## RESEARCH

# CHINA FOR INVESTORS III: GEOPOLITICAL DIMENSION

April 23, 2004

Topical Study #66

All important disclosures can be found beginning on page 21.

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#### I. From Threat To Partner

The geopolitical headlines have been bearish for stock investors. However, while the media focuses on terrorism around the world and the turmoil in Iraq, the Big Story may be the extraordinary geopolitical transformation of China in recent months. The unheralded story is extremely bullish, in my opinion. Since joining the World Trade Organization (WTO) on December 11, 2001, China in effect has become one of America's most important allies, sharing common national interests in a few crucial areas. Both the United States and China are very conservative geopolitical powers. Both require global stability to assure that they have unfettered access to foreign sources of the critical commodities that they must have to maintain their dynamic economies and to promote their might.

How quickly we forget: One of the main reasons that the incoming Bush administration may not have responded more aggressively to the national security threat posed by al Qaeda right away is that the President and his top advisers were preoccupied with China. On April 1, 2001, an American surveillance plane and a Chinese fighter collided off the coast of China. The Chinese jet crashed into the sea. The American crew made an emergency landing on China's Hainan Island. They were detained for several days. They were released after the U.S. ambassador to China wrote a letter that was taken as an apology by the Chinese.

The May 4, 2001, issue of the *Chicago Tribune* reported that "While President Bill Clinton eventually came to view China as a 'strategic partner,' emphasizing common interests such as trade, Bush refers to China as a 'strategic competitor,' reflecting the view of conservatives who believe China should be treated as a potential threat."

Today, the Bush administration has embraced the strategic partnership approach almost wholeheartedly. Indeed, Vice President Dick Cheney, in two days of meetings with China's political leaders during April 15 and 16, urged that North Korean nuclear disarmament talks must proceed and show progress. "Time is not necessarily on our side," he said. He warned that the unstable situation could trigger a nuclear arms race in the region. In other words, in a diplomatic manner, he was giving the Chinese a wake-up call: Fix the North Korea problem, or risk a nuclear-armed Japan and South Korea:

[T]here are nations in the region that have the technical capacity to produce nuclear weapons who have not done so. But if North Korea becomes a nuclear power, and has ballistic missiles, which it does, and has the ability to threaten other nations in the region with nuclear weapons, then those nations may conclude that their only option is to develop their own capability. And then we'd have a nuclear arms [race] unleashed in Asia, and that's not in anybody's interest. So we hope we can be successful through diplomacy at achieving our objective. But it is vitally important that we achieve this objective. <sup>1</sup>

http://www.whitehouse.gov/news/releases/2004/04/20040415-1.html.



The Chinese got the message. They wasted no time. On Monday, April 19, North Korean leader Kim Jong II was in Beijing for a summit with Chinese President Hu Jintao. Mr. Kim arrived at the unannounced visit by special train at Beijing railway station early on Monday amid tight security, according to South Korean media reports. At first, China declined to confirm the visit. "We have no official information," said the foreign ministry. But then on Wednesday, April 21, the Chinese government news agency announced that Mr. Kim assured the Chinese president that "the North Korean side would continue to be patient and flexible and actively participate in advancing the six-party talks." He also agreed on the need for a nuclear weapons-free Korean peninsula.<sup>2</sup>

China has been hosting six-nation talks to resolve the North Korean nuclear standoff, talks that also have brought together the two Koreas, the United States, Russia, and Japan. China has been actively attempting to pressure North Korea to drop its nuclear plans in return for help for its depressed economy.<sup>3</sup> A new round of discussions is scheduled to take place before the end of June. The Bush administration demands the complete, verifiable, and irreversible dismantling of North Korea's nuclear program.<sup>4</sup>

China's newfound interest in playing a major stabilizing role in international relations was confirmed by news that Beijing is expected to join the Nuclear Suppliers Group, 40 nations seeking to control the export of nuclear materials and technology. The news just happened to coincide with Mr. Cheney's visit and signals a sea change in China's policy toward nuclear proliferation.

A top priority for the Chinese is to develop new sources of energy. In their discussions with Mr. Cheney, they raised the issue of importing U.S. technology for nuclear power stations. Plans call for at least 20 nuclear power plants to be built by 2020. They are more likely to get what they want if they can assure American officials that they won't sell it to other nations, especially ones with rogue regimes. The April 13, 2004, issue of the *Financial Times* observes:

Beijing has a long history of missile and missile-related sales overseas, and in the 1980s provided Pakistan with enriched uranium and a bomb design, later sold to Libya and possibly North Korea and Iran.

Apparently, the Chinese are ready to come in out of the cold. Rather than supplying the "Axis of Evil" with weapons of mass destruction, they now seem ready to help America to remove those weapons from rogue nations.

<sup>&</sup>lt;sup>2</sup> Footage on Chinese state-run television of the meeting showed Mr. Kim in a Mao-style gray tunic, while the Chinese were all wearing Western business suits.

<sup>&</sup>lt;sup>3</sup> Previous summits in 2000 and 2001 had been followed by increased Chinese shipments of fuel and grain and forgiveness of some of Pyongyang's debts. The North Koreans can expect another gift this time as well for showing a more cooperative attitude.

<sup>&</sup>lt;sup>4</sup> According to the March 14, 2004, issue of *The New York Times*, Pakistan has provided the United States with information detailing how North Korea acquired nuclear technology from Khan Research Laboratories headed by Dr. Abdul Qadeer Khan, the father of Pakistan's nuclear bomb program.



