

### Box Comm.2 The role of emerging markets in commodity consumption

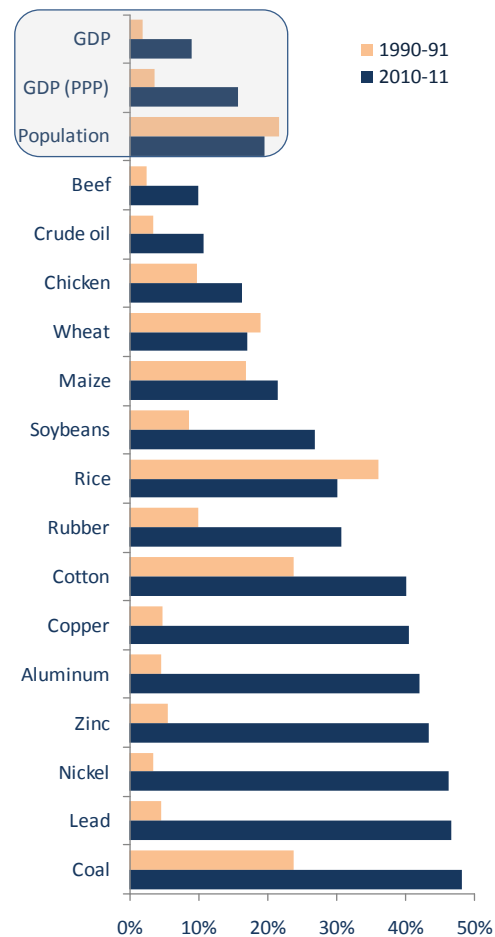
Emerging market demand, especially by China, has been a major force in pulling up the prices of refined metals. In energy commodities, while China plays an important role (especially in coal), its share of crude oil consumption is more limited, but is a major contributor to growth. In fact, it is the entire group of emerging economies that has been the key driver of oil prices. In food commodities, the role of emerging economies is less important than sometimes thought (Baffes 2012).

Since 1990, China's refined metal consumption (aluminum, copper, lead, nickel, tin, and zinc) has jumped seventeen-fold; China now accounts, for 43 percent of the world's refined metal consumption, up from just 5 percent two decades ago (Figure Comm 2.1). This enormous share of the world's metal market reflects substantial investment in construction, infrastructure, and manufacturing that has led China's rapid economic growth. In 1990, China's metal intensity (metal use per \$1,000 of real GDP) was three times higher than the rest of the world. By 2008, it was almost nine times higher (Figure Comm 2.2). High demand by China has been instrumental to the super-cycle in metal prices (Jerrett and Cuddington 2008).

Emerging market demand has played a critical role in increasing demand for, and price of, crude oil (Killian 2009). In 1965, OECD countries accounted for three-quarters of global crude oil consumption, but by 2010 their share had fallen to a little over half. Over the same period, China's and India's shares grew from less than one percent each to roughly 10 and 4 percent, respectively. Over the past 15 years non-OECD countries' share of oil consumption has increased from 35 percent to 47 percent. More important, developing countries accounted for all the net growth in global crude oil consumption in the last decade.

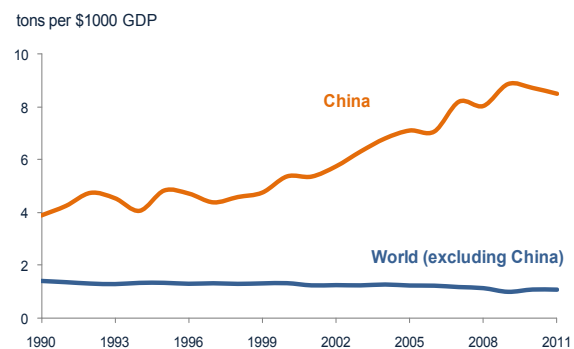
The role of emerging market demand has been much more muted in food commodities, despite the conventional wisdom that rising incomes have translated into much greater demand for food, and hence, higher food prices (see Krugman (2008) and Wolf (2008) as well as Alexandratos 2008 and Baffes and Haniotis (2010) for different views). For example, while in some food commodities China's share in global consumption increased (e.g., meats, soybeans, and to a lesser extent maize) in others did not. In fact, for China's share in rice and wheat declined--from 36.1 to 30.1 percent in rice and from 18.9 to 17 percent in wheat. India's per capita grain consumption has declined as well; and, its per capita calorie intake declined also, despite sharply rising incomes and increased consumption of fruits and vegetables (Deaton and Dreze 2008). Thus, a slowdown in China's growth is likely to have a large impact on metal prices, a moderate impact on crude oil prices, and very little effect on food prices. More generally, a slow-down in emerging economy growth is likely to affect energy prices the most.

### Box figure Comm 2.1 China's share of world's commodity consumption



Source: World Bank, USDA, UN, Metal Statistics, IEA

### Box figure Comm 2.2 China's metal intensity



Source: World Metal Statistics