

The COVID-19 pandemic is inflicting high and rising human costs worldwide. Protecting lives and allowing health care systems to cope have required isolation, lockdowns, and widespread closures to slow the spread of the virus. The health crisis is therefore having a severe impact on economic activity. As a result of the pandemic, the global economy is projected to contract sharply by –3 percent in 2020, much worse than during the 2008–09 financial crisis (Table 1.1). In a baseline scenario, which assumes that the pandemic fades in the second half of 2020 and containment efforts can be gradually unwound, the global economy is projected to grow by 5.8 percent in 2021 as economic activity normalizes, helped by policy support.

There is extreme uncertainty around the global growth forecast. The economic fallout depends on factors that interact in ways that are hard to predict, including the pathway of the pandemic, the intensity and efficacy of containment efforts, the extent of supply disruptions, the repercussions of the dramatic tightening in global financial market conditions, shifts in spending patterns, behavioral changes (such as people avoiding shopping malls and public transportation), confidence effects, and volatile commodity prices. Many countries face a multi-layered crisis comprising a health shock, domestic economic disruptions, plummeting external demand, capital flow reversals, and a collapse in commodity prices. Risks of a worse outcome predominate.

Effective policies are essential to forestall worse outcomes. Necessary measures to reduce contagion and protect lives will take a short-term toll on economic activity but should also be seen as an important investment in long-term human and economic health. The immediate priority is to contain the fallout from the COVID-19 outbreak, especially by increasing health care expenditures to strengthen the capacity and resources of the health care sector while adopting measures that reduce contagion. Economic policies will also need to cushion the impact of the decline in activity on people, firms, and the financial system; reduce persistent scarring effects from the unavoidable severe slowdown; and ensure that the economic recovery can begin quickly once the pandemic fades.

Because the economic fallout reflects particularly acute shocks in specific sectors, policymakers will need to implement substantial targeted fiscal, monetary, and

financial market measures to support affected households and businesses. Such actions will help maintain economic relationships throughout the shutdown and are essential to enable activity to gradually normalize once the pandemic abates and containment measures are lifted. The fiscal response in affected countries has been swift and sizable in many advanced economies (such as Australia, France, Germany, Italy, Japan, Spain, the United Kingdom, and the United States). Many emerging market and developing economies (such as China, Indonesia, and South Africa) have also begun providing or announcing significant fiscal support to heavily impacted sectors and workers. Fiscal measures will need to be scaled up if the stoppages to economic activity are persistent, or the pickup in activity as restrictions are lifted is too weak. Economies facing financing constraints to combat the pandemic and its effects may require external support. Broad-based fiscal stimulus can preempt a steeper decline in confidence, lift aggregate demand, and avert an even deeper downturn. But it would most likely be more effective once the outbreak fades and people are able to move about freely.

The significant actions of large central banks in recent weeks include monetary stimulus and liquidity facilities to reduce systemic stress. These actions have supported confidence and contribute to limiting the amplification of the shock, thus ensuring that the economy is better placed to recover. The synchronized actions can magnify their impact on individual economies and will also help generate the space for emerging market and developing economies to use monetary policy to respond to domestic cyclical conditions. Supervisors should also encourage banks to renegotiate loans to distressed households and firms while maintaining a transparent assessment of credit risk.

Strong multilateral cooperation is essential to overcome the effects of the pandemic, including to help financially constrained countries facing twin health and funding shocks, and for channeling aid to countries with weak health care systems. Countries urgently need to work together to slow the spread of the virus and to develop a vaccine and therapies to counter the disease. Until such medical interventions become available, no country is safe from the pandemic (including a recurrence after the initial wave subsides) as long as transmission occurs elsewhere.

Key Considerations for the Forecast

The nature of the shock. The COVID-19 pandemic differs markedly from past triggers of downturns. Infections reduce labor supply. Quarantines, regional lockdowns, and social distancing—which are essential to contain the virus (see, for example, [Ferguson, Ghani, and others 2020](#))—curtail mobility, with particularly acute effects on sectors that rely on social interactions (such as travel, hospitality, entertainment, and tourism). Workplace closures disrupt supply chains and lower productivity. Layoffs, income declines, fear of contagion, and heightened uncertainty make people spend less, triggering further business closures and job losses. There is a de facto shutdown of a significant portion of the economy. Health care expenditures necessarily rise sharply above what had been expected. These domestic disruptions spill over to trading partners through trade and global value chain linkages, adding to the overall macroeconomic effects.

Amplification channels. The initial shock amplifies through channels familiar from past severe downturns and crises. Financial markets are sharply repricing with the increase in uncertainty and the sudden materialization of extensive disruptions to economic activity. The flight to safe assets and rush to liquidity have put upward pressure on borrowing costs and credit has become more scarce, aggravating financial strains. Rising unemployment increases the risk of widespread defaults. Lenders—worried that consumers and firms will not be able to repay—hold back on extending credit. Asset fire sales may ensue as financial intermediaries liquidate their holdings to meet funding withdrawal requests from their investors, exacerbating the market turmoil. The effects can be further magnified through international financial linkages. In particular, countries reliant on external financing experience sudden stops and disorderly market conditions. Moreover, as weaker global demand drives down commodity prices, commodity exporters face pressure on their public finances and on real economic activity. These additional layers add to the direct economic fallout of the health crisis, and the full extent of disruptions to economic activity can be particularly severe as a result.

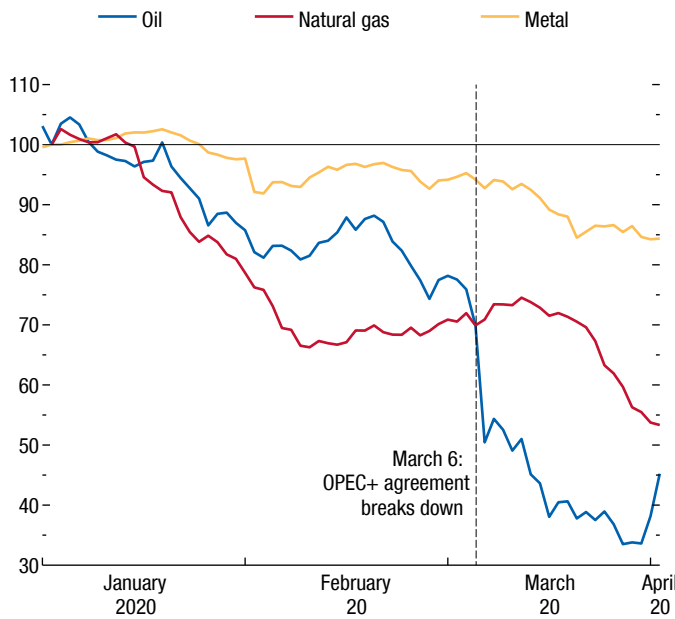
Early indications of severe economic fallout. The economic impact is already visible in the countries most affected by the outbreak. For example, in China, industrial production, retail sales, and fixed asset investment dropped dramatically in January and February. The extended Lunar New Year holidays,

gradual reopening of nonessential businesses across the country, and low demand for services as a result of social distancing imply a significant loss of working days and a severe contraction in first-quarter economic activity. As more countries are forced to respond to the pandemic with stringent quarantine and containment efforts of the kind seen, for example, in China, Italy, and Spain, this will necessarily entail similar sharp economic activity slowdowns from closures of nonessential workplaces, travel restrictions, and behavioral changes. Initial jobless claims in the United States during the fourth week of March, for example, exceeded 6.6 million, compared with about 280,000 just two weeks before. And surveys of purchasing managers pointed to plummeting economic activity in March in the euro area, Japan, and the United States. However, up-front containment measures are essential to slow the spread of the virus and allow health care systems to cope and to help pave the way for an earlier and more robust resumption of economic activity. Uncertainty and reduced demand for services could be even worse in a scenario of greater spread without social distancing.

A sharp drop in commodity prices. The fast deterioration of the global economic outlook as the epidemic has spread and the breakdown of the OPEC+ (Organization of the Petroleum Exporting Countries, including Russia and other non-OPEC oil exporters) agreement among oil suppliers have weighed heavily on commodity prices (Figure 1.1; Commodity Special Feature). From mid-January to end-March, base metal prices fell about 15 percent, natural gas prices declined by 38 percent, and crude oil prices dropped by about 65 percent (a fall of about \$40 a barrel). Futures markets indicate that oil prices will remain below \$45 a barrel through 2023, some 25 percent lower than the 2019 average price, reflecting persistently weak demand. These developments are expected to weigh heavily on oil exporters with undiversified revenues and exports—particularly on high-cost producers—and compound the shock from domestic infections, tighter global financial conditions, and weaker external demand. At the same time, lower oil prices will benefit oil-importing countries.

Significantly tighter financial conditions. Financial market sentiment has deteriorated since mid-February as concerns about the global spread of COVID-19 and its economic fallout have grown. The oil price plunge in early March took a further toll, exacerbating the decline in sentiment. As discussed in the April 2020

Figure 1.1. Commodity Prices
(January 2, 2020 = 100)



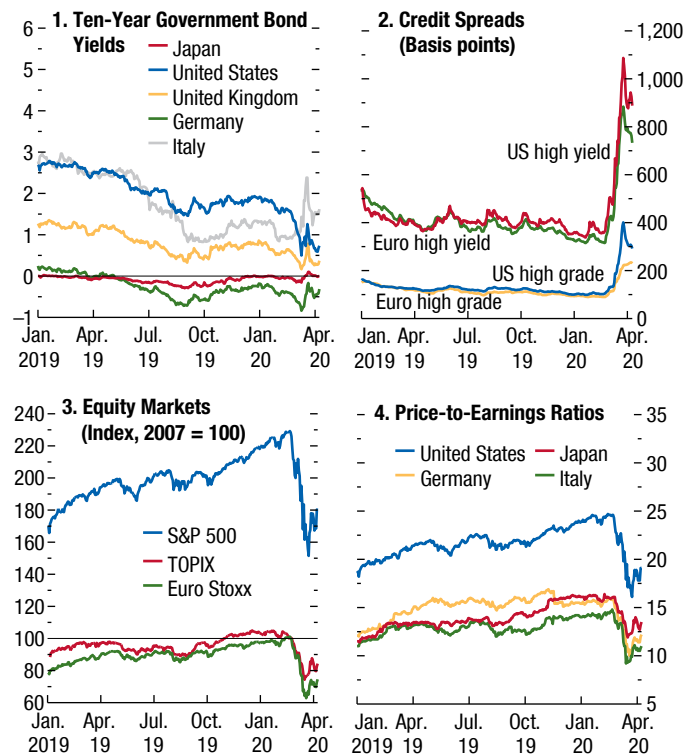
Sources: IMF, Primary Commodity Price System; and IMF staff calculations.
Note: OPEC+ = Organization of the Petroleum Exporting Countries, including Russia.

Global Financial Stability Report, financial conditions in advanced as well as emerging market economies are significantly tighter than at the time of the October 2019 *World Economic Outlook* (WEO) forecast. Equity markets have sold off dramatically; high-yield corporate and emerging market sovereign spreads have widened significantly (Figures 1.2 and 1.3); and portfolio flows to emerging market funds have reversed, particularly in the case of hard currency bonds and equities. Signs of dollar funding shortages have emerged amid the general rebalancing of portfolios toward cash and safe assets.

Currency movements have generally reflected these shifts in risk sentiment. The currencies of commodity exporters with flexible exchange rates among emerging market and advanced economies have depreciated sharply since the beginning of the year, while the US dollar has appreciated by some 8½ percent in real effective terms as of April 3, the yen by about 5 percent, and the euro by some 3 percent (Figure 1.4).

The rapidly worsening risk sentiment has prompted a series of central bank rate cuts, liquidity support actions, and, in a number of cases, large asset purchase programs, including from the US Federal Reserve, European Central Bank, Bank of England, Bank of

Figure 1.2. Advanced Economies: Monetary and Financial Market Conditions
(Percent, unless noted otherwise)

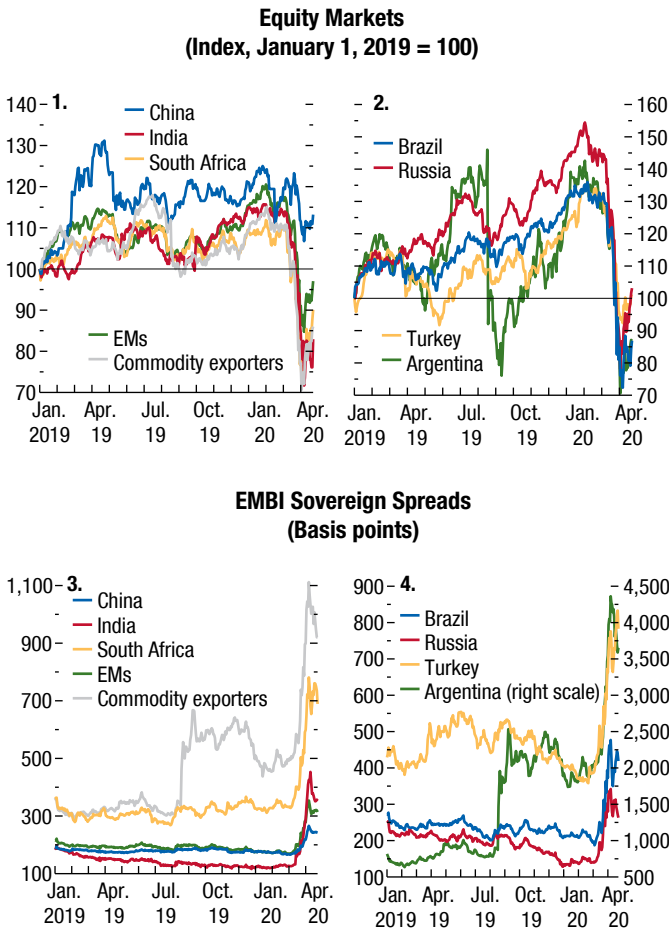


Sources: Bloomberg Finance L.P.; Haver Analytics; Thomson Reuters Datastream; and IMF staff calculations.
Note: S&P = Standard & Poor's; TOPIX = Tokyo Stock Price Index; US = United States. Data are through April 7, 2020.

