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# Commodity Markets Outlook

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WORLD BANK GROUP



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The report and data can be accessed at:  
[www.worldbank.org/commodities](http://www.worldbank.org/commodities)

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## Executive Summary

*Commodity prices are expected to decline by about 7 percent overall this year, reflecting subdued global economic activity, elevated trade tensions and policy uncertainty, and ample global supply of oil. In 2026, commodity prices are forecast to fall by a further 7 percent, a fourth consecutive year of decline, as global growth remains sluggish and the oil market oversupplied. Energy price movements are expected to continue contributing to global disinflation in 2026. Metals and minerals prices are projected to remain stable in 2026, while agricultural prices are forecast to edge down, primarily due to strong supply conditions. Precious metals prices are projected to rise another 5 percent, after a historically large, investment-driven rally of about 40 percent in 2025. Risks to the commodity price projections are tilted to the downside. Key downside risks include weaker-than-expected global growth, a longer-than-assumed period of economic policy uncertainty, and additional oversupply of oil. Upside risks include intensifying geopolitical tensions, the market impact of additional oil sanctions, supply reductions stemming from additional trade restrictions, unfavorable weather conditions, and faster-than-expected rollout of new data centers. Commodity price volatility in recent years has revived interest in supply management via international commodity agreements. Historical experience, however, shows that the most effective policy is to promote diversification, innovation, transparency, and market-based pricing—measures that build lasting resilience to commodity price volatility.*

## Recent developments

Commodity markets have been impacted by a confluence of factors over the past six months, leaving prices below 2024 levels. Continued subdued economic activity, trade restrictions and associated high economic policy uncertainty, and weather-related supply shocks have all affected commodity markets. Energy prices, in particular, have pulled down the World Bank Group's overall commodity price index (figure 1.A). The softening of commodity prices in nominal U.S. dollars would have been larger without the depreciation of the dollar since early 2025.

In energy markets, the announcement of a new set of U.S. sanctions on Russian oil companies in late October was followed by spike in oil prices. Prior to recent events, Brent oil prices declined by 14 percent in the first nine months of the year (y/y), reflecting an oversupplied market and sluggish global growth. Over the past two years, oil demand growth in China, a key source of demand, has been sharply below its 2015-19 average, weighing on prices, while growth in the rest of the world has been broadly steady (figure 1.B). Increasing oil production by eight OPEC+ members since April, on top of continued strong gains in non-OPEC countries, has put additional downward pressure on prices. The U.S. benchmark for natural gas prices rose by 64 percent in

the first nine months of the year (y/y) as European demand for U.S. liquified natural gas (LNG) surged due to reduced electricity output from renewable sources and efforts to build stocks.

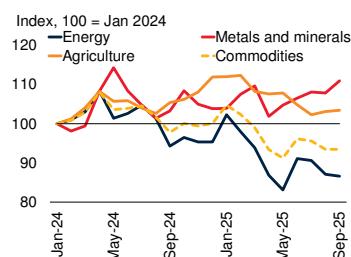
Recent developments in base metals markets have been shaped by evolving trade policy and economic conditions in China. Metal prices recovered in 2025Q3 after declining earlier in the year, reflecting resilient demand in major economies. In the lead-up to the U.S. tariffs, importers front-loaded purchases of aluminum and copper, contributing to short-term market tightening. For copper, accelerated shipments to the United States lifted onshore inventories ahead of the August tariffs and widened the price spread between the COMEX and LME exchanges (figure 1.C). In addition, an accident at one of the world's largest mines in September caused a spike in copper prices. Iron ore prices rebounded in the third quarter, supported by expectations of record-high steel exports and a temporary pickup in Chinese steel production, despite a prolonged downturn in the property sector.

Among precious metals, for which prices have risen for eight consecutive quarters, gold has surged to successive record highs in the second half of 2025 on strong investment demand due to its safe-haven status amid elevated geopolitical uncertainty, macroeconomic factors such as recent

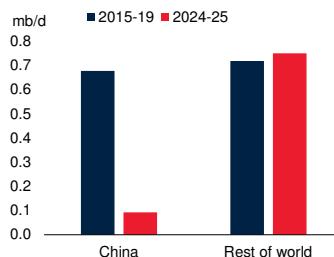
## FIGURE 1 Recent developments in commodity markets

Commodity prices have fallen since the beginning of 2025, largely driven by lower energy prices. A sharp decline in oil prices in 2025 reflects sluggish oil demand growth in China and excess global supply. Market anticipation of tariffs led to unusually wide price differentials across major copper exchanges for several months in 2025. Gold prices surged to successive record highs in the second half of the year, largely reflecting safe-haven demand. Food prices have continued to edge down, while beverage prices experienced a sharp, weather-related spike in the first half of the year.

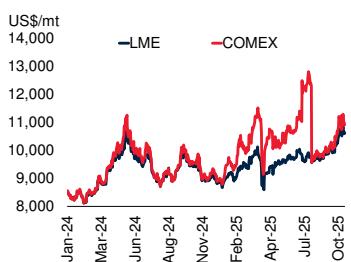
### A. Commodity prices



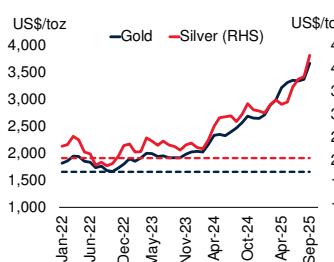
### B. Average annual increase in oil demand



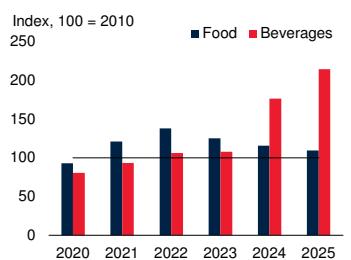
### C. Copper prices



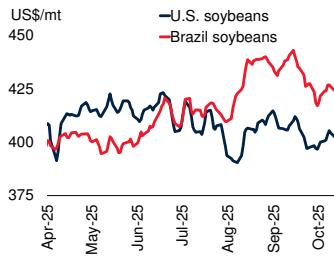
### D. Gold and silver prices



### E. Food and beverage commodity prices



### F. Benchmark soybean prices



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

Note: COMEX = The Commodity Exchange; LME = London Metal Exchange; mb/d = million barrels per day; mt = metric ton; RHS = right-hand side; toz = troy ounce.

A. Indexes show prices in U.S. dollars. Last observation is September 2025.

B. Annual difference in oil demand for China and the rest of the world, based on IEA's *Oil Market Report*, October edition.

C. Last observation is October 17, 2025.

D. Dotted lines show averages of gold and silver prices (blue and red lines, respectively) for 2019-21.

E. Prices are in U.S. dollars. Food commodities include oils and meals, grains, and other food (bananas, beef, chicken, oranges, shrimp, and sugar). Beverage commodities include cocoa, coffee, and tea. For 2025, bars show indexes based on data for January through September.

F. Three-day rolling averages. Last observation is October 17, 2025.

U.S. monetary easing, and heightened policy uncertainty, reinforced by a weaker U.S. dollar (figure 1.D). Silver prices have also risen to record levels, reflecting the metal's dual roles as a safe-haven asset and a key input in fast-growing renewable energy applications. Geopolitical uncertainty and a weakening U.S. dollar were also factors behind the last major surge in gold prices, in 1979-80, but a distinguishing feature of the current rally is the unprecedented pace of gold purchases by central banks.

In food commodity markets, prices edged down for the third consecutive quarter in 2025Q3 (q/q), driven by marked declines in grain prices—notably rice, wheat, and maize—amid ample global supplies (figure 1.E). Soybeans, however, have been the target of fresh trade restrictions that have curtailed U.S. exports to China while significantly increasing export opportunities for producers in Argentina and Brazil, contributing to a substantial gap between benchmark soybean prices in the United States and Brazil (figure 1.F). Although beverage commodity prices have retreated in recent months, prices of coffee remain close to all-time highs reached in early 2025, when weather-related challenges suppressed production.

Fertilizer prices have continued to climb, by 19 percent in the first nine months of 2025 (y/y), reflecting strong demand, the effects of trade restrictions, and production shortfalls. Combined with lower grain prices, higher fertilizer costs have reduced profits for many agricultural producers.

## Outlook

The broadest index of commodity prices is projected to drop by 7 percent in 2025 (y/y) in nominal U.S. dollar terms and by a further 7 percent in 2026, before rebounding by 4 percent in 2027 (table 1).<sup>1</sup> Energy prices are expected to decline considerably in 2025 and 2026, although by far less than during the COVID-19 pandemic or the mid-2010s commodity price drop, while projected changes in non-energy prices are comparatively small (figure 2.A). For both years, price

<sup>1</sup> The forecasts do not reflect announced but not yet implemented policies.

forecasts have been upgraded since April, owing largely to global activity that has been more resilient than expected. The forecast for 2026 is predicated on the continuation of two major forces—subdued global economic growth and an oversupplied global oil market—as well as on the assumption of generally ample supplies of agricultural and metal commodities.

If realized, the baseline 2026 price forecast would mark the fourth consecutive year of decline, and a 36 percent drop from the most recent peak in 2022, following a surge of about 125 percent from 2020 to 2022 (figure 2.B). The outlook implies that commodity prices would still be about 14 percent higher in 2026 than they were in 2019, before the pandemic.

## Energy

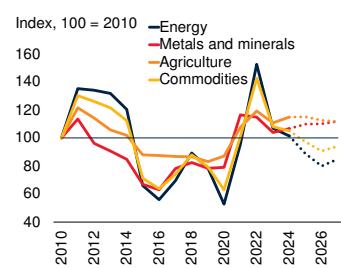
The World Bank Group's energy price index is expected to fall by 12 percent in 2025 (y/y) and by an additional 10 percent in 2026, before rising by 6 percent in 2027. The 2026 energy price forecast assumes that weakening oil prices will outweigh a projected rise in natural gas prices stemming from accelerating gas consumption. The Brent oil price is forecast to average \$68/bbl (per barrel) in 2025, a sharp decline from \$81/bbl in 2024, and to average \$60/bbl in 2026. The oil price forecast envisages a continued slowdown in oil consumption growth, reflecting very weak demand growth in China, continued rapid adoption of electric and hybrid vehicles, and a further rise in global oil supply (figure 2.C). Excess supply in the global oil market has expanded significantly in 2025 and is expected to rise next year to 65 percent above the most recent high, in 2020 (figure 2.D).

Natural gas prices in the United States, Europe, and Asia are expected to diverge during the forecast period. After surging by an estimated 60 percent in 2025, mainly owing to a sharp increase in LNG imports from Europe, the U.S. benchmark price is projected to rise by a further 11 percent in 2026, before holding steady in 2027. The European benchmark price is expected to rise by 10 percent in 2025 but decline by about 11 in 2026 and 9 percent in 2027, as plans for the European Union to phase out purchases of natural gas from Russia proceed. The benchmark LNG

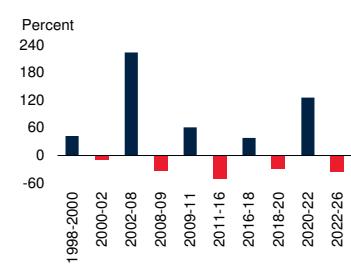
## FIGURE 2 Commodity market outlook

*Commodity prices are projected to decline by 7 percent in 2026 as energy prices fall further. If realized, the anticipated drop in commodity prices in 2026 would mark the fourth consecutive year of decreases, although it follows a two-year spike in prices during the pandemic. In the oil market, continued excess supply, together with the rising adoption of electric vehicles and the subsequent reduction in demand for oil, are expected to keep downward pressure on prices.*

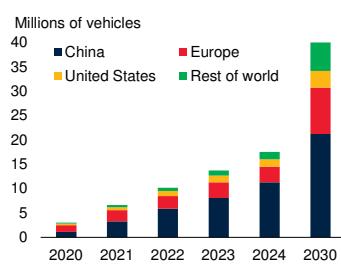
### A. Commodity price forecasts



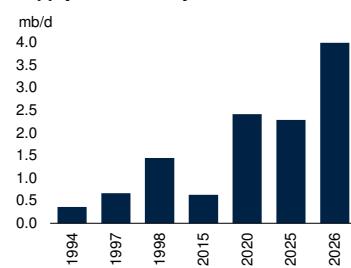
### B. Cumulative change in commodity prices



### C. Electric vehicle sales



### D. Average annual excess oil market supply in selected years



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

A. Commodity prices line refers to the World Bank's commodity price index, excluding precious metals. Indexes show prices in nominal U.S. dollars. Dashed lines indicate forecasts.

B. Bars show compound annual price changes in the World Bank's commodity price index, in nominal U.S. dollars, during periods of continuous annual increase and decrease. Prices for 2025 and 2026 are forecasts.

C. Data are based on the IEA's *Global EV Outlook 2025 Report*. Data for 2030 are IEA forecasts.

D. mb/d = million barrels per day. Bars show size and timing of average estimated annual implied oil market balance greater than 0.3 mb/d since 1991. Positive values indicate an excess of supply over demand. Data are based on the October edition of IEA's *Oil Market Report*.

price in Japan is also projected to decline in 2026 and 2027, on growing global LNG production.

After falling by an estimated 21 percent in 2025 (y/y), the Australian benchmark coal price is anticipated to fall by a further 7 percent in 2026. This forecast reflects expectations of subdued global growth, adequate supply conditions, and rising diffusion of renewable energy sources.

## Agriculture and fertilizers

The World Bank Group's agricultural commodity price index is projected to fall slightly, by 2 percent in 2026 (y/y) and 1 percent in 2027, after

holding steady in 2025. Food commodity prices, including all three sub-components—grains, oils and meals, and other foods—are forecast to fluctuate within narrow ranges around recent levels, as supply growth for key crops returns to long-term trends. Soybean prices are anticipated to drop in 2025, as U.S. supply that typically goes to China must be sold to other buyers at lower cost. The price of soybeans, a product at the center of ongoing trade restrictions between major economies, is forecast to be relatively stable in 2026 and 2027. Lower prices are anticipated to curtail the area under cultivation in the United States, while Brazil is on track to expand its soybean acreage. Beverage prices are forecast to drop by 7 percent in 2026 and about 5 percent in 2027, owing mainly to an expected improvement in supply conditions for coffee and cocoa.

Fertilizer prices are projected to rise by 21 percent in 2025 (y/y), on strong demand, trade constraints, and isolated supply shortfalls. Although fertilizer prices are expected to ease by about 5 percent in 2026 and again in 2027, they are set to remain well above their 2015–19 average due to elevated input costs and ongoing export restrictions and sanctions. China has restricted exports of nitrogen and phosphate fertilizers, while Belarus—a major potash supplier—remains under EU sanctions. Together with Russia, it is also subject to new EU tariffs on fertilizers.

### Metals and minerals

The index of metals and minerals prices tracked by the World Bank Group is projected to be essentially flat (y/y) in 2026 and to rise by a moderate 2 percent in 2027, following a 3 percent increase in 2025, as rising demand related to investment in renewable energy, electric vehicles, and grid infrastructure offsets the drag from weak industrial activity and policy uncertainty.

Base metals prices are forecast to rise by less than 1 percent (y/y) in 2026 and about 3 percent in 2027, following an estimated 5 percent increase in 2025. The prices of copper and tin—critical for clean energy—are projected to reach new record levels in nominal U.S. dollar terms. Iron ore prices, however, are expected to fall below 2019 levels as China's property downturn continues.

Following a rally to record-setting levels in 2025 on continued strong investment demand, precious metal prices are set to rise further in 2026. Gold prices are projected to reach levels about 180 percent above their 2015–19 average in 2026, supported by continued (though easing) central bank purchases and expectations of further U.S. monetary easing, amid still-elevated geopolitical risks and policy uncertainty. Silver prices are also expected to reach new record highs, supported by safe-haven and industrial demand.

## Risks

Risks to the baseline commodity price projections remain tilted to the downside. Slower-than-expected global output growth—perhaps stemming from resurgent trade tensions, renewed policy uncertainty, or weaker-than-expected economic conditions in major economies—remains a substantial risk that could weigh on the demand for energy and metals, pushing prices below baseline forecasts. Further oversupply in the oil market is another key downside risk.

There are also upside risks to the commodity price outlook, including a deterioration in geopolitical conditions or increased sanctions, both of which could disrupt supplies of oil and other commodities, and lead to increased demand for precious metals. Other upside risks include new trade restrictions and supply disruptions, especially for energy-transition metals like copper and tin, where production is geographically concentrated and demand price-inelastic. Extreme weather events, such as a stronger-than-anticipated La Niña, could also trigger price spikes across agricultural and energy commodities, while stronger-than-expected investment in data centers could push up prices of natural gas and metals.

### Downside risks

#### *Slower global growth*

Global economic growth could fall short of the baseline if there are increased trade tensions or rising trade policy uncertainty. The resulting shortfall would particularly affect demand for energy and metals, which is closely linked to fixed investment and durable goods consumption. A

deeper slowdown in China, perhaps stemming from continued weakness in the property sector or export-oriented manufacturing activity, could place even greater downward pressure on base metal prices.

### ***Oil market oversupply***

The oil market could become significantly oversupplied due to rising non-OPEC+ production, notably from the U.S. shale industry. Oil prices at or below the baseline forecasts for 2025 and 2026 are likely to restrain the drilling of new wells in the U.S. shale sector, but prices are still far above the levels required to cover the average operating expenses of existing wells, indicating that production could exceed assumptions. Similarly, a larger-than-expected increase in OPEC+ output could result from further reversals of approximately 3 mb/d of announced cuts still remaining or from accelerated implementation of planned production increases, although some of the increases have been hindered by capacity constraints.

### **Upside risks**

#### ***Additional geopolitical tensions and sanctions***

Oil and precious metals markets, in particular, remain sensitive to geopolitical developments, including active conflicts and attacks on oil infrastructure. The market impact of additional sanctions, such as the recently announced U.S. sanctions on Russian oil companies, could raise oil prices above the baseline forecast. The impact of sanctions will depend on the extent to which buyers are willing to risk breaching them, the secondary measures in place for those engaging with sanctioned parties, and the extent to which sanctioned parties can find alternate buyers. For precious metals, including gold and silver, escalation of trade tensions, inflationary pressures, financial market stress, or armed conflict could lift prices higher than projected.

#### ***Additional trade and production restrictions***

Metals have been increasingly subject to trade restrictions in recent months, including the 50 percent U.S. tariff on semi-finished copper

products introduced in August and new U.S. tariffs on aluminum and steel imposed earlier in the year. These new restrictions add to earlier measures, including EU curbs on Russian aluminum, Indonesia's ban on exports of copper and nickel ores, and Myanmar's tin export taxes. Further supply restrictions could push prices above projections and widen divergences across price benchmarks. Relatedly, disruptions from regulatory changes, shifts in policy priorities, or operational challenges that constrain supply could lift prices above projections, particularly for energy-transition metals with geographically concentrated production and price-inelastic demand.

#### ***Adverse weather conditions***

A stronger-than-expected La Niña could bring weather that is hotter and drier than normal to major agricultural-producing regions, including Argentina, southern Brazil, and the U.S. Gulf Coast (figure 3.A). This could compromise the production of major staples such as maize, wheat, and soybeans and push prices above forecasts. La Niña could also cause flooding or landslides in key producing countries in East and South Asia, disrupting the planting season for rice and other crops. In energy markets, colder-than-expected winter temperatures in the Northern Hemisphere could put upward pressure on prices through both increased consumption and reduced supply from frozen gas fields. Meanwhile, heatwaves could increase electricity demand for air conditioning while reducing output, driving up prices of oil, coal, and alternative sources such as hydropower. Additionally, periods of intense rainfall could restrict coal mining.

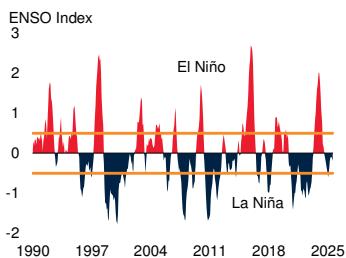
#### ***Faster-than-expected expansion in data centers***

The ongoing boom in artificial intelligence (AI) investment has resulted in a rapid surge in the construction of data centers, which is expected to continue in the medium term. A faster-than-expected diffusion of AI could increase demand for electricity, especially in China, Europe, and the United States, and consequently put upward pressure on natural gas to support additional electricity production. At the same time, infra-

### FIGURE 3 Risks and broader implications of the commodity price outlook

Weaker-than-expected global growth remains a key downside risk to the commodity price outlook. A stronger-than-expected La Niña could hinder production of several agricultural commodities, pushing up prices of maize, wheat, soybeans, and rice. Rapid rollout of generative AI (artificial intelligence) could push up prices of natural gas, used to fuel additional electricity production, and of copper and aluminum, used in data center infrastructure. The baseline outlook suggests that energy prices will continue contributing to global disinflation in 2026, although there are downside and upside risks to the forecast.

#### A. Strength of El Niño and La Niña



Sources: National Oceanic and Atmospheric Administration (NOAA); Organisation for Economic Co-operation and Development; World Bank.

Note: ENSO = El Niño Southern Oscillation; f = forecast.

A. The ENSO Index represents a centered three-month mean sea surface temperature anomaly for the Niño 3.4 region ( $5^{\circ}\text{N}$ - $5^{\circ}\text{S}$ ,  $120^{\circ}$ - $170^{\circ}\text{W}$ ). According to the U.S. National Oceanic Atmospheric Administration (NOAA), events are defined as five consecutive overlapping three-month periods at or above the  $+0.5^{\circ}\text{C}$  anomaly for El Niño events and at or below the  $-0.5^{\circ}\text{C}$  anomaly for La Niña events. Horizontal lines indicate the  $+0.5^{\circ}\text{C}$  and  $-0.5^{\circ}\text{C}$  anomaly. Last observation is July 2025.

B. GDP-weighted annual average direct contributions of energy prices to headline CPI inflation, based on data for up to 34 countries (29 advanced economies and 5 EMDEs, excluding China and Türkiye). Values for 2025-27 are estimated using an OLS regression of energy contributions to inflation on current and lagged changes in energy commodity prices.

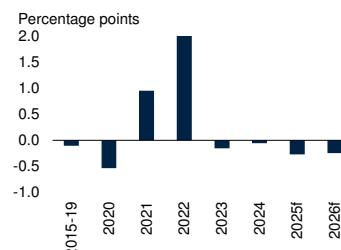
structure related to the faster-than-expected uptake of AI could push up prices of copper and aluminum.

## Broader implications

### Fiscal policy

For oil-importing economies, lower oil prices create space for policy makers to reallocate public expenditures. In particular, the decline in oil prices reduces the need for fuel subsidies and presents an opportunity to shift expenditures to cash transfers to households, which are more targeted and typically less costly than subsidies, or to growth-enhancing investment in health, education, and investment in infrastructure and climate-related priorities. Budgetary resources released by reduced expenditures on subsidies could also be used to accumulate fiscal buffers, which in many economies are limited.

#### B. Direct contribution of energy prices to global inflation



### Inflation

Consumer price inflation has fallen closer to central bank targets in most countries over the past year. However, in recent months, it has flattened or even edged up in some advanced economies, while continuing to recede in emerging market and developing economies (EMDEs).

Commodity price movements have supported disinflation since 2023, with decreases in energy prices, in particular, exerting downward pressure both directly through consumer energy costs and indirectly through their impact on goods prices. In the baseline forecast, energy price movements will help reduce consumer price inflation in 2026, shaving about 0.2 percentage point from global inflation in 2026, slightly less than the 0.3 percentage point estimated for 2025 (figure 3.B).

### Food security

Falling prices of food commodities in 2025—especially rice, but also for wheat and certain fruits—are likely to have helped improve the affordability of basic foods in some EMDEs. However, country-specific factors, including conflicts and economic developments, mean that changes in global prices do not consistently pass through to domestic prices.

