CBO TESTIMONY

Statement of
Douglas Holtz-Eakin
Director

Economic Relationships Between the United States and China

before the
Committee on Ways and Means
U.S. House of Representatives

April 14, 2005

This statement is embargoed until 11 a.m. (EDT) on Thursday, April 14, 2005. The contents may not be published, transmitted, or otherwise communicated by any print, broadcast, or electronic media before that time.

CONGRESSIONAL BUDGET OFFICE
SECOND AND D STREETS, S.W.
WASHINGTON, D.C. 20515

Mr. Chairman and Members of the Committee, thank you for inviting the Congressional Budget Office (CBO) to testify on economic relationships between the United States and China and on China's role in the world economy. Today, I will review some of the basic facts of U.S. trade with China; the impact of China's exchange rate policy on the U.S. current-account deficit; the impact of trade with China on manufacturing jobs in the United States; and recent developments in the markets for petroleum and other commodities, products based on intellectual property, and textiles and apparel.

Economic Linkages Between the United States and China

The United States' current-account balance includes net investment income and net unilateral transfers, as well as the balance of trade in goods and services; thus, it is an overall summary of the United States' transactions with the rest of the world. The current-account balance—in deficit by some $666 billion in 2004—also reflects the difference between saving and investment in the United States. Those activities are driven by market forces that incorporate a complex mix of factors in the U.S. and foreign economies—such as business cycles, demographic trends, monetary and fiscal policies, political stability, opportunities for profits, taxation, and the regulatory environment.

One important component of the current-account deficit is the U.S. trade deficit in goods, which was over $700 billion in 2004.[1] Of that, the deficit for trade in goods with China accounted for about $176 billion.[2] Having increased rapidly in recent years, it now is the single largest bilateral deficit (see Table 1). Nevertheless, because the United States' trade deficit with the rest of the world has risen about as fast, the deficit with China has generally remained between 20 percent and 25 percent of the total (see Figure 1).

Much popular attention has been focused on the role of the dollar/yuan exchange rate in determining the volume of trade flows. However, China's exchange rate policy has only a modest influence on the overall trade deficit and, in turn, on the current-account deficit. Any influence probably stems as much from the role of China's central bank in increasing liquidity in the United States as from maintaining the price competitiveness of Chinese goods and services.

China has fixed the exchange value of the yuan at about 8.3 yuan per dollar since 1995. China pegs the value of the yuan to the dollar through the use of exchange controls in conjunction with its official buying and selling of dollars. If exporters' earnings and inflows of foreign capital result in more dollars received than are

---

1. Figures for trade in goods are based on data from the Bureau of the Census, which differ from the measurements used by the Bureau of Economic Analysis for the current-account balance.

2. No data exist on trade in services with China.

Table 1.

The 10 Largest U.S. Trade Deficits in Goods in 2004

	U.S. Trade Deficit in Goods in Billions of Dollars	U.S. Trade Deficit in Goods with Each Country as a Percentage of Total
China	**175.8**	**24.8**
European Union	118.3	16.7
Japan	78.9	11.1
Canada	72.1	10.2
Mexico	47.0	6.6
South Korea	21.5	3.0
Venezuela	21.5	3.0
Malaysia	18.2	2.6
Saudi Arabia	17.3	2.4
Nigeria	15.6	2.2
Memorandum:		
All Countries	708.9	100.0

Source: Congressional Budget Office based on data from the Bureau of the Census

Note: Numbers are based on free-alongside-ship values of total exports and customs-insurance-freight values of general imports.

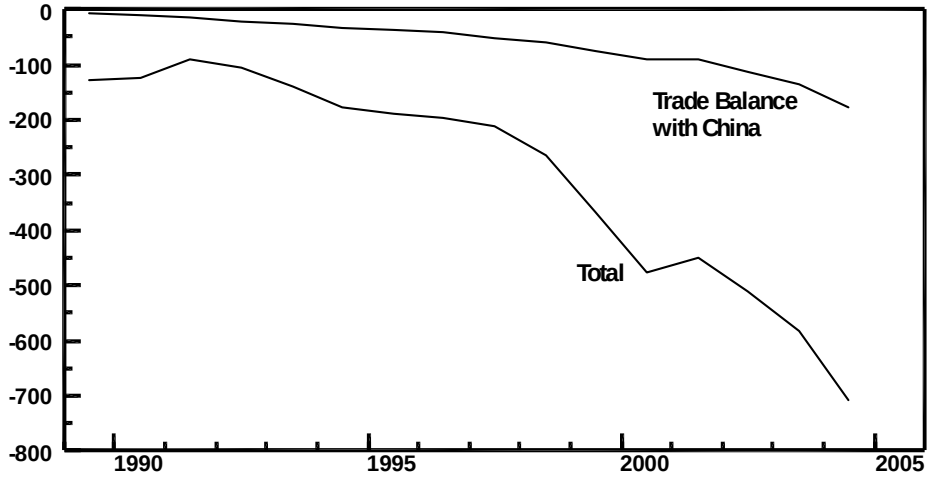
needed to purchase imports, China requires that the dollars be turned in to the central bank in exchange for yuan at the fixed rate. If a shortage of dollars develops, those accumulated dollars (referred to as foreign exchange reserves) can be provided to importers in exchange for yuan at the prescribed rate. Over the past few years, China's fixed exchange rate policy has yielded its central bank a large and rising volume of assets. From 2000 to 2004, those foreign exchange reserves rose at an average annual rate approaching 40 percent, reaching $610 billion—most of it in U.S. dollar assets.

