Recent developments, challenges and opportunities in commodity markets

Note by the UNCTAD secretariat, revised

Summary

This note contains a review of recent developments in key commodity markets and an analysis of factors that contributed to the trends in commodity prices observed in 2020. In January–September 2020, the prices of most commodities analysed in this note (food and agricultural commodities; minerals, ores and metals; and energy) trended downwards during the early part of the year, owing to weak demand driven by a slowdown in global economic activity prompted by the coronavirus disease (COVID-19) pandemic. Commodity prices recovered thereafter due to various factors, including a recovery in industrial activity in China, which drove a rebound in demand for metals; and production cuts by members of the Organization of Petroleum Exporting Countries, which led to tightening markets. Prices of some food commodities also rose due to supply disruptions triggered by measures taken to mitigate the potential impacts of the pandemic on domestic supply and to strengthened demand amid adverse weather conditions. In the precious metals group, gold prices trended upwards as investors sought safe-haven assets to limit their exposure to losses in a period of uncertainty. Some policy issues are explored with regard to the large price variations observed in these commodity markets and recommendations suggested that could help commodity-dependent developing countries, both importers and exporters, to mitigate exposure to price fluctuations and achieve sustainable development and inclusive growth.
Introduction

1. The Accra Accord, in paragraph 208, gave a mandate to the Trade and Development Board of UNCTAD to establish a multi-year expert meeting on commodities. The mandate was reaffirmed in paragraph 17 of the Doha Mandate, which extended it to 2016. The mandate was further extended to 2020 in paragraph 100 (s) of the Nairobi Maaflkiano.

2. This note contains an analysis of commodity market developments in 2020, with a focus on price trends and the underlying causes of price fluctuations. It also highlights some policy issues associated with recent market developments and draws lessons in the form of policy recommendations to assist commodity-dependent developing countries in their efforts to achieve sustainable development and inclusive economic growth. Commodities are grouped into three categories, namely, food and agricultural commodities (food, vegetable oilseeds and oils, tropical beverages and agricultural raw materials); minerals, ores and metals; and energy (crude oil, coal, natural gas and renewable energy).

I. Recent developments in commodity markets

A. Overview

3. The UNCTAD free market commodity price index\(^1\) for all commodity groups fell from an average of 114.2 points in January 2020 to an average of 73.5 points in April 2020. The sharp decline was driven largely by low prices of crude oil in the heavily weighted petroleum subgroup. In May 2020, the index for all groups reversed its downward trend and rose to 98.1 points in September 2020, as indices for all subgroups trended upwards. In January–September 2020, the index for all groups declined by 12 per cent, compared with a 0.5 per cent rise in the corresponding period in 2019.

\[ \text{Figure 1} \]
\[ \text{UNCTAD free market commodity price index, all groups} \]
\[ (2015=100) \]

\[ \begin{array}{c}
\text{Source: UNCTAD calculations, based on data from the UNCTADstat database.}
\end{array} \]

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\(^1\) This index has been rebased to 2015=100, with new commodities added and new weights used, and including separate indices for the group of fuels and a subgroup of precious metals.

Notes: All websites referred to in this note were accessed in December 2020. All prices are in United States dollars. The term “tons” refers to metric tons.
4. The monthly fluctuations of the commodity index illustrate the degrees of variation in commodity prices (figure 2). In the first nine months of 2020, the index showed wide monthly variations due to a variety of factors (see chapter II). The lowest and highest changes occurred in March (-20.3 per cent) and June (11.3 per cent). The following sections review market developments in major commodity groups.

Figure 2
Monthly fluctuations of the UNCTAD free market commodity price index, all groups

Source: UNCTAD calculations, based on data from the UNCTADstat database.

B. Developments in key commodity sectors

1. Food and agricultural commodities

5. The UNCTAD monthly food index averaged 105.4 points in January 2020 and was slightly down in September 2020, at 101 points (figure 3). In January–May 2020, the index declined by 8 per cent due to the downward trend in the prices of beef, maize, sugar, soybeans and wheat, offsetting the increasing price of rice. Thereafter, the index was relatively stable, at around 100 points, as the pace of increases in rice prices slowed and the other commodities in the group reversed their downward trend. In the first three quarters of 2020, the index fell by 4.4 per cent, in comparison with the flat trend in the corresponding period in 2019.
6. Maize prices declined from an average of $176.42 per ton in January 2020 to $150.05 per ton in May 2020, due to a contraction in demand for the manufacture of maize-based ethanol and animal feed, then, in June 2020, the downward trend reversed and prices rose to an average of $189 per ton in September 2020, due in part to strengthening demand for feed-related and industrial uses of maize, compared with earlier expectations (figure 4). The forecast is that in 2020/21, global maize stocks will tighten, consumption will marginally exceed production and prices will come under upward pressure.

