Uncertainty Seeping through as Policies Shift

The past four years have put the resilience of the global economy to the test. A once-in-a-century pandemic, eruption of geopolitical conflicts, and extreme weather events have disrupted supply chains, caused energy and food crises, and prompted governments to take unprecedented actions to protect lives and livelihoods. The global economy has demonstrated resilience overall, but this masks uneven performance across regions and lingering fragilities.

The negative supply shocks to the global economy since 2020 have had lasting effects on output and inflation, with varied impacts across individual countries and country groups. The sharpest contrasts are between advanced and developing economies. Whereas the former have caught up with activity and inflation projected before the pandemic, the latter are showing more permanent scars (see the October 2023 World Economic Outlook), with large output shortfalls and persistent inflation (Figure 1.1). They also remain more vulnerable to the types of commodity price surges that followed Russia's invasion of Ukraine (Figure 1.2; October 2023 and April 2024 World Economic Outlook).

Since the beginning of the year, signs have emerged that cyclical imbalances are being gradually resorbed, with economic activity in major economies better aligned with their potential. These developments may have helped bring inflation rates across countries closer together, but the momentum in global disinflation appears to have slowed in the first half of the year (July 2024 World Economic Outlook Update). Goods prices have stabilized, and some are declining, but services price inflation remains high in many countries, partly reflecting rapid wage increases, as pay is still catching up with the inflation surge of 2021-22. This has forced some central banks to delay their policy-easing plans (Chapter 2), putting public finances under more pressure, especially in countries where debt-servicing costs are already high and refinancing needs significant.

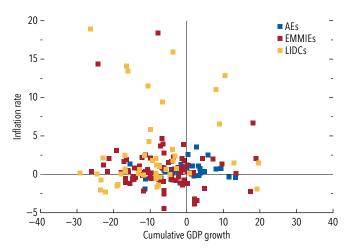
Now, as before, the global outlook will be shaped largely by fiscal and monetary choices, their international spillovers, the intensity of geoeconomic fragmentation forces, and the ability of governments to implement long-overdue structural reforms. With inflation approaching central bank targets and governments striving to manage debt dynamics, the policy mix is expected to shift from monetary to fiscal tightening as monetary policy rates are brought down, closer to their natural levels. How fast such rotations occur in individual countries will have consequences for capital flows and exchange rates.

The level of uncertainty surrounding the outlook is high. Newly elected governments (about half of the world population has gone or will go to the polls in 2024) could introduce significant shifts in trade and fiscal policy (Box 1.2). Moreover, the return of financial market volatility over the summer has stirred old fears about hidden vulnerabilities. This has heightened anxiety over the appropriate monetary policy stance especially in countries where inflation is persistent and signs of slowdown are emerging. Further intensification of geopolitical rifts could weigh on trade, investment, and the free flow of ideas. This could affect long-term growth, threaten the resilience of supply chains, and create difficult trade-offs for central banks. On the upside, governments could succeed in building the necessary consensus around overdue and difficult-to-pass structural reforms (Chapter 3), which would boost growth and enhance fiscal sustainability and financial stability.

Steady Disinflation, yet Bumps in the Road Still Possible

In many advanced economies, disinflation has come at a relatively low cost to employment, thanks partly to offsetting supply developments. These included a faster-than-expected decline in energy prices and a surprising rebound in labor supply, bolstered by substantial immigration flows that helped cool labor markets (April 2024 World Economic Outlook). Moreover, temporary sectoral bottlenecks during

Figure 1.1. Growth and Inflation Revisions (Percentage points, relative to January 2020 WEO Update)



Source: IMF staff calculations.

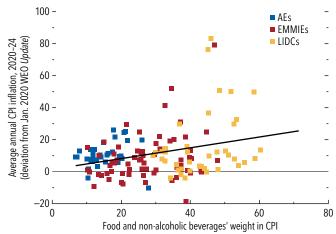
Note: X-axis reports latest estimates for cumulative GDP growth from 2020 to 2024 in deviation from January 2020 WEO *Update* forecast. Y-axis reports latest estimates for inflation rate in 2024 in deviation from January 2020 WEO *Update* forecast. AEs = advanced economies; EMMIEs = emerging market and middle-income economies; LIDCs = low-income developing countries; WEO = *World Economic Outlook*.

and after the pandemic led to a steepening of the Phillips curve and implied a small sacrifice ratio (the slack required to decrease inflation). As explained in Chapter 2, a temporarily steeper Philips curve helps explain both the rapid surge in inflation and the—so far—relatively painless disinflation (Figure 1.3, panel 1).

Since the beginning of 2024, signs that cyclical imbalances are being gradually resorbed have helped bring inflation rates across countries closer together (Figure 1.3, panel 2). Disinflation has continued broadly as expected but did show signs of slowing in the first half of the year, suggesting potential bumps on the road to price stability (July 2024 World Economic Outlook Update). The persistence in core inflation has been driven primarily by services price inflation. At 4.2 percent, core services price inflation is about 50 percent higher than before the pandemic in major advanced and emerging market economies (excluding the US). This contrasts with core goods price inflation, which has declined all the way to zero (Figure 1.3, panel 3). Recent increases in shipping rates, especially for routes to and from China, have put upward pressure on goods prices. However, this source of upward pressure has been mitigated so far by declining prices for exports from China (Figure 1.3, panel 4).

Stubbornness in services price inflation partly reflects higher nominal wage growth relative to

Figure 1.2. Inflation Surprises and Importance of Food in CPI (Percent)



Source: IMF staff calculations.

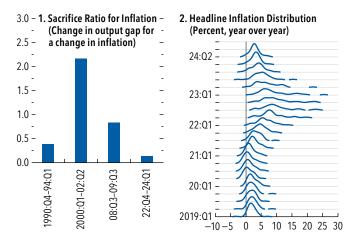
Note: The solid line denotes linear regression. AEs = advanced economies; CPI = consumer price index; EMMIEs = emerging market and middle-income economies; LIDCs = low-income developing countries; WEO = World Economic Outlook.

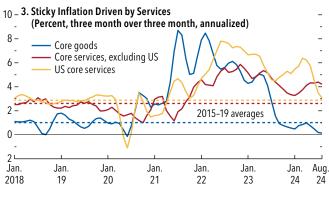
prepandemic trends. Even as labor market pressure has started to ease (Figure 1.4, panel 2), wage negotiators have continued to aim for sizable raises to counter the cost-of-living squeeze felt after the 2021–22 inflation surge (Figure 1.4, panel 1). That nominal wage growth continues to run higher after the inflation surge is consistent with past inflationary episodes—when real wages catch up to their equilibrium level determined by labor productivity—and does not necessarily risk a wage-price spiral (see Chapter 2 of the October 2022 World Economic Outlook).

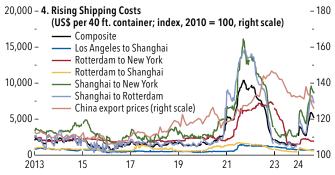
With output gaps expected to close, and assuming no disruptions to labor supply in advanced economies, wage growth is expected to moderate. Whether recent increases translate into further persistence in core inflation will depend on (1) the impact of recent real wage increases on unit labor costs, which itself depends on labor productivity, and (2) the willingness of firms to absorb increased unit labor costs in their profit margins.

These two factors seem to be working differently in the largest two advanced economies but should still allow disinflation to continue. In the United States, wage growth has reflected productivity gains lately, keeping unit labor costs contained. In the euro area, recent wage increases have exceeded productivity, raising unit labor costs (Figure 1.4, panel 3). However, European firms should be able to absorb those costs, given large increases in profit shares in recent years (Figure 1.4, panel 4).

Figure 1.3. Recent Inflation Developments



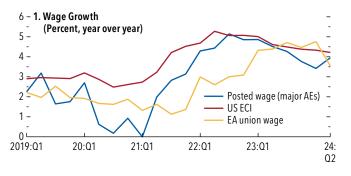


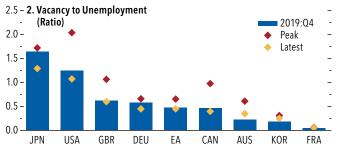


Sources: Haver Analytics; Organisation for Economic Co-operation and Development; and IMF staff calculations.

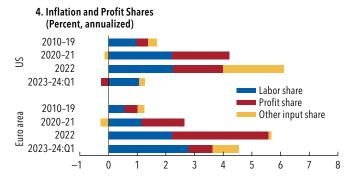
Note: In panel 1, sample includes 37 advanced economies. Panel 2 shows the density distribution of headline inflation developments across 32 advanced economies and 13 emerging market and developing economies. The vertical line indicates the 2019:Q1 median. In panel 3, the two aggregates are the purchasing-power-parity-weighted averages. Sample includes 11 advanced economies and 9 emerging market and developing economies that account for approximately 55 percent of 2021 world output at purchasing-power-parity weights.

Figure 1.4. Labor Market Developments









Sources: Eurostat; Haver Analytics; US Bureau of Economic Analysis; and IMF staff calculations.

Note: In panel 4, US decomposition uses data on factor shares from the nonfinancial corporate sector only. Euro area decomposition is based on whole-economy data. Data labels in the figure use International Organization for Standardization (ISO) country codes. AEs = advanced economies; EA = euro area; ECI = Employment Cost Index.

Policy Mix: Tight Monetary, Loose Fiscal Policies

Economic developments over the past four years have had a lot to do with how individual countries have deployed fiscal and monetary policies since the pandemic.

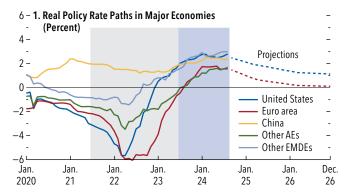
Following an initial period of easing, monetary policy has tightened significantly, with central banks in many emerging markets starting earlier than major central banks in advanced economies (Chapter 2). Most central banks stopped increasing nominal policy rates in the first half of 2023. But real rates continued to rise as inflation expectations started to decline (Figure 1.5, panel 1), tightening the monetary policy stance further. Real policy rates are currently above estimates of the natural rates and thus are acting to cool down economic activity and bring inflation back to target.

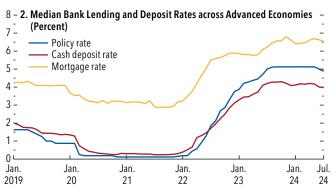
Higher policy rates have led to higher mortgage and bank lending rates, a sign that the first leg of monetary transmission has worked as expected. The pass-through to market rates has been gradual but seems to have finished. The increase in borrowing costs has in turn held back private credit growth and investment, moderating aggregate demand (Figure 1.5, panels 2 and 3).

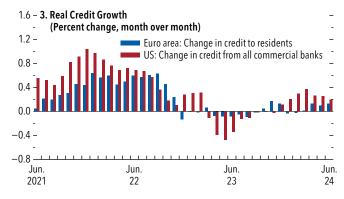
The contrast with fiscal policy is striking. Despite a strong rebound in activity in 2022 and generalized inflationary pressures, fiscal policy has remained looser. Some slippage with respect to consolidation plans is evident (see the October 2024 Fiscal Monitor), except in low-income developing countries, where limited fiscal space has constrained their ability to tackle energy and food crises (Figure 1.6, panel 1). From 2022 to 2024, monetary policy tightened significantly in most countries, but fiscal policy lagged and even eased in many instances (Figure 1.6, panel 2), complicating the task of central banks in their effort to rein in inflation and delaying the necessary rebuilding of fiscal buffers. Tight monetary policy combined with relatively loose fiscal policy, particularly relevant in the United States, may be one of the key factors that has led to dollar appreciation in 2024.

This is expected to change. With public-debt-servicing costs on an upward trend in emerging market and developing economies and a recent jump in the United States (Figure 1.6, panel 3), the baseline assumes a rotation of the policy mix. Necessary fiscal consolidation in many economies is expected to slow down growth and calls for looser monetary policy, which should in turn help governments trim deficits more easily (see "Policy Priorities: From Restoring Price Stability to Rebuilding Buffers").

Figure 1.5. Monetary Transmission



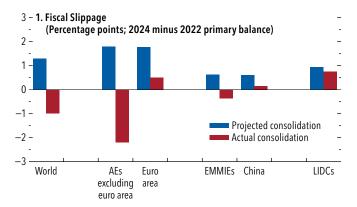


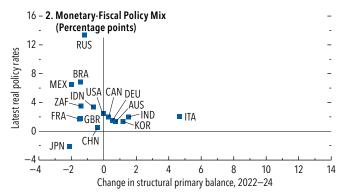


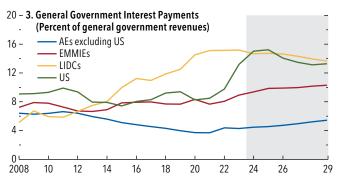
Sources: Bank for International Settlements; Consensus Economics; European Central Bank; Federal Reserve Board; Haver Analytics; and IMF staff calculations.

Note: In panel 1, the gray area denotes discretionary tightening periods (nominal rate hikes, excluding China), and the blue area denotes nondiscretionary tightening periods (nominal rate pauses, excluding China). Sample includes 16 AEs and 65 EMDEs. "Other" aggregates are medians. Real rates are calculated by subtracting 12-month-ahead inflation expectations, computed based on Consensus Forecast surveys of professional forecasters, from nominal policy rates. The 12-month-ahead inflation expectations are constructed as the weighted sum of forecasts for the current and subsequent calendar years (see Buono and Formai 2018). Projections for United States and euro area real rates are based on market-implied policy rates and inflation swaps for expected inflation. Panel 2 includes Australia, Canada, Japan, New Zealand, the United Kingdom, and the United States. In panel 3, credit growth is deflated by GDP deflator. AEs = advanced economies; EMDEs = emerging market and developing economies.

Figure 1.6. Fiscal Policy Stance







Source: IMF staff calculations.

Note: In panel 1, the projected and actual consolidations are from January 2022 WEO *Update* and October 2024 WEO, respectively; the panel uses the primary balance to broaden the country coverage. In panel 2, the primary balance refers to the general government structural primary balance in percent of potential GDP, and G20 economies are presented, except for Argentina, Saudi Arabia, and Türkiye, owing to lack of data availability. In panel 3, the projections are based on the October 2024 WEO. Data labels in the figure use International Organization for Standardization (ISO) country codes. AEs = advanced economies; EMMIEs = emerging market and middle-income economies; LIDCs = low-income developing countries; WEO = *World Economic Outlook*.

Returning Financial Market Volatility

In the first week of August, global financial markets experienced significant turbulence, interrupting a steady and rapid ascent of equity markets. Weaker-than-expected jobs data raised concerns about a potential recession in the United States, leading to a stock market correction. This, combined with the Bank of Japan's decision to hike interest rates, resulted in a rapid unwinding of Japanese-yen-funded carry trades, which amplified the equity market correction (see Box 1.3 of the October 2024 Global Financial Stability Report and Box 1.4 of the April 2023 Global Financial Stability Report).

Markets have rapidly stabilized. The Chicago Board Options Exchange Volatility (VIX) Index, after having surged to its highest point since 2020, has returned to its historical average. However, vulnerabilities that contributed to the recent increase in market volatility persist. These include the disconnect between economic uncertainty and market volatility (see Chapter 1 of the October 2024 Global Financial Stability Report) and overstretched equity valuations, particularly in the technology sector.

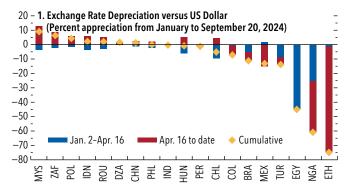
Revised market expectations regarding US monetary policy have aligned the outlook for rate cuts there more closely with those for other advanced economies, halting the appreciation of the US dollar against the currencies of major advanced economies. However, depreciation pressures remain high in emerging market and developing economies (Figure 1.7, panel 1). Many of these economies, which began hiking interest rates earlier, have also started easing earlier, leading to a narrowing of differentials between their policy rates and that of the United States.

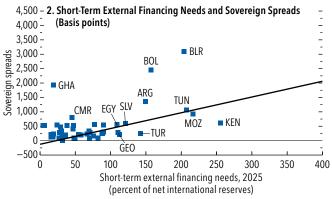
For some emerging market and developing economies faced with large short-term external financing needs—often a significant share of their buffer of net international reserves—sovereign borrowing spreads have increased since April, posing an additional challenge (Figure 1.7, panel 2). Although few of these economies are in debt distress—defined as having spreads greater than 1,000 basis points—heavy reliance on short-term external financing reveals vulnerabilities to sudden currency swings.

Rising Geopolitical Tensions but Limited Impact on Global Trade So Far

Despite ongoing geopolitical tensions, global trade volume as a share of world GDP has not deteriorated. However, signs of geoeconomic fragmentation

Figure 1.7. Pressure on Emerging Markets





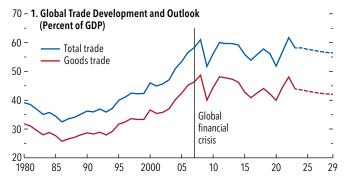
 $Sources: Haver\ Analytics;\ and\ IMF\ staff\ calculations.$

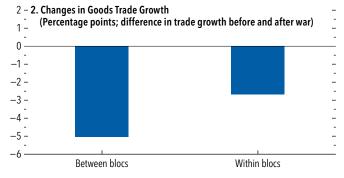
Note: In panel 1, percentage appreciation is computed as the difference in log exchange rates. In panel 2, fitted regression line is y = -19.5 + 4.47x, with a slope t-statistic equal to 2.51. The regression is weighted by purchasing-power-parity GDP. The sample excludes EMDE oil exporters. Data labels in the figure use International Organization for Standardization (ISO) country codes. EMDE = emerging market and developing economy.

have started to emerge, with increasingly more trade occurring within geopolitical blocs rather than between them (Figure 1.8). Specifically, when the averages for the periods 2017 to 2022 and 2022 to the first quarter of 2024 are compared, goods trade growth is observed to have declined by approximately 2½ percentage points more between geopolitically distant blocs than within blocs.

