

Prices of U.S. imports and exports declined in 1984

Throughout the year, the economy benefited from lower prices and abundant quantities of imported goods; however, the continued strength of the dollar and stiffer competition from foreign producers spelled trouble for the Nation's exporters in sluggish world markets

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U.S. import prices declined for the second consecutive year in 1984, decreasing 1.7 percent after a 2.5-percent drop in 1983. (See table 1.) The downward trend in import prices during the year was more broad-based than in 1983, when aggregate price movements were predominately influenced by falling energy prices. The price index for nonenergy imports decreased a moderate 1.0 percent in 1984, after having advanced 2.1 percent in 1983. Substantial price reductions were registered for food, chemicals, and machinery and transport equipment in 1984. While price increases for fats and oils, and tobacco and beverages helped to moderate the decline, prices for intermediate manufactures and miscellaneous manufactures also drifted downward over the year.

The appreciation of the U.S. dollar and plentiful supplies of foreign-produced goods were the principal factors exerting downward pressure on import prices, despite the Nation's vigorous economic growth. Strong U.S. demand was increasingly met by imported merchandise; the record \$328 billion of goods imported in 1984 represented a 25.5-percent increase over 1983.¹ The large supplies and lower prices of foreign-made merchandise contributed to low levels of domestic inflation.²

The export price index, which was first published for the

fourth quarter of 1983, fell 1.4 percent during 1984. (See table 2.) The principal contributors to the downward drift in the index were declining prices for food, crude materials, chemicals, and miscellaneous manufactures, which were partially offset by increases in export prices for machinery and transport equipment, and fats and oils. Export prices for intermediate manufactures and fuels were relatively stable, with slight rises registered for the year, while a small price decrease occurred for beverages and tobacco. As with imports, escalating competition in the world market and the strength of the U.S. dollar exerted downward pressure on prices, but rising demand moderated some price declines. Sluggish economic growth in Western Europe in recent years and international debt problems experienced by some of the Nation's major trading partners also contributed to the moderation in U.S. export prices. The \$220 billion worth of merchandise exported by the United States in 1984 was almost 10 percent above the \$200 billion exported in 1983, but was only 4 percent higher than the 1982 level and still well below the \$237 billion exported in 1981.³ The U.S. share of total world exports has been declining since 1980.⁴

The price indexes discussed in this article are not seasonally adjusted and are based on transaction price information provided by a sample of U.S. importers and exporters. They represent 100 percent of the value of all imported and exported products. Indexes are published for detailed and aggregate categories of imports and exports.⁵

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Table 1. Change in selected import price indexes in 1984, and commodity shares of total 1980 trade value

Commodity	Share of total 1980 trade value	Percent change in—				
		All of 1984	First quarter	Second quarter	Third quarter	Fourth quarter
All commodities ¹	100.000	-1.7	0.7	0.3	-1.6	-1.1
All commodities, except fuels and related products ¹	67.223	-1.0	0.8	0.5	-1.7	-0.5
Fuels and related products	32.776	-3.0	0.8	-0.3	-1.3	-2.2
Crude petroleum and petroleum products	30.653	-3.1	0.7	-0.1	-1.2	-2.4
Crude petroleum	25.799	-3.5	-0.4	0.4	-0.6	-2.9
Natural gas and liquified natural gas	1.642	-3.6	0.2	-2.3	-1.6	0.0
Machinery and transport equipment	25.442	-1.2	-0.1	0.1	-1.4	0.3
Metalworking machinery . . . . .	.755	-6.1	-1.5	-0.5	-1.8	-2.4
Telecommunications, sound recording and reproducing equipment	2.785	-3.8	-0.7	0.6	-1.3	-2.5
Electric machinery and equipment	3.396	-9.8	-1.8	-3.2	-4.6	-0.6
Road vehicles and parts	10.887	1.6	-0.5	1.3	-0.5	1.4
Passenger automobiles	7.201	2.3	-0.9	2.0	-0.3	1.5
Parts for motor vehicles . . . . .	.814	-5.1	1.1	-0.2	-4.2	-1.8
Food	6.554	-2.3	2.1	1.0	-1.4	-3.8
Meat . . . . .	.977	-1.3	-0.5	0.3	1.2	-2.3
Fruits and vegetables . . . . .	.838	-6.2	8.9	-0.2	-0.3	-13.4
Vegetables, fresh, chilled, or frozen . . . . .	.183	-33.0	20.0	-1.3	1.8	-44.4
Fruits and nuts, fresh or dried . . . . .	.347	-3.0	2.2	-2.9	-0.8	-1.4
Coffee, tea, and cocoa	2.241	-2.0	3.0	1.6	-3.4	-3.2
Coffee	1.644	-0.2	2.9	1.0	0.3	-4.2
Tea . . . . .	.054	3.7	9.1	0.1	-4.4	-0.6
Intermediate manufactures	13.520	-0.4	0.2	1.5	-1.7	-0.3
Iron and steel	3.127	3.5	-0.8	4.5	0.7	-0.8
Nonferrous metals	3.123	-7.9	0.2	1.4	-6.3	-3.2
Silver and platinum	1.037	-14.2	1.4	-2.6	-14.3	1.3
Copper . . . . .	.581	-7.1	-3.1	3.1	-4.7	-2.5
Miscellaneous manufactures	9.794	-0.1	0.6	0.9	-1.8	0.2
Clothing	2.666	7.8	1.3	1.8	2.2	2.3
Footwear	1.232	4.8	0.6	2.9	-1.7	3.0
Watches and clocks . . . . .	.437	5.3	-0.4	6.6	-1.5	0.7
Professional, scientific, and controlling apparatus . . . . .	.628	-4.8	1.1	-0.9	-2.2	-2.8
Collectors' pieces, including gold and silver coins . . . . .	.802	-17.3	-0.4	-2.4	-12.6	-2.7
Musical instruments and accessories . . . . .	.203	-7.6	1.0	-3.3	-2.8	-2.6
Beverages and tobacco	1.082	0.7	-0.1	0.6	0.5	-0.4
Crude materials	4.275	-0.2	4.7	-0.6	-1.9	-2.2
Fats and oils . . . . .	.226	14.4	16.9	20.8	-12.3	-7.6
Chemicals and related products	3.475	-2.4	1.6	-0.5	-1.8	-1.7

¹This 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*, USDL-85-45 (Bureau of

Labor Statistics) Jan. 31, 1985.

General developments in U.S. foreign trade

Appreciation of the dollar against the currencies of our major trading partners in recent years has had a significant impact on U.S. export and import prices. From its low in July 1980 to December 1984, the dollar's trade-weighted exchange rate gained 46 percent.⁶ (See chart 1.) Over this period, the dollar rose 14.6 percent against the Canadian dollar and 12.2 percent against the Japanese yen. In 1984, the dollar reached all-time peaks against the currencies of the United Kingdom and France, and climbed to an 11-year high against the Deutschmark. The dollar's rise was particularly dramatic against currencies of countries experiencing large external debts. For example, the dollar surged 219 percent against the Brazilian cruzeiro and 33 percent against the Mexican peso from December 1983 to December 1984.⁷ This rapid appreciation has made U.S. imports less expensive while driving up the prices of U.S. exports in foreign markets. (See chart 2.)

Relative economic growth rates also had an important influence on trade patterns and export and import price movements in 1984. A robust U.S. economic recovery boosted demand for a wide variety of imported products. Total U.S. auto sales in 1984 were 13.1 percent higher than in 1983, which fueled demand for such products as steel, aluminum, and rubber.⁸ In addition, housing starts were up by 2.6 percent over strong 1983 levels, and private nonresidential construction leaped 41 percent from December 1983 to December 1984.⁹ This activity boosted sales of lumber, copper, appliances, and other products associated with construction. Moreover, personal consumption expenditures were 8.6 percent higher than in 1983.¹⁰ The increasingly important role played by imports in satisfying both investment and consumer demand was seen in the unprecedented \$59 billion worth of capital goods imported in 1984; this represented a 46-percent rise over 1983. Imports of consumer goods also jumped 33 percent over the year.¹¹

These import surges influenced economic growth in some foreign countries, especially those Far Eastern and European nations with economies substantially affected by export levels (such as West Germany, Japan, South Korea, and Taiwan), and those developing nations facing large external debts (including Mexico, Brazil, and Argentina). Increased production for export in these nations has spurred competition in the world market, contributing to lower price levels. U.S. imports from Asia grew 31.6 percent in 1984 while imports from Latin America and the European Economic Community increased 18.8 percent and 31.4 percent, respectively.¹²

Conversely, lower economic growth rates in some traditional export markets tended to depress demand for U.S. products, particularly as the strength of the dollar has made them more expensive. While Europe experienced moderate economic growth in 1984, its expansion was sluggish compared with developments in the United States and Japan; U.S. exports to the European Economic Community increased 6 percent in 1984, but were still 2.1 percent below the \$48 billion exported in 1982.¹³ Although up 16 percent

over 1983 levels, U.S. exports to Latin America were well below those of 1980, 1981 and 1982, primarily because the international debt situation of many of these nations has forced them to cut back their imports.¹⁴ Major oil-producing nations had lower export revenues in 1984, and thus bought fewer U.S. products. Forty-eight percent of the growth in total U.S. exports for the year was attributable to a 22-percent increase in exports to Canada. This top trading partner of the United States has experienced healthy economic growth during the past 2 years.¹⁵ Exports of capital goods, which have traditionally been the largest U.S. export category, increased moderately in 1984 following declines in each of the previous 3 years. (See chart 3.)

