Producer Price Trends in 1982

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Summary

Inflation of prices received by producers of the Nation's goods slowed sharply in 1982. From December 1981 to December 1982, the Producer Price Index for Finished Goods moved up 3.5 percent, only half as much as the 1981 advance of 7.1 percent. (See chart.) The 1982 rise was the smallest change for any calendar year since the 3.2 percent increase recorded in 1971, when tight price controls were in effect for much of the year. As 1982 ended, the finished energy goods index was 0.1 percent below its December 1981 level; in contrast, this index had climbed 14.1 percent during 1981. Capital equipment prices slowed markedly, from a 9.2 percent increase in 1981 to a 4.0 percent rise in 1982. Prices for finished consumer goods other than foods and energy also moved up less in 1982 (5.0 percent) than in the previous 12 months (7.1 percent). Consumer food prices were up 2.1 percent over the year in 1982, the second consecutive modest annual increase; these prices had risen 1.4 percent in 1981. (See table C.)

Prices of materials used in industrial production showed little net change over the year. The Producer Price Index for Intermediate Materials, Supplies, and Components edged up only 0.3 percent from December 1981 to December 1982, and crude material prices were only 0.4 percent higher at the end of the year than at the beginning. As with finished goods, prices for intermediate and crude energy goods played significant roles in the overall moderation of inflation, and prices for most materials other than food and energy either dropped or rose far less than in 1981.

The recession that began in mid-1981 persisted throughout 1982 and played a critical role in reducing inflation by cutting demand. The rise in the unemployment rate to a double-digit figure by the fourth quarter not only cut the purchasing power of those unable to find work, but also made many other consumers unusually cautious about spending because of fears of potential layoffs. The housing and automotive industries and their suppliers were among the hardest hit. Such key economic indicators as capacity utilization rates and industrial production reached or approached postwar lows during 1982.

A tight monetary policy and widespread apprehension about a possible reacceleration of inflation once a recovery started helped to keep real (i.e., inflation-adjusted) interest rates at virtually unprecedented high levels through the first half of 1982. However, a growing conviction that the recovery would not be so strong as to re-ignite double-digit inflation, as well as a loosening of monetary policy, contributed to a sharp slide in most interest rates during the second half. Lower interest rates gave rise to a more robust outlook for the residential construction and automotive industries in particular. However, interest rates charged by financial institutions for most other consumer purchases generally remained high, restraining the ability and willingness of consumers to undertake major purchases on credit.