Although the Chinese government's purchases of U.S. dollar assets have prevented the yuan from appreciating against the dollar and contributed to lower interest rates in the United States (encouraging U.S. spending), China's currency policy is not primarily responsible for the large U.S. current-account deficit. The steady rise in the U.S. current-account deficit has resulted from many developments, including stronger economic growth in the United States than in other industrial countries, faster productivity growth in the United States since 1995, and strong international demand for U.S. assets from countries besides China; for example, the Japanese government purchased more U.S. dollar assets than the Chinese government did over the 2000-2004 period.

Figure 1.

The United States' Trade Balance in Goods with China and with the World, 1989 to 2004

(Billions of dollars)



Source: Congressional Budget Office based on data from the Bureau of the Census.

Note: Trade balances are calculated using free-alongside-ship values of total exports and customs-insurance-freight values of general imports.

There is concern that a large sale of U.S. Treasury securities by the Chinese could cause a significant increase in the Treasury yield and a sharp fall in the dollar. Such fears appear to be exaggerated. The combined holdings of China and Hong Kong represented only slightly more than 5 percent of outstanding U.S. Treasury securities at the end of 2004.[3] Therefore, even a large sale by China would be a modest fraction of the highly liquid market for Treasury securities worldwide.[4] Only if such a sale triggered a broader shift against dollar- denominated assets could it spur a noticeable rise in U.S. interest rates. At the same time, any broad fall in the dollar relative to other currencies would help improve the U.S. trade balance, lowering the foreign-currency price of U.S. exports and raising the price that U.S. businesses and consumers pay for imports.

The future of China's exchange rate policy is unclear. In contrast to the recent past, China may not wish to continue to fix its currency at 8.3 yuan per dollar. A growing stock of dollar assets exposes China's central bank to large capital losses

3. At that time, China owned $195 billion and Hong Kong, $53 billion in such securities.

4. China owns other dollar-denominated assets as well. If they were included, CBO's conclusions would probably not change significantly.

if the yuan does eventually appreciate. The longer the fixed-exchange-rate regime, the larger the accumulated dollar assets, and the bigger the potential capital loss.[5] Moreover, as the Chinese become wealthier and import more from the rest of the world, the benefits of freeing the yuan to appreciate and commanding greater purchasing power would also grow. Ultimately, those arguments for allowing the yuan to float may outweigh two factors that up to now appear to have played a more dominant role: China's desire for rapid, export-led growth to employ its large population moving from farms, and concerns about the maturity of the Chinese financial system.

The implications of ultimately allowing the yuan to float will depend on whether or not China retains capital controls. Without capital controls, to the extent that Chinese citizens and businesses wanted to diversify their portfolios and reduce their exposure to potential problems in the Chinese banking system, they would probably remove some of their funds from Chinese banks, leading to an outflow of funds to other countries. China's commercial banks have been struggling to resolve a large amount of nonperforming loans—that is, loans not being repaid or repaid on time—and rebuild their capital bases. Any outflow, if sufficiently severe, could cause financial stress if capital controls were removed prematurely.

If China Allows the Yuan to Float and Retains Capital Controls

If China retains capital controls and the dollar/yuan exchange rate is determined solely by the supply of and demand for dollars from trade flows, then the yuan will probably appreciate against the dollar and the bilateral deficit in the U.S. goods trade with China will diminish.[6] The resulting dollar/yuan exchange rate, reflecting a constrained capital market, would be higher than a market rate that reflected the supply and demand of dollars from both trade flows and from unconstrained capital flows.

Although the yuan would appreciate in that scenario, the overall U.S. current-account deficit would probably diminish by less than the bilateral trade deficit with China would. As exchange rates shifted, the pattern of trade would change, most likely resulting in imports to the United States from other, now more competitive countries. Viewed from another perspective, the cessation of purchases of dollar assets by the Chinese government would reduce one external source of capital for

---

5. At the end of 2004, China's foreign exchange reserves amounted to about 38 percent of its gross domestic product.

6. At the current exchange rate, there is an excess supply of dollars (from exports to the United States) relative to the demand for dollars (from imports to China from the United States). Left unchecked, that would exert downward pressure on the price of dollars in terms of yuan. The yuan would have to appreciate substantially against the dollar to induce those exports to fall and those imports to rise until the demand for dollars equaled the supply.

the United States. However, more capital might come from other countries, thereby diminishing the improvement in the U.S. current-account deficit.