The U.S. merchandise trade deficit soared to a record \$107.6 billion in 1984, 76 percent over the 1983 amount, and 195 percent above the 1982 level.¹⁶ (See chart 4.) Rising imports led to higher U.S. deficits with almost all major trading partners, and particularly with Japan; the \$36.8 billion deficit vis à vis that country in 1984 represented a 70-percent increase over the 1983 figure. (See table 3.) The trade deficit with Canada rose 42.5 percent, as strong U.S.

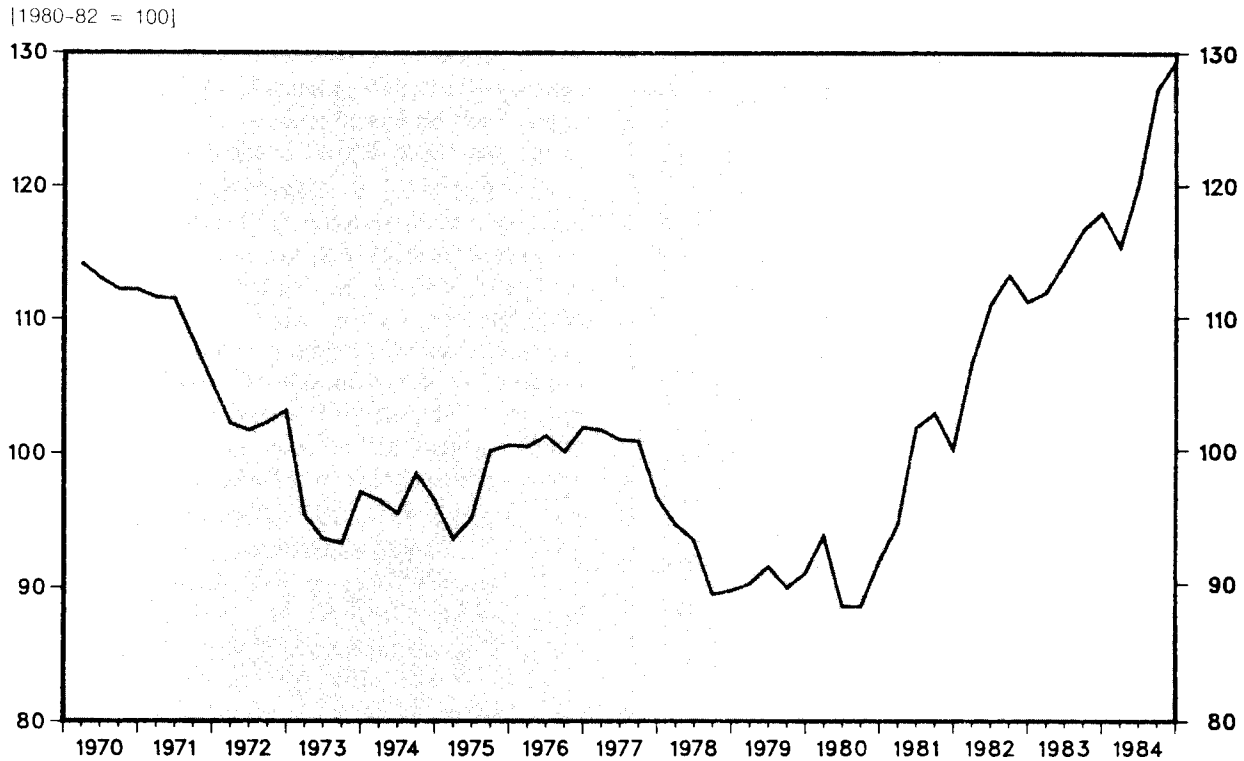
Table 2. Change in selected export price indexes in 1984, and commodity shares of total 1980 trade value

Commodity	Share of total 1980 trade value	Percent change in—				
		All of 1984	First quarter	Second quarter	Third quarter	Fourth quarter
All commodities ¹	100.000	-1.4	0.7	1.3	-2.2	-1.2
Machinery and transport equipment	35.261	3.3	1.1	0.6	0.5	1.0
Power generating machinery and equipment	3.943	8.5	2.6	-0.9	2.4	4.3
Office machines and automatic data processing equipment	3.990	-1.1	-1.1	0.1	-1.7	1.6
Road vehicles and parts	6.726	2.3	1.1	0.8	-0.2	0.6
Passenger automobiles	1.861	2.7	0.2	-0.5	0.5	2.5
Parts for motor vehicles	3.499	0.8	1.6	1.2	-0.7	-1.1
Other transport equipment, except military and commercial aircraft	2.718	6.9	2.1	2.5	1.0	1.1
Grain and grain preparations	8.341	-12.0	-2.7	4.6	-5.8	-8.2
Wheat	2.943	-0.2	-2.1	4.8	-1.7	-1.1
Yellow corn	3.956	-18.4	-3.3	5.4	-6.5	-14.3
Yellow sorghum .....	.498	-18.0	-4.8	6.0	-19.5	0.9
Animal feeds, except unmilled cereals	1.332	-30.0	-8.9	-7.6	-15.5	-1.6
Vegetable oilcake extracts and residues .....	.800	-33.5	-10.2	-6.8	-16.9	-4.4
Crude materials	10.948	-9.6	0.3	5.2	-11.1	-3.6
Oilseeds	3.024	-22.7	-3.0	11.1	-23.4	-6.4
Soybeans	2.716	-22.9	-3.8	9.8	-23.1	-5.1
Wood	1.417	-3.4	1.0	-1.3	-4.3	1.3
Textile fibers	1.813	-13.3	-2.1	4.2	-12.9	-2.5
Cotton	1.341	-16.2	-0.3	5.2	-17.5	-3.1
Chemicals and related products	9.578	-0.9	2.8	-1.7	-1.4	-0.6
Organic chemicals	2.289	-5.3	0.2	0.8	-3.6	-2.8
Hydrocarbons not elsewhere specified and their derivatives .....	.799	-16.9	-3.4	0.1	-9.5	-5.1
Polymerization and copolymerization products	1.042	-12.2	1.4	-3.2	-4.3	-6.6
Intermediate manufactures	10.544	0.4	1.0	0.3	0.7	-1.6
Paper and paperboard products	1.300	9.6	3.2	3.0	3.4	-0.3
Kraft paper and paperboard .....	.442	17.5	7.6	7.4	4.6	-2.8
Nonferrous metals	2.280	-12.0	0.4	-1.4	-2.7	-8.7
Aluminum .....	.919	-13.7	0.0	-4.4	5.6	-14.5
Beverages and tobacco	1.229	-0.2	0.1	0.3	0.9	-1.5
Fuels and related products	3.691	0.5	-0.1	0.6	0.0	0.0
Fats and oils .....	.911	21.2	6.4	26.7	-11.4	1.5
Miscellaneous manufactures	7.397	-0.9	0.4	-0.2	0.3	-1.4

¹This 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*, usol-85-45 (Bureau of

Labor Statistics), Jan. 31, 1985.

Chart 1. Trade-weighted exchange rate index for the U.S. dollar, quarterly averages, 1970-84



NOTE: Estimates are based on 1980 bilateral trade weights.

SOURCE: International Economics Department, Morgan Guaranty Trust Company.

exports to that country were more than offset by increased imports of Canadian goods in most nonagricultural product categories. The trade deficit with the United Kingdom expanded 24.4 percent, with Taiwan it jumped 48.9 percent, and with Western Germany it soared 96.4 percent.¹⁷ Of the top trading partners of the United States, Mexico was the only one with which the trade deficit narrowed in 1984, by 2.1 percent.¹⁸ The product group which experienced the largest import gains over the year was machinery; such imports grew 46 percent, resulting in the first annual trade deficit for the category.¹⁹ Other high-deficit product groups were transport equipment and miscellaneous manufactures. However, surpluses were recorded for food, crude materials, and chemicals.

Gross trade (imports plus exports) as a percentage of U.S. final goods production, a measure of the importance of foreign trade to the goods sector of the economy, began to increase during the year after some minor decreases in 1983

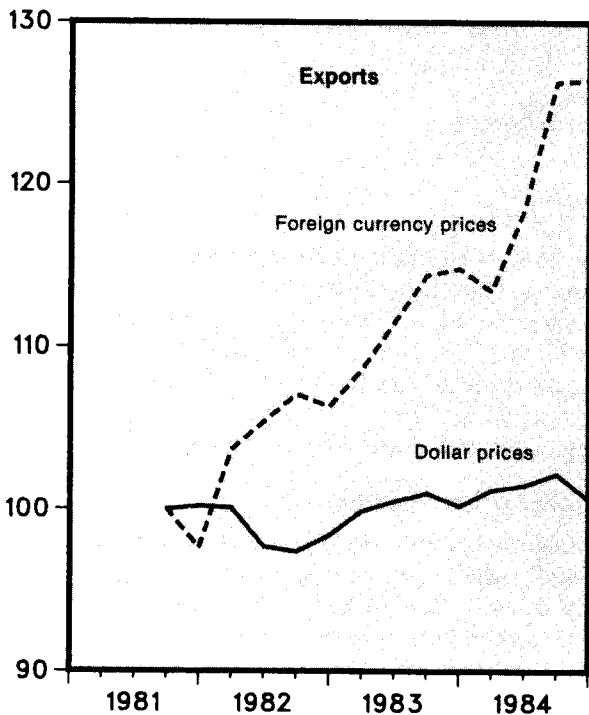
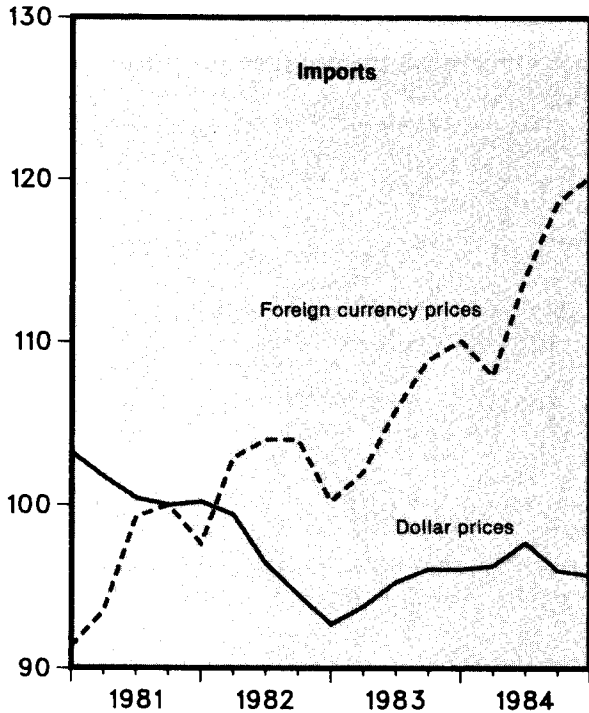
and 1982. The figure stood at 30 percent in 1984, compared to 16 percent in 1970.²⁰ The U.S. current account, which incorporates the balances on both merchandise trade and services (including payments and receipts of interest and dividends on international investments), also set a record deficit of \$101.6 billion in 1984, compared with the previous record of \$41.6 billion in 1983.²¹

