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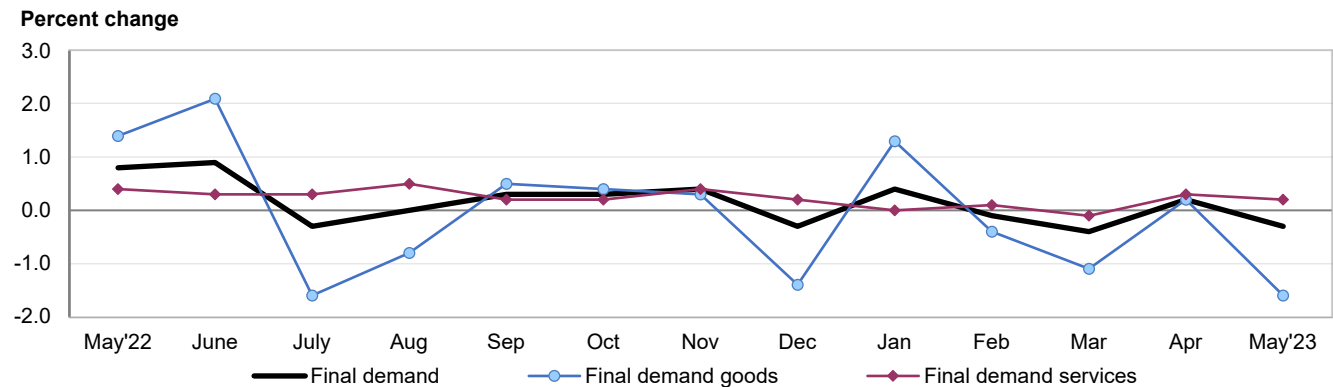
## PRODUCER PRICE INDEXES – MAY 2023

The Producer Price Index for final demand declined 0.3 percent in May, seasonally adjusted, the U.S. Bureau of Labor Statistics reported today. Final demand prices rose 0.2 percent in April and fell 0.4 percent in March. (See table A.) On an unadjusted basis, the index for final demand moved up 1.1 percent for the 12 months ended in May.

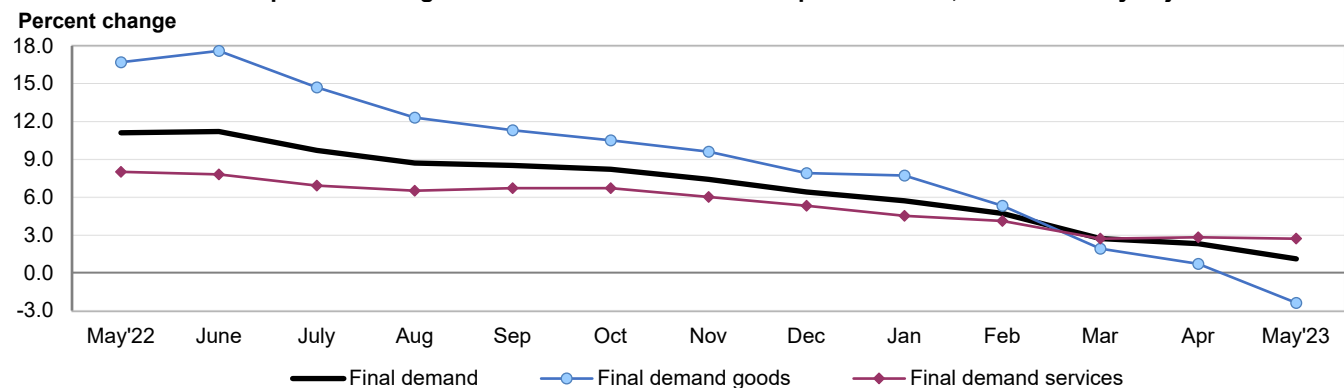
In May, the decline in the final demand index can be traced to prices for final demand goods, which fell 1.6 percent. The index for final demand services increased 0.2 percent.

Prices for final demand less foods, energy, and trade services were unchanged in May after inching up 0.1 percent in April. For the 12 months ended in May, the index for final demand less foods, energy, and trade services increased 2.8 percent.

**Chart 1. One-month percent changes in selected PPI final demand price indexes, seasonally adjusted**



**Chart 2. Twelve-month percent changes in selected PPI final demand price indexes, not seasonally adjusted**



## Final Demand

**Final demand goods:** Prices for final demand goods moved down 1.6 percent in May, the largest decrease since falling 1.6 percent in July 2022. Most of the May decline is attributable to the index for final demand energy, which dropped 6.8 percent. Prices for final demand foods moved down 1.3 percent. In contrast, the index for final demand goods less foods and energy increased 0.1 percent.

