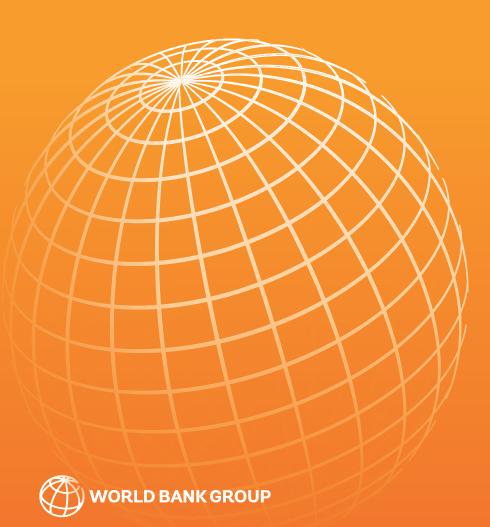
A World Bank Group Report

## **APRIL 2025**

# Commodity Markets Outlook



Apr Oct

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The cutoff date for the data used in this report was April 16, 2025.

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The report and data can be accessed at: www.worldbank.org/commodities

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## **Executive Summary**

Commodity prices are set to fall sharply this year, by about 12 percent overall, as weakening global economic growth weighs on demand. Next year, commodity prices are projected to decline by another 5 percent, reaching a six-year low. Oil prices are expected to exert substantial downward pressure on the aggregate commodity index in 2025, as a marked slowdown in global oil consumption coincides with expanding supply. The anticipated commodity price softening is broad-based, however, with more than half of the commodities in the forecast set to decrease this year, many by more than 10 percent. The latest shocks to hit commodity markets extend a so far tumultuous decade, marked by the highest level of commodity price volatility in at least half a century. Between 2020 and 2024, commodity price swings were frequent and sharp, with knock-on consequences for economic activity and inflation. In the next two years, commodity prices are expected to put downward pressure on global inflation. Risks to the commodity price projections are tilted to the downside. A sharper-than-expected slowdown in global growth—driven by worsening trade relations or a prolonged tightening of financial conditions—could further depress commodity demand, especially for industrial products. In addition, if OPEC+ fully unwinds its voluntary supply cuts, oil production will far exceed projected consumption. There are also important upside risks to commodity prices. Economic growth prospects could improve if trade barriers are rolled back in a lasting manner, leading to stronger commodity demand and higher prices. Commodity prices could otherwise rise if geopolitical tensions worsen, threatening oil and gas supplies, or if extreme weather events lead to agricultural and energy price spikes.

## The state of commodity markets

Industrial commodity prices have plunged in recent weeks, reflecting mounting concerns about the outlook for global economic growth following a sharp increase in global trade tensions. The speed of commodity price declines in early April was striking, ending a period of several months of relatively stable prices (figures 1.A and 1.B). Between April 2 and April 8, the price of Brent crude oil declined by a little more than \$12 per barrel-the 11th-worst four-day price performance since 1990. Although the fall in oil prices followed immediately from the announcement of large new tariffs, it also coincided with news of a sizable expansion of oil production by OPEC+. In the same period, copper prices dropped by 11 percent. Since then, the Brent oil price has fluctuated in the mid-sixties U.S. dollars per barrel, while copper prices have been more volatile against a backdrop of shifting trade policy announcements and expectations.

From a medium-term perspective, the current large shock is just the latest to rock commodity markets in a remarkably turbulent decade so far one that has been characterized by the highest degree of overall commodity price volatility on record (figure 1.C). Some of the shocks that have hit since 2020-the global recession caused by the COVID-19 pandemic and the swift subsequent recovery-affected commodity markets mainly via their impacts on global demand and activity. Other shocks with geopolitical origins-the Russian Federation's invasion of Ukraine, and the eruption of conflict in the Middle East-roiled commodity markets primarily due to their actual and potential implications for commodity trade and production. In addition, markets for several commodities-for example coffee, cocoa, and natural gas-have been buffeted by supply shortfalls or demand surges linked to extreme weather. Geopolitical and economic policy uncertainty has also led to a surge in gold and silver prices due to safe-haven demand. This sequence of past shocks gave rise to cycles in individual commodity prices during 2020-24 that were shorter in duration and marked by sharper price surges than was typical in earlier periods since the 1970s (figure 1.D; see Special Focus).

It remains to be seen whether this pattern of shorter, sharper cycles continues, marking the beginning of a structurally more turbulent era for commodity markets. Such an outcome is distinctly possible, given the confluence of a range

#### FIGURE 1 State of commodity markets

Commodity prices plunged in early April, as global trade tensions rapidly intensified, ending a period of relatively stable prices. This latest shock extends a remarkably volatile period for commodity markets since 2020, marking the highest decadal level of commodity price volatility in at least half a century. During this period, price booms for individual commodities have been larger than historical norms, and price slumps have been smaller. Yet, both booms and slumps have been shorter. With measures of economic and trade policy uncertainty reaching record highs this year, the risk of future commodity market disruptions is elevated. In addition, the warming climate represents another source of potential commodity market shocks.

A. Four-day commodity price changes in early April 2025

#### B. Commodity prices

Index, 100 = Jan 2022

-Agriculture

Jan-22

Jul-22

-Energy

160

140

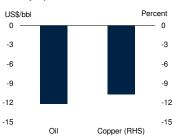
120

100 80

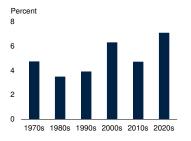
60

40

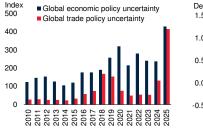
Jan-21 Jul-21



C. Decadal volatility of commodity price movements



E. Global economic and trade policy uncertainty



## D. Amplitude and duration of phases of commodity price cycles

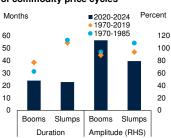
Jan-23 Aug-23

-Metals and minerals

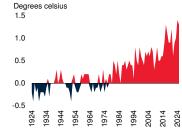
Aug-24 Mar-25

-Commodity prices

Feb-24



F. July temperature anomaly relative to the 1901-2000 average



Sources: Bloomberg; Caldara et al. (2019); NOAA National Centers for Environmental information; World Bank.

A. Bars show price change in Brent crude oil and copper prices in the four trading days between April 2 and April 8, 2025.

B. Monthly prices. Last observation is March 2025.

C. Volatility of composite commodity index by decades, measured as standard deviation of monthly price changes.

D. Phases are assigned to the period in which they commence. Average duration (in months) and amplitude (in log differences) of completed phases for the indicated periods. See Special Focus chapter for methodological details.

E. The Global Trade Policy Uncertainty (TPU) Index tracks the frequency of trade-related news articles mentioning uncertainty across major economies, with higher values signaling greater global uncertainty. The GEPU Index is a GDP-weighted average of Economic Policy Uncertainty (EPU) indexes for 21 countries, where each national EPU index measures the monthly frequency of domestic newspaper articles discussing economic policy uncertainty.

F. Temperature anomaly measures the difference between the preceding 12-month average global land and ocean temperature for each month and the long-term average temperature (1901- 2000). Last observation is January 2025.

of disruptive factors. In the near term, prospects for global economic growth are waning, partly owing to acute uncertainty about trade and broader economic policies (figure 1.E). At the same time, global oil markets may be heading for a period of excess supply, with OPEC+ holding elevated spare capacity and starting to unwind production cuts while the oil intensity of economic output-that is, the amount of oil consumed per unit of economic output-continues its longterm decline. Geopolitical tensions and the incidence of armed conflict-including in key commodity-supplying regions-also remain elevated, threatening supply disruptions. And, with global average temperatures rising, an increased prevalence of weather-related shocks is likely (figure 1.F). Against this backdrop, the risk of structurally greater commodity price volatility is clear.

## Commodity price volatility and shifting commodity trade patterns ahead

Turmoil in commodity and financial markets in April principally reflects the emerging consensus that adverse trade policy shifts and pronounced uncertainty will substantially weaken global economic growth. In addition, although many recently announced tariffs exclude trade in many industrial commodities, some do not, and agricultural commodities have generally not been exempted. The latest surge in trade-restrictive policy measures affecting commodity markets continues a recent trend. Over 2022-24, the number of new restrictions implemented on trade in energy, metals, and food commodities was more than ten times the corresponding number in the three years before the COVID-19 pandemic (figure 2.A). The potential effects on commodity markets of proliferating trade tensions fall into two broad categories:

- Broad aggregate effects relate to the general decline in commodity consumption that follows from slowing economic growth, especially affecting industrial commodities.
- Specific disaggregate effects concern the price and quantity effects of restrictions and tariffs

Although the baseline commodity price forecasts assume a significant slowdown in global economic growth, the precise magnitudes of the hit to growth from recent policy shifts, and the concomitant aggregate effects on commodity markets, remain highly uncertain. Much depends on the length of time that recently enacted trade measures stay in place, whether trading partners engage in further retaliation or escalatory actions, and the duration of the current spell of acute policy uncertainty. If trade tensions escalate or uncertainty deepens further, overall commodity demand is likely to be even weaker, and prices lower (see Risks section for further discussion). Historically, since 1990, quarters with negative per capita global economic growth have been followed by an average drawdown in the World Bank's commodity index of close to 25 percent within nine months (figure 2.B).

The disaggregate effects of trade barriers affecting specific commodities are necessarily heterogeneous. Commodity markets are highly integrated globally. If imports subject to new tariffs can be easily substituted with domestic resources or imports from non-tariffed sources through changes in trade patterns, then the overall impact on prices may be small and transitory. In cases where commodity trade is diversified and transport from alternative destinations is not prohibitively expensive, commodity trade flows are likely to be heavily rerouted, with minimal changes in global supply and demand, all else being equal. In such instances, the adoption of less-than-optimal trading arrangements implies reduced efficiency and higher economic costs, but these effects may be relatively small and diffuse.

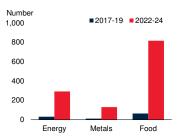
In other cases, partial trade diversion may occur, dampening but not eliminating the effects of commodity-specific tariffs on prices. This is more probable when flows of a particular commodity between affected countries are large relative to global trade in that commodity. It is then more challenging for producers subject to tariffs to find alternative buyers rapidly, and for consumers to find suppliers other than those subject to tariffs.

#### FIGURE 2 Trade tensions and commodity markets

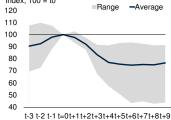
The number of new restrictive measures impacting commodity trade has surged in recent years. Nevertheless, the dominant factor shaping the commodity outlook is a potentially abrupt weakening of global economic growth, which typically results in sharp commodity price declines. Rising commodity-specific trade measures can stoke market disruptions of various kinds—for example, if tariffs are imposed on trade between large producers and consumers relative to global totals. A steepening premium for U.S. aluminum earlier this year signaled another source of volatility related to trade tensions, as buyers rushed to secure aluminum supplies prior to the imposition of tariffs.

A. New restrictive measures affecting commodities trade

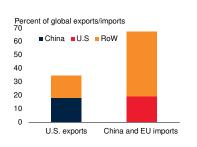
#### B. Change in commodity prices after quarters with negative per capita global growth, 1990-2025

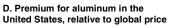


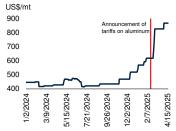
#### **global growth, 1990-2025** Index, 100 = t0



C. Trade in soybeans







Sources: Bloomberg; Global Trade Alert (database); WITS (Comtrade); World Bank. Note: RoW = rest of the world.

A. Number of new restrictive measures affecting each commodity group: energy (oil, coal, and natural gas), metals (aluminum, copper, nickel, lead, zinc, tin, cobalt, and iron ore) and food (barley, maize, wheat, and rice). Data as of March 21, 2025.

B. Dating of quarters with negative per capita global growth is based on Kose, Sugawara, and Terrones (2020). t = 0 is the month preceding a quarter when per capita global growth was negative. Blue line represents the average value for the World Bank Commodity index around each period, indexed to 100 at t = 0. Range represents the maximum and minimum monthly values from t-3 to t+9. C. Composition of U.S. exports and China and EU imports for soybeans, based on the average of 2022-23 data.

D. Futures contract for May 2025 for Aluminum Midwest premium. Last observation is April 16, 2025.

Some U.S. agricultural products could fall into this category. China's recently increased tariffs on U.S. exports have lowered demand for U.S. crops while raising demand for those from other exporters. For soybeans, China's role as a major consumer—including of U.S. soybean exports has put notable upward pressure on the prices of alternative suppliers, which, at least in the short term, will be unable to expand production to fully meet import demand previously served by the United States (figure 2.C).<sup>1</sup>

Finally, there are instances when mitigating tariff effects through trade redirection is not feasiblefor example, if levies cover imports from all trading partners. This is currently the case for the 25 percent tariffs on U.S. aluminum and steel imports implemented in March. In the case of aluminum, the short-term effect of the tariff announcement was to push global prices higher as U.S. buyers sought to build inventories before the tariffs came into effect—as evident in a steepening premium for U.S. aluminum relative to global aluminum prices (figure 2.D). More generally, however, demand for base metals is highly sensitive to prospects for global industrial activity, such that benchmark prices dropped precipitously in early April.

Until the outlook for economic growth becomes clearer, the chances of disruptions to commodity markets will remain elevated. Accordingly, while the commodity price projections reflect the central outlook for global supply and demand, the uncertainty surrounding these forecasts is higher than usual.

## Outlook

Commodity prices are forecast to fall by 12 percent in 2025 (y/y) and by a further 5 percent in 2026 (figure 3.A). If realized, these declines will end a period of elevated inflation-adjusted commodity prices in the aftermath of the COVID-19 pandemic and Russia's invasion of Ukraine. While nominal commodity prices would remain 17 percent higher than their 2015-19 average in 2026, inflation-adjusted prices would likely be slightly below the average of that period. Commodity price declines are expected to be broad-based. These projections reflect the emerging consensus that global economic growth will slow significantly this year, combined with gradually increasing commodity supplies and ample spare oil production capacity.

#### **Energy prices**

The energy price index is expected to fall by 17 percent in 2025 (y/y) and a further 6 percent in 2026. These projections assume that there are no protracted trade disruptions in energy commodities. In addition, a substantial share of the voluntary 2.2 mb/d of OPEC+ production cuts agreed in late 2023 is assumed to remain in place throughout 2025, despite the organization recently announcing a significant production increase. This reflects a judgment that the tradeoff OPEC+ will face between maintaining market share and accepting a lower oil price will prove more exacting than implied by OPEC+ oil consumption forecasts. In this context, the Brent crude oil price is projected to average \$64 per barrel (\$/bbl) in 2025—a fall of \$17/bbl from last year—and \$60/bbl in 2026 (figure 3.B).<sup>2</sup>

Global oil supply is expected to expand by about 1.2 mb/d in 2025, slightly exceeding 104 mb/d in total. The anticipated supply growth is composed of relatively small increments across multiple producers. OPEC+ oil output (excluding Brazil) is projected to increase by about 0.3 mb/d overall in 2025. Meanwhile, U.S. oil supply growth is set to slow markedly from the 0.7 mb/d added last year, with the price of the WTI benchmark likely to be generally below profitable levels for new drilling projects (figure 3.C). Elsewhere, Brazil, Canada, and Guyana are expected to add a collective 0.4 mb/d to global supply in 2025, with several smaller producers also raising oil output.

Oil consumption is forecast to rise by only 0.7 mb/d in 2025, close to half of the average annual increase in 2015-19, resulting in an oil surplus of about 0.7 mb/d. The main cause of weak oil demand growth this year is slowing economic growth, but there are also secular drivers underlying a longer-term deceleration in global oil demand, including declining potential global GDP growth and the continued decrease in the oil intensity of global economic activity. The latter

<sup>&</sup>lt;sup>1</sup>The World Bank commodity price index uses U.S. benchmark prices for several agricultural commodities, including maize and soybean. In the case of tariffs imposed on imports from the United States, this may lead the index to understate prices relative to true global averages in the near term.

<sup>&</sup>lt;sup>2</sup> The forecast implies that the price of Brent oil will average a little more than \$60/bbl over the latter three quarters of 2025. Projections from forecasters other than the World Bank depicted in figure 3.B are from March and early April.

trend is now partly driven by the increasing adoption of electric vehicles. In China, the world's largest auto market, more than 40 percent of new cars purchased in 2024 are estimated to have been battery-powered or hybrid vehicles-almost three times the share in 2021 (figure 3.D).

The World Bank natural gas price index is set to post a notable increase this year, partly reflecting spiking prices in 2025Q1, and to decline somewhat in 2026. Projected price changes vary across the main benchmarks. U.S. natural gas prices are expected to surge by 51 percent in 2025 and rise a further 3 percent in 2026. In contrast, the European benchmark is forecast to post a 6 percent increase this year and a 9 percent decrease next year. These disparate movements reflect the strengthening linkages between different markets for natural gas as the importance of LNG exports increases. Thus, the steep projected rise in U.S. gas prices partly closes the large price gap between benchmarks in the United States and elsewhere. Coal prices are envisaged to decline by 27 percent in 2025, then soften modestly in 2026. Global coal consumption is expected to pick up slightly this year, driven by power generation in emerging market and developing economies (EMDEs), although the market share of coal power plants continues to shrink as renewables gain ground.

#### Metal prices

Metals and minerals prices are projected to decline by 10 percent in 2025 (y/y) and 3 percent in 2026, despite increases in several base metals' prices in 2025Q1 (q/q). The main factor putting downward pressure on metals prices is the anticipated slowdown in global economic growth, although supply is also expected to steadily expand for several metals. Among base metals, only tin is set to post modestly higher prices in the next two years, owing to tightening supply conditions amid a limited pipeline of mining projects (figure 3.E). Other base metals are set for generally sizable price declines, reflecting anticipated weakness in global manufacturing and broader industrial activity. Iron ore prices are forecast to underperform those of other metals, falling by 13 percent this year and 7 percent in 2026. Major iron ore producers are

#### **FIGURE 3 Outlook**

Amid a global economic slowdown and escalating trade tensions, overall commodity prices are projected to decline sharply in 2025 and soften further in 2026, led by oil prices. Growth of shale oil production is anticipated to slow significantly this year, given that the WTI benchmark is expected to be below profitable levels for most new drilling. In addition to the effects of weakening economic growth, decelerating global oil demand reflects technological changes that tend to reduce the oil intensity of output, a key example being the growing adoption of electric vehicles. Prices for most base metals, which are typically sensitive to global industrial activity, are forecast to decrease considerably over the next two years. Although food and raw materials commodity prices are expected to soften this year, the anticipated decline in overall agricultural prices is modest due to a sharp projected increase in beverage prices.

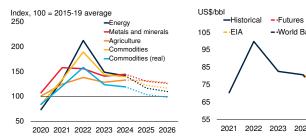
#### A. Commodity price forecasts

#### B. Oil price forecast comparisons

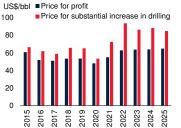
--World Bank

2022 2023 2024 2025 2026

- Consensus



C. Industry threshold levels of WTI oil price

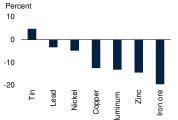


Market share and displaced oil demand Percent

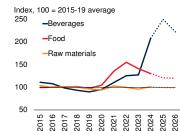
D. Sales of electric vehicles in China:



E. Projected cumulative change in base metals prices, 2025-26







Sources: Bloomberg; Consensus Forecasts; Energy Information Administration (EIA); Federal Reserve Bank of Kansas City; Ha, Kose and Ohnsorge (2023);International Energy Agency (IEA); World Bank

A.F. Dashed lines indicate forecasts.

A. Commodity prices line refers to the World Bank commodity price index. Forecast for real commodity prices assumes the long-run historical relationship between global CPI inflation and the World Bank's MUV deflator, using Consensus Economics global CPI forecast for 2025 and 2026. B. Brent crude oil forecasts for 2025 and 2026. Futures data as of April 15, 2025. Consensus data as of March, 2025 report. EIA data from Short-Term Energy Outlook, released April 10. Dashed lines indicate forecasts for 2025 - 2026.

C. Data is based on the Energy Survey for 2025Q1. Data for 2025 is based on 2025Q1.

D. Data are based on the IEA's Global EV Outlook 2024. Data for 2024 are estimated by interpolation from 2023 data and the 2025 forecast from IEA

E. Compound projected price changes in 2025 and 2026.

set to expand output and new mines are expected to come online, even as stagnant activity in China's property sector continues to weigh on demand.

In contrast, the precious metals price index, after reaching a record high in 2024, is set to climb sharply again this year before stabilizing in 2026. Gold prices are expected to remain more than 150 percent above their 2015–19 average in 2025 and 2026, sustained by strong safe-haven demand amid elevated policy uncertainty, financial volatility, and rising trade tensions, and by further increases in central bank holdings. Silver prices are also forecast to make substantial gains, coming close to record price levels as safe-haven demand outweighs the effects of subdued industrial consumption.

#### Agricultural prices

Agricultural prices are expected to edge down 1 percent in 2025 and soften 3 percent in 2026. Rising beverage prices are set to mostly offset softening food and raw materials prices this year, before all three indexes decline next year (figure 3.F). Beverage prices surged to record highs in early 2025 mainly owing to adverse weather limiting supplies of cocoa in West Africa and coffee in Brazil. All three sub-indexes of the food price index are forecast to dip in 2025, with grains falling by more than 10 percent, while the oils and meals and other foods, sub-indexes decrease by 7 percent and 5 percent, respectively. Ample rice and soybean supplies are projected to put downward pressure on both grains and oils and meals prices this year, although tighter markets for maize and wheat are expected to limit overall food price declines. Next year, the agricultural price index is pulled lower by the expectation that beverage prices will ease somewhat as coffee and cocoa supplies begin to recover, while only small changes are expected across the food price subindexes. Prices for agricultural raw materials are projected to wane about 2 percent in 2025 due to lower cotton and tobacco prices, before stabilizing in 2026.

## **Risks**

Overall, risks to the baseline commodity price projections are tilted to the downside. This primarily reflects marked downside risks to the outlook for global economic growth amid rising trade tensions, and therefore also to commodity demand. Moreover, declines in commodity prices due to weakening economic activity could be compounded by larger-than-expected increases in OPEC+ oil production. There are also some distinct upside risks to commodity prices. Geopolitical tensions could flare, putting upward pressure on prices, especially if commodity supplies are disrupted. Extreme weather events could cause price spikes in a range of agricultural and energy commodities. More positively, a lasting rollback in trade restrictions could improve growth prospects and support a recovery in commodity prices.

#### Downside risks

#### Weaker-than-expected global economic growth.

Against the current backdrop of acute policy uncertainty and deteriorating trade relations between major economies, downside risks to global growth are pronounced. If trade tensions escalate further, consumer and business confidence will likely continue to decline, while the tightening of financial conditions may intensify. Even without further worsening of trade relations, economic activity could decelerate more than expected-for example, if critical supply chains become disrupted, leading to large price shocks that erode real incomes. The effects of persistently elevated uncertainty are similarly challenging to gauge and could result in a more severe retrenchment in business investment than generally foreseen.