Import price determinants

Fuels and related products. Import prices for fuels and related products fell 3 percent in 1984, after an 11.8-percent drop in 1983. Because this product group comprised over 32 percent of U.S. imports in 1980, the base year for the all-import index, its price movement contributes substantially to fluctuations in that index. The 1984 price decrease for fuels and related products was the result of a 3.5-percent fall in crude oil prices and a 3.6-percent decline in natural gas prices, which were only partially offset by moderate

Chart 2. Quarterly U.S. dollar and foreign currency price indexes for U.S. imports and exports of intermediate manufactured goods, 1981-84

[September 1981 = 100]



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

risers in prices for petroleum products. Import prices for crude petroleum have consistently fallen in recent years, registering a 29-percent drop from March 1981 to December 1984. (See chart 5.) The price slide reflects declining demand due to sluggish world economic growth, increased substitution of other forms of energy for crude oil, and stepped-up conservation in the major industrialized nations. Moreover, most major producing nations—including such non-OPEC members as Mexico, the United Kingdom, and Norway—increased production significantly during those years. Fuel and related products accounted for 18.6 percent of the total value of U.S. imports in 1984.

The 1984 world oil market was characterized by excess capacity and competition for market share among major producers. Supplies were not reduced when the Iran-Iraq conflict escalated in the first half of the year because other OPEC members boosted output more than enough to compensate for any disruption in shipments.²² Inventory accumulation by OECD countries also exerted further downward pressure on oil prices.²³ By mid-1984, OECD inventories had climbed to their highest level in 3 years, with U.S. stocks about 7 percent above year-earlier estimates.

Oil surpluses led to widespread discounting below official price levels, which rapidly drove down spot, or non-contract, prices from June through December 1984. This slide was especially evident for the more expensive light crudes, and it was increasingly difficult for producers of this product grade to maintain official price quotes. In mid-October, reductions in official crude oil prices were announced by several producers of light crudes.²⁴ An OPEC meeting held in late October to shore up oil prices resulted in an agreement to curb OPEC output by approximately 9 percent, and in regulations to end the practice of discounting from the official price on certain oil transactions.²⁵ During the remaining 2 months of the year, however, a number of OPEC members continued to boost production and/or offer price discounts, although the benchmark price officially remained at \$29 per barrel.

World oil consumption in 1984 was an estimated 3 percent above depressed 1983 levels, primarily because of economic upturns in the major industrialized nations.²⁶ Tending to curb the growth in demand, however, was the strength of the U.S. dollar. Specifically, the dollar's appreciation against the currencies of our major trading partners meant that those nations did not reap the full benefit of the cuts in posted dollar prices for oil. In fact, buyers in several nations found that oil prices in their own currencies actually rose in 1984 because of the depreciation of those currencies against the dollar. This phenomenon contributed to low levels of world oil demand in the face of robust economic growth. Even in the United States, where a strong economic recovery sharply stimulated overall import demand, 1984 crude oil imports were just 2.7 percent (in thousands of barrels per day) above 1983 amounts.²⁷

U.S. imports of petroleum products rose a more substantial 15.3 percent in 1984.²⁸ Purchases of foreign gasoline and heating oil at the end of the year were nearly double those registered 3 years earlier.²⁹ New refineries in the Persian Gulf contributed to the increased supplies and lower prices, particularly because these nations have no rules for pricing refined products as they have for crude oil.³⁰ The growing volume of oil products from foreign sources was instrumental in lowering the capacity rate of U.S. refineries, which averaged between 65 and 70 percent during 1980–83. By the end of 1984, the capacity utilization rate had risen moderately to 76 percent as U.S. refiners continued to trim costs by cutting back excess capacity.³¹

Early in 1984, heating oil demand and prices rose temporarily as a result of an unusually cold winter in the north-eastern United States. Demand slackened in the remainder of the year, leading U.S. refineries to cut prices in November. As a result, the U.S. average price for heating oil was

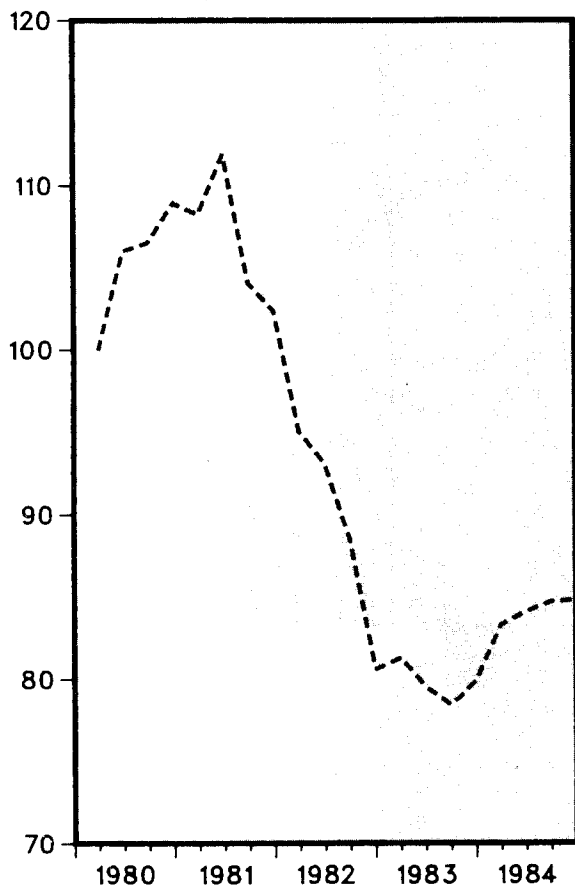
\$1.12 per gallon in 1984, compared with \$1.17 per gallon in 1983.³² The increase in gasoline supplies drove U.S. prices for all types of the fuel down by 3 percent from December 1983 to December 1984.³³ When the improved fuel efficiency of the Nation's auto fleet is taken into account, gasoline costs per mile driven for U.S. consumers have declined substantially since 1980.

U.S. oil and petroleum product imports continued to come predominately from non-OPEC sources in 1984. The United States purchased 38 percent of its oil and oil products from OPEC sources in that year, compared with 37 percent in 1983, 42 percent in 1982, and 70 percent in 1977—the year of the greatest volume of U.S. oil imports.³⁴ Leading suppliers in 1984 were Mexico at 740 thousand barrels per day (bpd), Canada (629 thousand bpd), Venezuela (536 thousand bpd), the United Kingdom (395 thousand bpd), and Saudi Arabia (322 thousand bpd).³⁵

The 3.6-percent price fall for imported natural gas in 1984 reflected lower prices for imports from Canada, which supplies approximately 90 percent of total U.S. imports of natural gas. Bountiful supplies of gas and oil were the primary influence on gas prices for the year.

Chart 3. Constant-dollar index of U.S. exports of capital goods, except autos

[March 1980 = 100]



SOURCE: Bureau of Labor Statistics, based on data from the Bureau and from the U.S. Department of Commerce.

Machinery and transport equipment. This index, which accounts for 25.4 percent of the weight of the all-import price index, decreased 1.2 percent in 1984, after rising 2.4 percent in 1983. Some \$123 billion of this merchandise was imported during 1984, up 38.4 percent from \$89 billion in 1983, as economic recovery fueled demand.³⁶ As indicated earlier, this substantial increase was a major factor in widening the 1984 U.S. merchandise trade deficit. Approximately half of the dollar value in this index consists of consumer products such as autos, videocassette recorders, and household appliances. As consumer spending grew, purchases of these types of items rose. The index also includes many important components of manufacturing processes, such as electric motors, air pumps, compressors, valves, and roller bearings, for which demand grew with U.S. manufacturing output. However, expanding foreign production along with the continued appreciation of the dollar tended to drive down prices for imported machinery in 1984, with the notable exception of prices for road vehicles.

