A World Bank Report

OCTOBER 2020

Commodity Markets Outlook

Persistence of Commodity Shocks

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The cutoff date for the data used in this report was October 16, 2020.

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Acknowledgments

The World Bank's *Commodity Markets Outlook* is published twice a year, in April and October. The report provides detailed market analysis for major commodity groups, including energy, agriculture, fertilizers, metals, and precious metals. Price forecasts to 2030 for 46 commodities are presented, together with historical price data. The report also contains production, consumption, and trade statistics for major commodities. Commodity price data updates are published separately at the beginning of each month.

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

For inquiries and correspondence, email at:
commodities@worldbank.org

Executive Summary

Almost all commodity prices recovered in the third quarter of 2020 following steep declines earlier in the year due to the COVID-19 pandemic. Crude oil prices have doubled since their April low, supported by sharp oil supply cuts by OPEC+, but prices remain one-third lower than their pre-pandemic levels. Metal prices recovered rapidly in response to a faster-than-expected pick up in China's industrial activity. Some food prices have also risen due to production shortfalls in edible oils. Looking ahead, oil prices are expected to increase very gradually from current levels and average $44/bbl in 2021, up from an estimated $41/bbl in 2020, as a slow recovery in demand is matched by an easing in supply restrictions. Metal and agricultural prices are projected to see modest gains of 2 percent and 1 percent, respectively, in 2021. The main risk to the price forecasts is the duration of the pandemic, including the risk of an intensifying second wave in the Northern Hemisphere and the speed at which a vaccine is developed and distributed. The COVID-19 pandemic is a shock to global commodity markets that presents a challenge to policy makers in commodity exporters: to the extent that it is short-lived, policy stimulus can buffer its impact; to the extent that it is lasting, policy makers need to allow their economies to adjust smoothly to a new normal. Identifying the duration of commodity price shocks is a challenge that frequently confronts policy makers in commodity exporters, as documented in a Special Focus section. The Focus finds that industrial commodity markets are mainly buffeted by transitory shocks, whereas agricultural commodity markets are chiefly subject to permanent shocks.

Recent trends

The COVID-19 pandemic has delivered a significant shock to commodity markets but its impact has varied in magnitude for different types of commodities (figure 1.A). This contrasts with the previous global recession in 2008-09, when almost all commodity prices saw large, and persistent, declines.

Energy prices rebounded by one-third in 2020Q3 following their steep fall in 2020Q2, but remain nearly one-third below their pre-pandemic levels. *Crude oil prices* drove the recovery, almost doubling to an average of $41/bbl in September from their low of $21/bbl in April. The recovery in prices was driven by a sharp reduction in production, particularly among OPEC+ (figure 1.B). Compared to the fall in oil prices during the global financial crisis, the most recent decline was a little steeper but also saw a faster recovery (figure 1.C). However, the recovery in prices stalled in September amid renewed outbreaks of COVID-19. *Natural gas prices* also rose sharply in 2020Q3, while *coal prices* were broadly stable.

Non-energy prices rose by 10 percent in 2020Q3, with increases in almost all commodities. The *metals and minerals price index* rose 20 percent (q/q) and most metal prices are above their pre-

pandemic levels. The robust recovery in China has led to a surge in consumption of metals, while consumption in advanced economies has proved resilient. The rapid rebound in prices is a marked difference compared to the global financial crisis, when prices saw larger declines that lasted for many months (figure 1.D). *Precious metal prices* also rose sharply, boosted by the depreciation in the U.S. dollar and lower interest rates. *Agricultural commodity prices* rose by 6 percent in 2020Q3, but with divergence between broadly stable grain prices and rising prices of other agricultural commodities.

Outlook and risks

Energy prices are expected to average one-third lower in 2020 than in 2019 (an upward revision from April) and are forecast to see a sizeable rebound in 2021 (table 1). *Non-energy prices* are projected to see a modest increase in 2020 as a small fall in metal prices is offset by an increase in agricultural prices, and see a further rise in 2021. The outlook remains exceptionally uncertain and depends on the duration and severity of the pandemic, including the risk of an intensifying second wave during the Northern Hemisphere winter and the speed at which a vaccine is developed and distributed.

FIGURE 1 Commodity market developments

The impact of the COVID-19 pandemic on commodity prices has varied. Oil prices have partially recovered as large production cuts by OPEC+ helped bring the level of global supply closer to demand. Compared to the global financial crisis, the most recent decline in oil prices was a little steeper but also saw a faster recovery. In contrast, metal prices saw a particularly strong recovery and now are above their pre-pandemic levels, a marked contrast to their behavior during the global financial crisis when the drop in prices was larger and more prolonged.

A. Commodity price indexes, monthly
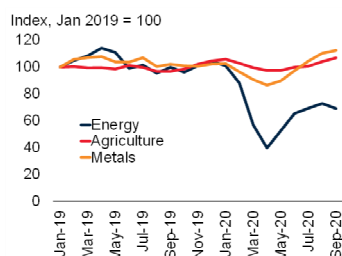
B. Global oil consumption and production
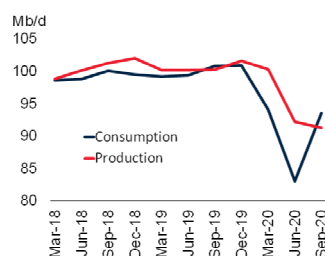
C. Comparison of oil prices around global recessions
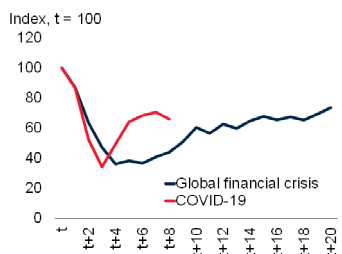
D. Comparison of metal prices around global recessions
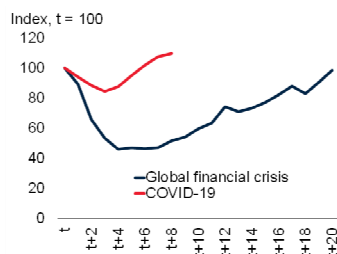
Source: Bloomberg; International Energy Agency; World Bank.
A. Last observation is September 2020.
B. Consumption in September 2020 shows the International Energy Agency's estimate based on available data.
C.D. Figure compares oil (metal) prices during the global financial crisis (blue line) and the COVID-19 pandemic (red line). For the global financial crisis, t = September 2008; for COVID-19, t = January 2020. Last observation for COVID-19 is September 2020.
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cuts at their current levels and a decline in U.S. production if new drilling fails to pick up.

The pandemic could also have lasting impacts on oil demand through changes in consumer and employment behavior. Air travel could see a permanent reduction, as business travel is curtailed in favor of remote meetings, reducing demand for jet fuel. A shift to working from home could reduce gasoline demand, but may be somewhat offset by increased use of private vehicles if people remain averse to using public transport. Long-term projections for oil demand have been revised down by major forecasters as a result of COVID-19 (in part due to weaker economic growth), with some scenarios suggesting demand may have already peaked in 2019. Several oil companies have announced changes in strategy including a significant reduction in investment in new hydrocarbon projects. Energy use more broadly is expected to increasingly shift away from fossil fuels toward renewables, in large part due to their increasing competitiveness, with several countries announcing plans to reach "net-zero" carbon emissions within the next 40 years. The recovery from COVID-19 offers an opportunity to direct stimulus funds toward green energy and infrastructure, however, so far more government stimulus has been directed to fossil fuel energy than clean energy.

Metal prices are projected to increase modestly in 2021 following a slight fall in 2020, boosted by the recovery in the global economy and continued stimulus from China. While the growth rate for 2021 is a little lower than in the previous report, the level of metal prices is significantly higher, as the anticipated decline in 2020 is much less than expected. Risks to this outlook are slightly to the downside, including a more prolonged global recession.

Agricultural prices are expected to rise slightly in 2021 following a projected 3 percent increase in 2020. Despite a modest increase in prices, concerns about food insecurity in several EMDEs have risen. In addition to lowering incomes, the pandemic has created bottlenecks in food availability at the local level due to supply chain disruptions and border closures that have

Oil prices are projected to average $41/bbl in 2020 before rising to $44/bbl in 2021, an upward revision from the April forecast of $35/bbl and $42/bbl. The forecast anticipates a slow recovery in consumption that is countered by a gradual easing in production restrictions among OPEC+. However, oil consumption is expected to remain below its pre-pandemic level until 2023. The main risk to the price forecast is an increase in the severity of the pandemic that could lead to renewed lockdowns, dampening economic growth and reducing travel. This would affect oil demand significantly more than other commodities. Risks to the upside include an extension of the OPEC+

TABLE 1 Nominal price indexes and forecast revisions

	Price Indexes (2010=100)[1]					Change (%) q/q		Change (%) y/y		Forecast revision[3]	
	2017	2018	2019	2020f[2]	2021f[2]	2020Q2	2020Q3	2020f[2]	2021f[2]	2020f[2]	2021f[2]
Energy	68	87	76	51	56	-35.8	33.9	-32.7	9.3	7.6	-9.5
Non-Energy[4]	84	85	82	83	84	-4.7	9.6	1.1	1.7	6.2	-0.8
Agriculture	87	87	83	86	87	-4.3	5.7	2.8	1.4	3.9	-0.4
Beverages	83	79	76	81	82	-1.6	8.1	6.6	1.1	11.9	-1.2
Food	90	90	87	90	91	-4.8	5.0	3.4	1.5	3.9	-0.4
Oils and meals	88	85	77	85	87	-7.5	14.3	10.2	1.8	10.1	-0.9
Grains	81	89	89	90	92	-2.3	-1.4	1.4	1.5	2.9	-0.4
Other food	102	99	98	96	97	-3.9	0.6	-2.0	1.0	-1.7	0.1
Raw Materials	81	81	78	77	79	-4.5	6.3	-1.0	1.6	-0.1	0.0
Fertilizers	74	83	81	73	75	-3.4	7.1	-10.3	3.2	-0.3	0.0
Metals and Minerals	78	83	78	77	79	-5.6	19.5	-1.1	2.1	12.1	-1.9
Precious Metals	98	97	105	134	129	6.2	16.5	27.3	-3.7	14.2	-3.4
Memorandum items											
Crude oil ($/bbl)[5]	*53*	*68*	*61*	*41*	*44*	*-38.3*	*38.8*	*-33.2*	*7.3*	*9.8*	*-12.7*
Gold ($/toz)	*1,258*	*1,269*	*1,392*	*1,775*	*1,740*	*8.0*	*11.8*	*27.5*	*-2.0*	*12.6*	*-1.3*

Source: World Bank.
Notes: (1) Numbers may differ from tables A.1-4 due to rounding. (2) "f" denotes forecast. (3) Denotes percentage points revision to the growth forecasts from the April 2020 report. (4) The non-energy price index excludes precious metals. (5) Average of Brent, Dubai, and WTI. See Appendix C for definitions of prices and indexes.
Download all report data and charts.

restricted food flows and movements of labor. Food prices have spiked in several countries, especially in South and East Asia.

Special focus: Persistence of commodity shocks

The pandemic has dealt a major blow to the global economy and global commodity markets. Policy makers in commodity-exporting economies need to consider the degree to which the pandemic-induced disruptions are likely to be short-lived or lasting in calibrating their policy responses. Short-lived shocks can be buffered by temporary macroeconomic stimulus; lasting shocks require long-term adjustment to a new economic reality. Historically, commodity markets have been prone to large swings, some of which were short-lived ("transitory") and others highly persistent ("permanent"). Based on an analysis of 27 commodity prices during 1970-2019, this Focus finds that permanent and transitory shocks have contributed almost equally to commodity price variation, although with wide heterogeneity across commodities. Permanent shocks accounted for

two-thirds of the variability in prices of annual agricultural commodities; for these commodities, high substitutability of inputs and uses as well as common policies help dampen any short-term fluctuations. In contrast, permanent shocks accounted for less than 50 percent of the variability in the prices of base metals, which are typically widely used in industrial production and, hence, highly cyclical. Since 1970, there have been two highly synchronized medium-term cycles which included all commodities (with median peaks in 1978 and 2010) and a cycle that peaked in the mid-1990s and involved fewer commodities. EMDEs that depend on exports of highly "cyclical" commodities that are subject to frequent transitory shocks may want to build fiscal buffers during the boom phase and use them during the bust period in order to support economic activity. In contrast, for economies that rely heavily on commodities that are subject to permanent shocks, structural policies may be needed to facilitate adjustments to new economic environments.

SPECIAL FOCUS

Persistence of commodity shocks

Persistence of commodity shocks

Almost two-thirds of emerging market and developing economies (EMDEs) and three-quarters of low-income countries rely heavily on commodity extraction and export. This can put their economies at the mercy of global commodity markets, which are prone to shocks. The most recent example is the impact of COVID-19 pandemic. To the extent such shocks are transitory, commodity-exporting EMDEs can buffer their impact on local economies; to the extent these shocks are permanent, policy makers in these countries need to facilitate a smooth adjustment to a new economic reality. Based on an analysis of 27 commodities during 1970-2019, this Special Focus finds that transitory and permanent shocks contributed almost equally to commodity price variations, although with wide heterogeneity. Permanent shocks accounted for two-thirds of the variability in annual agricultural commodity prices but less than half of the variability in base metals prices. For energy prices, permanent shocks have trended upward, for agricultural prices, downwards, and for metals prices, flat. The volatility triggered in April-October by the COVID-19 pandemic appears to constitute a series of largely transitory shocks for oil prices.

Introduction

The COVID-19 pandemic delivered an enormous shock to the global economy and led to the deepest global recession since the second world war, by far surpassing the recession in 2009 that was triggered by the global financial crisis (World Bank 2020a). The pandemic impacted commodity markets as well, but its effect on prices has been heterogenous (World Bank 2020b). Between January and April 2020 energy prices dropped nearly 60 percent while metals and food prices declined by 15 and 10 percent, respectively (figure SF.1). Metal prices recovered in response to supply shocks and a quicker-than-expected pickup in China's industrial activity, and food prices stabilized as concerns about restrictive policy measures faded. However, the impact of the demand shock on the oil market may last much longer.[1]

Commodity price movements explain considerable fluctuations in economic activity, particularly in EMDEs (Aguiar and Gopinath 2007; Kose 2002). Policy makers can smooth some of these fluctuations with policy stimulus or

contraction—provided commodity price movements are temporary. For longer lasting shocks, policy makers need to facilitate their economies' smooth adjustment to a new normal.

Transitory shocks can originate from recessions, such as the 2009 global financial crisis and the 1997 East Asian financial crises (both of which impacted a wide range of commodities), trade tensions (such as in 2018-19 and of special relevance to metals and soybeans) or bans on grain exports during 2007 and 2011 (World Bank 2019). They can also arise from adverse weather conditions, most common to agriculture, such as El Niño and La Niña episodes or drought-related production shortfalls (such as grains in 1995 and coffee in 1975 and 1985). Transitory shocks can also result from accidents (2019 Vale accident in Brazil which disrupted iron ore supplies), conflicts (the first Gulf war, when Iraq/Kuwait oil production was halted), or terrorist attacks (on the Saudi oil facilities in 2019, which halted oil exports temporarily) (World Bank 2019).

Shocks can also exert a permanent impact on commodity markets. For example, the shale technology shock in the natural gas and oil industries rendered the United States a net energy exporter in 2019, for the first time since 1952 (EIA 2020). The biotechnology shock of the 1990s increased crop productivity by more than 20 percent (Klümper and Qaim 2014). Policy shocks can also have long-lasting impacts on

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[1] According to BP (2020), 2019 may have been the year during which global oil consumption peaked, marking a considerable revision to earlier projections which placed the "peak demand" year in the early 2030s. For example, IEA (2019) projected that global oil consumption would plateau around 2030. Peak demand discussions, which emerged after the 2014 price collapse (Dale and Fattouh 2018), replaced the "peak oil" supply debate of the early 2010s (Helbling et al. 2011; Kumhof and Muir 2014).

FIGURE SF.1 Commodity price indexes

Commodity prices have been impacted differently by COVID-19. Energy prices, which declined more than 60 percent from January to April 2020, were still 32 percent lower in September. Metals and food prices were impacted much less and have returned to pre-pandemic levels. The long-term effects of shocks on prices also varies across commodities.

A. Energy and metals, monthly
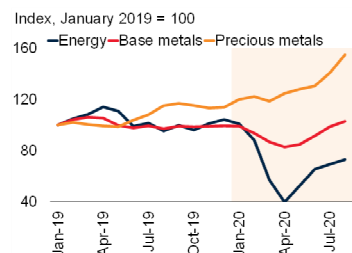
B. Fertilizers and agriculture, monthly
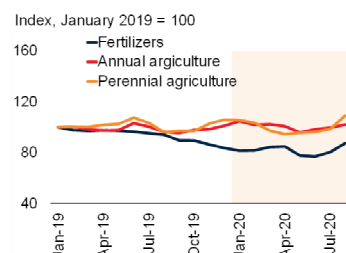
C. Energy and metals, annual
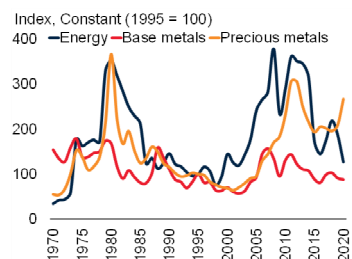
D. Fertilizers and agriculture, annual
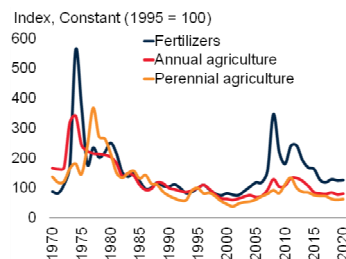
Source: World Bank.
A.B. Shaded areas denote the pandemic period: January 2020 (when the first human-to-human transmission was confirmed) to September 2020 (last observation of the sample).
C.D. The indexes have been deflated by the U.S. CPI. Last observation is 2020.
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commodity prices. Examples include government efforts to encourage biofuel production, which caused a 4 percent shift of global land from food to biofuel production (Rulli et al. 2016); interventions in agricultural markets by most OECD countries, which have been shown to have long term downward pressures on food prices (Aksoy and Beghin 2004); and OPEC's decisions to reduce oil supplies (Kaufmann et al. 2004).

Shocks, especially those related to energy markets, often propagate succeeding shocks. For example, the COVID-19 oil demand shock, which caused an estimated 10 percent decline in oil consumption during 2020, triggered a policy-driven supply shock of similar magnitude by the OPEC-plus group of a 9.7 mb/d oil production cut in April

2020.[2] The oil price increases of the mid-2000s (driven by EMDE demand, OPEC supply cuts, and geopolitical concerns) rendered shale technology profitable, pushed up the costs of food production, and triggered biofuel policies. Following the oil price collapse of 2014, food production costs declined, but production of shale (through innovation and cost reduction) and biofuels (diverted from food commodities) appear to have a permanent character.

Earlier literature on commodity price movements reached two broad conclusions: prices respond to shocks differently (Cuddington 1992; Snider 1924), and price movements are dominated by volatility rather than long-term trends (Cashin and McDermott 2002; Deaton 1999). More recent research, however, finds that commodity prices are subject to long-term cyclical patterns, the so-called supercycles (Cuddington and Jerrett 2008).

This Focus examines how transitory and permanent shocks impact commodity price movements. Whereas the existing literature analyzes price movements in the context of either super-cycles or cyclical-versus-trend behavior, this analysis allows for business- and medium-term cycles in line with the macroeconomic literature. Specifically, this *Focus* addresses the following questions.

1) How much do transitory and permanent shocks contribute to commodity price variability?

2) How have transitory and permanent shocks compared across commodities?

How much do transitory and permanent shocks contribute to commodity price variability?

Methodology. To decompose commodity price movements into transitory and permanent components, a novel frequency domain approach is used that has thus far mostly been applied to

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[2] The demand plunge and production cuts following COVID-19 were the largest in history (see energy section).

economic business cycles (Corbae, Ouliaris, and Phillips 2002; Corbae and Ouliaris 2006). The analysis rests on monthly data for 27 commodity price series over the period 1970-2019. It includes 3 energy prices, 5 base- and 3 precious-metals prices, 11 agricultural commodity prices (separated into annual and perennial crops) and 4 fertilizer prices.[3] The transitory shocks consist of three components—short-term fluctuations (that unwind in less than 2 years); traditional business cycles with frequency of 2-8 years, as are typically associated with economic activity (Burns and Mitchell 1946); and medium-term cycles with periodicity of 8-20 years, which are often associated with investment activity (Slade 1982). The permanent shock component captures movements with periodicity of more than 20 years—consistent with supercycles.

Permanent and transitory shocks account for roughly equal shares. On average across commodities, permanent shocks accounted for 47 percent of price variability. Of the remainder (i.e., transitory shocks), medium-term cycles accounted for 32 percent of price variability and business cycles for 17 percent. Only a small portion (4 percent) of price variability is due to shocks that are unwound in less than two years. The large role of the permanent component is in line with the findings of research into commodity price supercycles (Erten and Ocampo 2013; Fernández, Schmitt-Grohé, and Uribe 2020). Furthermore, the predominance of the medium-term cycle in the transitory component is in line with recent research that finds a greater role of medium-term cycles than shorter business cycles in output fluctuations or domestic financial cycles (Aldasoro et al. 2020; Cao and L'Huillier 2018).

The composition of transitory shocks differed across commodities. Shocks at medium-term frequency accounted for 55 and 27 percent of price variability in energy and metals, respectively, and only 14 percent for agriculture. In contrast, business cycles accounted for 24 percent of price variability for metals (figure SF.3). This greater contribution of business cycle shocks to metal commodity price fluctuations is in line with the strong response of metal consumption to industrial activity.[4] Some of the commodities that exhibited the highest contribution of transitory shocks to price variability are used mainly within the transportation sector. For example, nearly two-thirds of crude oil is used for transportation, three-quarters of natural rubber goes to tire manufacturing, and half of platinum is used in the production of catalytic converters (World Bank 2020b).

These averages mask heterogeneity across commodities. Transitory shocks were more relevant to the price variation of industrial commodities, while permanent shocks mattered most in agricultural commodity price movements (figure SF.2). For agricultural commodities, permanent shocks accounted for two-thirds of price variability, for metals (including base and precious) they accounted for about 45 percent, while for energy they accounted for less than 30 percent. Precious metals exhibited the largest heterogeneity as a group, with gold prices driven mostly by permanent shocks, silver driven equally by permanent and transitory shocks, and platinum exhibiting one of the highest shares of medium-term cyclicality.

How have transitory and permanent shocks evolved?

Transitory shocks

Almost all commodities have undergone three medium-term cycles since 1970. The first

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[3] The selection of commodity prices analyzed in this *Focus* was based on a unique selection criteria by excluding commodities that are close substitutes (e.g., selecting only one edible oil), they are no longer economically important (e.g., hides and skins), or their prices are not determined at an exchange (e.g., bananas). Following the decomposition, the individual commodities were combined into six groupings, based on the uses and production characteristics of commodities (see annex SF.1). A few studies that have used both individual commodity price series and indexes (e.g., Erten and Ocampo 2013; Jacks 2019; Ojeda-Joya, Jaulin-Mendez, and Bustos-Pelaez 2019) used data obtained directly from the International Monetary Fund or World Bank commodity price databases without applying selection criteria.

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[4] The relationship between metals prices and economic activity has been well-established by numerous authors. See, for example, Baffes, Kabundi, and Nagle (2020), Davutyan and Roberts (1994), Labys, Achouch, and Terraza (1999), Labys, Lesourd, and Badillo (1998), Marañon and Kumral (2019), Roberts (2009), Stuermer (2017), and Tilton (1990).

FIGURE SF.2 Price variation according to type of shock

Transitory and permanent shocks contribute almost equally, on average, to commodity price variation. However, these shares mask large heterogeneity across commodities. Transitory shocks account for most of industrial commodity price variability, while permanent shocks dominate agricultural commodity price movements.

A. Transitory and permanent shocks
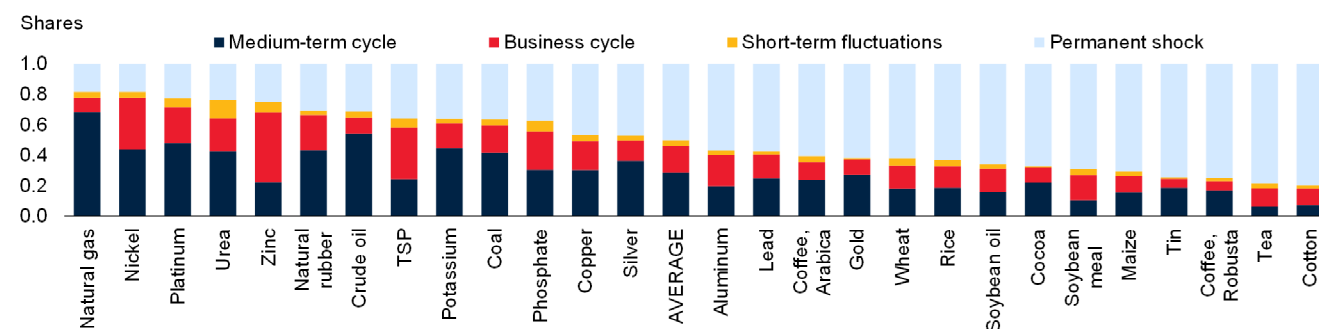
Source: World Bank.
Click here to download charts and data.

medium-term cycle, which involved all commodities, began in the early 1970s, peaked in 1978, and lasted until the mid-1980s. The second, which peaked in 1994, was most pronounced in base metals and agriculture (with similar duration and amplitude to the first cycle) but did not include energy commodities. The third cycle, which again involved all commodities, began in the early 2000s, peaked in 2010, and for some commodities is still underway as of October 2020.

Crude oil's "missing cycle" reflected offsetting oil-specific shocks. Of the 27 commodities, crude oil and natural gas (whose price is highly correlated with oil) are the only commodities that exhibited two, instead of three, medium-term cycles. During the period spanning the second medium-term cycle, the oil market was subjected to three shocks.

• *Unconventional and offshore oil.* New production from unconventional sources of oil came into the market (North Sea, Gulf of Mexico, and Alaska). This was a result of innovation and investment in response to the high prices during the 1970s and early 1980s, partly caused by OPEC supply restrictions (World Bank 2020b).[5]

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[5] The three unconventional sources of oil—U.S. shale oil,

• *New spare capacity from the former Soviet Union.* Considerable spare capacity became available in the global oil market following the collapse of the Soviet Union. Prior to its collapse, the Soviet economy featured both inefficient production and energy-intensive consumption (World Bank 2009).[6]

• *Substitution and demand contraction.* High oil prices during the late 1970s and early 1980s led to substitution of oil by other energy sources (especially coal and nuclear energy) in electricity generation. Policy-mandated efficiency standards in many OECD countries lowered global demand for energy (Baffes, Kabundi, and Nagle 2020).

Permanent shocks

The evolution of permanent shocks differed markedly across commodity groups. For energy commodities, the permanent shock component of prices has trended upward, for agricultural and

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Canadian oil sands, and biofuels—are also associated with the third medium-term cycle (Baffes et al. 2015). In the first and third medium-term cycles these unconventional sources of oil account for about 10 percent of global oil supplies (measured at the end of the cycle).

[6] The collapse of the Soviet Union played a similar role in metals and grain commodities. However, the increase in supplies of those commodities was much smaller and gradual.

fertilizer prices downward, and for most base metals they have been largely trendless (figure SF.4). The upward trend in energy prices may reflect resource depletion and the largely trendless nature of long-term metals price movements may reflect the opposing forces of technological innovation and resource depletion (see discussions in Hamilton (2009) and Marañon and Kumral (2019) on oil and metals, respectively). The downward trend in permanent shocks to agricultural prices is consistent with low income elasticities of food commodities (Baffes and Etienne 2016). Commodities with a history of widespread policy interventions (cotton) or subjected to international commodity agreements (cocoa, coffee, crude oil, cotton, natural rubber, and tin) followed a highly non-linear path (see annex table SF.1).[7]

Annual agricultural price trends are highly synchronized and differ from those of other commodity groups. The contribution of permanent shocks to annual agricultural price variability (68 percent) is the highest among all six commodity groups, and these permanent shocks have evolved in a similar manner across annual agricultural prices (figure SF.4).[8] This similarity reflects diffusion of shocks across commodities due to input substitutability, consumption substitutability, and agricultural policies, which are similar across most crops.

- *Input substitution.* Annual agricultural commodities tend to be farmed using the same land, labor, machinery, and other inputs. As a result, reallocation between different annual crops from one year to another prevents large price fluctuations in individual crops. The impact of the restrictions in soybean imports by China from the United States in 2008, was short-lived due to

FIGURE SF.3 Transitory shocks

The business cycle component of transitory shocks is highest in metal, consistent with the response of metals demand to industrial activity. There have been three medium-term cycles, peaking in 1978, 1994, and 2020. However, oil was subjected to only two medium-term cycles.

A. Contribution of business cycle
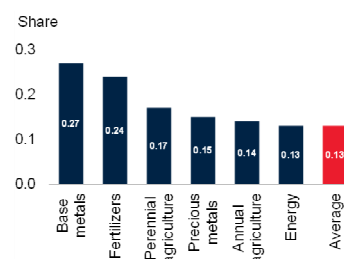
B. Medium-term cycle: energy and metals
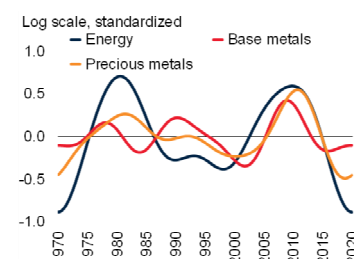
C. Medium-term cycle: fertilizers and agriculture
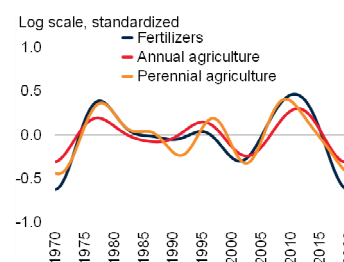
D. Oil's "missing" medium-term cycle
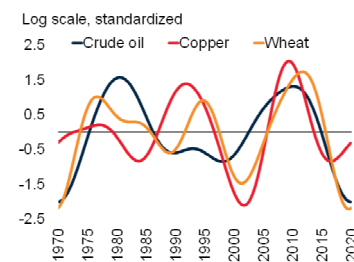
Source: World Bank.
A.-D. Authors' calculations.
Click here to download charts and data.

land reallocation and trade diversion. Separately, despite a policy-induced increase in demand for maize, sugarcane, and edible oils over the past two decades, price increases in these three crops were in line with those of other annual crops (e.g., rice and wheat) as land was reallocated (World Bank 2019).[9]

- *Consumption substitution.* Since annual crops have overlapping uses, substitution in consumption can dampen price fluctuations in any one of them. In the example of import

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[7] Cotton has been subjected to a high degree of government intervention by most major producers, including subsidies by the United States and the EU, taxation of Sub-Saharan cotton producers, and various types of policy interventions by Central Asian producers. Throughout the 1960s and 1970s the cotton market was also subjected to policy distortions by the Soviet Union (Baffes 2011).

[8] Permanent shocks to agriculture have lasting effects on economic activity in low income countries through their impact on labor productivity (Dieppe, Francis, and Kindberg-Hanlon 2020).

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[9] Global demand for maize, a key feedstock for ethanol production in the United States, doubled over the past two decades. This compares with 26-28 percent increases in global demand for rice and wheat, broadly in line with the 27 percent global population growth over this period.

FIGURE SF.4 Permanent shocks

The permanent shock component trends upward for energy and precious metals, is nearly trendless for precious metals and fertilizers, and trends downward for agriculture. These trends are homogenous for agriculture but heterogenous for other groups.

A. Permanent shock, energy, and metals
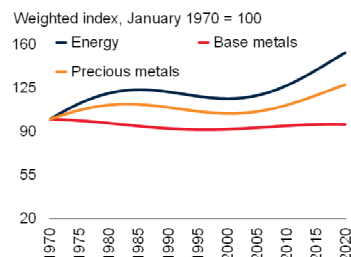
B. Permanent shocks, agriculture, and fertilizers
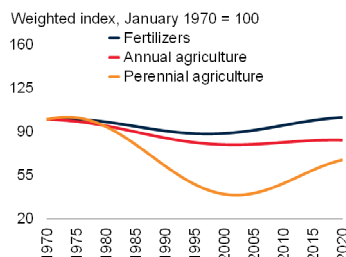
C. Permanent shocks, selected metals prices
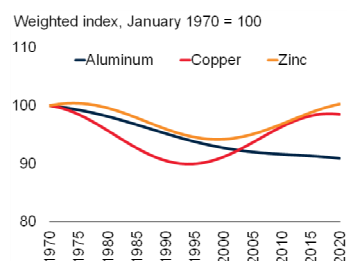
D. Permanent shocks, selected agricultural prices
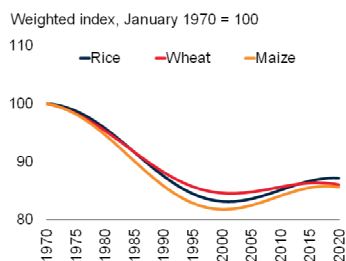
Source: World Bank.
A.-D. Authors' calculations.
Click here to download charts and data.

restrictions on soybeans discussed earlier, soybean meal was substituted by maize for animal use in China while soybean oil was substituted by palm oil for human consumption (World Bank 2019).[10]

- *Policy synchronization.* Policy interventions for agricultural markets tend to apply to the entire sector and stay in place for several years, even decades, with few or no changes. For example, agricultural policies in the United States and the EU, the world's largest producers in several agricultural commodity

markets, are renewed every few years and apply to the same crops. Indeed, the 1985 Farm Bill reform in the U.S. and the 1992 Common Agricultural Policy reform in the EU, applied to all commodities of the respective programs (Baffes and De Gorter 2005).

Conclusion

This *Focus* section finds that commodities are subject to a multitude of different shocks. Permanent shocks account for two-thirds of agricultural price variability but less than half of industrial commodity price variability over the past fifty years. Meanwhile, business cycle shocks play the largest role for base metals, reflecting their heavy use in highly cyclical industries. For oil prices, the COVID-19 pandemic constitutes a series of temporary shocks, mainly at the business cycle frequency. Permanent shocks have trended upward for energy and precious metals prices but downward for agricultural prices and have been largely trendless for base metals prices. Annual agricultural commodities were the commodity group with the most homogeneous price trends, reflecting high substitutability in inputs and uses, and similar policies.

The heterogenous behavior of shocks suggests a need for policy flexibility, especially in commodity-exporting countries. Countercyclical macro-economic policies can help buffer the impact of transitory shocks. Countries that depend on exports of highly "cyclical" commodities that are buffeted by frequent transitory shocks may want to build fiscal buffers during the boom phase and use them during the bust period in order to support economic activity. In contrast, in countries that rely heavily on commodities that are subject to permanent shocks, structural policies may be needed to facilitate adjustments to new economic environments.

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[10] The imposition of tariffs by China on U.S. soybean imports resulted trade diversion. As China's soybean imports from the U.S. declined and increased from Brazil, the EU began importing more from the U.S. and less from Brazil.

ANNEX SF.1 Model and data description

Decomposing commodity prices into cycles and long-term trends

The real price of the commodity, p_t, is expressed as the following sum:

$$p_t \equiv PC_t + TC_t^{[8,20]} + TC_t^{[2,8]} + S_t$$

PC_t, which represents the permanent component, can be a linear trend, perhaps subjected to structural breaks. (Alternatively, one could include non-linearities.) $TC_t^{[8,20]}$ denotes the medium-term cycle with a periodicity of 8-20 years as proposed by Blanchard (1997) and popularized by Comin and Gertler (2006). $TC_t^{[2,8]}$ represents the business cycle with a periodicity of 2-8 years, following NBER's traditional definition (Burns and Mitchell 1946). Lastly, S_t captures fluctu-ations with periodicity of less than 2 years, which may reflect short-term movement in economic activity or other macroeconomic variables (such as exchange rates and interest rates), seasonality or weather patterns (in the case of agriculture), and *ad hoc* policy shocks. These fluctuations are typically studied within the context of VAR models (Baumeister and Hamilton 2019; Kilian and Murphy 2014) and GARCH models by utilizing high-frequency data, focusing mostly on volatility (Engle 1982). The decomposition is based on the frequency domain methodology developed by Corbae, Ouliaris, and Phillips (2002) and Corbae and Ouliaris (2006).

The price data were taken from the World Bank's world commodity price data system. The sample covers 50 years: January 1970 through December 2019 (600 observations). The prices, which are reported in nominal U.S. dollar terms, were deflated with the U.S. CPI (taken from the St. Louis Federal Reserve Bank). Although the World Bank covers more than 70 commodity price series, this paper uses only 27 series. The selection was based on the following criteria:

- *Substitutability.* If two commodities are close substitutes only one was included. For example, because the edible oils are close substitutes, only soybean oil is used in the analysis.

- *Importance.* Commodities whose share in consumption diminished throughout the sample (either because of changes in preferences or substitution from synthetic products) were not included in the sample. Notable exclusions include wool, hides and skins, sisal, and tobacco.

- *Price determination process.* Prices are determined by market-based mechanisms, such as on commodity exchanges or at auctions (in the case of tea). Notable exclusions are iron ore (its price used to be the outcome of a negotiation process among key players of the steel industry until 2005), bananas (its price reflects quotations from a few large trading companies), and sugar (policy interventions reduce the significance of the world price indicator), groundnuts (thinly traded commodity), and timber products (not traded on exchanges).