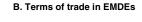
Sharper slowdown scenario: To quantify the potential effects of weaker-than-anticipated global economic growth on key commodity prices, a sharper slowdown scenario is defined by aggregating the 10th percentile of GDP forecasts from a large range of private sector forecasts across major economies. All forecasters have similar information but differ in their assumptions about future policies and the impact of current policies. Therefore, by construction, this approach should result in a scenario for global growth that assumes further worsening of trade tensions, worse-thanconsensus estimates of the effects of current tensions, or both.<sup>3</sup> To translate the additional growth slowdown into price impacts on both oil and copper—the commodities with the largest weights in each of the World Bank's energy and metals indexes—economic research is used to estimate the relationship between declining growth and oil and copper prices (Baumeister and Hamilton 2019; Baumeister, Ohnsorge, and Verduzco-Bustos 2023). <sup>4</sup>

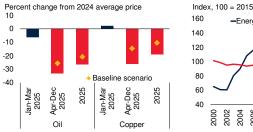
In the baseline, the Brent oil price is forecast to average \$64/bbl this year, down 21 percent from last year, while copper prices are set to average \$8,200/mt, a 10 percent drawdown from 2024. In a sharper slowdown scenario, annual average oil prices could be another 7 percent lower in 2025, relative to the baseline, averaging about \$59/bbl. This would entail an oil price decrease of more than 26 percent between 2024 and 2025 (figure 4.A). The sharper slowdown scenario also sees annual copper prices decline in 2025 to about 10 percent below the baseline forecast. This additional drop would amplify the already sizable reduction in copper prices expected for the remainder of this year in the baseline scenario, highlighting how vulnerable copper-intensive manufacturing may be to newly imposed trade restrictions. In all, average copper prices would drop by 19 percent between 2024 and 2025, even after copper prices increased in 2025Q1.

## FIGURE 4 Risks to commodity prices and implications of the commodity price forecasts

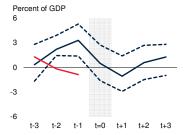
If trade tensions and related uncertainty usher in a sharper-than-expected slowdown in global growth, commodity prices could undershoot the forecasts. For example, in a downside growth scenario, oil prices might decline by 26 percent in 2025, with copper prices sinking by 19 percent. Even assuming the baseline price forecasts, the terms of trade for energy exporters will deteriorate substantially. The forecasts imply notable downward pressure on inflation from energy prices, extending the trend of recent years. With hunger concentrated in areas subject to localized economic crises, armed conflicts, and natural disasters, the moderate forecast decline in food commodity prices may be too limited to materially lessen acute food insecurity.

#### A. Oil and copper prices in a sharper global slowdown scenario

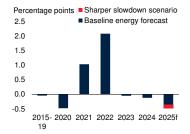




C. Primary fiscal balances in energy exporters during oil price plunges



## E. Direct contribution of energy component to global inflation

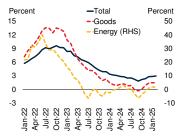


## 120

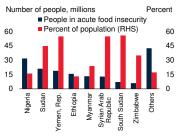


-Energy exporters -Energy importers

## D. Consumer price inflation: Total, goods, and energy



#### F. Acute food insecurity in hunger hotspots



Sources: Baumeister and Hamilton (2019); Baumeister, Ohnsorge, and Verduzco-Bustos (2023); Bloomberg; Kose et al. (2022); International Monetary Fund; Organization for Economic Cooperation and Development; United Nations Food and Agriculture Organization; World Bank; World Food Program.

A. Changes in Brent oil and copper prices in a "sharper slowdown" global growth scenario, calibrated as described in the main text. See footnotes 3 and 4 for details regarding estimation technique. Blue bars represent realized prices, red bars represent prices in the sharper slowdown scenario.

B. GDP-weighted terms of trade indexes for 31 energy-exporting and 118 energy-importing EMDEs.
C. Primary balances in up to 35 EMDE energy exporters during oil price plunges in 1991, 1998, 2001, 2008, 2014, and 2020 (for year t). Blue and dashed lines represent median and interquartile ranges.
Red line refers to 2025. Primary fiscal balance is government revenue minus non-interest expenditure.
D. Median 12-month CPI inflation by category in 29 economies. Last observation is February 2025.
E. GDP-weighted annual average direct contributions to headline CPI inflation from energy prices, based on data for up to 36 countries (26 advanced economies and 10 EMDEs, excluding China and Türkiye). 2025 is a forecast estimated with an OLS regression of energy contributions to inflation on changes in energy commodity prices and one lag of changes in energy commodity prices. Sharper slowdown scenario assumes the 2000-24 average elasticity between changes in oil prices and changes in energy commodity prices.

F. Acute food insecurity defined as Integrated Food Security Phase Classification level 3 or above. "Hunger hotspots" as defined by the UN FAO and WFP.

<sup>&</sup>lt;sup>3</sup>To calibrate the assumed decline in global economic growth, private sector forecasts are drawn from Consensus Economics. In the sharper slowdown scenario, global growth in 2025 is estimated to be about 0.4 percentage point lower. This is calculated relative to Consensus Economics mean growth forecasts as of April 14, 2025.

<sup>&</sup>lt;sup>4</sup>The method uses historical decomposition exercises in Baumeister and Hamilton (2019) and Baumeister, Ohnsorge, and Verduzco-Bustos (2024) to isolate the contribution of economic activity shocks to the evolution of oil and copper prices over time. These contributions are filtered for periods when economic activity shocks directionally coincide with changes in the growth of global economic activity to estimate time-varying elasticities of oil and copper prices with respect to global demand. The numbers reported represent the average of these time-varying elasticities.

Although the dominant effect on commodity markets of increasing trade tensions would be lower prices due to weaker economic growth, proliferating trade restrictions could also create localized price spikes and geographic price differentials for similar commodities. For example, tariffs implemented on imports of a commodity from all trading partners are likely to raise a commodity's price for consumers in the importing jurisdiction, relative to global prices. In addition, if large commodity exporters lose competitiveness due to trade restrictions, it may lead to increases in the prices of commodity exports from competing producers, as demand for alternative supplies suddenly rises. Furthermore, with tariffs between key economies recently reaching prohibitive levels, there could be increased use of non-tariff measures, such as quotas and export bans. Export bans can generate abrupt supply shocks and may quickly lead to higher global prices if the exporter in question accounts for a substantial proportion of a commodity's global production.

Increased oil supply. The baseline oil price projections incorporate weaker oil consumption than anticipated by OPEC+, consistent with a worsening outlook for global economic growth. Accordingly, the oil price forecast also assumes that OPEC+ will ultimately increase oil production by considerably less than officially scheduled for 2025. It is nonetheless possible that OPEC+ will continue to expand output even in the context of softening demand—especially after the organization surprised markets with a larger-thanexpected production increase in April. Such an approach could reflect a decision to prioritize market share at a time when producers with higher marginal costs are likely to be constrained by weaker profitability.

#### Upside risks

**Geopolitical tensions.** Geopolitical risks remain elevated amid ongoing armed conflicts in Europe and the Middle East. Surges in geopolitical tensions last year did not ultimately result in conflict-related disruptions to the supply of energy or other essential commodities. Still, this risk remains, as illustrated in 2022 by the dramatic effects of Russia's invasion of Ukraine. Beyond armed conflicts, other geopolitical developments could adversely impact commodity supplies. For example, increased sanctions on oil producers could reduce oil exports, the prospect of which briefly pushed Brent prices above \$80/bbl in early 2025. The sharp ascent of gold prices—once again breaking records this year—offers a market-based barometer of the extent to which geopolitical concerns remain highly salient to investors.

Extreme weather events. The average global surface air temperature in January 2025 was 1.75 degrees Celsius above pre-industrial levels, marking the eighteenth month out of nineteen when this temperature anomaly exceeded 1.5 degrees Celsius. Higher average temperatures are linked to more frequent and longer heat waves. In the United States, for example, the average number of heat waves per year has increased from two in the 1960s to more than six in the 2020s, while their average duration has risen from three days to more than four. Increasingly frequent and lengthy heat waves and other weather extremes increase uncertainty about commodity production and consumption, and can exert upward pressure on the prices of several commodities. In the energy sector, heat waves and droughts curtail hydropower output, increasing demand for natural gas and coal, while floods can reduce coal production by compromising access to mines. Heat waves can raise the prices of agricultural commodities by reducing crop yields. At the other extreme, periods of unusually low temperatures, such as those occurring in January 2024 and 2025 in North America, drive up consumption of natural gas for heating while constraining oil and natural gas production.

**Mitigation of global trade tensions.** The baseline commodity price forecasts assume materially weaker global economic growth than last year, consistent with broadly deteriorating expectations for growth in major economies. However, to a large extent, such forecasts reflect negative expectations about the effects of recent trade policy shifts on economic activity, which could be partially reversed if policies become more supportive of growth and trade tensions ease. For example, if tariffs recently enacted between major economies are significantly decreased in a lasting

9

manner or rolled back altogether, growth prospects could improve markedly, aided by a rapid easing of global financial conditions. In that case, commodity prices would likely strengthen to above the forecast levels, anticipating stronger demand.

## **Broader implications**

**Growth in energy-exporting EMDEs.** The commodity price forecasts reflect an expected decline in global economic growth, which is also likely to entail a substantial slowdown in global trade and investment. For many emerging market and developing economies (EMDEs), this will weaken external demand, weighing on overall output growth. For EMDE energy exporters—economies that rely heavily on energy exports for fiscal and export revenues—external headwinds to growth may be exacerbated by sharp deteriorations in terms of trade, which tend to be far more volatile than the terms of trade of energy importers (figure 4.B).

Such commodity terms-of-trade shocks hamper growth through several channels. First, adverse income effects weigh on domestic demand, as less income is transferred in aggregate from commodity importers to commodity exporters. Second, incentives to invest in future commodity production decline. Third, with export-derived fiscal revenues falling, fiscal space diminishes, which can lead to procyclical fiscal tightening-particularly in countries where fiscal space is already limited or where fiscal breakeven energy prices are well above spot prices. This channel could prove important in the coming years, given primary fiscal balances in energy exporters are weaker than prior to previous oil price plunges (figure 4.C). Finally, depending somewhat on exchange rate arrangements and corporate and government balance sheets, financial conditions may tighten due to a combination of pressure on the foreign exchange value of local currencies and higher perceived default risks. The latter three channels may be muted in energy exporters with low marginal production costs and strong fiscal and financial buffers, but could intensify a downturn in growth among producers with relatively high marginal costs and greater financial vulnerabilities.

**Inflation.** Consumer price inflation has trended downward globally over the last two years, but the pace of decline has slowed in the last six months. Indeed, global median consumer price inflation was slightly higher in February 2025 than in August 2024, with services inflation proving sticky in many economies and goods inflation moving into positive territory. Commodity prices have been a key source of disinflation since 2022, with decreases in energy prices especially weighing on headline inflation—directly through consumer energy costs and indirectly through their impact on goods prices (figure 4.D).

The commodity price forecasts suggest that energy prices should impart further downward pressure on global inflation over the coming year. Oil and coal prices are set to remain considerably below last year's levels, while natural gas prices are expected to soften over the remainder of 2025, after having spiked in 2025Q1. Together, the direct effects of energy commodity price movements could reduce global consumer price inflation by about 0.35 percentage point in 2025 (figure 4.E). In the sharper slowdown scenario discussed above, energy prices could directly knock half a percentage point off global inflation this year-the same size of the negative contribution in 2020. Declines in food commodity prices this year should also help reduce overall price pressures, especially in countries where rice is a key staple-primarily in Asia and Africa. The commodity-derived disinflationary impulse is likely to fade over 2026, as commodity prices start to stabilize at lower levels.

**Food insecurity.** Food commodity prices are set to soften somewhat this year, which should help alleviate food insecurity situations at the margin. That said, the decline in food prices projected for 2025-26 is likely too small to substantially curb instances of acute food insecurity, especially given that lower prices are attributable in part to weaker income growth prospects. The link between global food prices and global hunger is attenuated by the fact that acute food insecurity often reflects localized crises such as armed conflicts, natural disasters, and economic downturns, often in places with limited integration into global markets. The amelioration of hunger in such settings is likely to require either marked improvements in local conditions or large, supply-driven declines in global prices.

Against this backdrop, the United Nations estimates that the number of people facing crisis or worse levels of food insecurity in hunger hotspots-countries where already elevated food insecurity is likely to worsen in the coming months-is slightly under 170 million, up from 158 million a year earlier (WFP and FAO 2023 and 2024). Three-quarters of these people are in just eight locations, with the primary driver of hunger remaining armed conflict. As a percentage of the population, severe food insecurity is most pervasive in Gaza, Haiti, the Republic of Yemen, South Sudan, Sudan, and the Syrian Arab Republic (figure 4.F). In this context, global humanitarian assistance is estimated to have declined for a second consecutive year in the twelve months to August 2024.

### **Special Focus**

## Post-Pandemic Commodity Cycles: A New Era?

The Special Focus analyzes commodity price cycles over the past 55 years, evaluating changes in behavior over time, and comparing post-pandemic commodity price cycles with earlier patterns. The analysis reveals three main findings. First, between 1970 and 2024, price slumps have lasted significantly longer than booms (52 vs. 38 months on average), while the amplitude of upswings has been similar to that of downswings. Across commodity types, prices of industrial commodities have been closely synchronized, reflecting their common sensitivity to macroeconomic conditions. Meanwhile, agricultural commodity price movements have tended to be driven by localized supply shocks.

Second, the analysis highlights some shifts in the characteristics of cycles. During 1970–85, cycles were relatively short but also relatively pronounced in amplitude, dominated by commodity supply shocks. During 1986–2001, longer, less pronounced cycles emerged, perhaps as a result of technological advances and market liberalization. Since 2002, commodity prices have experienced renewed swings. Cycles became shorter, with price movements reflecting a mix of global macroeconomic shocks—including rapid EMDE growth and international integration, followed by the global financial crisis—and more commodity-specific shocks, such as the oil price collapse in the mid-2010s.

Third, the post-pandemic period has been marked by record commodity price volatility, reflecting the impact of overlapping global and commodityspecific shocks, including the pandemic and geopolitical conflicts. In this context, commodity price cycles have become more frequent and increasingly asymmetric, with phase durations nearly halving relative to their long-term average, booms becoming sharper, and slumps moderating. Among other factors, these developments likely reflect the influence of structural trends that are increasing the likelihood of commodity price shocks, including the energy transition, climaterelated supply risks, and rising economic fragmentation. Together, these forces may be reshaping cycle dynamics by shifting demand preferences, introducing new supply frictions, and amplifying price swings.

#### TABLE 1 World Bank Commodity Price Forecasts

	-					Percent c from previc	•	Differences in October 2024	
Commodity	Unit	2023	2024	2025f	2026f	2025f	2026f	2025f	2026f
INDEXES (in nominal U.S. dollars	s, 2010 = 100)								
Total 1		108.0	105.1	92.1	87.7	-12.4	-4.8	-6.9	-9.6
Energy <sup>2</sup>		106.9	101.5	83.8	78.9	-17.4	-5.9	-10.7	-13.6
Non-Energy		110.2	112.5	108.8	105.4	-3.3	-3.1	0.6	-1.5
Agriculture		110.9	115.0	114.0	110.3	-0.9	-3.2	5.6	2.4
Beverages		107.8	176.4	211.1	187.9	19.7	-11.0	56.1	37.1
Food		125.4	115.8	107.7	106.8	-7.0	-0.9	-2.5	-3.0
Oils and Meals		118.9	106.9	99.6	100.0	-6.8	0.3	-1.6	-2.0
Grains		133.0	112.9	101.0	99.9	-10.5	-1.1	-6.6	-8.0
Other food		127.2	130.4	124.3	121.9	-4.6	-2.0	-0.1	0.0
Raw Materials		77.1	81.6	79.8	79.4	-2.2	-0.6	-0.6	-2.0
Timber		79.1	79.6	79.3	81.0	-0.4	2.2	-2.6	-2.2
Other Raw Materials		74.9	83.9	80.5	77.7	-4.0	-3.5	1.6	-1.7
Fertilizers		153.5	117.6	126.1	124.8	7.2	-1.1	10.9	7.7
Metals and Minerals <sup>3</sup>		104.0	106.7	96.2	93.3	-9.8	-3.1	-10.6	-10.4
Base Metals <sup>4</sup>		109.0	114.1	103.5	100.9	-9.3	-2.5	-13.0	-12.6
Precious Metals ⁵		147.3	180.2	239.6	237.4	33.0	-0.9	61.6	63.1
PRICES (in nominal U.S. dollars)									
Energy									
Coal, Australia	\$/mt	172.8	136.1	100.0	95.0	-26.5	-5.0	-20.0	-10.0
Crude oil, Brent	\$/bbl	82.6	80.7	64.0	60.0	-20.7	-6.3	-9.0	-12.0
Natural gas, Europe	\$/mmbtu	13.1	11.0	11.6	10.6	5.8	-8.6	0.1	0.1
Natural gas, U.S.	\$/mmbtu	2.5	2.2	3.3	3.4	50.6	3.0	-0.1	-0.3
Liquefied natural gas, Japan	\$/mmbtu	14.4	12.8	12.5	11.5	-2.7	-8.0	-1.0	-1.0
Non-Energy									
Agriculture									
Beverages	<b>•</b> "						10 -		
Cocoa	\$/kg	3.28	7.33	8.00	7.00	9.1	-12.5	2.00	1.10
Coffee, Arabica	\$/kg	4.54	5.62	8.50	7.25	51.2	-14.7	3.50	2.50
Coffee, Robusta	\$/kg	2.63	4.41	5.50	5.00	24.6	-9.1	1.30	1.10
Tea, average	\$/kg	2.74	3.04	2.50	2.80	-17.8	12.0	-0.70	-0.40
Food									
Oils and Meals									
Coconut oil	\$/mt	1,075	1,519	1,800	1,750	18.5	-2.8	250	350
Groundnut oil	\$/mt	2,035	1,796	1,685	1,670	-6.2	-0.9	-65	-30
Palm oil	\$/mt	886	963	1,020	1,040	5.9	2.0	160	190
Soybean meal	\$/mt	541	442	370	369	-16.3	-0.3	-65	-75
Soybean oil	\$/mt	1,119	1,022	990	967	-3.1	-2.3	-30	-86
Soybeans	\$/mt	598	462	382	386	-17.4	1.0	-48	-54
Grains									
Barley	\$/mt			180	184		2.2	-5	0
Maize	\$/mt	253	191	187	183	-1.9	-2.1	2	-5
Rice, Thailand, 5%	\$/mt	554	588	421	422	-28.5	0.2	-109	-96
Wheat, U.S., HRW	\$/mt	340	269	263	260	-2.1	-1.1	-2	-8

#### TABLE 1 World Bank Commodity Price Forecasts (continued)

						Percent change from previous year		Differences in levels from October 2024 projections	
Commodity	Unit	2023	2024	2025f	2026f	2025f	2026f	2025f	2026f
PRICES (in nominal U.S. dollars)									
Non-Energy									
Other Food									
Bananas, U.S.	\$/kg	1.60	1.23	1.23	1.20	-0.3	-2.4	-0.10	0.00
Beef	\$/kg	4.90	5.93	5.90	5.91	-0.5	0.2	0.00	0.00
Chicken	\$/kg	1.53	1.46	1.40	1.38	-4.3	-1.4	0.00	0.00
Oranges	\$/kg	1.57	2.26	1.85	1.75	-18.1	-5.4	0.20	0.20
Shrimp	\$/kg	10.19		9.00	9.50		5.6	0.00	0.00
Sugar, World	\$/kg	0.52	0.45	0.44	0.43	-1.9	-2.3	-0.10	-0.10
Raw Materials									
Timber									
Logs, Africa	\$/cum	379	379	390	395	3.0	1.3	0	0
Logs, S.E. Asia	\$/cum	212	197	200	210	1.7	5.0	-10	-5
Sawnwood, S.E. Asia	\$/cum	678	697	690	700	-0.9	1.4	-20	-20
Other Raw Materials									
Cotton	\$/kg	2.09	1.91	1.65	1.70	-13.7	3.0	-0.30	-0.40
Rubber, TSR20	\$/kg	1.38	1.75	2.00	1.90	14.0	-5.0	0.20	0.00
Tobacco	\$/mt	5,016	5,899	5,300	5,000	-10.2	-5.7	400	200
Fertilizers									
DAP	\$/mt	550	564	600	550	6.4	-8.3	90	45
Phosphate rock	\$/mt	322	153	155	160	1.6	3.2	-5	-5
Potassium chloride	\$/mt	383	295	310	315	5.0	1.6	20	20
TSP	\$/mt	480	475	470	465	-1.0	-1.1	45	40
Urea, E. Europe	\$/mt	358	338	390	375	15.3	-3.8	55	35
Metals and Minerals									
Aluminum	\$/mt	2,256	2,419	2,175	2,100	-10.1	-3.4	-325	-500
Copper	\$/mt	8,490	9,142	8,200	8,000	-10.3	-2.4	-1100	-500
Iron ore	\$/dmt	120.6	109.4	95.0	88.0	-13.2	-7.4	0	-2
Lead	\$/mt	2,136	2,069	2,030	2,000	-1.9	-1.5	-20	-100
Nickel	\$/mt	21,521	16,814	15,800	16,000	-6.0	1.3	-1700	-2500
Tin	\$/mt	25,938	30,066	31,000	31,500	3.1	1.6	-1000	-2500
Zinc	\$/mt	2,653	2,776	2,500	2,375	-9.9	-5.0	-100	-125
Precious Metals									
Gold	\$/toz	1,943	2,388	3,250	3,200	36.1	-1.5	925	950
Silver	\$/toz	23.4	28.3	33.0	34.0	16.7	3.0	3.0	3.0
Platinum	\$/toz	966	955	1,050	1,075	9.9	2.4	0	-25

Source: World Bank.

1. The World Bank's commodity total price index is composed of energy and non-energy prices (excluding precious metals), weighted by their share in 2002-04 exports. The energy index's share in the overall index is 67 percent.

2. Energy price index includes coal (Australia), crude oil (Brent), and natural gas (Europe, Japan, U.S.).

3. Base metals plus iron ore.

4. Includes aluminum, copper, lead, nickel, tin, and zinc.

5. Precious metals are not part of the non-energy index.

f = forecast.



# Commodity Market Developments and Outlook

### Energy

Heightened concerns about a substantial global economic slowdown had a significant impact on energy markets in April. In particular, the price of Brent oil fell by \$12 per barrel over a four-day period in early April, reflecting a sudden deterioration in the demand outlook amid rising trade tensions, which was compounded by the announcement of a largerthan-expected increase in oil production by OPEC+. Prior to these developments, overall energy prices had increased in 2025Q1 (q/q), driven by rising natural gas prices, while oil prices fluctuated, and coal prices declined. The World Bank's energy price index is projected to decrease by 17 percent in 2025 (y/y) and a further 6 percent in 2026. This forecast assumes a slowdown in global economic growth due to rising trade tensions and elevated policy uncertainty, with consequent reductions in global energy demand growth. The price of Brent oil is forecast to average \$64/bbl (per barrel) in 2025, down from \$81/bbl in 2024, and to then decrease further to \$60/bbl in 2026. European natural gas prices are expected to increase by 6 percent in 2025, before falling back by 9 percent in 2026. U.S. natural gas prices are set to climb sharply in 2025 and edge up further in 2026, with expanding exports supporting prices. Coal prices are projected to fall throughout the forecast period. Overall, risks to energy prices are tilted to the downside. Key risks include weaker-than-expected global growth should trade tensions increase further. In addition, given the significant uncertainty surrounding both OPEC+ oil production and global coal output, energy supplies could exceed projections, leading to lower prices. Conversely, risks that could raise energy prices include intensifying geopolitical tensions, increased demand for LNG and coal, and supply issues caused by extreme weather events.