*Product detail:* Sixty percent of the May decline in the index for final demand goods can be traced to a 13.8-percent drop in prices for gasoline. The indexes for diesel fuel, chicken eggs, jet fuel, fresh and dry vegetables, and iron and steel scrap also fell. Conversely, prices for tobacco products advanced 1.7 percent. The indexes for electric power and for beverages and beverage materials also increased. (See table 2.)

**Final demand services:** The index for final demand services moved up 0.2 percent in May following a 0.3-percent advance in April. Leading the May increase, margins for final demand trade services rose 1.0 percent. (Trade indexes measure changes in margins received by wholesalers and retailers.) Prices for final demand services less trade, transportation, and warehousing edged up 0.1 percent. In contrast, the index for final demand transportation and warehousing services declined 1.4 percent.

*Product detail:* Over 40 percent of the May increase in prices for final demand services can be attributed to margins for automobiles and automobile parts retailing, which rose 4.2 percent. The indexes for fuels and lubricants retailing; apparel, footwear, and accessories retailing; securities brokerage, dealing, investment advice, and related services; machinery and vehicle wholesaling; and food wholesaling also advanced. Conversely, prices for truck transportation of freight fell 2.1 percent. The indexes for portfolio management and for health, beauty, and optical goods retailing also decreased.

**Table A. Monthly and 12-month percent changes in selected final demand price indexes, seasonally adjusted**

Month	Total final demand	Final demand less foods, energy, and trade	Final demand goods				Final demand services				Change in final demand from 12 months ago (unadj.)	Change in final demand less foods, energy, and trade from 12 mo. ago (unadj.)
			Total	Foods	Energy	Less foods and energy	Total	Trade	Transportation and warehousing	Other		
<b>2022</b>												
May. . .	0.8	0.5	1.4	0.7	4.0	0.7	0.4	0.6	2.5	0.1	11.1	6.8
June...	0.9	0.3	2.1	-0.1	8.4	0.5	0.3	0.5	0.8	0.1	11.2	6.4
July...	-0.3	0.2	-1.6	1.3	-8.3	0.2	0.3	0.8	-0.3	0.1	9.7	5.8
Aug...	0.0	0.2	-0.8	-0.2	-4.4	0.2	0.5	1.0	-1.1	0.4	8.7	5.6
Sept...	0.3	0.3	0.5	1.5	1.0	0.0	0.2	-0.3	-0.2	0.5	8.5	5.6
Oct....	0.3	0.2	0.4	0.7	1.5	0.0	0.2	0.2	0.0	0.2	8.2	5.5
Nov....	0.4	0.4	0.3	3.3	-2.3	0.3	0.4	0.5	-0.4	0.5	7.4	4.9
Dec....	-0.3	0.2	-1.4	-0.9	-6.3	0.1	0.2	0.3	0.0	0.2	6.4	4.7
<b>2023</b>												
Jan. <sup>1</sup> ..	0.4	0.5	1.3	-1.3	5.4	0.6	0.0	-0.8	-0.5	0.5	5.7	4.4
Feb. <sup>1</sup> ..	-0.1	0.3	-0.4	-2.3	-0.8	0.3	0.1	-0.2	-0.8	0.4	4.7	4.4
Mar. <sup>1</sup> ..	-0.4	0.2	-1.1	0.3	-6.0	0.2	-0.1	-0.6	-0.7	0.3	2.7	3.7
Apr. <sup>1</sup> ..	0.2	0.1	0.2	-0.4	0.8	0.1	0.3	0.6	-2.4	0.4	2.3	3.3
May. . .	-0.3	0.0	-1.6	-1.3	-6.8	0.1	0.2	1.0	-1.4	0.1	1.1	2.8

<sup>1</sup> Some of the figures shown above and elsewhere in this release may differ from those previously reported because data for January 2023 through April 2023 have been revised to reflect the availability of late reports and corrections by respondents.

## Intermediate Demand by Commodity Type

Within intermediate demand in May, the index for processed goods fell 1.5 percent, prices for unprocessed goods dropped 4.8 percent, and the index for services advanced 0.2 percent. (See tables B and C.)