Japan, Bank of Canada, and Reserve Bank of Australia, as well as from emerging market central banks in Brazil, China, India, Malaysia, Mexico, the Philippines, Saudi Arabia, South Africa, Thailand, and Turkey—which will help partially offset the tightening in financial conditions. Moreover, several central banks have activated bilateral swap lines to improve access to international liquidity across jurisdictions.¹ Nonethe-

¹The Bank of Canada, the Bank of England, the Bank of Japan, the European Central Bank, the US Federal Reserve, and the Swiss National Bank announced a coordinated action on March 15, 2020, to enhance the provision of liquidity through the standing US-dollar-liquidity swap line arrangements. On March 19, the Federal Reserve established temporary US dollar swap lines with the Reserve Bank of Australia, Banco Central do Brasil, Danmarks Nationalbank, Bank of Korea, Banco de Mexico, Norges Bank, Reserve Bank of New Zealand, Monetary Authority of Singapore, and Sveriges Riksbank. On March 31, the Federal Reserve launched a temporary repurchase agreement facility to enable a wide range of central banks and monetary authorities to exchange US Treasury securities for US dollars.

Figure 1.3. Emerging Market Economies: Equity Markets and Credit



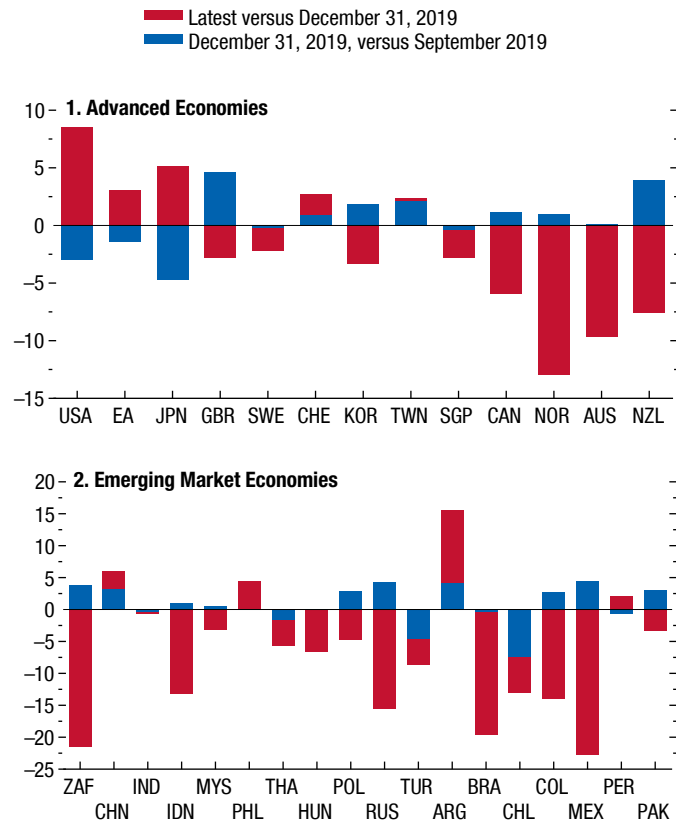
Sources: Haver Analytics; Thomson Reuters Datastream; and IMF staff calculations.
 Note: Commodity exporters = Argentina, Chile, Peru, Russia, South Africa; EMBI = J.P. Morgan Emerging Markets Bond Index; EMs = emerging market economies. Data are through April 7, 2020.

less, the significant tightening of financial conditions will further dampen economic activity in the near term, adding to the direct macroeconomic fallout of the health crisis.

COVID-19 Pandemic Will Have a Severe Impact on Global Growth

There is extreme uncertainty around the global growth forecast because the economic fallout depends on uncertain factors that interact in ways hard to predict. These include, for example, the pathway of the pandemic, the progress in finding a vaccine and therapies, the intensity and efficacy of containment efforts,

Figure 1.4. Real Effective Exchange Rate Changes, September 2019–April 2020 (Percent)



Source: IMF staff calculations.
 Note: EA = euro area. Data labels use International Organization for Standardization (ISO) country codes. Latest data available are for April 3, 2020.

the extent of supply disruptions and productivity losses, the repercussions of the dramatic tightening in global financial market conditions, shifts in spending patterns, behavioral changes (such as people avoiding shopping malls and public transportation), confidence effects, and volatile commodity prices.

Baseline Assumptions

Pandemic. In the baseline scenario, the pandemic is assumed to fade in the second half of 2020, allowing for a gradual lifting of containment measures.

Duration of shutdown. Considering the spread of the virus to most countries as of the end of March 2020, the global growth forecast assumes that all countries experience disruptions to economic activity due to some combination of the above-mentioned factors.

The disruptions are assumed to be concentrated mostly in the second quarter of 2020 for almost all countries except China (where it is in the first quarter), with a gradual recovery thereafter as it takes some time for production to ramp up after the shock. Countries experiencing severe epidemics are assumed to lose about 8 percent of working days in 2020 over the duration of containment efforts and subsequent gradual loosening of restrictions.² Other countries are also assumed to experience disruptions to economic activity related to containment measures and social distancing, which, on average, are assumed to entail a loss of about 5 percent of working days in 2020 over the period of shutdown and gradual reopening. These losses are compounded by those generated by tighter global financial conditions, weaker external demand, and terms-of-trade losses described below.

Financial conditions. The tight financial conditions for advanced and emerging market economies discussed above are expected to remain in place for the first half of the year. Consistent with the assumed path of the pandemic and gradual normalization in economic activity, financial conditions are expected to ease in the second half of 2020.

Commodity prices. Based on futures market pricing at the end of March 2020, the average petroleum spot prices per barrel are estimated at \$35.60 in 2020 and \$37.90 in 2021. For the years thereafter, oil futures curves show that prices are expected to increase toward \$45 but stay below their average 2019 level (\$61.40). Metals prices are expected to decrease 15.0 percent in 2020 and 5.6 percent in 2021. Food prices are projected to decrease 1.8 percent in 2020 and then increase 0.4 percent in 2021.

Global Economy in Recession in 2020

Global growth is projected at –3.0 percent in 2020, an outcome far worse than during the 2009 global financial crisis. The growth forecast is marked down by more than 6 percentage points relative to the October 2019 WEO and January 2020 WEO Update

²The loss of working days is smaller than the number of days severe containment measures are in place given that essential businesses continue to operate during the shutdown. The duration of containment efforts will vary across countries based on the intensity of the measures (for example, cancellation of public gatherings and school closures versus stay-at-home orders and lockdowns enforced with penalties).

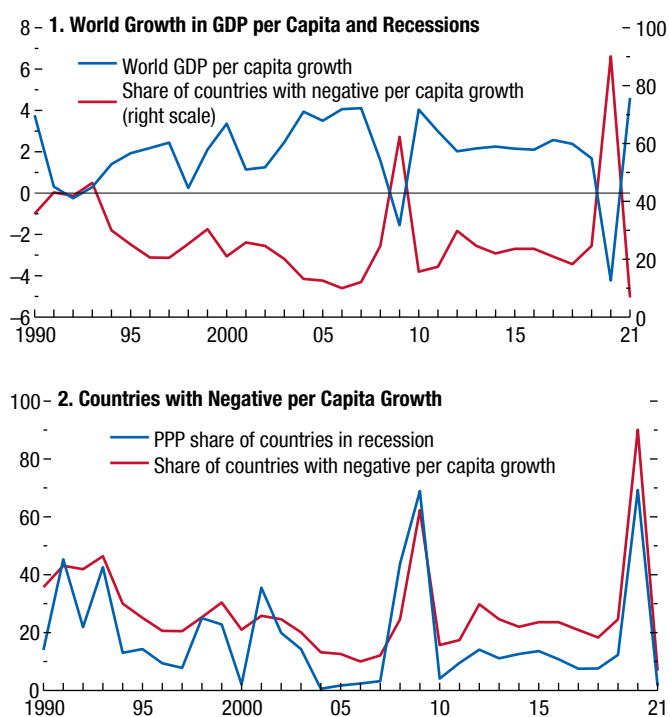
projections—an extraordinary revision over such a short period of time.

Growth in the *advanced economy* group—where several economies are experiencing widespread outbreaks and deploying containment measures—is projected at –6.1 percent in 2020. Most economies in the group are forecast to contract this year, including the United States (–5.9 percent), Japan (–5.2 percent), the United Kingdom (–6.5 percent), Germany (–7.0 percent), France (–7.2 percent), Italy (–9.1 percent), and Spain (–8.0 percent). In parts of Europe, the outbreak has been as severe as in China’s Hubei province. Although essential to contain the virus, lockdowns and restrictions on mobility are extracting a sizable toll on economic activity. Adverse confidence effects are likely to further weigh on economic prospects.

Among *emerging market and developing economies*, all countries face a health crisis, severe external demand shock, dramatic tightening in global financial conditions, and a plunge in commodity prices, which will have a severe impact on economic activity in commodity exporters. Overall, the group of emerging market and developing economies is projected to contract by –1.0 percent in 2020; excluding China, the growth rate for the group is expected to be –2.2 percent. Even in countries not experiencing widespread detected outbreaks as of the end of March (and therefore not yet deploying containment measures of the kind seen in places with outbreaks) the significant downward revision to the 2020 growth projection reflects large anticipated domestic disruptions to economic activity from COVID-19. The 2020 growth rate for the group excluding China is marked down 5.8 percentage points relative to the January WEO projection. As discussed below, growth would be even lower if more stringent containment measures are necessitated by a wider spread of the virus among these countries.

Emerging Asia is projected to be the only region with a positive growth rate in 2020 (1.0 percent), albeit more than 5 percentage points below its average in the previous decade. In China, indicators such as industrial production, retail sales, and fixed asset investment suggest that the contraction in economic activity in the first quarter could have been about 8 percent year over year. Even with a sharp rebound in the remainder of the year and sizable fiscal support, the economy is projected to grow at a subdued 1.2 percent in 2020. Several economies in the region are forecast to grow at modest rates, including India (1.9 percent)

Figure 1.5. World Growth in GDP per Capita and Recessions (Percent)



Source: IMF staff estimates.
Note: PPP = purchasing-power-parity.

and Indonesia (0.5 percent), and others are forecast to experience large contractions (Thailand, -6.7 percent).

Other regions are projected to experience severe slowdowns or outright contractions in economic activity, including Latin America (-5.2 percent)—with Brazil's growth forecast at -5.3 percent and Mexico's at -6.6 percent; emerging and developing Europe (-5.2 percent)—with Russia's economy projected to contract by -5.5 percent; the Middle East and Central Asia (-2.8 percent)—with Saudi Arabia's growth forecast at -2.3 percent, with non-oil GDP contracting by 4 percent, and most economies, including Iran, expected to contract; and sub-Saharan Africa (-1.6 percent)—with growth in Nigeria and South Africa expected at -3.4 percent and -5.8 percent, respectively. Following the dramatic decline in oil prices since the beginning of the year, near-term prospects for oil-exporting countries have deteriorated significantly: the growth rate for the group is projected to drop to -4.4 percent in 2020.

Figure 1.5 shows that a much larger fraction of countries is expected to experience negative per capita

income growth in 2020 than at the time of the 2009 financial crisis. These countries account for a broadly similar purchasing-power-parity share of the world economy compared with the group that experienced negative per capita income growth in 2009.

Uncertain Recovery in 2021: Predicated on Pandemic Fading, Helped by Policy Support

Global growth is expected to rebound to 5.8 percent in 2021, well above trend, reflecting the normalization of economic activity from very low levels. The advanced economy group is forecast to grow at 4.5 percent, while growth for the emerging market and developing economy group is forecast at 6.6 percent. In comparison, in 2010 global growth rebounded to 5.4 percent from -0.1 percent in 2009.

The rebound in 2021 depends critically on the pandemic fading in the second half of 2020, allowing containment efforts to be gradually scaled back and restoring consumer and investor confidence. Significant economic policy actions have already been taken across the world, focused on accommodating public health care requirements, while limiting the amplification to economic activity and the financial system. The projected recovery assumes that these policy actions are effective in preventing widespread firm bankruptcies, extended job losses, and system-wide financial strains. Nonetheless, as Figure 1.6 shows, the level of GDP at the end of 2021 in both advanced and emerging market and developing economies is expected to remain below the pre-virus baseline (January 2020 *WEO Update*).

As with the size of the downturn, there is extreme uncertainty around the strength of the recovery. Some aspects that underpin the rebound may not materialize, and worse global growth outcomes are possible—for example, a deeper contraction in 2020 and a shallower recovery in 2021—depending on the pathway of the pandemic and the severity of the associated economic and financial consequences, as discussed in the next section.