Import prices for automobiles rose 1.6 percent over the year. This movement incorporates adjustments to the data to account for quality improvements in new models introduced in the fourth quarter. In 1984, total U.S. car sales (domestic and foreign) exceeded the 10 million unit sales barrier for the first time since 1979. In addition, imports achieved record sales of almost 2.5 million units. However, due to strong sales of domestic models, the import penetration rate declined to 23.5 percent from 26.0 percent in 1983.³⁷

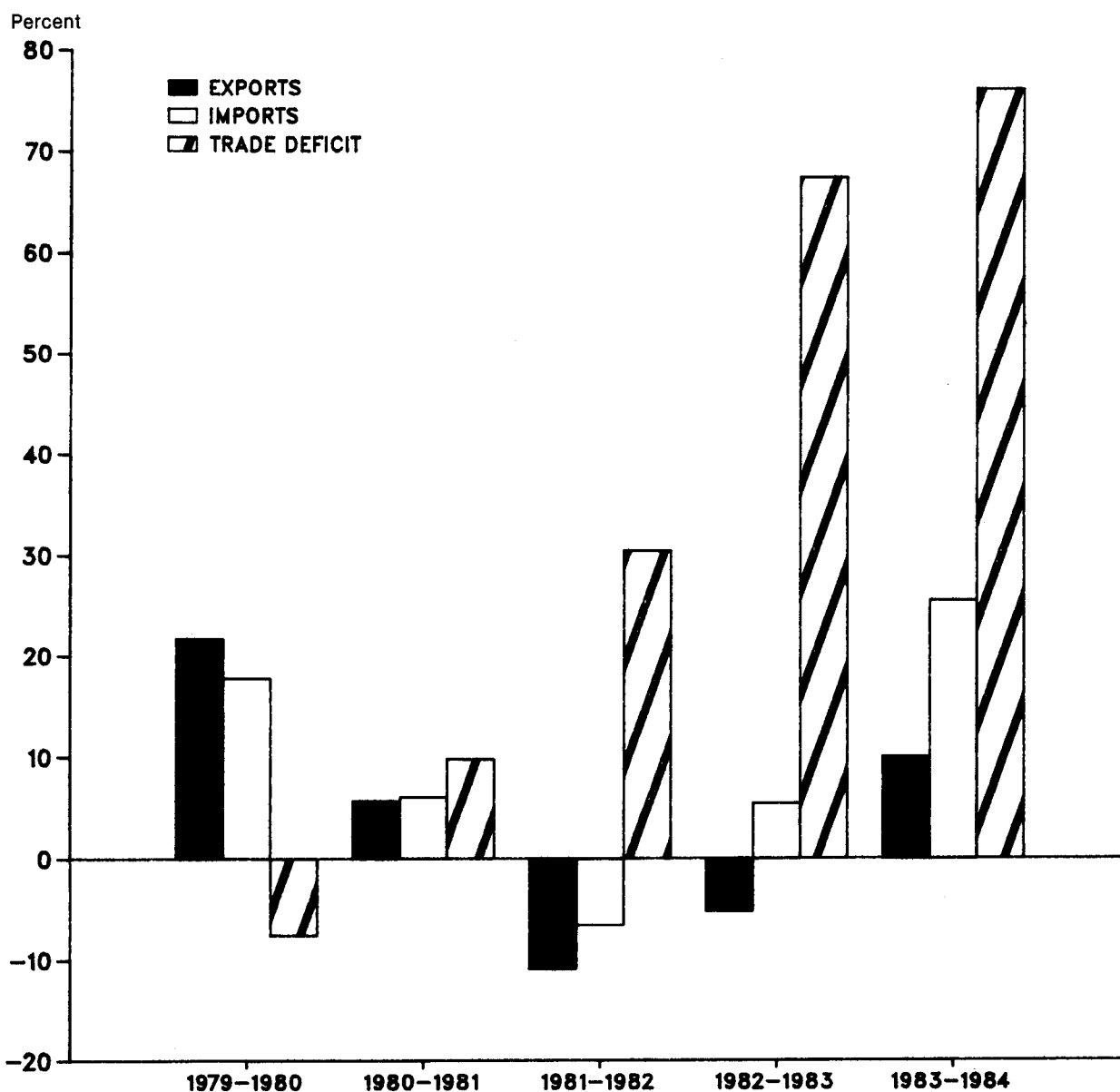
A noteworthy trend is the significant upgrading of the import vehicle mix, with respect to both value and options.

The domestic industry now faces the strong competition on the high end of the market (\$15,000+) that it has felt previously on the lower end. The share of the U.S. market for high-priced cars held by imports has grown from 5.7 percent in 1965 to 19 percent in 1984.³⁸ The West German share of the overall import market increased to 13.5 percent in 1984 from 11.7 percent a year ago, with a number of manufacturers from that nation and other European countries registering all-time U.S. sales records.³⁹ In addition, Jap-

anese manufacturers have continued to promote their higher-priced, option-rich models in an effort to counteract the constraints of the Voluntary Restraint Agreement. (The Agreement was extended for another year in April 1984, with quotas expanded to 1.85 million units for shipment to the United States.)

As a result of this change in the mix of imported automobiles, the unit value index for automobiles increased at a much sharper rate than did the price index. (See chart 6.)

Chart 4. Percent change in the dollar volume of U.S. exports and imports and in the trade deficit, 1979-84



NOTE: Data are on a balance of payments basis.
SOURCE: Bureau of the Census.

The price index adjusts for quality changes and maintains a constant mix of goods; price is the only fluctuating variable. The unit value index reflects the shift to higher-valued models, as well as price change.

The Voluntary Restraint Agreement on Japanese autos continues to be a major price-related issue. Most segments of the domestic industry still contend that the quotas are necessary to compensate for the market advantages arising from the differences in the Japanese commodity tax structure and the undervaluation of the yen. It is clear that the agreement has limited supplies of Japanese autos to U.S. consumers. In the robust car market of 1984, the Japanese share of the American market declined to 18.3 percent from 20.8 percent in 1983, with a decrease of over 9,000 units sold.⁴⁰ In addition, the quota-driven shift to higher-priced cars has, in effect, provided a pricing floor for competition. The domestic industry has benefited from the combination of competitive new products, a resurgence of consumer interest in larger, more profitable cars, and from strenuous cost-cutting programs. The three major auto makers set all-time highs in net income in 1984 with the industry total at over \$10 billion dollars.⁴¹ As of this writing, there has been no official decision on extension of the quota system beyond April 1985.

U.S. and Japanese automakers continued to pursue cooperative agreements throughout the year. General Motors and Toyota began to assemble prototypes of their jointly-produced subcompact to be delivered to dealers in the spring of 1985. The other three domestic automakers have also entered into joint projects with foreign auto companies, while a third Japanese producer is preparing to produce autos in this country.

Although this trend is consistent with the internationalization of the world automobile industry, the U.S.-Japanese efforts are specially designed for mutual advantage. The Japanese enjoy access to the lucrative U.S. market and dampen pressures for domestic content legislation; the domestic industry gains technological and financial assistance in the area of capital-intensive small car production.

Prices for imported metalworking machinery continued to decline in 1984, particularly in the second half. Favorable exchange rates and decreasing production costs were key factors in this downward movement. In addition, competition from foreign producers intensified as undercapacity in the domestic industry tended to lengthen delivery times.

Under these conditions, the dollar volume of machine tool imports increased 43 percent over 1983 levels, while the value of imported machinery for cutting metal was up by 48 percent.⁴² Japanese machine tool builders increased their share of import sales in this country to 50 percent in 1984, up from 42 percent in 1982.⁴³ This reflects a strategy of concentration on metal-cutting tools, such as computer numerically controlled (CNC) lathes and machining centers (units which feature a series of variable metal-cutting functions). These Japanese tools have attained a reputation for

Table 3. Annual U.S. imports from and exports to selected areas, 1982-84

[In billions of dollars]

Area	Imports			Exports		
	1982	1983	1984	1982	1983	1984
Developed countries ¹	\$147.0	\$157.9	\$208.6	\$122.5	\$122.8	\$135.9
Canada	46.8	52.5	66.9	33.7	38.2	46.5
Japan	39.9	43.6	60.4	21.0	21.9	23.6
United Kingdom	13.5	12.9	15.0	10.6	10.6	12.2
West Germany	12.5	13.2	17.8	9.3	8.7	9.1
France	5.7	6.3	8.5	7.1	6.0	6.0
Developing countries ²	104.2	108.0	126.9	82.7	72.3	74.4
Mexico	15.8	17.0	18.3	11.8	9.1	12.0
Venezuela	5.0	5.2	6.8	5.2	2.8	3.4
Brazil	4.6	5.4	8.3	3.4	2.6	2.6
Taiwan	9.6	12.1	16.1	4.4	4.7	5.0
South Korea	6.0	7.7	10.0	5.5	5.9	6.0
Hong Kong	5.9	6.8	8.9	2.5	2.6	3.1
Saudi Arabia	7.9	3.8	4.0	9.0	7.9	5.6

¹Generally follows the assignment of countries made by the United Nations to include Canada, Western Europe, Japan, Australia, New Zealand, and the Republic of South Africa.

²Generally follows the assignment of countries made by the United Nations to exclude the developed countries and communist countries in Europe and Asia but include the rest of the world.

NOTE: Export data are on a free-alongside-ship (f.a.s.) value basis, and import data are on a cost-insurance-freight (c.i.f.) basis.

SOURCE: *Highlights of Export and Import Trade*, FT-990 (Bureau of the Census), table 5, section b, and table 8, section c.

reliability and competitive price, and deliveries tend to be prompt.

In this climate of fierce international competition and shifting markets, the pace of technological development has quickened. Machine tool flexibility and computer compatibility are two areas in which product innovation has been swift in recent years. Intensified competition has also increased protectionist pressures. At yearend, the Japanese Ministry of International Trade and Industry (MITI) was expected to approve a 1-year extension of a floor-price system for numerically controlled machine tools exported to the United States, Canada, and Western Europe.⁴⁴ Meanwhile, there has not yet been any action taken in response to a petition filed by the National Machine Tool Builders' Association seeking restrictions on machine tool imports to this country.