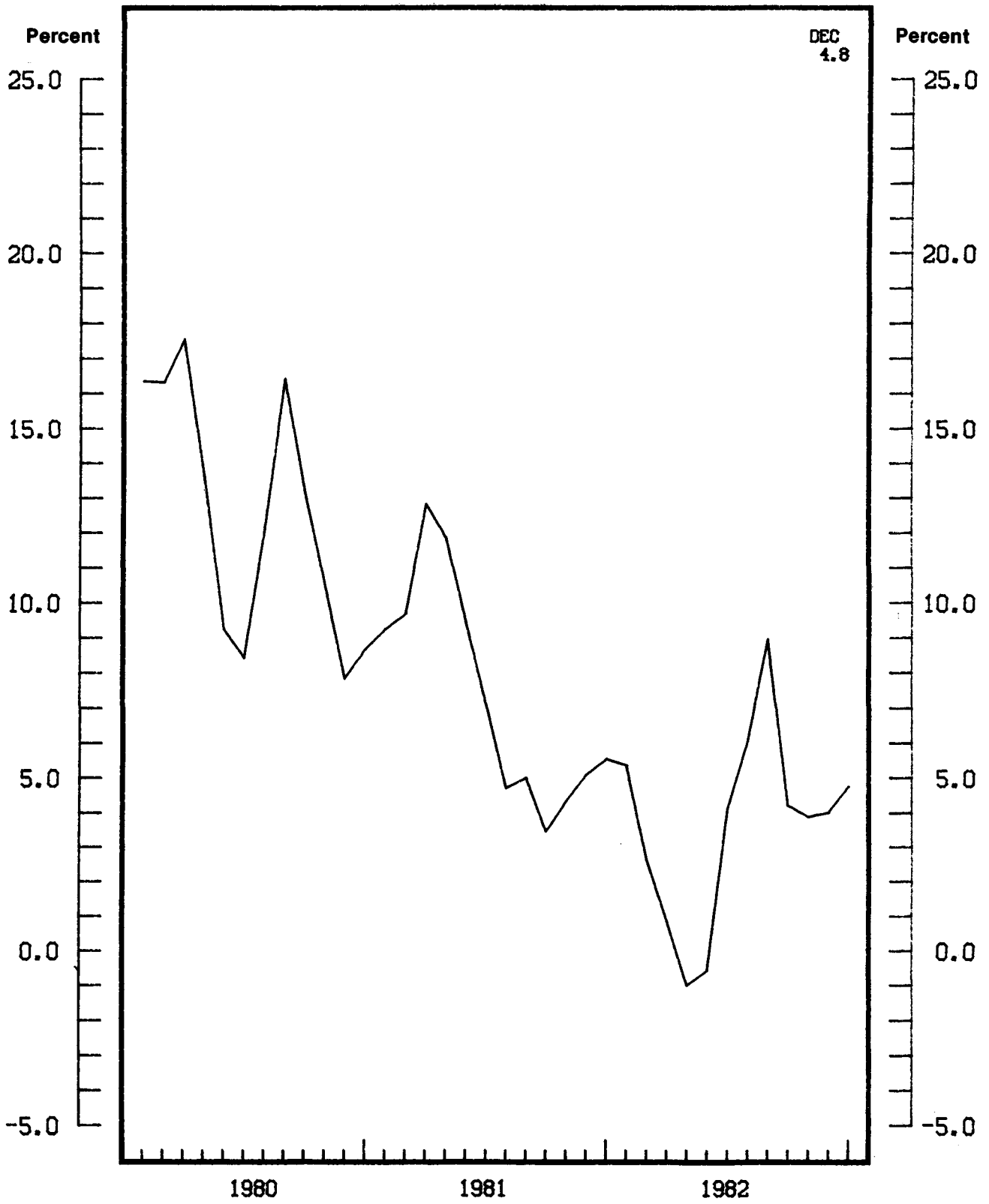
By maintaining an elevated value of the American dollar in international currency markets, high interest rates discouraged exports of American goods. The worldwide recession and growing financial difficulties of many lesser developed countries further restricted foreign markets. Therefore, even though imports of crude oil declined dramatically, the balance of merchandise trade in 1982 registered the largest deficit on record.

Table C. Percent changes in selected producer price indexes by stage of processing, 1980-82

Index	12 months ending December—		
	1980	1981	1982
Finished goods	11.8	7.1	3.5
Finished consumer foods	7.5	1.4	2.1
Finished energy goods	27.8	14.1	-.1
Finished consumer goods excluding foods and energy	10.4	7.1	5.0
Capital equipment	11.4	9.2	4.0
Intermediate materials, supplies, and components	12.6	6.0	.3
Intermediate foods and feeds	16.1	-12.9	.1
Intermediate energy goods	25.4	11.1	-1.0
Intermediate materials excluding foods and energy	10.1	6.6	.6
Crude materials for further processing	12.1	-3.7	.4
Crude foodstuffs and feedstuffs	8.6	-14.0	1.4
Crude energy materials	26.9	22.8	2.4
Crude nonfood materials excluding energy	7.5	-11.4	-7.6

Producer Price Index for Finished goods, 1980-82

(3-month annual rates of change, seasonally adjusted)



This reversed the historical pattern in previous recessions, which had generally been marked by expanding exports.

Energy

After climbing at double-digit rates from 1979 to 1981, prices received by producers of energy goods generally turned down in 1982, or else moved up considerably less than in 1981. The most notable exception was the natural gas index, which soared more than 20 percent for the third consecutive year as the phased decontrol of natural gas prices continued. Among the dominant factors helping to restrain energy consumption and most energy prices in 1982 were the continued economic slump in most of the non-Communist industrialized world; heavy production by many oil-exporting countries; and the trend towards improved energy efficiency by manufacturers, electric utilities, other businesses, and households in reaction to the energy price runup during the 1970's.