Severe Risks of a Worse Outcome

Even after the severe downgrade to global growth, risks to the outlook are on the downside. The pandemic could prove more persistent than assumed in the baseline. Moreover, the effects of the health crisis on economic activity and financial markets could turn out

Table 1.1. Overview of the World Economic Outlook Projections
(Percent change, unless noted otherwise)

	2019	Projections		Difference from January 2020 WEO Update ¹		Difference from October 2019 WEO ¹	
		2020	2021	2020	2021	2020	2021
World Output	2.9	-3.0	5.8	-6.3	2.4	-6.4	2.2
Advanced Economies	1.7	-6.1	4.5	-7.7	2.9	-7.8	2.9
United States	2.3	-5.9	4.7	-7.9	3.0	-8.0	3.0
Euro Area	1.2	-7.5	4.7	-8.8	3.3	-8.9	3.3
Germany	0.6	-7.0	5.2	-8.1	3.8	-8.2	3.8
France	1.3	-7.2	4.5	-8.5	3.2	-8.5	3.2
Italy	0.3	-9.1	4.8	-9.6	4.1	-9.6	4.0
Spain	2.0	-8.0	4.3	-9.6	2.7	-9.8	2.6
Japan	0.7	-5.2	3.0	-5.9	2.5	-5.7	2.5
United Kingdom	1.4	-6.5	4.0	-7.9	2.5	-7.9	2.5
Canada	1.6	-6.2	4.2	-8.0	2.4	-8.0	2.4
Other Advanced Economies ²	1.7	-4.6	4.5	-6.5	2.1	-6.6	2.2
Emerging Market and Developing Economies	3.7	-1.0	6.6	-5.4	2.0	-5.6	1.8
Emerging and Developing Asia	5.5	1.0	8.5	-4.8	2.6	-5.0	2.3
China	6.1	1.2	9.2	-4.8	3.4	-4.6	3.3
India ³	4.2	1.9	7.4	-3.9	0.9	-5.1	0.0
ASEAN-5 ⁴	4.8	-0.6	7.8	-5.4	2.7	-5.5	2.6
Emerging and Developing Europe	2.1	-5.2	4.2	-7.8	1.7	-7.7	1.7
Russia	1.3	-5.5	3.5	-7.4	1.5	-7.4	1.5
Latin America and the Caribbean	0.1	-5.2	3.4	-6.8	1.1	-7.0	1.0
Brazil	1.1	-5.3	2.9	-7.5	0.6	-7.3	0.5
Mexico	-0.1	-6.6	3.0	-7.6	1.4	-7.9	1.1
Middle East and Central Asia	1.2	-2.8	4.0	-5.6	0.8	-5.7	0.8
Saudi Arabia	0.3	-2.3	2.9	-4.2	0.7	-4.5	0.7
Sub-Saharan Africa	3.1	-1.6	4.1	-5.1	0.6	-5.2	0.4
Nigeria	2.2	-3.4	2.4	-5.9	-0.1	-5.9	-0.1
South Africa	0.2	-5.8	4.0	-6.6	3.0	-6.9	2.6
<i>Memorandum</i>							
European Union ⁵	1.7	-7.1	4.8	-8.7	3.1	-8.8	3.1
Low-Income Developing Countries	5.1	0.4	5.6	-4.7	0.5	-4.7	0.4
Middle East and North Africa	0.3	-3.3	4.2	-5.9	1.2	-6.0	1.2
World Growth Based on Market Exchange Rates	2.4	-4.2	5.4	-6.9	2.6	-6.9	2.6
World Trade Volume (goods and services)	0.9	-11.0	8.4	-13.9	4.7	-14.2	4.6
Imports							
Advanced Economies	1.5	-11.5	7.5	-13.8	4.3	-14.2	4.2
Emerging Market and Developing Economies	-0.8	-8.2	9.1	-12.5	4.0	-12.5	4.0
Exports							
Advanced Economies	1.2	-12.8	7.4	-14.9	4.4	-15.3	4.3
Emerging Market and Developing Economies	0.8	-9.6	11.0	-13.7	6.8	-13.7	6.6
Commodity Prices (US dollars)							
Oil ⁶	-10.2	-42.0	6.3	-37.7	11.0	-35.8	10.9
Nonfuel (average based on world commodity import weights)	0.8	-1.1	-0.6	-2.8	-1.2	-2.8	-1.9
Consumer Prices							
Advanced Economies	1.4	0.5	1.5	-1.2	-0.4	-1.3	-0.3
Emerging Market and Developing Economies ⁷	5.0	4.6	4.5	0.0	0.0	-0.2	0.0
London Interbank Offered Rate (percent)							
On US Dollar Deposits (six month)	2.3	0.7	0.6	-1.2	-1.3	-1.3	-1.5
On Euro Deposits (three month)	-0.4	-0.4	-0.4	0.0	0.0	0.2	0.2
On Japanese Yen Deposits (six month)	0.0	-0.1	-0.1	0.0	-0.1	0.0	0.1

Source: IMF staff.

Note: Real effective exchange rates are assumed to remain constant at the levels prevailing during February 17–March 16, 2020. Economies are listed on the basis of economic size. The aggregated quarterly data are seasonally adjusted. WEO = *World Economic Outlook*.

¹Difference based on rounded figures for the current, January 2020 WEO Update, and October 2019 WEO forecasts.

²Excludes the Group of Seven (Canada, France, Germany, Italy, Japan, United Kingdom, United States) and euro area countries.

³For India, data and forecasts are presented on a fiscal year basis, and GDP from 2011 onward is based on GDP at market prices with fiscal year 2011/12 as a base year.

Table 1.1 (continued)
(Percent change, unless noted otherwise)

	Year over Year				Q4 over Q4 ⁸			
	2018	2019	Projections		2018	2019	Projections	
			2020	2021			2020	2021
World Output	3.6	2.9	-3.0	5.8	3.3	2.7	-1.4	4.9
Advanced Economies	2.2	1.7	-6.1	4.5	1.8	1.5	-5.2	4.4
United States	2.9	2.3	-5.9	4.7	2.5	2.3	-5.4	4.9
Euro Area	1.9	1.2	-7.5	4.7	1.2	1.0	-5.9	3.6
Germany	1.5	0.6	-7.0	5.2	0.6	0.5	-5.2	3.6
France	1.7	1.3	-7.2	4.5	1.2	0.9	-5.0	2.7
Italy	0.8	0.3	-9.1	4.8	0.0	0.1	-7.2	3.9
Spain	2.4	2.0	-8.0	4.3	2.1	1.8	-7.0	3.7
Japan	0.3	0.7	-5.2	3.0	-0.2	-0.7	-3.2	3.4
United Kingdom	1.3	1.4	-6.5	4.0	1.4	1.1	-5.3	3.8
Canada	2.0	1.6	-6.2	4.2	1.8	1.5	-5.4	4.0
Other Advanced Economies ²	2.6	1.7	-4.6	4.5	2.3	2.0	-4.6	5.5
Emerging Market and Developing Economies	4.5	3.7	-1.0	6.6	4.5	3.7	1.6	5.2
Emerging and Developing Asia	6.3	5.5	1.0	8.5	6.1	4.7	4.8	5.0
China	6.7	6.1	1.2	9.2	6.6	6.0	4.9	5.1
India ³	6.1	4.2	1.9	7.4	5.8	2.0	7.4	4.0
ASEAN-5 ⁴	5.3	4.8	-0.6	7.8	5.1	4.5	1.1	6.0
Emerging and Developing Europe	3.2	2.1	-5.2	4.2	...	...	...	...
Russia	2.5	1.3	-5.5	3.5	2.9	2.3	-6.5	5.4
Latin America and the Caribbean	1.1	0.1	-5.2	3.4	0.2	-0.1	-5.6	4.8
Brazil	1.3	1.1	-5.3	2.9	1.3	1.7	-5.8	3.6
Mexico	2.1	-0.1	-6.6	3.0	1.5	-0.4	-7.4	5.7
Middle East and Central Asia	1.8	1.2	-2.8	4.0	...	...	...	...
Saudi Arabia	2.4	0.3	-2.3	2.9	4.3	-0.3	-0.5	1.3
Sub-Saharan Africa	3.3	3.1	-1.6	4.1	...	...	...	...
Nigeria	1.9	2.2	-3.4	2.4	...	...	...	...
South Africa	0.8	0.2	-5.8	4.0	0.2	-0.6	-7.2	9.6
<i>Memorandum</i>								
European Union ⁵	2.3	1.7	-7.1	4.8	1.7	1.4	-5.9	4.2
Low-Income Developing Countries	5.1	5.1	0.4	5.6	...	...	...	...
Middle East and North Africa	1.0	0.3	-3.3	4.2	...	...	...	...
World Growth Based on Market Exchange Rates	3.1	2.4	-4.2	5.4	2.7	2.3	-2.9	4.7
World Trade Volume (goods and services)	3.8	0.9	-11.0	8.4	...	...	...	...
Imports								
Advanced Economies	3.3	1.5	-11.5	7.5	...	...	...	...
Emerging Market and Developing Economies	5.1	-0.8	-8.2	9.1	...	...	...	...
Exports								
Advanced Economies	3.3	1.2	-12.8	7.4	...	...	...	...
Emerging Market and Developing Economies	4.1	0.8	-9.6	11.0	...	...	...	...
Commodity Prices (US dollars)								
Oil ⁶	29.4	-10.2	-42.0	6.3	9.5	-6.1	-42.2	12.4
Nonfuel (average based on world commodity import weights)	1.3	0.8	-1.1	-0.6	-2.3	4.9	-3.1	0.9
Consumer Prices								
Advanced Economies	2.0	1.4	0.5	1.5	1.9	1.4	0.3	1.8
Emerging Market and Developing Economies ⁷	4.8	5.0	4.6	4.5	4.2	4.9	3.1	4.0
London Interbank Offered Rate (percent)								
On US Dollar Deposits (six month)	2.5	2.3	0.7	0.6	...	...	...	...
On Euro Deposits (three month)	-0.3	-0.4	-0.4	-0.4	...	...	...	...
On Japanese Yen Deposits (six month)	0.0	0.0	-0.1	-0.1	...	...	...	...

⁴Indonesia, Malaysia, Philippines, Thailand, Vietnam.

⁵Beginning with the April 2020 WEO, the United Kingdom is excluded from the European Union group. Difference based on European Union excluding the United Kingdom.

⁶Simple average of prices of UK Brent, Dubai Fateh, and West Texas Intermediate crude oil. The average price of oil in US dollars a barrel was \$61.39 in 2019; the assumed price, based on futures markets, is \$35.61 in 2020 and \$37.87 in 2021.

⁷Excludes Venezuela. See country-specific note for Venezuela in the "Country Notes" section of the Statistical Appendix.

⁸For World Output, the quarterly estimates and projections account for approximately 90 percent of annual world output at purchasing-power-parity weights. For Emerging Market and Developing Economies, the quarterly estimates and projections account for approximately 80 percent of annual emerging market and developing economies' output at purchasing-power-parity weights.

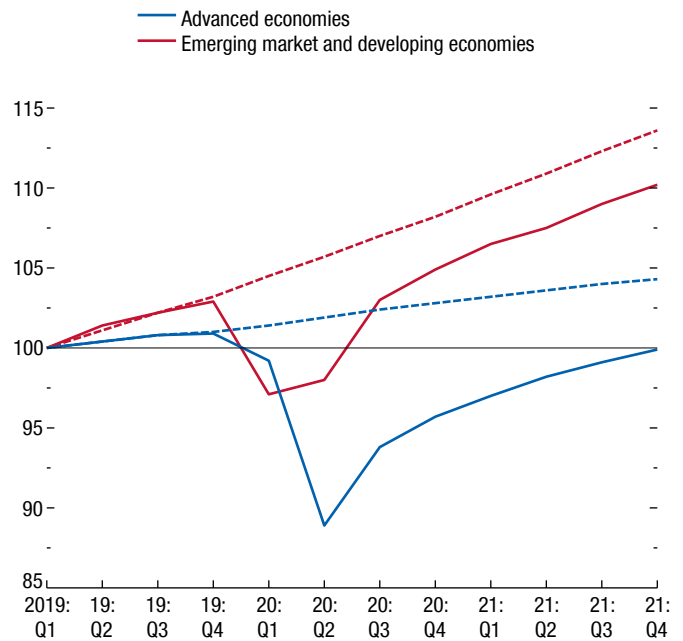
to be stronger and longer lasting, testing the limits of central banks to backstop the financial system and further raising the fiscal burden of the shock. Of course, if a therapy or a vaccine is found earlier than expected, social distancing measures can be removed and the rebound may occur faster than anticipated.

As of early April 2020 the path of the COVID-19 pandemic remains uncertain. Strong containment efforts in place to slow the spread of the virus may need to remain in force for longer than the first half of the year if the pandemic proves to be more persistent than assumed in the WEO baseline. Once containment efforts are lifted and people start moving about more freely, the virus could again spread rapidly from residual localized clusters. Moreover, places that successfully bring down domestic community spread could be vulnerable to renewed infections from imported cases. In such instances, public health measures will need to be ramped up again, leading to a longer downturn than in the baseline forecast. And although the disease has been most concentrated in advanced economies, fresh outbreaks in large emerging market or developing economies could further hamper any recovery, and the staggered nature of outbreaks could imply longer-lasting disruptions to travel.

The recovery of the global economy could be weaker than expected after the spread of the virus has slowed for a host of other reasons. These include lingering uncertainty about contagion, confidence failing to improve, and establishment closures and structural shifts in firm and household behavior, leading to more lasting supply chain disruptions and weakness in aggregate demand. Scars left by reduced investment and bankruptcies may run more extensively through the economy (as occurred, for example, in previous deep downturns—see Chapter 4 of the October 2009 WEO and Chapter 2 of the October 2018 WEO). Depending on the duration, global business confidence could be severely affected, leading to weaker investment and growth than projected in the baseline. Related to the uncertainty around COVID-19, an extended risk-off episode in financial markets and tightening of financial conditions could cause deeper and longer-lasting downturns in a number of countries.

The Scenario Box later in this chapter provides illustrative examples that combine these aspects. Three alternative scenarios are considered. The first assumes a more protracted duration of the pandemic and necessary containment measures remaining in place for about 50 percent longer than in the baseline in

Figure 1.6. Quarterly World GDP
(2019:Q1 = 100; dashed lines indicate estimates from January 2020 World Economic Outlook Update)



Source: IMF staff estimates.

all countries. The second features a recurrence of a milder outbreak in 2021. The third considers both a protracted pandemic and longer containment effort in 2020 as well as a recurrence in 2021.

