U.S. import and export prices in 2004

Import and export prices increased at an accelerated rate in 2004, as each continued the upward trend that began in 2002; the increases for both indexes were driven by industrial supplies and materials, which trended upward because of higher fuel and raw material prices.

The Bureau of Labor Statistics import and export price indexes both increased for a third consecutive year in 2004. Import prices were up 6.7 percent for the year, almost triple the 2.4-percent increase seen in 2003. Export prices saw the highest increase in 15 years with a 4.0-percent advance in 2004; the increase in the previous year was only 2.2 percent.

Prices within the industrial supplies and materials index had the most impact on the import side, increasing 22.0 percent for the year. The industrial supplies and materials price index comprises the fuel price index, which increased 31.5 percent, and the nonfuel industrial supplies and materials price index, which increased 13.4 percent. Import prices were up in all major categories, with the exception of the capital goods index. Downward movements for computer, peripheral, and semiconductor prices caused the contrasting trend in the capital goods index. On the export side, annual price increases were posted for each of the major indexes, except for the foods, feeds, and beverages price index, which decreased 4.5 percent. Similar to the import price index, the largest movement in the export price index was seen in the nonagricultural industrial supplies and materials price index, which posted a 16.6-percent increase in 2004. (See table 1.)

Other price measures

The key factor behind the substantial import and export price movements in 2004 was the growth in international demand, especially from China, for raw materials such as petroleum and steel. According to statistics from China’s Customs Bureau, the total value of imports into China increased 36 percent. Import increases were most significant in iron ore and fine mine products (161.8 percent), crude oil (71.4 percent), unwrought copper (37.9 percent), and plastics (31.5 percent). China’s demand for these raw materials led to tight global supplies and higher international prices, which put additional upward pressure on prices for manufactured goods.

Changes in the exchange rate were also a factor behind the increases in import prices, as the U.S. dollar weakened against the currencies of several major trading partners. In 2004, the exchange rate decreased between the U.S. dollar and the United Kingdom (UK) pound (10.2 percent), the euro (9.1 percent), the Canadian dollar (7.8 percent), and the Japanese yen (3.8 percent). The U.S. dollar, which has been weakening for 2 years, put upward pressure on prices of goods imported from these countries, which in 2004 accounted for 45.5 percent of the total dollar value for goods imported into the United States.

Other price measures

The Consumer Price Index (CPI) and the Producer Price Index (PPI) increased at an accelerated rate in 2004 because of higher energy costs. The CPI measures monthly changes in the prices paid by urban
Import and Export Prices, 2004

was boosted by a 13.4-percent increase in energy prices and a 3.1-percent increase in food prices. Excluding food and energy prices, overall producer prices increased a more modest 2.3 percent. (See chart 1.)

Import price trends

Energy. Increases in energy prices were the most significant factor in import prices in 2004. The price index for petroleum and petroleum products increased 30.3 percent for the year, following a 12.8-percent increase in 2003 and a 56.9-percent increase in 2002. Crude oil prices started out strong in January at just more than 34 dollars per barrel,
peaked in October at 53.32 dollars per barrel, and eased back at the end of the year to 43.12 dollars per barrel. While concerns about potential supply interruptions continued to play a role in these price movements, demand factors were also prominent in 2004.

Total world oil demand increased by 2.5 million barrels per day (mb/d), or slightly more than 3.0 percent, representing the largest increase in demand in 28 years. Increased demand brought excess capacity (the volume over that which is needed to meet expected demand) to the lowest level since the conclusion of the Gulf War in 1991. The largest change in demand was witnessed in China, where demand increased 15.5 percent over 2003 because of an expanding economy and rapid industrial development. In 2004, China surpassed Japan to become the second largest consumer of oil behind the United States. Oil demand was also up in the United States and Western Europe, increasing 2.0 percent and 1.5 percent, respectively.