A more fragmented global trade landscape could emerge if geopolitical tensions continue to develop in a way similar to that during the Cold War (Figure 1.9). Although fragmentation, if it goes hand in hand with an increase in intrabloc trade, may not necessarily imply rapid deglobalization (Gopinath and others 2024), it could reduce the resilience of global supply chains, increase funding costs, disrupt cross-border capital flows (see Chapter 3 of the April 2023 *Global Financial Stability Report*) and lower market efficiency, slow the transfer of knowledge between advanced and

Figure 1.8. Globalization and Trade Fragmentation





Sources: Gopinath and others 2024; and IMF staff calculations.

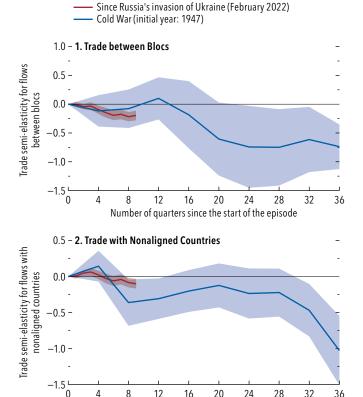
Note: In panel 1, "trade" is defined as the sum of exports and imports. Global trade and GDP for percentage calculation are in current US dollars. Dashed portions of graph lines indicate October 2024 World Economic Outlook forecasts. In panel 2, change is calculated as the average trade growth during 2022:Q2-24:Q1 minus the average trade growth during 2017:Q1-22:Q1 within and between blocs. For the current period, bloc definition is based on a hypothetical Western bloc centered on the US and Europe and a hypothetical Eastern bloc centered on China and Russia. Bilateral quarterly growth rates are computed as the differences in log bilateral trade, which are then aggregated using bilateral nominal trade as weights.

emerging market and developing economies (hampering income convergence), increase costs and risks for businesses, and induce a larger economic cost for the green transition (Box 1.1).

The Outlook: Stable yet Underwhelming-Brace for Uncertain Times

There has been little change in the global growth outlook since the April 2024 *World Economic Outlook*. Following the postpandemic rebound, the global projection for GDP growth has been hovering at about 3 percent, both in the short and the medium term. Weak growth extends beyond the disinflation period, suggesting that potential growth has been durably affected (see Chapter 3 of the April 2024 *World Economic Outlook*).

Figure 1.9. Trade Fragmentation: Cold War and Now (Percentage points)



Sources: Gopinath and others 2024; and IMF staff calculations.

8

12

16

Number of quarters since the start of the episode

20

24

28

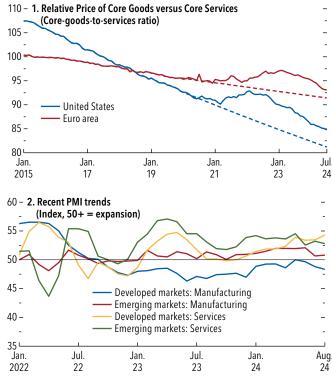
32

36

Note: The figure plots the change in global trade between blocs (panel 1) and with nonaligned countries (panel 2) during the Cold War (blue line, with $t_0 = 1947$) and since Russia's invasion of Ukraine (red line, with $t_0 = 2021:Q4$). For each episode, the figure plots the semi-elasticity of trade for flows, estimated using a difference-in-differences approach, with bilateral goods trade values on the y-axis, with importer-exporter, importer-year, and exporter-year fixed effects controlled for, and the associated 90 percent confidence bands. The missing category is trade within blocs. The Cold War results are obtained using yearly data from 1920 to 1990-excluding the World War II years (1939-45), and with 1947 as an excluded year-and the bloc definition based on Gokmen (2017). The results for the most recent period are based on quarterly trade data from 2017:Q1 to 2024:Q1 (with 2021:Q4 as an excluded quarter), with the wider bloc definition based on the ideal point distance (a measure based on voting patterns in the United Nations General Assembly computed by Bailey, Strezhnev, and Voeten [2017]).

> The picture is far from monolithic, however, and important sectoral and regional shifts underpin the stable global outlook that has emerged since the April 2024 World Economic Outlook. Relative to prepandemic trends, goods prices remain elevated compared with those for services, a lingering effect of the pandemic and its aftermath, which saw strong demand for goods alongside supply constraints (Figure 1.10, panel 1). Consequently, behind stable growth figures, a global shift from goods to services consumption is underway. This rebalancing

Figure 1.10. Continued Rotation to Services



Sources: Haver Analytics; and IMF staff calculations.

Note: Solid lines denote GDP growth from the October 2024 World Economic Outlook, and dashed lines denote GDP growth forecasts from the April 2024 World Economic Outlook, respectively. PMI = purchasing managers' index.

is tending to boost activity in the services sector in advanced and emerging markets but is dampening manufacturing. Manufacturing production is also increasingly shifting toward emerging market economies-in particular, China and India-as advanced economies lose competitiveness (Figure 1.10, panel 2).

Global Assumptions

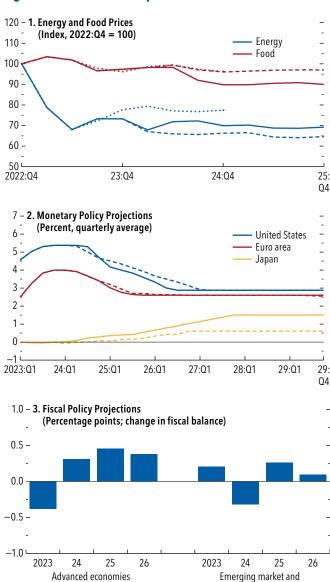
Before regional developments are discussed, it is important to review the key assumptions about commodity prices and fiscal and monetary policy on which the baseline projection is predicated.

With acknowledgment of exceptional policy uncertainty associated with newly elected governments in 2024 (in 64 countries representing about half of the global population), the baseline projection is flanked with two alternative scenarios, which lay out the main implications for growth and inflation of shifts in trade and fiscal policy. The scenarios are meant to be

illustrative but are quantitatively plausible alternatives around the baseline (Box 1.2).

- Commodity price assumptions: Oil prices are expected to rise by 0.9 percent in 2024 to about \$81 a barrel as production cuts by OPEC+ (Organization of the Petroleum Exporting Countries plus selected nonmember countries, including Russia), sustained global oil demand growth, and geopolitical tensions in the Middle East offset strong non-OPEC+ supply growth. Overall, however, prices for fuel commodities are projected to fall on average by 3.8 percent—owing to declines in prices of natural gas (by 16.4 percent) and coal (by 18.0 percent) as they come off their 2022 peaks—but less rapidly than assumed in April (Figure 1.11, panel 1). Food prices are expected to decline by 5.2 percent in 2024 and by a further 4.5 percent in 2025 as global grain production is forecast to reach record highs in 2024-25.
- Monetary policy assumptions: Compared with that in April 2024, the anticipated trajectory of policy rates for major central banks in advanced economies has shifted. In the euro area, 100 basis points of cuts are expected in 2024 and 50 basis points in 2025, bringing the policy rate to 2.5 percent by June 2025. In the United States, the Federal Reserve pivoted to cutting rates in September, starting with a 50 basis point drop. The federal funds rate is projected to reach its long-term equilibrium of 2.9 percent in the third quarter of 2026, almost a year earlier than what was expected in April. In Japan, however, policy rate projections have been revised upward (since the April 2024 World Economic Outlook), reflecting the Bank of Japan's rate hike in July. The policy rate is projected to continue to rise gradually over the medium term toward a neutral setting of about 1.5 percent, consistent with keeping inflation and inflation expectations anchored at the Bank of Japan's 2 percent target.
- Fiscal policy assumptions: Governments in advanced economies are on average expected to tighten their fiscal policy stances in both 2024 and 2025, halving primary deficits by 2029. However, contrasts between the euro area and the United States are important. In the baseline, the US fiscal deficit is only marginally trimmed down, remaining at about 6.0 percent in 2029, with about half of this reflecting interest rate expenses. Under current policies, the US public debt is not stabilized, reaching almost 131.7 percent of GDP in 2029. In the euro area, on the other hand, the debt-to-GDP ratio is expected to have stabilized already at about 88 percent in

Figure 1.11. Global Assumptions



Source: IMF staff calculations.

Note: In panels 1 and 2, solid lines denote projections from the October 2024 World Economic Outlook and dashed lines from the April 2024 World Economic Outlook. Also, the dotted line in panel 1 denotes projections from October 2023 World Economic Outlook. In panel 3, the fiscal balance used is the general government structural primary balance, which is the cyclically adjusted primary balance corrected for a broader range of noncyclical factors such as changes in asset and commodity prices.

developing economies

2024, although with some cross-country differences. Large contrasts are apparent in the emerging market and developing economies country group as well. Whereas fiscal stances are expected to remain relatively loose on average in emerging markets, fiscal consolidation is ongoing among developing economies. Over the past few years, many low-income countries have either lost market access or

been forced to drastically scale back deficits because higher interest rates have pushed up borrowing costs (see Chapter 1 of the October 2024 *Global Financial Stability Report*). Forced consolidation is expected to bring down their debt-to-GDP ratios to 45.8 percent in 2029 from 53.2 percent in 2024, a reduction of about 1.5 percent of GDP every year.

Baseline Outlook: Stable Growth amid Continuing Disinflation

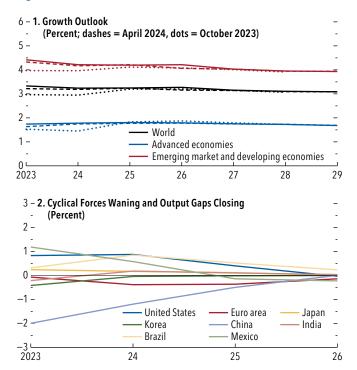
Global growth is expected to remain broadly flat—decelerating from 3.3 percent in 2023 to 3.1 percent by 2029—and is largely unchanged from *World Economic Outlook* forecasts in April 2024 and October 2023 (Tables 1.1 and 1.2; Figure 1.12). Under the surface, however, offsetting revisions have brought major economies closer together as cyclical forces wane and GDP moves closer to potential. As inflation recedes, policy rates are expected to follow suit, preventing undue increases in real interest rates. Interest rates are expected to gradually descend toward their natural levels: the levels of risk-free real interest rates compatible with output at potential and inflation at target.

Although global revisions to the forecast since April have been minimal, offsetting shifts at the country group level reflect recent shocks and policies, most notably in emerging market and developing economies. Cuts in production and shipping of commodities (oil in particular), conflicts, and civil unrest have led to downward revisions to the regional outlooks for the Middle East and Central Asia and for sub-Saharan Africa. At the same time, surging demand for semiconductors and electronics, driven by significant investment in artificial intelligence, has fueled stronger growth in emerging Asia.

Growth Outlook: Major Economies Draw Closer Together

Following a reopening rebound in 2022, growth in advanced economies markedly slowed in 2023 and is projected to remain steady, oscillating between 1.7 and 1.8 percent until 2029. This apparent stability conceals differing country dynamics as various cyclical forces unwind and economic activity gets back in

Figure 1.12. Growth Outlook



Source: IMF staff calculations.

Note: In panel 1, solid lines denote GDP growth from the October 2024 World Economic Outlook, and dashed and dotted lines denote GDP growth forecasts from the April 2024 World Economic Outlook and the October 2023 World Economic Outlook, respectively.

line with potential. In the United States, growth is expected to decelerate, with output reaching potential from above by 2029. In the United Kingdom and the euro area, on the other hand, activity is projected to accelerate, closing the output gap from below. In Japan, where the output gap is already closed, GDP is expected to grow in line with potential.

- In the *United States*, projected growth for 2024 has been revised upward to 2.8 percent, which is 0.2 percentage point higher than the July forecast, on account of stronger outturns in consumption and nonresidential investment. The resilience of consumption is largely the result of robust increases in real wages (especially among lower-income households) and wealth effects. Growth is anticipated to slow to 2.2 percent in 2025 as fiscal policy is gradually tightened and a cooling labor market slows consumption. With GDP growth lower than potential, the output gap is expected to start closing in 2025.
- In the euro area, growth seems to have reached its lowest point in 2023. A touch weaker than projected in April and July 2024, GDP growth is

¹For the global and regional aggregates, this *World Economic Outlook* report uses the newly revised purchasing-power-parity GDP weights based on the latest release from the International Comparison Program; see the Statistical Appendix for details.

Table 1.1. Overview of the World Economic Outlook Projections

(Percent change, unless noted otherwise)

		Proje	ections		from July O <i>Update</i> ¹		from April WEO ¹
	2023	2024	2025	2024	2025	2024	2025
World Output	3.3	3.2	3.2	0.0	-0.1	0.0	0.0
Advanced Economies	1.7	1.8	1.8	0.1	0.0	0.1	0.0
United States	2.9	2.8	2.2	0.2	0.3	0.1	0.3
Euro Area	0.4	0.8	1.2	-0.1	-0.3	0.0	-0.3
Germany	-0.3	0.0	0.8	-0.2	-0.5	-0.2	-0.5
France	1.1	1.1	1.1	0.2	-0.2	0.4	-0.3
Italy	0.7	0.7	0.8	0.0	-0.1	0.0	0.1
Spain	2.7	2.9	2.1	0.5	0.0	1.0	0.0
Japan	1.7	0.3	1.1	-0.4	0.1	-0.6	0.1
United Kingdom	0.3	1.1	1.5	0.4	0.0	0.6	0.0
Canada	1.2	1.3	2.4	0.0	0.0	0.1	0.1
Other Advanced Economies ²	1.8	2.1	2.2	0.1	0.0	0.1	-0.2
Emerging Market and Developing Economies	4.4	4.2	4.2	0.0	-0.1	0.1	0.0
Emerging and Developing Asia	5.7	5.3	5.0	-0.1	-0.1	0.1	0.1
China	5.2	4.8	4.5	-0.2	0.0	0.2	0.4
India ³	8.2	7.0	6.5	0.0	0.0	0.2	0.0
Emerging and Developing Europe	3.3	3.2	2.2	0.0	-0.3	0.1	-0.6
Russia	3.6	3.6	1.3	0.4	-0.2	0.4	-0.5
Latin America and the Caribbean	2.2	2.1	2.5	0.3	-0.2	0.2	0.0
Brazil	2.9	3.0	2.2	0.9	-0.2	0.8	0.1
Mexico	3.2	1.5	1.3	-0.7	-0.3	-0.9	-0.1
Middle East and Central Asia	2.1	2.4	3.9	0.0	0.0	-0.4	-0.3
Saudi Arabia	-0.8	1.5	4.6	-0.2	-0.1	-1.1	-1.4
Sub-Saharan Africa	3.6	3.6	4.2	-0.1	0.1	-0.2	0.1
Nigeria	2.9	2.9	3.2	-0.2	0.2	-0.4	0.2
South Africa	0.7	1.1	1.5	0.2	0.3	0.2	0.3
Memorandum							
World Growth Based on Market Exchange Rates	2.8	2.7	2.8	0.0	0.0	0.0	0.1
European Union	0.6	1.1	1.6	-0.1	-0.2	0.0	-0.2
ASEAN-5 ⁴	4.0	4.5	4.5	0.1	-0.1	0.1	0.0
Middle East and North Africa	1.9	2.1	4.0	-0.1	0.1	-0.6	-0.2
Emerging Market and Middle-Income Economies	4.4	4.2	4.2	-0.1	0.0	0.1	0.1
Low-Income Developing Countries	4.1	4.0	4.7	-0.2	-0.4	-0.5	-0.4
World Trade Volume (goods and services) Imports	0.8	3.1	3.4	0.0	0.0	0.1	0.1
Advanced Economies	-0.7	2.1	2.4	-0.3	-0.3	0.1	-0.4
Emerging Market and Developing Economies	3.0	4.6	4.9	0.4	0.1	-0.3	0.8
Exports							
Advanced Economies	1.0	2.5	2.7	-0.1	-0.2	0.0	-0.2
Emerging Market and Developing Economies	0.6	4.6	4.6	0.4	0.5	0.9	0.7
Commodity Prices (US dollars)							
Oil ⁵	-16.4	0.9	-10.4	0.1	-4.4	3.4	-4.1
Nonfuel (average based on world commodity import weights)	-5.7	2.9	-0.2	-2.1	-1.8	2.8	0.2
World Consumer Prices ⁶	6.7	5.8	4.3	-0.1	-0.1	-0.1	-0.2
Advanced Economies ⁷	4.6	2.6	2.0	-0.1 -0.1	-0.1 -0.1	0.0	-0. 2 -0.1
Emerging Market and Developing Economies ⁶	8.1	7.9	5.9	-0.1	0.0	-0.3	-0.1
Emerging warker and beveloping Economics	0.1	,	5.7	0.1	0.0	0.5	0.2

Source: IMF staff estimates.

Note: Real effective exchange rates are assumed to remain constant at the levels prevailing during July 30, 2024–August 27, 2024. Economies are listed on the basis of economic size. The aggregated quarterly data are seasonally adjusted. WEO = World Economic Outlook.

