Import price declines in 1986 reflected reduced oil prices

Despite price increases for major product categories resulting from the decline in the dollar, the overall import index decreased for the fourth consecutive year; export prices were relatively stable again last year

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Prices of goods imported into the United States in 1986 were influenced primarily by three divergent trends. First, prices of imports originating largely in industrialized countries rose significantly as the currencies of those countries continued to appreciate against the dollar. Second, prices of goods which are produced by the newly industrialized countries and developing countries were more stable as those countries' currencies did not appreciate substantially against the dollar. However, both of these trends were outweighed by the third trend, a large decline in the price of crude oil, which caused an overall decrease of 8.7 percent in prices of all commodities imported. This was the fourth consecutive annual decline of the import index. If fuels are excluded, however, import prices rose 8.4 percent. (See chart 1.)

The dollar's decline against currencies of the United States' major industrialized trading partners began in the first quarter of 1985. The decline accelerated in September 1985 because the United States and four other industrialized countries agreed to intervene in foreign exchange markets to weaken the dollar. Between its peak in the first quarter of 1985 and the fourth quarter of 1986, the dollar declined approximately 60 percent against the Japanese yen and 63 percent against the West German mark. (See chart 2.) By contrast, the dollar remained comparatively stable against currencies of other major trading partners, such as the Canadian dollar, against which it appreciated 2 percent, as well as the Taiwanese dollar and the South Korean won, which are tied to the dollar.[1]

Import price decreases were recorded for fuels and related products, which plunged 51.5 percent, and chemicals, which fell 1.1 percent. Overall, increases were recorded in indexes for most major product areas. The index for machinery and transport equipment rose 12.0 percent, while the miscellaneous manufactured products index moved up 8.7 percent.

U.S. export prices remained relatively stable for the third year in a row, declining 0.5 percent. This followed 1.4-percent decreases each in 1984 and 1985. (See chart 3.) Moderate increases were recorded for machinery and transport equipment (1.6 percent); intermediate manufactured goods (3.6 percent); and crude materials (8.0 percent), among others. However, these increases were offset by decreases in the indexes for food (−13.2 percent) and for chemicals (−4.5 percent).

Trends in U.S. foreign trade

Despite the decline of the dollar against the currencies of the U.S. major industrialized trading partners, the U.S. merchandise trade deficit climbed for the sixth consecutive year to a record high of $170 billion, 14.3 percent above

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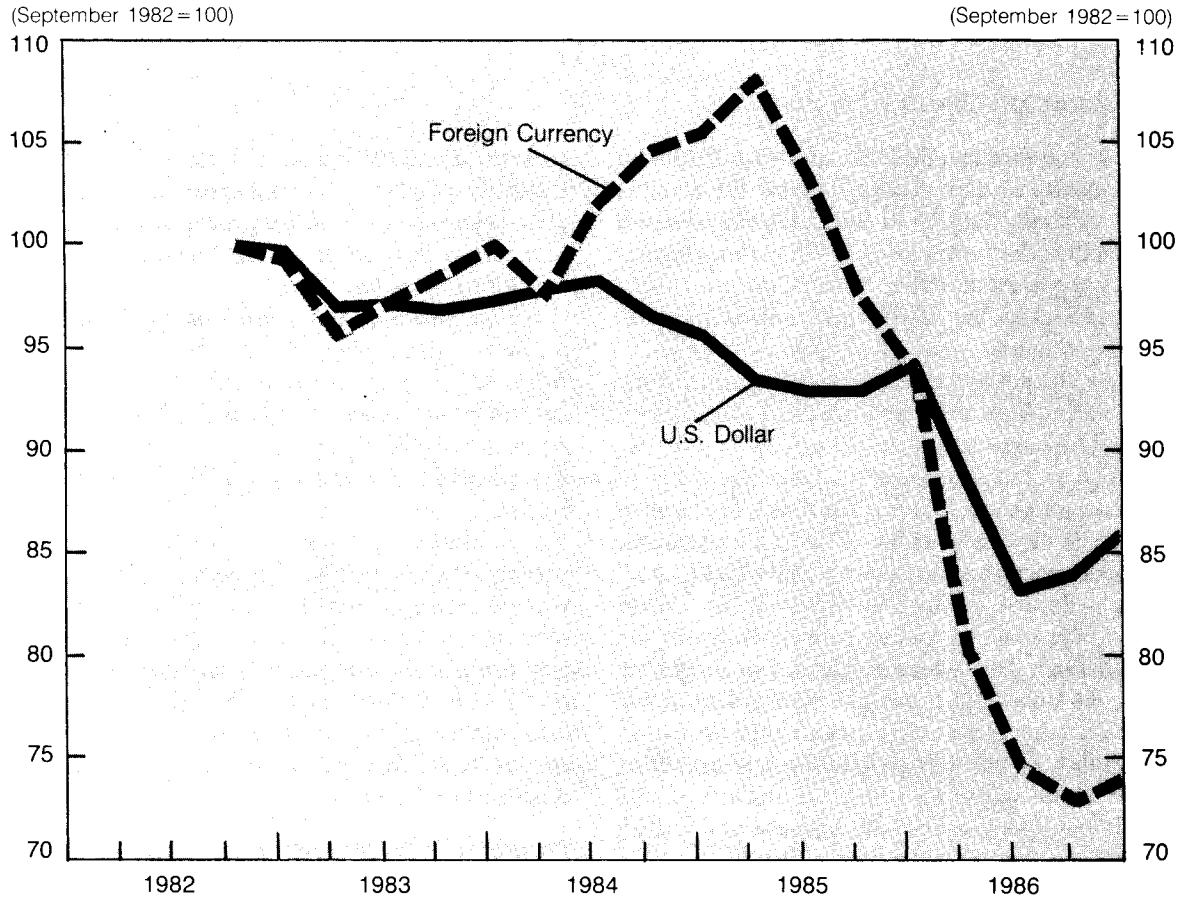
the 1985 deficit of $149 billion. (See chart 4.) The bulk of the increase can be attributed to a larger value of imports, which rose $26 billion to $387 billion, while exports rose only $4 billion to $217 billion.[2]

The U.S. deficit with Japan, the largest deficit with one country, rose $8.9 billion to $58.6 billion in 1986. U.S. imports from Japan climbed 24.4 percent to $85.5 billion, while U.S. exports to Japan rose only 11.1 percent to $26.9 billion. The United States also had large deficits with Canada ($23.3 billion) and the European Community ($26.4 billion). In addition, the U.S. deficit with newly industrialized South Korea, Taiwan, Singapore, and Hong Kong has grown from less than $500 million in 1975 to $30.8 billion in 1986.[3] Several reasons have been proposed to explain the increasing deficit, including the *j*-curve effect, willingness of foreign exporters to absorb currency shifts, the international debt crisis, and increased trade with countries whose currencies did not appreciate against the dollar.

The *j*-curve effect, in which trade balances tend to worsen before improving following a currency depreciation, is the result of the same volume of imports being bought at higher prices, resulting in a larger import bill. In the short run, import volume levels remain unchanged because of a lag in the response time to the new currency exchange rates by both consumers and producers. These lags arise from delay in realizing the new competitive situation, contracts negotiated before the currency realignment remaining in effect, difficulties in changing production patterns to accommodate the new situation, and slowly changing demand patterns.

