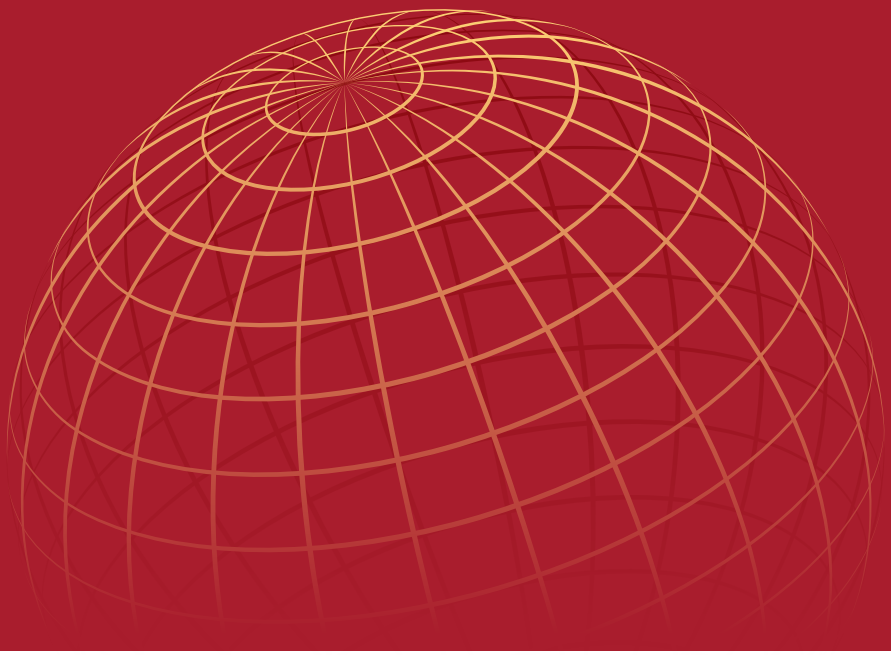


CHAPTER 1

GLOBAL OUTLOOK

Following more than two years of pandemic, spillovers from the Russian Federation's invasion of Ukraine are set to sharply hasten the deceleration of global economic activity, which is now expected to slow to 2.9 percent in 2022. The war in Ukraine is leading to high commodity prices, adding to supply disruptions, increasing food insecurity and poverty, exacerbating inflation, contributing to tighter financial conditions, magnifying financial vulnerability, and heightening policy uncertainty. Growth in emerging market and developing economies (EMDEs) this year has been downgraded to 3.4 percent, as negative spillovers from the invasion of Ukraine more than offset any near-term boost to some commodity exporters from higher energy prices. Despite the negative shock to global activity in 2022, there is essentially no rebound projected next year: global growth is forecast to edge up only slightly to a still-subdued 3 percent in 2023, as many headwinds—in particular, high commodity prices and continued monetary tightening—are expected to persist. Moreover, the outlook is subject to various downside risks, including intensifying geopolitical tensions, growing stagflationary headwinds, rising financial instability, continuing supply strains, and worsening food insecurity. These risks underscore the importance of a forceful policy response. The global community needs to ramp up efforts to mitigate humanitarian crises caused by the war in Ukraine and conflict elsewhere, alleviate food insecurity, and expand vaccine access to ensure a durable end of the pandemic. Meanwhile, EMDE policy makers need to refrain from implementing export restrictions or price controls, which could end up magnifying the increase in commodity prices. With rising inflation, tightening financial conditions, and elevated debt levels sharply limiting policy space, spending can be reprioritized toward targeted relief for vulnerable households. Over the long run, policies will be required to reverse the damage inflicted by the dual shocks of the pandemic and the war on growth prospects, including preventing fragmentation in trade networks, improving education, and raising labor force participation.

Summary

Still suffering from the effects of more than two years of pandemic, the global economy is experiencing yet another major negative shock. Russia's invasion of Ukraine has not only precipitated a humanitarian catastrophe—with thousands of civilians killed and millions more displaced—but also resulted in a deep regional slowdown and substantial negative global spillovers. These spillovers are magnifying pre-existing strains from the pandemic, such as bottlenecks in global supply chains and significant increases in the price of many commodities.

The effects of the invasion have also caused a further reduction in policy space, which is now much more limited than at the onset of the pandemic. Amid surging commodity prices and supply disruptions, inflation has soared across the world, exacerbating the exceedingly difficult tradeoffs policy makers face between supporting growth and controlling price pressures. Global financial conditions have tightened and borrowing costs have increased, particularly in emerging market and developing economies (EMDEs), reflecting reduced policy accommodation in response to inflationary pressures, elevated uncertainty, and heightened geopolitical risks. In addition, the unwinding of fiscal support measures has continued to weigh on global activity.

Against the backdrop of this significantly more challenging context, the world economy is expected to experience its sharpest deceleration following an initial recovery from global recession in more than 80 years. Global growth is projected to slow from 5.7 percent in 2021 to 2.9 percent in 2022 and average 3 percent in 2023-24, as Russia's invasion of Ukraine significantly disrupts activity and trade in the near term, pent-up demand fades, and policy support is withdrawn amid high inflation (figures 1.1.A and 1.1.B). The effects of the war—including more acute inflationary pressures and a faster pace of monetary tightening than previously assumed—account for most of the 1.2 percentage points downward revision to this year's growth forecast. Growth projections for 2022 have been downgraded for most economies—including for

Note: This chapter was prepared by Carlos Arteta, Justin-Damien Guénette, Patrick Kirby, Lucia Quaglietti, and Collette Wheeler, with contributions from Jongrim Ha, Osamu Inami, Sergiy Kasyanenko, Phil Kenworthy, Peter Nagle, and Ekaterine Vashakmadze.

TABLE 1.1 Real GDP[1]

	2019	2020	2021e	2022f	2023f	2024f	Percentage point differences from January 2022 projections 2022f	2023f
World	**2.6**	**-3.3**	**5.7**	**2.9**	**3.0**	**3.0**	**-1.2**	**-0.2**
Advanced economies	**1.7**	**-4.6**	**5.1**	**2.6**	**2.2**	**1.9**	**-1.2**	**-0.1**
United States	2.3	-3.4	5.7	2.5	2.4	2.0	-1.2	-0.2
Euro area	1.6	-6.4	5.4	2.5	1.9	1.9	-1.7	-0.2
Japan	-0.2	-4.6	1.7	1.7	1.3	0.6	-1.2	0.1
Emerging market and developing economies	**3.8**	**-1.6**	**6.6**	**3.4**	**4.2**	**4.4**	**-1.2**	**-0.2**
East Asia and Pacific	5.8	1.2	7.2	4.4	5.2	5.1	-0.7	0.0
China	6.0	2.2	8.1	4.3	5.2	5.1	-0.8	-0.1
Indonesia	5.0	-2.1	3.7	5.1	5.3	5.3	-0.1	0.2
Thailand	2.2	-6.2	1.6	2.9	4.3	3.9	-1.0	0.0
Europe and Central Asia	2.7	-1.9	6.5	-2.9	1.5	3.3	-5.9	-1.4
Russian Federation	2.2	-2.7	4.7	-8.9	-2.0	2.2	-11.3	-3.8
Turkey	0.9	1.8	11.0	2.3	3.2	4.0	0.3	0.2
Poland	4.7	-2.2	5.9	3.9	3.6	3.7	-0.8	0.2
Latin America and the Caribbean	0.8	-6.4	6.7	2.5	1.9	2.4	-0.1	-0.8
Brazil	1.2	-3.9	4.6	1.5	0.8	2.0	0.1	-1.9
Mexico	-0.2	-8.2	4.8	1.7	1.9	2.0	-1.3	-0.3
Argentina	-2.0	-9.9	10.3	4.5	2.5	2.5	1.9	0.4
Middle East and North Africa	0.9	-3.7	3.4	5.3	3.6	3.2	0.9	0.2
Saudi Arabia	0.3	-4.1	3.2	7.0	3.8	3.0	2.1	1.5
Iran, Islamic Rep.[3]	-6.8	3.4	4.1	3.7	2.7	2.3	1.3	0.5
Egypt, Arab Rep.[2]	5.6	3.6	3.3	6.1	4.8	5.0	0.6	-0.7
South Asia	4.1	-4.5	7.6	6.8	5.8	6.5	-0.8	-0.2
India[3]	3.7	-6.6	8.7	7.5	7.1	6.5	-1.2	0.3
Pakistan[2]	3.1	-0.9	5.7	4.3	4.0	4.2	0.9	0.0
Bangladesh[2]	7.9	3.4	6.9	6.4	6.7	6.9	0.0	-0.2
Sub-Saharan Africa	2.6	-2.0	4.2	3.7	3.8	4.0	0.1	0.0
Nigeria	2.2	-1.8	3.6	3.4	3.2	3.2	0.9	0.4
South Africa	0.1	-6.4	4.9	2.1	1.5	1.8	0.0	0.0
Angola	-0.7	-5.2	0.7	3.1	3.3	3.2	0.0	0.5
Memorandum items:								
Real GDP[1]								
High-income countries	1.7	-4.6	5.1	2.7	2.2	2.0	-1.1	-0.2
Middle-income countries	4.0	-1.3	6.8	3.3	4.2	4.5	-1.3	-0.3
Low-income countries	4.8	1.9	3.9	4.1	5.3	5.7	-0.8	-0.6
EMDEs excl. Russian Federation and Ukraine	3.9	-1.5	6.7	4.2	4.5	4.5	-0.5	0.0
EMDEs excl. China	2.5	-4.0	5.6	2.7	3.4	4.0	-1.5	-0.4
Commodity-exporting EMDEs	1.8	-3.8	4.8	1.2	2.6	3.2	-2.1	-0.5
Commodity-exporting EMDEs excl. Russian Federation and Ukraine	1.8	-4.0	4.8	3.7	3.3	3.4	0.3	-0.1
Commodity-importing EMDEs	4.9	-0.4	7.5	4.4	4.9	5.0	-0.8	-0.1
Commodity-importing EMDEs excl. China	3.2	-4.2	6.6	4.6	4.5	4.9	-0.7	-0.1
EM7	4.5	-0.5	7.3	3.3	4.3	4.7	-1.5	-0.4
World (PPP weights)[4]	2.9	-3.0	6.0	3.1	3.4	3.5	-1.3	-0.2
World trade volume[5]	**1.4**	**-8.0**	**10.3**	**4.0**	**4.3**	**3.8**	**-1.8**	**-0.4**
Commodity prices[6]								
Oil price	-9.9	-33.9	66.5	42.0	-8.0	-13.0	35.0	3.8
Non-energy commodity price index	-4.2	3.3	32.7	17.9	-8.1	-3.1	19.9	-4.1

Source: World Bank.

1. Headline aggregate growth rates are calculated using GDP weights at average 2010-19 prices and market exchange rates. The aggregate growth rates may differ from the previously published numbers that were calculated using GDP weights at average 2010 prices and market exchange rates. Data for Afghanistan and Lebanon are excluded.

2. GDP growth rates are on a fiscal year basis. Aggregates that include these countries are calculated using data compiled on a calendar year basis. Pakistan's growth rates are based on GDP at factor cost. The column labeled 2022 refers to FY2021/22.

3. GDP growth rates are on a fiscal year basis. Aggregates that include these countries are calculated using data compiled on a calendar year basis. The column labeled 2022 refers to FY2022/23.

4. World growth rates are calculated using average 2010-19 purchasing power parity (PPP) weights, which attribute a greater share of global GDP to emerging market and developing economies (EMDEs) than market exchange rates.

5. World trade volume of goods and nonfactor services.

6. Oil price refers to the Brent crude oil benchmark. The non-energy index is the weighted average of 39 commodity prices (7 metals, 5 fertilizers, and 27 agricultural commodities). For additional details, please see https://www.worldbank.org/commodities.

Note: e = estimate; f = forecast. World Bank forecasts are frequently updated based on new information. Consequently, projections presented here may differ from those contained in other World Bank documents, even if basic assessments of countries' prospects do not differ at any given date. For the definition of EMDEs, commodity exporters, and commodity importers, please refer to table 1.2. EM7 includes Brazil, China, India, Indonesia, Mexico, the Russian Federation, and Turkey. The World Bank is currently not publishing economic output, income, or growth data for Turkmenistan and República Bolivariana de Venezuela owning to lack of reliable data of adequate quality. Turkmenistan and República Bolivariana de Venezuela are excluded from cross-country macroeconomic aggregates.

the majority of commodity exporters despite improved terms of trade, partly due to higher input costs in non-energy exporters (figure 1.1.C). The cumulative losses to global activity relative to its pre-pandemic trend are expected to continue mounting over the forecast horizon, especially among EMDE commodity importers, as a result of lasting damage inflicted by more than two years of negative shocks (figure 1.1.D).

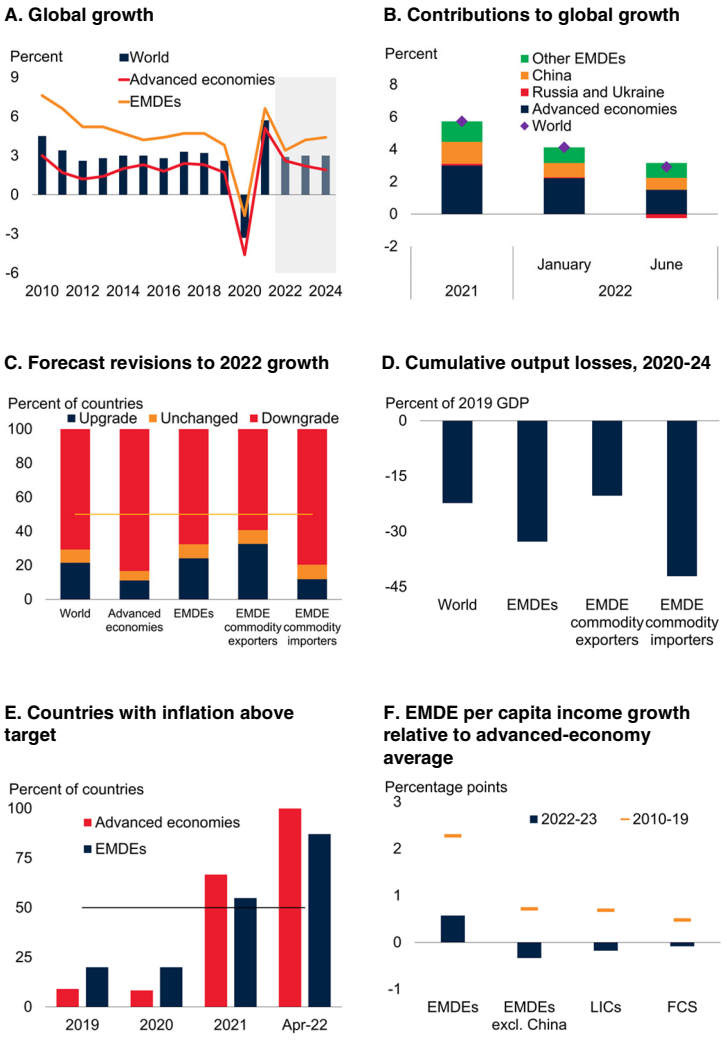
In advanced economies, activity is being dampened by rising energy prices, less favorable financial conditions, and supply chain disruptions, all of which have been exacerbated by the war in Ukraine. As a result, growth in these economies is projected to decelerate from 5.1 percent in 2021 to 2.6 percent in 2022—1.2 percentage points below previous projections. Growth is expected to further moderate to 2.2 percent in 2023, largely reflecting the further unwinding of the fiscal and monetary policy support provided during the pandemic.

EMDE growth is projected to roughly halve this year, slowing from 6.6 percent in 2021 to 3.4 percent in 2022—well below its annual average of 4.8 percent over 2011-19, despite a still-incomplete recovery from the pandemic. The slowdown in part reflects the spillovers from the war in Ukraine, which have led to commodity price volatility, higher input costs, trade disruptions, and weaker confidence. These spillovers are also magnifying the effects of pre-existing headwinds to growth, including rising inflationary pressures, tightening financial conditions, continued withdrawal of macro-economic policy support, and softening external demand. And since EMDE households devote a relatively large proportion of their spending to basic necessities, the war's impact on food and energy prices is also weighing markedly on consumption. This is especially true among commodity importers, whereas energy exporters are benefitting from higher global energy prices and easing oil production cuts.

The forecast for EMDE growth in 2022 has been downgraded by 1.2 percentage points, largely on account of the adverse effects of the war. Excluding Russia and Ukraine, growth in EMDEs

FIGURE 1.1 Global prospects

The Russian Federation's invasion of Ukraine has significantly accelerated the projected slowdown in global growth. Forecasts for most economies have been downgraded for this year. Headwinds from the war are adding to large cumulative losses in output since the onset of the pandemic, particularly for commodity-importing emerging market and developing economies (EMDEs). Surging commodity prices have contributed to broadening price pressures, pushing inflation above central bank targets in the vast majority of inflation-targeting countries. For many EMDEs, adverse shocks from the pandemic and war have reversed the catch-up of per capita income with advanced economies.



Sources: Consensus Economics; International Monetary Fund; World Bank.

Note: EMDEs = emerging market and developing economies; FCS = fragile and conflict-affected situations; LICs = low-income countries. Unless otherwise indicated, aggregate growth rates are calculated using real U.S. dollar GDP weights at average 2010-19 prices and market exchange rates.

A. Shaded area indicates forecasts.

B. Figure shows the contributions to global growth forecasts in the January 2022 and June 2022 editions of *Global Economic Prospects*.

C. Forecast revisions are the change in 2022 growth forecasts between January 2022 and June 2022 editions of *Global Economic Prospects*.

D. Bars show cumulative output losses over 2020-24, which are computed as deviations from trend, expressed as a share of GDP in 2019. Output is measured in U.S. dollars at 2010-19 prices and market exchange rates. Trend is assumed to grow at the regression-estimated trend growth rate of 2010-19. EMDE commodity exporters exclude the Russian Federation and Ukraine.

E. Bars show the share of inflation-targeting economies with average inflation during the course of the year (or month) above the target range. Sample includes 12 advanced economies and 31 EMDEs.

F. Relative per capita income growth is computed as the difference in per capita GDP growth between each respective EMDE group and the advanced-economy average.

in 2022 has been revised down by 0.5 percentage point, as improved prospects in energy exporters are more than offset by downgrades to most other EMDEs. Indeed, forecasts for 2022 growth have been revised down in nearly 70 percent of EMDEs, including most commodity-importing countries. EMDE growth is anticipated to firm to an average of 4.3 percent in 2023-24, as the lingering effects of the war abate.

Global consumer price inflation has climbed higher around the world and is above central bank targets in almost all countries which have them (figure 1.1.E). Inflation is envisioned to remain elevated for longer and at higher levels than previously assumed. It is expected to peak around mid-2022 and then decline only gradually as global growth moderates, demand shifts further from goods toward services, supply chain bottlenecks abate, and commodity prices edge down, including for energy. Whereas wage pressures remain generally contained in EMDEs, they are likely to persist in several advanced economies in the near term. Despite new headwinds to growth, monetary policy across the world is expected to be further tightened as central banks seek to contain inflationary pressures. Pandemic-related fiscal support will also continue to be withdrawn in advanced economies and EMDEs.

The abrupt growth slowdown in EMDEs implies a pronounced deceleration in per capita income growth, from 5.4 percent in 2021 to 2.3 percent in 2022. As a result of the damage from the pandemic and the war in Ukraine, the level of EMDE per capita income this year will be nearly 5 percent below its pre-pandemic trend. EMDE catch-up with advanced-economy income levels is expected to be markedly slower over the next few years than in the pre-pandemic period, with progress reversing in EMDEs excluding China (figure 1.1.F). Higher food prices are likely to lower real per capita incomes in many EMDEs reliant on food imports and substantially worsen global food insecurity and poverty. The lingering effects of the pandemic, the war, and the surge in food prices are combining to make the external environment far more challenging for many countries, and are expected to lead to a net increase of 75 million people in extreme poverty by the end of this year relative to pre-pandemic projections.

The global outlook is subject to various interlinked downside risks. Intensifying geopolitical tensions could further disrupt economic activity, generate policy uncertainty and, if persistent, lead to fragmentation in global trade, investment, and financial systems. Supply disruptions from the pandemic and the war in Ukraine have led to a spike in commodity prices comparable to the oil shocks of 1973 and 1979-80 (figure 1.2.A). Additional adverse shocks would increase the possibility that the global economy will experience a period of stagflation reminiscent of the 1970s, with low growth and high inflation (Special Focus 1).

Central banks may be forced to tighten monetary policy more rapidly than currently expected to bring rising price pressures under control. Historically, EMDE financial crises have been more likely when U.S. monetary policy pivots toward a more aggressive tightening stance, as it is currently doing to rein in elevated inflation (figure 1.2.B). Financial stress could spread across countries. The production and shipping of food and fertilizer could be further disrupted, leading to widespread food shortages, pushing millions of people into food insecurity and extreme poverty. The pandemic could worsen due to the appearance of new, more virulent variants and lead to the reintroduction of disruptive control measures. The simultaneous materialization of several downside risks could result in a much sharper and more prolonged global slowdown. Specifically, if faster tightening of U.S. monetary policy were to cause acute financial stress in EMDEs, European Union (EU) member countries were to face a sudden ban on their energy imports, and China were to experience renewed pandemic-related lockdowns, global growth could fall to 2.1 percent and 1.5 percent in 2022 and 2023, respectively (figure 1.2.C).