The Food and Agriculture Organization estimates that the number of people facing hunger globally will decline modestly in 2025, to 634 million, from 673 million at end-2024. This decline, however, follows several consecutive annual increases in the number of people facing hunger.

### Crop yields

Fertilizer prices have increased nearly every month in 2025, reaching a level in 2025Q3 about 30 percent higher than a year earlier. In contrast, food commodity prices have declined so far this year, and in 2025Q3 were 5 percent lower than a year earlier. This divergence, with costs of important inputs rising while output prices fall, has eroded many farmers' profit margins. As a result, farmers, especially those with limited access to finance, may reduce fertilizer application rates in the 2025-26 season, potentially lowering crop yields.

## Special focus

### New shocks, old tools: Revisiting commodity agreements in a fragmented world

Commodity price volatility in recent years—driven by geopolitical tensions, trade policy uncertainty, pandemic-induced supply chain disruptions, and shifts in energy use—has sparked interest in coordinated market interventions (figure 4.A). There is a long history of international commodity agreements that attempt to target price levels or limit boom-and-bust cycles. These arrangements have used a variety of interventions, including inventory controls, trade restrictions, production quotas, and even price setting.

Early efforts, mostly in the 1920s and 1930s, sought to influence price movements in coffee, tea, sugar, wheat, wool, rubber, copper, tin, aluminum, and silver markets, among others. Although some arrangements were temporarily successful at stabilizing prices, none were long-lasting, and in many cases their collapse intensified price volatility (figure 4.B). Several post-World War II agreements involving both producers and consumers applied to tropical agricultural commodities (coffee, sugar, cocoa), as well as to wheat, rubber, and tin. Like their predecessors, none of these agreements remained successful for long, although several agreements evolved into organizations that continue to monitor market developments and facilitate information sharing.

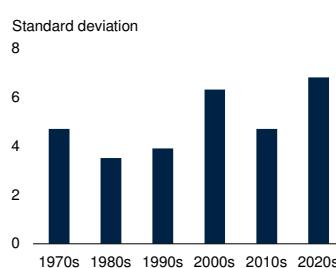
For oil, the Organization of the Petroleum Exporting Countries (OPEC), formed in 1960, is the most successful and enduring collective effort to coordinate production and control prices. Yet even OPEC has faced challenges in maintaining its intended market power amid competition from nonmember suppliers, changing consumer behavior, and shifts in energy use. Pressure from other suppliers has been particularly evident during periods of high oil prices (figures 4.C and 4.D).

Historical experience with international commodity agreements offers cautionary lessons for current proposals to form industrial cartels or manage global food inventories. Temporary interventions during acute disruptions can be effective, but

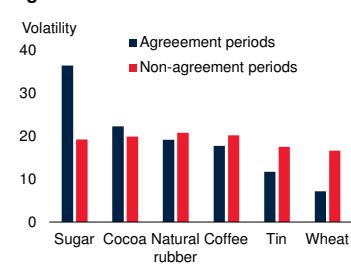
**FIGURE 4 Commodity price volatility and commodity agreements**

*Commodity price volatility since 2020 has been higher than during the previous five decades, and is one of the reasons underlying renewed interest in international commodity agreements. Historically, the success of such agreements in containing price volatility has been mixed: volatility was lower for wheat and tin during the years agreements were active, higher for sugar, and little different for four other commodities. OPEC (the Organization of the Petroleum Exporting Economies) has been the sole producer group to endure. Yet even OPEC has faced pressure from new sources of production, especially during periods of high oil prices.*

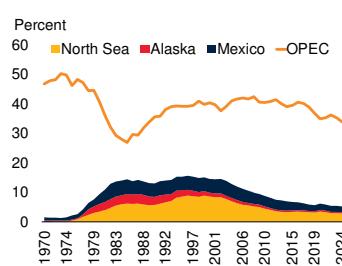
**A. Volatility of overall commodity price index**



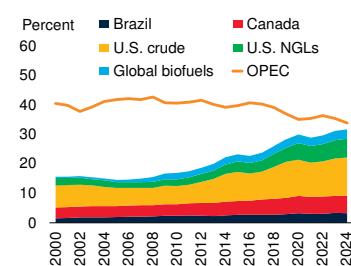
**B. Price volatility during periods with and without international commodity agreements**



**C. Sources of global oil production, 1970-2024**



**D. Sources of global oil production, 2000-24**



Sources: Baffes, Nagle, and Streifel (2024); The Energy Institute; International Energy Agency; World Bank.

Note: NGLs = natural gas liquids; OPEC = Organization of the Petroleum Exporting Countries.

A. Bars show mean standard deviation of monthly price changes in the composite commodity index by decade, spanning data from January 1970 to September 2025. The commodity index measures prices in U.S. dollars.

B. Price changes reflect year-on-year logarithmic change, expressed in absolute terms. The periods during which agreements were in effect are given in table SF.2.

C. The North Sea region refers to Norway and the United Kingdom.

D. U.S. crude oil and NGLs predominantly originate from shale, while Canadian production is largely derived from bitumen and oil sands, and Brazil's output is mainly from offshore sources.

sustained price management schemes have a poor record, often leaving participants more vulnerable. Experience instead points to a more resilient approach: fostering diversification and production efficiency, investing in technology and innovation, improving data transparency, and relying on market-based pricing mechanisms. Such measures offer more durable protection against commodity price volatility than attempts to control prices and markets directly.

**TABLE 1 World Bank Group's commodity price forecast (nominal U.S. dollars)**

Commodity	Unit	2023	2024	2025f	2026f	2027f	Percent change from previous year			Differences in levels from April 2025 projections	
							2025f	2026f	2027f	2025f	2026f
<b>INDEXES (in nominal U.S. dollars, 2010 = 100)</b>											
Total <sup>1</sup>		108.0	105.1	97.4	90.7	94.0	-7.4	-6.8	3.6	5.3	3.0
Energy <sup>2</sup>		106.9	101.5	88.9	79.9	84.9	-12.4	-10.2	6.2	5.1	1.0
Non-Energy		110.2	112.5	114.4	112.7	112.5	1.8	-1.6	-0.2	5.6	7.3
Agriculture		110.9	115.0	115.2	112.7	111.8	0.2	-2.2	-0.8	1.2	2.4
Beverages		107.8	176.4	207.8	193.0	183.9	17.8	-7.2	-4.7	-3.3	5.1
Food		125.4	115.8	108.8	108.5	109.3	-6.1	-0.3	0.8	1.1	1.7
Oils and Meals		118.9	106.9	103.7	103.3	103.6	-3.0	-0.4	0.3	4.1	3.3
Grains		133.0	112.9	100.7	100.8	102.8	-10.8	0.1	2.0	-0.3	0.9
Other food		127.2	130.4	122.9	122.2	122.8	-5.7	-0.6	0.5	-1.4	0.3
Raw Materials		77.1	81.6	83.5	82.1	81.2	2.3	-1.7	-1.0	3.7	2.7
Timber		79.1	79.6	82.0	83.3	84.1	3.0	1.5	1.0	2.7	2.3
Other raw materials		74.9	83.9	85.1	80.8	78.1	1.5	-5.1	-3.4	4.6	3.1
Fertilizers		153.5	117.6	142.2	134.9	127.8	20.9	-5.1	-5.3	16.1	10.1
Metals and Minerals <sup>3</sup>		104.0	106.7	109.8	110.1	112.0	2.9	0.3	1.7	13.6	16.8
Base Metals <sup>4</sup>		109.0	114.1	119.7	120.7	123.7	4.9	0.9	2.5	16.2	19.8
Precious Metals <sup>5</sup>		147.3	180.2	254.2	268.2	251.8	41.1	5.5	-6.1	14.6	30.8
<b>PRICES (in nominal U.S. dollars)</b>											
<b>Energy</b>											
Coal, Australia	\$/mt	172.8	136.1	107.0	100.0	105.0	-21.4	-6.5	5.0	7.0	5.0
Crude oil, Brent	\$/bbl	82.6	80.7	68.0	60.0	65.0	-15.7	-11.8	8.3	4.0	0.0
Natural gas, Europe	\$/mmbtu	13.1	11.0	12.1	10.8	9.8	10.4	-10.7	-9.3	0.5	0.2
Natural gas, U.S.	\$/mmbtu	2.5	2.2	3.5	3.9	3.9	59.7	11.4	0.0	0.2	0.5
Liquefied natural gas, Japan	\$/mmbtu	14.4	12.8	12.5	11.5	10.5	-2.7	-8.0	-8.7	0.0	0.0
<b>Non-Energy</b>											
<b>Agriculture</b>											
<b>Beverages</b>											
Cocoa	\$/kg	3.28	7.33	8.00	7.50	7.00	9.1	-6.3	-6.7	0.00	0.50
Coffee, Arabica	\$/kg	4.54	5.62	8.30	7.25	6.90	47.6	-12.7	-4.8	-0.20	0.00
Coffee, Robusta	\$/kg	2.63	4.41	4.80	4.70	4.60	8.7	-2.1	-2.1	-0.70	-0.30
Tea, average	\$/kg	2.74	3.04	2.90	2.95	3.00	-4.6	1.7	1.7	0.40	0.20
<b>Food</b>											
<b>Oils and Meals</b>											
Coconut oil	\$/mt	1,075	1,519	2,505	2,254	1,985	64.9	-10.0	-11.9	705	504
Groundnut oil	\$/mt	2,035	1,796	1,655	1,537	1,602	-7.8	-7.1	4.2	-30	-133
Palm oil	\$/mt	886	963	1,020	1,051	1,062	5.9	3.0	1.0	0	11
Soybean meal	\$/mt	541	442	351	336	343	-20.6	-4.3	2.1	-19	-33
Soybean oil	\$/mt	1,119	1,022	1,158	1,175	1,158	13.3	1.5	-1.4	168	208
Soybeans	\$/mt	598	462	405	410	416	-12.4	1.2	1.5	23	24
<b>Grains</b>											
Barley	\$/mt	...	...	171	174	175	...	1.8	0.6	-9	-10
Maize	\$/mt	253	191	198	195	197	3.9	-1.5	1.0	11	12
Rice, Thailand, 5%	\$/mt	554	588	406	401	409	-31.0	-1.2	2.0	-15	-21
Wheat, U.S., HRW	\$/mt	340	269	249	258	267	-7.3	3.6	3.5	-14	-2

**TABLE 1 World Bank Group's commodity price forecast (nominal U.S. dollars) (continued)**

Commodity	Unit	2023	2024	2025f	2026f	2027f	Percent change from previous year			Differences in levels from April 2025 projections							
							2025f	2026f	2027f	2025f	2026f						
<b>PRICES (in nominal U.S. dollars)</b>																	
<b>Non-Energy</b>																	
<b>Other Food</b>																	
Bananas, U.S.	\$/kg	1.60	1.23	1.06	1.04	1.07	-14.0	-1.9	2.9	-0.10	-0.20						
Beef	\$/kg	4.90	5.93	6.76	6.82	6.91	14.0	0.9	1.3	0.90	0.90						
Chicken	\$/kg	1.53	1.46	1.69	1.70	1.71	15.5	0.6	0.6	0.30	0.30						
Oranges	\$/kg	1.57	2.26	1.53	1.52	1.45	-32.3	-0.7	-4.6	-0.40	-0.30						
Shrimp	\$/kg	10.19	...	8.60	9.00	9.47	...	4.7	5.2	-0.40	-0.50						
Sugar, World	\$/kg	0.52	0.45	0.38	0.37	0.37	-15.3	-2.6	0.0	0.00	0.00						
<b>Raw Materials</b>																	
<b>Timber</b>																	
Logs, Africa	\$/cum	379	379	390	395	400	3.0	1.3	1.3	0	0						
Logs, S.E. Asia	\$/cum	212	197	200	210	215	1.7	5.0	2.4	0	0						
Sawnwood, S.E. Asia	\$/cum	678	697	720	725	730	3.4	0.7	0.7	30	25						
<b>Other Raw Materials</b>																	
Cotton	\$/kg	2.09	1.91	1.70	1.75	1.80	-11.0	2.9	2.9	0.00	0.10						
Rubber, TSR20	\$/kg	1.38	1.75	1.77	1.80	1.85	0.9	1.7	2.8	-0.20	-0.10						
Tobacco	\$/mt	5,016	5,899	6,400	5,600	5,000	8.5	-12.5	-10.7	1100	600						
<b>Fertilizers</b>																	
DAP	\$/mt	550	564	710	650	600	26.0	-8.5	-7.7	110	100						
Phosphate rock	\$/mt	322	153	155	160	165	1.6	3.2	3.1	0	0						
Potassium chloride	\$/mt	383	295	350	330	320	18.6	-5.7	-3.0	40	15						
TSP	\$/mt	480	475	585	540	500	23.3	-7.7	-7.4	115	75						
Urea, E. Europe	\$/mt	358	338	440	410	375	30.1	-6.8	-8.5	50	35						
<b>Metals and Minerals</b>																	
Aluminum	\$/mt	2,256	2,419	2,580	2,600	2,700	6.7	0.8	3.8	405	500						
Copper	\$/mt	8,490	9,142	9,700	9,800	10,000	6.1	1.0	2.0	1500	1800						
Iron ore	\$/dmt	120.6	109.4	98.0	94.0	90.0	-10.4	-4.1	-4.3	3	6						
Lead	\$/mt	2,136	2,069	1,970	1,975	2,000	-4.8	0.3	1.3	-60	-25						
Nickel	\$/mt	21,521	16,814	15,300	15,500	16,000	-9.0	1.3	3.2	-500	-500						
Tin	\$/mt	25,938	30,066	33,000	34,000	34,500	9.8	3.0	1.5	2000	2500						
Zinc	\$/mt	2,653	2,776	2,800	2,750	2,700	0.9	-1.8	-1.8	300	375						
<b>Precious Metals</b>																	
Gold	\$/toz	1,943	2,388	3,400	3,575	3,375	42.4	5.1	-5.6	150	375						
Silver	\$/toz	23.4	28.3	38.0	41.0	37.0	34.4	7.9	-9.8	5.0	7.0						
Platinum	\$/toz	966	955	1,230	1,275	1,300	28.8	3.7	2.0	180	200						

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

Energy prices experienced a significant decrease in October, continuing their prevailing downward trend. Nevertheless, oil prices rose by 5 percent toward the end of the month following the announcement of new U.S. sanctions on Russian oil companies. In 2025 as a whole, the World Bank Group's energy price index is projected to drop by 12 percent y/y, followed by a further 10 percent decline in 2026. This forecast assumes continued sluggish oil consumption growth, surging oil supply, rising U.S. LNG exports, and a plateauing of coal consumption. Brent oil is forecast to average \$68/bbl (per barrel) in 2025, a sharp decline from \$81/bbl in 2024—before decreasing to \$60/bbl in 2026. After climbing sharply in 2025, the U.S. natural gas price is projected to increase by 11 percent in 2026, while the European natural gas price is expected to fall 11 percent. Risks to the projections for energy prices are tilted to the downside and stem primarily from an oversupplied oil market and weaker-than-expected global growth. However, there are also upside risks to the forecast, including intensifying geopolitical tensions, the market impact of additional oil sanctions, adverse weather conditions, and increased competition for LNG exports.

### Oil

#### Recent developments

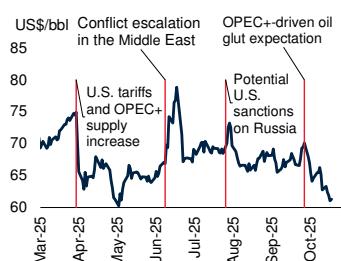
The Brent oil price surged 5 percent upon the announcement of a new set of U.S. sanctions on Russian oil companies in late October. Prior to recent events, oil prices have fallen throughout 2025, as trade policy tensions compounded concerns about excess supply, a decline occasionally interrupted by spikes in response to geopolitical developments (figure 5.A). OPEC+ has markedly increased its production targets since April 2025 through a series of monthly policy decisions. The planned production increases relate to the announced full reversal of the 2.2 million barrels-per-day (mb/d) cuts introduced in November 2023 and a partial reversal of the 1.6 mb/d cuts implemented in April 2023 (figure 5.B).

The impact on prices of this ongoing process, however, has been constrained by the fact that a significant share of the targeted production

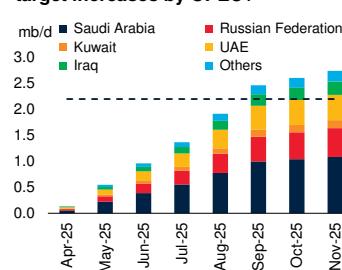
**FIGURE 5 Oil market: Global price and market developments**

Before the recent decline, the Brent oil price rose 2 percent in 2025Q3, as geopolitical developments supported the market even as OPEC+ markedly increased its production targets. The Urals oil price dropped below the \$60 per barrel (bbl) price cap, before a more stringent cap was introduced in September. Price volatility spiked following the announcement of U.S. trade tariffs in April and during the airstrikes on the Islamic Republic of Iran's nuclear facilities in June, but has since fallen below the average levels observed over the last several years—excluding the periods following the pandemic outbreak and Russia's invasion of Ukraine.

#### A. Brent oil price and key events



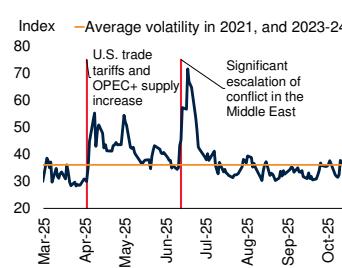
#### B. Cumulative size of production target increases by OPEC+



#### C. Brent versus Urals oil prices



#### D. Oil price volatility around major events



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

Note: bbl = barrel; mb/d = million barrels per day; UAE = United Arab Emirates.

A. Daily Brent prices; last observation is October 17, 2025. Vertical lines indicate major events.

B. Data are based on OPEC+ press releases between December 2024 and October 2025; dates indicate the month in which production is expected to be increased. Dashed line denotes OPEC+ 2.2 mb/d production cuts initially announced in November 2023.

C. Data for Russian Urals FOB Primorsk prices are from multiple editions of the IEA's *Oil Market Report*. Last observation is September 2025.

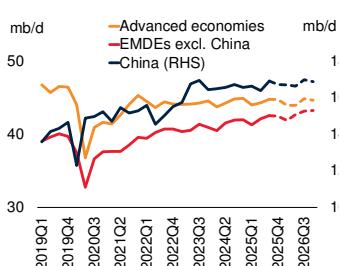
D. Crude oil volatility index measures expected 30-day volatility based on options spanning a wide range of strike prices. Daily data; last observation is October 17, 2025. Horizontal line indicates the average market volatility in 2021, 2023, and 2024—excluding periods following the start of the COVID-19 pandemic and the start of Russia's invasion of Ukraine.

increases has not been implemented yet. The fall in the Brent price since early this year has helped lower the Urals price below the \$60/bbl price cap, before a new lower cap (\$47.6/bbl) was introduced in September (figure 5.C). Oil price volatility spiked following the increase in trade policy uncertainty in April and during the airstrikes on the Islamic Republic of Iran's nuclear facilities in June. It has since fallen near or below the average of the past five years, excluding the periods following the Russia's invasion of Ukraine and the pandemic outbreak (figure 5.D).

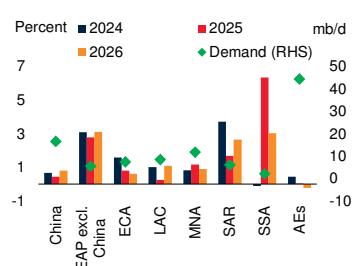
## FIGURE 6 Oil market: Demand and supply

Annual oil consumption in advanced economies and China is expected to be stable in 2025. Among emerging market and developing economies, oil demand growth in 2025 is on track to slow in Europe and Central Asia (ECA), Latin America and the Caribbean (LAC) and South Asia (SAR), but remain steady in most other regions. In India, a major contributor to oil demand growth, the increase in consumption in 2025 has been primarily driven by liquefied petroleum gas (LPG) and gasoline. Oil supply growth in 2025 is expected to resume in the Middle East, North Africa, Afghanistan, and Pakistan (MNA); accelerate in LAC; and slow in advanced economies. Increasing production targets announced by OPEC+ have reduced computed spare capacity, while contributing to continued oversupply.

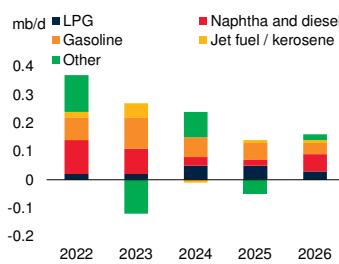
A. Oil demand



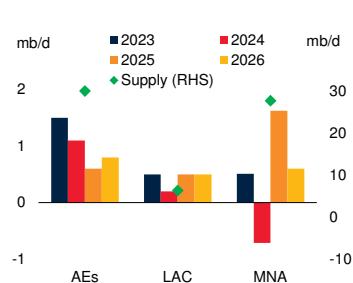
B. Change in oil demand by region



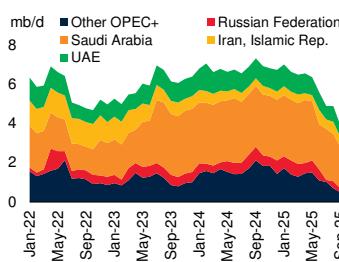
C. Change in India's oil demand by product



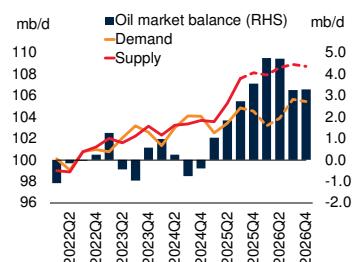
D. Change in oil supply by region



E. Computed OPEC+ spare capacity



F. Implied oil market balance



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

Note: AEs = advanced economies; bbl = barrel; EAP = East Asia and Pacific; EMDEs = emerging market and developing economies; ECA = Europe and Central Asia; LAC = Latin America and the Caribbean; LPG = liquefied petroleum gas; mb/d = million barrels per day; MNA = Middle East, North Africa, Afghanistan, and Pakistan; RHS = right-hand side; SAR = South Asia; SSA = Sub-Saharan Africa; UAE = United Arab Emirates.

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

B. Bars show year-on-year change in demand. Diamonds show demand for 2024.

C. Data are based on July 2025 edition of the IEA Oil Market Report.

D. Bars show year-on-year change in supply. Diamonds show regional supply for 2024.

E. Computed spare capacity for OPEC+ members from monthly IEA Oil Market Reports. "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 the Islamic Republic of Iran, Libya, the Russian Federation, and República Bolivariana de Venezuela are computed from data on sustainable capacity and supply in monthly IEA Oil Market Reports.

F. The implied oil market balance is the difference between supply and demand. Data are from October 2025 IEA Oil Market Report.

Global oil demand is estimated to have increased by 0.8 mb/d (0.7 percent) y/y in 2025Q3, to 104.8 mb/d, indicating continued sluggish consumption growth relative to the 2015-19 average. Annual oil consumption in advanced economies and China, which together account for about 60 percent of global demand, is expected to remain essentially unchanged in 2025 (figure 6.A). Elsewhere, oil demand growth is expected to soften in Europe and Central Asia (ECA), Latin America and the Caribbean (LAC) and South Asia (SAR) but remain stable in other emerging markets and developing economy (EMDE) regions, with the exception of Sub-Saharan Africa (SSA), where a significant rebound is ongoing (figure 6.B). Among the major contributors to oil consumption growth in 2025, India's increase is primarily driven by higher demand for liquefied petroleum gas (LPG) and gasoline (figure 6.C).