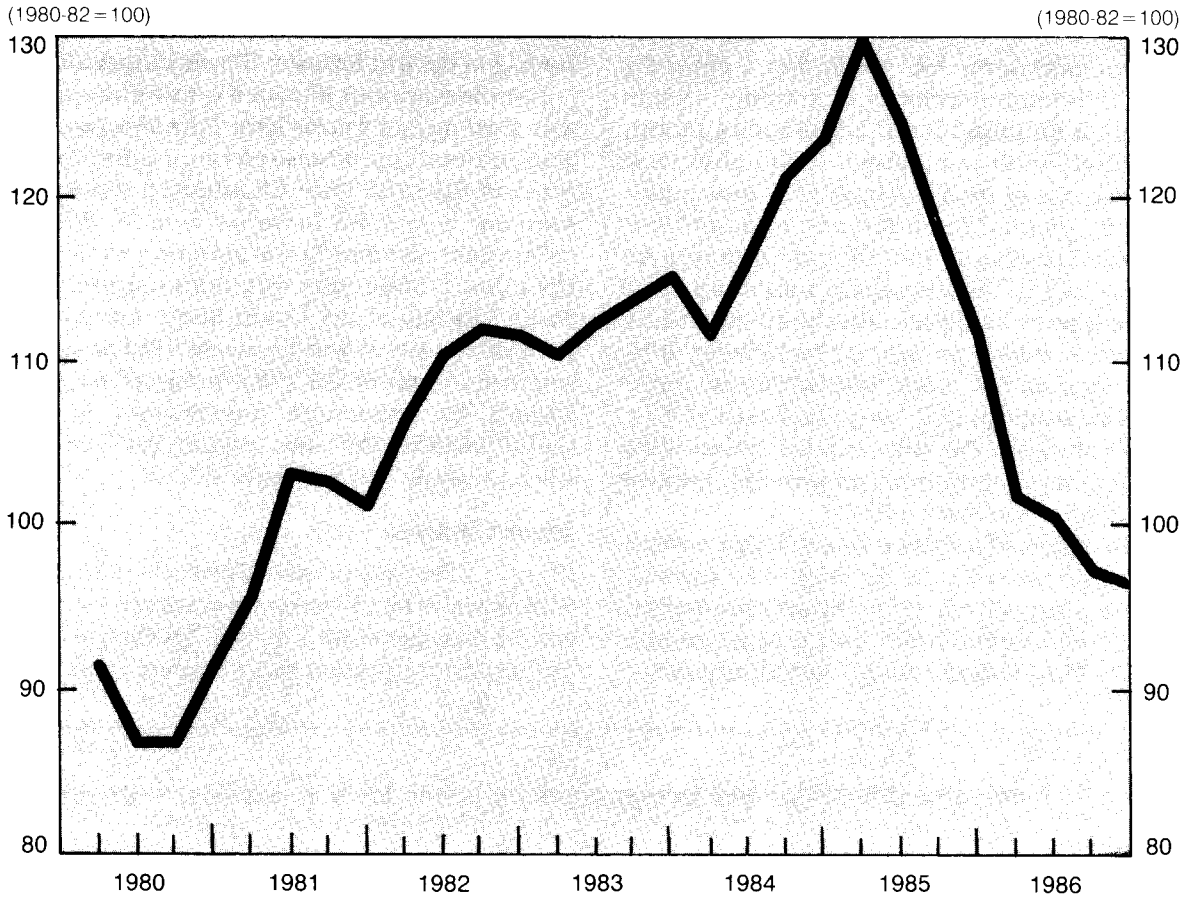
Another explanation for the continuing deficit is the fact that many foreign producers, to maintain U.S. market shares, did not increase prices in direct proportion to exchange rate shifts. When the dollar was strong, many foreign manufacturers accumulated large profits. This cushion allowed them, when faced with a weakening dollar, to

Chart 1. Indexes of U.S. dollar and foreign currency prices for U.S. imports, 1982–86



SOURCE: Bureau of Labor Statistics, based on data from the Bureau and from the Morgan Guaranty Trust Co.

Chart 2. Index of the effective real exchange rate of the U.S. dollar, 1980–86



NOTE: Data are for the last month in the quarter, rather than the 3-month average.

SOURCE: International Economics Department, Morgan Guaranty Trust Co.

moderate price increases by accepting lower profit margins. The machinery and transport index reflects this trend; import prices increased only 12.1 percent while the currencies of Japan and West Germany, the two major trading partners in this category, rose 25.3 percent and 28.2 percent, respectively, during 1986.[4]

Another factor contributing to the deficit is Third World debt, particularly that of Latin American countries, which owe approximately half of total Third World debt, or $400 billion. About $300 billion of that figure is accounted for by Argentina, Brazil, and Mexico.[5] Interest payments on those debts reduce foreign exchange necessary to buy imports, many of which would come from the United States. Brazil, for example, produced a $12 billion trade surplus, yet $10 billion of that was used for interest payments.[6] U.S. exports to Latin American countries declined by 7.0 percent (from $30.1 billion to $28.0 billion)[7] between 1982, when the debt crisis first came to the fore, and 1986.

Furthermore, competition from Pacific Rim countries has continued to put pressure on the trade balance. These nations' currencies were tied to the dollar during 1986, so that when the value of the dollar fell, the newly industrialized countries did not lose the cost advantage they enjoyed. The falling dollar actually made the industrializing nations' products more competitive in the United States against the more expensive Japanese and German goods. As a result, the volume of imports from newly industrialized countries grew as they struggled to capture the lower priced product market. This is the same position Japan held 10 to 15 years ago. Trade with these newly industrialized countries constitutes 11.2 percent of all U.S. trade.[8]

There have been several efforts to measure how far the dollar has fallen. Exchange rate indexes are published by the Federal Reserve Board of Governors, Morgan Guaranty Trust, the International Monetary Fund, the Department of Commerce, the International Trade Commission, Manufacturers Hanover Trust, and the Atlanta and Dallas Federal Reserve Banks, among others. These indexes, constructed

to measure currency movements, differ in their estimates of the dollar's decline because of the varying methodologies used in their design. For example, the Federal Reserve Board of Governors' index uses weights which are based on percentages of total world trade, or multilateral trade, while others use weights based on bilateral trade. A multilaterally trade-weighted index gives less weight than a bilaterally trade-weighted index to currencies of countries such as Canada, which is the United States' largest trading partner, but is a relatively small world trader. It also gives more weight to currencies of relatively small U.S. trading partners, such as Belgium and the Netherlands, because of their trade with other European nations. Other differences in the construction of indexes include whether weights are based on fixed or moving periods; the number of trading partners included; whether indexes are adjusted for differing inflation rates among countries, that is, whether they are real or nominal; and the algorithm used. Largely as a result of these differing methodologies, the trade-weighted indexes show the dollar falling anywhere from 2.0 percent to 35.0 percent from March 1985 to December 1986.

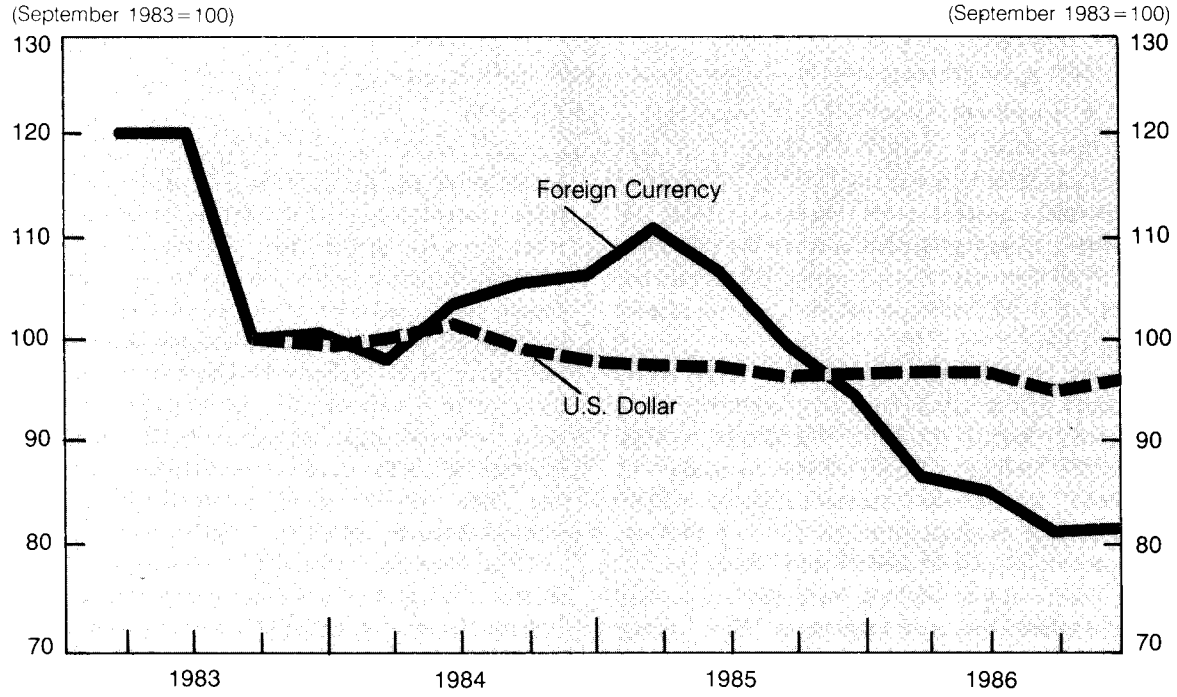
The Bureau of Labor Statistics is constructing a nominal average exchange rate index for the dollar on a quarterly basis. The BLS index will use 1985 bilateral trade weights and exclude those countries which have experienced high inflation rates. These indexes can be used in conjunction with export and import price indexes in dollar terms to examine U.S. export and import price movements in foreign currency terms. In contrast to the existing exchange rate indexes which are published only at the combined export and import level, the BLS index will be published at the two-digit, one-digit, all-export, and all-import levels according to the SITC Revision II trade classification system.