The more subdued global economic prospects and the risks clouding the outlook underscore the major challenges policy makers face at the global and national levels. Global efforts are urgently

required to alleviate the mounting human suffering caused by Russia's invasion of Ukraine and conflict elsewhere, including forced displacement, as well as acute food shortages. Regional cooperation will also be needed to house refugees and meet their basic needs. Once hostilities in Ukraine subside, large-scale coordinated support will be necessary to accelerate reconstruction efforts. The war also underscores the need to enhance global energy security, including by accelerating the transition toward low-carbon energy sources. At the same time, global cooperation is still needed to achieve a durable end to the COVID-19 pandemic, particularly in fostering vaccination in the poorest countries.

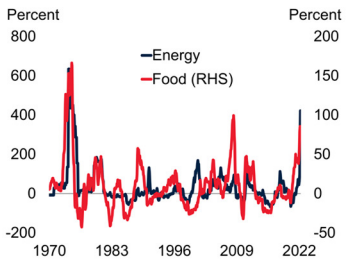
Policy interest rates in many economies have been increasing at a far slower pace than headline inflation, as central banks have generally attempted to look through fluctuations driven by commodity prices. As a result, despite recent nominal policy hikes, monetary conditions—including in major economies such as the United States and the euro area—continue to be accommodative (figure 1.2.D). The surge in oil and other commodity prices has created additional monetary policy challenges, as the ensuing rise in inflationary pressures heightens the possibility of a de-anchoring of inflation expectations. Addressing these new pressures without unduly impairing the recovery will require clear communication and a steadfast commitment to credible monetary frameworks. Maintaining the resilience of financial institutions through effective macroprudential regulation is also critical.

The ability of EMDE fiscal authorities to provide support will be severely limited by tighter financing conditions and higher borrowing costs amid elevated debt loads and depleted policy space. Debt was already on an unsustainable path for many EMDEs prior to the war, and fiscal sustainability is likely to be eroded further by weaker growth prospects and higher borrowing costs. Balancing the need to ensure fiscal sustainability against that of mitigating the war's adverse effects on vulnerable populations may require reprioritizing existing spending, especially in commodity importers. Recent global developments underscore the urgency for EMDEs

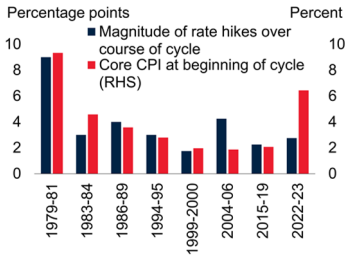
FIGURE 1.2 Global risks and policy challenges

Surging energy and food prices heighten the risk of a prolonged period of global stagflation reminiscent of the 1970s. Broad-based inflationary pressures in the United States may precipitate more aggressive monetary tightening, potentially triggering financial stress in emerging market and developing economies (EMDEs). Global growth could be substantially weaker if key downside risks were to materialize. Despite central bank rate hikes, real rates remain low amid high inflation, suggesting that further policy tightening may be needed. To address rising food insecurity, EMDE policy makers can deploy targeted support rather than distortionary price controls, which are already widespread.

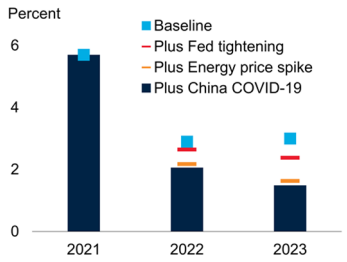
A. Energy and food prices



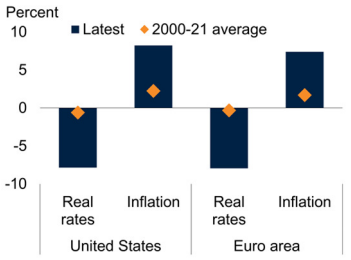
B. Magnitude of rate hikes and U.S. core CPI during previous Federal Reserve tightening cycles



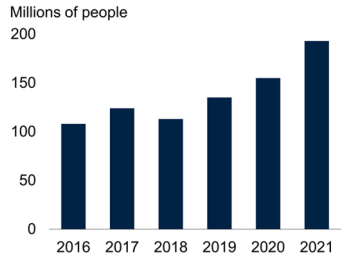
C. Global growth scenarios



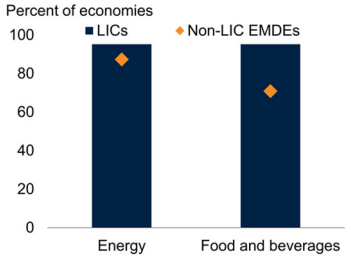
D. Real policy interest rates and inflation



E. People in acute food insecurity



F. Economies with price controls



Sources: Eurostat (database); Federal Reserve Economic Data; FSIN and GNAFC (2022); Guénette (2020); Haver Analytics; Oxford Economics; World Bank; World Trade Organization (WTO).

Note: EMDEs = emerging market and developing economies; LICs = low-income countries.

A. Figure shows percent change in monthly energy and food price indexes over a 24-month period. This facilitates a comparison of the April 2020 trough with the most recent data (April 2022). Due to data limitations, prior to 1979, the energy price change is proxied using the oil price change.

B. Blue bars show the extent of policy rate increases during previous tightening cycles. The value for 2023 is an estimate based on market expectations for the level of the Fed Funds rate in mid-2023. U.S. core CPI for 2023 shows latest data associated with tightening cycle.

C. Scenario outcomes produced using the Oxford Economics Global Economic Model. Scenarios are linearly additive.

D. "Real rates" are policy interest rates minus consumer price index inflation. "Latest" refers to the last available data, which are for April 2022.

E. Data from the Food Security Information Network's *Global Report on Food Crises* 2022.

F. Listed price control policies are retrieved from WTO *Trade Policy Review* publications. Sample includes 21 low-income countries and 56 other EMDEs.

to redirect expenditures from inefficient and costly items, such as fossil fuel subsidies, toward targeted fiscal relief for vulnerable households, and thus mitigate additional spikes in poverty and food insecurity. EMDEs also need to emphasize spending on growth-enhancing investments and social protection. For some energy exporters, higher commodity prices represent an opportunity to invest windfall gains in measures that yield long-term growth dividends and promote diversification, which will help these economies adapt to the green transition.

EMDEs continue to be confronted with significant long-term challenges. Enhancing resilience to food crises remains a key priority in light of worsening food insecurity (figure 1.2.E). To this end, policy makers in EMDEs should refrain from putting in place controls on food and energy prices, which are already widespread and have been shown to be ineffective and costly (figure 1.2.F). Instead, they need to strengthen targeted social safety nets and enhance the resilience of food systems, including by investing in public infrastructure that can improve the efficiency of food production and trade. Over the long run, reversing the damage inflicted by the dual shocks of the pandemic and the war in Ukraine on growth prospects will require measures to prevent fragmentation in trade networks, effective investment in education and digital technologies, and the promotion of labor force participation—especially female participation—through active labor market policies.

Global context

Russia's invasion of Ukraine—the second major global shock in just over two years—is exacerbating the global economic slowdown. It has worsened the strains in global supply chains and caused significant additional increases in the prices of many commodities, particularly those exported by Russia and Ukraine. This has contributed to a further acceleration of inflation in both advanced economies and EMDEs. Global financial conditions have tightened considerably, reflecting increases in monetary policy rates, greater volatility, and waning risk appetite.

Russia's invasion of Ukraine represents not only an enormous humanitarian crisis but also a significant negative shock for a world economy still struggling to recover from the pandemic. Global activity was already slowing as pent-up demand was being depleted and supportive macroeconomic policies were being unwound, while inflation was mounting owing to supply disruptions and rising prices for food and energy. The war has aggravated these strains on the global economy, with particularly large costs for poor and vulnerable populations.

Global trade

Goods trade slowed in the first half of 2022 as supply chains continued to be affected by the lingering effects of the pandemic, including disruptions in major Asian ports and lockdowns in key cities in China. In addition, Russia's invasion of Ukraine and its repercussions have led to severe physical and logistical dislocations that have magnified pre-existing bottlenecks (figure 1.3.A).

Russia and Ukraine account for a small share—under 3 percent—of global exports. However, many global industries rely on supplies of key commodities produced in the two countries, especially in Russia. Shortages and unprecedented increases in the prices of these inputs have rippled through global value chains (GVCs), leading to production standstills and elevated producer prices. At the same time, transport costs have increased, including in the wake of the war in Ukraine. Navigation and trade in the Black Sea have been materially disrupted, negatively affecting the transport of food and crude oil. Cargos and shipments held at Russian and Ukrainian ports have been rerouted through longer and more expensive routes (Ruta 2022).

Services trade has regained its pre-pandemic level, driven by a rebound in non-tourism services. While tourism activity has started to recover in advanced economies with high vaccination levels, it remains generally subdued in EMDEs, especially in tourism-reliant countries and in small states. The invasion is also weighing on tourism activity in countries that rely on tourists from Russia and Ukraine.

Global trade growth is anticipated to slow to 4 percent in 2022 as the war in Ukraine further disrupts global value chains, global activity gradually shifts back toward the less trade-intensive services sector, and international mobility moves toward pre-pandemic levels only gradually. This is a substantial downward revision relative to previous forecasts, largely because of higher transport costs and significant global value chain disruptions associated with the war (figure 1.3.B). Global trade growth is expected to moderate to an average of 4.1 percent in 2023-24 as global demand for tradable goods continues to decelerate.

Prolonged closures of factories and key ports in China as a result of COVID-19 lockdowns pose a significant downside risk to the near-term trade outlook. Delivery times could lengthen further, leading to new trade disruptions and global supply shortages, which could in turn severely affect production and activity in other countries. In addition, although some of the effects of the invasion of Ukraine could be mitigated by new trade linkages, a more protracted war and its long-lasting repercussions, such as persistent uncertainty, represent a substantial downside risk to the longer-term trade outlook, as it could lead to fragmentation in the global trade system.

Commodity markets

Commodity prices surged in the first half of 2022, in part reflecting the effects of Russia's invasion of Ukraine, and following a broad-based rise that began in mid-2020 spurred by a rebound in demand amid constrained production for several commodities. The increase in prices was particularly pronounced for commodities of which Russia and Ukraine are large exporters, including energy and wheat, as the war resulted in major disruptions to production and trade (figures 1.4.A and 1.4.B). Prices of oil products, notably diesel and gasoline, rose much more than crude oil prices as a result of insufficient refining capacity and disruption to Russia's exports of refined oil products. The G7 and the EU announced they would ban or gradually phase out their imports of Russian oil, with similar measures taken for coal and natural gas. Several oil companies also announced they would cease operations in Russia, while many traders chose to boycott Russian oil.

FIGURE 1.3 Global trade

Supply chains continue to be under strain amid new COVID-19 lockdowns affecting major Asian ports and logistical disruptions associated with Russia's invasion of Ukraine. Global trade growth has been substantially revised down, in part reflecting significant value chain disruptions associated with the war.

Sources: Benigno et al. (2022); Federal Reserve Bank of New York; World Bank.
A. Figure shows the Global Supply Chain Pressure Index on a monthly basis since 1998. The index is normalized such that zero indicates the average value and positive/negative values represent how many standard deviations the index is above/below this average value.
B. Trade measured as the average of export and import volumes. January 2022 forecasts are from the January 2022 edition of *Global Economic Prospects* report.

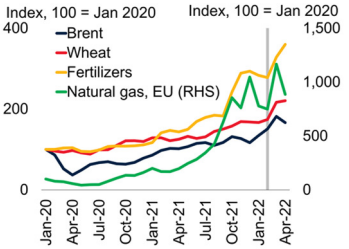
The ultimate impact of the war on energy markets—and commodity markets more broadly—will depend on its duration and the extent of sanctions as a result of Russia's invasion. The International Energy Agency estimates that, under current sanctions, Russia's oil exports could be temporarily reduced by 2.5 million barrels per day, about 30 percent of its current exports and about 3 percent of global supply (IEA 2022). A combination of diversion of oil to other countries, use of strategic petroleum reserves, and potentially some additional production from OPEC would likely be sufficient to fill this shortfall (figure 1.4.C; World Bank 2022a). While some energy commodities are already being redirected to other countries, this process is constrained by the availability of physical transportation infrastructure. This is particularly the case for Russian natural gas, which depends on pipelines largely oriented toward Europe.

Against this backdrop, energy prices are forecast to rise 52 percent in 2022, 47 percentage points higher than previously projected (Special Focus 2). Brent crude oil prices are forecast to average $100/bbl—an upward revision of $24/bbl. Sanc-

FIGURE 1.4 Commodity markets

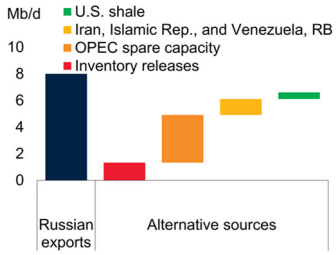
Commodity prices surged in the first half of 2022, especially for those commodities of which the Russian Federation and Ukraine are major global exporters. Further disruption to Russia's exports of crude oil could be offset by inventory releases or the scaling up of production among other major exporters; however, increasing production would take time. The increase in energy prices this year is unusual compared with previous episodes since price increases have been broad-based across all fuels, reducing the possibilities for substitution.

A. Commodity price changes

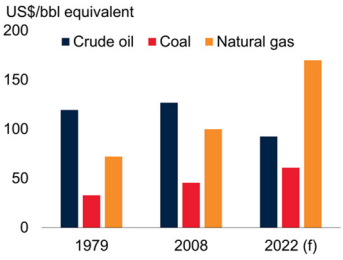


B. Russian Federation's and Ukraine's commodity exports

C. Alternative sources of oil



D. Real energy prices during price spikes



Sources: Bloomberg; Comtrade (database); IEA (2022); World Bank.

A. Monthly data, last observation is April 2022. Gray line denotes the onset of the Russian Federation's invasion of Ukraine.

B. Data for energy and food is trade volume; data for metals and minerals is trade values. Fertilizers include phosphate rock and potash minerals, and ammonia-based non-minerals. Data are for 2020.

C. Figure shows exports of Russian oil and oil products prior to the war in Ukraine and alternative sources of supply. "Inventory releases" refer to the current announced release of oil by IEA members, including the United States. Estimates for production are author calculations based on IEA's "Oil Market Report—April 2022." Production from OPEC refers to Iraq, Saudi Arabia, and United Arab Emirates only.

D. Figure shows the annual price of coal, Brent crude oil, and European natural gas, deflated using U.S. CPI. 2022 shows the current price forecast.

tions imposed on Russia in response to the invasion are expected to have a lasting negative effect on the country's crude oil and natural gas production on account of the exit of foreign oil companies, lower investment, and reduced access to foreign technology. Prices are projected to moderate in 2023 as production rises elsewhere, including in the United States; however, they will remain much higher than previously forecast, and well above the average of the past five years.

There is a material risk that energy prices could increase much more than expected. Disruption to Russia's energy exports, particularly natural gas, could be more severe than expected if bans are implemented more rapidly, or if there is less diversion of exports to other countries.[1] For example, as a result of the invasion of Ukraine, the EU and the United States have proposed restricting the provision of shipping and insurance services related to the transport of Russian oil, which could materially reduce the scope for redirection of oil to other countries. In addition, inventories have fallen (and are set to decline further) and there are concerns that OPEC spare capacity may be lower than currently estimated, as evidenced by a sluggish supply response. U.S. shale faces several constraints on significantly increasing output, including shortages of labor and other inputs, as well as demands on the industry to focus on returning cash to shareholders. Furthermore, in contrast to previous oil price spikes when plentiful coal and natural gas enabled substitution away from oil, the prices of all fossil fuel energy sources are currently very high, which reduces the possibility of easing price pressures by substituting to cheaper fuels (figure 1.4.D).

Agricultural prices are forecast to rise 18 percent this year, above previous projections, reflecting weaker grain production in Ukraine as well as much higher input costs, including for fuel, chemicals, and fertilizers. Fertilizer prices are expected to increase by nearly 70 percent in 2022, due to soaring input costs, reduced production, and trade disruptions (World Bank 2022a). Russia and Ukraine are key exporters of wheat, together accounting for about one-quarter of global wheat exports. Russia is also the world's largest exporter of fertilizers and has instituted new quotas and restrictions on exports. About 90 percent of Ukraine's grain exports flow through Black Sea ports, which are not currently operational. Some wheat may be transported through road and railway corridors, but volumes will be sharply reduced because of infrastructure bottlenecks and safety concerns. Russia's invasion is likely to partially disrupt agricultural production in

[1] The "Global outlook and risks" section presents a quantification of this risk as part of downside scenarios for global growth.

Ukraine for 2022—including for corn, barley, and sunflowers, which are typically planted during spring. In addition, there is a risk that Russian production of grains could be reduced by more limited access to imported agricultural inputs, such as seeds and pesticides (FAO 2022). Accordingly, the projected 2022 price increase reflects a surge in wheat and corn prices that is partially offset by modest declines in the price of other major staples, including rice and soybeans, for which global supplies are currently adequate.

Agricultural prices are forecast to moderate in 2023, reflecting increased supplies from the rest of the world, particularly for wheat in Canada and the EU. Nonetheless, agricultural commodity prices are expected to remain much higher than earlier projections, and well above their average over the previous five years. Prices could rise further if input costs are higher than expected; for example, an extended disruption to Russian fertilizer exports could impede future agricultural production in other large EMDE producers. Export bans are a further risk to agricultural prices, as exemplified by the fact that several countries have already implemented export bans on food commodities (Chavez 2022). These measures can have harmful consequences; for example, measures undertaken during the 2007-08 and 2010-11 food price spikes resulted in higher price volatility and were not effective in protecting vulnerable populations (Laborde, Lakatos, and Martin 2019; World Bank 2019a).

Metal prices have continued to increase in 2022, adding to last year's substantial gains. Aluminum and nickel prices rose by about 30 percent due to the importance of Russia as an exporter, as well as a "short squeeze" on the nickel market (World Bank 2022a). Metal prices are now expected to rise 12 percent in 2022, a significant upward revision from previous forecasts. Most prices are expected to moderate in 2023, reflecting increasing supply—for example, nickel production is expected to increase in Indonesia. The effects of the war in Ukraine are assumed to have less of a lasting impact on metal prices than on energy prices given that, with the exception of palladium and nickel, Russia has a more modest role as a global exporter.

Global inflation

Inflation has accelerated in both advanced economies and EMDEs, reflecting firming demand; persistent supply disruptions; tight labor markets in some countries; and, especially, surging commodity prices, which have been pushed up further by the invasion. Global median headline CPI inflation rose to 7.8 percent (y/y) in April 2022, its highest level since 2008. Aggregate EMDE inflation reached over 9.4 percent—its highest level since 2008—while inflation in advanced economies, at 6.9 percent, is the highest since 1982 (figure 1.5.A). The energy component of global consumer price inflation has risen sharply and is at its highest level since the early 1980s. In two-fifths of EMDEs and most low-income countries (LICs), consumer food price inflation is expected to remain in double-digits this year.

While increases in food and energy prices have mainly driven the sharp rise in headline inflation, core inflation has also risen globally. In the first half of 2022, the housing, fuel, transport, and furnishing sectors contributed about two-thirds and two-fifths to total headline inflation in advanced economies and EMDEs, respectively. In particular, housing price inflation has been pronounced in advanced economies.

Inflation is above target in the vast majority of advanced economies and EMDEs that have adopted inflation targeting (figure 1.5.B). In most countries, both market- and survey-based inflation expectations have risen further since Russia's invasion of Ukraine (figures 1.5.C and 1.5.D). Although inflation expectations have generally been well contained, in about one-third of EMDEs (particularly in ECA, LAC, and SAR) survey-based long-term inflation expectations have increased by more than ¼ percentage point from pre-pandemic levels.

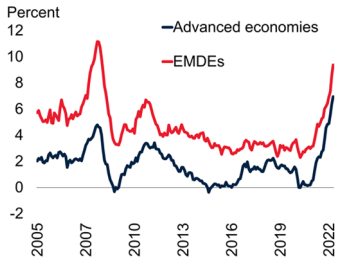
Financial developments

Rising inflation has led to expectations of faster monetary policy tightening across the world. Advanced-economy bond yields have risen markedly, and measures of equity volatility have seen a sustained increase, weighing on valuations

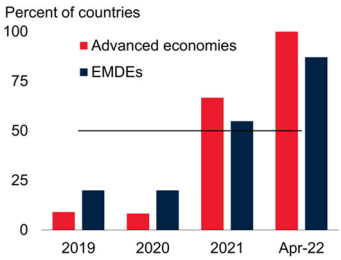
FIGURE 1.5 Global inflation and financial developments

The invasion of Ukraine is intensifying inflationary pressures. Inflation in many countries is reaching multidecade highs and is now above target in most advanced economies and emerging market and developing economies (EMDEs). Inflation expectations have also risen further. The war triggered an initial appreciation of the U.S. dollar that was larger than those following the taper tantrum and previous geopolitical events. Sovereign spreads have increased across EMDEs, but by substantially more among commodity importers relative to commodity exporters.