7. The international benchmark price of United States of America wheat (hard red winter No. 2; free on board) declined from an average of $236 per ton in January 2020 to $215 per ton in June 2020 (figure 4). The decline was largely due to improved production prospects in a number of major exporting countries, due to favourable weather conditions and a slump in demand resulting from the pandemic. Prices reversed in July 2020 and rose by 15 per cent, to an average of $248 per ton in September 2020, due to increasing demand amid increased uncertainties over production prospects in Argentina and Australia, as well as dry conditions that adversely affected winter sowing in many parts of Europe. The forecast is that wheat production will increase in 2020/21 but that more robust global demand and tighter than average stocks will contribute to pushing prices up, by 8.3 per cent in 2021.

8. The benchmark price of Thailand rice (white, milled, 5 per cent broken; free on board) increased from an average of $451 per ton in January 2020 to $564 per ton in April 2020, the highest level since January 2013 (figure 4). The increase in prices was driven in part by a severe drought that began in late 2019 in key producing regions in Asia and strong

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2 Food and Agriculture Organization of the United Nations, 2020a, Global food commodity prices drop further in April, 7 May.
3 The Economist Intelligence Unit, 2020, Commodities, 1 November, available at https://www.eiu.com/industry/commodities/articlelist.
4 Reuters, 2020a, Grains: Wheat falls on expected abundance of global supply, 10 August.
5 Food and Agriculture Organization of the United Nations, 2020b, Food Price Monitoring and Analysis Bulletin No. 8, 13 October.
6 The Economist Intelligence Unit, 2020.
demand from importers in Africa and Asia. This coincided with temporary export restrictions by Viet Nam to mitigate the potential impact of the pandemic on domestic supply. The upward trend reversed in May 2020 and prices declined to $507 per ton in September 2020 as the tightness in the market eased with increasing prospects of large harvests. The forecast is that rice production will exceed consumption in the 2020/21 crop season and inventories are expected to rise. The combination of these factors is likely to exert a downward pressure on prices.

9. The monthly average of International Sugar Agreement daily prices declined by 28 per cent in the first four months of 2020, to 10 cents per pound in April 2020, largely due to falling demand triggered by the onset of the pandemic and a decline in demand for sugar to produce ethanol, as crude oil prices fell (figure 4). Sugar prices rebounded in May 2020 and rose by 11 per cent, to an average of 12.8 cents per pound in September 2020, due to such factors as reduced production expectations due to unfavourable weather conditions in the European Union and Thailand, the world’s second-largest sugar exporter, as well as strong import demand from China. Prices are forecast to rise in 2020/21 due to strong demand as the global economy recovers. However, an increase in supply is likely to subdue a price rise.

10. Soybean prices rose from an average of $356 per ton in January 2020 to $406 per ton in September 2020, with short-term fluctuations in between (figure 4). In January 2020, prices rose by 7 per cent, to an average of $377.25 per ton in March 2020, largely due to logistical disruptions caused by pandemic-related measures introduced at ports, which led to supply chain disruptions. Thereafter, prices experienced upward and downward movements in part due to demand fluctuations caused by the implementation and easing of pandemic-related restrictions. Low prices boosted demand for bulk soybean imports and, in September 2020, prices averaged $408 per ton. The forecast is that prices will rise in 2021 due to tightening markets and an expected fall in production in the United States.

11. The price of Australia and New Zealand beef (frozen; cost, insurance and freight) trended downwards, from an average of $5.03 per kilogram in January 2020 to $4.6 per kilogram in September 2020, with short-term fluctuations in between (figure 4). The fall in prices was driven in part by the impacts of pandemic-related measures that led to a decline in global import demand and substantial volumes of unsold meat products, as well as logistical bottlenecks. Short-term fluctuations were driven largely by short-term disruptions at processing plants in response to pandemic-related regulations for physical distancing. In January–September 2020, frozen beef prices declined by 9 per cent, a reversal of the increase by 10 per cent in the corresponding period in 2019.

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8 Reuters, 2020b, Viet Nam PM[Prime Minister] says to fully resume rice exports from May, 28 April.
9 The Economist Intelligence Unit, 2020.
10 Food and Agriculture Organization of the United Nations, 2020b, Global food prices rise in August, 3 September.
12 The Economist Intelligence Unit, 2020.
14 Reuters, 2020c, China halts beef imports from four Australian firms as COVID-19 spat sours trade, 12 May.
12. The UNCTAD vegetable oils index declined from an average of 105 points in January 2020 to 90 points in May 2020, largely influenced by declining soybean prices due to weak demand and abundant supply, driven by the impacts of pandemic-related measures (figure 5). The index rebounded thereafter and rose by 24 per cent, to reach 111 points, due to a rebound in soybean oil and palm oil prices. In January–September 2020, the vegetable oilseeds and oils index rose by 6 per cent, in contrast to a 3 per cent decline in the corresponding period in 2019.