Global oil supply is estimated to have risen by 4.1 percent in 2025Q3 y/y, double the increase in the previous quarter. In 2025, annual production growth is expected to resume in Middle East North Africa, Afghanistan and Pakistan (MNA), accelerate in LAC, and slow in advanced economies (figure 6.D). Computed OPEC+ spare capacity has decreased sharply from its September 2024 peak of 7.3 mb/d, to about 3.9 mb/d in September 2025, reflecting an increase in OPEC+ production targets (figure 6.E).

In part due to a shift in OPEC+ supply management, the implied oil market balance (supply minus demand) is estimated to be 2.7 mb/d in 2025Q3 (figure 6.F). This represents an excess of quarterly supply previously surpassed only during the 2020 pandemic and the 1998 oil market crisis. Global observed crude oil inventories in the year to August, however, increased by only about 0.9 mb/d, or half the implied surplus in 2025Q1-Q3.<sup>1</sup> Three recent data points suggest a developing global oil supply glut. U.S. crude oil inventories declined in 2025Q3, during the U.S. driving season, but only at about a quarter of the average rate of the previous five years, while several crude oil cargoes in the Middle East recently went

<sup>1</sup>The difference between computed and observed data may reflect reporting lags, inaccuracies, missing data or error in the models used by the IEA and other forecasting organizations.

unsold, amid a spike in the amount of oil in tankers at sea in September.

## ***Outlook***

The Brent oil price is projected to average \$68/bbl in 2025, \$13 less than in 2024. Prices are forecast to fall further to \$60/bbl in 2026, as oil consumption growth continues to moderate and oil supply continues to rise, before increasing to \$65/bbl in 2027 (figure 7.A).<sup>2</sup> The price increase in 2027 reflects a projected rebalancing of the oil market, as low prices in 2026 curtail excess supply. These forecasts assume no major escalation in armed conflicts, weak demand growth relative to the 2015–19 average, a well-supplied oil market and stable OPEC+ production.

Global oil supply is expected to increase significantly in 2025 and 2026, as new production continues to come online. Output in 2025 is projected to grow by 3.0 mb/d y/y (2.9 percent) to 106.1 mb/d, a new all-time high, and to 108.5 mb/d in 2026. According to International Energy Agency (IEA) projections, nearly half of the 2025 increase is attributable to OPEC+, reflecting higher production targets. The IEA and other major oil market forecasting organizations project further supply growth in 2026, mainly in non-OPEC countries.

Global oil consumption is projected to expand only moderately in 2025 and 2026. The IEA anticipates an increase of approximately 0.7 mb/d in each year, whereas the U.S. Energy Information Administration forecasts a rise of 1.1 mb/d in both 2025 and 2026. China and India are expected to account for one-quarter of global consumption growth in 2025 and two-fifths in 2026, according to the IEA. However, growth in China's oil demand continues to be restrained by the rapid adoption of electric and hybrid vehicles, while demand in advanced economies is expected to remain broadly unchanged.

As a result of sluggish demand growth and surging supply, a sizable surplus is expected to take hold of the oil market. In 2025Q4, supply is estimated to

be 3.6 mb/d higher than demand. On an annual basis, the International Energy Agency anticipates the surplus to be 2.3 mb/d in 2025—rising to 4.0 mb/d in 2026—1.6 mb/d above the surplus in 2020, during the pandemic outbreak (figure 7.B).

## ***Risks***

Risks to the oil price forecast are tilted to the downside. Higher-than-expected oil output from OPEC+ represents the most significant downside risk to prices. Other risks include a sharper-than-anticipated slowdown in the growth of oil demand, for example due to a renewed rise in trade tensions. Conversely, a tighter-than-expected oil market, and additional geopolitical tensions or sanctions could push prices above current forecasts.

### **Downside risk: Change in OPEC+ policy to raise output**

A rise in OPEC+ output relative to baseline assumptions may result from further increases in production targets or OPEC+ production rising closer to the announced targets. There are likely technical factors limiting some OPEC+ members' ability to expand production to match the group's announcements since April 2025, but if these constraints are overcome, supply could rise beyond current baseline assumptions. In addition, as per the group's announcements through early October, about 3.0 mb/d of OPEC+ production cuts remain in force, providing scope for higher output.

### **Downside risk: Resurgent trade tensions and policy uncertainty**

Resurgent trade tensions could result in more restrictive trade policies or increased policy uncertainty, leading to a weaker global economic growth than assumed in the baseline. In this context, oil demand is likely to be weaker, especially in countries directly impacted, and the Brent price could sink below the baseline forecast, if economic growth remains subdued.

### **Upside risk: Tighter-than-expected oil market**

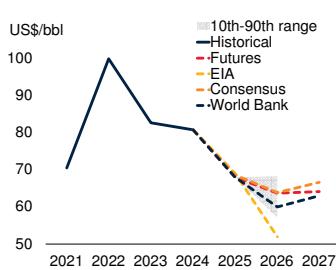
Several major commodity forecasting organizations project that excess supply in the oil market will increase in 2026 (figure 7.C). However, a

<sup>2</sup>The forecasts do not reflect announced but not yet implemented policies, including the recently announced U.S. sanctions on Russian oil companies.

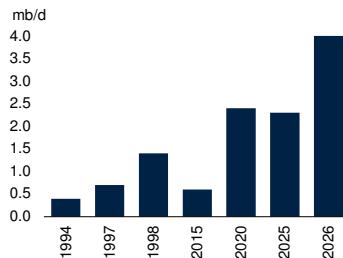
## FIGURE 7 Oil market: Outlook and risks

After falling sharply in 2025, to \$68 per barrel (bbl), the Brent oil price is projected to decrease further to \$60/bbl in 2026 before edging up to \$65/bbl in 2027. The oil market glut is expected to increase in 2026, although considerable uncertainty remains regarding the magnitude of the supply-demand balance. Key downside risks include greater-than-expected oil output from OPEC+ and a resurgence of trade tensions and policy uncertainty. Conversely, a tighter-than-expected oil market and higher prices could occur if supply is restrained through production curbs, increased geopolitical tensions, or new oil sanctions.

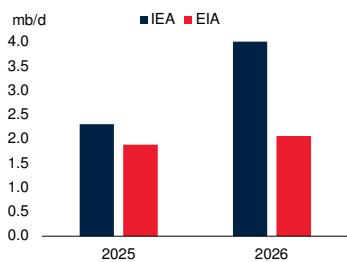
### A. Price forecast comparisons



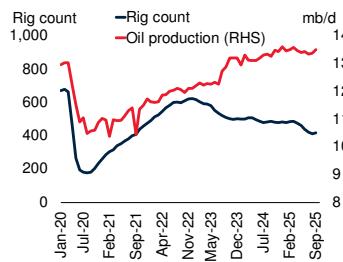
### B. Average annual excess oil market supply in selected years



### C. Forecasts for the implied oil market balance



### D. U.S. rig count and oil production



Sources: Baker Hughes; Bloomberg; Consensus Forecasts; International Energy Agency (IEA); U.S. Energy Information Administration (EIA); World Bank.

Note: bbl = barrel; mb/d = million barrels per day; RHS = right-hand side.

A. Futures data as of October 17, 2025. Consensus data as of September 2025 report; EIA data are from the October 2025 issue of *Short-Term Energy Outlook*. Dashed lines indicate forecasts for 2025-27. Grey area indicates the 10th-90th percentile range of private-sector oil price forecasts, included in the September 2025 Consensus Forecasts release.

B. Bars show size and timing of average estimated annual implied oil market balance greater than 0.3 mb/d since 1991. Positive values indicate an excess of supply over demand. Data are based on the October edition of IEA's *Oil Market Report*.

C. Selected forecasts for the average oil market balance, defined as the excess of supply over demand. Data are based on the October 2025 editions of IEA's *Oil Market Report* and EIA's *Short-Term Energy Outlook*.

D. Weekly data, averaged by month. Last observation is September 2025.

more constrained oil market remains possible. A tighter-than-expected oil balance could emerge if demand, especially in major non-OECD consumers, exceeds expectations, or if oil supply growth falls short, for example due to production constraints in several OPEC+ countries.<sup>3</sup> Uncertainty about the oil market balance in 2026 remains high and depends largely on producers' responses to

<sup>3</sup> Oxford Institute for Energy Studies, OIES Oil Monthly, October 2025, <https://www.oxfordenergy.org/publications/oies-oil-monthly-issue-48>.

2025 market conditions. U.S. oil output has declined from its December 2024 peak due to fewer operating rigs, and delays in investments, as the West Texas Intermediate (WTI) price has been near or below the assumed \$65/bbl break-even point for new wells (figure 7.D).<sup>4</sup> If producers prioritize profit over volume, U.S. supply could shrink further, supporting higher prices in 2026.

### Upside risk: Additional geopolitical tensions and sanctions

The oil market remains sensitive to geopolitical developments. An escalation of conflict in the Middle East or Ukraine, for example, could have significant energy market implications, as intensification of attacks on oil infrastructure, or the disruption of oil exports could each have lasting effects on oil prices. Furthermore, the market impact of additional sanctions, such as the recently announced U.S. sanctions on Russian oil companies, could raise oil prices above the baseline forecast. The effect of sanctions will depend on the extent to which international buyers are willing to risk breaching them, the secondary measures in place for those engaging with sanctioned parties, and the extent to which sanctioned parties can find alternative buyers. Depletion of effective spare capacity in most OPEC+ countries following its planned production increases could sharpen the impact of geopolitical developments and sanctions, especially in the short term.

## Natural gas

### Recent developments

The World Bank Group's natural gas price index edged down in October, extending a 5 percent (q/q) decline in 2025Q3, as prices moderated from the spike early in the year (figure 8.A). Changes in U.S. and European benchmark prices have been strikingly divergent in recent months. Compared to a year earlier, U.S. benchmark prices were 44 percent higher in 2025Q3, reflecting strong demand for shipments of U.S. LNG to Europe, while the European benchmark was little changed.

<sup>4</sup> Federal Reserve Bank of Dallas, *Dallas Fed Energy Survey*, March 2025, <https://dallasfed.org/research/surveys/des/2025/2501#tab-questions>.

Global demand for natural gas in 2025H1 was boosted by a weather-related decrease in electricity output from renewables in Europe, and colder-than-normal temperatures in North America.<sup>5</sup> Demand in Asia Pacific, particularly China and India, fell in 2025H1 on lower consumption by the industrial and refining sectors, and stronger renewable electricity production. For eleven consecutive months through September, China's LNG imports were lower than a year earlier, reflecting higher domestic natural gas production and weak demand.

Global supply of natural gas is estimated to have expanded in 2025H1, driven by strong performance in North America. U.S. production was 2.4 percent higher y/y, as high prices in 2025Q1 led to a surge in output and exports. This was accompanied by a redirection of U.S. LNG flows to Europe, which received 57 percent of U.S. exports (figure 8.B). Relatively low levels of natural gas storage in Europe will require LNG imports to remain high during the 2025-26 European heating season (figure 8.C). Production in Russia shrank by 3.2 percent in 2025H1, owing to recent reductions in pipeline supply to Europe and tepid growth in domestic demand.

## Outlook

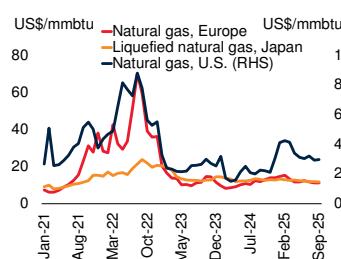
Natural gas prices are expected to take different directions over the forecasting horizon in the United States, Europe, and Asia. After surging in 2025 by an estimated 60 percent y/y, the U.S. benchmark is projected to rise by 11 percent in 2026 and stabilize in 2027 on higher LNG exports. After rising by an estimated 10 percent in 2025, the European benchmark is projected to decline by 11 and 9 percent in 2026 and 2027 respectively, owing to moderate demand and greater availability of LNG imports. Japan's LNG price is expected to broadly track the European benchmark, reflecting continued competition for LNG between Asia Pacific and European markets.

The forecast for natural gas prices is based on relatively tight markets, low exports from Russia,

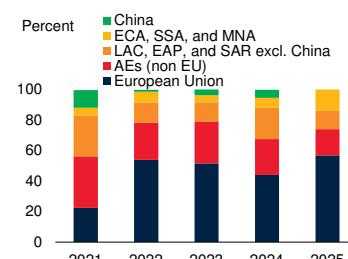
**FIGURE 8 Natural gas markets**

The World Bank's natural gas price index edged down by 5 percent (q/q) in 2025Q3, following a spike early in the year. Changes in U.S. and European benchmark prices have been remarkably divergent in 2025, with U.S. prices strongly rising and European prices little changed. About 57 percent of U.S. LNG output was shipped to Europe in the first seven months of 2025, where natural gas storage levels are close to their 2017-21 average. Global natural gas demand growth is projected to slow in 2025, with consumption stable in Asia Pacific and Eurasia, while supply expands most strongly in North America. The key upside risks to the price forecast include shortfalls in U.S. natural gas production relative to targets.

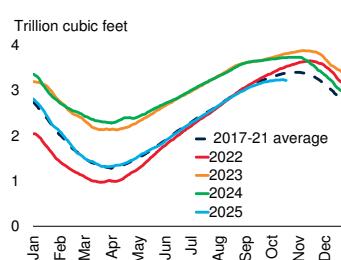
### A. Natural gas prices



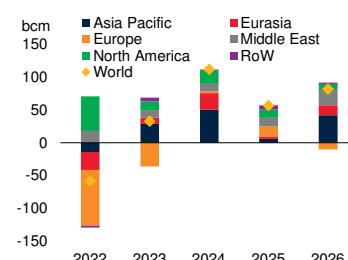
### B. Destinations of U.S. LNG exports



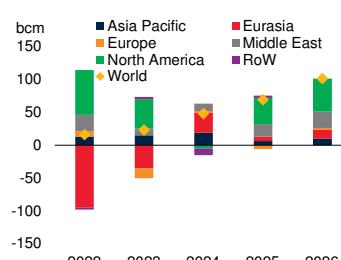
### C. EU inventories of natural gas



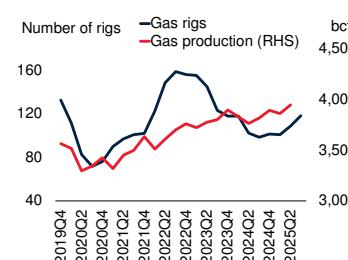
### D. Changes in natural gas consumption



### E. Changes in natural gas production



### F. U.S. natural gas rigs and production



Sources: Baker Hughes; Bloomberg; Gas Infrastructure Europe (AGSI+); International Energy Agency (IEA); Official Statistics of Japan; U.S. Energy Information Administration (EIA); World Bank.

Note: AEs = advanced economies; bcf = billion cubic feet; bcm = billion cubic meters; EAP = East Asia and Pacific; ECA = Europe and Central Asia; LAC = Latin America and the Caribbean;

LNG = liquefied natural gas; mbtu = million British thermal units; MNA = Middle East, North Africa, Afghanistan, and Pakistan; RoW = rest of world; RHS = right-hand side; SAR = South Asia;

SSA = Sub-Saharan Africa.

A. Monthly data; last observation is September 2025.

B. Average share of monthly U.S. LNG shipments between January and July of each year. Poland is included in the European Union bar, not in ECA, to avoid double counting.

C. Sample includes 20 EU countries and the United Kingdom. Last observation is October 17, 2025.

D.E. Regions are defined as in the IEA's Gas Market Reports. Data for 2025-26 are computed based on IEA forecasts.

F. Monthly data. Quarterly average of monthly U.S. natural gas rig count and natural gas production. Last observation is 2025Q2 for natural gas production and 2025Q3 for natural gas rig count.

<sup>5</sup> Regions in the natural gas section are defined as in IEA's *Gas Market Report*.

rising LNG exports, and a level of demand corresponding to normal seasonal temperatures. Over the remainder of 2025, prices are expected to remain broadly stable, as weak demand growth in Asia Pacific offsets supply constraints in Russia, where unutilized capacity in the natural gas sector continues to expand. For 2025 as a whole, global natural gas consumption is expected to reach about 4,270 bcm, an increase of about 60 bcm, or 1.4 percent—half the increase recorded in 2024 (figure 8.D). In 2026, a projected 1.9 percent rise in consumption to about 4,350 bcm assumes a rebound in demand in Asia-Pacific, as industrial activity recovers and demand from the power sector increases.

On the supply side, global natural gas production is expected to grow by 1.7 and 2.4 percent in 2025 and 2026, respectively, reaching 4,250 bcm in 2025 and 4,350 bcm in 2026. These increases are mostly driven by developments in North America—particularly, further growth in LNG exports, as new terminals come online (figure 8.E). Qatar is also expected to contribute to the increase in supply, though by slightly less than projected previously, as the start of a major field expansion has been delayed to mid-2026. Growth in natural gas production in Russia is expected to remain constrained by international sanctions, the planned termination of purchases by Europe, and delays to upcoming projects.

### Risks

Risks to the natural gas price forecast are tilted to the upside. Prices could rise above the baseline projection in the event of conflict-driven disruptions to production and shipping in the Middle East, increasing competition for U.S. exports, colder temperatures during the Northern Hemisphere winter or faster diffusion of artificial intelligence (AI) and data centers. Downside risks include higher LNG exports from Russia.

#### Upside risk: Escalation of conflict and geopolitical risk

Middle East natural gas production and exports could be adversely affected by an escalation of conflict in the region, raising international prices. While a blockage of the Strait of Hormuz, for example, might be short-lived, any lasting damage

to the region's production and export infrastructure could cause a prolonged price increase. Exports from gas fields in the Mediterranean could be at risk, as evidenced by the fact that an agreement between Israel and Egypt was recently put on hold. Tighter sanctions and restrictions on Russian LNG could be introduced if the Russia's invasion of Ukraine continues unabated.

#### Upside risk: Colder-than-predicted temperatures

Higher demand arising from colder-than-normal winter temperatures in the U.S. Midwest and Northeast, Europe and Asia could raise natural gas prices beyond baseline projections, especially if supply in North America is simultaneously constrained due to frozen gas fields. Weather-related effects on prices could be amplified by ongoing market conditions—specifically, a relatively low amount of natural gas in European storage facilities, and in other consuming regions.

#### Upside risk: Increased competition for LNG exports

LNG imports to China tumbled by about 20 percent in 2025H1, freeing up supply for other buyers. A reversal of this decline, which is not assumed in the baseline, could cause a surge in natural gas prices, especially given Europe's need for LNG imports due to its lower storage and curtailment of Russian imports. A similar increase in competition for LNG imports could occur if the anticipated rise in U.S. production fails to materialize, for example because of a drop in the number of operating rigs or delays in new export capacity (figure 8.F).

#### Upside risk: Faster-than-expected surge in construction of data centers

The ongoing boom in artificial intelligence (AI) investment has resulted in a rapid surge in the construction of data centers. According to recent research, data centers could account for about 8 percent of the increase in global electricity demand between 2024 and 2030.<sup>6</sup> An even more rapid diffusion of AI could imply higher electricity demand, especially in China, Europe, and the

<sup>6</sup>International Energy Agency. 2025. Energy and AI. Paris: IEA.

United States. This could raise demand for natural gas used in power generation with consequent increases in the three natural gas prices included in the World Bank Group's index.

### Downside risk: Higher LNG exports from Russia

LNG exports from Russia could exceed baseline assumptions if international sanctions are explicitly or implicitly relaxed, for example through higher exports from the sanctioned Arctic LNG 2 plant. The market reaction to the recent docking of ships carrying sanctioned Russian LNG at key international receiving terminals will help determine whether potential buyers are willing to risk breaching international sanctions.

## Coal

### Recent developments

The price of Australian coal has remained relatively stable in October, following a \$6 per ton (t) (6 percent) rebound in 2025Q3 that reversed the previous quarter's decline (figure 9.A). The increase in 2025Q3 was driven by strong Asian demand owing to a number of heatwaves in the region, and lower exports from Australia and Indonesia.

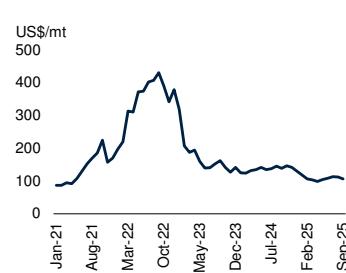
Global coal demand declined by approximately 1 percent in 2025H1 (y/y), with changes across major consuming regions mainly reflecting differences in renewable electricity output and power demand. In China and India, coal power generation declined due to lower electricity consumption and increased renewable energy production. Conversely, U.S. coal consumption rose, driven by elevated power demand and higher natural gas prices. In the EU, increased coal use was primarily associated with a temporary reduction in output from renewable energy.

Coal supply continued to grow in 2025H1 (y/y), primarily due to higher output from China and the United States. China's coal production increased by 6 percent (y/y), recovering from a period of reduced output, while production in the United States expanded 8 percent. Contributing to upward price pressures, especially in 2025Q3, adverse weather disrupted production in Australia and Indonesia, the two largest exporters, with the

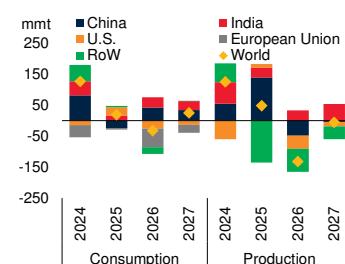
### FIGURE 9 Coal markets

*The price of Australian coal rebounded by \$6 per ton (6 percent) in 2025Q3. Global consumption is projected to remain broadly stable over the forecast horizon, with production meeting demand requirements despite a decline in 2026. Key risks to the price outlook include—on the upside—higher-than-expected coal demand for power generation in China, and—on the downside—greater-than-expected coal output, especially in China and in the United States.*

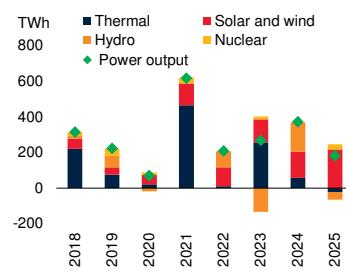
#### A. Coal prices



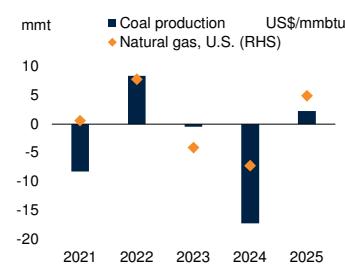
#### B. Changes in coal consumption and production by region



#### C. Changes in China's power generation by source



#### D. Natural gas prices and changes in the U.S. coal production



Sources: Bloomberg; International Energy Agency (IEA); National Bureau of Statistics of China (NBS); U.S. Energy Information Administration (EIA); World Bank.

Note: mmbtu = million British thermal units; mmt = million metric tons; mt = metric ton; RHS = right-hand side; RoW = rest of world; TWh = terawatt hour.

A. Monthly data for Australian coal prices. Last observation is September 2025.

B. Data for 2025-27 are computed based on IEA forecasts. Data are from the IEA's *Coal Mid-Year Update 2025*.

C. Composition of China's power output growth by source. "Thermal" includes oil, natural gas, and coal. Data show the average from January to August for each year.

D. Q1 year-on-year changes in U.S. coal production; last observation is 2025Q1. Q1 average of monthly U.S. natural gas prices; last observation is March 2025.

latter also impacted by mining incidents. Output remained stable in India while falling in Russia, reflecting international sanctions and financial strains within the sector.

### Outlook

The Australian coal price is projected to fall by 21 percent in 2025 (y/y), decrease by a further 7 percent in 2026, and recover in 2027. This forecast assumes subdued global economic growth and adequate supply conditions, while accounting for the prospect of increased power demand in EMDEs, and the continued expansion of renewable power sources.