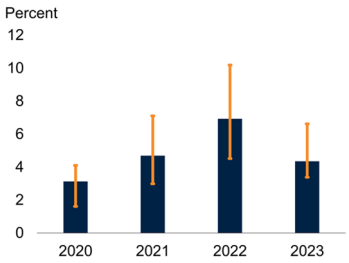
A. Monthly CPI inflation, year-on-year



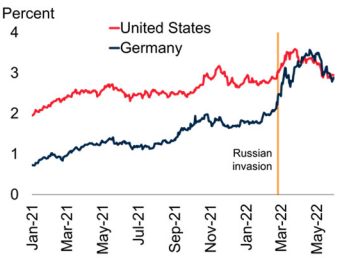
B. Countries with inflation above target



C. Survey-based EMDE inflation expectations

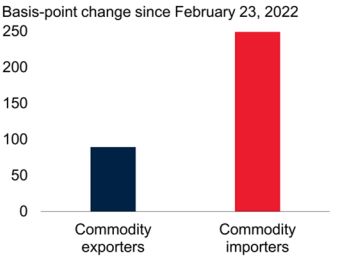


D. Market-based five-year inflation expectations



E. Evolution of the U.S. dollar against EMDE currencies during select events

F. Change in EMDE sovereign spreads by commodity exporter status



Sources: BIS (database); Consensus Economics; Haver Analytics; International Monetary Fund; J.P. Morgan; World Bank.

Note: EMDEs = emerging market and developing economies.

A. CPI refers to consumer price index. Lines show group median inflation for 81 countries, of which 31 are advanced economies and 50 are EMDEs. Last observation is April 2022.

B. Bars show the share of inflation-targeting economies with average inflation during the course of the year (or month) above the target range. Sample includes 12 advanced economies and 31 EMDEs.

C. Consensus forecast for median headline CPI inflation for 2022-23 based on May 2022 surveys of 50 EMDEs. 2020-2021 numbers are based on actual inflation.

D. Implied breakeven inflation, measured as the spreads between nominal and real five-year treasury bond yields in Germany and the United States. Last observation is May 30, 2022.

E. Figure shows cumulative daily percentage change in a GDP-weighted index of exchange rates between the U.S. dollar and EMDE currencies from the trading day before an event (t-1) to six trading days afterwards (t+6). The EMDEs in the index are Brazil, India, Indonesia, Mexico, Poland, South Africa, and Turkey.

F. Figure shows the difference in bond spreads between the latest available data and February 23, 2022 (day prior to the invasion of Ukraine). Last observation is May 23, 2022.

of risky assets. Since the beginning of the year, U.S. and euro area stocks have fallen about 13 percent and 12 percent, respectively. The invasion triggered an initial appreciation of the U.S. dollar against EMDE currencies that was larger than appreciations related to the 2013 taper tantrum and previous conflict-related events involving oil exporters (figure 1.5.E). It has since strengthened further, increasing the cost of servicing dollar-denominated liabilities globally.

In Russia, financial markets initially suffered significant dislocations following the invasion of Ukraine. Russian financial asset prices have since stabilized, though yields on Russia's dollar-denominated sovereign debt continue to indicate a prominent risk of default. Negative effects on global banks appear largely contained, however, reflecting limited balance-sheet exposures. Credit default swap spreads on the sovereign debt of countries neighboring Ukraine have also increased notably.

Overall, EMDE financial conditions have reached their tightest level since the start of the pandemic, as investor risk appetite has been sapped by the war in Ukraine, lockdowns in China, a weaker growth outlook, and higher interest rates in advanced economies. Equity and debt flows to EMDEs turned sharply negative in March, while bond issuance in the first quarter of 2022 across EMDEs was weaker than in any first quarter since 2016. Whereas ECA and regions with substantial numbers of commodity importers (such as EAP and SAR) have experienced sizable short-term debt and equity outflows, regions with large numbers of commodity exporters (such as LAC and MENA) have seen more resilient flows. Since the invasion, sovereign spreads have increased on average across EMDEs, but by considerably more among commodity importers relative to commodity exporters (figure 1.5.F).

Major economies: Recent developments and outlook

The recovery in advanced economies is being dampened by surging energy prices and supply chain disruptions, which have been aggravated by Russia's invasion of Ukraine. Growth is expected to decline

markedly in 2022—especially in the euro area, which has closer economic links with Russia. Monetary policy support is expected to be withdrawn at a notably faster pace than previously anticipated, especially in the United States. Authorities in China have significantly eased macroeconomic policy to cushion the ongoing slowdown.

Advanced economies

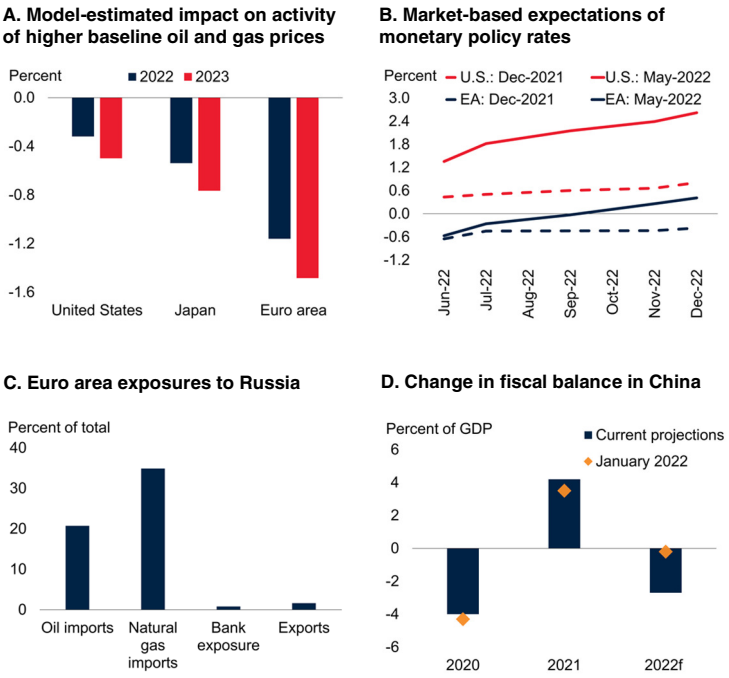
Growth in advanced economies slowed during the first half of 2022, reflecting the war in Ukraine, pandemic resurgences at the turn of the year, persistent supply chain disruptions, reduced fiscal support, and tightening financial conditions. Russia's invasion of Ukraine has increased financial market volatility, policy uncertainty, and supply chain strains, especially in the euro area. Moreover, its effect on energy prices is weighing significantly on disposable income and profit margins, and thus on activity, and is raising inflation to multidecade highs (figure 1.6.A). Given rapid increases in energy and food prices and a broadening of inflation across components, major central banks are expected to tighten monetary policy at a faster pace than previously anticipated (figure 1.6.B). The effects of the invasion and of policy tightening are likely to exert a significant drag on output.

Growth in advanced economies is projected to slow markedly in 2022, to 2.6 percent, as spillovers associated with the war weigh on near-term activity, especially in the euro area. Growth is then expected to continue to moderate, averaging 2.1 percent in 2023-24, as macroeconomic policy support is unwound further and pent-up demand is exhausted. A worsening war in Ukraine is the major risk clouding the outlook, as it could destabilize an already fraught geopolitical situation, trigger additional increases in energy and food prices, exacerbate inflationary pressures, further tighten financial conditions, and prolong policy uncertainty.

In the **United States**, activity lost momentum in the first half of this year, owing to the short-lived hit from the Omicron wave, tighter financing conditions, and the economic effects of Russia's invasion of Ukraine. Although the direct impact of the invasion has been contained so far, owing to limited trade and financial linkages, it is heightening inflationary pressures, which have already been more pronounced than in other advanced economies. With inflation well above target, the Federal Reserve began to raise policy

FIGURE 1.6 Major economies: Recent developments and outlook

In advanced economies, surges in commodity prices are weighing significantly on activity. To respond to rising inflation, major central banks are expected to tighten monetary policy at a faster pace than previously anticipated. Given its large reliance on Russian oil and natural gas, the euro area is particularly vulnerable to spillovers from the war in Ukraine. In China, fiscal policy is envisioned to be more supportive than previously expected to cushion the slowdown.



Sources: BIS (database); Bloomberg; Comtrade (database); Eurostat (database); Oxford Economics; World Bank.

Note: EA = Euro area.

A. Simulation prepared using the Oxford Economics Global Economic Model. It combines the impacts on global output of supply-driven increases in Brent oil prices and natural gas prices over a two-year period (2022-2023). Brent oil prices average 40 percent above baseline while natural gas prices average 70 percent above baseline. Upward revision to natural gas prices is average of revisions to U.S. prices (+33 percent), European prices (+115 percent), and Japanese prices (+61 percent). These revisions are scaled to match the upward revision to energy price projections from January 2022 to June 2022.

B. Figure shows changes in market-based expectations of monetary policy rates over time.

C. Bank exposure shows claims of BIS foreign banks on Russian residents on a consolidated basis. Claims are expressed as shares of total outstanding cross-border claims. Bank exposure data is for quarter ending September 2021. Oil imports, natural gas imports, and exports data are for 2020, shown in percent of total oil and gas imports.

D. f = forecast. World Bank staff calculations. "January 2022" refers to the January 2022 edition of the *Global Economic Prospects* report. The augmented fiscal balance is a sum of the general public (excluding adjustment from the stabilization fund), government fund, state capital operation, and the social security fund budget balances.

rates in March; in all, markets expect policy rates to reach 2.5 percent by end-2022—an increase of almost 170 basis point from December market expectations.

U.S. growth is forecast to slow to 2.5 percent in 2022, 1.2 percentage points below previous projections, reflecting sharply higher energy prices, tighter financial conditions, and additional supply disruptions caused by the invasion of Ukraine. Growth is expected to moderate further to an average of 2.2 percent in 2023-24, as continued withdrawal of fiscal support and monetary policy tightening weighs further on activity. Although inflation is expected to peak around mid-2022 and gradually decline thereafter, it is envisioned to remain above its 2 percent target over the forecast horizon owing to persistent wage pressures from a tight labor market.

Activity in the **euro area** decelerated in the first half of 2022, mainly on account of Russia's invasion of Ukraine and an earlier resurgence of COVID-19. Key members of the euro area are particularly dependent on energy imports from Russia—including imports of gas, which account for about 35 percent of total gas imports into the area (figure 1.6.C). Beyond energy, direct trade exposures to Russia are small, which limits the direct impact of sanctions. However, indirect effects through distressed supply chains, increased financial strains, and declines in consumer and business confidence have dented activity. Surging energy and food prices have contributed to a sharp rise in inflation, which reached a record-high of 5.8 percent in February 2022.

Euro area growth is projected to slow to 2.5 percent in 2022, as additional supply shocks caused by the invasion of Ukraine weigh on activity. The outlook has been revised down by 1.7 percentage points this year, as the war leads to higher energy prices, continued supply disruptions, and tighter financial conditions. Energy subsidies in several major euro area members, albeit distortive, are expected to slightly cushion the impact of high energy costs on household consumption. Growth is projected to moderate further to an average of 1.9 percent in 2023-24, as the European Central Bank tightens monetary policy and lingering repercussions of the war continue to weigh on activity.

Activity in **Japan** has slowed in the first half of 2022, amid subdued domestic demand and unfavorable external conditions. Growth is expected to be 1.7 percent this year, 1.2 percentage points below previous forecasts, reflecting a larger-than-expected drag from COVID-19, a deterioration in the terms of trade caused by the war in Ukraine, and weaker exports. Growth is forecast to slow over 2023-24, as pent-up demand is exhausted.

China

Activity has slowed sharply due mainly to COVID-19 outbreaks and strict lockdowns, with growth in consumer spending particularly subdued. Trade and manufacturing investment have lost momentum, owing to supply disruptions and the negative impact of the war in Ukraine. While the contraction of real estate investment moderated at the start of the year, it has deepened again due to pandemic-related restrictions.

Policy action has been pursued to cushion the slowdown. The People's Bank of China has implemented policy rate and reserve requirement cuts, relaxed regulations on bank loans for low-cost rental housing, and allowed commercial banks to lower mortgage rates. Following last year's sharp fiscal consolidation, policy has eased and infrastructure investment has rebounded.

China is expected to grow 4.3 percent in 2022 and 5.2 percent in 2023. The forecast for this year has been downgraded 0.8 percentage point, reflecting larger-than-expected damage from COVID-19 and related lockdowns. Higher commodity prices will reduce the current account surplus and push up inflation toward target. To mitigate the impact of the lingering pandemic and worsening terms of trade, fiscal, monetary, and regulatory policies are envisioned to be more supportive than previously expected (figure 1.6.D).

The outlook is subject to significant risks. Repeated COVID-19 outbreaks and strict lockdowns across major cities would curtail the recovery of consumption and services activity,

disrupt supply chains, and weigh on investor confidence.[2] In addition, renewed stress in the housing sector would further reduce real estate investment and government revenues, affect the solvency of developers and local government financing vehicles, and weigh on house prices and consumer spending.

Emerging market and developing economies

The effects of Russia's invasion of Ukraine are weighing on growth across many EMDEs and resulting in a deep downturn in the ECA region. Activity in most EMDEs is expected to decelerate as negative spillovers from the war add to rising inflationary pressures and lead to tighter financial conditions, fiscal and monetary policy support continues to be unwound, and external demand weakens further. The effects may be somewhat cushioned by higher commodity prices in some EMDE commodity exporters. High inflation and disruptions to global food markets are worsening food insecurity in many EMDEs, especially LICs. EMDE per capita income growth is anticipated to slow markedly in 2022, as real household income is dampened by high food and fuel prices.

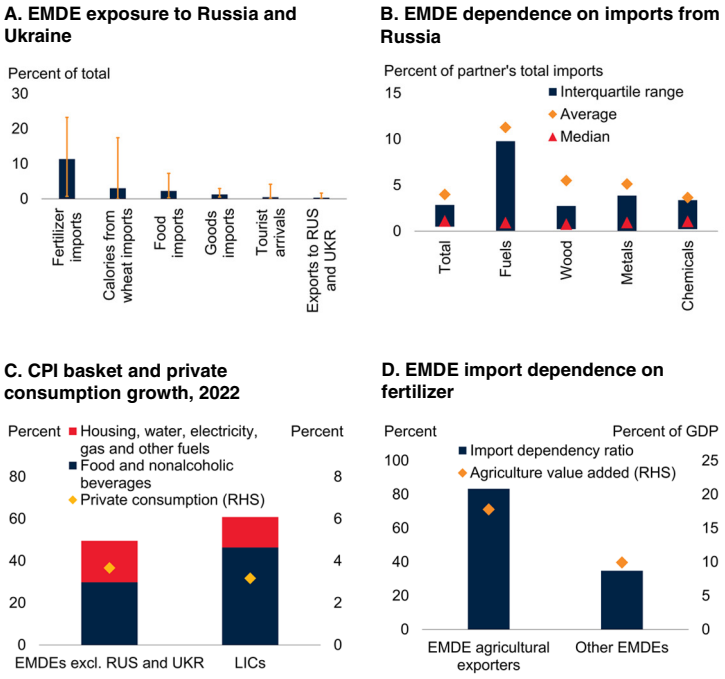
Recent developments

The war in Ukraine has delivered another major shock to EMDEs, well before their recovery from the pandemic is complete (box 1.1; chapter 2). Prior to the invasion, EMDE output, which expanded 6.6 percent in 2021, was already slowing across many countries. The war has exacerbated this deceleration, made the external environment markedly less supportive, and caused a devasting economic contraction in Ukraine and deep recession in Russia (chapter 2). To varying degrees, the war is also having significant economic spillovers in many other EMDEs, including through commodity and trade linkages (figure 1.7.A). Trade disruptions are feeding through value chains, as many EMDEs heavily depend on both Russia and Ukraine for key commodity imports and intermediate goods (figure 1.7.B). As a result, the aggregate EMDE manufacturing PMI and new export orders subcomponent have fallen to their lowest readings since mid-2020 and point to a contraction of activity. Business confidence has also slipped in a broad set of countries.

[2] The "Global outlook and risks" section presents a quantification of this risk as part of downside scenarios for global growth.

FIGURE 1.7 Recent developments in emerging market and developing economies

The Russian Federation's invasion of Ukraine is adversely affecting activity in emerging market and developing economies (EMDEs), to varying degrees, through multiple channels such as commodity markets and trade. Trade disruptions are affecting value chains, as many EMDEs are heavily dependent on Russia and Ukraine for key commodity imports. Surges in commodity prices are weighing on private consumption, especially in low-income countries due to high food and fuel shares in the consumption basket. Rising energy and fertilizer costs are offsetting the benefits of higher prices for agricultural exporters.



Sources: Comtrade (database); International Monetary Fund; Ministry of Economy of the Republic of Armenia; United Nations World Food Programme; UNWTO (2021); Winkler, Wuester, and Knight (2022); World Bank.

Note: EMDEs = emerging market and developing economies; LICs = low-income countries; RUS = the Russian Federation; UKR = Ukraine.

A. Bars show the EMDE median. Trade data show goods exports/imports to/from the Russian Federation and Ukraine as a share of the total goods exports/imports in 2019-20. Tourist arrivals refer to nonresident tourists at national borders by nationality. For countries where this data series is not available, estimates use number of non-resident visitors at national borders by nationality. Orange whiskers show the interquartile range.

B. Figure shows 2018-20 average from Winkler, Wuester, and Knight (2022). Sample includes 94 EMDEs.

C. Includes CPI basket data for 126 EMDEs and 20 LICs and private consumption data for 100 EMDEs and 17 LICs. Aggregate growth rates are calculated using real U.S. dollar GDP weights at average 2010-19 prices and market exchange rates. Data for 2022 are forecasts.

D. Import dependency ratio is defined as imports / (production + imports – exports). Sample includes 103 EMDEs. Aggregates are calculated using simple averages. Data as of 2019 for imports and 2020 for agriculture value added.

BOX 1.1 Regional perspectives: Outlook and risks

The Russian Federation's invasion of Ukraine is affecting emerging market and developing economy (EMDE) regions to different degrees via impacts on global trade and output, commodity prices, inflation, and interest rates. The adverse spillovers from the invasion will be most severe for Europe and Central Asia, where output is forecast to sharply contract this year. Output growth is projected to slow this year in all other regions except the Middle East and North Africa, where the benefits of higher energy prices for energy exporters are expected to outweigh those prices' negative impacts for other economies in the region. Risks for all EMDE regions are tilted to the downside and include intensifying geopolitical tensions, rising inflation and food shortages, financial stress and rising borrowing costs, renewed outbreaks of COVID-19, and disruptions from disasters.

Introduction

The economic rebound in emerging market and developing economies (EMDEs) following the pandemic-induced recession of 2020 was already fading prior to Russia's invasion of Ukraine. Spillovers from the invasion will slow the recovery further and exacerbate inflationary pressures through higher commodity prices and renewed supply chain disruptions. EMDE regions are at different stages in their recovery and will be affected by the war in Ukraine in different ways. The war is expected to cause a major recession in Europe and Central Asia (ECA), while its global spillovers will weigh particularly heavily on regions with many commodity importers. Regions with many commodity exporters, by contrast, will benefit from higher commodity prices, but new investment in extractive sectors is expected to be limited because of policy uncertainty, price volatility, and higher input costs. Downside risks to regional baseline forecasts—such as worsening geopolitical tensions, financial stress, and severe food insecurity—have increased because of the war in Ukraine, while disasters or renewed outbreaks of COVID-19 still have the potential to weaken activity.

This box considers two questions:

- What are the cross-regional differences in the outlook for growth?
- What are the key risks to the outlook for each region?

Outlook

The cyclical rebound from the global recession of 2020 was already waning prior to Russia's invasion of Ukraine as macroeconomic support was being withdrawn amid rising inflation. The invasion and its repercussions are expected to exacerbate the global slowdown and add to inflation pressures. Despite the fact that the recovery from the 2020 recession remains incomplete, activity in most EMDE regions is forecast to slow sharply this year (figure B1.1.1.A).

The invasion and its spillovers are having substantially different effects across EMDE regions. They are weighing particularly heavily on regions with a large number of commodity importers, as well as in those with countries especially vulnerable to the increases in global inflation and investor risk aversion (figure B1.1.1.B).

The worst affected region is ECA. In addition to its tragic human toll, the invasion is expected to cause a devastating economic contraction in Ukraine this year, a sharp recession in Russia, and a significant slowdown in the rest of the ECA region through direct trade and financial linkages. Spillovers from the invasion in the form of higher prices for energy and food are reducing incomes and increasing input costs, with particularly negative impacts on the terms of trade of South Asia (SAR). Forecasts for activity have also been downgraded this year in East Asia and the Pacific (EAP) a result of lockdowns in China and recent commodity price movements, while the forecast for Sub-Saharan Africa (SSA) has been downgraded if major energy exporters such as Nigeria are excluded.

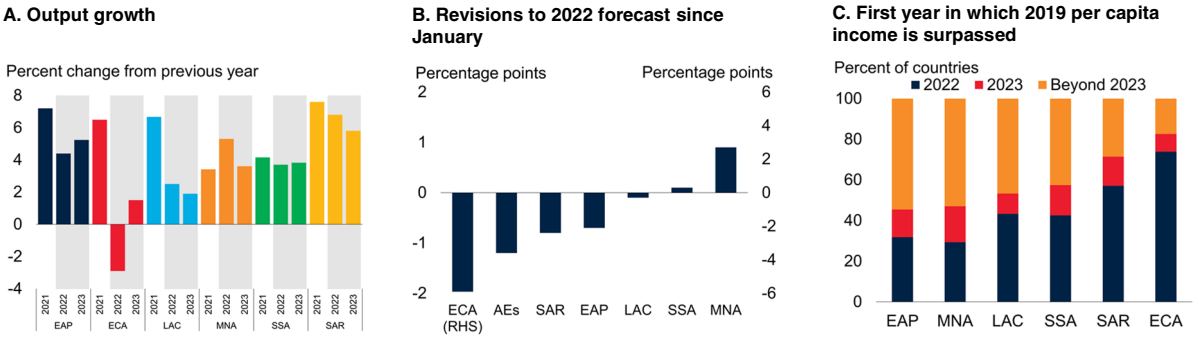
By contrast, some regions with large numbers of commodity exporters, especially in Middle East and North Africa (MNA), are expected to benefit from the significant increases in the prices of energy, some agricultural commodities, and several metals. However, increased policy uncertainty, price volatility, higher input costs, and weaker global demand are all expected to reduce new investment, including in extractive sectors.

