

The Competition for World Resources: China's Demand for Commodities

Speeches & Transcripts

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Presentation by

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I am delighted to be here among a group of people who understands international trade because you live it every day. Like CMC and TEGMA, the Cato Institute is working in the public arena to promote "open and competitive markets."

Trading in commodities remains an important part of globalization. Non-fuel commodities account for 14 percent of global trade and fuel another 7 percent; combined, they account for more than one-fifth of global trade. While more and more economic activity takes place in our minds, we still occupy bodies that need to be fed, clothed, housed and moved from one place to another. We need offices, furniture and hardware to conduct business. Those physical needs require commodities. Even though commodities will constitute a declining share of economic activity, our demand for them in absolute terms will continue to grow for the foreseeable future.

My talk today combines the age-old story of international trade in commodities with a spectacular new twist: the rise of China as a global economic giant.

Anxieties over China: Why Lou Dobbs is Wrong

I'm bullish on China's rise. China's engagement in the global economy is good for people of China, good for Americans, good for the world. While the critics of trade with China mistakenly focus on the alleged harm it causes, they tend to overlook the benefits. Those benefits include lower-priced imports for U.S. consumers and businesses, expanding export opportunities to China, and the economy-wide benefits of Chinese capital flowing to the United States.

A Variety of Affordable Imports

Producers in China specialize in goods that are especially attractive to consumers in the United States. Most of what we import from China fits in the category of consumer goods that improve the lives of millions of Americans everyday at home and the office. Of the \$280 billion worth of goods we imported from China in 2006, more than three-quarters were goods bought directly by consumers: computers and computer accessories; cell phones and other telecommunications equipment; furniture, appliances and other household goods; clothing and shoes; toys, sporting goods, and TVs, radios and other consumer electronics. The remaining 20 percent of imports from China last year were industrial supplies and industrial machinery.

Those imports allow Americans to stretch their paychecks further, raising real wages for millions of workers. Money saved because of lower prices for Chinese imports allows U.S. consumers to spend more on other, non-Chinese goods and services, including those produced in the United States. Those savings are especially important for low- and middle-income American families who spend a relatively larger share of their budgets on the discount-store shoes, clothing and other products made in China.

Tariffs on imports from China would amount to a direct tax on tens of millions of U.S. households that buy those \$200 billion in consumer goods we imported from China last year. A tax on imports from China would mean higher prices for shoes, clothing, toys, sporting goods, bicycles, TVs, radios, stereos, and personal and laptop computers.

A Growing Market for American Products

American producers and workers have gained tremendously from growing export opportunities to China. China's fixed currency has allegedly discouraged exports to China, but that is not supported by the trade numbers.

Since 2000, U.S. exports of goods to China have increased by 158 percent, from \$16.2 billion to \$41.8 billion in 2005. The rate of growth of U.S. exports to China since 2000 is more than 12 times the rate of growth of U.S. exports to the rest of the world other than China during the same period. Our leading exports to China are soybeans, cotton, and other agricultural products; plastics, chemicals, wood pulp, and other industrial materials; civilian aircraft; and semiconductors, computer accessories, industrial machines and other machinery.

A unilateral tariff against Chinese imports would invite retaliatory tariffs from the Chinese government against U.S. exports to China. This would jeopardize U.S. exports to our fourth largest and fastest growing major export market. The resulting trade war would drag down economic growth in the world's two most dynamic major economies. Disrupting commercial relations between the two most important engines of the global economy would have negative reverberations throughout the world.

More capital, lower interest rates

The dollars earned by producers in China by selling in the U.S. market are not stuffed under mattresses. They either come back to the United States to buy our goods and services, or they are used to invest in the United States through the purchase of U.S.-based assets. The large majority of Chinese investment in the United States comes through official purchases of U.S. Treasury bills by China's central bank. As of December 2005, Chinese monetary authorities hold \$262 billion in U.S. Treasury bills.