#### II. Power Requires Energy

China is the main reason that I continue to recommend that long-term equity investors should overweight the Energy sector in their portfolios. The Chinese are desperate for more energy to power their economy. Previously, I have explained why I believe the nation is driven by a "Growth Imperative." Real GDP must grow almost 10% per year to create approximately 8 million new jobs annually. To accommodate the 20 million people migrating from the rural areas to the cities every year, the Chinese must in effect build a Houston, Texas, once a month! If they don't grow fast enough and build enough infrastructure in response to these demographic pressures, unemployment would soar, potentially unleashing major social and political instability. Furthermore, rising unemployment and poverty could create living conditions that would spread diseases like SARS. Such a grim scenario will be avoided at all costs, at least until the summer of 2008 when Beijing hosts the Olympics. This is one of the main reasons that the Chinese are so motivated to make sure that the world is thoroughly impressed with their progress.

Needless to say, all this requires plenty of energy as well as other commodities. Every two years, the Chinese are adding the energy consumption of a middle-sized country like Brazil. The country's energy needs are expected to more than double by 2020. National electric power demand is expected to continue growing between 10% and 15% annually, outpacing supply. Since last year, 21 provinces—out of the total 22—experienced power shortages with blackouts. The situation is likely to get worse as China's rapidly growing middle class acquires more air conditioners. Before the constraints of the control of the total 22—experienced power shortages with blackouts.

Roughly 70% of China's power supply comes from domestically produced coal, which is the dirtiest source of energy. The burning of high-sulfur coal has resulted in massive pollution. By 2020, China could surpass the United States as the world's biggest source of carbon monoxide. According to a recent article posted on <a href="www.chinadaily.com">www.chinadaily.com</a>, China's "coal reserves will run out in the coming decade." If true, this is an extraordinary projection. I have not been able to verify it yet.

Over the past 12 months through February of this year, China's demand for crude oil rose to a record 5.4 million barrels per day. Extrapolating the trend since 1995 suggests that China should be consuming at least 7 million barrels per day by 2010 (Figure 1). China became a net oil importer in 1993 and now imports one third of its oil consumption, and it is expected to import more than half of its oil by 2010 by some estimates.

<sup>&</sup>lt;sup>5</sup> *Topical Study #62*, "China For Investors I: The Growth Imperative," November 7, 2003, http://www.cm1.prusec.com/yardweb.nsf/TopicalStudies?readform

<sup>&</sup>lt;sup>6</sup> *Topical Study* #63, "China For Investors II: The Games," January 21, 2004, http://www.cm1.prusec.com/yardweb.nsf/TopicalStudies?readform

<sup>&</sup>lt;sup>7</sup> "China's Economic Engine Needs Power (Lots of It)," *The New York Times*, March 14, 2004.

<sup>&</sup>lt;sup>8</sup> "China: In the dark," *The Economist*, March 27, 2004, pp. 43-44.

<sup>&</sup>lt;sup>9</sup> "Experts warn of hasty nuke plan," *China Business Weekly*, March 9, 2004.



The Chinese fully recognize that the major obstacle for their Growth Imperative is sufficient supplies of industrial commodities, especially petroleum and natural gas. In response to the Iraq war last year, the Chinese reportedly began building storage facilities for a strategic oil reserve. The Chinese are desperate to obtain reliable, secure long-term sources of crude oil.

They seem to be competing with equally desperate Japanese buyers. Both are struggling to get more Russian oil. China recently surpassed Japan as the world's second-largest consumer of crude oil (Figure 2). China had been negotiating with Russia for a decade to build a pipeline from the Siberian oil fields to Daqing, China's major oil city in the Northeast. The Chinese thought they had a deal last year, but Japan sweetened its bid, offering to put up \$5 billion for pipeline construction and another \$2 billion for oil field development. China and Russia have already agreed on a \$17 billion project to build a 3,055-mile natural gas pipeline from eastern Siberia to northeastern China and South Korea.

The March 24, 2004, issue of the *Financial Times* reported that Japan expected to win the tug of war with China. They expected that the 2,600-mile pipeline, costing an estimated \$10 billion, would be built between Taishet in eastern Siberia to the Russian port of Nakhodka, across from Japan. The Japanese claim was confirmed by Transneft, Russia's state monopoly pipeline operator. Nevertheless, the March 23, 2004, issue of China's *People's Daily* reported that the Chinese and Russians were still in negotiations.

Meanwhile, the Chinese have concluded energy deals with several other countries:

- 1) In mid-March, China announced a preliminary agreement to purchase \$20 billion worth of liquefied natural gas (LNG) from Iran over 25 years, one of the largest deals of its kind. China is seeking to triple its LNG consumption as a percentage of overall energy consumption to 8% by the end of the decade. The Chinese are also finalizing terms for the development of three oil fields in Iran. Oil imports from Iran accounted for 14% of China's total crude imports last year. <sup>10</sup>
- 2) In March, Saudi Arabia agreed to allow energy companies from both China and Russia to be among the first foreigners to explore its natural gas reserves since the 1973 oil crisis. China already imports more crude oil from Saudi Arabia than from any other source. Saudi Arabia hopes that more domestic gas production can be used to run power stations and desalinization plants, freeing up more oil for export.<sup>11</sup>
- 3) In February, Hu Jintao, the Chinese president, led a state visit to Algeria that produced agreements allowing China to explore for oil and gas in Algeria's rich southern Saharan fields. 12

<sup>&</sup>lt;sup>10</sup> "China Plans to Buy Iran Gas Over 25 Years for \$20 Billion," *The Wall Street Journal Online*, March 18, 2004.