Falling demand for petroleum and petroleum products imposed a severe strain on the ability of the Organization of Petroleum Exporting Countries (OPEC) to harmonize its members' production and pricing policies. Supply competition from major non-OPEC nations—such as Mexico, Britain, and Norway—was increasingly important during the year. These countries lowered their prices in hopes of selling more of their oil to maintain the flow of funds for their domestic budgetary and development requirements. OPEC members agreed to support their schedule of officially posted prices by cutting production. However, such understandings were at least partially frustrated by those OPEC countries which deliberately produced more than their allocations and/or sold below official postings, for much the same reasons that motivated nonmember countries to cut prices and keep production relatively high.

While these OPEC members (which in most cases had traditionally acted to push prices higher) were undercutting the benchmark price of $34 per barrel, Saudi Arabia sought to stabilize the global petroleum market and maintain the cohesion of OPEC by continuing to reduce its output. As its market share diminished, the power of Saudi Arabia to influence world oil markets waned somewhat. Nevertheless, there was a widespread fear within OPEC of any dissension serious enough to provoke an all-out price war, since drastically lower prices would cut every member's revenues with little prospect of stimulating demand in the midst of worldwide recession.

Finished energy goods. Gasoline prices fell 8.6 percent from December 1981 to December 1982, following a 10.6 percent advance in the preceding year. Although demand showed some occasional spurts during the year, such as at the start of the summer driving season, overall consumption was down slightly from 1981 levels. Several major oil companies discontinued or restricted their credit card operations during 1982; some of these firms instituted price cuts so that their dealers could remain competitive, while others allowed discounts for customers who paid in cash.

Home heating oil prices registered no net change from December 1981 to December 1982, in contrast to the 20 percent upward surge recorded in 1981. However, prices were extremely volatile during the year. For example, there was a steep decline in prices during the winter months, followed by a sharp upturn in the spring as cold weather lingered much longer than usual in much of the country. Prices jumped again in the autumn when there was a scramble by dealers to rebuild unusually low inventories in the wake of widespread predictions of an early and harsh winter. These prices then retreated at the end of the year when temperatures were surprisingly moderate in many heavily populated regions. High interest rates contributed to the reluctance of many dealers to carry more than a minimum level of inventories, making heating oil prices vulnerable to sudden changes in demand. The development of a futures market for No. 2 fuel oil enabled dealers to operate with smaller inventories than were considered safe before.

Intermediate energy goods. During 1982, prices declined moderately for most fuels that are important for transportation, utilities, and manufacturing uses, including commercial jet fuel, residual fuel, diesel fuel, kerosene, and coke oven products. Most of these fuels had advanced at, or close to, double-digit rates the year before. Electric power rates continued to increase, but only about half as much as in 1981, as more utilities switched among fuels to exploit the most advantageous cost opportunities. A relatively mild summer, combined with a long-term trend towards moderating demand, contributed to the first annual decline in peak electricity demand in many years. The index for liquefied petroleum gas (LPG) went counter to the trend towards falling or moderating prices by accelerating to a 7.0 percent jump; this largely reflected low output levels for domestic crude petroleum, of which LPG is a byproduct.

Crude energy goods. The crude petroleum index (which is based solely on prices of domestic production) moved down 8.5 percent over the year, after climbing 24.4 percent in 1981 when price controls on domestic crude oil were terminated. Most of the 1982 decrease occurred early in the year; after remaining virtually unchanged for about 6 months, the index (which is based on buyers' prices posted by major producers, rather than on quotations in the small and volatile spot market) turned up somewhat in the autumn towards a level

closer to the prevailing prices for imported oil. Prices resumed their downward movement at the end of the year, reflecting the overabundance of most refined products, especially heating oil. Demand for chemical feedstocks derived from petroleum was generally weak all year.

Coal prices rose 4.9 percent, somewhat less than the 1981 advance of 8.4 percent. Domestic demand from utilities was relatively good, as more utilities switched to coal from natural gas and oil-based fuels. However, export demand for steam coal, which had grown rapidly in recent years as Western European utilities increasingly turned towards coal to make themselves less dependent on Middle East oil, stagnated in 1982 as excess coal inventories accumulated at many European utilities. The strength of the American dollar also dampened West European enthusiasm for American coal. Domestic and foreign demand for metallurgical coal was also poor because of the depressed state of the steelmaking industry.