13. Soybean oil prices declined from an average of $876 per ton in January 2020 to $680 per ton in April 2020, largely due to concerns about the impact of the pandemic on global demand (figure 5). Prices reversed in May 2020 and rose by 33 per cent over the next four months, to reach $906 per ton in September 2020, in part due to the slow pace of crushing in South America and firm demand from the biodiesel industry in the United States. The forecast is that soybean oil prices will increase in 2021, supported by demand for biodiesel as pandemic-related travel restrictions continue to ease.

14. Palm oil prices declined from an average of $810 per ton in January 2020 to $574 per ton in May 2020, largely due to a slump in demand triggered by the pandemic, depressed crude mineral oil prices, higher-than-expected production and increased stocks in major exporting countries (figure 5). The downward trend reversed in June 2020 and prices rose to $798 per ton in September 2020, due to increasing global demand following the easing of initial pandemic-related lockdowns, declining inventory levels in Malaysia and

Source: UNCTAD calculations, based on data from the UNCTADstat database.

uncertainties regarding the pace of production in South-East Asia in the coming months.\textsuperscript{16} The forecast is that prices will rally in early 2021 due to disruptions caused by heavy rainfalls induced by the La Niña weather pattern in the production regions of Indonesia and Malaysia.\textsuperscript{17}

Figure 5

\textbf{Price trends of selected vegetable oilseeds and oils}

\begin{figure}[h]
\centering
\includegraphics[width=\textwidth]{Price_trends_of_selected_vegetable_oilseeds_and_oils.png}
\caption{Price trends of selected vegetable oilseeds and oils}
\end{figure}

\textit{Source:} UNCTAD calculations, based on data from the UNCTADstat database.

15. The UNCTAD tropical beverages index averaged 88 points in January 2020 and was largely unchanged in September 2020, at 89 points (figure 6). However, in the first half of 2020, the prices of commodities making up the index trended downwards, before returning to an upward trajectory that put the index back to the level of January 2020. This was due to changing supply and demand factors related to weather and the pandemic.

16. Cocoa bean prices rose by 4 per cent at the start of 2020, to 123 cents per pound in February 2020, the highest level since September 2016 (figure 6). The increase was largely due to dry weather in growing regions in West Africa. Prices trended downwards thereafter, reaching 95.3 cents per pound in July 2020, before rebounding to an average of 111.6 cents per pound in September 2020. The downward movement was largely driven by a favourable crop outlook as weather conditions improved and by declining demand triggered by the pandemic.\textsuperscript{18} The rally in prices was driven by adverse weather conditions expected to impact production levels in the main cocoa-producing regions in West Africa.\textsuperscript{19}

17. Tea prices trended downwards, from an average of $2.23 per kilogram in January 2020 to $1.8 per kilogram in July 2020, due to increased production driven by good weather in growing regions in Kenya, disruptions in shipments to various importing

\textsuperscript{17} Reuters, 2020d, Palm oil prices to rally in first half of 2021, say top analysts, 8 October.
\textsuperscript{19} International Comunicaffe, 2020, Cocoa prices rally as below average rainfalls are recorded in main areas of West Africa, 14 September.
countries and weak demand (figure 6). Prices reversed thereafter, climbing by 15 per cent, to $2.04 in September 2020, as demand picked up and production decreased following cold and dry weather conditions. The forecast is that production will grow faster than consumption in 2021 and the market deficit will contract. This will lead to a marginal increase in prices.

18. The International Coffee Organization average monthly composite indicator price increased from 107 cents per pound in January 2020 to 116 cents per pound in September 2020, with short-term fluctuations (figure 6). In the first half of 2020, prices exhibited upward and downward movements, to reach 99 cents per pound in June 2020, due to a variety of factors, including excess supply weighing down prices and a surge in demand at the start of the pandemic that pushed prices up, followed by a slump in demand due to ongoing pressure from the global economic downturn. However, after July 2020, prices rallied, reaching 116.25 cents per pound in September 2020, due to concerns over a temporary tightness in supply, as evidenced by lower levels of output and export in some countries, in particular producers of mild arabica.

Figure 6
Price trends of selected tropical beverages

Source: UNCTAD calculations, based on data from the UNCTADstat database.

19. The UNCTAD agricultural raw materials index averaged 99 points in January 2020 and remained at the same level in September 2020 (figure 7). However, in January–September 2020, the index exhibited volatile movements due to fluctuations in the prices of the individual commodities making up the index. The main influence on the index was declining rubber and cotton prices in the first four months of 2020, followed by a rebound in prices that brought the index back to the level of the start of 2020.

20. The cotton A index price, a benchmark for world cotton prices, declined from an average of $1.74 per kilogram in January 2020 to $1.40 per kilogram in April 2020, the lowest price since March 2009 (figure 7). The decline was largely due to a decline in global

20. Cytonn Report, 2020, Tea prices increase as production is expected dip[sic], 17 August.
consumption, as the pandemic led production to stall and factories and stores to close.\textsuperscript{24} Prices reversed direction in May 2020 and climbed to $1.56 per kilogram in September 2020, due to a recovery in consumption growth, in particular in China, and increased buying due to concerns about the potential impact of two hurricanes approaching the Gulf of Mexico.\textsuperscript{25} The forecast is that global production will decrease in the 2020/21 season, as low prices and food security concerns have led to fewer planted areas in some countries and consumption is expected to increase.\textsuperscript{26} This is likely to exert an upward pressure on prices.