#### Oil

#### **Recent developments**

Escalating concerns about global economic growth saw oil prices fall sharply in early April to below \$63 per barrel (\$/bbl), the lowest level since April 2021 (figure 5.A). The price slump started with the April 2 announcement of large trade tariffs by the United States. This was associated with a \$12/

#### FIGURE 5 Oil market: Global price and market developments

Brent crude oil plunged by more than \$12 per barrel (\$/bbl) in the four trading days following April 2. This marked the 11th-worst four-trading-day price performance since 1990 and was accompanied by a 50 percent surge in anticipated oil price volatility. Earlier, Brent prices had climbed about 10 percent in January after new U.S. sanctions on vessels linked to the Russian Federation and the Islamic Republic of Iran. Subsequently, prices fell back as concerns over global growth mounted, driving the Urals price below the \$60/bbl cap stipulated by the G7-led Price Cap Coalition. In March and April, OPEC+ announced, first the reversal of part of its 2.2 mb/d voluntary cuts, and later an unexpectedly large production increase from May of about 0.4 mb/d.

#### A. Oil prices and key events, August 2024-April 2025



C. Oil price volatility and key events

Jan-AprEscalation of

- Fast

U.S. trac

tariffs an

OPEC-supply

Jan-25

25

Apr-

Oct-24

Start of conflict in

Middle East

Index

60 55 50

Jan-23

33 Jul-23 33 -24 24 Jul-24

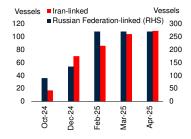
65 U.S. bank failures

#### B. Historical four-trading-day changes in Brent price per barrel

~=8



D. U.S.-sanctioned vessels



#### E. Brent vs. Urals prices

F. Timeline of OPEC+ 2.2 mb/d production cuts, initially announced in November 2023



Sources: Bloomberg; International Energy Agency (IEA); OPEC; U.S. Department of the Treasury; World Bank

Note: bbl = barrel.

A. Daily Brent prices. Last observation is April 16, 2025. Red lines indicate significant events, while the blue line marks the U.S. Presidential inauguration.

B. The bars indicate the percentage of four-trading day price changes falling in each range in the horizontal axis. The four-trading-day period ending on April 8, 2025 is the 11th-worst performance among the non-overlapping four-trading-day periods computed from daily Brent prices since June 24. 1988. Last observation is April 9, 2025.

C. The crude oil volatility index measures expected 30-day volatility based on options spanning a wide range of strike prices. Last observation is April 16, 2025.

D. Number of sanctioned vessels linked to the Russian Federation and the Islamic Republic of Iran The number of sanctioned vessels reflects new sanctions since October 2024.

E. Data for Russian Urals FOB Primorsk prices from IEA's Oil Market Reports. Last observation is March 2025.

F. Dashed lines indicate the announcement of a new cut extension. Red lines indicate the first day the cut extension applies, with the arrows showing its duration. Green lines show the reversal of supply cuts in April and May 2025.

bbl decrease in the course of four trading days, the 11th-worst four-trading-day price performance since 1990 (figure 5.B). Additionally, market volatility surged (figure 5.C). Concerns about the scale of negative effects on global economic growth mounted, as some countries announced or considered retaliatory action. Thereafter, the Brent price recovered somewhat amid further trade policy announcements and increased market focus on potential risks to exports from the Islamic Republic of Iran.

Demand-driven concerns arising from rising trade tensions were compounded by OPEC+ announcing on April 3 that oil supply from the group would increase by about 0.4 million barrels per day (mb/d) on May 1, three times the previouslyannounced increase. Since November 2023, 2.2 mb/d of OPEC+ voluntary cuts had in effect put a floor under the oil price, while also opening up extensive spare production capacity. The level of potential oil supply being kept off the market also helped to keep prices within a fairly narrow range, only breached over the last 18 months at moments of especially heightened geopolitical tensions. Nonetheless, some OPEC+ members also overshot production quotas, leading to plans for compensatory member-specific production cuts. The unexpected scale of the overall production increase announced by OPEC+ in April was thus seen partly as a signal that greater internal cohesion and discipline within the group would be required to re-establish a price floor. However, it also prompted doubts about whether supply management efforts could successfully support oil prices in the face of weakening economic growth.

Before the latest developments, oil markets had been influenced by several largely offsetting forces over the preceding two quarters. Prominent drivers of the oil price included economic data signaling slowing demand, increasing concerns about policy uncertainty and potential tariffs, shifting expectations about sanctions, and about OPEC+ policy interventions. Prices slumped in late 2024Q3 due to worries about economic growth in key economies but were subsequently lifted by increasing geopolitical risks related to conflict in the Middle East. Relative stability gave way in early January when the introduction of new sanctions on vessels linked to the Russian Federation and the Islamic Republic of Iran briefly lifted prices back above \$80/bbl (figure 5.D). Over the remainder of 2025Q1, concerns about slowing global growth, elevated policy uncertainty, and rising trade tensions put downward pressure on oil prices.

Although the Brent price had declined to \$70/bbl by early March, the net impact of these different factors resulted in a small increase of \$1/bbl in 2025Q1 (q/q), partially reversing a \$5/bbl q/q decrease in 2024Q4. Downward pressure on Brent helped bring Russia's Urals Primorsk average price in February and March below the \$60/bbl price cap stipulated by the G7-led Price Cap Coalition (figure 5.E). OPEC+ supply management also contributed to softening oil prices late in 2025Q1. After being postponed five times since June 2024, the consortium unexpectedly announced in early March that a gradual reversal of the 2.2 mb/d voluntary production cuts would begin on April 1 (figure 5.F). Per the original OPEC+ schedule, revised on April 3, this would have resulted in incremental monthly increases of about 135,000 barrels per day until September 2026.

Global oil demand increased by 1.2 mb/d (1.2 percent) in 2025Q1 compared with 1.1 percent in 2024Q4. Oil demand in China edged up by 0.2 mb/d (1.4 percent) in 2025Q1 from 1.0 percent in 2024Q4, with demand in advanced economies also picking up by 0.4 mb/d (0.9 percent), from 0.3 percent (figure 6.A). Over the course of 2024, oil consumption growth slowed in China, Europe and Central Asia (ECA), and Latin America and the Caribbean (LAC), but accelerated in East Asia and the Pacific (EAP) excluding China, the Middle East and North Africa (MNA), and South Asia (SAR). Consumption fell in Sub-Saharan Africa (SSA), while it was flat in advanced economies (figure 6.B). The deceleration of China's oil demand in 2024 was due in part to increasing penetration of electric vehicles (EVs). More than 40 percent of new cars purchased in China in 2024 are estimated to be EVs, with a resulting oil demand reduction of about 0.45 mb/d (figure 6.C).

Global oil supply increased by 0.2 mb/d in 2024Q4 (y/y) and by 1.3 mb/d in 2025Q1. However, supply in 2025Q1 decreased by 0.3 percent compared to the previous quarter, as freezing temperatures in January disrupted production in Canada and the United States for the second year in a row. In 2024, oil supply increased in advanced economies and LAC, outweighing a decrease in MNA (figure 6.D). Owing to OPEC+ production cuts, oil supply from the group decreased 0.8 mb/d in 2024 (y/y)while non-OPEC+ production rose by 1.5 mb/d. With only moderate changes in supply from OPEC+ members in the last two quarters, OPEC+ spare capacity has been relatively steady, remaining elevated above 6 mb/d (figure 6.E). Oil production in Russia was also broadly stable in 2024Q4 and 2025Q1, as exports to China, India, and Türkiye continued largely unabated.

OPEC+ supply management helped improve the oil market balance in 2024, with supply exceeding demand by just 0.2 mb/d. However, in 2025Q1 a surplus of 0.7 mb/d emerged, which is expected to sustain through 2025 (figure 6.F). OECD countries' industry stocks decreased by 0.6 mb/d in 2024Q4, and this drawdown continued into February 2025. Refilling of the U.S. Strategic Petroleum Reserve paused briefly in February 2025 but bounced back in March.

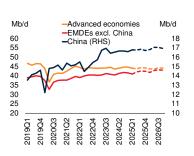
#### Outlook

The Brent oil price is projected to average \$64/bbl in 2025—almost \$17 lower than in 2024—before declining further to \$60/bbl in 2026 (figure 7.A). This projection is predicated on slowing global economic growth amid rising trade tensions and elevated uncertainty, with a consequent slowdown in global oil demand growth to about 0.7 mb/d in both 2025 and 2026. Global oil supply is expected to increase by 1.2 mb/d in 2025-almost double the rise seen in 2024-reaching a new all-time high of 104.2 mb/d, before going up by a further 1.0 mb/d in 2026. The baseline forecast also assumes that there will be no additional disruptions from geopolitical events and that OPEC+ achieves internal cohesion, with members abiding by agreed quotas. Following several years when energy price swings have substantially contributed

#### FIGURE 6 Oil market: Demand and supply developments

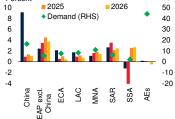
Oil demand growth lost momentum in 2024 owing to a slowdown in China—partly due to the increasing penetration of electric vehicles—and despite faster growth in East Asia and Pacific (excluding China), South Asia, and the Middle East and North Africa. Oil production rose in 2024 in advanced economies and in Latin America and the Caribbean. The oil market remained tight overall in 2024, as spare capacity withheld from the market remained elevated. In 2025 and 2026, a surplus is expected, as slowing economic activity weighs on oil demand.

A. Oil demand



# demand between 2023 and 2026, by region Percent 2023 2024 Mb/d 10 2025 2026 50

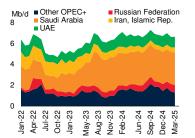
B. Oil demand in 2024, and changes in



C. Sales of electric vehicles in China: Market share and displaced oil demand



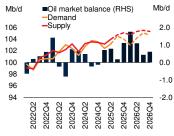
#### E. OPEC+ spare capacity



D. Oil supply in 2024, and changes in supply between 2023 and 2025, by region



#### F. Oil market balance



Sources: International Energy Agency (IEA); World Bank.

Note: AEs = advanced economies; EAP = East Asia and Pacific; EMDEs = emerging market and developing economies; EV = electric vehicle; ECA = Europe and Central Asia; LAC = Latin America and the Caribbean; Mb/d = million barrels per day; MNA = Middle East and North Africa; SAR = South Asia; SSA = Sub-Saharan Africa; UAE = United Arab Emirates.

A. Dashed lines indicate IEA forecasts for 2025Q2 to 2026Q4.

B. Bars show the percent year-on-year change in oil demand. Green diamonds show demand for oil in millions of barrels per day (mb/d) for 2024. Data for 2025 and 2026 are IEA forecasts.

C. Data are based on the IEA's *Global EV Outlook 2024*. Data for 2024 are estimated by interpolation from 2023 data and the 2025 forecast from IEA.

D. Bars show year-on-year changes in oil supply. Green diamonds show oil supply in 2024. Data for 2025 are World Bank projections, drawing on IEA data.

E. "Other OPEC +" includes Algeria, Azerbaijan, Bahrain, Brunei, Republic of Congo, Equatorial Guinea, Gabon, Iraq, Kazakhstan, Kuwait, Libya, Malaysia, Mexico, Nigeria, Oman, South Sudan, Sudan, and República Bolivariana de Venezuela. Values for Islamic Republic of Iran, Libya, Russian Federation, and República Bolivariana de Venezuela are computed from data on sustainable capacity and actual supply in IEA *Oil Market Reports*. Values for other countries are from IEA *Oil Market Reports*.

F. The oil market balance is the difference between supply and demand in each quarter. Data are from IEA Oil Market Report, April 2025 edition. Dashed lines indicate IEA forecasts for 2025Q2 to 2026Q4.

#### FIGURE 7 Oil market: Outlook and risks

The Brent crude oil price (annual average) is forecast to fall from \$81/bbl in 2024 to \$64/bbl in 2025 and \$60/bbl in 2026. This implies that the West Texas Intermediate (WTI) oil price will be close to the threshold required by the average U.S. oil shale producer to lock in a profit. Upside risks to this forecast include supply curtailments due to sanctions. On the downside, a sharper slowdown in global economic growth is a substantial risk, especially if it affects countries that are expected to drive oil demand growth. Whether OPEC+ can significantly reduce spare capacity without triggering sustained price declines will depend on the level of oil consumption, for which forecasts vary considerably.

B. Global consumer price inflation

D. Industry threshold levels of WTI oil

Price for substantial increase in drilling

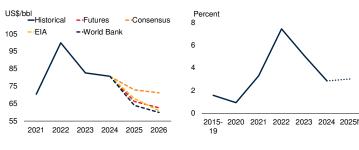
2022

202

2021

Price for profit

#### A. Price forecast comparisons



price

100

80

60

40

20

2016

201

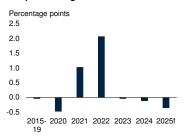
2018 2019 2020

2017

F. Oil demand forecasts

US\$/bbl

C. Direct contribution of energy component to global inflation



E. Oil demand growth



Sources: Bloomberg; Consensus Forecasts; Federal Reserve Bank of Kansas City; Haver Analytics; IMF; International Energy Agency (IEA); OECD; OPEC; U.S. Energy Information Administration (EIA); World Bank.

Note: AEs = advanced economies; ASEAN = Association of Southeast Asian Nations; bbl = barrel; Mb/d = million barrels per day; WTI = West Texas Intermediate.

A. Futures as of April 15, 2025. Consensus data are from the March 2025 report. EIA data are from the April 2025 *Short-Term Energy Outlook*. Dashed lines indicate forecasts.

B.C. Historical data reflect GDP-weighted annual average CPI inflation (headline level and contribution from energy prices), based on data for up to 37 countries (27 AEs and 10 EMDEs, excluding China and Türkiye).

B. 2025 value is a GDP-weighted average of the Consensus Economics forecast from the April 2025 survey.

C. 2025 forecast is estimated with an OLS regression of annual energy contributions to inflation on annual energy commodity price changes and its first lag.

D. Data from the 2025Q1 Energy Survey published by the Federal Reserve Bank of Kansas City. 2025 bar indicates data for 2025Q1.

E. Bars indicate the average change in annual oil demand for the selected periods. Data sourced from IEA's *Oil Market Report*, April 2025 edition. 2025 and 2026 are projections. ASEAN includes the following members: Brunei, Cambodia, Indonesia, Lao People's Democratic Republic, Malaysia, Myanmar, the Philippines, Singapore, Thailand, and Viet Nam.

F. Data sourced from OPEC's *World Oil Outlook 2050* report. IEA data are from April 2025 *Oil Market Report* for 2023, 2024, 2025, and 2026, and from *Oil 2024* report for the remaining years.

to large changes in inflation, the anticipated downtrend in oil prices is likely to dampen broader price pressures over the forecast period. The direct effects of falling energy prices could take about 0.35 percentage points from global consumer price inflation in 2025 (figures 7.B and 7.C).

Contributions to oil supply growth this year are expected from both OPEC+ and non-OPEC+ producers. In 2025, Brazil, Canada, and Guyana are between them expected to boost production by about 0.4 mb/d. Production increases among several other relatively small producers are also envisaged to proceed as planned, while U.S. shale oil supply growth is expected to slow sharply from the 0.7 mb/d rise recorded in 2024. This is because the baseline price forecast implies the U.S. West Texas Intermediate (WTI) price will be at considerably lower levels than those required for the average shale oil producer to break even, even before factoring in rising costs of materials, especially steel (figure 7.D). Supply from OPEC+ (excluding Brazil) is projected to rise by about 0.3 mb/d in 2025.

Oil consumption is expected to rise by only 0.7 mb/d in both 2025 and 2026, about half the average annual increase in 2015-19. This reflects an expected global economic slowdown, in addition to the continued decline in the oil intensity of global economic activity. Consumption in China in particular, but also in India, Indonesia, and Viet Nam, is expected to be adversely affected by the economic fallout from rising trade tensions. In 2026, oil consumption is expected to grow modestly in China (rising just 0.2 mb/d) and at a more solid pace in other EMDEs (0.7 mb/d), while demand in advanced economies is expected to shrink by 0.2 mb/d. The adoption of EVs will further dampen the long-run growth of global oil demand, especially in China.

#### Risks

Risks to the oil price forecast are tilted to the downside. A significant risk is a sharper-thananticipated slowdown in global growth, potentially triggered by persistently high policy uncertainty or a further escalation of trade tensions. Other downside risks include greater-than-expected oil output from OPEC+. Conversely, higher prices could result from tightening oil sanctions. Oil prices could also rise if policy steps to sustainably ameliorate trade tensions result in better-thanexpected global demand.

#### Upside risks

Geopolitical developments and sanctions. The possibility of additional sanctions on oil from the Islamic Republic of Iran-potentially reducing Iranian exports to 0.1 mb/d or lower, as recently suggested by the U.S. administration-implies a 1.5 mb/d supply reduction compared to exports in December 2024. Such a reduction could tip the oil market into deficit, subject to the extent of any offsetting response from other OPEC+ producers. In addition, tensions in the Middle East remain high, and the possibility of conflictdriven oil supply disruptions-a key risk affecting oil markets in 2024-persists. Furthermore, developments relating to the invasion of Ukraine could also raise oil prices-for example, through the imposition of additional sanctions on Russia.

Lasting reduction in trade tensions. Future policy shifts that herald a lasting reduction in trade tensions—such as a rollback in tariffs perceived as permanent—could result in stronger global economic growth than assumed in the baseline. Under this scenario, demand for oil would be stronger, especially in export-oriented economies and the United States. As a result, oil prices would likely be higher than forecast, especially in the short term, before supply adjusts in response to both higher demand and elevated international prices.

#### Downside risks

**Deeper slowdown in global economic growth.** The oil price forecast assumes that global economic growth will slow in 2025, amid heightened policy uncertainty alongside rising trade tensions. Additional downside risks to global economic growth remain. Trade tensions could escalate further, and consumer and business confidence could erode more severely, leading headwinds to economic activity to build more than generally expected. Should these risks

Greater-than-expected OPEC+ oil output. The scale of production increases officially scheduled by OPEC+ this year substantially exceeds the amount assumed in the baseline forecast. This discrepancy likely reflects the group's forecast that oil consumption will surge ahead. If global oil demand peaks at a volume only marginally higher than its current level—as in the baseline assumptions, and closer to the International Energy Agency's longer-term projections-it is unlikely that 2.2 mb/d can be returned to the market over the next two years without substantial additional downward pressure on oil prices (figure 7.F). It is also possible that OPEC+ could elect to return more oil to the market, even in the absence of stronger consumption growth. This could be driven by a desire to regain market share, particularly from shale oil producers, or to enforce discipline on OPEC+ members that continue to exceed production quotas.

drive oil consumption growth in the near term

#### Natural gas

(figure 7.E).

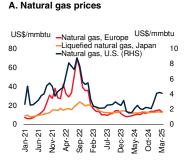
#### **Recent developments**

After announcements in early April of large increases in trade tariffs between key economies, natural gas prices fell in anticipation of lower demand amid a global economic slowdown. The European benchmark declined by 12 percent over the four days following the initial tariff announcements, and U.S. prices declined by 15 percent over the same period.

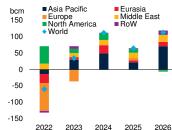
Prior to these developments, the World Bank natural gas price index had increased by 24 percent in 2025Q1 (q/q), reaching a level 66 percent higher than in 2024Q1 (figure 8.A). The U.S. benchmark price surged by 70 percent (q/q) in 2025Q1, reflecting strong demand both domestically and externally, in part due to cold winter weather, which also temporarily disrupted U.S. production. The European benchmark increased by a smaller 6 percent in 2025Q1, as upward price pressure from low inventories was dampened by waning competition from East Asia

#### FIGURE 8 Natural gas markets: Fundamentals

Natural gas prices increased in 2025Q1, led by a surge in the United States, while increases for the European benchmark were more moderate. The Asia Pacific region was the main driver of growth in global demand in 2024, while Eurasia was the main source of rising output. The share of U.S. LNG destined for the European Union declined markedly in 2024 but remained higher than before the Russian invasion of Ukraine in 2022.

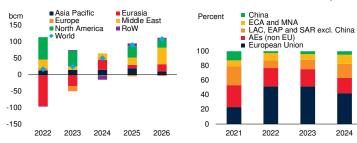


B. Changes in natural gas consumption



D. Destinations of U.S. LNG exports

C. Changes in natural gas production



Sources: Bloomberg; International Energy Agency (IEA); Official Statistics of Japan; U.S. Energy Information Administration (EIA); World Bank.

Note: AEs = advanced economies; bcm = billion cubic meters; EAP = East Asia and Pacific; ECA = Europe and Central Asia; LAC = Latin America and the Caribbean; LNG = liquefied natural gas; mmbtu = million British thermal units; MNA = Middle East and North Africa; RoW = rest of world;

SAR = South Asia.

A. Monthly data. Last observation is March 2025.

B.C. Regions in the charts are defined as in IEA's Gas Market Reports. Data for 2025-26 are computed based on IEA forecasts. "Eurasia" includes Armenia, Azerbaijan, Georgia, Kazakhstan, Kyrgyz Republic, the Russian Federation, Tajikistan, Turkmenistan, and Uzbekistan. D. Averages are based on monthly data of U.S. LNG shipments. Last observation is December 2024.

> for LNG supplies. Japan's benchmark LNG price was steady, held back by the effect of moderating oil prices on oil-indexed LNG contracts and by soft demand in the region amid mild weather.

> The rise in average natural gas prices in 2025Q1 continued the trend seen in 2024, with growth in supply struggling to keep pace with demand. In 2024, global gas demand bounced back, increasing by about 2.7 percent (110 billion cubic meter, bcm) after a notably smaller rise in 2023 (0.9 percent; figure 8.B). The Asia Pacific region and Russia together accounted for almost two-thirds of the 2024 pickup (with increases of about 50 bcm

and 20 bcm, respectively), underpinned by growing demand from the power and industrial sectors. Consumption in North America increased by about 1.8 percent (21 bcm), incentivized by low prices, while demand in the Middle East continued to rise as the region tapped into natural gas reserves to support power generation and industrial activity. Demand in Europe was stable, following two years of declining consumption in response to the sharp rise in prices triggered by the Russian invasion of Ukraine in 2022.

Global gas supply increased by 1.2 percent (about 50 bcm) in 2024, mainly driven by Russia (figure 8.C). A 7 percent increase in 2024 brought Russian production close to 2020 levels, with rising LNG exports compensating for the loss of pipeline exports to Europe. U.S. natural gas production was stable last year, despite historically low prices, as rising oil output drove an increase in associated natural gas production. The United States remained the world's largest LNG exporter in 2024, with about half of its exports shipping to destinations outside the European Union (EU), up from about 40 percent in 2023 (figure 8.D). LNG imports by China were strong, close to the 2021 record high of 79 million tons (mmt).

Large inventory drawdowns in the European and U.S. markets in 2024Q4 and 2025Q1 put upward pressure on prices. In the EU, storage levels last October were near the top of the 2017-21 range. However, injections ahead of the winter heating season stopped earlier than in the two previous years, and stored volumes markedly fell with the onset of colder weather (figure 9.A).

#### Outlook

The World Bank natural gas price index is forecast to rise sharply in 2025 and remain relatively steady in 2026. The U.S. benchmark is expected to surge by 51 percent in 2025 (y/y). This implies prices slipping by about one-quarter of the average price in 2025Q1 for the remainder of the year, as demand weakens due to decelerating global economic activity. In 2026, the U.S. natural gas price is expected to increase by a modest 3 percent. The European gas price is expected to increase by 6 percent in 2025, as the filling of severely depleted inventories is facilitated by lower demand for LNG from East Asia. Europe's benchmark is then projected to decrease by 9 percent in 2026, as international supplies of LNG increase further.