Following a 4.1-percent slide from December 1981 to December 1983, prices for imported electrical machinery and equipment dropped another 9.8 percent in 1984, despite brisk demand for new appliances for residential housing and electronic components for military equipment. A substantial 17.4-percent price decline for imported electronic components was the main contributor to the large downward movement in the index, although moderate decreases also occurred for household appliances, electrical apparatus for circuits, electric power machinery, and automotive electric equipment. Soaring U.S. demand for Asian electronics in 1984 induced hurried expansion of foreign manufacturing facilities. Output increases occurred in Hong Kong, Taiwan, and South Korea, and in Malaysia, where some new factories

were completed in 1984.⁴⁵ Economies of scale and technological advancements combined with lower costs for aluminum, copper, and steel inputs to further depress 1984 import prices for this product group.

Similarly, import prices for telecommunications, sound recording, and sound reproducing equipment fell 3.8 percent in 1984. Since June 1983, this product group had experienced a 6.1-percent price erosion, despite healthy growth in demand. Intense competition among an increasing number of domestic and foreign companies continued to depress prices for some high-growth products within the group in 1984. Videocassette recording (VCR) equipment is a case in point. U.S. VCR sales were about 7 million units in 1984, compared to 4 million in 1983 and 2 million in 1982.⁴⁶ Throughout 1984, however, U.S. and Japanese producers fought to maintain and expand market shares and distribution channels, in anticipation of Korea's entry into the U.S. VCR market in the summer of 1985.⁴⁷

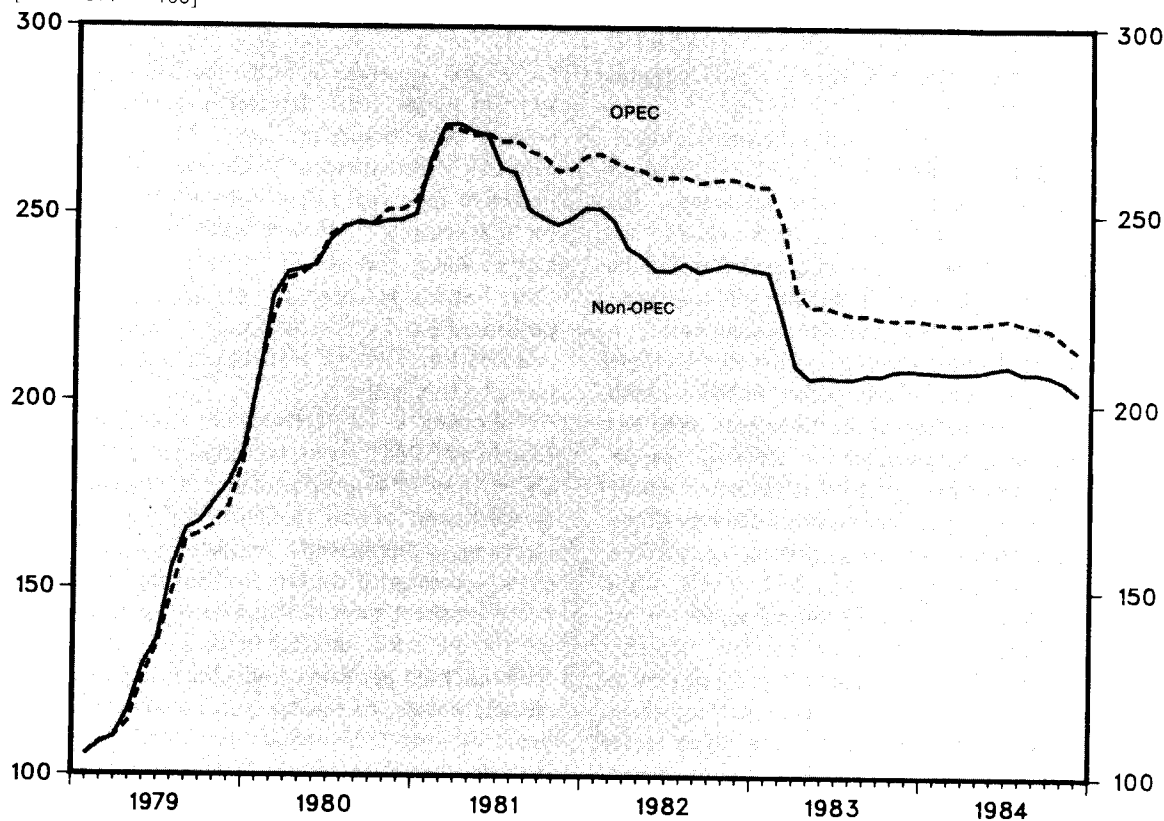
Many producers of equipment in this import price index have taken advantage of technological advancements which tend both to reduce production costs of new output and to lower prices on competing older models. Some products in this group, such as stereos and televisions, enjoyed less spectacular U.S. sales growth in 1984, but experienced sim-

ilar levels of competition among Asian suppliers as well as large inventory accumulation. Furthermore, deregulation of the U.S. telecommunications industry has led European and Japanese manufacturers of telephone and telegraph equipment to enter the U.S. market aggressively.⁴⁸ In April 1984, however, the U.S. International Trade Commission ruled that imports of color television sets from South Korea and Taiwan were injuring domestic producers and penalty duties were imposed, helping to mitigate the price decline in the index for telecommunications, sound recording and reproducing equipment.⁴⁹

Food. The import price index for food decreased 2.3 percent in 1984, following a 3.8-percent advance in 1983. The 1984 decline was mainly the result of a 6.2-percent drop in the index for fruits and vegetables, a 2.0-percent fall in coffee, tea, and cocoa prices, and a 1.3-percent lowering of meat prices. Domestic meat supplies were at a record level in the first half of the year, while U.S. crop output was up sharply in the second half.⁵⁰ Furthermore, global commodity prices were under pressure, as large yields were only partially offset by a modest expansion in consumption.⁵¹ U.S. food imports were \$19.4 billion for the year, up from \$16.7 billion in 1983.⁵² The price index for food, which represents 6.6 percent of the all-import price index,

Chart 5. Monthly OPEC and non-OPEC price indexes for U.S. imports of crude petroleum, 1979-84

[June 1977 = 100]



is one of the most volatile components of that index because of production uncertainties related to weather and other factors.

The index for coffee, tea, and cocoa comprises 35 percent of import food index. World coffee prices fell rapidly in the second half of the year, following steep gains in 1983 and the first half of 1984. Undershipments caused by transportation difficulties, the threat of a frost in Brazil, and shortages of quality beans from West Africa and Brazil resulted in rising coffee prices in first-half 1984. Additional stocks equivalent to 7 percent of the quotas initially negotiated by the International Coffee Organization (ICO) were released during the first three quarters of 1984 to reverse the upward price trend.⁵³ (The ICO is an organization of producing and consuming nations which uses export quotas to stabilize global prices.) A new ICO agreement concluded in October 1984 allowed for an especially large release of coffee between October and December—a peak consumption period in the Northern Hemisphere—and abundant supplies contributed to the decline in coffee prices in the second half.⁵⁴ Expectations of good crops in major African producing countries placed further downward pressure on coffee prices late in the year.⁵⁵

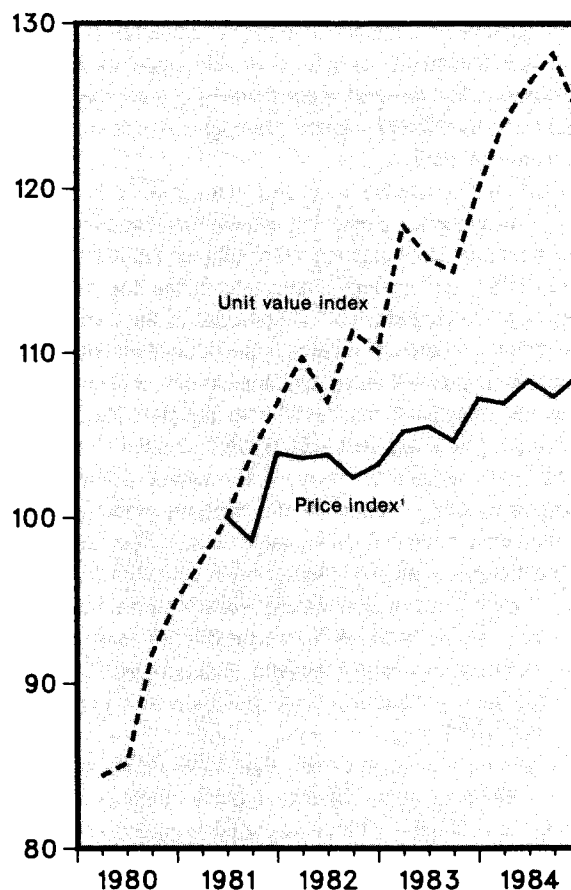
Similarly, abundant cocoa supplies in the second half of 1984 drove prices downward. This decline was sharper than that for coffee in the absence of any price-stabilizing agreement among major exporter and importer countries. Conversely, imported tea prices rose 3.7 percent over the year, for a price gain of 55 percent since June 1982. The price advance reflected a shortage of raw tea in the world market, as production failed to keep pace with increased demand, particularly in the Middle East, the Soviet Union, and Western Asia. Exports from China and India were also limited in 1984 by strong internal demand. From late 1983 to the summer of 1984, the Indian government banned exports of certain types of teas to ensure adequate domestic supplies.⁵⁶ However, tea prices began to fall in late 1984, primarily because favorable weather conditions in Sri Lanka boosted that country's tea output approximately 17 percent above 1983 levels.⁵⁷ An abundance of lower quality teas in May and June also moderated the 1984 price increase.