21. Natural rubber prices declined by 21 per cent, from an average of 168.34 cents per kilogram in January 2020 to 133.42 cents per kilogram in April 2020, the lowest price since October 2015 (figure 7). The decline was largely driven by reduced demand caused by the slowdown in economic activity triggered by the pandemic. Prices rebounded thereafter by 39 per cent, reaching 186 cents per kilogram in September 2020, as pandemic-related concerns caused demand for rubber products such as protective gloves to increase and also due to a rebound in the manufacturing sectors and automotive industries in China and India.\textsuperscript{27} The forecast is that continued demand from the automotive and latex sectors and lower supply will exert an upward pressure on prices in 2021.\textsuperscript{28}

Figure 7
\textbf{Price trends of selected agricultural raw materials}

![Price trends of selected agricultural raw materials](image)

\textit{Source:} UNCTAD calculations, based on data from the UNCTADstat database.

2. **Minerals, ores and metals**

22. The UNCTAD minerals, ores and non-precious metals index dropped from an average of 132 points in January 2020 to 117 points in April 2020, due to the declining prices of all commodities in the group (figure 8). However, the greatest impact on the index came from the falling prices of heavily weighted copper and iron ore. In May 2020, the

\textsuperscript{24} See International Cotton Advisory Committee, 2020a, Cotton to suffer 12 per cent decline in global consumption due to COVID-19 pandemic, 1 May; and https://www.thetrends.com/markets/cotton-prices-hit-ten-year-low-on-uncertainty-over-coronavirus.html.
\textsuperscript{25} See https://www.cotlook.com/information-2/cotlook-monthly/august-2020-market-summary/.
\textsuperscript{26} International Cotton Advisory Committee, 2020b, \textit{Annual Report} 2020, Washington, D.C.
downward trend reversed, and the index climbed by 28 per cent, to reach 153 points in September 2020, largely due to a rebound in the prices of iron ore and copper. In January–September 2020, the index rose by 16 per cent, almost 9 per cent higher than in the corresponding period in 2019.

23. Iron ore prices declined in the first four months of 2020, from an average of $96 per dry ton in January 2020 to $85 per dry ton in April 2020, due to falling demand resulting from a slowdown in economic activity triggered by the pandemic (figure 8). The decline in activities by end users in construction, automobile manufacturing and other industrial applications played a major role in weakening prices. Iron ore prices rebounded by 43 per cent thereafter, to an average of $123.75 per dry ton in September 2020, the highest price since February 2014. The increase in prices was largely driven by rising demand in China and constraints in supply due to weather and pandemic-related production disruptions in Brazil, the world’s second-largest producer. Prices were expected to remain elevated in the rest of 2020 and in early 2021 as demand from China strengthened and supply increased slowly.30

24. Copper prices declined from an average of $6,031 per ton in January 2020 to $5,058 per ton in April 2020, largely due to a combination of slump in demand due to a slowdown in industrial activity and an increase in inventories (figure 8). Prices rebounded in May 2020 and climbed to $6,705 per ton in September 2020, due to a number of factors, including recovery in demand from China, improvement in global economic activity and speculative buying. In addition, pandemic-related measures, such as the halting of production in major producing countries such as Chile and Peru, contributed to the tightening supply. The forecast is that prices will fall slightly in 2021 as mining production and refining output increases.

25. Aluminium prices trended down in the first four months of 2020, falling from an average of $1,773 per ton in January 2020 to $1,460 per ton in April 2020 (figure 8). This decline was due to a combination of high production levels caused by the continued operations of aluminium smelters despite declining prices due to the high costs associated with smelter closure and a slowdown in demand from end users in the automotive and construction sectors triggered by the pandemic. The downward trend in prices reversed in May 2020, when prices rose to $1,744 per ton as industrial activity picked up and demand improved in the automotive sector amid declining inventories. Prices are forecast to rise modestly in 2021 as a result of increasing demand supported by the automotive and aerospace sectors.

26. Zinc prices declined from an average of 115 cents per pound in January 2020 to 94 cents per pound in April 2020, largely due to oversupply and a fall in demand due to a slowdown in global economic activity that affected major end-user industries such as automotive manufacturers (figure 8). Prices rebounded thereafter, as demand slowly recovered, reaching 119 cents per pound in September 2020 following the easing of some pandemic-related measures and increased economic activity and tightening supply due in part to the slow reopening of mines in the Plurinational State of Bolivia, Mexico and Peru. The forecast is that prices of refined zinc will increase modestly in 2021, supported by increased demand from the steel industry as economic activity strengthens.