<sup>&</sup>quot;Russia and China get Saudi gas deal," *International Herald Tribune*, March 8, 2004.

<sup>&</sup>lt;sup>12</sup> "Algeria Shows Willingness to Abandon Its Violent Past," *The New York Times*, February 16, 2004, p.A3.



Another important new source of energy for China is the Three Gorges Dam project on the Yangtze River. This year, four new generators will begin to operate, and will be able to produce 33.38 billion kilowatt hours (kwh) of electricity annually. About half is for the East China Power Grid, of which 7 billion kwh is just for Shanghai. Despite numerous dam projects, hydroelectric power isn't likely to account for much more than the current 5% of the country's energy production in the foreseeable future.

China's nuclear power plants capacity is expected to rise to 36 million kilowatts in 2020, up from 8.7 million kilowatts currently. Nuclear power should account for 4% to 5% of the country's total power capacity of an estimated 800 million to 900 million kilowatts. It currently accounts for only 1.3%.

China is the world's largest producer of coal, with output rising 21.5% last year. Yet domestic demand is so strong that in March China reduced the 2004 export quota of coal allocated to the production of steel overseas. This has upset European steel producers, who fear it will lead to a coal shortage. The European Union has warned China that it must end restrictions on exports of coking coal, designed to protect the Chinese steel industry, or risk a challenge at the WTO. 14

I believe that while short-term supply and demand factors still matter most for the pricing of oil, there is also a "China Premium" in the crude oil market. It is widely known that the Chinese are desperately scrambling to obtain and lock up long-term sources of energy to fuel their extraordinary growth. <sup>15</sup> The average price of a barrel of crude oil was \$19.68 during the 1990s. From 2000 through 2003, the average price was \$28.38 despite the recession and stock market debacle (Figure 3). Most industry analysts seem to believe that the price should revert to the mean of the 1990s. I am starting to wonder whether the new "equilibrium" price might be north of \$30 per barrel. If so, this would imply higher equilibrium prices for alternative sources of energy, including natural gas and coal (Figure 3).

#### III. Hitting The Brakes?

Of course, my Growth Imperative hypothesis implies that China's demand for industrial commodities should continue to soar, and so should the prices of those commodities. Some slowing on the demand side of China's economy would be a good thing. There are already signs

<sup>&</sup>lt;sup>13</sup> "Shanghai invests record amount in power infrastructure," *People's Daily*, March 9, 2004.

<sup>&</sup>lt;sup>14</sup> Even Fed Chairman Alan Greenspan is worrying about the availability of coke. In his Congressional testimony to the Joint Economic Committee on April 21, 2004, he said: "And the one thing I have never thought we would find we had a shortage of is coke."

<sup>&</sup>lt;sup>15</sup> In my *Topical Study #62*, I noted that the Chinese are building a highway system that should be as big as the one in the United States by 2020.



that the supply side of the economy is suffering from shortages of electricity, water, coke, and other raw materials. The global economy has also been stressed by China's extraordinary demand for commodities. According to China's National Bureau for Statistics, in 2003 the country accounted for half of the world's consumption of cement, 30% of its coal, and 36% of its steel. Copper imports rose by 15%, and nickel imports more than doubled.

Recently, however, industrial commodity prices have stopped soaring, and so have the stock prices of the S&P 500 Materials sector. Indeed, some Materials industry groups have had significant corrections so far this year through April 23: Aluminum is down 13.9%, and Metals & Mining is down 15.4%. In my opinion, these downdrafts are profit-taking corrections triggered by rising interest rates and a strong dollar. If my China-led Global Synchronized Boom scenario is still on track, then most industrial commodity prices and Materials stock prices should find support around their 200-day moving averages and rebound into next year (Figures 4 and 5).

In other words, I don't believe that China is about to experience either a soft landing or a hard landing. I realize that the Baltic Dry Index and the prices of Chinese H-shares are weakening after soaring last year (Figures 6). Nevertheless, I expect that China's economy will continue to grow rapidly through the 2008 Summer Olympics.

Pessimists on the outlook for China warn that the economy is overheating and that Chinese leaders have already expressed their concerns and intention to cool it off. The M2 money supply was up 19.1% from a year ago during March. The year-over-year Consumer Price Index inflation rate was 3.0% in March. A year ago it was only 0.9% (Figure 7). Last year, real GDP rose 9.1%. It rose at an annualized rate of 9.7% during the first quarter, with fixed investment up 43.0% and consumption up 10.7%. Beijing is moving to slow the growth in excess production capacity. This shouldn't cause either a soft or hard landing as long as consumption growth increases as I expect.

In mid-March, Prime Minister Wen Jiabao warned that the economy was at a "critical juncture," pointing to the threat of over-investment, inflation, and shortages of energy. In my opinion, China's leaders are attempting to manage the rapid pace of economic growth—to make sure that it is sustainable—rather than trying to slow the pace significantly. Undoubtedly, they are stepping on the brakes for some industries that are expanding capacity too rapidly. In mid-March, the National Development and Reform Commission, the country's most powerful cabinet department in charge of economic development, said it will generally stop approval of new construction of steel and iron mills. It is estimated that by the end of 2005, China's annual steel output will reach 330 million tons, enough to meet the market demand of 2010. They are also adopting measures to stop over-investment in aluminum and cement production. <sup>16</sup>

<sup>&</sup>lt;sup>16</sup> "China douses overheating in steel, iron industries," *People's Daily*, March 12, 2004.