The import price index for meat decreased 1.3 percent in 1984, after dropping 6.5 percent the previous year. The price reduction was influenced by a 4-percent rise in domestic cattle slaughter in 1984, which added to already large meat supplies.⁵⁸ The price decline also reflected sluggish demand, as U.S. consumers showed a continued dietary preference away from red meat. Imports of meat were down 9 percent in the 1983/1984 marketing year (October–August), while poultry imports increased 37 percent for the same period.⁵⁹

Import prices for fruits and vegetables decreased a substantial 6.2 percent in 1984, as steep price drops in the second half dominated significant first-half increases. (The offsetting price movements reflect differences in the types

Chart 6. Quarterly unit value and price indexes for U.S. automotive imports, 1980–84

[June 1981 = 100]



¹ First published for second-quarter 1981.

SOURCE: Bureau of Labor Statistics and Bureau of the Census.

of crops harvested in the 2 marketing years included in calendar year 1984.) Fruits and vegetables are particularly sensitive to weather developments, with domestic supplies limited early in 1984 because of harsh weather conditions. Imports of vegetables and vegetable preparations, mainly from Mexico and Canada, jumped 24 percent over the 1984 marketing year (October–August), while fruit and nut imports gained a similar 21 percent for the same period.⁶⁰ However, spring yields of vegetables in the United States and worldwide were considerable, and the upward trend of prices was rapidly reversed. Imports of orange juice from Brazil continued to soar during the year as Florida citrus was damaged by the fourth freeze within the decade in December 1983, and was threatened by an outbreak of citrus canker late in 1984.

Intermediate manufactures. Prices for imports of intermediate manufactures decreased a slight 0.4 percent in 1984,

after rising 3.7 percent in 1983. This product category includes a number of basic inputs to manufacturing processes, such as paperboard, glassware, iron and steel, and nonferrous metals. The United States imported \$49 billion of these products in 1984, up from \$37 billion in 1983, as the economic recovery spurred demand.⁶¹ Substantial price declines for nonferrous metals, cork and wood manufactures, and nonmetallic mineral manufactures during the year were almost wholly offset by sharp price gains for textiles, paper, and iron and steel.

Prices for imported iron and steel rose 3.5 percent in 1984, following a 1.8-percent increase during the preceding year. Iron and steel imports were 60 percent higher in 1984 than in 1983, and import penetration of the domestic market climbed to 26 percent from 20 percent in the earlier year.⁶² U.S. demand for sheet steel was particularly strong because of increased sales of autos and appliances. Although import prices for steel have increased over the past 2 years, many foreign suppliers are still able to deliver steel to the United States at prices below those of the major domestic steelmakers, primarily because of the strength of the U.S. dollar and their own relatively low output costs. Specifically, foreign producers often enjoy lower labor costs than U.S. firms, receive some form of government subsidization, and/or make extensive use of more efficient production methods, such as the continuous casting method of production.⁶³ In 1984, domestic steel production was up a modest 8 percent from depressed 1983 levels.⁶⁴

A significant portion of the post-1981 steel import surge came from developing nations—particularly Mexico, Argentina, and Brazil—which engaged in aggressive marketing practices in order to obtain foreign exchange to service their international debts. Other countries, such as South Korea, expanded steel facilities in 1984, adding to the glut in world steelmaking capacity. Also in 1984, additional foreign shipments entered the United States after being diverted from other countries which had imposed restrictions on their steel imports.⁶⁵

The wave of imports led the U.S. steel industry to petition for Federal relief in May of 1984. This threat of quotas or tariffs caused some foreign steelmakers to step up shipments during the first 6 months of the year. Others, fearing that they would be charged with selling steel below cost, raised their prices to the United States. The end result of the domestic industry's efforts to limit imports was a pledge by the U.S. government to restrict 1985 steel imports to 18.5 percent of the domestic steel market through voluntary agreements with major suppliers. By mid-December, the United States had concluded several supply-limiting agreements with foreign steel producers, including Japan's commitment to limit her exports to the United States to 5.5 to 6.0 percent of the U.S. market.⁶⁶ Other negotiations, such as those conducted with South Korea, were stalled at year's end, with domestic steel producers threatening revival of numerous other import petitions if the Government failed

to conclude such export-restraint accords.⁶⁷

Nonetheless, stiff competition among fully integrated U.S. steelmakers, foreign suppliers, and domestic minimills continued during 1984. Minimills convert steel scrap and semi-finished slabs into products such as bars, rods, and light structurals. Taking advantage of production costs that are approximately one-third less than those of integrated plants, they continued to expand their market share over the year. To become more competitive, the major U.S. steel firms have sought mergers, cut capacity, lowered labor costs, and invested in technological advancements. Domestic steel capacity was reduced from 160 million tons in 1977 to 135 million tons at the start of 1984.⁶⁸ Since the beginning of 1982, 20 major continuous casting capital projects have been completed or initiated, and plans for four electrogalvanizing lines have been announced since the start of 1984. During the year, the development of a new process called thin-slab casting (already being tested in Japan and Europe) spurred a joint research project between U.S. Steel and Bethlehem Corporation. A 1984 merger between LTV Steel and Republic Steel formed the second largest U.S. steel producer, and a venture between this company and Sumitomo Metal Industries of Japan to produce rust-resistant steel in the United States also was undertaken during the year.⁶⁹

The competition among producers has become even sharper as demand for steel in this country declines. Demand has been dampened by significantly higher U.S. spending on foreign-made capital goods, by the downsizing of U.S. automobiles in recent years, and by the substitution of other metals and plastics for steel by many of the industry's traditional customers.

The effect of the strong dollar was evident in price decreases for imported nonferrous metals in 1984. The volume of imports of many metals sharply increased over the year as suppliers in debt-burdened developing countries stepped up production for export. Moreover, exchange rates further enhanced the price competitiveness of imports, which stems from production cost advantages. Copper and copper alloy imports by the United States increased 13.0 percent in 1984, leading domestic producers to seek (albeit unsuccessfully) quota protection from the U.S. International Trade Commission.⁷⁰ The oversupply on world markets has also caused market prices for copper to fall, despite low domestic inventory levels and an 8-percent increase in copper consumption by the non-Communist world.⁷¹

Prices for zinc did not sustain their strong growth of the first half of 1984, yet showed a decline of only 0.3 percent for the year as a whole. The metal was in great demand for steel galvanizing applications, especially in the domestic automobile sector where increased steel durability is being emphasized under expanded warranty protection. Tin prices, on the other hand, continued in steep decline, reflecting a combination of slack demand and significant oversupplies in world markets.

The metal for which price is most directly affected by

movements in the dollar and interest rates is silver, due to its appeal as a speculative commodity and a hedge against inflation. In the past, there has tended to be an inverse relationship between the price performance of silver and the direction of interest rates. Thus, in the economic climate of 1984, silver prices hovered at depressed levels, although there was a small rally in the fourth quarter in response to a decline in short-term interest rates.

Miscellaneous manufactured goods. The import price index for miscellaneous manufactures, which comprise almost 10 percent of the all-import index, experienced a very slight, 0.1-percent downward drift in 1984. The stability of this index was the result of significant price movements in both directions for a number of consumer items. The upward pressure exerted by a 7.8-percent increase in clothing prices, a 4.8-percent rise in footwear prices, and a 5.3-percent gain in watch and clock prices was more than offset by a 17.3-percent price drop for collectors' pieces, a 4.8-percent decline for professional, scientific, and controlling instruments, a 7.6-percent decrease for musical instruments and accessories, and various more-moderate drops for such items as toys and jewelry. U.S. imports of miscellaneous manufactures leaped 35 percent in 1984.⁷²

Increased clothing and footwear prices reflected healthy domestic demand throughout 1984, and imports of these products soared. Limited supplies of some apparel items contributed to higher price levels, in part because of Federal tightening of import controls in 1983 and 1984, and new quota regulations issued late in 1984.⁷³ These new "transshipping" rules attempt to prohibit shipment of a garment under a country's quota if the garment was not substantially constructed in that country. The regulations especially curbed supplies of sweaters and knit shirts from Hong Kong, Taiwan, and China. Investigations by the U.S. International Trade Commission on the effect of footwear imports on the domestic industry took place in 1984. Although a June ruling determined that imports were not injuring the domestic industry, another investigation was initiated in November and the possibility of increased import controls placed upward pressure on prices for the year as a whole.

The substantial 17.3-percent price drop for imported collectors pieces in 1984 was primarily caused by a decline in gold prices, as speculative demand abated in response to the strength of the U.S. dollar. Similarly, jewelry prices dropped 5.7 percent because of falling metal prices. Other imported consumer products in the miscellaneous manufactures group experienced price decreases despite booming U.S. demand, reflecting expanded foreign output levels and sluggish economic growth in other parts of the world. Videotapes provide an example of a product in this index for which production outpaced sales growth in 1984. Twice as many brands of videotapes were available in the United States in 1984 as in 1983, and prices declined substantially during the year. Worldwide capacity for videotapes in-

creased from 121 million units in 1980 to 736 million units in 1984, resulting in an estimated 25-percent surplus capacity.⁷⁴ Major Japanese videotape producers kept unit costs down during the year by manufacturing tapes for other companies to sell under their own brand names, and this practice further depressed prices over the year.⁷⁵ Also in 1984, Korean manufactures began shipping tapes to the United States and these newcomers captured more than 8 percent of the U.S. market in that year.⁷⁶

Export price trends

Machinery and transport equipment. Machinery and transportation equipment account for 35.3 percent of the value of all U.S. exports. Export prices for these products advanced by 3.3 percent in 1984, following a rise of 2.2 percent in 1983. All major product groups within the machinery and transportation equipment index, with the exception of office machines and computers, showed moderate price gains for the year. Also, the trade value of U.S. exports falling into this category was 8.7 percent greater in 1984 than in the previous year.⁷⁷ Price growth was strongest in such areas as power-generating equipment, electrical machinery, and aircraft, where the technical sophistication of U.S. production provides a comparative advantage. Other product areas in which world competition based on quality considerations has intensified—such as telecommunications equipment, office machines, and transportation equipment—showed more moderate price movements, as U.S. producers attempted to cope with the current exchange rate climate.