Note: This box was prepared by Patrick Kirby.

BOX 1.1 Regional perspectives: Outlook and risks (*continued*)

FIGURE B1.1.1 Regional outlooks

Growth in most emerging market and developing economy regions is expected to slow sharply this year, despite the fact that the recovery from the pandemic is far from complete. The Russian Federation's invasion of Ukraine has led to a substantial downgrade in the forecast for Europe and Central Asia, and is also weighing on regions with large numbers of commodity importers. Per capita income is expected to be lower in 2023 than in 2019 in about half of the countries in East Asia and the Pacific, the Middle East and North Africa, Latin America and the Caribbean, and Sub-Saharan Africa.



Source: World Bank.
Note: AEs = advanced economies; EAP = East Asia and Pacific, ECA = Europe and Central Asia, LAC = Latin America and the Caribbean, SAR = South Asia, SSA = Sub-Saharan Africa.
A.B. Aggregates are calculated using constant GDP weights at average 2010-19 prices and market exchange rates.
A. Shaded areas indicate forecasts.
C. Sample includes 22 EAP, 23 ECA, 30 LAC, 17 MNA, 7 SAR, and 47 SSA economies.

The combined effects of the pandemic, increased inflation, the war in Ukraine, and country-specific factors are expected to lead to a net increase of 75 million people in extreme poverty by the end of this year relative to pre-pandemic projections, primarily in regions where poverty is already elevated. Per capita income is expected to be lower in 2023 than its pre-pandemic level in about half of the countries in EAP (predominantly small island economies), MNA, Latin America and the Caribbean (LAC), and SSA (figure B1.1.1.C). Within regions, the recovery in per capita incomes is expected to be slowest low-income countries and island economies dependent on tourism, where incomes remain deeply depressed relative to pre-pandemic levels. In tourism dependent EMDE small states (countries with populations under 1.5 million), most of which are in EAP and LAC, per capita income is expected to remain 7 percent below its pre-pandemic level in 2022.

Risks

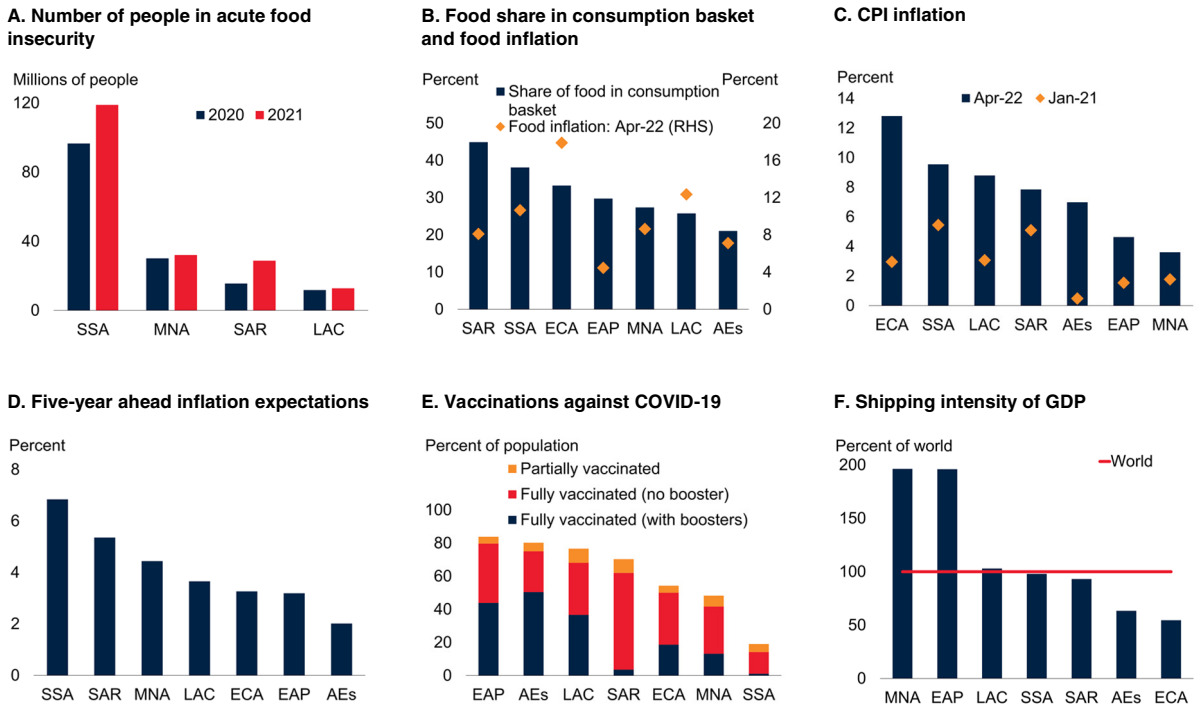
Downside risks to the baseline forecast, many of which have increased since Russia's invasion of Ukraine, dominate all regional outlooks. Intensifying geopolitical tensions could result from the use of weapons of mass destruction, the spread of the war in Ukraine to a larger region, a prolongation of the war, or widespread state-sponsored cyberattacks on public infrastructure or financial systems. This could result in lower global demand, renewed trade disruptions, greater policy uncertainty, further damage to business and consumer confidence, and refugee crises. Although these risks are especially pronounced in the ECA region, spillovers would also cast a shadow over activity in other regions, especially those that are most dependent on integration into global supply chains and foreign demand, notably EAP. Shortages of vital inputs due to production disruptions or trade barriers—such as those related to sanctions in response to Russia's invasion of Ukraine—could disrupt supply chains already struggling with bottlenecks and elevated costs.

Food imports have become notably more expensive, increasing the risk of widespread food insecurity and social unrest (figure B1.1.2.A). Food accounts for an average of about one-third of the consumption basket in EMDEs, but considerably more in SAR and SSA (44 and 37 percent of average consumption baskets, respectively; figure B1.1.2.B). Russia and Ukraine are

BOX 1.1 Regional perspectives: Outlook and risks (*continued*)

FIGURE B1.1.2 Regional risks

The war in Ukraine has increased downside risks. Elevated food prices increase the risk of widespread food insecurity, especially in regions where food is a large share of the consumption basket. Higher costs in some regions from supply chain disruptions and persistently elevated commodity prices could add to already-high inflationary pressures and de-anchor inflation expectations. Renewed outbreaks of COVID-19 remain a risk in all regions, particularly those with lower vaccination coverage.



Sources: Consensus Economics; FSIN and GNAFC (2022); Haver Analytics; Our World in Data (database); Ritchie et al. (2022); World Bank.
Note: AEs = advanced economies; EAP = East Asia and Pacific, ECA = Europe and Central Asia, LAC = Latin America and the Caribbean, MNA = Middle East and North Africa, SAR = South Asia, SSA = Sub-Saharan Africa.
A. Bars represent the sum of people in high levels of food insecurity, measured here as phase 3 or above of the Integrated Food Security Phase Classification (IPC) for 2020 and 2021. Sample size includes 3 SAR, 36 SSA, 9 MNA, and 5 LAC economies.
B. Blue bars show median food share in consumption basket. Sample includes 8 advanced economies, 10 EAP, 13 ECA, 19 LAC, 11 MNA, 6 SAR, and 25 SSA economies. Orange diamonds show median food inflation. Sample includes 33 advanced economies, 8 EAP, 19 ECA, 18 LAC, 9 MNA, 3 SAR, and 22 SSA economies.
C. CPI refers to consumer price index. Bars show median 12-month inflation for latest data available (March 2022), while diamonds show inflation data for January 2021. Sample includes 34 advanced economies, 5 EAP, 20 ECA, 18 LAC, 6 MNA, 3 SAR, and 9 SSA economies.
D. Chart shows the median inflation expectations for 2027 based on Consensus Economics April 2022 Survey data. Sample includes 33 AEs, 7 EAP, 19 ECA, 18 LAC, 2 MNA, 3 SAR, and 2 SSA economies.
E. Sample includes 37 advanced economies, 24 EAP, 31 ECA, 39 LAC, 19 MNA, 8 SAR, and 47 SSA economies. Last observation is May 25, 2022.
F. Data are for 2019. Values are ratios of port container traffic (20-foot equivalent units) to real 2019 GDP, normalized to the world ratio.

both major exporters of agricultural commodities, and global food prices could increase further in the face of additional disruptions to planting, harvesting, and transportation. Food shortages would squeeze budgets for both households and governments—particularly in net food-importing countries concentrated in ECA, MNA, and SSA—with urban consumers and vulnerable groups suffering the most. In the past, food shortages have also contributed to rising social unrest. Food production is also at risk of further disruption through lack of access to critical agricultural inputs. The sharp increases in the prices of fuel, chemicals, and fertilizers may be especially damaging in regions where agriculture accounts for a large share of the economy, such as SSA and SAR (19 and 18 percent of value added in 2020, respectively).

BOX 1.1 Regional perspectives: Outlook and risks (*continued*)

Elevated levels of inflation, combined with sharply slowing growth, raise concerns that the global economy is entering a period of stagflation reminiscent of the 1970s. Higher costs from supply chain disruptions and persistently elevated commodity prices could add to already-high inflationary pressures (figure B1.1.2.C). Monetary authorities may tighten monetary policy at a faster-than-expected pace to avoid a de-anchoring of inflation expectations, particularly in regions where inflation is rising at a faster pace and long-term inflation expectations are higher (SSA, LAC, ECA; figure B1.1.2.D). In regions with many commodity-importing countries, the rising cost of food and energy subsidies are adding to the strain on governments' budgets.

Elevated inflation and rising interest rates could combine with high debt and weak growth to produce financial stress in some regions. The recession and financial turmoil in ECA could spill over to other regions directly through balance sheet effects, or through a more general increase in investor risk aversion. A disorderly tightening of financial conditions could stem from capital outflows and currency depreciations, which would further worsen inflationary pressures, macroeconomic instability, and debt burdens. This is more likely given existing debt sustainability problems (SSA), elevated sovereign debt (LAC) and corporate debt (EAP), and substantial hidden public debt and contingent liabilities (Melecky 2021; SAR).

Renewed outbreaks of COVID-19 remain a risk in all regions, particularly those with lower vaccination coverage (SSA, MNA; figure B1.1.2.E). Persistent or worsening disruptions from the pandemic to activity at critical infrastructure, such as ports in China, could cause further disruptions to supply chains, with larger spillovers for regions that are more heavily embedded in global value chains or particularly dependent on shipping (figure B1.1.2.F). A new wave of COVID-19 could also interrupt the rebound in global tourism, as was the case during the spread of the Omicron variant in early 2022, with especially important consequences for tourism-dependent small states concentrated in LAC and EAP.

Disruptions from disasters are a persistent source of downside risk. Island countries face rising sea levels and increasingly extreme storms that can wipe out years of economic development. About half of the population of SAR lives in areas where changing weather patterns risk permanently lowering living standards, for example through increasingly frequent heatwaves (Mani et al. 2018). In about one-quarter of countries in EAP and LAC, more than 10 percent of the population lives in areas 5 meters or less above sea level and is at serious risk from more frequent storms. In MNA, SAR and SSA, more severe heatwaves and floods threaten to reduce agricultural yields and exacerbate water-scarcity, undermining food security and raising the likelihood of conflict. By one estimate, crop yields in MNA could decrease by up to 30 percent if temperatures rise 1.5-2 degrees Celsius above pre-industrial levels (World Bank 2014).

Across EMDEs, the spillovers from the war are magnifying the pre-existing drag from lingering COVID-19 disruptions, persistent supply-chain bottlenecks, and continued withdrawal of macroeconomic policy support. Financing conditions have tightened further, as mounting inflationary pressures in major advanced economies has led to expectations of faster withdrawal of monetary support. In EMDEs, inflation has also increased as the war has put additional pressure on commodity prices and supply chains. Higher prices have eroded real incomes and dampened private consumption, especially in economies with high shares of food and energy in their consumption baskets (figure 1.7.C). Investment has weakened further in many EMDEs, particularly in those facing tighter financial conditions amid marked increases in policy uncertainty, an erosion in confidence, and subdued growth prospects. External demand is also softening as global growth decelerates, particularly for countries that rely on Russia and Ukraine as destinations for exports or as sources of tourists.

The impact of the war differs across EMDEs. For commodity importers, the negative spillovers from the war are particularly significant as they face a large shock to their terms of trade. In contrast, higher energy prices are cushioning some of the adverse effects of the war in energy exporters. In other commodity exporters, however, the beneficial effects of higher metal and agricultural prices have been dampened by a sharp increase in input costs. To a large extent, this reflects these economies' reliance on energy and fertilizer imports for domestic activity—including industrial and agricultural production—as well as their limited ability to substitute these imports with domestically produced sources (figure 1.7.D).

Growth in LICs—which reached a modest 3.9 percent in 2021, far slower than the pace of recovery in EMDEs as a whole and well below the rate of potential growth—is mainly being adversely affected by the war's impact on food prices. More than half of the population in LICs are experiencing food shortages, with food availability already stressed by the prevalence of conflict in some countries and vulnerabilities to climate change (FSIN and GNAFC 2021). Import disruptions and higher prices are worsening food insecurity and reducing access to proper nutrition (FAO 2022). Even in LICs with low food insecurity, price increases and disruptions to the food supply are tipping many more people into extreme poverty (Wang et al. 2020).

Outlook

EMDE outlook

The war in Ukraine is weighing on aggregate EMDE growth prospects owing to higher inflation and input costs, disruptions to trade, weaker confidence, and a steep rise in policy uncertainty. These will add to pre-existing headwinds to growth, including rising inflationary pressures and tightening financial conditions, the ongoing removal of fiscal and monetary policy support, and softening external demand. EMDE growth is expected to roughly halve in 2022, to 3.4 percent—far weaker than its annual average of 4.8 percent over 2011-19—a downgrade of 1.2 percentage points relative to previous projections (figure 1.8.A). This downward revision reflects, to a significant degree, deep recessions in Russia and Ukraine. Excluding these two countries, the EMDE growth forecast for 2022 has been downgraded by 0.5 percentage point, as improved growth prospects in energy exporters partly offset broad-based downgrades in other EMDEs (figure 1.8.B). Forecasts for 2022 growth have been lowered in nearly 70 percent of EMDEs, including most commodity-importing economies (figure 1.8.C). EMDE growth is anticipated to firm to an average of 4.3 percent in 2023-24, as the lingering effects of the war abate.

The near-term outlook for EMDE private consumption has weakened, driven in part by higher prices and the erosion of real incomes. EMDE households' exposure to commodity price shocks has risen in recent years, as an increasing proportion of spending is on basic necessities, including food and energy (figure 1.8.D; FAO 2021). The weakness in private consumption also reflects job losses in economies affected by the war, as well as those highly dependent on remittances from Russia.

Investment, which was already expected to be subdued, is likely to be further weakened by soft investor confidence, higher interest rates, and heightened uncertainty about growth prospects and policy, especially in economies perceived as less creditworthy. Increases in extractive investment are expected to be limited by investor concerns regarding the significant volatility in commodity prices and heightened geopolitical uncertainty.

EMDE exports are expected to be dampened by a sharp slowdown in growth in advanced economies and continued strains on global supply chains. The spike in commodity prices and disruption to exports from Russia and Ukraine are anticipated to hinder production in some large manufacturing economies, as their value chains are especially exposed to intermediate goods and services from these countries (Winkler, Wuester, and Knight 2022).

On balance, recent increases in commodity prices are a drag on aggregate EMDE activity. On the one hand, the increase in energy prices will

improve fiscal space, current account positions, and incomes of some commodity exporters. On the other hand, the increase in commodity prices will raise production costs for firms and weaken purchasing power among households in commodity importers, which account for more than two-thirds of EMDE GDP. For agricultural and metal commodity exporters, sharply higher input costs—including fuel as well as fertilizers, for which Russia is a key exporter—are expected to limit the gains from higher commodity prices.

Although the pandemic is weighing less heavily on the near-term outlook, it is still expected to have lasting effects on long-term growth across EMDEs, and many of these effects will be compounded by the war. The adverse impact on human capital, investor confidence, fixed capital formation, and supply chains from these two crises will weigh on long-term growth prospects. As a result, EMDE potential growth is expected to be below 4 percent over 2022-30—a sharp slowdown from about 5 percent in the 2010s.

LICs outlook

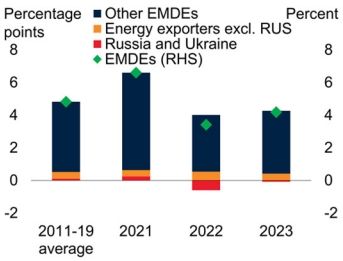
Growth in LICs is anticipated at 4.1 percent in 2022 and 5.3 percent in 2023 (box 1.2). Despite improving terms of trade in commodity exporters, the forecast for this year has been downgraded 0.8 percentage point, in part reflecting sharp increases in global food and fuel prices due to the invasion of Ukraine—growth in more than four-fifths of LICs has been revised down. In many LICs, where households on average spend over 40 percent of their budget on staple foods, food price inflation remains stubbornly high, eroding real incomes and weighing on consumption. Higher fertilizer prices are expected to make agricultural production even more costly, which will lower agricultural output for many LICs. Elevated levels of conflict and violence are also dampening growth and investment in some LICs.

The outlook for LICs is clouded by various risks. Median inflation in LICs is approaching 11 percent—its highest reading in five years—and is expected to continue to rise in the near term (figure 1.8.E). Many LICs are at risk of worsening food insecurity and malnutrition if grain imports from Russia and Ukraine are further disrupted

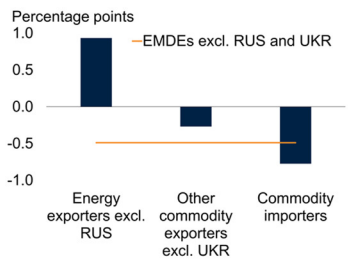
FIGURE 1.8 Outlook in emerging market and developing economies

Growth in emerging market and developing economies (EMDEs) is forecast to slow to 3.4 percent in 2022—1.2 percentage points below previous projections, largely on account of the effects of the war. Excluding the Russian Federation and Ukraine, the deterioration is more modest, as an improvement in energy exporters partly offsets broad-based downgrades in most other EMDEs. Surging food and energy prices are fueling inflation and eroding real incomes, particularly for low-income households and countries, which devote a large share of their expenditures to these goods. Continued disruptions to Russian and Ukrainian wheat exports would worsen food insecurity and increase malnutrition in some countries, including many low-income countries.

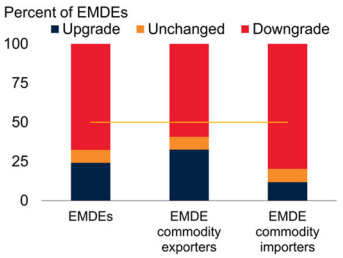
A. Contributions to EMDE growth



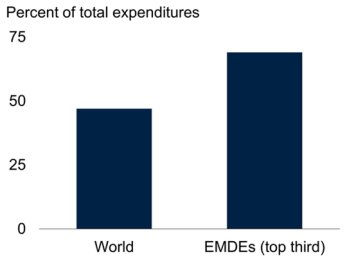
B. Revisions to 2022 growth forecasts



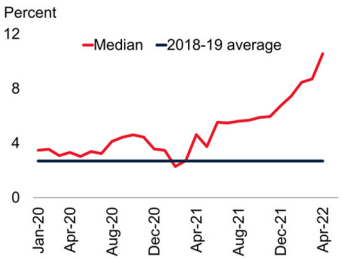
C. Forecast revisions to 2022 growth



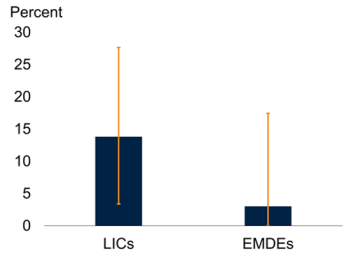
D. Average household expenditures on food, fuel, housing, and water in 2021



E. Inflation in LICs



F. Share of caloric intake dependent on wheat imports from Russia and Ukraine



Sources: Comtrade (database); FAO (2021); Haver Analytics; U.S. Department of Agriculture; World Bank.

Note: EMDEs = emerging market and developing economies; LICs = low-income countries; RUS = the Russian Federation; UKR = Ukraine. Data for 2022-23 are forecasts.

A.B. Aggregates are calculated using real U.S. dollar GDP weights at average 2010-19 prices and market exchange rates.

B.C. Figures show the change in 2022 growth forecasts between the January 2022 and June 2022 editions of *Global Economic Prospects*.

