by selected risk factors and other risk factors not included in the analysis. OLS-based weights are the absolute values of the coefficients obtained from an OLS-regression of global growth on oil prices, S&P500 and global term spreads. Regressions use annual data for 1982-2014.

ANNEX TABLE SF2.2 Global growth skewness weights: OLS estimates

	VAR-based weights				OLS-based weights
	6-months ahead	12-months ahead	18-months ahead	24-months ahead	(All horizons)
S&P500 (α_1)	0.36	0.40	0.49	0.47	0.23
Term spread (α_2)	0.1	0.14	0.41	0.52	0.48
Oil price (α_3)	-0.06	-0.21	-0.76	-0.82	-0.27

Source: World Bank staff estimates.

Note: Impulse responses-based weights are derived from a VAR including in this order: oil prices, S&P500 Index, term spread and global growth. The responses of global growth to own innovations are not presented here. OLS-based weights are derived from OLS-regression of global growth on oil prices, S&P500 and global term spreads. Regressions use annual data for 1982-2014.

ANNEX TABLE SF2.3.A Literature review: Fan chart construction methodology

Author	Country/ Variable of interest	Methodology	Variables included
Banco Central do Brasil, Inflation Report, Dec. 2015	Brazil. Inflation, real GDP growth	Asymmetric fan chart based on historical forecast errors.	External and domestic developments: global demand, commodity prices, financial market, and GDP growth. Inflation.
Bank of Canada, Monetary Policy Report, Jan. 2016	Canada. Inflation, core inflation	Fan chart based on Bank of Canada forecast errors and survey professional forecast data.	Inflation, real GDP growth.
Canada, Parliamentary Budget Office, Aug. 2010	Canada. Budget balance	Uses the procedure proposed by Kannan and Elekdag (2009) to construct the forecast distribution of Canadian Parliament budget projection in 2010.	Real GDP, U.S. growth, U.S. term spread, oil prices, budget deficit.
Banco Central de Chile, Monetary Policy Report, Feb. 2015	Chile. Inflation, real GDP	Fan chart based on historical forecast errors and allowing subjective assessment of risk.	Global demand, commodity prices, financial market, GDP growth, inflation.
Michal et al. (2014)	Czech Republic. Inflation, real GDP growth, interest rate, exchange rate	BVAR forecast model and minimum distance method in the construction of a fan chart for inflation, real GDP growth, and interest and exchange rate forecasts. Assess the Zero Lower Bound of interest rate effect on the fan chart and propose a test procedure that evaluates the severity of macroeconomic risk factors included in the central bank financial stress and macroeconomic outlook test model. Data are from 1998Q1 - 2012Q2.	CPI inflation, real GDP growth, 3-month interest rate, nominal CZK/ EUR exchange rate.
National Bank of Czech Republic	Czech Republic. Inflation, real GDP growth, interest rate	Fan chart based on historical smoothed forecast errors.	Inflation, real GDP growth.
Alvaro and Maximiano (2003)	Euro Area. Inflation, GDP growth	A critique to the Bank of England linear approximation of the forecast distribution and the independence of risk factors assumptions. Proposes an alternative density to the Two-Piece Normal (TPN) density. Use of VAR for the baseline forecast.	Real GDP growth, inflation, commodity prices index, effective exchange rate, real GDP growth outside the Euro Area.
Smets and Wouters (2004)	Euro Area. Many macro variables	Forecasts the baseline using BVAR DSGE model.	Many macro variables including GDP, consumption, investment, employment, and inflation.
Reserve Bank of India, Apr. 2016 (Banerjee and Das 2011)	India. Inflation, real GDP growth	Fan charts for inflation and GDP growth are constructed based on historical forecast error variances.	Wholesale price index inflation rate, real GDP growth, international investment position, real effective exchange rate, M1 money aggregate.
Bank of Israel, Monetary Policy Report, H12015	Israel. Inflation, interest rates	Uncertainty results from shocks to endogenous variables whose distribution is based on their past developments.	External and domestic developments: global demand, commodity prices, financial market index, real GDP growth, inflation.
Bank of Japan, Outlook for Economic Activity and Prices, Jan. 2016	Japan. Inflation, real GDP growth	Distributions of forecasts are based on the Policy Board members' assessment of uncertainty and their judgement of the balance of risk associated with their forecasts. The distributions of Board members forecast are presented to illustrate the extent of uncertainty and balance of risk associated with the projections.	Inflation, real GDP growth.

ANNEX TABLE SF2.3.A Literature review: Fan chart construction methodology (continued)

Author	Country/Variable of interest	Methodology	Variables included
Banco de Portugal, Economic (2015)	Portugal. Inflation, real GDP growth	Fan chart on inflation and real output growth based on subjective assessment of uncertainty and balance of risk.	Inflation, real GDP growth.
South African Reserve Bank, MPR (2015)	South Africa. Inflation	Fan chart for inflation and growth in the semi-annual <i>Monetary Policy Review</i> to communicate the view of the MPC on the distribution of risk around the SARB inflation forecast.	Global demand, commodity prices, domestic supply factors, GDP growth, inflation.
Blix and Sellin (1998)	Sweden. Inflation, GDP growth	Methodology to assess uncertainty in GDP growth and inflation using uncertainty and balance of risks extracted from macro risk factors. Allows for subjective assessment of the current risk (relative to historical levels) by introducing judgments or expert views on the current balance of risk in the risk factors.	Inflation rate, GDP growth, other exogenous macro variables.
Sveriges Riksbank, MPR (2016)	Sweden. Inflation, GDP growth, repo rate	Baseline forecasts for inflation, Riksbank repo rate, and real GDP growth using Riksbank historical forecast errors.	Inflation, GDP growth, repo rate, global developments, and Forex variables.
Board of Governors of the Federal Reserve System, Feb. 2016	United States. PCE (personal consumption expenditure) inflation, real GDP growth, unemployment	Density of individual forecast series are based on Board members' assessment and judgement of the balance of risk. Histograms of individual series are presented to illustrate the distributions of the forecasts.	Global demand, commodity prices, financial markets index, unemployment, GDP growth, inflation.
Britton and Whitley (1998)	United Kingdom. Inflation, real GDP growth	Methodology of U.K. Inflation Report fan chart construction. Fan chart is based on historical forecast errors variance of the Monetary Policy Committee inflation forecast.	Retail Price Index (RPIX) inflation, real GDP growth.
Cogley et al. (2003)	United Kingdom. Inflation	BVAR forecast model and minimum entropy method in the construction of a fan chart for inflation forecast. The paper assesses the effect of parameter uncertainty on inflation forecasts and compares the BVAR fan chart with the one produced by the Bank of England. The sample used is from 1957Q1 to 2002Q4.	Output gap, RPIX inflation, 3-month Treasury Bill rate.
Wallis (2004)	United Kingdom. Inflation	Evaluates the Bank of England and the National Institute of Economic Social Research density forecasts using data up to 2003Q4.	Inflation.
U.S. Congressional Budget Office (2007)	United States. Budget balance	Fan chart for budget balance elements including revenue, expense, and debt. Fan chart is based on historical forecast errors. The revenue historical forecast error is decomposed into cyclical and noncyclical components using OLS regressions of revenue forecast error on a measure of business cycle (output gap). The distribution of the revenue forecast is predicted by making assumptions on the cyclical and non-cyclical components and using the OLS estimation coefficients as weights.	Primary surplus/deficit, debt/GDP, GDP growth.
Gürkaynak et al. (2013)	United States. Inflation, real GDP growth, interest rate.	Assesses the performance of Dynamic Stochastic General Equilibrium (DSGE) model forecast against different reduced-form models (RW, AR, VAR, BVAR) out-of-sample from 1992Q1 - 2006Q1.	Real GDP growth, inflation, Fed funds interest rate.
Wolters (2015)	United States. Inflation, real GDP growth, interest rate.	Evaluates the accuracy of point and density forecasts from various DSGE models using real-time dataset synchronized with Fed's Greenbook projections. Forecast performance is compared against BVAR-based forecast and the Greenbook projections. Data used covers 1960Q1 - 2000Q3.	Real GDP growth, inflation, Fed funds interest rate.
Kannan and Elekdag (2009)	World (IMF's <i>World Economic Outlook</i> , Oct. 2008). Forecast of global real GDP growth	Incorporate market-based and survey-based relevant global growth risk factors (inflation, oil prices, financial conditions) uncertainty information in the construction of global growth fan chart. Forecasted global growth uncertainty is estimated as a scaled function of the historical uncertainty in growth. The scale parameter is a function of risk factors uncertainty. Use of data from 1970 to 2007 to estimate the weight as elasticities by OLS.	Baseline: WEO's forecast of real GDP global growth. Survey-based risk factors: Consensus forecast of inflation oil prices and term spread. Market-based: S&P 500 option prices implied volatility.

ANNEX TABLE SF2.3.B Literature review: Estimation of weight parameters for risk factors

Author	Country/Variable	Methodology
1. Linear Approximation: Forecast points as input in the construction of the forecast distributions from key risk factors		
Elekdag and Kannan(2009)	World, IMF's Oct 2008 World Economic Outlook (WEO)/ Forecast of global real GDP growth	OLS estimation of the elasticity of global growth with respect to each risk factor. Dependent variable: global growth; Independent variables: lag of global growth and standardized risk factors
IMF, WEO Oct 2015	World /Forecast of global real GDP growth	Same as in Elekdag and Kannan(2009)
Blix and Sellin (1998)	Sweden/Inflation, GDP growth	Elasticity of inflation or the variable of interest with respect to each risk factor. Does not suggest any estimation method
2. VARs and DSGE Methods: Forecast distribution is inferred directly from the forecasting model		
Cogley et al (2005)	United Kingdom/Inflation	The weight parameters are obtained from BVAR with stochastic volatility
Alvaro and Maximiano (2003)	Euro Area/ Inflation, GDP growth	The weight parameters are estimated in VAR forecasting model
Smets and Wouters (2004)	Euro Area/ Many macro variables	The weight parameters are obtained from the sticky prices DSGE model using a Bayesian technique
Gürkaynak et al (2013)	U.S./Inflation, real GDP growth, Interest rate.	The weight parameters are obtained from an estimated DSGE and a VAR and forecast performances of the two approaches are compared
Wolters (2013)	U.S./Inflation, real GDP growth, Interest rate.	The weight parameters are obtained from a DSGE model and BVAR model. The forecast performance of the two approaches are compared

ANNEX TABLE SF2.3.C Literature review: Measurement of dispersion and skewness

Author	Country/Variable	Methodology
Mixon (2011)	U.S./S&P500	$(25\delta \text{ Put} - 25\delta \text{ Call})/50 \delta$
Bates (2001)	U.S./S&P500	Out of The Money (OTM) Call/OTM Put -1
Baksi et al (2003)	U.S./S&P100	The slope from regression log of Implied Volatility (IV) on log of moneyness
Carr and Wu (2007)	Currencies: JPY/USD, GBP/USD, GBP/JPY	Risk Reversal (RR[25])= $25\delta \text{ put} - 25\delta \text{ call}$
Chicago Board of Option Exchange (CBO) (2010)	U.S./SPX 500	Skewness = $100 - 10 * (\text{Price of Skewness})$
Elekdag and Kannan (2009)	U.S./SPX 500	Skewness of the risk neutral density

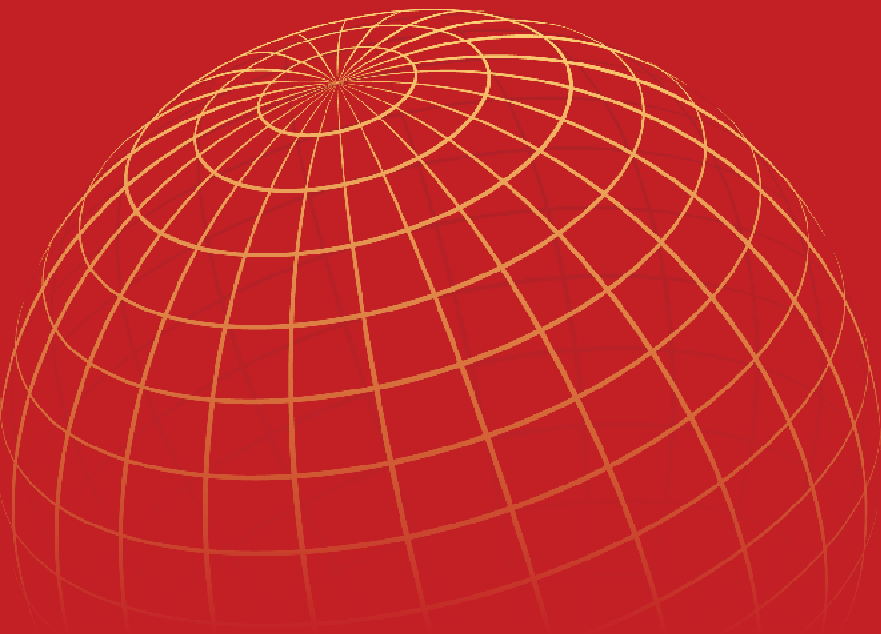
References

- Andersen, T. G., and O. Bondarenko. 2007. "Construction and Interpretation of Model-Free Implied Volatility." National Bureau of Economic Research.
- Arizala, F., C. Castro, E. Cavallo, and A. Powell. 2010. "Debt Sustainability Fan Charts: Combining Multivariate Regression Analysis and External Forecasts." Inter-American Development Bank, Research Department.
- Bachmann, R., S. Elstner, and E.R. Sims. 2010. "Uncertainty and Economic Activity: Evidence from Business Survey Data." National Bureau of Economic Research.
- Baffes, J., M. A. Kose, F. Ohnsorge and M. Stocker. 2015. "The Great Plunge in Oil Prices: Causes, Consequences, and Policy Responses." Policy Research Note No. 1. World Bank, Washington, D.C.
- Bakshi, G., N. Kapadia, and D. Madan. 2003. "Stock Return Characteristics, Skew Laws, and the Differential Pricing of Individual Equity Options." *Review of Financial Studies* 16(1): 101-143.
- Banerjee, N., and A. Das. 2011. "Fan Chart: Methodology and its Application to Inflation Forecasting in India." Reserve Bank of India Working Paper.
- Barro, R.J. 1989. "Economic Growth in a Cross Section of Countries." National Bureau of Economic Research.
- Banco Central de Chile. 2016. Informe de Política Monetaria. Santiago: Banco Central de Chile.
- Banco Central do Brasil. 2016. Inflation Report. Brasília: Banco Central do Brasil.
- Bank of Canada. 2016. Monetary Report. Ottawa: Bank of Canada.
- Bank of England. 2015. Inflation Report. London: Bank of England.
- Bank of Israel. 2015. Monetary Policy Report. Jerusalem: Bank of Israel.
- Bank of Japan. 2016. Outlook for Economic Activity and Prices. Tokyo: Bank of Japan.
- Blix, M., and P. Sellin. 1998. "Uncertainty Bands for Inflation Forecast." Sveriges Riksbank Working Paper No. 65.
- Blix, M., and P. Sellin. 2000. "A Bivariate Distribution of Inflation and Output Forecasts." No 102. Sveriges Riksbank Working Paper Series.
- Board of Governors of the Federal Reserve System. 2016. Inflation Report. Washington, DC: Board of Governors of the Federal Reserve System.
- Britton, E., P. Fisher, and J. Whitley. 1998. "The Inflation Report Projections: Understanding the Fan Chart." *Bank of England Quarterly Bulletin* 38 (1): 30-37.
- Busch, T., B.J. Christensen, and M. Ø. Nielsen. 2011. "The Role of Implied Volatility in Forecasting Future Realized Volatility and Jumps in Foreign Exchange, Stock, and Bond Markets." *Journal of Econometrics* 160(1): 48-57.
- Burdekin, R.C., A.T. Denzau, M.W. Keil, T. Sithiyot, and T.D. Willett. 2004. "When Does Inflation Hurt Economic Growth? Different Non-linearities for Different Economies." *Journal of Macroeconomics* 26(3): 519-532.
- Carr, P., and L. Wu. 2007. "Stochastic Skew in Currency Options." *Journal of Financial Economics* 86(1): 213-247.
- Carter, C.A. 1999. "Commodity Futures Markets: A Survey." *Australian Journal of Agricultural and Resource Economics* 43: 209-247.
- Chicago Board Options Exchange. 2010. CBOE Skew Index FAQ. Chicago: CBOE.
- Christensen, B. J., and N.R. Prabhala. 1998. "The Relation between Implied and Realized Volatility." *Journal of Financial Economics* 50(2): 125-150.

- Cieslak, A., and P. Povala. 2014. "Information in the Term Structure of Yield Curve Volatility." *Journal of Finance*, forthcoming.
- Clark, T.E. 2011. "Real-time Density Forecasts from Bayesian Vector Autoregressions with Stochastic Volatility." *Journal of Business & Economic Statistics* 29(3): 327-341.
- Cogley, T., S., Morozov, and T.J. Sargent. 2005. "Bayesian Fan Charts for UK Inflation: Forecasting and Sources of Uncertainty in an Evolving Monetary System." *Journal of Economic Dynamics and Control* 29(11): 1893-1925.
- Congressional Budget Office. 2007. *The Uncertainty of Budget Projections: A Discussion and Methods*. Washington, DC: CBO.
- Czech National Bank. 2016. *Inflation Report*. Prague: Czech National Bank.
- David, B. 1991. "The Crash of 87: Was It Expected? The Evidence from Options Markets." *The Journal of Finance* 46(3): 1009-1044.
- David, C.W., and E.W. Mark. 2009. "Can the Term Spread Predict Output Growth and Recessions? A Survey of the Literature." *Federal Reserve Bank of St. Louis Review* 91(5): 419-40.
- Demetrescu, M., and M.C. Wang. 2014. "Incorporating Asymmetric Preferences into Fan Charts and Path Forecasts." *Oxford Bulletin of Economics and Statistics* 76(2): 287-297.
- Dotsey, M. 1998. "The Predictive Content of the Interest Rate Term Spread for Future Economic Growth." *FRB Richmond Economic Quarterly* 84 (3): 31-51.
- Dueker, M. 1997. "Strengthening the Case for the Yield Curve as a Predictor of U.S. Recessions." *Federal Reserve Bank of St. Louis Review* 79(2): 41-51.
- European Central Bank. 2014. *Eurosystem/ECB Staff Macroeconomic Projections for the Euro Area*. European Central Bank.
- Estrella, A., G.A. Hardouvelis. 1991. "The Term Structure as a Predictor of Real Economic Activity." *The Journal of Finance* 46(7): 555-576.
- Estrella, A., and F.S. Mishkin. 1996. "The Yield Curve as a Predictor of U.S. Recessions." *Current Issues in Economics and Finance* 2(7):1-6.
- Faria, J.R., and F.G. Carneiro. 2001. "Does High Inflation Affect Growth in the Long and Short Run?" *Journal of Applied Economics* 4(1): 89-105.
- Ferderer, J.P. 1997. "Oil Price Volatility and the Macroeconomy." *Journal of Macroeconomics* 18(1): 1-26.
- Franta, M., B. Jozef, H. Roman, and K. Šmídková. 2014. "Are Bayesian Fan Charts Useful? The Effect of Zero Lower Bound and Evaluation of Financial Stability Stress Tests". *International Journal of Central Banking* 10(1): 159-188.
- Geraats, P.M. 2008. "ECB Credibility and Transparency". European Commission, Directorate-General for Economic and Financial Affairs.
- Ghosh, A., and S. Phillips. 1998. "Warning: Inflation May Be Harmful to Your Growth". *IMF Staff Papers* 45(4): 672-710.
- Golan, A., G.G. Judge, and D. Miller. 1996. *Maximum Entropy Econometrics: Robust Estimation with Limited Data*. New York: Wiley.
- Gürkaynak, R.S., B. Kısacıkoglu, and B. Rossi. 2013. "Do DSGE Models Forecast More Accurately Out-Of-Sample than VAR Models?" In *VAR Models in Macroeconomics—New Developments and Applications: Essays in Honor of Christopher A. Sims, Advances in Econometrics* 32: 27-79.
- Hall, S.G, and J. Mitchell. 2004. "Optimal Combination of Density Forecasts." National Institute of Economic and Social Research.
- Hall, S.G., and J. Mitchell. 2007. "Combining density forecasts." *International Journal of Forecasting* 23(1): 1-13.
- Hamilton, J.D. 2005. Oil and the Macroeconomy. In *The New Palgrave Dictionary of Economics*, London: Palgrave Macmillan.

- Harvey, C.R. 1989. "Forecasts of Economic Growth from the Bond and Stock Markets." *Financial Analysts Journal* 45(5), 38-45.
- Haubrich, J.G., and A.M. Dombrosky. 1996. "Predicting Real Growth Using the Yield Curve." *Federal Reserve Bank of Cleveland Economic Review* 32(1), 26-35.
- Hendry, D.F., and M.P. Clements. 2004. "Pooling of Forecasts." *The Econometrics Journal* 7 (1), 1-31.
- International Monetary Funds. 2015. *World Economic Outlook: Adjusting to Lower Commodity Prices*. Washington, DC : International Monetary Fund.
- _____. 2009. *World Economic Outlook: Crisis and Recovery*. Washington, DC : International Monetary Fund.
- Jimenez-Rodriguez, R., and M. Sánchez. 2005. "Oil Price Shocks and Real GDP Growth: Empirical Evidence for Some OECD Countries." *Applied Economics* 37(2): 201-228
- Judge, G.G., and R.C. Mittelhammer. 2011. *An Information Theoretic Approach to Econometrics*. Cambridge, U.K.: Cambridge University Press.
- Kannan, P., and S. Elekdag. 2009. "Incorporating Market Information into the Construction of the Fan Chart." International Monetary Fund, Washington, DC.
- Kao, Y.-C., C.-M. Kuan, and S. Chen. 2013. "Testing the Predictive Power of the Term Structure without Data Snooping Bias." *Economics Letters* 121 (3): 546-549
- Kilian, L. 2008. "Exogenous Oil Supply Shocks: How Big Are They and How Much Do They Matter for the U.S. Economy?" *The Review of Economics and Statistics*, 90 (2): 216-240.
- Knüppel, M., and G. Schulte Frankenfeld. 2012. "How Informative Are Central Bank Assessments of Macroeconomic Risks?" *International Journal of Central Banking* 8 (3): 87-139.
- Kose, A., and M. Terrones. 2015. "Collapse and Revival: Understanding Global Recessions and Recoveries." International Monetary Funds, Washington DC (December).
- Kozicki, S. 1997. "Predicting Real Growth and Inflation with the Yield Spread." *Economic Review-Federal Reserve Bank of Kansas City* 82 (4): 39-58.
- Kremer, S., and A. Bick, and D. Nautz. 2013. "Inflation and Growth: New Evidence from a Dynamic Panel Threshold Analysis." *Empirical Economics* 44 (2): 861-878.
- Mixon, S. 2011. "What Does Implied Volatility Skew Measure?" *Journal of Derivatives* 18 (4): 9-25.
- Moschini, G., and H. Lapan. 1995. "The Hedging Role of Options and Futures under Joint Price, Basis, and Production Risk." *International Economic Review* 36 (4): 1025-1049.
- Novo, Á., and M. Pinheiro. 2003. "Uncertainty and Risk Analysis of Macroeconomic Forecasts: Fan Charts Revisited." Banco de Portugal, Economic Research Department.
- Office of the Parliamentary Budget Officer. 2010. *An Approach for Assessing Uncertainty and the Balance of Risks: Constructing a Fan Chart for Real GDP Growth Forecasts*. Ottawa: OPBO.
- Österholm, P. 2009. "Incorporating Judgement in Fan Charts." *The Scandinavian Journal of Economics* 111 (2): 387-415.
- Patton, A. J., and A. G. Timmermann. 2008. The Resolution of Macroeconomic Uncertainty: Evidence from Survey Forecast." CREATES Research Paper.
- Reserve Bank of India. 2016. *Monetary Policy Report*. Mumbai: Reserve Bank of India.
- Riksbank, 2016. *Monetary Policy Report*. Stockholm: Sveriges Riksbank.
- Siklos, P. L. 2014. "Inflation Forecasts in Asia and the Pacific: Performance, Disagreement and Spillovers." In *Globalisation, Inflation and Monetary*

- Policy in Asia and the Pacific* (77): 15-30. Basel, Switzerland: Bank for International Settlement.
- Smets, F., and R. Wouters. 2004. "Forecasting with a Bayesian DSGE Model: An application to the Euro area." *JCMS: Journal of Common Market Studies* 42 (4): 841-867.
- South African Reserve Bank. 2016. *Monetary Policy Review*. Pretoria: South Africa Reserve Bank.
- Stock, J. H., and M. W. Watson. 1989. "New Indexes of Coincident and Leading Economic Indicators." In *NBER Macroeconomics Annual 1989, Volume 4*. Cambridge, Massachusetts: MIT Press.
- Stock, J. H., and M. W. Watson. 2003. "Forecasting Output and Inflation: The Role of Asset Prices." *Journal of Economic Literature* 41 (3): 788-829.
- Sun, J., and T. D. Lynch, eds. 2008. *Government Budget Forecasting: Theory and Practice*. Boca Raton, Florida: CRC Press.
- TCMB (Central Bank of the Republic of Turkey). 2014. *Inflation Report*. Ankara: Central Bank of the Republic of Turkey.
- Wallis, K. F. 2005. "Combining Density and Interval Forecasts: A Modest Proposal." *Oxford Bulletin of Economics and Statistics* 67 (S1): 983-994
- Wallis, K. F. 2014. "The Two-Piece Normal, Bimodal, or Double Gaussian Distribution: Its Origin and Rediscoveries." *Statistical Science* 29 (1): 106-112.
- Wolters, M. H. 2015. "Evaluating Point and Density Forecasts of DSGE Models." *Journal of Applied Econometrics* 30 (1): 74-96.



CHAPTER 2

REGIONAL OUTLOOKS

EAST ASIA and PACIFIC



Regional growth slowed to 6.5 percent in 2015, and is expected to decelerate to 6.2 percent during 2016-18. The gradual slowdown in China more than offsets a nascent pickup in activity elsewhere in the region, supported by public investment and robust private consumption. Short-term risks are broadly balanced. On the downside, they include a sharper-than-expected slowdown in China (although a low-probability scenario), and tighter business credit amid high corporate and household leverage in the region. Since the region is highly open to trade, a pickup in advanced country growth, or further declines in commodity prices, are upside risks. Key policy objectives include an orderly sectoral rebalancing and deleveraging in China, strengthened medium-term fiscal and macro-prudential frameworks, and structural reforms to support long-term growth as the population ages and the labor force grows more slowly.

Recent developments

Growth in the East Asia and Pacific (EAP) region slowed from 6.8 percent in 2014 to 6.5 percent in 2015, in line with previous expectations (Table 2.1.1). The deceleration reflects the gradual slowdown in China—from 7.3 in 2014 to 6.9 percent in 2015.¹ Other commodity-importing economies in the region saw an acceleration of activity, supported by solid domestic demand, amid strong labor markets and low energy prices (Figure 2.1.1). The region as a whole has shown resilience to external headwinds, including weak trade and tightened financing conditions (World Bank 2016a). This resilience partly reflects several years of countercyclical policies that have helped build policy buffers and buttress investor confidence (Box 2.1).

China

In China, measures to address overcapacity, including through cuts in investment, in energy-intensive, highly polluting, inefficient enterprises in older sectors (raw coal and crude steel for

example), have caused a sharp drop in industrial production (Figure 2.1.2). Weak external demand and periods of financial market volatility have also contributed to the slowdown in activity. Expansionary policies have moderated the deceleration. In 2015, the People's Bank of China (PBC) implemented five cuts in the benchmark one-year lending rate and four cuts to the reserve requirement rate. A new round of fiscal stimulus measures in 2016 includes tax cuts, increases in spending on social welfare (poverty reduction and social housing), and education. These measures are expected to contribute to a record budget deficit of 3 percent of GDP in 2016. The PBC kept an easing bias in 2016 by implementing additional cut in reserve requirement rate in March.

The rapid growth of monetary aggregates, accompanied by a rise in debt to over 250 percent of GDP in March 2016, and of housing prices (especially in first tier cities), is raising concerns about financial vulnerabilities. A tightening of property market policy, including higher down payment requirements for home buyers and tighter oversight on financing through the shadow banking system, was implemented in March, and aims to moderate the surge in first tier housing prices. There are also indications that credit growth started to ease in April, reflecting new measures implemented by the PBC to temper excessive borrowing.

Note: The author of this section is Ekaterine Vashakmadze. Research assistance was provided by Liwei Liu.

¹Chinese official statistics indicate that growth has declined gradually from 10.6 percent in 2010 to 6.9 percent in 2015. Alternative assessments by some analysts, weighing industrial activity more heavily suggest a sharper slowdown.

BOX 2.1.1 Macroeconomic policy developments in selected EAP countries

The resilience of the region to financial market volatility partly reflected several years of counter-cyclical policies. Since 2013, these have helped build policy buffers, allowed accommodative policies in 2015-16, and supported investor confidence.

Monetary and exchange rate policy

Since the taper-tantrum of mid-2013, policy tightening in Indonesia (one of the emerging economies considered fragile during that episode) and tighter macro-prudential regulations in the rest of the region helped reduce vulnerabilities. This, in combination with low inflation (helped by falling oil prices), enabled EAP central banks to ease or maintain an accommodative monetary policy stance in late 2015 and early 2016 (Figure 2.1.3). For example, Indonesia lowered policy rates in January, February, and March, in response to the stabilization of the rupiah and a decline in inflation. Flexible exchange rates, occasionally supplemented with foreign currency interventions to smooth volatility, helped absorb shocks and prepare economies for tighter external financing conditions.

Fiscal policy

In Indonesia and Malaysia, macroeconomic frameworks have been improved by historic subsidy reforms, a series of investment-friendly policy packages, and reduced dependence on budget revenue related to the commodity sector. Malaysia introduced a new Goods and Services Tax (GST) in April 2015 which, together with measures to reduce operating expenditures, helped achieve a target deficit of 3.2 percent of GDP in 2015. Absent the introduction of the GST, the deficit might have widened to 4.2 percent of GDP. Fiscal consolidation amid strong GDP growth also helped to stabilize the government debt-to-GDP ratio.

While Indonesia's fiscal deficit widened in 2015, it remained below the statutory limit of 3 percent of GDP on the back of subsidy reform and cuts to low-priority spending, helping to protect outlays for infrastructure and targeted social assistance. In the Philippines, fiscal deficits for the general government narrowed significantly, from 3.5 percent of GDP in 2010 to just under 1 percent in 2015, helped by strong revenue collection through faster growth and improved tax administration.

China's economic rebalancing continues, from investment to domestic consumption, and from manufacturing to services (Lardy 2016). The services sector, which now constitutes half of nominal GDP, has overtaken manufacturing as the major driver of growth and accounts for the majority of new urban jobs. The financial sector and other services were particularly dynamic in 2015. Inflation, which was less than 2 percent in 2015 (below the PBC target rate of 3 percent), picked up in early 2016. Producer price inflation, which has been negative since March 2012, showed signs of bottoming out.

Capital outflows in 2015 contributed to a depletion of about 20 percent (\$0.8 trillion) of foreign reserves compared with their August 2014 peak. About two fifths of these outflows were related to a repayment of short-term external debt and diversification of assets by residents. The remaining capital outflows may partly have reflected expectations of renminbi depreciation. Tighter enforcement of capital controls and improved communication of policy objectives, including exchange rate policies, helped to clarify policy objectives, stabilize financial markets, ease pressures on the renminbi, and slow outflows. China's net foreign asset position remains firmly positive (14 percent of GDP at the end of the third quarter of 2015; BIS 2016; World Bank 2016b).

Rest of the region

Growth in the region excluding China has been resilient. This reflects strong consumption, encouraged by low fuel prices, and public investment. Plunging oil prices contributed to low inflation, which allowed the region's major central banks to maintain accommodative policies. Strong domestic demand underlay growth in commodity importers (the Philippines) and an acceleration of activity in Vietnam and Thailand (Table 2.1.2). Growth in net-fuel exporting Malaysia moderated with output expanding by 5 percent in 2015, reflecting some softening in private consumption. Growth in exporters of other commodities (Indonesia, Myanmar), showed signs of bottoming out amid buoyant domestic demand and a recovery of public investment.

Export growth slowed in the region as a whole in 2015, but started to show signs of bottoming out in the first half of 2016. In contrast to the rest of the region, exports in Cambodia and Vietnam have remained buoyant throughout 2015—these countries benefit from sizeable foreign direct investment into their highly cost-competitive manufacturing, including production of garments and other consumer goods. Growth in the Philippines has been bolstered by steady inflows of remittances and trade in services.

Despite weak exports, compression of import values has led to increased or stable current account surpluses in commodity importers, especially in Thailand. In Vietnam, expansionary fiscal policy and related strong imports contributed to a lower current account surplus in 2015 (Figure 2.1.4). In net-energy exporters such as Malaysia, the current account surplus narrowed but remained positive, with strong non-commodity export performance (particularly electrical and electronics manufactures).

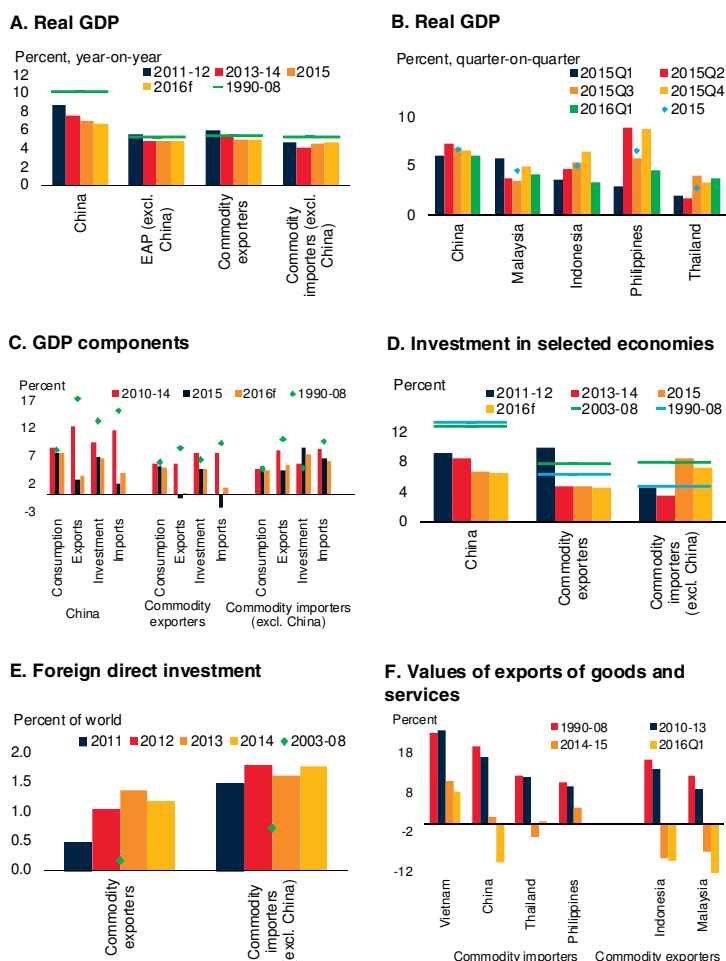
Financial market conditions were volatile in early 2016 but have stabilized since February, driven in part by signs that monetary policy in advanced economies will remain more accommodative than previously anticipated. In recent months, corporate and sovereign risk spreads, which rose across the region in late 2015 and early 2016, have eased, and regional currencies have appreciated against the U.S. dollar, reflecting renewed capital inflows and moderating outflows. Equity and bond markets have generally recovered over the same period.

Outlook

The regional outlook remains broadly unchanged, with growth expected to ease slightly, but remain above 6 percent through 2018. This assumes an orderly slowdown in China, where growth is projected to slow gradually from 6.7 percent in 2016 and 6.3 percent in 2018, which in turn depends on smooth progress of structural reforms, with appropriate policy stimulus as needed. In the remainder of the region, growth will increase gradually, from 4.8 percent in 2016 to 5.2 percent in 2018, supported by rising investment in several

FIGURE 2.1.1 EAP growth

Growth is estimated to have slowed to 6.5 percent in 2015, and is expected to decelerate further to 6.2 percent on average in 2016-18. This reflects the gradual slowdown in China and a modest recovery in the rest of the region. Activity in the region excluding China has been supported by public investment, but exports have been weak.



Sources: World Bank World Development Indicators; International Monetary Fund, International Financial Statistics; World Economic Outlook; Haver Analytics; United Nations Conference on Trade and Development.

A. Commodity exporters include Fiji, Indonesia, Malaysia, Mongolia, Myanmar, Papua New Guinea, Tonga, and Timor-Leste. Commodity importers include Cambodia, Lao PDR, Philippines, Samoa, Solomon Islands, Thailand, Tuvalu, Vanuatu, and Vietnam.

B. The data are seasonally adjusted.

C and D. Commodity exporters include Indonesia and Malaysia. Commodity importers include Cambodia, Kiribati, Lao PDR, Philippines, Solomon Islands, Thailand, and Vietnam.

F. Exports of goods for China, Thailand, and Vietnam.

large economies (Indonesia, Malaysia, Thailand), low commodity prices (Thailand, the Philippines, Vietnam), and strong consumption (the Philippines).