The scenarios depart from the baseline in several important aspects: the magnitude of the direct impact of measures to contain the spread of the virus, the tightening in financial conditions and the pace at which they ease, and the scarring resulting from the economic dislocation during the shutdown. As the Scenario Box shows, global GDP is estimated to deviate significantly from the baseline across the scenarios, ranging from 3 percent below baseline in 2020 in the first case (protracted pandemic in 2020) to 8 percent below baseline in 2021 in the third case (protracted pandemic in 2020 and recurrence in 2021). In all scenarios, output recovers only gradually and remains below the baseline throughout the medium term.

Policy Priorities

Securing Adequate Resources for the Health Care System

With the world facing a dramatic health and economic crisis in 2020, the policy response needs to be commensurate with the challenge. Effective policies are essential to forestall worse outcomes. As a first priority, resources should be made available for health care systems to cope with the surging need for their services. This means expanding public spending on additional testing, rehiring retired medical professionals, purchasing personal protective equipment and ventilators, and expanding isolation wards in hospitals. Trade restrictions on medical and health products should be avoided to help ensure that they are able to go to where they are most critical. International aid to provide support to countries with limited health care system capacity and resources will be needed to help them prepare for and weather the pandemic.

Shared Economic Policy Objectives across Countries, but Emerging Market and Developing Economies Relatively More Constrained

Beyond strengthening health care systems, policies will need to limit the propagation of the health crisis to economic activity by shielding people and firms affected by necessary containment measures, minimizing persistent scarring effects from the unavoidable severe slowdown, and ensuring that the economic recovery can begin quickly once the pandemic fades. This will require sizable targeted policies complemented by broader stimulus at the national level.

Advanced economies with relatively stronger health care capacity, better access to international liquidity (in some cases by virtue of issuing reserve currencies), and comparatively lower borrowing costs will be better equipped to combat the health crisis and meet the large financing needs of supportive policies. In the euro area, where many countries are particularly hard-hit by outbreaks, meaningful European support targeted at these countries should supplement their national efforts, which would help meet financing needs arising from the very large and purely exogenous common shock.

In *emerging market and developing economies*, the objectives of policy are much the same, but resources to achieve them are more constrained, both by more limited health system capacities and tightening borrow-

ing constraints (see also the April 2020 *Fiscal Monitor*). The increased demand for safe-haven assets and tighter financial conditions have pushed up spreads for many emerging market and developing economies, which, in tandem with already-elevated borrowing levels in some places, may constrain the scope for fiscal stimulus. To accommodate increased demands for public health and related essential expenditures, some countries may need to reprioritize existing spending while safeguarding other key priorities, such as support to vulnerable populations. Automatic stabilizers, though they may be small in developing economies, should be allowed to operate. Even so, some emerging market and developing economies may soon be overwhelmed by crisis costs. External support for them will be crucial. Strong multilateral cooperation is therefore essential, including to help financially constrained countries facing twin health and funding shocks.

Limiting the Amplification of the Health Shock to Economic Activity

Because the economic fallout reflects particularly acute shocks in specific sectors, policymakers will need to implement substantial targeted fiscal, monetary, and financial market measures to help affected households and businesses. Advanced as well as emerging market and developing economies have already moved forward on such measures (Figure 1.7; [IMF Policy Tracker on responses to COVID-19](#)). Such actions will help maintain economic relationships through the shutdown and enable economic activity to begin normalizing once the pandemic fades.

Sizable targeted fiscal measures. The objective of fiscal policy should be twofold: to cushion the impact on the most-exposed households and businesses, and to preserve economic relationships (particularly by reducing firm closures) for the postcrisis era. In doing this, specific policies should be large, timely, temporary, and targeted.

The fiscal response in affected countries has been swift and sizable in many advanced economies (such as Australia, France, Germany, Italy, Japan, Spain, the United Kingdom, and the United States). Many emerging market and developing economies (such as China, Indonesia, and South Africa) have also begun providing or announcing significant fiscal support to heavily impacted sectors and workers. Fiscal measures will need to be scaled up if the stoppages to economic

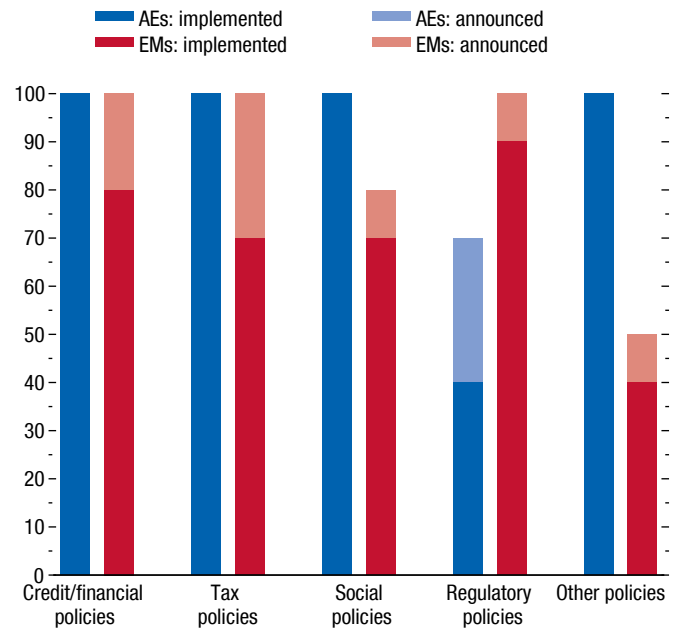
activity are persistent, or the pickup in activity as restrictions are lifted is too weak.

In countries with large informal sectors—often emerging market and developing economies—existing support programs should be expanded and new programs introduced where feasible. Further development of digital payments systems, which have seen rapid growth in many emerging market and developing economies, may provide an opportunity to improve the delivery of targeted transfers to the informally employed. New digital technologies can be used to process applications for income support and deliver direct transfers to identified individuals or households (for instance, India, Kenya, Rwanda, and Uganda are using such technologies to improve transfers to eligible recipients). Efforts to widen access to electronic and mobile platforms are likely to further enhance the impact of other policies to lessen the effects of the downturn. In countries without the infrastructure to deliver direct transfers, subsidies to essential services, such as utilities, are a possible alternative.

Dampening the impact of the shock on the most exposed households and businesses should rely heavily on temporary and targeted policies, including cash transfers, wage subsidies, tax relief, and extension or postponement of debt repayments. Many countries have already implemented large and timely measures of this sort (see also the April 2020 *Fiscal Monitor*). For example, China and Italy have temporarily waived tax, social security, mortgage, and rental payments for the most affected areas and sectors; Japan has announced cash handouts to affected households and firms and deferral of payment of tax and social security premiums for one year; Canada has increased cash transfers, implemented wage subsidies, and deferred federal tax and student loan payments; Germany and Spain have introduced temporary interest-free tax deferrals, suspended enforcement of some debt contracts, and put in place targeted cash transfers for the self-employed and small and medium-sized enterprises; India has announced new in-kind (food and cooking gas) and cash transfers to poorer households; Botswana and South Africa have implemented tax relief measures and announced targeted support to households, through cash transfers or wage subsidies; and Thailand is accelerating excess value-added tax refunds.

Where paid sick and family leave are not standard benefits, governments should consider funding them to allow unwell workers or their caregivers to stay home without fear of losing their jobs during the pandemic.

Figure 1.7. G20+: Economic Policy Responses to COVID-19
(Percent of countries)



Source: IMF staff calculations.

Note: G20+ refers to the Group of Twenty countries, including Spain, which is a permanent invitee. Measures as recorded as of April 1, 2020. Credit/financial policies include government guarantees, loans to businesses/households from government entities, forbearance (including deferral of payments and loan reprofiling), and easing of credit regulation; tax policies include tax cuts/waivers/deductions and extensions of payment deadlines; social policies include unemployment benefits, sick leave assistance, cash transfers, and vouchers/in-kind support; regulatory policies include price controls, employment, and trade restrictions; other policies include public investments and firm subsidies. "Implemented" counts the number of countries where at least one measure from the relevant category has been implemented; "announced" counts the number of countries where measures from the relevant category have been announced but not yet implemented. AEs = advanced economies; EMs = emerging market economies.

Canada, for example, has implemented a benefit for workers without paid sick leave who are quarantined or have to take care of children home from closed schools. Japan enhanced paid leave and compensation to working parents affected by the school closure. Countries with short-time work programs in place could temporarily strengthen their attractiveness, as was the case during the global financial crisis. For laid-off workers, unemployment insurance could be temporarily enhanced by relaxing eligibility and, if the downturn turns out to last longer than expected, by extending benefit duration combined with higher spending on active labor market policies. For instance, Italy has broadened the wage supplementation fund to provide income support to laid-off workers. Further-

more, as unemployment rates rise, hiring subsidies should also be considered.

Policies that help preserve viable firms will reduce bankruptcies and the scarring effects of firm closures, ensuring a swifter normalization of economic activity once the medical emergency fades. Small and medium-sized enterprises in supply chains hit hard by production shutdowns are particularly at risk. Temporary and targeted policies, such as tax relief and wage subsidies, have an important role to play in achieving this goal. Again, many countries have already implemented large and timely measures of this sort. For example, Italy has extended tax deadlines for companies in affected areas; Indonesia is providing tax cuts to the highly impacted tourism sector and to local manufacturers; Spain has expanded eligibility for unemployment benefits and exempted impacted firms that maintain employment from social contributions; Japan has enhanced subsidies to firms that maintain employment while operations are scaled down; Denmark will subsidize heavily impacted firms, paying 75 percent of wages for workers facing layoffs; the United Kingdom has announced 80 percent payment of furloughed workers' monthly salary up to a ceiling; Russia has introduced tax deferrals (excluding value-added taxes) for companies negatively affected by COVID-19; and Korea has introduced wage subsidies for small merchants and increased allowances for home care and job seekers. Similarly, Germany and France have eased and expanded firms' access to subsidized short-time work programs to preserve jobs and workers' incomes.

Provision of liquidity and credit guarantees. Central banks should provide ample liquidity to banks and nonbank finance companies, particularly to those lending to small and medium-sized enterprises, which may be less prepared to withstand a sharp disruption. Several central banks (including the European Central Bank, US Federal Reserve, Bank of England, Bank of Canada, and Central Bank of the Republic of Turkey) have already moved to launch or activate targeted lending facilities; for example, to financial intermediaries that fund corporate commercial paper. Governments could offer temporary and targeted credit guarantees or direct loans for the near-term liquidity needs of these firms—although, to avoid fiscal risks, such policies should be temporary and transparently reported. For example, Korea and Japan have expanded lending for business operations and loan guarantees for affected small and medium-sized enterprises; Philippines has introduced a new microfinancing loan package for

micro, small, and medium-sized enterprises; and Germany, Italy, and Spain have offered loan guarantees for firms.

Loan restructuring. As noted in the April 2020 *Global Financial Stability Report*, supervisors could also encourage banks to renegotiate loan terms for distressed borrowers, without lowering loan classification and provisioning standards. In China, for instance, creditors are encouraged to temporarily defer loan and interest payments with no penalty for eligible small and medium-sized enterprises. The People's Bank of China has also increased the quota of relending and rediscounting facilities to support manufacturers of medical supplies and daily necessities as well as micro, small, and medium-sized firms at lower interest rates. More generally, banks should absorb the cost of restructuring loans by drawing on their capital conservation buffer or, where activated, by releasing their countercyclical capital buffer. Bank asset quality should be closely monitored to determine whether fiscal support (equity injections, for instance) is required, particularly if the downturn persists.

Broader stimulus. Central banks in advanced and emerging market economies have responded aggressively to the sudden stop in real activity and the rapidly tightening financial conditions. Beyond conventional interest rate cuts, several central banks have significantly expanded asset purchase programs (for instance, the European Central Bank's €750 billion Pandemic Emergency Purchase Program to buy private and public securities; the Federal Reserve's purchases of US Treasury debt and mortgage-backed securities, as needed, to ensure smooth market functioning as well as, for the first time, corporate bonds up to \$300 billion; the Bank of Canada's purchases of banker's acceptances, provincial money market securities, commercial paper, government securities, and mortgage bonds; and the Bank of Japan's scaled-up purchases of government and corporate bonds, commercial paper, and exchange-traded funds). These synchronized actions across countries can magnify their impact on individual economies and will also help generate the space for emerging market and developing economies to use monetary policy to respond to domestic cyclical conditions. The recently activated central bank swap lines will improve access to international liquidity. Extending swap lines to additional emerging market central banks could further limit financial strains in countries facing external funding shocks.

Unlike during other deep downturns, such actions may have a relatively limited impact on spending while mobility restrictions and lockdowns are in place. Nevertheless, they play a critical role in containing the amplification of the shock and ensuring economic activity is better placed to recover when containment measures can be gradually lifted. By limiting the rise in borrowing costs, they ease debt service burdens and protect cash flow for sovereigns, households, and businesses that continue to operate, helping reduce further job losses.

Similarly, broad-based fiscal stimulus where financing constraints permit (such as public infrastructure investment or across-the-board tax cuts) can preempt a steeper decline in confidence, help lift aggregate demand, limit the propagation of the shock by reducing bankruptcies, and avert an even-deeper downturn. But it would most likely be more effective in stimulating spending after the outbreak recedes, containment efforts are scaled back, and people can move about freely. Policymakers should continue coordinating their broader responses internationally to magnify the impact of individual country actions.

External sector policies. Countries with flexible exchange rates should allow them to adjust as needed, intervening under disorderly market conditions to limit financial stress, particularly where there are large balance sheet mismatches and unhedged foreign currency liabilities. For countries facing sudden and destabilizing reversals of external financing, temporary capital flow measures on outflows could be used, provided they do not substitute for warranted policy actions.

Multilateral Cooperation to Assist Constrained Countries

Countries urgently need to work together to slow the spread of the virus and to develop a vaccine and therapies to counter the disease. Until such medical interventions become universally available, no country is safe from the pandemic (including a recurrence after the initial wave subsides) as long as transmission occurs elsewhere. Taming the pandemic therefore requires significant multilateral cooperation, including avoiding trade restrictions (particularly on medicines and other essential supplies) and especially to help financially constrained countries with limited health care capacity, by providing them equipment and medical expertise financed through grants and zero-interest emergency loans (April 2020 *Fiscal Monitor*).