Global coal consumption is expected to fluctuate throughout the forecast period (figure 9.B). Electricity demand is set to rise in China, India, and the United States due to greater use of electric vehicles (EVs), air conditioning, and expanding data centers. However, higher output from renewable electricity plants—especially in China and India—will moderate coal demand growth. Among the major coal consumers, demand in 2026 and 2027 is expected to increase only in China and India. In 2026, declines in the EU and the United States are expected to outweigh increases in China and India.

Global coal production is forecast to be lower in 2026 than in 2025, contributing to a drawdown in existing coal stocks (figure 9.B). India is the only major coal producer expected to increase supply, albeit at a moderate rate. Production in China is expected to decrease starting in 2026. International coal trade is expected to edge lower in 2026, in line with falling imports in Asia. This will decrease exports from Australia and Indonesia, the two largest major exporters, and contribute to lower prices.

### Risks

Risks to the coal price forecast are broadly balanced. The most notable upside risks are unexpected increases in China's coal consumption, more frequent or severe extreme weather events and higher-than-expected power demand from data centers. Downside risks include strong coal supply, and subdued demand resulting from weaker-than-expected economic activity.

#### Upside risk: Unexpected increase in consumption in China

The projection that global coal consumption will plateau through the forecast period is contingent upon stable demand in China. Rising electricity consumption driven by growing EV adoption presents a notable risk to this assumption. The record number of coal power plants permitted in 2025Q1 underscores coal's continuing—albeit gradually declining—role in the national power grid (figure 9.C).

#### Upside risk: Increasing frequency or severity of extreme weather events

Higher-than-normal temperatures, including during heatwaves, drive up electricity demand for cooling, while at the same time reducing output from some power generation sources, such as hydropower. If the ability to rapidly increase electricity production from other sources is limited, demand for coal may rise, pushing up prices. Additionally, periods of intense rainfall could restrict access to coal-producing regions and facilities, as observed in Australia and Indonesia in 2025H1, contributing to short-term supply constraints and price increases.

#### Upside risk: Higher-than-expected electricity demand from data centers

As noted in the discussion of natural gas, a faster-than-expected expansion in data center construction could place a sustained pressure on electricity markets. Coal demand in the power sector could rise as a result, especially in China and the United States, where domestic production could help offset any shortfall in power generation.

#### Downside risk: Higher-than-expected supply

Uncertainty remains as to whether the supply reductions assumed in the baseline will materialize. In China coal production could increase, unless safety inspections targeting excess production have a long-lasting impact. U.S. production could continue increasing, if coal suppliers benefit from higher natural gas prices—a key substitute of coal in power generation—as occurred in 2025Q1 (figure 9.D). U.S. supply could also benefit from federal policies aimed at increasing domestic coal production.

#### Downside risk: Subdued economic activity

Prices may fall below projections if economic growth is weaker than anticipated, particularly in China and India, which together account for approximately 70 percent of global coal demand. In China, the recent slowdown in industrial activity and infrastructure investment could prove to be more intense and prolonged than currently expected.

## Agriculture

*The World Bank Group's agricultural commodity price index eased in October as seasonal harvests in the Northern Hemisphere and sizable supplies weighed on grains and some beverages. Earlier, the index fell by 4 percent in 2025Q3 (q/q)—its second consecutive quarterly decline—due to improved weather conditions in cocoa- and coffee-growing regions and an ample grain supply. The agricultural price index is projected to remain stable in 2025 before edging down by 2 percent in 2026. Food and agricultural raw material prices are forecast to remain little changed in 2026, as supply growth keeps pace with demand, while beverage prices are expected to fall by 7 percent in 2026, owing to expanding supply. Risks to the forecast are broadly balanced, with upside risks from extreme weather events, reduced trade tensions involving several commodities with U.S. benchmarks (particularly soybeans), and higher-than-expected input costs such as natural gas for fertilizers offset by downside risks from weaker biofuel demand and more subdued global growth.*

### Food commodities

#### Recent developments

Food commodity prices edged down in October as declines in grains and other foods were partly offset by gains in edible oils. Food prices fell by 1 percent in 2025Q3 (q/q) and were 5 percent lower than a year earlier (figure 10.A). The year-on-year decrease reflects ample global supplies and favorable growing conditions, led by a 12 percent decline in grain prices and a 6 percent drop in other foods, while oils and meals were little changed (figure 10.B).

In October, rice prices fell to their lowest level since early 2017 due to subdued import demand amid abundant global supplies. Earlier, prices decreased by 10 percent in 2025Q3 (q/q) and by more than one-third from a year earlier. This sharp decline reflected record-high production, India's removal of export restrictions, and a 5 percent increase (y/y) in global ending stocks for 2024-25, mainly among the major exporters—India, Pakistan, Thailand, the United States, and

Viet Nam (figure 10.C). Maize prices softened in October as the U.S. Midwest harvest progressed. Prices fell 7 percent in 2025Q3 amid seasonal harvests and improved supply but remained 8 percent above levels a year earlier, after hotter and drier conditions in parts of South America had lifted prices in the first half of 2025. Wheat prices eased in October amid slower U.S. export shipments, an upward revision to EU 2025-26 production, and a pickup in Russian exports after a slow start. Prices declined 4 percent in 2025Q3 and were 10 percent lower than a year earlier, reflecting an improved supply outlook, with global wheat production projected to reach a record in the 2025-26 crop year.

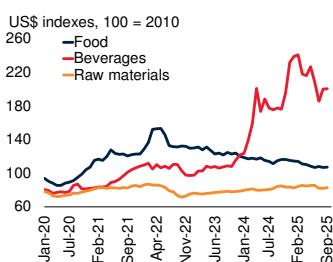
The oils and meals price index rose by 2 percent in 2025Q3 (q/q) and remained unchanged from a year earlier (figure 10.B). Soybean oil and palm oil prices both increased by 7 percent in 2025Q3, a trend that continued in October. The rise was supported by stronger domestic feedstock demand for biodiesel production—driven by higher admixture mandates in Brazil, plans to raise blending mandates in Indonesia, and the expiration of tax credits for imported biofuels in the United States. Higher demand from major edible oil importers to restock depleted inventories provided additional support for prices. In contrast, increased crushing of soybeans into oil prompted by low soybean prices and tight alternative oilseed supplies, boosted the supply of soybean meal (a co-product of soybean oil production) by 8 percent in 2024-25, pushing its price 22 percent lower in the year to 2025Q3 (figure 10.D).

Other food prices edged down in 2025Q3 (q/q) and were 6 percent lower than a year earlier, as declines in fruit and sugar prices outweighed gains in beef. Sugar prices fell by 6 percent (q/q) to 15 percent lower than a year earlier, with further declines in October, driven by strong production in Brazil and expectations of a global surplus in 2025-26. In contrast, beef prices in the United States—a benchmark market for both beef and chicken—rose 2 percent in the quarter and 9 percent from four quarters earlier. U.S. cattle inventories dropped to their lowest since 1951, reflecting long-term shifts toward chicken consumption and greater reliance on imports. Beef

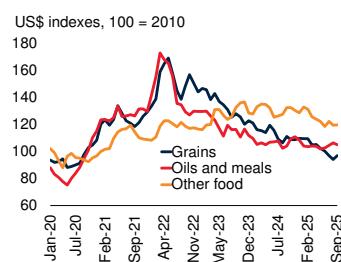
## FIGURE 10 Agricultural prices

Agricultural commodity prices fell by 4 percent in 2025Q3 (q/q), driven by a 10 percent drop in beverage prices. Raw material prices declined by nearly 3 percent in the quarter, while food prices eased by 1 percent. Among food groups, a 6 percent decline in grain prices, due to ample global supplies, was partially offset by a 2 percent increase in oil seeds and meals, reflecting stronger demand for edible oils in biodiesel production. The agricultural price index is projected to decline by 2 percent in 2026, led by a further 7 percent drop in beverage prices, while other components are expected to remain broadly stable. Agricultural prices are forecast to be largely unchanged in 2027.

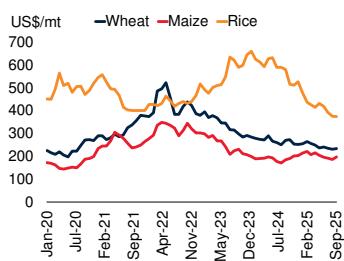
### A. Agriculture price indexes



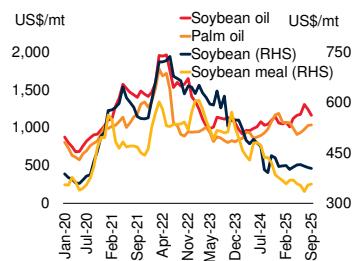
### B. Food price indexes



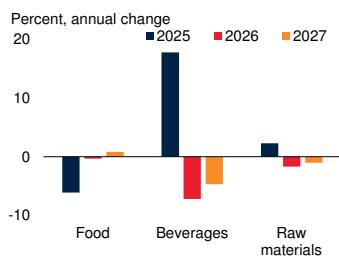
### C. Grain prices



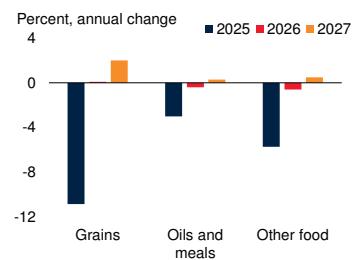
### D. Oils and meals prices



### E. Agricultural price forecasts



### F. Food price forecasts



Sources: Bloomberg; S&P Global; World Bank.

Note: mt = metric tons; RHS = right-hand side.

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

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

E.F. 2025-27 are forecasts.

price pressures were compounded by prolonged Midwest drought conditions and a U.S. ban on livestock imports from Mexico imposed for disease control reasons. Chicken prices eased 2 percent in 2025Q3 but remained 25 percent higher than in 2024Q3, after sharp increases earlier in 2025 linked to efforts to contain bird flu outbreaks.

## Outlook

Following an estimated 6 percent decline in 2025, the food price index is projected to remain broadly stable in 2026 and 2027, with annual prices for all three components—grains, oils and meals, and other foods—expected to remain within 1-2 percent of the previous year's levels (figures 10.E and 10.F).

Global grain supply growth is envisaged to return to its long-term annual trend in 2025-26, with stocks-to-use ratios (a measure of supply relative to demand) projected to inch down only slightly for major grains (figures 11.A and 11.B). After a 31 percent decline in 2025, following a strong harvest and the easing of export restrictions, rice prices are forecast to dip by a further 1 percent in 2026, as supply growth slightly outpaces consumption. In 2027, however, rice prices are expected to rise by 2 percent, reflecting a likely contraction in production due to decade-low prices and increasing consumption amid continued population growth in Asia and Africa.

Wheat prices, which are projected to fall by 7 percent in 2025, are forecast to rise by 4 percent in both 2026 and 2027. Global wheat production in the 2025-26 season is expected to rise by 1 percent, slower than consumption growth, with end-season stocks projected to decline by 2 percent to a seven-year low. Maize prices, which are estimated to increase by 4 percent in 2025, are forecast to edge down in 2026 before rising modestly in 2027. Global maize production in the 2025-26 season is expected to grow by 5 percent to an all-time high, but with rising consumption and low opening stocks, overall supply is projected to only marginally surpass demand (figure 11.B).

The oils and meals price index is forecast to decline by 3 percent in 2025, with a 12 percent drop in the price of soybeans and a 21 percent plunge in soybean meal prices, partly offset by gains in the prices of soybean oil (13 percent) and palm oil (6 percent). The index is projected to remain essentially unchanged in 2026-27, as balanced growth in edible oil supply and consumption keeps stocks-to-use ratios stable (figures 11.C and 11.D). The 2025 decline in soybean prices is expected to prompt a 1 percent

contraction in global soybean planting area during the 2025-26 season. With global consumption projected to reach a new high in 2025-26 and tight year-end inventories, soybean prices are forecast to increase by 1 percent in 2026 and 2 percent in 2027.

Soybean oil consumption is projected to rise by 3.0 million metric tons (4 percent) in 2025-26, outpacing expected supply growth of 1.8 million tons. This deficit is set to push prices slightly higher in 2026. However, prices are forecast to decline modestly in 2027 as improving sunflower oil supplies ease upward pressure on soybean oil prices. Palm oil production in 2025-26 is envisaged to grow at about half the pace of the 2015-24 average, while demand is expected to remain strong owing to improved price competitiveness relative to alternative oils. As a result, palm oil prices are forecast to rise by 3 percent in 2026 and edge up in 2027. Soybean meal prices, after a projected 21 percent decline in 2025, are expected to fall by 4 percent in 2026, driven by increased soybean oil production, which raises meal supply as a co-product. In 2027, however, soybean meal prices are expected to strengthen by 2 percent, as rising reliance on sunflower oil reduces soybean oil demand and production, thereby tightening soybean meal supply.

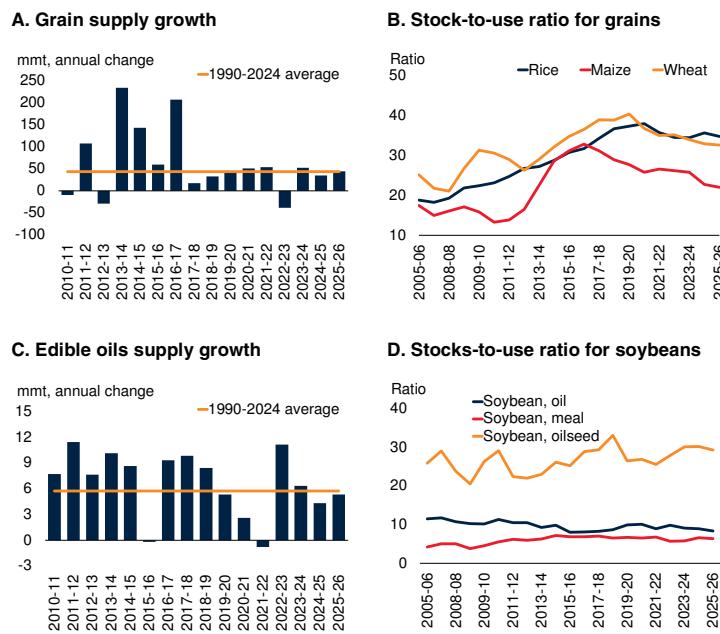
The other foods price index is projected to decline by 6 percent in 2025 and 1 percent in 2026 before edging up by 1 percent in 2027. Beef and chicken prices—after projected increases of 14 percent and 16 percent, respectively, in 2025—are forecast to remain broadly stable in 2026 and 2027. The stability reflects an expected recovery in the size of the U.S. beef herd and a steady rise in chicken production, supported by favorable margins between feed costs and chicken prices. Sugar prices are envisaged to fall by 15 percent in 2025 and a further 3 percent in 2026 before stabilizing in 2027, as global supply is projected to outpace consumption.

### Risks

Risks to the food price outlook are broadly balanced. The main upside risks include reduced trade tensions, especially for soybeans; extreme

**FIGURE 11 Supply conditions for grains and edible oils**

*Global grain supply is forecast to increase in the 2025-26 crop year, in line with its historical average, with stocks-to-use ratios for most grains expected to decline only marginally. Edible oil supply is also projected to strengthen broadly in line with its historical average, but stronger demand growth is expected to reduce stocks-to-use ratios for soybeans and soybean oil.*



Sources: U.S. Department of Agriculture; World Bank.

Note: mmt = million metric tons. Year spans indicate crop seasons. Data updated as of October 17, 2025.

A.C. Supply is the sum of beginning stocks and production and excludes imports.

A. Grains include barley, maize, rice, oats, rye, sorghum, and wheat.

C. Edible oils include coconut, cottonseed, palm, palm kernel, peanut, rapeseed, soybean, and sunflower seed oil.

B.D. Stocks-to-use ratio is the ratio of domestic consumption to end-season stocks.

weather events; and higher fertilizer costs. Key downside risks include weaker-than-anticipated biofuel demand and a sharper-than-expected slowdown in global economic growth.

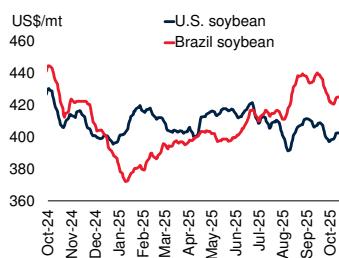
### Upside risk: Reduced trade tensions

Trade tensions between the United States and China have widened price gaps and strengthened trade diversion in global soybean markets. U.S. soybeans trade at a discount to those in Brazil, but China's retaliatory tariffs prevent Chinese buyers from capitalizing on lower U.S. prices (figure 12.A). As a result, China has increased imports from Brazil, while other buyers have shifted toward U.S. soybeans. If tensions ease and trade normalizes, soybean prices in the United States, the benchmark market, could rise above forecasts.

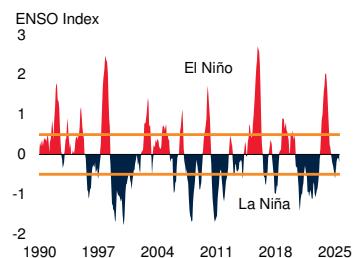
## FIGURE 12 Risks to agricultural price projections

*U.S. soybean prices in 2025Q3 traded at a discount to Brazil's amid ongoing trade tensions among major economies. A stronger or longer-lasting La Niña than currently forecast could push agricultural prices above forecasts, as could higher-than-expected fertilizer costs. Conversely, weaker-than-expected demand growth for edible oils in the biofuel industry could push agricultural prices below baseline projections.*

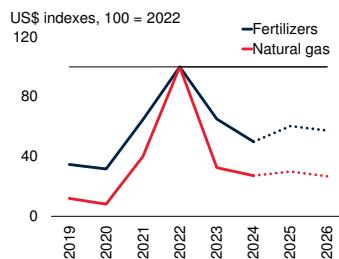
### A. Benchmark soybean prices



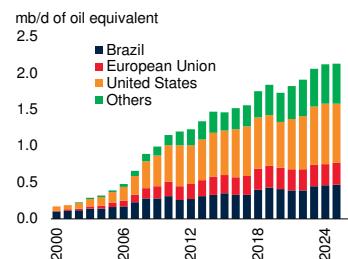
### B. El Niño/La Niña strength



### C. Fertilizer and natural gas price indexes



### D. Biofuels production



Sources: Bloomberg; National Oceanic and Atmospheric Administration (NOAA); Organisation for Economic Co-operation and Development (OECD); Statistical Review of the World Energy, Energy Institute; World Bank.

Note: ENSO = El Niño–Southern Oscillation.

A. Seven-day rolling averages of FOB (free on board) prices for U.S. No. 2 soybeans (U.S. Gulf) and Brazilian soybeans (Paraná). Last observation is October 17, 2025.

B. The ENSO Index represents a centered three-month mean sea surface temperature anomaly for the Niño 3.4 region (i.e., 5°N–5°S, 120°–170°W). According to NOAA, events are defined as five consecutive overlapping three-month periods at or above the +0.5°C anomaly for El Niño events and at or below the -0.5°C anomaly for La Niña events. Horizontal lines indicate the +0.5°C and -0.5°C anomaly. Last observation is July 2025.

C. Dashed lines indicate forecasts. "Natural gas" refers to the European benchmark.

D. mb/d = million barrels per day. Years 2024–25 include projections from the OECD-FAO Agricultural Outlook 2024–2033.

### Upside risk: Stronger or more prolonged La Niña than expected

Meteorological conditions indicate a likely occurrence of a La Niña event in late 2025 or early 2026 (figure 12.B).<sup>7</sup> If La Niña proves stronger and more prolonged than expected in the baseline, it could bring hotter and drier-than-normal weather to key agricultural-producing

regions—including Argentina, southern Brazil, and the U.S. Gulf Coast—potentially compromising the production of maize, wheat, and soybeans and pushing prices above current forecasts. In other countries, such as Indonesia, Malaysia, and the Philippines, a stronger-than-expected La Niña could cause flooding or landslides that disrupt the planting season for rice and other crops, potentially increasing import demand.

### Upside risk: Higher-than-expected fertilizer costs

Fertilizer prices are projected to rise by 21 percent in 2025 before declining in 2026 and 2027, an outlook predicated on the assumption that China's export restrictions on nitrogen and phosphate fertilizers will ease (figure 12.C). If these restrictions are maintained, natural gas prices rise, or demand proves stronger than expected, fertilizer costs could remain elevated, pushing food prices above current forecasts.

### Downside risk: Weaker-than-expected biofuel demand

Prices of edible oils have been supported by growth in their use as biodiesel feedstocks, particularly in Brazil, Indonesia, and the United States (figure 12.D). This trend is expected to continue, but lower crude oil prices or softer blending mandates could reduce demand and lower prices.

### Downside risk: Weaker-than-expected global growth

These baseline agricultural price forecasts assume broadly steady global economic growth in 2026–27. However, risks to the global growth outlook remain tilted to the downside. Weaker-than-expected global growth could lead to softer commodity demand and lower food prices—particularly for edible oils and beef, which tend to exhibit higher elasticity with respect to global economic activity than other food commodities.

### Implications for food price inflation and food security

In 2025Q3, the global median domestic food price inflation (from four quarters earlier) stood at 3.3 percent in local currency terms, down from 3.7 percent in the previous quarter. Four-quarter

<sup>7</sup>La Niña is a climate pattern in the Pacific Ocean marked by cooler-than-average sea surface temperatures in the central and eastern tropical Pacific, altering rainfall, storms, and temperature patterns worldwide.

inflation picked up in advanced economies, from 3.6 percent in 2025Q2 to 3.8 percent in 2025Q3, but declined in EMDEs, from 3.9 percent to 2.9 percent. Regionally, four-quarter food inflation was highest in Europe and Central Asia, at 7.1 percent, accelerating from 2025Q2. Food inflation remained elevated in Sub-Saharan Africa and South Asia, though it moderated in Q3 compared with the previous quarter (figure 13.A).

The number of people facing hunger globally is projected to decline to 634 million in 2025, from 673 million in 2024, according to the UN Food and Agriculture Organization. Falling 2025 prices for staples—especially rice and wheat—likely improved basic food affordability in EMDEs, though conflicts and domestic economic conditions often limit and unevenly transmit global price declines to domestic markets. However, the world remains off track in achieving the Sustainable Development Goal (SDG) of zero hunger by 2030. Given that the number of people facing hunger rose by 150 million between 2018 and 2021, it would take two more years of progress at currently-projected rates to return to the 2015 level of global hunger—the year the SDGs were adopted (figure 13.B).

## Beverages

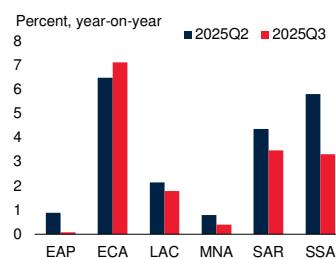
After reaching record highs in early 2025, in response to weather-related shortfalls in cocoa and coffee production, the World Bank Group's beverages price index fell by 10 percent in 2025Q3 (q/q). The decline reflected continued drops in coffee and cocoa prices related to recoveries in production, while tea prices rose modestly. After a projected 18 percent increase in 2025, the index is expected to fall by 7 percent in 2026 and 5 percent in 2027 as supply continues to expand.

**Coffee** prices declined by 10 percent in 2025Q3 (q/q), easing from weather-related spikes earlier in the year, as supplies improved and demand growth remained solid (figure 14.A). Arabica prices fell by nearly 5 percent and Robusta prices by 15 percent in 2025Q3. Global coffee production, which reached 174 million bags in the 2024-25 season, is expected to rise to 179 million bags in 2025-26 (figure 14.B). Following a nearly 50 percent increase in 2025 (y/y), Arabica prices are projected

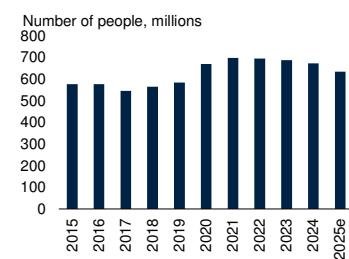
## FIGURE 13 Food price inflation and food insecurity

*Domestic food inflation eased across most regions in 2025Q3 (q/q), though it continued to rise in Europe and Central Asia. The number of people suffering from chronic hunger globally has declined since 2021, albeit gradually.*

A. Food consumer price inflation from four quarters earlier by EMDE region



B. Number of undernourished people, 2015-25



Sources: Food and Agriculture Organization of the United Nations (FAO); Haver Analytics; World Bank.