Regardless of the extent to which any appreciation of the yuan affected U.S. economic growth and employment overall, it would directly affect consumers and some producers in the United States by increasing the prices paid for imports and reducing the prices paid for exports.

If China Allows the Yuan to Float and Lifts Capital Controls

The Chinese government has indicated its willingness to allow the yuan to float and its intent to become more integrated with the international financial market. Private bond-rating agencies report that the government has made significant, though not yet sufficient, progress in improving the soundness of the Chinese banking system—a necessary condition for removing capital controls.[7] Moreover, China recently made arrangements with seven international commercial banks to help two domestic banks gain the necessary expertise for foreign exchange trading. Those steps suggest a greater preparedness for open trade in both goods and capital.

If China allows the yuan to float and simultaneously lifts capital controls, the impact on the value of the yuan is less clear than when capital controls remain. If a sufficiently large outflow of private funds occurred, occasioned by the liberalization of capital controls, the yuan might depreciate. (A potential factor in this regard is that a portion of the buildup of China's reserves may reflect an inflow of funds by speculators in anticipation of gains from a revaluation. If the currency was allowed to float and reach its market value, such one-sided speculative activity would cease, thereby ending that source of upward pressure on the yuan.)

In the absence of large outflows of private capital from China, a move by the Chinese government to float the yuan would reduce the demand for U.S. dollar assets. That decline in demand would tend to lower the exchange value of the dollar.

Ultimately, however, trade is not affected by the nominal exchange rate alone, but by the relative prices of exports and imports. The effect of a change in the dollar/yuan exchange rate on the bilateral trade balance will depend on the extent to which Chinese and U.S. exporters pass through that change to their export prices.

---

7. Standard & Poor's reports that the Chinese government recently injected $45 billion into two major state-owned commercial banks, although that rating agency still considers capitalization to be weak and the level of assets that are impaired to be high. Fitch Ratings suggests that the rules for the capital required of Chinese banks have come up to Basel I standards.

The Effect of a Stronger Yuan

If the yuan appreciated relative to the dollar, it would directly increase the U.S. price of imports from China. However, those increases would probably be much less than the appreciation of the yuan itself. One reason is that a large share of the price of Chinese exports reflects the cost of imported materials, and an appreciation of the yuan would reduce the yuan prices of many of those inputs. Only the value added in China would be made more expensive in dollar terms by the yuan's appreciation. One group of analysts has estimated that, on average, only 20 percent to 30 percent of the value of exported Chinese goods represents value added in China.[8] If so, a 20 percent appreciation of the yuan would increase the final dollar price of the exports by only 4 percent to 6 percent (20 percent appreciation times 20 percent to 30 percent value added), even if the extra cost were passed through completely.

Moreover, Chinese firms and their workers may also absorb part of any increase in the yuan's exchange value. Exporters tend to try to prevent the appreciation of their currencies from eroding their price competitiveness (and thus market shares) in the international market by accepting a cut in their profit margins. The opportunity for such cost cutting is presumably limited to the value added in China, unless Chinese exporters can find even cheaper sources of their imported inputs.

The ultimate impact of any resulting price increase on the volume of U.S. imports from China depends on how competitive China is compared with other countries. If the countries that previously assembled the products that China now assembles remain close competitors of China, then a price increase of plausible magnitude might be enough to induce a substantial shift in production from China back to those other countries. In effect, the process by which U.S. imports from China grew over time would to some extent be reversed. Imports from China would decline (or grow more slowly), but imports from the other countries would rise. The United States' overall trade deficit would decline only slightly.

U.S.-Chinese Bilateral Trade in Goods

While the dollar value of U.S. exports of goods to China has more than doubled since 2000, the value of U.S. imports of goods from China has increased even

---

8. See the statement of Lawrence J. Lau, "Is China Playing by the Rules? Free Trade, Fair Trade, and WTO Compliance," before the Congressional-Executive Commission on China (September 24, 2003); and Xikang Chen and others, "The Estimation of Domestic Value-Added and Employment Induced by Exports: An Application to Chinese Exports to the United States" (presentation to the Institute of Systems Science, Academy of Mathematics and Systems Science, Chinese Academy of Sciences, Beijing, June 18, 2001). See also Xikang Chen and others, "The Estimation of Domestic Value-Added and Employment Induced by Exports" (revised December 2001), as cited in the statement of Stephen S. Roach before the Commission on U.S.-China Economic and Security Review, September 25, 2003.

Table 2.

