

### BOX SF1.1 The role of the EM7 in commodity production

*After decades of rapid growth, the EM7 have become major commodity producers. China is the world's single-largest producer of coal, several base metals, and fertilizers, while other EM7 are also key suppliers of several commodities. As a result, policies that affect EM7 commodity production—such as recent trade- and security-related measures—can move global markets.*

Following several decades of rapid growth in commodity production, in part in response to rising domestic demand, the EM7 have become major commodity producers. For many commodities, their production exceeds that of the G7 economies by a wide margin. China in particular is now a major commodity producer, although its consumption of most commodities has outpaced its production.

This box analyzes the following questions:

- What is the role of EM7 in today's commodity production?
- How has this role evolved over time?

#### EM7's current role in commodity production

**Major producers of many commodities.** The EM7 account for more than half of global production in coal, rice, and most base metals (aluminum, copper, lead, tin, and zinc). In some energy commodities (oil and natural gas), they account for more than one-fifth of global production. EM7 production dwarfs G7 production in coal, metals, rice and maize, while it almost matches G7 production in crude oil, natural gas, and wheat. The EM7 produce about 20 times as much rice as G7 economies, almost eight times as much aluminum, and three to five times as much copper, coal, and zinc.

**Individual EM7 countries.** Individual EM7 countries, especially China, dominate global production of several commodities (Table SF1.2):

- *China* is the world's largest producer of coal, several metals (aluminum, refined copper, lead and gold), rice, and fertilizers.
- *India* is the largest producer of cotton and the second-largest producer of fertilizers.
- *Russia* is the second-largest producer of aluminum and natural gas, and third largest producer of oil.

- *Brazil* is the largest producer of coffee and sugar, the second-largest producer of soybeans, and the third-largest producer of bauxite.
- *Indonesia* is the largest producer of tin and palm oil and the second largest producer of rubber.
- *Mexico* is the largest producer of silver.

China's production of rice and wheat is almost as large as that of all other EM7 combined, while its production of most base metals (aluminum, copper, lead, zinc, and tin) is a multiple of that of all other EM7 combined.

#### Evolution of the EM7's role over time

**Role of the EM7 in energy and metals markets.** Between 1996 and 2016, the EM7 share of global metals production more than doubled to 60 percent and their share of global energy production increased to 39 percent (Figure SF1.1.1). Over this period, the EM7 accounted for almost 90 percent of the increase in metals production and over half of the increase in global energy production.

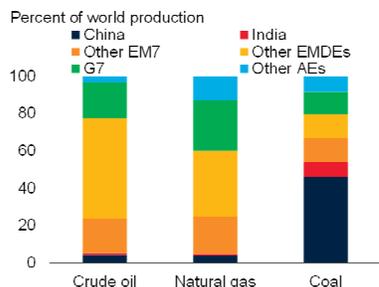
**Role of China in energy and metals markets.** The growing role of the EM7 in global commodity production largely reflects expansion in China. China's share of global metals production increased to 48 percent between 1996 and 2016 (driven by aluminum), and its share of global energy production nearly doubled, to 18 percent in 2016. Growing domestic production dampened the impact of the increase in China's demand on global commodity markets, with domestic supply accounting for nine-tenths of the increase in China's metals consumption. China's consumption of copper and nickel was more dependent on imports than consumption of other metals. While production of metals rose in the other EM7, they lost global market share (from 16 percent to 12 percent) to China. The EM7 share of energy production rose slightly, driven by oil in Brazil and Russia, and coal in India and Indonesia.

**BOX SF1.1 The role of the EM7 in commodity production (continued)**

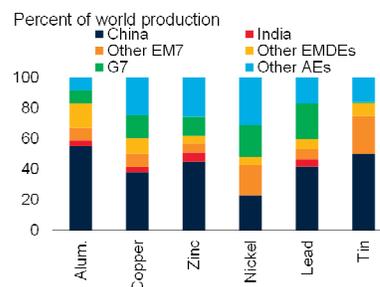
**FIGURE SF1.1.1 EM7 in commodity production**

The EM7 are some of the largest commodity producers in the world. Their share of global production of commodities has increased rapidly over the past 20 years, and they now account for around 60 percent of metals production, and 40 percent of energy and agricultural production.

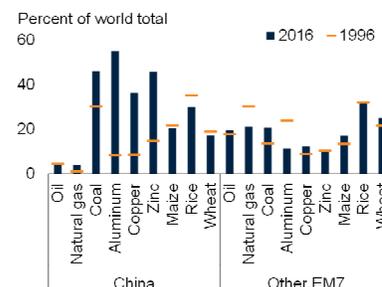
**A. Share of energy production, 2016**



**B. Share of metals production, 2016**



**C. Share of commodity production**



Sources: BP Statistical Review, U.S. Department of Agriculture, World Bank, World Bureau of Metals Statistics.  
 A.B. "AEs" stands for advanced economies. "Other EM7" includes Brazil, Indonesia, Mexico, Russia, and Turkey (and excludes China and India).  
 A. Other AEs contains five countries. Other EMDEs is calculated as the residual of the global total.  
 B. Alum. refers to the metal aluminum. Other AEs contains 10 countries. Other EMDEs contains 25 countries.  
 C. Other EM7 includes Brazil, India, Indonesia, Mexico, Russia, and Turkey.  
[Click here to download data and charts.](#)

**Role of EM7 in agricultural commodities.** In contrast to energy and metals, the role of the EM7 in agricultural production has been fairly constant over the last two decades, similar to the evolution of their consumption. The EM7 share of the three main grains (maize, rice, and wheat) has stayed broadly flat at about 44 percent since 1996.

**Role of the EM7 in other EMDEs.** Some of the EM7 are increasingly involved in production in other EMDEs through investments, or partnerships and subsidiaries. Sub-Saharan Africa has been one of the main beneficiaries of investment, which has been prevalent in agriculture and metals, notably rare

earths (Deininger et al. 2011; Dollar 2016). Again, China has been the most prominent country, although Russia has also been a key player, particularly in aluminum.

**Conclusion**

The EM7 have become some of the world's largest commodity producers after a period of rapid production growth. As a result, policies that affect their production or ability to export commodities—such as environmental policies to reduce pollution, or trade-related measures—can move global commodity markets and have spillovers to other regions.

China and India are particularly prominent consumers. China is the world's largest consumer of coal, several industrial metals (aluminum, refined copper, and lead) and fertilizers. India is the world's largest consumer of palm oil, and its second-largest consumer of coal (about one-quarter of China's consumption) and gold (for fabrication, about two-thirds of Chinese consump-

tion). India is also the third-largest consumer of crude oil and natural rubber.

Combined, China's and India's use of commodities is a multiple of the remaining five EM7. For example, consumption in the two countries is more than ten times the remaining EM7 in coal, aluminum, and nickel, and more than six times in