Note: e = estimate; EAP = East Asia and Pacific; ECA = Europe and Central Asia; LAC = Latin America and the Caribbean; MNA = Middle East, North Africa, Afghanistan, and Pakistan; SAR = South Asia; SSA = Sub-Saharan Africa.

A. Bars show medians for each region. Sample includes up to 110 EMDEs from EAP (10 countries), ECA (17), LAC (26), MNA (17), SAR (6), and SSA (36). Data for 2025Q3 include the July-August average.

B. Estimated share of the population consuming insufficient calories to meet energy requirements for an active, healthy life. Indicator is used to monitor hunger and is based on country data on food availability, food consumption, and energy needs. Data for 2025 are FAO estimates.

to decline by 13 percent in 2026 and 5 percent in 2027, as output from Colombia, the world's second-largest Arabica producer, recovers. Robusta prices are projected to rise by 9 percent in 2025 but to fall by 2 percent in both 2026 and 2027. Upside risks to the forecasts include weather-related supply disruptions, particularly in Brazil, the leading global producer, and the potential impact of new U.S. tariffs on coffee imports from Brazil.

**Cocoa** prices fell by 14 percent in 2025Q3 (q/q) but remained 7 percent higher than a year earlier (figure 14.C). The easing of prices reflects an improved outlook for the 2025-26 crop season in West Africa, as global production is projected to rebound by more than 10 percent, driven by increases of 5 percent in Côte d'Ivoire, the largest producer, and 34 percent in Ghana. The expected rebound follows a production decline in the 2024-25 season due to unfavorable weather conditions (figure 14.D). Cocoa prices are projected to rise by 9 percent in 2025 (y/y) but to fall by 6 percent in 2026 and 7 percent in 2027 as supplies expand. The price forecast is subject to downside risk from

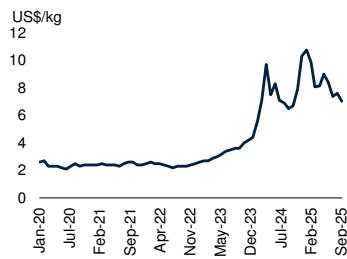
## FIGURE 14 Beverage markets

Beverage prices eased in 2025Q3 from their record high earlier in the year, as coffee and cocoa prices fell, while tea prices remained broadly stable owing to ample supplies. The beverage price index is projected to decline by 7 percent in 2026 and an additional 5 percent in 2027, reflecting favorable prospects for coffee and cocoa production. Key risks to the outlook include weather-related disruptions to production and more-severe-than-assumed effects of U.S. tariffs on Brazil's coffee exports than assumed.

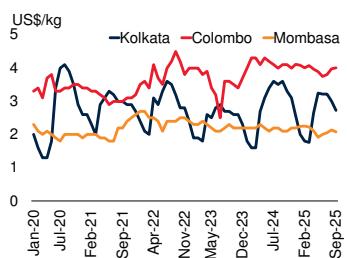
A. Coffee prices



C. Cocoa prices



E. Tea prices



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

Note: mt = metric ton.

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

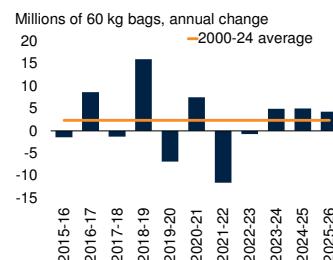
B. Data updated as of October 17, 2025.

B.D. Year spans indicate crop seasons.

D. Data for 2024 are ICO estimates.

F. Twelve-month change in production from July 2024 to June 2025. Tea-producing regions in northern India include Assam, West Bengal, Himachal Pradesh, and Uttar Pradesh; in southern India, Karnataka, Kerala, and Tamil Nadu.

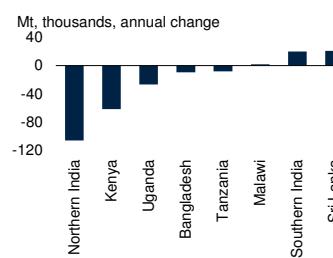
B. Changes in coffee production



D. Changes in cocoa production



F. Changes in tea production, July 2024-June 2025



weather-related developments, particularly if La Niña conditions in West Africa prove more favorable to production than expected.

**Tea** prices (three-auction average) rose by 1 percent in 2025Q3 (q/q) but remained 8 percent lower than a year earlier (figure 14.E). Weather-related supply constraints and strong demand for high-grade tea pushed up prices at the Colombo and Mombasa auctions, while prices at the Kolkata auction slipped due to seasonal factors. Despite localized supply concerns in Kenya and Uganda, the global tea market remains well supplied, partly owing to higher output from Sri Lanka (figure 14.F). After a projected 5 percent decline in 2025, tea prices are expected to recover by nearly 2 percent in both 2026 and 2027, supported by higher production in both South Asia and East Africa.

## Agricultural raw materials

The World Bank Group's agricultural raw materials price index fell by 3 percent in 2025Q3 (q/q), with modest gains in cotton and natural rubber offset by declines in timber and other materials. The index is expected to rise by more than 2 percent in 2025 before declining in 2026 and 2027, reflecting strong global supply prospects and softening demand.

**Cotton** prices were broadly stable through the first three quarters of 2025, although they were down by half from the 2022 peak (figure 15.A). This stabilization reflects supply growth during the 2024-25 crop year, when global production rose 6 percent, alongside stronger-than-expected demand. Global cotton production is expected to fall by 2 percent in the 2025-26 season, according to the U.S. Department of Agriculture's latest assessment, with sharp declines in Australia (27 percent), Türkiye (9 percent), and the United States (8 percent). Together with China and India, these producers account for more than two-thirds of global output. Global consumption of cotton is projected to remain broadly stable, leaving the stocks-to-use ratio at 0.63 (figure 15.B). Following an 11 percent decline in 2025 (y/y), cotton prices are expected to rebound by about 3 percent annually in both 2026 and 2027. Key risks to the

price outlook include weaker-than-expected global economic growth, which would dampen demand, and adverse weather conditions in key producing regions, which would reduce supply.

**Natural rubber** prices rose by 2 percent in 2025Q3 (q/q) in response to concerns over trade restrictions and weather-related supply disruptions in Southeast Asia, following heavy seasonal rains in Malaysia and Thailand. However, in the 12 months to September 2025, global production rose by 4.7 percent, led by Indonesia (11 percent), Malaysia and Côte d'Ivoire (about 8 percent each), and Thailand (5 percent), the world's largest producer. Demand for natural rubber increased by 2 percent in the year to September 2025. Tire production, which accounts for nearly two-thirds of natural rubber use, changed little for light vehicles and fell slightly for heavy vehicles, underscoring sluggish automotive demand. Natural rubber prices are projected to remain broadly unchanged in 2025 before rising by 2 percent in 2026 and 3 percent in 2027. Risks to the forecast are skewed to the downside and include a sharper-than-expected slowdown in global automobile production amid recently imposed tariffs and persistent overcapacity in China's auto sector.

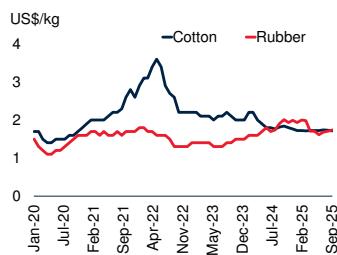
## Fertilizers

The World Bank Group's fertilizer price index jumped by almost 14 percent in 2025Q3 (q/q)—the fifth consecutive quarterly increase—to a level 28 percent higher than a year earlier. Urea, TSP (triple superphosphate), and DAP (diammonium phosphate) have all recorded sharp gains, while MOP (muriate of potash, or potassium chloride) was marginally lower following strong increases in the previous two quarters. The overall increase reflects strong demand, trade restrictions, and some production shortfalls—especially in the case of urea. The fertilizer price index is projected to rise by 21 percent in 2025 before easing in 2026 and 2027, albeit to levels well above the 2015-19 average. Prices are expected to remain elevated due to raised input costs (especially for nitrogen), resilient consumption, and trade restrictions and sanctions affecting producers. Key risks include higher input costs on the upside and increased exports from China on the downside.

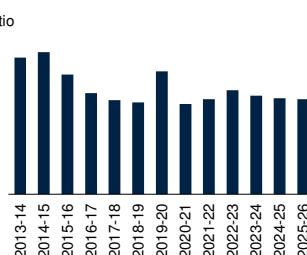
## FIGURE 15 Agricultural raw materials markets

The agricultural raw material price index fell by 3 percent in 2025Q3, with declines in the prices of timber and other products outweighing moderate gains in natural rubber prices. Cotton prices remained broadly stable, supported by strong supply growth in the 2024-25 crop year. Natural rubber prices edged up in 2025Q3, following earlier declines from record highs, amid weather-related supply concerns in key producing regions and uncertainty over trade restrictions. After increasing by around 2 percent in 2025, the index is projected to ease in 2026 and 2027, reflecting strong global supply prospects and subdued demand.

A. Agricultural raw material prices



B. Cotton stocks-to-use ratio



Sources: Bloomberg; U.S. Department of Agriculture; World Bank.

Note: Mt = metric ton.

A. Monthly data. Last observation is September 2025.

B. Year spans indicate crop seasons. Stocks-to-use ratio is the ratio of domestic consumption to end-season stocks. Data updated as of October 17, 2025.

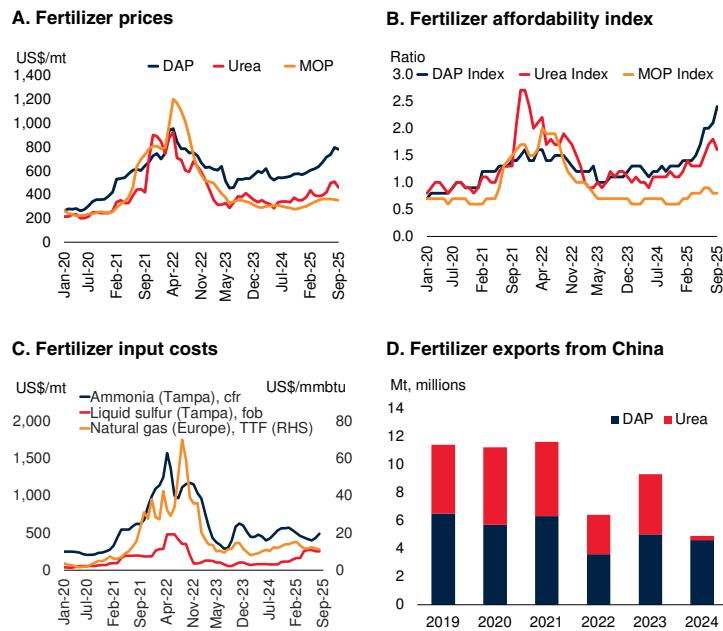
## Recent developments

After briefly falling to pre-pandemic levels in December 2024, fertilizer prices have increased markedly over the past three quarters, though they eased in October (figure 16.A). Urea prices rose 43 percent in the year to 2025Q3, partly due to strong import demand and restocking in India, while DAP (diammonium phosphate) and TSP (triple superphosphate) surged 41 and 31 percent, respectively. MOP increased 22 percent. Combined with weaker agricultural commodity prices, these increases have eroded farmers' profit margins. The DAP affordability index (the price of DAP relative to food) is now well above its previous peak in early 2022 (figure 16.B).

Some input costs have moderated in recent months. Natural gas prices—a critical input for nitrogen fertilizer production—fell by 26 percent in the United States and 16 percent in Europe (in U.S. dollar terms) during January-September 2025. Ammonia prices have also declined sharply. By contrast, liquid sulphur prices have tripled since end-2024 (figure 16.C).

## FIGURE 16 Fertilizer markets

Fertilizer prices rose further in 2025Q3, driven by sharp increases in triple superphosphate (TSP) and diammonium phosphate (DAP) amid strong demand, trade restrictions, and production shortfalls. The fertilizer price index is projected to rise by more than 20 percent in 2025 before moderating over the next two years. Risks to the outlook include higher input costs on the upside and increased exports from China on the downside.



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 potash; mt = metric ton; TSP = triple superphosphate; TTF = Title Transfer Facility.

A.-C. Monthly series. Last observation is September 2025.

B. Fertilizer affordability is calculated as the ratio of fertilizer prices to the food price index.

D. Bars show total exports of DAP and urea from China.

Trade policies and sanctions continue to reshape global fertilizer markets. Nitrogen supplies have been constrained, particularly by China's discretionary export restrictions: in 2024, the country's nitrogen fertilizer exports fell by more than 90 percent (y/y) as authorities prioritized domestic price stability and supply security (figure 16.D). These restrictions extended well into 2025. Phosphate exports have also been curbed by China to secure inputs for lithium-iron-phosphate batteries used in electric vehicles. Meanwhile, Belarus—a significant potash exporter—remains

subject to EU trade sanctions. More recently, the EU introduced tariffs on agricultural imports, including nitrogen fertilizers, from Russia and Belarus in turn causing a rerouting of these fertilizers to Asia and the Americas.

### Outlook and risks

The fertilizer price index is expected to increase by more than 20 percent in 2025, reflecting stronger demand and supply constraints stemming from trade restrictions, before declining in 2026 and 2027. Urea prices are projected to rise by 30 percent in 2025 amid tighter market conditions, before easing by 7 percent in 2026 and 9 percent in 2027 as new capacity in East Asia and the Middle East comes online. A modest recovery in European production of urea may also occur, offsetting the shortfall of imports from Russia. This follows a long period of subdued output due to the loss of natural gas flows after Russia's invasion of Ukraine. Upside risks to the baseline price forecast include slower capacity expansion, renewed trade restrictions, and higher natural gas prices. In the longer term, there are structural challenges to the supply of nitrogen fertilizers—given their high carbon footprint—which could accelerate a shift toward lower-emission alternatives such as biofertilizers, organic amendments, and regenerative farming technologies.

DAP prices are forecast to increase by 26 percent in 2025 before falling by 8 percent in 2026 and again in 2027, as new capacity eases supply pressures. The forecast assumes that Russia will continue diverting exports from Europe to Brazil and India, although additional export restrictions, supply disruptions, or spikes in ammonia or natural gas prices could push DAP prices higher. MOP prices are expected to rise by 19 percent in 2025 amid firm demand, followed by moderate declines in 2026 and 2027. A key downside risk is a faster-than-expected expansion of Belarusian exports through alternative routes.

## Metals and Minerals

*Metal prices rose by 4 percent in 2025Q3 (q/q), and continued to climb in October, supported by firm global metal demand. After an expected 3 percent increase in 2025 (y/y), metal and mineral prices are projected to remain steady in 2026 before edging up 2 percent in 2027, supported by modest demand growth amid tightening supply conditions. Precious metal prices are expected to increase by 41 percent in 2025 as a whole, driven by gains in gold and silver, with smaller gains of 6 percent projected for 2026, before easing by 6 percent in 2027. Risks to the price outlook for base metals are tilted to the downside. Most prominently, weaker-than-expected growth in major economies could dampen metal demand and push prices below baseline projections. Upside risks to the price forecast for base metals include production disruptions, new trade restrictions, and faster-than-expected expansion of data centers. For precious metals, further escalation of geopolitical tensions or policy uncertainty could lift gold and silver prices above forecasts.*

### Base metals and iron ore

#### *Recent developments and outlook*

Metal prices rebounded in 2025Q3 and rose further in October, driven mainly by aluminum and copper, following a decline in the previous quarter (figures 17.A and 17.B). The recovery reflects resilient activity in major economies. Rising renewable energy investment and related infrastructure projects, especially in China, continue to support demand for aluminum, copper, and tin, among other metals. Nonetheless, the weakness in China's property sector remains a major drag on demand for construction-related metals such as iron ore—the key input for steel—and zinc. More broadly, persistent cyclical headwinds, including subdued global activity, will constrain base metal prices during the forecast period. Base metal prices are projected to hold steady in 2026 and inch higher in 2027, while iron ore prices are forecast to decline in both years (figure 17.C).

**Aluminum** prices rose by 7 percent in 2025Q3 (q/q) and have extended their gains in October, recovering from the sharp drop that followed the

introduction of U.S. tariffs earlier in the year. Despite subdued activity in major economies, aluminum demand growth is expected to remain resilient, underpinned by its critical role in renewable energy technologies such as solar and wind power and expanding electricity grid infrastructure. On the supply side, aluminum output growth is projected to moderate as China, which accounts for 60 percent of global production, approaches the output ceiling it introduced in 2017 to contain emissions. In Europe, primary aluminum production is gradually recovering from smelter closures triggered by high energy costs following Russia's invasion of Ukraine, though output remains about 15 percent below 2019-21 levels. Further recovery will likely be limited by environmental regulations and scarce affordable aluminum scrap. Following an estimated 7 percent increase in 2025 (y/y), aluminum prices are expected to rise modestly by 1 percent in 2026 and a further 4 percent in 2027, supported by steady demand growth amid tighter supply conditions.

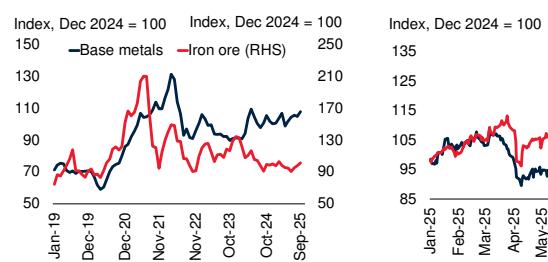
**Copper** prices rose by 3 percent in 2025Q3 (q/q), to a 16-month high and have continued to climb in October. The third quarter increase reflected surging U.S. imports ahead of tariffs as well as output disruptions at a major Indonesian copper mine. Copper demand is expected to expand only modestly over the next two years, as subdued global activity and continued weakness in China's property sector weigh on consumption. These headwinds are anticipated to be partly offset by growing use of copper in renewable energy technologies—including electric vehicles (EVs), power grids, and data centers—as well as by increasing defense spending and artificial intelligence (AI)-related infrastructure. On the supply side, global production is also expected to increase modestly, as operational setbacks at several large mines constrain near-term output growth. After an expected 6 percent increase in 2025 (y/y), copper prices are projected to rise by 1 percent in 2026 and 2 percent in 2027, reaching new all-time highs in annual terms, reflecting broadly balanced demand and supply conditions.

**Lead** prices edged up by 1 percent in 2025Q3 (q/q) and have remained broadly stable in October.

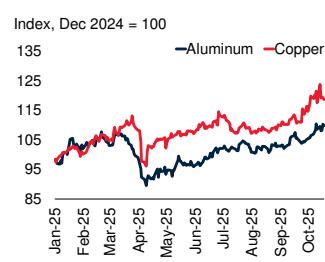
## FIGURE 17 Metals and minerals markets

Base metal prices increased in 2025Q3, reflecting resilience in major economies despite ongoing headwinds, with gains driven mainly by aluminum and copper. After rising by an expected 2 percent in 2025, metal and mineral prices are projected to remain broadly stable in 2026 before edging higher in 2027. Downside risks to the outlook dominate: weaker-than-expected growth in major economies, particularly in China, could cause prices to undershoot forecasts. Upside risks include unexpected supply disruptions—potentially stemming from additional trade restrictions—and stronger-than-expected stimulus measures.

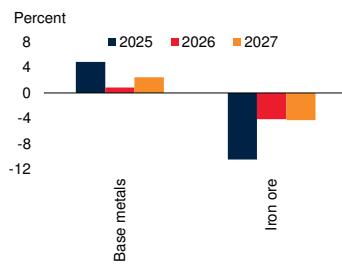
### A. Base metals and iron ore prices



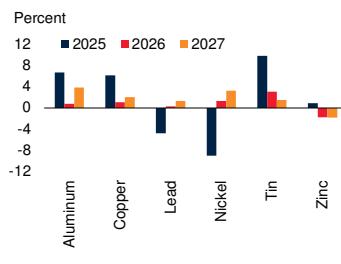
### B. Aluminum and copper prices



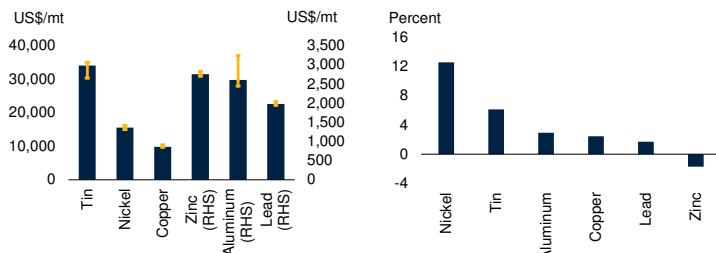
### C. Changes in base metals index and iron ore prices



### D. Changes in base metal prices



### E. Base metal price forecasts for 2026



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

Note: mt = metric tons.

A. Base metals and iron ore price indexes. Last observation is September 2025.

B. Daily aluminum and copper price indexes. Last observation is October 17, 2025.

C-D. Bars show year-on-year change. Data for 2025-27 are based on World Bank forecasts.

E. Whiskers show forecasts for 2026 using the most optimistic to pessimistic models, as presented in Arroyo Marioli et al. 2023. "Forecasting Industrial Commodity Prices: Literature Review and a Model Suite." Policy Research Working Paper 10611, World Bank, Washington, DC.

F. Bars show year-on-year change.

Demand for lead—driven primarily by batteries, around two-thirds of which are used in internal combustion engine vehicles—is expected to increase moderately, supported by growth in

vehicle sales and battery replacements, partly offset by growing EV adoption. Global mine production is projected to rise moderately over the forecast horizon, reflecting new developments—some linked to other metals—in several countries, including North and South America. Meanwhile, refined lead recycling—which accounts for about two-thirds of total supply—is also expected to increase, keeping overall availability broadly in line with demand. After an expected 5 percent decline in 2025 (y/y), lead prices are projected to remain steady in 2026 and inch higher by 1 percent in 2027, reflecting a broadly balanced market (figure 17.D).

**Nickel** prices edged down by 1 percent in 2025Q3 (q/q), extending the weakness of the previous quarter amid ample supply and were broadly unchanged in October. Global production is expected to expand steadily over the forecast horizon, with most of the growth occurring in Indonesia, which accounts for about 60 percent of global output. Indonesia's plan to revert to one-year (from three-year) production quotas is intended to strengthen oversight and support prices, but the impact on the still-oversupplied global market is envisaged to be limited, with the surplus projected to narrow only gradually. On the demand side, stainless steel production—which accounts for about two-thirds of nickel demand—is expected to provide only modest support amid subdued global activity. Demand is also set to benefit from continued EV adoption, where nickel is a key input for nickel-rich EV batteries, particularly in China, despite the growing use of nickel-free lithium-iron-phosphate batteries. Against this backdrop, after falling by an estimated 9 percent in 2025 (y/y), nickel prices are projected to increase by 1 percent in 2026 and by a further 3 percent in 2027 as the demand-supply balance gradually tightens (figure 17.E).

**Tin** prices rose by 5 percent in 2025Q3 (q/q) and have continued to climb in October, supported by firming industrial activity. Tin is primarily used in solder, most of which goes into electronics and semiconductors. Global tin supply is expected to strengthen over the forecast horizon, driven by higher exports from Indonesia—following the end of licensing delays that had impeded exports since

2024—and the anticipated restart of major mines in Myanmar that have been idle since 2023. Despite these near-term gains in output, the global tin market is likely to remain tight, given the limited pipeline of new projects and continued vulnerability to geopolitical and operational disruptions. On the demand side, growth is projected to remain resilient, underpinned by increases in the production of semiconductors, photovoltaic panels, and other energy-transition technologies. Against this backdrop, after rising by an estimated 10 percent in 2025, tin prices are forecast to increase by 3 percent in 2026 and a further 2 percent in 2027, bringing prices to new record annual highs.