Following a robust rise last year, the increase in global consumption of natural gas is expected to moderate to about 60 bcm in 2025, before bouncing back to 110 bcm in 2026, mainly driven by Asian Pacific countries, and the Middle East. Consumption in the European and North American markets is set to stagnate.

Increases in production are expected to outstrip the rise in demand in 2025 but slip back just behind demand in 2026. In 2025, the projected increase in supply is expected to be split almost evenly among the four main producing regions: Asia Pacific, Eurasia, the Middle East, and North America. In 2026, a major expansion in Qatar is expected to deliver almost half of the projected 110 bcm increase in global production. LNG trade growth in the next two years is expected to be primarily met by rising exports from North America and Qatar.

#### Risks

Risks to the natural gas price forecast are tilted to the downside. Prices could be higher than projected due to the need to refill depleted natural gas inventories, increased competition for LNG supply, and extreme weather events. However, weak demand due to worse-than-anticipated economic growth, especially in Asia, could result in lower prices, especially if accompanied by surging global production.

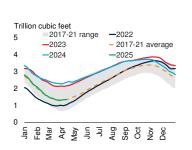
#### Upside risks

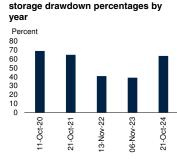
Low storage levels. In the United States, severe depletion of natural gas inventories in the 2024-25 winter months resulted from record-high consumption and production disruptions during freezing temperatures. In Europe, natural gas injections and withdrawals this year reverted to patterns seen before the Russian invasion of Ukraine (figure 9.B). This resulted in relatively low storage levels, on par with the 2017-21 average rather than the higher precautionary levels

#### FIGURE 9 Natural gas markets: Risks

Relatively low European Union (EU) natural gas inventories may increase the likelihood of price spikes in the event of stronger demand or supply disruptions. These low inventories reflect the early end to the 2024 filling season and a rapid subsequent drawdown—similar to the pattern observed prior to Russia's invasion of Ukraine. Upside risks to the price forecast include potential delays in bringing new U.S. LNG export terminals online in 2025. On the downside, the return to operation of idle U.S. natural gas rigs could lead to higher production and exert downward pressure on prices.

#### A. EU inventories of natural gas

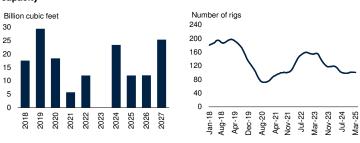




D. U.S. natural gas rigs

B. Peak dates and EU natural gas

C. Additional U.S. liquefaction capacity



Sources: Baker Hughes; Gas Infrastructure Europe (AGSI+); U.S. Energy Information Administration (EIA); World Bank.

A. Gray area indicates 2017-21 range. Sample includes 20 EU countries and the United Kingdom. Last observation is April 12, 2025.

B. Dates represent the day when peak storage was recorded. For each peak-date in the horizontal axis, the vertical bars display the percentage of natural gas from the peaks, which has been withdrawn by April 12 of the following year.

C. 2025, 2026 and 2027 are EIA estimates based on up-to-date project information. Last update is 2025Q1.

D. Three-month rolling average of U.S. natural gas rig count. The last observation is March 2025.

built in the last two years. Decisions to fully replenish inventories over the summer could exert additional upward pressure on prices, similarly to developments in August 2022.

**Increased competition for LNG supply.** LNG demand in Europe and Asia Pacific could exceed expectations later in 2025 if, for example, trade tensions ease and growth prospects strengthen. The effect on natural gas prices would also be greater if delays in the delivery of U.S. LNG terminals continue this year (figure 9.C). In this

case, U.S. gas exports would likely underperform expectations, putting significant upward pressure on European and Asian prices, while decreasing U.S. prices.

Weather events. Natural gas prices are exposed to a wide array of weather-related upside risks. These include unusually cold temperatures that can both increase consumption and reduce production (as in the United States in January 2025); heatwaves, droughts, and reduced wind speeds that limit energy generation from renewable sources, requiring back-up generation from natural gas power plants (as in Latin America in 2024, and Europe in 2024Q4); and extreme weather events that pose risks to production and trade.

#### Downside risks

Weaker economic growth. Taken together, the EAP and SAR regions are expected to account for 45 and 65 percent of the global growth in natural gas consumption in 2025 and 2026, respectively. Weaker-than-expected economic growth and associated shortfalls in gas consumption in these regions—perhaps because of worsening trade tensions affecting key economies, or greater-than-expected economic damage from recent policy shifts—could weigh on natural gas prices.

**Surging natural gas production.** U.S. prices might be lower than expected if shale gas rigs that were shuttered in 2023 and 2024 because of low prices are brought back into production (figure 9.D). If diplomatic efforts result in the cessation of armed conflict in Ukraine, gas exports from Russia to Europe could increase considerably and relatively quickly. This could reduce European natural gas prices directly and also put downward pressure on global prices by reducing competition for LNG supplies.

#### Coal

#### **Recent developments**

The price of Australian coal fell by \$5 per ton (5 percent) in the four days following the announcement of U.S. trade tariffs on April 2, briefly reaching its lowest level since May 2021. This extended a reduction of 21 percent in 2025Q1 (q/q), after coal prices had inched down

in the previous quarter (figure 10.A). The decline in 2025Q1 was driven by slowing import demand in China and India, amid steady increases in seaborne supply.

Global coal consumption continued to rise in 2024 to a new all-time high of almost 8,800 mmt. However, growth slowed to about 80 mmt in 2024, less than a third of the increase recorded over the previous two years. The rise in China's coal consumption slowed by 80 percent in 2024, to about 60 mmt, while growth in India's consumption softened by one third to 70 mmt (figure 10.B). Demand in Europe and North America continued to decline, though by less than in 2023. Global coal production rose by an estimated 75 mmt in 2024, around one-quarter of the increase in 2023. Output picked up in China (about 40 mmt), India (80 mmt), and Indonesia (30 mmt) but continued to decline in Europe and the United States (figure 10.C). Global trade in coal is estimated to have reached an all-time high in 2024, but trade growth was only a third of that in the previous year due to slowing increases in overall demand. Increasing imports in China and ASEAN countries were met primarily by exports from Australia, Indonesia and Mongolia.

#### Outlook

The Australian coal price is forecast to fall by 27 percent in 2025 (y/y), implying an average price for the rest of this year that is \$10 per metric ton below that in 2025Q1. Coal prices are set to decline a further 5 percent in 2026. The price forecast reflects an expected slowdown in global economic growth, with consequent negative impacts on coal demand. It also reflects two more specific countervailing drivers. On the one hand, growing power demand in EMDEs is expected to result in continued increases in coal consumption in power plants. On the other hand, the increasing penetration of renewable energy sources globally is expected to continue shrinking the market share of coal-fired generation, partly reflecting relatively high marginal costs. These two considerations together suggest that global consumption will edge up in 2025 and 2026, with Asia's share of global demand continuing to rise. India is expected to be

the main engine of demand growth, with renewables meeting only a limited share of the country's rising electricity needs (figure 10.D). China's coal consumption is expected to decline in 2025, amid lower demand from the power sector, as the role of renewables continues to expand rapidly.

Global coal production is expected to edge down over the forecast period. Among the major producers, India is the only country where output is expected to increase, supported by government policy. Production in China is expected to plateau, while in Indonesia it is expected to decrease sharply, in line with official targets. Reductions in supply are also anticipated in the United States and Australia.

#### Risks

Risks to the coal price forecast are broadly balanced. The main upside risk is the possibility that coal consumption in China and India could increase by more than expected. Downside risks include weaker-than-expected economic growth and a potential supply glut.

#### Upside risks

Increasing consumption in China and India. Despite reduced economic growth weighing on demand, coal consumption in the power sector might be more than anticipated, if production from hydropower, solar, and wind fail to match the strong output seen in 2024 (figure 10.E). Similarly, a potential increase in India's coal power capacity in 2025, building on the growth of recent years, could lead to stronger demand for coal and upward pressure on global prices (figure 10.F). In China, a significant easing of trade tensions would increase the likelihood of robust coal consumption, given the prospect of stronger-than-expected industrial activity and exports. Coal consumption in China might also increase should market dynamics evolve such that power producers find coal cheaper than imported LNG.

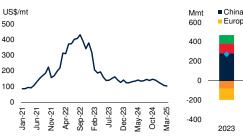
#### Downside risks

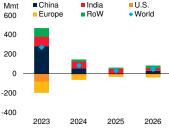
Weaker economic growth in Asia. The EAP and SAR regions account for about 80 percent of

#### FIGURE 10 Coal market

The price of Australian coal decreased in 2025Q1, reflecting weak import demand in Asia, large stocks, and steady increases in seaborne supply. In 2025, global coal consumption is expected to rise slightly, primarily driven by India. Among major producers, coal output is expected to increase only in India in 2025 and 2026. This growth is supported by government policies, as coal continues to meet the vast majority of annual changes in power demand. Upside risks to the price forecast include stronger-thanexpected demand from the power sector in China and India—particularly if output from renewable energy falls short of expectations. New coal power generating plants added to the grid, especially in India, increases the likelihood of higher demand for coal.

A. Coal prices





B. Changes in coal consumption

C. Changes in coal production

D. Changes in India's power generation by source

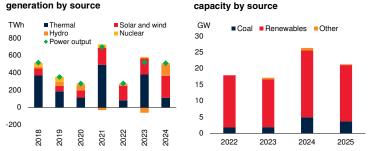
TWh



Coal Solar and wind Hydro Other Coal Solar and Coal Solar and Wind Hydro Other Coal Solar and Coal Sola

F. Additions to India's generating

E. Changes in China's power generation by source



Sources: Bloomberg; Central Electricity Authority, Government of India Ministry of Power; International Energy Agency (IEA); National Bureau of Statistics of China; National Institution for

Transforming India (NITI Aayog); World Bank. Note: GW = gigawatt; Mmt = million metric tons; Mt = metric ton; RoW = rest of world; TWh = terawatt hour

A. Monthly data of Australian coal prices. Last observation is March 2025.

B.C. Data for 2025 and 2026 are computed based on the IEA's forecast for the 2025-26 period. Data based on IEA's Coal 2024 report.

D. Monthly data. Last observation is December 2024. The category "Hydro" includes power generation from hydro, small hydro and bio power plants. The category "Other" includes oil, gas and nuclear power generation.

E. Composition of China's power output growth by source. "Thermal" includes oil, natural gas, and coal. Data show the annual average for each year.

F. Monthly data. Last observation is February 2025. Data for 2025 only includes January and February. "Other" includes lignite, gas, diesel, and nuclear.

global coal consumption. Weaker-than-expected economic growth in these regions therefore poses a material downside risk to coal prices. In addition, while the forecast already assumes a decrease in demand for coal in China, a deeper contraction could occur if infrastructure and manufacturing investment fails to offset the downturn in construction activity, as envisaged under the baseline.

**Ample coal supplies.** The price forecast is based partly on expectations of a decrease in global coal supply in 2025 and 2026, owing to shrinking

output across many producers. In several countries, production could exceed forecasts. Indonesia's output has significantly exceeded national targets in the past, including by 17 percent in 2024, suggesting that the planned reduction may not materialize. Recent changes in U.S. energy policies to boost the use of coal could also slow or potentially reverse—the trend of decreasing U.S. coal output. Meanwhile, if diplomatic efforts to resolve the conflict triggered by Russia's invasion of Ukraine prove successful, potential markets for coal exports from Russia might broaden, encouraging higher production levels.

## Agriculture

Prices of several agricultural commodities have fallen in recent weeks, reflecting concerns about the impact on demand from rising trade tensions between major economies. Earlier, the World Bank's agricultural commodity price index rose by 1 percent overall in 2025Q1 (q/q), driven by a 16 percent spike in beverage prices—particularly cocoa and coffee which reached record highs due to weather-related shocks. The increase in beverage prices was partially offset by lower food and raw material prices. The agriculture price index is forecast to be broadly unchanged in 2025 (y/y), with declines in food and raw material prices of 7 percent and 2 percent, respectively, expected to offset a 20 percent increase in beverage prices. Next year, agricultural commodity prices are projected to decline by 3 percent. Risks to the forecasts are tilted to the downside and include weaker-than-expected economic growth, which would weigh on agricultural commodity demand. The imposition of restrictions on trade in agricultural commodities poses both downside and upside risks for different products, depending on the details of the measures and the affected markets. Another two-sided risk stems from biofuel policies. Upside risks for agricultural prices include extreme weather events.

#### Food Commodities

#### **Recent developments**

Prices of food commodities decreased in March and early April due to concerns about the impact of escalating trade tensions on global demand. Additional downward pressure resulted from improved rainfall in the main growing regions of South America, which reduced production risks that had driven prices higher at the beginning of the year. The World Bank's food price index fell by about 2 percent in 2025Q1 (q/q) overall, to a level roughly 4 percent lower than a year earlier. The quarterly decline was led by a 5 percent drop in oils and meals prices and a 1 percent dip in grain prices, while other foods edged down slightly (figures 11.A and 11.B).

Maize and wheat prices dropped in March and early April amid worsening international trade relations and improved weather conditions in Argentina and Brazil. However, earlier this year, hotter and drier-than-normal weather in parts of South America-attributed to a weak La Niñahad pushed maize prices substantially higher, resulting in prices 8 percent higher on average in 2025Q1 (q/q), and 11 percent above those of a year earlier. The decrease in wheat prices in March more than fully offset the earlier gains from the first two months of the year, bringing the average price in 2025Q1 to nearly 1 percent lower than the previous quarter and 8 percent lower than the same period last year (figure 11.C). Rice prices tumbled 14 percent in 2025Q1 to a level 29 percent lower than a year earlier, fully reversing the gains made over the previous two years, when El Niño-related supply concerns and export restrictions by India affected the market. The decline in rice prices this year reflects ample global production and large inventories in major exporting countries. A promising new harvest in Viet Nam and strong competition among exporters have also exerted downward pressure on prices.

The oils and meals price index softened in early April as crude oil prices declined—reducing demand for biofuel feedstocks-and increasing trade barriers put pressure on soybean prices. The index fell by 5 percent in 2025Q1 (q/q), to a level 3 percent lower than a year earlier, and included lower prices for soybeans, soybean meal, soybean oil, and palm oil. Soybean prices dropped 5 percent in 2025Q1 to a level 21 percent lower than a year earlier. This decline reflects a 7 percent expected increase in global supplies in the 2024-25 season, alongside the impact of tariffs imposed by China-which accounts for about 60 percent of global soybean imports-on shipments from the United States, the world's second-largest soybean exporter.

Despite a 6 percent decline in 2025Q1, soybean oil prices remained 10 percent higher than in the same period last year, reflecting increased global reliance on soybean oil, following a significant slowdown in production of sunflower and rapeseed in Europe and the Black Sea region (figure 11.D). The increased processing of soybean seeds into oil has boosted the supply of soybean meal, pushing its prices down by a further 7 percent in 2025Q1 to a level 21 percent lower than a year

#### FIGURE 11 Agricultural prices

Agricultural commodity prices rose by 1 percent in 2025Q1 (q/q), driven by a 16 percent surge in beverage prices. Raw material prices decreased by nearly 3 percent, while food prices declined by 2 percent. Among food groups, the overall drop was led by falling prices for oils and meals, as well as rice, due to ample global supplies. The agriculture price index is expected to be broadly stable in 2025, with declines in food and raw material prices offsetting increases in beverage prices. Food prices are projected to decline by 7 percent in 2025 (y/y), driven by weaker demand for grains as energy feedstocks and ample supplies, before stabilizing in 2026.

180

160

140

120

100

80

60

Jan-20

US\$/mt

2.500

2 000

1,500

1,000

500

0

Jan-20 Jul-20

Jul-20

lan-21 Jul-21

D. Oils and meals prices

Jan-22 Aug-22 Feb-23 Aug-23 Feb-24 Sep-24

**B.** Food price indexes

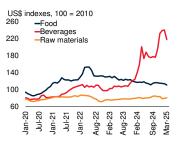
US\$ indexes, 100 = 2010

Oils and meals

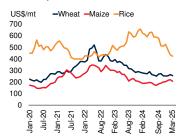
Grains

Other food

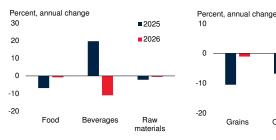




C. Grain prices



E. Agricultural price forecasts



Sources: Bloomberg; S&P Global; World Bank

A.-D. Monthly data. Last observation is March 2025.

C. Wheat refers to the U.S. HRW benchmark, while rice refers to the Thai 5% benchmark.

E.F. 2025 and 2026 are forecasts

earlier. Palm oil prices fell by 7 percent in 2025Q1 as demand weakened, due to consumers shifting to more attractively priced edible oils, such as soybean oil. In India, the largest importer of palm oil, the share of palm oil in total vegetable oil imports in 2025Q1 dropped to about 44 percent,

down from 58 percent during 2022-24, with soybean oil gaining market share.

The other foods price index-which comprises sugar, meat, and fruits-remained broadly stable in 2025Q1, extending a year-long trend in which lower sugar prices largely offset increases in beef and chicken prices. Sugar prices decreased 8 percent in 2025Q1 (q/q) to a level 15 percent lower than a year earlier. The decline is mainly attributable to a positive production surprise in Brazil at the end of the harvest season, as well as India's January announcement that it would allow 1 million tons of sugar exports, easing restrictions after more than a year. Beef prices in the United States, the reference market for both beef and chicken, rose 7 percent in 2025Q1 and 23 percent from a year earlier, reflecting tight cattle supplies and a ban on imports of cattle from Mexico between November 2024 and February 2025 because of animal disease. Chicken prices increased 9 percent in 2025Q1 to a level 4 percent higher than a year earlier, influenced by a slower rate of slaughter for food, partly due to the culling of poultry to control the spread of bird flu.

#### Outlook

Mar-25

-Soybean oil -Palm oil

Aug-23

Feb-24

2025

2026

Other food

Sep-24

25

Mar-

Aug-22 Feb-23

Oils and

meals

Jan-22

Jul-21

Jan-21

F. Food price forecasts

The World Bank's food price index is projected to fall by 7 percent in 2025 (y/y) and edge down in 2026 (figure 11.E). All three components of the index are expected to decline in 2025—grains by 11 percent, and oils and meals, and other foods, by 7 percent and 5 percent, respectively. In 2026, all sub-components of the food index are expected to remain broadly stable (figure 11.F).

The projected downturn in grain prices for 2025 is primarily driven by an expected 29 percent plunge in rice prices, reflecting ample supplies and the relaxation of export restrictions by India. Global rice production in 2024-25 is expected to increase by 2 percent, with production in India which accounts for about 40 percent of global exports—forecast to rise by 5 percent. Rice prices are projected to be stable in 2026 as preliminary estimates for the 2025-26 season from the International Grains Council indicate that a small increase in global supply will be matched by a similar increase in consumption. Wheat prices are

Note: mt = metric tons.

Maize prices are forecast to edge down by 2 percent in both 2025 and 2026, weighed down by lower crude oil prices-which reduce demand for ethanol, and thereby for maize-and increased tariffs on U.S.-China trade. Further downward pressure stems from the price advantage of maize in recent months over soybeans and wheat, which is likely to incentivize maize acreage expansion, with production projected to rebound in the 2025-26 season (figures 12.C, 12.D, and 12.E). However, the price decline is expected to be limited by tight inventories, projected to reach their lowest levels in over a decade.

The oils and meals price index is forecast to decline by 7 percent in 2025, driven by favorable global food oil supplies, before stabilizing in 2026 (figure 12.F). The decrease in 2025 mainly reflects reductions in soybean and soybean meal prices. Soybean prices are projected to tumble by 17 percent in 2025, as global production is expected to rise by 6 percent to a new record in the 2024-25 season, with the stocks-to-use ratio climbing close to its 2018-19 record high. Weaker imports of U.S. soybeans in China, amid heightened trade tensions, are expected to weigh on the U.S. benchmark price, as China accounts for over half of U.S. soybean exports. With the soybean-tomaize price ratio expected to favor maize acreage in 2025-26, soybean prices are forecast to stabilize next year.

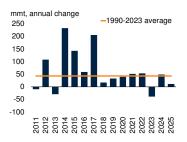
Soybean oil prices are forecast to ease by 3 percent in 2025 and 2 percent in 2026, largely due to lower crude oil prices dampening biofuel demand. However, the downward pressure is partially offset by strong demand resulting from reduced supplies of close substitutes, such as palm oil, sunflower oil, and rapeseed oil. Soymeal prices are projected to decline by 16 percent in 2025, reflecting robust soybean production. Soymeal prices are expected to stabilize in 2026 as production of alternative oils recovers. Palm oil prices are projected to rise

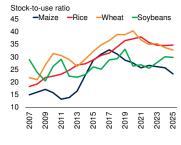
#### FIGURE 12 Supply conditions for grains and edible oils

Global grains output in the 2024-25 crop year is forecast to be little changed from 2023-24, with stocks-to-use ratios declining for most grains. However, increased global rice production and the easing of India's export restrictions are projected to raise rice supply and stocks. Rising prices of maize relative to wheat and soybeans are expected to drive an expansion in maize acreage, as confirmed by U.S. growers' planting intentions for 2025-26 and preliminary supply estimates for the season. Growth in edible oils supply is forecast to strengthen in the 2024-25 crop year, with the stocks-to-use ratio for soybeans near the 2018-19 record.

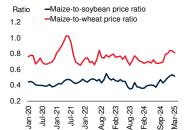
#### A. Grain supply growth

#### B. Stock-to-use ratio for grains





C. Ratios of maize prices to soybean and wheat prices

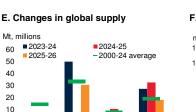


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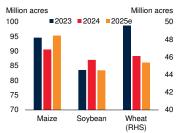
-20

Wheat

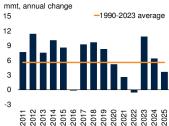


Rice

#### D. Planting intentions in the U.S.



F. Edible oil supply growth



Sources: International Grains Council; U.S. Department of Agriculture; World Bank. Note: mt = metric tons; mmt = million metric tons. 2025 and 2026 are forecasts. Years represent crop season (for example, 2025 refers to 2024-25).

Soybean

A.F. Supply is the sum of beginning stocks and production. Data updated as of April 11, 2025. B. Stocks-to-use ratio is the ratio between domestic consumption and ending stocks. Data updated as of April 11, 2025.

C. Monthly prices. Last observation is March 2025

Maize

D. Data are taken from the Prospective Plantings report of the U.S. Department of Agriculture, published in March 2025.

E. Bars show year-on-year changes in total global supply based on data from the International Grains Council's Grain Market Report, published in March 2025. Horizontal green lines show the long-term 2000-24 average based on USDA data.

by 6 percent in 2025, as a moderate pickup in production is insufficient to replenish low global stocks. Additionally, Indonesia's plan to increase its biodiesel mixture—from 35 percent in 2024 to 40 percent in 2025 and to 50 percent in 2026 will support palm oil prices. However, the substitution of palm oil with soybean oil is likely to curb sharp price gains. At the same time, structural challenges in palm oil production, including declining yields and a slowdown in new plantings, will sustain global supply tightness and support prices. As a result, palm oil prices are forecast to increase by 2 percent in 2026.

The price index for other foods is projected to decrease by 5 percent in 2025 and 2 percent in 2026. Chicken prices are expected to decline by 4 percent in 2025 and 1 percent in 2026, reflecting a 1 percent anticipated increase in chicken production this year, owing to a recovery in the second half of the year from the impact of bird flu. Beef prices are forecast to remain broadly stable in 2025 and 2026, as the retaliatory tariff from China—a \$1.6 billion market for U.S. exports—interacts with a 2 percent decline in beef production this year. Sugar prices are expected to edge down in 2025-26, with a transition to surplus conditions expected in the second half of 2025.