With demand at such high levels, perceived threats to supply affected oil prices. Toward the end of 2003, a strike in Venezuela halted oil production, refining, and export at the State oil company, Petroleos de Venezuela, S.A. The situation improved by the beginning of 2004, but supplies on the world market were still recovering from the loss of some 200 million barrels of oil and gasoline. Additional threats to oil supplies developed during 2004, such as Hurricane Ivan and labor conflicts in Nigeria and Norway. Hurricane Ivan caused major delays in oil shipments, resulting in many U.S. refineries shutting down or cutting back production. The hurricane initially cut production of approximately 1.0 mb/d at the refinery level because of damages in the oil infrastructure in the Gulf. By the end of 2004, production had yet to fully recover in the Gulf. Responding to the surge in demand and the supply concerns, the Organization of the Petroleum Exporting Countries (OPEC) increased its production of oil 15 percent by the end of 2004. These changes to the OPEC supply ceiling led to a positive world oil demand/supply balance, reversing the negative balances witnessed in 2002 and 2003. Concurrently, the import petroleum and petroleum products price index decreased in November and December, down 6.0 percent and 11.4 percent, respectively.

Nonfuel industrial supplies and materials. The nonfuel industrial supplies and materials import price index increased 13.4 percent in 2004, more than double the 6.3-percent increase in 2003 and more than triple the 3.6-percent increase in 2002. The index was affected chiefly by higher metal, chemical, and lumber prices. As previously mentioned, world
The unfinished metals index increased 39.6 percent in 2004, the highest annual increase since 1982 when the index was first published. Within this index, steelmaking and ferroalloying materials prices increased 56.2 percent; iron and steel mill product prices increased 69.1 percent; and nonferrous metals prices increased 23.5 percent. Strong Chinese and international demand raised concerns about commodity shortages for steel products, such as pig iron and scrap. According to the International Iron and Steel Institute, China accounted for 56.4 percent of the increase in global steel consumption between 2001 and 2004 because of expansion in its construction and manufacturing industries.

Chemical prices rose 5.3 percent because of higher fuel feedstock costs, strong demand, and tight global supplies for products such as fertilizers, insecticides, and plastics. The industry has faced higher energy feedstock prices since the spring of 2003 when oil prices began a steady upward climb. Strong demand from end-users also placed upward pressure on chemical prices. According to the Purchasing Manager’s Index published by the Institute for Supply Management, both the manufacturing economy and overall economy expanded throughout 2004. Strength in the manufacturing economy tends to drive up demand for chemicals, which are primary inputs into the consumer goods industry and the automobile industry.

The lumber import price index gained 11.4 percent also because of strong Chinese and international demand. A shortage of available space onboard shipping vessels placed upward pressure on lumber prices for U.S. importers. China’s demand for raw materials strained the availability of shipping vessels as additional capacity was needed to bring the large quantities of lumber, iron ore, and other materials to Chinese ports.

Capital goods. The capital goods import price index recorded a downward movement of 0.8 percent in 2004, the index’s ninth consecutive annual decrease. The decline was led by computer prices, which continued to trend downward in 2004 as weak demand and oversupply led companies to continue competitive pricing mechanisms. In recent years, computer companies have been lowering prices through innovation and by shifting manufacturing locations, in an effort to offset a decline in sales. A significant amount of production in this industry was shifted to China, which has become a major exporter of computers, peripherals, and
seamcimers into the United States. The value of imports of these goods from China accounted for 8.2 percent of the value of total imports in 2000 and 30.5 percent in 2004.12

In contrast, the capital goods price index excluding computers, peripherals, and semiconductors posted an increase of 2.0 percent in 2004 following a 1.2-percent increase in 2003. Price increases were published in 2004 for the electric generating equipment price index, the nonelectrical machinery price index, and the transportation equipment excluding motor vehicles price index. Higher steel prices had a large effect on the manufacturing costs of machinery, especially industrial and service machinery, which posted a 4.1-percent annual increase. Prices were also affected by exchange rate increases as the dollar weakened against the currencies of Japan, Canada, Mexico, and Germany, which were the top exporters to the United States of the capital goods included in this category.13

Automotive vehicles, parts, and engines. Import prices for automotive vehicles, parts, and engines increased 1.8 percent in 2004, as compared with the 0.9-percent increase published in 2003. Canada and Japan were the top two exporters of automotive vehicles, parts, and engines to the United States, representing 30 percent and 21 percent of the total value of export trade, respectively. As the dollar weakened against the Canadian dollar and the Japanese yen, exports from those countries became relatively more expensive.14