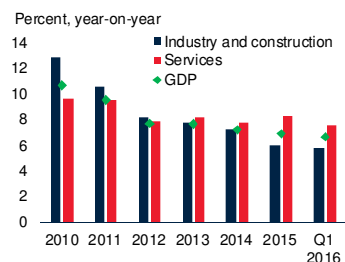
Commodity exporters

Growth is expected to edge up in Indonesia to slightly over 5 percent in 2016 and 5.5 percent by 2018. Investment is likely to lead the recovery,

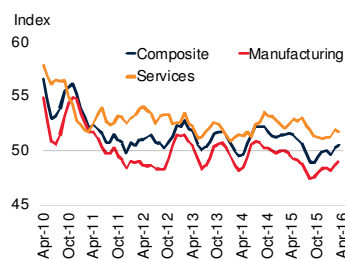
FIGURE 2.1.2 China: Activity, exchange rates, and external accounts

Growth in China continues to slow gradually and is rebalancing. The services sector, which now constitutes about half of GDP, has overtaken industry as a driver of growth. Policy support has contributed to a rebound of activity in 2016. Financial markets have stabilized. Pressures on the renminbi (RMB) eased and capital outflows slowed after contributing to about a 20 percent fall in foreign reserves from the August 2014 peak.

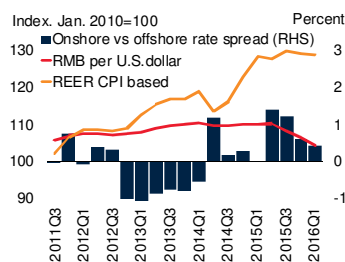
A. Real GDP growth



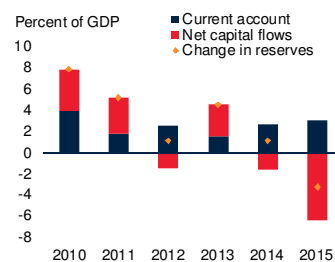
B. Purchasing Managers Index



C. Nominal and real effective exchange rates (REER)



D. Balance of payments



Sources: World Bank; Bloomberg; Haver Analytics; International Monetary Fund, International Financial Statistics.

B. Value greater than 50 indicate expansion. Data are seasonally adjusted, rolling 3-month average.

D. Net capital flows include net errors and omissions.

helped by an acceleration of public spending. However, with external demand still facing headwinds, this projection depends on the implementation of an ambitious public investment program and the success of recent government reforms to reduce red tape and uncertainty for private investments (IMF 2016e, World Bank 2016c).

In Malaysia, growth should slow to around 4.4 percent in 2016, as the economy adjusts to weak commodity prices and public spending cuts due to lower natural resource sector revenues. Tight labor market conditions are expected to underpin solid, albeit moderating, domestic demand growth. Financial conditions are likely to remain benign, but credit growth will continue to moderate, reflecting tighter macro-prudential policies.

Growth is expected to rebound gradually in 2017-18, as commodity prices stabilize and reforms are implemented to spur investment, which has already showed signs of bottoming out (IMF 2016e; World Bank 2015a).

Mongolia continues to adjust to the end of a mining boom, with economic activity held back by weakening mineral exports and by government efforts to contain public debt. In Myanmar, growth is projected to accelerate to 8.4 percent on average in 2017-18, reflecting continued strong commodity-related investment. In Papua New Guinea, growth should fall sharply in 2016 following strong output in 2015, the first full year of production, and reflecting domestic adjustment to low liquefied natural gas (LNG) prices. In Timor-Leste, growth in the non-oil economy is expected to rebound to 5.5 percent on average in the medium term, with investment, especially public sector construction projects, the major driver of growth.

Commodity importers

Among the large developing ASEAN economies, Vietnam and the Philippines have the strongest growth prospects. In the Philippines, growth is projected to firm to 6.4 percent in 2016, with an accelerated implementation of public-private partnership projects and strong domestic demand. The country benefits from diversified export markets and low global commodity prices. In Vietnam, output is expected to expand at an average of 6.3 percent in 2016-18, with all categories of demand buoyed by strong foreign direct investment, growing exports of manufactures, and solid labor markets. In Thailand, growth is expected to strengthen gradually as investor confidence returns, but is likely to remain below 3 percent in 2016-18, reflecting weak global trade.

Growth in several of the smaller economies in the region should be supported by strong FDI. They are also likely to benefit from export growth (such as garments in Cambodia and electricity in Lao PDR), despite weak global demand, reflecting competitive price advantages. Growth in Cambodia will to ease only slightly and should

remain around 6.8 percent in 2016–18. In Lao PDR, growth is expected to remain at around 7 percent, supported by investment in the power sector and growing regional trade integration.

Risks

Short-term risks to the forecast are balanced. On the downside, they include a sharper-than-expected slowdown in China (although a low-probability scenario), which would generate sizable spillovers to the rest of the region. Within China, excessive leverage in parts of the industrial and real estate sectors is a growing vulnerability. Estimates show that a one-off, 1-percentage-point decline in China's growth rate would reduce growth by around 0.4 of a percentage point in Indonesia, Malaysia, and Thailand. The magnitude of spillovers from China would be more pronounced if growth fluctuations are amplified via the confidence channel (World Bank 2016b). Other risks are related to weaker-than-expected global trade and bouts of volatile and tighter global financial conditions, similar to the episodes in August 2015 and January-February 2016. A renewed decline in commodity prices is mainly an upside risk for the region as a whole, which is a net commodity importer, but a downside risk for commodity exporters (World Bank 2016d).

Policy challenges

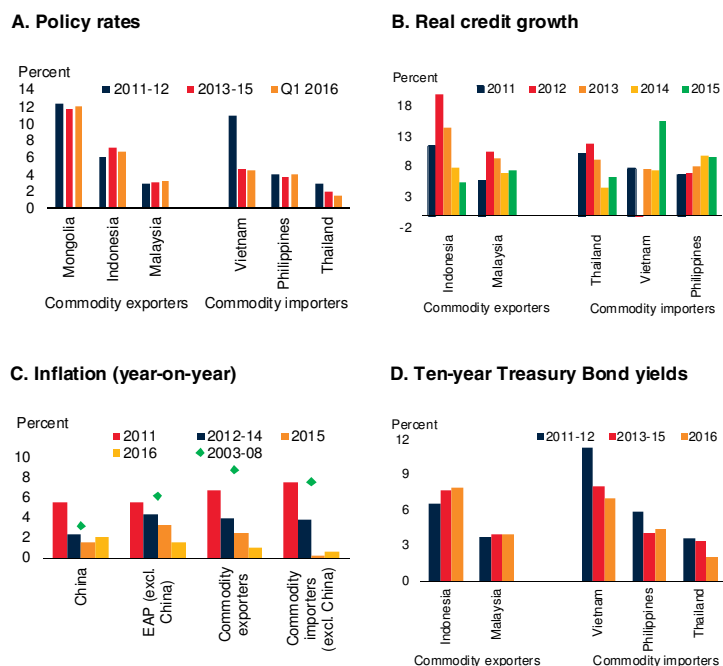
China

Key policy challenges for China include managing a gradual slowdown and rebalancing demand from exports and investment to domestic consumption. There is also a pressing need to reduce leverage—particularly in industrial sectors where overcapacity is most evident and in areas where credit growth has been exceptionally high—through strengthened market discipline in the financial sector.² The use of short-term counter-cyclical fiscal measures would help avoid a sharp

²Chen et al. (2015) suggest that larger and faster deleveraging in the private sector (mainly driven by deleveraging in nonfinancial corporates) is positively associated with growth afterwards. Deleveraging should focus on up-front balance sheet adjustments.

FIGURE 2.1.3 EAP excluding China: Selected indicators

Since the taper-tantrum of mid-2013, policy tightening in Indonesia and strengthened macro-prudential regulations in the rest of the region helped reduce vulnerabilities—including a slower pace of real credit growth. This, in combination with low inflation, helped EAP central banks to ease or maintain an accommodative monetary policy stance in late 2015 and early 2016. Improved macroeconomic frameworks led to lower bond yields.



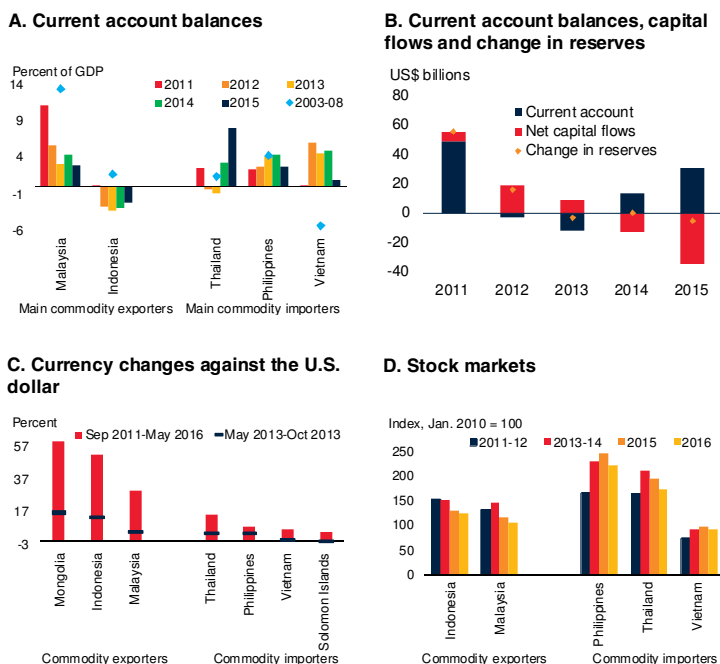
Sources: World Bank; Haver Analytics; International Monetary Fund, International Financial Statistics.
 A. Policy rates are average of end-of-period data.
 B. Average growth from January to August for 2015.
 C. 2016 is an average of January-April.
 D. 2016 data are through May.

slowdown in growth, but it would need to be undertaken within a medium-term fiscal consolidation framework. In particular, the government should reduce its extensive contingent liabilities to strengthen its government sheet (World Bank 2015b, 2016a; IMF 2015b). Reform of Chinese state-owned enterprises (SOEs) represents a key policy challenge (Peng, Shi, and Xu 2016). Sectors that are dominated by SOEs should be opened up to competition, privileges traditionally accorded to SOEs should be reduced to ensure a level playing field, and inefficient SOEs should be allowed to close in an orderly way (World Bank 2015b).

Recent turmoil in Chinese equity and currency markets is a reminder that financial market reforms that proceed faster than broader, market-

FIGURE 2.1.4 EAP excluding China: Selected indicators (continued)

Plunging oil prices contributed to solid current account balances for energy importers in the region, with the exception of Vietnam. Net energy exporters fared less well. Financial market conditions were volatile in early 2016 but have stabilized more recently. Regional currencies have appreciated against the U.S. dollar since February, and equity and bond markets have generally recovered.



Sources: World Bank; Haver Analytics; Bloomberg; International Monetary Fund, International Financial Statistics.

B. Net capital flows include net errors and omissions.

C. Positive values indicate depreciation.

D. 2016 data are through May.

oriented and institutional reforms may exacerbate volatility. Institutional reforms—such as better corporate governance, enhanced auditing and accounting standards, and stronger regulatory frameworks—are also required. In the absence of broad reforms of this nature, inefficient resource allocation, lower productivity growth, and wasteful investment may persist. This would weaken growth, worsen the debt overhang, and heighten risks to the financial system (Prasad 2016). To mitigate the negative effects of policy uncertainty and foster confidence, clear official communication is also essential.

Continued structural reforms will be required to improve the longer-term outlook. Growth has recently been supported by falling oil prices and monetary and fiscal stimulus. To create the conditions for sustainable increases in income, the

goal should be to facilitate reallocation of credit and factors of production toward more productive sectors, and away from declining sectors with excess capacity. Reducing the role of administrative measures in the financial sector and allowing a more market-based allocation of capital would help.

Rest of the region

For the rest of the region, the main policy challenge is to achieve faster, more inclusive growth, while preserving macro-financial stability. A major contribution could be through strengthening medium-term fiscal and macro-prudential frameworks (ADB 2016; World Bank 2016a). Medium-term fiscal consolidation to stabilize debt and reduce financing requirements would be particularly important for economies where domestic demand growth has been accompanied by high credit growth (Malaysia, Thailand), or where external demand had previously been boosted by the commodities boom (Indonesia, Mongolia, Papua New Guinea), or where fiscal deficits remain elevated (Mongolia, Papua New Guinea, Vietnam).³

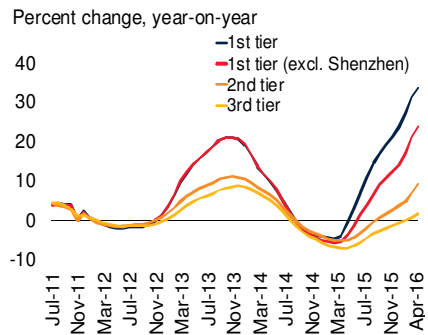
Fiscal policy measures should be established within a medium-term framework to create fiscal space and improve public expenditure efficiency. This can be achieved through improved revenue mobilization (Cambodia, Indonesia, the Philippines, Lao PDR), reduced dependence on fiscal revenue from energy sectors (Malaysia, Mongolia, Papua New Guinea), and increased and more efficient investment (Indonesia, the Philippines, Thailand). Better fiscal institutions would provide support for such reforms (World Bank 2015c; IMF 2016c). For commodity producers like Indonesia, Malaysia, Mongolia, and Papua New Guinea, the decline in prices underscores the need to enhance fiscal rules and improve the operation of institutions designed to manage commodity price volatility, such as sovereign wealth funds. State-owned enterprise reforms, including measures to enhance transparency and governance, could reduce drains on fiscal resources (Thailand, Vietnam). In

³Notwithstanding some stabilization, total debt remains high in China, Malaysia, and Thailand.

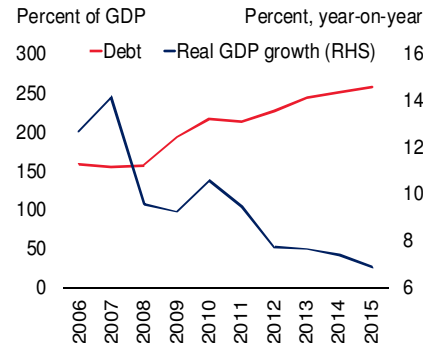
FIGURE 2.1.5 Vulnerabilities

In China, a sharp increase in house prices in the first tier cities raised concerns about renewed price bubbles. Fiscal policies across the region have generally tightened in line with medium-term fiscal objectives or remained neutral. Foreign currency reserves are generally adequate, but in a few cases foreign indebtedness is high. Stocks of outstanding domestic debt remain elevated in China, Malaysia, and Thailand.

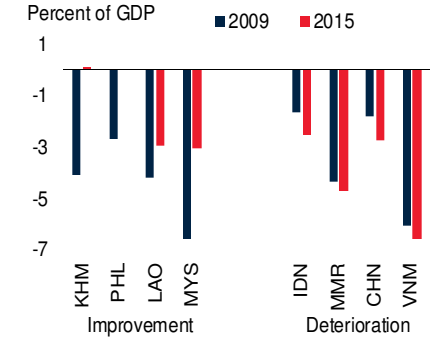
A. Housing prices in China



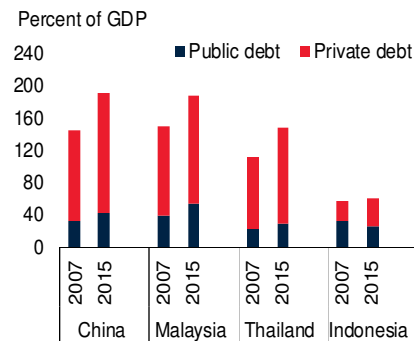
B. Total debt and real GDP growth in China



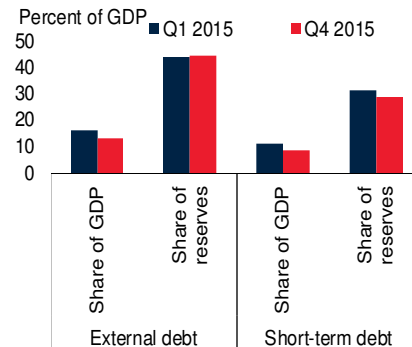
C. Fiscal balances



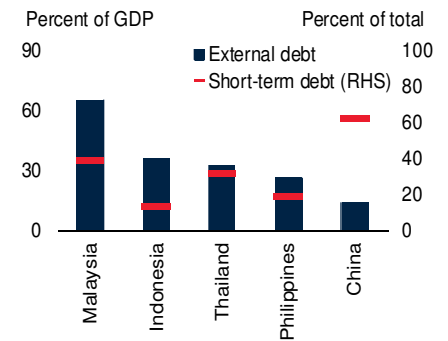
D. Total debt in EAP



E. External debt, China



F. External debt in EAP, 2015



Sources: World Bank, Quarterly External Debt Statistics; Bank for International Settlements; Haver Analytics; International Monetary Fund, World Economic Outlook. C. CHN = China, IDN = Indonesia, KHM = Cambodia, LAO = Lao PDR, MMR = Myanmar, MYS = Malaysia, PHL = Philippines, VNM = Vietnam. D. For both private and public debt, 2015 data are the average of 2015 Q1, 2015Q2 and 2015Q3. F. The data for China are for 2015Q3; for other countries, the data are for 2015Q4.

Thailand, where the closing of a large negative output gap may require an expansionary fiscal stance in the short-term, policies should also be framed in the overall context of a sustainable medium-term fiscal framework.

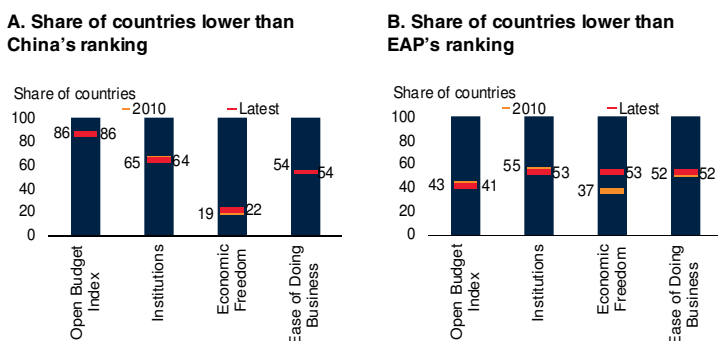
While low inflation has allowed reductions in policy interest rates, central banks must be watchful that a recovery in commodity prices does not generate a sustained acceleration in inflation. Banking sector reforms would be priorities for improving efficiency and the allocation of capital in Cambodia, Mongolia, and Vietnam. Strengthened financial sector (macro- and micro-prudential) policies could help buttress financial stability in the event of market turmoil. Relevant

measures include risk-informed pricing, rigorous borrower affordability assessments, supervisory vigilance over underwriting practices and capital adequacy, elevated reserve requirements, higher liquidity ratios or loan-loss provisions, and appropriate loan-to-value limits (IMF 2016d). Exchange rate flexibility should remain a key shock absorber, especially where terms of trade shocks are large (Mongolia, Papua New Guinea). Reserve interventions may, however, be useful to smooth unusually sharp exchange rate fluctuations caused by short-term capital flows in countries that have strong reserve positions.

Policy buffers—such as fiscal space (low public debt), and foreign currency reserves—are robust in

FIGURE 2.1.6 Policy issues

Across the region there is a room to improve business environment to boost competitiveness.



Sources: International Budget Partnership; World Economic Forum; Heritage Foundation; Transparency International; World Bank, World Development Indicators.

Note: The Open Budget Index (OBI) is the world's only independent, comparative measure of central government budget transparency. The OBI assigns countries covered by the Open Budget Survey a transparency score on a 100-point scale using 109 of the 140 questions on the Survey. The latest rank is for 2015. The Institution Rank data are from Pillar I. *Institutions* in Global Competitiveness Index. GCI is defined by the World Economic Forum. The variables are organized into twelve pillars with the most important including: institutions, infrastructure, macroeconomic framework, health and primary education and higher education and training. The GCI score varies between 1 and 7 scale, higher average score means higher degree of competitiveness. The latest rank is for 2015-16. Index of Economic Freedom measures economic freedom of 186 countries based on trade freedom, business freedom, investment freedom, and property rights. Each of the ten economic freedoms within these categories is graded on a scale of 0 to 100. A country's overall score is derived by averaging these ten economic freedoms, with equal weight being given to each. The latest rank is for 2016. The Ease of Doing Business Index ranks countries against each other based on how the regulatory environment is conducive to business operation and stronger protections of property rights. Economies with a high rank (1 to 20) have simpler and more friendly regulations for businesses. The latest rank is for 2015.

China, and are generally adequate in the rest of the region. Several countries, however, especially those with sizeable external financing needs, should rebuild these buffers. High leverage is the most important vulnerability across the region. Tighter macro-prudential policies in several of the larger regional economies (Malaysia, Thailand, the Philippines) have already resulted in moderating credit growth. The stocks of outstanding domestic debt (both corporate and household), however, remain elevated in Malaysia and Thailand (Figure 2.1.5).

Structural reforms should focus on productivity growth, higher private investment, and greater labor force participation to mitigate the impact of aging populations and slower labor force growth in China, Indonesia, Malaysia, and Thailand. In some younger, lower-income countries, including Cambodia, Lao PDR, Myanmar, Papua New Guinea, the Philippines, and Timor-Leste, reforms should aim at maximizing the potential demographic dividend (ADB 2016; World Bank 2015d). Improvements in the business climate and

reductions in the cost of doing business should be a high priority in Cambodia, Lao PDR, Myanmar, Papua New Guinea, Timor-Leste, and the small Pacific Islands. These countries rank low on the World Bank of Ease of Doing Business Index (World Bank 2015e, 2016e). Better performance in this regard will help catalyze private investment and enhance productivity growth.

Many countries in the region, especially Cambodia, Lao PDR, Myanmar, Papua New Guinea, Solomon Islands, also rank low on the 2015 Corruption Perceptions Index reported by Transparency International, as well as on other governance indicators (Figure 2.1.6). Enhanced transparency, strengthened accountability, and more responsiveness by state institutions to the needs of the private sector would bolster investor confidence (World Bank 2016a). Other measures to promote productivity include high-quality education to further raise the skills of the labor force. Reforms that raise the mandatory retirement age for civil servants and increase female participation would help increase labor participation (ADB 2015).

Finally, deepening global and regional trade and investment integration through lower non-tariff barriers would further boost productivity and competitiveness. New partnerships, including the Trans-Pacific Partnership agreement, signed in 2015, and other regional trade agreements, including the ASEAN economic community and the proposed Regional Comprehensive Economic Partnership, should all help anchor structural reforms and raise potential growth in the region.⁴

⁴Twelve countries in the Pacific Rim, including Malaysia and Vietnam, recently concluded negotiations on the Trans-Pacific Partnership (TPP).

TABLE 2.1.1 East Asia and Pacific forecast summary

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

(percentage point difference from January 2016 projections)

	2013	2014	2015e	2016f	2017f	2018f	2015e	2016f	2017f	2018f
EMDE EAP, GDP^a	7.1	6.8	6.5	6.3	6.2	6.1	0.1	0.0	0.0	-0.1
(Average including countries with full national accounts and balance of payments data only) ^b										
EMDE EAP, GDP^b	7.1	6.8	6.5	6.3	6.1	6.1	0.1	0.0	-0.1	-0.1
GDP per capita (U.S. dollars)	6.4	6.0	5.7	5.6	5.5	5.5	0.0	0.0	0.0	-0.1
PPP GDP	7.0	6.7	6.4	6.3	6.1	6.1	0.0	0.0	0.0	-0.1
Private consumption	6.8	6.9	7.0	6.9	7.0	7.0	0.1	0.0	0.0	0.0
Public consumption	7.7	4.3	6.4	6.1	5.9	5.8	0.1	0.0	0.0	0.1
Fixed investment	8.8	7.1	6.6	6.4	6.3	5.7	0.2	0.1	0.2	-0.2
Exports, GNFS ^c	7.2	6.5	2.5	3.4	4.3	4.8	-1.2	-0.9	-0.5	-0.4
Imports, GNFS ^c	8.5	5.7	2.1	4.0	4.8	5.4	-1.1	-0.7	-0.3	-0.2
Net exports, contribution to growth	-0.2	0.4	0.2	-0.1	0.0	-0.1	0.0	-0.1	0.0	-0.1
Memo items: GDP										
East Asia excluding China	5.1	4.7	4.8	4.8	4.9	5.2	0.2	0.0	-0.1	0.1
China	7.7	7.3	6.9	6.7	6.5	6.3	0.0	0.0	0.0	-0.2
Indonesia	5.6	5.0	4.8	5.1	5.3	5.5	0.1	-0.2	-0.2	0.0
Thailand	2.7	0.8	2.8	2.5	2.6	3.0	0.3	0.5	0.2	0.3

Source: World Bank.

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. EMDE refers to emerging market and developing economy. GDP at market prices and expenditure components are measured in constant 2010 U.S. dollars. Excludes American Samoa and Democratic People's Republic of Korea.

b. Sub-region aggregate excludes American Samoa, Democratic People's Republic of Korea, Fiji, Kiribati, Marshall Islands, Micronesia, Federated States, Myanmar, Palau, Papua New Guinea, Samoa, Timor-Leste, Tonga, and Tuvalu, for which data limitations prevent the forecasting of GDP components.

c. Exports and imports of goods and non-factor services (GNFS).

TABLE 2.1.2 East Asia and Pacific country forecasts^a

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

(percentage point difference from January 2016 projections)

	2013	2014	2015e	2016f	2017f	2018f	2015e	2016f	2017f	2018f
Cambodia	7.4	7.1	7.0	6.9	6.8	6.8	0.1	0.0	0.0	0.0
China	7.7	7.3	6.9	6.7	6.5	6.3	0.0	0.0	0.0	-0.2
Fiji	4.6	5.3	4.0	2.4	3.8	3.5	0.0	-1.1	0.7	0.5
Indonesia	5.6	5.0	4.8	5.1	5.3	5.5	0.1	-0.2	-0.2	0.0
Lao PDR	8.5	7.5	7.0	7.0	7.0	6.8	0.6	0.0	0.1	-0.1
Malaysia	4.7	6.0	5.0	4.4	4.5	4.7	0.3	-0.1	0.0	-0.3
Mongolia	11.6	7.9	2.3	0.7	2.7	6.2	0.0	-0.1	-0.3	-0.2
Myanmar	8.5	8.5	7.0	7.8	8.4	8.3	0.5	0.0	-0.1	-0.2
Papua New Guinea	5.5	8.5	8.6	3.0	4.1	2.9	-0.1	-0.3	0.1	-0.9
Philippines	7.1	6.1	5.8	6.4	6.2	6.2	0.0	0.0	0.0	0.0
Solomon Islands	3.0	1.5	3.3	3.0	3.3	3.0	0.0	0.0	-0.2	-0.4
Thailand	2.7	0.8	2.8	2.5	2.6	3.0	0.3	0.5	0.2	0.3
Timor-Leste ^b	2.8	6.0	4.3	5.0	5.5	5.5	-2.5	-1.9	-1.5	-1.5
Vietnam	5.4	6.0	6.7	6.2	6.3	6.3	0.2	-0.4	0.0	0.3

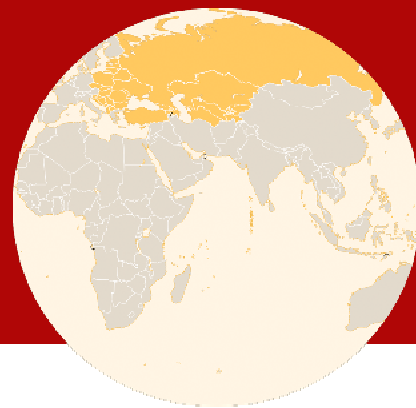
Source: World Bank.

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 significantly differ at any given moment in time.

a. GDP at market prices and expenditure components are measured in constant 2010 U.S. dollars. Excludes American Samoa and Democratic People's Republic of Korea.

b. Non-oil GDP. Timor-Leste's total GDP, including the oil economy, is roughly four times the non-oil economy, and highly volatile, sensitive to changes in global oil prices and local production levels.

EUROPE and CENTRAL ASIA



Economic activity in emerging market Europe and Central Asia stagnated in 2015, driven by the deep recession in the Russian Federation.¹ Excluding Russia, regional growth remained at the 2014 rate of 2.5 percent. Turkey saw continued robust growth, while commodity exporters generally slowed. Despite the uptick in oil prices in April and May, they remain at low levels and continue to exert pressure on key oil exporters, including Azerbaijan, Kazakhstan and Russia, where government policy buffers are eroding. Regional growth is expected to pick up to only 1.2 percent in 2016, as the Russian economy contracts further (albeit at a shallower pace) and political uncertainty in Turkey and Ukraine weighs on confidence. With a return to positive growth in Russia and Ukraine, regional growth will accelerate to about 2.6 percent in 2017-18. Key downside risks include geopolitical flare-ups, pressures from persistently low oil prices, less favorable external financing conditions as substantial bond repayments come due, and political polarization. Managing the adjustment to low commodity prices will be a major policy challenge for exporters, especially in view of the limited scope for fiscal and monetary accommodation. Priorities for non-commodity exporters center on making the most of the lower fuel import bill and implementing structural reforms to lift productivity and long-term growth.

Recent developments

Activity in emerging market and developing economies (EMDE) of the Europe and Central Asia (ECA) region contracted by 0.1 percent in 2015, compared to the 1.8 percent expansion in 2014 (Tables 2.2.1 and 2.2.2, and Figure 2.2.1). The dip mainly reflected the ongoing recession in Russia, which accounts for about 37 percent of GDP in the region. Excluding Russia, regional growth in 2015 was 2.5 percent, unchanged from the previous year's pace. Recent data point to

Note: The author of this section is Christian Eigen-Zucchi. Research assistance was provided by Shituo Sun.

¹The EMDE grouping for Europe and Central Asia adds Croatia, Hungary, Poland, and the Russian Federation to the previous developing economy grouping, and encompasses the following sub-groupings and countries: The eastern part of the region comprises Eastern Europe (Belarus, Moldova, and Ukraine), South Caucasus (Armenia, Azerbaijan and Georgia), Central Asia (Kazakhstan, Kyrgyz Republic, Tajikistan, Turkmenistan, and Uzbekistan) and Russia; all except Belarus, Georgia, and Moldova are classified as commodity exporters (commodities account for more than 30 percent of exports, or a single commodity accounts for more than 20 percent of exports). The western part of the region includes Central and Southeastern Europe (Bulgaria, Hungary, Poland and Romania), the Western Balkans (Albania, Bosnia and Herzegovina, Kosovo, the Former Yugoslav Republic of Macedonia, Montenegro, and Serbia), Croatia, and Turkey; all are classified as commodity importers.

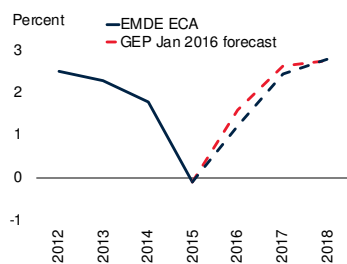
continued weakness across much of the region, as low oil prices put pressure on exporters (Azerbaijan, Kazakhstan, Russia), geopolitical tensions dampen confidence (Russia, Turkey, Ukraine), and external financing conditions become more difficult with wide spreads and ratings downgrades. Exchange rates have come under pressure, and in some countries non-performing loans have ticked upwards or remain at elevated levels. High inflation rates and efforts to defend exchange rates have led to tight or procyclical tightening of monetary policy stances (Azerbaijan, Kazakhstan, Russia). The U.S. dollar value of recorded remittances is estimated to have fallen by over 20 percent in 2015, led by a decline in transfers from Russia (World Bank 2016f; Figure 2.2.2).

The eastern part of the region comprises mostly commodity-exporting countries and has seen the biggest slowdown, especially among oil exporters (Azerbaijan, Kazakhstan, Russia), as economies adjust to a deterioration in the terms of trade (Figure 2.2.3). With average oil prices falling by 47 percent to \$51 per barrel in 2015, and touching lows of under \$30 per barrel in January 2016, export receipts and government revenues

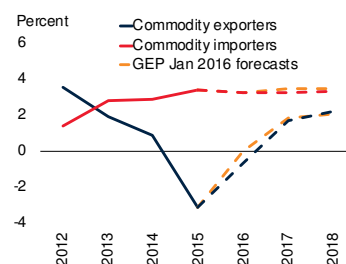
FIGURE 2.1 Key indicators

Growth came to a halt in the EMDE ECA region in 2015, as Russia went into recession. A modest rebound is expected in 2016, but growth projections have been revised downwards, especially among commodity exporters, as low oil prices widen current account deficits and put downward pressure on exchange rates.

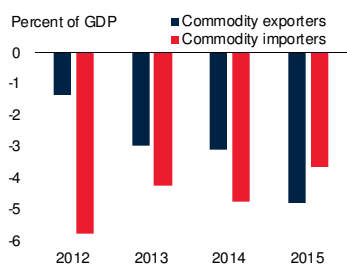
A. EMDE ECA growth and forecast revisions



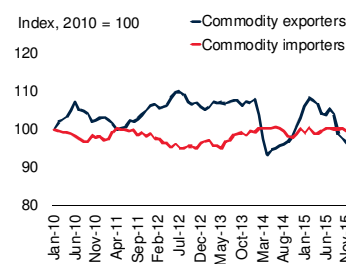
B. Sub-region growth and forecast revisions



C. Current account balances



D. Nominal effective exchange rates



Sources: World Bank; International Monetary Fund, World Economic Outlook (April 2016).

A. Dashed lines indicate projections.

B. GDP data are aggregations of all countries in each grouping. EMDE ECA commodity importers include Albania, Belarus, Bosnia and Herzegovina, Bulgaria, Croatia, Former Yugoslav Republic of Macedonia, Georgia, Hungary, Kosovo, Moldova, Montenegro, Poland, Romania, Serbia, and Turkey. EMDE ECA commodity exporters include Armenia, Azerbaijan, Kazakhstan, Kyrgyz Republic, Russian Federation, Tajikistan, Turkmenistan, Ukraine, and Uzbekistan. Dashed lines indicate projections.

C. Data for groupings are simple averages for all countries where data are available.

D. Median nominal effective exchange rates of commodity exporters and commodity importers, where data are available. A decline denotes depreciation. Latest observations are December 2015.

have fallen, current account balances have generally weakened, and reserves and other buffers have eroded. Commodity exporters have seen sharp exchange rate devaluations and depreciations, which though necessary for adjustment, added strains to financial systems in a context of vulnerabilities associated with the build-up of private nonfinancial debt (Chapter 1, Special Focus 1). The ongoing recession in Russia is bringing adverse spillovers through trade and remittances, which have fallen precipitously in U.S. dollar terms. Turkmenistan and Uzbekistan are also experiencing slowdowns in growth, despite their strong buffers and limited economic ties to the rest of the world.

The western part of the region is comprised of commodity importers that are more closely linked to, or are members of, the European Union (EU), and has been growing modestly. Lower fuel costs are putting downward pressure on prices (Poland, Turkey), and boosting consumer spending. In a context of soft external demand from key trading partners in the EU, growth will hinge on domestic demand, both consumption and investment. Policy uncertainty and geopolitical tensions contributed to bouts of exchange rate volatility during 2015.

Real GDP in Russia declined by 1.2 percent (year-on-year) in the first quarter of 2016, following the sharp 3.7 percent contraction in 2015 (Figure 2.2.4). The Russian economy is struggling to adjust to continued low oil prices, trade embargoes and geopolitical concerns. Though necessary to support the adjustment, tight fiscal and monetary policies are also weighing on growth. The sharp fall in oil revenues is weakening the fiscal position. Even with across-the-board spending cuts, the country's oil reserve fund is financing government spending at a pace that may deplete its resources. Interest rates are being maintained at 11 percent, despite the ongoing recession. With activity so far in 2016 contracting more slowly than in 2015, there are tentative indications that the decline in some sectors may be bottoming out. Industrial production is recovering, despite shrinking investment and restricted access to external financing for Russian firms. After depreciating sharply at the beginning of 2016, the ruble has strengthened to levels last seen in mid-2015, helping to reduce the rate of inflation from double digits throughout 2015 to 7.3 percent in May 2016.

Growth in Turkey picked up to 4.0 percent in 2015. Domestic demand was strong, despite the uncertainty associated with two rounds of elections, and rising geopolitical risks (World Bank 2016g). Lower fuel costs helped narrow the current account deficit to 4.5 percent of GDP. Indicators on industrial production, exports and retail sales suggest continued solid growth in the first half of 2016. However, tourism slowed sharply so far this year, and geopolitical tensions (violence in the East, terrorist attacks in

metropolitan centers, and the refugee crisis emanating from Syria) are weighing on confidence. In the three months to May, the manufacturing Purchasing Managers' Index (PMI) weakened to levels signaling contraction, and capital inflows have been easing, pointing to some moderation in growth ahead.

Growth in Poland slowed to 3 percent year-on-year in the first quarter of 2016, easing from the robust expansion of 3.6 percent registered in 2015. Private consumption and investment growth accelerated in the first quarter on continued employment gains and low oil prices, but public spending fell in part due to lower funds from the European Union. Industrial production grew strongly in the first four months of 2016, and retail sales have also posted solid gains. Consistent with weak price pressures across the EU and falling oil prices, inflation has been negative since mid-2014, and was -1 percent (year-on-year) in May 2016. Against the backdrop of deflation, the central bank has kept interest rates at a record-low of 1.5 percent since March 2015.

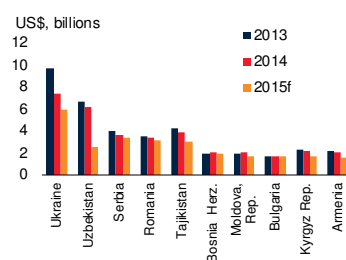
In Kazakhstan, growth decelerated to 1.2 percent in 2015, from 4.1 percent in 2014, as the economy adjusted to the decline in the price of oil (which accounted for 19 percent of GDP and 76 percent of exports in 2014), the deep recession in Russia, and the slowdown in China. The contraction in industrial production, exports, and retail sales persisted through the first quarter of 2016. The sharp devaluation, followed by the move to a floating exchange rate in August 2015, boosted inflation and put pressure on domestic borrowers, as about 30 percent of loans in the banking system in mid-2015 were denominated in foreign currency, mostly U.S. dollars. While policy interest rates were lowered by 200 basis points to 15 percent in May, they remain elevated as the authorities seek to support of the tenge, sharply constraining domestic borrowing. Government spending supported by a drawdown of the oil fund has provided a cushion, but buffers are eroding.