27. Nickel prices continued their downward trend from the last quarter of 2019, falling from $13,507 per ton in January 2020 to $11,804 per ton in April 2020, largely due to the onset of the pandemic, which disrupted global demand (figure 8). Subsequently a combination of factors, including disruption to production triggered by pandemic-related

29 Mining.com, 2020a, Rising supplies set to undermine iron ore price rally, 20 August.
30 Bloomberg, 2020a, World’s top iron ore shipper says robust prices are here to stay, 28 June.
31 Mining.com, 2020b, Copper price forecast up on buoyant demand: Report, 14 September; Reuters, 2020c, Metals: Copper bulls drive prices back towards two-year high, 16 July.
32 Reuters, 2020f, Metals: Copper extends gains on China demand hopes, supply risks, 16 October.
33 Mining.com, 2020b.
34 A Home, 2020, New aluminium crisis looms as output rises in demand void, Reuters, 22 April.
35 Mining Weekly, 2020, Aluminium demand growth will soon outpace production growth, 30 October.
36 The Economist Intelligence Unit, 2020.
measures, restrictions in major producing countries on the export of nickel ores and growing demand for electric vehicle batteries, contributed to reversing the downward trend. Prices rose by 23 per cent, reaching $14,857 per ton in September 2020, the highest price since January 2015. Prices are expected to increase in 2021 in part due to supply disruptions and rising demand for nickel use in the electric vehicle industry.

Figure 8
Price trends of selected minerals, ores and non-precious metals

Source: UNCTAD calculations, based on data from the World Bank global economic monitor database.

28. In contrast to the prices of most of the other commodity groups, the UNCTAD precious metals index trended upwards, from an average of 131 points in January 2020 to an average of 162 points in September 2020, largely due to the influence of heavily weighted gold (figure 9). The prices of silver and platinum exhibited upward and downward movements in January–August 2020, but the downward movements were not strong enough to weigh down the index. In January–September 2020, the index rose by 24 per cent, almost 7 per cent higher than in the corresponding period in 2019.

29. Gold prices continued their upward trend from 2019, rising from an average of $1,560 per troy ounce in January 2020 to $1,922 per troy ounce in September 2020 (figure 9). This was largely due to concerns about a sharp global economic slowdown driven by uncertainty created by the outbreak of the pandemic, prompting investment in safe-haven assets, and the forecast is that prices will remain high in 2021, reflecting ongoing uncertainty about the prospects for the global economy.

30. Silver prices declined from an average of $18 per troy ounce in January 2020 to $15 per troy ounce in March 2020, largely due to a slump in demand as the pandemic led to slowed-down activities in the electronics and solar-based industries, which account for over 50 per cent of consumption, then reversed in April 2020, due in part to increased demand from investors for silver as a safe-haven asset, and rose by 73 per cent, to 26 cents per troy ounce in September 2020, the highest price since March 2013 (figure 9). The forecast is


[The Economist Intelligence Unit, 2020.]

[The Economist Intelligence Unit, 2020.]

[Reuters, 2020g, Investors will rescue silver from coronavirus collapse: Silver Institute, 22 April.]
that prices will rise in 2021 to $32 per troy ounce, supported by continued low real interest rates and heightened uncertainty due to the worsening of public debt burdens in many countries.\textsuperscript{41}

31. Platinum prices trended downwards in the first four months of 2020, falling from $987 per troy ounce in January 2020 to $754 per troy ounce in April 2020, the lowest price in 17 years (figure 9). The decline in prices was driven in part by a slump in demand in the automotive, chemical, oil refining and glass manufacturing sectors, due in part to pandemic-related measures that limited operations. The downward trend in prices reversed in May 2020 as prices rose by 20 per cent, to $907.6 per troy ounce in September 2020, due to strengthening demand and tightening supply. Prices are forecast to increase in 2021 as demand improves with the recovery of the automotive sector.\textsuperscript{42}

Figure 9

Price trends of selected precious metals

\begin{figure}[h]
\centering
\includegraphics[width=\textwidth]{figure9.png}
\caption{Price trends of selected precious metals}
\end{figure}

\textit{Source:} UNCTAD calculations, based on data from the UNCTADstat database and the World Bank global economic monitor database.

3. Energy

32. The UNCTAD fuel index fell from an average of 112 points in January 2020 to 49 points in April 2020, as it came under pressure from a sharp drop in the price of heavily weighted crude oil, as well as weakened prices of coal and natural gas (figure 10). The downward trend reversed in May 2020 and the index rose by 65 per cent, to an average of 77 points in September 2020, largely due to a rebound in crude oil prices. Although the price of coal continued its downward trend from May 2020, its impact on the index was minimal due to its low weight in the group of commodities comprising the index. In January–September 2020, the index declined by 27 per cent, compared with a decline of 3.2 per cent in the corresponding period in 2019.