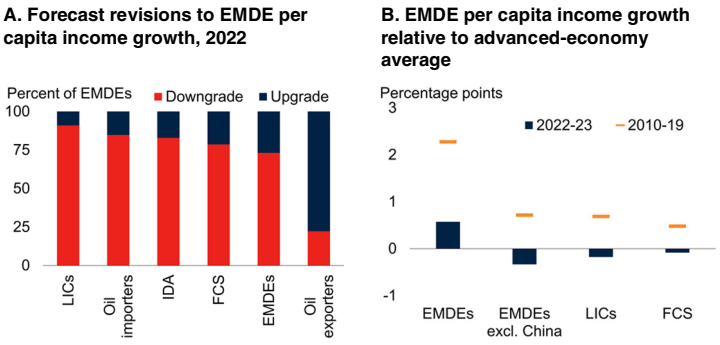
D. Figure shows share of energy, water, housing, and food based on FAO (2021) calculations. "World" includes 176 countries and "EMDEs (top third)" includes the 53 countries with the highest expenditure shares on these categories.

E. Sample includes seven LICs. Last observation is April 2022.

F. Figure shows the share of wheat imports from the Russian Federation and Ukraine (as percent of total wheat imports in 2020) multiplied by the share of dietary energy supply derived from cereals, roots, and tubers multiplied by the share of wheat imports to wheat consumption. Sample includes 85 EMDEs and 15 LICs. Blue bars are medians and orange whiskers are the interquartile ranges.

FIGURE 1.9 Per capita income in emerging market and developing economies

Per capita income growth forecasts have been revised down in about 70 percent of emerging market and developing economies (EMDEs) in 2022. EMDEs are expected to make little headway toward catching up with advanced-economy per capita income levels over the next couple of years; if China is excluded, catch-up progress is forecast to reverse.



Source: World Bank.
Note: EMDEs = emerging market and developing economies; FCS = fragile and conflict-affected situations; IDA = International Development Association; LICs = low-income countries. Per capita GDP levels calculated using the total GDP for each subgroup divided by its total population. Data for 2022-23 are forecasts. Sample includes 145 EMDEs, 22 LICs, and 28 FCS.
A. FCS excludes oil exporters; oil importers excludes China. Figure shows the change in 2022 per capita income growth forecasts between the January 2022 and June 2022 editions of *Global Economic Prospects*.
B. Aggregates calculated using GDP weights at average 2010-19 prices and market exchange rates. Relative per capita income growth is computed as the difference in per capita GDP growth between each respective EMDE group and the advanced-economy average.

(figure 1.8.F; WFP 2022). Food price surges of the same magnitude have been associated with tens of millions more people falling into extreme poverty in LICs (de Hoyos and Medvedev 2011; Ivanic, Martin, Zaman 2011). In addition, debt distress, slowing activity in major export markets, violence, and social unrest could substantially weigh on growth in many LICs.

Per capita income growth

Per capita income growth in EMDEs is expected to decelerate sharply, from 5.4 percent in 2021 to 2.3 percent in 2022. Excluding Russia and Ukraine, EMDE per capita income growth is still anticipated to slow markedly in 2022, to 3 percent, as high food and fuel prices weigh on real household incomes, constrained fiscal space limits government support, and labor market recoveries decelerate. After remarkable resilience over the past two years, growth in remittances to EMDEs is likely to moderate, as mounting inflationary pressures erode real wages and pandemic-related income support programs subside in advanced economies. A steep recession in Russia is also expected to trigger a sharp decline in transfers to neighboring countries, where remittances from Russia can account for as much as 30 percent of GDP.

Aggregate EMDE measures mask differing near-term prospects across countries. In energy exporters excluding Russia, per capita income growth is forecast to firm from 1.8 percent in 2021 to 3.3 percent this year, as higher energy prices help cushion the negative impact from the war. In contrast, in commodity importers, where inflation is rising at a faster pace than in most energy exporters, per capita income growth is projected to soften, as weaker terms of trade fuel further price increases and diminish household purchasing power.

Per capita income growth forecasts for 2022 have been revised down in about 70 percent of EMDEs, primarily reflecting the adverse effects of the war, with particularly pronounced downward revisions in countries in fragile and conflict-affected situations (figure 1.9.A). Weaker growth will also slow the pace of catch-up with advanced-economy per capita income for many EMDEs—especially in LICs, where per capita income is projected to grow at only half the pace of advanced economies. Over the next few years, EMDEs are expected to make little progress toward catching up with advanced-economy income levels—and, if China is excluded, progress is expected to reverse, undoing some of the gains made over 2010-19 (figure 1.9.B).

Together, and in the absence of policies that alleviate their scarring effects, the pandemic and the war will have long-lasting adverse impacts on per capita incomes. Even by 2023, per capita incomes are projected to be below 2019 levels in about two fifths of EMDEs. The rising cost of food is likely to have particularly adverse near-term effects, especially in countries reliant on importing staple foods like wheat and corn. Attempts to safeguard domestic food supplies could further increase global prices, as has been the case in the past (Ivanic and Martin 2014; World Bank 2019b). Taken together, the lingering effects of the pandemic, the war, and the surge in food prices are expected to lead to a net increase of 75 million people in extreme poverty

by the end of this year relative to pre-pandemic projections (World Bank 2022a).

Global outlook and risks

The effects of Russia's invasion of Ukraine—particularly, sharply higher commodity prices—coupled with the anticipated policy response to higher global inflation, are expected to accentuate the near-term slowdown in advanced economies and most EMDEs. The war is also exacerbating various risks, including intensifying geopolitical tensions, acute financial stress, stagflation, and widespread food shortages. The simultaneous materialization of several downside risks could result in substantially weaker growth.

Global outlook

The war in Ukraine has steepened the projected slowdown in global activity (figure 1.10.A). In addition to causing a deep recession in the ECA region, the economic effects of the war are spilling over across the globe through commodity prices, financial conditions, trade patterns, migration flows, and confidence.

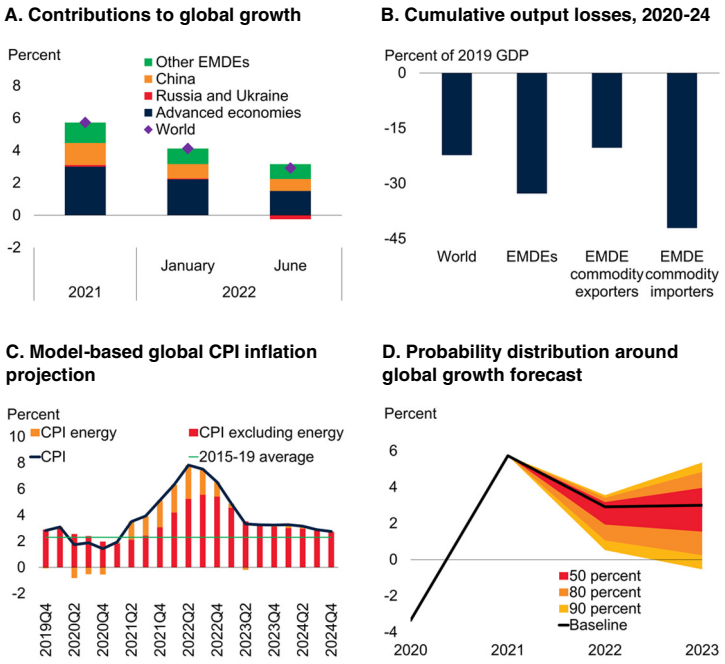
The invasion of Ukraine represents an additional supply shock to a global economy still recovering from the pandemic. The associated physical and logistical disruptions and the ensuing sharp rise in commodity prices are driving inflation higher and weighing on activity, exacerbating the pre-existing strains from the pandemic on the global economy. The war has also eroded confidence and heightened risk aversion, contributing to weaker trade and investment as firms seek to hedge against adverse outcomes.

Global growth is expected to slow sharply from 5.7 percent in 2021 to 2.9 percent in 2022 as a result of deep recessions in Russia and Ukraine, adverse global spillovers from the war in Ukraine, the fading of pent-up demand, and the withdrawal of policy support amid high inflation. Despite the negative shock to global activity in 2022, there is essentially no rebound projected next year. Global growth is forecast to edge up only slightly, to a still-subdued 3 percent in 2023, as many headwinds—in particular, high commodity prices and continued monetary tightening—are expected to persist. In 2024, global growth is projected to remain at 3 percent, as activity converges to its long-run potential pace. The cumulative losses to global activity relative to its pre-pandemic trend are expected to continue mounting, especially among EMDE commodity importers (figure 1.10.B).

High global consumer price inflation is envisioned to persist for longer than previously assumed as a result of surging commodity prices and lingering

FIGURE 1.10 Global outlook

The war in Ukraine has steepened the projected slowdown in global economic activity, adding to the cumulative output losses since the onset of the pandemic. Global inflation is set to peak around mid-2022 before declining gradually, aided by a projected moderation in energy prices. The global growth outlook is subject to significant uncertainty, and risks are markedly tilted to the downside in the near term.



Sources: Bloomberg; Consensus Economics; Haver Analytics; Ohnsorge, Stocker, and Some (2016); Oxford Economics; World Bank.

Note: EMDEs = emerging market and developing economies. Aggregate growth rates calculated using real U.S. dollar GDP weights at average 2010-19 prices and market exchange rates. Data for 2022-24 are forecasts.

A. Figure shows the contributions to global growth forecasts in the January 2022 and June 2022 editions of *Global Economic Prospects*.

B. Bars show cumulative output losses over 2020-24, which are computed as deviations from trend, expressed as a share of GDP in 2019. Output is measured in U.S. dollars at 2010-19 prices and market exchange rates. Trend is assumed to grow at the regression-estimated trend growth rate of 2010-19. EMDE commodity exporters exclude the Russian Federation and Ukraine.

C. Model-based projection of quarterly global year-over-year CPI inflation using Oxford Economics Global Economic Model. Projection embeds global oil price forecast presented in table 1.1.

D. Probabilities for the forecast distribution of global growth are generated using time-varying estimates of the standard deviation and skewness extracted from the forecast distribution of oil price futures, S&P 500 equity price futures, and term spread forecasts, as described in Ohnsorge, Stocker, and Some (2016). Values for 2022 and 2023 are based on 6-month-ahead and 18-month-ahead forecast distributions, respectively. Last observation for S&P 500 and oil price futures is May 31, 2022, whereas term spread forecasts are from May 2022.

BOX 1.2 Recent developments and outlook for low-income countries

The economic recovery in low-income countries (LICs) is anticipated to remain weak this year, with growth expected at 4.1 percent—almost a full percentage point below previous projections. Growth forecasts for 2022 have been downgraded in more than 80 percent of LICs, largely reflecting a sharp surge in food prices due to the Russian Federation's invasion of Ukraine. The ensuing increase in the cost of living across LICs is offsetting the benefit to commodity exporters from high industrial metal and energy prices. The disruption of global food supplies caused by the war in Ukraine has led to food shortages and a rapid deterioration of food security in many LICs. A sustained increase in food prices could further deepen poverty, stoke social unrest, and dampen economic recoveries, especially in LICs already experiencing high incidence of extreme poverty and acute food insecurity.

Introduction

Russia's invasion of Ukraine has pushed global food prices to all-time highs, sharply lifting inflation and eroding food affordability across many low-income countries (LICs). Although elevated global commodity prices benefit some exporters of metals and energy, millions of people across LICs are experiencing deepening poverty and worsening food insecurity. As a result, the economic recovery stemming from a gradual waning of the pandemic and increased export earnings is being muted, as rapidly rising costs of living are weakening domestic demand. In some countries, debt distress, policy uncertainty, social unrest, and violence still hamper recoveries, especially in fragile and conflict-affected LICs.

This box explores recent developments in, and the outlook for, LICs by examining the following questions.

- What have been the main recent economic developments in LICs?
- What is the outlook for LICs, and what are the associated risks?

The economic outlook for LICs comprises subdued per capita income growth, and remains highly uncertain, as a predominance of downside risks surrounds baseline projections. Higher-than-expected food prices could cause a growing number of people to fall into extreme poverty and experience acute food insecurity, considerably dampening growth prospects. A further slowdown in global growth amid a protracted war in Ukraine, as well as renewed lockdowns in China, could have sizable adverse effects on many LICs.

Note: This box was prepared by Sergiy Kasyanenko.

Recent developments

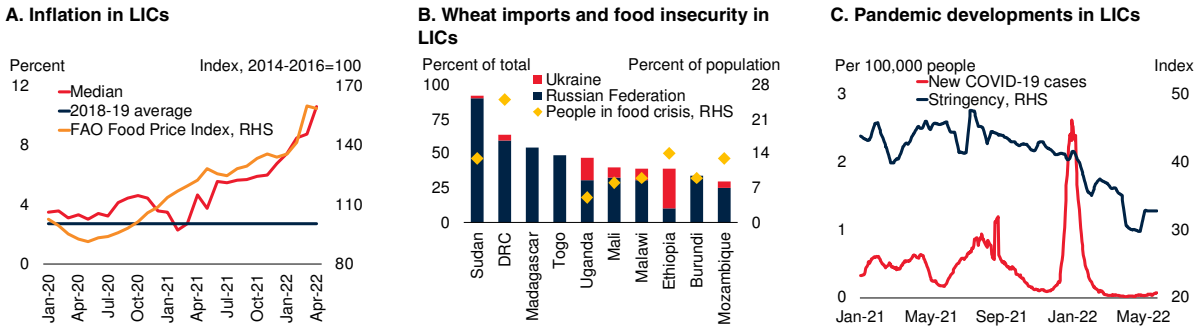
After growing 3.9 percent in 2021, the tepid economic recovery in LICs continued in the first half of this year, albeit at a much slower pace than previously envisaged. Disruptions to global commodity markets, considerably amplified by Russia's invasion of Ukraine, have led to food and fuel shortages and surging prices of staple consumer goods, eroding real incomes and weakening domestic demand. Rapid food price inflation, preceding the war in Ukraine in many economies (Burkina Faso, Ethiopia, Togo) has accelerated further, contributing to LIC median inflation rising to a five-year high (figure B1.2.1.A). Surging food and energy prices are also pushing many vulnerable people into acute food insecurity, especially in those LICs that rely heavily on imports of wheat from Russia and Ukraine (figure B1.2.1.B). High food prices and food shortages are causing severe hardship for tens of millions of people in LICs, adding to the protracted humanitarian crisis caused by fragility, conflict, and large population displacements in some countries (Afghanistan, Somalia, Syrian Arab Republic, Republic of Yemen).

In many LIC commodity exporters, increasing living costs have also tempered gains from higher global prices of energy and metals. Industrial metals (mostly copper), energy, and gold account for about one half of all LIC exports. Prices of these commodities were already elevated amid persistent supply bottlenecks and firming global demand, before war-induced supply shocks pushed them even higher. This favorable price environment is supporting increased mining activity along with positive spillovers to nonresource sectors in some LICs (Chad, Democratic Republic of Congo, Mozambique). In a few countries, higher export revenues also helped partly offset increased fiscal and external financing needs due to rising costs of imported food and fuel.

BOX 1.2 Recent developments and outlook for low-income countries (*continued*)

FIGURE B1.2.1 LICs: Recent developments

Inflation in LICs—which was already rising before Russia's invasion of Ukraine—has accelerated, as the war has pushed global food prices to very high levels. Rapidly rising living costs are weighing on growth, especially in LICs reliant on wheat imports from the Russian Federation and Ukraine. Following a surge in COVID-19 cases in LICs earlier this year, new infections have trended down, facilitating a further easing of social restrictions.



Sources: Blavatnik School of Government, University of Oxford; Comtrade (database); Global Network Against Food Crises; Haver Analytics; Johns Hopkins University; World Bank.

Note: LICs = low-income countries; DRC = Democratic Republic of Congo.

A. "Median" line shows median percentage increase in consumer prices from 12 months earlier, for a sample of seven LICs. Last observation April 2022.

B. Wheat imports shares are averages for 2019-2020; wheat imports data for Sudan are available only for 2018. "People in food crisis" indicates the estimated percentage of population being in phase 3 or above of the Integrated Food Security Phase Classification (IPC) for 2022; estimates are not available for Madagascar and Togo.

C. New case count shows the seven-day moving average of daily new infections. "Stringency" indicates the COVID-19 Government Response Stringency Index—a simple average of nine response indicators including school closures, workplace closures, and travel bans, rescaled to a value from 0 to 100 (100 = strictest). Last observation May 31, 2022.

Pandemic developments have been broadly favorable across LICs following a short-lived surge in COVID-19 cases earlier this year, supporting activity as mobility restrictions have eased and borders have reopened (figure B1.2.1.C). Yet, the boon to growth from eased pandemic restrictions remains fragile amid extremely low vaccination rates in many countries.

Outlook

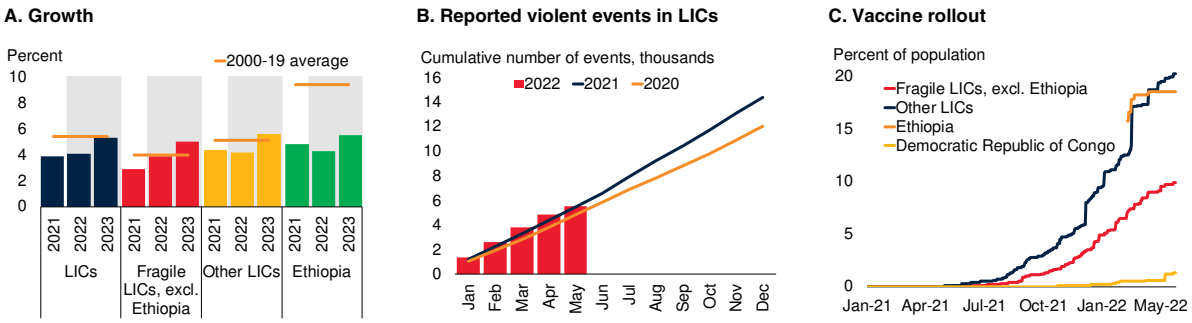
Although most LICs have very small direct trade and financial exposures to Russia and Ukraine, the war's indirect adverse effects will weigh substantially on LICs activity this year. Reflecting these effects, growth forecasts for 2022 have been downgraded in more than 80 percent of LICs. In particular, a number of countries—such as the Democratic Republic of Congo, Madagascar, Rwanda, and Uganda—that rely heavily on wheat imports from Russia and Ukraine are expected to experience persistently elevated food inflation as the war disrupts global cereals trade and worsens food shortages. In addition to the adverse impact of surging living costs, the growth outlook for LICs is anticipated to be further weakened by the global economic slowdown. Aggregate growth in LICs is forecast at only 4.1 percent in 2022 and 5.3 percent in 2023 – 0.8 and 0.6 percentage points below the January projections (figure B1.2.2.A).

Russia's invasion of Ukraine is expected to further deepen poverty and worsen food insecurity in LICs (Husain 2022; Mitchell, Hughes, and Huckstep 2022). Food consumption in LICs accounts for over 45 percent of total household expenditure, and diets remain heavily based on staple foods, including wheat (OECD/FAO 2020, 2021). All LICs are food-deficit countries reliant on imported foods with imports of wheat from Russia and Ukraine accounting for about 14 of total caloric intake in a median LIC compared to just 3 percent in a median EMDE. Disruptions to wheat imports from Russia and Ukraine, along with surging global food prices, are therefore expected to exert a strong drag on LIC growth and stall progress in poverty reduction, particularly in those economies where large shares of the population are already experiencing food insecurity (Democratic Republic of Congo, Ethiopia, Madagascar, Mozambique, South Sudan).

BOX 1.2 Recent developments and outlook for low-income countries (*continued*)

FIGURE B1.2.2 LICs: Outlook and risks

Rapidly increasing prices of food and further disruptions of wheat imports could leave many millions in acute food insecurity and extreme poverty, depressing per capita incomes in many low-income countries (LICs). Elevated violence and insecurity could continue to stymie growth in fragile and conflict-affected countries. In many LICs, vaccination rates remain very low, heightening the risk of new and more severe COVID-19 outbreaks.



Sources: Armed Conflict Location & Event Data Project (ACLED), https://www.acleddata.com; Our World in Data (database); World Bank.
Note: Shaded area indicates forecasts. Fragile LICs = fragile and conflict-affected LICs; LICs = low-income countries.
A. Aggregate GDP growth rates calculated using constant GDP weights at average 2010-19 prices and market exchange rates. Sample comprises 22 LICs, which include 13 fragile LICs.
B. Violent events include battles, explosions, violence against civilians, riots, and protests, reported since the start of the year. Last observation May 20, 2022.
C. Share of population who are fully vaccinated. Last observation is May 31, 2022.

In some commodity exporters, the deleterious effects of higher food and fuel costs on real incomes are expected to be partly offset by gains from elevated prices of metals—particularly copper, aluminum, nickel, and gold. In Mozambique, higher prices of coal and natural gas are expected to support activity, though continued violence and insecurity weigh on the recovery. However, elevated oil prices are unlikely to boost growth substantially in LIC energy exporters, as aging oil fields and weak extractive investment limit prospects for increased oil production (Chad, South Sudan). In those commodity exporters where Russia has large stakes in extractive sectors (Guinea, Mozambique, Sudan), international sanctions due to the invasion of Ukraine are anticipated to weaken activity and investment in mining. The projected sharp growth slowdown in the European Union is also expected to slow growth in some LICs dependent on markets in high-income countries (Madagascar, Malawi).

Growth in fragile and conflict-affected LICs (excluding Ethiopia, the largest economy, accounting for 30 percent of total output in LICs) is projected to average 4.4 percent a year in 2022-23—0.6 percentage point below previous forecasts. In those countries, elevated levels of violence and insecurity are expected to lead to an even further deterioration of food security (Kuemmerle and Baumann 2021). As a result, real income per capita is projected to still fall short of pre-pandemic levels in almost 50 percent of fragile and conflict-affected LICs in 2023.