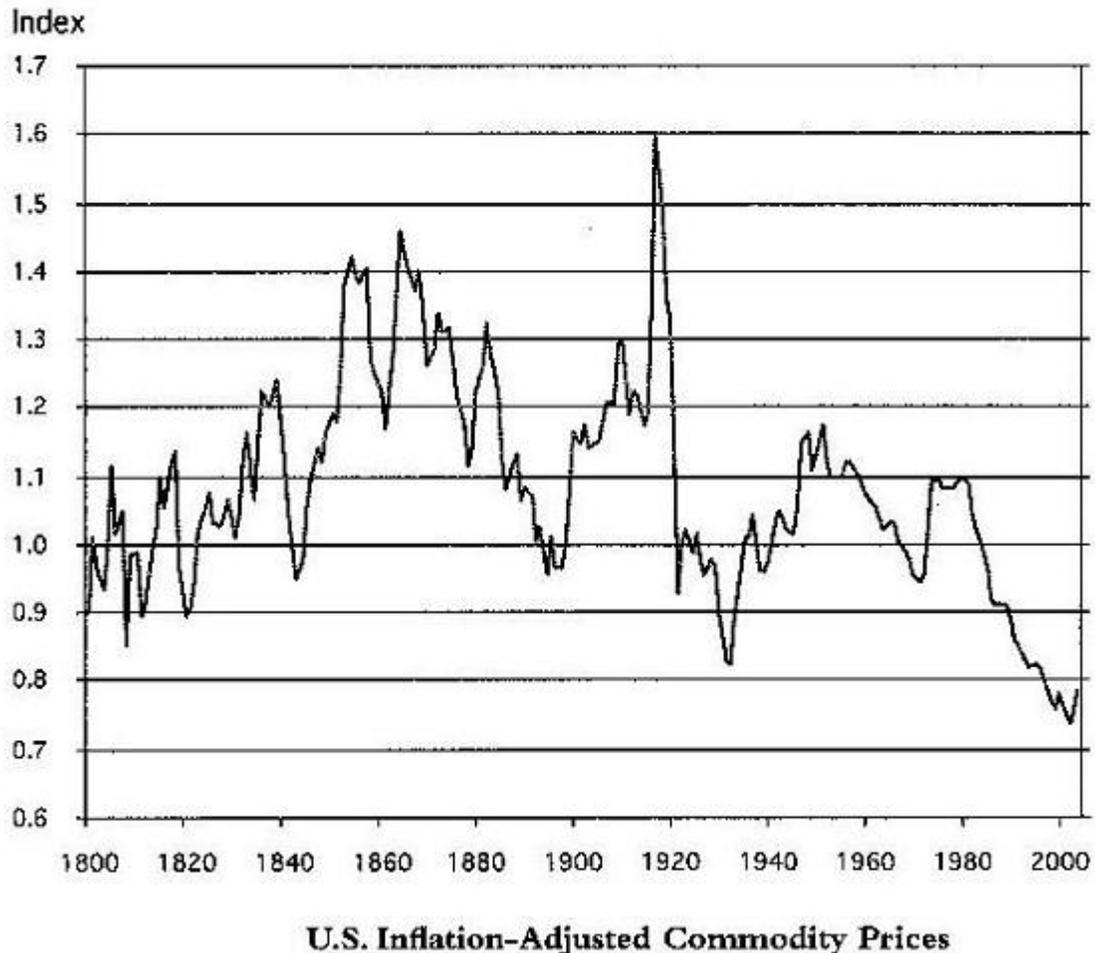
China's investment in the United States, while a relatively small share of the total U.S. securities market, does put upward pressure on bond prices and thus downward pressure on U.S. interest rates. Lower rates, in turn, mean lower mortgage payments for American families and lower borrowing costs for U.S. business. Lower borrowing costs have also stoked demand for durable goods such as cars and appliances, benefiting U.S.-based manufacturers. And, of course, lower interest rates paid on U.S. Treasury bills means less spending by the federal government and savings for U.S. taxpayers.

A one-sided view of trade with China--a view that only considers the alleged harm while ignoring the real benefits--will likely result in misguided policies that would put those benefits in jeopardy.

The Global Boom in Commodities

In the world of global commodity markets, there are also two visions competing visions: One sees China as a hungry giant whose insatiable demand for commodities heralds a new era of permanently higher prices--a "commodities super cycle." The other sees China's rise as only the latest chapter in a long-running story of cyclical ups and downs amid a long-term downward trend in commodity prices.