Crude oil

33. The Brent and West Texas Intermediate benchmark prices of crude oil declined from $64 and $57 per barrel, respectively, in January 2020, to an average of $23 and $17 per barrel in April 2020 (figure 10). The decline was largely due to a combination of factors, including a drop in demand caused by reduced economic activity and transportation disruptions due to pandemic-related measures, excess oil supply and record high levels of

\textsuperscript{41} Mining.com, 2020c, CIBC [Canadian Imperial Bank of Commerce] issues new forecasts for gold and silver prices, 16 September.

\textsuperscript{42} Mining.com, 2020d, Platinum and palladium prices to rise through 2021, 21 July.
global inventories. Failed attempts to reduce the glut of crude oil on the market by the Organization of Petroleum Exporting Countries and oil-producing allies contributed to exacerbating the sharp drop in prices. The West Texas Intermediate benchmark price of delivery in May 2020 fell below $0 per barrel as lack of storage space, inter alia, led to producers offering to pay buyers to take the barrels of oil. Brent and West Texas Intermediate prices then rebounded and rose to $41 and $39 per barrel, respectively, in September 2020, due in part to a recovery in demand helped by the easing of some pandemic-related measures and tightening supply prompted by production cuts agreed by major producers. The forecast is that Brent and West Texas Intermediate benchmark prices will average $49 and $46 per barrel, respectively, in 2021 due to rising global oil demand and inventory draws.

Coal

34. Australian thermal coal prices declined steadily, from $70 per ton in January 2020 to $54.6 per ton in September 2020, largely due to import restrictions in China, the largest importer of thermal coal, and declining consumption of coal in preference to renewable energy sources (figure 10). The forecast is that demand will pick up relative to supply in 2021 and exert an upward pressure on coal prices.

Natural gas

35. Natural gas is predominantly traded in three distinct markets in the United States, Asia and Europe. There was a wide variation in prices in these markets in 2020. The monthly average price of natural gas in the United States Henry Hub market declined steadily from $2.03 per million British thermal unit in January 2020 to $1.60 per million British thermal unit in June 2020, before recovering in subsequent months, to reach $1.92 per million British thermal unit in September 2020 (figure 10). The decline in prices was largely due to a combination of factors, including mild weather at the start of 2020, followed by the economic slowdown induced by pandemic-related measures. The increase in prices was largely driven by a recovery in demand amid lower levels of natural gas production, and Henry Hub prices are expected to average $3.14 per million British thermal unit in 2021 due to rising domestic demand, liquefied natural gas exports and reduced production.

In the European market, natural gas prices followed a declining path in the first five months of 2020, falling from $3.63 per million British thermal unit in January 2020 to $1.57 per million British thermal unit in May 2020, before recovering, to reach $3.95 per million British thermal unit in September 2020. The decline was largely due to depressed natural gas consumption due to a combination of pandemic-related measures, mild temperatures and strong energy generation from wind. The increase was largely driven by a recovery in demand and concerns about tightening supply. In the liquefied natural gas market in Asia, prices increased slightly in the first quarter of 2020 due to resilient demand growth despite reduced economic activity due to the pandemic. Prices declined thereafter, by 38 per cent, reaching $6.34 per million British thermal unit in September 2020, largely due to a combination of factors, including high levels of inventory,
reduced demand due to the pandemic and a sustained period of lower oil prices and increased competition among gas supply sources as new supply came on the market.52

Figure 10
Price trends of selected fuels

![Price trends of selected fuels](image)

Source: UNCTAD calculations, based on data from the UNCTADstat database and the World Bank global economic monitor database.

Renewable energy

36. Renewable energy generation capacity grew by 176 gigawatts in 2019, slightly lower than the estimated growth of 179 gigawatts in 2018; most of this growth came from wind and solar energy generation, which accounted for 90 per cent of the addition, with smaller contributions from hydropower and geothermal generation. Solar energy generation added 98 gigawatts, 60 per cent of which was in Asia, and wind energy generation added approximately 60 gigawatts, led by growth in China (26 gigawatts) and the United States (9 gigawatts). The largest consumer of renewable energy in 2019 was the power sector, accounting for more than 200 gigawatts of installed power capacity; renewable energy growth in the sector was 2.6 times fossil fuel growth, thereby continuing the dominance of renewable energy in power expansion.53

37. The growth in renewable energy-based power capacity has been largely driven by cost reductions and government incentives.54 The annual consumption growth rates of major renewable energy sources are shown in figure 11.

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53 International Renewable Energy Agency, 2020a, Renewables account for almost three quarters of new capacity in 2019, 6 April.
II. Some policy issues arising from recent market developments

38. Market trends as analysed in this note show large price variations across different commodity groups, driven largely by supply and demand fluctuations caused by the onset of the pandemic and the related measures adopted in countries. Such price movements can have development implications for commodity-dependent developing countries, both importers and exporters. For example, a shortfall in export revenue arising from a slump in prices may require spending cuts and could complicate fiscal management, debt servicing and budgeting and long-term planning. It could also lead to a sharp deterioration of terms of trade, increase the cost of borrowing and affect investor confidence. By contrast, in import-dependent developing countries, which include many of the poorest countries in the world, low prices of fuels and basic foodstuffs such as cereals, grains and oilseeds translate into lower food and energy import bills and may lead to better terms of trade. The net effect of such processes depends on whether a country is a net importer or exporter of a specific commodity. For example, the decline in oil prices was beneficial for the large number of net oil importers, yet had significant negative effects on many of the oil-exporting countries that derive most of their export earnings from the oil sector.