Ukraine returned to positive growth of 0.1 percent (year-on-year) in the first quarter of 2016, and the contraction of 9.9 percent in 2015 was not as

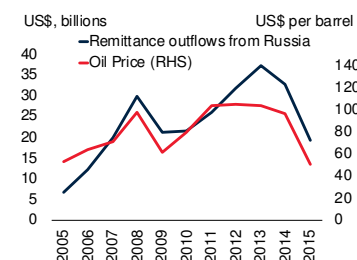
FIGURE 2.2.2 Remittances

Remittances to the ECA region expressed in U.S. dollars fell by over 20 percent in 2015, led by a drop in flows from Russia, one of the biggest sources for the region. Part of the fall is explained by exchange rate movements. Lower remittances are impacting household consumption in recipient countries.

A. Remittance inflows



B. Remittance outflows from Russia and oil prices



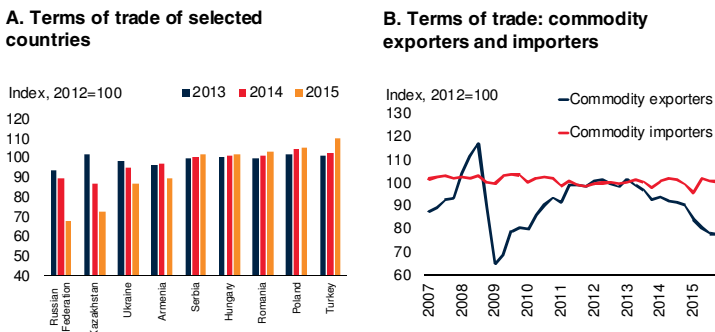
Sources: World Bank 2016f; International Monetary Fund, Balance of Payments Statistics. B. Oil price is the average crude oil price from World Bank Commodities Price Data. Remittance outflows for 2015 are estimates based on IMF Balance of Payments Statistics available up to 2015 Q3.

severe as previously anticipated. Other data so far this year also suggest that the recession has bottomed out. Following steep price increases in 2014 and 2015 associated with the devaluation of the hryvnia and price reforms, inflation slowed as the currency stabilized, enabling a lowering of policy interest rates to 18 percent in May. The western part of Ukraine is not directly affected by conflict and is recovering. Still, exports and imports are down by more than half from their 2012 levels and remain weak. The capacity of the banking sector to lend is sharply constrained. External financing remains costly, with average spreads on euro and U.S. dollar-denominated borrowings more than 400 basis points above those of other countries in the region during the first quarter of 2016 (Figure 2.2.5). Additional downgrades by ratings agencies could contribute to keeping spreads elevated. Tensions over a debt dispute with Russia continue. The authorities are endeavoring to maintain progress on the reform program agreed with the IMF, despite the fall of the ruling coalition, which was replaced in mid-April with an administration that has pledged to combat corruption and promote closer ties with the EU.

Several other countries in the region are maintaining robust economic activity.

FIGURE 2.2.3 Terms of trade

The sharp fall in commodity prices has led to substantial changes in the terms of trade in both commodity exporters and importers.



Source: Haver Analytics.

B: Median of terms of trade data available for each sub-grouping. Latest observations are 2015Q4.

Turkmenistan and Uzbekistan grew by 6.5 percent and 8.0 percent in 2015, respectively, helped by the deployment of strong buffers. However, there was a deceleration relative to 2014, and indications so far this year are of further slowing. Also posting growth above 3 percent in 2015 were Armenia, Kosovo, and Macedonia FYR, all of which enjoy close economic ties with the EU. In contrast, Belarus and Moldova, which are closely connected to the Russian and Ukrainian economies, went into recession in 2015, and both encountered sharp falls in industrial production in early 2016.

Outlook

Despite some expected uptick from the soft performance in 2015, prospects for the region have generally slipped. Growth is subdued, external accounts are under pressure, and exchange rates are weakened, while policy uncertainty continues. Geopolitical concerns, including in eastern Ukraine and the Caucasus, terror attacks in Turkey, and the ongoing refugee crisis, are weighing on the outlook.

The continuing contraction in Russia keeps the expected growth rate for ECA at about 1.2 percent this year. Excluding Russia, forecast growth accelerates to 2.9 percent. Activity in western ECA will benefit from moderate growth in the Euro Area and strengthening domestic demand, with

subdued fuel costs boosting the purchasing power of consumers. Growth projections for the mostly commodity exporting eastern part of the region have been revised downward relative to the January 2016 *Global Economic Prospects*, amid the ongoing adjustment to the terms of trade shock (affecting oil exporters especially, and to varying degrees metals and agricultural commodities exporters), with little scope for policy accommodation to smooth the transition.

Across the largest countries in the region, there is considerable variation in prospects. Russia's economy is projected to decline by 1.2 percent in 2016, led by falls in private investment and consumption, before returning to modest growth in 2017 (World Bank 2016h). Growth is expected to come to a virtual stand-still in Kazakhstan in 2016, as falling oil revenues constrain public spending and exchange rate pressures compel the central bank to maintain elevated policy interest rates. Growth in Turkey is likely to slow in 2016, partly due to lower net exports (falling tourism, weak external demand, and trade restrictions with Russia) and policy uncertainty weighing on confidence. Economic activity in Poland will be helped by additional public spending in the form of monthly support payments for parents with two or more children, and growth is forecast at about 3.5 percent in 2016-18. In the absence of an escalation of conflict in the east, Ukraine's economy could return to modest growth in 2016, helped by the real depreciation of the hryvnia, efforts to boost exports to the EU market, and banking sector reforms that will support a resumption of lending.

The outlook for the external sector across the region diverges between commodity importers and exporters, especially of oil. With commodity prices projected to remain low for longer, exporters (Azerbaijan, Kazakhstan, Russia) face further adjustment to the deterioration in the terms of trade that is weakening current account balances, eroding reserves, and exerting pressure on exchange rates (World Bank 2016i). Key priorities include adjusting to lower government revenues and mitigating financial sector risks in a context of reduced fiscal space for potential financial sector stabilization measures. Several neighboring

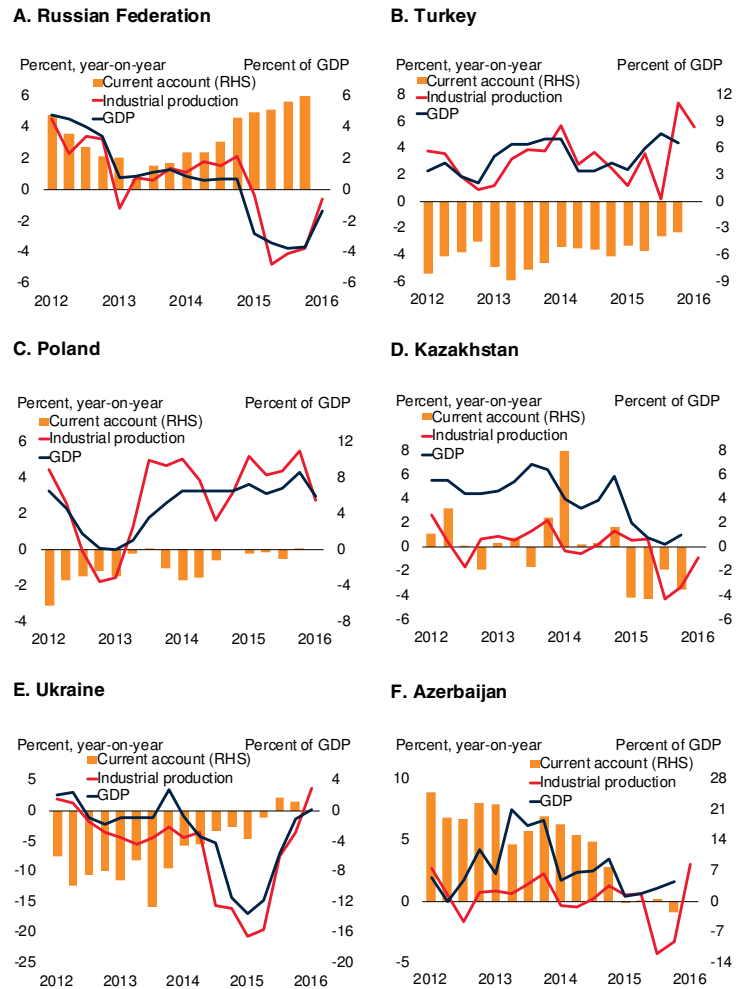
countries are being adversely affected by spillovers in the form of reduced trade and remittances (Armenia, Georgia, Kyrgyz Republic, Moldova, Tajikistan). Trade embargos and quantitative trade restrictions will affect Russia, Turkey, and Ukraine. Commodity importers, however, will continue to reap windfalls in the form of low fuel prices, helping to strengthen current account balances and ease pressures on exchange rates. Countries that are oriented towards, or are members of, the European Union (Bulgaria, Hungary, Poland, Romania, and increasingly Ukraine) will benefit from some recovery in export demand, supported by real exchange rate depreciation (Bulgaria, Poland, Romania, Ukraine). Ukraine will be helped by the accession on January 1, 2016, to the Deep and Comprehensive Free Trade Area with the European Union.

External financing conditions are expected to remain challenging for several countries in the region. Despite some easing of spreads in March and April, they remain elevated (Kazakhstan, Russia, Turkey, Ukraine; Figure 2.2.5), and downgrades in 2016 by ratings agencies (Armenia, Azerbaijan, Croatia, Kazakhstan, Poland), and sanctions imposed on Russia have raised borrowing costs or constrained access to international financial markets. With large volumes of bonds falling due in 2016-18 (Russia, Turkey), and current account deficits remaining sizable in the baseline (Albania, Bosnia and Herzegovina, Georgia, Kosovo, Montenegro, Serbia, Turkey), managing external financing will remain a priority. For Ukraine, this will also require staying on track with the reform program underpinning the debt restructuring agreement.

Geopolitical concerns and political uncertainty are major factors weighing on baseline prospects in ECA. The refugee crisis that is directly affecting host countries (Turkey) and transit countries (Western Balkans) is posing enormous humanitarian and political challenges. The baseline forecast of strengthening growth in the region is predicated on an easing of conflict in the southeast of Turkey and eastern Ukraine, and a subsiding of terrorist attacks in urban centers in Turkey.

FIGURE 2.2.4 Recent developments at the country level

Growth performance continues to diverge between commodity exporters, where activity contracted or slowed, and commodity importers, which have seen a pickup. The steep fall in activity in Ukraine has bottomed out.



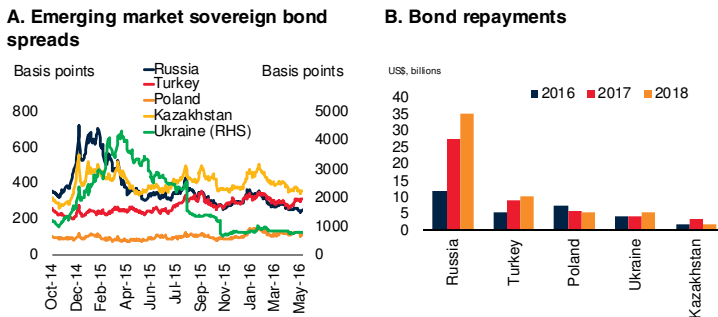
Sources: Haver Analytics; International Monetary Fund, International Financial Statistics. A.- F. Latest observations for GDP are 2016Q1 for Russia, Poland and Ukraine, and 2015Q4 for Turkey, Kazakhstan and Azerbaijan. Latest observations for industrial production are 2016Q1. Latest observations for current account (seasonally adjusted) are 2015Q4.

Risks

ECA countries face a wide range of risks, primarily to the downside—particularly for the commodity exporters of the eastern part of the region. The impacts of geopolitical tensions (especially in eastern Ukraine and the South Caucasus), terror attacks and conflict in Turkey, and the refugee crisis emanating from Syria could intensify, dampening confidence, capital inflows, investment, tourism and growth. Knock-on effects could include sharply increased contingent

FIGURE 2.2.5 External financing

Despite some easing in the first quarter of 2016, spreads remain elevated among major borrowers in the region. Elevated bond repayments fall due in 2016-18.



Sources: J.P. Morgan Chase; Dealogic.

A. Emerging Market Bond Index Global produced by JP Morgan Chase. Latest observations are May 2016.

B. Debt redemptions are indicated at face value.

liabilities (stemming from state owned enterprises and financial sector disruptions) that undermine fiscal positions. There is also a risk that policy responses will be inadequate to address challenges. External financing conditions may become more difficult and volatile, despite low bond yields and generally loose monetary conditions in advanced market economies, as greater risk aversion is reflected in elevated spreads.

The main risks confronting the eastern, mostly commodity exporting part of the region center on oil prices remaining lower for longer than expected. This would increase pressure on oil exporters (Azerbaijan, Kazakhstan, Russia) and could precipitate disorderly adjustments, including further fiscal deterioration, sharp exchange rate depreciations, and financial system instability. Financial strains and fiscal deterioration could lead to further pro-cyclical policy tightening to preserve fiscal and reserve buffers, including public spending cuts and policy interest rate increases. A deeper than expected recession in Russia could generate intensified spillovers for neighboring countries (Armenia, Belarus, Georgia, Kyrgyz Republic, Moldova, Tajikistan, Uzbekistan) through reduced remittance flows and lower demand for imports.

The western part of the ECA region faces risks associated with policy uncertainty. Further political polarization (Hungary, Poland, Turkey,

Ukraine) would jeopardize the independence of key economic institutions and set back efforts to strengthen the overall policy framework. Geopolitical concerns in Turkey may lead to a sharp reduction in tourist arrivals, especially from the Euro Area and Russia. Since the region remains heavily dependent on trade, financial and labor market ties with the Euro Area (World Bank 2016b), growth would disappoint in the event of slower-than-anticipated Euro Area growth. On the positive side, if as expected oil prices do not rise significantly, inflation would remain subdued, interest rates could be reduced, current accounts and exchange rates would strengthen, and output would rise.

Policy challenges

Policy makers in ECA countries are confronting a range of challenges. Eastern commodity exporters are grappling with adjustment to the terms of trade shock from the drop in oil prices, while trying to sustain domestic demand, ensure financial sector stability, and mitigate vulnerabilities. The western part of the region is seeing a windfall from lower fuel import costs, but faces challenges in public expenditure management and structural issues. A decline in the working age share of the population underscores the need to boost productivity.

The scope for countercyclical monetary policy is limited in several commodity exporters, as they are constrained by concerns about the exchange rate and persistent or above-target inflation, leading to pro-cyclical monetary tightening or maintenance of elevated policy interest rates (Azerbaijan, Kazakhstan, Russia; Figure 2.2.6). For example, the largest deviations of Russian inflation above target were associated with substantial ruble depreciations, as in 2009 and 2015 (Korhonen and Nuutilainen 2016). While exchange rate depreciation serves as an important adjustment mechanism, it may also raise concerns about financial stability. Even oil exporters that entered the oil price decline with strong sovereign wealth funds and reserves (Azerbaijan, Kazakhstan) are scaling back their exchange market intervention in support of depreciating currencies, which had led to significant reserve losses.

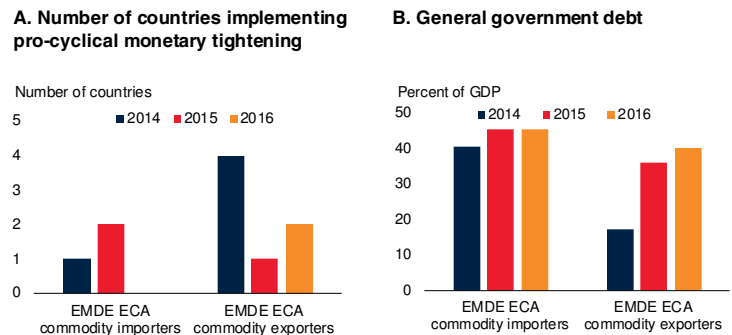
Oil importing countries are benefiting from reduced fuel import costs. Those with very subdued inflation or deflation (Croatia, Poland, Romania) have more room for maneuver, helped by the accommodative monetary policy stance of the European Central Bank. In Turkey, inflation pressures resulting from exchange rate depreciation in 2015 are abating, but core inflation remains above target. In a context of weaker currencies and substantial foreign currency denominated liabilities (Azerbaijan, Kazakhstan, Russia), policy makers will need to ensure sound macro-prudential frameworks. Measures might include introducing higher risk weights or capping exposure to corporate lending, constraining lending in foreign currency to unhedged borrowers, intensifying supervision, and increasing transparency (IMF 2015c, 2015d). Together with efforts to address existing non-performing loans and limit deterioration of financial sector balance sheets, private sector credit is weakening in the short-term (IMF 2016f).

Space for countercyclical fiscal policy is also limited across the region, by the size of government debt in the case of commodity importers. Oil-exporting countries have suffered a substantial fall in revenues from oil. While they have revised their budgets to reflect lower oil prices, in many instances fiscal break-even oil prices remain above the \$41 per barrel currently projected for 2016 (Azerbaijan, Kazakhstan, Russia). Buffers, such as reserve funds or low overall public debt levels that were built up during the period of high oil prices, are eroding. Even countries where public finances were in surplus for many years and reserve funds are very large, such as Azerbaijan, face challenges balancing pressures for fiscal consolidation and stimulus, and may need to pursue pro-cyclical tightening to stem fiscal deterioration over the medium-term.

Oil importers are realizing fiscal savings, especially those that are taking advantage of low energy prices to implement subsidy reforms (Romania, Ukraine). Still, many countries entered the period of low commodity prices carrying substantial structural fiscal deficits and elevated public debt levels. Given limited fiscal space, they will need to consolidate spending (Armenia, Georgia). Efforts

FIGURE 2.2.6 Monetary and fiscal policy

Over 40 percent of eastern commodity exporters have implemented pro-cyclical tightening, amidst exchange rate pressures and above-target inflation. Government debt in the eastern part of the region is generally lower than the western part, but is on an upward trajectory.



Sources: Central Bank Rates; International Monetary Fund, World Economic Outlook (April 2016).
 A. Number of countries in each sub-grouping that adopted pro-cyclical increases of policy interest rates (as of May 23, 2016).
 B. Median gross general government debt of the countries in each sub-grouping.

to boost revenues have also had a significant impact on strengthened fiscal balances (Western Balkans, World Bank 2016i). Governments need to be prepared for spikes in risk aversion, which in past episodes have sharply raised financing costs, or cut off access to capital. In order to support these efforts, several countries (Kazakhstan, Ukraine) have embarked on ambitious public expenditure management and civil service reforms aimed at boosting the efficiency of public spending, enhancing the effectiveness of public service provision, and improving the targeting of social support.

Structural reforms will be central to responding effectively to the economic headwinds faced by the region. Mounting evidence shows that structural reforms play an important role in improving resource allocation, boosting productivity and raising long-term growth (Dabla-Noris, Ho and Kyobe, 2016). Gains in EMDEs are largest from enhancing the efficiency of the banking system, facilitating capital market development, and improving the business environment. For example, firm-level data from 10 ECA EMDEs suggest that reforms improving access to finance for smaller, younger firms may increase manufacturing productivity by 17 percent (Larrain and Stumpner 2013). More generally, structural reforms provide a boost to investor confidence,

and over time have substantial benefits through improved allocation of resources and productivity. The pull of the European Union is also helping to incentivize reform efforts, especially in the western parts of the region.

Structural reforms are needed if firms in the tradeable goods sector are to benefit from the relative price advantages associated with weaker currencies. Such reforms should aim to increase competition, improve factor allocation, and reduce policy uncertainty, especially in commodity

exporting countries. Several Central Asian countries are poorly integrated into global trade networks, with the state playing an outsized role in the economy. Key initiatives that would raise productivity and growth in these countries include privatization, trade liberalization, and the promotion of foreign direct investment, especially by multinationals that can facilitate integration into supply chains, transfer technology, and enable the transition towards higher value-added exports (Mitra et al. 2016).

TABLE 2.2.1 Europe and Central Asia forecast summary

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

	2013	2014	2015e	2016f	2017f	2018f	(percentage point difference from January 2016 projections)			
							2015e	2016f	2017f	2018f
EMDE ECA, GDP^a	2.3	1.8	-0.1	1.2	2.5	2.8	0.0	-0.4	-0.1	0.0
EMDE ECA, GDP excl. Russia	3.1	2.5	2.5	2.9	3.2	3.4	0.1	-0.2	-0.3	-0.1
(Average including countries with full national accounts and balance of payments data only) ^b										
EMDE ECA, GDP^b	2.3	1.8	-0.2	1.2	2.4	2.8	0.0	-0.4	-0.2	0.1
GDP per capita (U.S. dollars)	1.8	1.3	-0.5	0.9	2.2	2.6	0.0	-0.4	-0.2	0.1
PPP GDP	2.3	1.7	-0.3	1.1	2.4	2.8	0.2	-0.4	-0.2	0.1
Private consumption	3.8	1.3	-3.0	1.9	2.5	3.0	-3.2	0.5	-0.3	0.1
Public consumption	2.7	1.1	1.6	1.2	1.2	1.5	2.0	0.3	-1.6	-1.3
Fixed investment	1.3	4.8	-1.7	-1.0	4.4	5.7	3.2	-1.7	1.8	2.6
Exports, GNFS ^c	3.3	2.2	2.8	3.1	3.6	3.6	2.2	-0.8	-1.5	-1.6
Imports, GNFS ^c	3.4	-1.3	-7.0	3.3	4.7	6.3	-3.4	-0.5	-0.6	1.0
Net exports, contribution to growth	0.0	1.2	3.2	0.1	-0.2	-0.7	1.8	0.0	-0.3	-0.8
Memo items: GDP										
Central Europe ^d	1.6	2.9	3.4	3.4	3.3	3.2	0.2	0.1	-0.2	-0.4
Western Balkans ^e	2.4	0.5	2.3	2.7	3.1	3.7	0.4	0.1	0.1	0.2
Eastern Europe ^f	0.6	-3.9	-7.8	-0.3	1.2	2.3	1.3	-0.8	-0.5	0.6
South Caucasus ^g	5.1	3.2	1.6	-0.5	1.7	2.2	-0.5	-1.8	-0.3	-0.9
Central Asia ^h	6.7	5.4	3.0	2.1	3.4	4.6	0.2	-1.1	-1.4	-0.3
Russian Federation	1.3	0.7	-3.7	-1.2	1.4	1.8	0.1	-0.5	0.1	0.3
Turkey	4.2	3.0	4.0	3.5	3.5	3.6	-0.2	0.0	0.0	0.2
Poland	1.3	3.3	3.6	3.7	3.5	3.5	0.1	0.0	-0.4	-0.4

Source: World Bank.

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. EMDE refers to emerging market and developing economy. GDP at market prices and expenditure components are measured in constant 2010 U.S. dollars.

b. Sub-region aggregate excludes Bosnia and Herzegovina, Kosovo, Montenegro, Serbia, Tajikistan, and Turkmenistan, for which data limitations prevent the forecasting of GDP components.

c. Exports and imports of goods and non-factor services (GNFS).

d. Includes Bulgaria, Croatia, Hungary, Poland, and Romania.

e. Includes Albania, Bosnia and Herzegovina, Kosovo, FYR Macedonia, Montenegro, and Serbia.

f. Includes Belarus, Moldova, and Ukraine.

g. Includes Armenia, Azerbaijan, and Georgia.

h. Includes Kazakhstan, Kyrgyz Republic, Tajikistan, Turkmenistan, and Uzbekistan.

TABLE 2.2.2 Europe and Central Asia country forecasts^a

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

(percentage point difference
from January 2016 projections)

	2013	2014	2015e	2016f	2017f	2018f	2015e	2016f	2017f	2018f
Albania	1.1	2.0	2.6	3.2	3.5	3.8	-0.1	-0.2	0.0	0.3
Armenia	3.3	3.5	3.0	1.9	2.8	2.9	0.5	-0.3	0.0	-0.1
Azerbaijan	5.8	2.8	1.1	-1.9	0.7	1.3	-0.9	-2.7	-0.5	-1.4
Belarus	1.1	1.6	-3.9	-3.0	-1.0	0.3	-0.4	-2.5	-2.0	-0.7
Bosnia and Herzegovina	2.3	1.1	3.2	2.6	3.1	3.5	1.3	0.3	0.0	0.0
Bulgaria	1.3	1.6	3.0	2.2	2.7	3.0	0.1	0.0	0.0	0.3
Croatia	-1.1	-0.4	1.6	1.9	2.0	2.4	0.6	0.5	0.3	0.4
Georgia	3.4	4.6	2.8	3.0	4.5	5.0	0.3	0.0	0.0	0.0
Hungary	1.9	3.7	2.9	2.6	2.4	2.3	0.1	0.1	-0.3	-0.7
Kazakhstan	5.8	4.1	1.2	0.1	1.9	3.7	0.3	-1.0	-1.4	0.3
Kosovo	3.4	1.2	3.6	3.6	4.0	4.1	0.6	0.1	0.3	0.1
Kyrgyz Republic	10.9	4.0	3.5	3.4	3.1	4.1	1.5	-0.8	-0.3	-0.2
Macedonia, FYR	2.9	3.5	3.7	3.7	4.0	4.0	0.5	0.3	0.3	0.3
Moldova	9.4	4.6	-0.5	0.5	4.0	4.5	1.5	0.0	0.0	0.5
Montenegro	3.5	1.8	3.4	3.7	3.1	3.0	0.0	0.8	0.1	0.1
Poland	1.3	3.3	3.6	3.7	3.5	3.5	0.1	0.0	-0.4	-0.4
Romania	3.4	2.8	3.7	4.0	3.7	3.4	0.1	0.1	-0.4	-0.6
Russian Federation	1.3	0.7	-3.7	-1.2	1.4	1.8	0.1	-0.5	0.1	0.3
Serbia	2.6	-1.8	0.8	1.8	2.3	3.5	0.0	0.0	0.1	0.0
Tajikistan	7.4	6.7	4.2	4.0	4.8	5.3	0.0	-0.8	-0.7	-0.2
Turkey	4.2	3.0	4.0	3.5	3.5	3.6	-0.2	0.0	0.0	0.2
Turkmenistan	10.2	10.3	6.5	5.0	5.0	5.0	-2.0	-3.9	-3.9	-3.9
Ukraine	0.0	-6.6	-9.9	1.0	2.0	3.0	2.1	0.0	0.0	1.0
Uzbekistan	8.0	8.1	8.0	7.3	7.2	7.2	1.0	-0.2	-0.5	-0.5

Source: World Bank.

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 significantly differ at any given moment in time.

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

LATIN AMERICA and THE CARIBBEAN



Latin America and the Caribbean is expected to face another year of weak economic performance due to domestic challenges among the region's largest economies, depressed commodity prices, and tighter regional monetary conditions. Output is expected to shrink another 1.3 percent this year, after declining 0.7 percent in 2015, marking a second consecutive year of recession for the first time in more than 30 years. Brazil and the República Bolivariana de Venezuela are in deep recessions, while Argentina is expected to see a modest contraction as it embarks on a period of macroeconomic policy adjustments toward more sustainable growth. In contrast, Mexico, Central America, and the Caribbean are expected to expand at moderate rates in 2016, boosted by robust growth in exports and tourism. The region as a whole is projected to return to growth in 2017-18, as domestic constraints gradually loosen and net exports continue picking up. Significant downside risks persist, as the South American economy has yet to bottom out and commodity prices could resume their declines. Regaining fiscal space, amid the economic slowdown and low commodity revenues, and enhancing productivity growth are major policy challenges for the region.

Recent developments

The Latin America and Caribbean (LAC) region is expected to suffer a second consecutive year of recession in 2016, the first double-year contraction in more than 30 years (Figure 2.3.1, Table 2.3.1).¹ Regional economic activity is projected to decline 1.3 percent this year, deeper than last year's contraction of 0.7 percent. There are, however, substantial differences among the three sub-regions (see Box 2.3.1). South America, the largest sub-region, is expected to remain in recession this year with output contracting 2.8 percent, significantly steeper than last year's 1.9 percent drop. In contrast, Mexico and Central

America will see output continue to expand in 2016 at 2.7 percent, while the Caribbean will grow by about 2.6 percent, slower than the exceptional year in 2015.

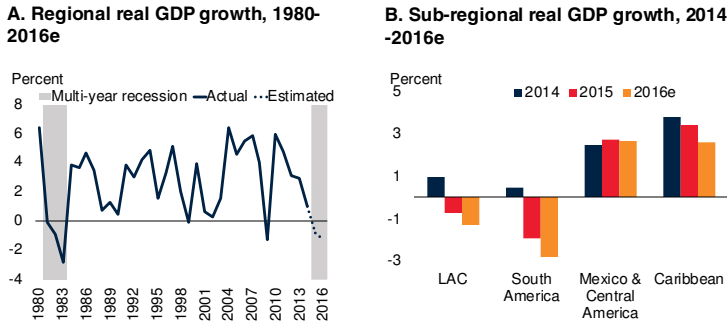
Domestic challenges in Brazil and the República Bolivariana de Venezuela, as well as the ongoing macroeconomic adjustment in Argentina, have weighed on regional growth. This year's disappointing regional economic performance also reflects the protracted decline in commodity prices. Slumping oil prices will weigh most heavily on the major oil exporters (Colombia, Ecuador, República Bolivariana de Venezuela). Yet, with metal and agricultural prices also declining, most economies in the region will be held back by the deterioration in the terms-of-trade, reduced export and fiscal revenues, and weaker investment especially in the commodities sector (Bolivia, Chile, Peru). The significance of commodities prices for LAC growth has been documented in the literature (Gruss 2014). Moreover, financial conditions have tightened, with reduced bond issuance and monetary policy rate increases, particularly in South America. Moderating the slowdown, the real depreciation of regional currencies has improved the competitiveness of exports.

Note: The author of this section is Derek H. C. Chen, with research assistance from Mai Anh Bui and contributions from Lei Ye, Eung Ju Kim, and Yirou Li.

¹The discussion in this section includes both developing and high-income economies in the Latin America and the Caribbean region. The South American sub-region includes Argentina, Bolivia, Brazil, Chile, Colombia, Ecuador, Paraguay, Peru, Uruguay, and the República Bolivariana de Venezuela. The Mexico and Central America sub-region includes Costa Rica, El Salvador, Guatemala, Honduras, Mexico, Nicaragua, and Panama. The Caribbean sub-region includes Antigua and Barbuda, The Bahamas, Barbados, Belize, Dominica, Dominican Republic, Grenada, Guyana, Haiti, Jamaica, St. Kitts and Nevis, St. Lucia, St. Vincent and the Grenadines, Suriname and Trinidad and Tobago.

FIGURE 2.3.1 GDP growth: Latin America and the Caribbean

The LAC region is expected to see another year of economic contraction in 2016, its first multi-year recession since the Latin American debt crisis in 1981-1983. Domestic challenges and the slump in commodity prices have weighed on growth, especially among South American economies.

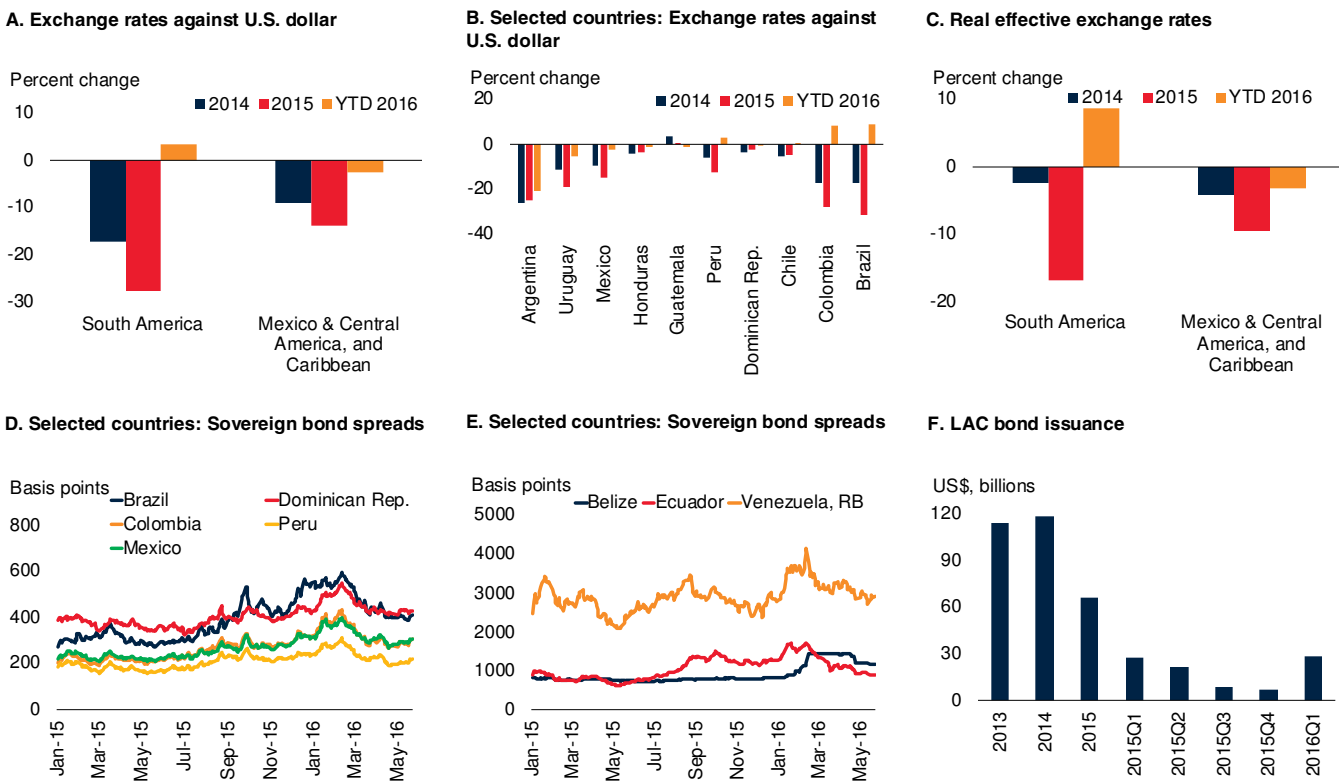


Source: World Bank. Note: e = estimated. GDP weighted average.

Amid market concerns about global prospects and possible further increases in U.S. interest rates, investor risk aversion has increased. Within the region, this aversion has been compounded by domestic political uncertainty, weak regional economic activity, and the renewed decline in commodity prices earlier in the year. The region, particularly South America, saw substantial depreciations at the beginning of 2016, but has since recovered, coming out almost flat for the year. However, given that South American currencies depreciated on average 27 percent against the U.S. dollar in 2015, these currencies are still relatively weakened, both in real and nominal terms (Figure 2.3.2). At the same time, international bond issuance from LAC slumped 61 percent (year-on-year) in 2015Q4, amounting

FIGURE 2.3.2 Exchange rates and sovereign bond spreads

Investor risk aversion spiked in early 2016, amid a renewed decline in commodity prices, leading to sharp increases in sovereign bond spreads and depreciated regional currencies, especially for oil exporters. However since then, nominal exchange rates and bonds spreads have largely recovered to their late 2015 levels.



Sources: Haver Analytics; International Monetary Fund, International Financial Statistics; JP Morgan; Dealogic.
 A. GDP weighted average. South America includes Argentina, Brazil, Chile, Colombia, Paraguay, Peru, and Uruguay. Mexico & Central America, and Caribbean includes Dominican Republic, Guatemala, Honduras, and Mexico. Last observation is April 2016.
 B. Last observation is April 2016.
 C. GDP weighted average. South America includes Bolivia, Brazil, Chile, Colombia, Ecuador, Paraguay, Peru, and Uruguay. Mexico & Central America, and Caribbean includes Mexico, and Panama. Last observation for Bolivia and Paraguay is February 2016. Last observation for the other countries is April 2016.
 D. E. Latest observation is May 2016.

BOX 2.3.1 Sub-regional divergence in Latin America and the Caribbean

In 2015, Latin America and the Caribbean saw its first contraction since the financial crisis. This recession is expected to deepen in 2016. Regional GDP is expected to decline 1.3 percent in 2016, after shrinking 0.7 percent in 2015. However, there is substantial heterogeneity among the three sub-regions.

In South America, a region of major hydrocarbon and metal exporters, domestic policy uncertainty, increasing global risk aversion, and higher policy interest rates contributed to a contraction in activity in 2015.

- In Brazil, LAC's and South America's largest economy, GDP shrank around 3.8 percent in 2015 in its worst recession in decades. Investor confidence has slumped partly due to the uncertainties surrounding the Lava Jato investigations and impeachment process against the president. The substantial depreciation against the U.S. dollar of over 30 percent in 2015 and the removal of energy subsidies have lifted inflation to around 10 percent. To re-anchor inflation expectations, the central bank has maintained its tight monetary policy stance, despite contracting output, and the one-year ahead inflation expectations are coming back into the target range. High inflation and rising unemployment have eroded real incomes and weighed on private consumption, while fixed investment has been on a steep decline since 2014.
- The República Bolivariana de Venezuela is also in a deep recession, contracting 5.7 percent in 2015, according to official data. Annual inflation reached 180 percent in 2015 and is expected to increase multi-fold in 2016. Public finances have deteriorated sharply with the collapse of oil prices and reduced oil production, despite some measures to contain spending pressures, including a 6000 percent increase in domestic gasoline pump prices, which is still heavily subsidized. Even with the introduction of a two-tier exchange rate system, foreign reserves have fallen to US\$12.6 billion in April 2016, the lowest since 1998, prompting CDS spreads to surge.²
- In Argentina, GDP expanded moderately in 2015, weighed down by double-digit inflation rates, a widening fiscal deficit, severe import controls and restricted access to international capital markets. The

new Macri administration has employed a series of policy measures to reduce economic distortions and set growth on a more sustainable path. The administration has thus far significantly reduced export taxes and import restrictions, lifted currency controls on the Argentine peso and adopted a floating exchange rate, and cut energy and transport subsidies. While these policy adjustments should serve to strengthen the Argentine economy in the medium and long-term, economic activity will be subdued in the short-term, with a modest contraction in 2016.