#### Risks

Risks to the price forecasts for food commodities are tilted to the downside. The main downside risks stem from a weaker-than-expected global growth, whereas the main upside risks are extreme weather events. Trade barriers affecting trade in specific commodities and biofuel policies pose two-sided risks to prices.

#### Downside risk

**Sharp slowdown in global economic growth.** In line with the emerging consensus, the forecasts assume that global economic growth will slow this year amid trade tensions and elevated uncertainty. It is possible this slowdown will be larger than anticipated—either because headwinds from recent policy shifts are more severe than expected, or due to factors such as the further intensification of trade tensions. Such developments would likely lead to weaker demand for food commodities, with many prices softening to below forecast levels. That said, the impact of weaker economic growth on food commodity prices would likely be less pronounced than for industrial commodities, reflecting their typically smaller demand elasticities.

#### Upside risk

Heat waves. Heat waves are becoming more frequent, intense, and prolonged. In the United States, the average number of heat waves per year has tripled-from two in the 1960s to over six in the 2020s (figure 13.A). Their average duration has also increased, from three to more than four days, while the length of the annual heat wave season has expanded from 24 to 70 days. This trend is part of a broader global pattern: March 2025 marked the 20th out of the past 21 months with global temperatures exceeding 1.5°C above pre-industrial levels. Though difficult to predict, heat waves that coincide with critical stages of crop growth-particularly in key exporting countries-can significantly drive up commodity prices.

#### Two-sided risks

Barriers to trade in agricultural commodities. Rising barriers affecting trade in agricultural commodities, including tariffs, may change price differentials and cause trade diversion across markets (figures 13.B and 13.C). The United States market is the benchmark for most food commodities in the World Bank's commodity index. Tariffs imposed by key trading partners on U.S. exports of commodities for which the U.S. is a sizable producer-such as soybeans-could weigh on demand sufficiently to lower prices. Conversely, U.S. tariff increases may contribute to price increases in some commodities with U.S. benchmarks. The price forecasts assume that all announced trade measures will be implemented as planned. However, if tariffs are withdrawn or adjusted to a much lower level, prices could rise or fall depending on the country initiating the policy, the scope of adjustments, and the size of imports relative to domestic production.

**Biofuel policies.** Rising prices of palm oil and seed oils, coupled with declining crude oil prices, have led to delays and pauses in planned admixture increases in Brazil and Indonesia, creating uncertainty regarding the implementation of biofuel mandates. These developments have contributed to the recent stabilization of biofuel production (figure 13.D). If these mandates resume as planned, they could support the prices of biofuel feedstocks. There is also uncertainty regarding how the new U.S. administration will approach existing biofuel programs. Current price forecasts assume continued policy support; any reduction in such support could put downward pressure on biofuel feedstock prices.

# Implications for food price inflation and food security

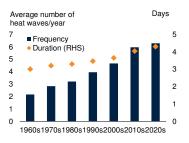
In 2025Q1, the median 12-month rate of domestic food price inflation globally was 3.4 percent (in domestic currency terms), slightly up from 3 percent in the last quarter of 2024, but down from about 3.9 percent a year earlier. Median food price inflation in EMDEs in the year to 2025Q1 was 4 percent, nearly twice that of advanced economies. Regionally, 12-month food price inflation was lower in 2025Q1 than in 2024Q4 in the Middle East and North Africa, but higher in all other EMDE regions, and significantly so in Europe and Central Asia (figure 14.A). Domestic food price inflation in the year to 2025Q1 remained exceptionally high in Argentina (70 percent), Burundi (53 percent), and Türkiye (40 percent), while it ranged between 20 and 40 percent in Angola, Ghana, Haiti, the Islamic Republic of Iran, Lebanon, Malawi, and Nigeria—with several other countries experiencing double-digit food inflation. During the same period, food inflation exceeded headline inflation by more than 100 percentage points in Argentina, and by 5 to 10 percentage points in the Arab Republic of Egypt, Lao People's Democratic Republic, Lebanon, Malawi, Mauritius, and Türkiye—signaling rising relative food prices.

Over the next couple of years, projected small declines in global food commodity prices may tend to reduce global food insecurity slightly. However, set against wider adverse trends,

### FIGURE 13 Risks to agriculture price projections

Heat waves are becoming more frequent, intense, and prolonged, exerting upward pressure on agricultural prices by negatively affecting crop yields. Tariffs implemented by trading partners may weigh on U.S. soybean prices while bolstering prices of other suppliers. These trade measures could also trigger trade diversion, as seen in soybean markets during the 2018 U.S.-China trade tensions. Biofuel production is expected to stabilize in 2025 amid higher prices of energy feedstocks and lower crude oil prices.

A. Heat waves in the United States, by decade

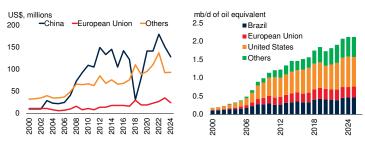


#### B. Soybean prices across benchmarks



**D. Biofuel production** 

## C. U.S. soybean exports by destination



Sources: Bloomberg; Organization for Economic Cooperation and Development (OECD); Statistical Review of the World Energy, Energy Institute; United States Department of Agriculture; U.S. Environmental Protection Agency; World Bank.

Note: mb/d = million barrels per day.

A. A heat wave is defined as a period of two or more consecutive days when the daily minimum apparent temperature (the actual temperature adjusted for humidity) in a particular city exceeds the 85th percentile of historical July and August temperatures (1981–2010) for that city. Chart shows the average duration and frequency of heat waves for 50 large metropolitan areas between 1961 and 2023.

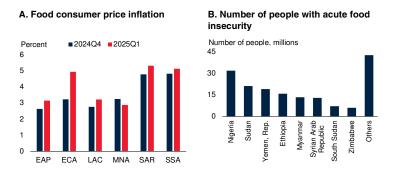
B. Lines show the price of soybean futures from three different ports. Daily data. Last observation is April 16, 2025.

D. Years 2024-25 include projections from the OECD-FAO Agricultural Outlook 2024-2033.

including elevated conflict in fragile countries and a reduction in global humanitarian funding, any positive effect of lower global food prices on food insecurity may well be outweighed by other factors. Approximately 170 million people across 22 countries are expected to face worsening acute hunger between November 2024 and May 2025 (WFP and FAO 2024; figure 14.B). Seventy-five percent of these cases are concentrated in just eight countries—Ethiopia, Myanmar, Nigeria, South Sudan, Sudan, the Syrian Arab Republic, the Republic of Yemen, and Zimbabwe—many of

### FIGURE 14 Food price inflation and food insecurity

Global food price inflation (in domestic currencies) was 3.4 percent in 2025Q1, slightly up from 3 percent in 2024Q4 but down from 3.9 percent a year earlier. This gradual easing of global food inflation will, however, do little to alleviate elevated acute food insecurity. Against a backdrop of declining humanitarian funding, conflicts, natural disasters, and economic shocks have left nearly 170 million people in 22 countries in need of emergency food assistance to save lives.



Sources: Haver Analytics; WFP and FAO (2024); World Bank.

Note: EAP = East Asia and the Pacific; ECA = Europe and Central Asia; LAC = Latin America and the Caribbean; MNA = Middle East and North Africa; SAR = South Asia; SSA = Sub Saharan Africa. A. Bars show median of year-on-year inflation rate in 2025Q1 compared to 2024Q4. B. Bars represent estimates for the sum of IPC Acute Food Insecurity phases 3 (crisis), 4 (emergency), and 5 (catastrophe/famine) acute food insecurity categories across 22 hunger hotspot countries from November 2024 to May 2025.

> which are facing armed conflict and large-scale displacement of peoples. Famine conditions—the most severe classification of acute food insecurity, where starvation and death are evident and 30 percent or more of children are acutely malnourished—are estimated to currently affect hundreds of thousands of people concentrated in Gaza, South Sudan, and Sudan. Emergency conditions, where households have large food consumption gaps and 15-30 percent of children are acutely malnourished, also exist in countries such as Burkina Faso, Chad, Haiti, Malawi, Mozambique, Niger, Somalia, and Zambia, impacting millions more.

### **Beverages**

The World Bank's beverages price index fell in early April after surging by 16 percent in 2025Q1(q/q) to a level 65 percent higher than a year earlier, reflecting sharp increases in coffee and cocoa prices driven by production shortfalls. The index is projected to rise by almost 20 percent in 2025 (y/y) before declining by approximately 11 percent in 2026 as coffee and cocoa production begins to recover.

Coffee prices eased in early April, following record nominal highs earlier this year. Arabica surged to \$9/kg in February-March while Robusta approached 6/kg. In 2025Q1 (q/q), Arabica rose by 26 percent—nearly doubling from a year earlier while Robusta gained 12 percent, marking a twothirds increase year-on-year (figure 15.A). Global coffee production, which rose to about 170 million bags in 2023-24, is expected to rise further, to 173 million bags in 2024-25, but remain below 2020-21 levels (figure 15.B). The lingering effects of the 2021-22 weather-related production shortfall, coupled with steady demand growth, have continued to drive prices higher. Arabica prices are projected to climb by more than 50 percent in 2025 (y/y)—assuming prices remain broadly stable for the rest of the year-before declining by 15 percent in 2026, in response to higher production expected by Colombia, the world's second largest Arabica producer. Robusta prices are expected to rise by nearly 25 percent in 2025 before falling by 9 percent next year. This baseline forecast is subject to significant risks, particularly the upside risk that low rainfall and above-average temperatures earlier in the year could negatively affect the 2025-26 harvest in Brazil, the world's leading coffee producer.

Cocoa prices softened in March and early April, after climbing to nearly \$11/kg in January. Despite the recent easing, prices remained more than 15 percent higher in 2025Q1 (q/q) compared to the previous quarter, and nearly 70 percent above year-earlier levels (figure 15.C). The surge in cocoa prices has been driven by unfavorable weather conditions in West Africa, compounded by strong seasonal demand. Global cocoa production declined by 12 percent in the 2023-24 season, to 4.3 million metric tons (mmt) from 4.9 mmt in 2022-23 (figure 15.D). The decline was due to lower output in Côte d'Ivoire and Ghana, which together account for nearly 60 percent of global cocoa production. Supply conditions are expected to improve in the 2024-25 season (ending in September 2025) with global output expected to increase by more than 11 percent, mostly driven by improved weather in Côte d'Ivoire and Ghana, where production is forecast to rise by 5 and 34 percent, respectively. After

increasing by a further 9 percent in 2025 (y/y), cocoa prices are projected to decline by 13 percent in 2026 as additional supplies enter the market. However, the potential return of adverse weather in West Africa remains a key upside risk to this forecast.

Tea prices (three-auction average) declined by 11 percent in 2025Q1 (q/q), driven by a sharp, primarily seasonal, 38 percent drop at the Kolkata auction (figure 15.E). In contrast, prices at the Colombo and Mombasa auctions remained relatively stable, reflecting adequate supplies from Sri Lanka. Although supply concerns persist in some East African tea exporters-particularly Tanzania and Uganda-the global tea market remains well-supplied overall, bolstered by improving conditions in Sri Lanka and especially Kenya (figure 15.F). Following a projected 18 percent decline in 2025, driven by a modest recovery in supplies from South Asia and East Africa, tea prices are expected to rebound by 12 percent in 2026.

### Agricultural raw materials

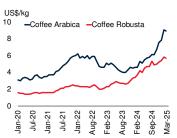
The World Bank's agricultural raw materials price index continued to decline in April, after falling by more than 3 percent in 2025Q1 (q/q). The quarterly decline was primarily driven by lower cotton prices, due to weak demand and strong supply prospects. The index is expected to fall by just over 2 percent in 2025 (y/y) before stabilizing in 2026. Slower-thanexpected global growth remains a key downside risk to the price outlook.

Cotton prices declined nearly 5 percent in 2025Q1 (q/q), with the March average reaching a 50-month low, approximately 20 percent lower than a year earlier (figure 16.A). Prices were volatile in early April but continued easing overall. The reduction in prices this year reflects subdued demand coupled with strong production prospects for the 2024-25 crop season. Recent price weakness also comes amid increases in tariffs on U.S.-China trade. The United States accounted for one-quarter of global cotton exports last year, while China accounted for nearly one-third of global imports and was the largest purchaser of U.S. cotton.

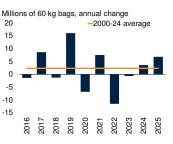
### FIGURE 15 Beverage markets

Beverage prices surged earlier this year due to weather-related production shortfalls in coffee and cocoa, while tea prices remained relatively stable. The beverage price index, on an annual average basis, is expected to rise in 2025 before stabilizing in 2026 as coffee and cocoa production recover. Weather-related supply disruptions remain a key upside risk. Tea prices fell overall in 2025Q1 due to a price slump at the Kolkata auction. Despite recent output declines in some major producing countries, tea markets remain well supplied overall.

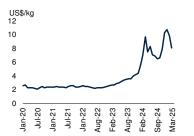
### A. Coffee prices



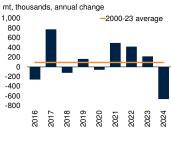
### B. Changes in coffee production



C. Cocoa prices

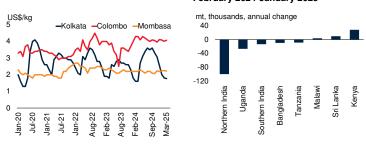


### D. Changes in cocoa production



E. Tea prices

F. Changes in tea production, February 2024-January 2025



Sources: Africa Tea Brokers Limited; Bloomberg; International Cocoa Organization (ICCO); International Tea Committee; Tea Board India; Tea Exporters Association Sri Lanka; U.S. Department of Agriculture; World Bank.

B.D. Years represent crop seasons (for example, 2024 refers to 2023-24).

D. Data for 2024 are ICCO estimates.

F. Twelve-month change in production from February 2024 to January 2025.

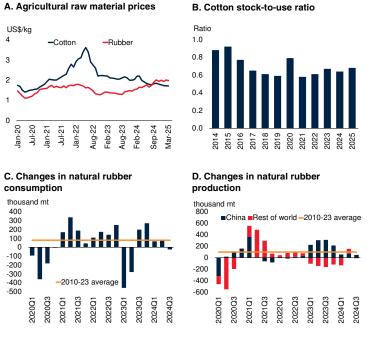
According to the latest U.S. Department of Agriculture report (April), global cotton production is projected to increase by 7 percent this season, with substantial gains in Brazil (17 percent), Türkiye (25 percent), and the United States

A.C.E. Monthly data. Last observation is March 2025.

B. Data updated through April 11, 2025.

### FIGURE 16 Agricultural raw materials markets

The agricultural raw materials price index edged down in 2025Q1, driven mainly by a decline in cotton prices in the context of rising inventories. Natural rubber prices, which increased last year due to production shortfalls outpacing relatively subdued consumption growth, stabilized during 2025Q1. The index is projected to decrease further throughout 2025 before stabilizing in 2026, with weaker-than-expected global growth posing a key downside risk.



Sources: Bloomberg; International Rubber Study Group; U.S. Department of Agriculture; World Bank.

A. Monthly data. Last observation is March 2025.

B. Years represent crop seasons (for example, 2025 refers to 2024-25). Years represent crop seasons (for example, 2025 refers to 2024-25). Stocks-to-use ratio is the ratio between domestic

consumption and ending stocks. Data updated as of April 11, 2025. C.D. Change in natural rubber production (consumption) from the same quarter in the previous year.

Last observation is 2024Q3.

(20 percent) more than offsetting a small decline in India (about 2 percent) and a larger fall in Pakistan (29 percent). Meanwhile, global consumption is expected to rise by about 1 percent, pushing the stock-to-use ratio up to nearly 68 percent, compared to 64 percent last season (figure 16.B). After falling by 14 percent in 2025 (y/y), cotton prices are expected to gain 3 percent in 2026 as supply growth moderates. Key risks to this outlook include weaker-than-expected global economic growth, which could exert further downward pressure on prices. Adverse weather in key producing regions for the 2025-26 season is an upside risk.

After surging in 2024Q3, natural rubber prices were relatively stable over the past two quarters,

averaging about 15 percent higher than a year earlier in 2025Q1. The price spike late last year was primarily driven by weather-related supply disruptions in Southeast Asia, including the effects of heavy rainfall in Malaysia and southern Thailand. In the 12 months ending in March 2025, global natural rubber production declined marginally. Output declines in the world's largest producers-Thailand (-1.3 percent) and Viet Nam (-17.8 percent)-were offset by production increases in Côte d'Ivoire (9.6 percent) and other suppliers (5.3 percent) (figure 16.C). Meanwhile, demand for natural rubber rose by nearly 2 percent in the same 12-month period, driven primarily by increases in China and India-the world's dominant consumers-of 2 and 1 percent, respectively. Tire production, which accounts for nearly two-thirds of natural rubber use, grew by 3.1 percent for light vehicles and 1.5 percent for heavy vehicles, reflecting strong automotive demand (figure 16.D).

Natural rubber prices are projected to rise by 14 percent in 2025 (y/y) and post a moderate decline in 2026 as production recovers. However, downside risks to the outlook remain, particularly from a potentially steep slowdown in the growth of global automobile production, especially if recently imposed trade measures significantly dampen automotive demand. Weakness in production could be further exacerbated by preexisting oversupply in China's auto sector.

### **Fertilizers**

After being relatively stable through most of 2024, the World Bank's fertilizer price index rose by more than 6 percent in 2025Q1 (q/q) to a level about 11 percent higher than a year earlier. This increase was driven primarily by stronger demand for urea in the face of production shortfalls and export restrictions. Despite some trade restrictions, overall fertilizer supplies—especially of phosphate and potash—have broadly matched demand. The fertilizer price index is expected to increase 7 percent in 2025 as demand strengthens, before stabilizing in 2026. Prices are projected to stay above 2015–19 levels due to a combination of robust demand, higher input costs (especially natural gas), and continued export restrictions, particularly by China. A key upside risk is an increase in input costs, whereas a resumption of Chinese exports could cause prices to ease.

Nitrogen (urea) prices rose by more than 12 percent in 2025Q1 (q/q) to a level nearly 20 percent higher than a year earlier (figure 17.A). This increase reflects both demand and supply factors. On the demand side, purchases from Brazil and India strengthened in late 2024 and are expected to remain robust through the first half of this year. On the supply side, there have been production shortfalls, particularly in the Arab Republic of Egypt, where declining natural gas output has constrained nitrogen production. Global nitrogen supplies have also been affected by policy actions, especially a discretionary reduction in China's exports, which fell by more than 90 percent in 2024 (y/y). Additionally, rising input costs-especially for natural gas-have supported prices (figure 17.B). Higher urea prices pushed the affordability index (the ratio of urea to food prices) to a 16-month high in March (figure 17.C).

With market conditions expected to remain tight this year, urea prices are projected to increase by 15 percent in 2025 (y/y) before declining by 4 percent in 2026, as new capacity comes online in East Asia and the Middle East. There may also be a modest recovery in European production, following disruptions caused by the 2022 surge in natural gas prices and reduced natural gas flows from the Russian Federation. Key upside risks to this price forecast include a smaller-than-expected expansion of production capacity, potential trade restrictions imposed by major exporters, and higher-than-forecast natural gas prices. Over the longer term, the nitrogen fertilizer industry faces challenges related to its high carbon footprint, which may drive shifts in production and consumption toward alternatives.

DAP (diammonium phosphate) prices rose 5 percent in 2025Q1 (q/q), returning close to levels seen a year earlier. The increase partly reflects China's restrictions on phosphate exports and sanctions on Russia, which have disrupted global trade flows (figure 17.D). In 2024, China's phosphate exports fell by 10 percent from the previous year due to government measures aimed

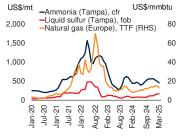
### FIGURE 17 Fertilizer markets

The fertilizer price index increased in 2025Q1, rising more than 10 percent from a year earlier, driven primarily by stronger demand for urea and rising input costs. Despite China's continuing restrictions on fertilizer exports, the global fertilizer market remains fairly well supplied, with affordability ratios much lower than their 2022-23 peaks. While prices are expected to be relatively stable through 2025 and 2026, key risks include rising input costs and trade barriers.

A. Fertilizer prices

### B. Fertilizer input costs

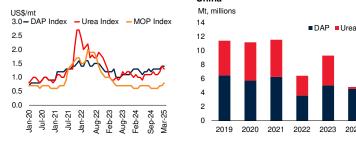




C. Fertilizer affordability index

D. Cumulative fertilizer exports by China

2024



Sources: Bloomberg; Bloomberg L.P. - Green Markets; General Administration of Customs of the People's Republic of China; World Bank.

Note: cfr = cost and freight; DAP = diammonium phosphate; fob = free on board; MOP = muriate of potassium; mt = metric tons; TTF = title transfer facility.

A. Monthly series. Last observation is March 2025.

B. Last observation is March 2025.

C. Ratio of fertilizer prices to the food price index. Ratio of fertilizer prices to the food price index. A rising ratio indicates reduced affordability of fertilizers relative to food prices, while a declining ratio suggests improved affordability. Last observation is March 2025.

D. Bars show the total exports of DAP and Urea exports by China.

at keeping domestic prices low and ensuring phosphate availability for lithium iron phosphate batteries used in electric vehicles. As a result of higher DAP prices, the DAP affordability index (the price of DAP relative to food) has risen further. The impact is particularly evident in Europe, where higher-cost supplies from Morocco, Saudi Arabia, and the United States have replaced imports from China and Russia. DAP prices are forecast to rise by 6 percent in 2025 (y/y) before declining by 8 percent in 2026 as new production capacity comes online, easing supply conditions. The forecast assumes that Russia's exports will continue to be diverted from Europe to Brazil and India. However, further trade restrictions, supply disruptions, or surging ammonia and natural gas prices could push DAP prices higher.

MOP (muriate of potash, or potassium chloride) prices rose by 12 percent in 2025Q1 (q/q), surpassing year-earlier levels by 8 percent. While MOP affordability (relative to food) has slightly deteriorated recently, over the last three quarters it has fluctuated at roughly pre-2020 levels. The market remains well supplied, as exports from Belarus and Russia have continued to grow despite sanctions on the former. Russian potash exports which are not subject to sanctions—surged by 70 percent in 2024 from 2023. Both countries are seeking new markets, with Belarus increasingly routing exports through Russia, particularly to Asia, albeit at higher costs to the importers than under pre-2022 trade patterns. Meanwhile, Canadian exports have increasingly shifted toward Europe. MOP demand has gradually recovered from its sharp decline in 2022, nearly returning to pre-2022 levels. MOP prices are projected to rise by about 5 percent in 2025 (y/y) as demand continues to firm, before stabilizing in 2026. A key downside risk to the forecast is a faster-thanexpected expansion of Belarusian exports via alternative trade routes. In the longer term, the introduction of significant new production capacity, particularly in Canada, could exert downward pressure on prices.

## Metals and Minerals

Metal prices dropped in early April following modest gains in 2025Q1 (q/q), as the demand outlook deteriorated sharply amid escalating international trade tensions. Following an increase of 3 percent in 2024 (y/y), the metals and minerals price index is projected to fall by 10 percent in 2025 and 3 percent in 2026. A sharper-than-expected slowdown in global economic growth and shifts in energy transition policies could weigh on demand for base metals, pushing prices below forecasts. On the upside, production disruptions or additional commodityspecific trade restrictions that curb metal supply could lift prices above projections. In addition, further policy uncertainty and rising geopolitical tensions could drive gold and silver prices above their current forecasts.

