

HIGHLIGHTS from Chapter 3:

Commodity Price Cycles: Drivers and Policies

Key Points

- *Commodity prices soared in 2021 following the broad-based decline in early 2020, with prices of several commodities reaching all-time highs. In part this reflected the strong rebound of demand from the 2020 global recession.*
- *Energy and metal prices generally move in line with global economic activity, and this tendency has strengthened in recent decades. Looking ahead, global macroeconomic developments and commodity supply factors will likely continue to cause recurring commodity price swings. For many commodities, these may be amplified by the transition away from fossil fuels.*
- *To dampen the associated macroeconomic fluctuations, the almost two-thirds of emerging market and developing economies (EMDEs) that are commodity exporters need to strengthen their policy frameworks and reduce their reliance on commodity-related revenues by diversifying exports and, more importantly, national asset portfolios.*

Commodity market developments. Commodity prices soared in 2021 (figure 1). The broad-based surge, led by energy and metals, was driven by a strong recovery in aggregate global demand, amplified by weather-related supply disruptions for both fossil and renewable fuels. Real incomes in both commodity exporters and importers have been severely affected by changes in the terms of trade resulting from the gyrations in commodity prices in 2020-21.

Commodity price cycles. Commodity prices regularly undergo booms and slumps, with the average cycle lasting 6 years. Over the past 50 years, booms were more pronounced than slumps: prices increased 4 percent per month compared with an average decline of 1 percent during slumps. For crude oil, the average rise in real prices in booms was about 8 percent a month while the average fall in prices in slumps was about 2 percent. In historical comparison, the commodity price swings over 2020-21 have been exceptionally large. The collapse in energy prices in early 2020, and their subsequent recovery, were the steepest of any during global recessions since 1970. Commodity price cycles have been highly synchronized. Energy and metal prices generally move in line with global economic activity, and this tendency has strengthened over time. Since the mid-1990s, global macroeconomic developments have explained about half of the variation in commodity prices.

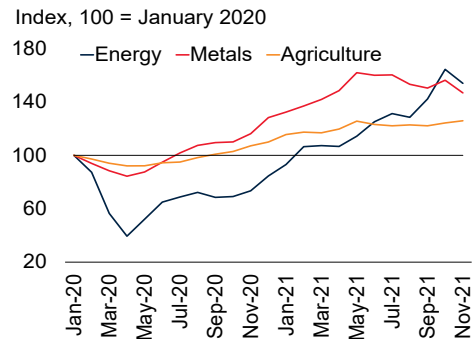
Policy options. A menu of options is available to EMDEs to place them on a firmer footing to manage future commodity price shocks, including those stemming from the energy transition and the effects of climate change. Commodity-exporting EMDEs can strengthen their fiscal, monetary, and macroprudential policy frameworks to manage the impacts of commodity price cycles. For example, oil exporters could use the current opportunity afforded by higher oil revenues to rebuild policy space and direct spending toward addressing longer-term challenges. Countries can also take measures to reduce reliance on commodities by encouraging diversification of exports and of national asset portfolios (that is, invest in a diversified stock of physical and human capital as well as institutions).

Global Economic Prospects

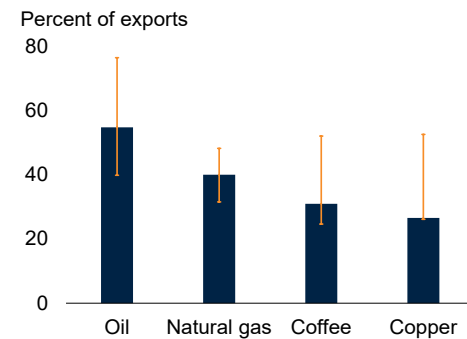
Figure 1. Commodity price cycles

Commodity prices soared in 2021, partly reflecting rebounds from the sharp declines during the 2020 global recession. Many EMDEs are heavily reliant on commodity exports. Commodity price cycles tend to comove with the global business cycle. Industrial commodity prices have been largely driven by global commodity price movements, and have become more synchronized over time. On average, commodity price booms have been more pronounced than slumps. The collapse in the energy price index in early 2020 was the steepest of any during global recessions in the past five decades, and the subsequent recovery was likewise the steepest.