**Zinc** prices increased by 7 percent in 2025Q3 (q/q) and increased further in October, rebounding from 7 percent declines in the two previous quarters amid a tighter supply-demand balance. Zinc consumption is closely tied to autos, manufacturing, and construction, as it is used mainly for galvanizing steel—particularly in China, which is the world's largest consumer. Zinc demand growth is expected to slow in 2026-27 as China's economy continues to decelerate, with continued weakness in the property sector weighing on steel demand and galvanizing activity. Some support for demand will come from infrastructure and power grid investment, as well as renewable energy applications, but these are unlikely to fully offset prevailing headwinds. After refined zinc production declined in the first half of 2025, it is expected to expand over the next two years as rising mine output in major producing countries—including China, which is also the world's largest producer—gradually feeds through to refined zinc supply (figure 17.F). With global supply steadily improving and demand growth subdued, zinc prices are projected to remain broadly stable in 2025 (y/y) before declining by 2 percent in 2026 and 2027.

**Iron ore** prices rose by 5 percent in 2025Q3 (q/q) and increased further in October, rebounding from a 6 percent decline in the previous quarter. The third-quarter recovery was supported by a temporary rebound in Chinese steel production (where iron ore is the key input) and by optimism over expectations of record-high steel exports this

year. However, continued weakness in China's property sector and subdued construction activity elsewhere are expected to weigh on iron ore demand. On the supply side, rising output from Australia and Brazil—the world's two largest producers—together with additional low-cost high-grade supply from West Africa, is expected to add further downward pressure on prices. Iron ore prices are projected to decline by 10 percent in 2025 (y/y), followed by further decreases of 4 percent in 2026 and 2027.

### Risks

Risks to the baseline forecast for metals and minerals prices are tilted to the downside. The most significant risk is weaker-than-expected global economic growth—particularly weaker growth in China, which accounts for about half of global base metal consumption. Weaker global growth would weigh heavily on demand, given the close links between investment and durable goods consumption and metals prices. On the upside, unexpected production disruptions or new trade restrictions could tighten supply, while a faster-than-anticipated expansion of data centers would bolster demand—particularly for metals critical to the energy transition—and drive prices above baseline projections.

#### Downside risk: Weaker-than-expected global growth

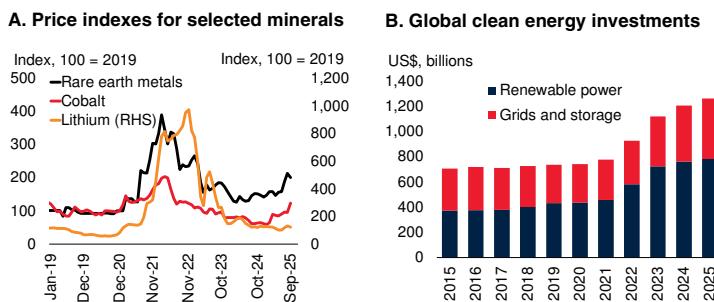
Several forces could lead to weaker-than-expected global growth over the forecast horizon. Increased geopolitical tensions, resurgent trade frictions, and elevated policy uncertainty could weigh heavily on consumer and business confidence and thus private sector spending and activity. Metals demand and prices could then weaken disproportionately, given their close ties to investment and durable goods consumption. Relatedly, if the slowdown in China deepens, with more severe weakness in the property sector or negative effects on export-oriented manufacturing from higher tariffs or other trade restrictions, base metal demand and prices could face even larger declines.

#### Upside risk: Production disruptions

Metal production remains vulnerable to sudden interruptions from labor disputes, energy or water

## FIGURE 18 Critical minerals markets

Critical mineral prices rose sharply in 2025Q3, led by strong gains in rare earths, lithium, and cobalt, reflecting escalating trade restrictions between major economies. While these increases underscore the sector's vulnerability to policy and geopolitical shocks, near-term prices are expected to remain contained as exploration and investment continue to expand. Over the longer term, however, sustained growth in demand from clean energy systems, electronics, artificial intelligence infrastructure, and defense technologies is expected to outpace supply, leaving markets structurally tight and supply chains vulnerable to disruption.



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

A. Last observation is September 2025.

B. Data for 2025 are estimates.

shortages, and extreme weather events. Any of these operational challenges could push prices higher than expected in the baseline, particularly for aluminum, copper, and tin, as supplies of these metals, critical for the energy transition, rely heavily on a limited number of producers. Output of base metals may also be constrained by unexpected regulatory changes and policy shifts. Such measures, including efforts to strengthen governance and environmental standards—notably recent actions in Indonesia's tin sector to curb illegal mining and raise royalties—could also weigh on production.

### Upside risk: Commodity-specific trade restrictions

Restrictions on metals trade have increased in recent years. They include the 50 percent U.S. tariff on imports of semi-finished copper products that took effect in August 2025, as well as new U.S. tariffs on aluminum and steel imports, announced earlier in the year. In addition, a U.S. Department of Commerce review of copper imports expected by June 2026 could trigger phased tariffs on imports of refined copper in 2027 and 2028. Other measures, such as European Union curbs on imports of Russian aluminum, Indonesia's nickel ore export ban, and Myanmar's

tin export taxes, have also affected supply and trade flows. Although markets have largely adjusted to these restrictions, any additional restrictions could disrupt supply chains, push prices above projections, and increase price volatility.

### Upside risk: Faster-than-expected expansion of data centers

A faster-than-expected buildout of AI-related data centers and supporting power infrastructure could raise metal demand and prices above baseline projections, particularly for metals such as aluminum and copper. Large investment plans announced in major economies, including China and the United States, could advance more rapidly than currently anticipated, reflecting rising demand to expand AI computing capacity. Data centers require a substantial amount of metals for cooling, power distribution, renewable-energy integration, and structural support. If construction accelerates or scales up beyond expectations, already tight supply-demand balances could intensify, posing an upside risk to prices of several metals, including aluminum and copper.

### Other critical minerals

The prices of other critical minerals climbed higher in 2025Q3 (q/q), led by a 31 percent jump in rare earth metals, followed by gains of 21 percent in cobalt and 18 percent in lithium (figure 18.A). Cobalt prices strengthened further in October, while lithium and rare-earth prices edged lower. The surge in rare earth prices in recent months has occurred amid escalating trade tensions between China and the United States. Lithium prices spiked in July after China tightened regulations on mining rights and permits. Cobalt prices also rose sharply following the Democratic Republic of Congo's announcement of an export ban earlier in the year. The government subsequently extended the restrictions into 2025Q3, with plans to transition to an export quota system.

Critical mineral prices are expected to stay well below their 2022 levels in the near term, despite recent upward pressure from trade restrictions, as investment in expanding supply continues in anticipation of future demand from the energy

transition (figure 18.B). Exploration activity is being supported by major policy initiatives, including the European Commission's Critical Raw Materials Act and the U.S. Department of Energy's new funding initiatives announced in August 2025 to expand domestic production, processing, and recycling of critical minerals. Nevertheless, over the longer term, prices are expected to rise as demand from clean energy systems, electronics, AI infrastructure, and advanced military technologies outpaces supply. Supply growth may be constrained by environmental concerns, long mine-development lead times, shifting policy incentives, and trade restrictions. Mining and processing remain highly concentrated in a few countries, leaving supply chains particularly vulnerable to disruptions amid elevated trade tensions.

## Precious metals

### *Recent developments and outlook*

Precious metal prices have surged to record highs in early October, adding to a 7 percent gain in 2025Q3 (q/q), before edging down recently. Gold and silver led the rally, reaching all-time peaks, while platinum also posted strong gains. Gold prices are projected to remain elevated through 2026-27, driven by safe-haven demand from gold-backed exchange-traded funds (ETFs) and continued (though moderating) central bank purchases amid elevated geopolitical tensions. Silver prices are projected to reach an all-time high on steadily rising demand, while tight supply conditions will continue to support platinum prices. The World Bank Group's precious metals price index is expected to increase by 41 percent in 2025 (y/y) and a further 6 percent in 2026 before declining by 6 percent in 2027. Geopolitical tensions or policy uncertainty could cause gold prices to surpass current projections, while softer-than-expected industrial activity in major economies may dampen silver and platinum demand, pulling prices below forecasts.

**Gold** prices rose by 5 percent in 2025Q3 (q/q) and extended gains in early October to new record highs, but have since moved lower amid a stronger dollar and possibly some investors locking in gains after the sharp rally. The rally in recent months has

been driven largely by investment demand, supported by a combination of geopolitical tensions, macroeconomic concerns, and heightened policy uncertainty, reinforced by a weaker U.S. dollar and recent U.S. monetary policy easing (figure 19.A). Global gold demand rose by 13 percent in 2025H1 (y/y), driven by a 117-percent surge in investment-related demand, primarily reflecting large inflows into gold-backed ETFs (figure 19.B). In contrast, demand from central banks and other institutions—a key source of support in recent years—as well as from jewelry fabrication, declined in 2025H1 (y/y). On the supply side, both mine production and recycled gold supply were broadly unchanged in the first half of 2025 (figure 19.C). This follows a slight decline in mine output and an 11 percent increase in recycled gold in 2024. Recycled supply is expected to continue rising modestly over the forecast horizon, while higher prices are likely to spur increased investment in mine production.

Gold prices are expected to increase by 42 percent in 2025 (y/y). The last major surge occurred in 1979-80, when gold prices almost doubled amid soaring U.S. inflation, oil price shocks, a weakening dollar, and geopolitical turmoil, including conflicts in the Middle East and Afghanistan, which fueled safe-haven demand (figure 19.D). Gold's current rally has again coincided with heightened geopolitical tensions and a weakening dollar, but unlike in 1979-80, inflation pressures and energy-market disruptions have been less intense. Instead, a key distinguishing feature has been the unprecedented pace of central bank purchases, which have more than doubled since 2022 relative to the 2015-19 average.

Following the sharp increase in 2025, gold prices are expected to rise more moderately—by 5 percent in 2026—supported by continued (though softening) central bank purchases and expectations of further U.S. monetary easing, amid still-elevated geopolitical tensions and policy uncertainty. Prices are then projected to decline by 6 percent in 2027, partly reflecting a normalization of ETF investment flows. Despite the anticipated moderation, prices are envisaged to remain more than 180 percent above their 2015-19 average in 2026.

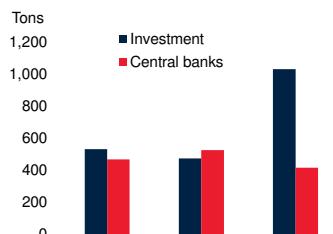
## FIGURE 19 Precious metals markets

Precious metal prices rose by 7 percent in 2025Q3 (q/q) and continued to climb in early October amid heightened geopolitical tensions. Gold and silver led the rally, with gold reaching record highs, driven by investment demand through gold-backed exchange-traded funds amid limited supply growth. Gold prices are expected to reach new highs in 2026, following a surge in 2025 reminiscent of the 1979-80 period. Silver prices are also expected to rise further, supported by their dual role as a safe-haven asset and a key input in energy transition technologies, while platinum prices are projected to strengthen amid persistent supply tightness. Further escalation of geopolitical tensions is a key upside risk for gold prices, while weaker-than-expected industrial activity in major economies remains a downside risk for silver and platinum.

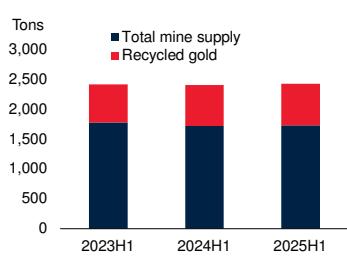
### A. Gold prices and geopolitical events



### B. Gold purchases



### C. Gold supply



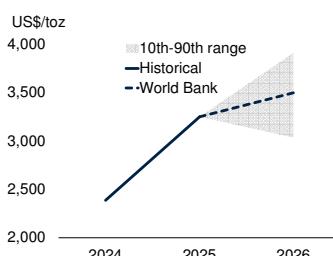
### D. Gold price surges



### E. Gold, silver, and platinum price forecasts



### F. Gold price forecasts



Sources: Bloomberg; Consensus Economics; World Gold Council; World Bank.

Note: toz = troy ounce.

A. Daily data. Last observation is October 23, 2025. Vertical lines indicate geopolitical events.

B. Gold purchases are measured in metric tons. Central banks include other official-sector institutions, such as the IMF. Investment demand includes physical and financial holdings of gold for investment purposes. It comprises total bar and coin demand—which includes bars, official coins, and medals or imitation coins—as well as exchange-traded funds (ETFs) and similar investment products. Last observation is 2025H1.

C. Gold supply is measured in metric tons for the first half of each year.

D. Percent change relative to the average of the last month in the previous year. *t* starts in January 1979 for the blue line and January 2025 for the red line. Last observation is October 22, 2025.

E. Price forecasts are based on table 1.

F. Annual data. The shaded area indicates the 10th-90th percentile range of private sector gold price forecasts, based on September 2025 Consensus Forecasts release.

**Silver** prices rose by 18 percent in 2025Q3 (q/q) and continued to surge to record highs in October. These gains were supported by renewed investor interest through silver-backed ETFs amid heightened geopolitical tensions and firm industrial demand, alongside low inventories at the London Metal Exchange (LME). Silver prices have since edged lower amid a broader market correction—similar to gold—and signs of easing supply concerns at the LME. Silver demand is projected to continue growing steadily, reflecting its dual role as a safe-haven asset and a critical input in fast-growing sectors such as renewable energy and the production of semiconductors. Industrial uses have accounted for almost 60 percent of recent silver demand, up from about 40 percent in 2015. In the near term, industrial manufacturing and installation of photovoltaic panels are expected to support demand, while heightened economic and geopolitical uncertainty may further strengthen safe-haven and ETF-related investment. On the supply side, availability is tight as mine production and recycled output growth are modest. On balance, demand growth is likely to continue outpacing supply growth, pushing prices up by an expected 34 percent in 2025 (y/y), followed by an 8 percent increase in 2026. However, momentum is expected to ease thereafter, with prices projected to decline by 10 percent in 2027 as the ongoing surge in investment flows, including silver-backed ETFs, normalizes.

**Platinum** prices rose by 31 percent in 2025Q3 (q/q) and continued to increase in October, reflecting multiyear low production levels. Demand for platinum is expected to continue rising, albeit at a moderate pace. Growth in automotive use—mainly for catalytic converters, which account for nearly 40 percent of total demand—is likely to remain soft as EV penetration advances, while industrial and jewelry demand are projected to post only modest increases. Supply is projected to recover modestly from recent lows, with increases in mining output in South Africa—the world's largest producer—and in recycling output from the auto and jewelry sectors. However, supply is expected to continue to fall short of demand. After rising by an expected 29 percent in 2025 (y/y), prices are projected to increase by

4 percent in 2026 and a further 2 percent in 2027 (figure 19.E).

### *Risks*

Risks to the precious metals price outlook are tilted to the upside. Although geopolitical tensions and policy uncertainty have eased somewhat in recent months, any renewed escalation—through trade frictions, higher tariffs, or worsening conflicts—could trigger additional safe-haven inflows, pushing gold and silver prices above current projections. Unexpected financial volatility could also push precious metal prices higher. Stronger-than-expected inflation, or a rise in inflation expectations alongside limited policy responses, could boost gold demand further as investors seek protection against eroding purchasing power. The outlook for gold remains subject to considerable

uncertainty given gold's high sensitivity to geopolitical developments and global economic conditions (figure 19.F). This was exemplified by the recent pullback in prices, which coincided with a stronger U.S. dollar and likely reflected some profit-taking by investors after the sharp rally.

Downside risks stem from a more hawkish U.S. monetary policy stance than currently expected, which would reduce gold's investment appeal, or from faster-than-anticipated disinflation. A durable easing of geopolitical tensions could also curb safe-haven demand, while weaker central bank purchases would add to downward pressure. In addition, softer industrial demand—particularly from renewable technologies, if subsidies for solar panels, EV adoption, and other clean energy investments are scaled back more than expected—could weigh on silver and platinum prices.





## Special Focus

New Shocks, Old Tools:  
Revisiting International Commodity  
Agreements in a Fragmented World



*Commodity price volatility, along with energy and food security concerns, has renewed interest in commodity supply and demand management. In the 20th century, producers from many countries sought to counter similar challenges through international agreements involving inventory controls, trade restrictions, and price-setting mechanisms. Efforts after World War I and the Great Depression targeted commodities such as coffee, copper, tin, rubber, and sugar. Some provided temporary price stability, but most eventually collapsed. Post-World War II arrangements, involving both producers and consumers, focused on tropical commodities and metals, yet they too failed. The most enduring agreement is in the oil market. The Organization of the Petroleum Exporting Countries has been in effect for 65 years, since 1960, yet it has repeatedly faced challenges from new supply sources and shifting consumer strategies, as well as efforts to promote energy security and diversification. Experience with these schemes offers cautionary lessons. Coordinated interventions during acute supply disruptions can help stabilize prices temporarily, but sustained price-control measures are much more difficult to maintain. More durable protection for producers and consumers could be achieved through continued reliance on market-based pricing; greater diversification of production and consumption; increased efficiency, including through technological innovation; and improved data transparency.*

## Introduction

Recent commodity price volatility and risks to energy and food security—driven by escalating conflicts, geopolitical tensions, trade policy uncertainty, pandemic-induced supply chain disruptions, and shifts in energy use—have reignited interest in commodity supply management.

Several proposals have been advanced. Following Russia's invasion of Ukraine in 2022, the establishment of strategic reserves of key commodities—where supply disruptions could pose serious economic risks, including oil, natural gas, wheat, potash, palladium, and copper—was proposed (Singh and Datta 2024). In the food sector, global reserves, both physical and virtual, have been widely discussed as a possible means of containing price surges, as seen in 2007-08 and 2010-11, and thus cushioning consumers (Von Braun and Toreo 2008). A multilayered, internationally coordinated buffer-stock system to support the green transformation of agriculture while enhancing global food security has also been proposed Weber and Schulken (2024). Policies to strengthen broader supply-chain resilience have been advocated (Alabi and Ngwenyama 2023).<sup>1</sup>

*Note:* This special focus is based on Baffes, Nagle, and Streifel (2024, 2025).

<sup>1</sup> Analysis of markets for critical minerals highlights their central role in energy diversification and vulnerability to geopolitical tensions. Proposals include a producer cartel (Harris 2023) and a Global Mineral Trust (Ali et al. 2025). The European Union has established a regulatory framework to diversify and secure supplies (EU 2024), while the United States is considering stockpiling strategies involving government and private actors (Moerenhout, Vazir, and Patrahan 2025).

Many of the proposals are for policies similar to past international supply- and demand-management schemes commonly referred to as international commodity agreements (ICAs). This special focus investigates experience with such agreements by considering three questions:

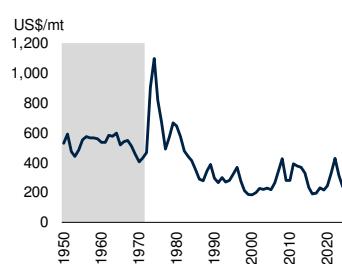
- What has been the experience with non-oil commodity agreements and cartels?
- What has been the experience with oil agreements?
- What policy lessons can be drawn from experience for current proposals?

The analysis makes three main contributions, building on earlier analyses of commodity price behavior (World Bank 2024, 2025). First, it offers a comprehensive review of international commodity arrangements since the early 20th century for both non-oil and oil commodities. Second, it distinguishes between two earlier approaches to supply management: (i) coordinated action by producers and consumers within a unified institutional framework, as in most post-World War II (WWII) non-oil ICAs; and (ii) producer-led supply management, as in the oil market by the Organization of the Petroleum Exporting Countries (OPEC), which has been countered by efforts to coordinate consumer responses, such as through the International Energy Agency (IEA). Third, it draws policy lessons from these arrangements, providing insights relevant, for example, to current debates on food and energy security, and the availability and use of critical minerals.

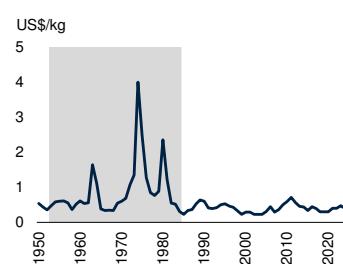
## FIGURE SF.1 Real commodity prices and periods of agreements, 1950-2024

*While trends and fluctuations in the prices of commodities subject to agreements have been highly heterogeneous, most prices reached secular highs in real terms during the boom of the 1970s. Since the collapse of the natural rubber agreement in 1999, no new commodity agreements have been established.*

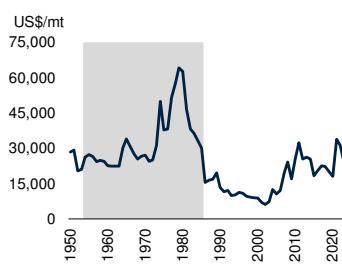
A. Wheat



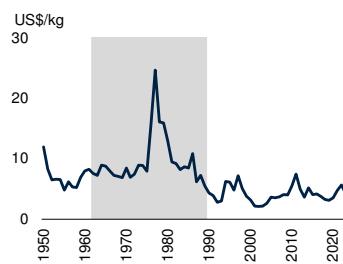
B. Sugar



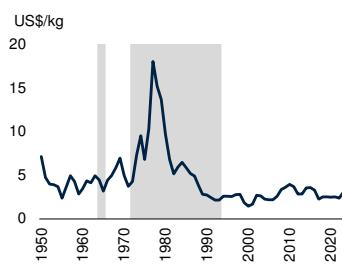
C. Tin



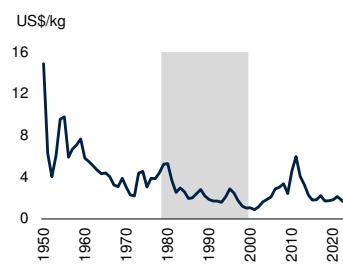
D. Coffee



E. Cocoa



F. Natural rubber



Source: World Bank.

Note: mt = metric tons. kg = kilogram. Prices are adjusted for inflation using the U.S. Consumer Price Index (2010 base year); shaded areas indicate periods during which a commodity agreement was in effect. Last observation is 2024.

Three key conclusions are drawn from the historical experience with ICAs. First, some pre-WWII efforts related to non-oil commodities (for example, in the markets for aluminum, copper, tin, and wool), particularly those marked by limited scope and membership, achieved price stabilization. Second, most pre- and post-WWII non-oil arrangements eventually collapsed (figure SF.1.A-F), while oil market interventions either ended abruptly or waned (tables SF.1-3). Third, while

OPEC endures, it continues to face pressures from new oil sources, shifting consumer strategies, and international coordination of consumer responses (particularly through the IEA), to enhance energy security and diversification. These experiences caution against the adoption of recent cartel and inventory proposals. Instead, durable protection for producers and consumers could be achieved through continued reliance on market-based pricing; greater diversification of production and consumption; increased efficiency, including through technological innovation; and improved data transparency.

## Non-oil commodity agreements

### Pre-WWII agreements

More than 20 non-oil agreements and cartels were established before WWII (table SF.1). Most involved industrial commodities (metals, agricultural raw materials), although some involved beverages (coffee, tea) and foods (beef, sugar, wheat).

### Metals

There was extensive intervention in the aluminum market in the early 20th century, as major producers formed cartels to control prices and output. These cartels collapsed under pressures from competitive forces, economic downturns, and wars (Bertilorenzi 2013). Although formal cartels ended at the start of WWII, coordination among producers persisted until 1978 when the introduction of aluminum futures trading on the London Metal Exchange marked a shift toward a more transparent and competitive market.