### Base metals and iron ore

Escalating trade tensions coincided with a sharp drop in metal prices in recent weeks. Tariff announcements in early April-despite some exemptions for several base metals-weighed on demand sentiment. Earlier, base metal and iron ore prices had edged up in 2025Q1 (q/q) to reach a 10month high in March (figure 18.A). Price gains in aluminum, copper, and tin more than offset modest declines in lead, nickel, and zinc, while iron ore prices remained broadly stable. Recent and anticipated tariff increases on trade in metalintensive products-including automobiles and consumer electronics-between major markets are expected to curb consumption and, in turn, dampen metal demand. These pressures are compounded by continued weakness in China's property sector, which has weighed on demand for construction-related metals such as iron ore and zinc, despite stimulus measures. Nevertheless, the expanding adoption of renewable energy technologies and related infrastructure, particularly in China, is expected to provide some offsetting support to demand for metals such as copper and nickel. Base metal prices are projected to decline by 10 percent in 2025 and by 3 percent in 2026 (y/y), reflecting subdued demand growth and steadily rising supply.

Aluminum prices rose by 2 percent in 2025Q1 (q/q), largely driven by frontloaded demand ahead

of an increase in U.S. tariffs in mid-March, before retreating in recent weeks (figure 18.B). Prices surged to a near three-year high in March, with a widening price differential between the global benchmark price and U.S. aluminum prices. The U.S. Midwest aluminum premium-reflecting regional market costs above the London Metal Exchange (LME) price-soared to about \$850 per metric ton in March, nearing a record high. The United States, a net importer, has recently accounted for about one-fifth of global primary aluminum imports, about two-thirds of which is typically imported from Canada. Aluminum demand growth is expected to slow sharply over the next two years amid heightened trade tensions and decelerating global industrial activity, including the withdrawal of subsidies for new photovoltaic projects in China. Nevertheless, its long-term demand outlook remains solid given aluminum's key role in renewable energy technologies. Meanwhile, global aluminum supply growth is set to weaken, as China, which accounts for 60 percent of global aluminum production, nears a selfimposed 45 million metric ton (mmt) output cap, introduced in 2017 to curb carbon emissions. Aluminum prices are projected to drop by 10 percent in 2025 (y/y) and a further 3 percent in 2026, as the softening demand outlook outweighs limited increases in production.

Copper prices edged up by 2 percent in 2025Q1 (q/q) before retreating rapidly in early April, reflecting anticipated headwinds to global growth amid rising trade tensions. After prices fell in the final quarter of 2024, concerns over potential U.S. sectoral tariffs-stemming from an investigation into U.S. copper imports specifically-drove prices higher. By March, they had surged 9 percent since end-2024, reaching their highest level since mid-2024, as U.S.-based traders sought to build inventories. Looking ahead, global copper consumption is expected to grow at a subdued pace, hampered by slowing global economic activity, on top of further weakness in China's property sector. While these headwinds dominate the outlook, copper's growing use in renewable energy technologies-including electric vehicles, power grids, and the expansion of data centers, partly fueled by surging investment in artificial intelligence-should partly offset subdued de-

### FIGURE 18 Metals and minerals markets

Base metal prices inched higher in 2025Q1 before falling sharply over the past month. Recent price declines were largely driven by aluminum amid a worsening demand outlook and rising trade tensions. Metal prices are projected to fall by 10 percent in 2025 (y/y) and 3 percent in 2026, with all base metals other than tin expected to see price declines. Price forecasts have generally been downgraded, given a deteriorating outlook for global growth. In addition, weak real estate activity in China remains a headwind to iron ore prices. Supply disruptions, including those related to trade restrictions, are a key upside risk to the forecast. A sharper-thananticipated slowdown in global growth could see base metals prices substantially undershoot forecasts.

### A. Base metals and iron ore prices



Index. Dec 2024 = 100

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116

112

108

104

100

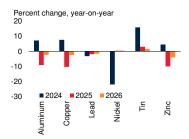
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92

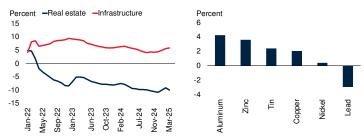
88



### C. Changes in base metals prices



E. China: Fixed asset investment growth from year earlier



2024

Sources: Bloomberg; Haver Analytics; Refinitiv (database); World Bank.

*Note:* dmtu = dry metric ton unit.

A. Last observation is March 2025.

B. Daily aluminum prices. Last observation is April 16, 2025.

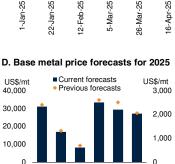
C. Year-on-year change in metal prices based on table 1.

D. Blue bars indicate current forecasts. Orange markers indicate 2025 forecasts made in the October 2024 Commodity Markets Outlook.

E. Year-on-year change in real estate and infrastructure investment. Last observation is March 2025. F. Year-on-year change in global metals supply in 2024 compared to 2023. Last observation is December 2024. mand from other sources. Prices are projected to fall by 10 percent in 2025 (y/y) and a further 2 percent in 2026, reflecting weaker demand growth and steadily rising supply, with additional output expected from Africa, East Asia, the Russian Federation, and South America (figures 18.C and 18.D).

Lead prices declined by 2 percent in 2025Q1 (q/q), extending their slide into early April, as supply conditions improved following a drop in output in 2024. Global lead supply is expected to pick up further over the forecast horizon, driven by a ramp-up in mine production-typically a byproduct of silver and zinc mining-in Australia, China, and Mexico. Expansion of refined lead recycling, which accounts for about two-thirds of total supply, will also support supply growth. Meanwhile, demand is expected to grow only modestly. With lead used mainly in batteries for internal combustion engine vehicles, demand growth is likely to be tempered not only by subdued growth in the major economies but also by the increasing penetration of EVs in the global automotive fleet. Lead prices are therefore projected to edge down by 2 percent in both 2025 (y/y) and 2026.

Nickel prices dropped by 2 percent in 2025Q1 (q/q), reaching their lowest level since 2020. This decline largely reflects rising output and a recent surge in London Metal Exchange warehouse stocks. Most of the surge in global output stems from Indonesia's expanding nickel production, boosted by China-backed smelter investments and government incentives. The global glut has driven prices down 35 percent over the past two years, leading to production cuts in other economies. However, global production growth is expected to slow gradually over the forecast horizon, as Indonesia-now accounting for about 60 percent of global production-introduces mining quotas to stabilize prices. Global nickel demand growth is also expected to moderate, reflecting decelerating demand from the EV battery market, only partially offset by modest growth in stainless steel production. As a result, nickel prices are forecast to fall by 6 percent in 2025 (y/y) before inching up 1 percent in 2026 as the demand-supply balance starts to tighten.



Copper

F. Base metals production growth,

Zinc (RHS) U.S. tariffs on

(RHS)

RHS)

aluminum

Tin prices increased by 5 percent in 2025Q1 (q/q)but fell in April amid mounting trade tensions. The rally in Q1 was fueled by supply concerns, including an earthquake in Myanmar-a major tin producer-and the suspension of mining operations at the world's third-largest tin mine in the Democratic Republic of Congo due to escalating conflict. Global tin supply is set to steadily pick up in 2025, principally due to production growth in Indonesia and Myanmar, which together account for one-fifth of global tin supply. Indonesian tin shipments are expected to rise this year after the resolution of export licensing delays that constrained supply in 2024. The anticipated restart of Myanmar's largest mine-closed since mid-2023-would further alleviate supply constraints in the near term. Set against steady growth demand—including for semiconductors, in photovoltaic panels, and other energy transition technologies—global market conditions expected to remain tight in the coming years, reflecting a limited pipeline of new tin mining projects in development. Accordingly, tin prices are set to increase by 3 percent in 2025 (y/y) and 2 percent in 2026, reaching near-record nominal levels on an annual average basis.

Zinc prices fell by 7 percent in 2025Q1 (q/q) and continued to decline in recent weeks, reflecting subdued industrial activity in key economies. Zinc demand is closely tied to global industrial production, particularly activity in China-the world's largest consumer. About 60 percent of zinc is used for galvanizing steel, mainly for construction. Zinc demand growth is set to slow as China's economy continues to decelerate in the forecast period, partly reflecting persistent weakness in its real estate sector (figure 18.E). After a modest rise in 2024, global zinc supply is projected to grow further over the next two years, driven by major mining projects in Africa, China, Kazakhstan, Mexico, and the Russian Federation, which are expected to feed into higher refined zinc production (figure 18.F). With supply improving amid tepid demand growth, zinc prices are expected to decline by 10 percent in 2025 (y/y) and 5 percent in 2026.

Iron ore prices were largely unchanged on average in 2025Q1(q/q), rising in mid-March on concerns

over U.S. steel tariffs, then falling as steel production cuts in China weakened demand. China accounts for three-quarters of global iron ore imports—the primary input for steel. China's struggling property sector and weak industrial activity in major economies are expected to keep the growth of iron ore demand subdued throughout the forecast period. At the same time, rising iron ore output from Australia and Brazil, the world's two largest producers, along with new lowcost supplies from West Africa, will put further downward pressure on prices. Thus, iron ore prices are projected to decline by 13 percent in 2025 (y/y) and 7 percent in 2026, to levels comparable to the 2018-19 average.

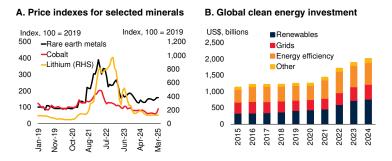
### Critical minerals

Critical-mineral prices rose in 2025Q1, driven by a 13 percent surge in cobalt prices and a 5 percent increase in rare-earth metals, and continued to strengthen in recent weeks. Lithium prices, by contrast, remained broadly stable after posting an increase in 2024Q4 (figure 19.A). Rare-earth prices rose amid concerns over China's recent export restrictions on metals critical for clean energy technologies and defense-which followed the introduction of increased U.S. tariffs. Similarly, cobalt prices surged in March, reversing a January slump that had pushed them to their lowest level since 2016. Prices rebounded after the Democratic Republic of Congo, the world's largest cobalt producer, announced a temporary export ban that lifted prices to a two-year high by the end of the quarter.

Despite recent increases in critical-mineral prices, driven mainly by trade restrictions, they are expected to remain well below their 2022 levels in the near term, as exploration continues to grow alongside clean energy investments (figure 19.B). The growth of exploration is supported by initiatives such as the European Commission's Critical Raw Materials Act and the U.S. Inflation Reduction Act—although some disbursement of funds from the latter was paused earlier this year. Nevertheless, prices are likely to rise over the longer term as demand from clean energy systems, electronics, and advanced military technologies outpaces supply growth. This growth could be

### FIGURE 19 Critical minerals markets

Critical mineral prices increased in 2025Q1, reflecting trade restrictions, including a temporary export ban on cobalt from the Democratic Republic of Congo and export restrictions on several rare earth minerals in China. Although a persistent slide in prices over the past few years has sparked concerns about reduced investment in new mineral supplies, exploration spending continues to grow. Nevertheless, longer-term critical mineral supply risks persist amid rising clean energy investments.



Sources: Bloomberg; International Energy Agency (IEA); World Bank.

A. Last observation is March 2025.

B. Bars indicate global investment in clean energy. 2024 data are estimates. "Other" refers to lowemission fuels, nuclear, and other clean power.

> constrained by factors that are difficult to foresee, including environmental concerns, the uncertain outcome of exploration efforts, long lead times for mine development, changing fiscal incentives, policy uncertainty, and trade restrictions. With mining and processing for many critical minerals currently geographically concentrated, there are particular risks relating to supply chains amid elevated trade tensions.

### **Precious metals**

Precious metal prices surged to record levels in recent weeks, building on a 7 percent gain in 2025Q1 (q/q). The increase was largely driven by a continued rally in gold prices, which hit new record nominal highs in early April amid rising economic uncertainty, including heightened trade tensions. Silver and platinum prices also climbed in 2025Q1, building on increases in the previous quarter. With persistent uncertainty and elevated geopolitical tensions, gold prices are expected to reach an all-time high in 2025. Tight supply is likely to support platinum prices, while strong demand is expected to lift silver prices to record levels. If geopolitical tensions and policy uncertainty become even more pronounced, gold prices could exceed current projections. Meanwhile, weaker-than-expected industrial activity in major

economies could dampen demand for silver and platinum, pushing prices below projections.

Gold prices rose by 7 percent in 2025Q1 (g/g), extending gains to reach an all-time high in early April (figure 20.A). The recent price surge has been primarily driven by strong safe-haven demand amid elevated policy uncertainty and rising trade tensions, and more recently, by a sell-off in other traditional flight-to-safety financial assets. Price gains have also been supported by continued central bank purchases, partly reflecting their reserves management strategies (figure 20.B). Strong safe-haven demand for gold is expected to persist in the near term, buoyed by uncertainty, geopolitical tensions, and concerns about volatility in major financial markets (figure 20.C). Gold prices are projected to increase by 36 percent in 2025 (y/y) before softening somewhat in 2026, assuming that policy uncertainty will start to abate. Even with this moderation, prices are expected to remain about 155 percent above their 2015-19 average throughout the forecast period. Uncertainty about this projection is especially elevated, however, given the outsized influence of geopolitical developments on the gold forecast.

Silver prices increased by 2 percent in 2025Q1 (q/q) on strong demand, extending gains in recent weeks. Silver demand is expected to grow steadily over the forecast horizon, supported by its role as both an alternative safe-haven financial asset and an input in growing industrial sectors like renewable energy technologies and semiconductors. Record-high industrial fabrication and global photovoltaic installations are set to support demand for silver this year, although these industries face potential downside risks from recent tariff announcements. Additionally, economic and geopolitical uncertainty could boost silver's safehaven appeal to investors. Global silver supply is set to grow steadily, with mine production expected to reach a seven-year high in 2025, reflecting increased output from Canada, Peru, the Russian Federation, and the U.S., alongside strong growth of supplies from silver recycling. On balance, robust demand is projected to dominate sufficiently to raise prices by 17 percent in 2025 (y/y) and a further 3 percent in 2026.

Platinum prices were roughly unchanged in 2025Q1 (q/q) after rising marginally in the previous quarter. Demand is expected to fall this year, with a downturn in the industrial sector—which accounts for one-quarter of global consumption, particularly in the chemical and fiber-glass industries—outweighing buoyancy in jewelry and investment demand. Nonetheless, platinum prices are projected to gain 10 percent in 2025 (y/y) and 2 percent in 2026, driven by declining production among major suppliers in South Africa—the world's largest producer—and North America (figure 20.D).

### Risks

While several upside risks remain, the overall outlook for metals prices is tilted to the downside. The main downside risks include the potential for a sharp slowdown in global growth and shifts in energy transition policies. Upside risks to base metals and iron ore prices include unexpected production disruptions and trade restrictions. For precious metal prices, further economic uncertainty stemming from geopolitical and trade tensions represents the key upside risk.

### Downside risks

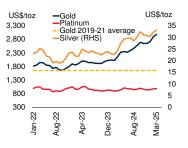
Sharper slowdown in global growth. Although the baseline forecasts assume that global growth will slow, persistent policy uncertainty and elevated trade tensions raise the risk of a more pronounced weakening of growth in the coming quarters. In that context, metals demand could cool disproportionately, given that it tends to be driven by investment and consumption of durable goods—relatively volatile components of expenditure. In particular, if demand deteriorates more than expected in China then the impact on base metals prices could be large.

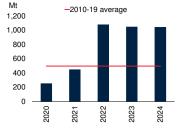
**Slower energy transition.** Potential policy shifts could slow the energy transition, particularly if they are accompanied by slowing activity in clean energy sectors. This could substantially soften demand for metals such as aluminum, copper, nickel, silver, and tin, which are critical for the production of renewable installations and supporting infrastructure. Prices for these metals could

### FIGURE 20 Precious metals markets

Precious metal prices rose by 7 percent in 2025Q1 (q/q). Gold prices reached an all-time high in April, buoyed by economic uncertainty, heightened geopolitical risks, financial volatility, and sustained official sector demand from central banks. On an annual average basis, gold prices are projected to gain 36 percent in 2025 before stabilizing in 2026. Silver and platinum prices are also forecast to increase in both 2025 and 2026, although weaker-than-expected industrial activity in major economies poses a key downside risk to both metals.

### A. Gold, silver, and platinum prices





B. Gold purchases by central banks





# D. Gold, silver, and platinum price forecasts



Sources: Bloomberg; World Gold Council; World Bank.

A. mt = metric tons; toz = troy ounce. Monthly prices. Last observation is March 2025.

B. Gold purchases by central banks and other official sector institutions for each year in metric tons. Last observation is 2024Q4.

C. Daily data. Last observation is April 16, 2025. Red vertical lines indicate geopolitical events and elevated trade tensions.

D. Price forecasts based on table 1.

then significantly underperform relative to the near-term baseline forecasts.

### Upside risks

**Production disruptions.** Mining and processing activities may be unexpectedly constrained by various factors, including environmental regulations, labor disputes, power and water shortages, and weather conditions. Such disruptions could push prices for specific metals higher than expected, particularly copper, nickel, and tin, which are crucial for energy transition technologies and highly sensitive to supply disruptions due to their reliance on a few key producing countries.

Commodity-specific trade restrictions. Increasing numbers of restrictions on metals trade are impacting metals markets. Such restrictions include European Union curbs on aluminum imports from the Russian Federation, Indonesia's nickel ore export ban, and Myanmar's tin export taxes. More such measures could disrupt production and trade, tightening supply and driving prices above forecasts, as well as causing trade diversion and volatility in price differentials across benchmarks. Increases in import tariffs on metals could also push domestic benchmark prices higher in economies imposing them, albeit while also dampening overall metal demand over time. Additionally, China's aluminum output, which reached nearly 44 mmt in 2024, is approaching its 45 mmt annual cap set in 2017 to curb emissions. If the cap is met and enforced, supply growth could be further constrained, pushing aluminum prices higher.

**Geopolitical tensions.** Precious metals, including gold and silver, have shown significant appeal as safe-haven assets in recent years. The further intensification of trade and broader policy uncertainty and trade tensions, a weakening U.S. dollar, additional bouts of financial volatility, and worsening conflicts could push prices of precious metals beyond current projections. Increased geopolitical tensions could boost not only private demand for gold but also demand by central banks if countries seek to further diversify their official reserves.



# **Special Focus**

Post-Pandemic Commodity Cycles: A New Era?

Since the onset of the COVID-19 pandemic, commodity prices have experienced marked swings. Starting with a widespread decline in early 2020, prices reached a record high in 2022 but retreated again in 2023-24. This Special Focus presents a comprehensive, 55-year analysis of commodity price cycles for 27 key commodities using a novel cycle-dating algorithm. On average, commodity prices experienced 14 turning points—roughly a change every four years—with downturns lasting 52 months and booms 38 months, indicating a marked asymmetry in cycle duration. Industrial commodities exhibit substantial synchronization driven by global macroeconomic factors, whereas agricultural commodities are more prone to localized supply shocks. In the post-pandemic period, commodity prices experienced record-high volatility, with cycles showing significant differences compared to past norms. Cycle durations have halved, occurring roughly every two years, with booms becoming more intense. This shift appears to be driven by a confluence of adverse events—including the global pandemic recession, natural disasters, and geopolitical conflicts—and long-term trends such as the energy transition and rising geoeconomic fragmentation.

## Introduction

Commodity prices have seen pronounced movements following the outbreak of the COVID-19 pandemic. Prices declined sharply in early 2020 due to collapsing demand, followed by a rapid surge to historical highs in 2022, driven by supply chain disruptions, strong post-pandemic demand, and geopolitical tensions. In 2023-24, commodity prices have eased somewhat but continue to exceed pre-pandemic levels (figure SF.1.A). More recently, amid heightened global uncertainty, shifting trade policies, and a subdued growth outlook, commodity prices have experienced renewed fluctuations. Driven by a confluence of overlapping shocks, the decadal volatility of the World Bank's Commodity Price Index is on course to reach record levels in the 2020s (figure SF.1.B). Heightened variability can be indicative of evolving patterns in commodity price cycles. Beyond repeated short-term perturbations, structural factors such as the global energy transition and geoeconomic fragmentation are also shaping price dynamics in the post-pandemic period.

This Special Focus examines commodity price cycles, a defining trait of commodity markets, through a systematic, cross-commodity analysis spanning more than five decades. A contribution of the study is the measurement of cycles using a novel dating algorithm that identifies turning points for 27 commodities over the last 55 years, from 1970 to 2024. This enables a comprehensive examination of cycle characteristics, including the length and intensity of price swings, the asymmetry between booms and slumps, and the degree of synchronization across commodities (see Terminology and concepts section for definitions).

The analysis addresses three central questions.

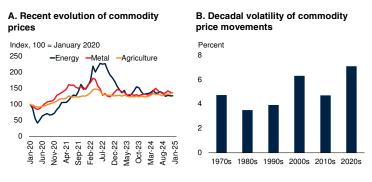
- First, how can commodity price cycles be defined and measured? Unlike business cycles, commodity price cycles lack a standardized classification, requiring a tailored methodology to identify turning points.
- Second, what are the key features of commodity price cycles? The study highlights commonalities and heterogeneity across commodities, revealing that downturns tend to be longer than upswings, with notable synchronicity across commodities.
- Third, how do post-pandemic commodity price cycles compare with historical trends? By placing recent price movements within a historical context, the study indicates that the post-pandemic period could mark a significant deviation in commodity price behavior, departing from established patterns.

Commodity prices are critical for emerging markets and developing economies (EMDEs), with about two-thirds relying on commodities for a significant share of their exports, fiscal revenues, and overall economic activity. The characteristic volatility of commodity prices has significant

*Note*: This Special Focus was prepared by Mirco Balatti and is based on Balatti (forthcoming). Helpful comments were provided by Paolo Agnolucci, Carlos Arteta, John Baffes, Jeetendra Khadan, Philip Kenworthy, Ayhan Kose, Gitanjali Kumar, Dawit Mekonnen, Dana Vorisek, and Hamza Zahid. Research assistance was provided by Juan Felipe Serrano Ariza.

# FIGURE SF.1 Commodity market dynamics: Prices, volatility, and cyclical behavior

Commodity prices have experienced significant volatility since 2020, initially declining sharply due to collapsing demand before surging to historical highs in 2022. While prices have moderated, they remain elevated relative to pre-pandemic levels.



Source: World Bank.

A. Monthly average commodity prices, in U.S. dollar terms. Index base period is January 2020.
B. Volatility of composite commodity index by decades, measured as average standard deviation of monthly price changes.

macroeconomic implications, influencing inflation, external balances, and growth prospects in both commodity-exporting and commodityimporting EMDEs. Understanding the nature and drivers of commodity price cycles is, therefore, essential for policymakers seeking to navigate the economic fluctuations associated with commodity market developments.

The Special Focus presents the following key findings.

Among the 27 commodities analyzed, price cycles exhibit an average of 14 turning points over the past 55 years-equivalent to a phase change every four years, on average. Slumps tend to last significantly longer than booms, with average durations of 52 months and 38 months, respectively, while the amplitudes of booms and slumps are broadly similar, indicating symmetrical price swings. On average, commodities are in the same cyclical phase almost two-thirds of the time, highlighting significant synchronization. Industrial commodities, such as base metals, display higher cycle comovements due to their sensitivity to global macroeconomic developments. In contrast, agricultural commodities exhibit lower synchronization, reflecting their vulnerability to localized, idiosyncratic supply

shocks such as weather disruptions and disease outbreaks.