Consumer goods. After posting a 0.1-percent increase in 2003, the consumer goods import price index increased 0.9 percent in 2004. The 2-year upward trend in the index is a reversal of the downward trend that occurred between the years 1996 and 2002. Higher jewelry and medical supplies prices were contributing factors to the index movement in 2004. The jewelry price index increased 6.2 percent, greater than the 3.5-percent increase published in 2003. Higher precious metals prices, such as silver and gold, increased the manufacturing costs for jewelry. As the dollar weakened throughout most of 2004, demand for precious metals strengthened as precious metals became a better option for investors and fund managers seeking higher rates of return.15

An increase of 4.2 percent for the medical supplies price index was also a significant factor in the consumer goods price index. The movement was the third consecutive increase in the index and the largest published increase since 1993. The research and development of new medicines requires an enormous amount of time and money, and unsuccessful research attempts dip further into the company’s profits. Development of major drugs takes 7 to 10 years with costs ranging between $200 million and $1 billion. New pharmaceuticals brought to the market, both over-the-counter and prescription, have been met with strong demand from consumers.16

Foods, feeds, and beverages. The foods, feeds, and beverages import price index increased 8.0 percent in 2004, more than double the 3.0-percent increase in 2003. The vegetable price index recorded the largest movement with an annual increase of 21.6 percent. Hurricanes and tropical storms brought winds and heavy rains to tomato producers in Florida, destroying crops and postponing early fall plantings. By November, there was a severe shortage of U.S. grown tomatoes as total shipments of Florida tomatoes declined 42 percent in 2004. The decrease in domestic tomato production led to an increase in the demand for imported tomatoes, putting upward pressure on prices. Pest infestation in the Baja region of Mexico and wet California weather also added to the higher tomato prices.17 The meat and poultry price index increased 10.8 percent in 2004 because of strong demand for pork products. Mad cow disease (Bovine Spongiform Encephalopathy, or BSE) and the avian flu curtailed demand for beef and chicken, respectively, creating a strong demand for pork.18

The price index for green coffee, cocoa beans, and sugar gained 19.3 percent in 2004 because of global shortages and strong demand. In 2002, green coffee prices were one-third the 1998 price levels because of excess supply overloading the market. However, the situation changed by 2003, and in 2004 coffee demand exceeded supply for the second consecutive year because of production cutbacks in a number of exporting countries as a result of the previous lower prices. Poor weather conditions in Brazil also added supply pressure.19 The price index for fish and shellfish increased 7.0 percent. An ongoing trade dispute regarding imported shrimp led to higher prices as importers stocked up on shrimp in the beginning of 2004 prior to the implementation of tariffs later in 2004.20

Locality of Origin price index. In order to better delineate and analyze price trends in U.S. trade, BLS publishes import price indexes by Locality of Origin. These price indexes include imports from Industrialized Countries, Other Countries, Canada, the European Union (EU), France, Germany, the UK, Latin America, Mexico, the Pacific Rim, China, Japan, the Asian Newly Industrialized Countries, the Association of Southeast Asian Nations (ASEAN), and Asia Near East.21 All of the above indexes, except those for China and the Asian newly industrialized countries, increased at an accelerated rate in 2004 when compared with 2003 price movements. The Canadian price index had the largest price change with an 11.7-percent increase, followed by the EU price index with a 7.0-percent increase, the Mexican price index with a 4.0-percent increase, and the Japanese price index with a 1.3-percent increase. Overall, import prices from the Industrialized Countries increased 7.5 percent, while import prices from the Other Countries increased 6.0 percent. The two
main factors behind these upward price movements were higher petroleum prices and exchange rate movements between the U.S. dollar and several major trading partners. Meanwhile, import prices from China decreased 1.0 percent in 2004.

Export price trends

Foods, feeds, and beverages. The agricultural goods price index decreased 4.5 percent in 2004, reversing the 12.6-percent increase observed in the previous year. The upward movement in the agricultural goods price index in 2003 was led by increases in the soybean price index and the corn price index. After gaining 33.0 percent in 2003, soybean prices remained strong in the beginning of 2004 because of export demand and harvest shortages. As a result of favorable weather conditions and higher market prices, farmers increased soybean plantings ahead of schedule. In June, soybean prices began to trend downward, because of a rebound in both United States and global supplies, and ended the year with a 28.4-percent annual price decline. According to U.S. Department of Agriculture figures, world soybean production rose 16 percent in 2004, with North American soybean production rising a record high 28 percent over the previous year’s production. High prices and favorable weather conditions similarly affected corn plantings, as U.S. corn production increased 16.8 percent. The price index for corn decreased 16.3 percent overall, reversing the 3.8-percent increase published in 2003.22 (See chart 3.)