Countries confronting the twin crises of health and external funding shocks—for example, those reliant on external financing, or commodity exporters dealing with the plunge in commodity prices—may additionally need bilateral or multilateral assistance to ensure that health care spending is not compromised in their difficult adjustment process. The IMF, with \$1 trillion in available resources, is actively supporting vulnerable countries through various lending facilities. The recent doubling of access limits of the IMF’s emergency financing facilities will allow the IMF to meet an expected demand of \$100 billion in emergency financing, provided through the Rapid Credit Facility and the Rapid Financing Instrument, of which the former is only for low-income countries. The Catastrophe Containment and Relief Trust can currently provide about \$500 million in grant-based debt service relief, including the recent \$185 million pledge by the United Kingdom and \$100 million provided by Japan as immediately available resources. Official bilateral creditors have been called upon by the IMF managing director and the World Bank Group president to suspend debt repayment from International Development Association countries (that is, those with gross national income per capita below \$1,175 in 2020) that request forbearance. This would help with their immediate liquidity needs to address the challenges of the pandemic.

Policies for the Recovery Phase

Once the pandemic abates and containment measures are lifted, the policy focus will need to shift to rapidly moving to recovery, while scaling back special targeted measures deployed during the shutdown and ensuring debt overhangs do not weigh on economic activity. This will require efforts at the national level and continued strong multilateral cooperation. There is still substantial uncertainty on how long it will take for economic activity to normalize, and the policy challenges will be much more severe in a scenario with more protracted dislocation from the pandemic.

Securing a swift recovery. The lifting of containment measures is likely to be gradual, and even after containment measures are unwound, economic activity might take a while to normalize. Uncertainty about contagion could lead to persistent voluntary social distancing and subdued consumer demand for services. Firms may only slowly start hiring workers and expanding payroll because they remain unsure about the demand for

their output and about securing parts and components, and if they worry about attrition of workers' skills following a spell of unemployment. Clear and effective communication about the state of the pandemic and the decline of new infections will be essential. As discussed above, broad monetary and fiscal stimulus where space permits—coordinated internationally to maximize impact—would be most effective to boost spending in the recovery phase. Hiring subsidies may need to be an important component of the fiscal strategy to encourage firms to hire unemployed workers. Worker retraining programs and active labor market policies would help ease the matching of unemployed workers to vacancies. More generally, strong policy frameworks and ensuring that inflation expectations remain well anchored will be essential through a recovery period likely to feature a range of inflation outcomes (in some countries, supply chain disruptions and shortages can lead to prolonged price increases and trigger expectations of rising inflation; in others, persistently weak demand may lead to drastically lower inflation expectations and worries about entrenched debt-deflation spirals).

Scaling back targeted measures. The temporary and targeted fiscal and financial sector measures that help maintain economic relationships through the shutdown will need to be unwound as the underlying restrictions are gradually lifted and the recovery is firmly under way—a process that may be protracted. This will help free up fiscal resources that can be channeled toward boosting demand. This includes removing credit guarantees for firms affected by the shutdown, rolling back wage subsidies and reduced worktime programs, and unwinding equity stakes in corporations.

Balance sheet repair, debt restructuring. Recoveries from past crises have often been slowed by impaired

balance sheets and debt overhangs. Supervisors and regulators should encourage early and proactive recognition of nonperforming loans. A strategy that facilitates effective resolution of distressed debt should include enhanced regulatory oversight, steps to strengthen the insolvency and debt enforcement framework, and measures to facilitate the development of a distressed debt market. Bankruptcy courts as well as out-of-court restructuring mechanisms with independent restructuring experts will need to move swiftly to assess valuations and apportion losses across banks, investors, and firms. Importantly, fundamentally unviable firms will need to be dissolved to avoid persistent resource misallocation, with the welfare costs of liquidation absorbed by the broader social safety net (unemployment benefits, retraining, and assistance with job search through employment agencies).

Strong multilateral cooperation. The recovery will also require strong multilateral cooperation to complement national policy efforts. This means reducing tariff and nontariff barriers that impede cross-border trade and global supply chains as well as scaling back capital flow measures as global financial sentiment recovers. Financially constrained countries will need continued multilateral assistance, including access to concessional financing, grants, and debt relief. Multilateral efforts should also be directed to improving global health care infrastructure and pandemic preparedness (for example, early and automatic exchange of information on unusual infections, global stockpiles of personal protective equipment, and clear protocols on social distancing and on cross-border transfers of essential medical supplies).

Scenario Box. Alternative Evolutions in the Fight against COVID-19

The IMF's G20 Model and a detailed sectoral-based analysis are used here to estimate the impact of three potential alternative outcomes for the evolution of the global fight against COVID-19. The first alternative estimates the impact of the fight against the spread of the virus in 2020 taking roughly 50 percent longer than assumed in the baseline. The second alternative considers the impact of a second, but milder, outbreak occurring in 2021. The third alternative estimates the potential impact of both the outbreak taking longer to contain in 2020 and a second outbreak occurring in 2021. All three scenarios contain four common elements: the direct impact of measures to contain the spread of the virus; tightening in financial conditions; discretionary policy measures to support incomes and ease financial conditions; and scarring resulting from the economic dislocation that policy measures are unable to fully offset.

The first scenario assumes that, in all countries, the measures to contain the spread of the virus in 2020 last roughly 50 percent longer than assumed in the baseline. In addition, financial conditions tighten further, with sovereign risk premiums rising by an average of 25 basis points in emerging market economies, and corporate risk premiums rising by an average of 75 basis points in emerging market economies and 50 basis points in advanced economies. Within advanced and emerging market economy groups, differentiation is based on relative creditworthiness. It is assumed that in advanced economies, monetary policy will prevent sovereign risk premiums from rising. In terms of discretionary policy, fiscal spending is also assumed to respond to the decline in output roughly twice as strongly as it would under typical business cycle fluctuations in economic activity. Because there is very limited room for conventional monetary policy in the baseline, advanced economies are also assumed to implement unconventional measures to contain increases in long-term interest rates. Despite these exceptional discretionary policy actions, it is assumed that there will be some longer-lived damage realized in 2021 in the form of capital destruction, a temporary slowing in productivity growth, and a temporary increase in trend unemployment. For advanced economies, 1 percent of the capital stock is assumed to be lost through bankruptcies, productivity growth is assumed to slow by $\frac{1}{4}$ percentage point, and trend unemployment is assumed to rise by $\frac{1}{2}$ percentage

point. In emerging market economies, more limited fiscal capacity to maintain incomes is assumed to result in scarring that is 50 percent higher than in advanced economies.

The second scenario assumes that there is a second outbreak of the virus in 2021 that is roughly two-thirds as severe as in the baseline. Financial conditions are assumed to tighten by twice as much as they do in the first scenario. Because of the larger impact on economic activity, the scarring, which materializes in 2022, is assumed to be roughly twice as large as in the first scenario.

The third scenario assumes that it takes longer to contain the outbreak in 2020 and that there is a second outbreak in 2021. Because of the larger impact of the combined scenarios on economic activity, it is assumed that there is a nonlinear response of financial markets and scarring. Financial conditions tighten by a further 50 percent, and scarring from the second outbreak increases by 50 percent.

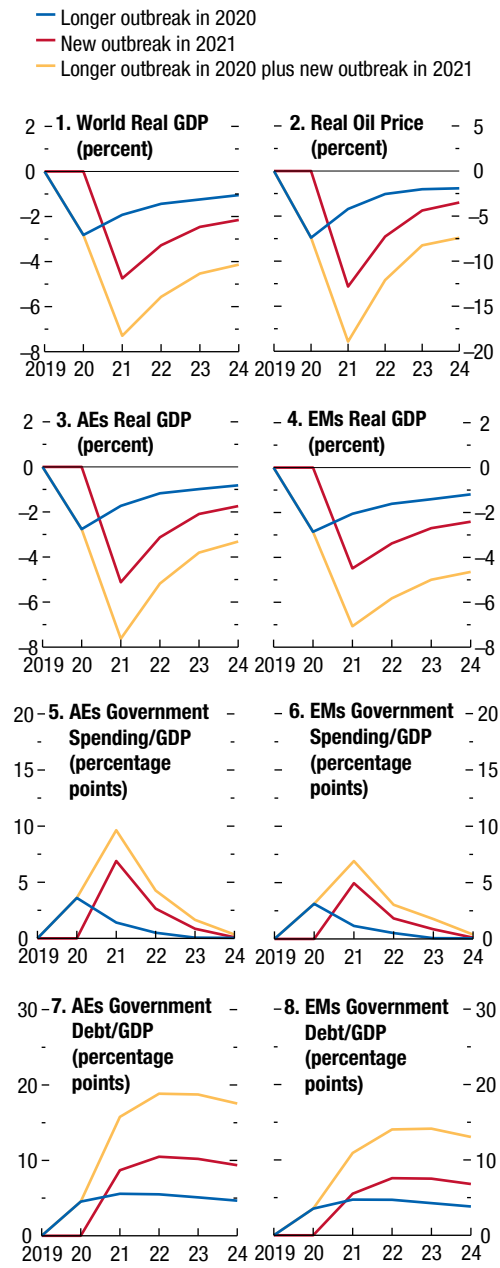
When it takes longer than expected to contain the outbreak (blue line in Scenario Figure 1), global output is 3 percent lower than in the baseline in 2020. Subsequently, output recovers toward the baseline gradually and remains roughly 1 percent below the baseline by the end of the *World Economic Outlook* horizon. The initial decline in economic activity is broadly similar for advanced and emerging market economies. This reflects the fact that, although many of the service sectors most affected by the virus are less important in emerging market economies, tighter financial conditions and more limited fiscal space in emerging market economies amplify the impact. In the medium term, output in emerging market economies is further below the baseline because the limited fiscal space leads to more scarring. If there is a second outbreak in 2021 (red line in Scenario Figure 1), global output is almost 5 percent below the baseline in 2021. Again, advanced and emerging market economies suffer roughly equally initially, with the effects of increased scarring in emerging market economies registering in the medium term. When it both takes longer than expected to contain the outbreak in 2020 and there is a second outbreak in 2021 (yellow line in Scenario Figure 1), global output is almost 8 percent below the baseline in 2021. The potential nonlinearities in financial conditions and scarring lead to output roughly 1 percent further below the baseline in the medium term than a simple linear combination of the two separate scenarios would imply.

The authors of this box are Keiko Honjo and Susanna Mursula.

Scenario Box (continued)

There is an important dimension along which the combined scenario could be underestimating the negative impact of these two potential developments should they both arise. The prospect of additional increases in public debt above a baseline that already sees notably higher public debt could spook markets. This increase in sovereign borrowing costs, or simply fear of it materializing, could prevent many countries from providing the income support assumed here. This would lead to even worse outcomes and additional scarring, which would in turn further worsen public balance sheets.

Scenario Figure 1. Alternative Evolutions in the Fight against COVID-19
(Deviation from baseline)



Source: IMF, G20 Model simulations.
Note: AEs = advanced economies; EMs = emerging market economies.

Special Feature: Commodity Market Developments and Forecasts

Commodity prices have decreased sharply since the release of the October 2019 *World Economic Outlook* (WEO), hit hard by the COVID-19 outbreak in late January. This reversed a previous upward trend supported, in part, by better economic prospects. Since the outbreak, energy and metal prices have fallen sharply as measures to contain the pandemic—first in China, then worldwide—substantially reduced travel and dented global industrial activity.¹ Oil prices collapsed further in March as the OPEC+ coalition broke down, unable to reach agreement on how to react to the weak oil demand outlook.² The price impact has varied significantly across commodities, depending on the specific end-use sectors and regions affected by the outbreak and on the storability and supply elasticity of the commodity (Figure 1.SF.1, panel 1, and Figure 1.1). Flight to safety has supported gold prices. The outbreak has reduced demand for some agricultural raw materials and animal feed; price support was, however, provided by cereals (such as wheat) following consumer stockpiling in regions affected by COVID-19.

Energy Prices Plummeted

Oil prices declined 7.3 percent between August 2019 and February 2020, falling from \$57.60 to \$53.40, before further declining by 39.6 percent in March to \$32.30 as the COVID-19 outbreak abruptly reversed a positive trend as containment measures directly hit the transportation sector, which accounts for more than 60 percent of oil demand.³ Confronting a weak demand environment, the OPEC+ coalition

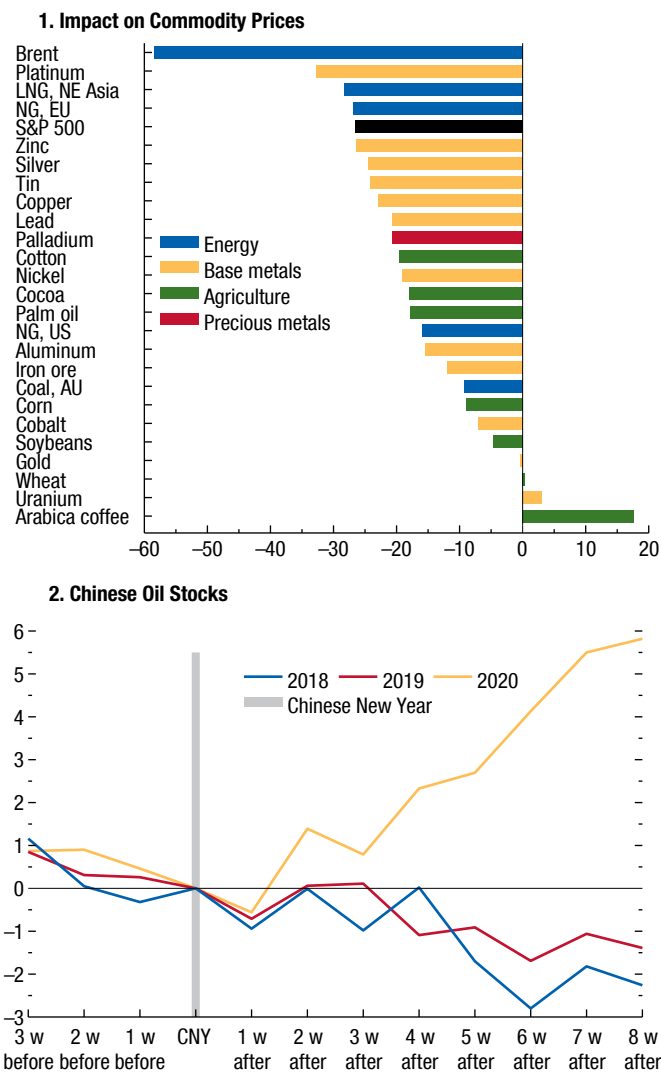
The authors of this special feature are Christian Bogmans, Lama Kiyasseh, Akito Matsumoto, Andrea Pescatori (team leader), and Julia Xueliang Wang, with research assistance from Lama Kiyasseh and Claire Mengyi Li.