¹ Difference based on rounded figures for the current, July 2024 WEO *Update*, and April 2024 WEO forecasts. Global and regional growth figures are based on new purchasing-power-parity weights derived from the recently released 2021 International Comparison Program survey (see Box A2) and are not comparable to the figures reported in the July 2024 WEO *Update* or the April 2024 WEO.

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

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

⁴ Indonesia, Malaysia, the Philippines, Singapore, and Thailand.

⁵ Simple average of prices of UK Brent, Dubai Fateh, and West Texas Intermediate crude oil. The average price of oil in US dollars a barrel was \$80.59 in 2023; the assumed price, based on futures markets, is \$81.29 in 2024 and \$72.84 in 2025.

⁶ Excludes Venezuela. See the country-specific note for Venezuela in the "Country Notes" section of the Statistical Appendix.

Table 1.1. Overview of the World Economic Outlook Projections (continued)

(Percent change, unless noted otherwise)

				Q4 over Q4	8		
		Proje	ctions		from July O <i>Update</i> ¹		from April WEO ¹
	2023	2024	2025	2024	2025	2024	2025
World Output	3.4	3.3	3.1	0.1	-0.2	0.1	0.0
Advanced Economies	1.7	1.9	1.7	0.2	-0.1	0.1	0.0
United States	3.2	2.5	1.9	0.5	0.1	0.4	0.1
Euro Area	0.2	1.2	1.3	-0.3	-0.2	-0.2	-0.1
Germany	-0.2	0.3	1.3	-0.5	-0.4	-0.4	-0.5
France	1.3	0.7	1.5	-0.1	0.0	-0.4	0.0
Italy	0.3	1.0	0.6	0.5	-0.7	0.3	0.0
Spain	2.3	2.9	2.0	0.6	-0.1	1.0	-0.1
Japan	0.9	1.8	0.2	0.2	-0.1	0.1	-0.3
United Kingdom	-0.3	2.1	1.1	0.6	-0.5	0.6	-0.2
Canada	1.0	2.3	2.1	0.1	-0.1	0.5	-0.2
Other Advanced Economies ²	2.0	1.8	2.6	-0.1	-0.2	-0.3	0.0
Emerging Market and Developing Economies	4.7	4.4	4.3	0.1	-0.1	0.1	0.2
Emerging and Developing Asia	5.9	5.4	5.0	0.1	0.0	0.3	0.3
China	5.4	4.5	4.7	-0.1	-0.2	0.1	0.6
India ³	7.8	6.7	6.5	0.2	0.0	0.3	0.1
Emerging and Developing Europe	4.3	2.3	2.7	-0.1	-0.7	-0.9	0.1
Russia	4.8	2.4	1.2	0.6	-0.5	-0.2	0.0
Latin America and the Caribbean	1.3	2.1	2.9	-0.3	0.3	0.0	0.3
Brazil	2.2	3.5	2.7	0.6	0.3	0.5	0.7
Mexico	2.3	1.3	1.4	-1.7	0.2	-0.6	-0.4
Middle East and Central Asia	2.5						
Saudi Arabia	-4.3	2.1	4.6	-0.5	0.3	-1.0	-1.3
Sub-Saharan Africa		2.1			0.5		
Nigeria Nigeria	3.2	3.5	3.7	0.2	1.0	0.0	1.2
South Africa	1.3	1.7	1.0	0.2	0.1	0.0	-0.2
***************************************	1.5	1.7	1.0	0.4	0.1	0.4	-0.2
Memorandum		0.0	2.1		0.0		
World Growth Based on Market Exchange Rates	2.8	2.8	2.6	0.1	-0.2	0.1	0.0
European Union	0.5	1.6	1.4	-0.1	-0.4	0.0	-0.3
ASEAN-5 ⁴	4.2	6.3	3.0	0.8	0.2	1.2	-0.1
Middle East and North Africa	-:-	• • • •		• • •			:-:
Emerging Market and Middle-Income Economies	4.7	4.4	4.3	0.1	-0.1	0.1	0.2
Low-Income Developing Countries						• • •	
Commodity Prices (US dollars)							
Oil ⁵	-4.4	-7.3	-4.9	-4.9	8.0	-1.3	0.6
Nonfuel (average based on world commodity import weights)	-0.2	3.8	0.5	-3.9	0.0	3.0	0.1
World Consumer Prices ⁶	5.7	5.3	3.5	-0.1	0.0	-0.1	-0.1
Advanced Economies ⁷	3.2	2.3	2.0	-0.2	0.0	-0.1	0.0
Emerging Market and Developing Economies ⁶	7.8	7.7	4.7	-0.1	-0.1	-0.1	-0.1

⁷The assumed inflation rates for 2024 and 2025, respectively, are as follows: 2.4 percent and 2.0 percent for the euro area, 2.2 percent and 2.0 percent for Japan, and 3.0 percent and 1.9 percent for the United States.

⁸ For world output, the quarterly estimates and projections account for approximately 90 percent of annual world output at purchasing-power-parity weights. For emerging market and developing economies, the quarterly estimates and projections account for approximately 85 percent of annual emerging market and developing economies' output at purchasing-power-parity weights.

Table 1.2. Overview of the World Economic Outlook Projection	s at Market Exchange Rate Weights
(Percent change)	

		Proje	ctions		from July O <i>Update</i> ¹		from April WEO ¹
	2023	2024	2025	2024	2025	2024	2025
World Output	2.8	2.7	2.8	0.0	0.0	0.0	0.1
Advanced Economies	1.8	1.8	1.8	0.1	0.0	0.0	0.0
Emerging Market and Developing Economies	4.3	4.0	4.1	-0.1	0.0	0.0	0.1
Emerging and Developing Asia	5.5	5.1	4.8	-0.1	-0.1	0.1	0.2
Emerging and Developing Europe	3.1	3.1	2.3	-0.1	-0.3	0.0	-0.5
Latin America and the Caribbean	2.2	1.9	2.4	0.2	-0.2	0.0	-0.1
Middle East and Central Asia	1.5	2.1	4.0	-0.1	0.0	-0.5	-0.3
Sub-Saharan Africa	3.4	3.4	4.1	-0.2	0.1	-0.2	0.1
Memorandum							
European Union	0.5	1.0	1.5	0.0	-0.1	0.1	-0.2
Middle East and North Africa	1.3	1.8	4.0	-0.3	0.0	-0.7	-0.3
Emerging Market and Middle-Income Economies	4.3	4.0	4.0	-0.1	-0.1	0.0	0.1
Low-Income Developing Countries	4.1	3.8	4.8	-0.3	-0.4	-0.6	-0.3

Source: IMF staff estimates.

Note: The aggregate growth rates are calculated as a weighted average, in which a moving average of nominal GDP in US dollars for the preceding three years is used as the weight. WEO = World Economic Outlook.

expected to pick up to a modest 0.8 percent in 2024 as a result of better export performance, in particular of goods. In 2025, growth is projected to rise further to 1.2 percent, helped by stronger domestic demand. Rising real wages are expected to boost consumption, and a gradual loosening of monetary policy is expected to support investment. Persistent weakness in manufacturing weighs on growth for countries such as *Germany* and *Italy*. However, whereas Italy's domestic demand is expected to benefit from the European Union–financed National Recovery and Resilience Plan, Germany is experiencing strain from fiscal consolidation and a sharp decline in real estate prices.

• Offsetting dynamics are also at play among other advanced economies. Growth is expected to decelerate in *Japan* in 2024, with the slowdown reflecting temporary supply disruptions and fading of one-off factors that boosted activity in 2023, such as the surge in tourism. With respect to April, growth is revised downward, by 0.6 percentage point, to 0.3 percent for 2024, reflecting a temporary supply disruption in the car industry and the base effect of historical data revisions. An acceleration to 1.1 is predicted in 2025, with growth boosted by private consumption as real wage growth strengthens. In the *United Kingdom*, in contrast, growth is projected to have accelerated to 1.1 percent in 2024 and is expected to continue doing so to 1.5 percent in 2025 as falling inflation and interest rates stimulate domestic demand.

Growth Outlook: Emerging Markets Get Support from Asia

In a manner similar to that for advanced economies, the growth outlook for emerging market and developing economies is remarkably stable for the next two years, hovering at about 4.2 percent and steadying at 3.9 percent by 2029. And just as in advanced economies, offsetting dynamics are occurring between country groups. Compared with that in April, growth in emerging market and developing economies is revised upward by 0.1 percentage point for 2024, reflecting upgrades for Asia (China and India) that more than offset downgrades for sub-Saharan Africa and for the Middle East and Central Asia (Table 1.1).

• Emerging Asia's strong growth is expected to subside, from 5.7 percent in 2023 to 5.0 percent in 2025. This reflects a sustained slowdown in the region's two largest countries. In *India*, the outlook is for GDP growth to moderate from 8.2 percent in 2023 to 7 percent in 2024 and 6.5 percent in 2025, because pent-up demand accumulated during the pandemic has been exhausted, as the economy reconnects with its potential. In China, the slowdown is projected to be more gradual. Despite persisting weakness in the real estate sector and low consumer confidence, growth is projected to have slowed only marginally to 4.8 percent in 2024, largely thanks to better-than-expected net exports. Compared with that in April, the forecast has been revised upward by 0.2 percentage point in 2024 and

¹ Difference based on rounded figures for the current, July 2024 WEO Update, and April 2024 WEO forecasts.

- 0.4 percentage point in 2025. Recent policy measures may provide upside risk to near-term growth.
- In contrast, growth in the *Middle East and Central Asia* is projected to pick up from an estimated 2.1 percent in 2023 to 3.9 percent in 2025, as the effect on the region of temporary disruptions to oil production and shipping are assumed to fade away. Compared with that in April, the projection has been revised downward by 0.4 percentage point for 2024, mainly the result of the extension of oil production cuts in *Saudi Arabia* and ongoing conflict in *Sudan* taking a large toll.
- In *sub-Saharan Africa*, GDP growth is similarly projected to increase, from an estimated 3.6 percent in 2023 to 4.2 percent in 2025, as the adverse impacts of prior weather shocks abate and supply constraints gradually ease. Compared with that in April, the regional forecast is revised downward by 0.2 percentage point for 2024 and upward by 0.1 percentage point for 2025. Besides the ongoing conflict that has led to a 26 percent contraction of the *South Sudanese* economy, the revision reflects slower growth in *Nigeria*, amid weaker-than-expected activity in the first half of the year.
- In Latin America and the Caribbean, growth is projected to decline from 2.2 percent in 2023 to 2.1 percent in 2024 before rebounding to 2.5 percent in 2025. In *Brazil*, growth is projected at 3.0 percent in 2024 and 2.2 percent in 2025. This is an upward revision of 0.9 percentage point for 2024, compared with July 2024 World Economic Outlook Update projections, owing to stronger private consumption and investment in the first half of the year from a tight labor market, government transfers, and smaller-than-anticipated disruptions from floods. However, with the still-restrictive monetary policy and the expected cooling of the labor market, growth is expected to moderate in 2025. In Mexico, growth is projected at 1.5 percent in 2024, reflecting weakening domestic demand on the back of monetary policy tightening, before slowing further to 1.3 percent in 2025 on a tighter fiscal stance. Overall, offsetting revisions leave the regional growth forecast broadly unchanged since April.
- Growth in *emerging and developing Europe* is projected to remain steady at 3.2 percent in 2024 but to ease significantly to 2.2 percent in 2025. The moderation reflects a sharp slowdown in *Russia* from 3.6 percent in 2023 to 1.3 percent in 2025 as private consumption and investment slow

amid reduced tightness in the labor market and slower wage growth. In *Türkiye*, growth is expected to slow from 5.1 percent in 2023 to 2.7 percent in 2025, with the slowdown driven by the shift to monetary and fiscal policy tightening since mid-2023.

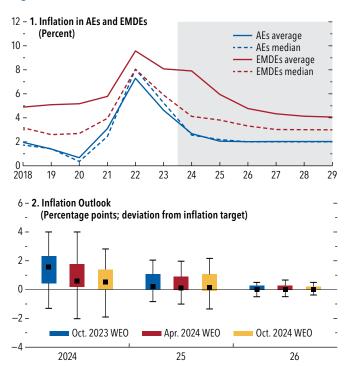
Inflation Outlook: Gradual Decline to Target

Although bumps on the path to price stability are still possible, global headline inflation is projected to decrease further, from an average of 6.7 percent in 2023 to 5.8 percent in 2024 and 4.3 percent in 2025 in the baseline. Disinflation is expected to be faster in advanced economies—with a decline of 2 percentage points from 2023 to 2024 and a stabilization at about 2 percent in 2025—than in emerging market and developing economies, in which inflation is projected to decline from 8.1 percent in 2023 to 7.9 percent in 2024 and then fall at a faster pace in 2025 to 5.9 percent.

There is a great deal of variation across emerging market economies, however, which is evident in the difference between median and average inflation (Figure 1.13, panel 1). Inflation in emerging Asia is projected to be on par with that in advanced economies, at 2.1 percent in 2024 and 2.7 percent in 2025, in part thanks to early monetary tightening and price controls in many countries in the region. In contrast, inflation forecasts for emerging and developing Europe, the Middle East and North Africa, and sub-Saharan Africa remain in double-digit territory on account of large outliers amid pass-through of past currency depreciation and administrative price adjustment (Egypt) and underperformance in agriculture (Ethiopia). For most countries in Latin America and the Caribbean, inflation rates have dropped significantly from their peaks and continue to be on a downward trend. However, large countries in the region have experienced upward revisions since the April 2024 World Economic Outlook that reflect a mix of (1) robust wage growth preventing faster disinflation in the services sector (Brazil, Mexico), (2) weather events (Colombia), and (3) hikes in regulated electricity tariffs (Chile).

The decline in global inflation in 2024 and 2025 reflects a broad-based decrease in core inflation, unlike the situation in 2023, when headline inflation fell mainly because of lower fuel prices. Core inflation is expected to drop by 1.3 percentage points in 2024, following a 0.1 percentage point

Figure 1.13. Inflation Outlook



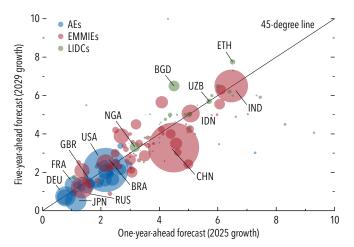
Sources: Central bank websites; Haver Analytics; and IMF staff calculations.

Note: In panel 1, the averages are calculated using purchasing-power-parity GDPs as weights. Panel 2 shows the distribution (box-whisker plot) from each WEO report. The blocks in the middle of the boxes are the medians, and the upper (lower) limits of the boxes are the third (first) quartile. The whiskers show the maximum and minimum within a boundary of 1.5 times the interquartile range from upper and lower quartiles, respectively. AEs = advanced economies; EMDEs = emerging market and developing economies; WEO = World Economic Outlook.

decrease in 2023, with advanced economies leading this decline. Factors contributing to lower core inflation include the delayed effect of tight monetary policies as well as diminishing pass-through effects from earlier declines in prices, especially in those for energy.

Overall, returning inflation to target is expected to take until 2025 in most cases. Although the pace of disinflation for the median economy has been faster than expected in October 2023, the dispersion across economies is now expected to be larger. Comparison of official inflation targets with the latest forecasts for a representative group of inflation-targeting advanced and emerging market economies suggests that annual average inflation will exceed targets (or the midpoints of target ranges) in more than three-quarters of these economies in 2025 (Figure 1.13, panel 2). But a great deal of this reflects annual carryover effects from 2024. Inflation is expected to decline steadily on a sequential

Figure 1.14. Medium-Term Outlook (Percent)



Source: IMF staff calculations.

Note: Bubble size reflects size of the economy using 2024 GDP in purchasing-power-parity international dollars. Data labels in the figure use International Organization for Standardization (ISO) country codes. AEs = advanced economies; EMMIEs = emerging market and middle-income economies; LIDCs = low-income developing countries.

basis, and by the end of 2025, most economies are expected to be either at target or within a stone's throw of it.

Medium-Term Outlook: A Low-Growth Regime Setting In

Absent a strong drive for structural reforms, output growth is expected to remain weak over the medium term (see Chapter 3 of the April 2024 *World Economic Outlook*).

Although monetary policy is expected to return to a neutral stance by 2025 in the world's largest economies, growth in most economies is expected to remain feeble over the medium term. For many advanced and emerging market economies, the five-year-ahead forecast is weaker than the one-year-ahead forecast (Figure 1.14), suggesting that persistent headwinds to growth will remain prevalent over the medium term.

Structural challenges such as population aging, weak investment, and historically low total factor productivity growth are still holding back global growth. The five-year-ahead forecast for global growth stands at 3.1 percent, indicating continued mediocre medium-term prospects relative to prepandemic forecasts. Compared with those in April 2024, medium-term growth prospects for advanced economies are unchanged. Although investment is expected to

pick up and productivity growth is also expected to see some normalization, the continued demographic drag is likely to produce an offsetting effect. Cerdeiro, Hong, and Kammer (2024) discuss underlying drivers of recent productivity divergence between the United States and euro area economies that may continue to define medium-term growth trends in these economies.

For emerging market and developing economies, medium-term growth prospects have not improved compared with those in the April 2024 World Economic Outlook and are still much weaker than they were in prepandemic projections. This partly reflects prolonged scarring from the shocks of the past few years, especially for low-income developing countries. It also reflects a slower pace of structural reforms, which is holding back productivity growth.