The 10 Largest Markets for U.S. Exports of Goods

(Billions of dollars)

	U.S. Exports of Goods in 2000	U.S. Exports of Goods in 2004	Change, 2000 to 2004
Canada	176.4	187.7	11.3
European Union	167.9	172.6	4.6
Mexico	111.7	110.8	-0.9
Japan	65.3	54.4	-10.9
China	**16.3**	**34.7**	**18.5**
South Korea	27.9	26.3	-1.6
Taiwan	24.4	21.7	-2.6
Singapore	17.8	19.6	1.8
Hong Kong	14.6	15.8	1.2
Australia	12.5	14.3	1.8
Memorandum:			
All Countries	780.4	816.5	36.1
China's Share of Total (Percent)	2.1	4.2	51.2

Source: Congressional Budget Office based on data from the Bureau of the Census.

Note: Numbers given are free-alongside-ship values of total exports.

more—creating a widening bilateral trade deficit in goods for the United States that now is the largest one it has with any of its trading partners. Part of that growth in the imports of goods, however, has displaced imports from other countries rather than U.S. domestic production.

As described, the primary force driving the increase in imports of goods from China is that manufacturers have shifted the final assembly of many of their products from other Asian countries (and perhaps a few non-Asian countries) to China. Much of the value of Chinese exports thus consists of parts made elsewhere in Asia. Consequently, the United States' bilateral trade deficit with China reflects the net balance of trade in goods with many Asian countries that is channeled primarily through China.

With the growth of U.S. exports to and U.S. imports from China, China has become one of the United States' most important trading partners. Last year, the largest category of U.S. exports of goods to China was semiconductors and other

Table 3.

The 10 Largest Categories of U.S. Exports of Goods to China in 2004

Product Category[a]	In Billions of Dollars	As a Percentage of Total
Semiconductors and Other Electronic Components	3.6	10.3
Waste and Scrap	2.5	7.2
Soybeans	2.3	6.7
Aerospace Products and Parts	2.1	6.1
Navigational, Measuring, Electromedical, and Control Instruments	1.7	5.0
Other Basic Organic Chemicals	1.6	4.6
Cotton	1.4	4.1
Resin and Synthetic Rubbers	1.4	4.0
Computer Equipment	1.4	3.9
Other General-Purpose Machinery	1.1	3.2
Memorandum:		
All Product Categories	34.7	100

Source: Congressional Budget Office based on data from the Bureau of the Census.

Note: Numbers are free-alongside-ship values of total exports.

a. Product categories correspond to five-digit codes of the North American Industrial Classification System.

electronic components, while the largest category of imports of goods was computer equipment.

U.S. Exports of Goods to China

U.S. exports to China have grown rapidly but remain only a small percentage of total U.S. exports. That rapid growth has raised China from the 10th largest U.S. export market in 1997 to the fifth largest in 2004. In fact, between 2000 and 2004, exports to China accounted for half of the increase in total U.S. exports (see Table 2 on page 7).

Some of the largest categories of exports by value in 2004 were semiconductors and other electronic components, waste and scrap, soybeans, aerospace products and parts, and various electronic equipment (such as navigational and medical instruments) (see Table 3). The identity of the 10 largest categories has changed very little since 2002, although the ranking within the top 10 has changed slightly. An exception is cotton exports—ranked seventh in 2004 after growing tenfold in value between 2002 and 2004—which supplied raw materials for China's rapidly growing textile and apparel industries.

Table 4.

The 10 Largest Suppliers of U.S. Imports of Goods

(Billions of dollars)

	U.S. Imports of Goods in 2000	U.S. Imports of Goods in 2004	Change, 2000 to 2004
European Union	233.9	290.0	57.0
Canada	232.7	259.8	27.1
China	**107.6**	**210.5**	**102.9**
Mexico	137.5	157.8	20.4
Japan	150.6	133.3	-17.3
South Korea	41.7	47.8	6.1
Taiwan	42.3	36.2	-6.0
Malaysia	26.4	29.1	2.7
Venezuela	19.6	26.3	6.7
Brazil	14.6	22.7	8.1
Memorandum:			
All Countries	1,258.2	1,525.5	267.3
China's Share of Total (Percent)	8.6	13.8	38.5

Source: Congressional Budget Office based on data from the Bureau of the Census.

Note: Numbers are customs-insurance-freight values of general imports.

U.S. Imports of Goods from China

In the past four years, U.S. imports from China roughly doubled (see Table 4). With that rapid growth, China has moved from being the fifth largest supplier of U.S. imports in 1997 to the third largest in 2004, when it accounted for almost 14 percent of U.S. imports.

Some of the largest categories (in terms of value) of U.S. imports from China are various kinds of electronic equipment (for example, computers and audio and video equipment), toys, footwear, and semiconductors (see Table 5). The identity of the 10 largest categories of imports from China has changed very little in the past two years.

Not all of the U.S. imports from China represent lost U.S. production. A significant share of imports from China appears to replace imports from other countries. For example, the U.S. International Trade Commission (ITC), observed in testimony before this Committee that China's rising share of U.S. imports of both electrical and nonelectrical machinery from 1990 through 2002 coincided with a fall in

Table 5.