Following the decomposition analysis, prices were grouped into six broad categories, each of which contained at least three series: Energy (coal, crude oil, and natural gas); base metals (aluminum, copper, lead, nickel, tin, and zinc); precious metals (gold, platinum, and silver); fertilizers (phosphate rock, potassium chlorate, TSP, and urea); annual agriculture (cotton, maize, soybean meal, soybean oil, rice, and wheat); perennial agriculture (cocoa, coffee Arabica, coffee Robusta, natural rubber, and tea).

Decomposition results are reported in table SF.1. The numbers in the square brackets of the first column represent weights and add to 100 for each commodity group, subject to rounding. The shares of each component add to 100, subject to rounding. For example, coal's shares are: 0.36 + 0.42 + 0.18 + 0.04 = 1. The penultimate column reports the parameter estimate from the regression of T_t on a time trend while the last column reports the Root Mean Square Error (RMSE)—a proxy for nonlinearity.

ANNEX TABLE SF.1 Real commodity price decomposition

	Share of variance explained by				Number of cycles		Trend	
	T_t	$C_t^{[8-20]}$	$C_t^{[2-8]}$	S_t	$C_t^{[8-20]}$	$C_t^{[2-8]}$	β	RMSE
ENERGY								
Coal [**4.6**]	0.36	0.42	0.18	0.04	3	11	0.43	5.31
Crude oil [**84.6**]	0.31	0.54	0.11	0.04	2	12	1.02	7.65
Natural gas [**10.8**]	0.19	0.68	0.10	0.03	2	11	0.57	2.50
AVERAGE	**0.29**	**0.55**	**0.13**	**0.04**	**2**	**11**	**0.95**	**6.99**
BASE METALS								
Aluminum [**32.9**]	0.57	0.20	0.20	0.03	4	10	-0.14	0.64
Copper [**47.4**]	0.47	0.30	0.19	0.04	3	9	-0.80	3.31
Lead [**2.2**]	0.57	0.25	0.16	0.02	3	8	-0.54	4.75
Nickel [**9.9**]	0.18	0.44	0.34	0.04	3	11	-0.78	1.63
Tin [**2.6**]	0.74	0.19	0.06	0.01	3	12	0.05	4.38
Zinc [**5.0**]	0.25	0.22	0.46	0.07	3	8	-0.09	2.08
AVERAGE	**0.46**	**0.27**	**0.24**	**0.04**	**3**	**10**	**-0.52**	**2.46**
PRECIOUS METALS								
Gold [**77.8**]	0.62	0.27	0.10	0.01	3	8	1.28	5.38
Platinum [**18.9**]	0.22	0.48	0.23	0.06	3	11	-0.22	1.85
Silver [**3.3**]	0.47	0.36	0.13	0.03	3	11	0.27	13.47
AVERAGE	**0.44**	**0.37**	**0.15**	**0.03**	**3**	**10**	**0.96**	**4.98**
FERTILIZERS								
Phosphate [**16.9**]	0.37	0.30	0.25	0.07	3	9	-0.40	6.48
Potassium [**20.1**]	0.36	0.45	0.16	0.03	3	10	-0.46	3.43
TSP [**21.7**]	0.36	0.24	0.34	0.06	4	9	-0.52	3.91
Urea [**41.3**]	0.24	0.42	0.22	0.12	3	12	-0.02	4.44
AVERAGE	**0.33**	**0.35**	**0.24**	**0.07**	**3**	**10**	**-0.28**	**4.47**
ANNUAL AGRICULTURE								
Cotton [**8.5**]	0.80	0.07	0.11	0.02	3	13	-0.07	9.00
Maize [**20.5**]	0.70	0.16	0.11	0.03	3	10	-0.50	3.55
Rice [**15.2**]	0.63	0.19	0.14	0.04	3	9	-0.43	3.29
Soybean meal [**29.0**]	0.69	0.10	0.17	0.04	3	10	-0.48	3.48
Soybean oil [**14.3**]	0.66	0.16	0.15	0.03	3	11	-0.72	3.15
Wheat [**12.5**]	0.62	0.18	0.15	0.05	3	9	-0.42	2.60
AVERAGE	**0.68**	**0.14**	**0.14**	**0.04**	**3**	**10**	**-0.47**	**3.78**
PERENNIAL AGRICULTURE								
Cocoa [**25.6**]	0.67	0.22	0.10	0.01	3	11	0.03	15.41
Coffee Arabica [**15.7**]	0.61	0.24	0.12	0.04	3	14	0.22	10.38
Coffee Robusta [**15.7**]	0.75	0.17	0.06	0.02	3	13	0.42	15.86
Natural Rubber [**30.6**]	0.31	0.43	0.23	0.03	3	10	-0.36	17.39
Tea [**12.4**]	0.78	0.07	0.12	0.03	3	13	-0.17	9.47
AVERAGE	**0.62**	**0.23**	**0.13**	**0.03**	**3**	**12**	**-0.03**	**14.56**
ALL AVERAGE	*0.47*	*0.32*	*0.17*	*0.04*	*3*	*11*	*0.10*	*6.21*

Source: World Bank.
Note: Description of terms appear in the text.

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Commodity Market
Developments and Outlook

Energy

Rebounding oil prices helped push up energy prices by one-third in 2020Q3, partially reversing a sharp fall in the previous quarter when energy demand plunged as a result of the COVID-19 pandemic. Notwithstanding steep production cuts, the recovery in oil prices has stalled recently amid concerns about renewed COVID-19 infections and their impact on oil consumption. Oil prices are expected to average $44/bbl in 2021, up from a projected $41/bbl in 2020. Natural gas prices are projected to rise in 2021 as consumption recovers in line with the global economy. In contrast, coal prices are expected to be broadly flat as the transition away from coal continues. The main risk to the forecast is the duration of the pandemic, including an intensifying second COVID-19 wave in the Northern Hemisphere and the speed at which a vaccine is developed and distributed.

Crude oil

Recent developments

Crude oil prices were nearly 40 percent higher, on average, in 2020Q3 (q/q), although they remain around 30 percent below their pre-pandemic levels. After plunging in March and April, crude oil prices saw a robust recovery in May and June (figure 2.A). The recovery in prices was driven by a sharp reduction in production, especially by OPEC+, as well as a modest recovery in consumption as lockdown measures were eased and travel and transport began to pick up (figure 2.B). Prices have been broadly flat since then, averaging $42/bbl in 2020Q3, only slightly above their level in June. Prices fell a little in September and into October as worries about a second wave of the pandemic in the Northern Hemisphere intensified.

Global consumption of crude oil plummeted in 2020Q2 by 16 percent (y/y) as a result of COVID-19 lockdown measures and reduced mobility. These disruptions to transport and travel had a disproportionately large impact on oil consumption since transport fuels account for about two-thirds of global oil consumption. The fall in demand was broad-based, with particularly large

FIGURE 2 Oil market developments

After rebounding from April lows, oil prices averaged nearly 40 percent higher in the third quarter of 2020 (q/q). Prices remain nearly one-third lower than pre-pandemic levels. The recovery in prices was driven by a steep fall in production, particularly by OPEC+ countries. Outside of China, demand remains lower than pre-pandemic levels and is expected to only gradually recover through the rest of this year. The weakness in demand is expected to be focused in jet fuel, in contrast to gasoline and diesel which are expected to recover much of their earlier declines.

A. Crude oil prices
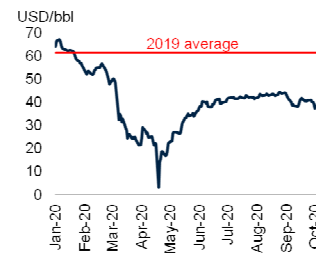
B. Global oil consumption and production
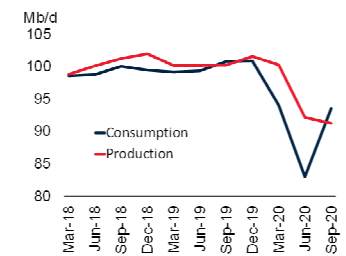
C. Oil consumption growth, by geography
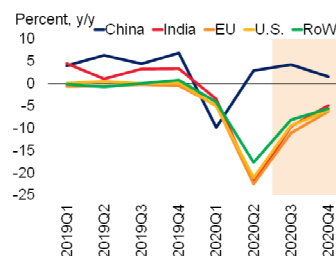
D. Oil consumption growth, by sector
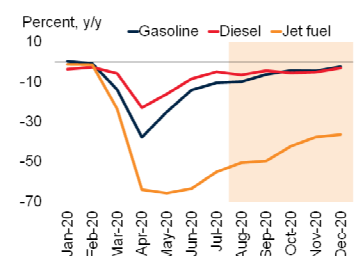
Source: Bloomberg; International Energy Agency; World Bank.
A. Simple average of Brent, Dubai, and WTI.
B. Quarterly averages. Consumption in September 2020 shows the International Energy Agency's estimate for 2020Q3 based on available data.
C. "RoW" refers to rest of world.
D. OECD countries only.
C.D. Shaded area indicates IEA estimates and forecast.
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declines in EU countries (figure 2.C). A notable exception was China, where oil consumption fell slightly in 2020Q1 but has since recovered amid rebounding activity and stockpiling, with consumption in 2020Q2 higher than the previous year. The strength in consumption in China looks set to continue, with imports of crude oil in September up nearly 18 percent from the previous year. Outside of China, oil consumption has started to recover as lockdown measures are lifted. This is expected to continue, albeit gradually. For 2020 as a whole, demand is expected to be around 8 percent lower than in 2019, according to the

FIGURE 3 Oil supply

Historically large production cuts by OPEC+ of 9.7mb/d caused oil production to plunge in May through July, before increasing slightly in August as the cuts were reduced. Crude oil production also fell sharply in the United States and Canada. The U.S. rig count fell to a record low where it has now stabilized, and new drilling activity is unlikely to see a material increase without a substantial rise in prices.

A. OPEC+ crude oil production
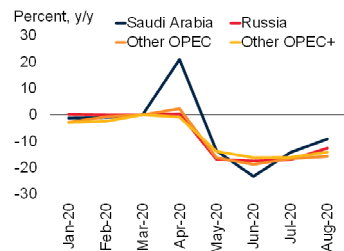
B. Crude oil production in U.S. and Canada
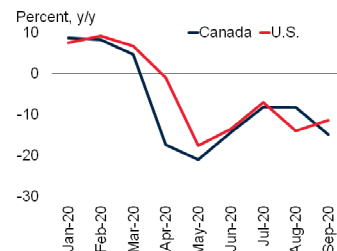
C. U.S. rig count
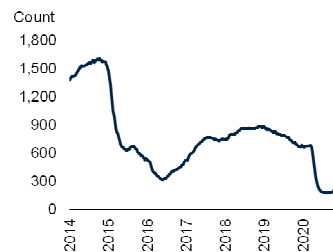
D. Impact of oil prices on U.S. drilling activity
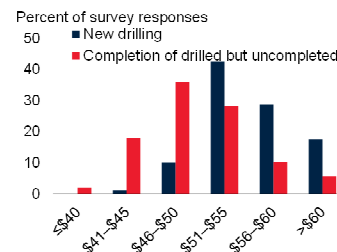
Source: Baker Hughes; EIA; Federal Reserve Bank of Dallas; IEA; OPEC; World Bank.
A. "Other OPEC" includes all current OPEC countries except Saudi Arabia and three countries that are exempt from production cuts: Iran, Libya, and Venezuela. "Other OPEC+" includes Azerbaijan, Bahrain, Brunei Darussalam, Kazakhstan, Malaysia, Oman, South Sudan, and Sudan.
C. Last observation is September 25, 2020.
D. Data from the Dallas Fed Energy Survey 2020 Q3 (Federal Reserve Bank of Dallas). First question asks, "At what West Texas Intermediate crude oil price would you expect the U.S. oil rig count to increase substantially?" Second question asks, "At what West Texas Intermediate crude oil price would you expect a substantial increase in completions of drilled but uncompleted wells (DUCs)?" Questions had 160 and 156 respondents, respectively, from oil and gas companies in the United States.
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International Energy Agency's October report.[1] This is roughly twice as large as any previous one-year decline since at least the second world war (see April 2020 *Commodity Markets Outlook)*.

The fall in consumption in April was focused in transport fuels, particularly jet fuel which fell more than 60 percent as a result of the collapse in air travel (figure 2.C). Diesel consumption was the

least affected transport fuel given its main use is to transport goods by road and ships, which was less affected than air and personal car travel, although it still declined by nearly one-quarter. Gasoline and diesel have seen a relatively robust recovery as goods shipments and passenger journeys have rebounded. While still averaging around 10 percent below 2019 levels in July, both are expected to almost reach pre-pandemic levels by the end of 2020. However, the weakness in jet fuel consumption is expected to be significantly more persistent because of sharply reduced air travel.

Global oil production plummeted by 12 percent in May, falling from 100mb/d to 88mb/d, and has only gradually increased since. Production is now lower than consumption, which has led to a drop in inventories, although they remain at very high levels. The fall was driven by large production cuts by OPEC and their non-OPEC partners (OPEC+), who collectively agreed to production cuts of 9.7mb/d—a reduction of more than one-fifth of their "baseline" levels—before gradually tapering production cuts over the next two years (figure 3.A).[2] Compliance with the cuts so far has been high, particularly compared with previous agreements, with only a couple of countries producing significantly in excess of their quota. The group increased production by 2mb/d in August, in line with their agreed schedules, with the next planned increase in January 2021. However, if the recovery in demand stalls, it is possible that this could be delayed.

Production among non-OPEC countries has also declined rapidly, led by the United States and Canada, where production fell by an unprecedented one-fifth in May (figure 3.B). Individual producers cut production amid plummeting demand and prices, with concerns that excess supply would overwhelm on-land storage capacity. Landlocked producers, notably many U.S. shale producers, are particularly vulnerable to this as

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[1] "Oil Market Report, October 2020." International Energy Agency, Paris.

[2] The actual size of production cuts depends on the definition of "baseline" production. In the first quarter of 2020, Saudi Arabia was producing around 10mb/d but increased production to nearly 12mb/d in April. If comparing production by the group in May relative to March, the total reduction was around 16 percent. If comparing May to April, the reduction was more than 20 percent.

they are less able to access floating storage on tankers. However, while inventories rose sharply, they did not reach maximum capacity. Production in the U.S. and Canada has since partially recovered as shale operators bring back shut-in wells in line with the recovery in demand. In 2020Q3, production in the two countries averaged around 10 percent below pre-pandemic levels, although U.S. production in August was disrupted by the impact of Hurricane Laura.

As a result of the pandemic, investment in 2020 is expected to fall at least 20 percent. For example, the U.S. rig count—a measure of new drilling activity—plummeted by 75 percent to reach an all-time low in August, although it has since seen a modest recovery (figure 3.C). Survey results indicate that most U.S. shale companies do not expect a major increase in new drilling until the price of WTI increases above $50/bbl—$10/bbl above its current level. However, completion of "drilled but uncompleted wells" may be economical at slightly lower prices and could allow for a modest increase in production. Regardless, depressed new drilling, together with the rapid rate of decline of shale oil wells, is expected to lower U.S. production from 11.5mb/d in 2020 to 11.1mb/d in 2021, according to the U.S. Energy Information Administration.[3]

Price forecasts and risks

Outlook. Oil prices are expected to average $44/bbl in 2021, a slight increase from a projected $41/bbl in 2020 but still significantly lower than their 2019 level of $61/bbl. The forecast is slightly above the April projections, primarily reflecting a somewhat improved global growth outlook, as well as a stronger-than-expected supply response.

After dropping by around 8 percent in 2020, oil consumption is expected to continue to recover in 2021, rising by around 6 percent. However, it will remain 5 percent below its trend prior to the pandemic (figure 4.A). Demand will be lower in almost all countries in 2021 than in 2019, with

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[3] "Short-Term Economic Outlook." October 2020. U.S. Energy Information Administration, Washington, DC.

FIGURE 4 Oil market outlook

The COVID-19 pandemic is expected to have a lasting impact on both oil consumption and production. By the end of 2021 consumption is expected to be around 5 percent below its pre-crisis trend, with China the only country where consumption will be higher than in 2019. While non-OPEC output is expected to rise in 2021, production in the United States is forecast to decline further, as low levels of investment in new production are insufficient to offset the rapid decline in output from existing fields. Despite a gradual tapering in production cuts, OPEC+ countries collectively have a significant amount of spare production capacity that is being held off the market.

A. Oil consumption forecast

B. Oil consumption forecast vs 2019

C. Non-OPEC oil production growth forecast

D. Spare production capacity among OPEC+ countries
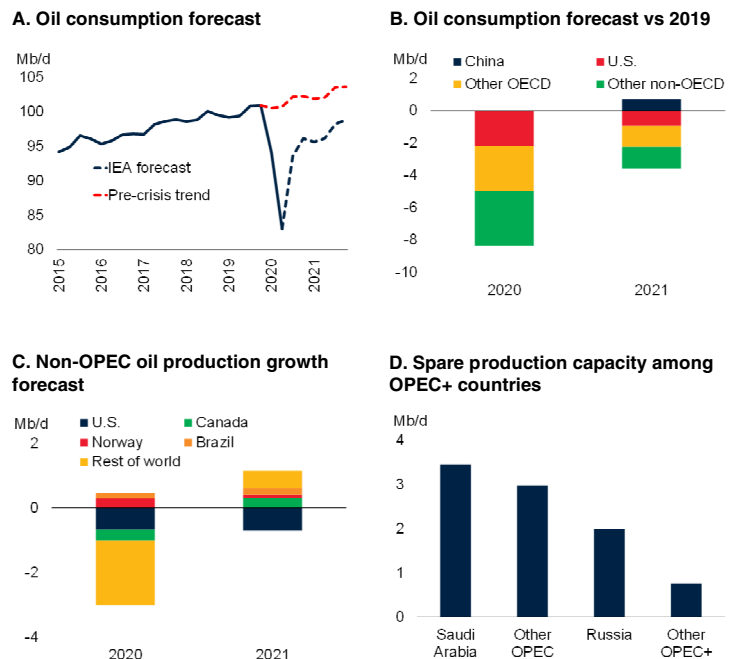
Source: EIA; IEA; World Bank.
A. Dashed blue line shows IEA September forecast for oil consumption. Dashed red line shows a continuation of pre-crisis growth rates.
B. Figure shows oil consumption relative to 2019 levels, using the IEA's September forecast.
C. IEA September forecast.
D. Spare production capacity estimated as the difference between a country's maximum output over the past three years and their August production level. "Other OPEC" includes all current OPEC countries except Saudi Arabia and three countries that are exempt from production cuts: Iran, Libya, and Venezuela. "Other OPEC+" includes Azerbaijan, Bahrain, Brunei Darussalam, Kazakhstan, Malaysia, Oman, South Sudan, and Sudan.
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the notable exception of China (figure 4.B). On the supply side, OPEC+ is expected to ease its production cuts in January, as agreed. Non-OPEC production is also expected to rise, although U.S. output is set to fall due to insufficient investment to offset declines in maturing fields and rapid depletion of shale wells. This is a marked difference from pre-COVID trends; between 2014 and 2019 rising U.S. production accounted for 70 percent of the total increase in global oil production. High levels of inventories are

FIGURE 5 Natural gas and coal

After a sharp fall in the first half of 2020, natural gas prices partially recovered in 2020Q3, particularly European prices. In contrast, coal prices reached new lows. Despite some disruption resulting from the COVID-19 pandemic, liquefied natural gas continues to increase in importance, and accounted for roughly half of all natural gas traded in 2019. Demand for coal fell sharply in 2020 as the COVID-19 pandemic exacerbated an existing transition toward natural gas and renewables in electricity generation. Reflecting this trend, the share of coal in U.S. energy demand was overtaken by renewables for the first time in 2020.

A. Natural gas prices
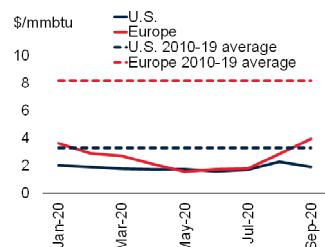
B. Coal prices
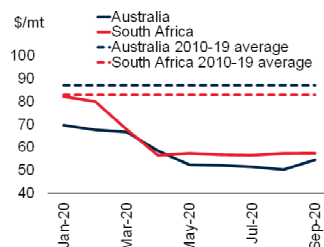
C. Global natural gas trade, by type
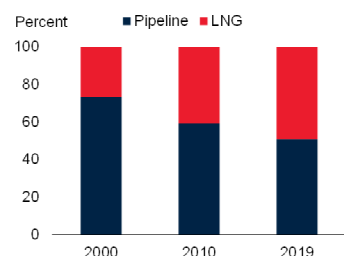
D. U.S. energy consumption, by selected fuel
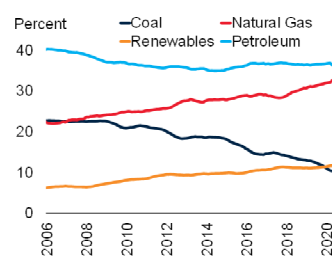
Source: BP Statistical Review; EIA; World Bank
A.B. Last observation is September 2020.
C. Sum of global imports of natural gas.
D. 12-month moving averages of monthly data. Last observation is June 2020. Figure does not show consumption of nuclear energy.
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expected to continue to unwind over the forecast, and will keep oil prices below $50 until 2022. Significant levels of spare production capacity among OPEC+ countries further reduce the likelihood of sharply higher prices.

Risks. Risks to the forecast are skewed to the downside. On the demand side, the greatest risk is the duration and severity of the pandemic. An intensifying second wave in the Northern Hemisphere could lead to renewed lockdowns and reduced mobility, which would affect oil demand

significantly more than other commodities. Delays to the development and distribution of a vaccine could slow the economic recovery and risk leaving deeper scars on the global economy, further reducing demand for oil.

On the supply side there are risks in both directions. Production in Libya has started to recover after falling close to zero as a result of internal geopolitical conflict (Libya's oil output averaged 1.1 mb/d during 2019). To the upside, OPEC+ may choose to extend their production cuts at current levels in January, particularly if the recovery in demand wanes. However, any extension or deepening of cuts is likely to be politically difficult, with many oil-exporting countries facing significant fiscal pressures as a result of the combined impact of the fall in oil revenue and the COVID-19 pandemic. U.S. production could also fall more than expected if investment in new shale wells remains weak.

The pandemic could also have lasting impacts on oil demand through changes in consumer and employment behavior. Air travel could see a permanent reduction, as business travel is curtailed in favor of remote meetings, reducing demand for jet fuel. A shift to working from home could reduce the demand for gasoline, but this may be somewhat offset by increased use of private vehicles if people remain averse to using public transport. Long-term projections for oil demand have been revised down by major organizations as a result of COVID-19 (in part due to weaker economic growth), with some industry scenarios suggesting demand may have already peaked in 2019, although a rapid decline in oil demand is not expected. Several oil companies have announced changes in long-term strategy, including a significant reduction in investment in new hydrocarbon projects.

The long-term impact on prices is less clear-cut. While demand may be lower than previously expected, a sustained reduction in investment in new oil production could result in production shortfalls, particularly if oil demand recovers more rapidly than expected. This could prompt a new price cycle (see Special Focus).

Natural gas and coal

Natural gas prices rose by 18 percent, on average, in 2020Q3 with a particularly sharp increase in European prices (figure 5.A). In contrast, coal prices were broadly flat (figure 5.B). Natural gas prices are now just 5 percent below their pre-pandemic levels, on average, while coal prices remain around 25 percent lower. The pandemic has accelerated existing shifts away from coal toward natural gas and renewables.

Natural gas. Natural gas prices declined steadily through the first half of 2020, with prices reaching record lows in 2020Q2 before recovering in 2020Q3. The COVID-19 pandemic and the associated global recession resulted in a fall in demand for natural gas, although the impact has been much smaller than for oil, given the primary uses of natural gas are in electricity generation, industry, and residential/commercial heating, rather than transport. As prices fell to unprecedented lows, most gas producers cut output, including natural gas output associated with oil production in the United States. U.S. natural gas production and exports have also been disrupted by hurricanes. Demand has started to recover, lifting prices a little in 2020Q3, but global demand is estimated to be 3 percent lower in 2020 relative to 2019, according to the International Energy Agency's 2020 *World Energy Outlook*.[4] Weaker global demand has also lowered trade of liquefied natural gas in 2020. This partially reversed the previous year's surge—especially shipments from the United States and Russia—with LNG accounting for roughly half of all natural gas traded in 2019, up from one-quarter in 2000, which had narrowed global price differentials (figure 5.C).[5]

Coal. After falling more than 20 percent in 2020Q2, coal prices stabilized in 2020Q3, a sharp contrast to crude oil and natural gas prices. The COVID-19 pandemic has accelerated an existing trend of declining coal consumption in favor of cleaner natural gas and renewables, while low natural gas prices accelerated coal-to-gas switching. All major producers reduced production, led by Colombia (in part due to labor disputes), Indonesia, and the United States. Despite rising demand and flat production, China (the world's largest consumer of coal) has had tight import restrictions in place since May. Coal demand is expected to decline 7 percent in 2020, similar to the drop in oil demand. Reflecting these developments, the share of coal in energy consumption in the United States dropped below renewables for the first time in 2020 (figure 5.D).

Outlook. Natural gas prices are expected to see a strong rebound in 2021 after a steep decline in 2020. The recovery is being driven by strong demand as global economic activity strengthens, while production is anticipated to increase only gradually. In contrast, coal prices are expected to stabilize near their current levels. Coal will continue to be impacted by the shift toward renewables and natural gas in electricity generation, although higher natural gas prices next year may increase its relative competitiveness. A key risk to the outlook, as with crude oil, is the duration of the pandemic, although the main channel through which coal and gas will be affected is a deeper or more prolonged recession as they are less affected by lockdown measures than oil. Over the short-to medium term, a concerted effort by governments to implement "green" COVID-19 recovery packages could be beneficial for renewables at the expense of coal (and to a lesser extent, natural gas). A sharp reduction in renewable energy costs over the past decade, particularly for solar, has increased the attractiveness of investing in sustainable energy. Many countries have already announced plans to reach net zero carbon emissions, with the European Union aiming to be carbon neutral by 2050 under its "Green Deal" plan, while China has set a target of 2060. This year, however, more government stimulus has been directed to fossil fuel energy than to supporting a green recovery (OECD 2020).[6]

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[4] "Sustainable Recovery." *World Energy Outlook* special report in collaboration with the International Monetary Fund. International Energy Agency, Paris.

[5] LNG exports in 2019 were led by the U.S. (up 66 percent) and Russia (up 58 percent).

[6] "Making the Green Recovery Work for Jobs, Income and Growth." OECD Policy Responses to Coronavirus (COVID-19), 2020. OECD, Paris.

Agriculture

The World Bank's Agricultural Price Index gained 6 percent in 2020Q3 (q/q), reversing declines earlier in the year. Prices now stand 6 percent higher than a year ago. Most agricultural commodity prices are gaining momentum as end-2020 approaches, driven by supply shortfalls in some oils and meals, strong demand for raw materials, and a depreciation in the U.S. dollar. Concerns of weakening demand and trade restrictions due to COVID-19 have faded. Prices of oils and meals gained most in the quarter due to supply shortfalls, followed by beverages and raw materials. The grain component remained broadly stable. Following a projected increase of nearly 3 percent in 2020, the Agricultural Price Index is expected to gain an additional 1.4 percent in 2021—both upward revisions from the April forecast. Risks to the forecasts emanate from higher energy costs, biofuel policies, emerging La Niña conditions, and macroeconomic uncertainties.

Grains, oils and meals

Recent Developments and Outlook

The World Bank's *Grain Price Index* has been broadly stable since early 2020—down 1 percent in the quarter and up 1 percent from a year ago. According to the U.S. Department of Agriculture's October assessment, global production of the three main grains—wheat, maize, and rice—is projected to increase more than 2 percent this season (September 2020 to August 2021). Consumption is set to grow by 1.6 percent, resulting in a marginal increase in stocks-to-use ratios (an approximate measure of supply relative to demand). These ratios remain at historically high levels for most food commodities, thus easing the risk of large price swings in the event of adverse weather conditions or other shocks.

Wheat prices gained momentum in 2020Q3, following declines earlier in the year, and are 5 percent higher than 2019Q3 (figure 6). Production estimates for the current season point to a new record, following upward crop revisions in Australia, the EU, and Russia, due to favorable growing conditions. Some weather problems,

including drought in Ukraine and frost in Argentina, are not large enough to pose significant threats to the outlook. Global production of wheat is expected to reach 773 mmt (million metric tons) this season, more than 1 percent higher than last season's crop. Global consumption is expected to grow slightly less than 1 percent, pushing the stocks-to-use ratio to 0.43, the highest level in over two decades.

Maize prices, which gained 7 percent in 2020Q3, remain 8 percent lower than a year ago. Although the projection for the 2020-21 global maize crop was revised slightly downward in October, production is expected to be nearly 4 percent higher than a year ago, as growing conditions in all main producing regions, including North and South America, are favorable. Global maize consumption is projected to grow by 2.4 percent, keeping the stocks-to-use ratio at 0.26, very similar to the previous season's ratio.

Rice prices spiked to a 7-year high in April but have since declined. They were down 6 percent in 2020Q3 compared to the previous quarter but remained 17 percent higher than a year ago. The earlier strength in prices followed supply concerns due to adverse weather from key East Asian producers, especially Thailand (world's second largest exporter after India), along with policy announcements including export restrictions. However, growing conditions in key producing countries (including India) improved, while many export restrictions never came into effect. Global rice production and consumption are projected to grow by a modest 1 percent each in the current season, leaving the stocks-to-use ratio largely unchanged at 0.36, a 20-year high.

The World Bank's *Oil and Meal Price Index* increased 14 percent in 2020Q3 and is 17 percent higher than a year ago. The strength in edible oils prices was led by soybeans and palm oil prices (both up 22 percent in the quarter), followed by rapeseed and sunflower oil (up 14 percent each). The higher prices reflect last season's production shortfalls in soybeans and palm oil (down 6.8 percent and 1.5 percent, respectively), current season's shortfalls in sunflower seed and rapeseed oils (down 5.7 percent and 1.8 percent,

respectively), and China's feed demand following the recovery from the African Swine Fever. Because of the high degree of substitution in their uses, supply shortfalls (or production surges) in any edible oil can affect most edible oil prices.

The edible oil production outlook for the current season (October 2020 to September 2021) appears more promising than last season (figure 7). Global output of the 10 major oils (including palm, soybean, and rapeseed, which together account for two-thirds of global output) is expected to grow by 1.7 percent, higher than last season's 1.3 percent growth, but just half the average growth during the past decade. Most of the output growth is expected to come from soybeans (4.5 percent) and palm oil (3 percent).

Global oilseed output for 2020-21 is projected to increase more than 5 percent, mostly due to a 10 percent increase in soybean production. The increase in soybean output reflects a 20 percent expansion in land allocated to its production in the United States, which partially offsets last season's large contraction following tariff-related reductions in imports by China (see discussion in the Agriculture section of the April 2019 CMO). Argentina and Brazil are projected to expand the amount of land allocated to soybean production by 9 and 6 percent, respectively.

Price forecasts and risks

The *Grain Price Index* is expected to remain fairly stable in 2021, following a projected 1 percent increase in 2020. The *Oils and meal* index is set to increase by 2 percent in 2021, after a projected 10 percent gain this year. Overall, the global markets of major food staples have been well-supplied compared to recent history (figure 8). During the past five years, the aggregate stocks-to-use ratio (which includes 12 major grains and edible oils) averaged nearly 0.30, up from less than 0.20 during 2007-11, a period which includes the food price spikes in 2007 and 2011 (see April 2019 CMO discussion on the channels and implications of food price shocks). Furthermore, both indexes have been remarkably stable since 2015 despite major shocks, including trade wars during 2018 (see October 2018 CMO discussion on the

FIGURE 6 **Agricultural price developments**

Following declines during the first half of the year, most agricultural commodity prices gained momentum in 2020Q3, driven by stronger demand due to easing lockdowns, supply shortfalls in some oils and meals, and a depreciation of the U.S. dollar.

A. Agriculture price indexes

B. Commodity index changes, January 2020 to September 2020

C. Wheat and maize prices

D. Soybean and soybean oil prices
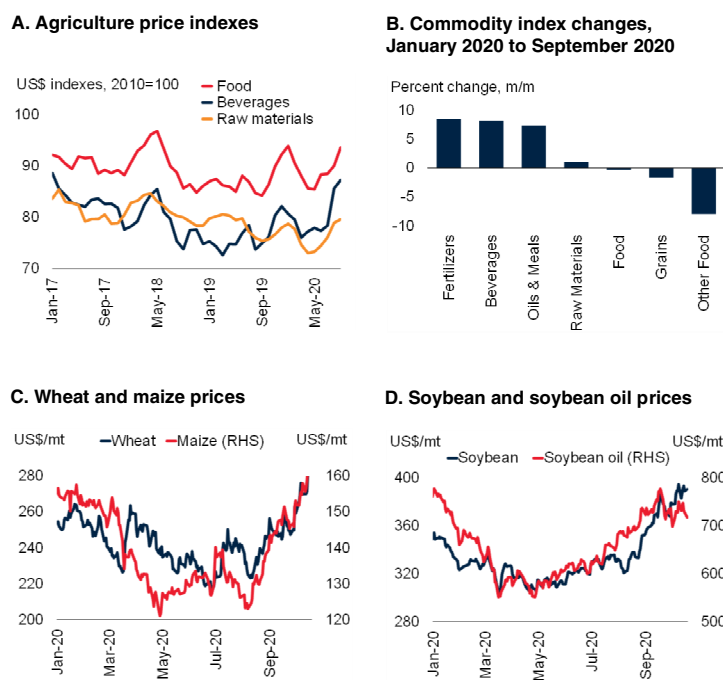
Source: Bloomberg, World Bank.
A.B. Last observation is September 2020.
C.D. Last observation is October 16, 2020.
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implications of trade wars) and COVID-19 this year (see April 2020 CMO discussion on the effects of the pandemic on commodity prices).

Several risks underpin these forecasts: the direction of input prices (notably energy and fertilizers); the path of biofuel production; emerging La Niña weather conditions; and macroeconomic uncertainties.

Energy costs. Energy is an important cost component to most crops, with direct channels (oil prices) and indirect channels (chemical and fertilizer prices). Prices for both energy and fertilizers are expected to rise in 2021 (by 9 percent and 3 percent, respectively), following projected declines in 2020 (by 33 percent and 10 percent, respectively). A slower-than-expected recovery in energy and fertilizer prices could push

FIGURE 7 Supply conditions for grains and edible oils

Global supplies, which include existing stocks and production, are steadily rising for the three key grains (wheat, rice, and maize) and soybeans. Estimates for the 2020-21 season have not been subject to substantial revisions.

A. Grain supply growth
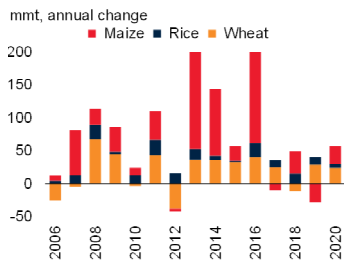
B. Edible oil supply growth
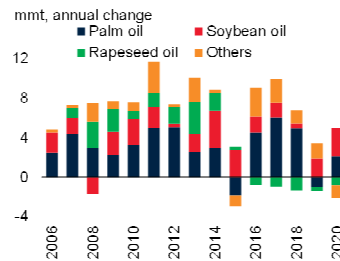
C. Global supply of wheat and rice
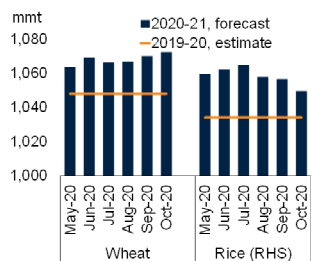
D. Global supply of maize and soybeans
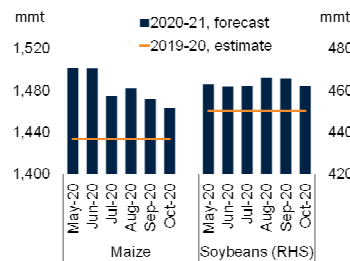
Source: USDA, World Bank.
A.B. Years represent crop season (for example, 2019 refers to 2019-20). Supply is the sum of beginning stocks and production. Data updated on October 9, 2020.
C.D. Blue bars denote revisions to the 2019-20 supply assessment (based on monthly USDA updates); orange lines denote the latest (October 9, 2020) estimate for the 2019-20 season.
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production costs down for grains and oilseeds, thus dragging their prices downward.

Biofuels. The agricultural outlook assumes that biofuels will continue to be a source of demand for key food commodities, including in Brazil, the European Union, and the United States, which together account for nearly two-thirds of global biofuel production. The crops most affected by biofuels are sugarcane and maize (for ethanol production) and edible oils (for biodiesel production). However, the diversion of these crops to biofuels (currently estimated at 4 percent of the world's land allocated to food crops) is not expected to grow further according to recent baseline estimates by the International Energy Agency and the Organization for Economic Co-operation and Development.

La Niña. The El Niño-Southern Oscillation (ENSO) climate phenomena is currently in the La Niña phase. According to the National Oceanic Atmospheric Administration, La Niña conditions began earlier in the year and are expected to continue through the Northern Hemisphere winter (85 percent chance) and into spring 2021 (60 percent chance). La Niña effects on agriculture are typically milder and more mixed than EL Niño (see October 2015 CMO for a discussion on the effects of El Niño on commodity markets). It could increase yields of some crops in the Northern Hemisphere, such as maize and wheat, but also reduce yields of these crops grown in the Southern Hemisphere due to added dryness.