One export category demonstrating significant price growth was power-generating machinery and equipment, for which the index advanced 8.5 percent in 1984. This grouping includes a variety of powerplant equipment for transportation uses, as well as industrial motors, turbines, generators, and their parts. Benefiting from increasing demand for capital equipment in export markets, export trade volumes for power-generating machinery and equipment increased by 5.8 percent in 1984.⁷⁸ Due to the reputation of U.S. manufacturers, product categories such as aircraft engines and their parts, and automotive engine parts have consistently enjoyed high levels of export demand, which has permitted moderate price advancement. Some groups, such as marine powerplants and replacement parts for generators, demonstrated even stronger price growth during the year.

The export price index for road vehicles and parts is the largest component of the machinery and transportation index. The indexes of its two major product groups, passenger automobiles and motor vehicle parts, moved in different directions during the second half of the year, although both categories registered moderate overall increases for the year as a whole.

The export index for automobiles advanced by 2.3 percent in 1984. The overwhelming majority of automobile exports from U.S. plants are shipped to Canada; in 1983, for ex-

ample, 93.9 percent of such exports were to the Canadian market.⁷⁹ Buoyed by an economic recovery in Canada, new car sales in that country increased by 15 percent in final 1984 figures.⁸⁰ This market growth has permitted U.S. automakers to raise prices, and thus to begin recouping the substantial investment in new design and production technologies made in recent years. Significant capital equipment outlays, in conjunction with strenuous cost-cutting efforts in other industry spending, are helping U.S. automakers compete effectively in the rapidly changing world automotive market.

Despite the continuing surge in shipments of export motor vehicle parts, the index for this category increased by only 0.8 percent in 1984. Increased original equipment manufacture in both Canada and Mexico has fueled demand for U.S. exports of auto parts. However, price growth for these components has been dampened by the strength of the U.S. dollar in an increasingly competitive world market, as evidenced by price erosion of 1.5 percent in the second half. The evolution of the "world car" concept has enhanced the development of parts industries in many countries, where high standards of quality control have been applied.

The "other transport" export price index, which includes aerospace parts, railway equipment, ships and boats, and general aviation aircraft, advanced 6.9 percent in 1984. Excluded from coverage in the index are commercial transport and military aircraft.

Prices for exported general aviation aircraft registered a 10.2-percent increase for the year. The percentage share of industry billings represented by exports continued to decline in 1984, having dropped to 15.4 percent from a 33-percent level in 1982.⁸¹ However, because price levels also reflect the state of domestic demand and the industry's high production costs, a stronger domestic sales performance in the second half, especially in the high-priced business jet aircraft segment, contributed to price growth.

Export prices for aircraft parts rose 6.3 percent during the year. The high quality and technological sophistication inherent in U.S. products has earned a worldwide reputation and sales dominance. Despite the disadvantageous exchange rate, U.S. manufacturers are able to raise prices as production costs increase because of the demonstrated inelasticity of demand for aerospace replacement parts.

In 1984, the office machine and data processing (ADP) equipment category continued to be the only major sector in the export machinery and transportation equipment index to register regular patterns of price erosion. The index for the category declined 1.1 percent over the year, and has fallen 15.6 percent since yearend 1980. In 1984, prices for office machines fell 0.5 percent, ADP machines and units were down 0.4 percent, and prices for associated parts weakened at a 1.8-percent rate.

This downward price trend is in part attributable to the high fixed costs of product development and low variable costs of production characteristic of goods in the category:

Once fixed costs are covered by sales in the initial period, it is relatively easy for producers to reprice output in order to compete successively in a variety of markets. As higher priced markets become saturated, the price of a given product is often lowered over time to be competitive in less-profitable market segments.

Another major factor associated with price declines is the fiercely competitive world market for these products, in which U.S. exporters are again burdened by the sustained strength of the dollar. This market context has stimulated alliances and partnerships between competitors for purposes of product-line diversification. For example, Burroughs, NCR, Sperry-Rand, Control Data Corp., and Honeywell—companies that formerly specialized in computer mainframes—all have made alliances with other firms that enable them to offer a more complete range of products.⁸²

The world competitiveness of U.S. exports of office machines and computers is reflected in export trade volumes for 1984, which were up 67.5 percent from 1980 levels and 25 percent from yearend 1983 levels.⁸³ Export trade was buoyed in 1984 by improved economic performance in European economies, a major export market for this equipment.

Food. Grain prices—the main component of the export food index—declined 12 percent in 1984 following a 16.8-percent advance in 1983. The drop in the index was attributable to significant reductions in corn and sorghum prices, and a slight downward movement in wheat prices. (Soybean prices, which also declined sharply over the year, are included in the crude materials index.) Market prices decreased as 1984 U.S. corn output was almost double that of 1983 and as wheat stockpiles remained large through the year. U.S. grain exports were \$16.1 billion in 1984, representing a 6.1-percent increase over 1983 levels and accounting for 7.4 percent of the value of total U.S. merchandise trade exports.⁸⁴

Corn prices dropped 18.4 percent in 1984, after a 34.5-percent jump in 1983. U.S. corn production had plummeted more than 50 percent in the 1983/84 marketing year (October through September), but should increase an estimated 80 percent for the same period in 1984/85.⁸⁵ The drawing down of corn surpluses in 1983 due to crop reduction programs and dry weather, and floods in the Midwest which disrupted the planting of spring crops in 1984 combined to increase speculative demand. Initially, high prices resulted, but these began to fall rapidly in mid-1984, because only an estimated 4.2 million acres of the corn base were idled in Federal land retirement programs in that year compared with 32 million acres in 1983.⁸⁶ In addition, yields were up about 30 percent from 1983's abnormally low level.⁸⁷ A factor inhibiting demand for corn during the year was the corn feeding rate; its 1983/84 level was the lowest since 1976/77, primarily because higher livestock prices encouraged large slaughters which reduced cattle herds.⁸⁸ Also, wheat prices were low

enough that wheat tended to be substituted for corn.

Other coarse grains, such as sorghum and barley, can also be used as substitutes for corn and these exhibited similar price declines in 1984 because of plentiful supplies. Competition from Argentina, Australia, Canada, South Africa, and Thailand limited U.S. export sales of coarse grains over the year. Production in these major exporting countries rose an estimated 10 percent in 1984, while the appreciation of the dollar made U.S. commodities relatively more expensive.⁸⁹ Meanwhile, China's coarse grain harvest set a record in crop year 1983/84 and is expected to increase another 3 percent in 1984/85.⁹⁰ China has not purchased major amounts of coarse grains from the United States since March 1983, despite the Long-Term Grain Agreement between the two nations that stipulates purchases of almost 1 million tons annually.⁹¹ Projected record production in Europe (stemming from increased use of high-yielding varieties), along with ideal weather conditions in the United States during the summer, further drove down prices of corn and other coarse grains in 1984. The price decline was somewhat tempered by large Soviet purchases to supplement poor harvests in that country, and by growing demand for high-fructose corn syrup as the U.S. beverage industry increasingly substituted this product for sugar.

Export prices for wheat edged downward 0.2 percent in 1984, a decline attributable to an abundant domestic harvest, huge U.S. stockpiles, and rising world production. The poor Soviet harvest, a drought in Africa, and severe spring flooding in the Midwestern part of the United States mitigated the price decline for the year. Competition in the world wheat market was heightened by output gains in Australia, China, and Europe. Moreover, harvests were better than expected in Argentina, a country which has substantially expanded its exports of hard winter wheat in recent years. Wheat prices also tumbled in second-half 1984 for the same reasons that export prices for other agricultural products were falling—the strength of the U.S. dollar, higher yields, and excellent summer weather conditions in the United States. Although the Soviet Union imported more U.S. wheat in 1984 than in 1983, that nation seemed to be shifting some of its business to the European Community and particularly to France, which had large export amounts available in 1984.⁹² Foreign-grown wheat exports in 1983/84 (July–June) were 10 percent higher than for the 1982/83 crop year, with slightly higher projections for the 1984/85 period. U.S. wheat exports will have increased approximately 4 percent between July 1982 and June 1985.⁹³

Crude materials. The 9.6-percent price drop for crude materials in 1984 contributed significantly to the decrease in the all-export price index, as these materials represent almost 11 percent of the index weight. Although demand for these products, which are used in the early stages of production, increased as worldwide industrial activity began to pick up in 1984, rising supplies of crude materials and

the dollar's strength tended to depress export prices. U.S. exports of crude materials during the year were \$20.25 billion, an 8.9-percent increase over the 1983 dollar volume.⁹⁴ Substantial price declines for oilseeds, textile fibers, wood, and metal ores and scrap were partially offset by increased prices for pulp and waste paper, crude minerals, and crude rubber.

Falling soybean prices contributed substantially to the decline in index for crude materials. Soybean supplies rebounded significantly in 1984 following a drought in 1983. Soybeans are processed into meal or oil. In November 1984, soybean meal prices stood at their lowest level since October 1977, in part because reduction of U.S. livestock herds had dampened demand for feeds.⁹⁵ Lower prices for soybean meal also reflected the increased use of wheat for feed; because wheat contains more protein than corn, less meal is required to balance rations when wheat is used.⁹⁶ Increased Brazilian exports, which were relatively inexpensive because of the rapid appreciation of the U.S. dollar against the cruzeiro, also depressed soybean prices in 1984. Strong demand for soybean oil helped mitigate the price decline, even as vegetable oil supplies in Southeast Asia increased in the second half of the year.