- Other countries in South America (virtually all commodity exporters) continue to struggle to adjust to sharply lower commodity prices. Falling resource revenues were met with expenditure cuts to preserve fiscal buffers (Colombia). Central banks responded to above-target inflation and depreciation pressures with policy rate hikes despite sharply lower growth (Chile, Colombia, Peru). As a result of the terms of trade shock and procyclical policy tightening, growth among the smaller South American countries continued to be below trend and slowed to 2.6 percent in 2015 from 3.3 percent in 2014.

In contrast to South America, growth picked up to a moderate rate in the Mexico and Central America sub-region, largely owing to its close economic ties with a steadily growing United States, competitiveness gains from real depreciation, and consumption supported by rising real incomes amid falling unemployment rates and inflation. In Mexico, excess capacity and lower oil prices have led to lower inflation rates, aided by some improvements brought by the telecom reform. The sub-region has been weighed down by commodity prices and worsening terms-of-trade, although to a lesser extent than South America. Despite being an oil exporter, Mexico's exports are largely diversified away from primary commodities. However, lower oil prices have translated into significant revenue losses, compelling the Mexican government to repeatedly cut fiscal spending, especially on government investments. Supported by low oil prices, low inflation and strong U.S. demand, other countries in Central America also continued to witness moderate growth rates in 2015 (El Salvador, Guatemala, Honduras, Nicaragua). Costa Rica saw a modest slowdown led by a sharp decline in exports, due to the effects of El Niño related drought and the residual effects of Intel's withdrawal of its microprocessor plant in 2014. Meanwhile, Panama, Central America's and the LAC

²The second tier DICOM exchange rate is still heavily managed, being valued at about one-third of the parallel exchange rate in May 2016.

BOX 2.3.1 Sub-regional divergence in Latin America and the Caribbean (continued)

region's fastest growing economy, saw growth broadly unchanged in 2015, with robust consumption and gains from net trade offsetting weaker investment, as many of the capital-infrastructure projects reached completion.

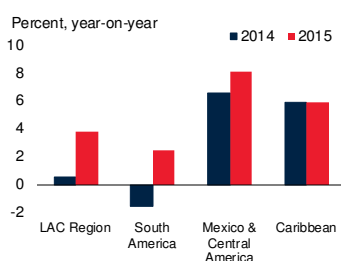
The Caribbean also enjoys close ties to the United States in terms of trade, investment and tourism. With the United States steadily growing in 2015, Caribbean tourism growth was robust, with international visits increasing 7 percent (7.5 percent in the Dominican Republic, the Caribbean's largest tourist destination). Tourism

expenditures also increased 4.2 percent (EIU 2016a). This has resulted in robust growth of more than 3 percent in 2015 at the sub-regional level. However, there was some degree of heterogeneity among Caribbean economies. Poor weather conditions in Belize and Haiti have taken a toll on agricultural production, contributing to a significant slowdown in overall growth in 2015. In contrast, a post-drought rebound in agricultural production supported growth in Jamaica, along with an increase in tourism growth and a recovery in the manufacturing sector.

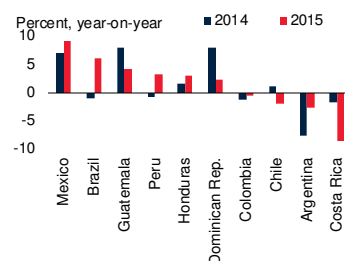
FIGURE 2.3.3 Export growth and current account balances

Exports expanded in a number of countries in 2015, supported by weak exchange rates. Weighed down by low commodity prices and reduced export revenues, current account deficits widened in South America and Central America.

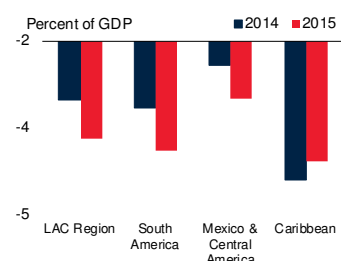
A. Regional exports: Growth of total export volumes



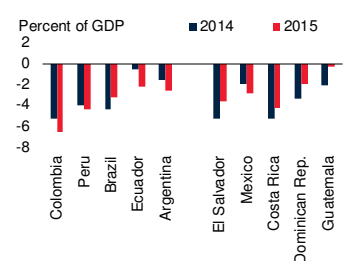
B. Selected countries: Growth of total export volumes



C. Regional current account balances



D. Selected countries: Current account balances



Sources: International Monetary Fund, World Economic Outlook; Haver Analytics.
A. C. GDP weighted average.

to only \$8.4 billion, the lowest level since mid-2009, at the height of the global financial crisis (EIU 2016b). This large reduction is in part because Brazil has been absent from international bond markets until March 2016, reducing the

overall volume of issuance at the regional level last year. Argentina, in its recent return to the global bond market, bucked this trend by selling \$16.5 billion worth of bonds on April 19, the largest one-day issue from an emerging economy. Reflecting higher risk aversion, sovereign bond spreads across the region increased significantly in early 2016, but subsequently fell back to their late 2015 levels in most countries.

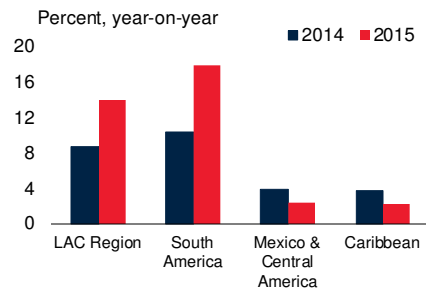
Partly due to improved competitiveness provided by weaker exchange rates, total regional export volumes surged to 3.5 percent in 2015, with the region's share of global merchandise exports expanding from 5.3 percent in 2014 to 7.4 percent in 2015.³ Export volumes expanded in a number of countries in 2015 (Brazil, Dominican Republic, Guatemala, Honduras, Mexico, Peru, see Figure 2.3.3). Most notably, Brazil's and Mexico's total export volumes jumped 6-9 percent in 2015. Costa Rica proved to be the strong exception, with exports dropping more than 8 percent in 2015, largely due to the loss in exports associated with weaker agricultural production and the closing of the Intel chip manufacturing plant in mid-2014. At the same time, weaker exchange rates and slower investment and GDP growth have constrained imports. Nevertheless, current account deficits as share of GDP on average widened 0.7 percentage point across the region, more so in South America due to the slump in

³Based on U.N. Comtrade data with 70 countries (including 12 LAC countries) reporting export data for 2015. 149 countries (including 25 LAC countries) reported export data for 2014.

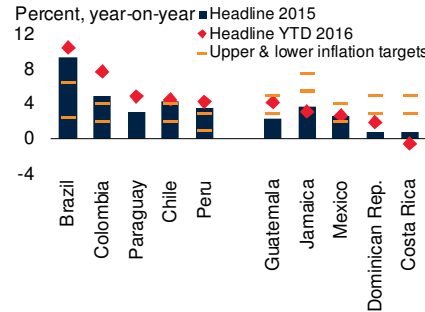
FIGURE 2.3.4 Inflation rates and policy rates

Consumer price inflation rates have increased across the region, particularly in some South American countries, where they have exceeded target bands, prompting central banks to increase policy interest rates. In contrast, central banks in Central America and the Caribbean, except Mexico, have either held steady or loosened rates, as inflation has remained within target bands.

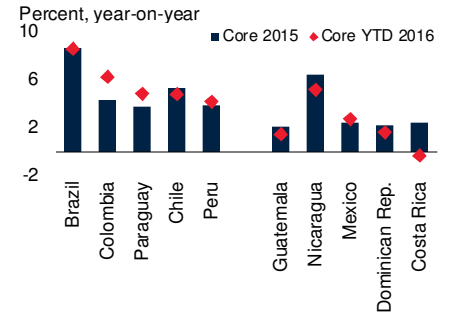
A. Regional headline inflation



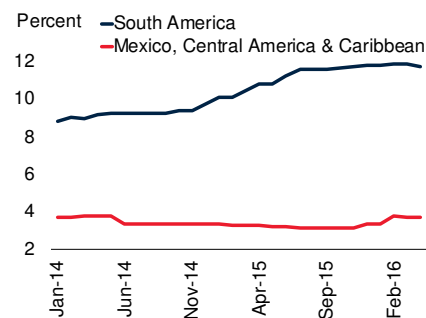
B. Selected countries: Headline inflation



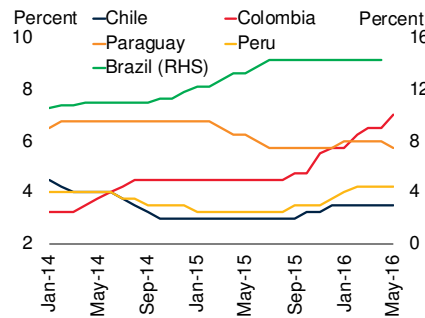
C. Selected countries: Core inflation



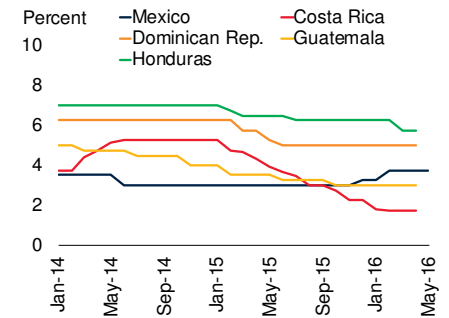
D. Regional policy rates



E. Central bank policy rates in South America



F. Central bank policy rates in Mexico, Central America and the Caribbean



Sources: International Monetary Fund, World Economic Outlook; World Bank, International Financial Statistics; Bloomberg; Haver Analytics.
 A. D. GDP weighted average.
 B. C. D. Last observation is April 2016.
 E. F. Last observation is May 2016 for Chile, Colombia, Mexico, Paraguay, and Peru; and April 2016 for others.

commodity prices (Argentina, Colombia, Ecuador, Peru). Ecuador’s current account deficit reached 2.2 percent of GDP in 2015, the largest since 2010, largely owing to a record trade deficit caused by the slump in oil prices. Since most countries are oil-importers and predominantly linked to a growing U.S. economy, current account balances widened less in Central America. In the Caribbean, with its concentration of commodity importers and hence lower import costs, current account balances narrowed in 2015.

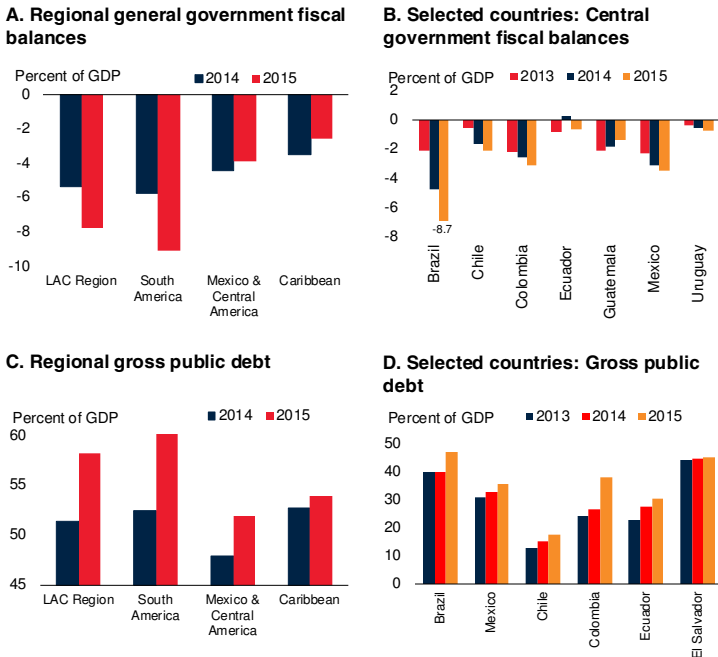
Headline consumer price inflation has increased across the region, in line with weakened exchange rates and higher import prices (Figure 2.3.4). Partly due to the larger depreciations, inflation rates are higher in South American economies, with rates exceeding inflation target bands in a

number of countries, prompting central banks to hike interest rates. Inflation rates have also been increasing in the Mexico and Central America sub-region and in the Caribbean earlier this year, after registering declines in 2015. However, most of the rates still fall below or within inflation target bands, allowing monetary policy to remain accommodative. Mexico has proven to be the exception, with the central bank hiking interest rates as recently as February to support the peso. With excess capacity and lower oil prices, Costa Rica, and to a lesser extent El Salvador, saw periods of deflation in 2015, which carried over into 2016.

As a result of revenue losses from lower commodity prices and weak economic activity, fiscal balances across the region have deteriorated

FIGURE 2.3.5 Fiscal indicators

Fiscal balances are on diverging paths among sub-regions, with lower commodity revenues and slower output growth weighing on fiscal revenues across the region but especially in South America. Wider fiscal deficits have translated to higher public debt ratios in 2015.



Sources: International Monetary Fund, World Economic Outlook; Haver Analytics.
A.C. GDP weighted average.

(Figure 2.3.5). At the regional level, general government fiscal deficits as a share of GDP widened on average from 5.4 percent in 2014 to 7.8 percent in 2015. However, there were distinct differences among the sub-regions. South America, with its concentration of oil and metal exporters, saw deficits increase on average 3 percentage points in 2015, with most countries seeing sharp reductions in government revenues, but also some countries loosening fiscal policy to support growth (Bolivia, Peru). In contrast, fiscal deficits in the Mexico and Central America sub-region, and the Caribbean, narrowed by 0.5 to 1 percentage point in 2015. Across the region, government gross debt levels increased on average to 58.2 percent of GDP in 2015, from 51.3 percent in 2014, with South America seeing debt ratios rise around 8 percentage points in 2015, and Mexico and Central America seeing a rise of 4 percentage points. In response to the deteriorating fiscal position, the Mexican authorities implemented budget cuts for 2016, amounting to 2 percent of GDP.

Outlook

Output is set to shrink another 1.3 percent in 2016, after declining 0.7 percent in 2015. Activity is only projected to begin expanding again in 2017, gradually gaining momentum to around 2 percent in 2018 (Figure 2.3.6). The outlook is predicated on commodity prices stabilizing and domestic political uncertainty moderating. Also, the baseline assumes that the use of expansionary fiscal policies will be limited, reflecting lower commodity prices, lower fiscal revenues, and widening fiscal deficits. Fiscal consolidation across the region will weigh on growth. However, there are contrasting paths among the three sub-regions. Underpinning the regional outlook, South America, after two years of recession, is projected to have a mild recovery in 2017 followed by a gradual strengthening of output growth to 1.7 percent in 2018. In contrast, output growth in the Mexico and Central America sub-region and the Caribbean, are expected to be moderate in 2016, and strengthen to around 3 percent in 2017 and 2018.

Brazil's outlook continues to be challenging. The continuing contraction in 2016 expected to carry over into 2017, amid attempts at policy tightening, rising unemployment, and shrinking real incomes (Table 2.3.2). If political uncertainties persist, the implementation of pertinent fiscal initiatives may be delayed, weighing on investment. While inflation has begun to ease, tight monetary conditions are assumed to continue in the short-term as inflation remains above target. Partially mitigating the adverse effects, the substantially depreciated real is likely to continue boosting net exports in the short-term.

As a result of ongoing macroeconomic adjustments and structural reforms, activity in Argentina is projected to be in a modest recession in 2016, before picking up on a firmer basis in 2017-18. Capital inflows are expected to strengthen from 2016-17, following a formal exit from technical debt default and regained access to international debt markets, and a return of investor confidence. Net exports will be helped by a significantly weaker Argentine peso. The recent

elimination of electricity subsidies will improve the fiscal position and bolster investor sentiment. External factors such as the prolonged recession in Brazil and low commodity prices continue to weigh on the outlook.

The economic downturn in the República Bolivariana de Venezuela has yet to bottom out, with continuing macroeconomic imbalances and elevated policy uncertainty. Oil prices are expected to stabilize around current levels and oil production is projected to decline further, partly due to inadequate maintenance. Fiscal revenues will therefore continue to be under pressure. Foreign reserves have fallen to the lowest level since 1998, and with a substantial amount of sovereign bonds maturing this year and even more in 2017; credit default swap spreads have surged to multi-year highs. The recent 6000 percent jump in petroleum pump prices and further monetizing of the public sector deficit are likely to continue contributing to inflationary pressures, weighing on output.⁴

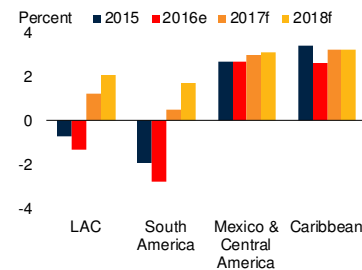
Elsewhere in South America, once commodity prices stabilize, generally sound economic fundamentals will continue to underpin growth in Chile, Colombia, and Peru. However, the outlook for these three countries will be weighed down by relatively tight domestic monetary conditions amid elevated inflation rates, and reduced fiscal revenues. Low commodity prices and reduced demand growth from slowing major trading partners, will continue to be major headwinds that will be met to varying degrees by production and investment adjustments. Oil output in Colombia is expected to dip in the medium term, owing to a lack of major discoveries and a drop in investment and seismic exploration. However, growth should be supported by strong investment in public works, with confidence being buttressed by enhanced security due to the expected internal peace agreement.

⁴A new amendment to the law governing the Central Bank passed by the National Assembly in 2009 allows the Central Bank to purchase bonds issued by PDVSA, thus bridging PDVSA's deficit in domestic currency. The continuous financing of PDVSA has been one of the main causes of the expansion in the monetary base in recent years and has led to a considerable increase in the amount of money in circulation (liquidity) in the economy (Vera 2015).

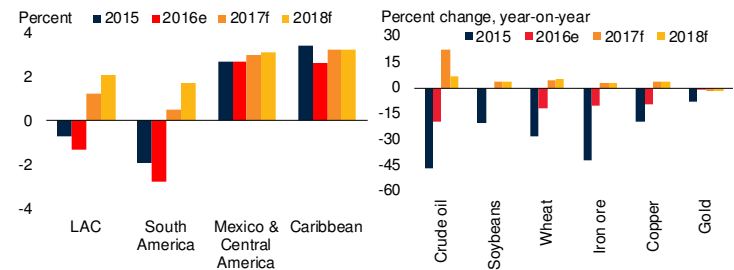
FIGURE 2.3.6 Regional outlook

The region as a whole is expected to rebound in 2017, with growth strengthening to 2.1 percent in 2018, as domestic policy uncertainty moderates, commodity prices stabilize and weakened exchange rates support exports.

A. GDP growth



B. Prices of key commodity exports



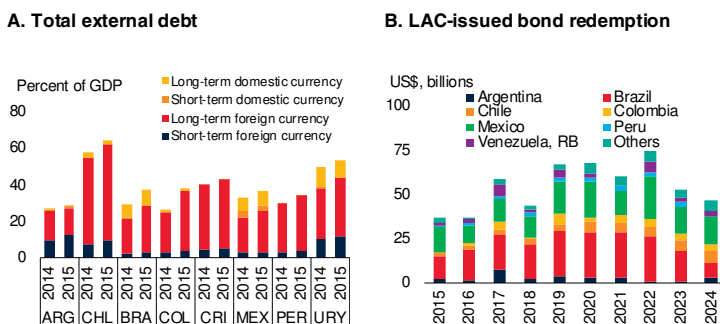
Source: World Bank.
Note: e=estimated; f=forecast.

Chile, the world's largest producer of copper, has either suspended or reduced production in a number of copper mines, slowing economic growth, at least in the near term. In contrast, due to high ore grades and low costs for energy and water, copper production has been surging in Peru with the recent opening of the Las Bambas mine and expansion of existing mines, despite low copper prices. Capacity will be expanding in the medium term with investment in new mines and further development of current mines, lifting Peru's near-term outlook. Ecuador is projected to experience a sharp contraction in the near term, reflecting low oil prices, loss of export competitiveness due to the strong U.S. dollar, and scarce external financing compelling substantial fiscal consolidation. The devastating earthquake on April 16 will compound current economic strains. The government estimates the rebuilding costs may reach 3 percent of GDP.

In contrast to South America, the Mexico and Central America sub-region is more closely linked to the U.S. economy for trade, investment, and remittance flows. With the protracted decline in agricultural commodity prices, growth is expected to remain broadly unchanged in 2016 largely due to fiscal consolidation across the sub-region. A modest increase should follow in 2017-18, as the real depreciation of local currencies spurs net exports and the U.S. economy continues to expand. Household consumption is expected to continue picking up, as real incomes are supported

FIGURE 2.3.7 External debt

External debt as a share of GDP has increased in most countries, especially long-term foreign currency denominated debt. The volume of debt maturing swells in 2017, exerting additional financing pressures.



Sources: World Bank, Quarterly External Debt Statistics; Dealogic; Haver Analytics.
 Note: ARG = Argentina, CHL = Chile, BRA = Brazil, COL = Colombia, CRI = Costa Rica, MEX = Mexico, PER = Peru, URY = Uruguay.

by low inflation and falling unemployment, particularly in Mexico. In a number of Central American economies, domestic monetary policy is expected to remain largely accommodative in the short and medium term, with low inflation rates encouraging investment (Costa Rica, Honduras). Stronger investment growth is also expected in Mexico, as benefits from recent structural reforms materialize.⁵

Despite strong tourism growth, the Caribbean region will slow down in 2016 in a normalization from a bumper year in 2015. Major tourism-associated construction is winding down, and a number of Caribbean economies are pursuing fiscal consolidation to strengthen public finances and lower heavy public-debt burdens. While there is a substantial downside risk posed by the Zika virus outbreak, tourism is expected to continue to expand and support growth.⁶ Fiscal consolidation in several countries (Dominican Republic, most OECS economies) will weigh on growth in the medium-term.

In particular, the opening of Cuba presents tourists from the U.S. with an additional

destination within the Caribbean. Total tourist arrivals in Cuba have already been surging, with January 2016 arrivals jumping 12.7 percent (year-on-year). Tourist arrivals from the United States jumped 77 percent in 2015, albeit from a low base, a figure that excludes the hundreds of thousands of Cuban Americans who visited relatives last year. At the sub-regional level, liberalized Cuba–U.S. bilateral tourism could increase overall arrivals, with total Caribbean arrivals increasing 4 percent per year (Romeu 2014), leading to increased employment creation and growth (Garsous, Novoa, and Velasco 2015; Castillo et al. 2015).

Risks

The balance of risks to the regional outlook is markedly tilted to the downside for a number of reasons. First, the baseline outlook for the region assumes that commodity prices will stabilize around current prices in the medium term. Should commodity prices drop further, the terms-of-trade of regional economies will continue to worsen, and falling fiscal and export revenues will trigger additional policy tightening, weighing on growth.

Second, total external debt across the region has been increasing, especially in recent years (Figure 2.3.7). The majority of the region's debt is foreign currency denominated, typically in U.S. dollars. With the recent appreciation of the U.S. dollar relative to domestic currencies, debt servicing costs have increased and debt-to-GDP ratios have risen substantially; the debt burden becomes more onerous if government revenues are mainly denominated in local currencies. Increases in debt ratios could contribute to sovereign credit downgrades, as in Brazil. Moreover, the volume of external debt maturing in 2017 is 60 percent higher than in 2016, adding to government financing pressures.

Third, the recessions in Brazil and the República Bolivariana de Venezuela have yet to bottom out and could last longer than expected due to political uncertainties and continued macroeconomic imbalances. There is additional risk that they may spill over to other countries in the region. In particular, negative growth shocks

⁵For example, the end of 2015 saw further progress in energy reform with the successful completion of the first of three public tenders for oil exploration, paving the way for more investments in the energy sector in the coming years.

⁶As of March 2016, no Caribbean country has reported any downturn in tourist arrivals, despite the widespread media attention to the effects of the virus (World Bank 2016).

from Brazil can lead to statistically significant declines in growth for Argentina, Chile, Colombia, Ecuador, Paraguay, and Peru (World Bank 2016b).

Fourth, the Zika virus has spread rapidly across Latin America in recent months, with more than 25 countries affected. The virus has been associated with a growing number of birth defects in the region, and there are also some indications that the virus is linked to paralysis. The immediate economic impact of the virus will be to reduce tourism, as well as to raise health care costs. The long-term impact of the virus will be the lost or delayed cohort of babies and the consequences on future fertility patterns and the size of the future working-age populations. The near-term economic costs associated with the virus could be considerable this year, especially if the mosquito-borne illness is not quickly contained (World Bank 2016j). However, the estimated economic impact across the region is modest, but could be larger for some countries—especially in the Caribbean, where economies are relatively more dependent on tourism (World Bank 2016k, 2016l).

Policy challenges

Slumping commodity prices, weaker trade flows, and slower global growth have weighed on growth across the region. Moreover, in a number of LAC countries, low fiscal buffers limit the use of counter-cyclical fiscal policy. In addition, some economies, especially those in South America, are also facing above-target inflation, limiting the capacity for counter-cyclical monetary policy. More importantly, given that commodity prices are projected to stabilize at current low prices, and global growth is expected to remain tepid in the medium term, regional economies need to rely on productivity improvements as a driver of sustained long-term growth.

During the financial crisis, regional economies implemented expansionary, countercyclical policies to support growth, leading to a build-up of debt and a narrowing of fiscal space. For many countries, these policies were not fully unwound in the post-crisis years (World Bank 2015c). Amid

the extended decline in commodity prices and the slowdown in economic activity, fiscal balances have therefore further worsened in a number of countries.⁷ A credible medium-term plan to raise revenues and reduce expenditures would help rebuild fiscal buffers and bolster investor confidence (Celasun et al. 2015). Novel approaches to broaden the tax base, levy additional taxes, or strengthen tax administration could be more widely explored.⁸ A number of regional governments have already cut and will continue to trim expenditures in order to prevent further deterioration in their fiscal accounts (Colombia, Ecuador, Mexico). Although such cuts will dampen growth in the short run, it will enhance economic resilience in the medium term. Structuring fiscal consolidation in ways to minimize adverse effects on growth, poverty, and income distribution will be important. Options include consolidating social assistance programs and improving targeting, enhancing access of low-income families to education and health services, expanding coverage of the Personal Income Tax, and pension reform by increasing the retirement age (IMF 2014).

Given that commodity prices are expected to stabilize around the current low levels in the medium term (World Bank 2016k), the ability of the region to boost economic growth in the medium and long-term will increasingly hinge on diversifying the economy and improving the competitiveness of other sectors through productivity improvements, so as to achieve a broader export base.

In support of the economic diversification agenda, governments could focus on the reduction of labor market rigidities and the retraining of workers. This would facilitate the transition of labor away from sunset industries towards blooming ones (de la Torre et al. 2015).

Productivity growth in LAC has been muted for the past few decades, and the productivity gap

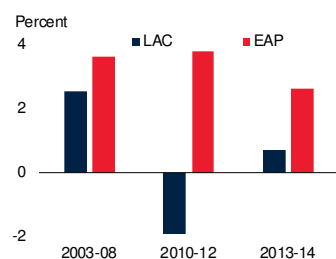
⁷More generally, studies have shown that a number of countries in the region have procyclical monetary and/or fiscal policies (Carneiro and Hnatkowska 2016).

⁸In Costa Rica, increased tax withholding from business sales has been found to reduce tax evasion and increase tax revenues (Brockmeyer and Hernandez 2016).

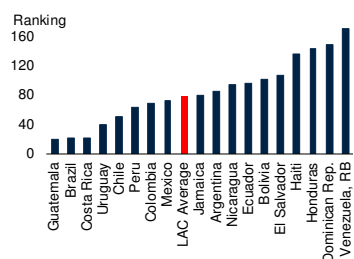
FIGURE 2.3.8 Total factor productivity growth and infrastructure quality

Total factor productivity growth has been low and weakening in the LAC region for a number of years. In particular, low levels of investment, especially infrastructure investment, has created bottlenecks to higher levels of TFP and economic growth. One measure of an adequate and accessible infrastructure is the ease of obtaining electricity, where a number of LAC economies rank poorly.

A. Total factor productivity growth



B. Ease of obtaining electricity



Source: World Bank.

A. LAC is the Latin America the Caribbean region; EAP is the East Asia and Pacific region.

between Latin America economies and the United States widened from 1980 to 2011 (OECD, UN and CAF 2014). Slowing productivity growth was a major contributor to the growth slowdown in LAC economies after 2014 (Didier et al. 2015, De Gregorio 2015; see Figure 2.3.8).

A series of structural reforms would help improve total factor productivity growth. Apart from grooming a sufficiently-skilled and appropriately-trained labor force, and investing in a modern and accessible information and communications, and energy and transport infrastructure, governments could encourage firms to invest in R&D and other productivity enhancing investments. Recent investment projects in LAC have already resulted in productivity improvements in a wide range of sectors.⁹ In the current environment of tight fiscal revenues, fiscal reform will be required to generate the necessary financial resources. Innovative public-private partnership arrangements could be also pursued to fund such medium-term investment projects.

⁹In Brazil, spillover effects from enhancements in agricultural productivity have boosted credit supply and employment in service and industrial sectors through banking linkages (Bustos, Garber, and Ponticelli 2016). In Uruguay, ICT investments have boosted productivity in the service and manufacturing sectors (Aboal and Tacsir 2015).

TABLE 2.3.1 Latin America and the Caribbean forecast summary

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

							(percentage point difference from January 2016 projections)			
	2013	2014	2015e	2016f	2017f	2018f	2015e	2016f	2017f	2018f
EMDE LAC, GDP^a	2.9	1.0	-0.7	-1.3	1.2	2.1	0.2	-1.3	-0.9	-0.3
(Average including countries with full national accounts and balance of payments data only) ^b										
EMDE LAC, GDP^b	2.9	1.0	-0.7	-1.3	1.2	2.1	0.2	-1.3	-0.9	-0.3
GDP per capita (U.S. dollars)	1.7	-0.1	-1.8	-2.4	0.1	1.0	0.2	-1.3	-0.9	-0.4
PPP GDP	3.0	1.3	-0.1	-0.8	1.5	2.2	0.3	-1.2	-0.7	-0.4
Private consumption	3.6	0.1	-0.8	-1.3	0.6	1.8	0.1	-1.2	-1.2	-0.2
Public consumption	2.6	4.2	0.7	-3.3	-1.1	0.4	0.6	-2.5	-0.6	-0.5
Fixed investment	2.9	-0.9	-5.5	-4.6	1.0	2.8	2.3	-1.7	-1.2	-0.2
Exports, GNFS ^c	1.4	1.6	3.5	3.9	4.4	4.8	0.9	-0.1	-0.1	0.1
Imports, GNFS ^c	2.8	-0.2	-3.0	-0.9	1.2	3.8	0.2	-1.5	-1.0	0.4
Net exports, contribution to growth	-0.3	0.4	1.3	1.0	0.7	0.3	0.1	0.3	0.2	-0.1
Memo items: GDP										
South America ^d	3.3	0.4	-1.9	-2.8	0.5	1.7	0.2	-1.7	-1.2	-0.3
Mexico and Central America ^e	1.7	2.5	2.7	2.7	3.0	3.1	0.0	-0.3	-0.2	-0.3
Caribbean ^f	3.1	3.8	3.4	2.6	3.2	3.2	0.1	-0.6	0.3	0.1
Brazil	3.0	0.1	-3.8	-4.0	-0.2	0.8	-0.1	-1.5	-1.6	-0.7
Mexico	1.4	2.3	2.5	2.5	2.8	3.0	0.0	-0.3	-0.2	-0.2
Argentina	2.9	0.5	2.1	-0.5	3.1	3.0	0.4	-1.2	1.2	0.0

Source: World Bank.

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. EMDE refers to emerging market and developing economy. GDP at market prices and expenditure components are measured in constant 2010 U.S. dollars. Excludes Cuba, Grenada, and Suriname.

b. Sub-region aggregate excludes Cuba, Dominica, Grenada, Guyana, St. Lucia, St. Vincent and the Grenadines, and Suriname, for which data limitations prevent the forecasting of GDP components.

c. Exports and imports of goods and non-factor services (GNFS).

d. Includes Argentina, Bolivia, Brazil, Chile, Colombia, Ecuador, Paraguay, Peru, República Bolivariana de Venezuela, and Uruguay.

e. Includes Costa Rica, Guatemala, Honduras, Mexico, Nicaragua, Panama, and El Salvador.

f. Includes Antigua and Barbuda, The Bahamas, Barbados, Belize, Dominica, Dominican Republic, Grenada, Guyana, Haiti, Jamaica, St. Kitts and Nevis, St. Lucia, St. Vincent and the Grenadines, Suriname, and Trinidad and Tobago.

TABLE 2.3.2 Latin America and the Caribbean country forecasts^a

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

(percentage point difference
from January 2016 projections)

	2013	2014	2015e	2016f	2017f	2018f	2015e	2016f	2017f	2018f
Argentina	2.9	0.5	2.1	-0.5	3.1	3.0	0.4	-1.2	1.2	0.0
Belize	1.3	4.1	0.9	0.8	1.8	2.2	-2.1	-1.7	-0.8	-0.6
Bolivia	6.8	5.5	4.8	3.7	3.4	3.4	0.8	0.2	0.0	0.0
Brazil	3.0	0.1	-3.8	-4.0	-0.2	0.8	-0.1	-1.5	-1.6	-0.7
Chile	4.3	1.8	2.1	1.9	2.1	2.3	0.0	-0.5	-0.8	-0.8
Colombia	4.9	4.4	3.1	2.5	3.0	3.5	0.0	-0.5	-0.3	0.0
Costa Rica	3.4	3.5	2.8	3.3	3.6	4.0	0.0	-0.7	-0.6	-0.4
Dominica	1.7	3.4	-4.0	2.5	2.0	2.0	-1.0	-1.5	0.0	0.0
Dominican Republic	4.8	7.4	6.9	5.0	4.3	4.0	1.3	0.4	0.5	0.1
Ecuador	4.6	3.7	0.3	-4.0	-4.0	0.0	0.9	-2.0	-4.0	-0.5
El Salvador	1.8	2.0	2.5	2.2	2.3	2.3	0.1	-0.3	-0.3	-0.5
Guatemala	3.7	4.2	4.1	3.5	3.5	3.6	0.4	-0.1	0.0	0.0
Guyana	5.2	3.8	3.0	4.0	3.9	3.8	-0.5	0.2	-0.1	-0.2
Haiti ^b	4.2	2.8	1.2	0.9	1.9	2.2	-0.5	-1.6	-0.9	-0.8
Honduras	2.8	3.1	3.6	3.4	3.5	3.5	0.2	0.0	0.0	-0.1
Jamaica	0.5	0.7	0.9	1.5	2.2	2.6	-0.4	-0.6	-0.2	0.0
Mexico	1.4	2.3	2.5	2.5	2.8	3.0	0.0	-0.3	-0.2	-0.2
Nicaragua	4.5	4.7	4.9	4.4	4.2	4.1	1.0	0.2	0.1	0.1
Panama	8.4	6.2	5.8	6.0	6.1	6.2	-0.1	-0.2	-0.3	-0.4
Paraguay	14.0	4.7	3.0	3.0	3.2	3.4	0.2	-0.6	-0.8	-0.8
Peru	5.9	2.4	3.3	3.5	3.5	3.2	0.6	0.2	-1.0	-1.4
St. Lucia	-1.9	-0.7	1.6	1.5	2.0	2.0	-0.1	-0.1	0.1	-0.1
St. Vincent and the Grenadines	2.3	-0.2	1.8	2.4	3.1	3.1	-0.3	-0.3	0.1	-0.3
Trinidad and Tobago	2.3	-1.0	-2.0	-2.0	2.0	2.5	-2.0	-2.5	0.8	1.0
Uruguay	4.6	3.2	1.0	0.7	1.6	2.5	-0.5	-1.2	-1.2	-0.5
Venezuela, RB	1.3	-3.9	-5.7	-10.1	-3.4	1.6	2.5	-5.3	-2.3	1.6

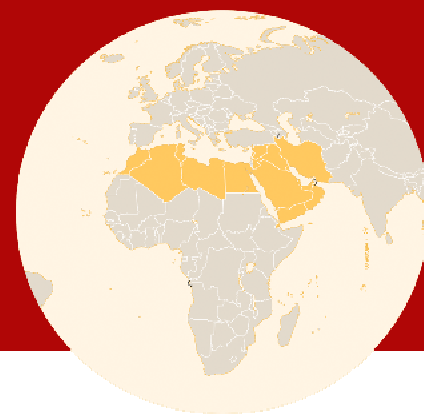
Source: World Bank.

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 significantly differ at any given moment in time.

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

b. GDP is based on fiscal year, which runs from October to September of next year

MIDDLE EAST and NORTH AFRICA



Growth in the Middle East and North Africa was an estimated 2.6 percent in 2015, slightly weaker than in 2014. The sharp drop in oil prices over the past two years and the continuation of several serious conflicts are major factors holding back activity in the region. Growth is expected to be little changed in 2016, at 2.9 percent. The marginal improvement is largely due to the expected strong recovery in the Islamic Republic of Iran following the lifting of sanctions in January 2016. Growth in most other oil-exporting countries, including most Gulf Cooperation Council (GCC) countries, will weaken in 2016, while performance in oil-importing countries will be mixed because of varied macroeconomic and geopolitical challenges. Risks to the outlook are tilted to the downside and include further declines in oil prices, the escalation of conflict in some countries, and fragile security conditions in others. Key policy challenges are to improve government finances; reduce economic dependence on oil; and address longstanding business environment, labor market, and financial sector shortcomings.