Macroeconomic conditions. Prices for agricultural commodities, especially the ones that are highly traded (such as wheat, rice, and edible oils), may come under more upward pressure if the U.S. dollar continues to weaken. The dollar's weakening—down 5 percent from April to September measured against a broad basket of currencies—may have contributed to the strengthening of some commodity prices, despite upward revisions to the current seasons' crop assessment. Furthermore, currency movements of countries that account for a large share of global trade of particular commodities could also affect the price outlook.

Poverty impact

The fact that global food markets are well-supplied, and prices have been broadly stable, does not imply food price stability and food availability everywhere. At its onset, measures to contain the pandemic's spread created bottlenecks in food availability at the local level due to supply chain disruptions and border closures that restricted food flows and movements of labor.

Food price inflation. With the easing of lockdowns local availability improved and prices moderated, but several places are still facing lingering impacts. In addition, depreciation of some currencies increased the cost of imported food and agricultural inputs, driving up local prices. The net effect has been persistent food price inflation in several EMDEs, especially in

South Asia, Sub-Saharan Africa, and Latin America (Figure 8). Average food price inflation in these regions exceeded 8 percent during January-August 2020 (y/y), compared to a 2.8 percent increase of global food prices during this period.

Undernourishment. Reduced income due to the pandemic combined with higher domestic food prices has taken a toll on poverty and undernourishment. A preliminary assessment by the Food and Agriculture Organization suggests that the pandemic may add between 83 to 132 million people to the global number of under-nourished in 2020—stood at about 690 million people before the pandemic.[1] Much of the increase in undernourishment is driven by income losses due to lockdowns, further exacerbated by food price increases due to currency depreciation (in some importers) and income losses due to export demand collapse (for exporters). The increase in undernourishment comes on top of growing undernourishment trends observed since 2015.

Beverages

The *World Bank's Beverage Price Index* gained 8 percent in 2020Q3 and is almost 11 percent higher than a year ago. The increase was led by coffee and tea prices, though the former has weakened recently (figure 9). The index is expected to post a moderate gain in 2021, following a projected increase of nearly 7 percent in the current year.

Arabica and Robusta coffee prices followed similar paths during the past several months. Both prices experienced moderate declines in 2020Q2 as a result of the pandemic, increased sharply during in the third quarter, and have slid back down in recent months. The recent weakness in coffee prices reflects news of marginally lower global consumption in 2020-21, which came on top of a downward revision to the global consumption estimate for 2019-20 (-1.6 percent compared to an earlier projection of -1.3 percent). Global production, on the other hand, is expected to

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[1] *The State of Food Security and Nutrition in the World 2020.* Food and Agriculture Organization of the United Nations, Rome.

FIGURE 8 Availability of supplies and risks

Overall, markets of major food staples have been well-supplied—stocks-to-use ratios have been remarkably stable at high levels. Risks to the outlook include the direction of input prices, the path of biofuel production, emerging La Niña conditions, and US dollar movements. Despite well-supplied conditions and broadly stable food prices, food price inflation and undernourishment has increased in several regions.

A. Stock-to-use ratios
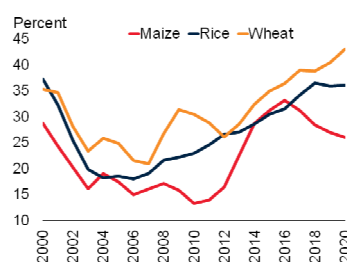
B. Aggregate stock-to-use ratio for food
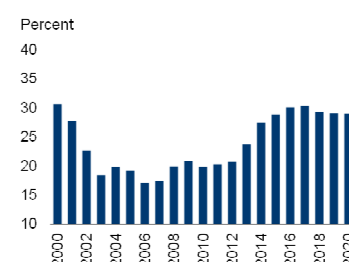
C. Agriculture index and U.S. Dollar Index
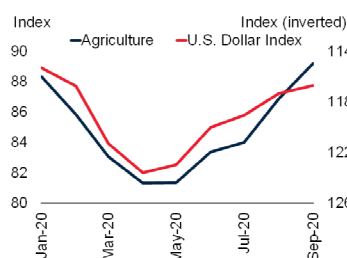
D. Biofuel production
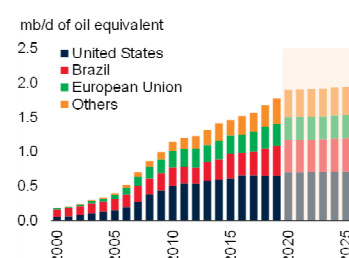
E. Domestic food price inflation and world food prices, Jan-Aug 2020 average (y/y)
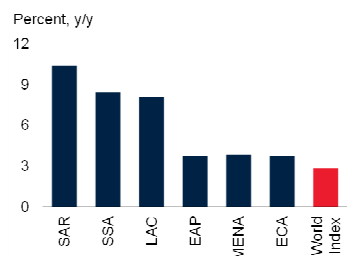
F. Number of undernourished people in the world, 2005-19
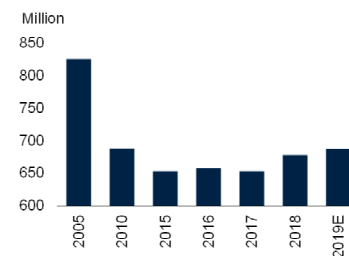
Source: Bloomberg; FAO; USDA; World Bank

A. Years represent crop seasons (for example, 2019 refers to 2019-20). Data updated on October 9, 2020.

B. Stocks include 12 grains and edible oils, aggregated according to calorific content. Updated on October 9, 2020.

C. Last observation is September 2019. January 2006 = 100 for U.S. Dollar Index.

D. "mb/d" denotes million barrels per day. Shaded area (2020-2025) represents IEA and OECD projections.

E. Regional aggregates follow World Bank classifications and are based on averages of over 155 countries. Inflation has been calculated as the year-on-year percent change for each month, averaged over January to August. "World Index" represents the corresponding change of the World Bank's Food Commodity Price Index.

F. The estimates of undernourished people have been taken from the FAO's 2020 edition of *The State of Food Security and Nutrition in the World*.

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FIGURE 9 Beverage commodity market developments

Most beverage commodity prices posted sizeable gains since July but lost momentum recently as news of larger-then-expected production for the current season emerged. Tea prices followed diverse paths—higher prices at the Kolkata action in response to the stringent lockdown and weakening prices at the Mombasa auction due to abundant supplies.

A. Arabica and Robusta coffee prices
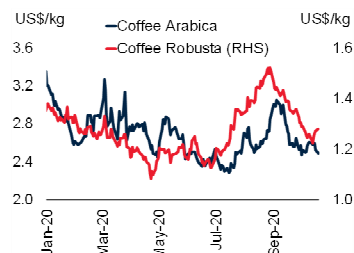
B. Cocoa and tea prices
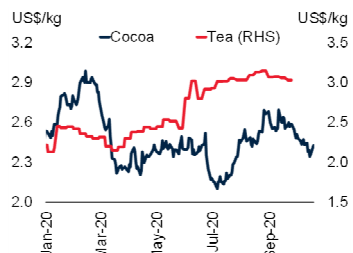
C. Coffee production
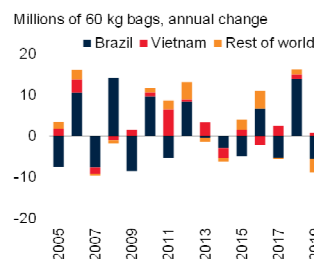
D. Cocoa production
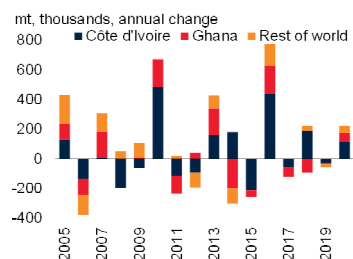
E. Tea prices
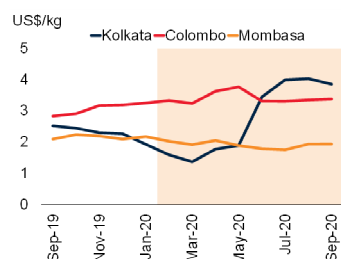
F. Tea production in India
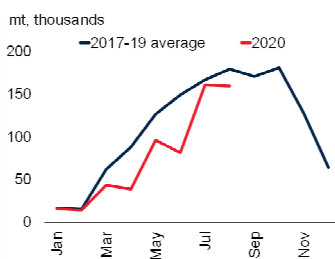
Source: Bloomberg; ICO; ICCO; USDA; World Bank.
A.B. Last observation is October 16, 2020. Tea is the average of Mombasa, Colombo and Kolkata auctions.
C.D. Years represent crop season (for example, 2019 refers to 2019-20). Data updated on October 9, 2020.
E. Shaded area represents the COVID-19 period. Last observation is September 2020.
F. Monthly averages over the period 2017-19 are shown. Last observation is September 2020.
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increase more than 4 percent in 2020-21 following a large Brazilian crop, especially Arabica (from 39 million bags in 2019-20 to 48.5 million bags in 2020-21). Arabica prices are expected to stabilize in 2021, following an estimated gain of 16 percent in 2020. Robusta prices are expected to gain 3 percent in 2021, after declining 7.5 percent in 2020.

Cocoa prices have been broadly stable in the past six months, after tumbling 14 percent in March on concerns about the impact of COVID-19 on demand. Global grindings, a measure of demand, fell 9 percent in 2020Q2 compared to the same quarter of 2019, as consumption of chocolate and other confectionary ingredients dropped during the lockdown. Global cocoa production for the current crop season is projected to be 5 percent higher than 2019-20, led by output increases in Côte d'Ivoire (5 percent) and Ghana (7 percent), the world's largest cocoa suppliers. As cocoa demand picks up, prices are expected to gain 1.6 percent in 2021, following a projected increase of 2.5 percent in 2020.

Tea prices followed diverse trajectories during the pandemic. Prices at the Kolkata (India) auction surged—almost doubling in 2020Q3 compared to a year ago—as Indian tea production declined sharply during the lockdown, especially in Assam and Darjeeling, India's important tea producing regions. In order to keep domestic tea price in check, the government considered temporarily removing its prohibitive 100 percent tea import tariffs, but ultimately decided not to. In contrast, prices at the Mombasa (Kenya) auction declined 2 percent in 2020Q3 (q/q), or 10 percent compared to a year ago, on ample supplies due to favorable weather and weak demand; the impact of COVID-19 on tea plucking and transportation in most East Africa tea producing countries, especially Kenya, was also subdued. Prices at the Colombo (Sri Lanka) auction eased in 2020Q3, but excessive rains and reduced mobility due to the lockdown during the peak harvest have kept prices 15 percent higher than a year ago. As Indian tea supplies recover, tea prices (3-auction average) are expected to remain broadly stable in 2021, following a 7.4 percent projected rise in 2020.

Agricultural raw materials

The World Bank's *Raw Materials Price Index* gained more than 6 percent in 2020Q3 (q/q), led by a sharp rebound in natural rubber prices (figure 10). The index stands 3 percent higher than 2019Q3. Raw material prices are expected to realize a 1.6 percent gain in 2021, following an estimated marginal decline this year.

Cotton prices dropped 20 percent between January and April and have risen moderately since. Despite the gains, prices in 2020Q3 were still 4 percent lower than the previous year. The price collapse earlier in the year reflected a pandemic-related 14 percent contraction in demand during the 2019-20 season (August to July). Meanwhile, production increased marginally, thus exerting upward pressure on the stocks-to-use ratio. Early estimates for the 2020-21 season point to a supply drop of 5 percent (notably by the United States and Brazil) and a broad-based increase in demand, estimated at 6 percent. Notwithstanding the rebalancing, stocks are expected to reach a near-record 9 million tons, thus limiting the price recovery. Cotton prices are expected to gain 3 percent in 2021 following a projected decline of almost 10 percent in 2020.

Natural rubber prices during the pandemic took a similar path to those of cotton: a sharp drop due to the pandemic followed by a partial recovery. Demand for natural rubber collapsed following the pandemic as numerous tire manufacturing facilities closed, first in China and later in Europe and South America (more than two-thirds of natural rubber goes to tire manufacturing). Despite a recovery, global natural rubber demand was down 10 percent during the 12-month period ending September 2020 (y/y). Production during this period declined less than 5 percent, with Thailand and Indonesia (world's two largest suppliers) accounting for more than half of the decline. As demand for tires rebounds, natural rubber prices are expected to increase more than 3 percent in 2021, following a projected marginal decline in 2020.

FIGURE 10 Agricultural raw materials market developments

Following sharp drops in the first half of the year, both cotton and natural rubber prices gained momentum as textile and tire manufacturing facilities began reopening. However, high stocks are likely to put a lid on prices.

A. Agricultural raw material prices

B. Cotton stocks

C. Natural rubber production

D. Natural rubber consumption
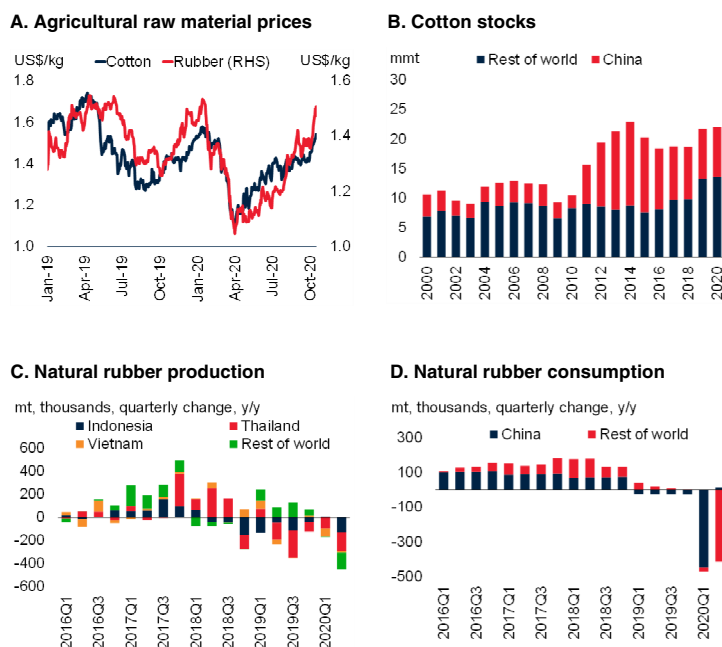
Source: Bloomberg; ICAC; IRSG; World Bank.
A. Last observation is October 16, 2020.
B. "mmt" denotes million metric tons. Years represent crop season (for example, 2019 refers to 2019-20 crop season).
C.D. "mt" denotes metric tons. Last observation is 2020Q2.
Click here to download charts and data.

FIGURE 11 Fertilizer market developments

Phosphate DAP and urea prices surged in the third quarter of 2020, reflecting strong demand and higher input costs, particularly natural gas and sulfur prices. Increased fertilizer use has been supported by a depreciation of the Brazilian real and favorable growing conditions in Australia, India, and North America. Potash prices, on the other hand, continued to fall.

A. Fertilizer prices
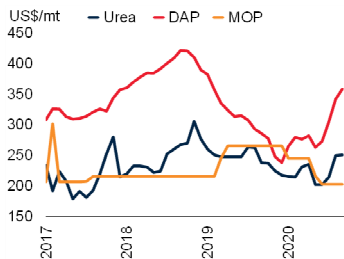
B. Fertilizer input costs
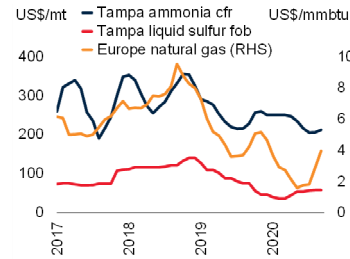
C. China's fertilizer trade
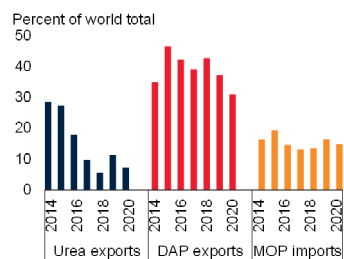
D. Top fertilizer producers in 2018
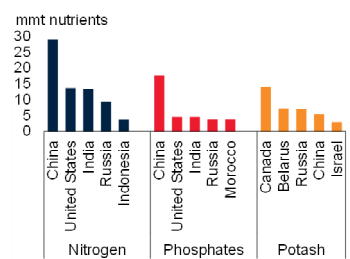
Source: Bloomberg; Food and Agriculture Organization; General Administration of Customs of the People's Republic of China; International Fertilizer Association; World Bank.
A.B. Last observation is September 2020.
B. cfr = cost and freight; fob = free on board.
A.C. DAP = diammonium phosphate. MOP = muriate of potash.
C. Data for 2019 and 2020 (annualized) as a share of 2018 world total. Last observation is August 2020.
C.D. mmt = million metric tons.
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Fertilizers

The World Bank's Fertilizer Price Index increased 7 percent in the third quarter of 2020 (q/q), after six consecutive quarterly declines. However, the increase has not been broad-based. Urea and phosphate prices jumped significantly, driven by robust demand and higher input costs. On the other hand, potash prices fell for the third consecutive quarter. Fertilizer prices are expected to average around 10 percent lower in 2020, while a modest increase of about 3 percent is forecast for 2021. Upside risks to the outlook include supply disruptions, especially the impact of labor immobility due to a prolonged second wave of COVID-19 infections, while downside risks include lower input costs.

DAP (diammonium phosphate) prices surged 23 percent in the third quarter, reflecting production disruptions due to the COVID-19 outbreak in Hubei, China—which accounts for more than one-quarter of the country's DAP capacity. Strong demand from key crop-growing regions helped support prices, notably from favorable weather in Australia, Brazil, India, and North America. Also for Brazil depreciation of the real led to higher domestic crop prices which boosted fertilizer demand. Prices were further lifted by petitions filed by Florida-based Mosaic—the world's largest producer of phosphates—which is seeking duties on phosphate imports from Morocco and Russia, claiming that DAP production in these countries is unfairly subsidized. Higher raw material costs, particularly sulfur, have also supported prices. DAP prices are projected to increase by about 3 percent in 2021, following marginal gains in 2020.

Nitrogen (urea) prices increased nearly 12 percent in the third quarter, recovering from a near three-year low in May. The increase reflected strong demand and higher input costs, notably energy, as prices of several energy benchmarks have doubled since May. In China, major coal producers in April called for production cuts to set a domestic price floor, and prices of anthracite and bituminous coal, the main urea feedstocks in China, have risen in recent months. Urea prices are expected to average 6 percent lower in 2020, given price weakness earlier in the year. In 2021, prices are forecast to increase by about 3 percent.

MOP (muriate of potash, or potassium chloride) prices fell by more than 8 percent in the third quarter, following declines in the first half of the year. Prices have been under pressure since mid-2019 due to oversupply, with the Vancouver f.o.b. benchmark falling to a 13-year low in June. Supply uncertainties following August labor strikes at Belaruskali—the world's second largest potash producer—failed to lift prices. While pandemic-related transportation bottlenecks in China and lower palm oil prices led to reduced fertilizer use in Southeast Asia, favorable growing conditions supported demand in Brazil, India, and North America. Potash prices are expected to gain 4 percent in 2021 as global demand recovers, particularly in China, following a projected decline of 14 percent in 2020.

Metals and minerals

The World Bank's Metals and Minerals Price Index jumped 19.5 percent in the third quarter of 2020 (q/q), erasing losses in the first half of the year. Although prices flattened somewhat during September and early October, the net gains were substantial, especially for copper and iron ore, which surpassed their 2019 highs early in the quarter. The recovery has been boosted by supply disruptions and a swift rebound in economic activity, particularly in China, as COVID-19 restrictions were eased and stimulus measures kicked in. Metal prices are projected to fall by 1 percent in 2020—a sharp upward revision from April's pessimistic forecasts—and increase by 2 percent in 2021. Risks to this outlook include a second wave of COVID-19 infections and sharp U.S. dollar movements. In addition, unforeseen supply side developments could alter the outlook.

Aluminum prices increased 14 percent in the third quarter, after eight consecutive quarterly declines, and climbed above pre-COVID-19 levels in mid-October. The price surge has been supported by strong demand from China, as the country's primary aluminum imports rose eight-fold in August from a year earlier, the largest monthly increase in over a decade. Aluminum demand in the United States has also risen, as brewers shifted from kegs to cans to accommodate consumption at home during lockdowns and limited public gatherings. Global auto sales have also gradually recovered. On the supply side, there were limited cutbacks in aluminum output in China as producers took advantage of lower input costs (alumina and fuel prices), and new capacity continues to come online. Aluminum prices are projected to increase by about 1 percent in 2021, after an expected decline of 7.5 percent in 2020. Despite an anticipated global demand recovery next year, planned capacity additions are expected to keep a lid on prices.

Copper prices jumped 22 percent in the third quarter—the highest quarterly growth since mid-2009—leaping well above pre-COVID-19 levels in September. Prices were driven higher by strong demand and surging imports in China, augmented by strategic government stockpiling. Major pandemic-induced supply disruptions also boosted prices. In Chile, the world's largest copper pro-

FIGURE 12 Metals and minerals market developments

Metal prices jumped in the third quarter of 2020, reflecting a recovery in global industrial demand, largely driven by consumption in China, as COVID-19 restrictions eased and stimulus measures took effect. Supply disruptions, particularly in South America, also supported metals prices. Copper and iron ore prices in September surpassed their 2019 highs. The rebound in metal prices has been swifter in the current COVID-19 episode than during the Global Financial Crisis of 2009.

A. Copper prices and global manufacturing PMI
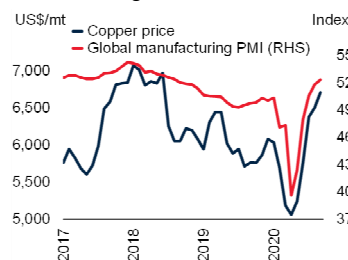
B. Evolution of metal prices
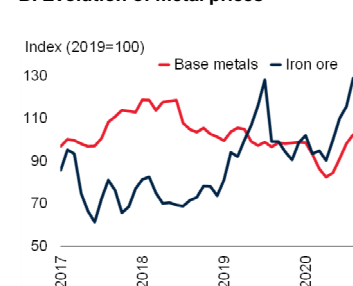
C. Top metal ore producers
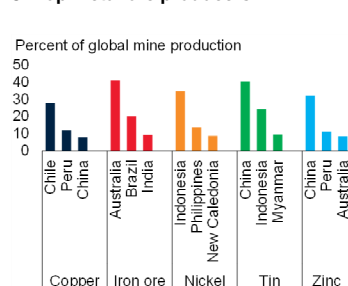
D. Changes in metal demand during crises
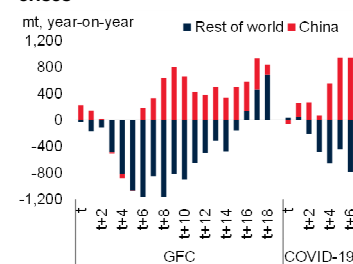
Source: British Geological Survey, Haver Analytics, London Metal Exchange, U.S. Geological Survey, World Bank, World Bureau of Metal Statistics.
A. The PMI (purchasing managers' index) is a leading indicator global manufacturing sector activity. Readings above (below) 50 indicate an expansion (contraction). Last observation is September 2020.
B. "Base metals" refer to aluminum, copper, lead, nickel, tin, and zinc. "dmtu" refers to dry metric ton unit, the agreed-on unit of measure for pricing iron ore. Last observation is September 2020.
C. Mine production data for 2019, except for iron ore (2017).
D. Horizontal axis represents the number of months after crisis start date (t). For the global financial crisis (GFC) episode, "t" is September 2008. For the COVID-19 episode, "t" is January 2020.
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ducer, rising COVID-19 cases and union responses led to temporary suspension of operations at state-owned Codelco. Pandemic-related labor shortages and weather issues also limited production in Panama and Peru. Supply tightness in the copper market is expected to loosen over the next couple years with major new projects or expansions coming online in Chile, the Democratic Republic of Congo, Indonesia, Mongolia, Panama, and Peru. However, recovering demand outside China is expected to keep balances tight next year. Copper prices are forecast to rise 4 percent in 2021, following an expected increase of just under 1 percent in 2020.

Iron ore prices increased by more than 25 percent in the third quarter, following smaller gains in the preceding two quarters. The price surge largely reflected robust demand for steel production in China, which accounts for two-thirds of seaborne iron ore trade, and supply disruptions. Production from Brazil's Vale has been derailed by transport and labor disruptions due to the COVID-19 outbreak, as well as tougher regulatory requirements following the collapse of its Brumadinho dam in early 2019. While recovering, significant growth in Brazilian supply in the short term is unlikely. Iron ore prices are anticipated to remain strong this year and average more than 7 percent higher than in 2019. In 2021, prices are projected to decline by 2 percent as supply from Brazil gradually recovers.

Lead prices gained 12 percent in the third quarter, but were still about 8 percent lower than pre-pandemic levels, after global automobile production regained momentum (four-fifths of lead demand is for lead-acid batteries). Chinese sales of light and commercial vehicles rose 12.8 percent year-on-year in September, the sixth straight monthly increase, while Euro Area car registrations in Q3 were 53 percent higher than the previous quarter. In addition, idled vehicles during the pandemic are prone to battery replacement. Lead prices are forecast to increase by about 2 percent in 2021, after an expected decline of 9 percent in 2020.

Nickel prices continued to increase in the third quarter, rising by nearly 17 percent, up from the nadir in April. Rising nickel consumption, spurred by strong demand from the stainless steel sector in China and concerns about nickel production shortages, have pushed prices higher. Indonesia's export ban on nickel ores, which came into effect in January 2020, has sharply limited raw material supplies for China's production of nickel pig iron (NPI). Meanwhile, supply from the Philippines, the single largest supplier of nickel ore to China, has been hampered by mine closures due to the COVID-19 outbreak. However, China's imports of low-cost NPI from Indonesia (which are not subject to a ban) have risen and are expected to more than offset declines in China's NPI output. Nickel prices are projected to average 3 percent

lower in 2020, before increasing by about 2 percent in 2021.

Tin prices gained more than 12 percent in the third quarter, after five consecutive quarterly declines. Supply disruptions have mainly supported prices, as lockdowns and virus-curtailment measures impacted mine production in several countries (e.g., Bolivia, Myanmar, and Peru). Smelter production in Malaysia and Indonesia has also been affected. The electronics sector, which accounts for about half of tin's consumption, has been somewhat resilient, in part due to increased demand for home electronics as people transitioned to working from home. In addition, China has been stockpiling the metal for its electronics sector. Tin prices are forecast to increase by about 1 percent in 2021, after an expected decline of more than 9 percent in 2020 owing to earlier price weakness.

Zinc prices jumped 19 percent in the third quarter, erasing large losses in the first half of the year. The boost in prices reflects persistent supply disruptions, especially in South America. Bolivia's San Cristobal mine, one of the world's largest producers of zinc, lead, and silver, suspended operations a second time after miners tested positive for COVID-19. Shipment issues in Peru also added to supply concerns. Prices have also been buoyed by strong demand in China, especially for construction and infrastructure amid stimulus spending. Demand outside China in these sectors has fallen sharply, and inventories remain high owing to a slow recovery. Zinc prices, which were already weak before COVID-19 struck, are forecast to average about 14 percent lower in 2020, but 4.5 percent higher in 2021.

These forecasts represent substantial upward revisions relative to April's outlook. However, they are subject to two main price risks. First, the possibility of a second wave of COVID-19 infections may force governments to re-impose stringent measures that would likely dampen industrial demand and depress metal prices. Second, a marked strengthening (weakening) of the U.S. dollar could push metal prices down (up). In addition to these risks, the abatement or intensification of supply side constraints may alter the outlook.

Precious Metals

The World Bank's Precious Metals Index gained 16.5 percent in the third quarter of 2020 (q/q). The surge in prices reflected a flight to safe-haven assets, heightened uncertainty amid the COVID-19 pandemic, and ultralow interest rates as major central banks continued expansionary monetary policies. A weakening of the U.S. dollar and supply disruptions also supported prices. Precious metals are expected to average 27 percent higher this year but fall by about 4 percent in 2021 as the global economy recovers. Upside risks to this outlook arise from a slower-than-anticipated global recovery, such as due to a second wave of COVID-19 infections or an escalation of geopolitical and trade tensions, while downside risks include a resurgence of the U.S. dollar.

Gold prices rose for the eighth consecutive quarter—gaining about 12 percent in 2020Q3—reaching an all-time high of $2,067 an ounce on August 6. Gold benefited from its status as a safe-haven asset during the pandemic and was buoyed by continued monetary easing by major central banks. Demand for exchange-traded funds (ETFs) rose more than three-fold year-on-year in 2020Q2, whereas jewelry demand and official sector buying fell by about one-half. Mine production disruptions, most notably in Mexico, Peru, and South Africa, and reduced gold recycling due to pandemic-induced restrictions on labor movement also supported prices. Prices are expected to average 27.5 percent higher in 2020 and remain broadly stable in 2021 as the global economy recovers.

Silver prices jumped 50 percent in 2020Q3, surpassing $28 an ounce on August 31, a seven-year high. Following a plunge in March to levels unseen since the global financial crisis, the sharp rebound was not only driven by the same factors as gold, but also the recovery in economic activity, given the metal's many industrial applications. Silver's lower price relative to gold enticed investors pushing silver-backed ETF holdings to record levels, almost double the previous record in 2009. The gold-to-silver ratio declined to 75 in September from an all-time peak of 125 in March but was still above its long-term average. Prices are

FIGURE 13 Precious metals market developments

Precious metal prices rose in 2020Q3, led by a 50 percent jump in silver prices, amid safe-haven flows and elevated uncertainty as major central banks maintained their expansionary monetary policy stances in response to the COVID-19 pandemic. Long-term real bond yields falling further into negative territory and a weaker U.S. dollar further supported prices. Record investor inflows into gold-backed exchange-traded funds have more than offset sharp declines in jewelry demand and central bank purchases. A recovery in industrial activity has also supported silver and platinum prices, given the metals' wider use in industry.

A. Precious metals prices
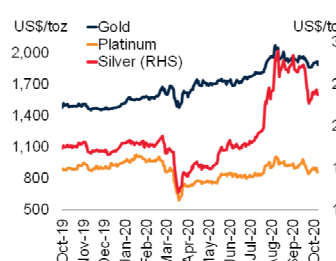
B. Correlation of gold prices with interest rates and U.S. dollar
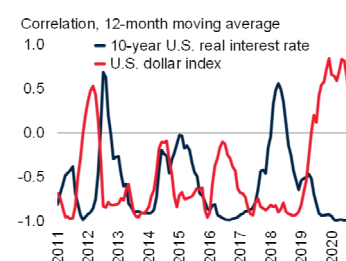
C. Gold demand, selected categories
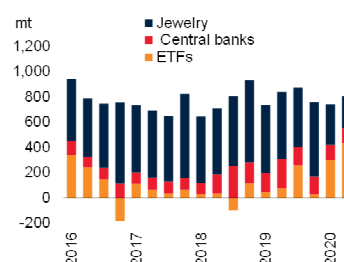
D. Demand for precious metals
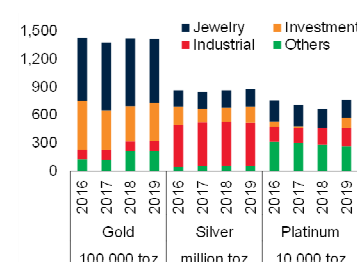
Source: Bloomberg; Federal Reserve Bank of St. Louis; Silver Institute; World Bank; World Gold Council; World Platinum Investment Council.
A. Last observation is October 7, 2020.
B. The interest rate is the 10-year U.S. Treasury inflation-indexed security with constant maturity (not seasonally adjusted). The U.S. dollar index (Jan. 2006=100, not seasonally adjusted) is based on a basket of currencies. Last observation is September 2020.
C. ETFs refer to gold-backed exchange-traded funds.
D. For gold, Others = central bank purchases; for silver, Others = silverware; for platinum, Others = automotive demand.
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expected to average nearly 30 percent higher in 2020, before falling 14 percent in 2021.

Platinum prices increased by 15 percent in 2020Q3, benefiting from the safe haven appeal of precious metals. Prices have also been supported by a recovery in global vehicle demand (platinum is used in catalytic converters) and supply disruptions in South Africa, the world's largest platinum producer. For 2020 as a whole, prices are expected to increase marginally, before remaining broadly stable in 2021.