The 10 Largest Categories of U.S. Imports of Goods from China in 2004

Product Category[a]	In Billions of Dollars	As a Percentage of Total
Computer Equipment	30.3	14.4
Audio and Video Equipment	13.0	6.2
Dolls, Toys, and Games	13.0	6.2
Footwear	11.8	5.6
Semiconductors and Other Electronic Components	10.4	4.9
Household and Institutional Furniture	9.6	4.6
Women's and Girls' Apparel	6.8	3.2
Radio and Television Broadcasting and Wireless Communications Equipment	6.2	2.9
Other Manufactured Commodities	6.2	2.9
Commercial and Service-Industry Machinery	5.1	2.4
Memorandum:		
All Product Categories	210.5	100

Source: Congressional Budget Office based on data from the Bureau of the Census.

Note: Numbers are customs-insurance-freight values of general imports.

a. Product categories correspond to five-digit codes of the North American Industrial Classification System.

Japan's import share in those same goods.[9] In analyzing changes in total imports to the United States from 2000 to 2002, the ITC found that China's increase in imports to the United States was largely offset by declines in imports to the United States by Japan, Taiwan, Singapore, Korea, and other Asian nations. Movement of the final assembly of manufactured goods from those other Asian countries to take advantage of lower labor costs facilitated China's apparent displacement of other Asian nations' imports in the U.S. market.

The Possible Effects of Imports from China on Employment in Particular U.S. Industries

Manufacturing employment in the United States declined by about 3 million jobs (or about 17 percent) between early 2000 and early 2004 and remains close to its recent low point. The bulk of the decline reflects the recession and the subsequent slow recovery in the demand for manufactured goods, as well as continued rapid

9. Statement of Robert A. Rogowsky, Director of Operations, U.S. International Trade Commission, before the House Committee on Ways and Means (October 30, 2003), p. 10.

growth in productivity within U.S. manufacturing and a long-term decline in the manufacturing sector as a share of total employment.[10] A decline in employment in any particular sector, such as manufacturing, does not necessarily mean lower employment in the economy as a whole; employment in many sectors has, in fact, expanded over the past two years. Nevertheless, job losses are likely to be costly for individual workers who need to find new jobs.

From 2000 to 2004, the overall import-penetration ratio for manufactured goods from all countries, including China, rose from 22.6 percent to 24.6 percent.[11] Other things being equal, that increase might have been expected to directly reduce manufacturing employment in the short run by between 2 percent and 3 percent—a small fraction of the 17 percent decline that actually occurred. Surprisingly, however, little evidence links higher import penetration directly to the loss of jobs. There is little difference between the job losses among industries that experienced particularly large increases in import penetration in that period and those where increases were smaller. (The general increase in imports of goods can be tied to an increase in the foreign exchange value of the dollar in the late 1990s, which reduced the price competitiveness of U.S. goods in world markets. The dollar has since fallen against a number of currencies of the major industrialized nations, leading to expectations of greater U.S. exports to those nations and a slowing of imports.)

Nevertheless, some industries probably were affected more by imports, including those from China, than the manufacturing sector as a whole was. Above-average declines in employment occurred in several industries with particularly large increases in the share of domestic demand accounted for by Chinese imports, including those for textile mill products, apparel, leather and allied products, computer and electronic products, and electrical equipment and appliances. By contrast, in furniture and fixtures, where the import-penetration ratio for Chinese goods also rose (from 5.9 percent to 12.9 percent), job losses were slightly below average.

Two interesting cases are the computer and electronics industry and the apparel industry. Imports of computers and electronic equipment from China increased by a factor of about 2½ between 2000 and 2004, and the import-penetration ratio for such goods from China rose from 4.3 percent to 11.1 percent. Meanwhile, employment in that industry declined by about 430,000 jobs (27 percent) between early 2001 and mid-2003 and has been roughly constant since then. However, the penetration ratio for imports from all countries was virtually unchanged, suggesting

10. Congressional Budget Office, *What Accounts for the Decline in Manufacturing Employment?* (February 18, 2004).

11. To be specific, the overall import-penetration ratio in an industry is defined as imports divided by the sum of shipments plus imports minus exports.

that imports from China were largely replacing imports from other sources. And much of the earlier drop in employment can be traced to the large boom in the late 1990s and the subsequent decline in businesses' investment in computers and telecommunications equipment, rather than to increases in imports.

Imports of apparel from China have also risen significantly in the past several years, from $8.7 billion in 2000 to $9.8 billion in 2002 and $13.9 billion in 2004. That rise was accompanied by a decline in employment of nearly 200,000 jobs (37 percent) between the second quarter of 2000 and the second quarter of 2003 and an additional 50,000 jobs (16 percent) by the first quarter of 2005. Employment in the closely related sectors for textiles and fabrics and textile mill products also experienced above-average employment declines both during the recession and since 2003. But those declines appear to represent a continuation of a long-standing trend: employment in the apparel sector had already fallen by 400,000 jobs, or by more than 40 percent, between 1992 and 2000 (see Figure 2).