**Processed goods for intermediate demand:** Prices for processed goods for intermediate demand moved down 1.5 percent in May, the largest decrease since falling 2.5 percent in December 2022. Most of the May decline can be traced to a 6.9-percent drop in the index for processed energy goods. Prices for processed foods and feeds decreased 1.9 percent, while the index for processed materials less foods and energy was unchanged. For the 12 months ended in May, prices for processed goods for intermediate demand fell 7.1 percent, the largest 12-month decline since moving down 7.2 percent in May 2020.

*Product detail:* In May, over 40 percent of the decrease in prices for processed goods for intermediate demand can be traced to the index for diesel fuel, which dropped 13.7 percent. Prices for gasoline, natural gas to electric utilities, jet fuel, primary basic organic chemicals, and prepared animal feeds also fell. Conversely, the index for commercial electric power rose 1.8 percent. Prices for cold rolled steel sheet and strip and for snack chips also advanced.

**Unprocessed goods for intermediate demand:** The index for unprocessed goods for intermediate demand fell 4.8 percent in May after increasing 1.6 percent in April. Almost 60 percent of the broad-based decrease is attributable to a 7.8-percent drop in prices for unprocessed energy materials. The indexes for unprocessed foodstuffs and feedstuffs and for unprocessed nonfood materials less energy also moved lower, falling 3.0 percent and 3.3 percent, respectively. For the 12 months ended in May, prices for unprocessed goods for intermediate demand declined 27.5 percent, the largest 12-month decrease since dropping 28.6 percent in April 2020.

*Product detail:* Nearly 60 percent of the May decline in the index for unprocessed goods for intermediate demand can be traced to prices for crude petroleum, which fell 10.2 percent. The indexes for ungraded chicken eggs, corn, iron and steel scrap, slaughter hogs, and natural gas also moved lower. In contrast, raw milk prices increased 4.8 percent. The indexes for coal and for aluminum base scrap also moved higher.

**Table B. Monthly and 12-month percent changes in selected intermediate demand price indexes for goods by commodity type, seasonally adjusted**

Month	Processed goods for intermediate demand					Unprocessed goods for intermediate demand				
	Total	Foods and feeds	Energy goods	Less foods and energy	Total, change from 12 months ago (unadj.)	Total	Food-stuffs and feed-stuffs	Energy materials	Nonfood materials less energy	Total, change from 12 months ago (unadj.)
<b>2022</b>										
May.....	2.2	1.2	4.4	1.7	21.6	5.4	0.3	14.6	-4.2	46.4
June.....	1.9	0.1	8.4	0.1	21.9	4.8	-0.7	11.1	-1.8	50.3
July.....	-2.1	0.5	-8.0	-0.4	17.2	-8.8	-1.1	-14.2	-5.9	32.5
Aug.....	-1.2	-0.2	-3.7	-0.6	14.3	4.8	-0.9	10.9	0.5	36.9
Sept.....	-0.1	-0.1	2.0	-0.8	12.9	-3.1	1.3	-6.6	-0.6	29.2
Oct.....	-0.2	-0.2	1.5	-0.8	10.1	-9.7	-0.7	-18.1	-4.1	9.3
Nov.....	-0.5	0.8	-1.9	-0.2	7.6	-3.1	0.0	-6.7	-0.7	3.5
Dec.....	-2.5	-0.6	-9.8	-0.4	4.8	1.5	-0.2	5.2	-1.7	10.7
<b>2023</b>										
Jan. <sup>1</sup> .....	1.1	0.2	4.9	0.1	3.9	-4.7	-5.8	-7.0	2.1	2.8
Feb. <sup>1</sup> .....	-0.4	-2.1	-1.6	0.2	2.1	-4.9	-1.0	-10.9	0.3	-10.4
Mar. <sup>1</sup> .....	-1.0	-0.2	-3.9	-0.3	-1.0	-4.6	-0.7	-11.1	-0.6	-16.7
Apr. <sup>1</sup> .....	-0.5	-1.1	-2.8	0.3	-3.4	1.6	-1.5	5.4	1.5	-19.8
May.....	-1.5	-1.9	-6.9	0.0	-7.1	-4.8	-3.0	-7.8	-3.3	-27.5

<sup>1</sup> Some of the figures shown above and elsewhere in this release may differ from those previously reported because data for January 2023 through April 2023 have been revised to reflect the availability of late reports and corrections by respondents.