Price developments discussed in this article are based on data from the BLS International Price Program. That program produces import and export price indexes based on the Standard Industrial Trade Classification scheme. Both indexes use a modified Laspeyres formula. Price data are collected for more than 22,000 products, and are not seasonally adjusted. Import price indexes are weighted by the 1980 Tariff Schedule of the United States Annotated. Export price indexes are weighted using the 1980 Schedule B classification system of the U.S. Bureau of the Census. In addition, the International Price Program, in 1985, also started producing SIC-based indexes and Bureau of Economic Analysis "end-use" price indexes.

Import indexes

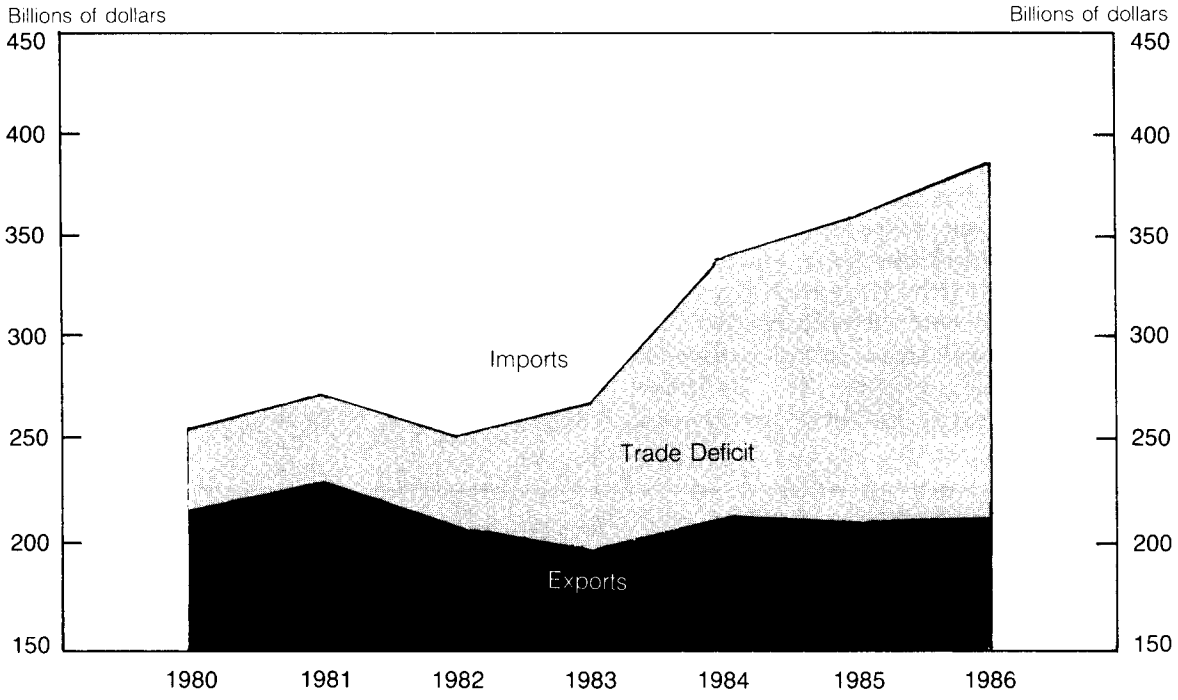
Energy. The fuels and related products category makes up 32.8 percent of the all-import index and was the major factor causing the import index's decline. The fuels index fell 57.9 percent over the year as crude petroleum prices plummeted

Chart 3. Indexes of U.S. dollar and foreign currency prices for U.S. exports, 1983–86



Source: Bureau of Labor Statistics, based on data from the Bureau and from the Morgan Guaranty Trust Co.

Chart 4. Volume of U.S. exports and imports of merchandise, 1980–86



SOURCE: U.S. Department of Commerce.

64.3 percent. The fuel index's decrease was concentrated in the first three quarters with prices rebounding slightly in the fourth quarter. In response to these price decreases, the volume of U.S. petroleum imports rose from an average of 3.2 million barrels per day in 1985 to 4.1 million in 1986.[9] During the same period, U.S. average daily production fell 3.3 percent from 9.0 million barrels a day to 8.7 million.[10] Despite the increased volume of petroleum imports, the U.S. deficit for petroleum fell $15.0 billion to $37.4 billion.[11] (See chart 5.)

Behind the precipitous fall in oil prices was a change in marketing strategy by Saudi Arabia in mid-1985 when it abandoned its role as swing producer in the oil market and adopted a system of "net-back" pricing, or linking the price of their crude oil to the value of the final products refined from that oil to ensure purchasers a profit. As swing producer, Saudi Arabia had found itself decreasing oil production and losing market share to maintain the official OPEC (Organization of Petroleum Exporting Countries) price. With its new system of net-back pricing, the Saudis were able to increase production.

At the end of 1985, the change in Saudi pricing started to affect import prices, as increased Saudi production hit the market at the end of the peak winter buying season in what had been a relatively mild winter. The index for petroleum and petroleum products plunged 31.7 percent in the first quarter of 1986. Saudi production rose from an average 2.4 million barrels a day in June of 1985 to 4.5 million in January of 1986, or 28.6 percent more than they produced in January 1985.[12] World production for January 1986 was 4.9 percent above January 1985,[13] and U.S. import volume rose 22.7 percent above the year-earlier volume.[14]

In the spring, OPEC ministers were unable to agree on individual quotas. Petroleum prices continued to decline—the index fell an additional 34 percent in the second quarter—as production and U.S. imports continued to rise. OPEC production rose to an average of 19.7 million barrels a day in June, with Saudi Arabia raising its production to 5.3 million.[15] U.S. imports of petroleum and petroleum products soared to 7.0 million barrels a day in June, 42.9 percent above imports for June 1985.[16]