Any simple correlation of declines in employment with increased imports from China could be misleading, however. Such calculations do not account for the extent to which imports from China displaced imports from other countries. They also do not account for the contributions of demand changes to job gains or losses in particular industries.

Recent Developments in the Markets for Petroleum, Intellectual Property, and Textiles and Apparel

Currently, attention is focused on China's growing role as a consumer of petroleum and other commodities and of intellectual property, including both creative products and technologies. In the markets for textiles and apparel, debate has intensified about China's increased share of world exports and U.S. imports—particularly since protections against those goods were dropped at the beginning of the year as part of China's entry into the World Trade Organization (WTO).

Petroleum and Other Commodity Markets

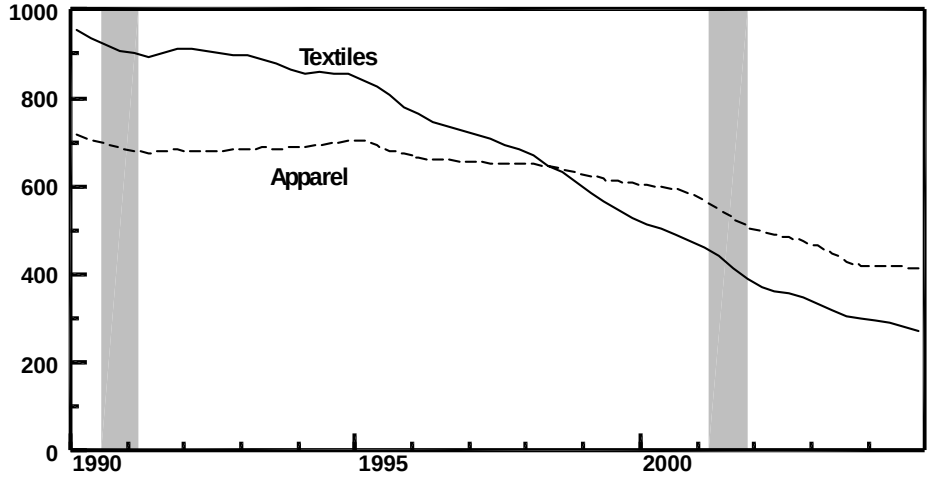
Increased demand for a broad range of important raw materials that trade in world markets is a global phenomenon. Fast economic growth in China is a contributor. The commodities for which growth in China's imports appears to be greatest are crude oil and petroleum products (including petrochemicals), iron and raw steel, other metals (including copper, aluminum, and magnesium), wood and paper pulp, and fibers (including cotton, wool, and synthetics).

The fixed business investment that is accompanying China's rapid urbanization partly accounts for the nation's rising demand for basic commodities. To support the construction of buildings and roads, China has become the world's largest

Figure 2.

Employment in the U.S. Apparel and Textiles Industries, 1990 to 2004

(Thousands of workers)



Sources: Congressional Budget Office; Department of Labor, Bureau of Labor Statistics.

consumer of steel and cement. To help support the electrification of the country, China also has become the world's largest consumer of copper. However, much of the new demand for raw materials also supports new domestic consumer demand. Developments in consumer markets provide some indication of the fundamental nature of the changes under way in China and of reasons why the demand for resources will continue to grow.

Significant changes in China's transportation sector have shifted the country from being a net exporter of crude oil as recently as 1992 to being the second largest importer last year (after the United States). From 1998 to 2004, China accounted for more than 25 percent of the total increase in world demand for oil. (In contrast, the United States accounted for only 17 percent of the global increase in petroleum use over that period.) Currently, China's oil consumption is over 6.5 million barrels a day, or about 8 percent of world use. Coincident with the global increase in demand for oil, which accelerated in 2004, world oil prices have doubled in the past year (from $28 a barrel in January 2004 to about $55 today) and have more than tripled since January 2002 (when the price was only $17).

With more people in China owning and using automobiles, the upward trend in oil demand and prices probably will continue. At the end of 2004, China's stock of motor vehicles for civilian use stood at 27.4 million vehicles, up from 16.1 million in 2000. New vehicle sales in China were about 4.3 million in 2004 (including 2.3 million passenger cars), and they are expected to surpass sales in Japan by 2008.

Extensive road construction that increases the total length of the country's highway system by about 30,000 miles each year (including over 2,500 miles of new expressways and several important new inter-regional arteries) supports the growing demand for automobiles and crude oil. In addition, China is investing in new petroleum refineries to help with the transition from a product mix dominated by industrial raw materials and kerosene to one dominated by gasoline and diesel fuel.

To support China's efforts to raise its share of the world oil market, the central government in recent years has ordered the consolidation of a long list of small companies involved in oil production, importation, transport, processing, and distribution into a few large vertically integrated firms with the goal that they compete with the other major oil companies of the world. Those new firms have been directed to help secure China's access to oil assets abroad through a range of joint ventures and long-term contracts. (The most important of those new world players are the Chinese National Petroleum Corporation, or CNPC, and the China Petroleum and Chemical Corporation, or Sinopec.)