**Services for intermediate demand:** The index for services for intermediate demand advanced 0.2 percent in May after moving up 0.7 percent in April. A major factor in the May increase was a 0.4-percent rise in prices for services less trade, transportation, and warehousing for intermediate demand. Margins for trade services for intermediate demand advanced 0.2 percent. Conversely, the index for transportation and warehousing services for intermediate demand decreased 0.9 percent. For the 12 months ended in May, prices for services for intermediate demand increased 3.9 percent.

*Product detail:* Leading the May advance in the index for services for intermediate demand, prices for business loans (partial) rose 3.2 percent. The indexes for securities brokerage, dealing, investment advice, and related services; food wholesaling; fuels and lubricants retailing; investment banking; and ground courier and messenger services also moved higher. In contrast, prices for truck transportation of freight fell 2.1 percent. The indexes for portfolio management and for machinery and equipment parts and supplies wholesaling also declined.

**Table C. Monthly and 12-month percent changes in selected intermediate demand price indexes for services by commodity type, seasonally adjusted**

Month	Services for intermediate demand				Total, change from 12 months ago (unadj.)
	Total	Trade	Transportation and warehousing	Other	
<b>2022</b>					
May.....	0.6	0.8	0.5	0.5	7.9
June.....	-0.3	-0.5	0.1	-0.3	6.3
July.....	0.3	0.2	1.1	0.1	5.9
Aug.....	0.6	-0.9	-0.3	1.3	6.0
Sept.....	0.5	0.1	-0.4	0.8	6.2
Oct.....	0.4	0.0	0.6	0.5	6.7
Nov.....	0.8	0.9	-1.3	1.2	6.9
Dec.....	0.0	-1.3	0.0	0.4	6.0
<b>2023</b>					
Jan. <sup>1</sup> .....	1.0	0.8	0.5	1.1	6.3
Feb. <sup>1</sup> .....	0.2	-0.8	0.0	0.5	6.1
Mar. <sup>1</sup> .....	-0.2	0.9	-0.9	-0.4	4.5
Apr. <sup>1</sup> .....	0.7	1.6	-1.1	0.9	4.4
May.....	0.2	0.2	-0.9	0.4	3.9

<sup>1</sup> Some of the figures shown above and elsewhere in this release may differ from those previously reported because data for January 2023 through April 2023 have been revised to reflect the availability of late reports and corrections by respondents.

### **Intermediate Demand by Production Flow**

**Stage 4 intermediate demand:** Prices for stage 4 intermediate demand decreased 0.2 percent in May after increasing 0.4 percent in April. In May, the index for total goods inputs to stage 4 intermediate demand moved down 0.6 percent. Conversely, prices for total services inputs edged up 0.1 percent. (See table D.) Decreases in the indexes for gasoline; diesel fuel; portfolio management; machinery and equipment parts and supplies wholesaling; warehousing, storage, and related services; and grains outweighed rising prices for securities brokerage, dealing, investment advice, and related services; business loans (partial); and commercial electric power. For the 12 months ended in May, the index for stage 4 intermediate demand advanced 1.5 percent.

**Stage 3 intermediate demand:** The index for stage 3 intermediate demand declined 1.0 percent in May, the fourth consecutive decrease. In May, prices for total goods inputs to stage 3 intermediate demand fell 2.4 percent. In contrast, the index for total services inputs inched up 0.1 percent. Declines in prices for diesel fuel; ungraded chicken eggs; jet fuel; grains; gasoline; and warehousing, storage, and related services outweighed increases in the indexes for business loans (partial), raw milk, and asphalt. For the 12 months ended in May, prices for stage 3 intermediate demand fell 6.5 percent, the largest 12-month decrease since dropping 8.1 percent in May 2020.

**Stage 2 intermediate demand:** The index for stage 2 intermediate demand declined 1.4 percent in May after rising 1.3 percent in April. In May, prices for total goods inputs to stage 2 intermediate demand moved down 4.0 percent. Conversely, the index for total services inputs advanced 0.6 percent. Falling prices for crude petroleum, gas fuels, iron and steel scrap, prepared animal feeds, broadcast and network television advertising time sales, and primary basic organic chemicals outweighed increases in the indexes for business loans (partial), fuels and lubricants retailing, and coal. For the 12 months ended in May, prices for stage 2 intermediate demand decreased 9.8 percent, the largest 12-month decline since dropping 10.3 percent in April 2020.