On April 25, the People's Bank of China—the central bank—raised reserve requirements to 7.5% from 7.0% on banks with insufficient capital. This means that the more feeble a bank is, the less money it will have to lend. <sup>17</sup> A bank spokesman said, "An excess of credit growth can create inflation and asset-price bubbles. This can create new non-performing bank loans and concentrate financial risk." This statement marked a break with a previous reluctance to use the word "bubble." China's central bankers clearly have a much more preemptive attitude toward bubbles than monetary officials at the Federal Reserve led by Alan Greenspan, whose attitude is that bubbles should be dealt with after they burst.

Meanwhile, the Chinese are moving forward with the construction of a highway system that should be almost as large as America's by 2020. They are just starting construction for the summer Olympics. They are working on a massive project to divert water from the Yangtze River to the Yellow River in the north. This will be even larger than the Three Gorges Dam project, which is scheduled to be completed in 2009. They are connecting major cities with super-fast trains.

#### IV. The Currency Question

The alternative to tightening monetary policy would be to allow an increase in the value of the yuan. This would stop the flood of foreign cash that is betting on a revaluation. Huge inflows have put upward pressure on the yuan. To peg the exchange rate, the central bank has been buying U.S. dollars. As a result, China's foreign-exchange reserves rose to a record \$440 billion during March, 39% above a year ago. This has fueled the rapid growth in China's M2 (Figures 8 and 9). Slower capital inflows following a revaluation would help to slow the growth in the money supply and in bank lending. A higher yuan would also reduce the domestic prices of imported commodities that are priced in dollars, thus helping to cool inflationary pressures.

The oft-quoted Chinese curse might be relevant to the currency issue: "Beware of what you wish for, it might happen." Earlier this year, Fed Chairman Alan Greenspan warned that unpegging the yuan could weaken China's banking system and threaten the world economy. In a letter to the Senate Banking Committee, he observed that 40% to 50% of Chinese bank loans may be nonperforming. Lifting capital controls to float the currency could cause deposit outflows from Chinese banks. On the other hand, in the Q&A portion of his congressional testimony before the Joint Economic Committee on April 21, 2004, when asked what the Chinese should do about their currency, Mr. Greenspan said:

<sup>&</sup>lt;sup>17</sup> "China bank reforms aim to cool loan growth," *Financial Times*, March 25, 2004, p.5.

<sup>&</sup>lt;sup>18</sup> "China acts to curb investments causing bad loans," *Financial Times*, April 13, 2004, p. 4.

<sup>&</sup>lt;sup>19</sup> "Greenspan Warns About Yuan Float," *The Wall Street Journal*, March 2, 2004, p. A2.



In my judgment, it would be basically to gradually remove controls and see what happens to capital flows as a consequence and be able to calibrate the degree of their intervention in the marketplace, which has largely been the purchase of U.S. Treasury instruments to support the suppressed value of their currency.

In late April, the administrator of China's foreign exchange reserves told the *Financial Times* that China would slowly move toward a floating system based on a basket of currencies.<sup>20</sup>

The Bush administration must be mighty pleased with our relationship with the Chinese. They responded remarkably quickly to Mr. Cheney's recent request regarding the North Korean problem. They were slower to respond to Treasury Secretary John Snow's suggestion that they let their currency float, but they are now moving in that direction. The latest very positive development is an agreement by the two countries to resolve a series of trade disputes. Most of the concessions were made by China. For example, Beijing agreed to delay indefinitely a plan to impose a security standard for wireless communications that U.S. telecommunications companies feared would freeze them out of China's rapidly growing market. While still relatively small, U.S. exports to China should continue to grow rapidly as China's overall import demand continues to soar (Figures 10-15). This should be particularly bullish for Industrials stocks (Figure 16). As Rick said to Louis at the end of *Casablanca*, "I think this is the beginning of a beautiful friendship."

In my recent *Topical Study #65*, "Profits Outlook: Dow 18,000 By 2010," I concluded:

During the 1990s, I wrote several Topical Studies explaining why the end of the Cold War was extremely bullish for stocks. Today, I believe that China entering the World Trade Organization on December 11, 2001, is an equally bullish "Big Bang." Both of these events unleashed globalization, more free trade, and more competition. Globalization has benefited consumers around the world, boosting their prosperity by providing better and cheaper goods and services. To compete, producers have been forced to provide better and cheaper goods and services. Because raising prices is hard to do in competitive markets, they've had to cut costs and boost productivity, increasingly relying on technology to do so. In some ways, the latest Big Bang is potentially more bullish than the first one. The triumph of Capitalism over Corruption in Asia is likely to create economic freedom and opportunity for many more people than the end of the Cold War did. Bringing prosperity to the people of China, India, and other Asian nations is bound to be good for the American economy and the stock market.