APPENDIX A

Historical commodity prices
Price forecasts

TABLE A.1 Commodity prices

Commodity	Unit		2018	2019	Q3 2019	Q4 2019	Q1 2020	Q2 2020	Q3 2020	Jul 2020	Aug 2020	Sep 2020
Energy												
Coal, Australia	$/mt	*	107.0	77.9	67.9	67.5	68.0	54.4	52.1	51.6	50.1	54.6
Coal, South Africa	$/mt		97.6	71.9	62.5	72.4	76.7	56.9	57.2	56.6	57.4	57.5
Crude oil, average	$/bbl		68.3	61.4	59.7	60.3	49.1	30.3	42.0	42.1	43.4	40.6
Crude oil, Brent	$/bbl	*	71.1	64.0	61.9	62.7	50.5	31.4	42.7	42.8	44.3	41.1
Crude oil, Dubai	$/bbl	*	69.2	63.2	60.9	61.4	50.7	31.7	42.5	42.6	43.7	41.1
Crude oil, WTI	$/bbl	*	64.8	57.0	56.4	56.9	46.0	27.8	40.9	40.8	42.4	39.6
Natural gas, Index	2010=100		81.9	61.2	54.3	59.5	44.7	35.8	42.3	34.8	45.8	46.4
Natural gas, Europe	$/mmbtu	*	7.68	4.80	3.83	4.94	3.09	1.82	2.87	1.80	2.86	3.95
Natural gas, U.S.	$/mmbtu	*	3.14	2.57	2.39	2.41	1.91	1.70	1.98	1.72	2.29	1.92
Liquefied natural gas, Japan	$/mmbtu	*	10.67	10.56	10.38	10.03	10.00	9.69	6.82	7.79	6.34	6.34
Non-Energy												
Agriculture												
Beverages												
Cocoa	$/kg	**	2.29	2.34	2.31	2.47	2.55	2.27	2.30	2.10	2.35	2.46
Coffee, Arabica	$/kg	**	2.93	2.88	2.87	3.12	3.13	3.28	3.50	3.24	3.60	3.67
Coffee, Robusta	$/kg	**	1.87	1.62	1.58	1.58	1.51	1.42	1.57	1.49	1.60	1.60
Tea, average	$/kg		2.85	2.56	2.58	2.58	2.33	2.57	3.10	3.03	3.16	3.10
Tea, Colombo	$/kg	**	3.61	3.10	2.93	3.11	3.23	3.57	3.37	3.32	3.38	3.40
Tea, Kolkata	$/kg	**	2.36	2.38	2.71	2.37	1.63	2.15	3.98	3.99	4.09	3.86
Tea, Mombasa	$/kg	**	2.58	2.21	2.11	2.27	2.13	1.98	1.94	1.78	2.00	2.05
Food												
Oils and Meals												
Coconut oil	$/mt	**	997	736	700	867	895	861	967	888	981	1,032
Fishmeal	$/mt		1,525	1,448	1,439	1,361	1,380	1,412	1,482	1,487	1,480	1,478
Groundnuts	$/mt		1,354	1,365	1,385	1,352	1,520	1,511	1,467	1,422	1,297	1,683
Groundnut oil	$/mt	**	1,446	1,407	1,451	1,417	1,393	1,609	1,878	1,877	1,877	1,881
Palm oil	$/mt	**	639	601	570	680	725	614	751	694	760	798
Palm kernel oil	$/mt		926	665	596	777	821	710	730	684	739	767
Soybean meal	$/mt	**	405	347	340	347	362	349	379	355	375	406
Soybean oil	$/mt	**	789	765	774	792	808	707	865	821	867	906
Soybeans	$/mt	**	394	369	366	380	378	363	396	381	385	424
Grains												
Barley	$/mt	**	125.9	128.1	133.0	114.8	114.8	91.9	80.4	80.4	80.4	80.4
Maize	$/mt	**	164.4	170.1	170.1	166.8	167.6	146.3	156.0	152.6	149.3	166.1
Rice, Thailand 5%	$/mt	**	420.7	418.0	424.3	425.7	465.0	531.3	497.3	480.0	505.0	507.0
Rice, Thailand 25%	$/mt		408.1	410.4	417.0	418.7	453.0	510.3	480.3	467.0	486.0	488.0
Rice, Thailand A1	$/mt		401.1	393.5	400.3	397.6	440.7	510.1	474.5	459.7	480.9	483.0
Rice, Vietnam 5%	$/mt		406.1	351.9	357.8	330.5	359.6	431.7	451.9	444.2	448.9	462.7
Sorghum	$/mt		168.6	161.5	152.4	163.2	164.9	171.2	184.6	174.9	189.5	189.5
Wheat, U.S. HRW	$/mt	**	209.9	201.7	189.0	204.5	216.3	207.7	198.4	198.4	198.4	198.4
Wheat, U.S. SRW	$/mt		203.9	211.3	201.1	224.7	238.4	210.7	213.8	212.7	208.9	219.7
Other Food												
Bananas, EU	$/kg		0.95	0.88	0.85	0.86	0.89	0.90	0.89	0.86	0.90	0.91
Bananas, U.S.	$/kg	**	1.15	1.14	1.13	1.14	1.18	1.29	1.25	1.27	1.25	1.24
Meat, beef	$/kg	**	4.20	4.76	4.63	5.45	4.74	4.87	4.64	4.70	4.63	4.60
Meat, chicken	$/kg	**	2.24	2.00	1.91	1.89	1.91	1.45	1.50	1.52	1.50	1.47
Meat, sheep	$/kg		5.87	…	…	…	…	…	…	…	…	…
Oranges	$/kg	**	0.79	0.56	0.53	0.52	0.53	0.63	0.63	0.66	0.62	0.61
Shrimp	$/kg		12.24	12.60	13.08	13.68	14.00	12.86	12.31	12.52	12.57	11.86
Sugar, EU	$/kg	**	0.39	0.37	0.36	0.36	0.36	0.36	0.38	0.37	0.39	0.39
Sugar, U.S.	$/kg	**	0.56	0.58	0.57	0.58	0.59	0.57	0.59	0.59	0.60	0.59
Sugar, World	$/kg	**	0.28	0.28	0.27	0.28	0.30	0.24	0.28	0.27	0.29	0.28

TABLE A.1 Commodity prices (*continued*)

Commodity	Unit		2018	2019	Q3 2019	Q4 2019	Q1 2020	Q2 2020	Q3 2020	Jul 2020	Aug 2020	Sep 2020
Raw Materials												
Timber												
Logs, Africa	$/cum		413.5	391.9	389.1	387.6	385.9	385.3	409.3	401.1	414.0	412.8
Logs, S.E. Asia	$/cum	**	269.7	273.1	277.5	273.8	273.3	276.9	280.6	278.9	280.8	282.1
Plywood	¢/sheets		494.7	500.9	508.9	502.3	501.3	507.9	514.6	511.5	515.0	517.3
Sawnwood, Africa	$/cum		640.0	611.8	590.4	616.9	613.7	594.8	619.3	606.8	629.1	621.9
Sawnwood, S.E. Asia	$/cum	**	727.9	695.9	671.6	701.7	698.1	676.9	708.3	692.8	719.5	712.5
Other Raw Materials												
Cotton	$/kg	**	2.01	1.72	1.60	1.65	1.64	1.45	1.54	1.51	1.54	1.56
Rubber, RSS3	$/kg	**	1.57	1.64	1.56	1.55	1.60	1.36	1.68	1.48	1.70	1.86
Rubber, TSR20	$/kg		1.37	1.41	1.35	1.38	1.34	1.13	1.30	1.20	1.32	1.37
Fertilizers												
DAP	$/mt	**	393.4	306.4	295.4	254.5	273.5	272.7	335.1	305.1	341.9	358.4
Phosphate rock	$/mt	**	87.9	88.0	78.5	74.7	72.3	72.9	77.1	75.0	76.9	79.4
Potassium chloride	$/mt	**	215.5	255.5	265.5	265.5	245.0	221.2	202.5	202.5	202.5	202.5
TSP	$/mt	**	346.7	294.5	276.3	259.1	243.0	242.7	273.7	262.2	276.3	282.5
Urea, E. Europe	$/mt	**	249.4	245.3	254.6	226.3	220.3	213.0	238.1	214.4	249.5	250.5
Metals and Minerals												
Aluminum	$/mt	**	2,108	1,794	1,764	1,757	1,691	1,498	1,708	1,644	1,737	1,744
Copper	$/mt	**	6,530	6,010	5,803	5,898	5,634	5,351	6,525	6,372	6,499	6,705
Iron ore	$/dmt	**	69.8	93.8	102.1	88.7	90.8	93.9	117.8	108.5	121.1	123.8
Lead	$/mt	**	2,240	1,997	2,031	2,035	1,844	1,676	1,876	1,818	1,936	1,873
Nickel	$/mt	**	13,114	13,914	15,651	15,349	12,690	12,237	14,266	13,402	14,538	14,857
Tin	$/mt	**	20,145	18,661	17,139	16,693	16,267	15,731	17,690	17,470	17,650	17,951
Zinc	$/mt	**	2,922	2,550	2,350	2,383	2,124	1,968	2,343	2,177	2,410	2,442
Precious Metals												
Gold	$/toz	***	1,269	1,392	1,475	1,482	1,583	1,710	1,912	1,847	1,969	1,922
Platinum	$/toz	***	880	864	883	908	902	788	904	865	940	908
Silver	$/toz	***	15.7	16.2	17.1	17.3	16.9	16.3	24.5	20.6	27.0	25.7
Commodity Price Indexes (2010=100)												
Energy			87.0	76.0	72.9	74.2	60.5	38.8	52.0	51.2	53.8	51.0
Non-energy			85.2	81.7	80.5	82.0	81.3	77.5	84.9	81.9	85.4	87.5
Agriculture			86.7	83.3	81.6	85.0	85.7	82.0	86.7	84.0	86.9	89.2
Beverages			79.1	76.1	75.5	79.5	78.7	77.5	83.7	78.4	85.7	87.2
Food			90.4	87.0	85.3	89.5	90.8	86.5	90.8	88.4	90.4	93.6
Oils and Meals			85.0	77.5	75.9	81.4	84.0	77.7	88.8	83.8	88.2	94.3
Grains			88.8	89.0	88.0	88.7	92.7	90.6	89.3	87.4	88.3	92.1
Other Food			99.1	97.7	95.1	100.8	98.1	94.3	94.8	95.5	95.1	93.9
Raw Materials			81.4	78.0	75.8	76.7	77.0	73.5	78.2	76.1	78.9	79.6
Timber			88.3	85.6	83.7	86.2	85.8	84.2	87.3	85.8	88.4	87.8
Other Raw Materials			73.9	69.8	67.2	66.4	67.3	61.9	68.1	65.4	68.5	70.5
Fertilizers			82.5	81.4	80.8	75.1	71.7	69.3	74.2	69.8	76.0	76.9
Metals and minerals			82.5	78.4	78.1	76.7	73.1	69.1	82.6	79.1	83.5	85.1
Base Metals		****	90.6	81.6	80.0	80.4	75.7	70.2	83.0	80.2	83.6	85.2
Precious Metals			97.2	105.4	111.5	112.2	118.3	125.6	146.3	138.4	152.3	148.1

Source: See Appendix C.
Note: (*) Included in the energy index; (**) Included in the non-energy index; (***) Included in the precious metals index; (****) Metals and Minerals excluding iron ore.
Monthly updates posted at https://www.worldbank.org/commodities.
Download Table A.1 data.

TABLE A.2 Commodity prices forecasts in nominal U.S. dollars

Commodity	Unit	2018	2019	2020	2021	2022	2023	2024	2025	2030
				Forecasts						
Energy										
Coal, Australia	$/mt	107.0	77.9	57.2	57.8	58.0	58.3	58.5	58.8	60.0
Crude oil, avg	$/bbl	68.3	61.4	41.0	44.0	50.0	52.1	54.4	56.7	70.0
Natural gas, Europe	$/mmbtu	7.7	4.8	2.8	4.0	4.3	4.5	4.8	5.1	7.0
Natural gas, U.S.	$/mmbtu	3.1	2.6	1.9	2.6	2.7	2.9	3.0	3.1	4.0
Liquefied natural gas, Japan	$/mmbtu	10.7	10.6	8.6	8.6	8.6	8.6	8.6	8.6	8.5
Non-Energy										
Agriculture										
Beverages										
Cocoa	$/kg	2.29	2.34	2.40	2.44	2.48	2.51	2.55	2.59	2.80
Coffee, Arabica	$/kg	2.93	2.88	3.35	3.35	3.36	3.36	3.37	3.37	3.40
Coffee, Robusta	$/kg	1.87	1.62	1.50	1.54	1.59	1.64	1.68	1.73	2.00
Tea, average	$/kg	2.85	2.56	2.75	2.77	2.80	2.82	2.85	2.87	3.00
Food										
Oils and Meals										
Coconut oil	$/mt	997	736	930	937	944	950	957	964	1,000
Groundnut oil	$/mt	1,446	1,407	1,675	1,687	1,699	1,712	1,724	1,736	1,800
Palm oil	$/mt	639	601	710	723	736	749	763	777	850
Soybean meal	$/mt	405	347	370	376	381	387	393	399	430
Soybean oil	$/mt	789	765	815	828	840	853	867	880	950
Soybeans	$/mt	394	369	390	400	410	420	431	442	500
Grains										
Barley	$/mt	126	128	92	97	103	109	115	121	160
Maize	$/mt	164	170	155	160	165	170	175	180	210
Rice, Thailand, 5%	$/mt	421	418	500	498	496	494	492	490	480
Wheat, U.S., HRW	$/mt	210	202	205	207	210	212	215	217	230
Other Food										
Bananas, U.S.	$/kg	1.15	1.14	1.25	1.23	1.22	1.20	1.19	1.17	1.10
Meat, beef	$/kg	4.20	4.76	4.70	4.71	4.72	4.73	4.74	4.75	4.80
Meat, chicken	$/kg	2.24	2.00	1.60	1.64	1.69	1.74	1.78	1.83	2.10
Oranges	$/kg	0.79	0.56	0.60	0.62	0.64	0.65	0.67	0.69	0.80
Shrimp	$/kg	12.24	12.60	12.75	12.87	12.99	13.11	13.24	13.36	14.00
Sugar, World	$/kg	0.28	0.28	0.28	0.29	0.30	0.31	0.32	0.33	0.38
Raw Materials										
Timber										
Logs, Africa	$/cum	414	392	400	403	406	409	412	415	430
Logs, S.E. Asia	$/cum	270	273	280	283	286	289	292	295	310
Sawnwood, S.E. Asia	$/cum	728	696	700	709	719	729	738	748	800
Other Raw Materials										
Cotton A, Index	$/kg	2.01	1.72	1.55	1.60	1.65	1.70	1.75	1.80	2.10
Rubber, RSS3	$/kg	1.57	1.64	1.62	1.68	1.74	1.80	1.86	1.93	2.30
Tobacco	$/mt	4,866	4,579	4,500	4,529	4,558	4,588	4,618	4,648	4,800
Fertilizers										
DAP	$/mt	393	306	310	318	326	335	343	352	400
Phosphate rock	$/mt	88	88	75	78	81	84	87	91	110
Potassium chloride	$/mt	216	256	220	228	237	246	256	265	320
TSP	$/mt	347	295	260	268	276	284	293	302	350
Urea, E. Europe	$/mt	249	245	230	236	243	249	256	263	300
Metals and Minerals										
Aluminum	$/mt	2,108	1,794	1,660	1,680	1,731	1,784	1,838	1,894	2,200
Copper	$/mt	6,530	6,010	6,050	6,300	6,374	6,449	6,525	6,602	7,000
Iron ore	$/dmt	69.8	93.8	107.0	105.0	103.2	101.5	99.7	98.0	90.0
Lead	$/mt	2,240	1,997	1,820	1,860	1,885	1,911	1,937	1,963	2,100
Nickel	$/mt	13,114	13,914	13,500	13,800	14,213	14,639	15,078	15,530	18,000
Tin	$/mt	20,145	18,661	16,900	17,100	17,673	18,264	18,876	19,508	23,000
Zinc	$/mt	2,922	2,550	2,200	2,300	2,321	2,343	2,365	2,387	2,500
Precious Metals										
Gold	$/toz	1,269	1,392	1,775	1,740	1,698	1,658	1,618	1,580	1,400
Silver	$/toz	15.7	16.2	21.0	18.1	18.1	18.1	18.1	18.1	18.0
Platinum	$/toz	880	864	875	870	906	943	982	1,022	1,250

Source and Note: See Appendix C. Next update: April 2021.
Download forecast data (Tables A.2 - A.4).

TABLE A.3 Commodity prices forecasts in constant U.S. dollars (2010=100)

Commodity	Unit	2018	2019	2020	2021	2022	2023	2024	2025	2030
						Forecasts				
Energy										
Coal, Australia	$/mt	105.2	78.3	57.8	57.5	56.8	56.0	55.3	54.5	50.6
Crude oil, avg	$/bbl	67.2	61.7	41.4	43.8	48.9	50.1	51.4	52.6	59.0
Natural gas, Europe	$/mmbtu	7.5	4.8	2.8	4.0	4.2	4.4	4.6	4.8	5.9
Natural gas, U.S.	$/mmbtu	3.1	2.6	1.9	2.6	2.7	2.8	2.8	2.9	3.4
Liquefied natural gas, Japan	$/mmbtu	10.5	10.6	8.7	8.6	8.4	8.2	8.1	7.9	7.2
Non-Energy										
Agriculture										
Beverages										
Cocoa	$/kg	2.25	2.35	2.42	2.42	2.42	2.42	2.41	2.40	2.36
Coffee, Arabica	$/kg	2.87	2.89	3.38	3.34	3.29	3.23	3.18	3.13	2.87
Coffee, Robusta	$/kg	1.84	1.63	1.52	1.54	1.55	1.57	1.59	1.61	1.69
Tea, average	$/kg	2.80	2.57	2.78	2.76	2.74	2.71	2.69	2.66	2.53
Food										
Oils and Meals										
Coconut oil	$/mt	979	740	939	931	923	914	904	894	843
Groundnut oil	$/mt	1,421	1,415	1,692	1,678	1,662	1,645	1,628	1,610	1,518
Palm oil	$/mt	627	604	717	719	720	720	721	721	717
Soybean meal	$/mt	398	349	374	373	373	372	371	370	363
Soybean oil	$/mt	775	769	823	823	822	820	818	816	801
Soybeans	$/mt	388	371	394	398	401	404	407	410	422
Grains										
Barley	$/mt	124	129	93	97	100	104	108	113	135
Maize	$/mt	162	171	157	159	161	163	165	167	177
Rice, Thailand, 5%	$/mt	413	420	505	495	485	475	465	454	405
Wheat, U.S., HRW	$/mt	206	203	207	206	205	204	203	201	194
Other Food										
Bananas, U.S.	$/kg	1.13	1.15	1.26	1.23	1.19	1.16	1.12	1.09	0.93
Meat, beef	$/kg	4.12	4.79	4.75	4.68	4.62	4.55	4.48	4.41	4.05
Meat, chicken	$/kg	2.20	2.01	1.62	1.63	1.65	1.67	1.68	1.70	1.77
Oranges	$/kg	0.78	0.56	0.61	0.61	0.62	0.63	0.64	0.64	0.67
Shrimp, Mexico	$/kg	12.02	12.67	12.88	12.80	12.70	12.60	12.50	12.39	11.81
Sugar, World	$/kg	0.27	0.28	0.28	0.29	0.29	0.29	0.30	0.30	0.32
Raw Materials										
Timber										
Logs, Africa	$/cum	406	394	404	401	397	393	389	385	363
Logs, S.E. Asia	$/cum	265	275	283	281	279	277	275	273	261
Sawnwood, S.E. Asia	$/cum	715	700	707	705	703	700	697	694	675
Other Raw Materials										
Cotton A	$/kg	1.98	1.73	1.57	1.59	1.61	1.63	1.65	1.67	1.77
Rubber, RSS3	$/kg	1.54	1.65	1.64	1.67	1.70	1.73	1.76	1.79	1.94
Tobacco	$/mt	4,781	4,603	4,546	4,503	4,458	4,410	4,361	4,311	4,049
Fertilizers										
DAP	$/mt	387	308	313	316	319	322	324	327	337
Phosphate rock	$/mt	86	88	76	77	79	81	83	84	93
Potassium chloride	$/mt	212	257	222	227	232	237	241	246	270
TSP	$/mt	341	296	263	266	270	273	277	280	295
Urea, E. Europe	$/mt	245	247	232	235	237	239	242	244	253
Metals and Minerals										
Aluminum	$/mt	2,072	1,804	1,677	1,670	1,693	1,715	1,736	1,757	1,856
Copper	$/mt	6,416	6,042	6,112	6,264	6,234	6,199	6,163	6,123	5,904
Iron ore	$/dmt	68.5	94.3	108.1	104.4	100.9	97.5	94.2	90.9	75.9
Lead	$/mt	2,201	2,007	1,839	1,849	1,844	1,837	1,829	1,821	1,771
Nickel	$/mt	12,885	13,987	13,638	13,722	13,900	14,072	14,240	14,404	15,182
Tin	$/mt	19,793	18,759	17,073	17,003	17,283	17,557	17,827	18,094	19,400
Zinc	$/mt	2,871	2,564	2,222	2,287	2,270	2,252	2,233	2,214	2,109
Precious Metals										
Gold	$/toz	1,247	1,400	1,793	1,730	1,661	1,594	1,528	1,465	1,181
Silver	$/toz	15.4	16.3	21.2	18.0	17.7	17.4	17.1	16.7	15.2
Platinum	$/toz	864	869	884	865	886	906	927	948	1,054

Source and Note: See Appendix C. Next update: April 2021.
Download forecast data (Tables A.2 - A.4).

TABLE A.4 Commodity price index forecasts (2010=100)

Commodity	2018	2019	Forecasts						
			2020	2021	2022	2023	2024	2025	2030
Nominal U.S. dollars (2010=100)									
Energy	87.0	76.0	51.1	55.9	62.6	65.2	68.0	70.8	87.2
Non-energy commodities	85.2	81.7	82.6	84.0	85.2	86.5	87.8	89.2	96.5
Agriculture	86.7	83.3	85.6	86.8	88.1	89.4	90.8	92.1	99.5
Beverages	79.1	76.1	81.2	82.0	82.9	83.8	84.8	85.7	90.6
Food	90.4	87.0	90.0	91.3	92.6	94.0	95.4	96.9	104.8
Oils and Meals	85.0	77.5	85.4	86.9	88.5	90.1	91.7	93.3	102.1
Grains	88.8	89.0	90.2	91.6	92.9	94.3	95.8	97.3	105.5
Other food	99.1	97.7	95.7	96.8	97.8	98.9	100.0	101.2	107.7
Raw materials	81.4	78.0	77.3	78.6	79.8	81.2	82.5	83.9	91.3
Timber	88.3	85.6	86.5	87.6	88.7	89.8	91.0	92.1	98.1
Other Raw Materials	73.9	69.8	67.2	68.6	70.1	71.7	73.3	74.9	83.8
Fertilizers	82.5	81.4	73.0	75.3	77.7	80.2	82.7	85.3	99.8
Metals and minerals *	82.5	78.4	77.5	79.1	80.1	81.2	82.3	83.5	89.8
Base Metals **	90.6	81.6	78.4	80.7	82.3	83.9	85.6	87.3	96.4
Precious Metals	97.2	105.4	134.3	129.3	126.7	124.2	121.8	119.4	108.4
Constant 2010 U.S. dollars (2010=100), deflated by the MUV Index									
Energy	85.5	76.4	51.6	55.6	61.2	62.7	64.2	65.7	73.5
Non-energy	83.7	82.1	83.4	83.5	83.3	83.1	82.9	82.7	81.4
Agriculture	85.2	83.7	86.5	86.4	86.2	86.0	85.7	85.4	83.9
Beverages	77.7	76.5	82.0	81.6	81.1	80.6	80.0	79.5	76.5
Food	88.9	87.4	90.9	90.7	90.6	90.3	90.1	89.8	88.4
Oils and Meals	83.5	77.9	86.2	86.4	86.5	86.6	86.6	86.6	86.1
Grains	87.2	89.4	91.2	91.0	90.9	90.7	90.4	90.2	89.0
Other food	97.4	98.2	96.7	96.2	95.6	95.0	94.4	93.8	90.8
Raw materials	80.0	78.5	78.1	78.1	78.1	78.0	77.9	77.8	77.0
Timber	86.7	86.0	87.4	87.1	86.8	86.4	85.9	85.4	82.7
Other Raw Materials	72.7	70.2	67.9	68.3	68.6	68.9	69.2	69.5	70.7
Fertilizers	81.1	81.8	73.8	74.9	76.0	77.1	78.1	79.1	84.2
Metals and minerals *	81.1	78.8	78.3	78.6	78.4	78.1	77.8	77.4	75.8
Base Metals **	89.0	82.0	79.2	80.3	80.5	80.7	80.8	80.9	81.3
Precious Metals	95.5	106.0	135.6	128.6	123.9	119.4	115.0	110.7	91.4
Inflation indexes, 2010=100									
MUV index ***	101.8	99.5	99.0	100.6	102.3	104.0	105.9	107.8	118.6
% change per annum	4.6	(2.3)	(0.5)	1.6	1.7	1.7	1.8	1.8	2.0
U.S. GDP deflator	114.2	116.0	118.1	120.5	122.9	125.4	127.9	130.4	144.0
% change per annum	2.1	1.5	1.8	2.0	2.0	2.0	2.0	2.0	2.0

Source: See Appendix C.
Note: (*) Base metals plus iron ore; (**) Includes aluminum, copper, lead, nickel, tin and zinc; (***) MUV is the unit value index of manufacture exports. Next update: April 2021. For other notes see Appendix C.
Download forecast data (Tables A.2 - A.4).

APPENDIX B

Supply-Demand balances

Aluminum

Monthly Prices (US$/mt)

Source: See World Bank Commodities Price Data.
Note: Last observation is September 2020.
Click here to download chart and data.

Annual Prices (US$/mt)

Source: World Bank.
Note: 2020-30 are forecasts.
Click here to download chart and data.

	1970	1980	1990	2000	2010	2016	2017	2018	2019
					(thousand metric tons)				
Bauxite Production									
Australia	9,256	27,179	41,391	53,801	68,535	83,517	89,421	95,948	105,176
Guinea	2,600	13,911	16,150	17,992	17,633	31,365	51,702	59,574	70,173
China	500	1,700	3,655	7,900	36,837	66,158	68,393	68,393	68,400
Brazil	510	4,632	9,749	14,379	32,028	39,244	38,242	32,377	31,938
India	1,370	1,785	4,853	7,562	12,662	24,219	22,776	23,229	22,307
Indonesia	1,223	1,249	1,164	1,151	27,410	1,458	2,900	13,243	16,593
Jamaica	12,010	11,978	10,965	11,127	8,540	8,540	8,245	10,058	9,022
Russia	n/a	n/a	n/a	5,000	5,475	5,432	5,524	5,650	5,572
Saudi Arabia	5	n/a	n/a	0	0	4,768	4,117	3,885	4,781
Kazakhstan	989	n/a	n/a	3,729	5,310	4,802	4,843	6,104	3,812
Vietnam	n/a	n/a	n/a	16	80	1,500	2,700	3,570	3,600
Guyana	3,211	3,052	1,424	2,689	1,083	1,479	1,459	1,926	1,920
Sierra Leone	449	674	1,445	0	1,053	1,369	1,788	1,938	1,884
Others	*n/a*	*n/a*	*n/a*	*13,543*	*12,156*	*13,934*	*10,799*	*8,127*	*8,595*
World	**57,280**	**93,268**	**115,099**	**138,889**	**228,802**	**287,786**	**312,908**	**334,022**	**353,772**
Refined Aluminum Production									
China	127	350	854	2,647	16,244	32,698	35,189	35,802	35,044
Russia	n/a	n/a	n/a	3,258	3,947	3,561	3,742	3,621	3,896
India	963	1,068	1,567	647	1,610	2,733	3,062	2,934	3,524
Canada	963	1,068	1,567	2,373	2,963	3,209	3,212	2,923	2,854
United Arab Emirates	n/a	35	174	536	1,400	2,471	2,600	2,640	2,579
Australia	206	303	1,234	1,761	1,928	1,634	1,488	1,574	1,570
Vietnam	n/a	n/a	n/a	0	12	485	501	1,310	1,374
Bahrain	n/a	126	213	509	851	971	981	1,011	1,365
Norway	530	653	867	1,026	1,090	1,247	1,253	1,295	1,279
United States	3,607	4,654	4,048	3,668	1,728	818	741	897	1,126
Saudi Arabia	5	n/a	n/a	0	0	871	916	932	967
Malaysia	1	n/a	n/a	0	60	620	760	760	760
South Africa	n/a	86	158	683	806	701	716	714	717
Others	*n/a*	*n/a*	*n/a*	*7,196*	*8,922*	*7,808*	*7,727*	*7,553*	*7,231*
World	**9,645**	**16,099**	**19,275**	**24,304**	**41,561**	**59,828**	**62,886**	**63,966**	**64,285**
Refined Consumption									
China	225	550	861	3,352	15,854	32,563	31,908	35,521	35,244
United States	3,488	4,454	4,330	6,161	4,242	5,121	5,615	4,630	4,926
Germany	825	1,272	1,379	1,632	1,912	2,197	2,160	2,139	1,988
India	162	234	433	601	1,475	2,202	2,253	1,750	1,829
Japan	911	1,639	2,414	2,223	2,025	1,742	1,950	1,979	1,765
Vietnam	n/a	n/a	n/a	21	102	150	200	1,253	1,405
Korea, Rep.	15	68	369	823	1,255	1,453	1,420	1,151	1,157
Turkey	14	45	152	211	703	949	961	954	971
Italy	279	458	652	780	857	909	924	951	938
Others	*4,108*	*6,579*	*8,662*	*9,200*	*12,138*	*12,374*	*12,801*	*13,177*	*12,916*
World	**10,027**	**15,298**	**19,252**	**25,004**	**40,563**	**59,659**	**60,192**	**63,504**	**63,140**

Source: British Geological Survey; Metallgesellschaft; U.S. Geological Survey; World Bureau of Metals Statistics; World Bank.
Note: n/a implies data not available.

Bananas

Monthly Prices (US$/kg)

Source: See World Bank Commodities Price Data.
Note: Last observation is September 2020.
Click here to download chart and data.

Annual Prices (US$/kg)
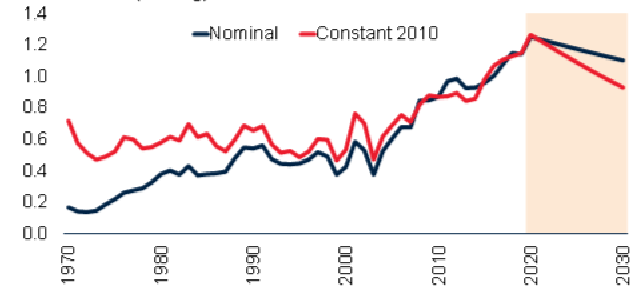
Source: World Bank.
Note: 2020-30 are forecasts.
Click here to download chart and data.

	1970	1980	1990	2000	2010	2015	2016	2017	2018
					(thousand metric tonnes)				
Exports									
Ecuador	1,246	1,291	2,157	3,994	5,156	6,070	5,974	6,415	6,554
Philippines	107	923	840	1,600	1,590	1,223	1,397	2,668	3,388
Costa Rica	856	973	1,434	2,079	1,909	1,974	2,365	2,525	2,484
Guatemala	200	371	360	802	1,388	2,152	2,238	2,343	2,361
Colombia	262	692	1,148	1,564	1,692	1,589	1,842	1,885	1,748
Belgium	n/a	n/a	n/a	967	1,219	1,129	1,130	1,284	1,156
Netherlands	1	7	43	49	136	440	506	684	804
Honduras	799	973	781	375	471	692	659	605	633
United States	191	205	337	400	503	568	573	594	584
Mexico	1	16	154	81	176	417	448	561	552
Côte d'Ivoire	140	122	94	243	266	305	364	387	377
Panama	600	504	745	489	271	268	250	288	298
France	0	3	26	242	322	287	253	250	250
Germany	5	3	29	105	384	370	357	343	247
Peru	0	0	0	0	1	191	202	203	232
Cameroon	50	65	78	238	238	283	295	276	212
Vietnam	3	8	3	5	32	12	33	51	148
Kuwait	1	1	1	0	0	85	41	69	145
Nicaragua	6	121	92	44	20	77	104	113	136
Others	*1,050*	*495*	*707*	*1,058*	*1,715*	*1,538*	*1,920*	*1,829*	*1,912*
World	**5,519**	**6,772**	**9,030**	**14,336**	**17,491**	**19,668**	**20,954**	**23,374**	**24,222**
Imports									
United States	1,846	2,423	3,099	4,031	4,115	4,633	4,597	4,814	4,778
China	29	21	48	647	739	1,146	958	1,113	1,619
Russia	n/a	n/a	n/a	503	1,068	1,227	1,356	1,544	1,556
Belgium	n/a	n/a	n/a	1,027	1,351	1,219	1,282	1,406	1,327
Germany	548	614	1,232	1,027	1,351	1,219	1,282	1,406	1,327
Netherlands	81	114	142	160	222	677	771	909	1,073
United Kingdom	335	322	470	743	979	1,121	1,148	1,133	1,021
Japan	844	726	758	1,079	1,109	959	956	986	1,003
Italy	288	279	429	605	658	679	712	758	777
France	435	446	497	341	550	580	560	669	725
Canada	199	246	341	399	496	562	570	579	572
Poland	3	47	8	285	245	319	305	446	460
Argentina	164	195	73	340	351	427	433	488	449
Korea, Rep.	3	15	22	184	338	363	365	437	427
Spain	n/a	n/a	n/a	143	158	233	274	308	365
Iraq	3	16	1	0	1	88	107	279	306
Iran	2	0	50	200	661	590	450	500	264
Ukraine	n/a	n/a	n/a	60	152	146	192	238	251
Chile	76	87	63	193	176	199	207	222	219
Greece	12	0	46	82	120	139	152	180	219
Czech Republic	n/a	n/a	n/a	105	162	160	193	194	193
Others	*717*	*1,130*	*1,605*	*2,285*	*2,931*	*3,693*	*3,463*	*3,593*	*3,510*
World	**5,584**	**6,680**	**8,881**	**14,436**	**17,934**	**20,379**	**20,331**	**22,203**	**22,442**

Source: FAO.
Note: FAOSTAT (August 26, 2020 update).

Coal

Monthly Prices (US$/mt)

Source: See World Bank Commodities Price Data.
Note: Last observation is September 2020.
Click here to download chart and data.

Annual Prices (US$/mt)
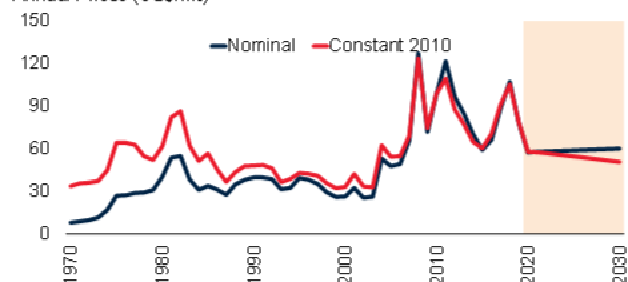
Source: World Bank.
Note: 2020-30 are forecasts.
Click here to download chart and data.

	1981	1990	2000	2005	2010	2016	2017	2018	2019
				(million metric tonnes oil equivalent)					
Production									
China	311	540	707	1242	1665	1691	1748	1829	1906
Indonesia	0	6	45	90	162	269	272	329	359
United States	440	538	544	555	528	351	374	368	342
Australia	68	115	172	215	251	306	299	312	314
India	64	106	152	190	252	284	286	306	304
Russia	n/a	186	122	136	151	194	206	220	220
South Africa	75	100	127	138	144	144	143	143	144
Colombia	3	14	26	41	51	62	62	58	57
Kazakhstan	n/a	57	32	37	47	44	48	51	50
Poland	103	100	72	69	55	52	50	47	45
Germany	149	125	61	57	46	40	39	38	30
Canada	23	40	39	35	35	33	32	28	27
Mongolia	2	3	2	3	11	16	23	25	26
Vietnam	3	3	6	19	25	22	21	23	26
Turkey	7	12	12	11	18	15	15	17	17
Ukraine	n/a	87	36	35	32	18	14	14	14
Czech Republic	43	36	25	24	21	16	15	15	13
Serbia	n/a	0	0	0	7	7	7	7	7
Mexico	2	3	5	6	7	6	7	7	6
Bulgaria	5	5	4	4	5	5	6	5	5
Romania	9	8	6	6	6	4	4	4	4
Thailand	0	4	5	6	5	4	4	4	4
Greece	3	7	8	9	7	4	5	4	3
Others	n/a	168	93	86	69	73	74	90	81
World	1,845	2,264	2,304	3,014	3,602	3,662	3,754	3,942	4,002
Consumption									
China	303	527	706	1324	1749	1889	1893	1906	1950
India	64	110	164	211	290	403	417	443	445
United States	381	459	540	546	499	340	331	317	271
Japan	65	78	95	115	116	120	122	119	117
South Africa	51	67	75	80	93	90	89	90	91
Russia	n/a	182	106	95	91	89	84	87	87
Korea, Rep.	15	24	43	55	77	81	86	87	82
Indonesia	0	3	13	24	39	53	57	68	81
Germany	144	132	85	81	77	77	72	69	55
Vietnam	3	2	5	9	15	28	28	38	49
Poland	91	78	56	55	55	49	50	50	46
Australia	29	38	51	55	52	46	45	44	43
Turkey	7	16	22	22	31	38	39	41	41
Kazakhstan	n/a	39	18	27	33	34	36	41	40
Taiwan, China	4	11	27	36	38	40	41	41	39
Others	n/a	455	349	370	350	390	320	278	336
World	1,818	2,226	2,357	3,110	3,610	3,713	3,728	3,792	3,770

Source: BP Statistical Review (June 2020 update).
Note: n/a implies data not available. Commercial solid fuels only, i.e., bituminous coal and anthracite (hard coal), and lignite and brown (sub-bituminous) coal, and other commercial solid fuels.

Cocoa

Monthly Prices (US$/kg)
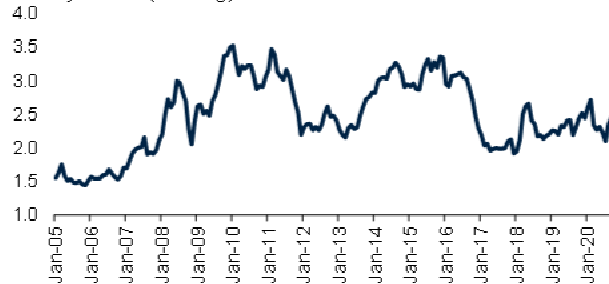
Annual Prices (US$/kg)

Source: See World Bank Commodities Price Data.
Note: Last observation is September 2020.
Click here to download chart and data.
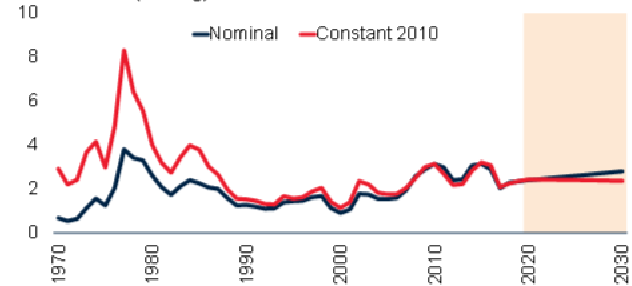
Source: World Bank.
Note: 2020-30 are forecasts.
Click here to download chart and data.

	1970/71	1980/81	1990/91	2000/01	2010/11	2016/17	2017/18	2018/19	2019/20
				(thousand metric tons)					
Production									
Côte d'Ivoire	180	417	804	1,212	1,511	2,020	1,964	2,154	2,130
Ghana	406	258	293	395	1,025	969	905	812	802
Ecuador	72	87	111	89	161	300	287	322	328
Cameroon	112	117	115	133	229	246	250	280	290
Nigeria	305	156	160	180	240	245	250	270	250
Indonesia	2	12	150	385	440	290	240	220	200
Brazil	182	353	368	163	200	174	204	176	190
Peru	2	7	11	17	54	116	134	130	125
Dominican Republic	35	35	42	45	54	57	85	75	75
Others	*233*	*252*	*452*	*233*	*396*	*352*	*330*	*341*	*335*
World	**1,528**	**1,694**	**2,507**	**2,852**	**4,309**	**4,768**	**4,648**	**4,780**	**4,724**
Grindings									
Côte d'Ivoire	35	60	118	285	361	577	559	605	610
Netherlands	116	140	268	452	540	565	585	600	590
Indonesia	1	10	32	83	190	455	483	487	480
Germany	151	180	294	227	439	410	448	445	430
United States	279	186	268	445	401	390	385	400	380
Malaysia	n/a	n/a	n/a	n/a	n/a	216	236	327	330
Ghana	48	27	30	70	212	250	310	320	300
Others	*801*	*964*	*1,315*	*1,480*	*1,796*	*1,530*	*1,578*	*1,600*	*1,515*
World	**1,431**	**1,566**	**2,325**	**3,041**	**3,938**	**4,394**	**4,585**	**4,784**	**4,635**
Exports									
Côte d'Ivoire	138	406	688	903	1,079	1,562	1,531	1,699	n/a
Ghana	348	182	245	307	694	611	525	650	n/a
Nigeria	216	76	142	149	219	236	178	273	n/a
Ecuador	46	19	56	57	136	314	218	355	n/a
Cameroon	75	96	96	102	204	285	288	320	n/a
Malaysia	3	40	148	17	21	90	104	109	n/a
Peru	n/a	n/a	n/a	n/a	n/a	78	66	67	n/a
Others	*294*	*282*	*362*	*451*	*643*	*312*	*274*	*299*	*n/a*
World	**1,119**	**1,100**	**1,737**	**1,987**	**2,996**	**3,487**	**3,183**	**3,773**	**n/a**
Imports									
Netherlands	116	167	267	549	806	906	827	1,181	n/a
Germany	155	187	300	228	434	503	340	386	n/a
United States	269	246	320	355	472	555	411	462	n/a
Malaysia	1	n/a	1	110	320	302	314	364	n/a
Belgium	18	28	50	101	194	301	211	295	n/a
Indonesia	n/a	n/a	n/a	n/a	n/a	190	259	265	n/a
France	42	59	74	157	149	147	153	157	n/a
Turkey	1	2	6	39	71	97	94	111	n/a
Spain	34	37	45	49	88	121	104	105	n/a
Others	*503*	*472*	*699*	*822*	*823*	*768*	*759*	*820*	*n/a*
World Total	**1,139**	**1,198**	**1,761**	**2,409**	**3,357**	**3,892**	**3,472**	**4,146**	**n/a**

Source: Quarterly Bulletin of Cocoa Statistics (Cocoa year 2019/20 Volume XLVI No. 3 update).
Note: n/a implies data not available. 1970/71 data are average of 1968-1972.