Myths of the Commodities Supercycle and Chinese Consumer Giant



I'm going to argue today that it is more of the latter, but clearly something big is going on in global commodity markets and China is a big part of the story.

Behind the recent rise in commodity prices

Higher commodity prices driven by five key factors as well as China: One, strong global growth almost everywhere has stoked demand. The IMF has declared that the world is enjoying its strongest growth in 30 years, especially in "developing Asia." Not just China but a number of developing countries have reached the stage in development where their intensity of resource use is taking off. Economic liberalization and deregulation have freed about 3 billion people who were laboring in planned and closed economies.

Two, low prices in 1980s and 1990s depressed global investment in commodity production. High-cost capacity was shut down, companies merged, and inventories were drawn down. The mining industry

reduced capacity in 1990s through mergers and restructuring. Environmental regulations also made capacity less responsive. Producers were caught short when demand rose.

Three, a depreciating dollar translates into higher dollar-denominated commodity prices. Since February 2002, the U.S. dollar has lost one quarter of its value against a basket of major currencies. If the dollar is worth that much less on foreign exchange markets, commodity producers will understandably demand more dollars for a given unit of their goods.

Four, commodity buyers are being charged a higher "security premium" because of rising geo-political tensions. Experts say the terrorist attacks of September 11, 2001, the invasion of Iraq, and looming confrontations with Iran and North Korea have added as much as \$15 to the price of a barrel of oil. Rising anxieties and oil prices have had a knock on effect on the price of other commodities.

And five, in the past few years commodities have emerged as an investment asset. Low global interest rates and underperforming stock markets in recent years have sent hedge funds and institutional investors in search of better yields. NYMEX oil futures contracts have increased four-fold in the past decade, and non-commercial contracts now make up one-sixth of the market. It would be wrong to say investor speculation is driving higher prices. Investors are following the fundamentals of the market, providing funds that help the market translate changes in sentiment into changes in prices. Higher prices are causing increased investor participation, not vice versa.

China's Impact on Global Commodity Markets

Reinforcing all those developments has been the spectacular rise of China as an economic power. Since the reforms of Deng Xiaoping began in 1978, China's economy has grown by more than 8 percent per year. If anything that growth has accelerated in the last 15 years, reaching double digit levels. Forty percent of China's GDP is spent on investment each year.

From a marginal player in the global economy 30 years ago, China is now the world's third largest trading nation, ahead of Japan and behind only the United States and Germany. Commodity imports are up by factor of 20 over past two decades, to \$200 billion in 2004, but are still the same as overall import demand and a steady one-third of total imports. China is now the world's top consumer of aluminum, copper, lead, nickel, tin, zinc, iron ore, coal, wheat, rice, palm oil, cotton, and rubber. It has been the world's top consumer and producer of steel for a decade, producing a third of the world's steel, three times as much as either the United States or Japan. While its economy has been growing by 9 percent a year since 1990, its consumption of metals has increased 17 percent per year. And China is only now reaching the stage of industrialization, urbanization, and infrastructure building that is the most commodity intensive.

China's soaring demand for commodities has exerted a powerful pull on global commodity markets. Let's take a brief look at China's impact on the three major segments, energy, the hard commodities

such as metals, and the soft commodities such as agricultural products. And then we'll look into our crystal ball to see where China's rise will take markets in the future.

First, let's consider energy, and oil in particular. China's impact here is less than you might think. Demand for oil is rising throughout Asia and the developing world, not just in China. Developing Asia accounts for 60 percent of the growth in world oil demand since 1990, with China accounting for about half that. China's demand for energy has actually grown at a slower rate than its overall economy, and two-thirds of its energy needs are met by coal, of which it is the world's largest producer. As a result, China accounts for only 6 percent of world oil imports, and 8 percent of consumption. If you are looking for somebody to blame for high global oil prices, China is far down the list of suspects.

Next, let's look at agricultural commodities. Here China's impact on food and other "soft commodities" has also been mixed and perhaps less than meets the eye. The people of China together are the world's largest consumers of wheat, rice, palm oil, cotton and rubber, and the second largest consumers of soybeans, soy oil, and tea. But China is also a major producer of vegetables, seafood, rice, and corn. In fact, in most years, China runs a surplus in agricultural trade, with its major market being other Asian countries.