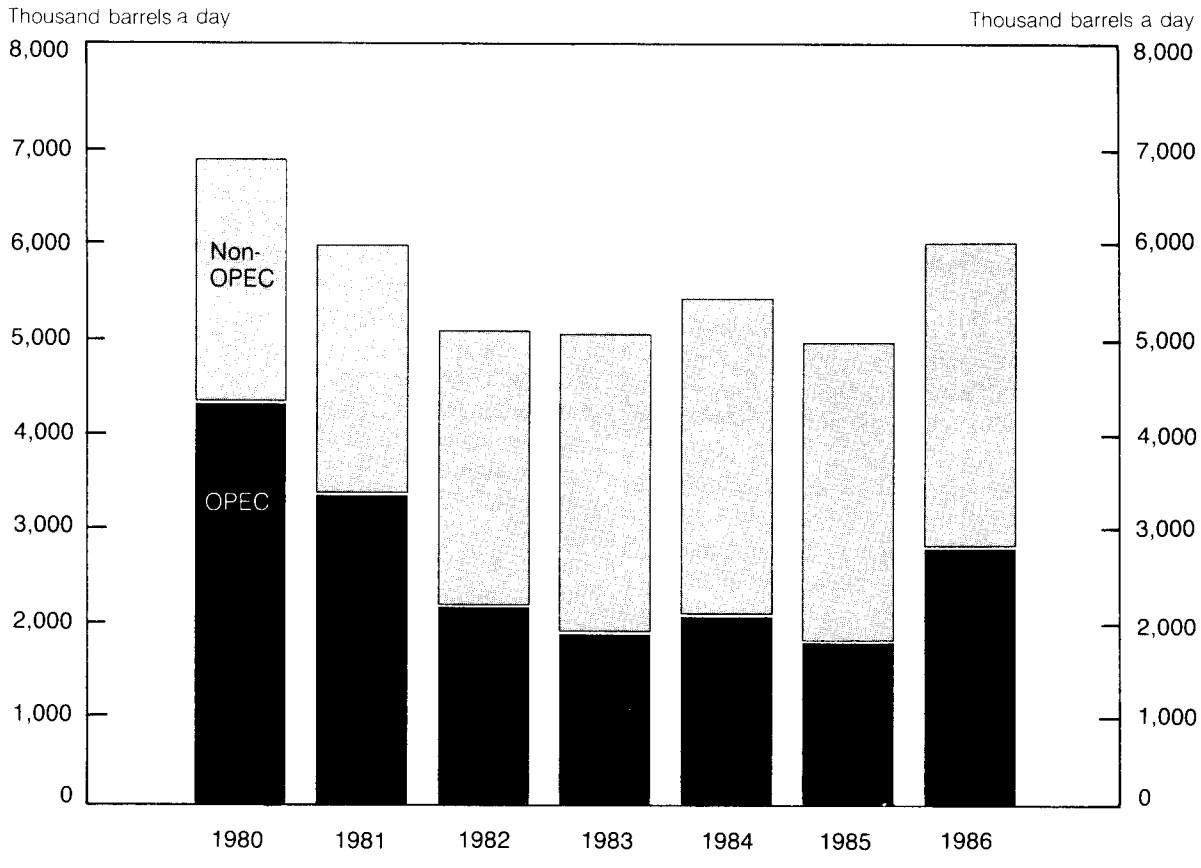
In August, OPEC ministers, meeting in Geneva, agreed to limit September and October production to 16.8 million barrels a day. This agreement set quotas for individual producers at the same level as agreed upon in December 1984. As a result, prices declined at a more moderate rate in the third quarter, and the petroleum and petroleum products index fell only 11.9 percent. Prices rebounded in the fourth quarter, and the index for petroleum and petroleum products rose 18.1 percent. In October, OPEC ministers extended the August agreement to include November and December with an increase of the total OPEC ceiling to 17 million barrels a day.

Machinery and transport equipment. Prices in the machinery and transport equipment index, which represents 25 percent of the all-import index, rose 12.0 percent for the year, after rising 4.2 percent in the previous year. (See chart 6.) Substantial price gains were recorded in seven of the eight categories which make up the index. The hikes are largely attributable to the dollar's decline against the yen and European currencies. The majority of products in this category are imported from Japan and Germany and the weakening of the dollar against these nations' currencies is reflected in the rise of the index during 1986, along with the effects of various quotas and pricing agreements. In contrast, prices in the telecommunication index, which includes such items as TV's, radios, and VCR's, remained relatively flat. Many of the products in the telecommunication index are imported from newly industrialized countries whose currencies have not appreciated against the dollar. The intense competition from these nations has forced Japanese and European suppliers to limit price increases. As a result, the telecommunication index rose only 4.5 percent in 1986.

Despite the weakening of the dollar, imports continued to flow into the United States with $162 billion being traded in 1986, up from $141.7 billion in 1985.[17] For instance, the 14.9-percent price hike in the passenger automobile index did not stem the flow of cars and trucks into the United States in 1986. Market penetration of imported cars rose to 30.0 percent in 1986, from 25.7 percent in 1985. The fast-growing U.S. auto market is the largest in the world; car and truck sales reached record levels of 16.3 million in 1986, compared with 15.7 million in 1985. Of the 16.3 million units sold, 5 million were imports.[18] Japan accounted for 47 percent of auto imports, while Canadian autos constituted 25.4 percent.[19]

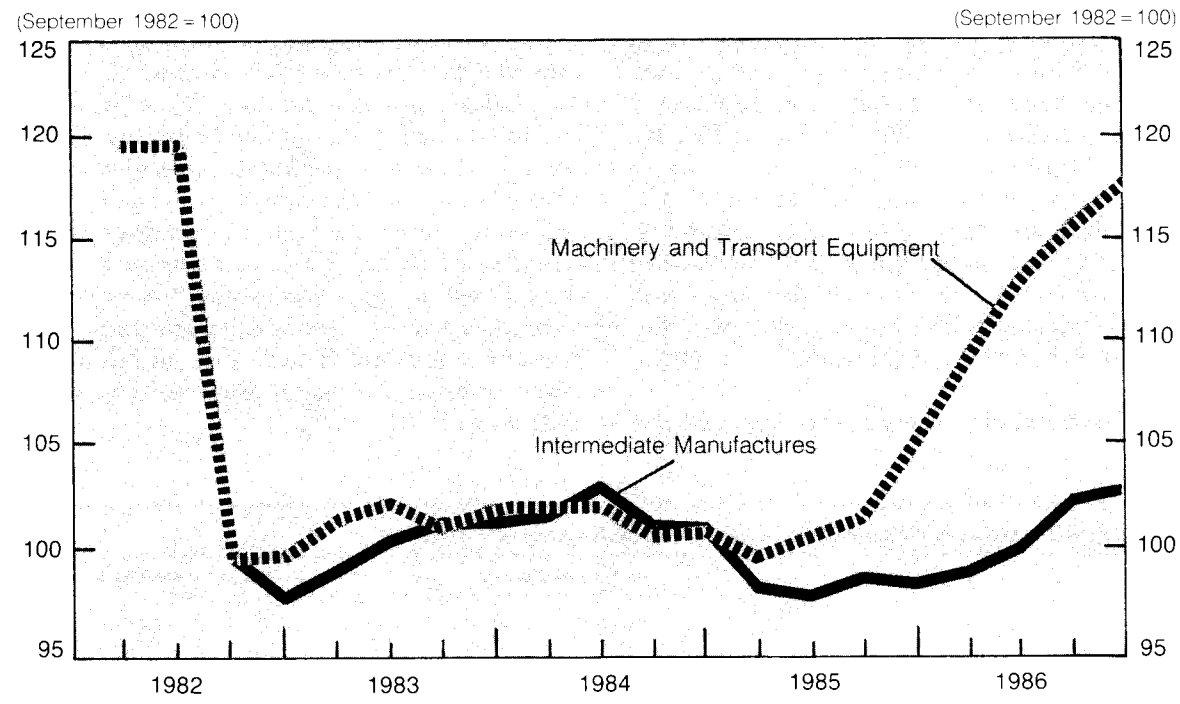
The fear of stronger protectionist action, along with the appreciation of the yen, prompted Japanese manufacturers to begin operating or building plants in North America.

Chart 5. Annual average U.S. imports of crude oil and petroleum products, OPEC and non-OPEC sources, 1980–86



Source: U.S. Department of Energy, Energy Information Administration.