Agricultural production in a number of LICs is expected to remain subdued. A few countries have faced worsening drought conditions with delayed and below-average rainfall (Horn of Africa—Ethiopia, Somalia, Sudan, Uganda); others have experienced planting delays because of poor rainfall (Burundi, Madagascar, Malawi, Mozambique). In some LICs, higher prices of grains are expected to limit the ability of farmers, especially those dependent on subsistence agriculture, to purchase enough seeds for the new planting season and feed for livestock. The war in Ukraine has also markedly disrupted global fertilizer supply, with Russia the world's largest fertilizer exporter. Higher prices of fertilizers and fuels are expected to weigh heavily on farming output as well.

BOX 1.2 Recent developments and outlook for low-income countries (*continued*)

TABLE B1.2.1 Low-income country forecasts[a]

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

	2019	2020	2021e	2022f	2023f	2024f	Percentage point differences from January 2022 projections: 2022f	2023f
Low-Income Country, GDP[b]	**4.8**	**1.9**	**3.9**	**4.1**	**5.3**	**5.7**	**-0.8**	**-0.6**
GDP per capita (U.S. dollars)	1.9	-0.9	1.1	1.3	2.5	2.9	-0.8	-0.6
Afghanistan[c]	3.9	-1.9	..	..	..	..	..	..
Burkina Faso	5.7	1.9	7.0	4.8	5.4	5.3	-0.8	0.1
Burundi	1.8	0.3	1.8	2.5	3.3	4.1	0.0	0.3
Central African Republic	3.1	0.9	0.9	3.2	3.4	4.0	-0.3	-1.1
Chad	3.2	-1.6	-1.2	2.8	3.5	3.9	1.0	0.6
Congo, Dem. Rep.	4.4	1.7	5.7	6.0	6.4	6.1	1.2	1.3
Eritrea	3.8	-0.6	2.9	4.7	3.6	3.7	0.0	0.0
Ethiopia[d]	9.0	6.1	6.3	3.3	5.2	5.9	-1.0	-1.3
Gambia, The	6.2	-0.2	5.6	5.6	6.2	6.5	-0.4	-0.3
Guinea	5.6	4.6	3.1	4.3	5.9	5.8	-1.8	0.0
Guinea-Bissau	4.5	1.5	3.8	3.5	4.5	4.5	-0.5	-0.5
Liberia	-2.9	-3.0	4.0	4.4	4.8	5.2	-0.3	-0.2
Madagascar	4.4	-7.1	4.4	2.6	4.2	4.6	-2.8	-0.9
Malawi	5.4	0.8	2.8	2.1	4.3	4.2	-0.9	-0.1
Mali	4.8	-1.2	3.1	3.3	5.3	5.0	-1.9	0.3
Mozambique	2.3	-1.2	2.2	3.6	6.0	5.8	-1.5	-3.6
Niger	5.9	3.6	1.4	5.2	7.1	10.4	-1.0	-2.3
Rwanda	9.5	-3.4	10.9	6.8	7.2	7.4	-1.0	-0.6
Sierra Leone	5.3	-2.0	3.1	3.9	4.4	4.8	-2.1	0.1
South Sudan[d]	3.2	9.5	-5.1	-0.8	2.5	4.0	-2.0	-1.0
Sudan	-2.2	-3.6	0.1	0.7	2.0	2.5	-2.8	-3.0
Syrian Arab Republic	3.7	1.3	-2.1	-2.6	..	..	..	..
Togo[e]	5.5	1.8	5.1	5.0	5.8	6.4	-0.6	-0.4
Uganda[d]	6.4	3.0	3.4	3.7	5.1	6.5	0.0	-0.4
Yemen, Rep.	1.4	-8.5	-2.1	0.8	2.5	..	..	..

Source: World Bank.

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

a. The Democratic People's Republic of Korea and Somalia are not forecast on account of data limitations.

b. Aggregate growth rates are calculated using GDP weights at average 2010-19 prices and market exchange rates.

c. Forecast for Afghanistan (beyond 2020), the Syrian Arab Republic (beyond 2022), and the Republic of Yemen (beyond 2023) are excluded because of a high degree of uncertainty.

d. GDP growth rates are on a fiscal year basis. For example, the column labeled 2022 refers to FY2021/22.

e. For Togo, growth figures in 2019 are based on pre-2020 rebased GDP estimates.

Risks

Downside risks to the outlook predominate. With almost all LICs relying on imports of wheat, a prolonged disruption to global trade in cereals because of the Russia's invasion of Ukraine would significantly worsen affordability and availability of staple foods in the group. Moreover, further price increases of farming inputs—such as seeds, fuel, and fertilizers—could lead to stronger and more persistent food price pressures in LICs. Persistent inflation remains a major challenge for policy makers amid risks of stagflation in many LICs (World Bank 2022b).

Insecurity and violence continue to weigh on the outlook of many LICs, and more rapid increases in living costs risk further escalating social unrest (figure B1.2.2.B). Elevated levels of conflict could also dampen

BOX 1.2 Recent developments and outlook for low-income countries (*continued*)

growth and worsen food insecurity, especially in LICs where agriculture is already stressed by climate change (Anderson et al 2021). The scope for policy action to alleviate such problems is likely to be limited in most cases, especially in countries where public safety nets are predominantly donor-financed as donors reallocate resources to the ECA region (World Bank 2022b). Increased public spending on security, food support, and fertilizer subsidies, could further widen fiscal deficits, raising the risk of debt distress in many LICs.

Despite a recent uptick in vaccination rates, as of end-May only about 14 percent of LIC populations were fully vaccinated against COVID-19, reflecting a much slower vaccination rollout than in most other EMDEs. Vaccination rates remain particularly low in fragile and conflict-affected LICs (figure B1.2.2.C). Unvaccinated people remain at risk of severe illness, especially if new, more dangerous, variants of COVID-19 were to develop, which could lead to more severe and longer lasting interruptions to economic activity than with the Omicron wave.

With global financial conditions likely to tighten further, a sustained increase in risk aversion resulting from heightened geopolitical tensions could lead to further currency depreciations and sharp increases in borrowing costs in LICs. High levels of public debt and increased diversity of creditors could further stall progress in debt restructuring, while tighter sovereign-bank links could amplify financial distress if governments were to default on local currency debt. Interest rate and refinancing risks are particularly elevated for LICs that already spend high proportions of their tax revenues servicing external debt and rely on market-based borrowing (World Bank 2019). In the median LIC, the share of non-concessional debt in total external government debt has risen to over 70 percent from less than 60 percent in 2010, while about one quarter of all LIC external debt now has variable interest rates, compared to just 11 percent in 2010. Further increases in global interest rates, and thus LICs' borrowing costs, would limit other public spending, including food subsidies and investment in physical and human capital—to the detriment of LICs' pressing infrastructure and development needs.

supply bottlenecks. Global inflation is expected to peak around mid-year and then decline gradually thereafter as global growth slows, supply bottlenecks abate, and commodity supply increases and leads to lower prices (figure 1.10.C). Nonetheless, inflation is projected to remain above target in a majority of advanced economies and EMDEs well into 2023.

Despite new headwinds to growth, central banks across the world are expected to respond to inflationary pressures by withdrawing monetary accommodation over the forecast horizon. Pandemic-related fiscal support will continue to be withdrawn in advanced economies and EMDEs, albeit at a somewhat slower pace than previously anticipated in some economies as authorities introduce some targeted fiscal support measures to attenuate the effects from the war.

The war in Ukraine and its attendant impacts account for most of the 1.2 percentage points downgrade to this year's global growth outlook. Almost one-third of this revision reflects the contraction envisaged in ECA owing to deep recessions in Russia and Ukraine. The combination of spillovers from the war, higher global inflation, and the associated faster withdrawal of monetary accommodation have also resulted in sizable downgrades to advanced economies and EMDEs outside of ECA. Sharp upward revisions to global energy prices, in particular, are weighing appreciably on activity in energy importers (Special Focus 2). As a result, downgrades among EMDEs are much more substantial among commodity importers, with growth forecasts for some energy exporters revised up because of improved terms of trade.

These baseline projections assume that the war persists in the near term but becomes increasingly contained to the eastern part of Ukraine. They also assume that sanctions due to the invasion are not lifted over the forecast horizon. Geopolitical

and policy uncertainty are anticipated to remain above historical norms but to begin to gradually wane later this year as the intensity of the war and its repercussions abate. The outlook is also predicated on a pronounced but orderly tightening of global financing conditions and the continued withdrawal of pandemic-related macroeconomic policy support. Commodity prices are expected to remain high but moderate over the forecast horizon as supply disruptions ease (World Bank 2022a). The economic impacts of new COVID-19 outbreaks are expected to be markedly less severe than earlier outbreaks due to behavioral changes, alongside improved vaccine coverage and pandemic management (Bidani et al. 2022; McCahan 2022).

Risks to the outlook

The underlying assumptions for the baseline forecast are subject to significant uncertainty (figure 1.10.D). Russia's invasion of Ukraine and its implications are increasing the probability of negative tail risks, many of which are interlinked. Widening geopolitical turmoil could further destabilize global economic activity and, in the longer term, cause global trade, investment, and financial networks to fragment. The drag on activity from persistent supply disruptions and very high commodity prices may cause the global economy to become mired in stagflation, with low growth and high inflation. Rising price pressures could require substantially more monetary tightening than currently expected. Food shortages could weigh heavily on the most vulnerable and spark social unrest. Although the economic impact of new outbreaks of COVID-19 has faded over the course of the pandemic, the appearance of new, more virulent variants could lead to the re-introduction of disruptive control measures. If several of these downside risks were to materialize simultaneously, model-based quantifications suggest that global growth could fall more sharply in 2022 and nearly halve in 2023—declining to 2.1 percent and 1.5 percent, respectively.

Intensifying geopolitical tensions

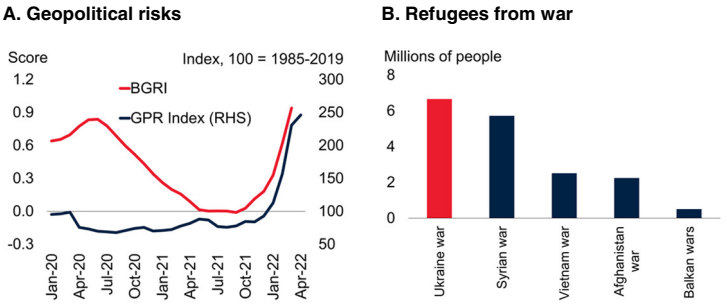
Russia's invasion of Ukraine has led to a global weakening of confidence and a rise of policy uncertainty (figure 1.11.A). The situation could worsen in a variety of ways, including through the spread of hostilities over a larger geographical area. It could also take the form of widespread state-sponsored cyberattacks on public infrastructure or financial systems, which could disrupt telecommunications, power grids, water supply, oil and gas pipelines, transportation networks, and critical manufacturing sectors. Such developments could have substantial destabilizing effects on the global economy, significantly heighten uncertainty and further erode confidence, and trigger additional sanctions or major retaliatory responses.

The existing refugee crisis could worsen. Global refugee levels were already historically high in recent years (figure 1.11.B; UNHCR 2021). The invasion of Ukraine—a country with more than twice the population of the Syrian Arab Republic (44 million versus 18 million)—has already caused nearly 7 million more to seek safety abroad. The sudden arrival of a large number of newcomers in host countries will put pressure on public finances and the delivery of basic services.

Global trade and financial networks could fragment if the war and its dislocating effects persist—especially if continued hostilities prompt

FIGURE 1.11 Intensifying geopolitical tensions

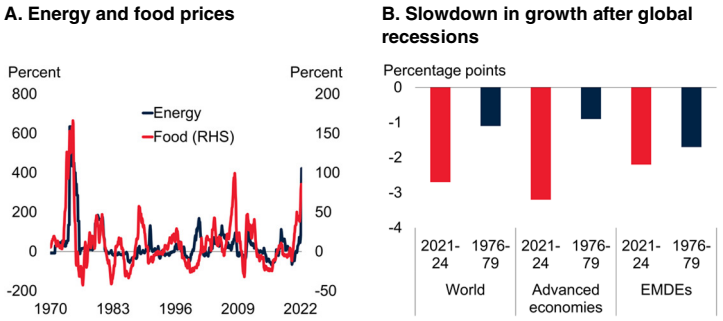
Sustained geopolitical turmoil could weaken confidence and heighten policy uncertainty. The refugee crisis resulting from the war in Ukraine could worsen, with the sudden arrival of millions of newcomers putting pressure on public finances and the delivery of basic services in host countries.



Sources: Barutciski (1994); BlackRock Investment Institute; Caldara and Iacoviello (2021); Matteo Iacoviello (data set); United Nations High Commissioner for Refugees; World Bank.
A. Figure shows the three-month moving average for the Geopolitical Risk (GPR) Index and the global BlackRock Geopolitical Risk Indicator (BGRI). The GPR, constructed by Caldara and Iacoviello (2021), is based on a count of newspaper articles that discuss geopolitical tensions. The BGRI tracks the relative frequency of brokerage reports and financial news stories associated with specific geopolitical risks.
B. Figure shows the number of registered refugees after each war.

FIGURE 1.12 Stagflation

Rising inflation and slowing growth raise concerns that the global economy is entering a period of stagflation reminiscent of the 1970s. The surge in energy and food prices over the past two years has been the largest and second largest, respectively, since the early 1970s. It has been accompanied by a steep slowdown in global growth that was even more pronounced than the one following the 1975 recession.



Source: World Bank.

Note: EMDEs = emerging market and developing economies.

A. Percent change in monthly price indices over a 24-month period. This facilitates a comparison of the April 2020 trough with the most recent data (April 2022). Due to data limitations, prior to 1979, the energy price change is proxied using the oil price change.

B. Figure shows changes in global growth (in percentage points) between 2021-24 and 1976-79; in both cases covering the rebound following a global recession. Aggregates are calculated using real U.S. dollar GDP weights at average 2010-19 prices and market exchange rates. Data for 2022-24 are forecasts.

the implementation of large-scale trade embargoes. The demonstrated impact of sanctions on the Russian economy may prompt some other countries to self-isolate and protect themselves from similar measures in the future. This could involve raising barriers to free trade and developing parallel payment systems independent of the U.S. dollar. The pace of global economic integration has slowed substantially in recent years, and an outright reversal could result in less specialization, fewer economies of scale, less competition, and the slower spread of innovations. This could slow output and income growth and add to inflation pressures.

Stagflation

The current multidecade high levels of inflation, combined with sharply slowing growth, raise concerns that the global economy is entering a period of stagflation reminiscent of the 1970s (Special Focus 1). In the 1970s, large supply shocks amid accommodative monetary and fiscal policies resulted in prolonged stagflation. The policy tightening in the early 1980s to contain high inflation played a major role in triggering a global recession in 1982 and set off a string of EMDE debt crises.

The current juncture resembles the 1970s in several key aspects. First, supply disruptions driven by the pandemic and the recent supply shock dealt to global energy prices by the war in Ukraine resemble the oil shocks in 1973 and 1979-80. In fact, the increase in energy prices over the past two years has been the largest since the 1973 oil crisis (figure 1.12.A). Second, global growth is decelerating sharply, with the current slowdown even more pronounced than the one following the 1975 recession (figure 1.12.B). Third, then and now, monetary policy was highly accommodative in the run-up to these shocks, with interest rates negative in real (inflation-adjusted) terms for an extended period. Fourth, with EMDE debt at multidecade highs now, a rise in global borrowing costs may trigger financial crises, as it did in the early 1980s.[3]

The stagflation experience of the 1970s is a reminder that there is a considerable risk that inflation will remain high or continue to rise. The supply bottlenecks and rising commodity prices that have contributed to elevated inflation could persist in the near term as a result of renewed pandemic-related lockdowns or continued commodity market disruptions. In the longer term, inflation may remain elevated as many of the factors that have contributed to low inflation in recent decades are slowing or in outright retreat. The growth of global value chains and the global labor force has fallen, the productivity gains from the reallocation of resources away from agriculture have waned, and technological progress has slowed (Ha, Kose, and Ohnsorge 2022). In addition, the commitment among some policy makers to disciplined fiscal and monetary policy frameworks could soften.

[3] There are also important differences with the 1970s. Over the past three decades, many central banks have built considerable credibility in their commitment to price stability, which has helped anchor inflation expectations. Disinflation will also be supported by the planned fiscal consolidation underway in many economies. In addition, the 1970s were a time of considerable structural rigidities, including wage, price, and interest rate controls. Economies have become more flexible over time, reducing the likelihood of price-wage spirals that entrench inflation.

Alongside the possibility of elevated inflation, global activity could remain anemic. Growth is already slowing, including in the world's major economies. The United States is withdrawing policy accommodation, the euro area is suffering substantial spillovers from the invasion of Ukraine, and activity in China is being hindered by difficulties in the real estate sector and lockdowns to control COVID-19. Growth could remain feeble for a prolonged period, as many of its structural determinants have weakened. Demographics represent a growing headwind to potential growth. Labor productivity has slowed considerably since the global financial crisis, largely as a result of weakness in both investment and total factor productivity (Dieppe 2021). The pandemic has left deep scars in the form of lower investment, lower human capital, and a retreat from global supply chains, all of which are likely to dampen potential growth in the longer term (World Bank 2021a).

Financial stress across EMDEs

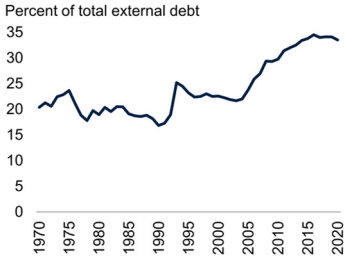
The current environment of elevated inflation and rising interest rates poses risks to the financial stability of many EMDEs. The increased cost of inputs, particularly energy, and of credit could trigger economic slowdowns, widen current account deficits, and generate significant financing gaps. Rising interest rates could result in fiscal pressures, widespread corporate defaults, and feeble global investment. These risks are particularly acute given that debt in many EMDEs has been on a decade-long upward trend capped by a broad-based surge during the pandemic, with increasingly tight interlinkages between the health of the government balance sheet and that of the banking system (Feyen and Zuccardi 2019; Kose et al. 2021). The most vulnerable EMDEs are those that could struggle to roll over debt in the face of significantly higher debt service obligations, or that hold large shares of debt that is denominated in foreign currencies, held by nonresidents, short-term, or subject to variable rates (figure 1.13.A).

Historically, financial crises in EMDEs have been more likely when the U.S. Federal Reserve pivots toward a more aggressive tightening stance, as it is currently doing to rein in inflation well above levels seen at the beginning of previous hiking cycles (figure 1.13.B). Some previous episodes of higher U.S. interest rates, such as the taper tantrum of 2013, have been followed by increased financial market volatility in EMDEs, including currency depreciation, rising bond spreads, portfolio outflows, equity price collapses, and liquidity shortages (Arteta et al. 2015; Hoek, Kamin, and Yoldas 2020). EMDE central banks may be forced to tighten monetary policy to stem capital outflows at the expense of domestic activity, as has occurred in the past.

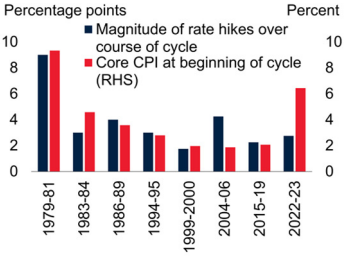
FIGURE 1.13 Financial stress across emerging market and developing economies

Emerging market and developing economies with debt vulnerabilities—such as a high proportion of variable-rate debt—could face higher debt-servicing burdens or struggle to roll over debt in an environment in which aggressive monetary tightening, especially in the United States, may sharply raise borrowing costs. Inflation has risen to decade highs, which has kept real monetary policy rates negative despite recent nominal increases, suggesting that policy continues to be accommodative. The Phillips curve may have flattened, which suggests that central banks may need to significantly tighten monetary policy to rein in inflation.

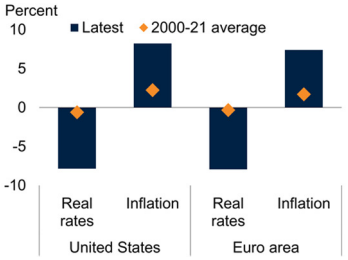
A. Share of EMDE external debt subject to variable rates



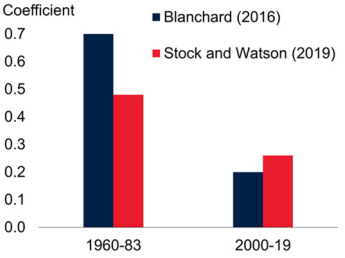
B. Magnitude of rate hikes and U.S. core CPI during previous Federal Reserve tightening cycles



C. Real policy interest rates and inflation



D. Time-varying estimates of the Phillips curve slope coefficient



Sources: Eurostat (database); Federal Reserve Economic Data; Haver Analytics; World Bank.
Note: EMDEs = emerging market and developing economies.
A. Figure shows the EMDE average of variable rate external debt as a share of total external debt.
B. Blue bars show the extent of policy rate increases during previous tightening cycles. The value for 2023 is an estimate based on market expectations for the level of the Fed Funds rate in mid-2023. U.S. core CPI for 2023 shows latest data associated with tightening cycle.
C. "Real rates" are policy interest rates minus consumer price index inflation. "Latest" refers to the last available data, which are for April 2022.
D. Estimates from Blanchard (2016) and Stock and Watson (2019).