Coconut oil and Palm kernel oil

Monthly Prices (US$/mt)

Source: See World Bank Commodities Price Data.
Note: Last observation is September 2020.
Click here to download chart and data.

Annual Prices (US$/mt)
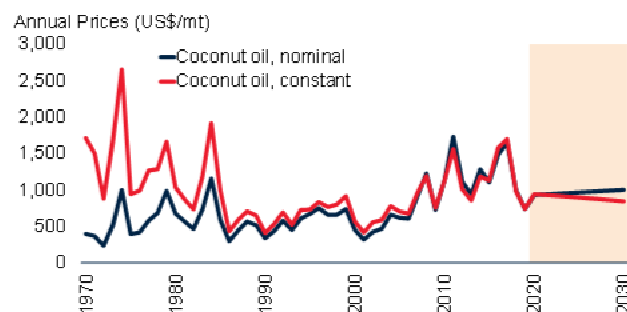
Source: World Bank.
Note: 2020-30 are forecasts.
Click here to download chart and data.

	1970/1971	1980/1981	1990/1991	2000/2001	2010/2011	2017/2018	2018/2019	2019/2020	2020/2021
					(thousand metric tons)				
Coconut oil production									
Philippines	620	1,256	1,263	1,753	1,820	1,698	1,700	1,615	1,575
Indonesia	373	740	795	833	943	1,018	975	930	955
India	223	207	250	448	376	481	474	474	474
Vietnam	13	25	77	149	89	174	180	184	192
Mexico	85	82	77	127	132	129	138	139	139
Bangladesh	0	0	0	17	15	14	83	69	69
Sri Lanka	131	78	67	62	43	29	71	54	42
Others	*820*	*459*	*398*	*212*	*189*	*122*	*135*	*130*	*130*
World	**2,265**	**2,847**	**2,927**	**3,601**	**3,607**	**3,665**	**3,756**	**3,595**	**3,576**
Coconut oil consumption									
Philippines	214	204	348	375	728	655	665	635	675
European Union	498	611	650	739	710	615	640	615	645
United States	397	474	407	446	486	437	420	490	497
India	223	278	255	454	380	470	470	465	470
Indonesia	372	742	585	336	378	367	370	370	375
Vietnam	14	25	72	142	95	170	178	178	193
China	29	24	20	189	197	140	177	150	180
Mexico	85	83	107	138	135	131	135	139	140
Bangladesh	0	9	30	24	19	17	69	74	80
Others	*354*	*466*	*366*	*383*	*440*	*423*	*423*	*447*	*423*
World	**2,186**	**2,916**	**2,840**	**3,226**	**3,568**	**3,425**	**3,547**	**3,563**	**3,678**
Palmkernel oil production									
Indonesia	0	48	305	1,050	2,680	4,545	4,724	4,870	4,958
Malaysia	49	235	784	1,520	2,072	2,225	2,325	2,180	2,258
Thailand	0	2	19	77	245	370	395	410	407
Nigeria	31	75	122	127	305	335	330	330	330
Ghana	14	14	17	16	40	297	333	277	279
Colombia	4	8	20	48	75	142	143	133	152
Guatemala	0	0	0	17	23	80	90	75	75
Others	*277*	*164*	*167*	*239*	*385*	*535*	*529*	*521*	*531*
World	**375**	**546**	**1,434**	**3,094**	**5,825**	**8,529**	**8,869**	**8,796**	**8,990**
Palmkernel oil consumption									
Indonesia	0	42	125	559	1,120	2,700	2,950	3,025	3,100
Malaysia	44	0	154	778	1,401	1,504	1,570	1,443	1,520
China	0	1	15	103	421	701	890	760	850
European Union	242	246	411	446	547	690	693	698	705
United States	43	83	164	116	282	387	321	375	358
Nigeria	5	30	132	128	310	344	345	340	340
Thailand	0	12	19	20	160	285	295	335	320
Ghana	14	14	17	16	31	294	334	275	280
Brazil	0	0	15	47	186	250	260	259	262
Others	*77*	*164*	*294*	*440*	*803*	*935*	*989*	*950*	*981*
World	**425**	**592**	**1,346**	**2,653**	**5,261**	**8,090**	**8,647**	**8,460**	**8,716**

Source: U.S. Department of Agriculture (October 9, 2020 update).
Note: All quantities are for the crop year (beginning October 1). For example, 2001/02 refers to October 2001 to September 2002. European Union includes EU-15 for 1980/81, 1990/91, and 2000/01, and EU-28 for 2010-21.
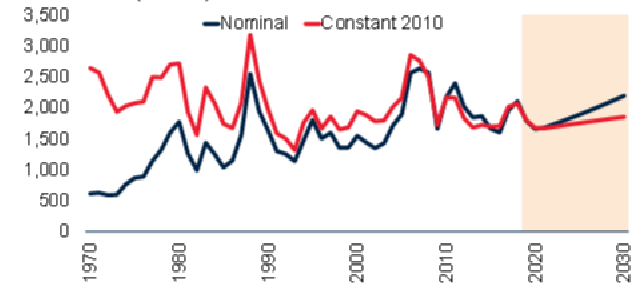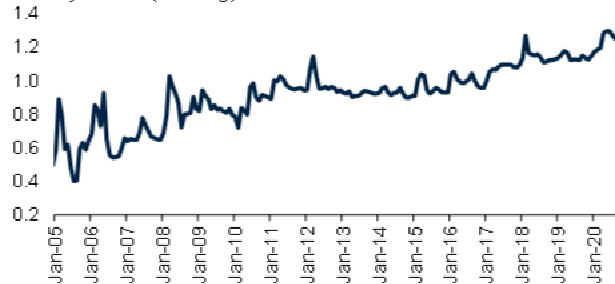
Coffee

Monthly Prices (US$/kg) — Arabica, Robusta

Source: See World Bank Commodities Price Data.
Note: Last observation is September 2020.
Click here to download chart and data.

Annual Prices (US$/kg) — Arabica, Robusta
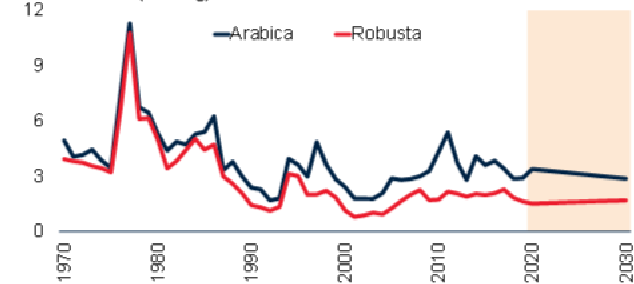
Source: World Bank.
Note: 2020-30 are forecasts.
Click here to download chart and data.

	1970/1971	1980/1981	1990/1991	2000/2001	2010/2011	2017/2018	2018/2019	2019/2020	2020/2021
					(thousand 60kg bags)				
Production									
Brazil	11,000	21,500	31,000	34,100	54,500	50,900	64,800	59,300	67,900
Vietnam	56	77	1,200	15,333	19,415	29,300	30,400	31,300	30,200
Colombia	8,000	13,500	14,500	10,500	8,525	13,825	13,870	13,800	14,100
Indonesia	2,330	5,365	7,480	6,495	9,325	10,400	10,600	10,700	10,300
Ethiopia	2,589	3,264	3,500	2,768	6,125	7,055	7,350	7,450	7,500
Honduras	545	1,265	1,685	2,821	3,975	7,600	7,515	5,600	6,125
India	1,914	1,977	2,970	5,020	5,035	5,266	5,325	4,890	5,310
Uganda	2,667	2,133	2,700	3,097	3,212	4,350	4,800	4,250	4,800
Peru	1,114	1,170	1,170	2,824	4,100	4,375	4,480	4,550	4,450
Mexico	3,200	3,862	4,550	4,800	4,000	4,000	3,550	3,700	3,900
Guatemala	1,965	2,702	3,282	4,564	3,960	3,780	3,770	3,665	3,650
Nicaragua	641	971	460	1,610	1,740	2,730	2,650	2,380	2,265
China	n/a	n/a	n/a	n/a	827	1,925	2,000	1,900	2,000
Malaysia	66	88	75	700	1,100	2,100	2,100	1,900	2,000
Cote d'Ivoire	3,996	6,090	3,300	5,100	1,600	1,250	2,000	1,800	1,800
Costa Rica	1,295	2,140	2,565	2,502	1,575	1,525	1,276	1,472	1,500
Tanzania	909	1,060	763	809	1,050	1,150	1,300	1,250	1,350
Papua New Guinea	401	880	964	1,041	865	810	965	855	900
Kenya	999	1,568	1,455	864	710	715	775	650	650
Others	*15,515*	*16,562*	*16,562*	*12,269*	*9,770*	*5,589*	*5,364*	*5,524*	*5,385*
World	**59,202**	**86,174**	**100,181**	**117,217**	**141,409**	**158,645**	**174,890**	**166,936**	**176,085**
Consumption									
European Union	n/a	n/a	n/a	n/a	41,350	45,700	46,155	45,850	46,300
United States	305	297	229	183	22,383	25,557	27,155	26,722	27,285
Brazil	8,890	7,975	9,000	13,100	19,420	22,420	23,200	23,530	23,530
Japan	n/a	n/a	n/a	n/a	7,015	8,231	8,017	7,967	8,100
Philippines	496	432	810	900	2,825	6,550	6,125	6,000	6,025
Russia	n/a	n/a	n/a	n/a	4,355	4,465	4,945	4,850	5,075
Canada	n/a	n/a	n/a	n/a	4,245	4,750	4,885	4,830	4,850
Indonesia	888	1,228	1,295	1,335	1,650	3,560	4,300	4,900	4,300
Ethiopia	1,170	1,600	1,900	1,667	2,860	3,150	3,193	3,140	3,400
China	n/a	n/a	n/a	n/a	1,106	3,085	3,100	3,250	3,350
Vietnam	31	35	100	417	1,337	2,880	2,940	3,100	3,200
Korea, Rep.	n/a	n/a	n/a	n/a	1,910	2,645	2,770	2,850	2,900
Mexico	1,512	1,500	1,400	978	2,620	2,295	2,580	2,600	2,700
Algeria	n/a	n/a	n/a	n/a	1,815	2,300	2,340	2,040	2,240
Australia	n/a	n/a	n/a	n/a	1,445	1,900	2,040	1,945	2,065
Colombia	1,349	1,825	1,615	1,530	1,120	1,650	1,950	1,700	1,900
Switzerland	n/a	n/a	n/a	n/a	1,570	1,525	1,460	1,425	1,500
Ukraine	n/a	n/a	n/a	n/a	1,685	1,105	1,145	1,225	1,275
Turkey	n/a	n/a	n/a	n/a	340	875	1,175	1,150	1,225
Others	*n/a*	*n/a*	*n/a*	*n/a*	*13,444*	*15,057*	*15,526*	*14,867*	*15,064*
World	**19,408**	**20,438**	**22,265**	**26,303**	**134,495**	**159,700**	**165,001**	**163,941**	**166,284**

Source: U.S. Department of Agriculture (June 12, 2020 update).
Note: n/a implies data not available. European Union includes EU-15 for 1980/81, 1990/91, and 2000/01, and EU-28 for 2010-2021.

Copper

Monthly Prices (US$/mt)

Source: See World Bank Commodities Price Data.
Note: Last observation is September 2020.
Click here to download chart and data.

Annual Prices (US$/mt)

Source: World Bank.
Note: 2020-30 are forecasts.
Click here to download chart and data.

|	1970	1980	1990	2000	2010	2016	2017	2018	2019
					(thousand metric tons)				
Mine Production									
Chile	686	1068	1588	4,602	5,419	5,553	5,504	5,832	5,787
Peru	220	367	323	553	1,247	2,354	2,446	2,437	2,455
China	n/a	165	300	549	1,180	1,851	1,656	1,507	1,601
Congo, Dem. Rep.	386	n/a	n/a	33	378	1,024	1,095	1,225	1,433
United States	1560	1181	1588	1,440	1,129	1,431	1,258	1,216	1,275
Australia	158	244	330	832	870	948	849	911	934
Russia	n/a	n/a	n/a	580	703	685	722	773	773
Mexico	61	175	299	365	270	766	742	751	770
Zambia	684	610	546	249	732	738	803	857	759
Kazakhstan	n/a	n/a	n/a	433	404	596	745	621	711
Canada	610	716	794	634	522	696	597	548	573
Poland	83	343	370	454	425	425	420	402	449
Indonesia	0	59	162	1,006	871	696	666	651	400
Others	*1,755*	*2,811*	*3,027*	*1,486*	*1,988*	*2,627*	*2,630*	*2,613*	*2,758*
World	**6,202**	**7,739**	**9,327**	**13,217**	**16,139**	**20,386**	**20,133**	**20,343**	**20,680**
Refined Production									
China	120	295	558	1,312	4,540	8,436	8,889	8,949	9,447
Chile	647	811	1,192	2,669	3,244	2,613	2,430	2,461	2,269
Japan	603	1,014	1,008	1,437	1,549	1,553	1,488	1,595	1,495
United States	1,489	1,730	2,017	1,802	1,093	1,221	1,079	1,111	1,057
Russia	n/a	n/a	n/a	824	900	867	949	1,020	1,020
Congo, Dem. Rep.	683	n/a	n/a	29	254	707	699	821	842
Korea, Rep.	5	88	192	471	556	607	664	665	638
Germany	134	425	532	709	704	672	695	670	600
Poland	69	357	346	486	547	536	522	502	567
Kazakhstan	n/a	n/a	n/a	226	767	426	466	458	458
Zambia	683	608	426	395	323	413	429	443	477
Mexico	n/a	n/a	n/a	399	247	474	411	422	448
India	n/a	n/a	n/a	265	647	768	845	555	427
Others	*2,295*	*4,147*	*4,403*	*3,737*	*3,841*	*3,927*	*3,899*	*3,948*	*3,871*
World	**6,729**	**9,475**	**10,675**	**14,761**	**19,214**	**23,220**	**23,464**	**23,619**	**23,619**
Refined Consumption									
China	180	286	512	1,869	7,385	11,642	11,790	12,482	12,800
United States	1,860	1,868	2,150	2,979	1,760	1,811	1,771	1,814	1,838
Germany	788	870	1,028	1,309	1,312	1,243	1,180	1,200	1,017
Japan	821	1,158	1,577	1,351	1,060	973	998	1,039	1,011
Korea, Rep.	10	85	324	862	856	759	767	717	633
Italy	274	388	475	674	619	596	635	552	553
India	55	77	135	246	514	499	486	512	527
Turkey	14	33	103	248	369	464	445	482	464
Mexico	54	117	127	464	274	423	361	407	442
Others	*3,236*	*4,502*	*4,349*	*5,094*	*5,197*	*4,772*	*4,900*	*4,718*	*4,591*
World	**7,291**	**9,385**	**10,780**	**15,096**	**19,347**	**23,183**	**23,334**	**23,925**	**23,874**

Source: British Geological Survey; Metallgesellschaft; U.S. Geological Survey; World Bureau of Metals Statistics; World Bank.
Note: n/a implies data not available. Refined production and consumption include significant recycled material.

Cotton

Monthly Prices (US$/kg)

Source: See World Bank Commodities Price Data.
Note: Last observation is September 2020.
Click here to download chart and data.

Annual Prices (US$/kg)
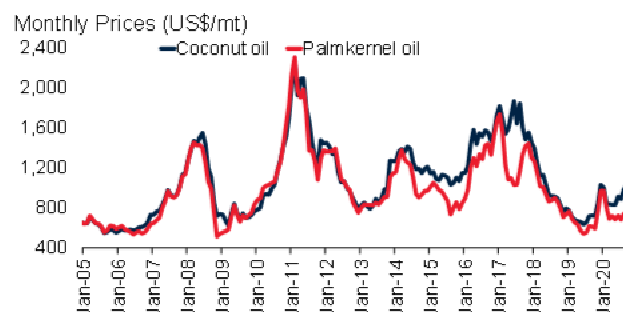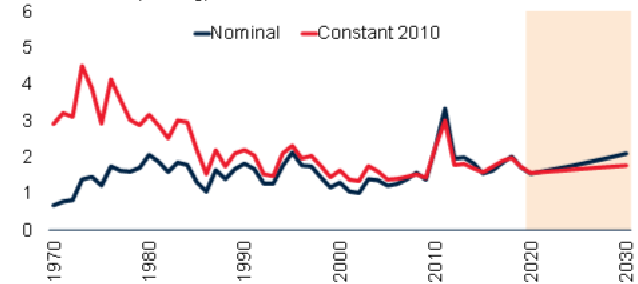

Source: World Bank.
Note: 2020-30 are forecasts.
Click here to download chart and data.

	1970/71	1980/81	1990/91	2000/01	2010/11	2017/18	2018/19	2019/20	2020/21
				(thousand metric tons)					
Production									
India	909	1,322	1,989	2,380	5,865	6,350	5,350	6,069	6,200
China	1,995	2,707	4,508	4,505	6,600	5,890	6,040	5,800	5,850
United States	2,219	2,422	3,376	3,742	3,942	4,555	3,999	4,336	3,715
Brazil	594	623	717	939	1,960	2,006	2,813	2,932	2,507
Pakistan	543	714	1,638	1,816	1,948	1,795	1,670	1,320	1,188
Turkey	400	500	655	880	817	792	977	800	650
Uzbekistan	n/a	1,671	1,593	975	910	800	641	641	641
Australia	19	99	433	804	926	1,058	485	135	361
Greece	110	115	213	421	180	258	300	350	325
Turkmenistan	n/a	n/a	437	187	385	304	300	307	314
Benin	14	6	59	141	60	257	295	311	285
Others	*4,936*	*3,652*	*3,334*	*2,738*	*2,276*	*2,646*	*2,874*	*3,024*	*2,573*
World	**11,740**	**13,831**	**18,951**	**19,527**	**25,869**	**26,711**	**25,744**	**26,025**	**24,609**
Stocks									
China	412	476	1,589	3,755	2,167	9,033	8,885	9,135	8,980
India	376	491	539	922	1,886	1,989	1,567	2,983	3,192
Brazil	321	391	231	755	1,400	1,598	2,374	2,718	3,040
United States	915	581	510	1,306	566	914	1,056	1,579	1,568
Turkey	24	112	150	292	542	918	997	1,236	1,201
Pakistan	55	131	313	608	901	819	754	486	486
Bangladesh	n/a	14	37	50	176	422	422	458	475
Others	*2,502*	*2,955*	*3,391*	*2,934*	*2,825*	*3,041*	*2,635*	*3,094*	*3,025*
World	**4,605**	**5,151**	**6,761**	**10,622**	**10,463**	**18,734**	**18,690**	**21,689**	**21,967**
Exports									
United States	848	1,290	1,697	1,467	3,130	3,545	3,230	3,381	3,179
Brazil	220	21	167	68	435	909	1,310	1,981	1,579
India	34	140	255	24	1,086	1,132	765	700	1,231
Greece	72	13	86	270	147	234	298	320	325
Benin	14	8	58	140	64	196	292	224	300
Australia	4	53	329	849	545	852	791	235	270
Burkina Faso	9	22	73	112	136	236	200	154	255
Others	*2,675*	*2,866*	*2,403*	*2,866*	*2,090*	*2,015*	*2,184*	*1,910*	*2,046*
World	**3,875**	**4,414**	**5,069**	**5,797**	**7,634**	**9,120**	**9,070**	**8,905**	**9,185**
Imports									
China	108	773	480	52	2,609	1,320	2,100	1,750	1,845
Vietnam	33	40	31	84	350	1,521	1,510	1,460	1,484
Bangladesh	n/a	45	80	248	896	1,671	1,544	1,374	1,390
Pakistan	1	1	0	101	314	671	638	627	982
Turkey	1	0	46	381	729	876	762	996	898
Indonesia	36	106	324	570	471	762	685	630	637
India	155	n/a	n/a	350	87	365	392	500	370
Others	*3,862*	*4,363*	*4,739*	*4,031*	*4,957*	*3,119*	*3,742*	*3,163*	*3,423*
World	**4,086**	**4,555**	**5,220**	**5,764**	**7,804**	**8,984**	**9,273**	**8,750**	**9,184**

Source: International Cotton Advisory Committee (October 2020 update).
Note: n/a implies data not available.

Crude oil

Monthly Prices (US$/mt)

Source: See World Bank Commodities Price Data.
Note: Last observation is September 2020.
Click here to download chart and data.

Annual Prices (US$/bbl)
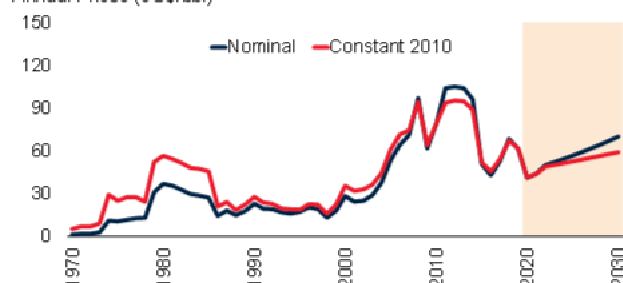
Source: World Bank.
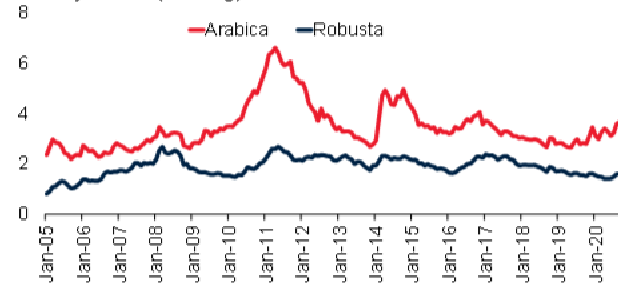Note: 2020-30 are forecasts.
Click here to download chart and data.

	1970	1980	1990	2000	2010	2016	2017	2018	2019
				(thousand barrels per day)					
Production									
United States	11,297	10,170	8,914	7,733	7,558	12,349	13,135	15,360	17,045
Saudi Arabia	3,851	10,270	7,106	9,121	9,865	12,406	11,892	12,261	11,832
Russia	n/a	n/a	10,342	6,583	10,379	11,269	11,255	11,438	11,540
Canada	1,473	1,764	1,968	2,884	3,457	4,655	5,037	5,501	5,651
Iraq	1,549	2,658	2,149	2,613	2,469	4,423	4,538	4,632	4,779
United Arab Emirates	780	1,735	1,985	2,599	2,937	4,038	3,910	3,912	3,998
China	616	2,122	2,778	3,257	4,077	3,999	3,846	3,798	3,836
Iran	3,848	1,479	3,270	3,850	4,421	4,578	5,007	4,801	3,535
Kuwait	3,036	1,757	964	2,244	2,564	3,150	3,009	3,050	2,996
Brazil	167	188	651	1,276	2,125	2,591	2,721	2,679	2,877
Nigeria	1,083	2,058	1,787	2,174	2,533	1,900	1,969	2,007	2,109
Kazakhstan	n/a	n/a	571	740	1,676	1,655	1,838	1,927	1,931
Mexico	487	2,129	2,941	3,456	2,959	2,456	2,224	2,068	1,918
Qatar	363	476	434	851	1,630	1,938	1,882	1,900	1,883
Norway	n/a	528	1,716	3,326	2,133	1,991	1,965	1,845	1,731
Algeria	1,054	1,134	1,367	1,549	1,689	1,577	1,540	1,511	1,486
Angola	103	150	475	746	1,812	1,745	1,671	1,519	1,417
Libya	3,357	1,862	1,424	1,475	1,799	412	929	1,165	1,227
United Kingdom	4	1,676	1,933	2,710	1,358	1,015	1,005	1,092	1,118
Oman	332	285	695	955	865	1,004	971	978	971
Venezuela	3,754	2,228	2,244	3,112	2,842	2,347	2,096	1,475	918
Colombia	226	131	446	687	786	886	854	865	886
India	140	193	715	726	901	874	885	869	826
Others	n/a	n/a	8,150	10,052	10,575	8,815	8,618	8,601	8,683
World	48,075	62,942	65,022	74,718	83,409	92,072	92,798	95,254	95,192
Consumption									
United States	14,710	17,062	16,939	19,594	18,324	18,618	18,883	19,428	19,400
China	554	1,707	2,297	4,697	9,390	12,248	12,842	13,375	14,056
India	390	643	1,210	2,258	3,378	4,632	4,860	5,112	5,271
Japan	3,876	4,989	5,240	5,542	4,434	4,006	3,971	3,855	3,812
Saudi Arabia	435	592	1,136	1,627	3,206	3,875	3,838	3,769	3,788
Russia	n/a	n/a	5,042	2,540	2,878	3,219	3,195	3,282	3,317
Korea, Rep.	162	476	1,041	2,260	2,370	2,771	2,801	2,781	2,760
Canada	1,472	1,898	1,747	2,043	2,333	2,393	2,393	2,443	2,403
Brazil	513	1,080	1,229	1,843	2,271	2,436	2,481	2,377	2,398
Germany	2,765	3,014	2,685	2,741	2,373	2,307	2,374	2,260	2,281
Iran	224	570	1,004	1,404	1,788	1,764	1,808	1,835	2,018
Mexico	441	1,072	1,611	1,952	2,040	1,950	1,883	1,821	1,733
Indonesia	138	386	652	1,148	1,411	1,572	1,660	1,724	1,732
United Kingdom	2,031	1,649	1,751	1,713	1,604	1,597	1,610	1,584	1,545
France	1,860	2,220	1,895	1,986	1,703	1,529	1,539	1,538	1,530
Others	n/a	n/a	20,886	23,138	27,352	29,485	29,872	30,166	30,230
World	45,313	61,408	66,364	76,485	86,856	94,404	96,013	97,348	98,272

Source: BP Statistical Review (June 2020 update).
Note: n/a implies data not available. Production includes crude oil and natural gas liquids but excludes liquid fuels from other sources such as biomass and derivatives of coal and natural gas include in consumption.

Fertilizers—Nitrogen

Monthly Prices (US$/mt)

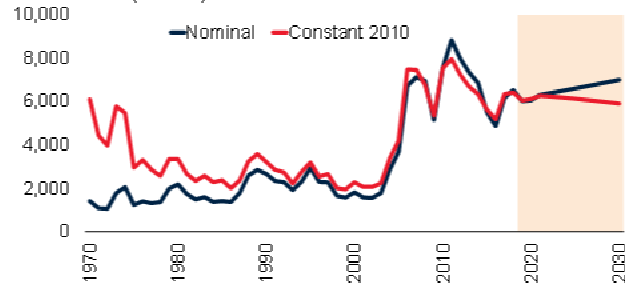Source: See World Bank Commodities Price Data.
Note: Last observation is September 2020.
Click here to download chart and data.

Annual Prices (US$/mt)

Source: World Bank.
Note: 2020-30 are forecasts.
Click here to download chart and data.

	1970	1980	1990	2000	2010	2015	2016	2017	2018
				(thousand tonnes nutrients)					
Production									
China	1,200	9,993	14,637	22,175	35,678	39,073	33,356	30,003	28,943
United States	8,161	12,053	10,816	8,352	9,587	9,011	10,327	11,579	13,617
India	838	2,164	6,993	10,943	12,178	13,476	13,377	13,423	13,337
Russia	n/a	n/a	n/a	5,452	6,544	7,864	8,574	9,116	9,430
Indonesia	45	958	2,462	2,853	3,207	3,475	3,223	3,417	3,660
Egypt	118	401	678	1,441	2,761	1,622	2,672	3,442	3,423
Canada	726	1,755	2,683	3,797	3,364	3,688	3,702	3,386	3,369
Pakistan	140	572	1,120	2,054	2,629	2,888	3,198	2,978	2,973
Iran	31	72	376	726	1,524	1,802	2,181	2,417	2,770
Saudi Arabia	n/a	138	568	1,278	1,680	2,320	2,578	2,526	2,761
Qatar	n/a	295	350	748	1,556	2,518	2,505	2,562	2,507
Poland	1,030	1,290	1,233	1,497	1,509	1,898	1,744	1,765	1,744
Netherlands	957	1,624	1,928	1,300	1,175	1,573	1,594	1,684	1,552
Algeria	22	24	80	91	21	774	1,035	699	1,529
Germany	1,900	2,380	1,165	1,558	1,289	1,225	1,334	1,330	1,398
Morocco	13	33	344	302	553	561	918	1,223	1,135
Vietnam	n/a	15	18	227	479	1,124	955	1,112	1,065
Ukraine	n/a	n/a	3,004	2,130	2,312	1,569	1,731	1,135	1,029
Turkey	82	600	1,026	400	747	867	775	902	999
Others	n/a	n/a	n/a	19,301	19,326	19,870	20,586	21,573	20,264
World	**32,690**	**62,951**	**71,964**	**86,624**	**108,118**	**117,198**	**116,363**	**116,270**	**117,504**
Consumption									
China	2,987	11,787	19,233	22,720	27,703	29,306	26,522	24,581	23,316
India	1,310	3,522	7,566	10,911	16,558	17,372	16,735	16,959	17,638
United States	7,363	10,818	10,239	10,467	11,737	11,683	11,751	11,815	11,298
Brazil	276	886	797	1,998	2,855	3,533	4,366	4,377	4,287
Indonesia	184	851	1,610	1,964	3,045	3,532	3,255	3,509	3,594
Pakistan	264	843	1,472	2,265	3,143	2,672	3,730	3,435	3,267
Canada	323	946	1,158	1,592	1,990	2,537	2,390	2,614	2,613
Russia	n/a	n/a	4,344	960	1,483	1,807	2,149	2,003	2,197
France	1,425	2,146	2,493	2,317	2,337	2,212	2,241	2,243	2,137
Vietnam	166	129	425	1,332	1,250	1,795	1,597	1,648	1,602
Turkey	243	782	1,200	1,276	1,344	1,487	1,896	1,788	1,548
Ukraine	n/a	n/a	1,836	350	650	985	1,197	1,365	1,533
Mexico	406	878	1,346	1,342	1,166	1,372	1,561	1,581	1,500
Germany	1,642	2,303	1,787	1,848	1,786	1,713	1,658	1,497	1,342
Bangladesh	99	266	609	996	1,237	1,258	1,209	1,251	1,321
Australia	123	248	439	951	982	1,347	1,514	1,534	1,263
Egypt	331	554	745	1,084	1,159	1,219	1,281	1,315	1,245
Thailand	50	136	577	922	1,311	1,240	1,225	1,178	1,196
Argentina	41	71	101	481	781	602	992	970	1,154
Others	n/a	n/a	18,801	16,294	17,040	18,526	19,352	20,177	19,656
World	**31,423**	**60,493**	**76,777**	**82,068**	**99,556**	**106,197**	**106,621**	**105,839**	**103,705**

Source: IFA (http://ifadata.fertilizer.org/ucSearch.aspx, September 2019 update).
Note: n/a implies data not available. The statistics are based on the nutrient content. All production statistics are expressed on a calendar-year basis, while consumption statistics are expressed either on a calendar- or on a fertilizer-year basis (see https://www.fertilizer.org for details).

Fertilizers—Phosphate and Potash

Monthly Prices (US$/mt)

Source: See World Bank Commodities Price Data.
Note: Last observation is September 2020.
Click here to download chart and data.

Annual Constant Prices (US$/mt)

Source: World Bank.
Note: 2020-30 are forecasts.
Click here to download chart and data.

	1970	1980	1990	2000	2010	2015	2016	2017	2018
				(thousand tonnes nutrients)					
Phosphate: Production									
China	907	2,607	4,114	6,759	15,998	18,633	17,964	17,736	17,605
United States	4,903	7,437	8,105	7,337	6,297	6,346	6,698	6,509	4,600
India	228	854	2,077	3,751	4,378	4,429	4,560	4,724	4,591
Russia	n/a	n/a	4,943	2,320	2,926	3,018	3,135	3,667	3,760
Morocco	99	174	1,180	1,122	1,875	2,092	3,089	4,023	3,715
Brazil	169	1,623	1,091	1,496	2,004	2,171	2,133	2,111	2,132
Saudi Arabia	n/a	n/a	n/a	159	119	1,328	1,343	1,572	1,477
Others	*14,279*	*20,982*	*14,908*	*9,800*	*8,960*	*8,629*	*8,889*	*9,178*	*8,758*
World	**20,585**	**33,677**	**36,417**	**32,744**	**42,558**	**46,645**	**47,810**	**49,521**	**46,638**
Phosphate: Consumption									
China	907	2,952	5,770	8,664	12,988	13,973	12,682	12,100	12,029
India	305	1,091	3,125	4,248	8,050	6,979	6,705	6,854	6,910
Brazil	416	1,965	1,202	2,544	3,384	4,401	4,974	5,126	5,157
United States	4,345	4,926	3,811	3,862	3,890	3,920	4,091	4,297	3,757
Indonesia	45	274	581	263	755	1,261	1,022	1,338	1,258
Pakistan	31	227	389	675	767	1,007	1,269	1,279	1,153
Canada	326	634	578	634	723	1,025	947	1,080	1,133
Australia	757	853	579	1,107	817	953	880	999	957
Vietnam	77	23	106	501	650	821	767	798	820
Others	*13,666*	*18,967*	*19,782*	*10,313*	*9,822*	*11,012*	*11,740*	*12,509*	*12,395*
World	**20,875**	**31,912**	**35,920**	**32,811**	**41,846**	**45,352**	**45,077**	**46,380**	**45,569**
Potash: Production									
Canada	3,179	7,337	7,005	9,174	10,289	11,500	10,938	12,696	13,990
Belarus	n/a	n/a	4,992	3,372	5,223	6,402	6,110	7,026	7,260
Russia	n/a	n/a	n/a	3,716	6,128	6,840	6,480	7,204	7,050
China	n/a	20	46	275	3,101	5,770	5,710	5,490	5,410
Israel	576	797	1,296	1,748	1,944	2,518	3,168	2,865	2,927
Germany	4,824	6,123	4,967	3,409	2,962	3,055	2,694	2,907	2,702
Jordan	n/a	n/a	842	1,162	1,166	1,413	1,202	1,393	1,486
Chile	21	23	41	408	850	1,229	1,203	1,102	953
United States	2,259	2,052	1,008	916	941	729	489	506	349
Others	*n/a*	*n/a*	*2,641*	*1,962*	*1,246*	*2,100*	*2,404*	*2,317*	*1,752*
World	**17,471**	**27,608**	**22,838**	**26,141**	**33,850**	**41,555**	**40,397**	**43,505**	**43,878**
Potash: Consumption									
China	25	527	1,761	3,364	5,853	10,018	9,911	10,151	9,344
Brazil	307	1,267	1,210	2,760	3,894	5,162	5,728	5,853	6,064
United States	3,827	5,733	4,537	4,469	4,165	4,473	4,872	4,877	4,175
India	199	618	1,309	1,565	3,514	2,402	2,508	2,780	2,680
Indonesia	18	91	310	266	1,250	1,635	1,600	2,006	2,273
Malaysia	61	250	494	650	1,150	1,154	1,249	1,339	1,431
Thailand	10	40	149	251	310	486	510	594	624
Others	*11,317*	*15,301*	*14,552*	*8,745*	*8,059*	*9,347*	*9,834*	*10,245*	*10,677*
World	**15,764**	**23,826**	**24,320**	**22,070**	**28,196**	**34,677**	**36,212**	**37,845**	**37,268**

Source: IFA (http://ifadata.fertilizer.org/ucSearch.aspx, September 2019 update).
Note: n/a implies data not available. The statistics are based on the nutrient content. All production statistics are expressed on a calendar-year basis, while consumption statistics are expressed either on a calendar- or on a fertilizer-year basis (see https://www.fertilizer.org for details).

Gold

Monthly Prices (US$/toz)

Source: See World Bank Commodities Price Data.
Note: Last observation is September 2020.
Click here to download chart and data.

Annual Prices (US$/toz)
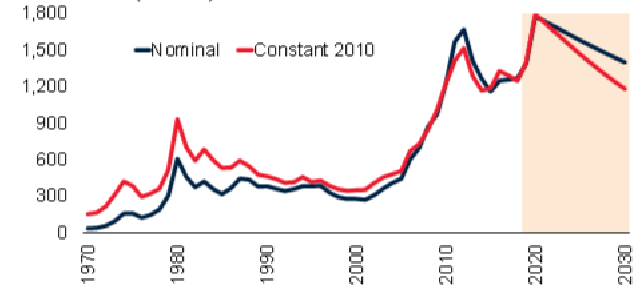
Source: World Bank.
Note: 2020-30 are forecasts.
Click here to download chart and data.