As a result, China's impact on global agricultural markets is more selective. As incomes in China have risen, consumers have been eating less course grains and more meats and processed foods. China's consumption of wheat and rice is actually down since 1990 and corn up only slightly. Meanwhile, its demand for meat, fruits and vegetables have been soaring. China's demand for soybeans has also been rising rapidly because of the demand for soy oil in cooking and soy meal to feed livestock. China is now the world's biggest importer of soy beans.

China's industrial growth has also driven up demand and prices for cotton, rubber, and wood. Since 2001, China has accounted for 90 percent of global consumption growth of cotton to feed its growing textile and apparel industries. China is now the world's top consumer of rubber, driven by 20 percent annual growth in tire production and booming automobile sales. China's expanding furniture industry has turned China into the world's top importer of timber.

Finally, let's turn to metals, the "hard commodities." Here China really is the prime suspect. China has reached a stage in its development where its demand for metal commodities is especially intense. Its metal consumption as a share of world consumption has jumped in the past decade from 10% to 25%. Since 1999, China has consumed two-thirds of the world's growth in base metals output. Since 2002, China has accounted for half the world's growth in consumption of steel, copper, and aluminum, almost all the world's growth of nickel and tin, and more than world's growth of lead and zinc.

Driving metals prices up has been strong demand, lead by China, low inventories, and high energy prices, which raise the cost of most mining most metals. China is a large net importer of oil, copper, iron ore, lead, nickel, and zinc, where prices have increased the most. China's demand for metals is, of

course, tied to its growth in industrial output, especially stainless steel, electrical wire, cable and infrastructure. The one exception is aluminum, where China is a major producer and net exporter, and where prices have been flat compared to copper.

So if you're keeping score, China's impact on oil markets has been modest and one among many driving forces. Its impact on the soft commodities has been mixed and selective. But its impact on virtually all the major "hard commodities" has been nothing short of earth-shaking.

"Commodity Super Cycle" or a Bump in the Road?

China's role in global commodity markets will only grow more important in the next 20 years. We know from the experience of other countries that have industrialized rapidly that the intensity of resource use takes off when per capita incomes reach the \$5,000 to \$10,000 range in terms of purchasing power parity, while resource use per capita begins to taper off when incomes reach the \$15,000 to \$20,000 range.

With a per capita income of \$6,400 in adjusted prices, China is just now entering the take-off phase of resource demand. When it comes to demand for major metals, "You ain't seen nothin' yet." If Chinese per capita GDP (PPP) approaches South Korean levels in the next 20 years, as it is on track to do, its consumption of aluminum and iron ore will increase five fold, oil eightfold, and copper nine fold.

I have visited China twice in recent years and I'm struck by the explosion of cars on the road. Goldman Sachs estimates that the number of cars in China will increase from about 20 million today to 100 million by 2020 and 400 million by 2040. Imagine what that will do to China's demand for oil.

Because of changing diets, we can expect the same type of growth for meat, fish, vegetable oil and oil seeds. Chinese meat consumption today is 50 kilograms per person compared to 130 kilograms in the United States. So on a broad range of commodities, the upside for potential growth remains huge. In China, land and renewable water resources are scarce, so pressure will only grow for agricultural imports.

And this will not be just a story of China but of all developing Asia, including India. From 2001 to 2015, developing Asia will account for 61 percent of the growth in global demand for commodities.

Adding to these fundamental forces will be the much expected appreciation of the yuan. A stronger currency will translate into more buying power for the Chinese in global markets, stoking demand for commodities.

China's hunger for commodities will be dampened by its gradual shift more toward consumption and away from such heavy emphasis on investment, which will lessen its resource intensity. And as incomes continue to grow, more of its economic activity will shift to services, where resource intensity is less than industry. Adoption of new technologies and conservation measures will also reduce the need

for commodities to produce a given amount of output. Keep in mind as well that some of China's rising demand represents a shift in demand from other countries that have relocated production facilities to China, such as Japan, Taiwan, South Korea, and the United States. But none of those mitigating factors together or separately will offset the sheer growth of China's economy and its growing demand for commodities in the foreseeable future.