**Stage 1 intermediate demand:** The index for stage 1 intermediate demand declined 0.9 percent in May, the largest decrease since moving down 1.8 percent in December 2022. In May, prices for total goods inputs to stage 1 intermediate demand fell 1.8 percent, while the index for total services inputs was unchanged. Decreasing prices for diesel fuel, gasoline, natural gas to electric utilities, grains, iron and steel scrap, and truck transportation of freight outweighed advances in the indexes for securities brokerage, dealing, investment advice, and related services; residual fuels; and commercial electric power. For the 12 months ended in May, prices for stage 1 intermediate demand declined 3.6 percent, the largest 12-month decrease since dropping 4.5 percent in July 2020.

**Table D. Monthly percent changes in selected intermediate demand price indexes by production flow, seasonally adjusted**

Month	Stage 4 intermediate demand			Stage 3 intermediate demand			Stage 2 intermediate demand			Stage 1 intermediate demand		
	Total	Goods inputs	Services inputs	Total	Goods inputs	Services inputs	Total	Goods inputs	Services inputs	Total	Goods inputs	Services inputs
<b>2022</b>												
May.....	0.9	1.4	0.5	1.7	2.5	0.7	3.6	6.6	0.3	1.5	2.1	0.8
June.....	0.3	1.0	-0.3	0.5	1.4	-0.5	2.9	5.3	0.1	1.0	2.4	-0.6
July.....	-0.4	-0.8	0.0	-1.2	-2.6	0.4	-4.1	-8.2	0.9	-1.6	-2.8	-0.3
Aug.....	0.3	0.0	0.6	-1.3	-2.6	0.1	3.0	4.8	1.2	-0.4	-1.2	0.5
Sept.....	0.4	0.1	0.7	0.0	-0.1	0.1	-1.9	-4.0	0.3	0.3	0.3	0.2
Oct.....	0.1	-0.1	0.2	-0.1	-0.6	0.5	-4.7	-9.8	0.8	0.1	-0.2	0.4
Nov.....	0.4	-0.2	1.0	-0.4	-1.1	0.3	-1.0	-2.9	0.8	0.1	-0.6	0.9
Dec.....	-0.4	-0.7	0.0	-2.0	-3.8	0.0	1.0	1.5	0.6	-1.8	-3.0	-0.4
<b>2023</b>												
Jan. <sup>1</sup> .....	1.0	0.8	1.2	0.2	-0.5	0.9	-0.9	-2.9	0.9	0.7	0.8	0.7
Feb. <sup>1</sup> .....	0.0	-0.1	0.0	-0.3	-0.6	0.1	-1.4	-4.5	1.2	-0.4	-0.4	-0.3
Mar. <sup>1</sup> .....	-0.2	-0.5	0.0	-0.7	-1.1	-0.4	-2.5	-4.9	-0.6	-0.4	-1.0	0.2
Apr. <sup>1</sup> .....	0.4	-0.2	0.8	-0.1	-1.2	0.8	1.3	1.9	0.8	0.0	-0.7	0.6
May.....	-0.2	-0.6	0.1	-1.0	-2.4	0.1	-1.4	-4.0	0.6	-0.9	-1.8	0.0

<sup>1</sup> Some of the figures shown above and elsewhere in this release may differ from those previously reported because data for January 2023 through April 2023 have been revised to reflect the availability of late reports and corrections by respondents.

**The Producer Price Index for June 2023 is scheduled to be released on Thursday, July 13, 2023, at 8:30 a.m. (ET).**

# Technical Note

## Brief Explanation of Producer Price Indexes

The Producer Price Index (PPI) of the Bureau of Labor Statistics (BLS) is a family of indexes that measures the average change over time in prices received (price changes) by producers for domestically produced goods, services, and construction. PPIs measure price change from the perspective of the seller. This contrasts with other measures, such as the Consumer Price Index (CPI). CPIs measure price change from the purchaser's perspective.

More than 10,000 PPIs for individual products and groups of products are released each month. PPIs are available for the products of virtually every industry in the mining and manufacturing sectors. Over time, new PPIs have been introduced for products of industries in the services and construction sectors of the U.S. economy. As of January 2023, the PPI covered 69 percent of services as measured by 2017 Census revenue, and 17 percent of construction.