The U.S. and world markets already are adjusting to higher prices on both the supply and demand sides, developing new sources of crude oil and new substitutes for it, as well as more-energy-efficient technologies. In this country, oil and gas drilling has increased by a total of about 50 percent over the past two years (in terms of both the number of active rigs and feet drilled). The economic prospects of oil fields in remote regions worldwide have improved. Backstop technologies such as tar sands and gas-to-liquids conversion are more profitable, too. On the demand side, high oil prices give businesses and consumers an incentive to switch to vehicles that are more fuel-efficient or to otherwise change their driving habits. That process may be under way already, with demand for large SUVs (sport utility vehicles) having dropped sharply since the end of 2004 and new hybrid vehicles coming to the market.

Following the major oil price increases of the 1970s, consumers and businesses in the United States made many advances that resulted in a large decline in the amount of energy needed to produce a dollar of output. Comparably large improvements in energy efficiency in the United States may be difficult in the future, but opportunities still exist. And there is great potential in China and other fast-developing regions of the world to make large improvements.

In the near term, however, all of those responses may not help to ease price pressures. For example, new drilling has not yet slowed the decline in domestic production, and changing preferences for new cars will not significantly affect total gasoline demand for years to come. However, new sources of energy and major changes in energy consumption are likely to occur soonest if investors and consumers expect oil prices to remain high, and those changes will help to curb further price increases.

The increase in the price of oil could slow the momentum of global growth because consumers who have to pay higher prices for gasoline have less to spend on purchases of other goods and services from domestic producers. The resulting slowing of spending could have reverberating effects in the short run, slowing both production of nonoil goods and services and, possibly, capital investment outside the oil sector. The International Monetary Fund, in its recent *World Economic Outlook*, forecast that global growth would slow by about 0.7 percentage points to 0.8 percentage points in the 2005-2006 period compared with that in 2004, in part because of the rise in petroleum prices.

Although the impact on U.S. growth is not very large at current prices, it could be more significant if prices rise substantially higher than they currently are. That possibility cannot be ruled out: oil prices are highly variable, and forecasts of those prices notoriously unreliable. At the end of 2003, for example, few people expected prices to rise much above $30 per barrel.

Intellectual Property Markets

Infringement of intellectual property in China is a pressing concern for U.S. holders of patents, copyrights, and trademarks. For example, although estimates of the market value of infringing (or "pirated") products are subject to numerous qualifications, the International Intellectual Property Alliances (IIPA) calculates that sales lost to pirated movies, music, software, and books in China totaled $2.5 billion in 2004. Economic losses to U.S. copyright owners from pirated works in China have remained at or above 90 percent since 2000. Reflecting those concerns, the United States Trade Representative negotiated specific commitments from China during a meeting of the Joint Commission on Commerce and Trade on April 7, 2004, and has scheduled a special review of China's progress in fulfilling those commitments for early 2005.

However, greater enforcement of the rights of U.S. intellectual property owners in China faces several near-term obstacles. First, the estimated $2.5 billion in lost sales of copyrighted works from piracy in China is a relatively small amount when compared with the $34.7 billion in exports.[12] As a result, efforts by the United States to protect its intellectual property could, in the event of retaliatory measures by China, be damaging to U.S. trade more broadly. Second, the digitization of creative works has made engaging in piracy easier—through unauthorized redistribution over the Internet and illicit manufacturing of CD-ROM (facilitated by sharp declines in the cost of CD-stamping equipment). As a result, copyright infringement is a challenge not just for China, but for other countries with similarly lagging institutions for intellectual property enforcement.[13] For example, the IIPA

12. The estimate of $2.5 billion in sales lost to copyright infringement in China does not take into account the impact of patent and trademark violations.

13. Congressional Budget Office, *Copyright Issues in Digital Media* (August 2004).

places Russia second behind China in copyright infringement, with estimated losses to U.S. copyright owners of $1.7 billion in 2004.

For the longer term, China has recently committed to strengthening its intellectual property laws and enforcement and, as its regulatory regime improves and the amount of intellectual property originating domestically increases, China should have increasing ability and incentive to protect U.S. intellectual property. China now successfully competes with U.S. and other producers on world markets for high-tech goods. As the importance to China of having its own patents respected abroad increases, so too should its efforts to enforce the intellectual property rights of foreigners in its own markets.[14]

Textile and Apparel Markets

After trade protections eased in 2001 with China's entry into the World Trade Organization, the value of Chinese exports of textiles and apparel to the United States increased by 49 percent between 2002 and 2004, from about $12.2 billion to over $18.2 billion.[15] Preliminary data for the first three months of 2005 indicate another large increase in China's exports of textiles and apparel to the United States as a consequence of lifting the remaining trade protections at the beginning of this year. Those developments in bilateral trade in textiles and apparel between the United States and China are part of a larger and longer-running increase in the share of U.S. textile and apparel consumption accounted for by imports (see Figure 3).