¹The IMF's Primary Commodities Price Index decreased by 1.5 percent between August 2019 and February 2020, the reference periods for the October 2019 WEO and the April 2020 WEO, respectively (Figure 1.SF.1, panel 1), driven by energy and base metals, which fell by 6.7 percent and 5.5 percent, respectively, while food prices increased by 3.3 percent. Most of the decline in commodity prices occurred in March, outside the reference period.

²OPEC is the Organization of the Petroleum Exporting Countries; OPEC+ includes Russia and other non-OPEC oil exporters.

³"Oil price" in this document refers to the IMF average petroleum spot price, which is based on UK Brent, Dubai Fateh, and West Texas Intermediate, equally weighted, unless specified otherwise.

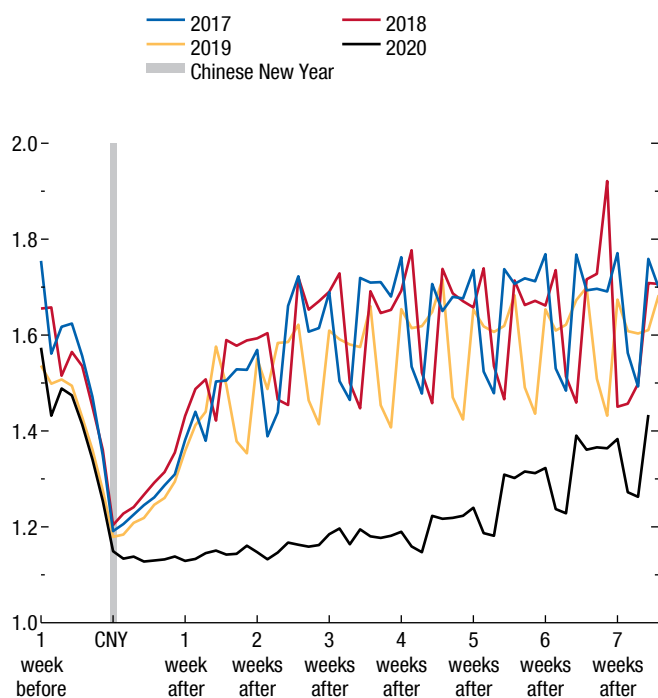
Figure 1.SF.1. Impact of the COVID-19 Outbreak (Percent)



Sources: Argus; Bloomberg L.P.; Thomson Reuters Datastream; URSA Space Systems; and IMF staff calculations.

Note: Panel 1 represents selected commodity price movements between January 17, 2020 (pre-outbreak), and February 7, 2020. Panel 2 represents the percentage point change in inventory fill as a share of inventory capacity, which is indexed to when the Chinese New Year began in each year. CNY = Chinese New Year; Coal, AU = coal, Australia; LNG, NE Asia = liquefied natural gas, northeast Asia; NG, EU = natural gas, Europe; NG, US = natural gas, United States; w = weeks.

Figure 1.SF.2. China Transport Congestion Index
(100 cities, average)



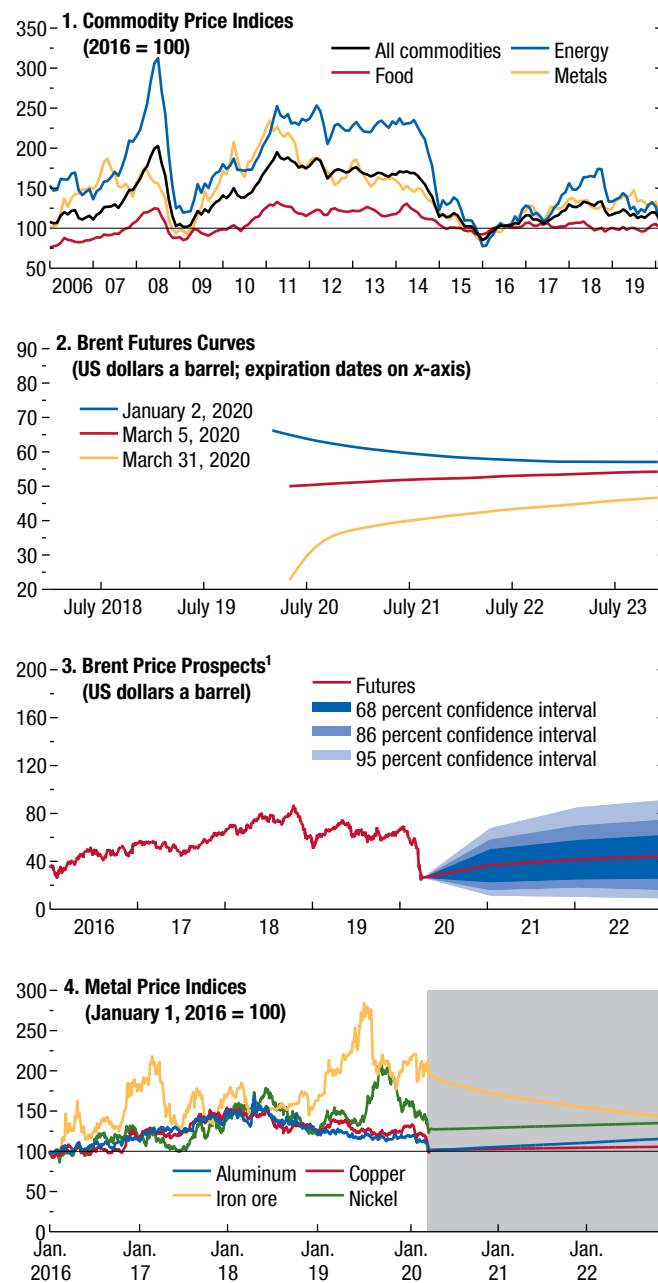
Sources: Wind; and IMF staff calculations.
Note: CNY = Chinese New Year.

broke down on March 6, 2020, leading to the worst one-day price drop in the oil market since 1991. After trading close to \$20 toward the end of March, oil prices recovered somewhat in early April as the OPEC+ coalition resumed talks.

International and domestic travel restrictions throughout the world and a sharp reduction in road traffic (Figure 1.SF.2) are expected to lead to an unprecedented decline in oil demand in 2020—mostly driven by a collapse in second-quarter oil consumption that could exceed 10 million barrels a day (that is, about 10 percent of global daily oil production). The adjustment would be reflected, first, by a sharp accumulation in oil stocks and voluntary production cuts and, then, in the second half of the year, by a reduction in oil output, especially by price-elastic shale oil and other high-cost producers. The steep upward-sloping oil forward curve suggests a fast reduction in storage capacity (Figure 1.SF.1, panel 2, and Figure 1.SF.3, panel 2).

In the natural gas market, COVID-19 containment policies introduced in late January in China strongly

Figure 1.SF.3. Commodity Market Developments



Sources: Bloomberg Finance L.P.; IMF, Primary Commodity Price System; Thomson Reuters Datastream; and IMF staff estimates.
¹Derived from prices of futures options on March 26, 2020.

reduced demand for natural gas, leading some Chinese liquefied natural gas (LNG) buyers to halt their LNG imports as storage tanks filled. As a result, Asian LNG spot prices fell below a record low of \$3.00 per million British thermal units in February. Prices recovered

slightly in March as Chinese activity slowly resumed, but European natural gas prices declined as the pandemic moved to Europe.

As of March 27, oil futures contracts indicate rising Brent prices close to \$45 over the next five years. (Figure 1.SF.3, panel 2). Baseline assumptions, also based on futures prices, suggest average annual prices of \$34.80 a barrel in 2020—a decrease of 43.3 percent from the 2019 average—and \$36.40 a barrel in 2021 for the IMF’s average petroleum spot prices. Uncertainty is very elevated, given the unpredictable course of the pandemic (Figure 1.SF.3, panel 3). Risks are tilted to the downside in the very near term, as storage may fill up locally. Medium-term risks are balanced. Upside risks to prices include faster containment of the COVID-19 pandemic and a strengthening of the OPEC+ deal. The biggest downside risk is a sharper slowdown in global economic activity from the pandemic. Other downside risks include a collapse of the OPEC+ coalition and a stronger-than-expected resilience of US shale oil production to the lower price environment.

Metal Prices Decline Mitigated by Storability, Upside Risks to Food Prices

Base metal prices declined by 5.5 percent between August 2019 and February 2020 and by an additional 9.1 percent in March, reversing a positive trend that ended in mid-January (Figure 1.SF.3, panel 1, and Figure 1.1). The shutdown of Chinese factories in February (China accounts for about half major metals global consumption) and, later, in Europe and in the United States, has weighed heavily on the demand for industrial metals. Since the outbreak, metal stocks

at warehouses approved by major metal exchanges have increased notably, buffering the impact of lower demand on spot prices and shifting the futures curve down significantly.

The IMF annual base metals price index is projected to decrease by 10.2 percent in 2020 and by a further 4.2 percent in 2021 on expectations of a sharp decline in global industrial activity. A further and more prolonged slowdown in metal-intensive sectors’ economic activity remains the most significant downside risk for metal prices, while supply stoppages present an upside.

The IMF’s food and beverage price index increased slightly, by 0.1 percent between the WEO reference periods, driven by cereals, oranges, seafood, and arabica coffee, which recorded substantial price increases, while the prices of meat, tea, wool, and cotton declined. Buoyed by strong global demand, tighter supply conditions, and news of the US–China Phase 1 trade deal, prices of many foods and beverages rose substantially until January, but the COVID-19 pandemic reversed this trend, especially for the prices of agricultural raw materials, such as cotton and wool. The recent oil price decline has put downward pressure on prices of palm oil, soy oil, sugar, and corn, and the demand outlook for biodiesel and ethanol has worsened considerably. More recently, consumer stockpiling in regions affected by COVID-19 has provided support for prices of wheat, rice, orange juice, and arabica coffee.

Food prices are projected to decrease by 2.6 percent in 2020 and increase by 0.4 percent in 2021. Supply chain disruptions, possibly due to trade restrictions or border delays, food security concerns in regions affected by COVID-19, and export restrictions in large food exporters are significant sources of upside risk for food prices.

Annex Table 1.1.1. European Economies: Real GDP, Consumer Prices, Current Account Balance, and Unemployment
(Annual percent change, unless noted otherwise)