	1990	2000	2005	2010	2015	2016	2017	2018	2019
					(metric tons)				
Production									
China	100	177	255	351	454	454	426	400	380
Australia	242	296	262	257	279	290	295	312	326
Russia	n/a	143	163	195	250	254	271	282	280
United States	294	353	256	230	216	222	230	253	200
Canada	169	156	121	104	163	165	176	193	181
Ghana	17	78	67	92	95	94	102	102	142
Peru	9	133	208	185	178	168	162	155	128
Mexico	9	26	27	79	141	133	127	122	111
Indonesia	11	127	143	184	176	175	154	190	109
South Africa	605	431	295	200	151	146	140	124	105
Kazakhstan	n/a	28	18	30	48	50	60	70	103
Uzbekistan	n/a	88	84	71	83	83	85	83	102
Brazil	102	60	38	68	82	84	80	82	97
Sudan	0	6	5	10	17	16	15	15	94
Papua New Guinea	34	75	68	70	57	63	63	71	74
Argentina	1	26	28	64	64	58	63	63	60
Burkina Faso	3	1	1	25	38	41	49	55	51
Tanzania	n/a	15	49	45	47	50	49	42	48
Mali	2	29	49	44	49	50	52	58	48
Others	*n/a*	*309*	*367*	*469*	*634*	*658*	*661*	*661*	*596*
World	**2,133**	**2,555**	**2,504**	**2,771**	**3,222**	**3,252**	**3,259**	**3,332**	**3,237**
Fabrication									
China	46	213	277	523	920	788	771	785	n/a
India	n/a	704	695	783	812	506	783	701	n/a
United States	n/a	277	219	179	167	172	150	156	n/a
Japan	205	161	165	158	102	99	100	100	n/a
Turkey	n/a	228	303	109	112	101	122	98	n/a
Italy	n/a	522	290	126	94	88	89	84	n/a
Korea, Rep.	n/a	107	83	93	79	78	80	81	n/a
South Africa	18	14	10	25	31	38	50	71	n/a
Iran	n/a	46	41	72	56	35	42	63	n/a
Indonesia	84	99	87	45	50	45	45	49	n/a
Russia	n/a	34	61	61	52	47	47	47	n/a
Germany	n/a	64	52	41	41	37	41	44	n/a
United Arab Emirates	n/a	50	55	33	45	45	56	43	n/a
Switzerland	n/a	54	56	41	41	34	33	36	n/a
Saudi Arabia	n/a	153	125	59	52	40	34	34	n/a
Malaysia	45	86	74	45	39	34	30	30	n/a
Singapore	31	26	30	28	29	27	28	28	n/a
Canada	n/a	25	27	44	40	41	29	25	n/a
Thailand	86	79	69	27	27	24	24	25	n/a
Others	*n/a*	*819*	*608*	*400*	*356*	*315*	*310*	*318*	*n/a*
World	**3,294**	**3,761**	**3,325**	**2,891**	**3,145**	**2,592**	**2,861**	**2,817**	**n/a**

Source: British Geological Survey; GFMS Gold Survey 2019; Thomson Reuters; U.S. Geological Survey; World Bureau of Metals Statistics; World Bank.
Note: n/a implies data not available. Fabrication includes the use of scrap. Fabrication of "Saudi Arabia" includes Saudi Arabia and Yemen in 1995 and 2000.

Iron Ore

Monthly Prices (US$/dmt)

Annual Prices (US$/dmt)
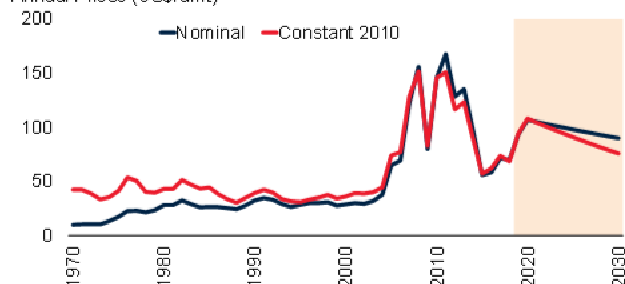
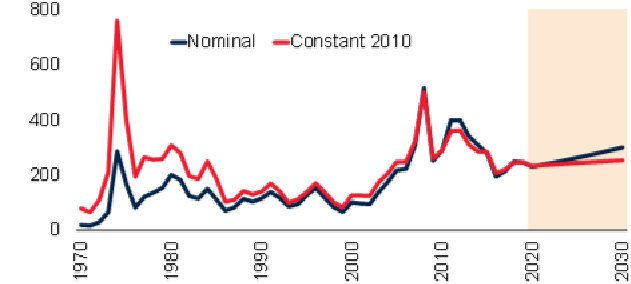|	1971	1980	1990	2000	2010	2016	2017	2018	2019
				(million metric tons)					
Iron Ore Production									
Australia	62	99	109	176	433	858	883	n/a	n/a
Brazil	38	113	152	209	372	434	436	n/a	n/a
India	34	41	54	75	209	185	202	n/a	n/a
China	55	113	148	105	357	114	115	n/a	n/a
Russia	n/a	n/a	n/a	87	99	104	107	n/a	n/a
South Africa	10	n/a	30	34	55	66	62	n/a	n/a
Ukraine	n/a	n/a	n/a	56	79	75	60	n/a	n/a
Iran	n/a	n/a	2	12	33	43	55	n/a	n/a
Canada	43	49	37	36	38	47	49	n/a	n/a
United States	82	71	55	63	50	42	48	n/a	n/a
Sweden	34	27	20	21	25	27	27	n/a	n/a
Mexico	5	8	9	11	14	19	17	n/a	n/a
Chile	11	9	8	8	10	16	16	n/a	n/a
Mauritania	8	9	11	11	11	13	12	n/a	n/a
Kazakhstan	n/a	n/a	n/a	15	18	10	11	n/a	n/a
Peru	9	6	3	4	9	8	9	n/a	n/a
Mongolia	n/a	n/a	n/a	n/a	3	6	8	n/a	n/a
Turkey	2	3	6	4	6	8	6	n/a	n/a
Venezuela	20	14	20	17	14	7	5	n/a	n/a
Liberia	23	18	4	n/a	n/a	2	2	n/a	n/a
Norway	4	4	2	0	3	2	2	n/a	n/a
Others	n/a	n/a	n/a	14	36	31	32	n/a	n/a
World	**781**	**931**	**984**	**959**	**1,874**	**2,116**	**2,163**	**n/a**	**n/a**
Crude steel production									
China	21	37	66	129	639	808	871	920	996
India	6	10	15	27	69	95	101	109	111
Japan	89	111	110	106	110	105	105	104	99
United States	109	101	90	102	80	78	82	87	88
Russia	n/a	n/a	n/a	59	67	70	71	72	72
Korea, Rep.	0	9	23	43	59	69	71	73	71
Germany	40	44	38	46	44	42	43	42	40
Turkey	1	3	9	14	29	33	38	37	34
Brazil	6	15	21	28	33	32	35	35	32
Iran	n/a	1	1	7	12	18	21	25	26
Italy	17	27	25	27	26	23	24	25	23
Taiwan, China	0	3	10	17	20	22	22	23	22
Ukraine	n/a	n/a	n/a	32	33	24	21	21	21
Vietnam	n/a	n/a	n/a	0	4	8	11	16	20
Mexico	4	7	9	16	17	19	20	20	19
France	23	23	19	21	15	14	16	15	14
Spain	8	13	13	16	16	14	14	14	14
Others	n/a	n/a	n/a	160	160	155	165	175	167
World	**583**	**716**	**770**	**849**	**1,433**	**1,629**	**1,732**	**1,814**	**1,869**

Lead

Monthly Prices (US$/mt)

Source: See World Bank Commodities Price Data.
Note: Last observation is September 2020.
Click here to download chart and data.

Annual Prices (US$/mt)
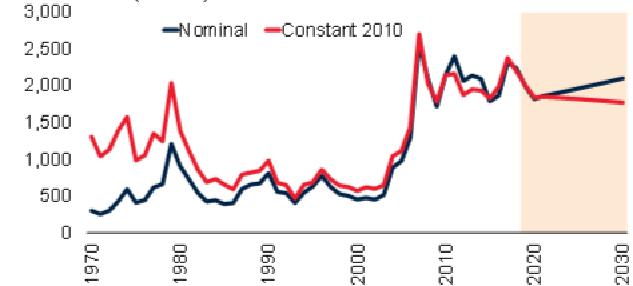
Source: World Bank.
Note: 2020-30 are forecasts.
Click here to download chart and data.

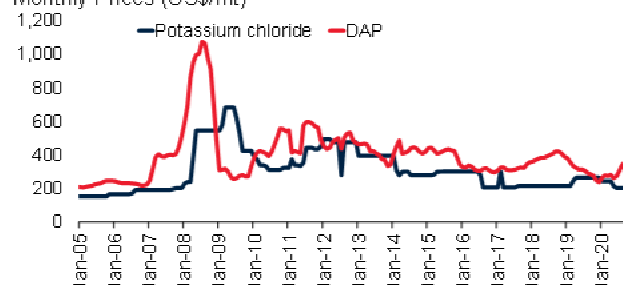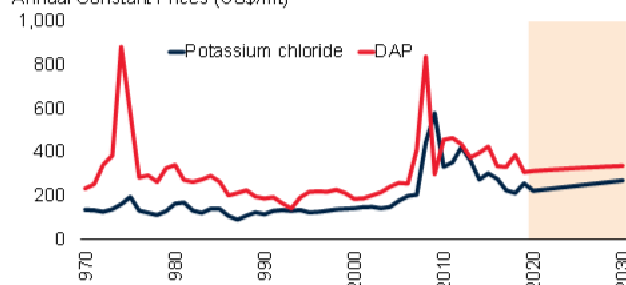|	1970	1980	1990	2000	2010	2016	2017	2018	2019
				(thousand metric tons)					
Mine Production									
China	100	160	350	660	1,981	2,338	1,852	2,214	2,405
Australia	457	397	565	678	711	440	395	446	509
Peru	157	189	188	271	262	314	307	289	308
United States	519	550	497	447	356	342	313	260	290
Mexico	177	146	177	138	192	241	241	235	259
Russia	n/a	n/a	n/a	13	97	217	210	220	220
India	2	14	26	38	89	139	176	185	201
Bolivia	n/a	17	20	10	73	90	111	112	88
Turkey	6	8	18	16	39	65	75	76	72
Sweden	78	72	98	107	68	76	71	65	63
Kazakhstan	n/a	n/a	n/a	39	35	71	112	86	56
Poland	n/a	48	45	51	44	37	36	38	45
Iran	n/a	12	9	17	32	47	48	44	44
Others	*n/a*	*n/a*	*n/a*	*597*	*388*	*428*	*494*	*525*	*490*
World	**3,350**	**3,548**	**3,143**	**3,080**	**4,367**	**4,843**	**4,441**	**4,794**	**5,051**
Refined Production									
China	100	175	300	1,100	4,157	4,604	4,726	5,113	5,797
United States	605	1,150	1,290	1,431	1,255	1,113	1,127	1,136	1,200
Korea, Rep.	n/a	15	63	222	321	813	807	801	813
India	2	26	39	57	366	512	563	595	653
Mexico	180	184	235	332	270	401	423	433	447
United Kingdom	44	325	329	328	301	331	330	313	353
Germany	138	392	394	387	405	343	356	313	328
Canada	186	235	184	284	273	274	274	250	260
Japan	175	305	327	312	267	240	239	238	237
Brazil	19	85	57	86	115	156	167	195	195
Russia	n/a	n/a	n/a	50	96	193	206	201	190
Spain	69	121	124	120	163	166	168	175	170
Italy	54	134	171	237	150	187	174	168	159
Others	*1,848*	*2,299*	*2,006*	*1,761*	*1,680*	*1,923*	*1,997*	*1,992*	*1,904*
World	**3,419**	**5,446**	**5,518**	**6,707**	**9,820**	**11,257**	**11,557**	**11,923**	**12,706**
Refined Consumption									
China	n/a	210	244	660	4,171	4,593	4,805	5,235	5,915
United States	n/a	1,094	1,275	1,660	1,430	1,610	1,758	1,613	1,650
Korea, Rep.	n/a	54	80	309	382	604	624	615	623
India	n/a	33	147	56	420	571	551	569	618
Germany	n/a	433	448	390	343	374	413	389	386
Mexico	n/a	85	132	288	201	312	313	318	330
United Kingdom	n/a	296	302	301	211	241	271	236	283
Spain	n/a	111	115	219	262	263	263	257	272
Japan	n/a	393	416	343	224	264	287	271	252
Others	*n/a*	*2,640*	*2,189*	*2,265*	*2,146*	*2,517*	*2,628*	*2,673*	*2,639*
World	**n/a**	**5,348**	**5,348**	**6,491**	**9,790**	**11,349**	**11,914**	**12,177**	**12,968**

Source: British Geological Survey; Metallgesellschaft; U.S. Geological Survey; World Bureau of Metals Statistics; World Bank.
Note: n/a implies data not available. Refined production and consumption include significant recycled material.

Maize

Monthly Prices (US$/mt)

Source: See World Bank Commodities Price Data.
Note: Last observation is September 2020.
Click here to download chart and data.

Annual Prices (US$/mt)
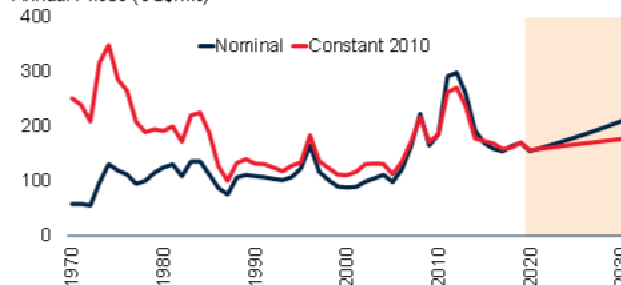
Source: World Bank.
Note: 2020-30 are forecasts.
Click here to download chart and data.

	1970/1971	1980/1981	1990/1991	2000/2001	2010/2011	2017/2018	2018/2019	2019/2020	2020/2021
					(million metric tons)				
Production									
United States	105.5	168.6	201.5	251.9	315.6	371.1	364.3	346.0	373.9
China	33.0	62.6	96.8	106.0	190.8	259.1	257.2	260.8	260.0
Brazil	14.1	22.6	24.3	41.5	57.4	82.0	101.0	102.0	110.0
European Union	29.8	42.5	36.5	51.8	58.6	62.0	64.4	66.7	66.1
Argentina	9.9	12.9	7.7	15.4	25.2	32.0	51.0	51.0	50.0
Ukraine	n/a	n/a	4.7	3.8	11.9	24.1	35.8	35.9	36.5
India	7.5	7.0	9.0	12.0	21.7	28.8	27.7	28.6	28.0
Mexico	8.9	10.4	14.1	17.9	21.1	27.6	27.6	26.5	28.0
Russia	n/a	n/a	2.5	1.5	3.1	13.2	11.4	14.3	15.0
Canada	2.6	5.8	7.1	7.0	12.0	14.1	13.9	13.4	14.0
South Africa	8.6	14.9	8.6	8.0	10.9	13.1	11.8	16.3	14.0
Indonesia	2.8	4.0	5.0	5.9	6.8	11.9	12.0	12.0	12.0
Nigeria	1.3	1.7	5.8	4.0	7.7	10.4	11.0	11.0	11.5
Others	*43.9*	*55.8*	*58.1*	*64.7*	*106.7*	*129.2*	*134.3*	*132.0*	*139.8*
World	**268.1**	**408.7**	**481.8**	**591.5**	**849.5**	**1078.6**	**1123.4**	**1116.3**	**1158.8**
Stocks									
China	8.9	42.8	82.8	102.4	43.2	222.5	210.2	200.9	188.9
United States	16.8	35.4	38.6	48.2	28.6	54.4	56.4	50.7	55.0
Brazil	2.0	1.3	0.8	2.7	6.3	9.3	5.3	5.5	8.0
European Union	2.3	4.8	3.7	3.2	5.2	9.2	7.7	7.2	7.8
Mexico	0.5	2.0	1.8	2.8	1.1	5.6	5.1	3.4	3.5
Others	*5.7*	*16.2*	*13.7*	*15.8*	*30.8*	*39.6*	*35.2*	*36.6*	*37.2*
World	**36.1**	**102.5**	**141.4**	**175.1**	**115.3**	**340.6**	**319.8**	**304.2**	**300.5**
Exports									
United States	12.9	60.7	43.9	49.3	46.5	61.9	52.5	45.2	59.1
Brazil	0.9	0.0	0.0	6.3	8.4	24.1	39.7	34.0	39.0
Argentina	6.4	9.1	4.0	9.7	16.3	22.5	37.2	38.0	34.0
Ukraine	n/a	n/a	0.4	0.4	5.0	18.0	30.3	29.2	30.5
Russia	n/a	n/a	0.4	0.0	0.0	5.5	2.8	4.2	3.9
Serbia	n/a	n/a	n/a	n/a	2.0	0.8	2.8	3.0	3.5
European Union	5.4	1.3	0.2	0.5	1.1	1.8	3.6	4.8	2.5
Others	*n/a*	*n/a*	*9.6*	*10.6*	*12.2*	*13.6*	*12.1*	*12.2*	*12.0*
World	**32.2**	**80.3**	**58.4**	**76.7**	**91.6**	**148.2**	**181.1**	**170.6**	**184.5**
Imports									
European Union	18.9	26.6	5.7	3.7	7.4	18.5	25.3	19.0	24.0
Mexico	0.1	3.8	1.9	6.0	8.3	16.1	16.7	17.0	18.3
Japan	5.2	14.0	16.3	16.3	15.6	15.7	16.1	16.0	16.0
Vietnam	0.1	0.1	0.0	0.1	1.3	8.6	10.2	11.0	12.0
Korea, Rep.	0.3	2.4	5.6	8.7	8.1	10.0	10.9	11.6	11.8
Egypt	0.1	1.0	1.9	5.3	5.8	9.5	9.4	10.6	11.0
Iran	0.0	0.4	0.8	1.3	3.5	8.9	9.0	8.0	9.0
Others	*3.7*	*25.9*	*26.2*	*33.6*	*43.4*	*62.7*	*65.8*	*73.9*	*75.7*
World	**28.4**	**74.3**	**58.5**	**75.0**	**93.4**	**149.9**	**163.2**	**167.1**	**177.8**

Source: U.S. Department of Agriculture (October 9, 2020 update).
Note: The trade year is January-December of the later year of the split. For example, 1970/71 refers to calendar year 1971. European Union includes EU-15 for 1980/81, 1990/91, and 2000/01, and EU-28 for 2010-2021.

Natural gas

Monthly Prices (US$/mmbtu)

Source: See World Bank Commodities Price Data.
Note: Last observation is September 2020.
Click here to download chart and data.

Annual Constant Prices (US$/mmbtu)
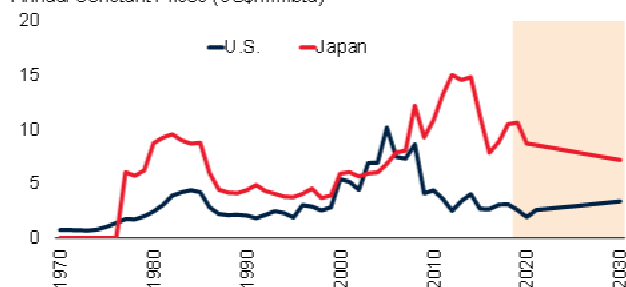
Source: World Bank.
Note: 2020-30 are forecasts.
Click here to download chart and data.

	1970	1980	1990	2000	2010	2016	2017	2018	2019
				(billion cubic meters)					
Production									
United States	571	525	483	519	575	727	746	836	921
Russia	n/a	n/a	600	537	598	589	636	669	679
Iran	3	5	25	56	144	199	220	238	244
Qatar	1	5	7	26	123	174	169	176	178
China	3	14	15	27	97	138	149	162	178
Canada	54	71	103	176	150	172	176	179	173
Australia	2	11	21	31	54	96	113	130	153
Norway	0	25	25	49	106	116	123	121	114
Saudi Arabia	2	9	32	47	83	105	109	112	114
Algeria	2	15	52	92	77	91	93	94	86
Malaysia	0	3	18	50	65	77	78	77	79
Indonesia	1	19	45	71	87	75	73	73	68
Egypt	0	2	8	20	59	40	49	59	65
Turkmenistan	n/a	n/a	79	42	40	63	59	62	63
United Arab Emirates	1	7	20	37	50	60	62	61	63
Uzbekistan	n/a	n/a	37	51	57	53	53	57	56
Nigeria	0	2	4	11	31	43	47	48	49
Argentina	6	8	17	36	39	37	37	39	42
United Kingdom	11	36	48	113	58	42	42	41	40
Oman	0	1	2	10	26	31	32	36	36
Thailand	0	0	7	21	34	37	36	35	36
Trinidad & Tobago	2	3	5	14	40	31	32	34	35
Mexico	11	25	26	33	51	44	38	35	34
Others	*n/a*	*n/a*	*292*	*329*	*501*	*498*	*501*	*483*	*484*
World	**976**	**1,428**	**1,971**	**2,401**	**3,146**	**3,540**	**3,673**	**3,858**	**3,989**
Consumption									
United States	575	534	517	628	648	749	740	820	847
Russia	n/a	n/a	414	366	424	421	431	454	444
China	3	14	15	25	109	209	240	283	307
Iran	3	5	23	59	144	196	209	224	224
Canada	35	50	64	89	88	106	109	118	120
Saudi Arabia	2	9	32	47	83	105	109	112	114
Japan	4	25	50	76	100	116	117	116	108
Mexico	10	22	27	36	66	83	86	88	91
Germany	16	61	64	83	88	85	88	86	89
United Kingdom	12	47	55	101	98	81	79	79	79
United Arab Emirates	1	5	16	31	59	73	75	74	76
Italy	12	26	45	68	79	68	72	69	71
India	1	1	12	25	59	51	54	58	60
Egypt	0	2	8	19	43	49	56	60	59
Korea, Rep.	0	0	3	20	45	48	50	58	56
Others	*n/a*	*n/a*	*603*	*726*	*1,025*	*1,119*	*1,144*	*1,152*	*1,186*
World	**961**	**1,424**	**1,948**	**2,400**	**3,161**	**3,559**	**3,659**	**3,852**	**3,929**

Source: BP Statistical Review (June 2020 update).
Note: n/a implies data not available.

Natural Rubber

Monthly Prices (US$/kg)

Source: See World Bank Commodities Price Data.
Note: Last observation is September 2020.
Click here to download chart and data.

Annual Prices (US$/kg)
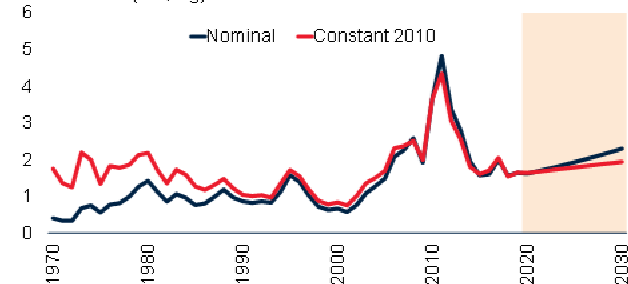
Source: World Bank.
Note: 2020-30 are forecasts.
Click here to download chart and data.

	1970	1980	1990	2000	2010	2017	2018	2019	2020
				(thousand metric tons)					
Production									
Thailand	287	501	1,275	2,346	3,252	4,775	5,145	4,900	4,631
Indonesia	815	822	1,261	1,501	2,736	3,499	3,486	3,100	2,834
Vietnam	28	46	94	291	752	1,094	1,142	1,222	1,311
Côte d'Ivoire	11	23	69	123	231	604	624	808	864
China	46	113	264	445	687	798	811	774	713
India	90	155	324	629	851	713	660	702	595
Malaysia	1,269	1,530	1,291	928	939	741	603	640	549
Cambodia	n/a	n/a	n/a	n/a	42	193	220	288	336
Myanmar	10	16	15	36	128	242	280	289	238
Others	*254*	*29*	*176*	*82*	*784*	*882*	*934*	*977*	*881*
World	**2,810**	**3,235**	**4,769**	**6,380**	**10,403**	**13,540**	**13,905**	**13,699**	**12,952**
Consumption									
China	250	340	600	1,150	3,622	5,301	5,504	5,497	5,095
European Union	991	1,007	1,012	1,293	1,136	1,236	1,231	1,191	1,033
India	86	171	358	638	944	1,082	1,220	1,144	869
United States	568	585	808	1,195	926	958	987	1,005	793
Thailand	8	28	99	243	487	685	752	800	765
Japan	283	427	677	752	749	679	706	714	598
Indonesia	25	46	108	139	421	608	618	625	577
Malaysia	20	45	184	364	458	489	515	501	463
Brazil	37	81	124	227	378	395	398	400	314
Others	*822*	*1,050*	*1,099*	*1,307*	*1,638*	*1,784*	*1,835*	*1,759*	*1,563*
World	**3,090**	**3,780**	**5,068**	**7,306**	**10,759**	**13,216**	**13,767**	**13,636**	**12,070**
Exports									
Thailand	279	457	1,151	2,166	2,866	4,433	4,499	3,969	3,961
Indonesia	790	976	1,077	1,380	2,369	3,250	2,961	2,579	2,372
Vietnam	23	33	80	273	782	1,380	1,500	1,698	1,702
Cote d'Ivoire	11	23	69	121	226	591	622	767	1,037
Malaysia	1,304	1,482	1,322	978	1,245	1,189	1,096	1,023	933
Cambodia	7	15	24	33	43	189	218	282	331
Myanmar	n/a	n/a	n/a	n/a	67	147	162	200	200
Others	*406*	*284*	*239*	*326*	*448*	*988*	*1,027*	*1,100*	*867*
World	**2,820**	**3,270**	**3,962**	**5,277**	**8,047**	**12,167**	**12,085**	**11,618**	**11,403**
Imports									
China	178	242	340	820	2,888	5,277	5,211	4,745	4,600
European Union	1,071	1,068	1,072	1,474	1,426	1,571	1,598	1,557	1,181
Malaysia	45	43	136	548	706	1,096	1,014	1,083	1,045
United States	543	576	820	1,192	931	972	997	1,010	706
Japan	292	458	663	801	747	699	694	731	595
India	3	1	61	11	187	398	586	486	423
Vietnam	n/a	n/a	n/a	n/a	127	526	583	456	340
Others	*678*	*847*	*1,677*	*1,534*	*1,667*	*1,706*	*1,743*	*1,680*	*1,875*
World	**2,810**	**3,235**	**4,769**	**6,380**	**8,680**	**12,245**	**12,425**	**11,749**	**10,766**

Source: Rubber Statistical Bulletin; International Rubber Study Group (July-September 2020 update), World Bank.
Note: n/a implies data not available.

Nickel

Monthly Prices (US$/mt)

Source: See World Bank Commodities Price Data.
Note: Last observation is September 2020.
Click here to download chart and data.

Annual Prices (US$/mt)
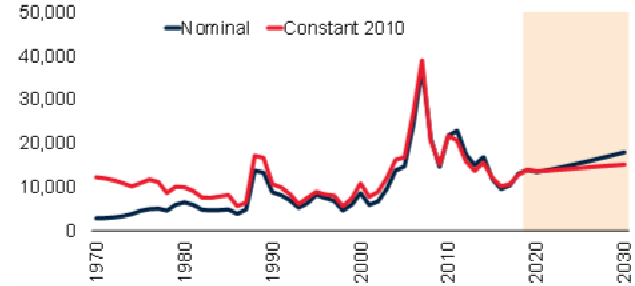
Source: World Bank.
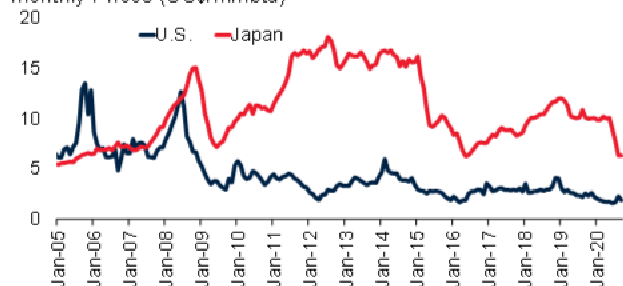Note: 2020-30 are forecasts.
Click here to download chart and data.

	1970	1980	1990	2000	2010	2016	2017	2018	2019
				(thousand metric tons)					
Mine Production									
Indonesia	11	41	69	117	216	173	357	651	918
Philippines	0	47	16	17	184	346	379	390	341
Russia	n/a	n/a	n/a	266	274	221	218	218	226
New Caledonia	139	87	85	129	130	204	215	216	210
Canada	277	185	196	191	160	235	214	186	187
Australia	30	74	70	170	168	203	185	160	159
China	n/a	11	27	51	80	100	102	99	105
Brazil	3	6	24	32	54	79	69	65	56
Cuba	37	38	39	71	65	51	53	52	55
South Africa	12	26	28	37	40	49	48	43	43
Colombia	n/a	0	23	28	49	37	41	43	41
Finland	5	7	11	3	12	22	36	44	39
Madagascar	n/a	n/a	n/a	0	0	42	35	33	34
Others	*n/a*	*n/a*	*n/a*	*79*	*84*	*201*	*215*	*195*	*183*
World	**663**	**758**	**906**	**1,191**	**1,518**	**1,963**	**2,169**	**2,396**	**2,595**
Refined Production									
China	n/a	11	28	52	314	437	621	733	852
Indonesia	n/a	4	5	10	19	95	187	280	361
Japan	n/a	109	100	161	166	196	187	187	183
Russia	n/a	n/a	n/a	242	263	192	160	150	154
Canada	n/a	142	135	134	105	158	155	137	125
Australia	n/a	35	45	112	102	121	109	115	106
Norway	n/a	37	58	59	92	93	87	91	92
New Caledonia	n/a	33	32	44	40	96	104	108	88
Finland	n/a	13	17	54	49	54	60	61	62
Brazil	n/a	3	13	23	28	77	69	65	54
Korea, Rep.	n/a	n/a	8	0	23	48	53	49	47
Colombia	n/a	0	18	28	49	37	41	43	41
United Kingdom	n/a	19	27	38	32	45	38	41	40
Others	*n/a*	*n/a*	*n/a*	*154*	*155*	*196*	*195*	*191*	*205*
World	**n/a**	**739**	**904**	**1,110**	**1,437**	**1,845**	**2,064**	**2,251**	**2,410**
Refined Consumption									
China	n/a	18	28	58	489	898	982	1,096	1,304
Indonesia	n/a	n/a	n/a	1	1	1	61	176	182
Japan	99	122	159	192	177	162	163	175	155
Korea, Rep.	n/a	0	24	91	101	104	109	118	116
United States	149	0	18	153	119	105	144	136	106
Taiwan, China	n/a	0	18	106	73	66	84	88	84
India	2	12	14	23	27	57	82	72	58
Germany	40	78	93	102	100	58	64	61	57
Italy	20	27	27	53	62	56	60	58	45
Others	*266*	*460*	*460*	*373*	*276*	*358*	*353*	*369*	*330*
World	**576**	**717**	**842**	**1,150**	**1,426**	**1,865**	**2,104**	**2,349**	**2,437**

Source: British Geological Survey, Metallgesellschaft, U.S. Geological Survey, World Bureau of Metals Statistics, World Bank.
Note: n/a implies data not available.

Palm oil and Soybean oil

Monthly Prices (US$/mt)


Source: See World Bank Commodities Price Data.
Note: Last observation is September 2020.
Click here to download chart and data.

Annual Constant Prices (US$/mt)
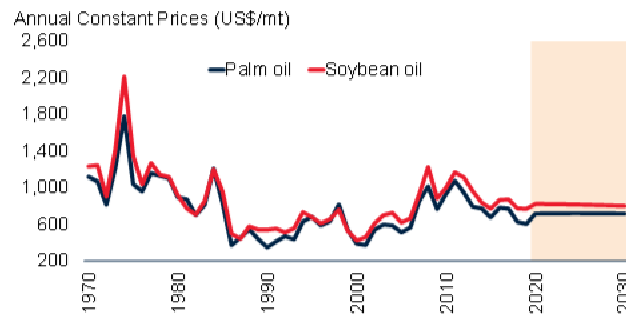
Source: World Bank.
Note: 2020-30 are forecasts.
Click here to download chart and data.

	1970/1971	1980/1981	1990/1991	2000/2001	2010/2011	2017/2018	2018/2019	2019/2020	2020/2021
					(thousand metric tons)				
Palm oil Production									
Indonesia	248	752	2,650	8,300	23,600	39,500	41,500	42,500	43,500
Malaysia	589	2,692	6,031	11,937	18,211	19,683	20,800	19,250	19,900
Thailand	0	19	200	580	1,832	2,780	3,000	2,800	3,100
Colombia	36	80	252	520	753	1,627	1,632	1,529	1,670
Nigeria	432	520	600	730	971	1,025	1,015	1,015	1,015
Guatemala	0	0	6	124	231	852	852	852	852
Ecuador	5	44	150	222	380	570	560	545	615
Honduras	0	18	64	148	320	580	580	580	580
Papua New Guinea	0	45	145	336	488	680	705	555	561
Others	*612*	*726*	*936*	*1,352*	*2,420*	*3,278*	*3,380*	*3,395*	*3,405*
World	**1,922**	**4,896**	**11,034**	**24,249**	**49,206**	**70,575**	**74,024**	**73,021**	**75,198**
Palm oil Consumption									
Indonesia	29	561	1,330	3,263	6,234	11,565	13,721	13,680	14,875
India	1	431	259	3,160	5,910	9,270	9,605	8,810	8,930
China	53	16	1,194	2,028	5,797	5,100	7,012	6,462	6,903
European Union	595	607	1,509	2,790	4,750	6,950	6,960	6,900	6,775
Malaysia	8	420	914	1,571	2,204	3,238	3,573	3,275	3,625
Pakistan	1	231	800	1,245	2,093	3,145	3,245	3,290	3,400
Thailand	0	43	208	508	1,304	2,343	2,640	2,640	2,750
Others	*1,112*	*2,454*	*4,941*	*7,946*	*17,185*	*25,360*	*26,096*	*26,562*	*27,313*
World	**1,799**	**4,763**	**11,155**	**22,511**	**45,477**	**66,971**	**72,852**	**71,619**	**74,571**
Soybean oil production									
China	181	183	599	3,240	9,856	16,128	15,232	16,397	17,741
United States	3,749	5,112	6,082	8,355	8,568	10,783	10,976	11,290	11,460
Brazil	0	2,601	2,669	4,333	6,970	8,485	8,180	8,500	8,750
Argentina	0	158	1,179	3,190	7,181	7,236	7,910	7,620	8,160
European Union	1,260	2,478	2,317	3,033	2,343	2,841	2,964	3,078	3,021
India	2	69	425	810	1,683	1,386	1,728	1,512	1,800
Mexico	52	255	330	795	648	937	1,100	1,110	1,145
Russia	0	0	75	62	367	824	834	834	855
Egypt	0	15	22	47	294	582	620	782	755
Others	*955*	*1,704*	*2,067*	*2,953*	*3,564*	*5,966*	*6,253*	*6,572*	*6,615*
World	**6,199**	**12,575**	**15,765**	**26,818**	**41,474**	**55,168**	**55,797**	**57,695**	**60,302**
Soybean oil consumption									
China	179	256	1,055	3,542	11,400	16,500	15,885	17,003	18,691
United States	2,854	4,134	5,506	7,401	7,506	9,698	10,376	10,183	10,433
Brazil	0	1,490	2,075	2,932	5,205	6,940	7,165	7,390	7,570
India	79	708	445	1,750	2,550	4,670	4,750	4,900	4,925
European Union	1,170	1,926	1,879	2,186	2,400	2,225	2,455	2,515	2,640
Argentina	0	56	101	247	2,520	3,081	2,574	2,329	2,350
Bangladesh	40	28	235	503	404	1,085	1,170	1,250	1,330
Others	*1,636*	*3,819*	*4,145*	*7,582*	*8,447*	*10,373*	*10,577*	*10,917*	*11,279*
World	**5,958**	**12,417**	**15,441**	**26,143**	**40,432**	**54,572**	**54,952**	**56,487**	**59,218**

Source: U.S. Department of Agriculture (October 9, 2020 update).
Note: The trade year is January-December of the later year of the split. For example, 1970/71 refers to calendar year 1971. European Union includes EU-15 for 1980/81, 1990/91, and 2000/01, and EU-28 for 2010-2021.

Platinum

Monthly Prices (US$/toz)

Source: See World Bank Commodities Price Data.
Note: Last observation is September 2020.
Click here to download chart and data.

Annual Prices (US$/toz)
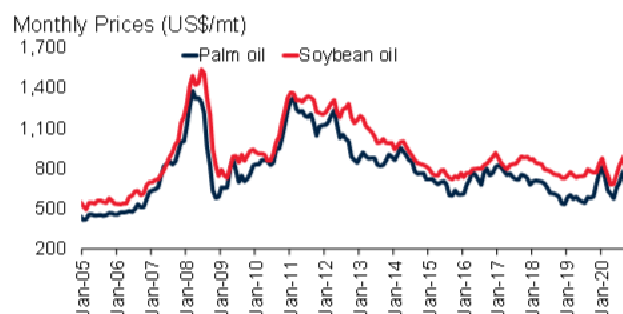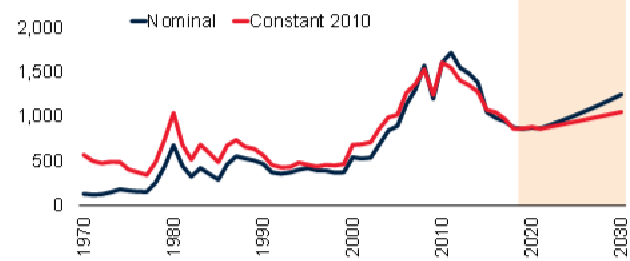

Source: World Bank.
Note: 2020-30 are forecasts.
Click here to download chart and data.

