

Import and export price trends, 2007

Prices for imports and exports increased in 2007 as global demand for raw materials expanded faster than supply and the U.S. dollar lost value against the currencies of trading partners

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In 2007, imports were most affected by rising energy, chemical, and metals costs, in addition to the devaluation of the dollar. Growing economies such as China and India pushed global demand for oil; demand remained strong throughout the year and pressured prices upward across all sectors of the economy. Import prices increased 10.6 percent in 2007, the sixth consecutive annual increase and the largest year-over-year advance since the measure was first published in 1982. Import prices excluding fuel increased 3.1 percent, the largest increase since 2002, when that measure was first published. The impact of exchange rates on import prices can be seen through the import locality-of-origin indexes. Prices of goods from China increased by 2.4 percent in 2007, the first annual price increase in Chinese goods since the index began to be published in December 2003. Merchandise goods from the European Union, Canada, and Japan all increased in price, with the dollar depreciating against the currency of each of those countries. Rising crude-oil costs were a primary factor in the 35.9-percent rise in prices for goods from Near East Asia and the 15.8-percent increase in prices for goods imported from Mexico.

Export prices increased 6.0 percent in 2007, in part because of higher agricultural prices for wheat, soybeans, and corn. Rising raw-materials prices also were a contributing factor. Agricultural product export prices increased 23.4 percent, reflecting

strong demand and the impact of weather-related supply shocks around the world. Nonagricultural prices increased 4.5 percent, the highest annual increase for those goods since 2004. Overall, the price trends of 2005 and 2006 continued and were more pronounced in 2007 as strong demand for many raw materials outpaced supply. (See table 1.)

Other price measures

Like the Import and Export Price Indexes, the Consumer Price Index for All Urban Consumers (CPI-U) and the Producer Price Index (PPI), two BLS monthly indexes that measure price movements, increased in 2007. The increase in these two indexes, however, was less than the 10.6-percent increase in import prices. (See chart 1.)

The CPI-U, which measures the average change over time in the prices paid by urban consumers for a market basket of consumer goods and services, posted the largest yearly increase since 1990, advancing 4.1 percent. The increase was driven by a 17.5-percent rise in the energy component of the index; the CPI-U for energy posted its largest yearly increase since 1990. Both indexes continued upward trends in 2007, at faster rates of increase than in 2006, when energy price increases were less significant.

The PPI, which measures changes in the selling prices received by domestic producers

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Table 1. Annual percent changes in U.S. import and export price indexes for selected categories of goods, 1997–2007

| End use ¹ | Description | Relative importance, November 2006 ² | Percent change, 12 months ended in December— | | | | | | | | | | |
|----------------------|---|---|--|-------|-------|------|-------|------|------|------|------|------|------|
| | | | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 |
| | Imports | | | | | | | | | | | | |
| | All commodities | 100.000 | -5.2 | -6.4 | 7.0 | 3.2 | -9.1 | 4.2 | 2.4 | 6.7 | 8.0 | 2.5 | 10.6 |
| | All imports, excluding petroleum | 82.778 | -2.8 | -3.3 | .0 | 1.3 | -4.5 | .3 | 1.2 | 3.7 | 2.4 | 1.9 | 3.0 |
| | All imports, excluding fuel | 80.324 | - | - | - | - | - | .0 | 1.0 | 3.0 | 1.1 | 2.9 | 3.1 |
| 0 | Foods, feeds, and beverages | 4.488 | 1.3 | -3.1 | -3 | -4.0 | -4.7 | 5.9 | 3.0 | 8.0 | 5.4 | 4.3 | 9.6 |
| 1 | Industrial supplies and materials | 35.271 | -10.4 | -17.1 | 33.7 | 13.8 | -24.6 | 21.9 | 9.5 | 22.0 | 25.5 | 5.0 | 26.8 |
| | Industrial supplies and materials, excluding petroleum | 18.050 | -1.7 | -6.7 | 5.1 | 11.2 | -14.6 | 5.8 | 7.2 | 16.4 | 11.3 | 4.6 | 6.7 |
| | Industrial supplies and materials, excluding fuels | 15.596 | - | - | - | - | - | 3.6 | 6.3 | 13.4 | 4.4 | 11.1 | 7.4 |
| 10 | Fuels and lubricants | 19.675 | -23.8 | -36.5 | 114.7 | 27.1 | -41.9 | 53.7 | 13.2 | 31.5 | 43.5 | .9 | 42.1 |
| 100 | Petroleum and petroleum products | 17.221 | -25.5 | -40.8 | 137.2 | 17.6 | -39.5 | 56.9 | 12.8 | 30.3 | 42.4 | 5.3 | 48.1 |
| 2 | Capital goods | 21.560 | -7.4 | -5.0 | -3.3 | -2.1 | -2.7 | -2.4 | -1.1 | -8 | -1.3 | .5 | .8 |
| | Capital goods, excluding computers, peripherals, and semiconductors | 15.091 | -4.7 | -2.1 | -1.8 | -1.1 | -1.0 | -1.3 | 1.2 | 2.0 | 1.2 | 2.3 | 3.3 |
| 3 | Automotive vehicles, parts, and engines | 14.691 | .5 | .0 | .7 | .7 | -2 | .5 | .9 | 1.8 | .4 | .7 | 2.4 |
| 4 | Consumer goods, excluding automobiles | 23.989 | -9 | -1.3 | -4 | -1.2 | -8 | -7 | .1 | .9 | .6 | 1.4 | 1.6 |
| | Exports | | | | | | | | | | | | |
| | All commodities | 100.000 | -1.2 | -3.4 | .5 | 1.1 | -2.5 | 1.0 | 2.2 | 4.0 | 2.8 | 4.5 | 6.0 |
| | Agricultural commodities | 8.115 | -2.9 | -9.3 | -6.8 | 3.1 | -1.8 | 8.0 | 13.4 | -5.9 | 4.9 | 13.5 | 23.3 |
| | Nonagricultural commodities | 91.885 | -1.0 | -2.7 | 1.2 | .9 | -2.5 | .4 | 1.3 | 5.0 | 2.6 | 3.7 | 4.5 |
| 0 | Foods, feeds, and beverages | 7.350 | -3.3 | -8.3 | -5.7 | 1.7 | -5 | 7.9 | 12.6 | -4.5 | 4.3 | 13.8 | 23.4 |
| 1 | Industrial supplies and materials | 30.132 | -1.4 | -7.1 | 5.3 | 3.6 | -8.6 | 5.0 | 6.8 | 15.1 | 8.4 | 9.0 | 10.5 |
| | Nonagricultural industrial supplies and materials | 28.638 | -1.3 | -6.9 | 6.3 | 3.3 | -8.4 | 4.8 | 6.3 | 16.6 | 8.5 | 9.2 | 10.2 |
| 2 | Capital goods | 39.585 | -1.6 | -1.8 | -1.1 | .3 | -8 | -1.3 | -6 | .7 | -5 | 1.1 | 1.8 |
| | Capital goods, excluding computers, peripherals, and semiconductors | 30.193 | -3 | -7 | -4 | .8 | .0 | .5 | .9 | 2.1 | 2.1 | 3.0 | 3.3 |
| 3 | Automotive vehicles, parts, and engines | 10.683 | .8 | .5 | 1.0 | .5 | .4 | .8 | .5 | 1.1 | 1.0 | 1.5 | 1.1 |
| 4 | Consumer goods, excluding automobiles | 12.250 | .8 | -8 | .6 | -4 | .2 | -6 | .6 | 1.3 | .7 | 2.1 | 3.2 |

¹ Category defined by Bureau of Economic Analysis.
² Relative importance figures are based on 2005 trade values.

SOURCE: Bureau of Economic Analysis.
 NOTE: Dash indicates data not available.