Recent developments

Growth in the Middle East and North Africa was an estimated 2.6 percent in 2015, slightly weaker than the already subdued rate of 2.9 percent in 2014 (Tables 2.4.1 and 2.4.2, and Figure 2.4.1).¹ Performance diverged in oil-exporting and oil-importing country groups, with 2015 activity slowing in exporters and strengthening in importers from the previous year. Low oil prices and ongoing conflict in the region are holding back growth.

In oil-importing countries, growth reached 3.3 percent in 2015. Strong public investment and resilient private consumption supported an uptick in growth in the Arab Republic of Egypt from 2.2 percent in FY2013/14 to 4.2 percent in FY2014/15, while bumper agricultural output

buoyed growth in Morocco. Jordan and Lebanon face continued trade and investment challenges stemming from the conflict in Syria and, in Lebanon's case, the economic slowdown in GCC countries. Together with domestic political and security challenges, continued spillovers from external conflicts slowed growth in these two countries in 2015. In Tunisia, several high-profile terrorist attacks and the resulting adverse impact on tourism, together with continued social unrest, slowed growth to only 0.8 percent, although historically high olive oil production boosted agricultural output.

While strong domestic demand supported activity in Egypt last year, net exports were weak, in part caps on U.S. dollar deposits in banks. The restrictions, intended to reduce the gap between the official and black market exchange rates, resulted in a shortage of foreign currency to pay for raw materials and equipment. This contributed to a sharp slowdown in manufacturing sector value added and a contraction of goods exports by 17 percent in FY2015 that worsened by the end of the calendar year. To support the economy, and with reserves hovering around just three months of imports, the central bank devalued the currency by 14 percent in March 2016 and announced that it would adopt a more flexible exchange rate policy

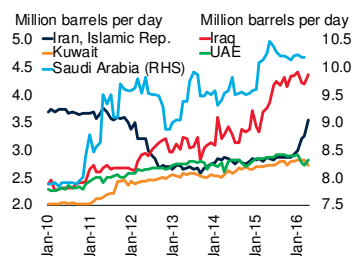
Note: The author of this section is Dana Vorisek. Research assistance was provided by Qian Li.

¹The EMDE grouping for the Middle East and North Africa (MENA) adds Gulf Cooperation Council (GCC) countries—Bahrain, Kuwait, Oman, Qatar, Saudi Arabia, and the United Arab Emirates—to the developing MENA grouping. All GCC countries are oil exporters. Other oil exporters are Algeria, the Islamic Republic of Iran, Iraq, and Libya. Oil importers in the region are Djibouti, Egypt, Jordan, Lebanon, Morocco, Tunisia, and West Bank and Gaza. The Syrian Arab Republic and the Republic of Yemen are excluded from regional growth aggregates due to data limitations.

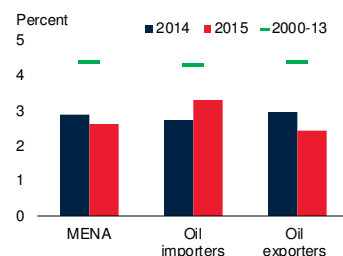
FIGURE 2.4.1 Growth and oil production

Growth in the Middle East and North Africa has slowed relative to its recent historical level, largely reflecting weaker activity in oil-exporting countries. The upswing in oil production in the Islamic Republic of Iran since the lifting of most sanctions in January is benefiting the domestic economy but is occurring in an environment of already high supply, including in other producers in the region.

A. Oil production in five largest producers in MENA



B. GDP growth



Sources: International Energy Agency, Haver Analytics, national sources, World Bank.

(Figure 2.4.2). The devaluation was quickly followed by a hike in the policy interest rate to limit the impact of higher import prices on inflation, which had moderated in the previous months but was still elevated, at 9 percent (year-on-year) in February 2016.

In Jordan and Lebanon—two other oil-importing countries with currencies pegged to the U.S. dollar—deflation underway since early 2015 continues. In Morocco, decelerating inflation and growth expectations for 2016 led the central bank to lower interest rates in March. In some oil-importing countries (Lebanon, Morocco), low global energy prices reduced the cost of imports in 2015, narrowing current account deficits, although Lebanon's deficit remains very large, at an estimated 23 percent of GDP. Remittances to non-GCC countries in the Middle East and North Africa are estimated to have contracted by 0.9 percent in 2015 in U.S. dollar terms, largely driven by a downward revision in estimated flows to Egypt and, to a lesser extent, a depreciation of the euro, the currency in which much of the remittances to other North African countries are denominated (World Bank 2016f).

Though the extended period of low oil prices has not been followed by a significant boost to growth in oil-importing countries in the region, it has

allowed several countries to adjust policy to contain deteriorating public finances. This has included lower spending on subsidies and wages (Egypt, Morocco) and cash transfers to households (Jordan), partly to offset a decline in aid from GCC countries (Morocco). The authorities in Morocco have shown notable commitment to fiscal adjustment, reducing the general government deficit for three consecutive years. However, deficits remain above 3 percent of GDP in all oil-importing countries in the region, and are financed by a combination of domestic and international borrowing, including concessional loans from international financial institutions (Jordan, Morocco, Tunisia). Budget shortfalls are contributing to high and growing government debt as a share of GDP, most prominently in Egypt, Jordan, and Lebanon. In Egypt, interest on this debt absorbs nearly one-third of government revenues, and in Lebanon nearly half.

Unemployment, particularly among youth, remains high in oil-importing countries. The unemployment rate in Jordan averaged 13.7 percent in the second half of 2015, close to two percentage points above the 2014 average, and rose to 15.4 percent in Tunisia in the fourth quarter, continuing an upward trend underway since mid-2014. Unemployment in the West Bank and Gaza is also persistently high, at 26 percent. In Egypt, however, unemployment fell slightly in 2015, to 12.8 percent at year end.

Oil-exporting economies as a group grew by 2.5 percent in 2015, down from 3.0 percent in 2014. In Iraq, a 20 percent increase in oil production was the main force pulling the economy out of recession in 2015, despite low oil prices. In most other oil-exporting countries, the steep decline in oil prices translated into 2015 growth rates that were below the 2000–13 average. In the Islamic Republic of Iran, the combination of low oil prices and uncertainty surrounding the timeline for the lifting of sanctions slowed growth significantly.

With fiscal and export revenues in most oil-exporting countries in the region highly dependent on the oil sector, the oil price collapse since mid-2014 led to market prices that were well below fiscal break-even prices (the price that

balances the government budget) in 2015, particularly in Libya, Bahrain, and Saudi Arabia. As a result, fiscal positions have worsened, with large surpluses in several GCC countries in 2014 swinging into deficit in 2015 and existing deficits in other oil-exporting countries worsening (Figure 2.4.3). A similar pattern can be observed in current account balances. Algeria, Iraq, and Oman, and even more so Libya, face especially large twin deficits. In GCC countries and in Algeria, public assets (foreign reserves and sovereign wealth funds) have been drawn down to finance fiscal deficits. Iraq’s government is issuing domestic bonds, borrowing from commercial banks, and plans to finance about 10 percent of the budget shortfall with international bond issuance in 2016.

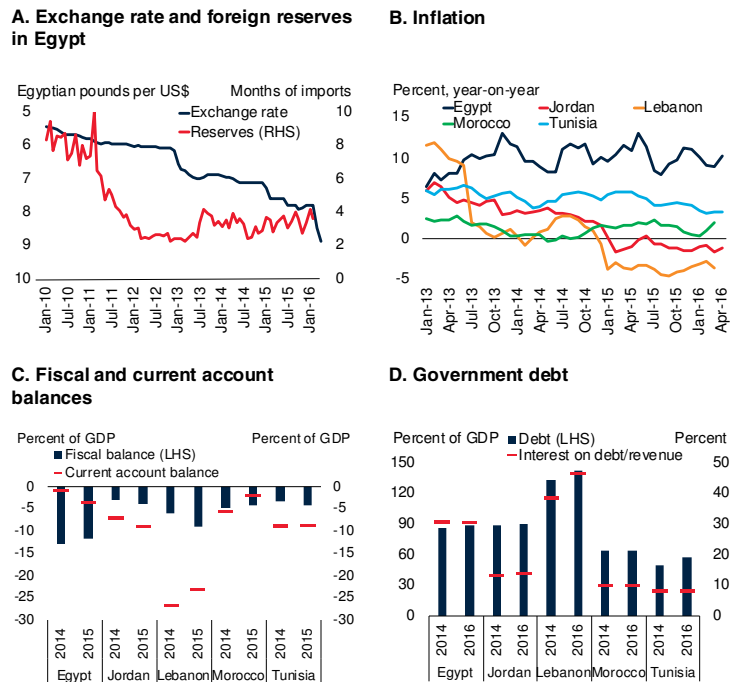
Budget adjustment in oil exporters is underway, predominantly through cuts in infrastructure spending, fuel and utility subsidies, and government wage bills. While public debt ratios were low in most of these countries prior to the oil price plunge and remain at manageable levels in all countries except Bahrain, Iraq, and Libya, other indications of fiscal vulnerability have risen. In early 2016, sovereign credit ratings of Bahrain, Oman, and Saudi Arabia were downgraded (Bahrain to below investment grade), and credit default swap spreads spiked. Spreads have since receded, but in Saudi Arabia and Bahrain they remain elevated compared to levels of the past 12 months.

In contrast to high and rising inflation in most emerging and developing oil-exporting economies in other regions, domestic price growth is subdued among oil exporters in the Middle East and North Africa (other than Algeria and the Islamic Republic of Iran), as currency pegs in most of these countries have kept nominal exchange rates stable. However, low oil prices, together with an appreciated U.S. dollar, have raised concerns about the sustainability of exchange rate regimes, while recent subsidy reform in GCC countries is now putting upward pressure on inflation.² Foreign reserves are being depleted (particularly in

²Among oil-exporting countries in the region, Kuwait pegs its dinar to an undisclosed basket of currencies, while other GCC countries and Iraq maintain conventional pegs against the U.S. dollar.

FIGURE 2.4.2 Macroeconomic conditions in oil-importing countries

Low levels of foreign exchange reserves contributed to the Egyptian central bank’s decision to devalue the currency in March. High inflation remains a challenge in Egypt, while low commodity prices have led to persistent deflation in Jordan and Lebanon. Fiscal and current account deficits are significant, and in some countries worsening, despite the extended period of low-priced oil imports. Budget shortfalls are contributing to already very high public debt in Egypt, Jordan, and, especially, Lebanon.



Sources: Haver Analytics; International Monetary Fund, World Economic Outlook database; Moody’s; World Bank.

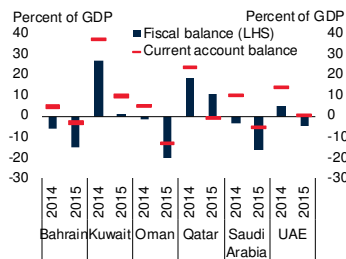
Algeria, Iraq, and Saudi Arabia) to defend pegs or to support budget overruns. With limited monetary autonomy, central banks in Bahrain, Kuwait, Saudi Arabia, and the United Arab Emirates followed the U.S. Federal Reserve’s December 2015 interest rate hike, despite their soft growth outlook and contained inflation.

Several recent geopolitical developments—namely, the start of the post-sanctions era in the Islamic Republic of Iran in mid-January, a January political agreement in Libya, and a ceasefire agreement in Syria at the end of February—are expected to benefit the regional growth outlook. Positive impacts for the Iranian economy, particularly in the form of higher oil production, are already apparent.

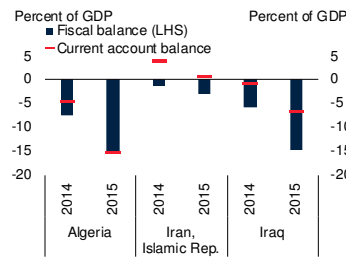
FIGURE 2.4.3 Macroeconomic conditions in oil-exporting countries

Fiscal and current account deficits deteriorated sharply in oil-exporting countries in 2015 as oil-related government and export revenues plummeted. This trend has been accompanied in some countries by receding public foreign assets and other indicators of rising fiscal vulnerability. In contrast to oil exporters in other regions, inflation remains contained in the Middle East, reflecting stable currency pegs.

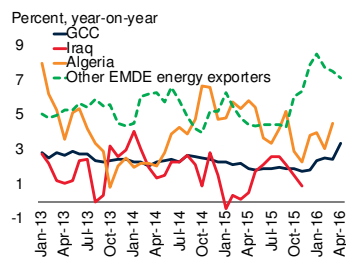
A. Fiscal and current account balances, GCC countries



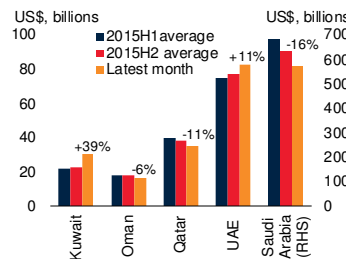
B. Fiscal and current account balances, other oil-exporting countries



C. Inflation



D. Foreign reserves



Sources: International Monetary Fund (IMF), World Economic Outlook database; Haver Analytics; Bloomberg; Kuwait Central Statistical Bureau; IMF International Financial Statistics database; World Bank.

A. B. Libya is not shown because its balances are well outside of the ranges shown.

C. For the GCC and "other EMDE energy exporter" aggregates, line reflects median of inflation in the country groups. The Islamic Republic of Iran is not shown because its inflation is outside the range shown: an average of 18 percent in 2014, 14 percent in 2015, and 9 percent in the first three months of 2016.

D. Percentages above bars indicate the difference between the level of foreign reserves in the latest available month and the average level in the first half of 2015. Last observation is April 2016 for Kuwait and Oman and March 2016 for Qatar, Saudi Arabia, and United Arab Emirates.

Outlook

The baseline forecast envisages that growth in the Middle East and North Africa will rise slightly in 2016, to 2.9 percent, 1.1 percentage points below the January estimate, largely due to a lower path for oil prices. The outlook assumes an average oil price of \$41 per barrel for 2016, down from \$51 per barrel assumed in January, and that the price will rise to \$50 in 2017 and \$53 in 2018. Other assumptions are that there is no further worsening of negative spillovers from the conflict in Syria; that the security situation in Iraq will continue to improve slowly in 2016; and that Libya's political agreement will be endorsed by the internationally-

recognized parliament in the east of the country and that the new government established under the agreement will take office. In addition, growth in the Euro Area, a major trading partner of several countries in the region, is expected to remain steady but modest in 2016–18. Given that oil exporting economies account for four-fifths of the region's GDP, the expected recovery in oil prices in 2017 is projected to lift regional growth to an average of 3.6 percent in 2017–18.

The main reason for the slight improvement in regional growth in 2016 is stronger activity in the Islamic Republic of Iran, the region's second-largest economy, which is forecast to grow 4.4 percent in 2016, up from an estimated 1.6 percent in 2015, following the removal of sanctions (Figure 2.4.4).³ In Iraq, as well, there is expected to be a strong increase in activity in 2016 (7.2 percent), reflecting rapidly rising oil production and continued success by the government in regaining territory from ISIS, notwithstanding supply disruptions early in the year.

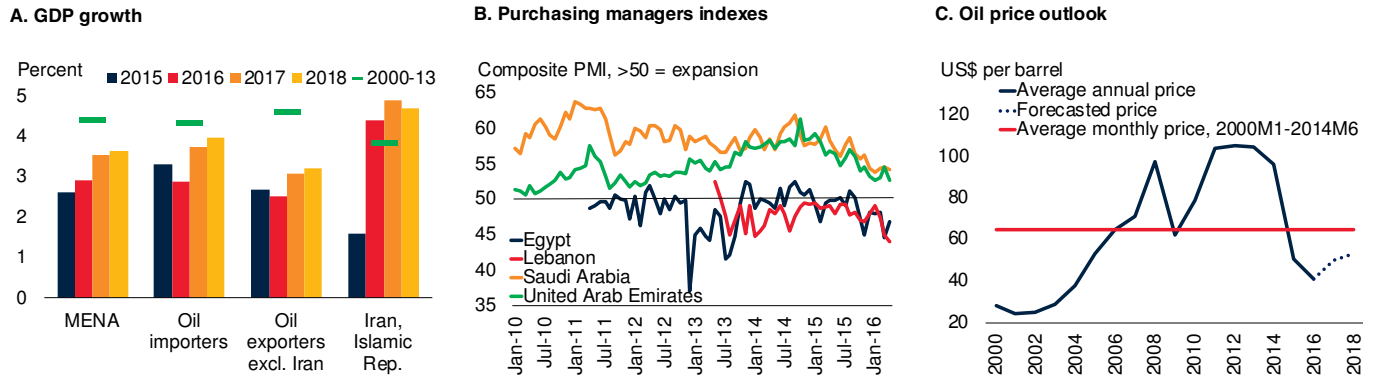
Excluding the Islamic Republic of Iran, growth in oil-exporting countries in the region will be somewhat lower than in 2015, at 2.5 percent. For GCC countries, continued low oil prices, together with tightening fiscal and (to a lesser extent) monetary policy, will be a drag on activity in 2016. Growth in these countries is forecast to fall from 2.9 percent in 2015 to 2.0 percent this year, the slowest pace since 2009. In Algeria, the coming online of a gas project, together with solid activity in the nonhydrocarbon sector, is expected to result in growth of 3.4 percent this year, a faster pace than in 2015.

For oil-importing countries, a lower aggregate forecast for 2016 is due to slowing growth in the largest economy, Egypt, where expected growth of 3.3 percent in FY2015/16 is well below the authorities' target of 5 percent. The weakness is due to a sharp downturn in tourism since October 2015, softening business sentiment, and the foreign currency shortage that plagued the economy for most of the fiscal year. The currency

³U.S. primary sanctions remain in place, however, meaning that direct engagement by U.S. businesses with the Islamic Republic of Iran continues to be prohibited.

FIGURE 2.4.4 Growth outlook

The expected modest recovery in regional growth in 2016 will come mainly from a sharp acceleration of activity in the Islamic Republic of Iran after the lifting of most sanctions. Growth in other oil-exporting countries will be restrained by fiscal consolidation and continued low oil prices, while slowing activity in Egypt and Morocco will moderate aggregate growth in oil-importing countries. Business sentiment is falling or already weak across the region. An envisaged turnaround in oil prices will support a modest regional growth recovery in 2017, but growth is expected to remain below the 2000-13 pace for the duration of the forecast period.



Sources: World Bank; national sources; Haver Analytics; International Monetary Fund, World Economic Outlook database.
 B. Composite PMI considers manufacturing and services sectors.
 C. Average annual price is the average of monthly data for each given year.

devaluation in March may boost the price competitiveness of Egypt’s exports, however. In Morocco, a significant contraction in agricultural output in the early part of the year due to a drought will push growth down to 1.7 percent from 4.4 percent in 2015, a strong harvest year. In other countries, growth is expected to firm somewhat in 2016, benefitting from increased phosphate production (Jordan, Tunisia) and subsiding negative trade and investment spillovers from the war in Syria (Jordan, Lebanon). For Morocco and Tunisia, which have deep trade ties with Europe, a somewhat worse growth outlook in the Euro Area than envisaged in January 2016 stands to restrain exports. An expected reduction in outward remittances from GCC countries in 2017 and 2018 will impact some oil-importing countries in the region (World Bank 2016f).

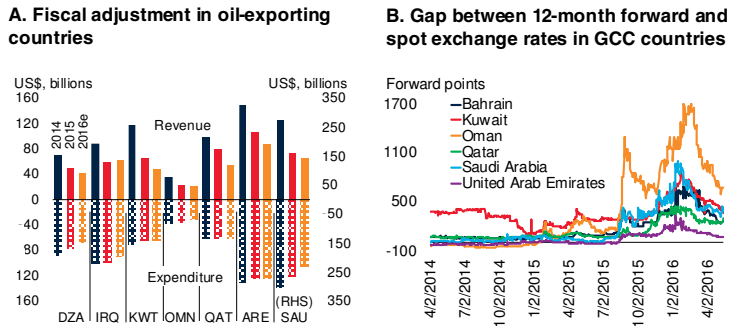
Procyclical fiscal consolidation is underway in most oil-exporting countries. Public expenditure cuts of 14 percent in Saudi Arabia, 11 percent in Oman, 9 percent in Algeria, 8 percent in Iraq, and smaller amounts in Kuwait, Qatar, and the United Arab Emirates have been outlined in 2016 budgets. Energy subsidy reforms were implemented in all GCC countries in 2015 or early 2016, and have begun to be put into effect in Algeria. Modest efforts to expand revenue have also been implemented, including raising

corporate and consumption taxes, but in the short term will not make up for large revenue losses in 2015 from plummeting oil prices (Figure 2.4.5). A GCC-wide agreement to enact a value-added tax at an expected rate of 5 percent at the beginning of 2018 was announced in March. Increasingly, governments will rely on domestic and international debt issuance to finance deficits, and in some cases will continue using public assets. The downward pressure on growth from fiscal consolidation will be reinforced in the GCC countries by tightening monetary policy in tandem with any rate increase in the United States. Central banks in the GCC and Iraq remain committed to their longstanding currency pegs, despite pressure on forward exchange rates in some countries.

For the Islamic Republic of Iran, the easing of sanctions has opened the country to international trade and investment. In April 2016, crude oil production was 3.6 million barrels per day (mbd), 25 percent higher than average monthly production in 2015, and already at the upper end of the 0.5–0.7 mbd increase estimated last October for the post-sanctions period (Devarajan and Mottaghi 2015). The post-sanctions era also holds strong promise for the Iranian financial services, mineral and metals, and manufacturing industries (Ianchovichina, Devarajan, and Lakatos

FIGURE 2.4.5 Policy outlook in oil-exporting countries

Public expenditure cuts are being implemented in response to the prolonged period of low oil prices, but will not be enough to offset large declines in public revenues in the near term. Budget sustainability will remain a challenge in the forecast period. Central banks intend to maintain exchange rate pegs but pressure in foreign exchange markets remains elevated in some countries, albeit below highs reached in early 2016.



Sources: International Monetary Fund, World Economic Outlook database; Bloomberg; World Bank. A. 2016e = 2016 expected. DZA = Algeria, IRQ = Iraq, KWT = Kuwait, OMN = Oman, QAT = Qatar, SAU = Saudi Arabia, ARE = United Arab Emirates. B. All exchange rates are against the U.S. dollar.

2016). There is also potential to exploit large, untapped natural gas reserves, although this is contingent upon significant investment in the sector and improvement in the domestic business and regulatory environment.

To the extent that higher Iranian oil production marginally reduces global oil prices, the impact of the country's reintegration into the global economy is likely to be negative for other oil-producing countries, including those in the Middle East. Moreover, higher Iranian oil output will occur as other developments, including an announcement by Saudi Arabia in May to increase production in 2016 and the mid-April collapse of a draft agreement among major oil exporters to freeze production at January 2016 levels, may put downward pressure on prices. The impacts of the Islamic Republic of Iran's reintegration into the global economy through trade channels are more challenging to assess, but exports from the European Union to the Islamic Republic of Iran, for instance, stand to approximately double if they rebound to the levels seen prior to the tightening of sanctions in 2012.⁴ Countries neighboring Iran may benefit from increased trade links and travel.

⁴A positive effect for the European Union (EU) is consistent with the findings of Ianchovichina, Devarajan, and Lakatos (2016), which finds that the EU's economic output would increase following the removal of sanctions on the Islamic Republic of Iran.

Risks

Risks to the growth outlook for the Middle East and North Africa are mainly to the downside. Three risks stand out: a further slide in oil prices, escalation of conflict, and further negative effects of security challenges and social unrest in countries not entrenched in war.

Should average annual oil prices not reach a trough in 2016, it would likely trigger additional downgrading of the forecast for oil exporters in the region. Weaker growth would be accompanied by intensification of fiscal vulnerabilities; further pressure on exchange rate pegs; and, in Bahrain, Iraq, and Libya, set the stage for a rise in government debt beyond already high levels.⁵ In addition, low oil prices have the potential to generate negative feedback effects through the financial sector. In Saudi Arabia, low growth of oil prices and nonoil private sector GDP are found to be associated with nonperforming loan ratios and lower credit and deposit growth in the banking sector (Miyajima 2016).

Even with some positive recent developments regarding conflicts in the region, the potential for conflict-related spillovers remains high. In addition, due to a large number of casualties, these conflicts have resulted in significant loss of human and physical capital in domestic, and neighboring, economies (Devarajan and Mottaghi 2016). Some estimates indicate that direct and indirect losses of the war in Syria and the advance of ISIS had been a cumulative \$35 billion in Egypt, Iraq, Jordan, Lebanon, Syria, and Turkey (in 2007 dollars) as of mid-2014, and to have, on average, reduced Syria's output growth by about 10 percentage points per year below what it would have been between 2011 and 2014 (Ianchovichina and Ivanos 2016). In Yemen, infrastructure and public service delivery damage from conflict in four cities between March and October 2015 is estimated to have been \$4.1 to 5 billion (World Bank 2016m), approximately 13 percent of Yemen's GDP as of

⁵In Bahrain, government debt in 2015 was already above the 60 percent threshold stipulated by the future GCC monetary union, and is expected to rise to approximately more than 80 percent in 2016 and significantly higher in the medium term.

2013, the year of the most recently compiled national accounts.⁶

In several countries not grappling with widespread domestic conflict (including Egypt, Jordan, Lebanon, Tunisia), a worsening of fragile domestic security or political stability could sap domestic sentiment and investor confidence and undermine economic activity. A series of high-profile terrorist attacks in Egypt and Tunisia in 2015 highlighted the destructive effect of these incidents for the tourism industry (Figure 2.4.6). Conflict risk in the Middle East and North Africa has risen much faster than in other emerging and developing regions over the past decade. Poor security conditions reflect both spillovers from conflicts and the absence of material improvement in living and business environment conditions in the five years since the Arab Spring.

Policy challenges

Policy challenges in Middle East and North African countries are centered on ensuring macroeconomic stability in an environment of sustained low oil prices, ongoing conflict, and longstanding challenges related to competitiveness.

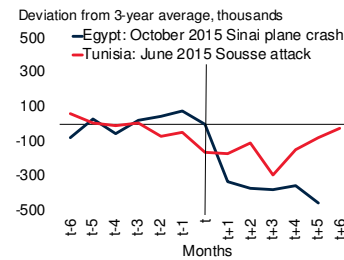
Both oil-exporting and oil-importing countries face substantial fiscal challenges. While expenditure cuts in oil exporters implemented in 2015 and underway in 2016 are a step in the right direction, additional cuts are needed to achieve fiscal sustainability, together with a boosting of non-oil-sector revenues—through tax increases, policy changes encouraging private sector participation and investment, or other changes. Moreover, these further adjustments will need to be carried out against the backdrop of already subdued growth and shrinking foreign assets. With increasing reliance on sovereign debt issuance to finance government deficits, oil-exporting countries should ensure that they have solid debt management frameworks in place. Oil exporters would also benefit from implementing fiscal frameworks that better manage oil price

⁶The assessment covers the health, education, energy, water and sanitation, transport, and residential housing sectors in Sana'a, Aden, Taiz, and Zinjibar.

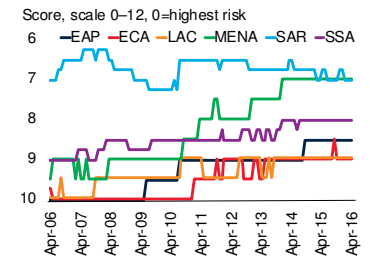
FIGURE 2.4.6 Risks

Major terrorist attacks in the region over the past year have been followed by sharp contractions in tourist arrivals and value added in the hotels and restaurants sector. Internal conflict risk in the Middle East and North Africa has risen much more over the past five years than in other emerging and developing regions.

A. Tourist arrivals around major terrorist events



B. Conflict risk



Sources: Haver Analytics, PRS Group, World Bank.

A. t = month of attack.

B. Figure shows median internal conflict risk among all emerging and developing economies in each region ranked in the PRS Group's International Country Risk Guide. The internal conflict risk score assesses political violence and its actual or potential impact on governance and is based on three subcomponents, each scored on a scale of 0–4. The subcomponents are civil war/coup threat, terrorism/political violence, and civil disorder. Sample includes 104 countries, categorized into regions according to the World Bank definitions. EAP = East Asia and Pacific, ECA = Europe and Central Asia, LAC = Latin America and the Caribbean, MENA = Middle East and North Africa, SAR = South Asia, and SSA = Sub-Saharan Africa.

volatility. Among oil importers, government debt-to-GDP ratios need to be reduced to more manageable levels in Egypt, Jordan, and especially Lebanon, where debt levels are among the highest of all emerging and developing economies. The complex situation posed by the continued presence of a large number of Syrian refugees will complicate debt reduction in Jordan and Lebanon, however.

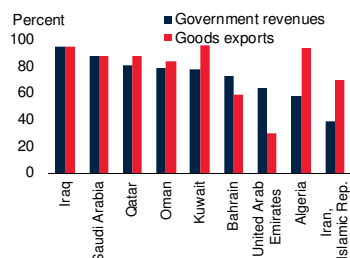
Monetary policy challenges in the region are less pronounced than fiscal policy challenges but are notable in some countries. As the Islamic Republic of Iran reintegrates into the global economy, the country's monetary authorities will need to keep inflation in line with the stated targets and unify the exchange rate regime (the latter of which is intended to be complete by the end of September), and to ensure banking sector stability (IMF 2015e). In Egypt, the central bank will need to continue efforts to rein in inflation against the backdrop of stabilizing oil prices and the pass-through of subsidy reductions in 2015 and the devaluation in the first quarter of 2016.

GCC policymakers are putting greater priority on structural reforms to reduce pressure on public

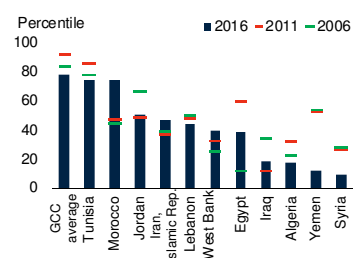
FIGURE 2.4.7 Policy challenges

Export and government revenue losses imposed by low oil prices underscore the pressing need to diversify away from oil in Algeria, Iraq, and most of the GCC countries. Across much of the region, there is a need to address uncompetitive business environments, labor market inefficiency, and insufficiently developed financial markets—measures by which countries in the Middle East and North Africa have largely stagnated or backtracked in recent years relative to other emerging and developing economies.

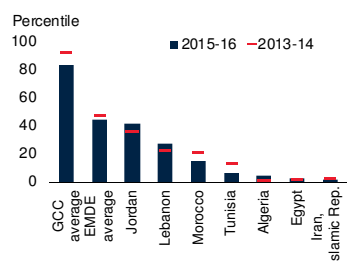
A. Oil dependence, 2014



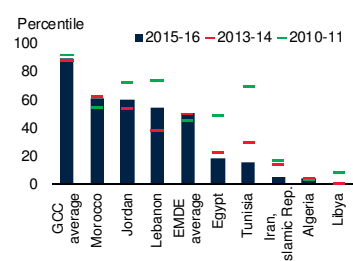
B. Ease of doing business



C. Labor market efficiency



D. Financial market development



Sources: International Monetary Fund; World Bank, Doing Business indicators; World Economic Forum; World Bank.

B. Figure shows the percentile rankings of indicated countries among the set of emerging and developing economies included in the World Bank's Doing Business "ease of doing business" indicator: 152 countries in 2016, 148 in 2011, and 122 in 2006. A decrease in the percentile ranking over time indicates a deteriorating business environment.

C, D. Figures show the percentile scores of indicated countries among the set of emerging and developing economies included in the World Economic Forum's Global Competitiveness Survey for labor market efficiency (103 countries in 2015–16, 110 in 2013–14) and financial market development efficiency (103 countries in 2015–16, 110 in 2013–14, and 101 in 2010–11). Labor market efficiency rankings for 2010–11 are excluded because the methodology differs from that used in the more recent surveys. A decrease in the percentile score over time indicates deteriorating labor market or financial market conditions.

finances, including easing restrictions to private sector participation in key economic sectors and privatizing state-owned companies. The details of reforms, such as those outlined in Saudi Arabia's Vision 2030 plan released in April, are still being developed. In the medium term, the export and government revenue losses imposed by low oil prices highlight the need to reduce high dependence on oil in Algeria, Iraq, and most of the GCC countries (Figure 2.4.7). Yet in an environment of continued low oil prices, which are expected to be well below 2010–14 levels in the medium term, diversification is likely to be challenging. Large emerging markets in other regions that have successfully diversified their economies away from oil (Indonesia, Malaysia, and Mexico) have made relevant policy adjustments during periods of strong oil revenues (Callen et al. 2014; Cherif and Hasanov 2016). For GCC countries, where business climates are for the most part already quite competitive among emerging and developing economies, the experience of other countries suggests that a combination of horizontal (creating linkages between existing industries) and vertical (development of sectors, particularly tradable sectors, outside their traditional comparative advantage) dimensions is key to successful diversification (Cherif and Hasanov 2016).

In countries other than those in the GCC, longstanding structural challenges include uncompetitive business environments, labor market inefficiency, insufficiently developed financial markets, and insufficient and poor-quality infrastructure (in particular, electricity; Mitra et al. 2016). Recent assessments of countries in the Middle East and North Africa indicate that some countries are now faring worse in comparison to other emerging and developing economies than they were during the past decade (World Economic Forum 2015; Doing Business Indicators 2016).

TABLE 2.4.1 Middle East and North Africa forecast summary

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

	2013	2014	2015e	2016f	2017f	2018f	(percentage point difference from January 2016 projections)			
							2015e	2016f	2017f	2018f
EMDE MENA, GDP^a	2.0	2.9	2.6	2.9	3.5	3.6	-0.2	-1.1	-1.0	-0.5
(Average including countries with full national accounts and balance of payments data only) ^b										
EMDE MENA, GDP^b	2.0	3.4	2.7	2.7	3.1	3.3	0.0	-0.8	-0.9	-0.6
GDP per capita (U.S. dollars)	0.0	1.4	0.8	1.0	1.5	1.8	-0.1	-0.8	-0.9	-0.7
PPP GDP	1.8	3.5	2.7	2.9	3.3	3.5	-0.1	-0.8	-0.9	-0.6
Private consumption	3.1	3.8	2.6	2.8	3.0	3.3	-0.6	-0.4	-0.4	-0.2
Public consumption	6.6	6.8	2.3	0.2	0.7	2.2	-1.5	0.3	-3.7	-2.5
Fixed investment	2.6	3.2	-2.6	-2.4	1.8	2.3	2.2	-7.5	-5.5	-2.8
Exports, GNFS ^c	1.4	3.3	3.5	4.9	4.6	4.4	-2.3	0.3	0.1	-0.5
Imports, GNFS ^c	3.2	5.4	0.9	-0.5	3.3	4.0	-0.6	-4.9	-1.4	-0.7
Net exports, contribution to growth	-0.6	-0.6	1.4	2.6	1.0	0.7	-0.7	2.1	0.6	0.2
Memo items: GDP										
Oil exporters	1.8	3.0	2.5	2.9	3.5	3.5	-0.1	-1.2	-1.0	-0.5
GCC countries ^d	3.3	3.4	2.9	2.0	2.3	2.7	-0.1	-1.0	-0.9	-0.5
Saudi Arabia	2.7	3.6	3.4	1.9	2.0	2.3	0.6	-0.5	-0.9	-0.6
Iran, Islamic Rep.	-1.9	4.3	1.6	4.4	4.9	4.7	-0.3	-1.4	-1.8	-1.3
Oil importers	2.9	2.7	3.3	2.9	3.7	4.0	-0.2	-0.6	-0.4	-0.4
Egypt, Arab Rep.	1.4	4.0	3.6	3.8	4.4	4.6	-0.4	-0.3	-0.2	-0.2
<i>Fiscal year basis</i>	2.1	2.2	4.2	3.3	4.2	4.6	0.0	-0.5	-0.2	-0.2

Source: World Bank.

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. EMDE refers to emerging market and developing economy. GDP at market prices and expenditure components are measured in constant 2010 U.S. dollars. Excludes Syrian Arab Republic and Republic of Yemen due to data limitations.

b. Sub-region aggregate excludes Djibouti, Iraq, Libya, and West Bank and Gaza, for which data limitations prevent the forecasting of GDP components.

c. Exports and imports of goods and non-factor services (GNFS).

d. Gulf Cooperation Council (GCC) countries include Bahrain, Kuwait, Oman, Qatar, Saudi Arabia, and United Arab Emirates.