	2003	2005	2008	2010	2016	2017	2018	2019
				(metric tons)				
Mine Production								
South Africa	146.1	157.2	145.4	147.7	132.9	133.4	134.3	130.7
Russia	25.9	29.9	25.8	24.4	21.1	22.0	21.6	21.2
Zimbabwe	4.3	5.0	5.6	8.9	15.0	14.9	14.9	14.3
Canada	4.6	7.2	7.1	4.0	8.3	7.2	6.6	6.9
United States	4.2	3.9	3.6	3.5	4.0	4.1	4.2	4.6
Others	*2.3*	*2.8*	*4.0*	*3.8*	*4.3*	*4.0*	*3.7*	*3.4*
World	**187.4**	**206.0**	**191.5**	**192.3**	**185.6**	**185.6**	**185.3**	**181.1**
Autocatalyst scrap								
Europe	3.9	5.4	9.2	9.3	12.7	13.4	13.9	15.7
North America	15.1	15.6	17.3	14.0	14.0	14.3	15.0	15.2
Japan	2.1	1.7	2.1	2.6	4.0	3.9	4.0	4.3
China	n/a	0.1	0.2	0.4	1.7	2.0	2.3	2.6
Others	*1.8*	*2.3*	*2.5*	*2.5*	*5.0*	*5.7*	*6.1*	*6.7*
World	**22.9**	**25.1**	**31.3**	**28.8**	**37.4**	**39.3**	**41.3**	**44.5**
Old jewelry scrap								
China	0.9	5.1	10.4	11.7	15.0	14.3	17.2	18.2
Japan	4.0	6.0	18.0	8.7	6.2	5.7	5.5	5.7
North America	0.1	0.2	1.3	0.4	0.2	0.2	0.2	0.2
Europe	0.1	0.1	0.4	0.3	0.2	0.2	0.2	0.2
Others	*0.1*	*0.1*	*0.0*	*0.1*	*0.0*	*0.1*	*0.1*	*0.1*
World	**5.2**	**11.5**	**30.1**	**21.2**	**21.6**	**20.5**	**23.2**	**24.4**
TOTAL SUPPLY	**215.5**	**242.6**	**252.9**	**242.3**	**244.6**	**245.4**	**249.9**	**250.0**
Autocatalyst demand								
Europe	41.3	56.1	56.9	44.5	45.9	43.8	40.2	38.4
North America	26.8	23.3	17.5	12.5	13.1	13.8	14.3	15.6
Japan	16.6	18.1	17.0	13.5	9.9	10.1	10.0	9.8
China	4.7	5.5	5.7	6.7	8.0	9.1	9.2	9.6
Others	*8.0*	*12.5*	*14.1*	*17.0*	*21.6*	*22.3*	*24.5*	*26.4*
World	**97.4**	**115.5**	**111.2**	**94.2**	**98.5**	**99.1**	**98.2**	**99.8**
Jewelry demand								
China	46.1	35.0	34.5	47.6	43.4	40.2	35.8	33.8
Japan	21.3	20.5	7.7	8.1	9.9	9.8	10.0	9.9
North America	9.9	8.1	6.4	6.6	7.7	7.6	7.6	7.7
Europe	8.5	7.9	7.4	6.8	6.6	6.2	6.3	6.4
Others	*2.4*	*1.2*	*1.4*	*2.1*	*5.1*	*5.7*	*6.4*	*6.9*
World	**88.2**	**72.7**	**57.4**	**71.2**	**72.7**	**69.5**	**66.1**	**64.7**
Other demand								
China	n/a	4.7	9.1	10.1	15.1	15.3	23.0	18.2
North America	15.8	15.8	14.2	11.5	17.2	17.0	15.9	16.2
Europe	11.1	9.5	9.8	9.8	12.3	11.6	11.1	11.1
Japan	9.9	13.2	17.9	10.4	16.7	10.0	11.5	11.0
Others	*14.0*	*14.0*	*18.7*	*21.3*	*15.1*	*17.7*	*19.2*	*21.5*
World	**50.8**	**57.2**	**69.7**	**63.1**	**76.4**	**71.6**	**80.7**	**78.0**
TOTAL DEMAND	**236.4**	**245.4**	**238.3**	**228.5**	**247.7**	**240.2**	**245.0**	**242.6**

Source: GFMS Platinum Group Metals Survey 2019; Thomson Reuters.
Note: Other demand includes chemical, electronics, glass, petroleum, retail investment, and other industrial demand.

Rice

Monthly Prices (US$/mt)

Source: See World Bank Commodities Price Data.
Note: Last observation is September 2020.
Click here to download chart and data.

Annual Prices (US$/mt)

Source: World Bank.
Note: 2020-30 are forecasts.
Click here to download chart and data.

	1970/1971	1980/1981	1990/1991	2000/2001	2010/2011	2017/2018	2018/2019	2019/2020	2020/2021
					(million metric tons)				
Production									
China	77.0	97.9	132.5	131.5	138.1	148.9	148.5	146.7	147.0
India	42.2	53.6	74.3	85.0	96.0	112.8	116.5	118.4	120.0
Bangladesh	11.1	13.9	17.9	25.1	31.7	32.7	34.9	35.9	36.0
Indonesia	13.1	22.3	29.0	33.0	35.5	37.0	34.2	34.0	34.9
Vietnam	6.4	7.7	12.4	20.5	26.4	27.7	27.3	27.2	27.0
Thailand	9.0	11.5	11.3	17.1	20.3	20.6	20.3	17.7	18.6
Myanmar	5.1	6.7	7.9	10.8	11.1	13.2	13.2	12.7	12.9
Philippines	3.4	5.0	6.4	8.1	10.5	12.2	11.7	11.9	11.7
Japan	11.5	8.9	9.6	8.6	7.9	7.8	7.7	7.6	7.6
Pakistan	2.2	3.1	3.3	4.8	4.8	7.5	7.3	7.2	7.6
Brazil	3.7	5.9	6.8	6.9	9.3	8.2	7.1	7.6	7.5
United States	2.8	4.8	5.1	5.9	7.6	5.7	7.1	5.9	7.2
Cambodia	2.5	1.1	1.6	2.5	4.4	5.6	5.7	5.7	5.8
Others	*22.9*	*27.6*	*33.3*	*39.3*	*48.1*	*55.2*	*55.1*	*57.3*	*57.7*
World	**213.0**	**269.9**	**351.4**	**399.2**	**451.6**	**494.8**	**496.7**	**495.8**	**501.5**
Stocks									
China	11.0	28.0	94.0	93.0	44.5	109.0	115.0	116.5	116.5
India	6.0	6.5	14.5	25.0	23.5	22.6	29.5	30.0	31.5
Thailand	1.2	2.0	0.9	2.2	5.6	3.0	4.2	4.6	4.4
Philippines	0.6	1.5	1.8	2.8	2.5	2.3	3.5	3.6	3.5
Indonesia	0.6	3.0	2.1	4.6	7.1	5.6	4.1	3.1	3.1
Others	*9.4*	*11.6*	*13.3*	*19.0*	*18.7*	*21.7*	*20.3*	*19.3*	*20.1*
World	**28.8**	**52.6**	**126.6**	**146.7**	**101.9**	**164.2**	**176.6**	**177.1**	**179.1**
Exports									
India	0.0	0.9	0.7	1.7	2.8	12.0	10.4	12.0	12.5
Thailand	1.6	3.0	4.0	7.5	10.6	11.1	7.6	5.5	7.0
Vietnam	0.0	0.0	1.0	3.5	7.0	6.6	6.6	6.6	6.3
Pakistan	0.2	1.2	1.3	2.4	3.4	4.0	4.5	4.0	4.1
United States	1.5	3.1	2.3	2.6	3.5	2.8	3.0	3.0	3.1
China	1.3	0.5	0.7	1.8	0.5	1.4	2.8	2.6	2.9
Myanmar	0.8	0.7	0.2	0.7	1.1	2.8	2.7	2.3	2.2
Others	*3.1*	*3.0*	*1.9*	*3.7*	*6.3*	*6.6*	*6.2*	*6.3*	*6.2*
World	**8.5**	**12.4**	**12.1**	**24.0**	**35.2**	**47.2**	**43.7**	**42.3**	**44.3**
Imports									
Philippines	0.0	0.0	0.4	1.4	1.3	1.3	3.6	2.5	2.6
European Union	0.9	0.5	0.7	1.2	1.4	2.0	2.2	2.3	2.4
China	0.0	0.2	0.1	0.3	0.5	5.5	3.2	2.4	2.2
Saudi Arabia	0.2	0.4	0.5	1.0	1.1	1.3	1.4	1.4	1.4
Cote d'Ivoire	0.1	0.3	0.3	0.5	0.9	1.4	1.4	1.1	1.2
Iran	0.1	0.6	0.6	0.8	2.0	1.2	1.3	1.0	1.2
Nigeria	0.0	0.4	0.2	1.3	2.4	2.0	1.9	1.0	1.2
Others	*6.5*	*8.9*	*7.9*	*15.7*	*23.5*	*32.2*	*28.8*	*29.0*	*29.8*
World	**7.7**	**11.3**	**10.6**	**22.1**	**33.1**	**46.9**	**43.7**	**40.5**	**41.9**

Source: U.S. Department of Agriculture (October 9, 2020 update).
Note: The trade year is January-December of the later year of the split. For example, 1970/71 refers to calendar year 1971. European Union includes EU-15 for 1980/81, 1990/91, and 2000/01, and EU-28 for 2010-2021.

Silver

Monthly Prices (US$/toz)

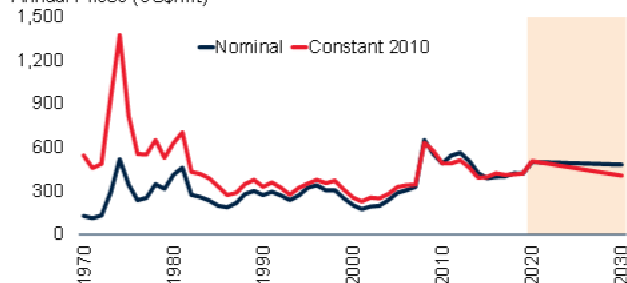Source: See World Bank Commodities Price Data.
Note: Last observation is September 2020.
Click here to download chart and data.

Annual Prices (US$/toz)
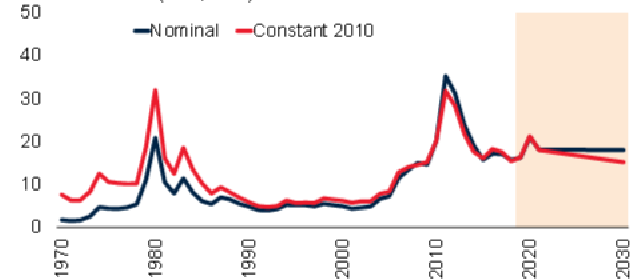
Source: World Bank.
Note: 2020-30 are forecasts.
Click here to download chart and data.

	1990	2000	2005	2010	2015	2016	2017	2018	2019
				(metric tons)					
Production									
Mexico	2,352	2,483	2,894	4,411	5,975	5,409	5,394	5,624	5,919
Peru	1,762	2,418	3,193	3,640	4,102	4,376	4,304	4,161	3,845
China	150	1,600	2,500	3,085	3,421	3,569	3,502	3,422	3,443
Poland	832	1,164	1,262	1,183	1,407	1,482	1,438	1,409	1,469
Australia	1,173	2,060	2,417	1,879	1,430	1,418	1,120	1,220	1,325
Russia	n/a	400	1,350	1,145	1,580	1,450	1,305	1,341	1,320
Chile	655	1,245	1,400	1,276	1,504	1,497	1,260	1,370	1,309
Bolivia	311	434	420	1,259	1,306	1,353	1,196	1,191	1,153
Kazakhstan	n/a	927	883	552	1,305	1,180	1,029	969	1,022
United States	2,121	2,017	1,230	1,280	1,090	1,150	1,026	925	977
Argentina	83	78	264	723	929	933	648	545	717
India	32	40	32	165	490	445	491	658	582
Indonesia	67	310	327	289	152	113	102	104	485
Sweden	243	329	310	302	480	515	488	471	424
Canada	1,501	1,204	1,124	591	384	385	393	404	419
Morocco	241	290	186	243	216	237	237	152	188
Spain	230	115	5	109	66	69	91	165	165
Papua New Guinea	115	73	51	84	72	90	90	93	147
Dominican Republic	23	0	0	23	100	122	148	170	109
Others	*2,940*	*1,015*	*906*	*1,210*	*1,631*	*1,702*	*1,148*	*937*	*898*
World	**14,828**	**18,202**	**20,753**	**23,450**	**27,639**	**27,495**	**25,410**	**25,332**	**25,916**
Fabrication									
India	47	115	3,116	3,222	7,374	5,081	5,327	6,864	n/a
China	18	36	4,307	6,792	6,866	5,873	6,241	6,262	n/a
United States	137	192	5,891	6,768	7,383	6,660	5,812	5,818	n/a
Japan	116	135	3,860	3,020	3,056	3,307	3,490	3,246	n/a
Germany	54	40	1,260	1,690	1,121	1,213	1,216	1,224	n/a
Thailand	24	31	1,150	991	1,063	1,015	914	875	n/a
Italy	51	67	1,577	1,109	878	854	890	855	n/a
Canada	7	3	126	667	1,243	1,181	734	742	n/a
Russia	n/a	n/a	795	944	724	671	663	673	n/a
United Kingdom	25	42	1,330	677	677	665	650	646	n/a
Taiwan, China	5	9	380	486	467	471	492	502	n/a
Korea, Rep.	7	20	794	929	628	516	514	492	n/a
France	27	29	381	697	446	439	440	438	n/a
Australia	5	7	210	450	566	583	499	404	n/a
Mexico	14	17	693	556	532	494	456	386	n/a
Belgium	20	35	846	577	425	426	345	322	n/a
Indonesia	1	4	159	199	234	248	253	262	n/a
Turkey	5	7	309	201	233	228	228	243	n/a
Brazil	7	7	232	319	358	304	228	234	n/a
Others	*n/a*	*n/a*	*2,025*	*2,359*	*513*	*1,814*	*1,662*	*1,658*	*n/a*
World	**n/a**	**n/a**	**29,441**	**32,653**	**34,787**	**32,043**	**31,054**	**32,146**	**n/a**

Source: British Geological Survey; GFMS Silver Survey 2019; Thomson Reuters; U.S. Geological Survey; World Bureau of Metals Statistics; World Bank.
Note: n/a implies data not available. Fabrication: jewelry and silverware including the use of scrap.

Soybeans

Monthly Prices (US$/mt)

Source: See World Bank Commodities Price Data.
Note: Last observation is September 2020.
Click here to download chart and data.

Annual Prices (US$/mt)

Source: World Bank.
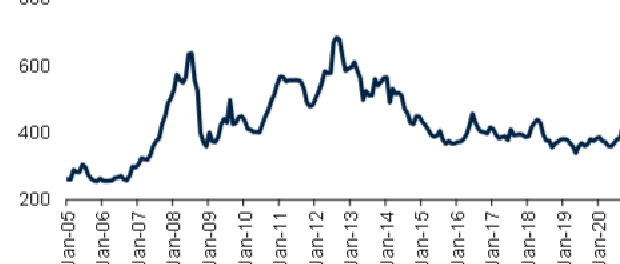Note: 2020-30 are forecasts.
Click here to download chart and data.

	1970/1971	1980/1981	1990/1991	2000/2001	2010/2011	2017/2018	2018/2019	2019/2020	2020/2021
					(million metric tons)				
Production									
Brazil	0.0	15.2	15.8	39.5	75.3	123.4	119.7	126.0	133.0
United States	30.7	48.9	52.4	75.1	90.7	120.1	120.5	96.7	116.2
Argentina	0.0	3.5	11.5	27.8	49.0	37.8	55.3	49.0	53.5
China	8.7	7.9	11.0	15.4	15.4	15.3	16.0	18.1	17.5
India	0.0	0.4	2.6	5.3	10.1	8.4	10.9	9.3	11.2
Paraguay	0.1	0.6	1.3	3.5	7.1	10.3	8.5	9.9	10.3
Canada	0.3	0.7	1.3	2.7	4.4	7.7	7.4	6.0	6.0
Russia	0.0	0.0	0.7	0.3	1.1	3.6	4.0	4.4	4.3
Ukraine	0.0	0.0	0.1	0.1	1.7	4.0	4.8	4.5	3.3
Bolivia	0.0	0.0	0.4	1.1	2.3	2.8	3.0	2.8	2.9
European Union	0.1	0.5	2.3	1.3	1.2	2.5	2.7	2.6	2.8
Others	*2.3*	*3.1*	*4.9*	*3.7*	*6.3*	*7.1*	*8.2*	*7.3*	*7.6*
World	**42.1**	**80.9**	**104.3**	**175.8**	**264.7**	**342.9**	**361.1**	**336.6**	**368.5**
Crushings									
China	1.5	1.5	3.9	18.9	55.0	90.0	85.0	91.5	99.0
United States	20.7	27.8	32.3	44.6	44.9	55.9	56.9	58.9	59.3
Brazil	0.0	13.8	14.2	22.7	36.3	44.2	42.5	44.3	45.5
Argentina	0.0	0.9	7.0	17.3	37.6	36.9	40.6	39.2	42.0
European Union	7.3	14.1	13.0	16.8	12.3	15.0	15.6	16.2	15.9
India	0.0	0.4	2.4	4.5	9.4	7.7	9.6	8.4	10.0
Mexico	0.3	1.5	1.9	4.5	3.6	5.3	6.2	6.2	6.4
Russia	n/a	n/a	0.4	0.4	2.1	4.6	4.7	4.7	4.8
Egypt	0.0	0.1	0.1	0.3	1.6	3.2	3.4	4.3	4.2
Others	*5.5*	*9.7*	*11.6*	*16.5*	*19.4*	*31.9*	*33.4*	*35.1*	*35.4*
World	**35.3**	**69.8**	**86.8**	**146.5**	**222.2**	**294.7**	**297.9**	**308.7**	**322.4**
Exports									
Brazil	0.0	1.8	2.5	15.5	30.0	76.1	74.6	92.5	85.0
United States	11.8	19.7	15.2	27.1	41.0	58.1	47.7	45.6	59.9
Argentina	0.0	2.7	4.5	7.3	9.2	2.1	9.1	10.0	7.0
Paraguay	0.0	0.6	1.0	2.4	5.1	6.0	4.9	5.9	6.3
Canada	0.0	0.1	0.2	0.7	2.9	4.9	5.3	3.9	3.9
Others	*0.5*	*0.4*	*2.1*	*0.7*	*3.4*	*5.8*	*6.9*	*6.7*	*5.9*
World	**12.3**	**25.3**	**25.4**	**53.7**	**91.6**	**153.1**	**148.4**	**164.6**	**167.9**
Imports									
China	0.0	0.5	0.0	13.2	52.3	94.1	82.5	97.4	100.0
European Union	7.4	13.6	13.2	17.7	12.5	14.6	15.0	15.6	14.9
Mexico	0.1	1.4	1.4	4.4	3.5	4.9	5.9	6.0	6.1
Egypt	0.0	0.0	0.0	0.3	1.6	3.6	3.4	4.5	4.2
Argentina	0.0	0.0	0.0	0.3	0.0	4.7	6.4	4.7	4.0
Thailand	0.0	0.0	0.0	1.3	2.1	2.5	3.2	3.8	3.9
Japan	3.2	4.2	4.4	4.8	2.9	3.3	3.3	3.4	3.4
Others	*1.9*	*6.5*	*6.5*	*11.1*	*14.7*	*26.0*	*25.5*	*27.6*	*28.5*
World	**12.6**	**26.2**	**25.5**	**53.1**	**89.7**	**153.6**	**145.1**	**163.0**	**164.9**

Source: U.S. Department of Agriculture (October 9, 2020 update).
Note: The trade year is January-December of the later year of the split. For example, 1970/71 refers to calendar year 1971. European Union includes EU-15 for 1980/81, 1990/91, and 2000/01, and EU-28 for 2010-2021.
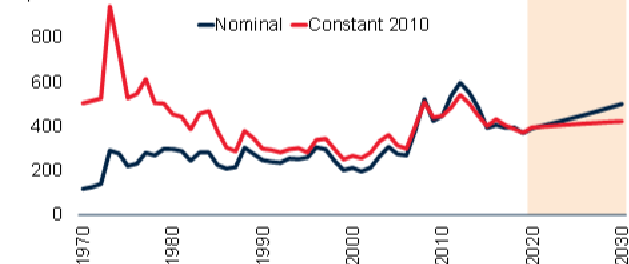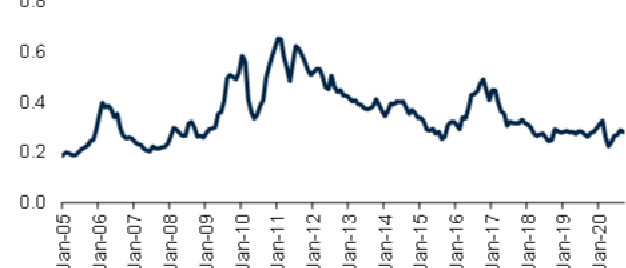
Sugar

Monthly Prices (US$/kg)

Source: See World Bank Commodities Price Data.
Note: Last observation is September 2020.
Click here to download chart and data.

Annual Prices (US$/kg)
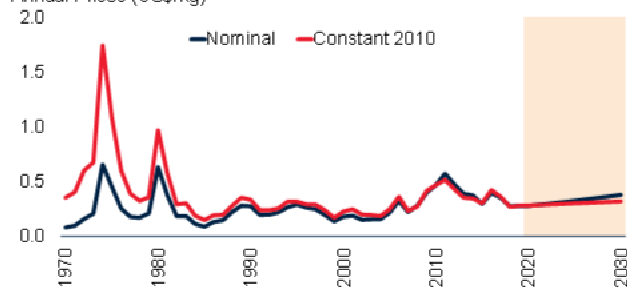
Source: World Bank.
Note: 2020-30 are forecasts.
Click here to download chart and data.

	1970/1971	1980/1981	1990/1991	2000/2001	2010/2011	2017/2018	2018/2019	2019/2020	2020/2021
					(million metric tons)				
Production									
Brazil	5.1	8.5	7.9	17.1	38.4	38.9	29.5	29.9	39.5
India	4.5	6.5	13.7	20.5	26.6	34.3	34.3	28.9	33.7
European Union	15.4	19.0	23.2	22.1	15.9	20.9	18.0	17.3	17.7
Thailand	0.5	1.7	4.0	5.1	9.7	14.7	14.6	8.3	12.9
China	2.1	3.2	6.8	6.8	11.2	10.3	10.8	10.2	10.7
United States	5.6	5.6	6.3	8.0	7.1	8.4	8.2	7.3	8.2
Russia	0.0	0.0	2.6	1.6	3.0	6.6	6.1	7.8	6.5
Mexico	2.5	2.5	3.9	5.2	5.5	6.4	6.8	5.4	6.5
Pakistan	0.0	0.9	2.1	2.6	3.9	7.2	5.5	5.6	5.9
Australia	2.7	3.3	3.6	4.2	3.7	4.5	4.7	4.3	4.5
Guatemala	0.2	0.5	1.0	1.6	2.0	2.9	3.0	2.8	2.8
Others	*31.7*	*36.7*	*39.4*	*35.9*	*35.2*	*39.2*	*38.3*	*38.5*	*39.3*
World	**70.3**	**88.6**	**114.4**	**130.8**	**162.2**	**194.3**	**179.7**	**166.2**	**188.1**
Stocks									
India	1.8	1.1	3.6	12.0	6.3	14.2	17.6	16.0	17.4
China	0.3	0.7	1.4	1.0	1.6	6.6	5.4	4.3	3.8
Thailand	0.0	0.2	0.2	0.6	3.0	6.8	8.3	3.5	2.9
Pakistan	0.0	0.1	0.3	0.4	1.5	3.1	2.7	2.2	1.9
United States	2.9	1.4	1.4	2.0	1.3	1.8	1.6	1.2	1.3
Philippines	0.0	0.2	0.2	0.3	0.9	1.1	1.1	1.1	1.1
Mexico	0.7	0.7	2.4	1.5	0.8	1.5	1.2	1.0	1.0
Others	*14.4*	*13.3*	*12.9*	*22.0*	*14.1*	*17.1*	*15.9*	*15.1*	*14.1*
World	**20.2**	**17.6**	**22.4**	**39.9**	**29.5**	**52.2**	**54.0**	**44.4**	**43.6**
Exports									
Brazil	1.2	2.3	1.3	7.7	25.8	28.2	19.6	19.3	28.9
Thailand	0.2	1.0	2.7	3.4	6.6	10.9	10.6	10.7	11.0
India	0.3	0.1	0.2	1.4	3.9	2.2	4.7	5.0	5.0
Australia	1.8	2.6	2.8	3.1	2.8	3.6	3.7	3.3	3.5
Guatemala	0.1	0.2	0.7	1.2	1.5	1.9	2.1	1.9	2.0
Mexico	0.6	0.0	0.3	0.2	1.6	1.1	2.3	1.0	1.7
European Union	2.7	6.5	8.1	7.3	1.1	3.9	2.0	1.2	1.5
Others	*14.4*	*15.7*	*17.8*	*14.2*	*10.6*	*12.4*	*11.0*	*11.7*	*11.7*
World	**21.3**	**28.4**	**33.9**	**38.3**	**53.9**	**64.3**	**56.0**	**54.1**	**65.2**
Imports									
Indonesia	0.1	0.6	0.2	1.6	3.1	4.3	5.4	4.0	4.7
China	0.4	1.1	1.1	1.1	2.1	4.4	4.1	4.1	4.2
United States	4.8	4.4	2.6	1.4	3.4	3.0	2.8	3.4	3.1
Bangladesh	n/a	0.0	0.0	0.8	1.5	2.7	2.4	2.2	2.5
Algeria	n/a	0.7	1.0	1.0	1.2	2.3	2.3	2.3	2.5
Malaysia	n/a	0.5	0.9	1.3	1.8	2.0	2.1	2.0	2.3
United Arab Emirates	n/a	0.1	0.1	1.1	2.0	2.8	1.6	1.3	2.2
Others	*n/a*	*20.9*	*26.2*	*32.0*	*34.0*	*32.8*	*30.8*	*31.3*	*33.3*
World	**17.3**	**28.2**	**32.1**	**40.4**	**49.1**	**54.1**	**51.5**	**50.7**	**54.8**

Source: U.S. Department of Agriculture (May 21, 2020 update).
Note: The trade year is January-December of the later year of the split. For example, 1970/71 refers to calendar year 1971. European Union includes EU-15 for 1980/81, 1990/91, and 2000/01, and EU-28 for 2010-2021.

Tea

Monthly Prices (US$/kg)

Source: See World Bank Commodities Price Data.
Note: Last observation is September 2020.
Click here to download chart and data.

Annual Prices (US$/kg)

Source: World Bank.
Note: 2020-30 are forecasts.
Click here to download chart and data.

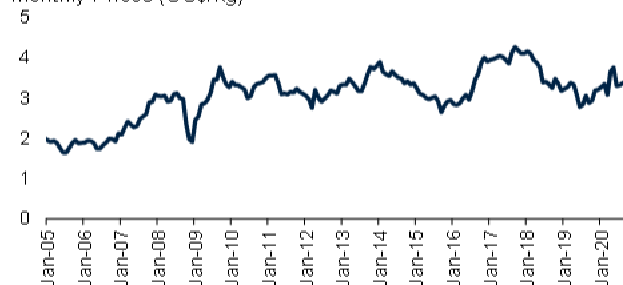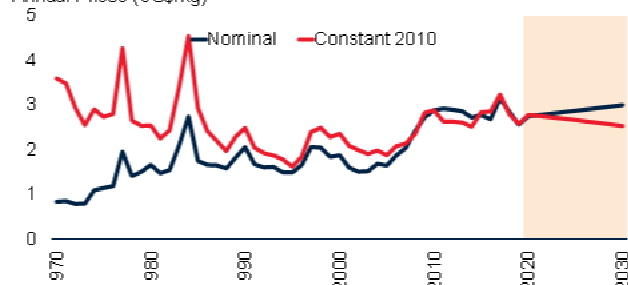|	1970	1980	1990	2000	2010	2015	2016	2017	2018
				(thousand metric tons)					
Production									
China	163	328	562	704	1,467	2,291	2,326	2,473	2,625
India	419	570	688	826	991	1,233	1,250	1,325	1,345
Kenya	41	90	197	236	399	399	473	440	493
Sri Lanka	212	191	233	306	331	321	293	308	304
Turkey	33	96	123	139	235	239	243	234	270
Vietnam	15	21	32	70	198	236	240	260	270
Indonesia	64	106	156	163	150	133	144	139	141
Iran	20	32	37	223	121	197	133	101	109
Myanmar	11	13	15	63	95	100	102	105	109
Japan	91	102	90	85	85	80	80	82	83
Argentina	26	36	51	74	92	82	85	81	82
Bangladesh	31	40	39	46	60	66	65	82	78
Uganda	18	2	7	29	49	61	63	64	62
Burundi	0	1	4	34	38	54	53	49	54
Thailand	n/a	1	7	32	67	49	55	48	51
Others	*142*	*265*	*284*	*201*	*242*	*250*	*256*	*257*	*262*
World	**1,287**	**1,894**	**2,525**	**3,231**	**4,622**	**5,790**	**5,860**	**6,048**	**6,338**
Consumption									
China	109	220	383	497	1,217	2,027	2,053	2,184	n/a
India	218	331	490	632	774	1,019	1,037	1,082	n/a
Brazil	90	81	133	514	406	431	415	419	n/a
Argentina	122	132	149	271	219	256	261	266	n/a
Turkey	26	91	95	137	242	255	252	253	n/a
Vietnam	13	12	16	14	62	168	173	214	n/a
Pakistan	30	61	106	111	93	163	184	182	n/a
Russia	0	0	0	158	176	171	164	154	n/a
United States	68	81	84	145	170	161	160	154	n/a
Iran	24	39	79	48	200	210	220	148	n/a
Kenya	6	12	21	2	2	150	162	125	n/a
Others	*796*	*1,026*	*1,283*	*1,196*	*1,492*	*1,677*	*1,664*	*1,749*	*n/a*
World	**1,502**	**2,086**	**2,839**	**3,725**	**5,053**	**6,688**	**6,745**	**6,930**	**n/a**
Exports									
Kenya	42	84	166	217	418	286	303	467	501
China	61	120	211	238	308	332	337	368	381
Sri Lanka	208	185	216	287	313	305	287	287	300
India	200	239	198	201	235	235	230	261	262
Vietnam	2	9	16	56	137	72	77	146	77
Argentina	19	33	46	50	86	76	78	75	73
Uganda	15	1	5	26	55	53	56	59	70
United Arab Emirates	n/a	8	7	12	50	30	32	55	67
Indonesia	41	74	111	106	87	62	51	53	49
Others	*164*	*231*	*251*	*271*	*336*	*321*	*342*	*352*	*356*
World	**752**	**984**	**1,228**	**1,464**	**2,023**	**1,772**	**1,792**	**2,123**	**2,136**

Source: Food and Agriculture Organization (Production September 14, 2020 update, Exports August 26, 2020 update, Food balance February 19, 2020 update).
Note: Consumption includes domestic use for food, feed, waste, and other uses. China includes Mainland, Hong Kong, Macao, and Taiwan, China.

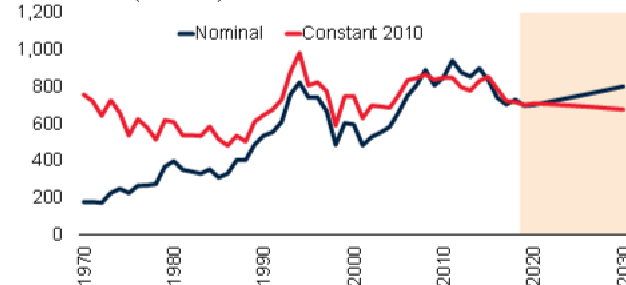# Timber—Roundwood and Sawnwood

Monthly Prices (US$/cum)
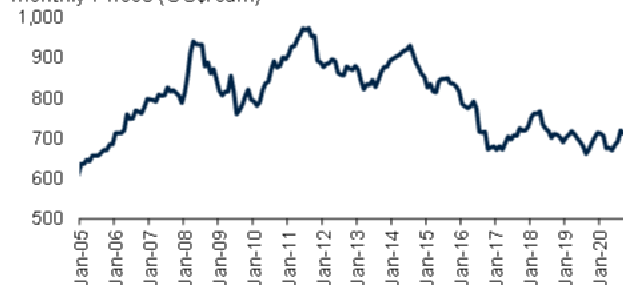
Source: See World Bank Commodities Price Data.
Note: Price refers to Sawnwood (S.E. Asia). Last observation is September 2020.
Click here to download chart and data.

Annual Prices (US$/cum)

Source: World Bank.
Note: Price refers to Sawnwood (S.E. Asia). 2020-30 are forecasts.
Click here to download chart and data.

	1970	1980	1990	2000	2010	2016	2017	2018	2019
				(million cubic meters)					
Industrial roundwood: Production									
United States	312.7	327.1	427.2	420.6	336.1	374.5	372.3	392.5	387.7
Russia	n/a	n/a	n/a	145.6	161.6	198.2	197.6	219.6	203.2
China	42.2	79.2	91.2	96.0	161.8	164.4	163.2	181.7	181.7
Brazil	23.9	61.7	74.3	103.0	128.4	145.1	151.0	158.1	158.1
Canada	117.5	150.8	156.0	198.9	138.8	154.7	155.2	155.6	144.0
Indonesia	12.7	30.9	38.4	48.8	54.1	74.0	74.0	74.0	74.0
Sweden	56.7	44.8	49.1	57.4	66.3	67.9	67.6	68.3	68.5
Finland	37.5	43.0	40.2	50.1	45.4	54.3	55.3	60.5	56.0
Germany	33.0	38.9	80.3	49.2	47.1	44.0	43.3	52.9	53.4
Others	*640.5*	*670.3*	*752.8*	*519.9*	*583.4*	*642.6*	*662.1*	*693.6*	*693.3*
World	**1,276.4**	**1,446.7**	**1,709.5**	**1,689.6**	**1,723.1**	**1,919.8**	**1,941.6**	**2,056.8**	**2,019.9**
Industrial roundwood: Imports									
China	2.0	8.3	7.2	15.7	35.4	51.8	55.7	60.2	61.1
Austria	2.0	3.7	4.4	8.5	8.0	9.2	8.8	10.1	10.5
Sweden	0.6	3.1	2.0	11.7	6.3	6.8	6.7	9.5	8.8
Germany	5.2	3.8	2.0	3.5	7.7	8.7	8.8	8.9	7.3
Finland	2.3	3.8	5.2	9.9	6.3	5.9	4.8	6.9	6.2
Canada	2.1	3.0	1.5	6.5	4.7	6.2	4.3	5.1	4.7
Korea, Rep.	3.2	6.1	10.1	6.7	4.2	6.0	6.1	5.6	4.3
Others	*65.8*	*63.6*	*50.2*	*52.7*	*37.2*	*39.6*	*35.7*	*37.4*	*37.4*
World	**83.1**	**95.4**	**82.6**	**115.3**	**109.8**	**134.2**	**130.8**	**143.8**	**140.3**
Sawnwood: Production									
China	14.8	21.2	23.6	6.7	37.2	77.2	86.1	90.3	90.3
United States	63.7	65.3	86.1	91.1	60.0	78.2	80.4	82.0	82.5
Russia	n/a	n/a	n/a	20.0	28.9	36.8	40.6	42.7	44.5
Canada	19.8	32.8	39.7	50.5	38.7	49.7	47.9	47.6	42.5
Germany	11.6	13.0	14.7	16.3	22.1	22.2	23.2	23.8	24.6
Sweden	12.3	11.3	12.0	16.2	16.8	18.4	18.4	18.4	18.7
Finland	7.4	10.3	7.5	13.4	9.5	11.4	11.8	11.9	11.4
Austria	5.4	6.7	7.5	10.4	9.6	9.4	9.8	10.4	10.5
Brazil	8.0	14.9	13.7	21.3	17.5	10.0	10.2	10.2	10.2
Others	*246.3*	*245.4*	*258.1*	*139.4*	*135.5*	*148.7*	*154.8*	*155.0*	*156.2*
World	**389.1**	**420.9**	**463.0**	**385.2**	**375.6**	**461.9**	**483.1**	**492.2**	**491.4**
Sawnwood: Imports									
China	0.1	0.3	1.3	6.1	16.2	33.4	38.8	38.1	39.5
United States	10.6	17.0	22.5	34.4	16.6	28.3	27.4	26.4	25.3
United Kingdom	9.0	6.6	10.7	7.9	5.7	6.6	7.7	7.2	7.0
Japan	3.0	5.6	9.0	10.0	6.4	6.3	6.3	6.0	5.7
Germany	6.0	6.9	6.1	6.3	4.4	5.1	5.2	5.6	5.2
Italy	4.0	5.8	6.0	8.4	6.1	4.7	5.2	4.8	4.5
Netherlands	3.1	3.2	3.5	3.7	2.8	2.8	3.2	3.5	4.4
Others	*17.0*	*26.2*	*25.5*	*39.1*	*50.2*	*56.3*	*57.2*	*60.7*	*60.6*
World	**52.7**	**71.5**	**84.5**	**115.8**	**108.4**	**143.7**	**151.0**	**152.2**	**152.2**

Source: Food and Agriculture Organization of the United Nations (August 18, 2020 update).
Note: Industrial roundwood, reported in cubic meters solid volume underbark (i.e., excluding bark), is an aggregate comprising sawlogs and veneer logs; pulpwood, round and split; and other industrial roundwood except wood fuel. Sawnwood, reported in cubic meters solid volume, includes wood that has been produced from both domestic and imported roundwood, either by sawing lengthways or by a profile-chipping process and that exceeds 6mm in thickness.

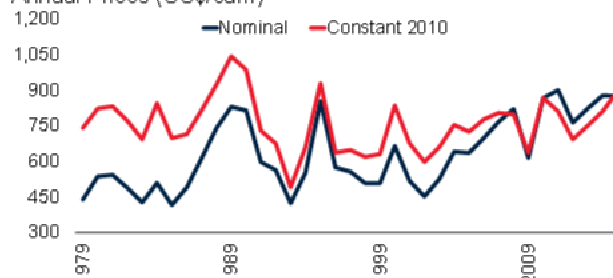# Timber—Wood panels and Woodpulp

Monthly Prices (US$/cum)

Source: See World Bank Commodities Price Data.
Note: Price refers to Woodpulp. Last observation is June 2014.
Click here to download chart and data.