More than 64,000 price quotations per month are organized into three sets of PPIs: (1) Final demand-Intermediate demand (FD-ID) indexes, (2) commodity indexes, and (3) indexes for the net output of industries and their products. The FD-ID structure organizes products by class of buyer and degree of fabrication as well as by stage of production. The commodity structure organizes products by similarity of end use or product type. The entire output of various industries is sampled to derive price indexes for the net output of industries and their products.

### Final Demand–Intermediate Demand Indexes

The PPI FD-ID structure measures price change for goods, services, and construction sold to final demand and to intermediate demand. The FD-ID system replaced the PPI stage-of-processing (SOP) system as PPI's primary aggregation model with the release of data for January 2014. The FD-ID model expands coverage beyond that of the SOP system through the addition of services, construction, exports, and government purchases.

Compared with finished goods under the SOP system, the PPI for final demand goods includes nearly a 50 percent expansion of coverage. This increase can be traced to the addition of government purchases and exports. For overall final demand, expansion to include final demand services represents an even larger increase in coverage. In December 2022, final demand goods were about 30.7 percent of overall final demand, final demand services were roughly 66.6 percent, and final demand construction was about 2.7 percent of final demand. Within intermediate demand, coverage of services for intermediate demand resulted in about a 45 percent increase in coverage of the intermediate demand portion of the economy.

FD-ID indexes are constructed from commodity-based producer output price indexes. Commodities are allocated to aggregate indexes primarily based on the type of buyer. The main source of data used to determine the type of buyer is the "Use of commodities by industries, before redefinition," table

from the Benchmark Input-Output Accounts of the U.S. In many cases, the same commodity is purchased by different types of buyers. As a result, commodities are often included in several FD-ID indexes. For example, regular gasoline is purchased for personal consumption, export, government use, and business use. The PPI program publishes only one commodity index for regular gasoline (wpu057104), reflecting sales to all types of buyers, and this index is used in all aggregations regardless of whether the gasoline is sold for personal consumption, as an export, to government, or to businesses. Proportions based on BEA "Use of Commodities" data are used to allocate the correct portion of the total weight of gasoline to each use category. In cases when buyer type is an important price determining characteristic, indexes are created based on specific buyer type. For example, within the PPI category for loan services, separate indexes for consumer loans and business loans were constructed. For more information relating to the FD-ID structure, see "A new, experimental system of indexes from the PPI program" in the February 2011 *Monthly Labor Review*.

**Final Demand:** The final demand portion of the FD-ID structure measures price change for commodities sold for personal consumption, capital investment, government, and export. The system is composed of six main price indexes: final demand goods; final demand trade services; final demand transportation and warehousing services; final demand services less trade, transportation, and warehousing; final demand construction; and overall final demand.

The final demand goods index measures price change for both unprocessed and processed goods sold to final demand. Fresh fruits sold to consumers and computers sold for capital investment are examples of transactions included in the final demand goods price index. The final demand trade services index measures price change for the retailing and wholesaling of merchandise sold to final demand, generally without transformation. (Trade indexes measure changes in margins received by wholesalers and retailers.) The final demand transportation and warehousing services index tracks price change for transportation of passengers, as well as, transportation of cargo sold to final demand, and also includes prices for warehousing and storage of goods sold to final demand. The final demand services less trade, transportation, and warehousing index measures price change for all services other than trade and transportation sold to final demand. Publishing, banking, lodging, and health care are examples of these services. The final demand construction index tracks price change for new construction, as well as maintenance and repair construction sold to final demand. Construction of office buildings is an example of a commodity that would be included in the final demand construction index. Lastly, the overall final demand index tracks price change for all types of commodities sold to final demand by combining the five final demand component indexes described above.

**Intermediate Demand:** The intermediate demand portion of the FD-ID system tracks price change for goods, services, and construction products sold to businesses as inputs to

production, excluding capital investment. The system includes two parallel treatments of intermediate demand. The first treatment organizes intermediate demand commodities by type. The second organizes intermediate demand commodities into production stages, with the explicit goal of developing a forward-flow model of production and price change.

The intermediate demand by commodity type portion of the system organizes commodities by similarity of product. The system is composed of six main price indexes: unprocessed goods for intermediate demand; processed goods for intermediate demand; intermediate demand trade services; intermediate demand transportation and warehousing services; intermediate demand services less trade, transportation, and warehousing; and intermediate demand construction.