Chart 1. Changes in the Import, Export, Consumer, and Producer Price Indexes, 2003–08

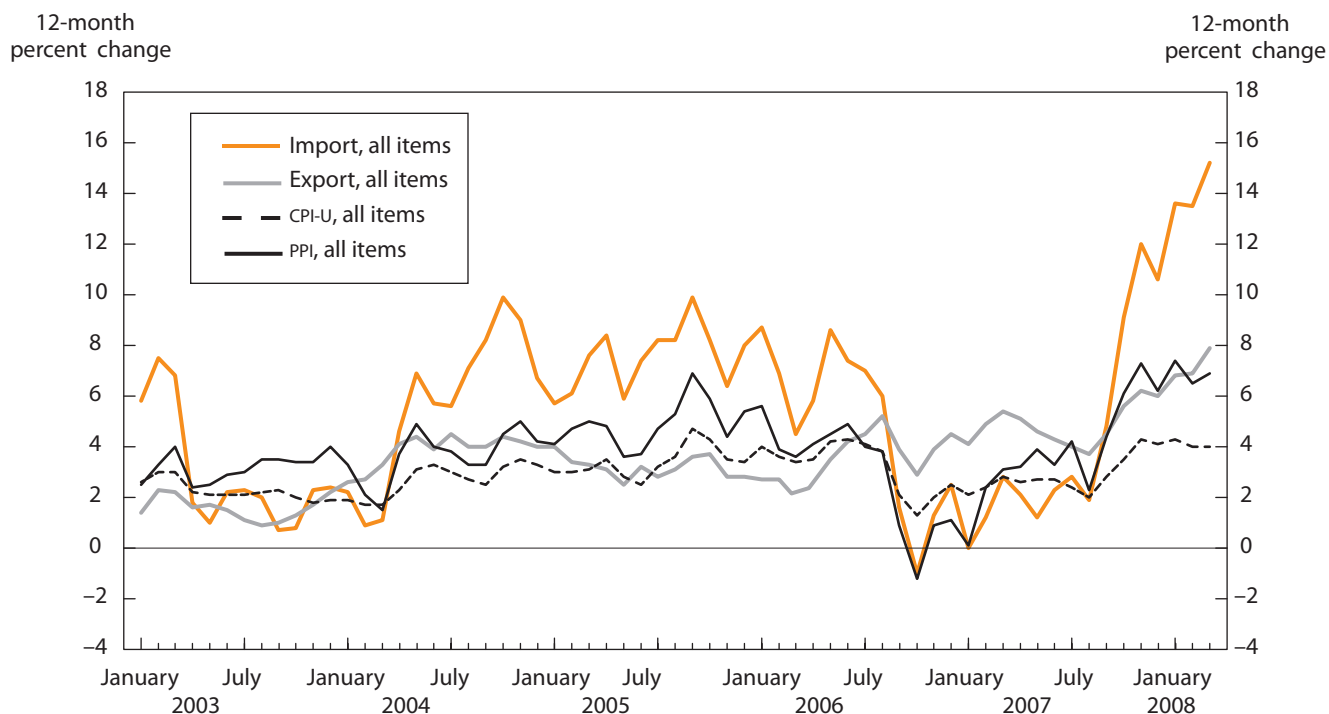
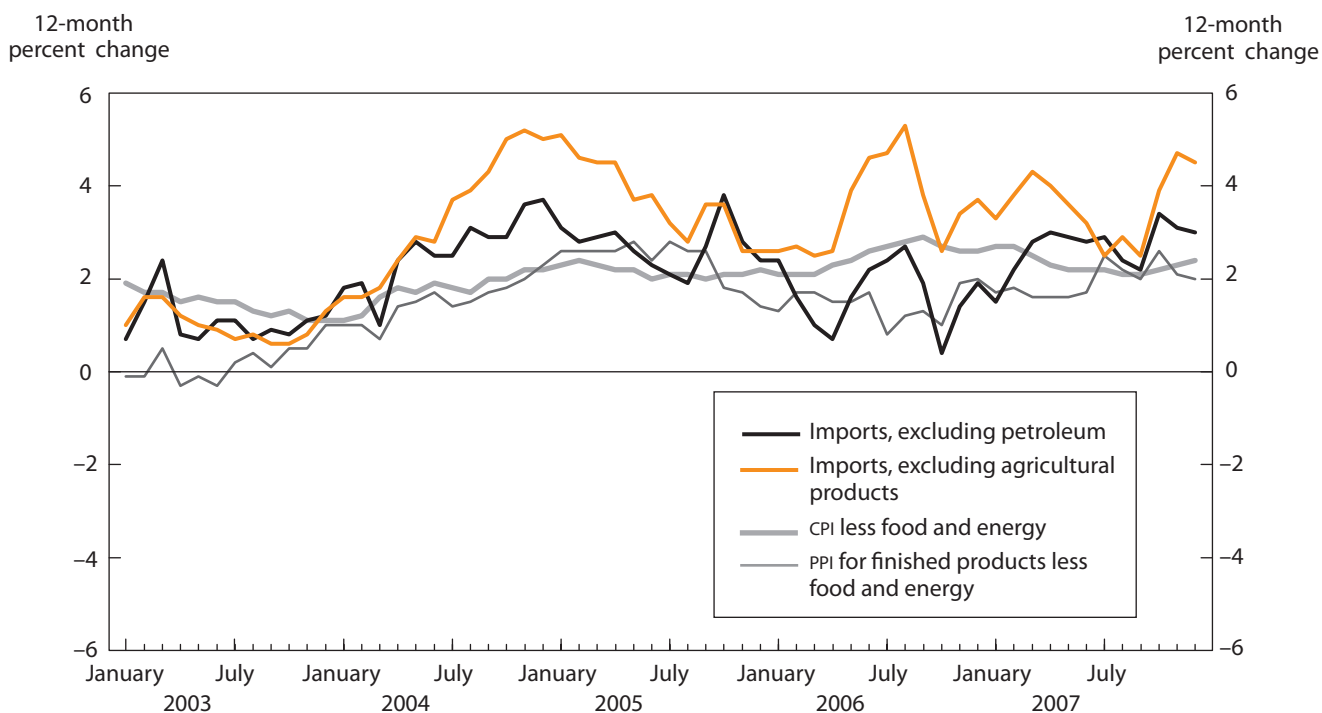


Chart 2. Changes in selected import, export, consumer, and producer price indexes, 2003–07



of goods and services, increased for the sixth consecutive year. The index rose 6.2 percent in 2007, after advancing 1.1 percent the previous year. The 2007 rise was driven by strong energy prices. The PPI for finished goods excluding energy increased 3.5 percent in 2007, higher than the 1.9-percent increase in 2006. (See chart 2.)

Imports

Locality of origin. A locality-of-origin index measures the average price level for all goods imported into the United States from a specific country or geographic region. Price indexes by locality of origin exhibit trends based on the type of goods imported into the Nation, as well as differences in exchange rate movements, among other factors unique to each locality. Traditional price indexes by type of good imported cannot provide this insight.¹ The 2007 locality-of-origin indexes were strongly affected by three developments: China's reducing export tax rebates on many of its goods imported by the United States; the U.S. dollar's losing significant value against major trading partners in the European Union and Canada; and imported oil prices increasing rapidly.²

Prices of imported Chinese goods increased 2.4 percent in 2007, reversing a historical downward trend in the index since its initial publication in December 2003. (See chart 3.) One of the primary reasons for the increase was a 7.0-percent depreciation of the dollar against the Chinese yuan, compared with a 2.7-percent depreciation in 2006. Another factor was China's decision to reduce export rebates on more than 2,800 goods. These reductions were implemented in July 2007.³ Clothing, electronics, toys, plastics, base metals, and chemicals, among other products, had rebate reductions ranging from 5 percent to 11 percent. This change decreased margins, and some of the price increases were passed on to international customers. The reduction in some rebates and the elimination of others was intended to curb growth in industries, such as cement, leather, and fertilizers, that use large amounts of energy. Rebate reductions were added in other industries—for example, toy and textile manufacturing—in order to reduce friction with trading partners who were unhappy with the rebates and were considering imposing their own barriers to trade.

Energy costs had a heavy impact on the locality-of-origin indexes from largely energy producing import partners. Import prices from Near East Asia, measured by an index dominated by petroleum prices, rose 35.9 percent, the biggest increase since 2004. Also, large quantities of oil exported to the United States by Mexico contributed

to the 15.8-percent increase in prices for all goods imported from that country.

The rise in energy prices also affected the Canadian locality-of-origin index, which increased 10.1 percent in 2007. In addition, the U.S. dollar depreciated 15.2 percent against the Canadian dollar, leading many Canadian manufacturers to charge higher U.S. dollar prices in order to maintain their revenue in Canadian dollars.⁴ (See chart 4.) Imported fuel from Canada also contributed strongly to the increase.

Import prices of Japanese goods increased 0.1 percent in 2007 after yearly decreases in 2005 and 2006. The dollar depreciated 6.1 percent against the yen in 2007. European goods increased in price by 3.8 percent, with a 9.9-percent depreciation of the dollar against the euro.

Energy. Import energy prices rose 48.1 percent in 2007 (see chart 5), the second-largest annual increase since 2000. With the exception of a decline in 2001, energy prices have risen by double-digit figures every year since 2000.