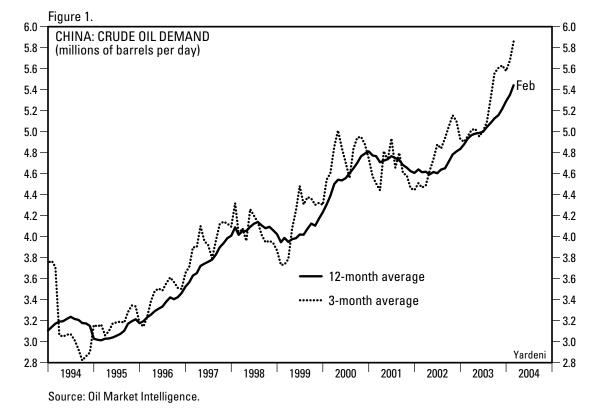
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<sup>&</sup>lt;sup>20</sup> "China hints at greater flexibility for renminbi," *Financial Times*, April 22, 2004, p. 7.

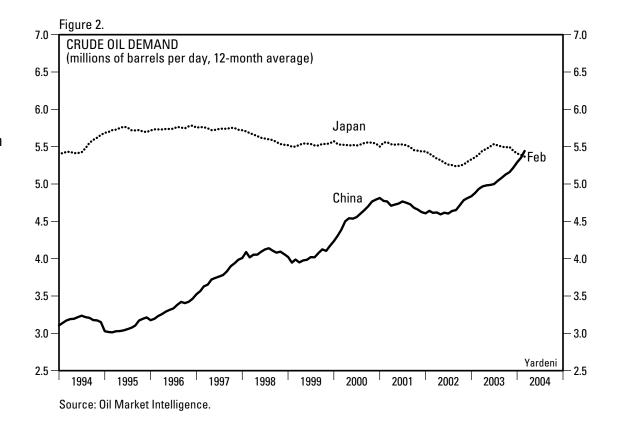
<sup>&</sup>lt;sup>21</sup> "US and China resolve trade disputes," *Financial Times*, April 22, 2004, p.1.

#### China: Oil Demand

China's crude oil demand soars into record territory.

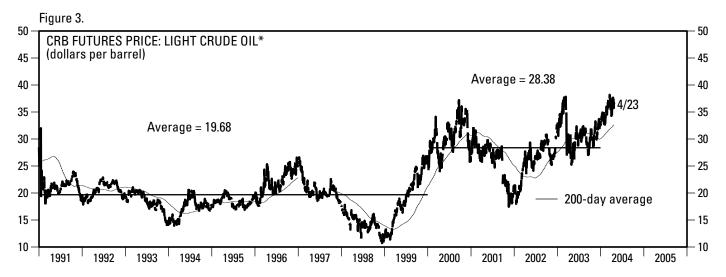


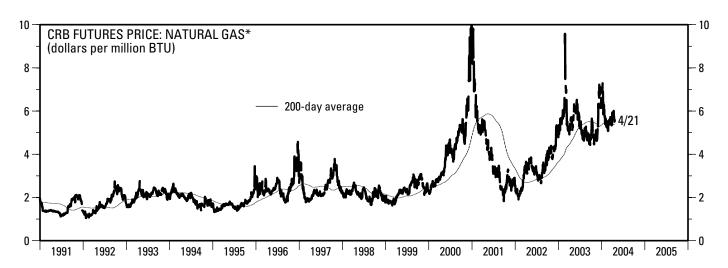
China surpasses Japan as second largest user of oil in the world.

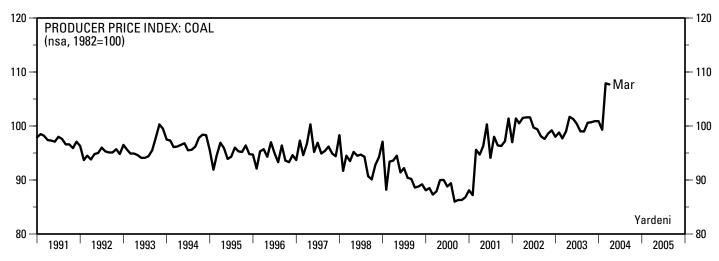




## **Energy Prices**





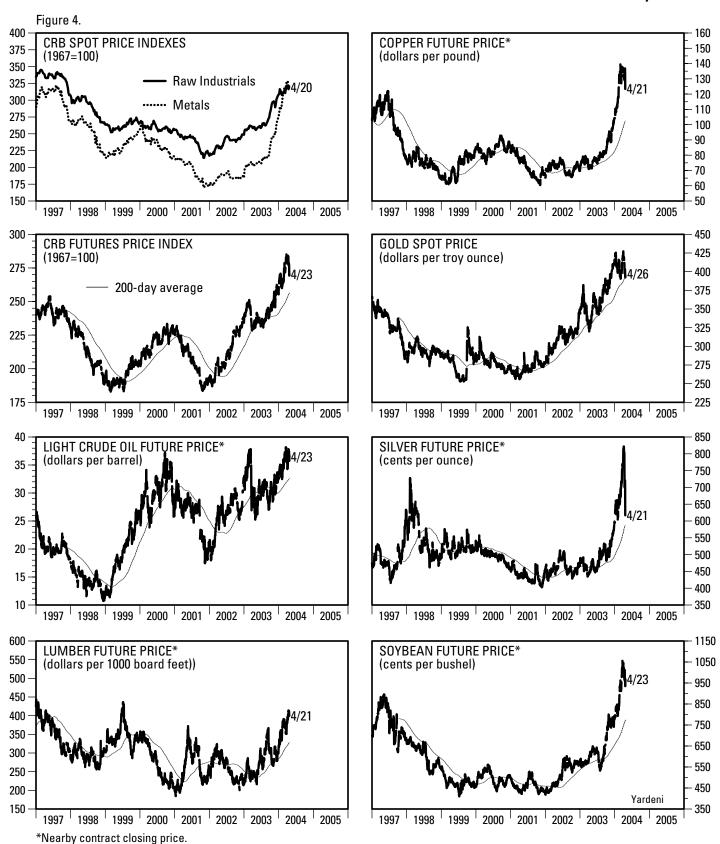


<sup>\*</sup> Nearby contract, closing price.