More generally, central banks around the world may accelerate the pace of tightening if the current period of persistent and elevated inflation causes expectations to become de-anchored. Policy rates have been increasing at a far slower pace than prices, suggesting that policy continues to be accommodative (figure 1.13.C). In the near term, expectations of additional price increases could become baked into wage and price setting behavior, resulting in persistent above-target inflation (Blanchard 2022). The process of re-setting inflation expectations to match central bank targets through tighter monetary policy has been costly in the past (Cecchetti and Rich 2001; Ha, Kose, and Ohnsorge 2022). The evidence that the Phillips curve may have flattened in recent decades highlights the risk that central banks will have to engage in significantly tighter monetary policy to contain inflation (figure 1.13.D; Bank of Canada 2021; Blanchard 2016; Stock and Watson 2019).

Past banking crises have often been preceded by credit booms and relaxed macroprudential oversight, leading to high debt levels, currency and maturity mismatches, and concentrated credit risks (Claessens et al. 2014, Reinhart and Rogoff 2009). The health of bank balance sheets may be overstated because of the zero-risk weight given to sovereign securities. Strains may also emerge in market segments that are more opaque. For example, in many economies the nonbank financial sector has a high level of inter-connectedness with other parts of the financial system, and can potentially spread vulnerability through a high degree of leverage and liquidity mismatches (Pearce 2022). Tightening credit conditions or the unwinding of debt forbearance measures introduced during the pandemic could trigger disruptive financial sector dynamics (World Bank 2022c).

Widespread food shortages

Agricultural prices have been increasing significantly as a result of weaker grain production from Ukraine alongside higher costs for critical agricultural inputs such as fuel, chemicals, and fertilizers. Food shortages will result in millions of people being pushed into food insecurity and extreme poverty, particularly poor urban households in LICs that spend large shares of their income on food (Laborde, Lakatos, and Martin 2019). This will likely have adverse long-term consequences, as malnutrition causes persistent damage to human capital and insufficient access to agricultural inputs can lock an economy in a state of widespread, low productivity subsistence farming (McGovern et al. 2017; McArthur and McCord 2017). Further increases in the prices of food and agricultural inputs would magnify these risks.

Droughts, floods, wildfires, and other extreme events made more likely by climate change could further stress food systems. Events leading to sudden food production losses have become more frequent in recent decades, and they have had more severe impacts in areas where climate change has already slowed the growth of agricultural productivity and where the global poor are more concentrated (CSEP 2022; IPCC 2022). Food accounts for about half of consumption baskets and 20 percent of goods imports in LICs, on average; accordingly, even modest disruption to food supplies or increases in food prices can worsen food crises and contribute to severe inflationary pressures. LICs and EMDEs that import significant quantities of agricultural products from Russia and Ukraine are particularly vulnerable to disruption to the production and transportation of key commodities.

Food production is also at risk of being poorly distributed. Smaller producers such as subsistence farmers may lack the resources (or access to financial markets) required to purchase costly inputs. Low domestic yields combined with weak fiscal positions and the high cost of shipping may put adequate food stocks beyond the reach of poorer countries.

Food shortages have significant negative consequences in both the near and long term. In the near term, food shortages can contribute to rising social unrest (Barrett 2013; Hendrix and Brinkman 2013). Rising food prices can also cause fiscal balances to deteriorate, particularly in the presence of subsidies, which can either crowd out other spending or increase debt-related risks. In

the long term, malnutrition has substantial human and economic costs that can persist for decades (Micha 2021).

Growth under alternative downside scenarios

A global macroeconomic projection model was used to further assess the impact of some key downside risks on the global economy.[4] These risks include widespread financial stress caused by faster U.S. monetary tightening, an intensification of geopolitical tensions in Europe, and recurring COVID-19 outbreaks in China.[5]

In the first scenario, the Federal Reserve would unexpectedly accelerate the pace of monetary policy tightening in response to resilient domestic demand, surging wage inflation, and rising inflation expectations. Policy rates would rise to 4 percent by the first quarter of 2023—about 1.5 percentage points higher than currently expected, and enough to bring real rates into positive territory—and stay at about that level for several quarters. A rapid tightening of global financial conditions would ensue, triggering widespread financial stress across EMDEs. Several major EMDEs would experience large scale capital outflows and soaring bond spreads, ultimately forcing authorities to accelerate fiscal consolidation efforts (World Bank 2021b). On net, EMDEs would experience much larger headwinds to activity than advanced economies, with EMDE growth reduced by 0.5 and 0.9 percentage point in 2022 and 2023, respectively, relative to baseline forecasts.

In the second scenario, Russia would respond to escalating EU sanctions by announcing an immediate ban on all energy exports to EU member countries starting in the third quarter. Further, sanctions by the United States and the EU targeting shipping companies or third parties purchasing Russian oil could reduce the potential for trade diversion of Russian exports to other countries. The sudden implementation of the ban, combined with additional sanctions in response to Russia's invasion of Ukraine, would severely disrupt global energy supply routes. The resulting disruption to energy exports would be largest for natural gas, then oil, and lastly, coal. The price of these commodities would spike in 2022Q3 and remain elevated over the remainder of the scenario horizon, reflecting both precautionary buying and lower global supplies (figure 1.14.A). Meanwhile, uncertainty about geopolitical developments would also spike, contributing to a decline in consumer confidence across Europe (World Bank 2022d). In this scenario, growth would slow sharply in advanced economies—particularly in the euro area—while EMDEs would face notable headwinds from higher energy prices and weaker foreign demand.

In the third scenario, China would experience COVID-19 resurgences of steadily decreasing severity through the second half of 2022 and into 2023. Containing the spread of COVID-19 would require strict but short-lived lockdowns across several major cities. Pandemic control measures would sharply reduce private consumption and have adverse effects on domestic investment and regional trade networks (Guénette and Yamazaki 2021; World Bank 2022e, 2022g).[6] After each short-lived resurgence, activity would bounce back in the subsequent quarter as restrictions are lifted. Overall, pandemic resurgences and associated restrictions would lower growth relative to baseline in China by 0.5 percentage point in 2022 and 0.3 percentage point in 2023. Broader spillovers to EMDEs and advanced economies would be generally contained, owing to the short-lived nature of the shock.

There is a distinct possibility that all three scenarios materialize simultaneously. Each scenario layer would add headwinds to growth (of

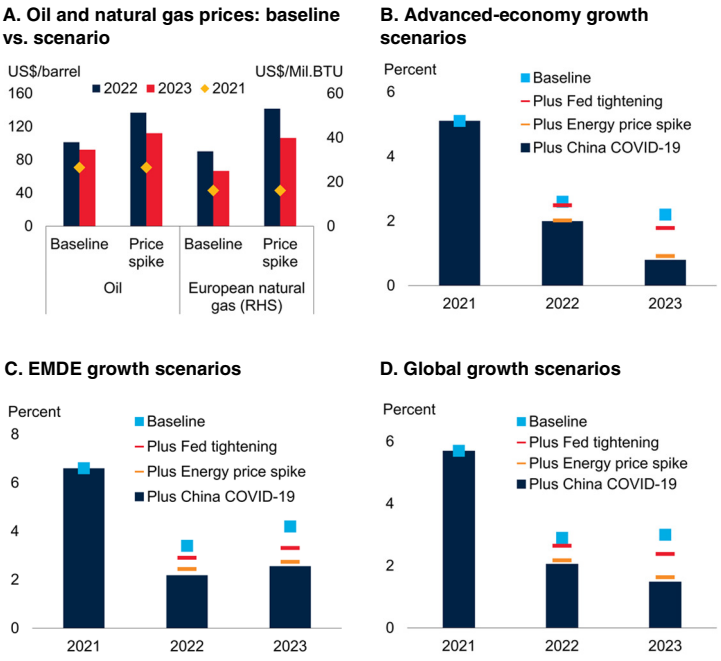
[4] Similar scenario analysis at the regional level is presented in recent World Bank publications such as the Spring 2022 regional updates for Europe and Central Asia (World Bank 2022d), East Asia and Pacific (World Bank 2022e), and South Asia (World Bank 2022f).

[5] Each scenario is prepared using the Oxford Economics Global Economic Model, a global semi-structural macro projection model which includes 81 individual country blocks, most of which are available at a quarterly frequency, with behavioral equations governing domestic economic activity, monetary and fiscal policy, global trade, and commodity prices (Oxford Economics 2019).

[6] As described in the 2022 Spring EAP Economic Update, the magnitude of the zero-COVID shock would be scaled to one fifth of initial pandemic shock experienced in 2020H1 (World Bank 2022e).

FIGURE 1.14 Growth under alternative downside scenarios

A ban by the Russian Federation on energy exports to the European Union, coupled with sanctions in response to Russia's invasion of Ukraine targeting shipping companies or third parties purchasing Russian oil, could significantly disrupt global energy markets and send prices soaring. The Federal Reserve could significantly accelerate its pace of policy tightening if wage pressures increase or if inflation expectations continue to rise. Renewed COVID-19 outbreaks in China could lead to additional lockdowns. The simultaneous materialization of these downside risks could result in substantially weaker growth.



Sources: Oxford Economics; World Bank.
Note: EMDEs = emerging market and developing economies.
A. Baseline scenario as described in the April 2022 *Commodities Market Outlook*. Alternative scenario paths are staff assumptions. Oil price is Brent oil benchmark in U.S. dollars per barrel.
B.-D. These scenarios are produced using the Oxford Economics Global Economic Model (OEM). The OEM is a global semi-structural macro projection model which includes 81 individual country blocks, most of which are available at a quarterly frequency, with behavioral equations governing domestic economic activity, monetary and fiscal policy, global trade, and energy prices (Oxford Economics 2019). The simulations assume that agents have adaptive expectations, monetary policy is endogenous, and fiscal policy is largely exogenous. Scenarios are linearly additive.

varying magnitudes) to advanced economies and EMDEs. Advanced economies—in particular the euro area—would be hard hit by soaring energy prices in addition to headwinds from faster Federal Reserve tightening and the pandemic-induced slowdown in China. Altogether, the three scenarios would see advanced-economy growth slow below 1 percent in 2023, compared to 2.2 percent in the baseline forecast (figure 1.14.B). Meanwhile, EMDEs would experience outsized impacts from the China COVID-19 shock in 2022 and acute financial stress amid faster Federal Reserve tightening in 2023. The layered shocks would reduce EMDE growth by 1.2 and 1.6 percentage points in 2022 and 2023, respectively, all but eliminating the projected rebound from the effects of the war in Ukraine (figure 1.14.C). The combined scenarios would entail a sharp global downturn with the global economy only narrowly avoiding an annual recession next year.[7] Global growth would slow abruptly from 5.7 percent in 2021 to 2.1 percent in 2022 and 1.5 percent in 2023—0.8 and 1.5 percentage points slower than the baseline forecast in 2022 and 2023, respectively (figure 1.14.D).

Policy challenges

Urgent global efforts are needed to address the humanitarian crises from Russia's invasion of Ukraine and conflict elsewhere, alleviate the rise in worldwide food insecurity, and bolster COVID-19 vaccination efforts. Surging commodity prices and tightening financial conditions can be addressed in part with safeguards to central bank independence and targeted relief for vulnerable households. Policy makers in EMDEs will have to confront the rise in food insecurity and the growing risk of fragmentation in trade networks. Over the longer term, policies that improve education and raise labor participation rates will help reverse economic damage from the pandemic, war, and conflict.

Key global challenges

The global community needs to urgently step up efforts to limit the humanitarian cost of Russia's invasion of Ukraine and armed conflicts in other parts of the world, such as through the coordinated delivery of emergency food, medical, and financial aid to war-torn areas. A concerted effort will also be required to equitably share the burden of housing and possibly relocating refugees displaced by war in Ukraine and conflict elsewhere (OECD 2022). Once the geopolitical situation has stabilized, coordinated efforts will be required to support and finance the reconstruction of war-ravaged areas. One way to improve the economic effectiveness of reconstruction efforts is to offer

[7] As in Kose, Sugawara and Terrones (2020), a global recession is defined as an annual contraction in global real per capita output.

grants rather than loans when appropriate, while closely aligning international support with the affected nation's interests (Becker et al. 2022).

International assistance will be needed to cushion the blow from surging oil and food prices, particularly in poorer nations facing acute food insecurity risks (G7 2022). The impact of the war alone could tip millions back into food insecurity over the next two years (FAO 2022). Globally coordinated efforts can also help boost the supply of commodities. For energy commodities, this could entail drawing on strategic stockpiles, accelerating transitions to low-carbon energy sources, and introducing measures to reduce energy consumption—for example, by improving the energy efficiency of buildings and the fuel efficiency of motor vehicles (Special Focus 2; IEA 2022). For metals, major producers can work to expand production, taking full advantage of the metal-intensive nature of the green transition (Kabundi and Vasishtha 2022).

It will also be key for commodity-exporting economies, particularly food exporters, to safeguard the global commodity trade system by eschewing protectionist policies (such as export restrictions or bans) that could further magnify the rise and volatility in prices (Laborde, Lakatos, and Martin 2019). This is a serious challenge as several countries introduced food export restrictions since the invasion of Ukraine, affecting about 17 percent of globally traded calories (Glauber, Laborde, and Mamun 2022). Policy makers can also consider temporarily waiving biofuel mandates to help ease price pressures in key agricultural commodity markets.

The global community also needs to maintain efforts to end the COVID-19 pandemic, particularly in the poorest countries. Sustained collective action is required to bolster global pandemic preparedness and rapidly expand vaccination campaigns. Expanding vaccination coverage is a global priority—especially in LICs, where only about 14 percent of people have been fully vaccinated owing to a combination of insufficient supply, logistical challenges, and vaccine hesitancy. Much of the existing production capacity of vaccines continues to be allocated to vaccinations and boosters in higher-income countries.

Globally coordinated debt relief efforts, including the G20 Common Framework for debt treatments, are critical to help EMDEs where debt sustainability has sharply deteriorated amid weak growth, surging commodity prices, and tighter financing conditions. Debt dynamics are especially unfavorable among LICs, about half of which were either experiencing or at high risk of experiencing debt distress prior to the invasion of Ukraine (World Bank 2022g). The same is true for about one-third of EMDE small states. In the past, delays in resolving unsustainable debt have had severe economic consequences for affected countries (Nagle 2022). Accordingly, debt relief needs to be rapid, comprehensive, and sizable to minimize risks to growth prospects. International financial institutions can help by easing near-term debt service pressures.

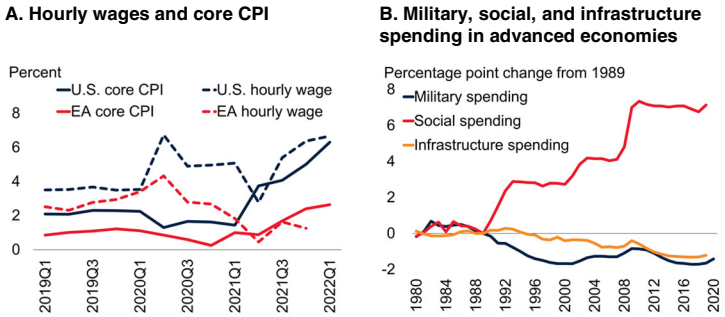
The global community also needs to foster a smooth transition toward low-carbon energy sources. To this end, countries can work collectively to reduce dependency on fossil fuels by aggressively expanding investments in electricity access and green energy, as well as increasing energy efficiency (OECD 2022). Governments need to work toward achieving consensus on priority reforms at the national level that can help achieve long-term climate and development objectives, while reducing global policy uncertainty. Key national policies can include creating climate-smart regulatory frameworks, introducing carbon pricing policy instruments, and strengthening land use regulations. Finally, policy makers need to renew support for a rules-based international economic order, guarding against the threat of fragmentation across trade, investment, and financial networks.

Challenges in advanced economies

Surging commodity prices have deepened the challenges facing monetary authorities, as they confront rising and above-target inflation at a time of slowing activity. Monetary policy normalization is also complicated by uncertainty about the effects of reducing the size of sizable central bank balance sheets.

FIGURE 1.15 Policy challenges in advanced economies

Central banks confronting rising inflationary pressures need to monitor the emergence of possible feedback loops between wages and core inflation. Fiscal support needs to ensure that possible increases in military spending amid heightened geopolitical risks do not crowd out social spending and public infrastructure investment.



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

Note: EA = euro area.

A. Last observation for CPI and U.S. nominal hourly wages is 2022Q1. Last observation for EA nominal hourly wages is 2021Q4.

B. Figure shows the percentage point deviation from 1989 on military, social, and infrastructure spending as a share of GDP. Blue line shows GDP-weighted average for the euro area, Japan, the United Kingdom, and the United States. Red and orange lines show GDP-weighted average for France, Germany, Italy, Japan, Spain, the United Kingdom, and the United States. Last observation is 2020 for military spending and 2019 for social and infrastructure spending.

Central banks will need to carefully calibrate the timing and size of their policy actions, paying close attention to incoming data and the emergence of possible feedback loops between wages and core inflation (figure 1.15.A). A delay in the removal of monetary policy accommodation in an environment of above-target inflation and limited slack would risk de-anchoring inflation expectations. Clear and consistent communication with markets continues to be crucial, as does effective macroprudential regulation to maintain the resilience of financial institutions (García and Doehr 2022).

Russia's invasion of Ukraine has also further complicated fiscal policy, as accommodating the arrival of a large number of refugees will likely strain public finances in the near term in some countries. In addition, new fiscal support may be needed just as fiscal balances begin to improve. In the near term, fiscal policy can focus on mitigating the pernicious effects of high energy and food prices on the lower-income segments of the population, given the larger share of energy and food in their consumption basket. To that end, efforts that directly target vulnerable groups, such as stronger social safety nets, may better support green objectives—unlike indirect measures (for example, energy subsidies) which often introduce economic distortions (World Bank 2013).

In the medium term, fiscal authorities need to promote resource reallocation to de-carbonize economic activity, including through carbon taxes when appropriate. These could help raise revenues to sustain investment in climate infrastructures and strengthen energy security in the face of rising energy prices (Islam 2022; Shang 2021). In addition, fiscal authorities need to ensure that social spending and productivity-enhancing expenditures, such as highly needed infrastructure, are not crowded out by possible increases in military spending in response to heightened geopolitical risk (figure 1.15.B). This is all the more important given that military expenditures have very low fiscal multipliers (van Gemert, Lieb, and Treibich 2022).

Widespread labor shortages in a number of advanced economies have slowed the recovery and put significant upward pressure on wages. This reflects a combination of declining labor supply and mismatches between available jobs and worker preferences. Active labor market policies that facilitate the reallocation of displaced workers and the recruitment of skilled and unskilled workers can foster increased labor force participation, helping to promote an equitable and sustained recovery (OECD 2021a).

Challenges in emerging market and developing economies

Concerns over high inflation and the rising risk of a de-anchoring of inflation expectations are expected to lead to further monetary policy tightening in many EMDEs. Having already experienced a marked erosion of fiscal space during the pandemic, commodity-importing EMDEs will face a further deterioration in fiscal positions due to the rise in borrowing costs. In contrast, some commodity exporters are likely to experience revenue windfalls. Russia's invasion of Ukraine threatens to raise food insecurity in many EMDEs and fragment broader trade and investment networks. Accordingly, it is critical

that policy makers put in place measures to confront volatile food prices and provide targeted relief to vulnerable households, while also safeguarding trade networks and lowering trade costs. Over the longer term, policy makers can prioritize policies to reverse the damage inflicted by the back-to-back global shocks of the past two years, including policies that improve learning and enhance labor force participation.

EMDE monetary and financial policy challenges

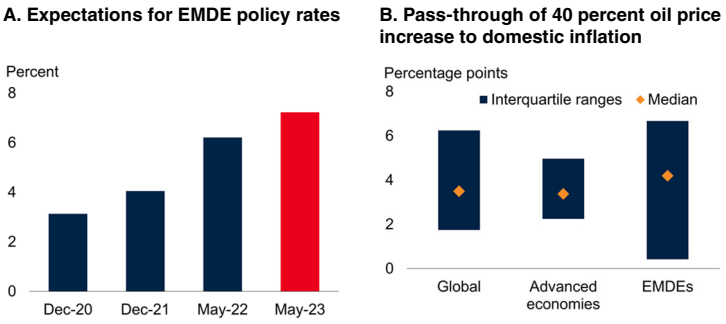
Central banks in EMDEs face the challenge of tackling high inflation at the expense of economic activity when their cyclical recovery from the pandemic is fragile and incomplete. This is more daunting in countries with less well anchored inflation expectations and less established monetary policy credibility.

The war and the resulting surge in global commodity prices are compounding inflationary pressures, which are expected to trigger an acceleration in the pace of monetary tightening in many EMDEs (figure 1.16.A). Even if energy and food prices had no effect on core inflation, global inflation would rise markedly since energy alone accounts for about 10 percent of the consumption basket in the median EMDE. Past experience suggests that a 40 percent increase in oil prices—still below the increase projected for 2022—can increase EMDE inflation by about 4 percentage points within two years (figure 1.16.B; Ha et. al. 2019).

Although central banks face an inherent trade-off between supporting growth and containing inflation, the terms of this trade-off can be improved in various ways. Communicating monetary policy decisions clearly within credible monetary policy frameworks, and safeguarding central bank independence, can more strongly anchor inflation expectations, reducing the degree of policy tightening needed to achieve the desired effects on inflation and activity. Clear communication can help shape the expectations of financial markets, households, and firms so that inflation dynamics do not translate into destabilizing increases in wages and production costs (Coibion, Gorodnichenko, and Weber 2019).