Natural gas prices climbed 20.7 percent, following a 26.5 percent jump the preceding year. As in other recent years, the steep advance in 1982 largely resulted from the phased decontrol of natural gas prices authorized by the Natural Gas Policy Act of 1978 (NGPA). However, the recession left demand for natural gas generally sluggish, as it was for most other kinds of energy. Even though natural gas prices for both business and residential uses remained well below the cost of an equivalent thermal amount of distillate heating fuel, the differential was seriously eroded by the combination of rapidly escalating natural gas prices and falling prices for distillates. Some natural gas distributors were locked into long-term "take-or-pay" contracts which forced them to pay the same total amount to pipelines regardless of the amount of gas actually purchased by the distributor; with requirements falling because of recession and conservation, the outcome of spreading a fixed cost over fewer units purchased was a higher unit price. Another contributing factor was shipment of an increased proportion of more expensive gas from newly opened wells instead of the less expensive gas from older wells, whose prices are more strictly controlled under the NGPA.

Foods

The index for finished consumer foods advanced moderately again in 1982—2.1 percent, compared with a 1.4 percent rise in 1981; this index had climbed considerably more in each of the preceding 4 years. Indexes for both crude foodstuffs and feedstuffs and for intermediate foods and feeds inched up after declining in 1981. Large supplies of many agricultural commodities due to bumper harvests, along with sluggish demand from consumers adversely affected by the recession, caused prices for many consumer foods to decline sharply. On the other hand, prices for pork, poultry, and sugar all turned up after falling in 1981.

Meats, eggs, and fish. The beef and veal index fell 2.9 percent, the third consecutive yearly decline. Cattle prices were also down for the third consecutive year, as ranchers increased their slaughter and as high interest rates and uncertainty about an economic recovery discouraged expansion of herds.

In contrast, pork prices advanced 19.7 percent in 1982, after falling 3.5 percent a year earlier. At the farm level, hog prices jumped 27.7 percent after an 8.7 percent decline in 1981. Hog prices soared in response to sharp cutbacks in pork production. The latest available estimates of the U.S. Department of Agriculture indicated that pork production dropped about 11 percent in 1982 to the lowest level since 1978. Despite recent profitability and less costly feed supplies, hog producers continued to reduce the breeding herd. The generally unprofitable period from mid-1979 through 1981 made producers extremely cautious about expanding production.

Poultry prices turned up slightly after falling sharply in 1981. The upturn in prices reflected higher prices for pork and decreased offerings of poultry that partly resulted from a large winter kill early in the year. On the other hand, egg prices fell at double-digit rates for the second consecutive year, reflecting in part reduced demand and heightened competition from other high-protein foods. The index for fresh and processed fish rose 16.6 percent, over twice as much as in 1981, in response to strong demand and short supplies, particularly for haddock and shrimp.

Sugar. After falling in 1981, prices for many sugar and confectionery products rebounded in 1982, reflecting a 29.4 percent upward surge in prices for raw cane sugar. Prices shot up in the spring when the government imposed new import quotas to boost domestic prices well above sagging prices in world markets. By the end of the year, domestic raw sugar prices were more than triple the depressed world level. The index for confectionery end products rose 10.9 percent as candy bar prices climbed, largely in response to higher sugar prices. On the other hand, the index for confectionery materials fell 13.1 percent. Corn syrup prices decreased mainly because of a bumper corn harvest and over-capacity in the industry. Chocolate coating prices dropped, reflecting a 22.8 percent decline in prices for cocoa beans in the face of excess supplies.

Cereal and bakery products. Price increases for cereal and bakery products slowed to 0.6 percent in 1982, after a rise of 2.6 percent in the previous year and 2 years of double-digit rates before that. Bakery products rose less

than a year earlier, partly because of smaller wage increases and lower prices for packaging and most ingredients other than sugar. However, sharply higher sugar prices exerted upward pressure on prices of sweet bakery products. Prices for flour and some cereals were down in response to lower wheat prices. Reflecting large supplies worldwide, prices for rice fell sharply for the second consecutive year.