Chart 6. U.S. Import Price Indexes for selected commodity groups, 1982-86



Currently, three of the nine Japanese automakers are operating plants in the United States. In 1986, such transplant facilities built 4 percent, or 365,000, of the 8.2 million cars built in the United States.[20] These facilities are expected to add up to 1.8 million more cars by 1989.[21]

Additional pressure is being placed on the U.S. auto producers at the less expensive end of the price scale. Korea and Yugoslavia began exporting cars to the United States in February 1986 and took the subcompact market by surprise. South Korea set a record for an imported auto's first year by selling more than 130,000 cars.[22] These sales translate into about a $1 billion automotive trade deficit between the United States and Korea.[23] Yugoslavia's entrance was not as successful, with fewer than 28,000 vehicles sold in 1986.[24]

Prices in the electrical machinery and equipment import index increased steadily throughout the year, rising 10.7 percent in 1986. In the semiconductor group, which accounts for 40 percent of the electrical machinery index, prices rebounded 13.6 percent in response to a Japan/U.S. semiconductor agreement, after dropping 14.6 percent in 1985. Electrical machinery and equipment imports jumped to $19.9 billion in 1986, up from $18.2 billion in 1985.[25]

In the early 1980's, makers of semiconductors, or computer chips, in Japan and the United States expanded their capacity in anticipation of a 30- to 100-percent annual sales growth when increased sales of products ranging from personal computers to video games created intensified demand for chips. However, instead of growing, the computer industry's sales stagnated, and a glut of chips triggered sharp price-cutting practices in the industry. For example, the cost of a 256K dynamic random access memory (dram) chip fell from $40 to as little as $3.[26] By instigating higher discounting practices, Japan was able to lure customers away from U.S. suppliers. The dram was developed in the United States, but Japan now holds 90 percent of the world market.[27]

The U.S. electronics industry obtained some relief in July, when Japan signed a 5-year agreement to stop "dumping" chips, specifically drams and erasable programmable read-only memories (eproms), at below fair market value in the United States and other countries. Japan also agreed to double purchases of American-made semiconductors above the $800 million a year level. With the new trade agreement, the Commerce Department sets fair market values for each Japanese chip exporter to the United States. The department tallies an individual chipmaker's cost of making each product and adds an 8-percent profit to arrive at the price for which the manufacturer is allowed to sell the semiconductor.[28] The agreement caused fair market value of chips to soar. For example, 256K dram prices jumped from

$3 to $8.75.[29] The effect of the agreement on chip prices was reflected in the rise of the index through the last three quarters of the year.

Exchange rate fluctuations were largely responsible for lifting the metalworking machinery index 17.9 percent in 1986, after it rose 9.1 percent in 1985. The major trading partners in this index include Japan, West Germany, and Switzerland, countries whose currencies appreciated against the dollar. Imports of machine tools amounted to $2.1 billion in the first 11 months of 1986, up 33 percent from the same period in 1985. Imports of metal cutting machinery totaled $1.5 billion and metal forming tools, $546.8 million.[30] Japan is the major supplier with U.S. sales totaling $1.1 billion in the first 11 months of 1986. Germany is next with 11-month sales totaling $341 million, followed by Taiwan selling $108.9 million and Switzerland with $102.6 million.[31]

In May 1986, the Reagan Administration requested that Japan, West Germany, Taiwan, and Switzerland voluntarily limit exports of machine tools to the United States for national security reasons. The agreement was designed to limit the United States' dependency on foreign manufacturers who make military equipment such as tanks and fighter planes. The National Machine Tool Builders Association estimated that imports account for about 43 percent of the $4.3 billion machine tool industry.[32] In December, Japan and Taiwan agreed to cut imports to the United States by 20 percent, which will push import penetration back to 1981 levels. The 5-year trade pact also calls for the Administration to monitor imports from other machine tool exporting countries and to place restrictions on these nations if they fill the void left by Japan and Taiwan.[33] West Germany and Switzerland have not negotiated an agreement, but the Administration informed these two nations that further action would be required if their machine tool exports exceeded 1985 levels.[34]

Table 1. Changes in Import Price Indexes for selected categories of goods, 1985–86

SITC category	Commodity	Percentage of 1980 trade value	Annual percent change		Quarterly percent change			
			December 1984 to December 1985	December 1985 to December 1986	December 1985 to March 1986	March 1986 to June 1986	June 1986 to September 1986	September 1986 to December 1986
	All commodities	100.000	−1.1	−8.7	−6.1	−6.0	0.8	2.5
	All commodities, excluding fuels and related products	67.223	0.9	8.4	3.4	1.1	2.9	0.6
0	Food	6.554	4.8	2.4	10.3	−7.7	4.2	−3.5
06	Sugar, sugar preparations, and honey	.925	−5.6	11.1	11.3	−2.4	1.9	0.3
07	Coffee, tea, cocoa	2.241	10.6	−5.6	33.0	−19.4	3.8	−15.0
1	Beverages and tobacco	1.082	3.3	3.6	0.7	1.4	0.2	1.3
2	Crude materials	4.275	−7.8	8.0	3.3	1.2	2.9	0.4
24	Wood	.865	−4.4	7.8	4.9	1.9	2.9	−2.0
25	Pulp and waste paper	.708	−18.7	22.4	−1.2	6.7	7.6	7.9
28	Metalliferous ores and metal scrap	1.465	−5.8	5.9	4.9	1.2	2.7	−2.9
3	Fuels and related products	32.776	−6.0	−51.5	−30.1	−32.2	−10.4	14.3
33	Crude petroleum and petroleum products	30.653	−4.8	−52.7	−31.7	−34.0	−11.1	18.1
4	Fats and oils	.226	−56.0	2.0	−18.2	−5.1	−9.7	45.4
5	Chemicals and related products	3.475	−3.0	−1.1	0.4	−1.4	0.1	−0.2
6	Intermediate manufactured products	13.520	−2.5	4.5	0.4	1.2	2.4	0.4
67	Iron and steel	3.127	−4.4	0.2	−0.8	0.7	0.8	−0.4
68	Nonferrous metals	3.123	−7.9	1.5	−1.2	−0.6	5.8	−2.3
7	Machinery and transport equipment	25.442	4.2	12.0	4.0	3.4	2.4	1.7
73	Metalworking machinery	.755	9.1	17.9	7.0	2.6	2.8	4.5
76	Telecommunications and sound recording and reproducing equipment	2.785	−3.0	4.5	0.9	2.5	2.3	−1.2
77	Electric machinery and equipment	3.396	−3.6	10.7	1.7	3.6	2.3	2.8
78	Road vehicles and parts	10.887	5.8	13.1	4.8	3.0	2.1	2.6
8	Miscellaneous manufactured articles	9.794	0.8	8.7	2.5	1.5	4.5	0.1
84	Clothing	2.666	−2.9	3.4	−0.8	1.4	1.8	0.9
85	Footwear	1.232	0.1	2.9	3.0	−3.3	2.5	0.8
87	Professional, scientific, and controlling instruments and apparatus	.628	10.2	16.3	3.9	5.7	5.2	0.7
88	Photographic apparatus and supplies, optical goods, watches and clocks	1.162	3.9	14.0	5.1	3.9	3.6	0.7
89	Miscellaneous manufactured articles, n.e.s.	3.286	1.7	13.4	4.3	1.3	8.6	−1.2

[1] This category includes indexes in addition to those shown here. For all of the indexes available in each category, see "U.S. Import and Export Indexes," *U.S. Department of Labor News Release* 87–40, January 29, 1987.

n.e.s. = not elsewhere specified.

Intermediate manufactures. The intermediate manufactures import index, which represents 13 percent of all imports, climbed 4.5 percent in 1986. Price increases were recorded in all nine categories. The iron and steel index, which encompasses 23 percent of intermediate manufactures, edged up 0.2 percent, compared with a 4.4-percent decline in 1985. This modest increase can be attributed, partially, to exchange rate fluctuations. Much of the steel imported into the United States comes from Japan and the European Community, countries whose currencies have appreciated against the dollar in 1986, raising the dollar price of foreign steel.

Even though the dollar price of steel has increased, international steel prices remain depressed. Declining demand and overcapacity characterized the industry in 1986, with industrialized nations' demand for steel falling 10 percent since the peak year of 1973.[35] This decline can be attributed to slower economic growth and decreasing steel usage in steel consuming industries such as construction and automobiles. According to the International Iron and Steel Institute, the industrialized nations currently have about 450 million tons of steel capacity and consume only 321 million tons. In an effort to curb the overcapacity problem, Western Europe, Japan, and the United States have cut production by 35 million tons, 13 million tons, and 33 million tons, respectively, since the start of 1973.[36] But developing countries are cutting prices instead of production, and exporting the excess tonnage to the United States.[37] These new entrants, which include Taiwan, Korea, and Brazil, have taken an expanding portion of the international steel market and have exerted downward pressure on world steel prices.