Source: U.S. Department of Labor, Bureau of Labor Statistics and New York Mercantile Exchange.



#### **Commodity Prices**



Source: Knight Ridder Commodity Research Bureau and Standard & Poor's Comstock.



#### **S&P 500 Materials**

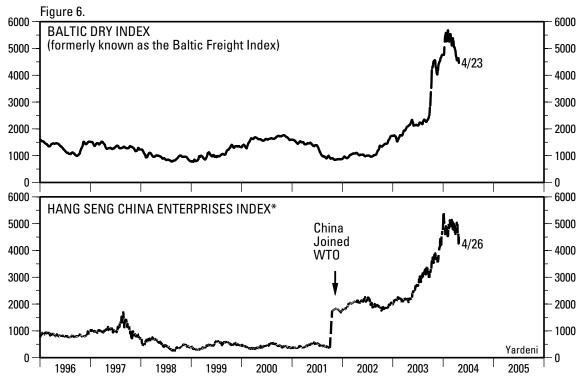


— 200-day average.

Source: Standard & Poor's Corporation.

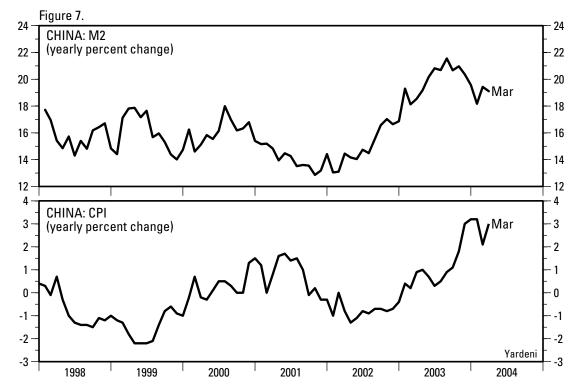
#### **China: Indicators**

After big gains last year, the Baltic Dry Index and Chinese H-shares have been moving sideways.



\* Price index of 32 Chinese companies listed in Hong Kong. Source: The Baltic Exchange and Hang Seng Exchange.

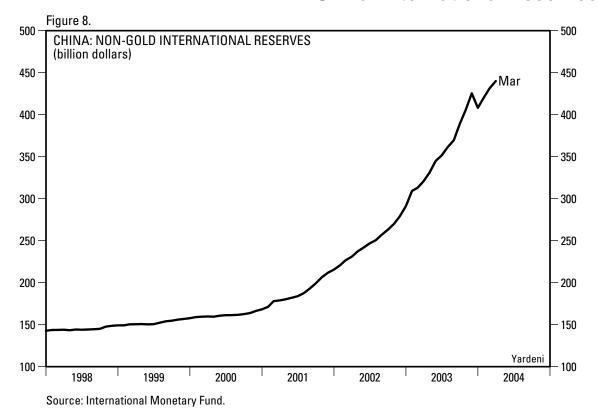
Chinese officials are concerned about the rapid growth in M2 and rising CPI inflation trend.



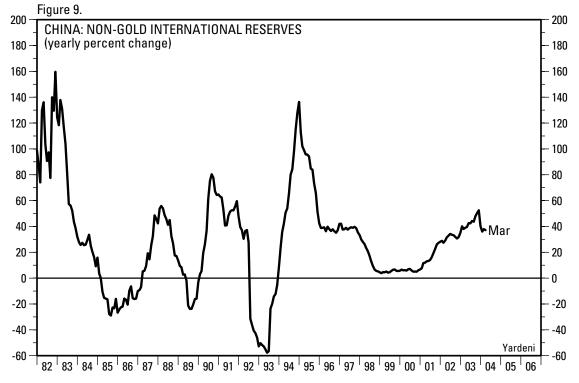
Source: International Monetary Fund and China National Bureau of Statistics.

#### China: International Reserves

China's international reserves soared to a record \$440 billion in March.

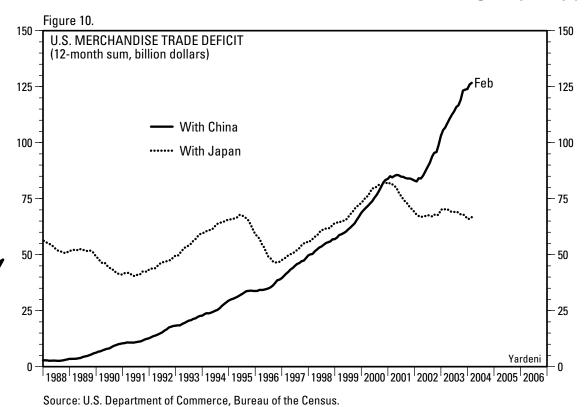


China's international reserves were up 37% from a year ago.



Source: IMF International Financial Statistics and Board of Governors of the Federal Reserve System.