Projected slowdowns in the largest emerging market and developing economies imply a longer path to close the income gaps between poor and rich countries. Having growth stuck in low gear could also further exacerbate income inequality within economies. IMF staff analysis suggests that periods of low economic growth lasting four years or more tend to widen income inequality within countries, because sluggish job creation and wage growth—as well as weaker fiscal positions preventing redistribution—tend to affect low-income earners disproportionately (IMF 2024).

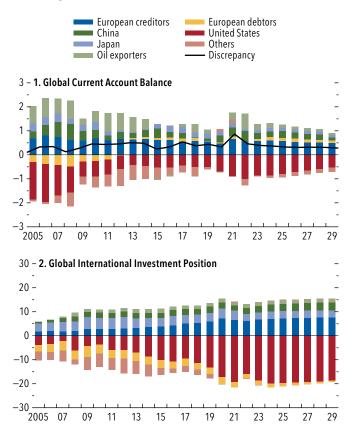
Trade Growth Historically Low, yet in Line with Output Growth

Global trade is expected to continue to grow in line with GDP, reaching an average of 3½ percent growth annually in 2024 and 2025, following a period of near stagnation in 2023. Despite an increase in cross-border restrictions affecting trade between geopolitically distant blocs, the global trade-to-GDP ratio is expected to remain stable. Intrabloc trade and trade with third countries have been compensating forces so far.

Meanwhile, global current account balances—the sums of absolute surpluses and deficits—are expected to continue to decline from their 2022 peaks (Figure 1.15). As reported in the IMF's 2024 External Sector Report, the significant moderation of current account balances in 2023 toward prepandemic levels reflected a reversal of large current account surpluses in commodity-exporting countries, continued economic recovery from the pandemic, and a slowdown in global goods trade during 2023. Over the medium term, global balances are expected to narrow gradually as

Figure 1.15. Current Account and International Investment Positions

(Percent of global GDP)



Source: IMF staff calculations.

Note: European creditors are Austria, Belgium, Denmark, Finland, Germany, Luxembourg, The Netherlands, Norway, Slovenia, Sweden, and Switzerland; European debtors are Cyprus, Greece, Ireland, Italy, Portugal, and Spain; oil exporters are Algeria, Azerbaijan, Iran, Kazakhstan, Kuwait, Nigeria, Oman, Qatar, Russia, Saudi Arabia, the United Arab Emirates, and Venezuela.

commodity prices decline. Creditor and debtor stock positions reached historically elevated levels in 2022, with the increases reflecting widening current account balances. They are expected to moderate slightly over the medium term as current account balances gradually narrow. In some economies, gross external liabilities remain large from a historical perspective and pose risks of external stress.

Risks to the Outlook: Tilted to the Downside

The most prominent risks and uncertainties surrounding the outlook are now discussed. A model-based analysis that quantifies risks to the global outlook and plausible scenarios—including shifts in trade and fiscal policies—is presented in Box 1.2.

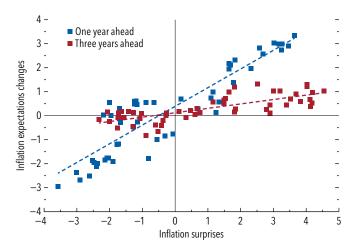
Downside Risks

Since the July 2024 World Economic Outlook Update, adverse risks have gained more prominence.

- Monetary policy tightening bites more than intended. Although policy rates are projected to normalize, an unanticipated back-loaded strengthening of the transmission of earlier rate increases could lead to a faster-than-anticipated deceleration in near-term growth and rising unemployment. Though the impact on growth is unlikely to be persistent given concurrent policy easing, a rapid weakening of activity could also work its way adversely through consumer and business sentiment. This would place a stronger drag on household spending and prompt businesses to dial back their investment plans, either (or both) of which could create a negative feedback loop to growth. In such circumstances, however, lower energy prices would cushion some of the negative effects on growth as lower demand would push oil prices down.
- Financial markets reprice as a result of monetary policy reassessments. The global economy is at the last mile of disinflation, which may present greater challenges to monetary policy than expected if the cost of reducing inflation in terms of unemployment (the sacrifice ratio) is closer to prepandemic estimates than suggested by recent evidence (Figure 1.3, panel 1). If underlying inflation proves more persistent than expected, consumers may adjust their near-term inflation expectations (Figure 1.16), forcing central banks to adjust the path of monetary policy normalization. This would weaken consumer and business confidence, lead to market repricing and tighter financial conditions, and slow economic recovery. Given existing vulnerabilities (see Chapter 1 of the October 2024 Global Financial Stability Report), financial market turbulence could resurge, prompting sizable price corrections. Contagion effects are possible and could increase risks to financial stability by, among other things, triggering sovereign debt stress in emerging markets.
- Sovereign debt stress intensifies in emerging market and developing economies. Although spreads have eased since peaking in July 2022, some emerging market and developing economies are still vulnerable to a repricing of risk. This could further increase their sovereign spreads and push them into debt distress. Countries with large external financing needs

Figure 1.16. Inflation Surprises and Changes in Inflation Expectations

(Percentage points)



Sources: Federal Reserve Bank of New York, Survey of Consumer Expectations; and IMF staff calculations.

Note: The figure covers the period January 2020 to May 2024. Dashed lines show fitted values. Inflation surprises are measured as the difference between actual year-over-year inflation and one-year (three-year) inflation expectations from one (three) years prior. Changes in inflation expectations are measured as the changes in one-year (three-year) inflation expectations relative to one (three) years prior.

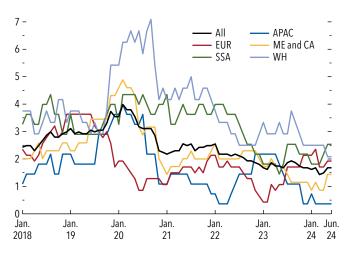
and a low buffer of international reserves will be most affected, as many are already subject to large sovereign borrowing spreads (Figure 1.7, panel 2). With little room to maneuver on fiscal policy, forcing a front-loaded fiscal consolidation could precipitate an economic downturn amid a fragile recovery. Low-income countries will be particularly at risk given their limited fiscal space and the need to maintain expenditure on programs supporting the most vulnerable.

• China's property sector contracts more deeply than expected. Conditions for the real estate market could worsen, with further price corrections taking place amid a contraction in sales and investment. The experiences of Japan in the 1990s and the United States in 2008 suggest that a further price correction is a plausible downside risk if the crisis is not adequately addressed. Further price drops could dent consumer confidence (which is already at historic lows) even more, further weakening household consumption. This could cause domestic demand to falter, with negative spillovers to both advanced and emerging market economies given China's rising footprint in global trade (see Chapter 4 of the April 2024 World Economic Outlook).

Government stimulus to counter weakness in domestic demand would place further strain on public finances. Subsidies in certain sectors, if targeted to boost exports, could exacerbate trade tensions with China's trading partners.

- Renewed spikes in commodity prices arise as a result of climate shocks, regional conflicts, or broader geopolitical tensions. Intensification of regional conflicts, especially given the wider span of conflict in the Middle East, or the war in Ukraine, could further disrupt trade, leading to sustained increases in food, energy, and other commodity prices. Commodity price volatility may result in higher inflation, especially for commodity-importing countries, and restrict central banks' room to maneuver. Extreme heat and prolonged droughts amid record high temperatures worldwide could also have an impact on harvests, adding to pressures on food prices and food security. Low-income countries are likely to be disproportionately affected, since food and energy costs take up a large part of household expenditures there.
- Countries ratchet up protectionist policies. A broadbased retreat from a rules-based global trading system is prompting many countries to take unilateral actions. Not only would an intensification of protectionist policies exacerbate global trade tensions and disrupt global supply chains, but it could also weigh down medium-term growth prospects by limiting positive spillovers from innovation and technology transfer, which fueled growth in emerging market and developing economies as globalization took off.
- Social unrest resumes. Reports of social unrest including protests, riots, and major demonstrations—have picked up in some regions, although globally they remain fewer in number than the recent peak in late 2019 to early 2020 (Figure 1.17). However, a resurgence of social turmoil, potentially driven by higher inflation, higher taxes, and associated loss of purchasing power; spillovers from conflicts; and rising inequality, could slow economic growth, particularly in countries with more limited scope to cushion the impact through policies (Hadzi-Vaskov, Pienknagura, and Ricci 2023). Social unrest could also complicate the passage and implementation of necessary reforms. Chapter 3 emphasizes the crucial role of social consensus in achieving successful and sustainable implementation of structural reforms.

Figure 1.17. Social Unrest Levels (Percent of economies experiencing major social unrest)



Sources: Barrett and others 2022; and IMF staff calculations.

Note: The figure shows the share of economies within a world region experiencing major events of social unrest (including protests, riots, and major demonstrations) in the preceding 12 months. All = all economies; APAC = Asia and Pacific; EUR = Europe; ME and CA = Middle East and Central Asia; SSA = sub-Saharan Africa; WH = Western Hemisphere.

Upside Risks

More favorable outcomes for global growth than in the baseline forecast are also plausible:

- Stronger recovery in investment in advanced economies: Public investment in advanced economies could accelerate to meet various pressing policy objectives, from the green transition to upgrading infrastructure and boosting investment in science and technology. This type of investment could also crowd in the private sector, increasing private investment, and lead to a higher-than-projected recovery in global demand and trade. Higher aggregate demand could be inflationary, although the pressure could be mitigated by the extent to which these investments enhance supply-side capacity (see Chapter 3 of the October 2022 World Economic Outlook). It also depends on how these investments are financed: fiscal slippage in advanced economies could further slow the pace at which central banks can bring inflation to target.
- Stronger momentum of structural reforms: Many advanced and emerging market economies may accelerate structural reform efforts to prevent productivity and potential growth from further lagging those of their more productive peers. Faster implementation of macro-critical structural reforms to

increase labor force participation (such as measures to better integrate immigrants and women), to reduce misallocation in labor and capital markets, or to help stimulate business innovations (Arnold, Claveres, and Frie 2024) could lead to higher medium-term growth.

Policy Priorities: From Restoring Price Stability to Rebuilding Buffers

Near-term policies should be carefully calibrated and sequenced to ensure a smooth landing. As central banks adopt a less restrictive stance, a renewed emphasis on medium-term fiscal consolidation is urgent. This is necessary to restore budgetary flexibility, fund priority investments, and ensure long-term debt sustainability. If inflation descends and approaches targets, central banks should also take into account the implications of monetary policy for growth and employment, as long as it does not undermine the goal of achieving price stability. Easing monetary policy, while still keeping inflation and inflation expectations on a downward path to target, would support growth and employment and also ease debt-servicing costs. This would in turn facilitate fiscal consolidation in a favorable feedback loop in which tighter fiscal policy paves the way for looser monetary policy. Implementing robust supply-enhancing reforms would help curb inflation and reduce debt, enabling economies to boost growth toward prepandemic rates, and accelerate progress toward higher income standards. Multilateral cooperation is essential to limit the costs and risks associated with geoeconomic fragmentation and climate change, speed up the transition to green energy, and support debt restructuring.

Ensuring a Smooth Landing

With output gaps gradually closing and inflation on a downward trajectory and approaching targets in many countries, the priority should be to ensure a smooth landing. Monetary policy should remain flexible and adjust based on a comprehensive analysis of incoming data and their implications for growth and inflation projections. As before, the focus should be to keep short- and long-term inflation expectations anchored. The varying pace of disinflation and monetary easing across advanced and emerging market and developing economies could trigger great exchange rate volatility, necessitating the use of alternative instru-

- ments in some cases. In particular cases, when risk-off episodes translate into higher borrowing costs—putting financial sectors under more stress—the importance of close supervision and comfortable buffers cannot be overstated.
- Carefully calibrate monetary policy. Monetary policy needs to be carefully calibrated to ensure the restoration of price stability while supporting growth and employment. In economies with core inflation persistently above target, it is crucial to maintain a restrictive stance, keeping real interest rates above the neutral level until there is clear evidence of sustained cooling in underlying inflation. This approach is vital to preserving the achievements of many central banks in anchoring long-term inflation expectations. Where underlying inflation is diminishing consistently, in sync with inflation expectations, a transition to a more neutral policy stance would be warranted. In such cases, the policy rate can be dropped gradually to avoid undue increases in real interest rates. When the economy cools down faster than expected, and to the extent that inflation remains under control and on a downward path to target, real rates could be reduced to support growth and employment and keep output close to potential, accounting for lags in the transmission of monetary policy. Throughout this process, it is important to communicate consistently a commitment to price stability.
- Mitigate disruptive foreign exchange volatility. As countries follow different paths to disinflation, central bank policies may become less synchronized, potentially leading to increased capital flows. For instance, US inflation that is more persistent than expected could elevate interest rate expectations, causing the US dollar to appreciate. This would push up domestic prices in economies with higher import dependence and greater shares of dollar-invoiced imports, potentially exerting pressure on their financial sectors (Gopinath and Gourinchas 2022; Adrian, Natalucci, and Wu 2024). The IMF's Integrated Policy Framework offers country-specific guidance on appropriate policy responses in such scenarios. For countries with deep foreign exchange markets and low foreign currency debt, adjusting policy rates and allowing exchange rate flexibility are advisable. When market stress arises, rapid and decisive use of tools to provide liquidity support, while avoiding moral hazard, can help limit contagion. In contrast, for countries with shallow foreign exchange

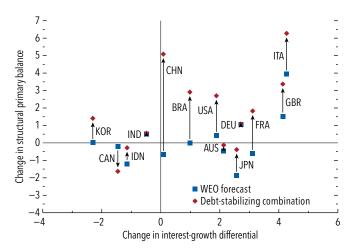
markets or substantial foreign currency debt, tightening global financial conditions might trigger a rise in risk premiums and lead to "taper tantrums" as investors offload domestic currency assets, posing systemic risks to financial stability and growth uncertainties. In these situations, while maintaining suitable monetary and fiscal policies, temporary foreign exchange interventions or capital flow management measures could be appropriate. Macroprudential measures should help mitigate financial vulnerabilities stemming from large foreign-currency-denominated debt exposures. When sharp exchange rate movements threaten to de-anchor inflation expectations, temporary foreign exchange interventions may support monetary policy, provided sufficient reserves are available and the cost of using monetary policy alone is excessive. Countries vulnerable to external shocks could consider using the global financial safety nets provided by international financial institutions, such as precautionary financial arrangements from the IMF.

Restore macroprudential buffers and ensure financial stability. With borrowing costs still higher than before the pandemic, it is crucial to carefully monitor serious misalignments in financing conditions and strengthen supervision. This includes implementing Basel III reforms to protect the financial system from potential repercussions of a sudden repricing of risk and anticipating stress in the banking sector. Where feasible, macroprudential buffers deployed during the pandemic and the 2021 global energy crisis should be gradually rebuilt in the context of a rapidly evolving real estate market. In the event of market strains, central banks should be prepared to deploy necessary financial stability tools, providing prompt and forceful liquidity support to limit contagion (Adrian, Gopinath, and Gourinchas 2023).

Rebuilding Fiscal Buffers while Avoiding Debt Distress

Fiscal deficits and government debt are still above what they were before the pandemic, and debt-service costs remain high and rising in many countries. To ensure debt sustainability and restore long-term budgetary flexibility, it is important for many countries, including both advanced and emerging market economies, to tighten fiscal policy (Figure 1.18). In countries where inflation remains elevated, fiscal consolidation can also reduce aggregate demand and help

Figure 1.18. Required Fiscal Consolidation (Percentage points)



Source: IMF staff calculations.

Note: "Debt-stabilizing combination" refers to the change in structural primary balance needed to stabilize the debt-to-GDP ratio at its 2023 level, given the projected change in the interest-growth differential from 2023 to 2024. Data labels in the figure use International Organization for Standardization (ISO) country codes. WEO = World Economic Outlook.

ease overall inflationary pressures. For countries with limited fiscal space, the reallocation of spending toward initiatives that support and enhance productivity and competitiveness can stimulate economic growth and release some of the pressure on overall spending. It is, however, important to ensure continuous support to the most vulnerable during fiscal consolidation, safeguarding key social spending and safety nets. Strong commitments, clearly defined medium-term fiscal policy plans, clear communication of objectives and policy rationale, and careful sequencing (see Chapter 3) are essential to maintain popular support, credibility, and confidence; prevent disruptive market reactions; and ensure debt sustainability.

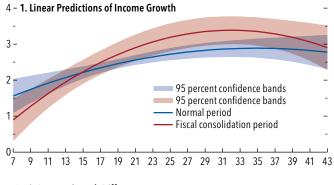
• Urgently devise credible fiscal plans to avoid disruptive adjustments. Restoring depleted fiscal buffers requires a consolidation path that is carefully calibrated to country-specific economic conditions. Unduly delaying consolidation may lead to market-imposed disruptive adjustments, while excessively front-loading the adjustments may end up hurting economic activity and putting an undue burden on vulnerable members in the society. Where consolidation is necessary, its pace should be gradual and well communicated to avoid abrupt adjustments that could diminish economic activity, trigger spikes in debt ratios, and undermine public support for

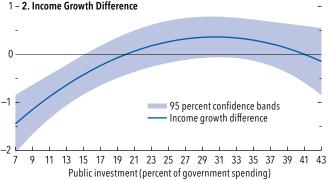
fiscal plans. In certain cases, front-loading fiscal adjustments may be necessary to alleviate stress on sovereign debt, particularly in economies that have already lost or are about to lose market access. To achieve lasting consolidation, a credible medium-term plan is essential. This plan should signal a commitment to and identify measures sufficient for meeting medium-term targets based on realistic assumptions about interest rates, revenues and spending, and the growth effects of the consolidation. In addition, it is critical for the plan's credibility to put a strong institutional framework in place, including binding legislation and fiscal frameworks to support medium-term consolidation plans.