Industrial supplies and materials. The export price index for industrial supplies and materials increased 15.1 percent in 2004, more than double the 6.8-percent increase in 2003. Price movements on the export side displayed trends similar to those previously noted on the import side. The fuels and lubricants index increased 26.7 percent because of low crude oil, gasoline, and coking coal stocks. High crude oil prices and low crude oil inventories led to lower petroleum product stocks and put upward pressure on prices, especially gasoline prices. Damage caused by Hurricane Ivan in September led to further inventory declines for gasoline and distillate fuels. As a result, the U.S. national average price for regular gasoline set a record in October, reaching 1.55 dollars per gallon (excluding taxes). Coking coal prices were also high in 2004 because of strong demand from the steel industry.23 Higher prices for petroleum products also impacted the U.S. chemical industry. Increases in energy feedstock prices were the largest factor behind the 18.5-percent advance for the chemicals price index.

Significant price increases occurred in the iron and steel

![Chart 3. Export price trends, 2004](image-url)
products price index and the nonferrous and other metals price index, which increased 53.1 percent and 24.8 percent, respectively. Strong demand from the construction and manufacturing industries, coupled with higher transportation and raw material costs, put upward pressure on prices. Chinese demand for U.S. metals increased significantly. For instance, the value of U.S. exports to China increased 78 percent for nonferrous metals, 57 percent for aluminum, and 38 percent for steelmaking materials.24

Capital goods. The capital goods price index, which includes machinery and transportation equipment not included in the automotive index, increased 0.7 percent, rebounding from a 3-year decline. Excluding computers, peripherals, and semiconductors from the index, the increase was up by a more significant 2.1 percent. Similar to price trends on the import side, higher prices were attributed to the increases in raw material costs for steel, copper, and energy. The transportation equipment price index increased 3.6 percent.

The computers, peripherals, and semiconductors index declined 3.0 percent, continuing a downward trend that began in 1989. High inventories and soft market demand conditions led to competitive pricing, as companies tried to keep costs and prices down. Prices for telecommunication equipment also put some downward pressure on the capital goods index. This index decreased 2.2 percent because of low demand and high competition, factors similar to those influencing the computer industry.

Automotive vehicles, parts, and engines. The automotive vehicles, parts, and engines price index increased 1.1 percent in 2004, higher than the 0.5-percent increase published in 2003. The primary factor behind the increase was the higher costs of raw materials, especially steel, aluminum, plastic, and rubber. Producer prices for these goods, as measured by the ppi, increased in 2004 because of strong demand and restrictive supplies, putting upward pressure on automobile prices. Producer prices increased 40.7 percent for iron and steel, 14.6 percent for aluminum, 6.1 percent for plastic, and 3.0 percent for rubber.

Consumer goods. The export consumer goods price index increased 1.3 percent in 2004 because of price increases for medical supplies and household goods. As in the import market, export medical supply prices were up because of continued high manufacturing costs and increases in demand for pharmaceuticals. The household goods index, which includes furniture, cookware, and textile floorcoverings, increased 1.8 percent because of higher raw material costs. The 1.3-percent increase in 2004 for the consumer goods price index is more than double the 0.6-percent increase published in 2003. These increases more than offset lower textile apparel and footwear prices, which decreased 0.5 percent. An increase in import volumes, especially from China, and a decline in international demand led to competitive pricing within the United States and the international textile industry.25 The value of textile and apparel imports into the United States from China increased 23 percent in 2004 and has increased 86 percent since 2001, the year China formally entered the World Trade Organization (WTO). The influx of imports from China put downward pressure on U.S. domestic and export apparel prices.