Third World excess capacity is often shipped to the United States because, relatively speaking, steel prices in the United States are still among the highest in the world. Steel imports have been significant, totaling 26.7 million tons in 1984 and 24.9 million tons in 1985.[38] The Reagan Administration negotiated voluntary restraint agreements in October 1984 with countries whose steel exports to the United States had increased significantly. The agreement included 17 countries and the European Community (excluding Portugal and Spain, which negotiated separate agreements) and was expected to limit the share of imports to 18.5 percent of the American market.[39]

Despite these controls, imports are still taking about 23 percent of the U.S. steel market. For the first 10 months of 1986, imports captured 22.7 percent of the market, down from the 25.3 percent foreign suppliers seized during the same period in 1985.[40] Trade data indicate a shift from countries agreeing to voluntary restraints to other countries, partially explaining the continued tide of steel imports. The share of total steel imports accounted for by countries which did not agree to voluntary restraints increased from 18.9 percent to 24.8 percent during the period. Of these countries, Canada is by far the leading supplier, with steel coming into the United States at a rate 10 percent higher in the first 10 months of 1986 than the same period in 1985.[41]

Similar to the steel industry, shrinking demand and abundant supplies have had a dampening effect on world metals prices. Price decreases were recorded for the copper, nickel, and tin subgroups. These decreases, however, were offset by price increases in the silver and platinum and zinc indexes. As a result, the nonferrous metals category rose 1.5 percent for the year. The U.S. demand for nonferrous metals has been decreasing, due primarily to the downsizing of automobiles, substitutions of lighter materials such as plastic, and replacement by such new technology materials as fiber optics in telecommunications.

Nonferrous metal prices registered their first increase in more than a year, rising 5.8 percent in the third quarter before falling 2.3 percent in the fourth quarter. The annual rise in this index can primarily be attributed to a 32.1-percent increase in platinum prices. Gold, silver, and platinum are "price sensitive" because they are traded daily in London, New York, and elsewhere, with their values shifting constantly according to such factors as the strength of the dollar, the level of interest rates, inflation, trade deficits, and political actions.[42]

Third-quarter platinum prices were boosted as political uncertainty about the future of South Africa, which produces 80 percent of the world's supply, brought speculators into the market. Supplies from South Africa, England, and the Soviet Union had kept pace with demand and platinum prices remained steady, but prices soared in response to fears that South Africa would restrain shipments of platinum in retaliation against the economic sanctions imposed on that nation by the West.

The halt of South African shipment never occurred and that nation's platinum output is now expected to be even higher than 1985 levels. As a result, prices have fallen nearly 30 percent since September's high of $673 an ounce.[43] The platinum and silver import index plunged 9.0 percent in the fourth quarter, after soaring 23.9 percent in the third quarter.

Imported copper prices have fallen 0.5 percent for the year, as demand for copper diminished due to a sluggish economy and continued substitution of aluminum and plastic in the automotive and housing markets and the use of fiber optics in the telephone communications market. Inventories remain low, but a perception of abundant copper supplies among consumers continues to push down prices. In June, total free-world inventories stood at 600,900 short tons, the lowest since 1974.[44]

Nickel prices fell 13.6 percent in 1986, reflecting the slump the industry is facing. The decrease was influenced by weakened demand; consumption has fallen 4 percent since 1974. Manufacturing advances such as automobile downsizing and component miniaturization has reduced the need for nickel, exerting a downward pressure on prices.[45]

Imported tin prices fell 30.7 percent in 1986 as overcapacity and weak demand hampered the market. In the first

two quarters, tin prices plunged after the breakup of the International Tin Cartel, as demand reflected the true market position and not the artificial one which resulted from the Cartel's price support operation.[46]

Food. The index for prices of food imports rose 2.7 percent in 1986, despite a 9.2-percent decrease in the index for coffee which constitutes 25.1 percent of the entire food index. The drop in coffee prices was offset by price increases for imports of fish and sugar. The indexes for these items rose 17.6 and 11.3 percent, respectively. The U.S. agricultural trade surplus continued to decline, falling to $6.0 billion in fiscal 1986 from $11.42 billion in fiscal 1985 and $19.10 billion in fiscal 1984.[47] U.S. agricultural imports rose 4.1 percent over 1985 levels to $20.5 billion in 1986, principally because of an increase in the value of coffee imports, which rose 31.3 percent to $4.2 billion.[48]

Events in Brazil dominated movement in the coffee index. Coffee prices rose 40.9 percent in the first quarter of 1986, largely because of a drought in Brazil. Brazilian production dropped from 33.0 million to 13.9 million bags, as world production fell from 95.8 million to 81.0 million bags between the 1985–86 and the 1986–87 marketing years.[49] In addition to the effect on price of the immediate decline in production, prices were strengthened by the perception that drought damage to coffee trees would adversely influence future production levels.

Several factors were involved in lowering the coffee index to its yearend level. In response to the price increase, the International Coffee Organization, which consists of coffee producing and consuming countries, suspended coffee export quotas in February.

The Organization, in an attempt to keep coffee prices between $1.20 and $1.40 per pound, automatically suspends quotas when the 15-day moving average for the price of coffee rises above $1.50 per pound. The suspension enabled Colombia and other major coffee producers to increase their coffee exports. Other factors involved in lowering the coffee index included the seasonal downturn in coffee consumption during the Northern Hemisphere's summer months and improved weather conditions in Brazil. As a result, the coffee index declined 22.2 percent in the second quarter.

After rising 3.2 percent in the third quarter, the coffee index fell 19.7 percent in the fourth. The Organization was unable to halt the price decline because it had no automatic mechanism for reinstating quotas, and could not agree on procedures for doing so or on distribution of the total quota among member countries.

The 11.3-percent increase in raw sugar prices was the result of a cut in the import quota announced by the U.S. Department of Agriculture in February. At that time, the 1986 quota year was extended by 3 months, to the end of December. This spread the 1.77 million short ton quota over 15 months instead of 12, decreasing the quota for 1986 by approximately 425,000 short tons.[50] Prices for sugar imports remained relatively stable after increasing 11.8 percent in the fourth quarter. The quota for 1987, announced in December 1986, was 1.07 million short tons.

Crude materials. Import prices for crude materials rose 8.0 percent in 1986, in contrast to 1985's 7.8-percent decline. This index represents 4.3 percent of all imports. A major factor contributing to the price increase was tighter supplies of and increased demand for pulp and waste paper, wood, and metalliferous ores.

Consumption of softwood lumber, sparked by new housing construction, jumped about 7 percent above the 43.1 billion board feet used in 1985 to 46.5 billion board feet in 1986. New housing starts during the first 10 months of 1986 totaled 1,578,000 units, almost 5.4 percent more than in the same period in 1985.[51] In response to increased construction activity, imports of softwood lumber in September were roughly 5 percent higher than year-earlier volumes, with 99 percent of the increase coming from Canada.[52]

The United States is the world's leading importer of softwood lumber, wood pulp and paper, and board products from Canada. Imports of Canadian softwood lumber are taking an increasing share of the U.S. market, rising from 18.75 percent in 1975 to about 36 percent in 1986.[53] This year, Canada shipped $3 billion worth of softwood lumber to the United States.[54]

In October, a preliminary 15-percent countervailing duty was placed on Canadian softwood lumber after the International Trade Administration ruled that the Canadian industry was subsidized by low prices for government-owned stumpage. The Commerce Department stated that the price Canadian lumber firms pay to cut trees on government land is so low that it amounts to an unfair subsidy on exports.

The imposed duty, coupled with a woodcutters' strike which idled part of the Canadian lumber production since August, boosted wood prices 7.8 percent in 1986. At yearend, the United States and Canada came to a decision on the countervailing duty. Canada agreed to impose a 15-percent export tax on softwood lumber shipments to the United States beginning January 8, 1987.[55] Fourth-quarter prices slipped 3.0 percent as yearend holiday and uncertainty about the negotiations kept overall trading volume low.

The woodcutters' strike also forced three major pulp and paper mills to shut down by secondary picketing or wildcat strikes. Also, the labor disputes dampened woodchip supplies, the vital input of pulp, generating a recovery of pulp prices beginning in the second quarter. The shutdowns occurred at a time when Scandinavian and North American pulp mills, already operating at 90-percent capacity, were unable to handle the extra demand.[56] As a result, imported pulp and waste paper prices rebounded 22.4 percent in 1986, after plummeting 25 percent in 1985.