39. Policy issues arising from the recent developments in commodity markets highlighted in this note are briefly discussed in this chapter and policy options suggested that are important in achieving sustainable development in commodity-dependent developing countries.

A. Price volatility and risk management

40. Supply and demand factors significantly impacted price movements in January–September 2020 in commodity markets highlighted in this note. Oil prices declined by 63 per cent in the first four months of 2020, then rebounded by almost 90 per cent in the next five months. In Nigeria, where oil accounts for almost 90 per cent of foreign exchange earnings, the sharp decline in the price of crude oil led to a reduction of the 2020 budget, which had been based on the assumption of the production of 2.18 million barrels per day at $57 per barrel.\(^{55}\) Production reached only 1.8 million barrels per day and the price was

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\(^{55}\) Reuters, 2020h, Nigeria to scale down budget in face of oil price crash, 9 March.
$28 per barrel, on average.\textsuperscript{56} As a result, export revenues were projected to fall by more than $26.5 billion and the economy was forecast to contract by almost 3.5 per cent in 2020.\textsuperscript{57}

41. Various strategies and instruments are available to mitigate the impact of highly volatile prices and incomes on commodity-dependent countries. One option to partly mitigate the fiscal volatility associated with declines in commodity prices is to establish stabilization funds, which consist of saving and setting aside a certain amount of revenue to buffer negative shocks on government expenditures. For example, in 2007, Chile established the Economic and Social Stabilization Fund to provide fiscal spending stabilization as revenue from copper and other sources fluctuated due to price volatility, enabling budget reductions originating from economic downturns to be financed in part through resources from the Fund, reducing the need to issue debt.\textsuperscript{58} Revenue stabilization funds can be effective in smoothing fiscal revenue but they can be difficult to manage because commodity prices are volatile and unpredictable, making it extremely difficult to develop optimal policies for a stabilization fund.\textsuperscript{59} Furthermore, rules for managing such a fund can be opaque, which could lead to transfer decisions becoming politicized.\textsuperscript{60}

42. Another option to mitigate commodity price risk that is not frequently employed in commodity-dependent developing countries is the use of market-based risk management instruments such as futures, options, swaps and forward contracts. Such instruments enable importers or exporters to lock in the price of a commodity at a pre-determined fixed rate through either exchange-traded or over-the-counter derivatives. For example, Mexico uses put, or right-to-sell, options in an annual hedging program to protect the federal budget from fluctuations in oil prices. The programme has proven highly effective several times since its inception, in particular in 2009, when it yielded multibillion-dollar payments after the global financial crisis led to a fall in oil prices; in 2015, when a record amount of over $6 billion was paid; and in 2016; and another large payment is expected in 2020, after oil prices declined steeply in early 2020 due to weak demand triggered by the pandemic and an oversupplied market.\textsuperscript{61}

B. Renewable energy

43. Low fuel prices bode well for net importing developing countries as they can boost the terms of trade and contribute to the pursuit of energy security objectives. However, a situation of sustained low crude oil prices has implications for the renewable energy market as it may make vehicles powered by internal combustion engines more competitive than electric vehicles. In this regard, the availability of cheap crude oil could derail efforts towards the expansion of lower-carbon energy sources. The International Energy Agency forecasts that fewer wind and solar energy projects will be built in 2020 compared with the record roll-out of renewable energy sources in 2019.\textsuperscript{62} This reduced deployment is likely to slow down efforts to achieve Sustainable Development Goal 7. Governments should therefore consider adopting policies that foster accelerating the deployment of renewable energy sources by making investments in the renewables sector, providing innovative financing for renewable energy projects and phasing out subsidies on fossil fuels that distort

\textsuperscript{57} International Monetary Fund, 2020, Nigeria: Request for purchase under the rapid financing instrument, Country Report No. 20/142.
\textsuperscript{60} UNCTAD, 2006, Boosting Africa’s growth through re-injecting “surplus” oil revenue: An alternative to the traditional advice to save and stabilize, available at https://digitallibrary.un.org/record/580709?ln=en.
\textsuperscript{61} World Oil, 2020, Oil price swings suggest Mexico’s 2021 oil hedge is underway, 10 August.
prices relative to renewable energy sources. This offers not only the prospect of diversifying the energy mix, but also opportunities for creating jobs and economic development, while reducing greenhouse gas emissions and the environmental impacts associated with fossil fuel use.