TABLE 2.4.2 Middle East and North Africa country forecasts^a

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

							(percentage point difference from January 2016 projections)			
	2013	2014	2015e	2016f	2017f	2018f	2015e	2016f	2017f	2018f
Algeria	2.8	4.1	2.9	3.4	3.1	2.7	0.1	-0.5	-0.9	-1.1
Bahrain	5.4	4.5	2.9	2.2	2.0	1.9	0.4	-0.5	-0.7	-0.9
Djibouti	5.0	6.0	6.5	6.5	7.0	7.0	0.0	-0.5	-0.1	0.0
Egypt, Arab Rep.	1.4	4.0	3.6	3.8	4.4	4.6	-0.4	-0.3	-0.2	-0.2
<i>Fiscal year basis</i>	2.1	2.2	4.2	3.3	4.2	4.6	0.0	-0.5	-0.2	-0.2
Iran, Islamic Rep.	-1.9	4.3	1.6	4.4	4.9	4.7	-0.3	-1.4	-1.8	-1.3
Iraq	6.6	-2.1	2.4	7.2	4.7	5.2	1.9	4.1	-2.4	-1.3
Jordan	2.8	3.1	2.4	3.0	3.3	3.6	-0.1	-0.5	-0.5	-0.4
Kuwait	1.2	-1.6	-1.3	1.3	1.6	2.4	-2.5	-1.1	-1.1	-0.3
Lebanon	3.0	1.8	1.5	1.8	2.3	2.5	-0.5	-0.7	-0.2	-0.5
Libya	-13.6	-24.0	-10.2	14.0	40.0	20.0	-5.0	-21.7	12.4	11.6
Morocco	4.7	2.4	4.4	1.7	3.4	3.6	-0.3	-1.0	-0.6	-0.4
Oman	3.9	2.9	3.3	1.6	1.9	2.6	-0.4	-1.6	-1.1	0.1
Qatar ^b	4.6	4.1	3.9	3.3	3.5	4.0	-2.7	-3.5	-2.4	-1.0
Saudi Arabia	2.7	3.6	3.4	1.9	2.0	2.3	0.6	-0.5	-0.9	-0.6
Tunisia	2.4	2.3	0.8	1.8	2.5	3.0	0.3	-0.7	-0.8	-1.5
United Arab Emirates	4.3	4.6	3.4	2.0	2.4	3.0	0.4	-1.1	-0.9	-0.5
West Bank and Gaza	2.2	-0.2	3.5	3.3	3.5	3.6	0.6	-0.6	-0.2	-0.1

Source: World Bank.

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 significantly differ at any given moment in time.

a. GDP at market prices and expenditure components are measured in constant 2010 U.S. dollars. Excludes Syrian Arab Republic and Republic of Yemen due to data limitations.

b. A recent rebasing of Qatar's GDP from 2004 to 2013 prices has resulted in significant revisions to historical and forecast growth rates compared to January 2016.

SOUTH ASIA



Growth in South Asia is expected to reach 7.1 percent in 2016, and to strengthen to 7.3 percent by 2018, underpinned by robust domestic demand. In the near term, consumption spending continues to benefit from low oil prices and modest inflation rates, although these effects will wane in the medium term. An accommodative monetary stance, public investments in infrastructure, and progress on the structural reform agenda should support growth. Risks to the forecast are weighted to the downside. On the external front, volatility in financial markets could lead to large capital outflows from the most vulnerable emerging market economies in the region. Lower remittance inflows could dampen consumption spending and the growth outlook in the region's smaller economies. Domestic risks include slower-than-expected progress in structural reform, vulnerabilities in bank and corporate balance sheets, and fiscal challenges. Reforms to strengthen macroeconomic stability, address business environment deficiencies (including energy shortages), and resolve non-performing loans problems will improve the region's prospects for growth and for further poverty reduction.

Recent developments

Economic activity in South Asia has remained resilient despite headwinds from the global economy. GDP growth reached 7 percent in 2015 (Table 2.5.1), making it the fastest-growing developing region. Robust domestic demand momentum (Figure 2.5.1), the main growth driver, continued through the first half of 2016. India is the region's largest and fastest-growing economy, but Pakistan, Bangladesh, and Bhutan also show strengthening activity. Most South Asian economies have benefitted from the decline in oil prices and the resulting benign inflationary environment and steady remittance flows. Monetary policies have been accommodative. Some economies have benefitted from a pick-up in the pace of reform or from improvements in the security situation. Nonetheless, to varying degrees, weak external demand, a challenging business environment (e.g., energy and infrastructure constraints), fiscal pressures, and poor weather have encumbered activity in some of the region's economies.

Growth in India picked up to 7.6 percent in FY2015/16, a 0.4 percentage point increase over FY2014/15 (Table 2.5.2), driven largely by domestic demand. Partly thanks to the ongoing liberalization of India's foreign direct investment (FDI) regime, FDI to India surged 37 percent from the launch of the "Make in India" campaign in October 2014 to February 2016, with the computer software and automotive sectors attracting the bulk of this investment. Manufacturing activity, though dampened by weak external demand, accelerated 9.3 percent in the final quarter of FY15/16. Relative to other large emerging economies, purchasing manager indices for India reflect more buoyant sentiment (Figure 2.5.2). Business start-ups are on the rise, particularly in the e-commerce and financial services sector.¹ The ensuing job creation from strengthening economic activity and boost to real income from low inflation and increase in wages² are lifting urban consumption. Furthermore, increased public investment in power generation, roads, railways and urban infrastructure is

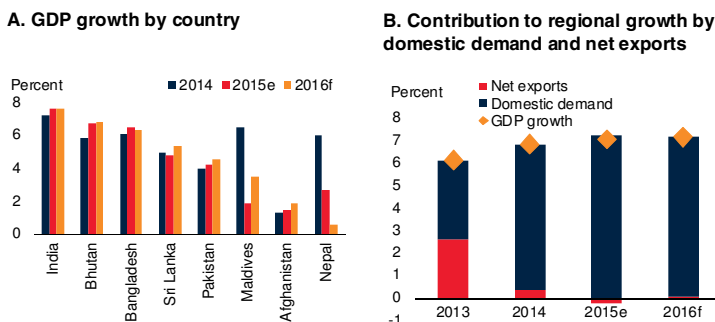
¹In January 2016, there were 19,400 technology-enabled startups, of which 5000 were started in 2015.

²According to firm-level survey data from the Reserve Bank of India, staff costs rose by an average of 15.4% in FY2014/15 and FY2015/16.

Note: The author of this section is Allen Dennis. Research assistance was provided by Yiruo Li.

FIGURE 2.5.1 Domestic growth

Domestic demand is the main driver of the region's growth.



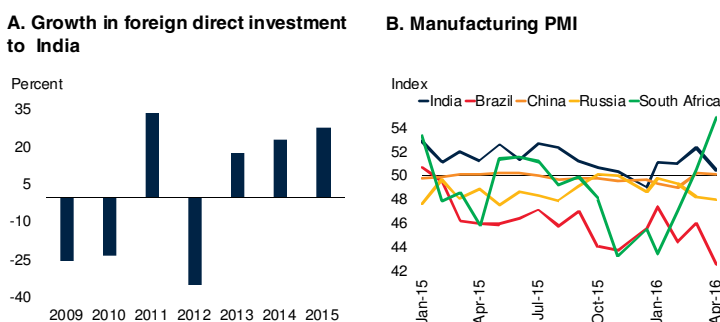
Source: World Bank.

A. GDP data for 2015 is estimated and GDP data for 2016 is a forecast. For Bangladesh, Bhutan, India, Nepal, and Pakistan (factor cost), fiscal year real GDP growth figures are used.

B. GDP data for 2015 is estimated and GDP data for 2016 is a forecast.

FIGURE 2.5.2 Foreign direct investment and PMIs

The opening up of more sectors for foreign participation, along with other reforms, has supported the rise in FDI to India. Relative to most other large emerging market economies, India's PMIs have been higher in recent months.



Source: Haver Analytics.

B. Index numbers greater than 50 represent an expansion and vice versa.

contributing to an improved business environment and reduced supply-side constraints. Nonetheless, India faces notable headwinds. Rural consumption has been hard-hit by two years of poor monsoons (rainfall in 2015/16 was 14 percent below the historical average). Despite five interest rate cuts since 2015, credit growth to the corporate sector remains sluggish because of stressed asset quality in the banking sector (especially for claims on the aviation, infrastructure, iron, and steel sectors). Weak exports also weigh on growth – February marked the 15th consecutive month of decline.

In Pakistan, GDP growth picked up to 4.2 percent (at factor cost) in FY 2015/16 – its highest

pace in seven years. This pickup was supported by several positive factors: an improving security situation, lower oil prices, higher remittances, an acceleration in credit growth, and rising public investment. The country's Extended Fund Facility arrangement with the IMF remains on track. The fiscal deficit was reduced to 5.3 percent of GDP in 2015, from 8.4 percent in 2013, as revenues improved and recurrent expenditures were curtailed. Ongoing security concerns (even if improving) and chronic energy deficiencies have weakened FDI, but a pick up is expected with the commencement of the China Pakistan Economic Corridor program. Nonetheless, domestic investment remains weak.

In Bangladesh, growth is estimated to have reached 6.5 percent in FY2015/16, supported by increased public investment, public sector wage increases, and steady remittance flows. Despite the contraction in global trade, Bangladeshi exports expanded by 15.5 percent in FY2015/16, with rapid growth in garment exports, where it holds a significant labor cost advantage. However, private investment continues to be held back by a poor business environment, inadequate infrastructure, energy bottlenecks, weak bank balance sheets, and occasional civil unrest. Economic activity in Sri Lanka steadied at 4.8 percent in 2015 supported by robust consumption, and strong growth in the services and agricultural sectors. However, earlier loose monetary policy and rising fiscal deficits have led to a deterioration in the current account balance and gross external reserves position. Sri Lanka is discussing a program with the IMF – in April 2016 it reached a staff level agreement for a \$1.5 billion Extended Fund Facility.

Inflation. Low global oil and food prices, tightening fiscal policy (India, Pakistan), easing electricity bottlenecks (India, Pakistan), reduction of administered food and energy prices (Sri Lanka), and in some countries benign weather conditions for food production (Bangladesh) have, to various degrees, reduced inflationary pressures across the region.³ Headline and core inflation

³The impact of lower oil prices on GDP growth ranges from 0.5 to 3.6 percentage points in South Asia (World Bank 2015f; Afshin and Zahran 2015).

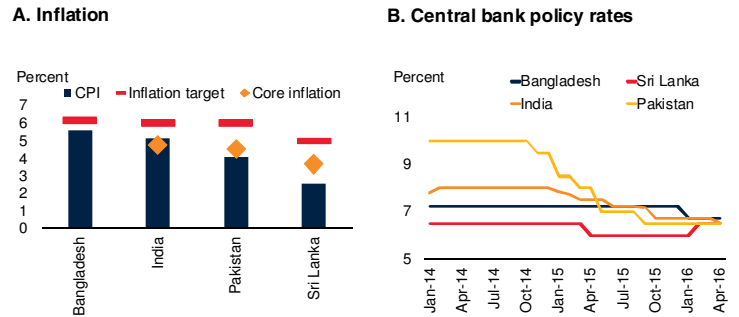
remains below target levels for most of the region's economies (Figure 2.5.3). In contrast, inflation in Nepal was elevated on account of supply disruptions after the earthquake in 2015, trade disruptions with India, and poor monsoon rains.

Fiscal Policy. The fiscal situation remains diverse across the region. India and Pakistan are on a path of fiscal consolidation, whereas fiscal deficits are on the rise in Bangladesh and Sri Lanka (Figure 2.5.4). Fiscal consolidation in India has been supported by an increase in excise duties, simplification of the tax regime, including the removal of tax exemptions, better expenditure control, and rationalization of some subsidies (in India, fuel subsidies fell to 0.1 percent of GDP in 2015 from 0.75 percent; see IMF 2016g). Notwithstanding delays to the Goods and Services Tax (GST) reform, other measures underway in India include: further fiscal decentralization as the states are to receive greater share of revenues from the central government; better targeting of transfers through the use of direct benefit transfers; higher rates of indirect taxes; and improvements in tax administration (including expanding the use of electronic platforms to assess and file taxes and measures to reduce uncertainty and litigation in the paying of taxes). The package of measures should support the objective in the FY2016 Union Budget to reduce the fiscal deficit by 0.4 percentage point. In Pakistan, fiscal consolidation has been supported by the rolling back of tax exemptions and increases to petroleum and excise taxes (IMF 2016h). If the planned divestment from state-owned enterprise materializes in both India and Pakistan, it will contribute to further fiscal consolidation.

In Bangladesh, above-inflation public sector wage increases and below-target revenue collection (due to weakness in tax administration) widened the deficit. The under-execution of budgeted public investment projects eased fiscal pressures in Bangladesh and Nepal, but may set back long-run growth. In Sri Lanka, an expansionary fiscal policy has contributed to the increased deficit and debt levels. Efforts are underway to address the deterioration in public finances, including the increase in the VAT rate from 11 to 15 percent. Government debt levels in South Asia are higher

FIGURE 2.5.3 Inflation

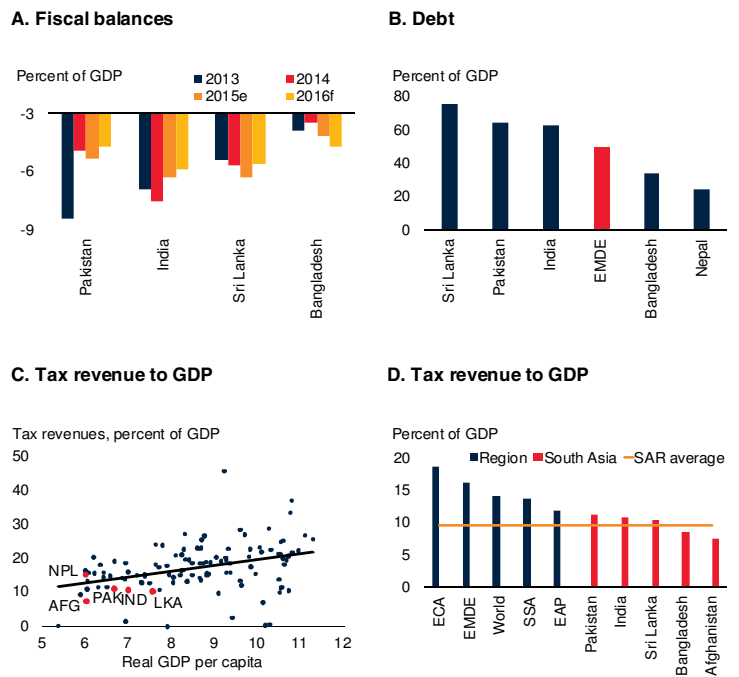
Inflation is generally below targets, in part because of the drop in energy prices. Core inflation is also low. Interest rates have been cut or sustained at moderate levels for most economies in the region.



Sources: World Bank, Central Bank News, Haver Analytics, Central Bank of Sri Lanka. A. CPI data are year-on-year headline inflation for the average of the latest three months. The inflation target for Sri Lanka is indicative. The inflation targets of Bangladesh and Pakistan are for FY2016. In Bangladesh the upper limit of the target is shown. The inflation target of India was 6 percent by January 2016 and is 4 percent by FY2016/17. Core inflation is on a year-on-year basis for the latest 3 months.

FIGURE 2.5.4 Fiscal indicators

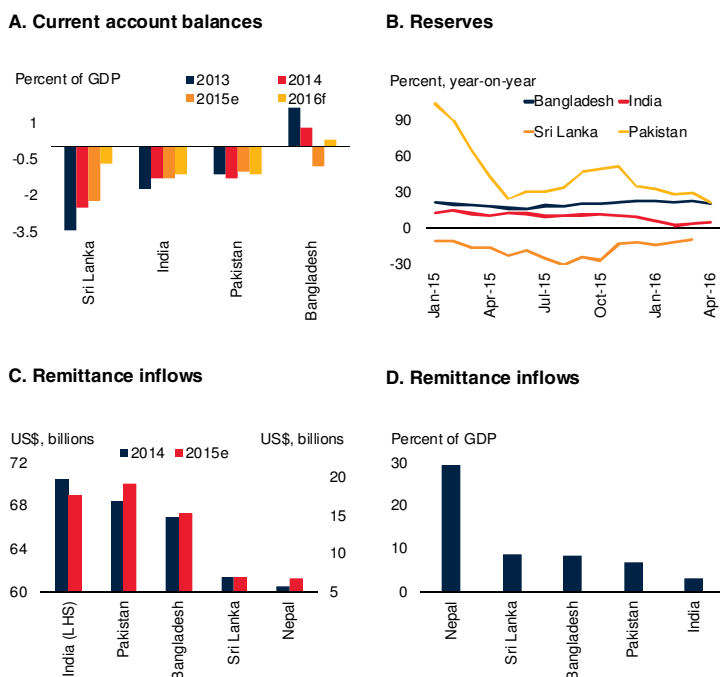
Except in India, fiscal deficits widened in 2015. The revenue base remains relatively low in comparison to other emerging markets and developing (EMDE) regions.



Source: World Bank. A. Data for 2015 is estimated and data for 2016 is forecasted. B. Debt refers to the general government gross debt in percent of GDP. EMDE is the unweighted average for emerging markets and developing economies. C. The data used is for 2012, except for Canada, Mali, Nepal, Pakistan, Rwanda, United Arab Emirates and the United States where 2013 data are used. AFG = Afghanistan, IND = India, LKA = Sri Lanka, NPL = Nepal, and PAK = Pakistan. Logarithm of real GDP per capita in U.S. dollars. D. EAP = East Asia and Pacific, ECA = Europe and Central Asia, EMDE = emerging markets and developing economies, SSA = Sub-Saharan Africa, and SAR = South Asia. The SAR and EMDE average is the unweighted average of the latest available tax-to-GDP ratio data.

FIGURE 2.5.5 Current account balances and remittances

The decline in oil prices and resilient remittance flows have supported the improvement in current account balances, notwithstanding weak export demand.



Sources: World Bank, Migration and Remittances database; International Monetary Fund; Haver Analytics; Central Bank of Sri Lanka.

A. Data for 2015 is an estimate and data for 2016 is forecasted.

C. Data for 2015 is an estimate. 2016 forecast numbers are not available by individual country. However, for the region as a whole, remittances are expected to increase by 4.6 percent.

D. Data are taken from Migration and Remittances database, April 2016.

than in other developing regions. In Bhutan, Maldives and Sri Lanka, government debt levels are above 70 percent of GDP. In Afghanistan, where the debt-to-GDP ratio is low, fiscal pressures are mounting as aid inflows decline and the deteriorating security situation puts pressure on military expenses.

Current Account. Notwithstanding weak trading-partner growth, current account balances have improved for most of the region's economies, in large part due to the decline in oil prices (Figure 2.5.5). Remittance flows have been broadly steady in Bangladesh and Sri Lanka, and increased in Pakistan, as a result of rising migrant populations and a gradual improvement in some destination economies (e.g., in Europe). In contrast, Bhutan's current account deficit widened to 30 percent in FY2015/16 as a result of capital imports for large hydropower projects. These projects are being

funded by India; upon their completion, they are expected to increase Bhutan's electricity exports to that country.

Gross International Reserves. Reserve buffers remain comfortable or improved in most countries in the region, compared to a year ago. In Pakistan, increased disbursements from the IMF and other multilateral and bilateral sources have contributed to the build-up of its gross international reserves. Reserves are also higher in Bangladesh, India, and Maldives. In contrast, along with its fiscal situation, import cover ratios in Sri Lanka deteriorated to an estimated 3.5 months. Reflecting improved macroeconomic fundamentals, capital outflows from India were limited during the global financial market turmoil earlier this year. However, Sri Lanka, along with other emerging and frontier market economies, experienced significant capital outflows. Gross official reserves in Sri Lanka fell to \$6.3 billion in March 2016 from \$7.3 billion in December 2015.

Outlook

Growth in South Asia is expected to remain robust at 7.1 percent in 2016, picking up to 7.3 percent in 2018 (Table 2.5.1). This represents, a downward revision from the January forecast, mainly due to external factors. Weaker-than-expected growth in advanced economies will dampen export growth. Fiscal consolidation in GCC countries will slow remittance flows, mainly affecting the outlook for the smaller economies that rely heavily on remittances (Bangladesh, Nepal and Sri Lanka). Gradually tightening financing conditions will increase external borrowing costs for economies with access to international capital markets (notably corporate borrowing in India and public sector borrowing in Sri Lanka). Poor monsoons in India continue to have a negative impact on rural incomes, and on output in agriculture-intensive sectors. In some countries, these factors will be mitigated, at least in the short run, by various developments. Public investment is on the rise in Bhutan, India, Sri Lanka; public sector wages are increasing in Bangladesh and India; and market-friendly reforms are in progress in India and Pakistan. A normalization of weather conditions (as El Niño

subsidies) will lift agricultural output in Bangladesh and India.

India will continue to grow faster than its large emerging market peers, with growth rates of 7.6–7.7 percent from FY2016/17 to FY2018/19.⁴ Rural incomes and spending should improve with the return to normal monsoons, as the benefits of direct transfers through the rolling out of the mobile banking initiative (Jan Dhan Aadhaar Mobile) are realized and improvements in agricultural productivity improve. New sectors will continue to attract FDI. As of December 2015 some \$45.7 billion (2.2 percent of GDP) had been pledged under the “Make in India” campaign. Private domestic investment is expected to benefit from an accommodative monetary policy. In addition, the government’s planned investment in infrastructure, and the streamlining of business procedures and of the tax regime, are expected to alleviate some constraints, and crowd-in private investment (Bahal, Raissi, and Tulin 2015). Nonetheless, private investment will still be held back by infrastructure bottlenecks, a challenging regulatory environment, and by tight credit amidst the ongoing resolution of stressed assets in the banking sector. If implemented as planned, continued fiscal consolidation from 2016 onwards should support investor confidence in India through future bouts of turmoil in global financial markets.

Pakistan will benefit from expected improvements in power supply and to its security situation. Investments under the China Pakistan Economic Corridor project will provide a boost to demand in the short run, and over time alleviate transportation bottlenecks and energy shortages. Ongoing monetary accommodation will support an expansion of credit for domestic borrowers. Pakistan is expected to continue on its path of fiscal consolidation. Sri Lanka’s growth is expected to pick-up to 5.3 percent over the forecast period, despite monetary and fiscal tightening. Growth will be supported by infrastructure spending financed by sizable FDI flows as part of the

government’s Port City and Western Province Megapolis initiatives. Also, recent policy measures to curb imports will contribute to growth. In Bangladesh, growth is expected to ease to 6.3 percent in FY2016/17, as a result of poor harvests and slowing credit, before rising to 6.8 percent in FY2017/18 on the back of rising public sector wages and improving harvests. Growth in Afghanistan will be subdued. Security problems hinder private investment, especially FDI into the minerals sector, and a decline in aid inflows exacerbates the fiscal situation. In Bhutan, construction of large hydropower projects and their subsequent exports will boost incomes. An expected pick-up in tourism, and supportive fiscal stance, will also contribute to a strengthening of economic activity.

Risks

Risks to the forecast are weighted to the downside and predominantly domestic.

Domestic risks to growth and fiscal positions include setbacks in reform implementation. These include reforms affecting the allocation of labor, land and capital, including the removal of impediments to productivity (Shah and Chadha 2016). Reforms delays may be related to entrenched political obstacles to privatization (Pakistan), and land and tax reforms (India). Delays would compromise future productivity and dampen growth prospects and, in some instances, increase fiscal pressures (in both India and Pakistan, the budget projections take into account proceeds from strategic disinvestments).

Although the region’s systemic banks do not rely heavily on wholesale funding, vulnerabilities in bank balance sheets may lead to financial stress and weigh on lending. Several banks must raise their capital adequacy ratios to meet Basel III requirements. Some corporate borrowers, particularly state-owned enterprises, are facing sizable losses, which could eventually turn into nonperforming bank loans and contingent government liabilities (e.g., India, Pakistan). However, in India stress tests suggest that the government is adequately resourced to recapitalize public sector banks were they to face a severe

⁴FY2016/17 Consensus forecasts for India range from 7.0 to 7.9 percent with a median of 7.6 percent, and for FY 2017/18 it ranges from 6.7 to 8.2 percent with a median forecast of 7.8 percent.

deterioration in asset quality (Lindner and Jung 2014).

External risks include weaker-than-expected global trade and an unexpected tightening of global financing conditions. South Asian economies will not be immune to such developments, even though the region is less integrated with global markets than other developing regions. Heightened volatility in financial markets could lead to a reversal of capital flows and debt rollover difficulties. Countries in the region with weaker buffers and exposure to international capital markets are likely to be the most adversely affected. If the ongoing fiscal consolidation in GCC countries is sharper than expected, remittance flows to the region could slow sharply, in particular to Bangladesh, Nepal, and Sri Lanka (World Bank 2016f; Wickramasekara 2016, Kelegama 2011). Furthermore, while the baseline forecast assumes that oil prices will recover only gradually over the forecast horizon, supply shocks (for instance, due to a geopolitical event) could lead to a spike in prices. Since the region is a net oil importer, this would weaken incomes and output growth.

As an upside risk, weather patterns could be better than expected. India has been through two poor monsoons in a row, due to the El Niño phenomenon. Historically, El Niño years are often followed by La Niña, which is associated with bumper harvests (NOAA 2016). Hence the possibility of La Niña could yield an upswing to agricultural output, rural income and spending, and lower food inflation. Average GDP growth in India for La Niña years has been 8.4 percent (India Ministry of Finance 2016), well above the current projection through 2018.

Policy challenges

Growth in South Asia has been remarkably strong, and with it, a steep decline in poverty rates over the past two decades.⁵ However, some of the tailwinds that have supported South Asia's recent

strong performance (e.g., significantly lower oil prices) are likely to fade over the medium term (World Bank 2016n). South Asian economies need to pursue macroeconomic policies that address areas of vulnerability and implement reforms to raise efficiency and productivity (Rajan 2016).

Against the backdrop of a fragile global economy, the priority for fiscal policy is to build fiscal buffers and reduce debt. This will give policy makers some flexibility to respond to future shocks with fiscal stimulus. Measures to raise direct tax revenues, which are low even by emerging market and developing country standards (India Ministry of Finance 2016), will free fiscal space for much-needed public investment. Such measures include the introduction and implementation of a GST tax (India), broadening the tax base (India and Sri Lanka), reducing exemptions (Sri Lanka) strengthened fiscal responsibility legislation (Pakistan), and improved tax administration (Bangladesh, India, Pakistan, Sri Lanka).

Efforts to raise revenue would benefit if they are complemented with better quality of spending. To this end, appropriate measures include strengthened public financial management (Bangladesh, Sri Lanka), and a shift from recurrent spending to spending on physical capital (roads, ports, energy infrastructure) and human capital (health and education). Such investments lay a long-term foundation for growth (Mallick 2016; Leduc and Wilson 2012; Pereira and Pereira 2015). To contain fiscal spending and inflationary pressures, subsidies could be further reduced (Bangladesh, India) and proposed public sector wage increases (Bangladesh, India) could receive additional scrutiny.

Easing inflation pressures have allowed some central banks (Bangladesh, India) to cut policy rates and others (Pakistan) to maintain their accommodative policy stances. Since the drop in energy prices is responsible for only part of the decline in inflation, as evidenced by the low rate of core inflation, policy easing has been warranted. In contrast, in Sri Lanka, rising core inflation and high credit growth have compelled the central

⁵South Asia's poverty rate fell from about 51 percent in 1990 (574 million poor) to 19 percent in 2012 (309 million poor; World Bank 2015d).

bank to tighten policy. Once oil prices stabilize or eventually begin to rise, monetary policy rate tightening may also be required elsewhere in the region if inflation rises above targets or more sharply than consistent with macroeconomic stability.

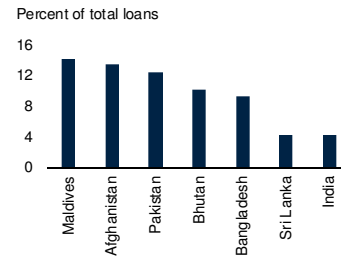
Stressed assets in the banking sector implies some impairment of bank capital, hence the need for a swift recapitalization of systemically important banks to restore buffers against future contingences (Rajan 2016). In India, the share of stressed assets (non-performing loans plus restructured loans) has risen by over 1.5 percentage points since 2013. Public sector banks (which represent about 76 percent of total banking system assets) account for most of the problem. A resolution of the issue would facilitate easier access to loans by credit-worthy borrowers, and thereby boost investment. In Afghanistan, Bangladesh, Bhutan and Pakistan non-performing loans amount to between 9 and 13 percent of the total loan portfolio (Figure 2.5.6).

Sound insolvency legislation and procedures encourage bank lending and support the reallocation of resources to the most productive uses. Bankruptcy processes in South Asia are among the most challenging, with insolvency processes that take an average of two and half years, and recovery rates of only about 32 cents on the dollar (Doing Business Indicators 2016). Such barriers to legal resolution of debts delay the exit of unviable firms, and hinder productivity gains from reallocation of resources to more productive firms (Bloom et al. 2011). Slow exit and factor reallocation may partly account for low total factor productivity in the Indian manufacturing sector, which estimates place at 40-60 percent below potential (Hsieh and Klenow 2009). In this regard, the recent passing of India's new bankruptcy law, which introduces time limits to the recovery of debts, should help improve the business regulatory environment and a more efficient allocation of resources.

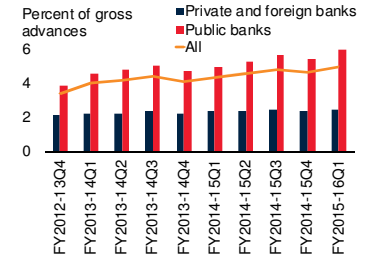
FIGURE 2.5.6 Banking sector vulnerabilities

Non-performing loans remain high, and are rising in some countries.

A. Non-performing loans



B. Non performing assets in India



Sources: Reserve Bank of India, World Bank.

A. The chart shows the latest observation of each country. For Afghanistan, Bhutan, India, Maldives, Pakistan, and Sri Lanka the latest year is 2015. For Bangladesh, the latest year is 2014.

B. Public sector banks account for 76 percent of total bank assets, and private and foreign banks account for 24 percent.

Addressing energy bottlenecks in South Asia remains critical for sustaining the region's long-term growth (Wijayatunga and Fernando 2013). In Pakistan, which has an annual energy deficit of about 5000MW, power shortages may have shaved off about 4 percentage points of GDP growth per year (Kugelman 2015). Similar shortages are reported in Bangladesh. These can be addressed with a combination of institutional reforms, additional generation capacity, privatization of state-owned generation and distribution companies, rationalization of utility tariffs, improved tariff collection, and measures to conserve energy (Sethi 2015). Some success is evident in India, where the peak electricity deficit in India declined to its lowest level on record (2.4 percent) in 2015, thanks to ongoing government investment and reforms that have increased generation capacity. Further, unrestricted cross-border electricity trading within the sub-region holds great potential, saving up to some \$9 billion per annum of electricity costs (Singh et al. 2015; Timilsina et al. 2015)

TABLE 2.5.1 South Asia forecast summary

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

(percentage point difference
from January 2016 projections)

	2013	2014	2015e	2016f	2017f	2018f	2015e	2016f	2017f	2018f
EMDE South Asia, GDP^{a, b}	6.1	6.8	7.0	7.1	7.2	7.3	0.0	-0.2	-0.3	-0.2
(Average including countries with full national accounts and balance of payments data only) ^c										
EMDE South Asia, GDP^c	6.1	6.8	7.1	7.2	7.3	7.3	0.1	-0.1	-0.2	-0.3
GDP per capita (U.S. dollars)	4.7	5.4	5.7	5.8	5.9	6.0	0.1	-0.2	-0.3	-0.2
PPP GDP	6.1	6.8	7.1	7.1	7.2	7.3	0.1	-0.2	-0.3	-0.2
Private consumption	5.7	6.0	6.0	6.7	6.8	6.5	-0.5	0.1	0.5	0.3
Public consumption	1.6	9.7	9.6	6.6	6.5	6.6	1.5	-0.9	-0.1	0.2
Fixed investment	3.9	4.7	7.2	7.1	8.1	8.8	2.5	-2.0	-3.3	-2.7
Exports, GNFS ^d	6.8	2.6	-2.9	2.7	5.9	7.5	-5.2	-1.3	0.9	1.8
Imports, GNFS ^d	-2.4	0.7	-1.8	1.6	5.0	6.3	-3.4	-3.0	-0.8	-0.2
Net exports, contribution to growth	2.6	0.4	-0.2	0.1	-0.1	0.0	-0.3	0.4	0.3	0.5
Memo items: GDP^b	13/14	14/15	15/16e	16/17f	17/18f	18/19f	15/16e	16/17f	17/18f	18/19f
South Asia excluding India	4.9	5.4	5.3	5.3	5.5	5.4	-0.4	-0.5	-0.5	-0.6
India	6.6	7.2	7.6	7.6	7.7	7.7	0.3	-0.2	-0.2	-0.2
Pakistan (factor cost)	3.7	4.0	4.2	4.5	4.8	5.1	0.0	0.0	0.0	0.3
Bangladesh	6.0	6.1	6.5	6.3	6.8	6.0	0.0	-0.4	0.0	-0.8

Source: World Bank.

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. EMDE refers to emerging market and developing economy. GDP at market prices and expenditure components are measured in constant 2010 U.S. dollars.

b. National income and product account data refer to fiscal years (FY) for the South Asian countries, while aggregates are presented in calendar year (CY) terms. The fiscal year runs from July 1 through June 30 in Bangladesh, Bhutan, and Pakistan, from July 16 through July 15 in Nepal, and April 1 through March 31 in India. 2014 data for Bangladesh, India, and Pakistan cover FY2014/15.

c. Sub-region aggregate excludes Afghanistan, Bhutan, and Maldives, for which data limitations prevent the forecasting of GDP components.

d. Exports and imports of goods and non-factor services (GNFS).

TABLE 2.5.2 South Asia country forecasts

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

(percentage point difference
from January 2016 projections)

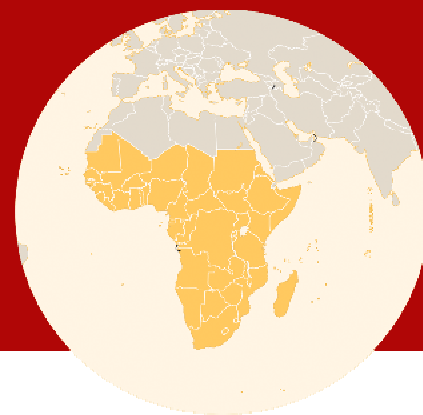
	2013	2014	2015e	2016f	2017f	2018f	2015e	2016f	2017f	2018f
Calendar year basis ^a										
Afghanistan	2.0	1.3	1.5	1.9	2.9	3.6	-0.4	-1.2	-1.0	-1.4
Bangladesh	6.1	6.3	6.4	6.6	6.4	6.0	-0.2	-0.2	-0.4	-0.8
India	6.4	7.1	7.5	7.5	7.6	7.7	0.2	-0.2	-0.3	-0.2
Maldives	4.7	6.5	1.9	3.5	3.9	4.6	-2.5	0.4	-0.3	0.1
Nepal	4.9	4.4	1.7	2.7	4.5	4.4	-0.9	-1.0	-0.6	-0.1
Sri Lanka	3.4	4.9	4.8	5.3	5.3	5.3	-0.5	-0.3	-0.7	-0.7
Fiscal year basis ^a										
	13/14	14/15	15/16e	16/17f	17/18f	18/19f	15/16e	16/17f	17/18f	18/19f
Bangladesh	6.0	6.1	6.5	6.3	6.8	6.0	0.0	-0.4	0.0	-0.8
Bhutan	3.9	5.8	6.7	6.8	8.0	8.0	-0.1	-0.4	2.4	2.0
India	6.6	7.2	7.6	7.6	7.7	7.7	0.3	-0.2	-0.2	-0.2
Nepal	3.8	6.0	2.7	0.6	4.7	4.4	-0.7	-1.1	-1.1	-0.1
Pakistan (factor cost)	3.7	4.0	4.2	4.5	4.8	5.1	0.0	0.0	0.0	0.3

Source: World Bank.

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 significantly differ at any given moment in time.

a. Historical data are reported on a market price basis. National income and product account data refer to fiscal years (FY) for the South Asian countries with the exception of Afghanistan, Maldives and Sri Lanka, which report in calendar year (CY). The fiscal year runs from July 1 through June 30 in Bangladesh, Bhutan, and Pakistan, from July 16 through July 15 in Nepal, and April 1 through March 31 in India. 2014 fiscal year data, as reported in the table for India, Pakistan, Bangladesh, Nepal, cover FY2014/15. GDP figures presented in calendar years (CY) terms for Bangladesh, Nepal, and Pakistan are calculated taking the average growth over the two fiscal year periods to provide an approximation of CY activity. Historical GDP data in CY terms for India are the sum of GDP in the four calendar quarters.

SUB-SAHARAN AFRICA



Growth in Sub-Saharan Africa is projected to slow again in 2016, to 2.5 percent, down from an estimated 3.0 percent in 2015. The forecast is 1.7 percentage points lower than the January 2016 projections. Low commodity prices, tightening global financial conditions, and drought in parts of the region will continue to weigh on growth this year. The recovery is expected to strengthen to an average of 4.1 percent in 2017-18, driven by a gradual improvement in the region's largest economies and as commodity prices stabilize. Nonetheless, risks to the outlook remain tilted to the downside, including a sharper-than-expected slowdown in major trading partners, further decline in commodity prices, delays in adjusting to the negative terms-of-trade shocks, worsening drought conditions, and political and security uncertainties. Key policy challenges include adjusting to an era of low commodity prices, addressing economic vulnerabilities, and developing new sources of growth.

Recent developments

GDP growth in Sub-Saharan Africa (SSA) slowed markedly in 2015 to an estimated 3.0 percent, down from 4.5 percent in 2014 (Figure 2.6.1). Low commodity prices, rising borrowing costs, and adverse domestic developments in several countries significantly impacted activity in the region. Per capita GDP growth weakened to 0.3 percent, compounding the challenge of accelerating poverty reduction. The slowdown was particularly pronounced among oil exporters (Nigeria, Republic of Congo), but activity also weakened substantially in non-energy mineral exporters (Botswana, South Africa, Zambia). Domestic impediments were an important contributory factor in countries affected by electricity shortages (Nigeria, South Africa, Zambia), the Ebola epidemic (Guinea, Liberia, Sierra Leone), conflict (Burundi, South Sudan) and political and security uncertainties (Burkina Faso, Chad, Mali, Niger, Nigeria). However, many other oil-importing countries continued to register robust growth, reflecting their more diverse export base. This was the case in Cote d'Ivoire and more broadly the West African Economic and Monetary Union (WAEMU),

where growth exceeded 6 percent in 2015. Rwanda and several countries in the East African Community (Ethiopia, Tanzania) grew at about 7 percent or more, supported by infrastructure investment, construction, and expanding services.