Falling cotton prices were the principal reason for the 13.3-percent slide in the textile fibers price index in 1984. U.S. cotton prices dropped 16.2 percent over the year, following a 30-percent gain in 1983. The United States is the world's leading exporter of raw cotton, and U.S. exports of this commodity for the 1983/84 season were 31 percent above those for the 1982/83 year.⁹⁷ (The cotton year runs from August through July.) This higher export demand had to be met from U.S. surplus stocks because cotton production had declined dramatically during the 1983/84 year. Consequently, cotton prices rose significantly in 1983 and first-half 1984.

The upward price trend for cotton was reversed in mid-1984, when it became apparent that world cotton production in the 1984/85 season could reach record levels, exceeding the previous season's output by 20 percent.⁹⁸ The downward price movement also reflected a 41-percent increase in acreage planted and a 22-percent higher yield from the 1984/85 U.S. crop.⁹⁹ Furthermore, the U.S. Department of Agriculture projected that U.S. cotton exports would decline 7.4 percent for the 1984/85 year, compared with the same July–June period in 1983/84.¹⁰⁰ However, cotton exports remained fairly strong in the second half of 1984, principally because of significantly higher shipments to the Soviet Union, Italy, Yugoslavia, West Germany, and Greece. Competition for the important Asian market escalated over the year as China enjoyed record-breaking harvests, and yields in Mexico and Brazil proved large. (Japan, South Korea, and Taiwan are the leading buyers of U.S. cotton.) While textile production and imports of U.S. cotton have grown in Latin America in recent years, these countries also have greatly expanded

their internal cotton production. Such policies have tended to dampen the growth of U.S. cotton exports to Latin America, particularly in the latter half of 1984.

Export prices for wood fell 3.4 percent in 1984, following a 1.2-percent increase in 1983. Prices for wood had registered decreases in 1980 and 1982, with only a slight increase in 1981; from March 1980 through December 1983, the index for this product group slid 18 percent. A significant proportion of U.S. wood exports consists of high-quality lumber and logs for furniture production in Japan, Europe, and, increasingly, in the newly industrialized Far Eastern countries. Lower quality U.S. lumber is used as general construction material in the Caribbean. The declining export prices in recent years were partially the result of the slow pace of construction and consumer spending in these foreign markets. Furthermore, competition from Canada combined with excess supplies in the United States to exert downward pressure on prices in 1984. U.S. log and lumber exports for the year were 3 percent below 1983 amounts.¹⁰¹

The U.S. wood and wood-products industry faced stiff competition in 1984 from Canadian companies, which enjoyed a price advantage because of abundant supplies of inexpensive government-owned timber, and the relative strength of the U.S. dollar. To become more competitive, U.S. manufacturers attempted to lower costs and to expand offshore markets. However, some foreign countries, such as Japan, have enacted measures to protect their domestic industries. Moreover, lumber for export must be sized to conform to metric standards, and some domestic mills are not equipped to cut wood in this manner.

Excess capacity and high production costs have beset the U.S. wood industry in recent years, primarily because homebuilding activity during the early 1980's was less than anticipated. Lumber companies had expected rapid growth in starts of single-family homes because of the maturing of the U.S. population. Accordingly, firms expanded their facilities and land holdings in the 1970's and bid up prices on Federal timberlands, resulting in high operating costs.¹⁰² Over the past 2 years, the industry has initiated deep production cuts and widespread mill closings, despite a pick-up in housing. A law enacted in October 1984, which permits companies to buy out of their high-priced Federal timber contracts, also helped to reduce costs late in the year.¹⁰³

Chemicals. The chemical export price index registered a 0.9-percent decline for 1984, reflecting increasingly competitive conditions in the world chemical market, the continued strength of the U.S. dollar, and lower raw material costs. Foreign market sales have historically been a substantial percentage of U.S. chemical shipments, and have resulted in trade surpluses for most chemical categories. These trade surpluses have narrowed in recent years because of a proliferation of imported chemicals in the domestic market at the same time that U.S. exports were being hampered by the strong dollar. Although chemical exports jumped

13 percent in 1984, imports climbed 27 percent, resulting in only a \$7.9 billion trade surplus, compared with \$8.5 billion in 1983 and \$10.4 billion in 1982.¹⁰⁴

Chemical prices were influenced by the expansion of foreign chemical production capacity, particularly in oil-producing nations such as Saudi Arabia, Kuwait, and Mexico. These nations enjoy the cost advantage resulting from the ready availability of extremely low-cost petroleum feedstocks, which has exerted downward pressure on world chemical prices in recent years. However, a continued decline in crude oil prices during 1984 enabled other producers, including those in the United States, to lower prices on some chemical products. For example, the production of polymers and copolymers (plastics) involves substantial petroleum use, and U.S. export prices for this group dropped 12 percent in 1984.

Although export prices for some chemical products, such as polyvinyl chloride (PVC), rose moderately in 1984, U.S. manufacturers of these products were also adversely affected by a rising tide of imports. Forty percent of the consumption of PVC is for pipeline, the demand for which depends on residential construction. The year saw an approximate doubling of PVC imports and a 50-percent reduction in U.S. exports.¹⁰⁵ Excess supplies of this product thus persisted in the United States despite healthy demand. Other chemical categories were similarly affected, and some U.S. producers continued to reduce their operating costs in 1984 in an attempt to remain competitive in both the domestic and foreign markets. These cost-reduction measures followed deep cuts induced by recession in the previous 3 years, and furthered the long-term slide in chemical prices. For example, export prices for hydrocarbons decreased 29.3 percent from June 1981 through December 1984.

Intermediate manufactured products. Export prices for intermediate manufactured products advanced 0.4 percent in 1984. A significant increase of 9.6 percent for paper and paperboard products was offset by a 12-percent decrease in prices for nonferrous metals. In 1983, this category had registered a 3.1-percent price increase. The decline in value of U.S. exports of intermediate manufactured goods over the past few years was halted in 1984, as volumes increased slightly to \$15.1 billion from the \$14.9 billion posted in 1983.¹⁰⁶

A 9.6-percent price advance for exported paper and paperboard products was a principal contributor to the upward movement in the intermediate manufactures export price index for 1984, as U.S. paper exports increased 11.9 percent.¹⁰⁷ Paper supplies remained tight as U.S. producers were operating at close to full capacity throughout the year. Production in this industry is highly capital-intensive and additional capacity cannot be brought on-line easily over a short period. In some cases, capacity planned in 1984 will not be ready for use until 1986. Foreign and domestic de-

mand for kraft paper, which is primarily used for packaging material, grew dramatically as manufacturing output rose, particularly in the United States and Japan. White coated-paper demand was up with brisk magazine sales, and booming catalog and advertising distribution. And the growing use of office and home automation products boosted demand for both writing and printing papers. From the supply side, a labor strike in the major pulp-producing region of Canada limited shipments from that nation in first-half 1984, further driving up world paper prices.

Export prices for nonferrous metals declined by 12 percent in 1984, following an increase of 1 percent in 1983. Significant price drops were registered for silver (-21.0 percent) and aluminum (-13.7 percent). Demand for silver remained very

slack as the strength of the dollar and the level of interest rates weakened the metal's attractiveness as a speculative commodity. Demand by industrial users was not sufficient to offset price dampening factors. Aluminum prices, which fell sharply in the fourth quarter, have been affected by steep drops in ingot prices and growing producer inventories, which increased by 738 million pounds between November 1983 and November 1984.¹⁰⁸ Export volumes for aluminum were down by 15.5 percent in a similar November to November comparison.¹⁰⁹ High domestic energy costs (the largest cost factor in aluminum production) and the strength of the dollar have damaged U.S. competitiveness in a world market that has seen dramatic increases in foreign capacity in recent years, particularly in such countries as Brazil, Australia, and Canada. □

—FOOTNOTES—

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¹ Amount indicated is on Balance of Payments basis. See *U.S. Department of Commerce News*, BEA 85-05 (Bureau of Economic Analysis), Feb. 7, 1985.

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⁴ Estimates from Data Resources Inc. See "The Superdollar," *Business Week*, Oct. 8, 1984, p. 164.

⁵ Import price indexes are weighted by 1980 import values and are published on an f.o.b. (free-on-board) foreign port or c.i.f. (cost, insurance, and freight) U.S. port basis. Export price indexes are weighted by 1980 U.S. merchandise trade values and are published on an f.o.b. factory or f.a.s. (free-alongside-ship) U.S. port basis. See "International Price Program" (Bureau of Labor Statistics).

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⁹ *U.S. Department of Commerce News, Housing Starts*, CB85-13 (Bureau of the Census), Jan. 17, 1985, table 1B; and *U.S. Department of Commerce News, New Construction*, CB85-23 (Bureau of the Census), Feb. 1, 1985, table 1.

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¹² *Ibid.*, table C-8.

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¹⁶ For information on imports, exports, and trade deficits, see *U.S. Department of Commerce News*, BEA 85-05 (Bureau of Economic Analysis), Feb. 7, 1985.

¹⁷ *Highlights of Export and Import Trade*, FT-990 (Bureau of the Census), December 1984, tables B-5 and C-8.

¹⁸ *Ibid.*

¹⁹ *Ibid.*, tables B-2 and C-3.

²⁰ The share of final good production that is accounted for by gross trade (merchandise imports plus merchandise exports) is calculated as:

$$\frac{\text{Merchandise imports} + \text{Merchandise exports}}{\text{Sales of final goods} + \text{Merchandise imports}} \times 100$$

It is computed using data from *Survey of Current Business*, various issues.

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²⁹ "Oil and Gas: More Bad News is in the Pipeline," *Business Week*, Jan. 14, 1985, p. 87.

³⁰ *Ibid.*

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³² See *Consumer Price Indexes for Fuel Oil*, various issues; and *Consumer Price Index for Energy and Food*, USDL-85-31 (Bureau of Labor Statistics), Jan. 23, 1984.

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