- The evolution of commodity price cycles reflects significant shifts in drivers and dynamics. Between 1970 and 1985, cycles were predominantly influenced by commodity supply shocks, especially in energy markets, resulting in frequent and severe swings. The period from 1986 to 2001 was marked by greater stability, with longer cycles driven by technological advancements and market liberalization, which bolstered productivity and trade. However, from 2002 onwards, commodity price volatility surged, leading to shorter and sharper cycles. In the twenty-first century, major global events-including financial crises, global recessions, oil price collapses, and wars-have contributed to volatility. Structural shifts, such as the energy transition, weather-related disruptions, and rising trade fragmentation, are also reshaping commodity markets, replacing the strong integration and growth trends seen at the beginning of the twenty-first century.
- Buffeted by a series of shocks, post-pandemic commodity markets have witnessed record price volatility. Since 2020, commodity price behavior has diverged from historical patterns, with more frequent and asymmetric cycles. The duration of phases has nearly halved, averaging less than 25 months compared with almost 50 months pre-pandemic. Booms have been more intense, while slumps have moderated, thereby generating the asymmetry. Commodity price swings have intensified in the 2020s due to short-term shocks and longer-term shifts. A combination of global and commodity-specific shocks-including the global pandemic, geopolitical tensions and conflicts, and extreme weather events-has driven short and sharp cycles. At the same time, the energy transition, climate-related supply risks, and rising geoeconomic fragmentation are also influencing the dynamics of commodity price cycles. These factors amplify price variability in commodities and introduce supply frictions while supporting sustained demand for key commodities.

Note: Last observation is December 2024.

# Methodology, database, and definitions

### Methodology and literature

Commodity prices tend to behave cyclically due to a combination of structural, financial, and external factors.<sup>1</sup> The methodology for this analysis begins with the measurement of commodity price cycles—a critical first step in understanding their dynamics. Drawing on the insight that "the study of cycles necessarily begins with the measurement of cycles" (adapted from Baxter and King 1999), a novel cycle-dating algorithm proposed by Balatti (forthcoming) is used. The approach refines existing methods to identify turning points in commodity price series systematically.<sup>2</sup>

There are two methodological approaches to the study of commodity price cycles in the literature. The first strand decomposes prices into components, with different filtering techniques introduced by Baxter and King (1999) to differentiate the trend and the cycle (Baffes and Kabundi 2023; Ojeda-Joya, Jaulin-Mendes, and Bustos-Pelaez 2019). The second strand follows the business cycle dating literature and aligns

<sup>2</sup> In contrast to business cycle analysis—where classifications such as the NBER provide standardized definitions for recessions and expansions—commodities lack such a benchmark due to the inherent differences between GDP time series and commodity price series. As argued by Deaton (1999), "what commodity prices lack in trend, they make up for in variance." When contrasted to GDP, a quantity variable with more gradual movements and overall upward trend, commodity prices are characterized by sharp and frequent fluctuations and the absence of a pronounced trend component. Also, GDP contractions are broadly negative, but commodity price shifts have mixed effects, benefiting producers or consumers depending on direction. These distinctive features necessitate a specialized algorithm tailored to the unique behavior of commodity prices to accurately date turning points and support rigorous empirical research and policy analysis. closely with the approach adopted in this Special Focus.<sup>3</sup> The identification of turning points to precisely date recessions has been central to understanding economic cycles. Foundational work by Bry and Boschan (1971) and subsequent refinements by Harding and Pagan (2002) have established robust frameworks for dating business cycle phases, while adaptations of these methodologies by Cashin, McDermott, and Scott (2002), World Bank (2022a), and others have extended the analysis to commodity markets.

This study uses a novel cycle dating algorithm introduced by Balatti (forthcoming) to identify turning points in commodity price series without resorting to smoothing or detrending techniques. Building on the Harding and Pagan (2002) framework and following Cashin, McDermott, and Scott (2002), the methodology imposes a minimum phase length of 12 months-ensuring that seasonal effects, such as those in annual crops, do not confound cycle detection-and a minimum full cycle duration of 36 months. A key difference compared to the previous literature is the inclusion of an explicit amplitude restriction to prevent the identification of negligible fluctuations as "regular" cycles and to distinguish between boom and slump phases accurately. Calibrated at a 15 percent threshold, this criterion addresses limitations observed in previous methodologies, ensuring that only suitable price movements are classified as cycles.<sup>4</sup>

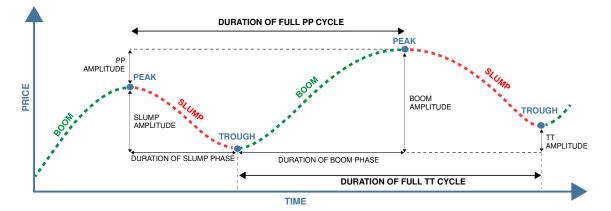
### Database

Monthly commodity prices are collected from the World Bank's *Pink Sheet* and are deflated using the U.S. Consumer Price Index (CPI), following previous literature. The inclusion of 27 different

<sup>&</sup>lt;sup>1</sup>On the supply side, long investment lead times and high capital intensity mean that production responds slowly to price changes, often resulting in overinvestment during booms and persistent excess capacity during slumps. Inventory dynamics also contribute—while stockpiles can buffer short-term imbalances, low inventories amplify price spikes, and excess stocks prolong downturns. Financial speculation further reinforces cycles, as investor sentiment drives price overshooting during upswings and sharp corrections during downturns. Moreover, commodity demand is closely linked to the global business cycle, rising during economic expansions and contracting during recessions. Finally, exogenous shocks—such as geopolitical conflicts and extreme weather events—can cause abrupt supply disruptions, often aligning with or amplifying existing cyclical patterns.

<sup>&</sup>lt;sup>3</sup> The identification of lower-frequency commodity price movements (often termed "super-cycles") through filtering methods has raised debate about the appropriateness of the term "cycle." While short- to medium-term approaches make no assumptions about regularity, some authors caution that labeling these longer movements as cycles implies regular repetition, whereas "waves" may better capture their irregular nature over longer time frames.

<sup>&</sup>lt;sup>4</sup>In a nutshell, the algorithm systematically detects turning points—peaks and troughs—in price data. It first pinpoints local maxima and minima in price series and then applies the predefined duration and amplitude rules to only select economically meaningful turning points, discarding non-eligible ones. The intervals between these points are subsequently classified as either boom or slump phases.



### **DIAGRAM SF.1** Cycle terminology and concepts: Stylized example of commodity price cycles

Source: World Bank.

Note: Slumps refer to the periods between a peak and a subsequent trough, while booms are the periods between a trough and a subsequent peak. A peak-to-peak (PP) cycle includes a slump followed by a boom; a trough-to-trough (TT) cycle includes a boom followed by a slump. Duration measures the time between turning points, and amplitude captures the magnitude of price changes within each phase or full cycle.

commodities from January 1970 to December 2024—ranging from energy, agriculture, metals and minerals, fertilizers, and precious metals—allows a long-term, broad overview of commodity markets. The selection follows Baffes and Kabundi (2023) and is designed to be sufficiently broad to capture commodity heterogeneity while remaining focused enough to provide a relevant analysis of the most significant commodities with market-based price mechanisms.<sup>5</sup>

### Terminology and concepts

The following conceptual definitions are consistently applied when examining the time series and turning points derived from the algorithm (diagram SF.1).

*Peaks and troughs.* Among the identified turning points, local maxima are defined as peaks, while local minima are defined as troughs. The algorithm ensures an alternation between peaks and troughs.

*Slumps and booms.* Time periods between a peak and a trough are referred to as slumps (or down-

ward phases), while periods between a trough and a peak are termed booms (or upward phases). Together, booms and slumps constitute the phases of a full cycle. A full peak-to-peak (PP) cycle is defined as a slump followed by a subsequent boom, while a full trough-to-trough (TT) cycle is defined as a boom followed by a subsequent slump.

*Duration.* Duration refers to the length, measured in months, of individual phases and full cycles. Specifically, it represents the number of months separating identified turning points—from peak to trough (slumps), trough to peak (booms), or from peak to peak (PP cycles) and from trough to trough (TT cycles).

*Amplitude*. Amplitude, measured in log differences, represents the magnitude of price movements during each phase or full cycle. Using log differences, rather than simple percentage changes, ensures symmetry and comparability between upward and downward phases.<sup>6</sup>

*Concordance.* Concordance ratios serve as a valuable metric in the context of assessing synchroniza-

<sup>&</sup>lt;sup>5</sup>Commodity selection follows Baffes and Kabundi (2023) and were "judiciously [chosen] from a larger set of prices based on several criteria, including the importance of the respective markets throughout the sample period, the desire to represent all major commodity groups, and the way in which price signals are formed." The sample includes 27 commodities: 7 agricultural (annual), 4 agricultural (perennial), 6 base metals, 3 energy, 4 fertilizers, and 3 precious metals.

<sup>&</sup>lt;sup>6</sup>This methodological choice is standard in the literature and offers several advantages, particularly in the context of examining commodity price booms and slumps. Log differences provide a symmetric and more consistent measure of proportional changes, ensuring that increases and decreases of the same magnitude are treated equivalently. Unlike percentage changes, which are inherently asymmetric, log differences avoid this distortion, leading to a more accurate representation of the volatility and magnitude of price fluctuations during booms and slumps.

tion across pairs of commodities. They measure the proportion of time two commodity prices are in the same phase of the cycle (boom or slump), providing an indicator of the synchronization of their cyclical behavior. This metric provides insights into the degree of simultaneous time spent in the same phase between two commodities, indicating whether their cyclical behavior over time is similar. The concordance ratio ranges between 0 and 1, indicating the percentage of time spent in the same state. Consequently, independent time series are expected to have a concordance ratio of 0.5.7

# Main features of commodity cycles

A systematic assessment of commodity cycles requires an understanding of their key features. This section starts with a brief analysis of the turning points in commodity price cycles over time. It then presents key stylized facts on cycle duration and amplitude over the 1970-2024 period. Next, it analyzes the similarities and differences across commodity groups. It concludes with an analysis of the synchronization of cycles.

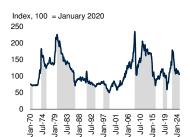
### Turning points of commodity cycles

Global commodity prices. In line with the previous literature, real commodity prices have been subject to significant fluctuations over the last 55 years, though no strong long-term trend is evident (figure SF.2.A). These prices have been characterized by repeated cycles, and have experienced seven troughs and seven peaks since 1970.8 Several of the identified troughsspecifically those in 1975, 1986, 1999, and 2020-coincided with periods of global recessions or economic slowdowns. The 1975 global

### FIGURE SF.2 Commodity price cycles and turning points

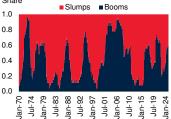
Commodity prices have exhibited recurring cycles over the past five decades, with repeated peaks and troughs often coinciding with global economic shocks or commodity-specific disturbances.

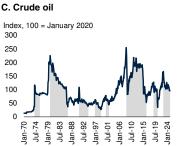
### A. Commodity index cyclical phases



and slumps Share

B. Share of commodities in booms





Index, 100 = January 2020

F. Coffee Arabica

800

600

400

200

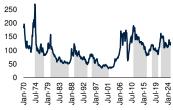
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2 74 79 8

Janj Janþ j Jan-É Jan-

D. Copper

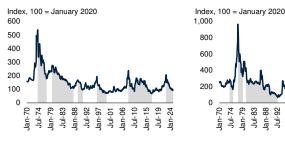
300



92 92

Jan-

97 é 90 Jul-10 Jan-15 Jul-19 Jan-24





E. Wheat

Note: Monthly prices deflated using U.S. Consumer Price Index. Last observation is December 2024. Indexes base period is January 2020. Shaded areas indicate slump phases

A. Monthly composite commodity index

B. Monthly share of commodities in booms and slump phases since 1970. Sample includes up to 27 commodities

C. Average price of Brent (38° API), Dubai Fateh (32° API), and West Texas Intermediate (WTI, 40° API)

D. Copper (LME), Grade A, minimum 99.9935% purity; cathodes and wire bar shapes; settlement price.

E. Wheat (U.S.): No. 1, Hard Red Winter (HRW), ordinary protein; export price, delivered at the U.S. Gulf port for prompt or 30-day shipment.

F. Coffee Arabica (ICO): International Coffee Organization indicator price; other mild Arabicas; average New York and Bremen/Hamburg markets; ex-dock.

recession and accompanying oil price slump followed the sharp increase in oil prices triggered by the Organization of the Petroleum Exporting Countries' (OPEC) price hike and the Arab oil embargo initiated in October 1973. The commodity price slump of 1986 largely resulted

<sup>&</sup>lt;sup>7</sup>In contrast to concordance ratios, correlation coefficients capture the strength and direction of the linear relationship between two commodity price series over time. While correlation coefficients reflect comovement in price changes, concordance ratios focus on the alignment of cyclical phases, making them particularly useful for assessing the degree of synchronization in commodity price cycles.

<sup>&</sup>lt;sup>8</sup>Over the sample, 14 turning points are identified, with peaks in February 1974, November 1979, October 1990, December 1996, June 2008, October 2018, and March 2022. The troughs are in December 1970, December 1975, July 1986, December 1993, February 1999, January 2016, and April 2020.

from changing oil supply dynamics, as OPEC shifted to higher production targets following substantial output cuts in the early 1980s. Although the mid-1980s did not encompass a global recession, economic growth slowed considerably during this period, intensifying downward pressure on commodity prices. Similarly, the decline in commodity prices in 1999 reflected weakening global demand in the aftermath of the 1997-98 Asian financial crisis. The most recent trough, recorded in April 2020 at the onset of the COVID-19 pandemic, followed the steepest commodity price collapse on record. This downturn was driven by a sharp contraction in global commodity demand amid the deepest global recession since World War II, compounded by widespread restrictions on transport and travel-sectors that together account for approximately of global two-thirds oil consumption (World Bank 2022a).

Individual commodity prices. Further insights emerge from analyzing the cyclicality of individual commodity price fluctuations. Since 1970, the share of commodities in slumps and booms has experienced significant swings (figure SF.2.B). Over the sample, on average, 42 percent of commodities were in a boom phase, while 58 percent were in a slump phase. The share of commodities in a boom reached levels above 90 percent in 1972-73 and in 2005-06, when commodity prices experienced strong and broadbased increases. The share of commodities in a slump has reached levels above 90 percent more frequently in 1970, 1981, 1984, 1998, 2012, and 2014-15. More recently, several economic shocks buffeted commodity markets, causing significant volatility and turning points in price cycles. For instance, in February 2020, around two-thirds of commodities were in a downward phase due to the pandemic-induced recession. The economic recovery over 2021-22 also coincided with a large share of commodities in boom phases, reaching a peak in 2022 following the Russian Federation's invasion of Ukraine. In 2024, an average of 54 percent of commodities were in a boom, while the remaining 46 percent remained in a slump.

A closer look at the turning points of four representative commodities—crude oil, copper,

wheat, and coffee—provides further insight into the nature of commodity price cycles.

Crude oil prices have experienced seven troughs since 1970 (figure SF.2.C). These declines have largely coincided with global recessions and OPEC production decisions. The most recent collapse occurred in April 2020, as the sharpest global economic downturn since World War II, combined with widespread mobility restrictions, led to a sudden drop in oil demand (Baffes and Nagle 2022). A strong rebound followed, with prices peaking in June 2022, driven by the postpandemic recovery and disruptions in commodity markets due to Russia's invasion of Ukraine. Despite ongoing volatility due to geopolitical risks and supply adjustments, oil prices have since entered a slump phase, repeatedly returning to an overall downward price trend after short-lived geopolitical surges, amid ample spare supply capacity within OPEC+ (World Bank 2024).

Copper prices have experienced six troughs since 1970 (figure SF.2.D), typically triggered by global recessions, technological advancements, shifts in demand, and the entry of new producers into the market (World Bank 2022a). While economic activity remains the primary determinant of longterm price trends, short-term volatility is largely driven by inventory fluctuations, consumption demand, and supply shocks (World Bank 2022b). The most recent decline occurred between January and April 2020, as the COVID-19 pandemic disrupted global markets. This was followed by a rapid rebound, fueled by economic recovery and supply constraints, leading to a post-pandemic price surge that peaked in May 2021-the most pronounced upswing in over a decade. Real copper prices subsequently declined amid continued weakness in China's real estate sector and softening global demand, but have recently trended upward, supported in part by rising demand from clean technologies (World Bank 2023).

Wheat prices have experienced several notable swings since 1970, with five troughs (figure SF.2.E). Price cycles have been driven primarily by supply disruptions, trade policy shifts, and weather-related impacts on yields. The major troughs in wheat prices have often coincided with periods of oversupply, such as the early 1980s and mid-1990s, when high global stocks depressed prices (Baffes and Nagle 2022). In contrast, price spikes have been linked to supply disruptions caused by droughts, geopolitical events, and export restrictions (World Bank 2022b). The 1970s' wheat price spike resulted from a confluence of supply and demand shocks. Adverse weather constrained production, while surging Soviet grain imports drove up demand. The oil crisis exacerbated inflation and production costs, amplifying price pressures and leading to a boom phase. One of the sharpest price increases occurred in 2007-08 when a combination of poor harvests, high energy costs, and policy-driven export bans led to a significant tightening of global wheat supplies. A similar surge took place in early 2022 following Russia's invasion of Ukraine, which initially halted a substantial portion of global wheat exports. In 2023-24, stock-to-use ratios, a key gauge of global supply tightness, have remained at adequate levels, reflected in the ongoing downward phase.

Arabica coffee prices have experienced six troughs since 1970 (figure SF.2.F). Dynamics are driven primarily by weather-induced supply disruptions, the rise of new producers, and evolving global demand patterns (World Bank 2022a). Some of the most dramatic price surges have stemmed from extreme weather events in key growing regions. The most pronounced occurred between 1975 and 1977, when a severe frost in Brazil-the world's largest coffee producer-triggered a threefold increase in real coffee prices, reaching a historic peak in April 1977. Similarly, severe weather conditions in Brazil and Peru in 1994 and 1997 fueled sharp price increases, leading to a prolonged five-year boom that ultimately gave way to a downturn (World Bank 2022a). More recently, prices soared in 2021, peaking in February 2022, as another severe frost in Brazil curtailed supply. However, during 2022-23, prices declined amid favorable weather conditions and expectations of a production rebound (World Bank 2023). Following the trough in October 2023, Arabica coffee prices have entered a new boom phase, driven by concerns over supplies

from key Robusta producers, including Brazil and Indonesia.

# Duration and amplitude of commodity cycles

Over the last 55 years, the analyzed set of commodities has experienced an average of 14 turning points—roughly one every four years. Figure SF.3.A plots the average duration of the resulting spells. Booms last 38 months on average, while slumps last 52 months, and their difference is statistically significant. In other words, the duration of slumps is usually 1.4 times longer than that of booms. Full cycles can be defined either as peak-to-peak (PP) or trough-to-trough (TT), and both have an average length of 90 months. By construction, these full cycles partially overlap, so similarities in their average statistics are expected.

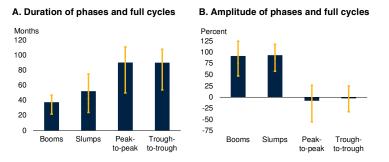
Figure SF.3.B presents the distribution of log amplitudes. Downward phases are shown in absolute terms-meaning their negative values are converted to positive-to allow for a direct comparison with upward phases. Amplitudes are measured in log differences rather than percentage changes, as log differences provide a more consistent and symmetric way to compare price increases and decreases. Booms and slumps record an average amplitude of 92 percent and 93 percent, respectively. Their difference is, however, not statistically significant. Reflecting the somewhat higher amplitude of downward phases, the average amplitude of PP and TT cycles is negative, at -8 percent and -3 percent, respectively. The wide interquartile ranges indicate significant variance in the intensity of full cycles.9

Several factors explain why slumps tend to last longer than booms in commodity markets. First, productivity gains in commodity production can

<sup>&</sup>lt;sup>9</sup>The relatively narrow interquartile ranges for phase duration and amplitude suggest a degree of regularity in commodity price cycles. While fluctuations in commodity prices are influenced by a range of macroeconomic and sector-specific factors, the observed consistency in these metrics suggests that price movements, while volatile, exhibit some recurring patterns over time. This does not imply, however, that commodity cycles follow a predictable, uniform trajectory. Unlike a perfectly periodic cycle, commodity price movements are shaped by shifting economic conditions, policy interventions, technological improvements, supply shocks, and demand shifts, leading to variations in timing and magnitude.

### FIGURE SF.3 Main features of commodity cycles

Commodity price cycles exhibit differences in phases, with slumps consistently outlasting booms. However, their amplitudes are broadly similar, with no statistically significant differences between upward and downward swings.



Source: World Bank.

B. Average amplitude of completed phases and full cycles across the sample. Amplitude measures the average real price change (in log differences) between turning points. For slumps, the absolute value of the amplitude is shown to facilitate comparison with booms.

lead to sustained declines in real prices, gradually reducing costs and increasing supply over time. Second, inventory management has limitations and cannot fully absorb demand fluctuations. High storage costs and perishability constraints amplify downward price pressures, as seen in the 2020 oil crash, when storage shortages led to a historic collapse in prices. Third, while demand can contract abruptly due to economic slowdowns, recessions, or efficiency improvements in commodity-intensive industries, positive supplyside adjustments are typically more gradual. Many com-modities are capital-intensive, with long production lags, prompting suppliers to maintain output despite short-term demand fluctuations. In contrast, booms tend to be sharp but shorter-lived, often triggered by sudden supply-side disruptions such as trade embargoes, extreme weather events, or geopolitical shocks that temporarily constrain availability before markets adjust.

# Cycle characteristics across commodity groups

Commodity price cycles exhibit similarities and differences across commodity groups, reflecting distinct demand and supply dynamics and sensitivity to macroeconomic and financial conditions. Slumps consistently last longer than booms across all categories (figure SF.4.A). However, this asymmetry is particularly pronounced in precious metals, fertilizers, and perennial agricultural commodities, where downturns tend to be persistent. In contrast, energy and base metals, which are closely linked to global industrial activity, exhibit relatively shorter booms and slumps.

A similar pattern emerges when analyzing full cycle durations (figure SF.4.B). TT cycles are generally comparable to PP cycles across most commodity groups, but precious metals stand out with notably longer and more variable cycles. This reflects the unique characteristics of precious metals markets, where price movements are often influenced by their role as safe-haven assets and their strong linkages to financial markets. Unlike industrial commodities, which are primarily influenced by supply and demand fundamentals, precious metals such as gold, silver, and platinum tend to rise in periods of economic uncertainty, inflationary pressures, or geopolitical instability, leading to prolonged booms. Conversely, as macroeconomic conditions stabilize, demand for these assets weakens, resulting in extended cycles.

The magnitude of price fluctuations between turning points is sizable across all commodity groups, with limited variation (figure SF.4.C). In agricultural commodities and base metals, booms exhibit lower amplitudes than slumps, while the opposite holds for energy, fertilizers, and precious metals. In contrast to the latter three groups, agricultural commodities—particularly annual crops—exhibit relatively lower price volatility across cycles. The wider interquartile ranges of full cycle amplitudes in energy, fertilizers, and precious metals, compared to other commodity groups, further underscore greater variability (figure SF.4.D).

Energy, fertilizers, and precious metals exhibit the most pronounced and variable swings in price cycles, reflecting structural and financial factors that amplify volatility. Energy markets are dominated by a few major producers, with OPEC+ supply decisions, geopolitical disruptions, and production shocks creating price fluctuations beyond standard demand-supply dynamics.