Fruits and vegetables. A bumper domestic harvest caused prices for fresh and dried vegetables to plummet. Since favorable growing conditions resulted in good crops in most other food-producing countries, export demand was sluggish. Prices for dry beans were cut in half; although the 1982 crop was estimated to be about 20 percent smaller than in 1981, it was still the third largest on record. Sweet potato prices fell sharply, as the 1982 harvest was the largest since 1965. A 4-percent increase in production for white potatoes led to a drop in white potato prices. Prices also fell for other fresh vegetables, many of which were expected to reach record production because of increased acreage.

Fresh fruit prices declined 11.9 percent from December 1981 to December 1982, led by decreases for apples, which were in good supply, and for bananas, imports of which increased markedly. Prices for lemons and oranges rose only moderately, reflecting a recovery from the steep increases in 1981 when freezing weather severely damaged crops.

Other food-related products. Prices for grains and feeds fell for the second consecutive year, as favorable growing conditions resulted in large harvests worldwide and as high interest rates and the strong performance of the American dollar abroad reduced demand for exports. Most of the price decline occurred in the third quarter when it became evident that another large harvest would be added to the already huge stocks of wheat and corn. A shortage of storage facilities in many areas also forced farmers to sell increased quantities. At year-end, however, grain prices rebounded markedly after interest rates decreased and grain markets seemed more attractive to speculators. Soybean prices contined to fall, reflecting both a record domestic harvest from increased acreage and keen competition from Brazilian crops.

Finished goods other than foods and energy

Consumer goods. Inflation persisted in 1982 for many nonfood, nonenergy finished goods, although at a reduced rate. The rise in the Producer Price Index for finished consumer goods other than foods and energy slowed from 7.1 percent in 1981 to 5.0 percent in 1982. The deceleration was widespread; categories which slowed 5 or more percentage points included passenger cars, light motor trucks, apparel, textile housefurnishings, soaps and detergents, newspapers, and books. Prices for floor coverings declined after a 1981 increase, and flatware and home electronic equipment prices decreased for the second consecutive year. In contrast, the tobacco products index climbed rapidly (partly in anticipation of a sharp rise in Federal excise taxes in January 1983), and indexes for prescription drugs and periodicals also climbed more than 10 percent.

The quality-adjusted price indexes for passenger cars and light trucks both rose slightly less than 2 percent during 1982; in 1981, on the other hand, these indexes had climbed 8.6 and 13.9 percent. Sales of new domestically produced cars dropped to the lowest level since 1961. Although sales of imports also declined, in part because of pressure on Japanese car manufacturers to restrict their exports, import sales actually claimed a slightly greater share of the market (about 28 percent, compared with 27 percent in the 1981 model year). Demand for smaller, more fuel-efficient autos was particularly weak, partly because of falling gasoline prices and partly because the segment of the auto-buying public traditionally most interested in lower priced cars was hard hit by actual or feared unemployment. Demand for larger cars was relatively stronger. Auto manufacturers frequently maintained rebate programs and/or below-market interest rate financing programs to bolster their sales. Midyear efforts to abolish such incentives in hopes that demand would nevertheless be strong proved premature; therefore, such programs remained common all year. Tire prices showed virtually no net change over the year; the effects of stagnant demand for new cars and slightly lower prices for both natural and synthetic rubber were balanced by good replacement demand for tires as car owners kept their cars longer.

Prices for apparel and textile housefurnishings rose 0.4 and 3.0 percent in 1982, considerably less than the advances of 7.6 and 9.0 percent recorded during the previous year. As previously noted for autos, demand for goods aimed at lower income consumers was poor, while sales of relatively expensive items tailored for upper income customers were generally good. Prices for footwear were up less than 4 percent for the second consecutive year, in part because of greatly increased competition from imports from Taiwan, Korea, and Italy since mid-1981 when trade restraints were eliminated. Imports accounted for more than $3 out of every $5 of sales of nonrubber footwear in the United States in 1982.

Prices for a broad range of household durable goods such as furniture and appliances also rose less than in 1981. Demand for such items depends heavily on the vitality of the market for new residential construction; the poor state of the housing industry throughout 1982 inevitably depressed demand for these items. The slight decrease in floor covering prices also reflected reduced prices for materials such as polyester yarns. As the year

ended, however, there were indications of revived demand for a number of appliances and home furnishings.