The 5.9-percent price hike for metalliferous ores was heavily influenced by tightened supplies of bauxite and alu-

mina. Alumina and bauxite production was cut in 1986, a result of depressed prices in 1984 and 1985. In response to reduced supplies, prices for these materials rebounded 20.4 percent for 1986, fueling the increase in the metalliferous ores category.

Miscellaneous manufactures. The index for miscellaneous manufactures increased 8.7 percent during 1986, as prices increased in all categories. The size of the increases differed among categories, however, largely as a result of varying points of origin of imported goods constituting those categories. The indexes for goods which predominantly come from industrialized countries rose sharply; the indexes for goods which predominantly come from the newly industrialized countries rose more moderately.

The index for photographic equipment, optical goods, and watches and clocks rose 14.0 percent during the year. The major exporters to the United States in this category are industrialized countries. Seventy percent of U.S. imports of photographic equipment, for example, comes from Japan, and the index for those goods rose 20.8 percent in 1986.[57] Similarly, the index for optical goods, the bulk of which originate in Japan and West Germany,[58] rose 21.6 percent during the year.

Clothing prices, in contrast, rose only 3.4 percent in 1986. The majority of imports in this category come from Hong Kong, Taiwan, South Korea, and China, countries whose currencies remained comparatively stable in value relative to the dollar.[59] Goods which are represented in the index for toys, games, and sporting equipment mainly originate in Taiwan and South Korea.[60] That index rose only 2.6 percent in 1986.

Export indexes

Grains. The export food index represents 12.8 percent of the all-commodities index. Export prices for food declined 17.2 percent during 1986, due to falling prices for grains and grain preparations. Grains and grain preparations constitute approximately 65.3 percent of the weight in the export food index and 8.3 percent in the all-commodities index. The grain surplus has declined $8.7 billion over the last 3 trade years.[61]

Export prices for grain and grain preparations plunged 32.0 percent during 1986, with most of the decrease, 25.4 percent, occurring in the third quarter. The decline was broad-based with all categories registering decreases. Corn and wheat varieties, which have the largest weights among grains, fell 30.3 percent and 19.6 percent, respectively. U.S. exports declined 35.2 percent, from 94.7 million metric tons in 1983–84 to 61.4 million in 1985–86,[62] as domestic stocks climbed from 77.9 million metric tons to 178.7 million, an increase of 129.4 percent.[63] The bulk of U.S. grain exports is made up of wheat varieties and corn, although rice and yellow sorghum are also important.

World grain markets are characterized by excess supplies due to large foreign debt and increasing self-sufficiency of traditional importers. Total world production for the 1985–86 trade year for wheat and coarse grains climbed to 1,343.3 million metric tons from 1,325.2 million in 1984–85 and 1,177.1 million in 1983–84, an increase of 14.1 percent for the 2-year period.[64] During the same period, world consumption has ranged between 1,244.5 million metric tons and 1,278.4 million.[65] As a result, world yearend stocks for the period grew 69.4 percent, from 187.4 million metric tons in 1983–84 to 317.5 million in 1985–86.[66]

A major reason behind the present state of oversupply has been the conversion of the European Community from a net importer to a net exporter. This has been a result of production incentives in the European Community's common agricultural policy and productivity increases. Between the 1976–77 and 1985–86 marketing years for wheat and coarse grains, the European Community went from being a net importer of 26.3 million metric tons to a net exporter of 15.3 million, adding an additional 41.6 million metric tons to world supplies.[67]

Movements in grain export prices over the last year are largely attributable to changes in farm policy brought about by the Food Security Act of 1985, which provides the Department of Agriculture with certain instruments to make grains more competitive on the world market. Provisions for lowering commodity basic loan rates and for automatically adjusting them on an annual basis to keep them in line with world prices have been key to grain price shifts. Loan rates are the effective support prices for commodities which are covered by the Food Security Act. The Department of Agriculture lends money to producers, using their crops as collateral. If the market price falls below the loan rate, producers can repay the loan with product, which the government stores and uses to control market price. In addition to the legislated lower loan rate, the 1985 act enables the Secretary of Agriculture to lower the loan rate by an additional 20 percent from the annual base loan rate. Producer income is supported by deficiency payments, which are the difference between the higher of the loan rate or the market price and the target price, which is calculated to ensure a certain level of farm income. Furthermore, the Department of Agriculture, by issuing stock entitlement certificates to producers rather than cash payments, can release stocks and current production of certain commodities onto the market to lower the market price below the loan rate without adversely affecting farm income. Thus, the Department of Agriculture has several tools for lowering export prices of commodities covered by the 1985 act.

The 30.3-percent drop in corn export prices, for example, was due to a lowering of the basic loan rate for corn from $2.55 per bushel to $2.40, and an additional 20-percent lowering of the actual loan rate to $1.92 by the Secretary of Agriculture. Corn represents 31.0 percent of the food index and 4.0 percent of the all-export index. Because of the previously high prices, U.S. corn exports fell 34.2 percent,

Table 2. Changes in Export Price Indexes for selected categories of goods, 1985–86

SITC category	Commodity	Percentage of 1980 trade value	Annual percent change		Quarterly percent change			
			December 1984 to December 1985	December 1985 to December 1986	December 1985 to March 1986	March 1986 to June 1986	June 1986 to September 1986	September 1986 to December 1986
	All commodities	100.000	−1.3	−0.5	0.3	−0.3	−1.7	1.2
0	Food	12.768	−3.0	−13.2	−3.3	−1.1	−13.7	5.2
04	Grain and grain preparations	8.341	−6.2	−25.6	−5.7	−3.7	−25.4	9.8
1	Beverages and tobacco	1.229	−2.7	3.0	−3.0	0.9	−0.2	5.5
2	Crude materials	10.948	−8.1	2.5	3.6	−0.2	−3.5	2.7
22	Oilseeds	3.024	−14.6	−1.6	4.7	−1.6	−2.0	−2.5
24	Wood	1.417	2.2	5.8	0.5	0.0	0.8	4.5
25	Pulp and waste paper	.954	−18.8	30.7	6.6	11.0	9.2r	1.2
26	Textile fibers	1.813	−3.8	−5.6	4.0	−3.0	−24.2	23.4
3	Fuels and related products	3.691	−3.1	−12.3	−4.9	−5.7	−1.2	−1.2
4	Fats and oils	.911	−31.4	−14.4	−10.5	−7.0	−9.4	13.5
5	Chemicals and related products	9.578	−1.1	−4.5	−0.1	−1.1	−2.4	−0.9
51	Organic chemicals	2.289	0.7	−6.0	−2.0	−4.5	−1.5	1.9
56	Fertilizers, manufactured	1.036	−5.1	−23.7	−1.6	−5.2	−7.9	−11.2
6	Intermediate manufactured products	10.544	−1.2	3.6	1.2	0.9	1.0	0.5
7	Machinery and transport equipment excluding military and commercial aircraft	35.261	1.3	1.6	0.5	0.1	0.3	0.7
72	Machinery specialized for particular industries	5.784	1.5	−0.3	−0.4	−0.5	0.2	0.5
73	Metalworking machinery	.829	4.3	2.1	0.4	−0.1	0.9	0.9
75	Office machines and automatic data processing equipment	3.990	−2.0	−1.3	0.5	−0.7	−0.3	−0.8
77	Electric machinery and equipment	4.738	−0.7	1.1	1.1	−0.8	0.2	0.5
78	Road vehicles and parts	6.726	2.4	2.1	0.4	0.7	0.1	1.0
8	Miscellaneous manufactured articles	7.397	1.0	4.0	2.3	0.8	0.7	0.2

[1] This catetory includes indexes in addition to those shown here. For all of the indexes available in each category, see "U.S. Import and Export Indexes," *U.S. Department of Labor News Release* 87–40, Jan. 29, 1987.

from 47.4 million metric tons to 31.5 million between the 1983–84 and the 1985–86 trade years.[68] During the same period, domestic production climbed 112.5 percent, from 106.0 million metric tons to 225.2 million.[69] Because U.S. utilization climbed only 9.4 percent, from 121.7 million metric tons to 133.2 million,[70] national stocks soared from 25.6 million metric tons to 102.6 million, an increase of more than 300 percent.[71] Despite the lower prices for corn exports, the Department of Agriculture is predicting exports will fall to 28.6 million metric tons during the 1986–87 trade year.[72]