*Note:* Last observation is December 2024. Sample includes 27 commodities. Yellow whiskers indicate the interquartile range.

A. Average duration of completed phases and full cycles across the sample. Duration refers to the average length in months.

Precious metals, which act as both commodities and financial assets, are highly sensitive to speculative trading, changes in investor sentiment, and frequent shifts in inflation and interest rate expectations. Fertilizer prices are closely tied to energy costs, as natural gas is a key input in their production, causing energy price shocks to impact fertilizer markets directly.

In contrast, agricultural and base metal markets tend to be competitive, with moderately concentrated production resulting in somewhat lower amplitudes. Among agricultural commodities, perennial crops experience larger booms and slumps due to inherent supply rigidities. Unlike annual crops, their production cannot be quickly adjusted to market conditions, making supply less responsive to demand fluctuations.

### Synchronization of commodity cycles

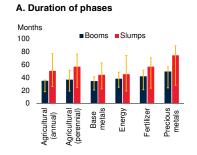
Commodity prices often exhibit synchronized movements, reflecting the influence of multiple economic and financial factors. The literature addressing commodity synchronization comprises three primary strands. The first emphasizes synchronization driven by common macro-economic shocks and fundamental market forces. The second, known as the excess comovement hypothesis, argues that commodity prices tend to move more closely together than fundamentals alone would justify, indicating the possible role of speculative behavior and market sentiment. The third highlights how increased financialization has strengthened linkages across commodity markets through speculative investments and portfolio diversification strategies, further amplifying price comovements.

Concordance ratios are computed for all possible commodity pairs to assess the degree of synchronization across commodities. The concordance ratio measures the proportion of time two commodities are in the same phase of the cycle, providing a gauge of cycle comovement within and across commodity groups. The average pairwise concordance ratio across all commodities stands at 0.64, indicating that two randomly chosen commodities typically shared the same phase 64 percent of the time (figure SF.5.A). Since positive comovements in commodity markets are well documented in the

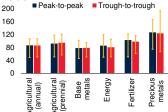
### FIGURE SF.4 Cycles characteristics across commodity groups

Across commodity groups, slumps consistently last longer than boomsenergy and base metals exhibit shorter cycles, while precious metals display extended cycles. Amplitudes are broadly similar, with energy, fertilizers, and precious metals showing the most pronounced swings.

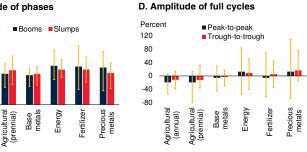
Months



B. Duration of full cycles



C. Amplitude of phases



Source: World Bank.

Agricultura

(annual)

Percent

200

160

120

80

40

Note: Last observation is December 2024. Sample includes 27 commodities. Yellow whiskers indicate the interquartile range.

A.B. Average duration (in months) of completed phases and full cycles within groups.

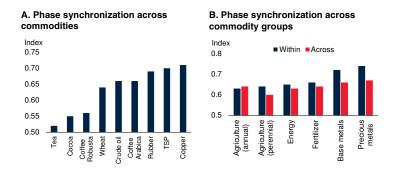
C.D. Average amplitude (in log differences) of completed phases and full cycles within groups. For slumps, the absolute value of the amplitude is shown to facilitate comparison with booms.

literature (World Bank 2024), concordance ratios above 0.5 are to be expected. Among individual commodities, rubber, copper, and the fertilizer triple superphosphate (TSP) exhibit the highest average pairwise synchronization with all other commodities, with concordance ratios close to 0.7, while tea, cocoa, and Robusta coffee display the lowest synchronization, with ratios between 0.5 and 0.6.

Beyond individual commodities, synchronization patterns within and across commodity groups provide further insights. The within-group concordance ratio measures the average degree of synchronization among commodities within the same category, while the across-group ratio captures synchronization between commodities from different groups. The results indicate that within-group synchronization tends to be higher

### FIGURE SF.5 Comovements of commodity cycles

Commodity price cycles exhibit robust synchronization at both the individual and group levels. Metals show the highest within- and acrossgroup synchronization, driven by shared demand dynamics and common cost structures. In contrast, agricultural commodities exhibit lower synchronization due to lower substitutability, distinct production cycles, and greater exposure to idiosyncratic supply shocks.



Source: World Bank.

Note: Synchronization is measured by the concordance statistic, defined as the proportion of time two price series spend in the same cyclical phase. It equals one if both series always coincide in the same phase.

A. Average pairwise concordance ratio between each commodity and other commodities in the sample. The chart displays a selected subset of the commodity sample, including the three most synchronized, the three least synchronized, and four representative commodities analyzed in the text and shown in figure SF.2. The total number of commodities shown is nine, as copper is both a representative commodity and the most synchronized one.

Cocoa: International Cocoa Organization daily price; average of the first three positions on the terminal markets of New York and London (nearest three future trading months). Coffee Robusta: International Coffee Organization indicator price; Robustas, average New York and Le Havre/ Marseilles markets; ex-dock. Coffee Arabica: International Coffee Organization indicator price; other mild Arabicas; average New York and Bremen/Hamburg markets; ex-dock. Copper: Standard Grade A; cathodes and wire bar shapes. Crude oil: Average price of Brent (38° API), Dubai Fateh (32° API), and West Texas Intermediate (WTI, 40° API). Rubber: RSS3 grade; Singapore Commodity Exchange Ltd (SICOM) nearby contract. Tea: Mombasa; African origin; all tea; arithmetic average of weekly quotes. TSP: Triple superphosphate; spot import U.S. Gulf. Wheat: No. 1 Hard Red Winter (HRW), ordinary protein; export price delivered at the U.S. Gulf port for prompt or 30-day shipment. B. Average pairwise concordance ratio for commodity pairs belonging to the same group (withingroup) and for pairs comprising commodities from different groups (across-group).

> than across-group synchronization, reflecting similarities in production processes, demand drivers, and substitutability, as well as complementarity, within each category (figure SF.5.B). Energy, fertilizers, base metals, and precious metals exhibit the highest within-group concordance ratios, ranging from 0.65 to 0.75. The high synchronization among these industrial commodities reflects their shared substitutability and complementarity on the demand side—such as copper and aluminum in industrial applications—as well as common cost drivers affecting extraction and production costs.

> Conversely, agricultural commodities display the lowest within-group synchronization, with a concordance ratio of approximately 0.63. The lower comovement among agricultural commodities stems from limited substitutability in production factors and greater exposure to

idiosyncratic supply shocks, such as weather conditions, disease outbreaks, and land constraints.

Across groups, industrial commodities—base metals, energy, and precious metals—and fertilizers show strong synchronization, reflecting their shared sensitivity to global macroeconomic conditions. Economic expansions tend to drive simultaneous increases in demand across these commodities, while downturns lead to broadbased declines (World Bank 2024). In contrast, perennial crops like coffee and cocoa exhibit particularly low synchronization due to long production cycles and localized supply constraints.

# Commodity cycles over time

### Commodity cycles: 1970-2024

Commodity price cycles have undergone significant transformations over the past five decades, driven by shifts in global economic conditions, evolving market structures, and changing policy environments. Previous research on commodity price dynamics has typically divided recent history into three broad periods since 1970, each distinguished by unique drivers and cycle characteristics (Baffes and Nagle 2022). This section presents a systematic temporal analysis of these cycles, focusing on changes in duration, amplitude, and underlying factors across three sub-periods commonly referenced in the literature: 1970-85, 1986-2001, and 2002-24. The analysis reveals notable contrasts across these periods. The 1986-2001 period stands out for its relatively smoother dynamics, characterized by longer cycles with moderate amplitudes, while the first and last periods experienced more abrupt and frequent fluctuations (figure SF.6.A-B).

The first period (1970-85) was marked by heightened volatility, primarily driven by widespread supply shocks, particularly in energy markets. Oil price shocks during the 1970s and 1980s emerged as the principal source of global commodity price fluctuations. The collapse of the Bretton Woods system further intensified inflationary pressures and geopolitical uncertainties, amplifying commodity price swings. In terms of cycle duration, booms during this period averaged 31 months, while slumps were notably longer. The amplitude of price movements was substantial, reflecting the intensity of supply-side disruptions and market instability. This period underscores the significant role of supply shocks in shaping commodity price behavior, with energy markets disproportionately affected.

The second period (1986-2001) exhibited comparatively tranquil market dynamics. Turning points were further apart, and full cycles averaged the longest duration among the three periods, indicating more stable market conditions. Compared to pre-1986, booms extended to an average of 47 months, while slumps stretched to 56 months, suggesting prolonged periods of more gradual price adjustments. Price amplitudes during this phase were relatively more muted and homogeneous, with both PP and TT full cycles exhibiting positive average values-unlike in other periods. This moderation in commodity price cycles can be attributed to significant productivity gains, particularly from advancements in biotechnology that boosted crop productivity. Market liberalization in emerging economies also played a key role by fostering global trade flows and expanding access to commodity markets. This combination of technological progress and structural economic reforms contributed to a more stable global commodity market environment, as increasing commodity supply was generally met by steady demand growth.

The third period (after 2002) saw a resurgence of volatility, driven by broad-based demand shocks and linked to rapid economic growth in EMDEs and their integration into the global economy. Cycle duration shortened compared to the previous period: booms averaged 35 months, while slumps declined to 46 months. Despite the notably shorter phases, amplitude statistics point to similarly pronounced booms and slumps compared to the past, suggesting faster price swings. Major events contributing to commodity price volatility during this period included the 2008 global financial crisis, the 2014-15 oil price collapse, the COVID-19 pandemic, and geopolitical shocks in the 2020s, notably the conflicts in Ukraine and the Middle East. In contrast to earlier decades, global macroeconomic shocksespecially demand shocks—became the predominant factor influencing commodity markets. The financialization of commodity markets has significantly strengthened price synchronization and likely increased their sensitivity to global economic developments, especially since the commodity price boom of the late 2000s (Baffes and Nagle 2022).

The intensified nature of commodity price cycles in this period reflects long-term structural shifts driven by two key global economic trends. First, the turn of the century was marked by rapid global economic integration, driven by surging demand associated with China's industrialization and urbanization and facilitated by numerous trade agreements and liberalization initiatives. This momentum slowed considerably following the global financial crisis, giving way in the 2010s to a period of sluggish global growth. A lackluster recovery in the United States, the euro area sovereign debt crisis, and the onset of slowing potential growth in China all contributed to a weaker global demand environment. This shift was reflected in commodity markets, most notably in the sharp collapse of oil prices in 2014-15, marking a departure from the earlier boom years and contributing to a more volatile cycle pattern. Since the late 2010s, the macroeconomic environment has been characterized by even weaker global growth, set back by the pandemicrelated global recession of 2020, and by escalating geopolitical tensions and a resurgence of protectionist measures (see Post-pandemic commodity cycles section). Second, climate-related factors and the global energy transition have gradually emerged as significant influences on commodity markets, progressively reshaping supply conditions and demand patterns. The increasing frequency of extreme weather events has steadily affected production, particularly in agricultural and energy commodities. Meanwhile, long-term policy initiatives supporting renewable energy sources have structurally boosted demand for critical minerals.

Collectively, these three sub-periods highlight a clear transition in the drivers of commodity price volatility over the last 55 years. The 1970-85 period was dominated by commodity supply-

driven shocks linked to geopolitical instability and inflationary pressures. The 1986-2001 period marked a shift toward more stable, supplyadjusted cycles influenced by technological advancements and market liberalization. In contrast, the post-2002 period has been shaped primarily by commodity demand dynamics, reflecting the increasing integration of EMDEs into global commodity markets and significant global events. In the latter part of this period, however, rising economic fragmentation and climate-related factors, combined with the energy transition, may have introduced new, persistent forces into commodity markets.

### Post-pandemic commodity cycles

The most recent period of commodity price fluctuations, beginning with the COVID-19 pandemic, offers critical insights into the evolving dynamics of commodity cycles. Given the geographic dependencies inherent in the production of many commodities, which create supply rigidities, and generally low demand elasticities, commodity markets are inherently susceptible to large price swings when adverse events occur. The pandemic itself may have been a singular event in this regard but longer-term trends—including rising economic fragmentation, more frequent weather shocks, and the energy transition—are likely to become increasingly influential for commodity prices, potentially increasing their sensitivity to macroeconomic shocks. By placing the 2020s in historical context, findings suggest that post-pandemic commodity behavior may signal a significant shift, marked by more frequent turning points and greater volatility.<sup>10</sup>

Results indicate a more compressed cyclical structure in commodity markets since 2020, with shorter phases driven by the increased frequency of turning points (figure SF.6.C). Post-pandemic boom phases average 24 months, significantly below the 38-month average recorded over the 1970-2019 period. The duration of slumps has contracted even more markedly, halving from an average of 54 months before 2020 to 23 months in the post-pandemic period. This translates to roughly a turning point every two years. In contrast with the full sample, the difference in duration between upward and downward cycles is not statistically significant. As a consequence of the lower phase duration, full cycles have become considerably shorter as well. While peak-to-peak and trough-to-trough cycles averaged 90 months prior to the pandemic-exceeding 100 months during the relatively stable 1986-2001 periodpost-pandemic cycles have been completing in just 45 months. While long cycles cannot yet have occurred in the 2020s by definition, the preponderance of already complete shorter cycles suggests a genuine shift in cycle durations, supported by comparisons of 2020-24 with other five-year periods.

The amplitude of commodity price fluctuations has also shifted markedly in the post-pandemic period (figure SF.6.D). Booms have intensified, averaging 113 percent—up from 89 percent over the 1970-2019 period and 94 percent during the highly volatile 1970-85 period. In contrast, slumps have become less severe, with an average price decline of 79 percent compared to 94 percent over the preceding five decades. Even

<sup>&</sup>lt;sup>10</sup> For both the full sample and individual sub-periods, including the 2020s, the cycle identification algorithm is applied to the complete time series to mitigate short-sample biases and ensure consistent turning-point detection. The analysis considers only those phases and cycles that are complete, thereby preventing ongoing cycles from skewing the average estimates.

In the post-pandemic period, more than 50 individual phases are observed across commodities, with an average of two turning points per commodity. This reflects a high frequency of fluctuations and provides a sufficient sample for analysis. The widespread nature of cycles since 2020 further supports the findings: 26 out of 27 commodities experienced at least one turning point, suggesting that the observed patterns are not driven by a single commodity but rather reflect broader market trends. Statistical tests confirm that duration

and amplitude metrics in the post-pandemic period differ significantly from most benchmark periods.

To address concerns about the limited time span of the 2020s (2020-24), a comparable analysis was performed using rolling fiveyear windows starting from 1970. Relative to earlier five-year periods, the post-pandemic window stands out for having the highest number of turning points, with duration and amplitude metrics diverging notably from historical norms—supporting the conclusion that recent cycles are shorter and marked by asymmetric intensity.

Nevertheless, while the post-pandemic period exhibits a considerable number of phases due to heightened commodity price fluctuations, the five-year sample provides only an initial assessment of these dynamics. A more comprehensive evaluation will require additional years of data to fully capture the evolving nature of commodity price cycles in the 2020s.

relative to the more subdued 1986-2001 period, post-pandemic slumps are milder on average. The divergent pattern leads to a pronounced and statistically significant asymmetry in amplitude between booms and slumps, differing from the more balanced pattern observed in the full sample. The combination of stronger upward price movements and more moderate downturns suggests an important transformation in commodity price behavior during the five years post-pandemic, with cycles characterized by sharper spikes and less pronounced declines.

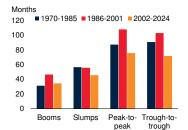
Multiple factors contribute to the observed deviations from historical commodity price patterns. Short-term macroeconomic shocksincluding the COVID-19 pandemic, geopolitical conflicts, monetary policy shifts, and China's economic slowdown-have played a key role in driving sharp price fluctuations. These global disruptions have heightened commodity price volatility and increased the frequency of cycles in the 2020s. Unlike previous economic recoveries, the post-2020 rebound was marked by a greater influence of commodity-specific shocks, such as disruptions to commodity trade and geopolitical tensions. This contrasts with previous episodes, such as the recovery following the 2009 global recession, where financial and demand-driven shocks played a major role in commodity price developments (World Bank 2024). Looking ahead, amid generally higher volatility, the amplitude of slumps may increase as well, particularly in response to adverse demand shocks.

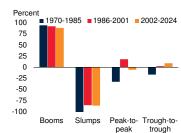
Beyond the post-pandemic economic rebound due to the natural resumption of activity, strong monetary and fiscal policy support further fueled commodity booms in the early 2020s, particularly in industrial sectors. As inflation surged, central banks rapidly tightened monetary policy, pushing global interest rates into restrictive territory. This policy shift dampened economic activity and weighed on commodity demand. Persistent weakness in China's property sector, along with broader concerns about a slowdown in China's growth, has further weighed on prices for some industrial commodities, such as iron ore. Food and energy prices spiked in the immediate aftermath of Russia's invasion of Ukraine, driven

### FIGURE SF.6 Evolution of commodity cycles

Commodity price cycles have undergone significant shifts over the past five decades, reflecting changes in global economic conditions, market structures, and policy environments. These cycles have become shorter and more intense in the post-pandemic period, with more frequent turning points and sharper recoveries. Post-2020 commodity volatility has been driven by overlapping shocks—including the COVID-19 pandemic and geopolitical conflicts—combined with long-term trends such as the energy transition and rising geoeconomic fragmentation.

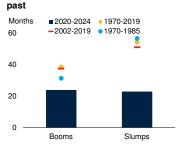
### A. Evolution of duration



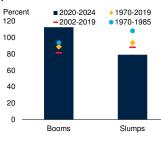


B. Evolution of amplitude

### C. Post-2020 duration compared to



# D. Post-2020 amplitude compared to past



Source: World Bank.

Note: Phases and cycles are assigned to the period in which they commence. Sample includes 27 commodities.

A.B. Average duration (in months) and amplitude (in log differences) of completed phases and full cycles for the indicated periods.

C.D. Average duration (in months) and amplitude (in absolute log differences) of completed phases for the indicated periods.

by supply disruptions, rising input costs, and heightened geopolitical risk premia. Energy markets have been particularly sensitive to OPEC decisions and ongoing geopolitical tensions. These factors indicate that the observed volatility is not solely a consequence of the pandemic but rather the result of multiple overlapping shocks. Recent developments since January 2025 have seen renewed large price swings, further adding to the elevated post-2020 volatility and underscoring the continued vulnerability of commodity prices and the tendency toward shorter cycles (see Executive Summary). However, whether this pattern marks the continuation of a broader regime shift toward shorter, sharper cycles and a fundamentally more volatile era for commodity markets remains uncertain.

Intertwined longer-term trends are also shaping commodity price dynamics. The global energy transition continues to drive sustained demand for critical minerals-such as lithium, copper, nickel, and rare earth elements—putting upward pressure on prices in these markets. Simultaneously, the growing frequency of extreme weather events has heightened supply risks, particularly for agricultural commodities, where production remains highly sensitive to climate conditions. Meanwhile, supply disruptions caused by adverse weather, disease outbreaks, and the high geographic concentration of production for certain key food commodities have tended to push up agricultural prices.

Additionally, the slowdown in global integration since the early 2000s has given way to rising geoeconomic fragmentation, marked by increased trade barriers, sanctions, and reshoring efforts aimed at securing strategic supplies—all potential sources of commodity market disruption. Recent evidence suggests that the global economy is becoming increasingly fragmented, as trade, industrial, and security policies grow more restrictive, reflecting rising constraints on the flow of goods and capital (Fernández-Villaverde, Mineyama, and Song 2024; World Bank 2025).11 Commodity markets are especially vulnerable to fragmentation due to their concentrated production, limited supply chain diversification, and low demand elasticity, which make them particularly sensitive to shocks (IMF 2023). Escalating trade tensions between major economies have further deepened fragmentation, heightening the risk of sharp commodity price swings, exemplified by the recent surge in gold prices, driven by safe-haven demand amid growing uncertainty.

# Conclusion

Since the onset of the COVID-19 pandemic, sharp swings in commodity prices have driven volatility to record highs, raising the question of whether these recent movements represent relevant changes in commodity price cycles or remain broadly within historical norms. To shed light on this issue, this Special Focus provides a comprehensive examination of commodity price cycles spanning more than five decades, analyzing key cyclical characteristics across 27 major commodities. It contributes to the wider literature by applying a novel cycle-dating algorithm specifically designed to identify commodity price cycles.

This examination yields several important conclusions. On average, commodity prices exhibit a turning point every four years. Downward phases tend to last significantly longer than upward phases, with slumps averaging 52 months compared to 38 months for booms, although the amplitude of price movements is broadly similar. Synchronization across commodities is substantial, particularly among industrial commodities, which exhibit higher comovement due to their sensitivity to common macroeconomic drivers. In contrast, agricultural commodities display lower levels of synchronization, reflecting their greater exposure to localized, idiosyncratic supply shocks.

A comparison of post-pandemic cycles with historical trends reveals significant shifts in commodity price behavior. Since 2020, full cycle durations have nearly halved, averaging 45 months compared to 90 months pre-pandemic. This transformation reflects a mix of short-term macroeconomic shocks-such as the 2020 global recession, geopolitical conflicts, and extreme weather events-and structural factors, including the energy transition and increasing geoeconomic fragmentation. Looking ahead, the interplay of possible supply disruptions, set against the backdrop of geopolitical risks, fragmentation, adverse weather conditions, and sustained demand for critical minerals, could heighten market vulnerabilities, leading to frequent and intense commodity cycles.

<sup>&</sup>lt;sup>11</sup> Empirical evidence from IMF (2023) points to increasing fragmentation in commodity markets. First, trade restrictions on commodities have risen sharply since 2018, exceeding those imposed on other goods. Second, foreign direct investment (FDI) and cross-border mergers and acquisitions in the commodity sector have been declining—a trend already underway before Russia's invasion of Ukraine. Third, widening price differentials across geographic markets for key commodities suggest a shift toward more segmented and less integrated markets.

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## **ECO-AUDIT**

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• ommodity prices are set to fall sharply this year, by about 12 percent overall, as weakening global economic growth weighs on demand. In 2026, commodity prices are projected to reach a six-year low. Oil prices are expected to exert substantial downward pressure on the aggregate commodity index in 2025, as a marked slowdown in global oil consumption coincides with expanding supply. The anticipated commodity price softening is broad-based, however, with more than half of the commodities in the forecast set to decrease this year, many by more than 10 percent. The latest shocks to hit commodity markets extend a so far tumultuous decade, marked by the highest level of commodity price volatility in at least half a century. Between 2020 and 2024, commodity price swings were frequent and sharp, with knock-on consequences for economic activity and inflation. In the next two years, commodity prices are expected to put downward pressure on global inflation.

Risks to the commodity price projections are tilted to the downside. A sharper-than-expected slowdown in global growth—driven by worsening trade relations or a prolonged tightening of financial conditions—could further depress commodity demand, especially for industrial products. In addition, if OPEC+ fully unwinds its voluntary supply cuts, oil production will far exceed projected consumption. There are also important upside risks to commodity prices—for instance, if geopolitical tensions worsen, threatening oil and gas supplies, or if extreme weather events lead to agricultural and energy price spikes.

The World Bank's **Commodity Markets Outlook** is published twice a year, in April and October. The report provides detailed market analysis for major commodity groups, including energy, metals, agriculture, precious metals, and fertilizers. Price forecasts for 46 commodities are presented together with historical price data. Commodity price data updates are published separately at the beginning of each month.