- Safeguard growth-enhancing measures while reducing inequality. During fiscal consolidation, it is crucial to maintain a growth-friendly approach to adjustments while mitigating the adverse impacts of consolidation on poverty and inequality, which could help increase social acceptability and gather political support. Continuing public investments, particularly in areas that boost productivity and competitiveness—such as public and digital infrastructure—can yield positive growth (Figure 1.19). In addition, implementing structural reforms to reduce market inefficiencies and increase labor supply can amplify the benefits of these growth-friendly investments. Key elements for a well-designed consolidation plan will vary across countries (see the October 2024 Fiscal Monitor).
- Ensure debt sustainability. Many countries, particularly emerging market economies and low-income countries, have stretched their ability to service their debt with borrowing costs and sovereign spreads still elevated and therefore require significant fiscal adjustments to ensure government debt sustainability (see the October 2024 Fiscal Monitor). In instances in which countries are in or at high risk of debt distress, achieving debt sustainability may require not only well-timed fiscal consolidation, but also debt restructuring (see Chapter 3 of the April 2023 World Economic Outlook). Recent progress in improving international sovereign debt resolution frameworks, including the Group of Twenty (G20) Common Framework and the Global Sovereign Debt Roundtable, is helping bring together debtors and creditors and facilitate predictable restructuring. It is critical to continue building on these initiatives and improve the efficiency of creditor coordination in cases that are not eligible for treatment under the Common Framework.

Figure 1.19. Government Spending Composition and Future Income Growth

(Percentage points)





Source: Kass-Hanna, Kpodar, and Tessema 2020.

Note: "Fiscal consolidation" is defined as a reduction of 1 percent of GDP or more in the primary deficit in two consecutive years after the fiscal deficit has climbed above 3 percent of GDP. Panel 1 plots predictions of medium-term income growth (GDP per capita, five-year-forward moving average) in the two periods. Panel 2 plots differences in the growth impacts in the two periods. It shows that the spending share of public investment is as important during consolidations as in good times.

Engineering Faster Medium-Term Growth and Combating Climate Change

To boost productivity and resolve key structural bottlenecks, targeted reforms are vital in areas that include health care, education, labor markets, competition, and digitalization. Effective and clear communication to garner consensus and stakeholder engagement is essential for successful implementation of these reforms. In some countries, first-generation reforms aimed at revitalizing domestic markets and opening up economies, including governance reforms to strengthen institutions, could have a significant impact on growth (Budina and others 2023).

 Advance macrostructural reforms. Carefully sequenced reforms targeting long-term structural weaknesses are crucial for reviving productivity growth and attracting infrastructure and human capital,

- especially when fiscal space is limited. This is increasingly important as medium-term growth prospects continue to weaken. Key reforms include enhancing human capital by expanding health care coverage and increasing access to early childhood and higher education, with a focus on affordability and quality; reducing labor market rigidity and increasing labor force participation, especially among women; reducing barriers to competition and supporting start-ups; and advancing digitalization. By accelerating growth, such reforms can also alleviate concerns about potential short-term growth costs of the transition to clean energy (see Chapter 3 of the October 2022 World Economic Outlook) and create the necessary fiscal space for implementation. Given the historical challenges in passing structural reforms, policymakers should engage in active and effective communication to build consensus. It is vital to design policy measures thoughtfully to ensure that reforms are sustainable and their benefits are widely shared. This includes early engagement with key stakeholders during policy design and crafting complementary and compensatory measures that consider the potential distributional effects of the reforms. Continuous engagement and robust institutions can help build trust (see Chapter 3).
- Accelerate the green transition and address climate change. Comprehensive and global policy actions are required to meet greenhouse gas reduction goals aiming to limit global temperature increases to 1.5-2.0°C above preindustrial levels. Carbon pricing, subsidies for green investments, and carbon border-adjustment mechanisms can support the green transition while maintaining consistency with World Trade Organization (WTO) rules. Green industrial policies in China, the United States, and the European Union, among others, should be designed to complement carbon pricing and avoid discriminatory elements and to be fully consistent with international law obligations of these countries. Significant emissions cuts are achievable by helping firms with high emissions per unit of output adopt frontier technologies.

- To reduce long-term energy security risks, scaling back fossil fuel investments should be matched by increases in clean energy supplies. In addition, investments in climate adaptation and infrastructure are essential, particularly for regions most vulnerable to climate shocks. Improving climate-risk-monitoring systems and risk management frameworks and strengthening safety nets and insurance are necessary to build climate resilience. Mobilizing climate finance for both adaptation and mitigation in low-income countries will require coordinated efforts by international organizations, private investors, country authorities, and donors (see the October 2023 Fiscal Monitor).
- Strengthen multilateral cooperation. Multilateral cooperation is essential in preventing fragmentation, sustaining economic growth and stability, and addressing climate change. Trade policies should be clear and transparent to stabilize expectations, lessen investment distortions, and reduce volatility in markets, including those for agricultural and critical mineral commodities. To combat climate change, establishing a "green corridor" agreement will secure the flow of critical minerals essential for the green transition, and increased sharing of data on these minerals can reduce uncertainty and price volatility. Industrial policies could be envisaged to address well-established negative externalities or market failures that horizontal policies cannot tackle. However, industrial policies should be well designed, with benefits greater than costs, and should protect fiscal sustainability and external stability. These policies should avoid protectionist measures and remain compliant with WTO agreements. Promoting a common platform for the transfer of low-carbon technologies to emerging market and developing economies and to regulate disruptive technologies such as artificial intelligence can help reduce emissions and foster global prosperity. In this context, priorities should be restoring a fully and well-functioning WTO dispute settlement system and achieving greater clarity and coherence between climate considerations and trade rules.

Box 1.1. The Global Automotive Industry and the Shift to Electric Vehicles

The rising adoption of electric vehicles (EVs) represents a fundamental transformation of the global automotive industry. It will have far-reaching consequences for patterns of investment, production, international trade, and employment. This box documents some key steps in the evolution of the automotive sector and charts possible economic and regional implications.

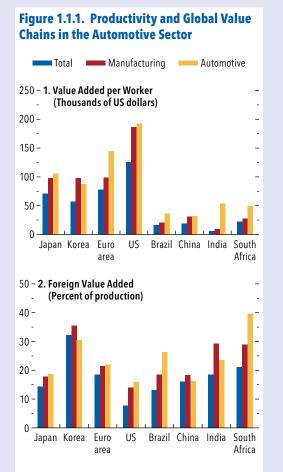
The car industry stands out among manufacturing sectors in several ways. First, it is very capital intensive, with high investment (including for innovation), and a significant capital share is value added. The sector relies on skilled labor and pays wages that reflect the high value added per worker (Figure 1.1.1, panel 1). Second, multinational firms in the sector operate in many countries along deep global value chains measured by the share of foreign value added in production (Figure 1.1.1, panel 2). Finally, despite having many competitors, carmakers manage to have effective product differentiation and extract a sizable share of the consumer surplus, particularly at the top end. With the sector having high wages, showing strong profits, using a high degree of technology, and having large export markets, many countries see it as strategic.

In 2022, the transportation sector generated 36 percent of greenhouse gas (GHG) emissions in the United States, 21 percent in the European Union, and 8 percent in China (IEA 2024b). Emissions from transportation have failed to decline at the same pace as those from electricity generation and industry in the past 15 years. Therefore, the shift to electric vehicles for personal transportation is a key part of the reduction of GHG emissions. To foster the adoption of EVs, both supply- and demand-side policies have been implemented across the world (IEA 2024a).

On the demand side, the European Union has set out an ambitious goal of reducing emissions from cars by 50 percent for 2030–35 from the 2021 levels in its "Fit for 55" package. In the United States, the Inflation Reduction Act includes subsidies for EV purchases and the deployment of charging stations.

Supply-side policies aim at closing the cost and convenience gaps between EVs and conventional internal combustion engine vehicles, which is a key obstacle to a widespread adoption of EVs. Policies are targeting the entire EV value chain: vehicles, batteries, and extraction and processing of metals.

The authors of this box are Benjamin Carton and Philippe Wingender.



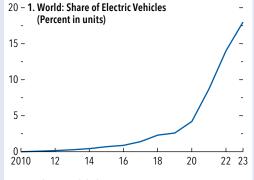
Sources: Organisation for Economic Co-operation and Development, Trade in Employment database and Trade in Value-Added indicators; and IMF staff calculations.

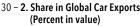
Cost reduction relies on two main pillars: innovation and increasing returns to scale. It explains the global race for innovation in EVs among large carmakers and battery manufacturers that resulted in the rise of many newcomers in the United States (Lucid, Rivian, Tesla) and even more in China (BYD, Geely, Wuling, and the like). The rise of lithium ion battery manufacturers has been even faster, as the industry started only 25 years ago.

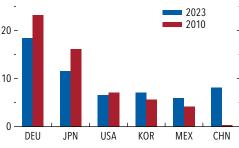
As a result of policies and technological breakthroughs in batteries, the global transition from conventional vehicles to EVs has accelerated in recent years (Figure 1.1.2, panel 1) and comes with a redistribution of comparative advantages. In particular, the role of China in both production and exports has

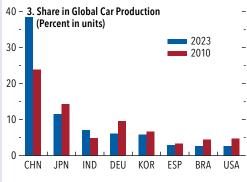
Box 1.1 (continued)

Figure 1.1.2. Global Share of Electric Vehicles









Sources: IEA 2024a; International Organization of Motor Vehicle Manufacturers; International Trade Centre; and IMF staff calculations.

Note: Data labels in the figure use International Organization for Standardization (ISO) country codes.

dramatically increased compared with that 15 years ago (Figure 1.1.2, panels 2 and 3).

The EV transition will have global and regional macroeconomic implications. An IMF working paper (Wingender and others 2024) estimates the macroeconomic implications of a policy-driven shift to EVs in the European Union by 2035. Two main channels are at play: (1) regulation moves demand away from conventional vehicles and toward EVs, and (2) China continues to enjoy a relative cost advantage in building EVs. Under realistic EV market penetration scenarios, GDP in Europe is reduced by about 0.3 percent in the medium term. In these scenarios, employment declines in the automotive sector, and labor reallocates gradually to less capital-intensive sectors (with lower value added per worker).

The analysis also emphasizes that the ability to import EVs from China softens the trade-offs between economic and climate goals. With fewer imported EVs, climate policies have to be more stringent to reach the same climate goal, and households' purchasing power is reduced. Imports of EVs also redistribute gains and losses between countries specializing in car manufacturing (losing market share) and net carimporting countries (gaining purchasing power). The EV transition will have implications beyond car manufacturing: for the energy sector, for instance, with a shift from gasoline to electricity to fuel car fleets, or for demand for minerals.

Box 1.2. Risk Assessment Surrounding the World Economic Outlook's Baseline Projections

The IMF's Group of Twenty (G20) and Global Integrated Monetary and Fiscal (GIMF) models are used in this box to derive confidence bands around the World Economic Outlook forecast and to quantify two scenarios.

Risks to growth are currently considered moderately tilted to the downside. The risk of global growth falling below 2 percent—an outcome that has occurred only five times since 1970—in 2025 is now assessed at 17 percent, compared with 12 percent in April, in part because the risk of a recession in the United States has increased moderately. Risks for global inflation are considered broadly balanced.

Confidence Bands

The G20 model (Andrle and others 2015) is used here to interpret historical data and recover the implied economic shocks. The shocks are then sampled and fed back through the model to generate predictive distributions. Unlike in the April 2024 World Economic Outlook, shocks from years in which US recessions took place are sampled more frequently when constructing the confidence bands for 2025 and 2026 projections. The approach reflects the assessment that US recession risks have increased somewhat in the near term on account of labor market developments. Data from five recessions are oversampled: those in 1969, 1982, 1990, 2001, and 2008. Shocks for all countries are also oversampled for those years to exploit possible co-movements in the data.

Panels 1–3 in Figure 1.2.1 show the distributions for US growth, headline inflation, and the federal funds rate, respectively. The probability of US growth falling below 0.8 percent in 2025—corresponding to a short-lived US recession starting in the fourth quarter of 2024—is about 25 percent. That is a modest increase from the risk of recession in the April 2024 World Economic Outlook (17 percent). The risk of average US headline inflation falling below 1.5 percent in 2025 is assessed at about 40 percent; the risk of the federal funds rate falling below 3 percent for 2025 is about 28 percent.

The authors of this box are Jared Bebee, Chris Jackson, Gene Kindberg-Hanlon, Dirk Muir, and Rafael Portillo.

¹The implications of greater recession risks for the distribution of 2024 growth are not considered, because the first-half outturn is already known and a hypothetical recession would start in the fourth quarter at the earliest.

Figure 1.2.1. Forecast Uncertainty around **Global Growth and Inflation Projections** (Percent) WEO baseline projection 6 - 1. US GDP Growth 4. Global GDP Growth 5 -4 -3 2 -1 -0 -2 2023 25 27 29 2023 25 27 29 10 - 2. US Inflation - 5. Global Inflation 8 -- 8 6 -2 0 2023 25 27 2023 25 29 7 - 3. US Policy Rate - 6. Global Core - 7 Inflation 6 - 6 4 3 2023 25 27 29 2023 25 27 29 Source: IMF staff calculations. Note: Each shade of blue represents a 5 percentage point probability interval. WEO = World Economic Outlook

Panels 4–6 in Figure 1.2.1 show the distributions for global growth and headline and core inflation, respectively. The balance of risks for global growth is also tilted to the downside, whereas risks for global inflation remain broadly balanced.

Box 1.2 (continued)

The probability of global growth in 2025 falling below 2 percent is assessed at about 17 percent. The probabilities of global measures of average headline and core inflation falling below 3 percent in 2025 are estimated at about 20 percent and 15 percent, respectively.

Scenarios

The G20 and GIMF models are then used to simulate two scenarios, each consisting of various layers. Scenario A is considered a plausible downside alternative to the current baseline. Scenario B looks at policies advocated to address existing imbalances in the world economy. If implemented, policies in scenario B could reduce the likelihood of policies in scenario A materializing. Both scenarios assume endogenous monetary and fiscal policy responses (automatic stabilizers). It is also assumed that exchange rate stability plays a role in China's monetary policy.²

Scenario A has five layers:

A global increase in tariffs. Trade tensions lead to a permanent increase in tariffs starting in mid-2025 and affecting a sizable swath of global trade. The United States, the euro area, and China impose a 10 percent tariff on trade flows among the three regions; a 10 percent tariff is also levied on trade flows (in both directions) between the United States and the rest of the world. The increase in tariffs directly affects about one-quarter of all goods trade, representing close to 6 percent of global GDP.³ The revenue generated by the tariffs is transferred back to households.

Greater trade policy uncertainty. US tariff hikes in 2018–19 increased uncertainty over future trade policies and adversely affected investment, especially in manufacturing. In scenario A, the tariff increases similarly raise trade policy uncertainty from mid-2025 onward.⁴ It is assumed that US aggregate investment declines by about 4 percent relative to the baseline,

²The GIMF model is used for scenario A, as it is better suited for the analysis of tariffs and provides a more detailed treatment of corporate taxes (Anderson and others 2013; Carton, Fernandez-Corugedo, and Hunt 2019). Scenario B uses the G20 model.

³Tariff scenarios were analyzed in the *World Economic Outlook* in 2018 and 2019. The share of global trade affected by higher tariffs here is about four times larger than in those scenarios. The increase in tariffs is smaller (about one-third of those there).

⁴See, for example, Caldara and others (2020). Chapter 2 of the October 2024 *Global Financial Stability Report* provides an in-depth discussion of various measures of uncertainty and of the channels through which they affect activity. about twice the estimated effect from the previous episode. The increase in uncertainty is global. The euro area experiences a decrease in investment similar to that in the United States, and other regions, including China, experience a hit that is about half as large. The impact on investment fades starting in 2027.

Taxation of business income in the United States. Many of the provisions of the 2017 Tax Cuts and Jobs Act (TCJA) relating to the taxation of business income are due to expire at the end of 2025, leading to less generous depreciation allowances and raising the effective tax rate for some businesses. Scenario A assumes these expiring provisions are renewed for 10 years, lowering business income taxes by about 4.0 percent of baseline GDP, cumulatively, between 2025 and 2034.

Migration flows to the United States and Europe. Migration has been boosting labor force growth in advanced economies in recent years, raising potential output and reducing inflationary pressures, most notably in the United States. Whereas a normalization is projected in the World Economic Outlook baseline for both the United States and the euro area, scenario A assumes further reductions in net migration, starting in 2025. As a result, the US labor force is permanently reduced by 1 percent by 2030 and the euro area labor force by 0.75 percent, relative to the baseline.

Global financial conditions. Three factors result in a moderate tightening in financial conditions in 2025–26. First, the scenario has a negative impact on the world economy, trade, and uncertainty. Second, US monetary policy is (endogenously) tighter than in the baseline, because of a (small) net increase in US inflation. Third, debt increases further, more so in the United States, adding to concerns about debt sustainability. As a result of these factors, sovereign premiums in emerging markets (excluding China) increase by 50 basis points in advanced economies and China and 100 basis points in other emerging markets. Term premiums also increase by 40 basis points in the United States and by 25 basis points in the euro area.