44. More than 40 countries worldwide provide fossil fuel consumption subsidies to make energy more affordable, in particular in pursuit of social goals such as universal access to modern energy.63 The cost to the economy of such subsidy schemes can be significant. Therefore, policymakers can take advantage of lower international oil prices by undertaking energy-subsidy reforms to help alleviate continuing budgetary challenges, but such reforms need to be complemented by stronger social safety nets to protect the most vulnerable segments of society.64 Some countries have introduced reforms on the back of low oil prices triggered by the pandemic. For example, Egypt has announced plans to cut spending on fuel subsidies by 47 per cent and Tunisia has introduced an automatic monthly price adjustment mechanism for domestic sales of gasoline and diesel, with the aim of eliminating fuel subsidies.65 The elimination of fuel subsidies not only provides additional resources for Governments but can also contribute to lowering greenhouse gas emissions and provide for cleaner and more efficient energy as consumption patterns shift towards carbon-free energy.

C. Food security

45. As the pandemic spread across countries, many policymakers introduced measures to contain the spread of the coronavirus, creating bottlenecks in farm labour, processing, transport and logistics. Some policymakers further restricted exports or opted to create stockpiles to ensure stability in domestic markets. Such measures raise concerns about food security because they have the potential to distort international supply chains, increase prices and cause economic losses. For example, as the pandemic spread, export bans on rice were introduced in Viet Nam to ensure national food security.66

46. An assessment of food systems by the Food and Agriculture Organization of the United Nations has shown that several vulnerabilities including, inter alia, inadequate storage infrastructure, weak market linkages, inadequate diversity of supplies (including from imports) and labour dislocations, have contributed to preventing many food products from reaching markets, creating supply and demand imbalances and significant food losses along supply chains, and stated that “disruptions to and possible breakdowns of marketing, logistics and trading systems, as well as shortage of labour to support agricultural production, could make food unavailable in some locations at certain times”.67

47. Enhancing food availability and access requires actions to remedy weaknesses in food systems and ensure that supply chain disruptions are reduced. As discussed earlier, in the current pandemic context, some countries have not followed the rules of the World Trade Organization to ensure the free flow of food products and have therefore been urged to respect their commitments under the World Trade Organization to refrain from imposing export bans and other export trade distorting measures that can hamper the availability of food imports in vulnerable food-importing countries.68 As the impacts of the pandemic are still being felt, policies that aim to ease disruptions in domestic food supply chains should be encouraged, such as facilitating the movement of food commodities across borders and

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63 International Energy Agency, 2020c, Low fuel prices provide a historic opportunity to phase out fossil fuel consumption subsidies, 2 June.
64 World Bank, 2020, Most commodity prices to drop in 2020 as coronavirus depresses demand and disrupts supply, press release, 23 April.
within countries from producing regions to urban areas in order to prevent food shortages; increasing capacity to manage large inventories; and hiring temporary staff to engage in planting and harvesting seasons.69 Some of these adjustments may lead to increased costs, but countries may be able to draw on the resources of international financial institutions under existing facilities. For example, the Rural Poor Stimulus Facility of the International Fund for Agricultural Development aims to improve food security and the resilience of poor rural people facing pandemic-related disruptions to food systems, through a focus on supporting production, market access and employment. Countries supported by International Fund for Agriculture Development programmes that are at risk of not achieving development outcomes due to the pandemic are eligible to receive funding through the facility. The World Bank works with countries to develop infrastructure that helps to improve, inter alia, product delivery while minimizing loss, such as storage facilities, dedicated agriculture port terminals and facilities for processing agricultural products.70

D. Energy commodities and minerals, ores and metals

48. In the second quarter of 2020, demand for energy and minerals, ores and metals slumped significantly as industrial activity slowed worldwide, due in part to pandemic-related lockdown and quarantine measures. A research paper highlighted that the sharp decline in demand from China, the world’s largest consumer of primary products, had a strong negative impact on imports from commodity-dependent developing countries. 71 For example, imports of liquefied natural gas had declined by up to 10 per cent in 2020 compared with a projected increase of 10 per cent before the pandemic. The paper pointed out that iron ore imports were expected to increase, yet growth could fall by two thirds, from a pre-pandemic annual growth projection of 19 per cent to a mere 6 per cent.

49. The pandemic may continue for some time and the consequences for demand for primary products are uncertain. This raises concerns for commodity-dependent developing countries with regard to depressed export earnings, as revenues obtained from commodity exports are critical for, inter alia, financing imports and public spending. To reduce the adverse effects of such demand shocks, commodity-dependent developing countries should consider diversifying their economies so that income losses in one area can be offset by potential gains, or at least stability, in another. This could significantly reduce vulnerability to shocks and strengthen resilience. For example, in Chile, volatile revenues from copper exports prompted the development of successful agriculture, forestry and fishing industries to buttress revenues, achieved by improving the business environment, providing incentives, investing in research and development together with the private sector and encouraging and facilitating links between various industries, including the extractives sector.72

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71 M Fugazza, 2020, Impact of the COVID-19 pandemic on commodities exports to China, Research Paper No. 44, UNCTAD.