Energy prices began the year on the decline, with unseasonably warm weather in the northeastern region of the Nation limiting demand for heating oil. As a result, residential heating-oil prices dropped for 6 consecutive weeks between late December 2006 and mid-January 2007. The warmer temperatures led to the expectation of larger heating-oil inventories,⁵ and that expectation affected West Texas Intermediate crude spot prices, which ultimately dropped under \$51 per barrel in January, the lowest price in 20 months.⁶ The declining prices represented a continuation of a downward trend that began during the latter half of 2006, when prices dropped after anticipated supply problems did not materialize. The downward trend reversed course as a cold snap in the northeastern United States raised consumption levels. Further, Saudi Arabia's announcement that it would adhere to a call for production cuts by the Organization of the Petroleum Exporting Countries (OPEC) helped send prices on an 18-percent increase to \$59 per barrel by early February.⁷ The upward trend continued throughout 2007 (see chart 6), with crude-oil prices ultimately reaching \$99 per barrel by the end of the year.⁸

Small inventories during 2007 partially explain the strong market sensitivity to supply disruptions throughout the year as markets remained vulnerable to supply threats. Geopolitical tensions in the Middle East and Africa compounded the problem by creating uncertainties about supplies and paralleled market reactions to ongoing political struggles in key regions that directly affect the world's oil supply. Well-publicized events caused oil markets to react

Chart 3. Changes in import prices, 2006–07

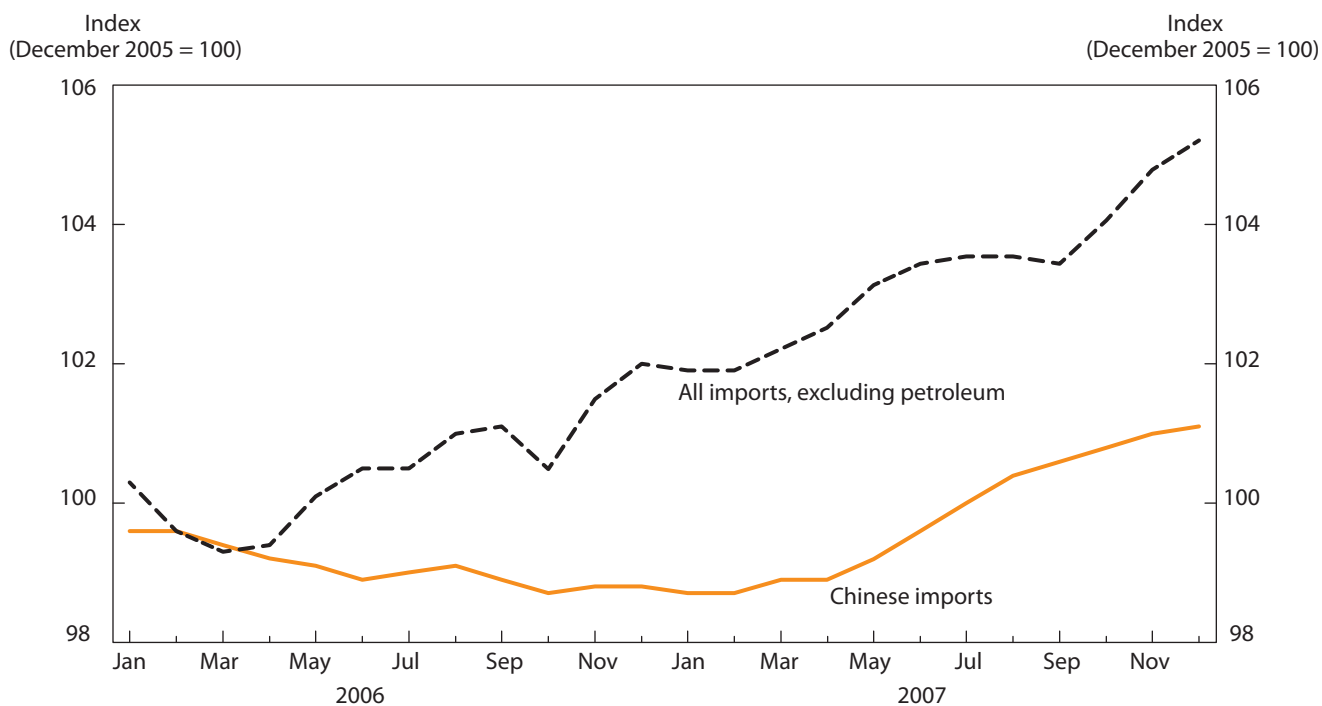


Chart 4. Changes in the exchange rate of the U.S. dollar with respect to the euro, peso, Canadian dollar, and yen, 2007