Scenario B has two layers:

Rebalancing in China. Reforms are implemented that strengthen China's social safety net by expanding coverage and increasing accessibility of social security benefits. As a result, the private saving rate gradually falls relative to the baseline starting in 2025 and is 3 percentage points of GDP lower by 2027. The saving

Box 1.2 (continued)

rate gradually converges back to the baseline starting in 2030.

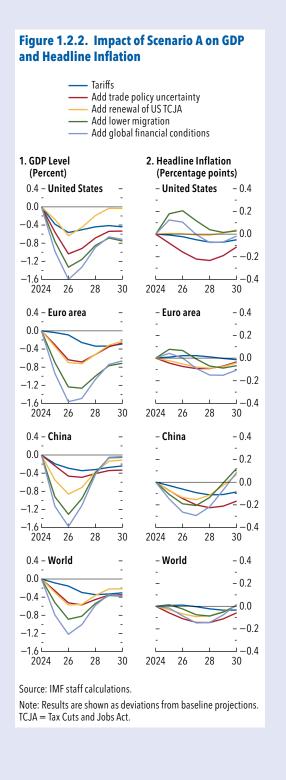
Higher EU public investment. Subdued productivity growth and ambitious green transition goals have underscored the need for higher investment in Europe, most recently advocated in the European Commission's "The Future of European Competitiveness." In scenario B, countries in the European Union undertake a region-wide expansion in public investment, which increases by 1.5 percent of the region's baseline GDP on average during 2025–30 and remains permanently higher by 0.5 percent of baseline GDP after that, to sustain higher public capital. About half of the surge is financed by higher deficits and the rest by a reallocation of government spending.

Impact on World Output and Inflation

Figures 1.2.2 and 1.2.3 present the effects for scenarios A and B. Panel 1 in each figure shows the effects on the *level* of GDP during 2024–30 for three economies (China, United States, euro area) and for the world. Panel 2 shows the effects for inflation. Effects on GDP are presented as percent deviations from the baseline, whereas effects on headline inflation are presented as percentage point deviations from the baseline.⁵

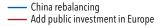
In scenario A, the increase in tariffs affects activity in all regions. Imposing tariffs on imports raises domestic input costs, and higher tariffs on exports lower external demand. The net effect on inflation depends on the relative strength of these two channels but is small. There is a small negative impact on investment; the impact on consumption is limited, because tariff revenue is transferred back to households. Across regions, the impact on the United States is larger, because US trade flows are subject in their entirety to the new tariffs: GDP falls by 0.4 percent in 2025 and by 0.6 percent in 2026. The impact on other regions and the world reaches -0.3 percent of GDP by 2026, and global imports and exports also fall by about 4 percent, relative to the baseline. The effects on GDP are permanent, however. The trade policy uncertainty layer has a more immediate impact on global activity. Global investment (not shown) falls by close to 2 percent by 2026, lowering GDP by 0.4 percent over the same period, while global inflation falls by 10 basis

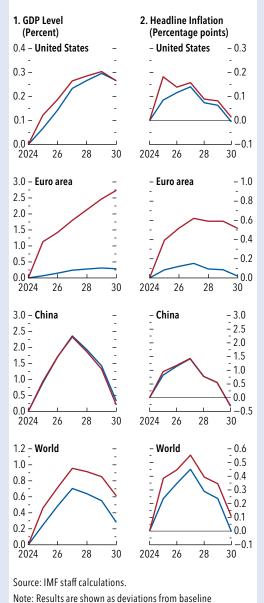
⁵The impact on growth rates can be approximated by subtracting the effects on output from the previous year.



Box 1.2 (continued)

Figure 1.2.3. Impact of Scenario B on GDP and Headline Inflation





projections.

The temporary renewal of US TCIA provisions raises US investment by about 2 percent in 2025 and 4 percent in 2026, relative to the baseline. US GDP increases by 0.4 percent, and inflation increases by an average of 20 basis points over 2025-30, prompting higher US policy rates. Spillovers to other regions are negative as investment demand decreases slightly outside the United States. The decrease in migration flows to the United States and euro area permanently reduces potential output in both regions and raises inflation along the adjustment path. GDP falls by 0.5 percent in the United States and by 0.4 percent in the euro area in 2025, whereas inflation increases by about 20 basis points and 15 basis points for the two, respectively. As domestic demand falls in the United States and the euro area, GDP in the rest of the world also dips. Finally, the tightening in global financial conditions reduces activity globally, more so in emerging markets excluding China (not shown).

The *combined effect* of scenario A is a decrease in global GDP of about 0.8 percent by 2025 and 1.3 percent by 2026, relative to the baseline, with some of the effects fading over time. US GDP falls by about 1 percent relative to the baseline in 2025. The impact on global inflation is by contrast muted, at –10 basis points by 2026, reflecting the role of both demand and supply factors in the scenario.

In scenario B, the China rebalancing layer generates an increase in China's domestic absorption. The positive effect on China's GDP peaks at 2.5 percent by 2027 relative to the baseline, and headline inflation increases by 90 basis points in 2025 and by as much as 140 basis points in 2027. The rebalancing reduces China's current account by more than 1 percent of GDP and benefits global activity, but the effect on inflation outside China is small. The EU public investment layer steadily raises the level of GDP in the euro area, which peaks at 2.5 percent above the baseline by 2030. Productivity increases, raising private investment and potential output and limiting inflationary pressures: inflation is about 40 basis points higher than the baseline over 2025–30. Spillovers to other regions are small. The combined effect of layers in scenario B is a 0.5 percent increase in world GDP and a rise of 30 basis points in headline inflation in 2025.

Commodity Special Feature: Market Developments and the Inflationary Effects of Metal Supply Shocks

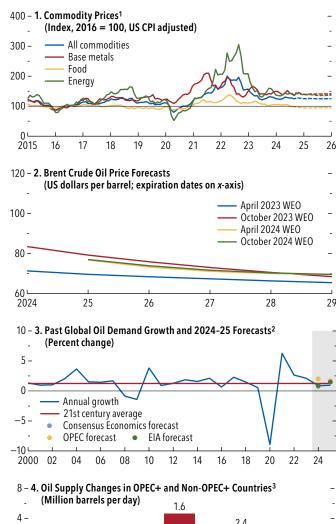
Primary commodity prices increased between February and August 2024, driven by natural gas, precious metal, and beverage prices. In oil markets, supply cuts by OPEC+ (Organization of the Petroleum Exporting Countries plus selected nonmember countries, including Russia) and geopolitical tensions in the Middle East offset strong non-OPEC+ supply growth. Beverage prices continued their ascent, which was driven by the impact of El Niño on tropical crops. Gold prices soared owing to geopolitical uncertainty and rising anticipation of rate cuts. This Special Feature analyzes the role of metals in the economy and their impact on inflation.¹

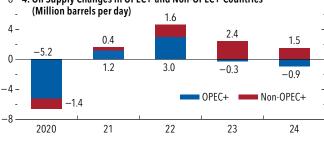
Commodity Market Developments

Oil prices steadied between February and August 2024 amid OPEC+ production cuts and Middle East tensions. Before weakening in September, oil prices held steady, with oil trading in a range of \$75 to \$90 a barrel between February and August, averaging \$83 a barrel. Oil demand growth for this year was expected to match its 21st century average, but this forecast was surrounded by great uncertainty (Figure 1.SF.1, panel 3).² Deep production cuts by OPEC+, totaling 5.86 million barrels per day (mb/d), have put a floor on prices, partially offsetting strong output growth in non-OPEC+ countries, led by Canada, Guyana, and the United States (Figure 1SF.1, panel 4).

Fears of a broader regional escalation of tensions in the Middle East have added a volatile risk premium to oil prices, though no major supply disruptions have occurred so far. A rise in Red Sea maritime attacks has dislocated seaborne oil flows, decreasing traffic through the Suez Canal by almost two-thirds and largely rerouting it around the Cape of Good Hope, though tanker rates for both products and crude oil

Figure 1.SF.1. Commodity Market Developments





Sources: Bloomberg Finance L.P.; Consensus Economics (CE); Haver Analytics; IMF, Primary Commodity Price System; International Energy Agency (IEA); Refinitiv Datastream; US Energy Information Administration (EIA); and IMF staff calculations.

Note: CPI = consumer price index; OPEC = Organization of the Petroleum Exporting Countries; WEO = World Economic Outlook.

¹Latest actual CPI value is applied to the dashed forecast.

²Data on past growth are from the IEA. 2024–25 forecast area is shaded. Baseline blue line in shaded area represents IEA forecast. Forecasts from CE, OPEC, and EIA are also included. CE does not have a 2025 forecast. All forecasts are from the latest September 2024 reports of the respective entities.

³OPEC+ denotes OPEC members plus some other oil-producing countries. Numbers are adjusted to account for Angola's departure from OPEC. Data are from the IEA, which assumes an extension of OPEC+ cuts for 2024.

¹The contributors to this Special Feature are Christian Bogmans, Jorge Miranda-Pinto, Andrea Pescatori (team lead), Martin Stuermer, and Xueliang Wang, with research assistance from Wenchuan Dong, Maximiliano Jerez Osses, Joseph Moussa, and Tianchu Qi. This Special Feature is based on Miranda-Pinto and others (2024).

²As of its September reports, the International Energy Agency forecasts 0.90 million barrels a day (mb/d) in average demand growth for 2024, compared with OPEC's 2.00 mb/d, the US Energy Information Administration's 0.94 mb/d, and Consensus Economics' polling of 0.75 mb/d. Most of the discrepancy relates to the pace of demand growth in economies outside of the Organisation for Economic Co-operation and Development.

have dropped back to pre-conflict prices. Russian oil, exported primarily to China and India, has been trading above the Group of Seven price cap for most of the past year—but at a \$15–\$20 discount to Brent.

Futures markets suggest that prices will rise by 0.9 percent year over year to average \$81.3 a barrel in 2024 and then fall to \$67.0 in 2029 (Figure 1.SF.1, panel 2). Risks to this outlook are tilted to the downside. Upside price risks from an escalation of the Middle East conflict or from a prolonged extension of OPEC+ cuts are outweighed by risks of weaker oil demand in China and the United States—which collectively account for almost 40 percent of global demand—as well as in Japan and other advanced economies, and a rise in OPEC+ production to regain market share.

Natural gas prices rose because of weather and supply concerns. Title Transfer Facility (TTF) trading hub prices in Europe rose 26.4 percent between February and August to \$10.2 a million British thermal units (MMBtu), though they remain well below their peak in 2022. Price increases were driven by warmer-than-expected summer weather in the Northern Hemisphere and a potential cutoff from Russia's remaining Europe-destined pipeline gas. Subdued economic activity in the European Union and high storage levels capped further price increases. For liquefied natural gas, Asian prices increased by 49.8 percent following strong import demand from Japan and especially China and India, and US Henry Hub prices rose by 16.8 percent. Futures markets suggest that TTF prices will average \$10.4/MMBtu in 2024, decreasing to \$8.2/MMBtu in 2029. Henry Hub prices may rise from \$2.3/MMBtu in 2024 to \$3.6/MMBtu in 2029, as US export capacity is expected to almost double through 2027, according to the US Energy Information Administration. Risks to this outlook are balanced.

Metals prices increased. The IMF's metals price index increased by 7.7 percent between February and August 2024 (Figure 1.SF.1, panel 1). Gold prices surged by 21.9 percent to record highs against the US dollar, driven by geopolitical uncertainty, expectations of US rate cuts, and past US consumer price index (CPI) inflation. Conversely, iron ore prices fell by 19.9 percent, affected by reduced demand from the steel and construction sectors in China. Copper (aluminum) prices soared by 8.1 (7.8) percent, reaching a record nominal high in early July, fueled by growing demand from renewable energy sources, electricity grids, electric vehicles, and data centers. However, starting in July, both copper and aluminum prices

retrenched on account of weaker demand projections from China.

Agricultural commodity prices declined. Between February and August 2024, the IMF's food and beverages price index decreased slightly, by 2.4 percent, as large price increases for beverages were more than offset by decreases in prices for other food categories. Cereal prices declined by 14.3 percent, with global grain production forecast to reach a record high over marketing year (MY) 2024-25. Cocoa prices increased by 20.4 percent, peaking at a record high in April, in line with expectations by the International Cocoa Organization of an 11 percent decline in global cocoa supply for MY 2023–24 on account of El Niño and crop diseases in West Africa. Coffee prices rallied, rising by 33.8 percent, following weather-related supply concerns in key producers Brazil and Vietnam. Rice prices declined by 7.5 percent, retreating from a multiyear peak reached in January of this year, as crop conditions improved in India and other parts of Asia. Upside risks stem from further trade disruptions in the Black Sea and new food export restrictions. Larger-than-expected harvests constitute the most important downside risk.

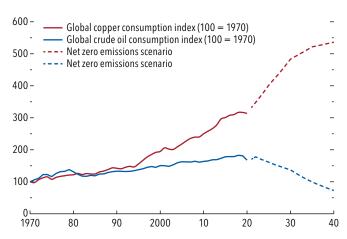
Metals Matter: The Economic Relevance of Critical Inputs

Since the end of World War II, oil has played a major role, among commodities, as a source of shocks for the global economy and inflation (see, for example, Hamilton 1983; and Kilian 2008, 2009). However, the shift from fossil fuels to metals as inputs to energy systems may render the global economy less oil intensive and relatively more metals intensive (Boer, Pescatori, and Stuermer 2024). The International Energy Agency predicts that demand for copper may grow by a factor of more than 1.5, and the consumption of oil could decline by 25 percent by 2030 in a net zero emissions scenario (Figure 1.SF.2; IEA 2022).

At the same time, metals production could become less reliable because of geopolitical tensions. Since most metals production is geographically concentrated (more so than that of oil) and most metals are not easily substitutable, trade disruptions could lead to sharp swings in prices, with a growing economic impact as the global economy and energy systems become more reliant on metals (Alvarez and others 2023).³

³New trade restrictions, including those on metals trade, have almost doubled since the start of the war in Ukraine (Gopinath and others 2024).

Figure 1.SF.2. Consumption of Copper and Oil (Index)



Sources: Boer, Pescatori, and Stuermer 2024; Schwerhoff and Stuermer 2019; International Energy Agency 2022; and IMF staff calculations.

Note: We assume that consumption equals production in 1970–2020.

Employing time series econometrics and a quantitative production network model, this Special Feature investigates how metals are used in an economy and how they affect fluctuations in inflation, using oil as a comparator.

Metals Embodied in Investment Goods

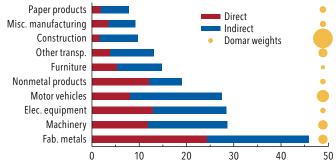
Primary metals are embodied in the production of investment goods in a different way than oil is. In fact, even as metals like copper and aluminum represent only a small fraction of final consumption expenditure (for example, 0.01 percent against 2.6 percent for oil and coal products in the United States), they are critical *direct* intermediate inputs into the production of investment goods. For example, metals represent more than 10 percent of direct input expenditure in US sectors for electrical equipment and machinery (Figure 1.SF.3, panel 1).

Because metals are embodied in investment goods, they are also *indirect* inputs. For example, to produce vehicles, metals are used not only for the body of the car, but also for the machines used to assemble the car. To capture these indirect effects, a production network model with flexible prices (for example, Balke and Wynne 2000) is used.

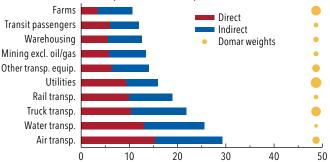
As shown later empirically, the fact that key upstream sectors providing capital are highly exposed to metals implies a slower and more persistent response of inflation to metals price shocks. In contrast, gas and petroleum products are much less embodied in machines and investment goods. Instead, they are used chiefly as

Figure 1.SF.3. Intermediate Input Expenditure Share of Metals and Oil in Gross Output in the United States (Percent)

1. Metals' Direct and Indirect Expenditure Share, Top 10 Sectors



2. Oil Direct and Indirect Expenditure Share, Top 10 Sectors



Source: Miranda-Pinto and others 2024.

Note: "Direct" is sectoral intermediate input expenditure of metals (oil) as a share of sectoral gross output. "Indirect" is Leontief inverse share element minus "Direct." The Domar weight is the ratio of the nominal value of each industry's gross output to GDP and is expressed by the bubble size. The highest Domar weight is for construction (9.59 percent), and the lowest is for water transportation (0.03 percent). We define the metals sector as the sum of the non-oil and non-gas mining sector and the primary metals sector. The oil sector is the sum of the oil and gas mining sector and the petroleum manufacturing sector. equip. = equipment; excl. = excluding; Misc. = miscellaneous; transp. = transportation; Elec. = electrical; Fab. = fabricated.

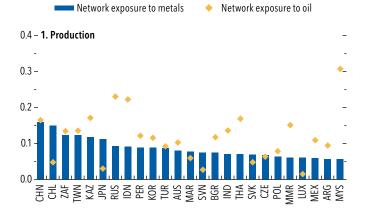
fuel to produce energy, mostly in transportation (air, water, truck, rail) and utilities (Figure 1.SF.3, panel 2). This makes the effect of an oil price shock on headline inflation more immediate. Once the indirect component is considered, fabricated metals and machinery stand out, with 28 percent and 46 percent shares, respectively, for the United States (Figure 1.SF.3, panel 1). Shares are also sizable for motor vehicles and electrical equipment and appliances.