The steep climb in tobacco product prices, which was concentrated at the end of the year, largely reflected producers' strategy for coping with a substantial boost in Federal excise taxes slated for January 1, 1983. Manufacturers feared that a sudden, one-time leap in cigarette prices would reduce sales sharply. They therefore preferred to raise prices in several stages at the end of the year and then to absorb the full impact of the January 1 tax rise.

Capital equipment. The Producer Price Index for capital equipment slowed markedly in 1982, rising just 4.0 percent after climbing 9.2 percent in 1981. The deceleration was pervasive; virtually all products which advanced at or close to double-digit rates in 1981 moved up far less in 1982. Among the most notable slowdowns were oilfield and gasfield machinery (up 18.2 percent in 1981 vs. 1.8 percent in 1982); transformers (16.2 vs. -0.8 percent); food products machinery (11.7 vs. 2.1 percent); pumps and compressors (11.0 vs. 2.8 percent); agricultural machinery (11.0 vs. 5.6 percent); and heavy trucks (12.8 vs. 7.6 percent). At the same time, very few kinds of capital equipment rose more in 1982 than in the previous year.

Weakness in investment spending laid the foundation for the widespread slowdown in price increases for capital goods. The real level of capital expenditures, which had inched up slightly in both 1980 and 1981, dropped about 5 percent during 1982, the first yearly decline since 1975. The continuation of the general recession throughout the year and the persistence of historically high real interest rates were the principal factors restraining capital goods inflation. There had been hopes that the incentives for investment incorporated into the 1981 changes in Federal corporate income tax law would induce businesses to lead the economy out of recession through a capital spending boom. Most firms instead followed the traditional pattern of waiting for an upturn in consumer demand before committing themselves to major capacity expansion efforts. Nevertheless, the 1982 drop in real capital spending was smaller than that typically recorded in previous postwar recessions.

One dramatic example of the problems leading to a deceleration in price increases for capital goods during 1982 was the story of the oilfield and gasfield equipment industry. Even while overall capital spending stagnated from 1979 through 1981, spending for the output of this industry was climbing rapidly. Demand for oil and gas exploration and production facilities was stimulated by the runup in world crude oil prices and the subsequent deregulation of domestic crude oil prices. Record numbers of drilling rigs came into operation during 1981. But as the worldwide recession contributed to declines in energy prices by early 1982, demand for oilfield and gasfield equipment fell abruptly; by midyear the number of drilling rigs in operation was more than one-third below the peak at the start of the year.

Problems in this market in turn had a marked effect on the machine tool producing industries. Healthy demand for machine tools from oilfield and gasfield equipment manufacturers had been one of the few bright spots for machine tool producers in the 1979-81 period, since most of their other traditional customers had been hard hit by the general stagnation. Without this advantage in 1982, and in the absence of a rebound in machine tool demand from other sectors, machine tool production declined sharply. Import competition added to the price slowdown for machine tools. As a result of these pressures, machine tool prices moved up only about 4 percent in 1982, compared to about 9 percent in the previous year.

The agricultural machinery and equipment industry was also badly hit by a slump in demand during 1982; but unlike the energy-related equipment industries, which had enjoyed prosperous times for several years, 1982 marked the third consecutive poor year for agricultural equipment manufacturers. With bumper harvests and low exports resulting in depressed farm prices since 1979, and with so many farmers already deeply in debt and heavily burdened by the rapid climb in interest costs, demand for tractors and other equipment was extremely weak. Price discounting and other concessions by farm equipment producers became more widespread as the year progressed, with few signs of any quick turnaround in demand.

Intermediate materials other than foods and energy

The Producer Price Index for intermediate materials other than foods and energy showed great price moderation in 1982 compared with other recent years. The 0.6 percent rise followed a 6.6 percent increase in 1981 and 2 years of double-digit increases before that. Widespread decreases for some basic manufacturing materials were offset only slightly by modest increases for more highly fabricated products such as manufacturing components and construction materials.