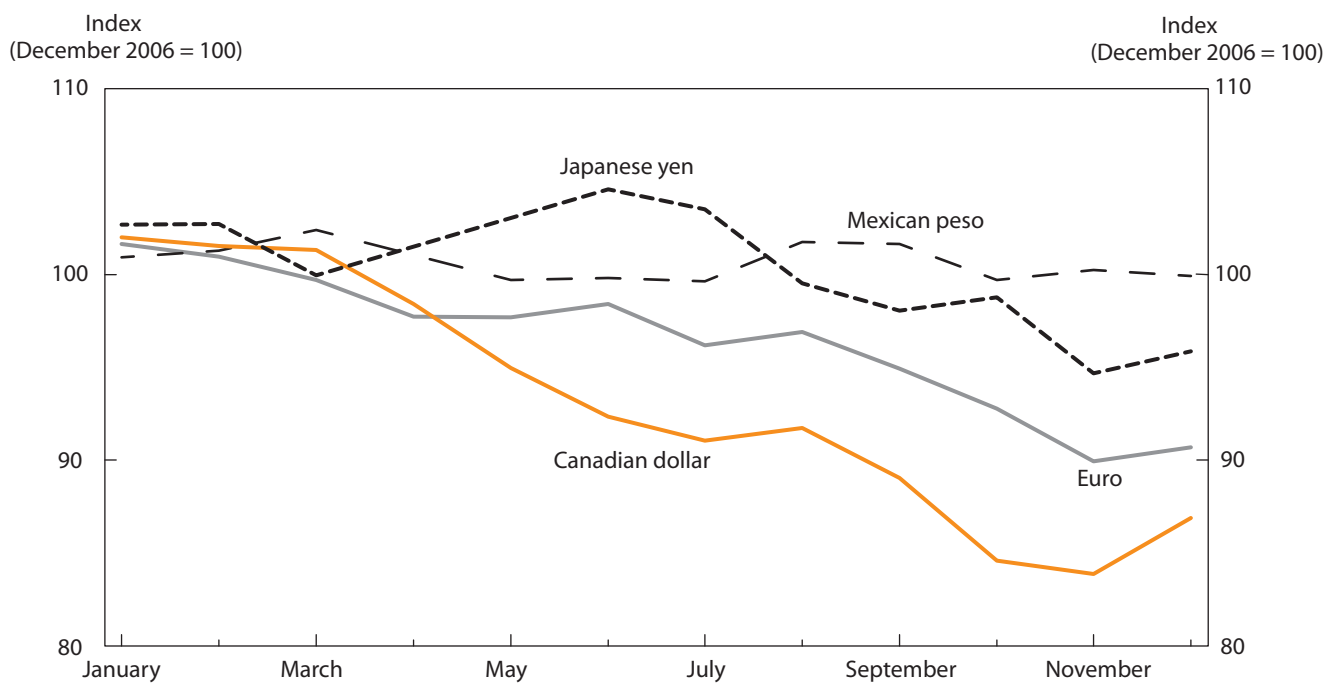


Chart 5. Changes in the import, PPI, and CPI energy price indexes, 2003–08

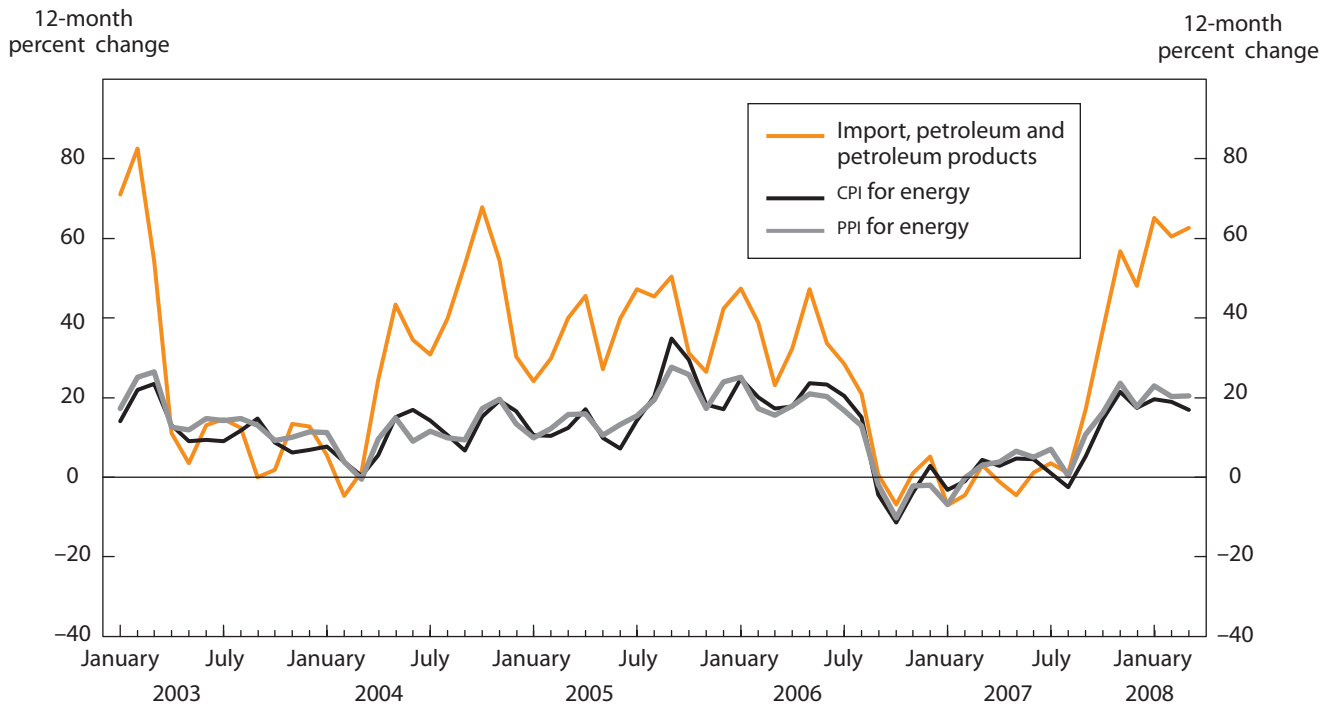
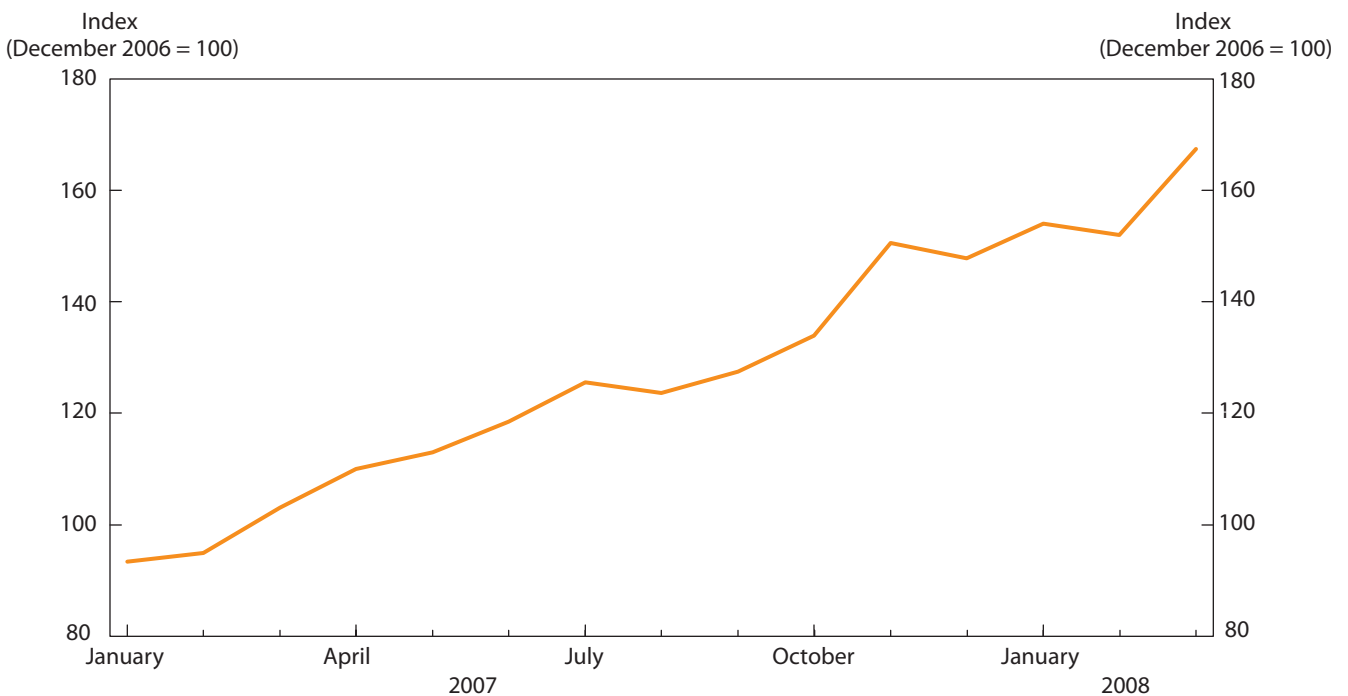


Chart 6. Changes in import petroleum prices, 2007–08



sharply and were symptomatic of the struggles. Episodes of violence and sabotage hampered oil output in Nigeria, cutting production from the world's eighth-largest oil exporter by about 547,000 barrels per day.⁹ Anxiety relating to conflict between Turkey and the Kurds in Iraq, as well as sanctions imposed by the United States against Iran because of its nuclear program, contributed to market tensions.¹⁰ Traders worried that an international incident between Iran and England could affect the movement of oil along the Straits of Hormuz, a waterway through which approximately 40 percent of the world's oil supply passes on its way to international markets.¹¹ Supply fears ultimately contributed to a then-high price of \$66 dollars per barrel of crude oil in early April, the highest price since the third quarter of 2006.¹²

The market also was influenced by a decline in surplus production capacity and inventories. Estimates indicate that the world consumed more than 85 million barrels of oil per day in 2007, compared with 84.62 million barrels in 2006 and 83.65 million in 2005.¹³ Yet there were just 2 million barrels per day of extra production capacity, so oil markets were extremely sensitive to potential supply disruptions.¹⁴ Furthermore, commercial inventories among member nations of the Organization for Economic Cooperation and Development declined by 136 million barrels in 2007, to 2.54 billion barrels.¹⁵ Compared with average commercial inventory levels of the previous 5-year period, the 2007 end-of-year inventory represented a change in trend. Inventories ended 2007 at 20 million barrels below the previous 5-year average,¹⁶ in stark contrast to the 2006 end-of-year level, which was 127 million barrels above its previous 5-year average.¹⁷

In addition to anxiety over supply, there was a strong growth in global consumption from emerging markets. Surging demand resulting from economic booms in China and India supported the strong upward trend in oil prices throughout the year.¹⁸ Through continuous development, industrialization, and modernization projects, these two countries accounted for approximately 59 percent of the total growth in world petroleum consumption from 2005 to 2007.¹⁹ Currently the second-largest oil consumer, China led the world in increased energy consumption at an estimated rate of 7.57 million barrels per day in 2007 (see chart 7), an increase of 93.5 percent over 1997 levels.²⁰

