Talking point

China's commodity hunger: From oil and copper to milk and grain*

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China's thirst for natural resources has for several years been an issue in the global markets for petroleum and hard commodities like iron ore and copper. Since the summer of 2007 at the latest China's thirst for commodities has even been felt by consumers in Germany – after all, the rising prices of dairy products in German stores have been blamed on increased demand in China. And shortly before Christmas it was reported that the prices of Christmas trees would also rise on account of unexpectedly strong demand from China.

The fact is that swift industrialisation and rapid growth in sectors ranging from steel to IT have made China the leading importer of a whole range of commodities. With a share of nearly 70% of global chromium imports China ranks a long way ahead of Russia with just 13%. China is also the world's biggest importer of iron ore and manganese with shares of over 40% of each segment. Only on copper imports does China land in second place with almost 19% – just behind Japan.

Another consequence is China's increased energy requirements. Fossil fuels provide more than 80% of all electricity generated in China, with hard coal the main source. China's proven coal reserves are the third largest in the world, behind those of the US and Russia. However, it tops the production rankings by generating nearly 40% of global output. As long ago as 1993 China had already lost its status as a net exporter of crude oil, and imports have risen inexorably since. Between 1996 and 2006 its oil consumption doubled, whereas its output rose by just 16%.

Only one-fifth of China's natural resource imports are agricultural commodities (also known as soft commodities). All the same, demand for meat and dairy products in particular has risen constantly in recent years. This can be attributed to the rise in incomes and the associated changes in dietary habits, and it is most clearly reflected in the growth of imported animal feed: around 40% of global soya bean exports are destined for China. There are, however, other categories like vegetable oils that are also posting strong growth. Besides demand-side factors urbanisation along with soil erosion and water shortages are reducing the land area used for agriculture. This limits the capacity for boosting output. China thus imports mostly commodities that require intensive land use – like grain, soya beans and cotton – and exports labour-intensive agricultural products like fruit and vegetables.

Besides food imports and imports of inputs for the food industry there are also other agricultural commodity imports posting high growth rates. Booming furniture, construction and paper industries have sharply driven up Chinese imports of timber and processed wood, with almost 30% of global petroleum exports having gone to China in 2006. Although China is the world's biggest producer of cotton the country has to import more and more of it to satisfy textile industry demand.

Forecasting China's future commodity hunger is fraught with many problems. Demand for crude oil will probably continue to rise, but energy-saving measures will have a noticeable impact in the medium term. The developments that have taken place in other countries such as South Korea, Spain and Japan can give us an idea of how China's demand for commodities could develop in future.

For commodities that are available domestically a slight easing of growth should become apparent in the medium term. The US Ministry of Energy estimates that coal production in China will grow by 3% per year until 2030. Annual coal consumption is forecast to rise by an average of around 3.5% until 2030 due to the continuing increase in energy requirements and the dominance of coal-fired power stations in generating electricity.

We expect demand for iron ore, copper and manganese to continue growing robustly (averaging 10% p.a. until 2020). If land becomes even more scarce and prosperity increases, imports of agricultural commodities are likely to increase further. Using the historic development in Japan und Spain as the basis for forecasting demand for soft commodities, we estimate that China's demand for imported soya will probably rise by an average of 4% per year until 2020. The estimated increase in demand for meat is much more striking: annual increases of up to 20% are expected until 2020.

The primary beneficiaries of the sustained strong demand for hard commodities are likely to be emerging markets, not only in central Asia and the Middle East, but also in Africa and Latin America. However, industrial nations with the corresponding resources, such as Canada or Australia, will also remain among China's key trading partners for these commodities. Furthermore, a whole raft of emerging markets has relatively large agricultural sectors. It therefore comes as no surprise that Chinese imports of agricultural commodities from Latin America in particular have risen sharply.

On top of this, Chinese investments in commodity-rich nations will probably increase considerably over the next few years. Even though the scale of clear political directives underlying investment objectives remains unclear, it can be stated that Chinese businesses made nearly 30% of all direct investments in the commodities sector in 2005. It is in Africa first and foremost where Chinese companies are active in the energy sector and often in countries where competition from western companies is minor or nonexistent – such as Angola or Sudan.

The target countries, however, are not only emerging markets: state-owned Chinese oil producers and also companies from other commodity sectors have already made many attempts to acquire stakes in western companies. Beyond these investments in pure commodity businesses increased involvement of Chinese companies in the downstream segment (i.e. in processing) and in ancillary industries (such as special machinery) should be expected during in the next few years

Commodity-rich emerging markets in particular will derive at least short-term benefits from sustained strong demand from China (and increasingly from India) thanks to higher export revenues and investments. In the medium term the effective profits made by each country will, however, depend upon whether the respective government succeeds in utilising the commodities boom to promote sustainable development. Chile and Malaysia provide good examples of how to operate a successful strategy. However, concentrating too heavily on China as an export destination may quickly become a handicap if the boom in China undergoes a blip. In the past in industrial nations there has often been stiff resistance to Chinese investments in commodities companies. Assuming that in future there will probably be more activity in the M&A segment, this defensive response could become even more entrenched.

For more on this topic see:

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