The Long, Downward Slide in Commodity Prices

Does China's dramatic rise signal a long-run "commodity super cycle" marked by ever rising prices, or does it only mark a temporary upward bump in otherwise long-term downward trend in commodity prices? The Economist declared last year that "The era of cheap raw materials is over." Perhaps prices will never be as cheap as they were in the late 1990s, but count me among the skeptics that we have entered a super cycle. Let me give you four reasons why I'm skeptical:

One, history is against it. Real commodity prices have been trending down since the 1840s. During the past 50, 100 or even 140 years, commodity prices have been trending downward by an average of 1 percent to 1.6 percent per year compared to consumer prices.

Two, the laws of supply and demand still apply. A long period of higher prices causes both consumers and producers to adjust their behavior in a way that ultimately undermines the higher prices. On the demand side, high prices force conservation and use of synthetic materials and other alternatives. In 2006, the developed countries, including the United States, the European Union, and Japan actually consumed less oil than the year before, even though their economies grew. On the supply side, higher prices are already stimulating greater investment in exploration and production of oil and minerals. Investment in mining has already jumped from \$1.9 billion in 2002 to \$5 billion in 2005. Investment in oil exploration is surging. Recovery of scrap metal has been accelerating.

In simple economic terms, the outward shift in the global demand curve is being followed by a slow but sure outward shift in the supply curve, which will eventually mean a downward shift in prices even as the volume of commodities produced and traded each year grows ever higher.

Three, economic growth around the world is causing structural changes that make commodities relatively less important. Transportation costs are falling, trade is being liberalized, financial markets are becoming more efficient, and less resource intensive substitutes are being found.

Four, inflation less likely to spiral out of control than in past commodity price spikes. Better monetary policy, globalization and deregulation, and financial market innovations will help to dampen speculation and keep commodity prices contained in the long run.

I'm not out on a limb by myself. A recent World Bank study predicts that "prices are expected to be cyclical, and not become permanently higher at anywhere near recent price levels." The Asian Development Bank predicts most commodity prices in 2020 will be below their 2005 peaks, with

exceptions of forestry and fishery commodities, but most prices will remain above their 2001 lows. The IMF recently concluded that "commodity prices are most likely to remain cyclical and volatile, and not permanently higher." Futures markets themselves are signaling a 44 percent decline in non-oil commodity prices in the years ahead.

Policy Prescription--Free Trade, Free Markets

The greatest threat to global commodity trade and prosperity is not China but the threat of protectionism. In the agricultural commodity markets, subsidies and import barriers in advanced economies depress global farm prices and trade. Because of this lingering protectionism, international agricultural commodity markets are thin and more volatile than they should be. According to the International Monetary Fund, elimination of agricultural intervention in the rich countries would raise global prices for rice, sugar, beef, corn, wheat by 5 to 6 percent and cotton 13.5 percent.

To promote more commodity trading and prosperity, we should support a comprehensive Doha-round agreement among members of the World Trade Organization. We should support China's continued integration into the global economy through its membership in the WTO and resist all protectionist members aimed at China's exports. CMC and TEGMA must continue to speak with one voice in favor of competitive and open global markets.

Thank you.

Sources:

Jeffrey M. Christian, *Commodities Rising: The Reality behind the Hype and How to Really Profit in the Commodities Market* (Hoboken, N.J.: John Wiley & Sons, 2006).

Deutsche Bank Research, "China's commodity hunger: Implications for Africa and Latin America," June 13, 2006.

The Economist, "Survey: The New Titans," Sept. 16, 2006, pp. 9-10.

Daniel Griswold, "[Who's Manipulating Whom? China's Currency and the U.S. Economy](#)," Cato Trade Briefing Paper No. 23, July 11, 2006.

IMF, *Economic Outlook*, "The Boom in Nonfuel commodity prices: Can it last?" September 2006.

Cyn-Young Park and Fan Zhai, "Asia's Imprint on Global Commodity Markets," Asian Development Bank. ERD Working Paper Series no. 90, December 2006.

Mathew Shane and Fred Gale, "China: A study of Dynamic Growth," U.S. Department of Agriculture, October 2004.

Shane Streifel, World Bank, "Impact of China and India on Global Commodity Markets," World Bank Working Paper.