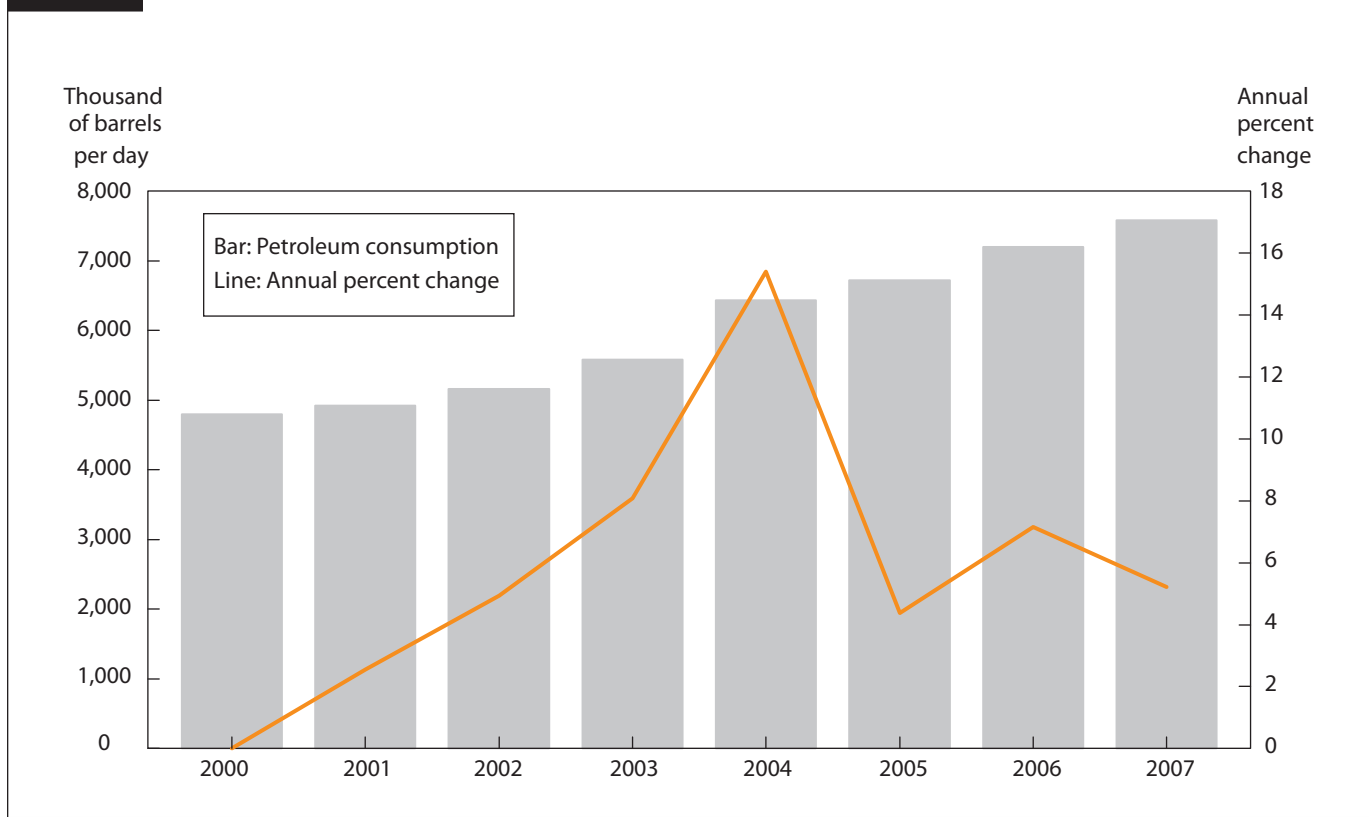
The declining value of the U.S. dollar, which lost 7.5 percent of its value against the 26 currencies in the Federal Reserve trade-weighted index for the year, contributed to bullish activity in the energy markets throughout the year as well.²¹ The decline in the value of the dollar has allowed buyers in countries with currencies that are rela-

tively stronger than the dollar to bid up oil prices.²² Both spot and futures prices of oil are traded internationally in U.S. dollars, allowing foreign buyers who hold currencies that have been gaining value against the dollar to buy oil more cheaply.²³ This activity had the effect of offsetting the rise in prices for those buyers, as well as any drop in demand in response to higher prices. In addition, investors with dollar holdings hedged potential losses due to the depreciating dollar by buying futures.²⁴

Nonfuel industrial supplies and materials. The index for imported industrial supplies and materials excluding fuels increased 7.4 percent in 2007, following an 11.3-percent rise in 2006 and a 4.4-percent increase in 2005. Price increases for chemicals proved to be the biggest factor in 2007, with the index for chemicals advancing 10.6 percent overall that year. Industrial organic chemical prices were volatile, but ultimately rose due to increased worldwide demand.²⁵ A major importer of chemicals, China consumed heavy amounts of petrochemicals and plastics²⁶ and continues to demand more chemicals than it produces. In 2007, China consumed more than \$68 billion worth of chemicals and posted a trade deficit of 17.4 billion.²⁷ Petrochemical raw materials known as olefins, which include ethylene and propylene, showed strong increases due to rising energy costs.²⁸ Plastics, which are derived from these olefins, subsequently increased in price due to energy feedstock costs.²⁹ Demand was strong from developing countries, leading to tight ethylene supplies.³⁰ Sustained strong demand benefited most U.S. exporters, who use ethane derived from natural gas to produce ethylene. These exporters enjoy a cost advantage over many other exporting countries that use naphtha-derived ethylene, which is manufactured from oil.³¹ Methanol prices also rose, due to numerous outages at various worldwide facilities as well as strong demand.³²

Metals prices increased as copper, steel, and steelmaking material prices were driven by strong demand from China.³³ China imported 58 percent more copper during 2007 than it did in 2006.³⁴ News of this spike in consumption fueled speculative buying and bolstered prices early in the year.³⁵ Prices dipped during the middle of the year as warehouse stocks rose in late summer when seasonal demand declined. Seasonal declines in the price of copper are common during late summer and fall after purchases are made by the housing and automobile markets to support their peak production levels in late spring and summer. By the fourth quarter, the weakening dollar, declining inventories, and supply disruptions resulting from an earthquake in Chile again led to price

Chart 7. Petroleum consumption in China, 2000–07



increases.³⁶ Steel prices rose, the result of upward pressure from steelmaking materials. Prices for traditional mill products increased 90 percent over what they were at the beginning of 2006.³⁷ Sheet mills were pressured by higher scrap costs, as well as by record-high prices for nickel, molybdenum, chrome, and cobalt.³⁸ Prices increased further after China phased out export rebates for various types of steel.³⁹ Prices for precious metals also increased as the weak U.S. dollar influenced gold price advances throughout the year. As the dollar declined in value against many of the world's currencies, hitting a record low against the euro, many investors who sought an alternative asset for protection against the falling dollar bought gold.⁴⁰

In the case of platinum and palladium, prices were quite volatile. Supply was constrained and global demand increased.⁴¹ Hedge fund managers increased the demand for these metals on expectations that supply deficits would lead to future price gains.⁴² Prices for both metals, however, started to decline by the summer as automobile producers announced intended reductions in use of the metals for catalytic converters.⁴³ Further, robust selling by hedge fund managers looking to come up with cash in the

face of the U.S. subprime loan market downturn resulted in falling palladium prices.⁴⁴

Capital goods. Prices for capital goods rose 0.8 percent in 2007, following a 0.5-percent increase in 2006, in contrast to decreases each year from 1995 to 2005. Prices for capital goods, excluding computers, increased by 3.3 percent in 2007, the largest increase in this index since 1990. Currency exchange rates were a major factor in price increases across industry sectors. The Canadian dollar, the euro, and the yen all appreciated sharply against the dollar in 2007. Another cause of the increase was an upward trend in global raw-materials costs that manufacturers passed on to customers. Prices of copper, steel, nickel, oil, and other inputs have pushed manufacturing costs upward for many producers of capital goods. The previously mentioned Chinese tax rebate reductions also affected a variety of capital-goods prices after the Chinese government eased protection for those goods in July. Numerous companies in the capital-goods sectors operate on the basis of long-term contracts with locked-in prices, wages, and material costs, so prices trended upward when those contracts were rene-

gotiated to reflect higher material and labor costs. Within the computer, peripheral, and semiconductor sector, prices decreased 5.7 percent because competition and slacking demand pressed computer prices downward and stiff competition in the dynamic read-access memory (DRAM) industry drove prices lower.⁴⁵ The industry has been seen as a high-growth industry for years, but oversupply has severely depressed DRAM prices in recent years.

Automotive vehicles. Prices for imported automotive vehicles, vehicle parts, and engines increased 2.4 percent in 2007, with import vehicle unit volume up by 1.3 percent, at 3.75 million units. In contrast, unit volume growth was 8.0 percent in 2006. Price increases in the industry were timed chiefly to coincide with the introduction of new models for the 2008 model year, the period when manufacturers generally increase prices slightly in order to keep pace with costs. In addition, the depreciation of the U.S. dollar against the Canadian dollar caused cost increases for imported auto parts as Canadian manufacturers struggled to maintain profitability in an industry that recently has had difficulty maintaining profits. Raw materials were another cause of price increases: automakers paid more for flat-rolled steel as their contracts with steel companies ended and reset at higher market prices. Market steel prices are higher than they were several years ago under previous contracts. As in other industries, automotive part importers were affected by the Chinese Government rescinding tax rebates on steel, causing Chinese manufacturers to pass at least part of the additional cost on to their American customers.

Consumer goods. Prices for imported consumer goods advanced 1.6 percent in 2007, the largest annual increase in consumer goods prices since 2003. This rise represented the fifth consecutive year-over-year increase in that index.

The index remained steady through the first half of the year, advancing by 0.2 percent through June. The second half of the year, however, saw comparatively larger increases in prices. Higher prices for precious metals had a strong impact on coins, gems, and jewelry, the prices of which increased by more than 8 percent from 2006 levels. Gold jewelry consumption rose 5 percent in 2007 compared with 2006, due to rising demand from China and India.⁴⁶ High-end platinum jewelry prices remained strong, with platinum price increases supported by shortages from mines in South Africa, the source of 80 percent of world platinum production.⁴⁷ Cookware and chinaware prices advanced as metals such as stainless steel and aluminum became more expensive and affected manufacturing costs.