	Real GDP			Consumer Prices ¹			Current Account Balance ²			Unemployment ³		
	2019	Projections		2019	Projections		2019	Projections		2019	Projections	
		2020	2021		2020	2021		2020	2021		2020	2021
Europe	1.6	-6.6	4.5	3.0	2.0	2.4	2.3	1.6	1.8	...	...	...
Advanced Europe	1.3	-7.3	4.7	1.3	0.5	1.1	2.5	2.0	2.2	6.6	9.2	7.9
Euro Area ^{4,5}	1.2	-7.5	4.7	1.2	0.2	1.0	2.7	2.6	2.7	7.6	10.4	8.9
Germany	0.6	-7.0	5.2	1.3	0.3	1.2	7.1	6.6	6.7	3.2	3.9	3.5
France	1.3	-7.2	4.5	1.3	0.3	0.7	-0.8	-0.7	-0.6	8.5	10.4	10.4
Italy	0.3	-9.1	4.8	0.6	0.2	0.7	3.0	3.1	3.0	10.0	12.7	10.5
Spain	2.0	-8.0	4.3	0.7	-0.3	0.7	2.0	2.2	2.4	14.1	20.8	17.5
Netherlands	1.8	-7.5	3.0	2.7	0.5	1.2	10.9	9.0	9.4	3.4	6.5	5.0
Belgium	1.4	-6.9	4.6	1.2	0.3	1.1	-1.2	-0.7	-1.1	5.4	7.3	6.8
Austria	1.6	-7.0	4.5	1.5	0.4	1.7	2.6	1.9	2.0	4.5	5.5	5.0
Ireland	5.5	-6.8	6.3	0.9	0.4	1.7	-9.5	6.3	5.3	5.0	12.1	7.9
Portugal	2.2	-8.0	5.0	0.3	-0.2	1.4	-0.1	0.3	-0.4	6.5	13.9	8.7
Greece	1.9	-10.0	5.1	0.5	-0.5	1.0	-2.1	-6.5	-3.4	17.3	22.3	19.0
Finland	1.0	-6.0	3.1	1.1	0.9	1.7	-0.1	-3.5	-3.0	6.7	8.3	8.4
Slovak Republic	2.3	-6.2	5.0	2.8	1.1	1.4	-3.2	-3.0	-2.4	5.8	8.0	7.4
Lithuania	3.9	-8.1	8.2	2.2	-0.3	1.7	4.3	6.0	4.5	6.3	8.9	8.1
Slovenia	2.4	-8.0	5.4	1.6	0.4	1.4	6.6	0.8	3.2	4.6	9.0	6.0
Luxembourg	2.3	-4.9	4.8	1.7	0.7	1.5	4.5	4.0	4.4	5.4	7.7	6.8
Latvia	2.2	-8.6	8.3	2.7	-0.3	3.0	-0.5	-2.2	-1.5	6.3	8.0	6.3
Estonia	4.3	-7.5	7.9	2.3	1.5	2.0	1.7	-2.7	-1.9	4.4	6.0	4.7
Cyprus	3.2	-6.5	5.6	0.6	0.7	1.0	-6.7	-8.3	-5.6	7.1	8.8	7.4
Malta	4.4	-2.8	7.0	1.5	0.6	1.9	8.4	3.3	6.1	3.4	5.0	4.4
United Kingdom	1.4	-6.5	4.0	1.8	1.2	1.5	-3.8	-4.4	-4.5	3.8	4.8	4.4
Switzerland	0.9	-6.0	3.8	0.4	-0.4	0.6	12.2	7.2	8.8	2.3	2.7	2.6
Sweden	1.2	-6.8	5.2	1.7	0.5	1.5	3.9	2.2	4.0	6.8	10.1	8.9
Czech Republic	2.6	-6.5	7.5	2.9	2.1	2.0	0.0	-2.1	-0.9	2.0	7.5	6.0
Norway	1.2	-6.3	2.9	2.2	2.4	2.2	4.0	-1.3	0.1	3.7	13.0	7.0
Denmark	2.4	-6.5	6.0	0.7	0.7	1.2	7.9	4.8	5.3	5.0	6.5	6.0
Iceland	1.9	-7.2	6.0	3.0	2.3	2.5	5.8	2.1	3.4	3.6	8.0	7.0
San Marino	1.1	-12.2	5.4	1.0	0.3	1.5	0.7	-4.5	-1.4	7.7	10.3	8.6
Emerging and Developing Europe⁶	2.1	-5.2	4.2	6.5	5.1	5.0	1.4	-0.4	-0.5	...	...	...
Russia	1.3	-5.5	3.5	4.5	3.1	3.0	3.8	0.7	0.6	4.6	4.9	4.8
Turkey	0.9	-5.0	5.0	15.2	12.0	12.0	1.1	0.4	-0.2	13.7	17.2	15.6
Poland	4.1	-4.6	4.2	2.3	3.2	2.6	0.5	0.2	0.1	3.3	9.9	8.0
Romania	4.1	-5.0	3.9	3.8	2.2	1.5	-4.7	-5.5	-4.7	3.9	10.1	6.0
Ukraine ⁷	3.2	-7.7	3.6	7.9	4.5	7.2	-0.7	-2.0	-2.4	8.5	10.1	9.3
Hungary	4.9	-3.1	4.2	3.4	3.3	3.2	-0.8	-0.1	-0.6	3.4	5.4	4.0
Belarus ⁷	1.2	-6.0	3.5	5.6	5.6	5.6	-1.8	-2.9	-2.5	0.3	2.3	1.8
Bulgaria ⁵	3.4	-4.0	6.0	2.5	1.0	1.9	4.0	1.7	0.6	4.2	8.0	4.5
Serbia	4.2	-3.0	7.5	1.9	1.4	1.9	-6.9	-6.1	-5.5	10.9	13.4	13.0
Croatia	2.9	-9.0	4.9	0.8	1.3	1.2	2.9	-4.0	-1.5	7.8	11.5	8.0

Source: IMF staff.

Note: Data for some countries are based on fiscal years. Please refer to Table F in the Statistical Appendix for a list of economies with exceptional reporting periods.

¹Movements in consumer prices are shown as annual averages. Year-end to year-end changes can be found in Tables A5 and A6 in the Statistical Appendix.²Percent of GDP.³Percent. National definitions of unemployment may differ.⁴Current account position corrected for reporting discrepancies in intra-area transactions.⁵Based on Eurostat's harmonized index of consumer prices except for Slovenia.⁶Includes Albania, Bosnia and Herzegovina, Kosovo, Moldova, Montenegro, and North Macedonia.⁷See country-specific notes for Belarus and Ukraine in the "Country Notes" section of the Statistical Appendix.

Annex Table 1.1.2. Asian and Pacific Economies: Real GDP, Consumer Prices, Current Account Balance, and Unemployment
(Annual percent change, unless noted otherwise)

	Real GDP			Consumer Prices ¹			Current Account Balance ²			Unemployment ³		
	2019	Projections		2019	Projections		2019	Projections		2019	Projections	
		2020	2021		2020	2021		2020	2021		2020	2021
Asia	4.6	0.0	7.6	2.7	2.5	2.5	1.8	1.0	1.2	...	...	...
Advanced Asia	1.2	-4.5	3.8	0.7	0.5	0.8	4.3	2.9	3.0	3.1	4.1	3.7
Japan	0.7	-5.2	3.0	0.5	0.2	0.4	3.6	1.7	1.9	2.4	3.0	2.3
Korea	2.0	-1.2	3.4	0.4	0.3	0.4	3.7	4.9	4.8	3.8	4.5	4.5
Australia	1.8	-6.7	6.1	1.6	1.4	1.8	0.5	-0.6	-1.8	5.2	7.6	8.9
Taiwan Province of China	2.7	-4.0	3.5	0.5	0.5	1.5	10.5	8.2	8.3	3.8	4.4	4.0
Singapore	0.7	-3.5	3.0	0.6	-0.2	0.5	17.0	14.8	15.7	2.3	2.5	2.4
Hong Kong SAR	-1.2	-4.8	3.9	2.9	2.0	2.5	6.2	6.0	5.0	3.0	4.5	3.9
New Zealand	2.2	-7.2	5.9	1.6	1.2	1.4	-3.0	-4.5	-3.2	4.1	9.2	6.8
Macao SAR	-4.7	-29.6	32.0	2.8	2.0	2.3	34.8	13.1	30.0	1.7	2.0	1.8
Emerging and Developing Asia	5.5	1.0	8.5	3.2	3.0	2.9	0.6	0.1	0.5	...	...	...
China	6.1	1.2	9.2	2.9	3.0	2.6	1.0	0.5	1.0	3.6	4.3	3.8
India ⁴	4.2	1.9	7.4	4.5	3.3	3.6	-1.1	-0.6	-1.4	...	...	...
ASEAN-5	4.8	-0.6	7.8	2.1	1.8	2.7	1.2	-0.5	0.1	...	...	...
Indonesia	5.0	0.5	8.2	2.8	2.9	2.9	-2.7	-3.2	-2.7	5.3	7.5	6.0
Thailand	2.4	-6.7	6.1	0.7	-1.1	0.6	6.9	5.2	5.6	1.1	1.1	1.1
Malaysia	4.3	-1.7	9.0	0.7	0.1	2.8	3.3	-0.1	1.7	3.3	4.9	3.4
Philippines	5.9	0.6	7.6	2.5	1.7	2.9	-0.1	-2.3	-2.2	5.1	6.2	5.3
Vietnam	7.0	2.7	7.0	2.8	3.2	3.9	4.0	0.7	1.0	2.2	...	...
Other Emerging and Developing Asia⁵	6.3	1.2	7.5	5.6	5.3	5.3	-2.6	-3.7	-2.3	...	...	...
<i>Memorandum</i>												
Emerging Asia⁶	5.4	1.0	8.5	3.2	2.9	2.8	0.7	0.3	0.6	...	...	...

Source: IMF staff.

Note: Data for some countries are based on fiscal years. Please refer to Table F in the Statistical Appendix for a list of economies with exceptional reporting periods.

¹Movements in consumer prices are shown as annual averages. Year-end to year-end changes can be found in Tables A5 and A6 in the Statistical Appendix.

²Percent of GDP.

³Percent. National definitions of unemployment may differ.

⁴See country-specific note for India in the "Country Notes" section of the Statistical Appendix.

⁵Other Emerging and Developing Asia comprises Bangladesh, Bhutan, Brunei Darussalam, Cambodia, Fiji, Kiribati, Lao P.D.R., Maldives, Marshall Islands, Micronesia, Mongolia, Myanmar, Nauru, Nepal, Palau, Papua New Guinea, Samoa, Solomon Islands, Sri Lanka, Timor-Leste, Tonga, Tuvalu, and Vanuatu.

⁶Emerging Asia comprises the ASEAN-5 (Indonesia, Malaysia, Philippines, Thailand, Vietnam) economies, China, and India.

Annex Table 1.1.3. Western Hemisphere Economies: Real GDP, Consumer Prices, Current Account Balance, and Unemployment
(Annual percent change, unless noted otherwise)

	Real GDP			Consumer Prices ¹			Current Account Balance ²			Unemployment ³		
	2019	Projections		2019	Projections		2019	Projections		2019	Projections	
		2020	2021		2020	2021		2020	2021		2020	2021
North America	2.0	-6.0	4.5	2.0	0.8	2.2	-2.2	-2.6	-2.6	...	...	...
United States	2.3	-5.9	4.7	1.8	0.6	2.2	-2.3	-2.6	-2.8	3.7	10.4	9.1
Canada	1.6	-6.2	4.2	1.9	0.6	1.3	-2.0	-3.7	-2.3	5.7	7.5	7.2
Mexico	-0.1	-6.6	3.0	3.6	2.7	2.8	-0.2	-0.3	-0.4	3.3	5.3	3.5
Puerto Rico ⁴	2.0	-6.0	1.5	0.7	-1.5	0.6	...	...	...	8.5	13.0	12.5
South America⁵	-0.1	-5.0	3.4	9.1	8.1	7.5	-2.3	-1.6	-1.9	...	...	...
Brazil	1.1	-5.3	2.9	3.7	3.6	3.3	-2.7	-1.8	-2.3	11.9	14.7	13.5
Argentina	-2.2	-5.7	4.4	53.5	...	...	-0.8	...	...	9.8	10.9	10.1
Colombia	3.3	-2.4	3.7	3.5	3.5	3.2	-4.3	-4.7	-4.2	10.5	12.2	11.9
Chile	1.1	-4.5	5.3	2.3	3.4	2.9	-3.9	-0.9	-1.8	7.3	9.7	8.9
Peru	2.2	-4.5	5.2	2.1	1.7	1.8	-1.4	-0.9	-1.0	6.6	7.1	7.3
Venezuela	-35.0	-15.0	-5.0	19,906	15,000	15,000	9.8	2.4	3.4	...	...	...
Ecuador	0.1	-6.3	3.9	0.3	0.0	1.2	-0.4	-5.7	-3.6	3.8	6.5	5.9
Paraguay	0.2	-1.0	4.0	2.8	2.9	3.2	-1.0	-2.2	-1.0	7.2	7.1	6.4
Bolivia	2.8	-2.9	2.9	1.8	2.3	4.4	-3.2	-4.6	-4.9	4.0	8.0	4.0
Uruguay	0.2	-3.0	5.0	7.9	8.8	7.9	0.2	-2.5	-3.1	9.4	10.5	8.1
Central America⁶	2.4	-3.0	4.1	2.2	1.3	1.7	-1.4	-2.6	-2.3	...	...	...
Caribbean⁷	3.3	-2.8	4.0	2.8	4.0	4.3	-0.6	-6.5	-3.8	...	...	...
<i>Memorandum</i>												
Latin America and the Caribbean ⁸	0.1	-5.2	3.4	7.1	6.2	5.9	-1.7	-1.5	-1.6	...	...	...
Eastern Caribbean Currency Union ⁹	3.7	-7.6	6.1	0.9	0.8	1.7	-8.9	-21.4	-14.2	...	...	...

Source: IMF staff.

Note: Data for some countries are based on fiscal years. Please refer to Table F in the Statistical Appendix for a list of economies with exceptional reporting periods.

¹Movements in consumer prices are shown as annual averages. Aggregates exclude Venezuela but include Argentina from 2017 onward. Year-end to year-end changes can be found in Tables A5 and A6 in the Statistical Appendix.²Percent of GDP.³Percent. National definitions of unemployment may differ.⁴Puerto Rico is a territory of the United States but its statistical data are maintained on a separate and independent basis.⁵Includes Guyana and Suriname. See country-specific notes for Argentina and Venezuela in the "Country Notes" section of the Statistical Appendix.⁶Central America comprises Belize, Costa Rica, El Salvador, Guatemala, Honduras, Nicaragua, and Panama.⁷The Caribbean comprises Antigua and Barbuda, Aruba, The Bahamas, Barbados, Dominica, Dominican Republic, Grenada, Haiti, Jamaica, St. Kitts and Nevis, St. Lucia, St. Vincent and the Grenadines, and Trinidad and Tobago.⁸Latin America and the Caribbean comprises Mexico and economies from the Caribbean, Central America, and South America. See country-specific notes for Argentina and Venezuela in the "Country Notes" section of the Statistical Appendix.⁹Eastern Caribbean Currency Union comprises Antigua and Barbuda, Dominica, Grenada, St. Kitts and Nevis, St. Lucia, and St. Vincent and the Grenadines as well as Anguilla and Montserrat, which are not IMF members.