The unprocessed goods for intermediate demand price index measures price change for goods sold to businesses as inputs to production that have undergone no fabrication. Crude petroleum sold to refineries is an example of an unprocessed good sold to intermediate demand. The processed goods for intermediate demand index tracks price change for fabricated goods sold as business inputs. Examples include car parts sold to car manufacturers and gasoline sold to trucking companies. The index for trade services for intermediate demand measures price change for the services of retailing and wholesaling goods purchased by businesses as inputs to production. The intermediate demand transportation and warehousing services index measures price change for business travel, as well as, transportation and warehousing of cargo sold to intermediate demand. The intermediate demand services less trade, transportation, and warehousing index measures price change for services other than trade, transportation, and warehousing sold as inputs to production. Legal and accounting services purchased by businesses are examples of intermediate demand services excluding trade, transportation, and warehousing. Finally, the construction for intermediate demand index measures price change for construction purchased by firms as inputs to production. The index for construction for intermediate demand tracks price change for maintenance and repair construction purchased by firms.

The production flow treatment of intermediate demand is a stage-based system of price indexes. These indexes can be used to study price transmission across stages of production and final demand. This system is constructed in a manner that maximizes forward flow of production between stages, while minimizing back-flow of production. The production flow treatment contains four main indexes: intermediate demand stage 1, intermediate demand stage 2, intermediate demand stage 3, and intermediate demand stage 4.

Indexes for the four stages were developed by first assigning each industry in the economy to one of four stages of production, where industries assigned to the fourth stage primarily produce output consumed as final demand, industries in the third stage primarily produce output consumed by stage 4 industries, industries assigned to the second stage primarily produce output consumed by stage 3 industries, and industries assigned to the first stage produce output primarily consumed by stage 2 industries. The four indexes then track prices for the net inputs consumed by industries in each of the four stages of production. The stage 4

intermediate demand index, for example, tracks price change for inputs consumed, but not produced, by industries included in the fourth stage of production. Hence, the index tracks price change in inputs to industries that primarily produce final demand commodities (stage 4 producers primarily produce commodities sold to final demand).

Examples of heavily weighted goods-producing industries in stage 4 include the manufacture of light trucks and utility vehicles, automobiles, and pharmaceuticals. Retail trade, food service and drinking places, and hospitals are examples of heavily weighted service industries included in stage 4. Stage 4 also includes all new construction industries. Examples of goods consumed by stage 4 industries include motor vehicle parts, commercial electric power, plastic construction products, biological products, and beef and veal. Engineering services, machinery and equipment wholesaling, long distance motor carrying, and legal services constitute examples of services consumed by stage 4 industries.

Examples of highly weighted goods-producing industries included in stage 3 are motor vehicle parts manufacturing, animal (except poultry) slaughtering and processing, and semiconductor manufacturing. Services industries classified in stage 3 include wholesale trade; insurance carriers; architecture, engineering, and related services; and hotels and motels. Examples of goods consumed by stage 3 industries include slaughter steers and heifers, industrial electric power, and hot rolled steel bars, plates, and structural shapes. Services commonly consumed by stage 3 industries include commissions from sales of property and casualty insurance, business loans, temporary help services, and administrative and general management consulting services.

Petroleum refineries; electricity generation, transmission, and distribution; natural gas distribution; cattle ranching and farming; and plastic materials and resin manufacturing are among the goods-based industries assigned to stage 2. Services industries that are heavily weighted in stage 2 include management of companies and enterprises; non-depository credit intermediation; insurance agencies and brokerages; and services to buildings and dwellings. Goods commonly purchased by stage 2 industries include crude oil, natural gas, formula feeds, and primary basic organic chemicals. Services that are heavily weighted in the intermediate demand stage 2 index are legal services, business loans, and cellular phone and other wireless telecommunication.

Goods producing industries in stage 1 include oil and gas extraction, paper mills, and grain farming. Real estate, legal services, and advertising services are examples of highly weighted services industries included in stage 1. Examples of goods consumed by stage 1 industries are commercial and industrial electric power and gasoline. Services commonly consumed by stage 1 industries include solid waste collection, chemicals and allied products wholesaling, and guestroom or unit rental. It should be noted that all inputs purchased by stage 1 industries are by definition produced either within stage 1 or by latter stages of processing, leaving stage 1 less useful for price transmission analysis. For additional information on industry stage assignments, see [www.bls.gov/ppi/fd-id/ppi-intermediate-demand-by-production-flow-industry-stage-assignments.htm](http://www.bls.gov/ppi/fd-id/ppi-intermediate-demand-by-production-flow-industry-stage-assignments.htm).