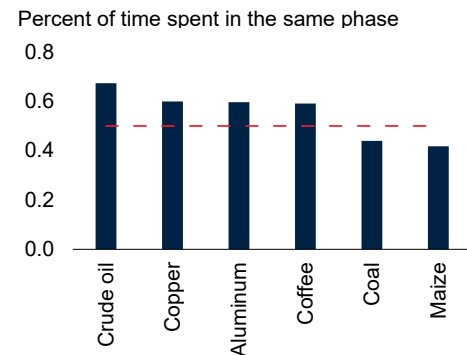
A. Commodity prices



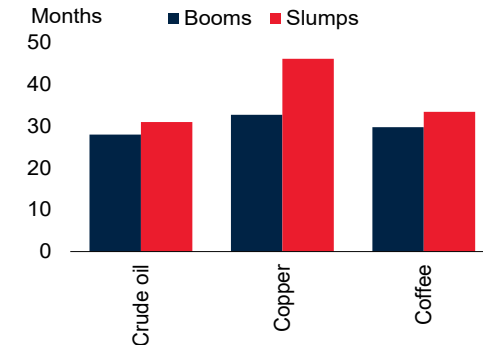
B. Commodity exports in EMDEs



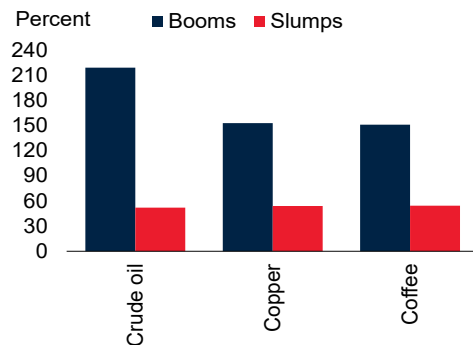
C. Synchronization of industrial production and key commodities



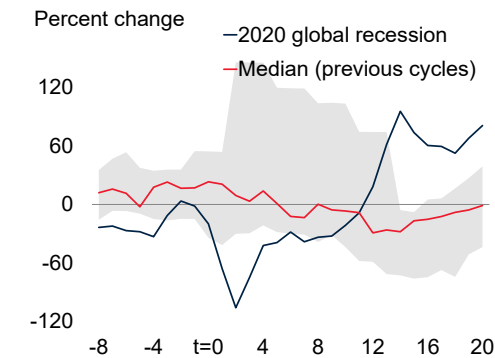
D. Average duration of commodity cycles



E. Average amplitude of commodity cycles



F. Energy prices around global recessions and downturns



Sources: Haver Analytics; International Monetary Fund; UNU-Wider (database); World Bank.

Note: EMDEs = emerging market and developing economies

A. Index 100 is January 2020. Monthly average commodity prices, in U.S. dollar terms. Last observation November 2021.

B. Figure shows the median share of exports accounted for by oil, natural gas, copper, and coffee, for EMDE exporters of that commodity. Oil includes 20 EMDEs, copper 6, natural gas 5, and coffee 4. Blue bars show medians and orange whiskers show interquartile ranges.

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C. Synchronization is measured by the concordance statistic which is defined as the proportion of time that two price series are in the same phase. It is equal to one if both series are in the same phase at any time. Dashed red line indicates 0.5. The global industrial production series is derived by aggregating country-level industrial production series (from Haver Analytics) with 'industry value added' (from the World Bank's World Development Indicators) used as weights. The series is incorporated in level terms.

D. Duration measures the average length (in months) of a phase (booms or slumps). Data from January 1970 to October 2021

E. Amplitude measures the average real price change (in percentage terms) from trough to peak for booms and from peak to trough for slumps. Data from January 1970 to October 2021

F. The figure shows the World Bank's energy price index. The horizontal axis represents the time period in months, where $t=0$ denotes the peak of global industrial production before global recessions and downturns since 1970, as in Kose, Sugawara, and Terrones 2020. The vertical axis measures the percent change in the commodity price series from a year earlier. The blue line shows the trajectory of the current commodity cycle around the COVID-19 recession, while the red line is the median of previous cycles around a global recession or downturn. Gray shaded areas represent the range of observed values in previous cycles. Data from January 1970 to October 2021. .