Advances in other consumer goods categories included a 4.5-percent increase in prices for sporting and camping apparel, a 2.8-percent rise in prices for medicinal, dental, and pharmaceutical preparatory materials, and a 2.2-percent increase in prices for books, magazines, and other printed materials.

In contrast, prices on home entertainment equipment continued to fall this year as strong competition pushed prices lower. The index declined 3.2 percent for the year after falling 3.6 percent in 2006 and 4.8 percent in 2005.

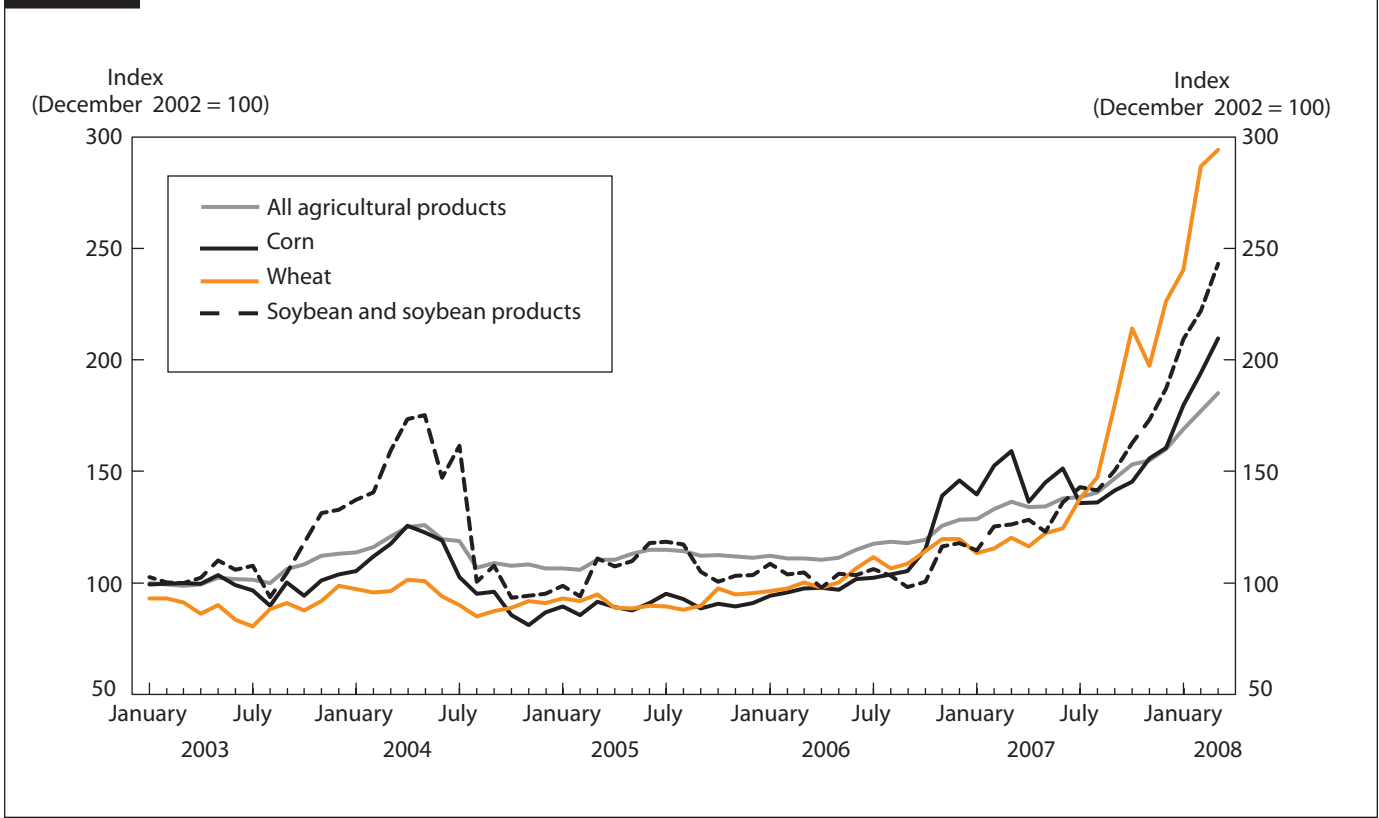
Foods, feeds, and beverages. Prices for imported foods, feeds, and beverages increased 9.6 percent in 2007, led by rising prices for vegetables, coffee, and baked goods. Vegetable prices increased 11.8 percent because of unusually wet weather conditions in Mexico and Peru and strong worldwide demand. Coffee prices increased 12.6 percent amidst concerns about low Brazilian rainfall. Brazil had little rain during the blooming season, which is a vital time in the beans' development. Buyers also had concerns over dry weather in Vietnam, pushing prices upward in commodity markets.⁴⁸ Prices for bakery and confectionery products also increased in 2007, by 10.4 percent, a reflection of rising grain costs.

Exports

Agricultural products. Export price trends were dominated by rising prices for agricultural goods, chiefly wheat, soybeans, and corn. Worldwide supply and demand factors influenced prices for these goods. Wheat prices increased 89.2 percent, soybean prices 58.2 percent, and corn prices 10.1 percent in 2007. (See chart 8.)

Wheat prices were affected primarily by poor weather conditions around the globe and unusually low stores at the beginning of the season. In Australia, which normally produces around 15 percent of the global wheat supply, drought drove an estimated 61-percent decline in production, down to 9.8 million tons.⁴⁹ In Europe, harsh spring rains in Western Europe and drought in Eastern Europe combined to cause lower yields and higher prices.⁵⁰ Brazil's wheat crop also was severely depleted, through a combination of frost, drought, and lower acreage. Wheat prices continued to rise at the beginning of 2008, increasing an additional 30.0 percent from January to March before starting to decline as the shortages eased due to stronger world production in the early part of 2008. Within the United States, wheat acreage rose from 57.3 million acres in 2006 to 60.4 million acres in 2007 and yields were strong. Global wheat consumption has outpaced wheat

Chart 8. Changes in agricultural products price indexes, 2003–08



production in 7 of the last 8 years, depleting inventories and exacerbating drought-induced shortages. As of winter 2007, U.S. wheat inventories were the lowest recorded since the U.S. Department of Agriculture began tracking the statistic in 1960, and world wheat stocks were at their lowest levels since 1981.

Acreage dedicated to corn production jumped to 93.6 million acres in 2007 from 78.3 million acres in 2006 as farmers reacted to the rapid increases in corn prices of the last several years. Normally, domestic farmers alternate planting corn and soybeans, because soybeans are less taxing than corn is on soil nutrients. In 2007, farmers began to plant corn without alternating with soybeans, thereby reducing domestic soybean acreage by 15.8 percent and production by 18.8 percent. Soybean acreage dropped to 63.6 million acres in 2007 from 75.7 million acres in 2006. Historically, soybean acreage and corn acreage have been roughly equal, but corn acreage accounted for 59.5 percent of combined acreage in 2007. Corn used in ethanol production has tripled since 2000, and biofuel distilleries are now consuming 20 percent of U.S. corn supplies.⁵¹ At the same time, demand for U.S. soybeans has risen rapidly in

China, and soybean prices in 2007 reached their highest levels since 1973, when Russia began importing soybeans. Between January 2008 and March 2008, soybean prices increased an additional 29.9 percent because of lingering effects of strong demand and increased acreage from the 2007 season. Total domestic acreage dedicated to wheat, corn, and soybeans increased 6.5 million acres, to 217.6 million acres, between 2006 and 2007, a 3.15-percent increase in acreage dedicated to those crops.⁵²

The cost of farming the land also has increased because of the strain from higher fuel costs. (Fuel is a key input in fertilizers, farm machinery, and the transportation of goods.) Fertilizer prices have risen as well because of increased corn plantings, which require more fertilizer than soybeans. In addition, the higher prices of all crops have encouraged farmers to get higher yields from their land by using more fertilizer.

Feedstuff composed primarily of corn and soybeans saw a 13.6-percent increase in 2007. As feeds became more expensive, the price of meat increased 15 percent as well. According to industry estimates, feed accounts for as much as 70 percent of the cost of producing chicken and

pork.⁵³ Meat prices also were bolstered by waning concerns about threats from avian flu and a downgrading of the risk of mad-cow disease from U.S. beef.⁵⁴

Nonagricultural industrial supplies and materials. Exported nonagricultural industrial supplies and materials increased 10.2 percent in 2007 after posting respective 9.2-percent and 8.5-percent advances in the previous 2 years. Except for 2001, this index has risen every year since 2000. Increases reflect strong export prices for metals and chemicals.