An assessment released by the International Trade Commission (ITC) in early 2004 points out that in 2002, the average cost per operator-hour in the textile industry (for spinning and weaving, specifically) in China's coastal region was $0.69. Costs for major East Asian producers—South Korea, Taiwan, and Hong Kong—were 8 to 10 times higher. Wages were lower in other South Asian countries, but productivity was also lower, granting Chinese producers a unit-cost advantage. In comparison to sources of U.S. imports in the Western Hemisphere—including Mexico, Guatemala, and El Salvador—China had a smaller but still substantial advantage. In summarizing its outlook for the U.S. textile and apparel markets, the ITC concluded that China "would become the 'supplier of choice' for many U.S. importers . . . because of its ability to produce almost any type of textile and apparel article at any quality level at competitive prices."[16]

---

14. See Hal R. Varian, "Copying and Copyrighting," mimeo (March 29, 2005), available at www.sims.berkeley.edu/~hal/Papers/2004/copying-and-copyright.pdf.

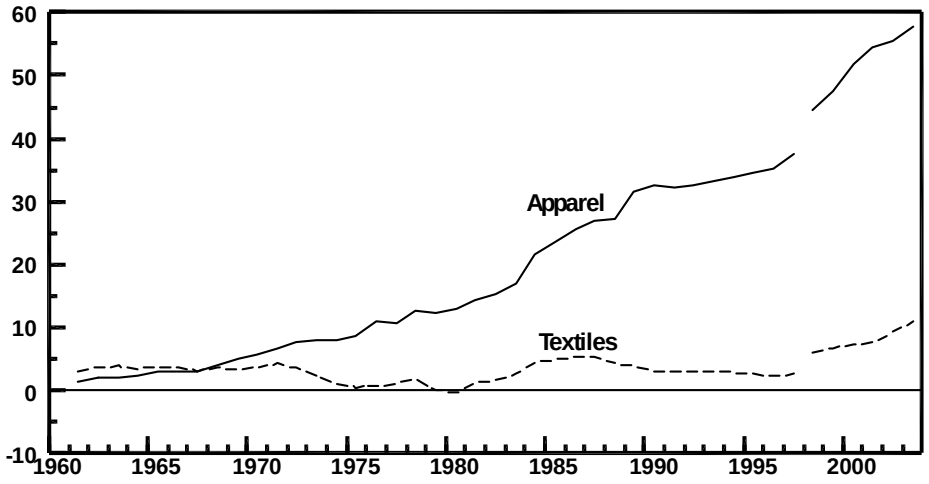
15. U.S. Census Bureau, Foreign Trade Division.

16. U.S. International Trade Commission, *Textiles and Apparel: Assessment of the Competitiveness of Certain Foreign Suppliers to the U.S. Market* (January 2004), pp. E3-E5.

Figure 3.

U.S. Net Imports in Textiles and Apparel, 1961 to 2003

(Percentage of U.S. market)



Source: Congressional Budget Office based on data about trade and industry shipments from the Department of Commerce, Bureau of the Census and Bureau of Economic Analysis.

Notes: Net imports equals imports minus exports. The U.S. market is equal to apparent consumption, which is domestic industry shipments plus imports minus exports. Exports are measured as the free-alongside-ship values of domestic exports. Imports are measured as the landed-duty-paid value of imports for consumption.

The breaks between 1997 and 1998 are a consequence of the change from the Standard Industrial Classification system to the North American Industrial Classification System.

Over the next several months, the Committee for the Implementation of Textile Agreements, an interagency group including one representative each from the Office of the Special Trade Representative and the Departments of Commerce, State, the Treasury, and Labor, may conclude that the safeguards included in the agreement to accept China into the WTO ought to be put in place to constrain the growth of specific Chinese textile and apparel products imported to the United States. Yet, after the resulting pause in the growth of Chinese imports, the cost advantage enjoyed by Chinese producers will probably allow Chinese imports to displace both the imports of other nations and domestic production in the U.S. market.

Regardless of whether safeguards that slow the growth of Chinese imports are activated, further contraction of the U.S. textile and apparel industries is likely. Policies currently in effect that provide assistance, including cash grants, training support, and tax credits for health insurance and wage insurance, may ease the continuing transition of workers and communities out of textile manufacturing and

into other economic activities.[17] Current policy also recognizes, however, the ultimate benefits of allowing markets to function and the location of production to be determined by cost. In the future, the scenario of a shifting cost advantage, economic dislocation, and overall economic gain, which is occurring in textile and apparel markets, is likely to play out in a number of markets as the world economy adapts to the addition of the labor forces of China, India, and other South Asian countries.

17. In fiscal year 2004, almost 30 percent of the cases certified for trade adjustment assistance were in the textile and apparel industry.