Nondurable manufacturing materials. The index for materials for nondurable manufacturing declined for the first time in over 15 years. Pervasive decreases reflected a generally soft market for these materials as a result of the recession. Production was cut as demand slumped sharply, particularly for materials used in making fibers and plastics. Prices for industrial chemicals fell through most of the year, notably for benzene, butadiene, ethylene, propylene, toluene, and almost all other basic organic chemicals.

Price indexes for major textile materials declined slightly over the year, as demand from such major sectors as apparel, furniture, and floor coverings weakened. Prices for synthetic fibers moved down 0.6 percent, following a 14.7 percent rise in 1981; the decline reflected generally weak demand and falling prices for chemicals. Declines were widespread among the staple, tow, and fiberfill categories. The drop in the processed yarns index was partly due to a sharp reduction in exports of synthetic yarns as China sharply curtailed purchases to work down a large backup of inventories.

Weak demand for tires from auto producers exerted a downward influence on the index for synthetic rubber, which fell 3.3 percent in 1982 after rising at double-digit rates in each of the previous 2 years. The market for rubber products was generally weak in 1982. Prices for plastic resins fell from January through July, then rebounded during the rest of the year. Capacity utilization in the plastics industry remained low and sales continued to be flat, partly reflecting the sluggishness in the automotive industry.

The indexes for woodpulp, paper, and paperboard declined in 1982 after rising in earlier years, reflecting soft demand in world pulp and paper markets, as well as increased imports of paper. Newsprint prices fell 5.1 percent, marking a sharp turnaround from the tight supplies of the past 3 years that let producers raise prices almost 12 percent annually. The glut of newsprint on the market forced producers to rescind increases announced earlier during the year.

In 1982 prices for most inedible fats and oils fell sharply, marking the fourth consecutive yearly drop for this index. Demand was slow and supplies were more than adequate. Leather prices edged up 0.6 percent. These prices fell in 1981 and the first half of 1982 as a result of soft demand for leather products, weak prices for cattle hides, and poor export markets. Leather prices trended higher in the latter part of the year because of improved foreign demand (especially from China) and a more optimistic outlook for 1983.

Durable manufacturing materials. The index for durable manufacturing materials fell 1.3 percent from December 1981 to December 1982, after rising moderately in each of the previous 2 years. Much of the reversal was due to declines for steel mill products and nonferrous metals.

After rapid increases in earlier years, the steel mill products index moved down 1.0 percent in 1982. This was the first time since 1964 that steel prices declined over the course of a calendar year, an indication of the fundamentally poor state of the market. The industry experienced cutbacks in production, permanent plant closings, and intense foreign competition, particularly from Japan. Shipments from domestic steel mills amounted to only about 60 million tons in 1982, down from a peak of about 122 million tons in 1973, and the lowest in about 25 years. Imports accounted for over 22 percent of total domestic consumption in 1982, up from 19.1 percent a year earlier and 12.5 percent in 1973. By the end of 1982, the steel industry was operating at only about one-third of its capacity. Consequently, price discounting was widespread.

Demand for steel pipe used in the petroleum and natural gas industry dropped off markedly, after soaring in recent years when oil price deregulation spurred exploratory drilling. Many steelmakers had invested heavily and had expanded production to meet drillers' anticipated need for pipe, but demand was not as strong as anticipated. To complicate matters, the Japanese undercut U.S. domestic prices by as much as 15 percent for tubular pipes. For the first time in history, sales by foreign producers accounted for a majority (55 percent) of the domestic market for tubular products.

The index for primary nonferrous metals dropped 6.7 percent, the third consecutive yearly decline. As a result, the index for nonferrous mill shapes (which includes such items as sheets, tubes, rods, and extrusions) also declined, after rising in each of the 2 previous years. Falling prices reflected sluggish demand in the industrial sector. With prices sometimes falling and remaining below the cost of production, some nonferrous metal companies closed mines and other parts of their operations permanently; this resulted in a major restructuring of these industries.