The first cartel targeting copper, established in 1918, used export quotas to liquidate World War I (WWI) surpluses but disbanded in 1924 (Walters 1944). A second cartel, formed in 1926 by U.S. and European producers, collapsed in 1932 during the Great Depression. Tin was managed by the 1921 Bandoeng Pool, which disposed of postwar surpluses before dissolving in 1924. In the 1930s, the Netherlands and the U.K. tried to stabilize tin prices through quotas and buffer stocks, but these efforts failed (Baranyai 1959). Silver was subject during 1933-37 to the 1933

London Silver Agreement, promoted by the U.S. to support domestic producers after the 1929 crash. It aimed to boost global prices through supply restrictions and government purchases but failed to do so and was not renewed after 1937 (Davis 1946).

### Agricultural raw materials

The market for **wool**, vital for military uniforms, was managed by intergovernmental schemes in both World Wars (Briggs 1947). During WWI, Britain secured all exportable wool from Australia, New Zealand, and South Africa under the Imperial Wool and Sheepskin Contract. After prices collapsed in 1921, a U.K.-Australia plan succeeded in stabilizing the market by 1924. A similar scheme was used during WWII, followed by surplus disposal. These are regarded as successful cases of international cooperation, though wool's importance subsequently declined with the rise of cotton and synthetic fibers.

The **natural rubber** market was regulated between 1922 and 1928 under Britain's Stevenson Plan, which imposed export quotas on its colonies of Malaya and Ceylon. However, the resulting higher prices encouraged production elsewhere, eroding Britain's market share. After the 1929 crash, the 1934 International Rubber Regulation Agreement (revised in 1938) sought price stability, but price swings persisted, and the scheme ended with WWII (Roberts 1951).

**Lumber** demand collapsed in the Depression and prices were depressed further by Soviet exports. The League of Nations' 1932 wood conference led to the 1935 European Timber Exporters Convention, where nine countries set quotas that stabilized markets until WWII.

### Beverages

Brazil, producing over 85 percent of the world's **coffee**, launched a series of programs in 1905 to restrict supply through planting bans and purchases by banks for stock accumulation (Hutchinson 1909). These efforts were initially profitable for the banks, but the increased prices spurred production outside regulated areas, and the programs

were abandoned. After the 1929 stock market crash, a coffee control scheme was undertaken by Brazil (1930-37); the scheme failed despite costly stock destruction, and Brazil's share of global production fell to 55 percent by 1940 (Wickizer 1943). The Inter-American Coffee Agreement (1941-45) raised global coffee prices but also brought new producers into the market.

For **tea**, a steep post-WWI price drop led producers in India, Ceylon, and the Dutch Indies to restrict supplies during 1929-33, helping price recovery (Roberts 1951). In 1933, a new price-support scheme was introduced, with export quotas and planting restrictions. Backed by the U.K. and the Netherlands, the scheme was enforced effectively through the London Tea Auction, but production grew in non-participating countries such as China and Japan. The system ended in 1947, as rising postwar demand boosted prices.

### Food commodities

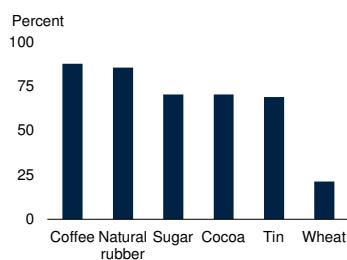
Cuba introduced **sugar** supply controls in 1928, but these were quickly undermined by rising U.S. and Japanese output. The 1931 Sugar Agreement, which involved export and production quotas agreed by seven exporting countries, helped to reduce stocks during the Great Depression but collapsed in 1935 due to increased output by non-participating countries (Hagelberg and Hannah 1994). A broader 1937 pact among 21 nations involved export quotas and production limits but was disrupted by WWII and ended in 1946.

**Wheat** was the only annual crop for which there was a major agreement. The 1933 pact, among nine exporters and twelve importers, imposed export and import quotas and acreage limits but collapsed within a year due to weak monitoring and a bumper harvest (Tyszynski 1949). Britain, the world's largest **beef** importer at the time, led the 1937 International Beef Agreement, initially allocating its market to Australia, Ireland, and New Zealand, which were later joined by Argentina, Brazil, and Uruguay. It stabilized prices for three years at low levels (Tsou and Black 1944), before being suspended early in WWII. Postwar attempts to revive it failed.

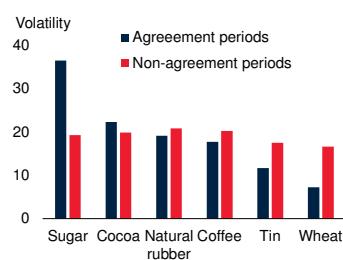
## FIGURE SF.2 Production shares and price changes for non-oil commodities during periods of post-WWII agreements

Production shares of non-oil commodities covered by agreements averaged around 65 percent, except for wheat, where the share was significantly lower. A comparison of price volatility between periods with and without agreements shows mixed results: volatility was lower for wheat and tin during agreement periods, higher for sugar, and little different for four other commodities.

### A. Production shares covered by agreements



### B. Price changes during periods with and without agreements



Sources: Baffes, Nagle, and Streifel (2024); World Bank.

A. Production shares of each commodity during periods of agreement.

B. Price changes reflect year-on-year logarithmic changes, expressed in absolute terms. The periods during which agreements were in effect are listed in table SF.2.

## Post-WWII agreements

Numerous commodity agreements were negotiated around the end of WWII, within the frameworks of the United Nations Conference on Food and Agriculture (1943) and the Havana Charter (1948) (Baranyai 1959). These agreements covered **tin** and four agricultural commodities—**cocoa**, **coffee**, **sugar**, and **wheat** (Gilbert 1987; Swerling 1968). A renewed UN-led effort in the mid-1970s added natural rubber (Gilbert 1996). Unlike pre-WWII agreements—formed mostly only by producers—the post-WWII agreements involved both exporters and importers, seeking “fair” prices through export and import quotas and inventory management (table SF.2). The shares of member countries in global production in post-WWII agreements varied around an average of about 65 percent, except that in the case of wheat the share was about 20 percent (figure SF.2.A). All the agreements collapsed—**coffee**, **sugar**, and **tin** in the 1980s; **cocoa** in 1993; and **natural rubber** in 1999. A comparison of price volatility between periods with and without agreement shows mixed results: volatility was lower in agreement periods for tin and wheat, higher for

sugar, and broadly similar for the other four commodities (figure SF.2.B).

## Coffee

The International Coffee Agreement (1962) introduced export quotas agreed by 42 producers and seven major consumers (Akiyama and Varangis 1990). It was supported by the United States, with the objective of stabilizing Central American countries economically and politically, and by European countries that sought to aid former colonies (Bates 1997). Undermined by Viet Nam’s rise as a major exporter, the agreement collapsed in 1989, with prices allowed to fall (Baffes, Lewin, and Varangis 2005).

## Cocoa

The 1972 International Cocoa Agreement followed a 1964 agreement that had survived for only a year. The 1972 agreement, which was extended four times, used buffer stocks and export controls but struggled financially, as the largest producer (Côte d’Ivoire) and consumer (the U.S.) were not members. It exhausted funds quickly, faced compliance issues, and was abandoned in 1993 after failing to keep prices within target ranges (Gilbert 1996).

## Natural rubber

The 1979 Agreement—part of the Integrated Program for Commodities designed to improve prospects for commodity exporters and adopted in 1976 by UNCTAD—stabilized prices through buffer stocks and an index tied to the currencies of key members (Indonesia, Malaysia, Thailand; Khan 1980). It faltered during the Asian financial crisis, as steep local-currency depreciations increased domestic prices of natural rubber and triggered stock releases despite weak demand. The agreement collapsed in 1999 after major producers withdrew and inventories were released, flooding the market.

## Sugar

The International Sugar Agreement (1953, renewed in 1958, 1968, and 1977) used quotas, price ranges, import limits, and stockholding, but had only limited success in stabilizing prices. By 1978, the European Community, a nonmember,

had become the largest net exporter, shaping world trade through its internal regime (Hagelberg and Hannah 1994). The agreement ended in 1984 as new producers gained market share.

### Tin

The International Tin Agreement (1954) sought to raise and stabilize prices through export quotas and inventory management. It initially succeeded, but higher prices led to new producers (notably Brazil) and substitution with other metals (like aluminum). By 1985, it was unable to finance its buffer stocks and collapsed, leading to price declines and mine closures (Nappi 1990).

### Wheat

The International Wheat Agreement (1949) created a multilateral contracting system under which producers (consumers) would commit to maximum (minimum) prices (Goley 1950). Its operations were maintained for more than two decades by intergovernmental trade, and it was renewed several times, but it eventually failed to stabilize prices and collapsed in 1971, in the early stages of the commodity price boom.

Though ineffective at stabilizing prices beyond the short term, many ICAs (e.g., the International Cocoa Organization, the International Coffee Organization, and the International Sugar Organization) evolved and engaged in market monitoring, gathering and providing intelligence, and technical assistance. These bodies preserved institutional knowledge, offered neutral producer—consumer platforms, and remain sources of expertise within the broader network of International Commodity Bodies and International Study Groups.

## Oil agreements

### Pre-1973 oil arrangements

After oil was discovered in Pennsylvania in 1859, prices became highly volatile, swinging through boom-and-bust cycles with destabilizing consequences for producers and consumers. Early producer groups, starting with the Oil Creek Association in 1861, attempted to restrict output and raise prices but proved unsuccessful (table SF.3).

Price volatility subsided once Rockefeller's Standard Oil Trust consolidated the industry, bringing greater stability between the 1870s and the 1910s (McNally 2017). However, following the breakup of the Trust under U.S. antitrust law in 1912, price volatility re-emerged. In the 1930s, control of pricing shifted to seven multinational, vertically integrated oil companies, in which global production was highly concentrated (Adelman 1972).<sup>2</sup>

In addition, the Texas Railroad Commission (TRC) introduced prorationing in the 1930s to manage surplus capacity, while federal oil import controls began in 1959 under the Mandatory Oil Import Program (Blair 1978).<sup>3</sup> Between 1960 and 1972, the volatility of oil prices was among the lowest of traded industrial commodities, supporting rapid postwar demand growth of nearly 8 percent annually. By the early 1970s, however, the global dominance of the major oil companies waned, and U.S. surplus capacity dissipated, paving the way for OPEC's rising influence.

OPEC was founded in 1960 with the objective to “coordinate and unify petroleum policies among member countries, in order to secure fair and stable prices for petroleum producers” (OPEC 2020).<sup>4</sup> The República Bolivariana de Venezuela, the group’s largest producer in its early years, accounting for more than one third of the group’s combined output, proposed that the organization be modelled after the TRC by withholding supply to achieve higher prices (figure SF.3.A). Other members, however, favored negotiating higher posted prices with the multinational companies

<sup>2</sup> The multinational companies, often called the “Seven Sisters,” were British Petroleum (BP), Chevron, Exxon, Gulf, Mobil, Shell, and Texaco (Sampson 1975).

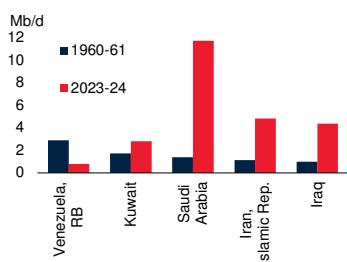
<sup>3</sup> Prorationing was the limiting of oil output from pools or wells to balance supply and demand and was implicitly designed to stabilize prices. It was mainly used in Oklahoma, Texas, and some other oil producing states (McNally 2017).

<sup>4</sup> OPEC—which as of 2025 comprises 12 member countries—was established at the Baghdad Conference of September 10-14, 1960, by Iran, Iraq, Kuwait, Saudi Arabia, and República Bolivariana de Venezuela. Others joined the organization later, including Qatar (1961; withdrew in 2019), Indonesia (1962; withdrew in 2009, rejoined in 2015, and withdrew again in 2016), Libya (1962), the United Arab Emirates (1967), Algeria (1969), Nigeria (1971), Ecuador (1973; withdrew in 1992, rejoined in 2007, and withdrew again in 2020), Gabon (1975; withdrew in 1995, rejoined in 2016), Angola (2007; withdrew in 2024), Equatorial Guinea (2017), and the Democratic Republic of the Congo (2018).

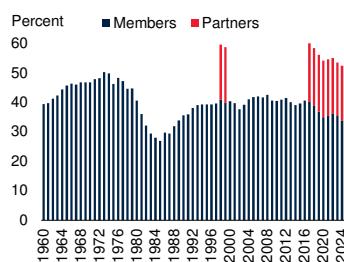
### FIGURE SF.3 Oil production by OPEC members and partner countries

When OPEC was founded in 1960, its members accounted for about 40 percent of global oil production, with Venezuela the dominant producer. By the early 1970s, OPEC's share had climbed to roughly 50 percent, with Saudi Arabia emerging as the largest producer and de facto leader—a position it has since retained. As OPEC's market share later plateaued, the organization began working with non-member partner producers to facilitate potential supply cuts. These collaborations were formalized in 1998 and again in 2016, the latter creating the OPEC+ alliance.

A. Production of major OPEC producers, 1960-61 and 2023-24



B. Production shares of OPEC members and partners, 1970-2024



Sources: Baffes, Nagle, and Streifel (2024); The Energy Institute; International Energy Agency; World Bank.

A. Country composition in 1960-61 reflects OPEC's founding members; for 2023-24, it includes its largest members.

B. OPEC partners include Mexico, Norway, Oman, and Russia during 1998-99, and Azerbaijan, Bahrain, Brunei, Kazakhstan, Malaysia, Mexico, Oman, Russia, South Sudan, and Sudan from 2016 onward—collectively referred to as OPEC+.

from which export revenues were derived. Despite rising output during the 1960s, OPEC's market influence remained limited.

#### OPEC since 1973

By 1970, OPEC accounted for about half of global oil production and began using its collective power to demand higher prices from major oil companies. The 1973 Yom Kippur War led Arab Gulf members to cut output and impose an embargo on the U.S. and its allies. OPEC quadrupled its official price in U.S. dollar terms within months, and many members nationalized oil assets, shifting major companies from producers to buyers of crude in a growing spot market.

Member countries of the Organization for Economic Co-operation and Development (OECD) responded by creating the IEA in 1974 to reduce dependence on imported oil, build emergency reserves, and coordinate supply during crises.

The Iranian Revolution (1979) and Iran-Iraq War (1980-88) triggered further supply disruptions,

and prices more than doubled in 1979-80. OPEC raised official prices in this period but did little to increase supply. Meanwhile, consumption fell while non-OPEC output—particularly from Alaska, the Gulf of Mexico, and the North Sea—surged. By 1983, OPEC's market share had dropped below 30 percent, leaving it with large surplus capacity. OPEC introduced production quotas in 1982, with Saudi Arabia—the group's largest supplier—agreeing to act as swing producer (figure SF.3.B). With its production and market share having plummeted, Saudi Arabia abandoned this role in 1985, boosting production and sending prices below \$8/bbl by April 1986 (Adelman 1995). OPEC subsequently abandoned official price-setting, focused on quotas, and let market forces determine prices. Between 1986 and 1999, oil prices averaged \$18/bbl, with the effect of the large OPEC surplus capacity exacerbated by the collapse of Soviet oil demand in the 1990s (World Bank 2009).

In the 2000s, surging demand by emerging market and developing economies (EMDEs), led by China, fueled what became known as a price “super cycle” (figure SF.4.A). Oil prices averaged \$83/bbl in terms of 2010 dollars—deflated by the U.S. consumer price index—during 2000-24, more than double the \$33/bbl of 1986-99, with far greater volatility of nominal prices (figure SF.4.B). Prices peaked above \$130/bbl (nominal) in 2008, with spare capacity nearly exhausted (OPEC 2001-08). The global financial crisis of 2008-09 then triggered a collapse in prices, but OPEC production cuts sparked a rebound, with prices staying above \$100/bbl from 2011 to mid-2014. Buoyed by high revenues, OPEC adopted an overall production target, with Saudi Arabia again acting as swing producer.

In 2014, the continued rise of U.S. shale output (from 5 mb/d in 2008 to 13 mb/d in 2024) eroded OPEC's market share, and OPEC responded by expanding production, driving prices below \$30/bbl by January 2016 (Baffes et al. 2015). This attempt to undercut shale producers proved ineffective, as the costs of shale production declined because of efficiency gains and technological innovation. In 2016, OPEC sought broader cooperation and established OPEC+ in partnership

with 10 nonmember producers, which jointly agreed to cut production by 1.8 mb/d. Prices stabilized near \$60/bbl during 2017-19 but remained well below earlier peaks as U.S. shale production continued to grow. History, in some ways, repeated itself: just as the high prices of the 1970s spurred production from new oil sources in Alaska, the Gulf of Mexico, and the North Sea, the 2000s boom encouraged the development of other sources, including Canadian bitumen and oil sands, biofuels, and U.S. shale production (figures SF.5.A and SF.5.B).

During the 2020s, the oil market has faced unprecedented shocks. The COVID-19 pandemic led to record price declines, prompting a temporary 9.7 mb/d cut in OPEC+ production in May 2020. Russia's 2022 invasion of Ukraine briefly lifted prices to \$120/bbl, but resilient Russian supply and weak demand led to production cuts of 4.6 mb/d by June 2023. Prices averaged below \$80 in 2024, weighed down by non-OPEC supply. In April 2025, OPEC+ began reversing its cuts, helping to lower the Brent benchmark to \$60-70/bbl in May-October.

### *Responses to OPEC*

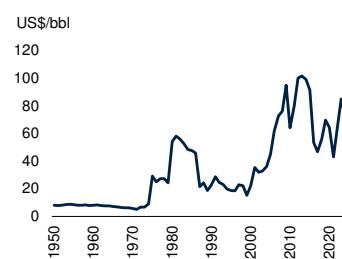
In the wake of the 1973 oil shock, member countries of the OECD worked to establish a coordinated response among consumer countries. In November 1974, an agreement on an International Energy Program was signed, leading to the creation of the IEA under the framework of the OECD. The Agreement was bound by international treaty to ensure the highest commitment from governments to the program, particularly concerning the rules governing the IEA's Oil Emergency Sharing System (IEA 1994a).

In its early years, the IEA focused on short-term strategies, such as establishing storage and consumption frameworks to address potential supply disruptions. Later, it promoted longer-term measures to reduce dependence on oil imports, including improving the efficiency of oil consumption, investing in domestic oil production, and promoting the development of substitutes such as coal, natural gas, nuclear power, and renewable energy sources (IEA 1994b). The IEA's objectives have since broadened to the promotion

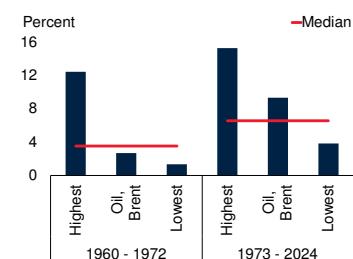
### **FIGURE SF.4 Real oil prices and volatility of nominal oil prices**

*In the first oil price shock, in 1973, real oil prices quadrupled, and in the second shock in 1979, they more than doubled again. Since then, real prices have fluctuated around an average roughly eight times higher than their 1950-1972 average. Volatility also increased significantly: between 1960 and 1972, oil prices were among the least volatile of internationally traded commodities, but since 1973, they have ranked among the most volatile.*

**A. Real oil price, U.S. dollars**



**B. Oil price volatility**



Sources: Bloomberg; World Bank.

Note: bbl = barrel.

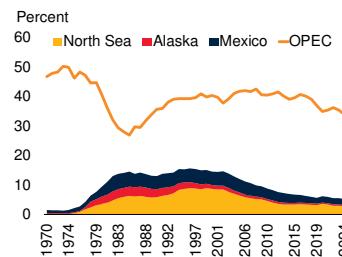
A. Prices are adjusted for inflation using the U.S. Consumer Price Index (2010 base year). Last observation is 2024.

B. Volatility is calculated as the standard deviation of returns based on logarithmic changes in nominal prices. The sample comprises 34 commodity prices. During 1960-72, the commodities with highest and lowest volatility were sugar (world) and natural gas (U.S.), respectively. During 1973-2024, bananas (U.S.) had the highest volatility, and gold had the lowest.

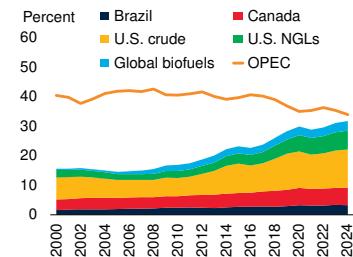
### **FIGURE SF.5 Sources of global oil production**

*The oil price spikes of the 1970s made higher-cost non-OPEC production economically viable, spurring major developments in the North Sea, Alaska, and Mexico. Similarly, the post-2000 price boom catalyzed the emergence of new and expanding supply sources—including U.S. shale crude and natural gas liquids (NGLs), Canadian oil sands, Brazil's offshore fields, and biofuels. In both periods, the expansion of non-OPEC production reduced OPEC's market share.*

**A. Sources of global oil production, 1970-2024**



**B. Sources of global oil production, 2000-2024**



Sources: The Energy Institute; International Energy Agency; World Bank.

Note: NGLs = natural gas liquids.

A.B. Last observation is 2024.

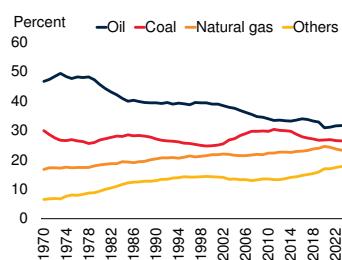
A. The North Sea region consists of Norway and the United Kingdom.

B. U.S. crude oil and NGLs predominantly originate from shale, while Canadian production is largely derived from bitumen and oil sands, and Brazil's output is mainly offshore-based.

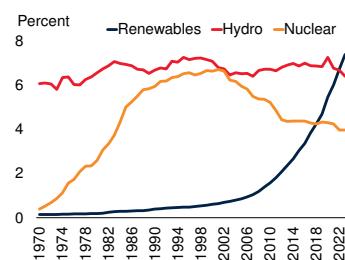
## FIGURE SF.6 Market shares of energy sources, consumption intensity, and market concentration

Oil's share of global energy use fell from nearly 50 percent in the early 1970s to about 30 percent by 2020, as natural gas, nuclear power, and renewables gained ground. The oil intensity of GDP has halved over the past 50 years, driven by efficiency gains, including through technological improvements (especially in transport), and shifts in output toward less energy-intensive services. This trend holds for both OECD and non-OECD countries, though levels remain higher in the latter. Despite falling oil intensity, per capita oil use has remained broadly stable—declining in OECD countries but rising elsewhere. The energy mix has become more diverse, as reflected by a decline in the Herfindahl index from 33 to 24 percent.

A. Shares of energy sources in total energy consumption



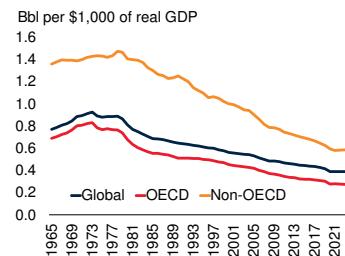
B. Shares of "other" sources in total energy consumption



C. Market concentration



D. Oil intensity



Sources: The Energy Institute; International Energy Agency; World Bank.

Note: Bbl = barrel.

A. "Others" comprises nuclear, hydro, and renewables.

C. The Herfindahl-Hirschman (HH) index (right panel) is the sum of squared market shares of oil, coal, natural gas, renewables, hydro, and nuclear. A HH value closer to one indicates that the sector relies predominantly on a single energy source, while a value closer to zero signifies a more balanced reliance on energy sources.