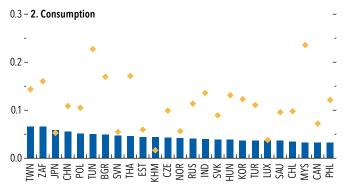
Metals Are Important in Many Countries' Production Networks

The relevance of metals in the production network is even more pronounced in some countries than in the United States. Figure 1.SF.4 plots the (total input-output network) exposure to metals and oil,

Figure 1.SF.4. Countries' Input-Output Network Exposure to Metals and Oil

(Percent)





Sources: Organisation for Economic Co-operation and Development; and IMF staff calculations.

Note: The figure depicts countries' network exposure for the year 2018. Data labels in the figure use International Organization for Standardization (ISO) country codes. Sectoral exposures are weighted by (1) sectors' value-added share in total value added (panel 1) and (2) sectors' final consumption share.

at the aggregate level, for the top 25 countries, using input-output data from the Organisation for Economic Co-operation and Development.⁴ Panel 1 aggregates sectoral exposures to metals and oil using *value-added* shares, which are suited for use in gauging the exposure of an economy to metals and oil on the *production* side. Panel 2 shows the exposure to metals and oil on the consumption side. It uses *final consumption expenditure* shares, the relevant measure for CPI, to construct the consumption exposure, which indicates the percent increase in the CPI of a country following a 10 percent negative supply shock that results in about a 15 (16) percent increase in metals (oil) prices, on average, across countries.

⁴The data cover 45 sectors for 2018 and include imports of intermediates, which are sizable in the case of metals and oil.

Several results stand out from Figure 1.SF.4. First, the heterogeneity in the exposure of production is starker than the one in the exposure of consumption across countries. This is because consumption preferences are likely similar across countries, leading to less heterogeneity in consumption exposure. At the same time, the location of production of tradable goods is independent of the location of consumption, creating more heterogeneity in production exposure. Moreover, differences in technological adoption also induce significant heterogeneity in sectoral exposures to metals and oil across countries. For instance, whereas the total metal exposure of the motor vehicle sector in the average country is 16 percent, the 10th percentile is 5 percent, and the 90th percentile is 34 percent.

Second, metals are more relevant than oil in production in 7 of the top 25 countries. Nevertheless, once consumption shares are used to aggregate, only three countries display larger exposure to metals than to oil. Indeed, the median CPI exposure is three times larger for oil than for metals.

Third, there are significant cross-country differences. Although the median country has a metals exposure of 0.03, a country in the 90th percentile has an exposure that is five times larger than that of a country in the 10th percentile of the distribution. For instance, a 10 percent supply-driven increase in metals prices would generate a 0.36 percentage point increase in China's CPI, compared with a 0.1 percentage point increase for the United States, according to the network model.

The Impact of Metal Supply Shocks on Inflation

To study the inflationary consequences of metal and oil supply shocks empirically, this Special Feature follows Silva (2023) and uses a small open economy production network model (see Online Annex 1.1).⁵ To test the implications of the model, local projections instrumental variables (LP-IV) methods are employed. These estimate the effects of copper and oil price shocks for a balanced panel of 39 countries from 1996 to 2019.⁶

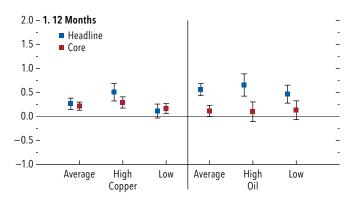
Panel 1 of Figure 1.SF.5 shows the cumulative 12-month effects of copper and oil supply shocks on headline and core inflation. A 10 percent increase in copper prices raises both headline and core inflation by

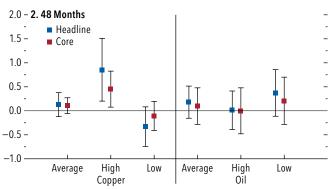
 $^{^5\}mbox{All}$ online annexes are available at www.imf.org/en/Publications/ WEO.

⁶The instruments for copper and oil prices are the copper supply shocks from Baumeister, Ohnsorge, and Verduzco-Bustos (2024) and the oil supply shocks from Baumeister and Hamilton (2019).

Figure 1.SF.5. Impulse Responses (Percent)

The figure shows impulse responses to a 10 percent increase in the prices of copper (left side) and oil (right side) for countries with a high (90th percentile) and low (10th percentile) network exposure to metals and oil.





Sources: Baumeister and Hamilton 2019; Baumeister, Ohnsorge, and Verduzco-Bustos 2024; and IMF staff calculations.

Note: Panel 1 shows the 12-month responses, while panel 2 shows the 48-month responses. Copper = impulse responses to copper supply shock. Oil = impulse responses to oil supply shock. "High" and "Low" indicate the 90th and 10th percentiles of network exposure to metals (for copper shock) and oil (for oil shock). Blue and red squares are the response for headline consumer price index (CPI) and core CPI. Whiskers indicate the 90 percent confidence intervals.

about 0.2 percentage point within 12 months, whereas oil price shocks show a substantial effect on headline inflation, but not on core.

There are, however, significant differences in the response of inflation as a function of countries' network exposure to metals and oil. The 12-month cumulative effect of a 10 percent increase in prices on headline (core) inflation is 0.5 (0.3) percentage point for copper and 0.7 (0.1) percentage point for oil in countries with high network exposure to metals and oil. For countries with low network exposure to metals and oil, the effect of a 10 percent increase in prices on headline (core) inflation is 0.1 (0.2) percentage point for copper and 0.5 percentage point (0.1) percentage point for oil.

To highlight the delayed and persistent effects on headline and core inflation, panel 2 of Figure 1.SF.5 shows the cumulative 48-month effects of metal and oil supply shocks. A 10 percent increase in copper prices leads to a cumulative 0.5 percentage point increase over 48 months in core inflation for the group of countries with high network exposure to metals. In contrast, a 10 percent increase in oil prices does not cause any significant increase in core inflation over the long term.⁷

Overall, empirical results underscore the delayed and persistent effects of metals prices on inflation through production networks' long-lasting effects on marginal costs through the cost of capital.⁸

Conclusions and Policy Implications

Primary metals play a major role as intermediate inputs for investment goods in production networks. Given how they enter the production network, metal supply shocks can have significant, persistent effects on core and headline inflation. In contrast, oil supply shocks affect mostly headline inflation.

Does this make the work of central banks easier or more difficult? Central banks have typically "looked through" oil price shocks, provided these shocks were not excessively large. As the energy system moves away from fossil fuels, however, such an approach may not work well when economies face major fluctuations in metals prices.⁹ Monetary authorities may eventually need to react to metal supply shocks, because these shocks have a more persistent effect on core inflation. In conclusion, central banks must be prepared for a potentially more metals-intensive global economy in which metals price shocks could become increasingly more relevant. Their impact on inflation may initially appear subtle but could prove to be quite persistent.

⁷The persistence of the copper and oil price shocks is roughly similar. However, copper price shocks have a stronger 48-month effect on copper prices than oil supply shocks have on oil prices. See Online Annex 1.1 for more details. Country heterogeneity is not significant for oil.

⁸The more persistent effect of metals price shocks is consistent with the version of the model with a capital stock (see Online Annex 1.1). Also, since copper represents 30 percent of the IMF's trade-weighted base metals index, these estimates are a lower bound in the case of a supply shock that increases base metals prices by 10 percent, as this effect is expected to be three times greater.

⁹Supply shocks to metals markets are more dispersed than those for oil markets, as they typically do not hit each of the metals markets at the same time. This has so far made the magnitude of supply shocks for the aggregate primary metals sector smaller than that for those in the petroleum sector.

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

		Real GDP		Con	sumer Pr	ices ¹	Current	Account	Balance ²	Une	employm	ent ³
		Proje	ctions		Proje	ctions		Proje	ctions		Proje	ections
	2023	2024	2025	2023	2024	2025	2023	2024	2025	2023	2024	2025
Europe	1.5	1.7	1.7	9.9	7.9	5.3	2.2	2.5	2.3			
Advanced Europe	0.5	1.0	1.4	5.7	2.4	2.0	2.8	3.1	3.0	5.9	6.0	5.8
Euro Area ^{4,5}	0.4	0.8	1.2	5.4	2.4	2.0	1.6	2.6	2.4	6.6	6.5	6.4
Germany	-0.3	0.0	0.8	6.0	2.4	2.0	6.2	6.6	6.4	3.0	3.4	3.2
France	1.1	1.1	1.1	5.7	2.3	1.6	-1.0	0.1	-0.1	7.4	7.4	7.2
Italy	0.7	0.7	0.8	5.9	1.3	2.1	0.0	1.1	1.4	7.7	7.0	7.2
Spain	2.7	2.9	2.1	3.4	2.8	1.9	2.7	3.4	3.2	12.2	11.6	11.2
The Netherlands	0.1	0.6	1.6	4.1	3.2	2.3	9.9	10.0	10.1	3.6	3.9	4.2
Belgium	1.4	1.1	1.2	2.3	4.3	2.1	-1.0	-0.3	0.0	5.5	5.7	5.7
Ireland	-5.5	-0.2	2.2	5.2	1.7	1.8	8.1	12.0	11.2	4.3	4.4	4.4
Austria	-0.8	-0.6	1.1	7.7	3.0	2.5	2.7	2.6	2.4	5.1	5.6	5.6
Portugal	2.3	1.9	2.3	5.3	2.5	2.1	1.4	2.0	2.3	6.6	6.5	6.4
Greece	2.0	2.3	2.0	4.2	2.9	2.1	-6.9	-6.5	-5.3	11.1	10.5	10.1
Finland	-1.2	-0.2	2.0	4.3	1.2	1.9	-1.1	-1.2	-1.2	7.2	8.3	7.4
Slovak Republic	1.6	2.2	1.9	11.0	2.8	5.1	-1.6	-1.7	-1.4	5.8	5.6	5.7
Croatia	3.1	3.4	2.9	8.4	4.0	2.8	1.1	1.5	0.9	6.2	5.6	5.5
Lithuania	-0.3	2.4	2.6	8.7	0.9	2.4	1.9	2.8	2.9	6.9	7.3	7.1
Slovenia	2.1	1.5	2.6	7.4	2.0	2.7	4.5	3.4	2.5	3.7	3.5	3.5
Luxembourg	-1.1	1.3	2.7	2.9	2.5	2.6	6.8	6.9	7.0	5.2	5.8	5.9
Latvia	-0.3	1.2	2.3	9.1	1.4	2.2	-4.0	-3.8	-3.6	6.5	6.7	6.5
Estonia	-3.0	-0.9	1.6	9.1	3.4	2.0	-1.7	-3.4	-3.3	6.4	7.5	7.1
Cyprus	2.5	3.3	3.1	3.9	2.2	2.0	-12.1	-10.1	-8.3	6.1	5.3	5.1
Malta	7.5	5.0	4.0	5.6	2.7	2.5	0.9	1.2	2.3	3.1	3.0	3.0
United Kingdom	0.3	1.1	1.5	7.3	2.6	2.1	-2.0	-2.8	-2.8	4.0	4.3	4.1
Switzerland	0.3	1.3	1.3	2.1	1.3	1.0	6.9	8.2	7.6	2.0	2.4	2.5
				5.9						2.0 7.7		
Sweden	-0.2	0.9	2.4		2.1	2.0	6.5	6.6	6.1		8.5	8.3
Czech Republic	-0.1	1.1	2.3	10.7	2.3	2.0	0.4	0.1	0.3	2.6	2.8	2.5
Norway	0.5	1.5	1.8	5.5	3.3	2.4	17.9	14.5	12.5	3.6	4.3	3.8
Denmark	2.5	1.9	1.6	3.4	1.8	2.2	9.8	9.0	9.3	2.8	2.9	3.0
Iceland	5.0	0.6	2.4	8.7	6.0	3.3	1.1	0.2	0.1	3.4	3.8	3.8
Andorra	1.4	1.4	1.6	5.6	3.6	2.5	17.0	17.2	17.3	1.6	1.6	1.6
San Marino	0.4	0.7	1.3	5.9	1.3	2.0	13.9	6.2	4.2	3.9	3.9	3.9
Emerging and Developing Europe ⁶	3.3	3.2	2.2	17.1	16.9	11.1	-0.5	-0.3	-0.7			
Russia	3.6	3.6	1.3	5.9	7.9	5.9	2.5	2.7	2.6	3.2	2.6	3.0
Türkiye	5.1	3.0	2.7	53.9	60.9	33.0	-4.0	-2.2	-2.1	9.4	9.3	9.9
Poland	0.2	3.0	3.5	11.4	3.9	4.5	1.5	0.8	0.0	2.8	3.2	3.3
Romania	2.1	1.9	3.3	10.4	5.3	3.6	-7.0	-7.5	-7.0	5.6	5.6	5.4
Ukraine ⁷	5.3	3.0	2.5	12.9	5.8	9.0	-7.0 -5.4	-7.3 -8.1	-14.3	19.1	14.2	12.7
Hungary	-0.9	1.5	2.9	17.1	3.8	3.5	0.2	1.6	0.6	4.1	4.4	4.2
	-0.9 3.9			5.0						3.5		
Belarus		3.6	2.3		6.0	6.4	-1.8	-2.0	-2.4		3.0	2.9
Bulgaria	1.8	2.3	2.5	8.6	2.8	2.6	-0.3	-1.0	-1.7	4.4	4.3	4.2
Serbia	2.5	3.9	4.1	12.4	4.5	3.6	-2.6	-4.2	-4.8	9.4	9.1	9.0

Source: IMF staff estimates.

¹ Movements in consumer prices are shown as annual averages. Year-end to year-end changes can be found in Tables A6 and A7 in the Statistical Appendix.

² Percent of GDP.

³ Percent. National definitions of unemployment may differ.

⁴ Current account position corrected for reporting discrepancies in intra-area transactions.

⁵ Based on Eurostat's harmonized index of consumer prices except for Slovenia.

⁶ Includes Albania, Bosnia and Herzegovina, Kosovo, Moldova, Montenegro, and North Macedonia.

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

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

		Real GDP		Cons	umer Pri	ces ¹	Current	Account I	Balance ²	Unemployment ³		
		Projec	tions		Proje	ctions		Proje	ctions		Proje	ections
	2023	2024	2025	2023	2024	2025	2023	2024	2025	2023	2024	2025
Asia	5.0	4.6	4.4	2.6	2.2	2.6	1.9	1.9	1.9			
Advanced Asia	2.0	1.6	1.9	3.6	2.4	2.1	4.4	4.7	4.6	2.8	2.9	3.0
Japan	1.7	0.3	1.1	3.3	2.2	2.0	3.6	3.8	3.6	2.6	2.5	2.5
Korea	1.4	2.5	2.2	3.6	2.5	2.0	1.9	3.9	3.6	2.7	2.9	3.0
Australia	2.0	1.2	2.1	5.6	3.3	3.3	0.3	-0.9	-1.1	3.7	4.1	4.4
Taiwan Province of China	1.3	3.7	2.7	2.5	2.1	1.7	13.8	14.8	14.6	3.7	3.7	3.7
Singapore	1.1	2.6	2.5	4.8	2.6	2.2	19.8	17.8	17.7	1.9	1.9	1.9
Hong Kong SAR	3.3	3.2	3.0	2.1	1.7	2.3	9.2	9.8	9.2	2.9	2.8	2.7
New Zealand	0.6	0.0	1.9	5.7	2.7	2.2	-6.9	-6.3	-5.0	3.7	5.1	5.1
Macao SAR	80.5	10.6	7.3	0.9	1.1	2.0	36.0	33.2	33.3	2.7	1.8	1.8
Emerging and Developing Asia	5.7	5.3	5.0	2.4	2.1	2.7	1.0	0.8	0.9			
China	5.2	4.8	4.5	0.2	0.4	1.7	1.4	1.4	1.6	5.2	5.1	5.1
India ⁴	8.2	7.0	6.5	5.4	4.4	4.1	-0.7	-1.1	-1.3			
Indonesia	5.0	5.0	5.1	3.7	2.5	2.5	-0.2	-1.0	-1.2	5.3	5.2	5.1
Thailand	1.9	2.8	3.0	1.2	0.5	1.2	1.4	1.8	2.0	1.0	1.1	1.0
Vietnam	5.0	6.1	6.1	3.3	4.1	3.5	5.8	3.0	2.7	2.0	2.1	2.0
Malaysia	3.6	4.8	4.4	2.5	2.8	2.5	1.5	2.6	2.8	3.6	3.5	3.5
Philippines	5.5	5.8	6.1	6.0	3.3	3.0	-2.6	-2.2	-1.8	4.4	4.4	5.2
Other Emerging and Developing Asia ⁵	4.1	4.3	4.1	11.5	9.7	9.6	-1.0	-0.9	-1.4			•••
Memorandum												
ASEAN-56	4.0	4.5	4.5	3.5	2.3	2.3	3.1	2.7	2.7			
Emerging Asia ⁷	5.8	5.4	5.1	2.0	1.8	2.4	1.0	0.9	1.0			• • •

Source: IMF staff estimates.

¹ Movements in consumer prices are shown as annual averages. Year-end to year-end changes can be found in Tables A6 and A7 in the Statistical Appendix.

² Percent of GDP.

³ Percent. National definitions of unemployment may differ.

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

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

⁶ Indonesia, Malaysia, the Philippines, Singapore, and Thailand.

⁷ Emerging Asia comprises China, India, Indonesia, Malaysia, the Philippines, Thailand, and Vietnam.