The fall in commodity prices represented a significant shock for a region for which commodities make up a large share of exports (Box 2.6.1). Oil exporters, in particular, experienced a sharp deterioration in their terms of trade, which strained their fiscal and current account balances. Most commodity prices rebounded in February-March on improved market sentiment and weakening U.S. dollar. Nevertheless, average prices are generally low, compared to their level in the fourth quarter of 2015, and are expected to remain subdued in the medium-term (World Bank 2016o). Meanwhile, production has continued to fall in a number of commodity exporters. In Nigeria, militant attacks in the oil-producing region contributed to a sharp decline in oil output. In South Africa, mining output fell by an annualized and seasonally-adjusted 19 percent (q/q) in 2016Q1, led by contractions in copper, platinum, and iron ore.

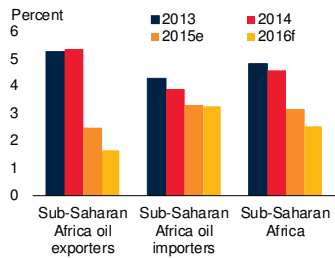
The plunge in commodity prices has been further exacerbated by reduced capital inflows, with cross-

Note: The author of this section is Gerard Kambou. Research assistance was provided by Xinghao Gong.

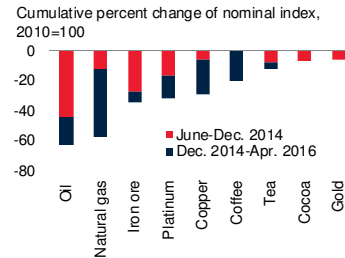
FIGURE 2.6.1 Economic activity

Growth in Sub-Saharan Africa slowed significantly in 2015 to 3.0 percent, down from 4.5 percent in 2014, due in part to low commodity prices. The impact of the decline in commodity prices has been most severe on oil exporters. In several instances, adverse domestic developments exacerbated the direct impact of declining commodity prices. In Nigeria, electricity and fuel shortages and policy uncertainty adversely affected activity in the non-oil sector. In South Africa, a severe drought reduced agricultural production and hydroelectricity generation.

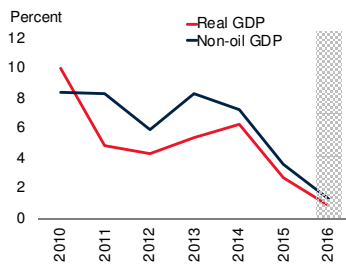
A. GDP growth in Sub-Saharan Africa



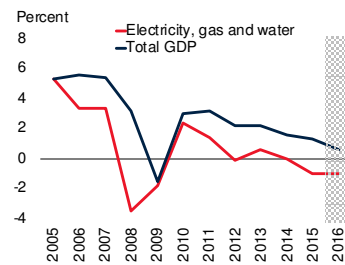
B. Commodity prices



C. Nigeria: GDP growth



D. South Africa: GDP growth



Sources: Haver Analytics, World Bank, International Monetary Fund Article IV staff reports, Statistics South Africa.

Note: Gray area denotes forecast.

border bank lending and Eurobond issuance declining. At the start of 2016, marked concerns about growth in large emerging markets and about plunging oil prices led to a further tightening of external financial conditions for developing economies. These developments have prompted many countries in the region to delay plans to tap the international bond market. In mid-April, South Africa issued 10-year government bonds at favorable coupon rates. However, sovereign bond spreads have remained elevated among oil exporters (Figure 2.6.2), reflecting markets' assessment of deteriorating economic conditions, and suggesting that Eurobond issuance is likely to remain expensive for these countries. In addition, a number of countries, especially in Southern Africa, are facing severe El Niño-related drought conditions that are adversely impacting

agricultural production and exerting pressures on their fiscal and external positions.

The current account balances of oil exporters have deteriorated sharply. A decline in export volumes has compounded the fall in oil prices in some countries (Nigeria, South Sudan). Non-oil commodity exporters also saw their current account deficits widened, in part because the improvement in oil prices was offset by the decline in the price of their commodity exports. The deterioration of current account balances has exposed many commodity exporters to a reversal of capital flows. In Nigeria, capital flows were 74 percent (y/y) lower in the first quarter of 2016, with portfolio inflows slowing significantly. The persistently low commodity prices exerted downward pressures on the currencies of commodity exporters, raising the value of their public debt denominated in foreign currency. As a result, a number of countries (Angola, Mozambique, Zambia) that have tapped the international bond market face significant refinancing and exchange rate risks, which are compounded by rising sovereign spreads. Most of the region's currencies stabilized at the end of the first quarter, reflecting the rebound in commodity prices and a decline in global risk aversion. The Angolan kwanza and Mozambican metical, however, continued to depreciate against the U.S. dollar, as investor sentiment weakened.

The pass-through of nominal exchange rate depreciation, compounded by the impact of drought on food supply and the removal of fuel subsidies, contributed to a rise in inflation in commodity exporters (Figure 2.6.3). Headline inflation has increased sharply in Angola, Mozambique, Nigeria, and Zambia, exceeding the central banks' targets. Core inflation also edged upward. To contain inflation, authorities in a number of countries responded to the pressures on exchange rates by tightening monetary policy (Angola, Mozambique, Nigeria, South Africa). In some countries (Angola, Burundi, Nigeria), monetary authorities introduced administrative measures in a bid to support their currency. The foreign exchange controls introduced by the Central Bank of Nigeria have helped stabilize the official exchange rate. However, the parallel

exchange rate has depreciated sharply against the U.S. dollar. This has driven inflation higher, stifled private sector demand, and contributed to the slowdown in non-oil GDP growth and decline in reserves. In March, against the backdrop of a sharp increase in core inflation, the Central Bank of Nigeria raised its key policy rate, but left the foreign exchange restrictions in place. Nigeria's real GDP contracted by 0.4 percent (y/y) in Q12016. In contrast, in a number of oil-importing countries (Kenya, Tanzania, Uganda), inflation has eased in recent months, reflecting a steady exchange rate and disinflationary pressures from lower food and oil prices. This prompted the Bank of Uganda to cut interest rates in April, followed by the Central Bank of Kenya in May.

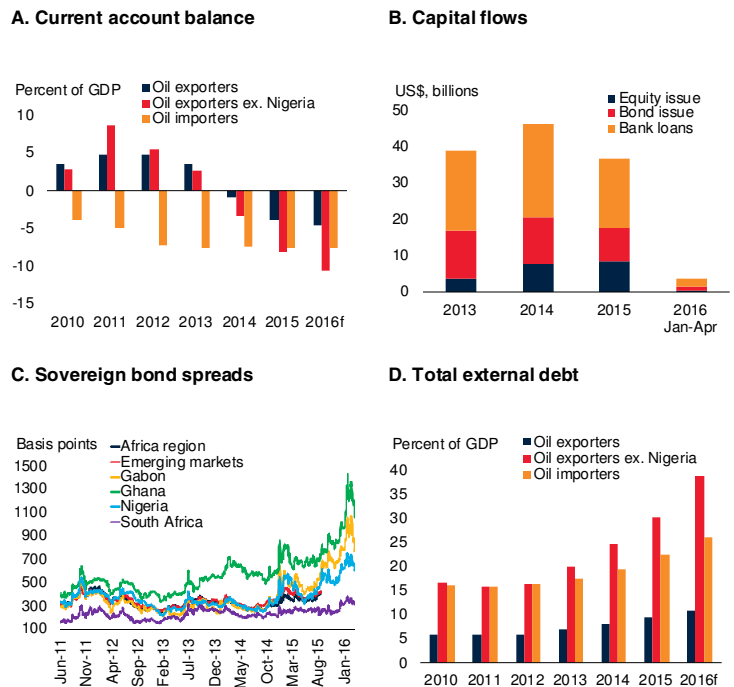
Fiscal positions have weakened across the region (Figure 2.6.4). The median fiscal deficit increased from 3 ¾ percent of GDP in 2014 to 4 ½ percent in 2015, the highest in more than five years. The deterioration in the overall fiscal balance was due to a number of factors, including low commodity prices, decelerating capital inflows, and weak growth, which depressed revenues. The median government debt ratio reached 48 ½ percent of GDP in 2015, up from 36 ½ in 2014, driven by rising fiscal deficits in some countries (Angola, Mozambique, Zambia) and currency depreciations in others (Tanzania, Zimbabwe). In this context, sovereign debt ratings have been recently downgraded in a number of countries, including Angola, Mozambique, Republic of Congo, and Zambia.

Outlook

The external environment confronting Sub-Saharan Africa is expected to remain less favorable in the near term. Commodity prices will remain low (Figure 2.6.5) amid only a gradual pickup in global activity, and external financing conditions will tighten further. Against this backdrop, average growth in SSA is projected to slow further in 2016, to 2.5 percent, reflecting low growth among oil exporters, before rising to 4.1 percent in 2017-18. The projected pickup in growth is contingent on commodity prices stabilizing and on improvement in conditions in the region's largest economies – Angola, Nigeria, and South Africa.

FIGURE 2.6.2 External sector developments

External positions weakened across the region as a result of the decline in commodity prices. The current account deficit widened in oil exporters, and remained elevated among oil importers due to strong import growth driven by large public investment projects. The commodity price shock was exacerbated by reduced capital inflows in the region. Cross-border bank lending fell and bond issuance softened from their record 2014 levels. Sovereign spreads rose in the region and have remained elevated among oil exporters. The deterioration of the current account balances across countries increased the region's external debt.



Sources: Bloomberg; Haver Analytics; World Bank; International Monetary Fund, Regional Economic Outlook.

Average per capita GDP growth is expected to remain weak in 2016, at -0.1 percent, before rising to 1.4 percent in 2017-18.

Underlying the regional outlook is the continued divergence between oil exporters and importers. The prospects for a significant pickup in private consumption growth in oil exporters remain weak in the near term, due in part to rising inflation. The removal of subsidies to alleviate pressure on budgets has resulted in higher fuel costs in Angola which, coupled with currency depreciation, are expected to weigh on consumers' purchasing power. By contrast, lower inflation in oil importers (Kenya, Tanzania), owing in part to lower fuel prices, should support real incomes and consumer spending. However, food price inflation due to drought in a number of countries (Zambia,

BOX 2.6.1 Macroeconomic effects of low commodity prices in Sub-Saharan Africa

Commodity prices. The sharp declines in commodity prices have been a major factor behind the marked slowdown in the region over the past year. The commodity price shock was compounded by the increase in the share of commodities in the region's exports. Fuels, ore, and metals account for more than 60 percent of the region's exports, compared with 16 percent for manufactured and 10 percent for agriculture goods (World Bank 2015g). Oil prices have declined markedly, falling by 67 percent since mid-2014. Despite a recent rebound, oil prices have remained low due to strong supply conditions. Among non-energy commodities, metal prices sustained a steep drop, with large declines in the prices of iron-ore, platinum, and copper, owing to weak global demand. Agricultural prices fell at a slower pace, amid higher stocks and increased production for some commodities despite a strong El Niño episode. Looking to 2017, a modest recovery is projected for most commodities as demand strengthens. Crude oil is projected to rise to \$50/bbl from \$41/bbl in 2016 (World Bank 2016l).

Economic activity. Reflecting the sharp decline in oil prices, average growth in oil-exporting countries is estimated to have slowed from 5.3 percent in 2014 to 2.5 percent in 2015. In Nigeria, the region's largest oil exporter and economy, growth more than halved from 6.3 percent in 2014 to 2.7 percent in 2015. In several instances, adverse domestic developments exacerbated the direct impact of declining oil prices. In Nigeria, electricity and fuel shortages, policy uncertainty, and security threats depressed activity in the non-oil sector. In other oil exporters, conflict (South Sudan), and Boko Haram insurgencies (Cameroon, Chad) diverted resources from development goals.

Economic activity weakened substantially in non-energy, mineral-exporting countries (Botswana, Guinea, Liberia, Sierra Leone, South Africa, Zambia). Sharp declines in the price of metals, their main commodity exports, played a major role. The adverse impact of low metal prices was compounded by domestic challenges. In Southern Africa (Botswana, South Africa, and Zambia), a severe drought reduced agricultural output and hydroelectricity generation. In South Africa, the marked decline in electricity production also reflected inadequate investment in the power sector. Insufficient electricity supply constrained activity in the manufacturing sector, slowing the overall pace of GDP growth. In addition, political tensions kept business confidence low and put pressures on the currency. In Guinea, Liberia, and Sierra Leone, the

economy had already been hit by the Ebola crisis, which began to recede at the end of 2015.

In comparison, the slowdown has been less pronounced in other non-oil exporting countries. In Mozambique, planned investment projects for the liquefied natural gas sector were delayed due to low commodity prices, which weighed on growth. In Uganda, a large currency depreciation spurred a tightening of monetary conditions that dampened domestic demand. Nevertheless, compared to the regional average, growth has remained robust in these countries, reflecting their more diversified export base. Among oil importers, Ethiopia, Rwanda, and Tanzania recorded solid growth. Growth remained buoyant in Kenya, amid improving investor sentiment. Despite terrorist attacks in some member countries (Mali, Niger), the West African Economic and Monetary Union continued to experience robust growth in 2015, helped in part by increased agricultural production. However, a severe political crisis contributed to a contraction of output in Burundi.

External positions. External positions weakened across the region in 2015. The current account deficit widened significantly in Angola and the Republic of Congo; in Nigeria, the current account surplus swung into deficit in 2015. The current account deficit deteriorated in several non-energy commodity exporters (Ethiopia, Mozambique, Namibia, Niger), in part because exports continued to fall but also due to strong import growth on the back of large public infrastructure investments. Ghana's current account deficit narrowed, helped by an increase in service exports and private transfers, including remittances. Overall, capital inflows to the region fell from their record level in 2014, led by a decline in cross-border bank lending. European banks have increasingly deleveraged and oriented their lending activities toward developing Asia. Eurobond issuance also softened; in addition, reflecting in part expectations about U.S. Federal Reserve interest rate hike that materialized toward the end of 2015, borrowing became more expensive. Yields reached 10.75 percent for Ghana in October, compared with 6.6 percent obtained by Côte d'Ivoire in February 2015.

External debt. The deterioration of current account balances and currency depreciations increased external debt, triggered a decline in reserves, and put pressures on exchange rates. The median external debt in the region is estimated at 28 percent of GDP in 2015, up from 23 percent of GDP in 2014. On aggregate, external debt

BOX 2.6.1 Macroeconomic effects of low commodity prices in Sub-Saharan Africa (continued)

levels increased moderately in oil-exporting countries, due in part to Nigeria's low level of external debt. However, Angola, the Republic of Congo, and Gabon saw a large increase in their external debt ratio. Other countries where external debt levels increased noticeably in 2015 include Ghana, Kenya, Mozambique, Tanzania, and Zambia. Several of them (Ghana, Kenya, Zambia) have tapped multiple times the international bond market, which is more expensive than concessional loans and carries significant refinancing and exchange rate risks. Across the region, international reserves have declined, with the median estimated at 3.6 months of imports, down from 4.2 months of imports in 2014. Reserve levels fell most markedly among oil exporters (Angola, Nigeria) and in countries defending fixed exchange rates or managed pegs (Burundi, Rwanda); in some cases, the resulting policy inconsistency caused a widening of parallel market premia (Burundi, Nigeria).

Inflation. Low food and fuel prices have helped keep inflation low in a number of oil-importing countries (Kenya, Tanzania, and Uganda). Inflation has also remained low in the CFA franc zone countries, on account of the stable peg to the euro and terms of trade improvements. However, sizeable currency depreciations, compounded by the effects of El Niño-related drought on food supply and the removal of fuel subsidies, contributed to a rise in inflation in a number of commodity exporters. In March, headline inflation rose to high double digits in Angola (23 ½ percent y/y), Mozambique (13 ½ percent y/y), Nigeria (12 ¾ percent y/y), and Zambia (22 percent y/y). Concerns about inflation led central banks in several countries to hike interest rates (Angola, Mozambique, Nigeria, South Africa).

Fiscal positions. Oil exporters (Angola, Chad, Republic of Congo, Gabon, Nigeria) experienced a substantial decrease in revenues that put pressures on the overall fiscal balance. The fiscal policy response to the revenue shortfalls has varied, suggesting that finding an appropriate fiscal response to economic shocks remains an important

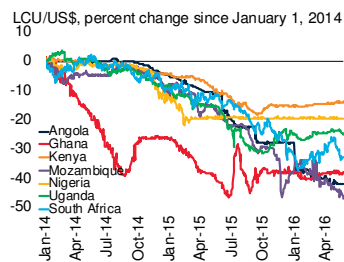
challenge for many countries. A number of oil exporters cut expenditures, with the expenditure cuts matching the reduction in revenues in few of them (Angola, Chad). In some countries (Cameroon, Republic of Congo), the government continued with its ambitious infrastructure investment program, financed in some cases through advances from the domestic banking system (Republic of Congo). Some large mineral exporters (Mauritania, Zambia) also saw a sharp decline in commodity revenues that was not met with a commensurate reduction in expenditure, resulting in a widening of the fiscal deficit. However, Ghana's fiscal adjustment has remained on track, with the overall deficit improving. In other countries (Ethiopia, Kenya, Madagascar), expenditure overruns caused the fiscal deficit to increase.

Government debt. As a result of the limited fiscal adjustment, public debt burdens have risen. The median government debt is estimated at 48 ½ percent of GDP in 2015, up from 36½ percent of GDP in 2014, with significant country-level variations. Public debt rose marginally in Nigeria in relation to GDP. However, a number of other oil exporters (Angola, Republic of Congo) saw a large increase in their public debt/GDP ratio, exceeding 15 percentage points in the case of Angola. The increase in debt burdens was more moderate in non-energy mineral exporting countries, with the exceptions of Niger, Sierra Leone, and Zimbabwe where the public debt/GDP ratio rose by more than 10 percentage points. Kenya, Mozambique, and Tanzania saw their debt levels increased by 5 percentage points on average. In several countries (Kenya, Niger), the increase in government debt reflected rising infrastructure spending that should support potential growth over the medium term. In others, exchange rate depreciations (Tanzania, Zimbabwe) also contributed to the rising debt levels. Overall debt ratios in 2015 were well above levels in 2011-13, with both external and domestic debt contributing to the increase in public debt. Debt sustainability assessments deteriorated in a number of countries (World Bank 2016m).

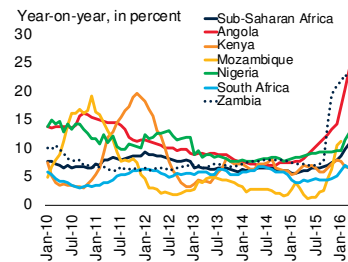
FIGURE 2.6.3 Exchange rates and inflation developments

Most of the region's currencies depreciated against the U.S. dollar, although they stabilized toward the end of the first quarter of 2016. The pass-through of nominal exchange rate depreciation contributed to a rise in inflation in a number of countries. Authorities responded by tightening monetary policy. However, easing inflation and a stable exchange rate prompted the Bank of Uganda to cut interest rates in April.

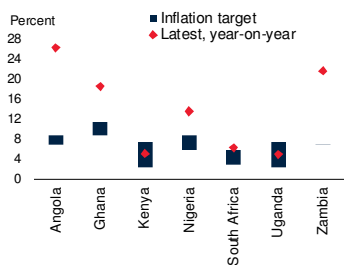
A. Exchange rates



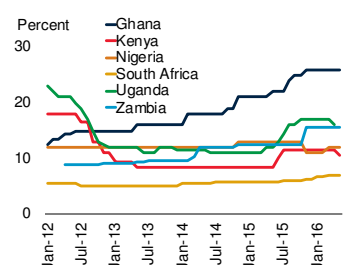
B. Inflation



C. Inflation: actual vs. target



D. Policy interest rates



Sources: Haver Analytics, World Bank.
Note: Last observations are May 25, 2016 for A, April 2016 for B and C, and May 2016 for D.

Zimbabwe), high unemployment (South Africa), and the price level impact of currency depreciation, combined with interest rate increases, could moderate these effects.

Investment growth is expected to slow across the region in 2016, particularly among oil and mineral exporters. China's rebalancing, lower commodity prices, and deteriorating growth prospects in many commodity exporters, are expected to result in further declines in FDI flows. Foreign direct investment declined by 48 ½ percent (y/y) in the first quarter of 2016 in Nigeria. Domestic policies are also weighing on private investment. In Nigeria, the central bank's foreign exchange controls have tightened credit conditions and curtailed private investment. In South Africa, economic sentiment is showing signs of stabilization. However, political uncertainty, coupled with deficient electricity supply, could hold back private investment. By contrast, in a

number of low-income, non-oil commodity exporters, governments are expected to continue with their public infrastructure program, drawing in part on public-private partnerships (Rwanda), donor aid (Tanzania, Rwanda) and financing from Chinese entities (Ethiopia, Kenya, Tanzania). Nevertheless, the pace of investment growth in low-income countries is expected to slow somewhat in 2016. Some countries, such as Mozambique, Tanzania, and Uganda, are experiencing delays in inward investment in their resource sectors due to the decline in commodity prices. Moreover, the tightening of global financing conditions has prompted other countries to delay tapping the international bond market.

The fiscal policy stance in commodity exporters is expected to remain tight in 2016. The governments of Angola and Nigeria, the region's largest oil exporters, are seeking assistance from international development institutions and other donors to alleviate public investment cuts, but further fiscal adjustment may be necessary unless oil prices pickup swiftly. With fiscal deficits widening across the region, other countries, including the low-income, non-oil commodity exporters that have experienced a surge in infrastructure investment spending, also face the need for fiscal consolidation to build buffers.

Net exports are expected to make a negative contribution to growth in 2016 (Table 2.6.1). Low commodity prices will depress export receipts, especially among oil exporters, even as export volumes rise in some countries. Demand from advanced economies is expected to stay modest, given their moderate prospects for medium-term growth. Among oil importers, current account balances are expected to deteriorate in many countries on account of continued solid import growth, driven by capital goods imports for infrastructure projects.

Against this backdrop, the following trends are anticipated:

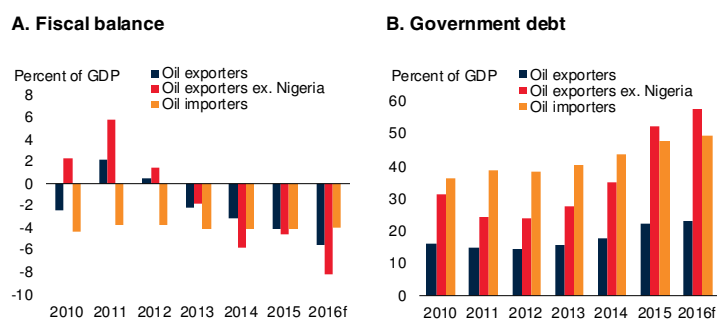
- Activity is expected to remain weak in the region's three largest economies in 2016. In Nigeria, foreign exchange restrictions, fuel shortages, and oil output disruptions will

weigh on economic activity, exacerbating the effects of low oil prices. In South Africa, low business confidence will slow investment growth, while high unemployment and tight monetary policy will limit private consumption. In Angola, low oil prices, a weak investment climate, and rising inflation will weigh on growth. Reforms of labor and product markets to spur private investment should help enhance growth prospects in these countries.

- Among the region's frontier markets, growth is expected to pick up moderately in Ghana, helped by improving investor sentiment, new oilfields, and the waning of electricity shortages. Growth is expected to remain subdued in Zambia owing to low copper prices and power shortages. In addition, higher interest rates and food prices stemming from the drought and a weak currency will weigh on domestic demand. However, growth is expected to remain robust in Cote d'Ivoire, Kenya, and Senegal, supported by ongoing infrastructure investment, private consumption, and agriculture.
- The outlook for the region's LICs is expected to include a modest pickup in growth in oil and mineral exporters, as they continue to adjust to low commodity prices. In Mozambique, delayed investment into the liquefied natural gas sector, rising inflation, and low investor confidence will adversely impact growth. Activity is also expected to slow in the Democratic Republic of Congo as the copper sector continues to struggle and political uncertainty weighs on investor sentiment. Infrastructure investment and an increase in iron ore exports should help boost activity in Liberia, Guinea, and Sierra-Leone as they emerge from the Ebola crisis. However, political and security uncertainties are expected to exert a drag on economic growth in Burundi, Burkina Faso, Mali, and Niger, and drought could significantly impact activity in Ethiopia. For most other LICs, including Rwanda, Tanzania, and Uganda, growth is projected to remain robust, supported by domestic demand.

FIGURE 2.6.4 Fiscal developments

Oil exporters experienced a substantial decrease in revenues that put pressures on the overall fiscal balance. Responses to the revenue shortfalls have varied. Some countries cut expenditures in the face of declining revenues; others continued with their infrastructure investment program, financing it in some cases through advances from the domestic banking system. Meanwhile, in a number of oil importers, expenditure overruns coupled with a decline in grants caused the fiscal deficit to widen. As a result of the limited fiscal adjustment, public debt burdens increased in the region.



Sources: Haver Analytics; Bloomberg; World Bank; International Monetary Fund, Regional Economic Outlook, International Monetary Fund, World Economic Outlook.

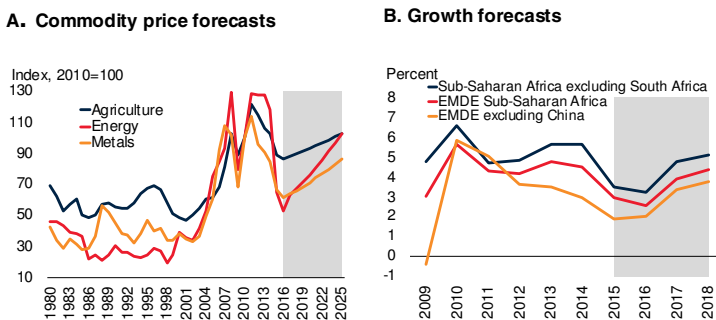
Risks

The balance of risks to the outlook remains tilted to the downside.

- On the external front, a sharper-than-expected slowdown in major trading partners could further weaken activity in commodity exporters, and lead to a reduction or cancelation of planned investment projects in their resource sectors. Weaker-than-expected growth in the Euro Area, an important trading partner for many countries in the region, could further lower exports, and reduce investment flows as well as official aid. A renewed decline in the price of oil would further strain the fiscal and current account balances of oil producers, which could force more cuts in public expenditure than envisaged. Tighter global financing conditions would result in higher borrowing costs that could affect the region through higher risk premia and reduced sovereign bond access for emerging and frontier countries.
- On the domestic front, delayed adjustment to the commodity price shock in the most affected countries would create policy uncertainties that could weigh on investor

FIGURE 2.6.5 Outlook

The external environment confronting Sub-Saharan Africa is expected to remain difficult in the near term. Commodity prices are expected to stay low in 2016, amid a gradual pick up in global activity, and external conditions are expected to tighten. Against this backdrop, average growth in SSA is projected to slow to 2.5 percent in 2016, rising to 4.1 percent in 2017-18, driven by a gradual improvement in the region's largest economies as commodity prices stabilize and policies become more supportive of growth.



Source: World Bank.

A. B. Gray area denotes forecast.

A. Index of nominal prices in U.S. dollars.

B. EMDE Sub-Saharan Africa excludes Somalia, Central Africa Republic and São Tomé and Príncipe.

sentiment. A worsening of drought conditions would dampen growth in agriculture, reduce hydroelectricity production, and accentuate inflationary pressures through higher food prices. Militant insurgencies and terrorist attacks remain a concern in West Africa and Kenya, with potential spillovers to neighboring countries. Risk of political upheavals in Burundi and South Sudan could further hurt growth in these countries, with implications for trading partners in their sub-region.

Policy challenges

Commodity exporters across the region need to adjust to a protracted period of lower commodity prices. With commodity markets likely to be less supportive than in the past, the region will also need to focus on developing new sources of growth. Meanwhile, widening fiscal and current account deficits have increased economic vulnerabilities that are reflected in depreciating currencies, falling reserves, and rising inflation and debt levels. This has prompted central banks in some countries to raise interest rates, even as economies are slowing, increasing the drag on growth. Responses to these challenges will vary, depending on country-specific conditions.

- For most countries, adjusting to low commodity prices will need to include stronger efforts to strengthen domestic resource mobilization. In particular, resource-rich countries would benefit from improving their non-resource tax systems. While tax revenues in SSA, as a share of GDP, have increased since the 1980s, much of the improvement was driven by the growth in commodity revenues. Excluding resource-based revenues, there has been limited improvement in the domestic mobilization of tax revenues in the region. Increasing domestic revenue will require stronger efforts to broaden the tax base and strengthen tax administration. This could be achieved by removing tax preferences, managing better transfer pricing by multinational companies, taxing extractive industries fairly and transparently, and improving the quality of information available to tax officials (AfDB/OECD 2010).
- Exchange rate flexibility, where feasible, could help cushion the impact of the decline in commodity prices. Policymakers may need to tighten monetary policy where inflation induced by currency depreciation is persisting, and where drought-related increases in food prices may have a second round inflationary effect. However, tighter monetary policy could adversely impact private sector activity through higher borrowing costs.
- The increased external and fiscal vulnerabilities point to the need for greater efforts to rebuild policy buffers. For most countries, this would require measures to rationalize current expenditure, particularly the wage bill, and improve public financial management and the quality of spending. In oil-exporting countries, measures are needed to reform energy subsidies and increase public investment efficiency (Dabla-Norris et al. 2011). In many countries that have taken advantage of favorable financing conditions to increase infrastructure investment spending, fiscal and current account deficits have remained elevated. These countries should adjust their policies to build buffers and

address vulnerabilities that could emerge if the external environment suddenly deteriorates. Countries needing a deeper and faster fiscal adjustment as a result of the commodity price shock may face a difficult trade-off between boosting development spending and building buffers. In these countries, fiscal adjustment should be designed to minimize the impact on growth and on vulnerable populations.

- Notable progress has been made across the region in recent years to improve the quality of regulations that enhance business activity (Doing Business 2016). During 2014/15, reforms were implemented that have increased access to electricity

(Kenya, Senegal, Uganda), eased access to credit information (Kenya, Uganda), and facilitated cross-border trade (Benin, Mauritania). Accelerating structural reforms aimed at boosting competitiveness and diversification will be critical for raising growth prospects and reducing extreme poverty. For most countries, this will require greater efficiency of infrastructure investment, further energy sector reforms to expand supply and reduce the cost of electricity, trade reforms to reduce trade logistics cost and regulatory barriers to services trade, enhancing the quality of education, and a more inclusive financial sector (World Bank 2016p).

TABLE 2.6.1 Sub-Saharan Africa forecast summary

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

	2013	2014	2015e	2016f	2017f	2018f	(percentage point difference from January 2016 projections)			
							2015e	2016f	2017f	2018f
EMDE SSA, GDP^a	4.8	4.5	3.0	2.5	3.9	4.4	-0.3	-1.7	-0.7	-0.3
(Average including countries with full national accounts and balance of payments data only) ^b										
EMDE SSA, GDP^b	4.7	4.5	3.0	2.5	3.9	4.3	-0.4	-1.7	-0.7	-0.4
GDP per capita (U.S. dollars)	2.0	1.8	0.3	-0.1	1.2	1.7	-0.4	-1.6	-0.7	-0.3
PPP GDP	5.0	4.8	3.2	2.8	4.2	4.6	-0.4	-1.6	-0.7	-0.4
Private consumption ^c	9.9	3.4	2.8	2.5	3.6	3.9	-0.3	-1.2	-0.4	-0.2
Public consumption	2.0	4.3	3.6	3.0	3.2	3.6	0.3	-0.6	-0.5	-0.2
Fixed investment	9.0	7.7	5.9	5.1	6.8	6.9	0.0	-1.5	-0.2	-0.2
Exports, GNFS ^d	-2.5	4.7	1.5	1.8	2.3	2.8	-0.4	-0.7	-0.4	0.0
Imports, GNFS ^d	6.6	2.9	3.3	3.3	3.4	3.5	0.5	0.4	0.3	0.4
Net exports, contribution to growth	-2.8	0.5	-0.6	-0.5	-0.4	-0.3	-0.3	-0.3	-0.2	-0.1
Memo items: GDP										
SSA excluding South Africa	5.7	5.6	3.5	3.2	4.8	5.1	-0.5	-1.9	-0.8	-0.6
Oil exporters ^e	5.4	5.3	2.5	1.7	3.8	4.2	-0.6	-2.7	-1.3	-1.0
CFA countries ^f	4.6	5.6	4.0	5.3	5.3	5.7	-0.4	-0.4	-0.7	-0.2
South Africa	2.2	1.5	1.3	0.6	1.1	2.0	0.0	-0.8	-0.5	0.4
Nigeria	5.4	6.3	2.7	0.8	3.5	4.0	-0.6	-3.8	-1.8	-1.3
Angola	6.8	3.9	2.8	0.9	3.1	3.4	-0.2	-2.4	-0.7	-0.4

Source: World Bank.

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. EMDE refers to emerging market and developing economy. GDP at market prices and expenditure components are measured in constant 2010 U.S. dollars. Excludes Somalia, Central African Republic, and São Tomé and Príncipe.

b. Sub-region aggregate excludes Liberia, Somalia, Central African Republic, São Tomé and Príncipe, and South Sudan, for which data limitations prevent the forecasting of GDP components.

c. The sudden surge in private consumption in the region in 2013 is driven by the revised and rebased NIA data of Nigeria in 2014.

d. Exports and imports of goods and non-factor services (GNFS).

e. Includes Angola, Cameroon, Chad, Cote d'Ivoire, Democratic Republic of Congo, Gabon, Nigeria, Republic of Congo, and Sudan.

f. Includes Benin, Burkina Faso, Central African Republic, Chad, Cote d'Ivoire, Cameroon, Equatorial Guinea, Gabon, Mali, Niger, Republic of Congo, Senegal, and Togo.

TABLE 2.6.2 Sub-Saharan Africa country forecasts^a

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

(percentage point difference
from January 2016 projections)

	2013	2014	2015e	2016f	2017f	2018f	2015e	2016f	2017f	2018f
Angola	6.8	3.9	2.8	0.9	3.1	3.4	-0.2	-2.4	-0.7	-0.4
Benin	5.6	5.4	5.2	5.5	5.8	6.1	-0.5	0.2	0.7	1.0
Botswana ^b	9.3	4.4	-0.3	3.7	4.3	4.4	-3.3	-0.3	0.1	0.2
Burkina Faso	6.7	4.0	4.0	5.2	5.5	6.0	-0.4	-0.8	-1.5	-1.0
Burundi	4.6	4.7	-2.5	3.0	3.5	4.0	-0.2	-0.5	-1.3	-0.8
Cabo Verde	1.0	1.8	1.0	1.5	1.9	2.2	-1.9	-2.0	-2.2	-1.9
Cameroon	5.6	5.9	6.2	6.0	6.1	6.2	-0.1	-0.5	-0.4	-0.2
Chad	5.7	6.9	1.8	-0.4	1.6	5.2	-2.3	-5.3	-4.5	-1.3
Comoros	3.5	3.0	2.3	2.4	3.0	3.1	0.0	-0.1	-0.1	0.0
Congo, Dem. Rep.	8.5	9.0	7.7	6.3	7.7	8.5	-0.3	-2.3	-1.3	-0.5
Congo, Rep.	3.4	6.5	2.6	3.8	3.2	3.0	1.3	0.3	-2.4	-2.6
Côte d'Ivoire	9.2	9.0	8.4	8.5	8.0	8.1	0.0	0.2	0.0	0.1
Equatorial Guinea	-4.8	-3.1	-15.5	1.5	-1.0	-1.6	-6.2	-0.8	-0.6	-1.4
Eritrea	1.3	1.7	3.0	4.0	4.3	4.3	2.1	2.0	2.1	2.1
Ethiopia ^b	10.5	9.9	9.6	7.1	9.4	8.6	-0.6	-3.1	0.4	-0.4
Gabon	4.3	4.3	4.0	3.9	4.4	4.6	-0.1	-1.2	-0.9	-0.7
Gambia, The	4.8	0.9	-2.5	-4.0	4.5	5.5	-6.5	-8.5	-0.8	0.2
Ghana	7.3	4.0	3.4	5.2	8.2	7.5	0.0	-0.7	0.0	-0.7
Guinea	2.3	-0.3	0.1	4.0	5.0	6.0	-0.3	0.5	1.0	1.8
Guinea-Bissau	0.8	2.9	5.1	5.7	6.0	6.0	0.7	0.8	0.7	0.7
Kenya	5.7	5.3	5.6	5.9	6.1	6.2	0.2	0.2	0.0	0.1
Lesotho	4.6	2.0	2.7	2.6	3.7	4.0	0.1	-0.2	-0.8	-0.5
Liberia	8.7	0.7	0.3	3.8	5.3	5.6	-2.7	-1.9	-1.5	-1.2
Madagascar	2.4	3.0	3.0	3.7	3.7	3.7	-0.2	0.3	0.1	0.1
Malawi	5.2	5.7	2.8	3.0	4.1	5.4	0.0	-2.0	-1.7	-0.4
Mali	1.7	7.2	5.5	5.3	5.1	5.0	0.5	0.3	0.1	0.0
Mauritania ^c	5.5	6.9	3.0	4.2	4.5	3.3	-0.2	0.2	0.5	-0.7
Mauritius	3.2	3.6	3.6	3.8	4.0	4.0	0.1	0.1	0.3	0.3
Mozambique	7.3	7.4	6.3	5.8	7.7	8.3	0.0	-0.7	0.5	1.1
Namibia	5.7	6.4	4.5	4.2	5.4	5.5	-0.5	-1.3	-0.5	-0.4
Niger	4.6	6.9	4.2	5.4	6.3	7.0	-0.2	0.1	-3.0	1.3
Nigeria	5.4	6.3	2.7	0.8	3.5	4.0	-0.6	-3.8	-1.8	-1.3
Rwanda	4.7	7.0	7.1	6.8	7.2	7.1	-0.3	-0.8	-0.4	-0.5
Senegal	3.6	4.3	6.5	6.6	6.8	7.0	1.5	1.3	1.5	1.7
Seychelles	6.6	2.8	4.3	3.7	3.6	3.6	0.8	0.0	0.0	0.0
Sierra Leone	20.1	7.0	-21.5	6.5	5.3	5.4	-1.5	-0.1	0.0	0.1
South Africa	2.2	1.5	1.3	0.6	1.1	2.0	0.0	-0.8	-0.5	0.4
South Sudan	13.1	3.4	-6.3	3.5	6.9	7.4	-1.0	0.0	-0.1	0.4
Sudan	3.3	3.1	3.2	3.3	3.8	4.0	-0.3	-0.1	-0.1	0.1
Swaziland	2.8	2.5	1.7	1.3	1.4	1.6	0.4	0.5	0.6	0.8
Tanzania	7.3	6.8	7.0	7.2	7.1	7.1	-0.2	0.0	0.0	0.0
Togo	5.1	5.7	5.5	5.6	5.0	5.5	0.4	0.7	0.3	0.8
Uganda ^b	4.4	4.7	5.0	5.0	5.9	6.8	0.0	0.0	0.1	1.0
Zambia	6.7	4.9	3.6	3.4	4.2	5.0	0.1	-0.4	-1.2	-1.0
Zimbabwe	4.5	3.8	1.1	1.4	5.6	3.5	0.1	-1.4	2.6	0.5

Source: World Bank.