Export steel prices increased for the first half of the year as a result of rising costs for scrap due to worldwide increases in production.⁵⁵ Prices receded during the summer as market participants chose to work off inventories while prices were high. Prices rebounded during the last quarter after China eliminated its export rebates on certain types of steel.⁵⁶ Gold and other precious metals were boosted by the weak dollar as investors looked for an alternative to the falling dollar and for protection against inflation.⁵⁷ Chemical prices rose 14 percent as petrochemical prices increased due to feedstock pressures from crude-oil and petroleum products.⁵⁸ The prices of many downstream derivatives of these petrochemicals, such as plastics, detergents, and resins, increased as a result.

Capital goods. Prices of exported capital goods increased 1.8 percent in 2007, the largest increase in this measure since a 2.3-percent increase in 1991. The price of capital goods excluding computers rose 3.3 percent in 2007. The increases came from a variety of industries, including aircraft parts, drilling equipment, construction equipment, and materials-handling equipment. Prices for civilian aircraft parts increased 6.6 percent, and non-motor-vehicle prices increased 5.0 percent, because of rising input costs of raw materials. Prices for oil-drilling and construction machinery continued rising, increasing 6.0 percent in 2007 and 31.2 percent since 2004 as demand for oil exploration grew and raw materials became more expensive. Paving and construction machinery prices increased 6.4 percent. All of these large capital-goods machines are heavily dependent on steel and other metal alloys, as well as on energy costs.

Prices for computers, peripherals, and semiconductors decreased 3.0 percent in 2007, as measured by an index that has averaged a 4.4-percent annual decline over the last 5 years. Computer prices fell 4.3 percent in 2007, the smallest yearly drop in that industry since 2003. The smaller decline may be attributed to fewer new companies entering into the personal-computer market and an

increase in prices for components. The computer market is saturated, and competition among manufacturers to sell their products has increased. Prices for computer peripherals declined 9.1 percent in 2007, the largest decrease since 1996. DRAM was a primary cause of this steep decrease: demand for these products was expected to grow rapidly, but has stalled over the past several years, creating a sizeable oversupply. The problem was that manufacturers built up inventories and production of 512-megabyte and 1-gigabyte RAM modules in anticipation of new demand for personal computers, but that demand did not keep pace with supply. By contrast to prices for computer peripherals, semiconductor prices increased in 2007 for the first time since 1995. The industry experienced some shortages in lower capacity memory modules, and many manufacturers increased prices to cover high fixed costs and increasing silicon prices. Prices also increased in early 2007 when the industry had two standards for chips: those compliant, and those noncompliant, with the Restriction of Hazardous Substances (RoHS) directive. On July 1, 2006, the European Union disallowed the sale of technology products containing dangerous substances, including lead and mercury, causing many companies to split their production between the two standards.⁵⁹ This set of two standards led to some shortages early in 2007, before companies began shifting more and more production toward compliant chips later in the year.

Automotive vehicles. Prices for automotive vehicles, parts, and engines increased 1.1 percent in 2007, with most of the increase occurring between July and December, when manufacturers annually introduce new model-year vehicles at slightly higher prices than those of the previous year's models. Passenger automobile export prices increased just 0.5 percent overall because of slow demand. Automotive parts increased 1.3 percent in 2007 as raw-material costs rose. Increases were dampened by profitability concerns in the automotive industry. Manufacturers renegotiated contract prices with many of their suppliers throughout the year, as opposed to the usual negotiations at the beginning of the production year.

Consumer goods. The index for exported consumer goods increased 3.2 percent this year, compared with a 2.1-percent advance in 2006. This increase was the fifth consecutive one for the index, which rose steadily throughout 2007.

Price indexes for household goods; medicinal, dental, and pharmaceutical preparatory materials; books, magazines, and other printed material; toiletries and cosmetics;

and notions and writing articles all recorded increases in 2007. Demand for durable goods was strong, and manufacturing costs increased along with annual price adjustments resulting from contract negotiations. The falling U.S. dollar also contributed to price increases: U.S. exports became less expensive in foreign currency terms, increasing the demand for other consumer nondurable items such as pharmaceuticals, printed materials, and toiletries and cosmetics.

Services. The import air passenger fares index, which measures changes in fares paid to foreign carriers by U.S. residents for international travel, advanced 7.9 percent, compared with a 7.8-percent increase in 2006. Prices rose steadily for the first 8 months of the year as fares for both Europe and Asia advanced due to sustained demand. Demand for European fares peaked at a 13.4-percent increase during the beginning of the travel season in June, the highest monthly advance in 2007.

The export air passenger fares index measures changes in fares paid to U.S. carriers by foreign residents for international travel. Fares increased 13.4 percent, following a more modest 7.0-percent increase in 2006. Exchange rates—in particular, the declining U.S. dollar—factored into the increase as foreign travelers took advantage of price declines for travel to the United States.

The air freight index measures changes in rates for air transportation of freight into and out of the Nation. Increased fuel surcharges resulting from higher crude-oil prices affected both export and import indexes. Import air freight prices rose 8.1 percent in 2007 after a comparatively modest 1.8-percent advance in 2006. Export air freight advanced 8.9 percent in 2007, compared with the more modest increase of 1.8 percent posted in 2006. In addition to increased jet fuel prices that led to higher fuel surcharges, base rates rose in several regions due to increases in market demand. The depreciation of the U.S. dollar throughout the year also influenced prices.

The inbound ocean liner freight index, which was published through December 2007, measured changes

in ocean liner freight rates for shipments to the United States.⁶⁰ The index declined 0.5 percent in 2007, a relatively modest decrease compared with the 10.1-percent drop in 2006. This was the second consecutive year the index declined after posting increases from 2002 through 2005. Competition and excess capacity in the industry kept rates low in 2007 as new shipbuilding outpaced current shipping demand.

The inbound crude-oil tanker index measured changes in rates paid for the transportation of crude oil loaded from foreign countries and shipped to the United States on tanker vessels. The index continued on a downward path in 2007, falling 20.6 percent through October, the last month of its publication.⁶¹ The decline continued the recent trend of decreasing prices, with both 2005 and 2006 having seen double-digit decreases of 17.2 percent and 20.1 percent, respectively. Early in the year, the mild winter kept demand relatively low. This trend of slow demand continued into the second quarter, due to traditional market weakness during that quarter. High gas prices also stifled demand through much of the year.

The export travel and tourism index measured price changes for travel-related goods and services paid by foreign visitors traveling in the United States. The index was published from January 2007 through November 2007 and posted a 5.9-percent increase during that time.⁶² Rising prices for travelers from Europe and Asia drove the index throughout the year. The biggest impact was between July and October, when the index advanced 3.7 percent.

The cost of higher education for foreigners in the United States, as measured by the annual export postsecondary education index, ended the year up 4.9 percent. The index represented receipts from foreign students studying at U.S. institutions of higher learning.⁶³ The export education index was influenced mostly by rising tuition and fees at both graduate and undergraduate institutions. Declines in government funding partially influenced the increase.⁶⁴ Private fees advanced at a faster rate than public fees for the second consecutive year, while fees for room and board also advanced in both graduate and undergraduate institutions. □

Notes

¹ Helen McCulley and Melissa Schwartz, “IPP introduces additional Locality of Origin import price indexes,” *Monthly Labor Review*, December 2005, pp. 36–43.

² Thomas J. Dueterberg, “The Competitive Edge: Implications of the Falling Dollar on U.S. Manufacturers,” *Manufacturers Industry Week*, Jan. 1, 2008, p. 14.

³ “Circular of the Ministry of Finance and the State Administration of Tax-

ation concerning Lowering the Export Rebate Rates for Some Commodities,” Ministry of Commerce, People’s Republic of China, on the Internet at english.mofcom.gov.cn/aarticle/policyrelease/domesticpolicy/200707/20070704853925.html (visited July 15, 2008).

⁴ *Exchange Rates and International Data* (Washington, DC, Federal Reserve Board, September 2008).

⁵ “Oil Prices Give Stocks a Bounce,” *The Washington Post*, Jan. 9, 2007, p. D05.