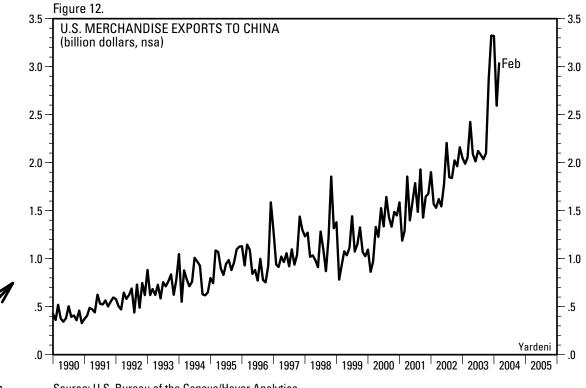
#### China: Trade



The U.S. trade deficit with China has widened to a record \$127 billion over the past 12 months as imports from China have soared.



#### U.S. Exports to China



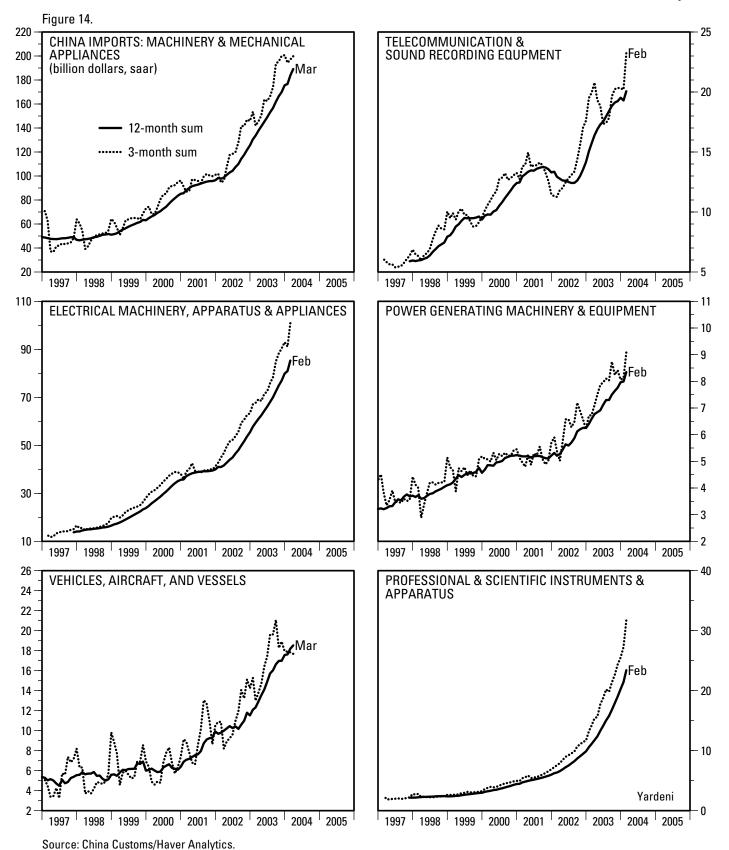
U.S. exports to China, though relatively small, are taking off.

Source: U.S. Bureau of the Census/Haver Analytics.



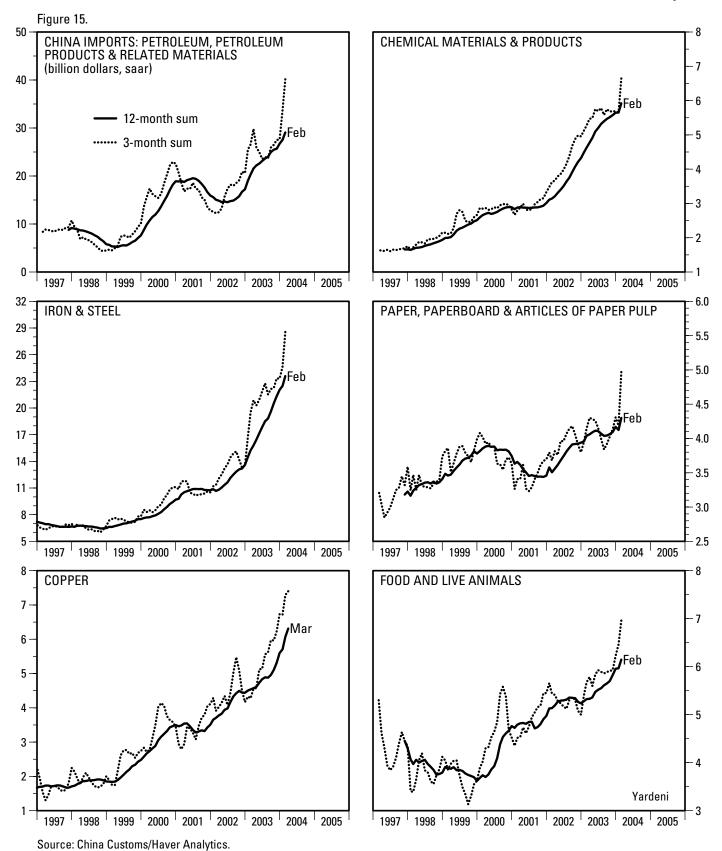
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## China: Imports