D. "Oil intensity" refers to the number of barrels of oil consumed to generate \$1,000 of real GDP (2010 base year).

of affordable and sustainable energy systems and to advancing the energy transition (IEA 2021, 2023). The IEA became a catalyst for numerous changes in the global oil industry, complemented by initiatives from both governments and the private sector, as described below.

- Reduced oil dependence and diversified resource base. Oil's share of total energy consumption fell from nearly 50 percent in the early 1970s to about 30 percent by 2020 (figure SF.6.A).

The share of natural gas expanded through its growing use in electricity generation, space heating, and industry, while the share of nuclear power grew rapidly in certain countries, particularly France, although globally it has declined since around 2000. The share of renewables has risen from below 1 percent in 2000 to almost 8 percent in 2022 (figure SF.6.B). The diversification of energy sources is shown by the Herfindahl index of market concentration, which dropped from 0.33 in the early 1970s to 0.24 in 2022 (figure SF.6.C). Oil intensity—the amount of oil needed to produce one unit of GDP—has halved since the early 1970s, mirroring declines in overall energy intensity (figure SF.6.D). This trend is similar across OECD and non-OECD countries, but oil intensity remains higher and more variable in the latter. The decline in intensity reflects both greater productive efficiency—partly due to technological advances—and a shift in the composition of output toward less energy-intensive services. Despite the decline in energy intensity, global per capita oil consumption has remained remarkably stable, declining in OECD countries but rising in most others, as per capita income growth offset efficiency gains.

- Strategic reserves. All IEA members except oil exporters Canada, Mexico, and Norway, are mandated to hold reserves equal to 90 days of net oil imports (figure SF.7.A). These are managed by governments or private entities. The U.S. established its Strategic Petroleum Reserve (SPR) in 1975, with capacity exceeding 700 MMbbl—equivalent to about five weeks of current domestic consumption or one week of global consumption (figure SF.7.B). The SPR has been drawn on several times, including after the oil price surge following Russia's 2022 invasion of Ukraine. Other OECD countries held an average of 850 MMbbl in reserves in 2024. Non-OECD countries also maintain large reserves—more than 700 MMbbl in the case of China and 55 MMbbl in the case of India (Zhang 2024). Numerous bilateral and regional energy coop-

eration arrangements have been established to further bolster supply security.

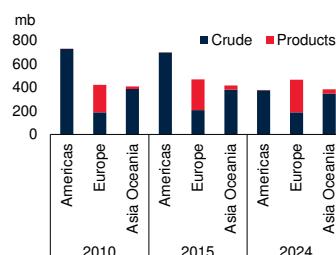
- *Coordinated policy responses.* In the event of significant actual or potential supply disruption, the IEA can coordinate responses among members, such as the release of emergency oil inventories and the implementation of demand-restraint measures, ranging from voluntary conservation to fuel rationing. It may also promote fuel switching, increased oil production, and the temporary easing of regulatory measures, including fuel specifications and quality standards. Since its inception, the IEA has undertaken collective action on five occasions: ahead of the Gulf War in 1991; after damage to offshore oil infrastructure caused by Hurricanes Katrina and Rita in 2005; in response to the prolonged supply disruption from the Libyan Civil War in 2011; and twice during the Ukraine war (March and April 2022).

- *Knowledge generation and information sharing.* Before the 1973 oil shock, public information about energy markets was limited, due to the industry's highly concentrated structure of vertically integrated producing companies. Following the shock, such information expanded significantly. Today, a wide array of reports, analyses, and datasets are produced by international organizations (including the IEA and OPEC), governments (including the U.S. Energy Information Administration), exchanges, financial companies, consultancies, and industry specialists. The International Energy Forum (IEF) is another intergovernmental body, which promotes data sharing and dialogue among more than 70 energy-producing and consuming nations. A major IEF initiative is the Joint Organizations Data Initiative (JODI), which compiles and publishes monthly indicators on global energy supply and demand, although submissions have become limited.
- *Price benchmarking.* Before WWII, there were no global price benchmarks for oil, as vertically integrated firms transferred oil internally (Adelman 2002). After the war, a single Per-

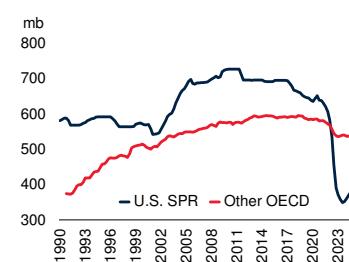
**FIGURE SF.7 Government-controlled inventories held by OECD member countries**

All IEA member countries are required to maintain oil reserves equivalent to at least 90 days of net imports. The U.S. Strategic Petroleum Reserve peaked at 727 million barrels in 2010 but fell to 350 million barrels by September 2023, following multiple drawdowns—including those triggered by the oil price spike after Russia's invasion of Ukraine. European and Asian countries maintain comparable reserves of around 400 million barrels each. Europe's stockpiles consist of both crude oil and refined products, while Asia's reserves are composed mainly of crude oil.

**A. Inventories of crude oil and products**



**B. Crude oil inventories**



Sources: The Energy Institute; International Energy Agency; U.S. Energy Information Administration; World Bank.

Note: mb = million barrels. SPR = Strategic Petroleum Reserve.

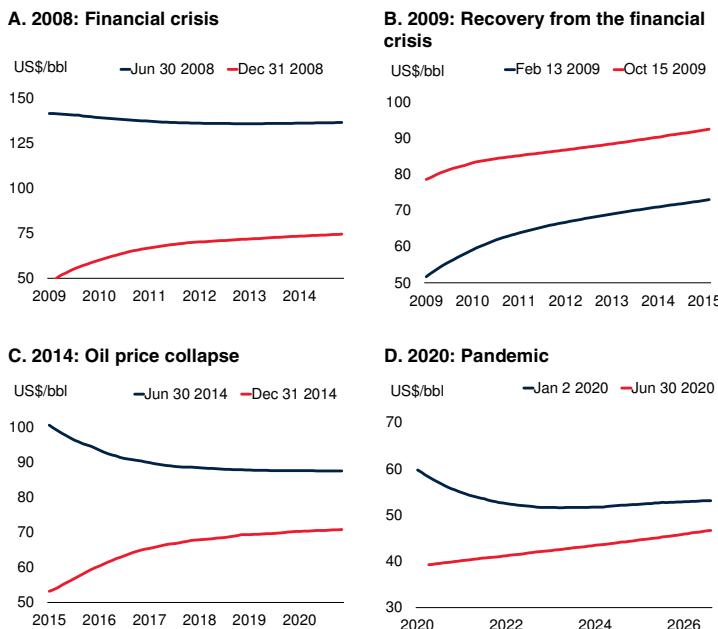
A. Annual averages of monthly data.

B. Quarterly averages of monthly data.

sian Gulf f.o.b. price emerged as the main reference, and subsequently other benchmarks emerged for specific crudes, such as Saudi Light 34° API, a key OPEC reference. As spot quotations proliferated, price discounting and underreporting by OPEC members were exposed, prompting the group to abandon official pricing in the mid-1980s. Greater transparency and spot trading paved the way for futures contracts—first for heating oil (1978), then West Texas Intermediate (1983), and Brent (1988). These highly liquid contracts support hedging and price discovery, especially during shocks such as the 2008 financial crisis (figure SF.8.A), the post-crisis recovery (figure SF.8.B), the 2014 price collapse (figure SF.8.C), and the 2020 pandemic outbreak (figure SF.8.D). Futures curves—whether in backwardation (i.e., falling prices with lengthening maturities) or contango (i.e., rising prices with lengthening maturities)—reflect near-term fundamentals and longer-term expectations, making the spread between short- and long-dated contracts a key gauge of market sentiment.

## FIGURE SF.8 Futures curves for the WTI benchmark price

*Highly liquid futures contracts facilitate hedging and price discovery, including when shocks occur. For instance, the global financial crisis prompted a parallel downward shift in the futures curve, followed by a comparable recovery. Futures curves also capture transitions in market conditions—from tight supply, characterized by backwardation (prices falling with lengthening maturities), to more normal or oversupply conditions, characterized by contango (prices rising with lengthening maturities).*



Sources: Bloomberg; World Bank.

Note: bbl = barrel. Curves represent WTI (West Texas Intermediate) futures contracts over a 6-year period.

## Lessons and policy implications

Since the onset of the COVID-19 pandemic, there have been sharp swings in commodity prices. Movements in the prices of industrial commodities were largely synchronized by global macroeconomic forces, while the prices of agricultural commodities were more affected by localized supply shocks (World Bank 2025). In the post-pandemic period, volatility has been historically high, with cycles occurring about every two years—half their previous duration—and booms becoming more intense. These shifts reflect a mix of adverse events, including the recession during the pandemic, natural disasters, geopolitical tensions, and armed conflicts, as well as longer-term trends such as energy diversification and increasing

international economic fragmentation. Synchronized price rises across commodities reduce consumers' ability to substitute higher-priced with lower-priced products, which amplifies welfare losses and complicates counter-inflation policies (World Bank 2024). Against this backdrop, this special focus examined one type of market intervention—international commodity agreements. Implemented across several commodity markets in the latter half of the 20th century, ICAs sought to stabilize prices, reduce the volatility of export and fiscal revenues in producing countries, and curb commodity price-driven inflation in importing economies.

ICAs were undermined by a central contradiction: when they stabilized or raised prices to balance the interests of producers and consumers, they triggered market forces that ultimately undermined their goals. Higher prices spurred innovation and production outside the agreements (as expected by the induced-innovation hypothesis; Hicks 1932). They also created incentives for quota violations and led consumers to seek substitutes or economize through improvements in efficiency (Johnson 1983). Such market responses led to failures of ICAs across various commodities, such as coffee, natural rubber, and tin. Efforts to maintain price bands through physical stockpiling underscored the financial and logistical challenges of countering market forces. This outcome aligns with theoretical models of competitive storage, which predict that prolonged departures of prices from market fundamentals will lead to excessive inventory accumulation or depletion (Williams and Wright 1991). The collapse of the International Tin Agreement in 1985—leaving substantial debts and legal disputes—highlights the risks of large-scale intervention. These challenges were especially apparent in post-WWII agreements, which aimed to balance the needs of both producers and consumers, unlike most pre-WWII agreements, which primarily served producer interests.

Some pre-WWII agreements achieved their stated objectives: the Copper Export Association (1918–24) liquidated excess inventories after WWI; the Bandoeng Pool reduced tin inventories (1921–25); and the Aluminum Alliance stabilized prices during 1931–39 through inventory management.

Two wool agreements (1916-20 and 1940-46) also stabilized prices and ensured garment supplies for Allied forces via government procurement. More recently, pragmatic approaches—such as the maintenance of strategic oil reserves by producers and consumers—have helped cushion short-term disruptions while not being intended to shape long-term price trends.

OPEC's longevity stands out among other ICAs. This partly reflects its willingness to adapt: shifting from fixed prices to market-based pricing; adopting flexible production quotas tied to nonrigid price targets; expanding cooperation through OPEC+, a broader alliance commanding a significantly larger share of global oil production; and engaging in dialogue with consumer countries. Still, OPEC faces the same persistent challenges as other commodity agreements—in particular, new sources of supply and shifting demand preferences. These are now compounded by the structural transformation of global energy markets, which may force OPEC to manage quotas in an environment of stagnant or even declining oil demand.

Internationally coordinated responses to commodity market disruptions can still play a stabilizing role. During the COVID-19 pandemic, for example, OPEC+ production cuts, alongside voluntary

and involuntary reductions by other producers, helped stabilize oil prices in the face of a historic collapse in economic activity. On the consumer side, strategic inventories have helped cushion short-term supply reductions. Meanwhile, greater knowledge sharing and improved data transparency have supported more informed policymaking and contributed to greater market stability.

Experience suggests that proposals for new commodity arrangements should be considered with caution. While temporary interventions during acute supply disruptions can be effective, longer-term price management schemes have a poor track record. The evidence points instead to a more resilient approach: fostering diversification of production and consumption; investing in technology and innovation; encouraging data transparency; and relying on market-based pricing mechanisms. These tools offer more durable protection against commodity price volatility than attempts to manage prices and markets directly. In the food sector, for example, strategic grain reserves can support crisis management and emergency preparedness, but their role should be limited to short-term stabilization during market disruptions—not long-term price control (World Bank, FAO, and WFP 2025).

**TABLE SF.1** Pre-WWII non-oil commodity agreements and cartels

	Nature of Agreement	Mechanism (membership)
Aluminum	<b>Aluminum Cartels (1901-1923):</b> Set prices but broke down due to competition from new entrants and a recession.	Quota allocation (5 aluminum companies)
Coffee	<b>Valorization Schemes (1905-29):</b> Raised and stabilized prices and were profitable to the participating banks, but ultimately failed.	Export quotas and planting restrictions (São Paulo, Brazil)
Wool	<b>Imperial Wool and Sheepskin Contract Scheme (1916-20):</b> Maintained price stability and was terminated in 1920 as scheduled.	Government purchases (1 importer and 3 exporters)
Copper	<b>Copper Export Association (1918-24):</b> Succeeded in the orderly liquidation of copper inventories and disbanded in 1924.	Export quotas (4 exporters)
Tin	<b>Bandoeng Pool (1921-25):</b> Successful in liquidating inventories and led to the establishment of the International Tin Committee.	Buffer stocks (2 exporters)
Rubber	<b>Stevenson Plan (1922-28):</b> Raised prices but led to output expansion by other exporters.	Export quotas and production restrictions (2 exporters)
Copper	<b>Copper Exporters, Inc (1926-32):</b> Raised prices, but a strike by buyers and the imposition of an import tax by the U.S. led to dissolution in 1932.	Export quotas (American and European mining companies)
Tea	<b>Tea Restriction Scheme (1929-33):</b> Raised prices of lower quality tea, but consumer preferences shifted toward higher-priced teas.	Production quotas (3 exporters)
Coffee	<b>Coffee Control Scheme (1930-37):</b> A costly scheme; eventually, the Brazilian government allowed free competition.	Prohibition of plantings and coffee destruction (Brazil)
Tin	<b>International Tin Control Scheme (1931-46):</b> Failed to stabilize prices due to rapid changes in demand during and after WWII.	Buffer stocks and export quotas (5 exporters)
Sugar	<b>Chadbourne Agreement (1931-35):</b> Failed to stabilize prices and collapsed a year before the termination date.	Export and production quotas (associations in 7 exporters)
Aluminum	<b>Aluminum Alliance Company (1931-1939):</b> Stock purchases. Initially successful, but the cartel ended with the start of WWII.	Stock management (several aluminum companies)
Silver	<b>London Silver Agreement (1933-37):</b> Did not increase prices as expected, but benefited some exporting countries and companies.	Government purchases (5 exporters and 3 importers)
Wheat	<b>International Wheat Agreement (1933-34):</b> Failed to stabilize prices and broke down after one year of operation.	Export and import quotas (9 exporters and 12 importers)
Tea	<b>Tea Regulation Scheme (1933-47):</b> Stabilized prices initially, but collapsed following increased demand after WWII.	Export quotas and planting restrictions (3 exporters)
Rubber	<b>International Rubber Regulation Agreement (1934-44):</b> Was not successful in reducing price volatility.	Export quotas and planting restrictions (5 exporters)
Copper	<b>International Copper Cartel (1935-39):</b> Stabilized prices but terminated due to the outbreak of WWII.	Production quotas (mining companies, 7 exporting countries)
Timber	<b>European Timber Exporters Convention (1935-39):</b> Raised prices, but the plan collapsed in 1939 following the outbreak of WWII.	Export quotas (9 exporters)
Beef	<b>Beef Agreement (1937-40):</b> Operated successfully, but suspended during the outbreak of WWII.	Export and import quotas (6 exporters)
Sugar	<b>Regulation of Production and Marketing of Sugar (1937-46):</b> Failed to address high-cost production among exporters.	Mostly export quotas (21 exporters and importers)
Wool	<b>Imperial Wool Purchase Scheme (1940-46):</b> Successful in coordinating supplies and managing wool inventories after WWII.	Government purchases (1 importer and 3 exporters)
Coffee	<b>Inter-American Coffee Agreement (1941-45):</b> Raised prices, but attracted new producers, especially from Africa.	Export quotas and import quotas (14 exporters and the U.S.)

Source: Baffes, Nagle, and Streifel (2024, 2025).

Note: The agreements appear in chronological order.

**TABLE SF.2 Post-WWII non-oil commodity agreements and cartels**

	Nature of Agreement	Mechanism (membership)
Wheat	<b>International Wheat Agreement (1949-71):</b> Failed to stabilize prices and collapsed shortly before the 1970s price boom.	Export and import quotas (5 exporters and 36 importers)
Sugar	<b>International Sugar Agreement (1953-84):</b> Did not achieve price stability (renewed three times but were not implemented between renewals).	Export and import quotas (26 exporters and 18 importers)
Tin	<b>International Tin Agreement (1954-85):</b> Raised and stabilized prices, but new entrants and the substitution of aluminum led to insolvency.	Buffer stocks and export quotas (7 exporters and 18 importers)
Coffee	<b>International Coffee Agreement (1962-89):</b> Raised prices, but disagreements among members and the rise of Viet Nam as a major export competitor led to its termination.	Export quotas (42 exporters and 7 importers)
Cocoa	<b>International Cocoa Agreement (1964-65):</b> Lasted only one year because of a bumper crop.	Export quotas (6 exporters)
Cocoa	<b>International Cocoa Agreement (1972-93):</b> Had a limited impact on prices, despite being extended four times.	Buffer stocks and export quotas (9 exporters and 35 importers)
Rubber	<b>International Natural Rubber Agreement (1979-99):</b> Did not stabilize prices and collapsed during the East Asian financial crisis.	Buffer stocks (13 exporters and 49 importers)

Sources: Baffes, Nagle, and Streifel (2024, 2025).

Note: The agreements appear in chronological order.

**TABLE SF.3 Oil agreements and cartels**

Nature of agreement	Mechanism (membership)
<b>Oil Creek Association (1861):</b> Introduced production cuts and minimum selling price, poor compliance resulted in its collapse.	Production cuts and minimum pricing (oil producers, U.S.)
<b>Petroleum Producers Association of Pennsylvania (1870):</b> Imposed production restrictions, including an embargo on new drilling. The Association was unable to enforce them, leading to the collapse of the agreement.	Production restrictions and embargo on drilling (oil producers, U.S.)
<b>Southern Improvement Company (SIC, 1872):</b> Refiners and railroads agreed not to compete with one another, but drillers refused to sell oil to SIC participants, leading to the collapse of the scheme.	Monopoly power among transportation and refining companies (refineries and railroad companies, U.S.)
<b>National Refiners Association (1872-73):</b> Refiners agreed to control production and transport of oil. After initial success, weak compliance and free riding by non-members led to its collapse.	Monopoly power among refining companies (refineries, U.S.)
<b>Petroleum Producers' Agency (1872-73):</b> Sought to control oil supplies, but the scheme collapsed within weeks due to weak compliance.	Stockholding and production restrictions (oil producers, U.S.)
<b>Standard Oil (1872-1910s):</b> At its peak it owned or controlled 90 percent of U.S. refining capacity and a large amount of transport. The company was later broken into 24 smaller companies following antitrust legislation.	Monopoly power through transport and refining (Standard Oil, refineries)
<b>Achnacarry Agreement (1928):</b> Also known as the "As-Is Agreement." Major oil producers agreed to reduce competition by keeping market shares constant, fixing prices, and limiting new production.	Production caps and fixed market shares (major oil companies, Middle East)
<b>Interstate Oil Compact Commission/Texas Railroad Commission (1935-1970s):</b> The IOCC, which covered 80 percent of U.S. production, set quotas to stabilize prices. The IOCC was rendered redundant by declining U.S. production.	Production quotas (state-level regulation of oil producers, U.S.)
<b>Seven Sisters (1935-1970s):</b> The seven largest oil companies (outside the USSR) colluded to limit production from the Gulf. Increased production elsewhere, the loss of U.S. surplus capacity, and deteriorating relationships with concession countries paved the way for OPEC's rise in influence.	Production restraint, price setting (Seven Sisters), and dominance of production and refining
<b>OPEC (1960- ):</b> Formed by five countries to prevent declines in "posted prices" by the major oil companies. The group later expanded, adopting production quotas as its main control mechanism from 1982 onward.	Initially price setting, subsequently replaced by production quotas (5-14 oil exporters)
<b>International Energy Agency (1974- ).</b> Sixteen OECD countries (now 32) signed the Agreement on an International Energy Program, a binding treaty to ensure the highest commitment, especially to the oil Emergency Sharing System.	Maintain oil emergency stocks equal to 90 days of imports for use during disruptions; other measures include demand restraint and fuel switching.
<b>OPEC+ (2016- ):</b> Formed in 2016, it consists of OPEC and 10 non-OPEC oil exporters. The group undertakes production restrictions to support oil prices following the 2014 price plunge.	Production quotas (13-23 oil exporters)
<b>London Silver Agreement (1933-37):</b> Did not increase prices as expected but benefited some exporting countries and companies.	Government purchases (5 exporters and 3 importers)
<b>International Wheat Agreement (1933-34):</b> Failed to stabilize prices and broke down after one year of operation.	Export and import quotas (9 exporters 12 importers)
<b>Tea Regulation Scheme (1933-47):</b> Stabilized prices initially but collapsed following increased demand after WWII.	Export quotas and planting restrictions (3 exporters)
<b>International Rubber Regulation Agreement (1934-44):</b> Not successful in reducing price volatility.	Export quotas and planting restrictions (5 exporters)
<b>International Copper Cartel (1935-39):</b> Stabilized prices but terminated due to the outbreak of WWII.	Production quotas (mining companies, 7 exporting countries)
<b>European Timber Exporters Convention (1935-39):</b> Raised prices, but the plan collapsed in 1939 following the outbreak of WWII.	Export quotas (9 exporters)
<b>Beef Agreement (1937-40):</b> Operated successfully but suspended during the outbreak of WWII.	Export and import quotas (6 exporters)
<b>Regulation of Production and Marketing of Sugar (1937-46):</b> Failed to address high-cost production among exporters.	Mostly export quotas (21 exporters and importers)
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<b>Inter-American Coffee Agreement (1941-45):</b> Raised prices but brought new producers, especially from Africa.	Export quotas and import quotas (14 exporters and the U.S.)

Sources: Adelman (1984); Baffes, Nagle, and Streifel (2024, 2025); McNally (2017); and Yergin (1991).

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## **ECO-AUDIT**

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Commodity prices are expected to decline by about 7 percent overall this year, reflecting subdued global economic activity, elevated trade tensions and policy uncertainty, ample global supply of oil, and weather-related supply shocks. In 2026, commodity prices are forecast to fall by a further 7 percent, a fourth consecutive year of decline, as global growth remains sluggish and the oil market oversupplied. Energy price movements are envisaged to continue contributing to global disinflation in 2026. Metals and minerals prices are expected to remain stable in 2026, while agricultural prices are projected to edge down, primarily due to strong supply conditions. Precious metals prices are expected to rise another 5 percent, after a historically large, investment-driven rally of about 40 percent in 2025.

Risks to the commodity price projections are tilted to the downside. Key downside risks include weaker-than-expected global growth, a longer-than-assumed period of economic policy uncertainty, and additional oversupply of oil. Upside risks include intensifying geopolitical tensions, the market impact of additional oil sanctions, supply reductions stemming from additional trade restrictions, unfavorable weather conditions, faster-than-expected rollout of new data centers. Commodity price volatility in recent years has revived interest in supply management via international commodity agreements. Historical experience, however, shows that the most effective policy is to promote diversification, innovation, transparency, and market-based pricing—measures that build lasting resilience to commodity price volatility.

The World Bank Group'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.