Annual Prices (US$/cum)

Source: World Bank.
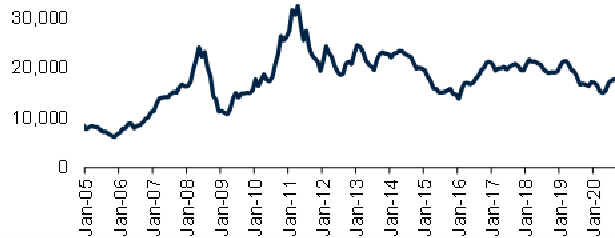Note: Price refers to Woodpulp.
Click here to download chart and data.

	1970	1980	1990	2000	2010	2016	2017	2018	2019
					(million cubic meters)				
Wood-based panels: Production									
China	0.9	2.3	3.0	18.9	106.1	208.5	201.6	199.9	199.9
United States	23.0	26.4	37.0	45.4	32.2	36.0	36.2	34.2	34.4
Russia	n/a	n/a	n/a	4.7	9.8	14.2	15.6	17.3	17.6
Germany	5.4	8.0	9.1	13.7	12.4	12.5	13.1	12.8	12.4
Poland	1.0	2.0	1.4	4.6	8.1	10.4	11.0	11.4	11.7
Canada	3.1	4.3	5.9	14.4	9.0	12.0	12.4	12.3	11.6
Brazil	0.7	2.3	2.7	5.2	8.8	10.3	11.1	12.0	11.0
Turkey	0.2	0.4	0.8	2.4	6.5	9.5	9.3	9.5	9.5
Thailand	0.1	0.1	0.3	1.2	5.2	6.5	6.7	7.0	7.0
Others	*32.1*	*51.1*	*63.6*	*67.7*	*76.9*	*84.3*	*85.7*	*87.2*	*86.6*
World	**66.6**	**96.9**	**123.8**	**178.2**	**275.1**	**404.1**	**402.6**	**403.7**	**401.6**
Wood-based panels: Imports									
United States	2.1	1.8	3.6	12.7	7.9	13.2	14.9	17.3	15.3
Germany	1.0	2.1	3.0	3.9	4.4	5.6	5.7	6.0	5.7
United Kingdom	2.0	2.4	3.2	3.3	2.7	3.4	3.5	3.8	3.6
Japan	0.5	0.2	3.2	6.1	4.0	3.8	4.1	4.0	3.3
Poland	0.2	0.4	0.1	0.7	1.7	2.4	3.1	3.1	3.2
Korea, Rep.	n/a	n/a	1.2	1.8	2.4	2.9	3.4	3.4	3.0
Italy	0.1	0.7	0.8	1.5	2.2	2.5	2.7	2.9	2.8
Others	*3.2*	*6.4*	*12.7*	*25.3*	*39.2*	*48.0*	*52.3*	*53.7*	*52.2*
World	**9.0**	**13.9**	**27.9**	**55.2**	**64.5**	**81.7**	**89.7**	**94.2**	**89.1**
Woodpulp: Production									
United States	37.3	46.2	57.2	57.8	50.9	49.5	49.2	53.2	52.1
Brazil	0.8	3.4	4.3	7.3	14.5	19.4	20.2	21.7	20.3
Canada	16.6	19.9	23.0	26.7	18.9	17.0	16.8	16.8	16.8
China	1.2	1.3	2.1	3.7	9.6	12.2	12.6	13.7	14.9
Sweden	8.1	8.7	10.2	11.5	11.9	11.8	12.2	12.0	12.1
Finland	6.2	7.2	8.9	12.0	10.5	10.9	11.1	12.1	12.0
Indonesia	0.0	0.0	0.7	4.1	5.7	7.3	8.7	8.7	8.7
Japan	8.8	9.8	11.3	11.4	9.5	8.8	8.9	8.8	8.6
Russia	n/a	n/a	n/a	5.8	7.4	8.4	8.3	8.6	8.2
Others	*22.5*	*29.1*	*37.1*	*30.7*	*33.6*	*35.8*	*36.0*	*36.2*	*36.1*
World	**101.6**	**125.7**	**154.8**	**171.1**	**172.4**	**181.1**	**184.0**	**191.7**	**189.6**
Woodpulp: Imports									
China	0.1	0.4	0.9	4.0	12.1	21.9	24.6	25.3	25.3
United States	3.2	3.7	4.4	6.6	5.6	5.6	5.4	5.6	5.3
Germany	1.8	2.6	3.7	4.1	5.1	5.2	5.3	4.8	4.5
Italy	1.4	1.8	2.1	3.2	3.4	3.4	3.2	3.5	3.6
Korea, Rep.	0.2	0.5	1.1	2.1	2.5	2.2	2.3	2.2	2.2
France	1.3	1.8	1.9	2.4	1.9	1.9	2.0	2.0	1.7
Japan	0.9	2.2	2.9	3.1	1.8	1.6	1.8	1.7	1.7
Others	*7.6*	*7.6*	*8.3*	*12.3*	*16.5*	*20.2*	*20.2*	*21.3*	*20.5*
World	**16.6**	**20.6**	**25.2**	**37.8**	**49.0**	**62.1**	**64.7**	**66.4**	**64.9**

Source: Food and Agriculture Organization of the United Nations (August 18, 2020 update).
Note: Wood-based panels, reported in cubic meters solid volume, is an aggregate comprising veneer sheets, plywood, particle board and fiberboard. Woodpulp, reported in metric tons air-dry weight (i.e., with 10% moisture content), is an aggregate comprising mechanical woodpulp, semi-chemical woodpulp, chemical woodpulp, and dissolving woodpulp.
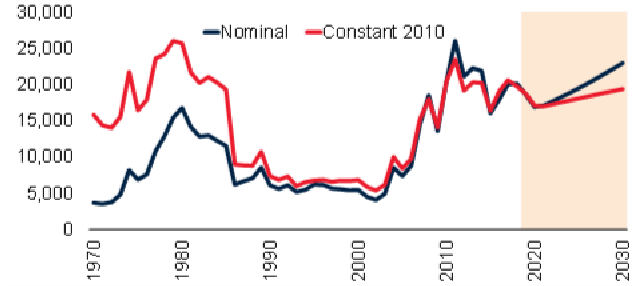
Tin

Monthly Prices (US$/mt)

Source: See World Bank Commodities Price Data.
Note: Last observation is September 2020.
Click here to download chart and data.

Annual Prices (US$/mt)

Source: World Bank.
Note: 2020-30 are forecasts.
Click here to download chart and data.

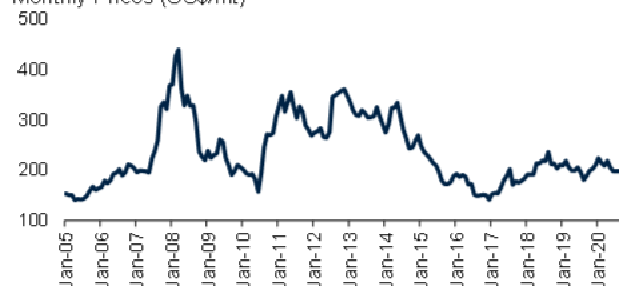|	1970	1980	1990	2000	2010	2016	2017	2018	2019
				(thousand metric tons)					
Mine Production									
China	n/a	16.0	40.0	87.7	129.6	97.2	112.2	127.0	134.3
Indonesia	19.1	32.5	40.0	51.6	84.0	60.0	82.8	84.0	86.4
Myanmar	0.3	1.3	0.5	1.6	0.8	60.0	58.9	45.9	45.0
Peru	0.1	1.1	5.1	36.4	33.8	18.8	17.8	18.6	19.7
Bolivia	28.9	27.3	17.2	12.5	20.2	17.5	18.4	17.3	17.2
Brazil	3.6	6.9	39.1	14.2	10.4	15.2	17.1	17.6	14.9
Congo, Dem. Rep.	6.5	n/a	n/a	0.0	7.4	6.5	10.2	9.0	12.5
Australia	8.8	11.6	7.4	9.1	18.6	6.6	7.4	6.9	7.7
Nigeria	8.0	2.7	0.3	2.0	1.3	3.4	8.6	7.9	7.0
Vietnam	n/a	n/a	0.8	1.8	5.4	4.5	5.0	5.5	5.5
Malaysia	73.8	61.4	28.5	6.3	2.7	4.1	4.8	3.9	3.6
Russia	n/a	n/a	n/a	6.5	0.1	0.6	1.0	1.5	2.3
Rwanda	1.4	2.9	0.7	0.4	2.9	2.2	3.0	3.0	2.2
Others	n/a	n/a	n/a	4.4	0.7	1.5	2.0	2.1	1.7
World	**184.3**	**228.1**	**210.6**	**234.5**	**318.0**	**298.1**	**349.2**	**349.9**	**360.0**
Refined Production									
China	20.0	16.0	35.8	109.9	149.0	182.7	178.4	177.7	181.0
Indonesia	5.2	30.5	30.4	46.4	64.2	52.3	72.0	81.4	81.6
Malaysia	92.1	71.3	49.0	26.2	38.7	26.5	27.2	27.2	23.7
Peru	n/a	n/a	n/a	17.4	36.4	19.4	17.9	18.3	19.5
Bolivia	n/a	17.5	13.4	9.4	15.0	16.8	16.1	15.6	15.1
Brazil	3.1	8.8	37.6	13.8	9.1	12.5	13.8	13.5	12.0
Thailand	22.0	34.7	15.5	17.2	23.5	11.1	10.6	10.9	9.6
Belgium	4.3	2.8	6.1	8.5	9.9	8.5	9.7	9.3	9.3
Vietnam	0.0	0.0	1.8	1.8	3.0	4.4	4.4	4.9	4.8
Poland	0.0	0.0	0.0	0.0	0.6	2.9	3.4	3.8	4.0
Taiwan, China	n/a	n/a	n/a	0	0	2.8	3	2.8	3.8
Japan	1.4	1.3	0.8	0.6	0.8	1.6	1.6	1.6	1.6
Russia	n/a	n/a	n/a	5.5	0.7	0.0	0.8	1.0	1.0
Others	n/a	n/a	n/a	5.6	5.5	0.0	0.0	0.1	0.4
World	**204.2**	**232.2**	**227.5**	**262.3**	**356.6**	**341.5**	**359.0**	**368.1**	**367.3**
Refined Consumption									
China	13	12.5	25.5	49.1	154.3	191.4	182.1	174.2	177.9
United States	53.8	46.1	36.8	51.0	32.0	29.5	31.5	34.7	31.3
Japan	28.6	30.9	34.8	25.2	35.7	26.1	29.1	28.1	24.9
Germany	17.3	19.0	21.7	20.7	17.4	18.2	20.0	20.2	18.4
Korea, Rep.	0.4	1.8	7.8	15.3	17.4	14.2	13.1	13.9	12.0
India	4.8	2.3	2.3	6.4	10.7	9.1	10.0	11.4	10.6
Taiwan, China	n/a	1.3	4.8	11.1	11.1	6.9	7.3	7.4	8.4
Netherlands	n/a	5.0	7.0	3.6	5.4	6.0	6.0	6.0	6.0
Spain	3	4.6	4.0	4.1	6.1	6.5	5.5	6.0	5.8
Others	104.9	100.5	92.9	90.4	78.5	76.9	74.5	75.6	6.0
World	**225.8**	**224.0**	**237.6**	**276.9**	**368.8**	**384.9**	**379.0**	**377.5**	**366.6**

Source: British Geological Survey; Metallgesellschaft; U.S. Geological Survey; World Bureau of Metals Statistics; World Bank.
Note: n/a implies data not available. Refined production and consumption include significant recycled material.
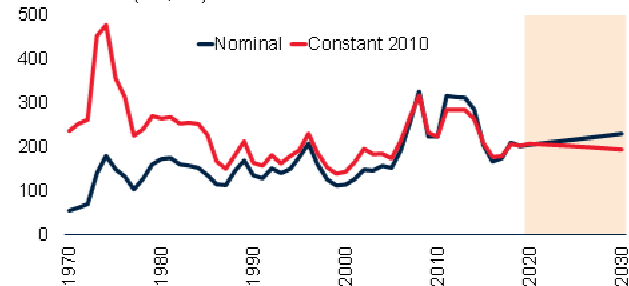
Wheat

Monthly Prices (US$/mt)

Source: See World Bank Commodities Price Data.
Note: Last observation is September 2020.
Click here to download chart and data.

Annual Prices (US$/mt)

Source: World Bank.
Note: 2020-30 are forecasts.
Click here to download chart and data.

	1970/1971	1980/1981	1990/1991	2000/2001	2010/2011	2017/2018	2018/2019	2019/2020	2020/2021
					(million metric tons)				
Production									
European Union	62.5	93.3	125.0	132.7	136.7	151.1	136.7	154.9	136.8
China	29.2	55.2	98.2	99.6	116.1	134.3	131.4	133.6	136.0
India	20.1	31.8	49.9	76.4	80.8	98.5	99.9	103.6	107.6
Russia	0.0	0.0	49.6	34.5	41.5	85.2	71.7	73.6	83.0
United States	36.8	64.8	74.3	60.6	58.9	47.4	51.3	52.6	49.7
Canada	9.0	19.3	32.1	26.5	23.3	30.4	32.2	32.3	35.0
Australia	7.9	10.9	15.1	22.1	27.4	20.9	17.6	15.2	28.5
Pakistan	7.3	10.9	14.4	21.1	23.3	26.6	25.1	24.3	25.7
Ukraine	n/a	n/a	30.4	10.2	16.8	27.0	25.1	29.2	25.5
Argentina	4.9	7.8	11.0	16.3	17.2	18.5	19.5	19.8	19.0
Turkey	8.0	13.0	16.0	18.0	17.0	21.0	19.0	17.5	18.5
Others	*120.8*	*128.9*	*72.8*	*64.7*	*91.6*	*102.1*	*101.5*	*107.9*	*107.8*
World	**306.5**	**435.9**	**588.8**	**582.8**	**650.7**	**763.0**	**730.9**	**764.5**	**773.1**
Stocks									
China	7.2	31.7	49.9	91.9	59.5	131.2	139.8	151.7	164.2
India	5.0	4.0	5.8	21.5	15.4	13.2	17.0	24.0	31.1
United States	22.4	26.9	23.6	23.8	23.5	29.9	29.4	28.0	24.0
European Union	8.6	13.0	22.5	17.9	13.5	17.9	16.0	14.8	14.1
Russia	n/a	n/a	16.4	1.5	13.7	12.0	7.8	7.2	10.7
Iran	0.7	1.2	3.2	2.9	2.9	8.1	6.2	6.6	6.6
Canada	20.0	8.5	10.3	9.7	7.4	6.7	5.9	5.0	5.8
Others	*16.7*	*27.3*	*39.1*	*36.9*	*65.0*	*69.2*	*61.9*	*62.1*	*64.9*
World	**80.5**	**112.6**	**170.9**	**206.1**	**200.8**	**288.3**	**284.0**	**299.4**	**321.5**
Exports									
Russia	n/a	n/a	1.2	0.7	4.0	41.4	35.9	34.5	39.0
United States	20.2	41.2	29.1	28.9	35.1	24.7	25.5	26.3	26.5
European Union	6.7	17.5	23.8	15.7	23.1	23.4	23.3	38.4	25.5
Canada	11.8	16.3	21.7	17.3	16.6	22.0	24.4	24.6	25.0
Australia	9.1	9.6	11.8	15.9	18.6	13.8	9.0	9.5	19.0
Ukraine	0.0	0.0	2.0	0.1	4.3	17.8	16.0	21.0	17.5
Argentina	1.0	3.8	5.6	11.3	9.5	12.7	12.2	13.5	13.0
Others	*7.7*	*1.7*	*8.6*	*11.2*	*21.9*	*26.8*	*27.3*	*23.7*	*24.4*
World	**56.5**	**90.1**	**103.8**	**101.2**	**133.0**	**182.6**	**173.6**	**191.5**	**189.9**
Imports									
Egypt	2.8	5.4	5.7	6.1	10.6	12.4	12.4	12.8	13.0
Indonesia	0.5	1.2	2.0	4.1	6.6	10.8	10.9	10.5	10.8
China	3.7	13.8	9.4	0.2	0.9	3.9	3.1	5.4	7.5
Algeria	0.6	2.3	4.4	5.6	6.5	8.2	7.5	7.1	7.0
Philippines	0.6	0.9	1.5	3.1	3.2	6.1	7.5	7.0	7.0
Turkey	0.9	0.0	0.3	0.4	3.7	6.0	6.4	10.7	7.0
Brazil	1.7	3.9	4.4	7.2	6.7	7.0	7.0	7.2	6.7
Others	*45.0*	*62.0*	*71.3*	*72.8*	*93.6*	*126.7*	*115.9*	*123.1*	*127.2*
World	**55.8**	**89.5**	**99.0**	**99.3**	**131.9**	**181.1**	**170.7**	**183.8**	**186.2**

Source: U.S. Department of Agriculture (October 9, 2020 update).
Note: The trade year is January-December of the later year of the split. For example, 1970/71 refers to calendar year 1971. 'n/a' implies not available. European Union includes EU-15 for 1980/81, 1990/91, and 2000/01, and EU-28 for 2010-2021.

Zinc

Monthly Prices (US$/mt)
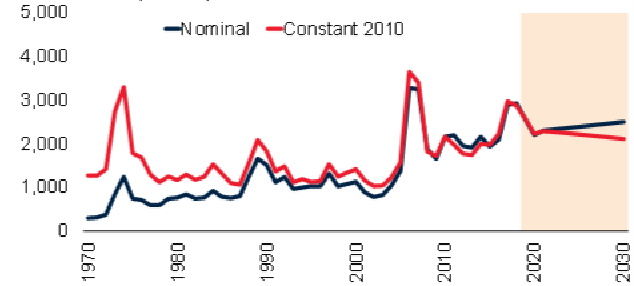

Source: See World Bank Commodities Price Data.
Note: Last observation is September 2020.
Click here to download chart and data.

Annual Prices (US$/mt)

Source: World Bank.
Note: 2020-30 are forecasts.
Click here to download chart and data.

	1970	1980	1990	2000	2010	2016	2017	2018	2019
				(thousand metric tons)					
Mine Production									
China	100	150	750	1,780	3,842	4,711	3,868	4,193	4,645
Peru	299	488	584	910	1,470	1,337	1,473	1,470	1,404
Australia	487	495	933	1,420	1,475	885	849	1,136	1,337
United States	485	317	543	829	748	805	774	838	753
India	8	32	70	208	741	646	835	747	713
Mexico	263	238	322	401	570	661	674	637	701
Bolivia	46	50	104	149	411	487	504	520	528
Kazakhstan	n/a	n/a	n/a	322	405	366	347	345	370
Canada	1,253	1,059	1,203	1,002	649	322	347	305	323
Russia	n/a	n/a	n/a	132	214	248	292	296	300
Sweden	93	176	164	177	199	258	251	238	248
Brazil	n/a	70	110	100	211	159	156	169	163
Portugal	n/a	n/a	n/a	0	6	70	71	145	162
Others	*n/a*	*n/a*	*n/a*	*1,385*	*1,532*	*1,501*	*1,537*	*1,721*	*1,783*
World	**5,359**	**6,189**	**7,117**	**8,815**	**12,469**	**12,385**	**11,908**	**12,614**	**13,269**
Refined Production									
China	100	155	550	1,957	5,209	6,196	6,144	5,681	6,236
Korea, Rep.	2	79	257	473	750	1,009	1,069	1,099	1,056
India	23	44	79	176	701	616	792	776	738
Canada	413	592	592	780	691	691	598	620	655
Japan	676	735	687	654	574	534	524	521	527
Spain	89	152	253	386	517	507	510	511	511
Australia	261	306	303	489	507	470	471	502	445
Mexico	85	145	199	337	322	321	327	336	389
Peru	71	64	118	200	223	342	312	334	356
Kazakhstan	n/a	n/a	n/a	263	319	326	329	329	296
Finland	57	147	163	223	307	291	285	295	291
Russia	n/a	n/a	n/a	241	260	255	265	263	263
Brazil	n/a	79	150	192	288	285	245	259	259
Others	*n/a*	*n/a*	*n/a*	*2,782*	*2,251*	*1,972*	*1,914*	*1,907*	*1,872*
World	**5,095**	**6,183**	**6,971**	**9,153**	**12,919**	**13,814**	**13,786**	**13,432**	**13,893**
Refined Consumption									
China	150	200	369	1,402	5,350	6,484	6,890	6,179	6,821
United States	1074	810	992	1,315	907	789	829	867	950
India	97	95	135	224	538	676	653	714	687
Korea, Rep.	11	68	230	419	540	627	735	716	672
Japan	623	752	814	674	516	474	482	482	517
Germany	448	474	530	532	494	483	452	444	389
Italy	178	236	270	377	339	312	275	280	277
Russia	n/a	n/a	n/a	138	203	224	240	233	273
Turkey	9	12	47	92	182	231	267	248	252
Others	*2,452*	*3,484*	*3,181*	*3,716*	*3,463*	*3,575*	*3,411*	*3,179*	*3,144*
World	**5,042**	**6,131**	**6,568**	**8,889**	**12,532**	**13,876**	**14,234**	**13,341**	**13,982**

Source: British Geological Survey; Metallgesellschaft; U.S. Geological Survey; World Bureau of Metals Statistics; World Bank.
Note: n/a implies data not available.

APPENDIX C

Description of price series
Technical notes

Description of price series

Energy

Coal (Australia). Thermal, f.o.b. Newcastle, 6,000 kcal/kg, spot price.

Coal (South Africa). f.o.b. Richards Bay, NAR, 6000 kcal/kg, sulfur less than 1%, forward month one.

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

Natural Gas Index (Laspeyres). Weights based on five-year consumption volumes for Europe, U.S. and Japan (LNG), updated every five years.

Natural gas (Europe). Netherlands Title Transfer Facility (TTF).

Natural gas (U.S.). Spot price at Henry Hub, Louisiana.

Liquefied natural gas (Japan). LNG, import price, cif; recent two months' averages are estimates.

Non-Energy

Beverages

Cocoa (ICCO). International Cocoa Organisation daily price, average of the first three positions on the terminal markets of New York and London, nearest three future trading months.

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

Coffee (ICO). International Coffee Organization indicator price, Robustas, average New York and Le Havre/Marseilles markets, ex-dock.

Tea. Average three auctions, arithmetic average of quotations at Kolkata, Colombo, and Mombasa/Nairobi.

Tea (Colombo). Sri Lankan origin, all tea, arithmetic average of weekly quotes.

Tea (Kolkata). leaf, include excise duty, arithmetic average of weekly quotes.

Tea (Mombasa/Nairobi). African origin, all tea, arithmetic average of weekly quotes.

Oils and meals

Coconut oil (Philippines/Indonesia). Crude, c.i.f. NW Europe.

Groundnuts (U.S.). Runners 40/50, CFR N.W. Europe

Groundnut oil. U.S. crude, FOB South-East.

Fishmeal. German, 64% protein, EXW Hamburg.

Palm oil (Malaysia). RBD, c.i.f Rotterdam.

Palmkernel Oil (Indonesia/Malaysia). Crude, c.i.f. NW Europe.

Soybean meal. Brazilian pellets 48% protein, c.i.f Rotterdam.

Soybean oil. Dutch crude, degummed, f.o.b. NW Europe.

Soybeans. U.S. No. 2 yellow meal, c.i.f. Rotterdam.

Grains

Barley (U.S.). Feed, No. 2, spot, 20-days-to-arrive, delivered Minneapolis.

Maize (U.S.). No. 2, yellow, f.o.b. U.S. Gulf ports.

Rice (Thailand). 5% broken, white rice (WR), milled, indicative price based on weekly surveys of export transactions, government standard, f.o.b. Bangkok.

Rice (Thailand). 25% broken, WR, milled indicative survey price, government standard, f.o.b. Bangkok.

Rice (Thailand). 100% broken, A.1 Super, indicative survey price, government standard, f.o.b. Bangkok.

Rice (Vietnam). 5% broken, WR, milled, weekly indicative survey price, minimum export price, f.o.b. Hanoi.

Sorghum (U.S.). No. 2 milo yellow, f.o.b. Gulf ports.

Wheat (U.S.). No. 1, hard red winter (HRW), ordinary protein, export price delivered at the U.S. Gulf port for prompt or 30 days shipment.

Wheat (U.S.). No. 2, soft red winter (SRW), export price delivered at the U.S. Gulf port for prompt or 30 days shipment.

Other food

Bananas (Central and South America). Major brands, free on truck (f.o.t.) Southern Europe, including duties.

Bananas (Central and South America). Major brands, U.S. import price, f.o.t. U.S. Gulf ports.

Meat, beef (Australia/New Zealand). Chucks and cow forequarters, frozen boneless, 85% chemical lean, c.i.f. U.S. port (east coast), ex-dock.

Meat, chicken (U.S.). Urner Barry North East weighted average for broiler/fryer, whole birds, 2.5 to 3.5 pounds, USDA grade "A".

Meat, sheep (New Zealand). Frozen whole carcasses Prime Medium (PM) wholesale, Smithfield, London.

Oranges (Mediterranean exporters). Navel, EEC indicative import price, c.i.f. Paris.

Shrimp (U.S.). Brown, shell-on, headless, in frozen blocks, source Gulf of Mexico, 26 to 30 count per pound, wholesale U.S.

Sugar (EU). European Union negotiated import price for raw unpackaged sugar from African, Caribbean, and Pacific (ACP), c.i.f. European ports.

Sugar (U.S.). Nearby futures contract, c.i.f.

Sugar (World). International Sugar Agreement (ISA) daily price, raw, f.o.b. and stowed at greater Caribbean ports.

Timber

Logs (Africa). Sapele, high quality (loyal and marchand), 80 centimeter or more, f.o.b. Douala, Cameroon.

Logs (Southeast Asia). Meranti, Sarawak, Malaysia, sale price charged by importers, Tokyo.

Plywood (Africa and Southeast Asia). Lauan, 3-ply, extra, 91 cm x 182 cm x 4 mm, wholesale price, spot Tokyo.

Sawnwood (Africa). Sapele, width 6 inches or more, length 6 feet or more, f.a.s. Cameroonian ports.

Sawnwood (Southeast Asia). Malaysian dark red seraya/meranti, select and better quality, average 7 to 8 inches; length average 12 to 14 inches; thickness 1 to 2 inches; kiln dry, c. & f. U.K. ports, with 5% agents commission including premium for products of certified sustainable forest.

Other raw materials

Cotton (Cotlook "A" index). Middling 1-3/32 inch, traded in Far East, C/F.

Rubber (Asia). RSS3 grade, Singapore Commodity Exchange Ltd (SICOM) nearby contract.

Rubber (Asia). TSR 20, Technically Specified Rubber, SICOM nearby contract.

Fertilizers

DAP (diammonium phosphate), spot, f.o.b. U.S. Gulf.

Phosphate rock , f.o.b. North Africa.

Potassium chloride (muriate of potash), spot, f.o.b. Vancouver.

TSP (triple superphosphate), spot, import U.S. Gulf.

Urea (Ukraine), f.o.b. Black Sea.

Metals and minerals

Aluminum (LME). London Metal Exchange, unalloyed primary ingots, standard high grade, physical settlement.

Copper (LME). Standard grade A, cathodes and wire bar shapes, physical settlement.

Iron ore (any origin). Fines, spot price, c.f.r. China, 62% Fe.

Lead (LME). Refined, standard high grade, physical settlement.

Nickel (LME). Cathodes, standard high grade, physical settlement.

Tin (LME). Refined, standard high grade, physical settlement.

Zinc (LME). Refined, standard special high grade, physical settlement.

Precious Metals

Gold (U.K.). 99.5% fine, London afternoon fixing, average of daily rates.

Platinum (U.K.). 99.9% refined, London afternoon fixing.

Silver (U.K.). 99.9% refined, London afternoon fixing.

Technical Notes

Definitions and explanations

Constant prices are prices which are deflated by the Manufacturers Unit Value Index (MUV).

MUV is the unit value index in U.S. dollar terms of manufactures exported from fifteen countries: Brazil, Canada, China, Germany, France, India, Italy, Japan, Mexico, Republic of Korea, South Africa, Spain, Thailand, the United Kingdom, and the United States.

Price indexes were computed by the Laspeyres formula. The Non-Energy Price Index is comprised of 34 commodities. U.S. dollar prices of each commodity is weighted by 2002-2004 average export values. Base year reference for all indexes is 2010. Countries included in indexes are all low- and middle-income, according to World Bank income classifications.

Price index weights. Trade data as of May 2008 comes from United Nations' Comtrade Database via the World Bank WITS system, Food and Agriculture Organization FAOSTAT Database, International Energy Agency Database, BP Statistical Review, World Metal Statistics, World Bureau of Metal Statistics, and World Bank staff estimates. The weights can be found in the table on the next page.

Reporting period. Calendar vs. crop or marketing year refers to the span of the year. It is common in many agricultural commodities to refer to production and other variables over a twelve-month period that begins with harvest. A crop or marketing year will often differ by commodity and, in some cases, by country or region.

Abbreviations

$ = U.S. dollar

bbl = barrel

c.i.f. = cost, insurance, freight

c.f.r. = cost and freight

cpi = consumer price index

cum = cubic meter

dmt = dry metric ton

f.o.b. = free on board

f.o.t. = free on truck

kg = kilogram

mb/d = million barrels per day

mmbtu = million British thermal units

mmt = million metric tons

mt = metric ton (1,000 kilograms)

toz = troy ounce

Acronyms

COVID-19	Coronavirus Disease 2019
DAP	diammonium phosphate
EIA	Energy Information Administration
EU	European Union
EMDEs	Emerging markets and developing economies
ENSO	El Niño-Southern Oscillation
ETF	exchange-traded funds
FAO	Food and Agriculture Organization
GARCH	Generalized Autoregressive Conditional Heteroskedasticity
GFC	global financial crisis
HRW	hard red winter
ICAC	International Cotton Advisory Committee
IEA	International Energy Agency
IFA	International Fertilizer Industry Association
IRENA	International Renewable Energy Agency
IRSG	International Rubber Study Group
LME	London Metal Exchange
LNG	liquefied natural gas
MOP	muriate of potash, or potassium chloride
MUV	Manufacture Unit Value

NPI	nickel pig iron	Intergovernmental Group on Bananas and Tropical Fruits
OECD	Organisation of Economic Co-operation and Development	Intergovernmental Group on Tea
OPEC	Organization of the Petroleum Exporting Countries	International Cocoa Organisation (ICCO)
		International Coffee Organization (ICO)
PMI	purchasing managers' index	International Cotton Advisory Committee (ICAC)
RMSE	Root Mean Square Error	
SRW	soft red winter	International Energy Agency (IEA)
TTF	Netherlands Title Transfer Facility	International Fertilizer Industry Association (IFA)
TSP	triple superphosphate	International Rubber Study Group (IRSG)
USDA	United States Department of Agriculture	International Tropical Timber Organization (ITTO)
WTI	West Texas Intermediate	International Sugar Organization (ISO)

International Sugar Organization (ISO)

ISTA Mielke GmbH Oil World

Data sources

Africa Tea Brokers Limited

Agribusiness Intelligence from Informa

Banana Market Review

Baker Hughes

Bloomberg

Bloomberg L.P.—Green Markets

BP Statistical Review

British Geological Survey

Cotton Outlook

Federal Reserve Bank of Dallas

Federal Reserve Bank of St. Louis Economic Data (FRED)

Food and Agriculture Organization (FAO)

General Administration of Customs of the People's Republic of China

Gold Fields Mineral Services (GFMS)

Haver Analytics

IHS Markit Agribusiness UK Ltd

Japan Lumber Journal

London Metal Exchange

Meat Trade Journal

Metallgesellschaft

Nova Media Publishing, Inc.

Official Statistics of Japan

Platinum and Palladium Survey

Silver Institute

Steel Statistical Yearbook

Tea Board India

Tea Exporters Association Sri Lanka

Thomson Reuters

Urner Barry

U.S. Department of Agriculture (USDA)

U.S. Energy Information Administration (EIA)

U.S. Geological Survey

World Bureau of Metal Statistics

World Gold Council

World Platinum Investment Council

Weights for commodity price indexes

Commodity group	Share of energy and non-energy indexes	Share of sub-group indexes
ENERGY	**100.0**	**100.0**
Coal	4.7	4.7
Crude Oil	84.6	84.6
Natural Gas	10.8	10.8
NON-ENERGY	**100.0**	
Agriculture	**64.9**	
Beverages	**8.4**	**100.0**
Coffee	3.8	45.7
Cocoa	3.1	36.9
Tea	1.5	17.4
Food	**40.0**	
Grains	**11.3**	**100.0**
Rice	3.4	30.1
Wheat	2.8	25.2
Maize (includes sorghum)	4.6	40.7
Barley	0.5	4.1
Oils and meals	**16.3**	**100.0**
Soybeans	4.0	24.6
Soybean Oil	2.1	13.0
Soybean Meal	4.3	26.3
Palm Oil	4.9	30.2
Coconut Oil	0.5	3.1
Groundnut Oil (includes groundnuts)	0.5	2.8
Other food	**12.4**	**100.0**
Sugar	3.9	31.5
Bananas	1.9	15.7
Meat, beef	2.7	22.0
Meat, chicken	2.4	19.2
Oranges (includes orange junice)	1.4	11.6
Agricultural Raw Materials	**16.5**	
Timber	**8.6**	**100.0**
Logs	1.9	22.1
Sawnwood	6.7	77.9
Other Raw Materials	**7.9**	**100.0**
Cotton	1.9	24.7
Natural Rubber	3.7	46.7
Tobacco	2.3	28.7
Fertilizers	**3.6**	**100.0**
Natural Phosphate Rock	0.6	16.9
Phosphate	0.8	21.7
Potassium	0.7	20.1
Nitogenous	1.5	41.3
Metals and Minerals	**31.6**	**100.0**
Aluminum	8.4	26.7
Copper	12.1	38.4
Iron Ore	6.0	18.9
Lead	0.6	1.8
Nickel	2.5	8.1
Tin	0.7	2.1
Zinc	1.3	4.1
PRECIOUS METALS	**100.0**	
Gold	77.8	
Silver	18.9	
Platinum	3.3	

Note: Index weights are based on 2002-04 developing countries' export values. Precious metals are not included in the non-energy index.

Commodity Markets Outlook: Selected Topics, 2011-20

Topics	Date
Persistence of commodity shocks	October 2020
Set up to fail? The collapse of commodity agreements	April 2020
A shock like no other: The impact of COVID-19 on commodity markets	April 2020
The role of substitution in commodity demand	October 2019
Innovation, disruptive technologies, and substitution among commodities	October 2019
Oil market implications of the strike on Saudi Arambo facilities	October 2019
Food price shocks: Channels and implications	October 2019
The implications of tariffs for commodity markets	October 2018
The changing of the guard: Shifts in commodity demand	October 2018
Oil exporters: Policies and challenges	October 2018
Investment weakness in commodity exporters	January 2017
OPEC in historical context: Commodity agreements and market fundamentals	October 2016
From energy prices to food prices: Moving in tandem?	July 2016
Resource development in era of cheap commodities	October 2016
Weak growth in emerging market economies: What does it imply for commodity markets?	January 2016
Understanding El Niño: What does it mean for commodity markets?	October 2015
Iran nuclear agreement: A game changer for energy markets?	October 2015
How important are China and India in global commodity consumption?	July 2015
Anatomy of the last four oil price crashes	October 2015
Putting the recent plunge in oil prices in perspective	January 2015
The role of income growth in commodities	October 2014
Price volatility for most commodities has returned to historical norms	July 2014
The nature and causes of oil price volatility	January 2014
A global energy market?	July 2013
Global reserves, demand growth, and the "super cycle" hypothesis	July 2013
The "energy revolution," innovation, and the nature of substitution	January 2013
Commodity prices: levels, volatility, and comovement	January 2013
Which drivers matter most in food price movements?	January 2013
Induced innovation, price divergence, and substitution	June 2012
The role of emerging markets in commodity consumption	June 2012
WTI-Brent price dislocation	January 2012
Metals consumption in China and India	January 2012
China, global metal demand, and the super-cycle hypothesis	June 2011

Almost all commodity prices recovered in the third quarter of 2020 following steep declines earlier in the year. Crude oil prices have doubled since April in response to supply cuts but remain much lower than their pre-pandemic levels. Metal prices recovered rapidly due to supply disruptions and a faster-than-expected pickup in China's industrial activity. Some food prices have also risen amid production shortfalls in edible oils. Oil prices are expected to average $44/bbl in 2021, up from an estimated $41/bbl in 2020. Metal and agricultural prices are projected to see modest gains of 2 percent and 1 percent, respectively, in 2021.

A *Special Focus* looks at the nature of shocks on 27 commodity prices during 1970-2019. It finds that highly persistent ("permanent") and short-lived ("transitory") shocks have contributed almost equally to commodity price variation, although with wide heterogeneity across commodities. Permanent shocks account for most of agricultural commodity price variability while transitory shocks are more relevant in industrial commodity prices.

The World Bank's *Commodity Markets Outlook* is published twice a year, in April and October. The report provides detailed market analysis for major commodity groups, including energy, agriculture, fertilizers, metals and minerals, and precious metals. Price forecasts to 2030 for 46 commodities are also presented together with historical price data. Commodity price data updates are published separately at the beginning of each month.

The report and data can be accessed at:
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