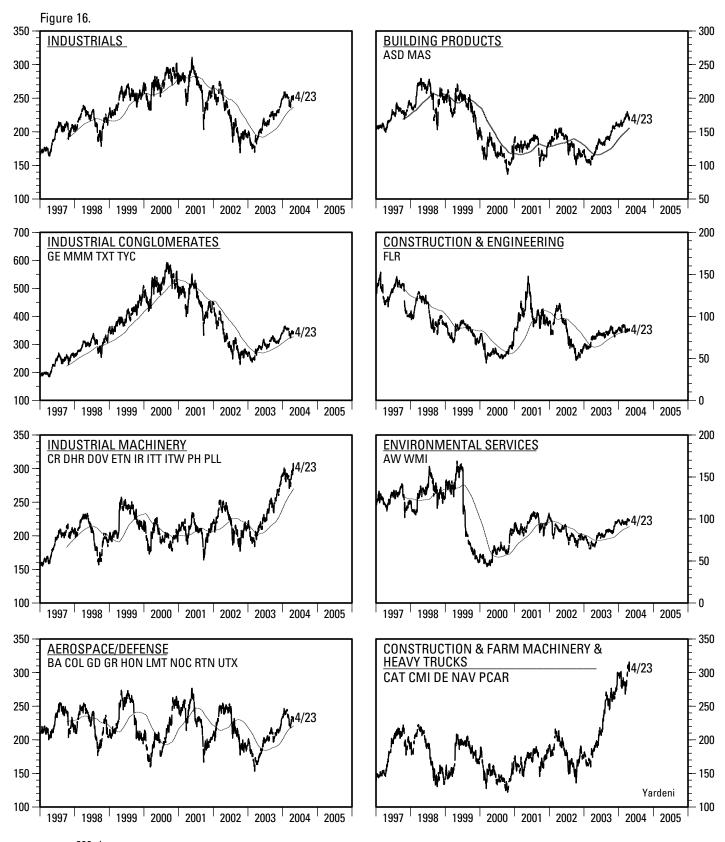


## China: Imports





#### **S&P 500 Industrials**



200-day average.

Source: Standard & Poor's Corporation.



#### Important Disclosures

#### **Rating Distribution**

#### Prudential Equity Group, LLC Research Universe

	Hoodardh Chivoroc		
04/23/04	Consolidated	Investment Banking Clients	
Overweight(Buy)*	35.00%	2.00%	
Neutral Weight(Hold)*	44.00%	3.00%	
Underweight(Sell)*	21.00%	1.00%	
Excludes Closed End Funds			
03/31/04	Consolidated	Investment Banking Clients	
Overweight(Buy)*	36.00%	2.00%	
Neutral Weight(Hold)*	43.00%	3.00%	
Underweight(Sell)*	21.00%	1.00%	
Excludes Closed End Funds			
12/31/03	Consolidated	Investment Banking Clients	
Overweight(Buy)*	34.00%	2.00%	
Neutral Weight(Hold)*	42.00%	4.00%	
Underweight(Sell)*	24.00%	1.00%	
Excludes Closed End Funds			
09/30/03	Consolidated	Investment Banking Clients	
Overweight(Buy)*	34.00%	2.00%	
Neutral Weight(Hold)*	41.00%	3.00%	
Underweight(Sell)*	26.00%	1.00%	
Excludes Closed End Funds			

<sup>\*</sup> In accordance with applicable rules and regulations, we note above parenthetically that our stock ratings of "Overweight," "Neutral Weight," and "Underweight" most closely correspond with the more traditional ratings of "Buy," "Hold," and "Sell," respectively; however, please note that their meanings are not the same. (See the definitions below.) We believe that an investor's decision to buy or sell a security should always take into account, among other things, the investor's particular investment objectives and experience, risk tolerance, and financial circumstances. Rather than being based on an expected deviation from a given benchmark (as buy, hold, and sell recommendations often are), our stock ratings are determined on a relative basis (see the, as defined below).

When we assign an **Overweight** rating, we mean that we expect that the stock's total return will exceed the average total return of all of the stocks covered by the analyst (or analyst team). Our investment time frame is 12-18 months except as otherwise specified by the analyst in the report.

When we assign a **Neutral Weight** rating, we mean that we expect that the stock's total return will be in line with the average total return of all of the stocks covered by the analyst (or analyst team). Our investment time frame is 12-18 months except as otherwise specified by the analyst in the report.

When we assign an **Underweight** rating, we mean that we expect that the stock's total return will be below the average total return of all of the stocks covered by the analyst (or analyst team). Our investment time frame is 12-18 months except as otherwise specified by the analyst in the report.

Prior to September 8, 2003, our ratings were Buy, Hold, and Sell. A **Buy** rating meant that we believed that a stock of average or below-average risk offered the potential for total return of 15% or more over the following 12 to 18 months. For higher-risk stocks, we may have required a higher potential return to assign a **Buy** rating. When we reiterated a **Buy** rating, we were stating our belief that our price target was achievable over the following 12 to 18 months. A **Sell** rating meant that we believed that a stock of average or above-average risk had the potential to decline 15% or more over the next 12 to 18 months. For lower risk stocks, a lower potential decline may have been sufficient to warrant a **Sell** rating. When we reiterated a **Sell** rating, we were stating our belief that our price target was achievable over the following 12 to 18 months. A **Hold** rating signified our belief that a stock did not present sufficient upside or downside potential to warrant a Buy or a Sell rating, either because we viewed the stock as fairly valued or because we believed that there was too much uncertainty with regard to key variables for us to rate the stock a Buy or a Sell.

When we assign an industry rating of Favorable, we mean that generally industry fundamentals/stock prospects are improving.

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