- ⁶ *This Week in Petroleum* (Energy Information Administration, Jan. 18, 2007).
- ⁷ *Ibid.*, Feb. 8, 2007.
- ⁸ *Ibid.*, Nov. 20, 2007.
- ⁹ *Short-Term Energy Outlook Supplement* (Energy Information Administration, November 2007).
- ¹⁰ Matt Chambers and Elizabeth Landau, "As Oil Breaks Through \$90, Further Gains Seen Fated," *The Wall Street Journal*, Oct. 26, 2007 p. C03.
- ¹¹ Ivan Watson, "U.S.-Iran Tensions Highlight Choke Point of Gulf Oil," National Public Radio, May 11, 2007; on the Internet at www.npr.org/templates/story/story.php?storyId=10135304 (visited July 7, 2007).
- ¹² *This Week in Petroleum*, Apr. 02, 2007.
- ¹³ *International Petroleum Monthly* (Energy Information Administration, June 10, 2008).
- ¹⁴ "Crude Oil Hits New High," *National Petroleum News*, November 2007, p. 6.
- ¹⁵ *Short-Term Energy Outlook*, March 2008.
- ¹⁶ *Ibid.*
- ¹⁷ *Ibid.*
- ¹⁸ Patrick Barta, Russell Gold, and Shai Oster, "As Oil Price Sets New High, Stress Hits Developing Nations; Fuel Shortages, Unrest Spur Beijing to Act; Market Turning Point?" *The Wall Street Journal*, Nov. 1, 2007, p. A1.
- ¹⁹ *International Petroleum Monthly*, August 2006–August 2008.
- ²⁰ *China Energy Profile* (Energy Information Administration, June 16, 2008).
- ²¹ Joanna Slater, "Weak Dollar Might Change Course," *The Wall Street Journal*, Jan. 2, 2008, p. R6.
- ²² "Prices More Likely To Rise Than Fall," *Petroleum Economist*, April 2008.
- ²³ Steven Mufson, "Taking Cues From Fed, Speculators Bid Up Oil," *The Washington Post*, Sept. 22, 2007, p. D01.
- ²⁴ "Prices More Likely."
- ²⁵ Wen-yuan Huang, "Tight Supply and Strong Demand May Raise U.S. Nitrogen Fertilizer Prices," *Amber Waves* (U.S. Department of Agriculture, Economic Research Service, November 2007), on the Internet at www.ers.usda.gov/AmberWaves/November07/Findings/TightSupply.htm.
- ²⁶ Deepti Ramesh, Peck Hwee Sim, and Ian Young, "Asian Petrochemicals: An Industry in Transition," *Chemical Week*, May 9, 2007, p. 44.
- ²⁷ See "Export Patterns Shift With Falling Dollar," *Chemical and Engineering News*, July 7, 2008, p. 71; and Ramesh, Sim, and Young, "Asian Petrochemicals," p. 44.
- ²⁸ Rebecca Coons, "Escalating Oil Prices Continue To Pressure Downstream Pricing," *Chemical Week*, Nov. 7, 2007, p. 25.
- ²⁹ *The Plastics Exchange*, Dec. 23, 2007, on the Internet at <https://theplasticsexchange.com/default.aspx> (visited Dec. 23, 2007).
- ³⁰ Peck Hwee Sim, "Petrochemicals: Strong Economic Growth, Capacity Delays Feed Optimism," *Chemical Week*, Mar. 29, 2006, p. 27.
- ³¹ Coons, "Escalating Oil Prices," p. 25.
- ³² Rebecca Coons, "Prices Spike on Tight Supply, Strong Demand," *Chemical Week*, Oct. 24, 2007, p. 43.
- ³³ Carolyn Cui and Ann Davis, "Why Copper Prices Keep Rolling On," *The Wall Street Journal*, Feb. 2, 2008, p. B1.
- ³⁴ PRC General Administration of Customs, "China's Customs Statistics," on the Internet at www.uschina.org/statistics/tradetable.html (visited Aug. 8, 2008).
- ³⁵ Allen Sykora, "Copper Gleams as China Buys," *The Wall Street Journal*, Apr. 12, 2007, p. C10.
- ³⁶ Matt Whittaker, "Copper Futures Surge 6.4% as Quake Hits Top Mining Area; It's Too Soon To Tell If Output In Chile Will Be Diminished," *The Wall Street Journal*, Nov. 15, 2007, p. C5.
- ³⁷ Tom Stundza, "Nickel buyers investigate material substitutes," *Purchasing*, July 14, 2007, p. 48B31.
- ³⁸ *Ibid.*
- ³⁹ Robert Guy Matthews, "Politics & Economics: Steel Prices Poised to Rise Faster," *The Wall Street Journal*, Sept. 8, 2007, p. A4.
- ⁴⁰ Matt Whittaker, "Gold Likely to Benefit if Dollar Stays Weak," *The Wall Street Journal*, Oct. 15, 2007, p. C4.
- ⁴¹ "Catalytic Converter Demand Pushes Platinum to a New High," *Professional Engineering*, Nov. 21, 2007, p. 10.
- ⁴² "Palladium Price Bounces \$7.40 to \$358.10," *Platt's Metals Week*, Feb. 26, 2007, p. 10.
- ⁴³ Allen Sykora, "Platinum Group's Prices Sag After Auto-Catalyst Advance," *The Wall Street Journal*, July 28, 2007, p. B3.
- ⁴⁴ Jim Hawe, "Brakes on Palladium," *Barron's*, Sept. 10, 2007, p. M16.
- ⁴⁵ Suzanne Deffree, "2007: A Less-Than-Memorable Year for DRAM," *Electronics Design, Strategy, News*, Jan. 1, 2008, on the Internet at www.edn.com/article/CA6515367.html.
- ⁴⁶ See World Gold Council, "Supply and Demand Statistics," on the Internet at www.research.gold.org/supply_demand (visited May 15, 2008); and Aaron Pressman, "A Bumpy Ride Up Gold's Yellow Brick Road," *Business Week*, Dec. 17, 2007, p. 70.
- ⁴⁷ Andrea Jezovit, "Hot For All The Wrong Reasons," *Canadian Business*, Mar. 31, 2008, p. 19.
- ⁴⁸ Vietnam Coffee and Cocoa Association, *Outlook*, April 2007.
- ⁴⁹ Australian Bureau of Agricultural Resource Economics, *Australian Crop Report No. 141*, February 2007, on the Internet at www.abareconomics.com/interactive/cr_feb07 (visited Aug. 12, 2008).
- ⁵⁰ Gary Vocke, "Global Production Shortfalls Bring Record Wheat Prices," *Amber Waves* (U.S. Department of Agriculture, Economic Research Service, November 2007), on the Internet at www.ers.usda.gov/AmberWaves/November07/Findings/Global.htm (visited Apr. 11, 2008).
- ⁵¹ Lauren Etter, "Ethanol Creates A Pricing Puzzle For Corn Farmers; Boom Complicates Bets On Planting, Contracts; Straddling Two Markets," *The Wall Street Journal*, Mar. 29, 2007, p. A.1.
- ⁵² Data from U.S. Department of Agriculture, National Agriculture Statistics Service.
- ⁵³ National Pork Producers Council, *Capital Pork Report*, July 2008), p. 3.
- ⁵⁴ "Resolutions Adopted by the International Committee of the OIE [Organization for Animal Health] during its 75th General Session, 20–25 May 2007, on the Internet at www.oie.int/download/SG/2007/A_RESO_2007_webpub.pdf.
- ⁵⁵ Matthews, "Politics & Economics," p. A.4.
- ⁵⁶ Robert Guy Matthews and Ann Jolis, "Higher Steel Prices Expected As Inventories Start to Drop," *Wall Street Journal*, Aug. 2, 2007, p. A.6.
- ⁵⁷ Matt Whittaker, "Gold Likely To Benefit," p. C4.
- ⁵⁸ Rebecca Coons, "Escalating Oil Prices," p. 25.
- ⁵⁹ "Directive 2002/95/EC of the European Parliament and of the Council of 27 January 2003 on the restriction of the use of certain hazardous substances in electrical and electronic equipment," *Official Journal of the European Union*, February 2003, on the Internet at europa.eu/eur-lex/pri/en/oj/dat/2003/l_037/l_03720030213en00190023.pdf (visited Aug. 15, 2008).
- ⁶⁰ Due to budgetary constraints, beginning with the January 2008 release published on February 15, the price series for inbound ocean liner freight services will no longer be published.
- ⁶¹ Publication of this index was discontinued due to budgetary constraints.
- ⁶² Due to budgetary constraints, beginning with the November 2007 release published in December, the price series for this index will no longer be published.
- ⁶³ Due to budgetary constraints, beginning with the January 2008 release published on February 15, the price series for export postsecondary education services will no longer be published.
- ⁶⁴ Kim Clark, "College Tuition Prices Continue To Rise," *US News and World Report*, Oct. 23, 2007.