Wheat prices also fell because of the 1985 farm law. Under the law, the basic loan rate dropped from $3.30 to $3 and additional reductions resulted in a loan rate of $2.40. As a result, wheat export prices fell 19.6 percent during the year. Over the last 2 trade years, U.S. exports of wheat and wheat flour fell 35.7 percent, from 38.9 million metric tons to 25.0 million.[73] At the same time, U.S. production and utilization figures remained approximately the same, with production rising from 65.9 million metric tons to 66.0 million[74] and utilization falling from 30.2 million metric tons to 28.4 million.[75] As a result, U.S. end stocks rose from 38.1 million metric tons to 51.8 million.[76] Yearend Department of Agriculture predictions for wheat exports during the 1986–87 year suggest a further decline to 26.6 million metric tons, as projections for imports into the Soviet Union are 12 million metric tons, down 23.6 percent from 1985–86.[77]

Chemicals. The index measuring export prices of chemicals and related products declined 4.5 percent during 1986, reflecting the extreme drop in prices of feedstocks for organic chemicals and the effect of the depressed farm economy on fertilizer prices. The chemicals index, which constitutes 9.6 percent of the all-commodities index, includes organic and inorganic chemicals, fertilizers, medicinal and pharmaceutical products, and artificial resins and plastics materials. The indexes for organic chemicals and for fertilizers fell 5.9 percent and 25.8 percent, respectively, during the year.

The last few years have been a period of rationalization, restructuring, and modernization for the chemical industry as it moved from producing commodity chemicals to producing higher value added "specialty chemicals." It is now in a position to reap the benefits of the lower valued dollar. The U.S. chemical industry made a substantial recovery in 1986, as profits reached $13.3 billion, the highest level ever and 54.5 percent above 1985 profits.[78] The industry's capacity utilization rose to 81.5 percent in June of 1986, up 23.5 percent from the post-World War II low of 66.0 percent in 1982.[79]

With the decline of the dollar's exchange value making

U.S. exports more attractive to foreigners, the chemicals trade surplus increased last year for the first time since 1980. The 1986 surplus was $7.7 billion, up 6.9 percent from the 1985 figure of $7.2 billion, but still below the record 1980 figure of $12.2 billion. Exports grew 4.6 percent to $22.8 billion as imports grew 3.3 percent to a record $15.0 billion.[80]

The 5.9-percent decrease for organic chemicals is primarily the result of falling petroleum prices. Hydrocarbons are commodity organic chemicals which are generally refined directly out of petroleum products or are processed only slightly further. They are the feedstuff for many other organic chemicals. As petroleum prices plummeted during the first three quarters of the year, some of that decrease was reflected in prices of downstream hydrocarbons, the index for which declined 10.9 percent during the first three quarters. The index for all organic chemicals declined 5.9 percent during that period. In August, OPEC announced that its members had reached an agreement on production controls to be effective in September. As a result, prices for petroleum, and therefore prices for organic chemicals, began to climb. During the fourth quarter, the index for hydrocarbons rose 8.7 percent, while the organic chemicals index increased 2.0 percent.

The index for fertilizers fell 25.8 percent in 1986, after falling 5.1 percent in 1984, primarily because of the state of the world farm economy, falling raw material prices, and below-cost pricing of some products by countries with nonmarket economies. The global farm economy is characterized by oversupply and low commodity prices, thus demand for fertilizers is low.

In the United States, fertilizer consumption was off 5 to 7 percent.[81] The decline was driven by acreage reduction provisions of the 1985 farm bill. Another factor depressing fertilizer export prices was the decline in the price of natural gas, which constitutes 75 percent of the production costs of ammonia. Ammonia is a precursor to urea and ammonium phosphates, fertilizers used for their nitrogen content. Prices have plummeted for both urea and diammonium phosphate as domestic natural gas prices declined 18.2 percent in 1986.[82] Urea prices, moreover, have faced pressure from countries with nonmarket economies selling the product for prices which the International Trade Commission has ruled are below cost.[83] Countries such as the Soviet Union, East Germany, and Romania do so in order to obtain hard currency.

Machinery and transport equipment. The machinery and transport export index, which encompasses 35 percent of the all-export index, registered a 1.6-percent gain in 1986, compared with 1.3 percent in 1985. Gains were posted in most of the categories, except for specialized machinery and office machinery indexes which declined 0.3 percent and 1.3 percent, respectively.

Export prices for electrical machinery, which constitutes 4.7 percent of the machinery and transport equipment index, edged up 1.1 percent in 1986. The largest price movement occurred in the semiconductor index which carries 37 percent of electrical machinery trade weight.

In 1986, the semiconductor industry grew 7 percent to $11.1 billion.[84] The export price hike of 2.1 percent in 1986 can be attributed to the U.S.-Japan semiconductor trade agreement that was signed in July 1986. The agreement allowed U.S. producers to raise their prices and still remain competitive. Semiconductor prices began inching up in the third quarter, rising 0.6 percent after falling 2.9 percent in the previous quarter. Fourth-quarter prices climbed 1.1 percent.

One consequence of the agreement, however, is a shift in the supply market from U.S. and Japanese producers to Third World producers. Emerging semiconductor manufacturers in Korea and Taiwan represent a competitive threat to both U.S. and Japanese suppliers and will have a negative impact on future semiconductor growth in the United States.[85]

After climbing 4.3 percent in 1985, metalworking machinery export prices inched up 2.1 percent in 1986. In the first 11 months of 1986, the United States exported $521.2 million worth of machine tools, up 28 percent from the same period in 1985. Despite the increase in exports, machine tools produced a trade deficit of $1.56 billion during this period.[86]

The road vehicles and parts index advanced 2.1 percent in 1986, fueled by the 6.1-percent increase in the passenger vehicles index, which carries 28 percent of the aggregate.

Crude materials. The crude materials index registered a 2.5-percent increase for the year. Price gains were recorded in the raw hides and skins (6.0 percent), wood (5.8 percent), pulp and waste paper (30.7 percent), and metal ores (2.5 percent) indexes. Decreases were recorded in the other four components.

The British Columbia mill workers and loggers strike which reduced world wood and pulp supplies contributed to higher wood and pulp prices worldwide. In addition to supply disruptions, the 20-percent increase for pulp and waste paper export prices was partially influenced by exchange rate shifts. The dollar's depreciation against the yen and mark has allowed U.S. suppliers to increase pulp prices by $30 a ton without any repercussions to their market shares.[87]

The largest decrease occurred in the textile fibers index, which declined 5.6 percent for the year. Cotton, which represents 75 percent of textile fibers, dropped 10.2 percent for the year, generating the downward movement in the index.

Third-quarter cotton export prices plunged 38.8 percent in response to new cotton legislation which became effective in August 1986. The new program was designed to make U.S. prices more competitive on the world market by recapturing lost export shares and reducing stock levels to

4 million bales. Previously, U.S. producers were encouraged to store cotton in return for government loans when prices fell below specified levels. This policy pushed U.S. cotton prices above world levels and resulted in lost export markets. The new plan called for producers to receive a world market price along with either a cash or certificate subsidy from the government.[88] As a result, U.S. cotton prices fell drastically. The low prices spurred cotton consumption, causing fourth-quarter prices to recover dramatically. Stronger-than-expected demand coupled with weather-related production problems boosted fourth-quarter prices 44 percent.

Oilseed export prices fell 1.6 percent in 1986. The 1986–87 oilseed world production will most likely reach a record level of 196.4 million metric tons. Prices for soybeans, the leading oilseed export, dropped 3.0 percent in 1986, as exports in the 1986–87 market year are projected to remain fairly stable at 20.68 million metric tons. Even though world production increased, U.S. production dropped to 54.68 million metric tons, compared with 57.11 million in 1985.[89]

The price drop was relatively moderate as the U.S. soybean loan rate was only lowered slightly. Soybean producers are eligible for participation in a Department of Agriculture program similar to the wheat and corn program, but the Department did not lower the soybean loan rate to the 25-percent or more drop for grains.[90] □

———*FOOTNOTES*———

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