FIGURE 1.16 Monetary policy challenges in emerging market and developing economies

The war and the resulting surge in global commodity prices are exacerbating inflationary pressures, which are expected to trigger additional monetary tightening in many emerging market and developing economies (EMDEs). Historical estimates suggest that an oil price shock that raises oil prices by 40 percent—still below the projected increase for 2022—can raise inflation in EMDEs by about 4 percentage points over two years.



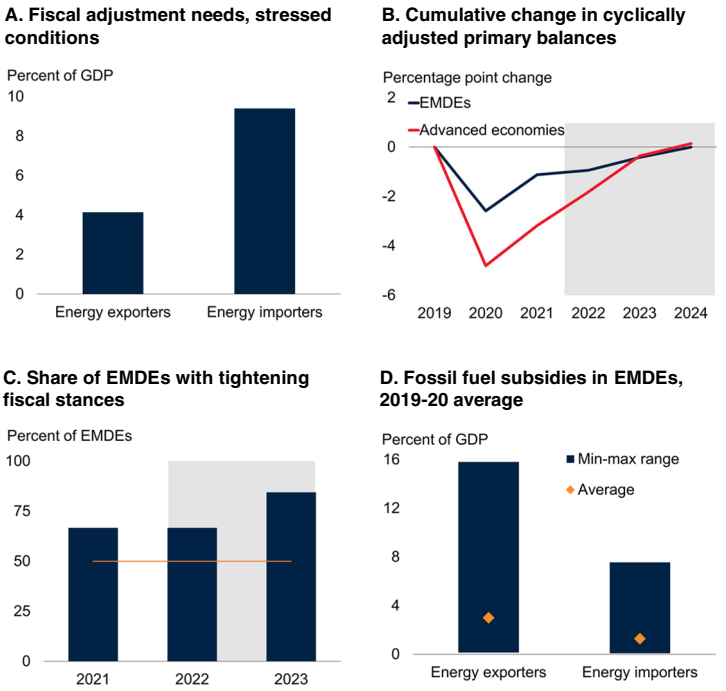
Sources: Consensus Economics; Ha, Kose, and Ohnsorge (2019); World Bank.
Note: EMDEs = emerging market and developing economies.
A. Consensus forecasts for one-year-ahead three-month treasury bill yields (or policy rates) for 18 EMDEs. Red bar based on May 2022 surveys.
B. Figure shows cumulative impulse responses after two years of domestic inflation to a positive 40 percent oil price shock. Orange diamonds indicate median and blue bars the 25th -75th percentiles of country-specific impulse responses. The results are based on the country-specific FAVAR models discussed in Ha, Kose, and Ohnsorge (2019), estimated for 29 advanced economies and 26 EMDEs for 1970-2017.

Rising global interest rates may cause financial stress in highly indebted corporate sectors, particularly if domestic activity remains weak. Refinancing debt would become more challenging in an environment where policy tightening in advanced economies and risk aversion lead to further increases in borrowing costs, capital flight, and currency depreciation. Countries can reduce these risks through the rapid and transparent treatment of nonperforming loans, insolvency reforms to allow for the orderly reduction of unsustainable debts, and innovations in risk management and lending models to ensure continued access to credit for households and businesses (Kose et al. 2021; World Bank 2020a).

More fundamentally, countries can reduce their vulnerability to volatile capital flows and exchange rate fluctuations by strengthening macro-prudential regulation—including capital and liquidity buffers, building foreign exchange reserves, and increasing debt transparency. Banks' capital and liquidity buffers must be able to absorb shocks. Credit quality and nonperforming loans

FIGURE 1.17 Fiscal policy challenges in emerging market and developing economies

Tightening global financial conditions and higher borrowing costs are likely to exacerbate the burden of servicing record-high levels of debt, which could cause fiscal stress and increase fiscal adjustment needs. Many emerging market and developing economies are tightening fiscal policy to restore fiscal sustainability, but fossil fuel subsidies will make this more challenging.



Sources: IMF (2022b); International Energy Agency; Kose et al. (2017); World Bank.
Note: EMDEs = emerging market and developing economies. Shaded areas indicate forecasts. Unless otherwise indicated, aggregates are calculated using real U.S. dollar GDP weights at average 2010-19 prices and market exchange rates.
A. Fiscal adjustment is the size of fiscal consolidation needed to return debt to a sustainable path, measured using the fiscal sustainability gap as in Kose et al. (2017). Stressed conditions are defined as nominal growth minus one country-specific standard deviation, or interest rates plus one standard deviation. Data as of 2021. Sample includes 77 EMDEs (17 energy exporters and 60 energy importers), excluding China, Russia, and Ukraine.
B. Figure shows the weighted cumulative change in cyclically adjusted primary balances (CAPB), as measured in IMF (2022b). Sample includes 34 advanced economies and 44 EMDEs, excluding China, Russia, and Ukraine.
C. Fiscal tightening defined as a decline in the fiscal impulse, with the impulse measured as the negative change in the CAPB from the previous year. Sample is limited to 45 EMDEs because of data availability.
D. Data are simple averages for 2019 and 2020. Sample includes 37 EMDEs (23 energy exporters and 14 energy importers).

need to be reported transparently, taking into account possible distortions from forbearance measures implemented during the pandemic, so that prompt corrective action is possible. Capital flow management measures may also help countries contend with large and volatile flows, but are best deployed sparingly—for example, to forestall immediate economic disruptions or to prevent the build-up of financial vulnerabilities (IMF 2022a).

Crypto asset markets have grown rapidly since the pandemic—in some EMDEs, the volume of crypto asset transactions now rivals those of domestic equities (IMF 2021). Sound regulatory frameworks for crypto assets (and decentralized financial systems more generally) will be required to ensure macro-financial stability.

EMDE fiscal policy challenges

Tightening global financial conditions and higher borrowing costs present mounting challenges for EMDE fiscal policy makers. A further increase in borrowing costs and slowdown in growth could place some EMDEs in fiscal stress amid record-high debt levels and trigger sizable fiscal adjustment (figure 1.17.A). Compared to previous crises, EMDEs entered 2022 in more precarious fiscal positions, with incomplete economic recoveries and much narrower fiscal space following the pandemic. EMDEs have few available tools to support their economies, with fiscal policy buffers depleted and external financing costs rising. Placing debt on a more sustainable path will be a daunting challenge, especially in commodity importers given still-weak revenues from the pandemic and higher commodity prices. Even before the invasion of Ukraine, 60 percent of LICs were in or near debt distress. More broadly, EMDEs will have to carefully balance the need to ensure fiscal sustainability with that of mitigating the war's adverse effects, especially on the poor.

For the EMDEs most exposed to spillovers from the war, targeted fiscal relief may be warranted to shield vulnerable households from higher commodity prices, prevent further spikes in poverty and food insecurity, and manage any influx of refugees. The impact of targeted fiscal support can be improved by measures that strengthen public service delivery, such as expanding data and administrative capacity (Grosh et al. 2022). Given limited fiscal space, some relief for vulnerable populations may need to come at the expense of other categories of spending. Fiscal policy is expected to continue to tighten in most countries over the next few years,

as EMDEs finish unwinding remaining pandemic support (figures 1.17.B and 1.17.C). Nonetheless, government debt in 2024 is anticipated to remain above 2019 levels in over two-thirds of EMDEs.

Food and energy subsidies are placing considerable strain on the budgets of households, public utilities, and some governments (figure 1.17.D). To mitigate the impact of sharp increases in commodity prices on households, numerous EMDEs have cut fuel taxes, increased subsidies, and imposed price controls on food and energy products. These measures are, in general, costly and ineffective at delivering benefits to low-income households, and can be challenging to dismantle.

Fiscal positions among many energy exporters will be improved by higher revenues related to rising commodity prices. This windfall may be best used to prepare for markedly higher borrowing costs, to bolster fiscal buffers, or to invest in improving human capital, accelerating business climate reforms, and strengthening governance. Prudent management of resource rents involves avoiding inefficient and distortive energy subsidies, and instead increasing export diversification, strengthening long-term growth prospects, and building resilience to external shocks. In commodity importers, measures that increase expenditure efficiency, such as strengthening expenditure review processes, can help ensure that limited fiscal space is used effectively. Across all EMDEs, leveraging private-sector involvement will be key given the necessary spending on longer-term investments and the limited degree of fiscal space.

More durable improvements in fiscal sustainability among EMDEs will be facilitated by efforts to increase domestic revenue mobilization and boost productivity. Broadening the tax base can improve government finances with limited impact on economic growth. Improvements in sovereign debt management would help preserve the ability of governments to support an equitable recovery.

EMDE structural policy challenges

EMDEs face various longer-term challenges, many of which have been aggravated by the pandemic and the invasion of Ukraine. These shocks have reversed progress made toward the achievement of the Sustainable Development Goals. Building resilience to food price volatility is critical, as the war has worsened food insecurity across many EMDEs. To counter the risk of costs being pushed up by trade and financial fragmentation, policy makers can put in place measures to enhance trade resilience and promote diversification. Moreover, reversing the scarring inflicted by COVID-19 on growth prospects will take substantial policy efforts, including investments in education and the enhancement of labor force participation through active labor market policies, especially for women.

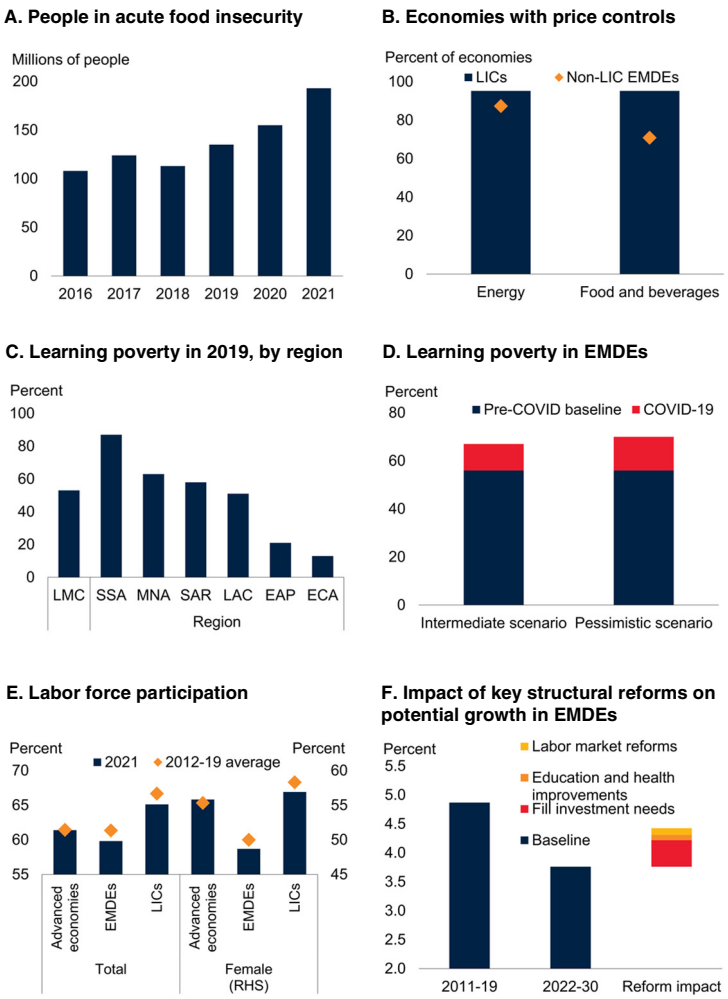
Confronting food insecurity

Food insecurity, already pervasive in many EMDEs, is rising as the war in Ukraine pushes up global food prices and heightens the risk of severe food shortages (figure 1.18.A; WFP 2022). In 2020, more than 700 million people—nearly one in 10 people in the world—experienced severe food insecurity, while an estimated 2.3 billion lacked regular access to sufficient food (FAO et al. 2021). Improving access to safe and nutritious food, and maintaining food security in times of crisis, are critical for health and human development. Children who are properly nourished during the first 1,000 days of their lives are 33 percent more likely to escape poverty as adults (UNICEF 2019). Yet, currently, more than 150 million children under the age of five across the world have experienced chronic malnutrition, 90 percent of which are located in EMDEs and almost 40 percent in Sub-Saharan Africa (WHO, UNICEF, and World Bank 2021b). Addressing food loss and waste can improve food and nutrition security, while also helping to meet climate goals.

To the extent possible, policy makers in EMDEs should refrain from responding to rising prices of food and fertilizers by adding to the already-high number of price controls, which are often paired with subsidies (figure 1.18.B). Price controls can generate significant distortions, and their adverse consequences for growth, poverty reduction, and government policies can increase over time

FIGURE 1.18 Structural policy challenges in emerging market and developing economies

Food insecurity remains pervasive in many emerging market and developing economies (EMDEs) and is being exacerbated by the war. Policy makers can deploy targeted enhancements to safety nets rather than introducing distortionary price controls on food and energy, which are already widespread in EMDEs. Policies aimed at mitigating the expected slowdown in potential growth include reducing learning poverty, addressing investment needs, and increasing labor force participation, especially female participation, in part through education and labor market reforms.



Sources: Azevedo et al. (2021); Barro and Lee (2010); FSIN and GNAFC (2022); Global Learning Assessment (database); Guénette (2020); Haver Analytics; ILO (database); International Monetary Fund; Organisation for Economic Co-operation and Development; PWT (database); UN Population Prospects; World Bank; World Trade Organization.

Note: EMDEs = emerging market and developing economies; LICs = Low-income countries; LMC = low- and middle-income countries; EAP = East Asia and Pacific, ECA = Europe and Central Asia, LAC = Latin America and the Caribbean, MNA = Middle East and North Africa, SAR = South Asia, SSA = Sub-Saharan Africa.

A. Data from the Food Security Information Network's *Global Report on Food Crises* 2022.

B. Listed price control policies are retrieved from WTO *Trade Policy Review* publications. Sample includes 21 low-income countries and 56 other EMDEs.

C.D. Learning poverty defined as the inability to read and understand a simple text by age 10.

C. Figure shows percent of children who are learning-poor in LMCs, by region.

D. Figure shows increase in learning poverty for LMCs in scenarios in Azevedo et al. (2021).

E. Figure shows labor participation rate for people older than 14 years old.

F. Period averages of annual GDP-weighted averages. Potential growth estimates are based on production function approach. Impact of structural reforms is computed as difference between 2020-30 potential growth under the baseline forecast and counterfactual reform scenarios. The latter assume a repeat of individual EMDEs best 10-year improvements in labor market participation, education and health, and investment over the period 1998-2020.

(Guenette 2020). Widespread subsidies negatively affect fiscal balances, limiting the ability to fund growth-enhancing investments. In addition, price controls often prove difficult to roll back after the crisis that led to their implementation has abated. In exceptional circumstances, a combination of price controls and subsidies may be warranted to cushion the short-term impact of dislocating commodity price developments in the absence of social protection programs. Nonetheless, price controls should be used as a last resort, and should include automatic sunset clauses. Trade restrictions should also be avoided and, where possible, pared back.

Instead of price controls and subsidies, EMDEs can improve social safety nets, encourage diversification of food sources, and promote efficiency in food production and trade. This can include investments aimed at promoting farming systems that use climate-smart techniques and produce a more diverse mix of foods. Improving supply chains to increase farmers' access to new markets, reduce postharvest food losses, and better link production to consumption is key. Reforms to leverage digital tools to improve the efficiency and integration of domestic food markets and reduce barriers to food trade can also be promoted (World Bank 2022b). When predictable and well-targeted, investment in social safety nets can also support households in new economic activities, boosting income levels in the longer-term and enabling access to healthy diets. Such comprehensive reforms can be both pro-poor and pro-growth.

Preventing fragmentation of trade and investment networks

Openness to trade and foreign direct investment is closely associated with positive technological spillovers, lower trade costs, and stronger long-term growth (World Bank 2020b). The war in Ukraine has heightened the risk of fragmentation in networks of trade, investment, and digital connectivity; EMDEs are particularly vulnerable to such fragmentation as they face high trade costs. Even before the invasion, trade costs in EMDEs were well in excess of 100 percent of the value of traded goods—substantially more than in

advanced economies.[8] This was the result of many factors, including inadequate transportation infrastructure, a lack of logistics services, lengthy border processes, regulatory procedures, and elevated tariff barriers (World Bank 2021b).

Well-functioning and diversified GVCs are a source of resilience far more than they are a source of vulnerability (Bas Fernandes and Paunov 2022; Brenton, Ferrantino, and Maliszewska 2022; Constantinescu et al. 2022). Although participation in GVCs may increase exporters' vulnerability to foreign shocks, as experienced during the COVID-19 pandemic, it reduces their exposure to domestic shocks (Borin, Mancini, and Taglioni 2021; Espitia et al. 2021). In addition, the reshoring of production can lead to sustained welfare losses (OECD 2021b). Policy makers in EMDEs need to refrain from putting in place protectionist policies such as export restrictions that could magnify the recent increase in commodity prices.

Instead, they should favor multilateral measures that promote the resilience of GVCs, reduce the cost of trading, and facilitate capital flows. These include policies that encourage firms to diversify trade partners and inputs, especially in key strategic sectors, and measures that streamline border procedures and ease impediments to trade flows. Enhancing investment promotion capacity and expanding preferential trade agreements should also be pursued. Policy makers should also favor policies to deepen integration into GVCs, including by modernizing trade information and digital systems, strengthening contract enforcement and addressing market distortions, facilitating trade finance, and fostering competitiveness (Abreha et al. 2021).

Promoting education

Investing in education benefits society by driving long-term growth, spurring innovation, strengthening institutions, and fostering social cohesion. At the individual level, education promotes employment, boosts earnings, and reduces poverty. Indeed, it is estimated that every extra year of schooling boosts hourly earnings by 9 percent (Psacharopoulos and Patrinos 2018).

Education systems across many EMDEs are experiencing the worst crisis of the last century (Saavedra 2021). With the spread of COVID-19, more than 180 countries, including the vast majority of EMDEs, mandated some form of school closures (Azevedo et al. 2020). Globally, about 131 million children missed three-quarters of their in-person learning from March 2020 to September 2021 (Mizunoya et al. 2021). Among them, 59 percent—or nearly 77 million—missed almost all in-person instruction time, with severe consequences for learning inequality. Given long school closures and the varying effectiveness of remote learning, learning poverty in low-and middle-income countries has risen sharply—the share of children under 10 who are unable to read and understand a simple text, which already exceeded 50 percent before the pandemic, is expected to surpass 70 percent (figures 1.18.C and 1.18.D; Azevedo et al. 2021). Unless governments act to recover these learning losses, they may continue to accumulate in coming years, potentially reaching about $17 trillion in global lifetime earnings in present value terms for the cohort of students affected by closures (Azevedo et al. 2021).

Past health emergencies suggest that the impact on education is likely to be most severe in countries with already low learning outcomes, high dropout rates, and low resilience to shocks. The harmful impact of the pandemic on households' ability to support children's education is also likely to be compounded by the fact that two-thirds of low- and lower-middle-income countries have cut their public education budgets since the onset of the pandemic (Al-Samarrai et al. 2021).

Against this sobering backdrop, it is critical for EMDEs to promote policies to enhance education and learning. These include learning recovery programs that prevent further learning losses once children return to school, as well as early-warning systems that monitor absenteeism or nonreturn of students (UNICEF 2022). Remote and hybrid

[8] Trade costs cover the full range of costs associated with trading and are expressed in excess of the costs that the same goods face when traded domestically, as defined in the ESCAP-World Bank (database).

education, which became a necessity during the pandemic, has the potential to transform the future of learning if systems are strengthened and technology is better leveraged (World Bank 2018). Enhancing digitalization and fostering connectivity are some of the steps that can increase the efficiency of education spending. Enhancing learning equality should also be promoted, including by channeling resources to disadvantaged pupils, such as those displaced by war and conflict. Finally, flexible programs aimed at lifelong learning and reskilling the unemployed are also needed.

Raising labor force participation

The pandemic resulted in widespread job losses in EMDEs, especially among vulnerable groups such as women and youth, leading to higher unemployment and lower participation rates (figure 1.18.E). In previous recoveries, the improvement in employment lagged behind activity, often resulting in long unemployment spells (Brown and Koettl 2012).

Promoting labor force participation is key to offsetting the labor market losses brought about by the pandemic and fostering long-run labor productivity. To that end, active labor market policies can increase labor demand and the efficiency of labor market matching. These include wage subsidies and job retention policies, measures that enhance job search assistance and on-the-job training, and pension reforms. A comprehensive policy package, including sustained investment, education policies and active labor market reforms, could enhance EMDEs labor force participation and help mitigate the slowdown in potential output expected over the next decade (figure 1.18.F; World Bank 2022g). Policy makers can also enhance participation through reforms that promote job market flexibility and improve the wider business environment, including those that spur competition and reduce red tape.

Boosting female labor participation can significantly increase household incomes among EMDEs (Pimkina and de la Flor 2020). This can be achieved by job training programs specifically aimed at women, including vocational training (Bandiera et al. 2020). Financial inclusion and access to savings and credit products, including noncollateralized credit, also need to be promoted to improve women's access to education and to enable them to set up new businesses, thus enhancing their participation in the labor force.

TABLE 1.2 Emerging market and developing economies[1]

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

* Energy exporters.

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

2. An economy is defined as commodity exporter when, on average in 2017-19, either (1) total commodities exports accounted for 30 percent or more of total exports or (2) exports of any single commodity accounted for 20 percent or more of total exports. Economies for which these thresholds were met as a result of re-exports were excluded. When data were not available, judgment was used. This taxonomy results in the classification of some well-diversified economies as importers, even if they are exporters of certain commodities (for example, Mexico).

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

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