Among primary nonferrous metals, tin prices plunged when a group of speculators who had purchased massive quantities of tin in 1981 began to liquidate their stocks. Despite an upward trend during much of the second half, tin prices fell 21.8 percent over the year. The copper and lead industries continued to be depressed by slow demand from the housing and automotive sectors of the economy; consequently, prices fell sharply. In creased use of unleaded gasoline and Federal regulations restricting the amount of lead in leaded gasoline contributed to substantial reductions in lead prices. The copper mining industry experienced increased pollution control and labor costs and stiff competition from foreign producers whose costs are substantially lower than those of U.S. producers. Prices for associated metals, namely titanium and cobalt, fell 27.4 and 37.5 percent. The titanium industry was depressed by a drop in commercial aircraft production; aerospace firms had built up excessive inventories of titanium. Aluminum prices dropped in response to slow demand from the aircraft and the durable goods sectors. Price competition was intense for aluminum can-sheet stock, as the industry faced increased competition from other packaging materials.

Prices for precious metals continued to sag through the first half of 1982, continuing a longstanding downward trend related to high interest rates, a strong American dollar in international currency markets, and poor industrial demand. These prices then rebounded

during the second half, as the rapid descent of interest rates weakened the dollar abroad and made precious metals more attractive investments. Silver and gold prices ended 1982 with net advances of 26.2 and 8.7 percent. Prices for jewelers' materials fell about 15 percent; although substantial, the 1982 drop was not as severe as the 25 percent decline in the previous year.

Components for manufacturing. The index for manufacturing components rose 3.7 percent, much less than in other recent years. Throughout this category, the recession tended to exert a moderating influence. Smaller increases were registered in 1982 compared to the previous year for mechanical power transmission equipment, parts for machine tools, ball and roller bearings, electric motors, internal combustion engines, and motor vehicle parts. The weakness in the replacement parts market for railroad equipment was exacerbated somewhat by the cannibalizing of unneeded cars in lieu of purchasing new parts.

Construction materials. The index for construction materials and components rose 1.2 percent over the year, the smallest increase since 1969. The slump in the housing industry continued to depress markets for nearly all types of construction materials. The oversupply of most petroleum-based fuels was another factor contributing to moderating or falling prices for several products which are petroleum derivatives or whose production is highly energy-intensive; this list includes plastic construction products, concrete products, structural clay products, gypsum products, and asphalt roofing. Flat glass prices continued to rise only moderately, even though the industry incurred steep advances in natural gas costs.

Prices for both softwood lumber and plywood decreased for the second consecutive year, although much less than in 1981. Even though domestic lumber consumption fell, producers were generally able to avoid more precipitous price declines by maintaining tight controls on output to minimize unintended inventory accumulations.

Crude materials other than food and energy

The Producer Price Index for crude nonfood materials less energy declined 7.6 percent from December 1981 to December 1982, following an 11.4 percent drop in the preceding year. This index, which measures changes in prices of raw industrial commodities which are usually responsive to shifts in general economic conditions, fell at a very steep rate from late 1981 through the first quarter of 1982. It then rebounded somewhat through the next several months before retreating again at the end of the year.

Prices for both ferrous and nonferrous scrap metals were particularly weak during 1982. Price indexes for iron and steel scrap and for aluminum base scrap were both down around 30 percent over the year, and copper scrap prices were off 11.2 percent. Demand for ferrous scrap from domestic and foreign steel mills was poor because of unusually low production. Declining prices for nonferrous scrap mirrored the sluggish state of most nonferrous metal markets.

Among other sensitive industrial commodities affected by the recession were wastepaper (down 19.1 percent), logs and timber (down 7.3 percent), and crude natural rubber (down 6.1 percent). The strength of the dollar in international money markets was a key factor in depressing exports of cattle hides and increasing imports of wool, contributing to lower prices for both. The troubled status of many farm enterprises contributed to poor demand and lower prices for potash.

Raw cotton prices turned up sharply in early 1982 after falling more than 38 percent in 1981, but then trended down for most of the second half because of weak demand from textile mills; the net result was a 9.0 percent increase from December 1981 to December 1982. Sand, gravel, and crushed stone prices countered the overall tendency for lower prices among raw nonfood commodities, registering a 6.9 percent advance, almost as much as in 1981. Local governments have been restricting the number of deposits that can be worked and, increasingly, are requiring firms to reclaim land while the deposits are still being worked, a more expensive practice than land reclamation projects conducted after other operations have been completed.

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