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 significantly differ at any given moment in time.

a. GDP at market prices and expenditure components are measured in constant 2010 U.S. dollars. Excludes Somalia, Central African Republic, and São Tomé and Príncipe.

b. Fiscal-year based numbers.

c. Data for Mauritania for 2013 and 2014 is provisional.

References

- Aboal, D., and E. Tacsir. 2015. "Innovation and Productivity in Services and Manufacturing: The Role of ICT Investment." Working Paper 658, Inter-American Development Bank, Washington, DC.
- African Development Bank and Organisation for Economic Co-operation and Development. 2010. "Public Resource Mobilization and Aid in Africa." In *African Economic Outlook. Paris: Organization for Economic Cooperation and Development*. Tunis: African Development Bank.
- Afshin, J., and N. Zahran. 2015. "Dynamic Panel Data Approaches to Estimating Oil Demand Elasticity." *OPEC Energy Review* 39 (1): 53–76.
- ADB (Asian Development Bank). 2016. *Asian Development Outlook 2016 Asia's Potential Growth*. Manila, Philippines: Asian Development Bank.
- Bahal, G., M. Raissi, and V. Tulin. 2015. "Crowding-Out or Crowding-In? Public and Private Investment in India." IMF Working Paper 15/264, International Monetary Fund, Washington, DC.
- Bank for International Settlements. 2016. "International Banking and Financial Market Developments." *BIS Quarterly Review*, March. Bank for International Settlements.
- Bloom, N., B. Eifert, A. Mahajan, D. McKenzie, and J. Roberts. 2011. "Does Management Matter? Evidence from India." NBER Working Paper No. 16658, National Bureau of Economic Research, Cambridge, MA.
- Brockmeyer, A., and M. Hernandez. 2016. "Taxation, Information, and Withholding: Evidence from Costa Rica." Policy Research Working Paper 7600, World Bank, Washington, DC.
- Bustos, P., G. Garber, and J. Ponticelli. 2016. "Capital Allocation Across Sectors: Evidence from a Boom in Agriculture." Working Paper 414, Banco Central Do Brasil, Brasilia.
- Callen, T., R. Cherif, F. Hasanov, A. Hegazy, and P. Khandelwal. 2014. "Economic Diversification in the GCC: Past, Present, and Future." IMF Staff Discussion Note 14/12, International Monetary Fund, Washington, DC.
- Carneiro, F., and V. Hnatkovska. 2016. "Business Cycles in the Eastern Caribbean Economies: The Role of Fiscal Policy and Interest Rates." Policy Research Working Paper 7545, World Bank, Washington, DC.
- Castillo, V., L. Figal Garone, A. Maffioli, and L. Salazar. 2015. "Tourism Policy, a Big Push to Employment: Evidence from a Multiple Synthetic Control Approach." Working Paper 572, Inter-American Development Bank, Washington, DC.
- Celasun, O., F. Grigoli, K. Honjo, J. Kapsoli, A. Klemm, B. Lissovolik, J. Luksic, et al. 2015. "Fiscal Policy in Latin America: Lessons and Legacies of the Global Financial Crisis." Staff Discussion Note 15/06, International Monetary Fund, Washington, DC.
- Chen, S., M. Kim, M. Otte, K. Wiseman, and A. Zdzienicka. 2015. "Private Sector Deleveraging and Growth Following Busts." IMF Working Paper 15/35, International Monetary Fund, Washington, DC.
- Cherif, R., and F. Hasanov. 2016. "Soaring of the Gulf Falcons: Diversification in the GCC Oil Exporters in Seven Propositions." In *Breaking the Oil Spell: The Gulf Falcons' Path to Diversification*, edited by R. Cherif, F. Hasanov, and M. Zhu. Washington, DC: International Monetary Fund.
- Dabla-Norris, E., J. Brumby, A. Kyobe, Z. Mills, and C. Papageorgiou. 2011. "Investing in Public Investment: An Index of Public Investment Efficiency." IMF Working Paper 11/37, International Monetary Fund, Washington, DC.
- Dabla-Norris, E., G. Ho, and A. Kyobe. 2016. "Structural Reforms and Productivity Growth in Emerging Market and Developing Economies." IMF Working Paper 16/15, International Monetary Fund, Washington, DC.

- De Gregorio, J. 2015. "From Rapid Recovery to Slowdown: Why Recent Economic Growth in Latin America has been Slow." Policy Brief 15-6, Peterson Institute for International Economics, Washington, DC.
- de la Torre, A., T. Didier, A. Ize, D. Lederman, and S. Schmukler. 2015. *Latin America and the Rising South: Changing World, Changing Priorities*. Washington, DC: World Bank.
- Devarajan, S., and L. Mottaghi. 2015. "MENA Quarterly Economic Brief: Economic Implications of Lifting Sanctions on Iran." World Bank, Washington, DC.
- _____. 2016. "MENA Quarterly Economic Brief: The Economic Effects of War and Peace." World Bank, Washington, DC.
- Didier, T., A. Kose, F. Ohnsorge, and L. S. Ye. 2015. "Slowdown in Emerging Markets: A Rough Patch or Hard Landing?" Policy Research Note No. 4, World Bank, Washington, DC.
- Doing Business Indicators. 2016. World Bank, Washington, DC (accessed May 2016).
- EIU (Economist Intelligence Unit). 2016a. "Caribbean Economy: Quick View – Tourism Growth Exceeds Global Rates in 2015." ViewsWire, February 25, 2016, London.
- _____. 2016b. "Americas Economy: LAC International Bond Financing Suffers Further Declines." ViewsWire, March 2, 2016, London.
- Garsous, G., D. C. Novoa, and M. Velasco. 2015. "Tax Incentives and Job Creation in the Tourism Industry of Brazil." Working Paper 644, Inter-American Development Bank, Washington, DC.
- Gruss, B. 2014. "After the Boom—Commodity Prices and Economic Growth in Latin America and the Caribbean." Working Paper 14/154, International Monetary Fund, Washington, DC.
- Hsieh, C. T., and P. J. Klenow. 2009. "Misallocation and Manufacturing TFP in China and India." *Quarterly Journal of Economics* 124 (4): 1403–1448.
- Ianchovichina, E., S. Devarajan, and C. Lakatos. 2016. "Lifting Economic Sanctions on Iran: Global Effects and Strategic Responses." Policy Research Working Paper 7549, World Bank, Washington, DC.
- Ianchovichina, E., and M. Ivanos. 2016. "Economic Effects of the Syrian War and the Spread the Islamic State on the Levant." Policy Research Working Paper 7135, World Bank, Washington, DC.
- IMF (International Monetary Fund). 2014. "Fiscal Policy and Income Inequality." IMF Policy Paper, International Monetary Fund, Washington, DC.
- _____. 2015a. "Malaysia: Selected Issues." IMF Country Report No. 15/59, International Monetary Fund, Washington, DC.
- _____. 2015b. "People's Republic of China 2015 Article IV Consultation—Staff Report." International Monetary Fund, Washington, DC.
- _____. 2015c. "Kazakhstan 2015 Article IV Consultation—Staff Report." International Monetary Fund, Washington, DC.
- _____. 2015d. "Russia 2015 Article IV Consultation—Staff Report." International Monetary Fund, Washington, DC.
- _____. 2015e. "Islamic Republic of Iran 2015 Article IV Consultation—Staff Report." International Monetary Fund, Washington, DC.
- _____. 2016a. "Indonesia 2015 Article IV Consultation—Staff Report." International Monetary Fund, Washington, DC.
- _____. 2016b. "Malaysia 2016 Article IV Consultation—Staff Report." International Monetary Fund, Washington, DC.
- _____. 2016c. *Fiscal Monitor: Fiscal Policies for*

- Innovation and Growth*. Washington, DC: International Monetary Fund.
- _____. 2016d. *Global Financial Stability Report: Potent Policies for a Successful Normalization*. Washington, DC: International Monetary Fund.
- _____. 2016e. *Regional Economic Outlook: Asia and Pacific—Building on Asia’s Strengths during Turbulent Times*. Washington, DC: International Monetary Fund.
- _____. 2016f. *Regional Economic Outlook Update: Middle East and Central Asia. April 2016*. Washington, DC: International Monetary Fund.
- _____. 2016g. “India 2016 Article IV Consultation—Staff Report.” International Monetary Fund, Washington, DC.
- _____. 2016h. “Pakistan: Tenth Review under the Extended Arrangement and Request for Modification of Performance Criteria.” IMF Country Report No. 16/94, International Monetary Fund, Washington, DC.
- India Ministry of Finance. 2016. “Economic Survey 2015–16.” India Ministry of Finance, New Delhi. http://indiabudget.nic.in/vol1_survey.asp. Accessed March 30, 2016.
- Kelegama, S., 2011. *Migration, Remittances and Development in South Asia*. New Delhi: Sage Publishing.
- Korhonen, I., and R. Nuutilainen. 2016. “A Monetary Policy Rule for Russia, or is It Rules?” BOFIT Discussion Paper 2016/2, Bank of Finland, Helsinki.
- Kugelman, M. 2015. “Easing an Energy Crisis that Won’t End.” In *Pakistan’s Interminable Energy Crisis: Is there any Way Out*, edited by M. Kugelman. Washington, DC: The Wilson Center.
- Lardy, N. R. 2016. “Reality Check on China.” In *Reality Check for the Global Economy*, edited by O. Blanchard and A. Posen: Peterson Institute for International Economics.
- Larrain, M., and S. Stumpner. 2013. “Capital Account Liberalization and Aggregate Productivity: The Role of Firm Capital Allocation.” Mimeo, Columbia Business School.
- Leduc, S., and D. J. Wilson. 2012. “Roads to Prosperity or Bridges to Nowhere? Theory and Evidence on the Impact of Public Infrastructure Investment.” NBER Working Paper No. 18042, National Bureau of Economic Research, Cambridge, MA.
- Lindner, P., and S. E. Jung. 2014. “Corporate Vulnerabilities in India and Banks’ Loan Performance.” IMF Working Paper 14/232, International Monetary Fund, Washington, DC.
- Mallick, J. 2016. “Effects of Government Investment Shocks on Private Investment and Income in India.” Working Paper No. 315, Indian Council for Research on International Economic Relations, New Delhi.
- Mitra, P., A. Hosny, G. Minasyan, M. Fischer, and G. Abajyan. 2016. “Avoiding the New Mediocre: Raising Long-Term Growth in the Middle East and Central Asia.” International Monetary Fund, Washington, DC.
- Miyajima, K. 2016. “An Empirical Investigation of Oil-Macro-Financial Linkages in Saudi Arabia.” IMF Working Paper 16/22, International Monetary Fund, Washington, DC.
- NOAA. (National Oceanic and Atmospheric Administration). 2016. “ENSO: Recent Evolution, Current Status and Predictions” (Accessed April 7, 2016).
- OECD, ECLAC and CAF. 2014. *Latin America Economic Outlook 2015: Education, Skills and Innovation for Development*. OECD, ECLAC and CAF, Paris.
- Peng, D., K. Shi, and J. Xu. 2016. “SOE and Chinese Real Business Cycle.” HKIMR Working Paper No. 02/2016, Hong Kong Institute for Monetary Research.

- Pereira, A. M., and R. Pereira. 2015. "Is All Infrastructure Investment Created Equal? The Case of Portugal." Working Paper No. 156, Department of Economics at College of William and Mary, Williamsburg, VA.
- Prasad, E. 2016. "China's Efforts to Expand the International Use of the Renminbi." Report prepared for the U.S.-China Economic and Security Review Commission.
- Rajan, R. 2016. "First Ramnath Goenka Memorial Lecture." Speech at Reserve Bank of India, New Delhi, March 12, 2016.
- Romeu, R. 2014. "The Vacation Is Over: Implications for the Caribbean of Opening U.S.-Cuba Tourism." *Economía* 14 (2): 1–27.
- Sethi, N. 2015. "Power Sector Reforms: Pakistan's Energy Crisis and Ways Forward." In *Pakistan's Interminable Energy Crisis: Is there any Way Out*, edited by M. Kugelman, 134–151. Washington, DC: The Wilson Center.
- Shah, S., and R. Chadha. 2016. "Why India's Policymakers Need to Fire on All Cylinders." *East Asia Forum* (blog), September 8. <http://www.eastasiaforum.org/2015/09/08/why-indias-policymakers-need-to-fire-on-all-cylinders/>.
- Singh, A., T. Jamasb, R. Nepal, and M. Toman. 2015. "Cross-border Electricity Cooperation in South Asia." Policy Research Working Paper 7328, World Bank, Washington, DC.
- Timilsina, G. R., M. Toman, J. Karacsonyi, and L. de Tena Diego. 2015. "How Much Could South Asia Benefit from Regional Electricity Cooperation and Trade?" Policy Research Working Paper 7341, World Bank, Washington, DC.
- Vera, L. 2015. "Venezuela 1999–2014: Macro-Policy, Oil Governance and Economic Performance." *Comparative Economic Studies* 57: 539–568.
- Wickramasekara, P. 2016. "South Asian Gulf Migration to the Gulf: A Safety Valve or a Development Strategy?" *Migration and Development* 5 (1): 99–129.
- Wijayatunga, P., and P. N. Fernando. 2013. "An Overview of Energy Cooperation in South Asia." South Asia Working Paper Series No. 19, Asian Development Bank, Manila.
- _____. 2015a. "Malaysia Economic Monitor: Immigrant Labour." World Bank, Washington, DC.
- _____. 2015b. "China Economic Update June." World Bank, Washington, DC.
- _____. 2015c. *Global Economic Prospects: Having Fiscal Space and Using It*. Washington, DC: World Bank.
- _____. 2015d. *Development Goals in an Era of Demographic Change. Global Monitoring Report 2015/2016*. Washington, DC: World Bank.
- _____. 2015e. *Doing Business: Going Beyond Efficiency*. Washington, DC: World Bank.
- _____. 2015f. "Making the Most of Cheap Oil." *South Asia Economic Focus*. Spring 2015, Washington, DC: World Bank.
- _____. 2015g. "Africa's Pulse." Volume 12. October 2015. World Bank, Washington, DC.
- _____. 2016a. "East Asia and Pacific Economic Update: Growing Challenges." April. World Bank, Washington, DC.
- _____. 2016b. *Global Economic Prospects: Spillovers amid Weak Growth*. Washington, DC: World Bank.
- _____. 2016c. "Indonesia Economic Quarterly: Private Investment Is Essential." World Bank, Washington, DC.
- _____. 2016d. "Commodity Markets Outlook, January 2016: Weak Growth in Emerging and Economies and Commodity Markets." World Bank, Washington, DC.

- _____. 2016e. *Doing Business: Measuring Regulatory Quality and Efficiency*. Washington, DC: World Bank.
- _____. 2016f. "Migration and Remittances: Recent Developments and Outlook." Migration and Development Brief 26. World Bank, Washington, DC.
- _____. 2016g. "Turkey Regular Economic Note." World Bank, Washington, DC.
- _____. 2016h. "Russia Monthly Economic Developments." World Bank, Washington, DC.
- _____. 2016i. "Europe and Central Asia Economic Update: The Impact of China on Europe and Central Asia." World Bank, Washington, DC.
- _____. 2016j. "The Short-term Economic Costs of Zika in Latin America and the Caribbean (LCR)." Mimeo, World Bank, Washington, DC.
- _____. 2016k. *The Commodity Cycle in Latin America: Mirages and Dilemmas*. April 2016. Washington, DC: World Bank.
- _____. 2016l. *Modeling Possible Effects of the Zika Virus on the Caribbean*. Mimeo, World Bank, Washington, DC.
- _____. 2016m. "Yemen Dynamic Damage Needs Assessment (DNA): First Phase Report." Unpublished report, World Bank, Washington, DC.
- _____. 2016n. *South Asia Economic Focus: Fading Tailwinds*. Spring 2016. Washington, DC: World Bank.
- _____. 2016o. "Commodity Markets Outlook, April 2016: Resource Development in an Era of Cheap Commodities." World Bank, Washington, DC.
- _____. 2016p. "Africa's Pulse." Volume 13. April 2016. World Bank, Washington, DC.
- World Economic Forum. 2015. *The Global Competitiveness Index Historical Dataset*. Geneva: World Economic Forum.



STATISTICAL APPENDIX

TABLE 1 Real GDP Growth

	Annual estimates and forecasts ^a						Quarterly growth ^b					
	2013	2014	2015e	2016f	2017f	2018f	14Q4	15Q1	15Q2	15Q3	15Q4	16Q1e
World	2.4	2.6	2.4	2.4	2.8	3.0	2.7	2.0	2.5	2.7	1.9	2.3
Advanced Economies	1.1	1.7	1.8	1.7	1.9	1.9	2.1	1.9	1.9	1.9	1.2	1.6
United States	1.5	2.4	2.4	1.9	2.2	2.1	2.1	0.6	3.9	2.0	1.4	0.8
Euro Area	-0.3	0.9	1.6	1.6	1.6	1.5	1.4	2.3	1.6	1.2	1.3	2.1
Japan	1.4	-0.1	0.6	0.5	0.5	0.7	2.1	5.4	-1.7	1.6	-1.7	1.7
United Kingdom	2.2	2.9	2.2	2.0	2.1	2.1	2.7	1.8	2.4	1.8	2.4	1.4
Emerging Market and Developing Economies	4.7	4.2	3.4	3.5	4.4	4.7	4.0	2.2	3.8	4.2	3.2	3.8
East Asia and the Pacific	7.1	6.8	6.5	6.3	6.2	6.1	6.8	5.6	6.8	6.5	6.5	5.5
Cambodia	7.4	7.1	7.0	6.9	6.8	6.8	..	..	..	..	..	..
China	7.7	7.3	6.9	6.7	6.5	6.3	..	..	..	..	..	..
Fiji	4.6	5.3	4.0	2.4	3.8	3.5	..	..	..	..	..	..
Indonesia	5.6	5.0	4.8	5.1	5.3	5.5	..	..	..	..	..	..
Lao PDR	8.5	7.5	7.0	7.0	7.0	6.8	..	..	..	..	..	..
Malaysia	4.7	6.0	5.0	4.4	4.5	4.7	6.1	5.7	3.8	3.5	5.0	4.2
Mongolia	11.6	7.9	2.3	0.7	2.7	6.2	..	..	..	..	..	..
Myanmar	8.5	8.5	7.0	7.8	8.4	8.3	..	..	..	..	..	..
Papua New Guinea	5.5	8.5	8.6	3.0	4.1	2.9	..	..	..	..	..	..
Philippines	7.1	6.1	5.8	6.4	6.2	6.2	7.4	2.9	8.9	5.7	8.8	4.5
Solomon Islands	3.0	1.5	3.3	3.0	3.3	3.0	..	..	..	..	..	..
Thailand	2.7	0.8	2.8	2.5	2.6	3.0	3.8	1.9	1.7	4.0	3.4	3.8
Timor-Leste	2.8	6.0	4.3	5.0	5.5	5.5	..	..	..	..	..	..
Vietnam	5.4	6.0	6.7	6.2	6.3	6.3	..	..	..	..	..	..
Europe and Central Asia	2.3	1.8	-0.1	1.2	2.5	2.8	1.1	-4.1	-0.2	3.4	1.7	-0.3
Albania	1.1	2.0	2.6	3.2	3.5	3.8	..	..	..	..	..	..
Armenia	3.3	3.5	3.0	1.9	2.8	2.9	..	..	..	..	..	..
Azerbaijan	5.8	2.8	1.1	-1.9	0.7	1.3	..	..	..	..	..	..
Belarus	1.1	1.6	-3.9	-3.0	-1.0	0.3	..	..	..	..	..	..
Bosnia and Herzegovina	2.3	1.1	3.2	2.6	3.1	3.5	..	..	..	..	..	..
Bulgaria	1.3	1.6	3.0	2.2	2.7	3.0	2.6	3.5	2.6	2.9	2.9	..
Croatia	-1.1	-0.4	1.6	1.9	2.0	2.4	..	..	..	..	..	..
Georgia	3.4	4.6	2.8	3.0	4.5	5.0	..	..	..	..	..	..
Hungary	1.9	3.7	2.9	2.6	2.4	2.3	1.6	5.7	1.6	1.2	2.4	-3.2
Kazakhstan	5.8	4.1	1.2	0.1	1.9	3.7	..	..	..	..	..	..
Kosovo	3.4	1.2	3.6	3.6	4.0	4.1	..	..	..	..	..	..
Kyrgyz Republic	10.9	4.0	3.5	3.4	3.1	4.1	..	..	..	..	..	..
Macedonia, FYR	2.9	3.5	3.7	3.7	4.0	4.0	..	..	..	..	..	..
Moldova	9.4	4.6	-0.5	0.5	4.0	4.5	..	..	..	..	..	..
Montenegro	3.5	1.8	3.4	3.7	3.1	3.0	..	..	..	..	..	..
Poland	1.3	3.3	3.6	3.7	3.5	3.5	2.8	5.3	2.0	3.2	5.3	-0.4
Romania	3.4	2.8	3.7	4.0	3.7	3.4	3.6	4.9	0.0	6.1	4.5	6.6
Russian Federation	1.3	0.7	-3.7	-1.2	1.4	1.8	..	..	..	..	..	..
Serbia	2.6	-1.8	0.8	1.8	2.3	3.5	..	..	..	..	..	..
Tajikistan	7.4	6.7	4.2	4.0	4.8	5.3	..	..	..	..	..	..
Turkey	4.2	3.0	4.0	3.5	3.5	3.6	5.6	4.5	5.3	4.8	3.0	..
Turkmenistan	10.2	10.3	6.5	5.0	5.0	5.0	..	..	..	..	..	..
Ukraine	0.0	-6.6	-9.9	1.0	2.0	3.0	..	..	..	..	..	..
Uzbekistan	8.0	8.1	8.0	7.3	7.2	7.2	..	..	..	..	..	..

TABLE 1 Real GDP Growth (continued)

	Annual estimates and forecasts ^a						Quarterly growth ^b					
	2013	2014	2015e	2016f	2017f	2018f	14Q4	15Q1	15Q2	15Q3	15Q4	16Q1e
Latin America and the Caribbean	2.9	1.0	-0.7	-1.3	1.2	2.1	1.8	-1.1	-3.0	-1.5	-1.3	0.9
Argentina	2.9	0.5	2.1	-0.5	3.1	3.0	1.5	..	..	..	..	..
Belize	1.3	4.1	0.9	0.8	1.8	2.2	..	..	..	..	..	..
Bolivia	6.8	5.5	4.8	3.7	3.4	3.4	..	..	..	..	..	..
Brazil	3.0	0.1	-3.8	-4.0	-0.2	0.8	0.9	-4.5	-7.7	-6.2	-5.2	-1.1
Chile	4.3	1.8	2.1	1.9	2.1	2.3	4.6	3.9	0.0	1.3	0.4	5.3
Colombia	4.9	4.4	3.1	2.5	3.0	3.5	2.4	3.1	3.2	4.3	2.4	..
Costa Rica	3.4	3.5	2.8	3.3	3.6	4.0	..	..	..	..	..	..
Dominica	1.7	3.4	-4.0	2.5	2.0	2.0	..	..	..	..	..	..
Dominican Republic	4.8	7.4	6.9	5.0	4.3	4.0	..	..	..	..	..	..
Ecuador	4.6	3.7	0.3	-4.0	-4.0	0.0	1.3	-0.5	-4.1	-0.6	0.2	..
El Salvador	1.8	2.0	2.5	2.2	2.3	2.3	..	..	..	..	..	..
Guatemala	3.7	4.2	4.1	3.5	3.5	3.6	..	..	..	..	..	..
Guyana	5.2	3.8	3.0	4.0	3.9	3.8	..	..	..	..	..	..
Haiti ^c	4.2	2.8	1.2	0.9	1.9	2.2	..	..	..	..	..	..
Honduras	2.8	3.1	3.6	3.4	3.5	3.5	3.9	3.8	1.9	5.7	5.1	..
Jamaica	0.5	0.7	0.9	1.5	2.2	2.6	..	..	..	..	..	..
Mexico	1.4	2.3	2.5	2.5	2.8	3.0	2.9	1.8	2.5	3.2	2.2	3.3
Nicaragua	4.5	4.7	4.9	4.4	4.2	4.1	..	..	..	..	..	..
Panama	8.4	6.2	5.8	6.0	6.1	6.2	..	..	..	..	..	..
Paraguay	14.0	4.7	3.0	3.0	3.2	3.4	..	..	..	..	..	..
Peru	5.9	2.4	3.3	3.5	3.5	3.2	..	..	..	..	..	..
St. Lucia	-1.9	-0.7	1.6	1.5	2.0	2.0	..	..	..	..	..	..
St. Vincent and the Grenadines	2.3	-0.2	1.8	2.4	3.1	3.1	..	..	..	..	..	..
Trinidad and Tobago	2.3	-1.0	-2.0	-2.0	2.0	2.5	..	..	..	..	..	..
Uruguay	4.6	3.2	1.0	0.7	1.6	2.5	..	..	..	..	..	..
Venezuela, RB	1.3	-3.9	-5.7	-10.1	-3.4	1.6	..	..	..	..	..	..
Middle East and North Africa	2.0	2.9	2.6	2.9	3.5	3.6	3.7	3.0	6.8	0.5	0.3	..
Algeria	2.8	4.1	2.9	3.4	3.1	2.7	..	..	..	..	..	..
Bahrain	5.4	4.5	2.9	2.2	2.0	1.9	..	..	..	..	..	..
Djibouti	5.0	6.0	6.5	6.5	7.0	7.0	..	..	..	..	..	..
Egypt, Arab Rep. ^c	2.1	2.2	4.2	3.3	4.2	4.6	..	..	..	..	..	..
Iran, Islamic Rep.	-1.9	4.3	1.6	4.4	4.9	4.7	..	..	..	..	..	..
Iraq	6.6	-2.1	2.4	7.2	4.7	5.2	..	..	..	..	..	..
Jordan	2.8	3.1	2.4	3.0	3.3	3.6	..	..	..	..	..	..
Kuwait	1.2	-1.6	-1.3	1.3	1.6	2.4	..	..	..	..	..	..
Lebanon	3.0	1.8	1.5	1.8	2.3	2.5	..	..	..	..	..	..
Libya	-13.6	-24.0	-10.2	14.0	40.0	20.0	..	..	..	..	..	..
Morocco	4.7	2.4	4.4	1.7	3.4	3.6	5.4	-3.5	10.8	6.3	8.0	-15.9
Oman	3.9	2.9	3.3	1.6	1.9	2.6	..	..	..	..	..	..
Qatar	4.6	4.1	3.9	3.3	3.5	4.0	..	..	..	..	..	..
Saudi Arabia	2.7	3.6	3.4	1.9	2.0	2.3	..	..	..	..	..	..
Tunisia	2.4	2.3	0.8	1.8	2.5	3.0	..	..	..	..	..	..
United Arab Emirates	4.3	4.6	3.4	2.0	2.4	3.0	..	..	..	..	..	..
West Bank and Gaza	2.2	-0.2	3.5	3.3	3.5	3.6	..	..	..	..	..	..

TABLE 1 Real GDP Growth (continued)

	Annual estimates and forecasts ^a						Quarterly growth ^b					
	2013	2014	2015e	2016f	2017f	2018f	14Q4	15Q1	15Q2	15Q3	15Q4	16Q1e
South Asia	6.1	6.8	7.0	7.1	7.2	7.3	2.2	5.9	11.9	9.4	2.0	9.2
Afghanistan	2.0	1.3	1.5	1.9	2.9	3.6	..	..	..	..	..	..
Bangladesh ^c	6.0	6.1	6.5	6.3	6.8	6.0	..	..	..	..	..	..
Bhutan ^c	3.9	5.8	6.7	6.8	8.0	8.0	..	..	..	..	..	..
India ^c	6.6	7.2	7.6	7.6	7.7	7.7	..	..	..	..	..	..
Maldives	4.7	6.5	1.9	3.5	3.9	4.6	..	..	..	..	..	..
Nepal ^c	3.8	6.0	2.7	0.6	4.7	4.4	..	..	..	..	..	..
Pakistan ^{c,d}	3.7	4.0	4.2	4.5	4.8	5.1	..	..	..	..	..	..
Sri Lanka	3.4	4.9	4.8	5.3	5.3	5.3	..	..	..	..	..	..
Sub-Saharan Africa	4.8	4.5	3.0	2.5	3.9	4.4	4.6	0.6	0.0	3.3	1.3	..
Angola	6.8	3.9	2.8	0.9	3.1	3.4	..	..	..	..	..	..
Benin	5.6	5.4	5.2	5.5	5.8	6.1	..	..	..	..	..	..
Botswana ^c	9.3	4.4	-0.3	3.7	4.3	4.4	..	..	..	..	..	..
Burkina Faso	6.7	4.0	4.0	5.2	5.5	6.0	..	..	..	..	..	..
Burundi	4.6	4.7	-2.5	3.0	3.5	4.0	..	..	..	..	..	..
Cabo Verde	1.0	1.8	1.0	1.5	1.9	2.2	..	..	..	..	..	..
Cameroon	5.6	5.9	6.2	6.0	6.1	6.2	..	..	..	..	..	..
Chad	5.7	6.9	1.8	-0.4	1.6	5.2	..	..	..	..	..	..
Comoros	3.5	3.0	2.3	2.4	3.0	3.1	..	..	..	..	..	..
Congo, Dem. Rep.	8.5	9.0	7.7	6.3	7.7	8.5	..	..	..	..	..	..
Congo, Rep.	3.4	6.5	2.6	3.8	3.2	3.0	..	..	..	..	..	..
Côte d'Ivoire	9.2	9.0	8.4	8.5	8.0	8.1	..	..	..	..	..	..
Equatorial Guinea	-4.8	-3.1	-15.5	1.5	-1.0	-1.6	..	..	..	..	..	..
Eritrea	1.3	1.7	3.0	4.0	4.3	4.3	..	..	..	..	..	..
Ethiopia ^c	10.5	9.9	9.6	7.1	9.4	8.6	..	..	..	..	..	..
Gabon	4.3	4.3	4.0	3.9	4.4	4.6	..	..	..	..	..	..
Gambia, The	4.8	0.9	-2.5	-4.0	4.5	5.5	..	..	..	..	..	..
Ghana	7.3	4.0	3.4	5.2	8.2	7.5	..	..	..	..	..	..
Guinea	2.3	-0.3	0.1	4.0	5.0	6.0	..	..	..	..	..	..
Guinea-Bissau	0.8	2.9	5.1	5.7	6.0	6.0	..	..	..	..	..	..
Kenya	5.7	5.3	5.6	5.9	6.1	6.2	7.5	2.1	9.3	5.9	13.4	..
Lesotho	4.6	2.0	2.7	2.6	3.7	4.0	..	..	..	..	..	..
Liberia	8.7	0.7	0.3	3.8	5.3	5.6	..	..	..	..	..	..
Madagascar	2.4	3.0	3.0	3.7	3.7	3.7	..	..	..	..	..	..
Malawi	5.2	5.7	2.8	3.0	4.1	5.4	..	..	..	..	..	..
Mali	1.7	7.2	5.5	5.3	5.1	5.0	..	..	..	..	..	..
Mauritania ^e	5.5	6.9	3.0	4.2	4.5	3.3	..	..	..	..	..	..
Mauritius	3.2	3.6	3.6	3.8	4.0	4.0	..	..	..	..	..	..
Mozambique	7.3	7.4	6.3	5.8	7.7	8.3	..	..	..	..	..	..
Namibia	5.7	6.4	4.5	4.2	5.4	5.5	..	..	..	..	..	..
Niger	4.6	6.9	4.2	5.4	6.3	7.0	..	..	..	..	..	..
Nigeria	5.4	6.3	2.7	0.8	3.5	4.0	..	..	..	..	..	..
Rwanda	4.7	7.0	7.1	6.8	7.2	7.1	..	..	..	..	..	..

TABLE 1 Real GDP Growth (continued)

	Annual estimates and forecasts ^a						Quarterly growth ^b					
	2013	2014	2015e	2016f	2017f	2018f	14Q4	15Q1	15Q2	15Q3	15Q4	16Q1e
Sub-Saharan Africa (continued)												
Senegal	3.6	4.3	6.5	6.6	6.8	7.0	..	..	..	..	..	..
Seychelles	6.6	2.8	4.3	3.7	3.6	3.6	..	..	..	..	..	..
Sierra Leone	20.1	7.0	-21.5	6.5	5.3	5.4	..	..	..	..	..	..
South Africa	2.2	1.5	1.3	0.6	1.1	2.0	4.1	1.9	-2.0	0.3	0.4	..
South Sudan	13.1	3.4	-6.3	3.5	6.9	7.4	..	..	..	..	..	..
Sudan	3.3	3.1	3.2	3.3	3.8	4.0	..	..	..	..	..	..
Swaziland	2.8	2.5	1.7	1.3	1.4	1.6	..	..	..	..	..	..
Tanzania	7.3	6.8	7.0	7.2	7.1	7.1	..	..	..	..	..	..
Togo	5.1	5.7	5.5	5.6	5.0	5.5	..	..	..	..	..	..
Uganda ^c	4.4	4.7	5.0	5.0	5.9	6.8	..	..	..	..	..	..
Zambia	6.7	4.9	3.6	3.4	4.2	5.0	..	..	..	..	..	..
Zimbabwe	4.5	3.8	1.1	1.4	5.6	3.5	..	..	..	..	..	..

Source: World Bank and Haver Analytics.

a. Aggregate growth rates calculated using constant 2010 U.S. dollars GDP weights.

b. Quarter-over-quarter growth, seasonally adjusted and annualized. Regional averages are calculated based on data from following countries.

East Asia and the Pacific: China, Indonesia, Malaysia, Mongolia, Philippines, Thailand, and Vietnam.

Europe and Central Asia: Albania, Azerbaijan, Belarus, Bulgaria, Croatia, Georgia, Hungary, Kazakhstan, Macedonia, FYR, Poland, Romania, Russian Federation, Serbia, Turkey, and Ukraine.

Latin America and the Caribbean: Argentina, Bolivia, Brazil, Chile, Colombia, Costa Rica, Ecuador, El Salvador, Guatemala, Honduras, Mexico, Nicaragua, Paraguay, Peru, and Uruguay.

Middle East and North Africa: Bahrain, Egypt, Arab Rep., Iran, Islamic Rep., Jordan, Morocco, Qatar, Saudi Arabia, and Tunisia.

South Asia: India and Sri Lanka.

Sub-Saharan Africa: Botswana, Kenya, Nigeria, and South Africa.

c. Annual GDP is on fiscal year basis, as per reporting practice in the country.

d. GDP data for Pakistan are based on factor cost.

e. Data for Mauritania for 2013 and 2014 is provisional.

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Global growth prospects have deteriorated in 2016. Emerging market and developing economies are facing increased external headwinds, including softer growth in advanced economies. Commodity exporters are struggling with particularly challenging conditions, while commodity importers are thus far showing greater resilience. Global growth is expected to gradually accelerate in 2017-18, but downside risks to the outlook are increasingly pronounced.

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This year marks the 25th anniversary of the *Global Economic Prospects*. The *Global Economic Prospects* is a World Bank Group Flagship Report that has, since its inception in 1991, examined international economic developments and prospects, with a special focus on emerging market and developing economies. It has also included analytical essays on a wide range of topical macroeconomic, financial, and structural policy challenges faced by these economies. It is published on a semiannual basis (in January and June). The January edition includes in-depth analyses of topical policy challenges, while the June edition contains shorter analytical essays.