Annex Table 1.1.4. Middle Eastern and Central Asian Economies: Real GDP, Consumer Prices, Current Account Balance, and Unemployment*(Annual percent change, unless noted otherwise)*

	Real GDP			Consumer Prices ¹			Current Account Balance ²			Unemployment ³		
	2019	Projections		2019	Projections		2019	Projections		2019	Projections	
		2020	2021		2020	2021		2020	2021		2020	2021
Middle East and Central Asia	1.2	-2.8	4.0	8.5	8.4	8.7	0.4	-5.7	-4.6	...	...	...
Oil Exporters⁴	-0.2	-3.9	4.6	7.5	7.6	8.1	2.4	-5.8	-4.5	...	...	...
Saudi Arabia	0.3	-2.3	2.9	-1.2	0.9	2.0	6.3	-3.1	-3.4	...	...	...
Iran	-7.6	-6.0	3.1	41.1	34.2	33.5	-0.1	-4.1	-3.4	13.6	16.3	16.7
United Arab Emirates	1.3	-3.5	3.3	-1.9	-1.0	1.5	7.4	1.5	4.1	...	...	...
Iraq	3.9	-4.7	7.2	-0.2	0.8	1.0	-1.2	-21.7	-14.1	...	...	...
Algeria	0.7	-5.2	6.2	2.0	3.5	3.7	-9.6	-18.3	-17.1	11.4	15.1	13.9
Kazakhstan	4.5	-2.5	4.1	5.2	6.9	6.8	-3.6	-6.8	-5.5	4.8	7.8	5.8
Qatar	0.1	-4.3	5.0	-0.6	-1.2	2.4	2.4	-1.9	-1.8	...	...	...
Kuwait	0.7	-1.1	3.4	1.1	0.5	2.3	8.9	-10.2	-7.8	...	...	...
Oman	0.5	-2.8	3.0	0.1	1.0	3.4	-5.2	-14.2	-11.1	...	...	...
Azerbaijan	2.3	-2.2	0.7	2.6	3.3	3.2	9.2	-8.2	-3.7	5.0	5.0	5.0
Turkmenistan	6.3	1.8	6.4	5.1	8.0	6.0	5.1	-1.4	-0.4	...	...	...
Oil Importers⁵	3.7	-0.8	2.9	10.4	9.9	9.7	-5.5	-5.4	-4.7	...	...	...
Egypt	5.6	2.0	2.8	13.9	5.9	8.2	-3.6	-4.3	-4.5	8.6	10.3	11.6
Pakistan	3.3	-1.5	2.0	6.7	11.1	8.0	-5.0	-1.7	-2.4	4.1	4.5	5.1
Morocco	2.2	-3.7	4.8	0.0	0.3	1.3	-4.1	-7.8	-4.3	9.2	12.5	10.5
Uzbekistan	5.6	1.8	7.0	14.5	12.6	10.6	-5.6	-9.4	-6.4	...	...	...
Sudan	-2.5	-7.2	-3.0	51.0	81.3	91.1	-14.9	-15.2	-11.8	22.1	25.0	22.0
Tunisia	1.0	-4.3	4.1	6.7	6.2	4.9	-8.8	-7.5	-8.1	14.9	...	...
Jordan	2.0	-3.7	3.7	0.3	0.2	1.6	-2.8	-5.8	-5.3	19.1	...	...
Lebanon	-6.5	-12.0	...	2.9	17.0	...	-20.6	-12.6	...	...	...	...
Afghanistan	3.0	-3.0	4.5	2.3	4.7	4.5	8.6	4.9	5.8	...	...	...
Georgia	5.1	-4.0	3.0	4.9	4.6	3.7	-5.1	-10.5	-6.9	11.6	...	...
Tajikistan	7.5	1.0	5.5	7.8	8.1	6.9	-3.3	-7.7	-4.5	...	...	...
Armenia	7.6	-1.5	4.8	1.4	0.8	2.0	-8.2	-8.6	-7.2	17.7	19.0	18.4
Kyrgyz Republic	4.5	-4.0	8.0	1.1	10.6	7.2	-9.1	-16.6	-11.0	6.6	6.6	6.6
<i>Memorandum</i>												
Caucasus and Central Asia	4.8	-1.0	4.7	6.8	7.7	6.9	-1.6	-7.2	-5.0	...	...	...
Middle East, North Africa, Afghanistan, and Pakistan	0.7	-3.1	3.9	8.7	8.5	8.9	0.6	-5.5	-4.5	...	...	...
Middle East and North Africa	0.3	-3.3	4.2	9.0	8.2	9.1	1.0	-6.0	-4.8	...	...	...
Israel ⁶	3.5	-6.3	5.0	0.8	-1.9	0.5	3.5	3.5	3.2	3.8	12.0	7.6
Maghreb ⁷	1.9	-6.2	9.3	2.2	3.5	3.8	-6.8	-12.6	-11.0	...	...	...
Mashreq ⁸	4.7	1.0	2.6	12.4	6.0	8.0	-5.8	-5.4	-5.2	...	...	...

Source: IMF staff.

Note: Data for some countries are based on fiscal years. Please refer to Table F in the Statistical Appendix for a list of economies with exceptional reporting periods.

¹Movements in consumer prices are shown as annual averages. Year-end to year-end changes can be found in Tables A5 and A6 in the Statistical Appendix.²Percent of GDP.³Percent. National definitions of unemployment may differ.⁴Includes Bahrain, Libya, and Yemen.⁵Includes Djibouti, Mauritania, and Somalia. Excludes Syria because of the uncertain political situation.⁶Israel, which is not a member of the economic region, is included for reasons of geography but is not included in the regional aggregates.⁷The Maghreb comprises Algeria, Libya, Mauritania, Morocco, and Tunisia.⁸The Mashreq comprises Egypt, Jordan, and Lebanon. Syria is excluded because of the uncertain political situation.

Annex Table 1.1.5. Sub-Saharan African Economies: Real GDP, Consumer Prices, Current Account Balance, and Unemployment
(Annual percent change, unless noted otherwise)

	Real GDP			Consumer Prices ¹			Current Account Balance ²			Unemployment ³		
	2019	Projections		2019	Projections		2019	Projections		2019	Projections	
		2020	2021		2020	2021		2020	2021		2020	2021
Sub-Saharan Africa	3.1	-1.6	4.1	8.4	9.3	7.6	-4.0	-4.7	-4.2	...	...	...
Oil Exporters⁴	1.7	-2.9	2.5	11.7	13.3	12.9	-2.5	-4.1	-2.9	...	...	...
Nigeria	2.2	-3.4	2.4	11.4	13.4	12.4	-3.8	-3.3	-2.5	...	...	...
Angola	-1.5	-1.4	2.6	17.1	20.7	22.3	2.9	-6.7	-3.0	...	...	...
Gabon	3.4	-1.2	3.6	2.0	3.0	3.0	-0.8	-8.4	-6.1	...	...	...
Republic of Congo	-0.9	-2.3	3.4	2.2	2.1	2.6	8.4	-1.2	-2.8	...	...	...
Chad	3.0	-0.2	6.1	-1.0	2.2	2.9	-4.9	-12.9	-10.1	...	...	...
Middle-Income Countries⁵	2.3	-3.0	4.9	4.1	3.8	4.1	-3.2	-2.1	-2.6	...	...	...
South Africa	0.2	-5.8	4.0	4.1	2.4	3.2	-3.0	0.2	-1.3	28.7	35.3	34.1
Ghana	6.1	1.5	5.9	7.2	9.7	8.5	-2.7	-4.5	-3.0	...	...	...
Côte d'Ivoire	6.9	2.7	8.7	0.8	1.2	1.4	-2.7	-3.3	-2.5	...	...	...
Cameroon	3.7	-1.2	4.1	2.5	2.8	2.3	-3.7	-5.7	-4.8	...	...	...
Zambia	1.5	-3.5	2.3	9.8	13.4	12.1	1.0	-2.0	-2.6	...	...	...
Senegal	5.3	3.0	5.5	1.0	2.0	1.9	-9.1	-11.3	-11.4	...	...	...
Low-Income Countries⁶	5.6	1.6	4.9	9.7	11.2	5.8	-6.7	-8.0	-7.5	...	...	...
Ethiopia	9.0	3.2	4.3	15.8	15.4	9.1	-5.3	-5.3	-4.6	...	...	...
Kenya	5.6	1.0	6.1	5.2	5.1	5.0	-4.5	-4.6	-4.4	...	...	...
Tanzania	6.3	2.0	4.6	3.4	3.9	4.3	-3.2	-3.8	-3.8	...	...	...
Uganda	4.9	3.5	4.3	2.9	3.9	4.8	-9.5	-9.7	-8.1	...	...	...
Democratic Republic of the Congo	4.4	-2.2	3.5	4.8	11.0	10.5	-4.2	-5.4	-4.1	...	...	...
Mali	5.1	1.5	4.1	-0.6	0.6	1.5	-4.2	-3.7	-3.9	...	...	...
Madagascar	4.8	0.4	5.0	5.6	5.5	6.5	-2.5	-2.9	-3.0	...	...	...

Source: IMF staff.

Note: Data for some countries are based on fiscal years. Please refer to Table F in the Statistical Appendix for a list of economies with exceptional reporting periods.

¹Movements in consumer prices are shown as annual averages. Year-end to year-end changes can be found in Table A6 in the Statistical Appendix.²Percent of GDP.³Percent. National definitions of unemployment may differ.⁴Includes Equatorial Guinea and South Sudan.⁵Includes Botswana, Cabo Verde, Eswatini, Lesotho, Mauritius, Namibia, and Seychelles.⁶Includes Benin, Burkina Faso, Burundi, the Central African Republic, Comoros, Eritrea, The Gambia, Guinea, Guinea-Bissau, Liberia, Malawi, Mali, Mozambique, Niger, Rwanda, São Tomé and Príncipe, Sierra Leone, Togo, and Zimbabwe.

Annex Table 1.1.6. Summary of World Real per Capita Output
(Annual percent change; in international currency at purchasing power parity)

	Average									Projections	
	2002–11	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
World	2.6	2.0	2.2	2.3	2.2	2.1	2.6	2.4	1.7	-4.2	4.6
Advanced Economies	1.1	0.7	0.9	1.6	1.8	1.2	2.1	1.8	1.3	-6.5	4.1
United States	0.9	1.5	1.2	1.8	2.2	0.9	1.7	2.4	1.8	-6.4	4.1
Euro Area ¹	0.7	-1.2	-0.5	1.2	1.8	1.7	2.4	1.8	1.1	-7.7	4.6
Germany	1.2	0.2	0.2	1.8	0.9	1.4	2.1	1.2	0.3	-7.0	5.2
France	0.6	-0.2	0.1	0.4	0.7	0.8	2.0	1.6	1.2	-7.4	4.2
Italy	-0.3	-3.3	-2.4	-0.5	0.8	1.5	1.8	1.0	0.5	-8.9	5.0
Spain	0.3	-3.0	-1.1	1.7	3.9	3.1	2.9	2.3	1.9	-8.4	3.8
Japan	0.5	1.7	2.2	0.5	1.3	0.5	2.3	0.5	0.9	-4.8	3.4
United Kingdom	0.8	0.8	1.5	1.8	1.5	1.1	1.3	0.7	0.8	-7.0	3.5
Canada	1.0	0.7	1.3	1.8	-0.1	0.0	1.9	0.6	0.2	-7.5	3.1
Other Advanced Economies ²	2.8	1.3	1.7	2.2	1.5	1.7	2.4	1.9	1.1	-5.3	3.8
Emerging Market and Developing Economies	4.8	3.6	3.6	3.2	2.8	3.1	3.3	3.2	2.3	-2.4	5.3
Emerging and Developing Asia	7.4	5.9	5.9	5.8	5.8	5.8	5.7	5.4	4.6	0.2	7.6
China	10.1	7.4	7.3	6.7	6.4	6.2	6.4	6.3	5.8	0.9	8.9
India ³	6.1	4.1	5.0	6.0	6.6	6.9	5.7	4.7	2.9	0.5	6.0
ASEAN-5 ⁴	3.9	4.7	3.7	3.4	3.6	3.9	4.2	4.2	3.8	-1.7	6.7
Emerging and Developing Europe	4.7	2.7	2.7	1.6	0.6	1.5	3.8	3.1	1.9	-5.4	4.0
Russia	5.0	3.5	1.5	-1.1	-2.1	0.1	1.7	2.6	1.4	-5.4	3.6
Latin America and the Caribbean	2.2	1.7	1.7	0.1	-0.9	-1.9	0.2	0.1	-1.2	-6.0	2.5
Brazil	2.8	1.0	2.1	-0.3	-4.4	-4.1	0.5	0.5	0.3	-5.9	2.2
Mexico	0.4	2.2	0.0	1.5	2.0	1.7	0.9	1.0	-1.2	-7.6	2.0
Middle East and Central Asia	2.6	0.9	0.5	0.5	0.4	2.8	-0.2	-0.2	-0.9	-4.9	2.0
Saudi Arabia	1.4	2.5	0.0	2.5	1.7	-0.6	-3.3	0.0	-1.6	-4.2	0.9
Sub-Saharan Africa	2.9	1.5	2.4	2.4	0.5	-1.3	0.3	0.6	0.3	-4.1	1.5
Nigeria	5.9	1.5	2.6	3.5	0.0	-4.2	-1.8	-0.7	-0.4	-5.8	-0.2
South Africa	2.2	0.7	0.9	0.3	-0.3	-1.1	-0.1	-0.7	-1.3	-7.2	2.4
<i>Memorandum</i>											
European Union ⁵	1.2	-0.9	-0.2	1.5	2.2	2.0	2.7	2.2	1.6	-7.3	4.7
Low-Income Developing Countries	3.8	1.8	3.6	3.8	2.1	1.4	2.5	2.8	2.8	-1.8	3.3
Middle East and North Africa	2.6	0.2	-0.3	-0.2	0.0	3.1	-1.2	-1.2	-1.8	-5.4	2.0

Source: IMF staff.

Note: Data for some countries are based on fiscal years. Please refer to Table F in the Statistical Appendix for a list of economies with exceptional reporting periods.

¹Data calculated as the sum of individual euro area countries.

²Excludes the Group of Seven (Canada, France, Germany, Italy, Japan, United Kingdom, United States) and euro area countries.

³See country-specific note for India in the "Country Notes" section of the Statistical Appendix.

⁴Indonesia, Malaysia, Philippines, Thailand, Vietnam.

⁵Beginning with the April 2020 *World Economic Outlook*, the United Kingdom is excluded from the European Union group.