Annex Table 1.1.3. Western Hemisphere Economies: Real GDP, Consumer Prices, Current Account Balance, and Unemployment

(Annual percent change, unless noted otherwise)

		Real GDP		Coi	nsumer Pric	es ¹	Current	Account	Balance ²	Une	Unemployment ³		
		Projec	tions		Proje	ctions		Proje	ctions		Proje	ections	
	2023	2024	2025	2023	2024	2025	2023	2024	2025	2023	2024	2025	
North America	2.8	2.5	2.1	4.2	3.1	2.0	-2.9	-3.0	-2.8	•••			
United States	2.9	2.8	2.2	4.1	3.0	1.9	-3.3	-3.3	-3.1	3.6	4.1	4.4	
Mexico	3.2	1.5	1.3	5.5	4.7	3.8	-0.3	-0.7	-0.9	2.8	3.0	3.3	
Canada	1.2	1.3	2.4	3.9	2.4	1.9	-0.7	-1.0	-1.3	5.4	6.2	6.2	
Puerto Rico ⁴	0.6	1.0	-0.8	3.5	1.6	1.9				5.9	6.2	6.5	
South America ⁵	1.5	1.8	2.7	19.8	23.7	10.9	-1.4	-1.2	-1.3				
Brazil	2.9	3.0	2.2	4.6	4.3	3.6	-1.0	-1.7	-1.8	8.0	7.2	7.2	
Argentina	-1.6	-3.5	5.0	133.5	229.8	62.7	-3.2	0.6	0.6	6.1	8.2	7.6	
Colombia	0.6	1.6	2.5	11.7	6.7	4.5	-2.5	-2.5	-2.6	10.2	10.2	10.0	
Chile	0.2	2.5	2.4	7.6	3.9	4.2	-3.5	-2.3	-2.7	8.7	8.5	8.0	
Peru	-0.6	3.0	2.6	6.3	2.5	1.9	0.8	0.3	-0.1	6.8	6.8	6.5	
Ecuador	2.4	0.3	1.2	2.2	1.9	2.2	1.9	2.8	2.4	3.4	4.2	4.0	
Venezuela	4.0	3.0	3.0	337.5	59.6	71.7	3.1	4.1	3.3				
Bolivia	3.1	1.6	2.2	2.6	4.3	4.2	-2.6	-5.4	-5.5	4.9	5.0	5.1	
Paraguay	4.7	3.8	3.8	4.6	3.8	4.0	0.3	-0.6	-2.5	6.2	6.3	6.3	
Uruguay	0.4	3.2	3.0	5.9	4.9	5.4	-3.8	-2.7	-2.6	8.3	8.4	8.0	
Central America ⁶	4.1	3.8	3.8	4.2	2.6	3.5	-1.3	-1.1	-1.2				
Caribbean ⁷	7.5	11.9	5.5	13.1	6.9	6.2	2.2	5.6	1.7				
Memorandum													
Latin America and the Caribbean ⁸	2.2	2.1	2.5	14.8	16.8	8.5	-1.1	-0.9	-1.1				
Eastern Caribbean Currency Union9	3.9	4.5	3.6	4.0	3.0	2.0	-11.6	-11.1	-10.8				

Source: IMF staff estimates.

¹ Movements in consumer prices are shown as annual averages. Year-end to year-end changes can be found in Tables A6 and A7 in the Statistical Appendix. Aggregates exclude Venezuela.

² Percent of GDP.

³ Percent. National definitions of unemployment may differ.

⁴ Puerto Rico is a territory of the United States, but its statistical data are maintained on a separate and independent basis.

⁵ See the country-specific notes for Argentina and Venezuela in the "Country Notes" section of the Statistical Appendix.

⁶ Central America refers to CAPDR (Central America, Panama, and the Dominican Republic) and comprises Costa Rica, the Dominican Republic, El Salvador, Guatemala, Honduras, Nicaragua, and Panama.

⁷The Caribbean comprises Antigua and Barbuda, Aruba, The Bahamas, Barbados, Belize, Dominica, Grenada, Guyana, Haiti, Jamaica, St. Kitts and Nevis, St. Lucia, St. Vincent and the Grenadines, Suriname, and Trinidad and Tobago.

⁸ Latin America and the Caribbean comprises Mexico and economies from the Caribbean, Central America, and South America. See the country-specific notes for Argentina and Venezuela in the "Country Notes" section of the Statistical Appendix.

⁹ Eastern Caribbean Currency Union comprises Antigua and Barbuda, Dominica, Grenada, St. Kitts and Nevis, St. Lucia, and St. Vincent and the Grenadines, as well as Anguilla and Montserrat, which are not IMF members.

Annex Table 1.1.4. Middle East and Central Asia Economies: Real GDP, Consumer Prices, Current Account Balance, and Unemployment

(Annual percent change, unless noted otherwise)

		Real GDP		Cor	nsumer Prio	ces ¹	Current	Account I	Balance ²	Une	mploym	nent ³
		Projec	tions		Proje	ctions		Proje	ctions		Proje	ctions
	2023	2024	2025	2023	2024	2025	2023	2024	2025	2023	2024	2025
Middle East and Central Asia	2.1	2.4	3.9	15.6	14.6	10.7	3.7	1.7	0.8	•••		•••
Oil Exporters ⁴	2.0	2.4	3.9	11.1	8.6	8.2	6.2	4.0	2.7			
Saudi Ārabia	-0.8	1.5	4.6	2.3	1.7	1.9	3.2	0.4	-1.8	3.8		
Iran	5.0	3.7	3.1	40.7	31.7	29.5	2.8	2.9	3.0	8.1	8.0	8.4
United Arab Emirates	3.6	4.0	5.1	1.6	2.3	2.1	10.7	8.8	8.2			
Kazakhstan	5.1	3.5	4.6	14.6	8.6	7.2	-3.3	-1.5	-2.7	4.8	4.8	4.8
Algeria	4.1	3.8	3.0	9.3	5.3	5.2	2.5	1.3	-0.8			
Iraq	-2.9	0.1	4.1	4.4	3.2	3.5	4.5	-1.9	-3.4			
Qatar	1.2	1.5	1.9	3.1	1.0	1.4	17.1	13.4	13.3			
Kuwait	-3.6	-2.7	3.3	3.6	3.0	2.4	31.4	28.2	23.7			
Azerbaijan	1.1	3.2	2.5	8.8	2.1	4.8	11.5	6.1	5.9	5.5	5.4	5.3
Oman	1.3	1.0	3.1	0.9	1.3	1.5	2.4	2.3	1.4			
Turkmenistan	2.0	2.3	2.3	-1.6	6.3	8.0	4.7	4.0	2.7			
Bahrain	3.0	3.0	3.2	0.1	1.4	1.8	5.9	5.3	4.5	6.3		
Oil Importers ^{5,6}	2.1	2.4	4.0	22.8	24.7	14.7	-3.1	-4.6	-4.4			
Egypt	3.8	2.7	4.1	24.4	33.3	21.2	-1.2	-6.6	-6.4	7.2	7.2	7.4
Pakistan	-0.2	2.4	3.2	29.2	23.4	9.5	-1.0	-0.2	-0.9	8.5	8.0	7.5
Morocco	3.4	2.8	3.6	6.1	1.7	2.3	-0.6	-2.0	-2.3	13.0	13.4	12.6
Uzbekistan	6.3	5.6	5.7	10.0	10.0	9.4	-7.7	-6.3	-6.1	6.8	6.3	5.8
Tunisia	0.0	1.6	1.6	9.3	7.1	6.7	-2.7	-3.5	-3.4	16.4		
Sudan ⁷	-18.3	-20.3	8.3	77.2	200.1	118.9	-3.6	-3.9	-8.6	46.0	58.0	55.7
Jordan	2.6	2.4	2.9	2.1	2.1	2.4	-3.5	-5.0	-4.0	22.0		
Georgia	7.5	7.6	6.0	2.5	1.1	2.6	-4.3	-5.8	-5.9	16.4	14.5	14.5
Armenia	8.3	6.0	4.9	2.0	0.2	3.1	-2.3	-4.2	-4.8	12.6	13.0	13.5
Tajikistan	8.3	6.8	4.5	3.7	4.5	5.9	4.9	0.3	-1.7			
Kyrgyz Republic	6.2	6.5	5.0	10.8	5.1	5.0	-48.2	-21.7	-6.5	9.0	9.0	9.0
Mauritania	6.5	4.4	4.2	4.9	2.7	4.0	-8.8	-7.2	-8.7			
West Bank and Gaza ⁷	-5.4			5.9			-16.6					
Memorandum												
Caucasus and Central Asia	4.9	4.3	4.5	9.8	6.9	6.9	-2.1	-1.5	-2.0			
Middle East, North Africa, Afghanistan,	1.6	2.1	3.9	16.5	15.9	11.4	4.6	2.2	1.3			
and Pakistan ⁶			· · · ·				0					
Middle East and North Africa	1.9	2.1	4.0	15.0	14.8	11.6	5.1	2.5	1.5			
Israel ^{7,8}	2.0	0.7	2.7	4.2	3.1	3.0	4.8	3.4	4.4	3.5	3.1	3.4

Source: IMF staff estimates.

¹ Movements in consumer prices are shown as annual averages. Year-end to year-end changes can be found in Tables A6 and A7 in the Statistical Appendix.

² Percent of GDP.

³ Percent. National definitions of unemployment may differ.

⁴ Includes Libya and Yemen.

⁵ Includes Djibouti, Lebanon, and Somalia. See the country-specific note for Lebanon in the "Country Notes" section of the Statistical Appendix.

⁶ Excludes Afghanistan and Syria because of the uncertain political situation. See the country-specific notes in the "Country Notes" section of the Statistical Appendix.

⁷ See the country-specific notes for Israel, Sudan, and West Bank and Gaza in the "Country Notes" section of the Statistical Appendix.

⁸ Israel, which is not a member of the economic region, is shown for reasons of geography but is not included in the regional aggregates.

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

	ļ	Real GDP		Coi	nsumer Pri	ces ¹	Current	Account	Balance ²	Unemployment ³		
		Projec	tions		Proje	ctions		Proje	ctions		Proje	ctions
	2023	2024	2025	2023	2024	2025	2023	2024	2025	2023	2024	2025
Sub-Saharan Africa	3.6	3.6	4.2	17.6	18.1	12.3	-2.7	-3.2	-2.9			
Oil Exporters ⁴	2.4	2.7	3.2	20.7	29.3	22.6	2.2	1.0	0.2			
Nigeria	2.9	2.9	3.2	24.7	32.5	25.0	1.7	-0.5	-0.7			
Angola	1.0	2.4	2.8	13.6	28.4	21.3	3.8	3.3	1.5			
Gabon	2.4	3.1	2.6	3.6	2.1	2.2	5.4	5.1	3.1			
Chad	4.9	3.2	3.8	4.1	4.9	3.7	-0.9	-1.7	-2.5			
Equatorial Guinea	-6.2	5.8	-4.8	2.5	4.0	2.8	-0.8	-0.4	-2.7			
Middle-Income Countries ⁵	3.1	3.1	3.9	9.4	6.3	5.2	-3.6	-3.3	-2.5			
South Africa	0.7	1.1	1.5	5.9	4.7	4.5	-1.6	-1.6	-1.9	33.1	33.7	33.9
Kenya	5.6	5.0	5.0	7.7	5.1	5.2	-4.0	-4.1	-4.1			
Ghana	2.9	3.1	4.4	39.2	19.5	11.5	-1.4	-2.5	-2.0			
Côte d'Ivoire	6.2	6.5	6.4	4.4	3.8	3.0	-8.0	-5.4	-1.3			
Cameroon	3.2	3.9	4.2	7.4	4.4	3.5	-3.9	-2.8	-3.5			
Senegal	4.6	6.0	9.3	5.9	1.5	2.0	-18.8	-12.7	-8.3			
Zambia	5.4	2.3	6.6	10.9	14.6	12.1	-1.9	-0.2	6.9			
Low-Income Countries ⁶	5.7	5.2	5.9	26.3	23.1	11.0	-6.0	-5.9	-5.7			
Ethiopia	7.2	6.1	6.5	30.2	23.9	23.3	-2.9	-3.4	-4.8			
Tanzania	5.1	5.4	6.0	3.8	3.2	4.0	-5.3	-3.9	-3.4			
Democratic Republic of the Congo	8.4	4.7	5.0	19.9	17.8	9.2	-6.3	-4.0	-2.0			
Uganda	4.6	5.9	7.5	5.4	3.5	4.4	-7.4	-6.6	-6.6			
Mali	4.4	3.8	4.4	2.1	2.5	2.0	-7.1	-5.5	-3.5			
Burkina Faso	3.1	5.5	5.8	0.7	2.1	2.0	-8.0	-3.8	-1.2			

Source: IMF staff estimates.

¹ Movements in consumer prices are shown as annual averages. Year-end to year-end changes can be found in Tables A6 and A7 in the Statistical Appendix.

² Percent of GDP.

³ Percent. National definitions of unemployment may differ.

⁴Includes Republic of Congo and South Sudan.

⁵ Includes Benin, Botswana, Cabo Verde, the Comoros, Eswatini, Lesotho, Mauritius, Namibia, São Tomé and Príncipe, and Seychelles.

⁶ Includes Burundi, Central African Republic, Eritrea, The Gambia, Guinea, Guinea-Bissau, Liberia, Madagascar, Malawi, Mozambique, Niger, Rwanda, Sierra Leone, Togo, and Zimbabwe.

Annex Table 1.1.6. Summary of World Real per Capita Output (Annual percent change; in constant 2017 international dollars at purchasing power parity)

	Average									Proje	ctions
	2006-15	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
World	2.2	1.9	2.5	2.5	1.8	-3.9	5.6	2.6	2.3	2.7	2.3
Advanced Economies	0.9	1.3	2.1	1.8	1.4	-4.5	5.8	2.5	1.1	1.3	1.5
United States	0.8	1.1	1.8	2.4	2.1	-3.0	5.7	2.2	2.4	2.3	1.7
Euro Area ¹	0.5	1.5	2.4	1.5	1.3	-6.5	6.4	3.2	0.0	0.5	1.0
Germany	1.4	1.5	2.3	8.0	8.0	-4.2	3.6	0.6	-1.1	-0.4	0.6
France	0.5	0.5	2.0	1.3	1.7	-7.8	6.4	2.3	8.0	0.8	8.0
Italy	-0.9	1.5	1.8	1.0	0.6	-8.6	9.7	5.0	8.0	0.7	8.0
Spain	-0.1	2.8	2.7	2.0	1.1	-11.4	6.7	5.5	2.3	1.7	1.0
Japan	0.6	0.8	1.8	8.0	-0.2	-3.9	3.0	1.5	2.2	0.8	1.6
United Kingdom	0.4	1.1	2.0	8.0	1.1	-10.7	8.3	4.0	-0.1	0.6	1.1
Canada	0.6	0.0	1.8	1.3	0.4	-6.1	4.7	2.1	-1.5	-1.5	1.0
Other Advanced Economies ²	2.1	1.8	2.5	2.1	1.3	-2.2	6.0	1.8	0.7	1.5	1.7
Emerging Market and Developing Economies	4.0	2.8	3.3	3.4	2.4	-3.1	5.9	2.9	3.3	3.7	3.1
Emerging and Developing Asia	6.7	5.8	5.6	5.5	4.5	-1.4	7.0	3.9	5.2	4.7	4.4
China	9.0	6.2	6.4	6.3	5.6	2.1	8.4	3.0	5.4	4.9	4.6
India ³	5.3	7.0	5.6	5.3	2.8	-6.7	8.8	6.3	7.3	6.0	5.5
Emerging and Developing Europe	2.7	1.2	3.6	3.3	2.3	-1.8	7.4	2.0	3.6	3.4	2.5
Russia	2.4	-0.1	1.6	2.7	2.1	-2.5	6.2	-0.9	3.9	3.8	1.7
Latin America and the Caribbean	1.8	-2.0	0.3	0.2	-0.9	-7.9	6.6	3.5	1.5	1.2	1.8
Brazil	1.9	-4.0	0.7	1.1	0.6	-3.9	4.3	2.6	2.5	2.6	1.8
Mexico	0.5	0.8	0.9	1.0	-1.3	-9.1	5.4	2.9	2.3	0.6	0.5
Middle East and Central Asia	1.6	2.0	0.0	1.0	0.1	-4.3	2.7	3.3	0.1	4.8	2.1
Saudi Arabia	0.5	-1.9	0.8	5.9	1.5	-8.1	7.7	2.8	-2.7	-0.5	2.5
Sub-Saharan Africa	2.2	-1.4	0.1	0.5	0.4	-4.3	2.1	1.4	0.9	0.9	1.6
Nigeria	3.6	-4.2	-1.8	-0.7	-0.4	-4.3	1.1	0.7	0.3	0.4	0.7
South Africa	1.1	-0.8	-0.3	0.0	-1.3	-7.5	3.8	0.7	-0.8	-0.4	0.0
Memorandum											
European Union	0.9	1.7	2.8	2.0	1.8	-5.8	6.7	3.5	0.2	0.8	1.4
ASEAN-5 ⁴	3.7	3.5	4.0	3.8	3.2	-5.5	3.3	4.5	3.0	3.5	3.6
Middle East and North Africa	1.2	2.5	-0.5	0.5	-0.3	-4.5	2.9	3.3	0.0	0.2	2.2
Emerging Market and Middle-Income Economies	4.2	3.1	3.6	3.7	2.6	-2.9	6.5	3.3	3.7	3.5	3.4
Low-Income Developing Countries	3.1	0.9	2.0	2.2	2.5	-2.3	1.9	2.0	1.7	3.1	2.4

Source: IMF staff estimates.

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

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

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

⁴ASEAN-5 comprises Indonesia, Malaysia, the Philippines, Singapore, and Thailand.

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