Services price trends

BLS publishes a limited number of international services price indexes, and the majority of those showed increases in 2004. Each of the major BLS services indexes increased in 2004. Import air passenger fares increased 4.4 percent in 2004, reversing the 0.2-percent decline published in 2003. Fares for flights destined to the Latin American and Caribbean region increased 6.0 percent, followed by the European region with a 5.6-percent increase in fares. On the export side, prices rose for the fourth consecutive year with a 13.2-percent increase, slightly lower than the 14.7-percent increase in 2003. The European index and the Asian index drove the upward movement, gaining 13.6 percent and 13.5 percent, respectively.26 The import air freight price index rose 10.4 percent, and the export air freight price index rose 11.2 percent. Those price movements followed increases in 2003 of 7.5 percent on the import side and 0.2 percent on the export side.27 The upward movements in the air passenger fares indexes and the air freight indexes were both affected by fuel cost increases. Fuel consumption by U.S. airlines increased 4.2 percent, while the cost of fuel increased 39.7 percent.28 After increasing 26.3 percent in 2003, the inbound ocean liner freight price index increased at a lesser rate of 4.2 percent. After 2 years of lackluster demand, the industry rebounded in 2003 and continued to strengthen throughout 2004. The inbound crude oil tanker freight price index increased 107.2 percent, the largest price increase published since 2000, when the index increased 130.5 percent. Inbound ocean liner freight prices and crude oil tanker freight prices continued their upward trends because of robust demand from China, Southeast Asia, and the United States for the shipment of goods. In 2004, both industries were characterized by vessel shortages and limited capacity. The increased costs witnessed in these indexes factored into the upward price movements previously mentioned in the import and export product price indexes.
Notes

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2 Trade data obtained from the Foreign Trade Statistics Division of the U.S. Census Bureau.

3 The 5.7-percent gain in 1990 was largely attributable to a 30.7-percent gain in energy, which coincided with the Iraqi invasion of Kuwait in August 1990.

4 Prices are based on West Texas Intermediate (WTI) crude oil, which is the U.S. benchmark grade. WTI crude oil is a light sweet crude; therefore, it is generally more expensive than the OPEC basket, which is an average of light sweet crude oils and heavier sour crude oils.


7 On July 1, the ceiling was increased from 23.5 mb/d to 25.5 mb/d; on August 1, it was increased to 26 mb/d; and on November 1, to 27 mb/d. See eia Country Analysis Briefs: opec (U.S. Department of Energy, Energy Information Administration, Last updated Mar. 8, 2005), on the Internet at http://www.eia.doe.gov/emeu/cabs/opec.html (visited Mar. 16, 2005).


12 Trade data obtained from the Foreign Trade Statistics Division of the U.S. Census Bureau.

13 In 2004, Japan accounted for 15.7 percent of the imports of capital goods, excluding computers, peripherals, and semiconductors into the United States; Canada for 12.5 percent; Mexico for 12.3 percent; and Germany for 10.0 percent.

14 Product trade data were obtained from the Foreign Trade Statistics Division of the U.S. Census Bureau.


20 In July, the Commerce Department imposed anti-dumping duties of up to 93.1 percent on shrimp from Vietnam, and up to 112.8 percent on shrimp from China. See “Shrimp Wars,” The Economist, July 10, 2004, p. 26. Note: USDA import price indexes do not include duties to ensure comparability with similar statistics published by other countries.

21 The following import price indexes by Locality of Origin were first published in 2004: France, Germany, the UK, Mexico, the Pacific Rim, China, ASEAN, and Asia Near East.

The Other Countries Locality of Origin (LOC) price index includes countries that are not included in the Industrialized Countries LOC price index. The following countries are excluded: Andorra, Australia, Austria, Belgium, Canada, Denmark, Faroe Islands, Finland, France, Germany, Gibraltar, Greece, Greenland, Iceland, Ireland, Italy, Japan, Liechtenstein, Luxembourg, Malta, Monaco, Netherlands, New Zealand, Norway, Portugal, San Marino, South Africa, Spain, St. Pierre and Miquelon, Svalbard and Jan Mayen Island, Sweden, Switzerland, and the United Kingdom.


23 Data were obtained from the Energy Information Association’s (EIA) Petroleum Product Prices for the United States, on the Internet at http:// www.eia.doe.gov/emeu/states/oilprices/oilprices_us.html (visited Mar. 23, 2005).

24 Product trade data were obtained from the Foreign Trade Statistics Division of the U.S. Census Bureau.


26 The import air passenger fares index measures fares paid by U.S. residents flying out of the United States on foreign carriers. The export air passenger fares index measures fares paid by foreign residents flying internationally on U.S. carriers.

27 The import air freight price index measures changes in rates paid for the transportation of freight from foreign countries into the United States on foreign air carriers. The export air freight price index measures changes in rates paid for the transportation of freight from the United States to foreign countries on U.S. carriers.