## Comparing the PPI with CPI

Although some data users utilize the PPI as a potential indicator of the Consumer Price Index (CPI), there are many reasons why the PPI and the CPI may diverge. The scope of the personal consumption portion of the PPI includes all marketable output sold by domestic producers for households. The scope of the CPI includes goods and services provided by business or government, where explicit user charges are paid by consumers. For example, the most heavily weighted item in the CPI, owners' equivalent rent, is excluded from the PPI. The scope of the CPI includes imports. The PPI excludes imports. The CPI only includes components of personal consumption directly paid for by the consumers, while the PPI includes components of personal consumption that may not be paid for by consumers. For example, the PPI includes medical services paid for by third parties. In contrast to CPI, PPI does not completely cover services. PPIs exclude taxes, since they do not represent producer revenue. Conversely, sales and other taxes paid by consumers are part of household expenditure and are included in the CPI. Additional technical differences between PPI and CPI also exist. For more information see "Comparing new final demand producer price indexes with other Government price indexes," *Monthly Labor Review*, January 2014, at [www.bls.gov/opub/mlr/](http://www.bls.gov/opub/mlr/).

## Commodity Indexes

The commodity classification of the PPI organizes goods, services, and construction by similarity of product or end use, disregarding industry of origin. With the release of data for July 2009, PPI expanded its commodity structure to include indexes for services and construction products. Prior to this date, the PPI commodity structure only included products from goods producing sectors. Table 9 of the *PPI Detailed Report* includes data for commodity indexes, organized in a hierarchal structure, including major groupings, subgroups, product classes, sub-product classes, and individual items.

## Industry Net-Output Price Indexes

PPIs for the net output of industries and their products are grouped according to the North American Industry Classification System (NAICS). Prior to the release of January 2004, industry-based PPIs were published according to the Standard Industrial Classification (SIC) system. Industry price indexes are compatible with other economic time series organized by industry, such as data on employment, wages, and productivity. Table 11 of the *PPI Detailed Report* includes data for NAICS industries and industry groups (3-, 4-, 5-, and 6-digit codes), Census product classes (7- and 8-digit codes), products (9-digit codes), more detailed sub-products (11-digit codes), and, for some industries, indexes for other sources of revenue.

Indexes may represent one of three kinds of product categories. Every industry has primary product indexes that show changes in prices received by establishments classified in the industry for products made primarily, but not necessarily exclusively, by that industry. The industry classification of an establishment is determined by which products make up a plurality of its total shipment value. In

addition, most industries have secondary product indexes that show changes in prices received by establishments for products chiefly made in some other industry. Some industries have miscellaneous receipts indexes that track price changes for other sources of revenue received by establishments within the industry that are not derived from sales of their products; for example, resales of purchased materials, or revenues from parking lots owned by a manufacturing plant.

## Data Collection

PPIs are constructed using selling prices reported by establishments of all sizes, selected by probability sampling, with the probability of selection proportionate to size. Individual items and transaction terms also are chosen by probability proportionate to size. BLS strongly encourages cooperating companies to supply actual transaction prices at the time of shipment to minimize the use of list prices. Prices submitted by survey respondents are effective on the Tuesday of the week containing the 13th day of the month. The survey is conducted online via the BLS Internet Data Collection Facility (IDCF). Data provided by survey respondents are supplemented with data from other sources for some areas.

Price data are provided by survey respondents on a voluntary and confidential basis; only sworn BLS employees are allowed access to individual company price reports. BLS publishes price indexes, not actual prices. All PPIs are subject to monthly revisions up to 4 months after original publication to reflect the availability of late reports and corrections by respondents.

BLS periodically updates the PPI sample of survey respondents to better reflect current conditions when the structure, membership, technology, or product mix of an industry shifts significantly and to spread reporting burden among smaller firms. Information on these resampling efforts are noted in the *PPI News Release* and *PPI Detailed Report* in the months they occur.

As part of an ongoing effort to expand coverage to sectors of the economy other than mining and manufacturing, an increasing number of service and construction sector industries have been introduced into the PPI. The following list of industries introduced since the mid-1990s includes the month and year in which an article describing the industry's content appeared in the *PPI Detailed Report*.

### Service and construction sector industries introduced into the Producer Price Index, by SIC or NAICS code at their date of introduction and the *PPI Detailed Report* issue that announces their introduction

Title	Code	<i>PPI Detailed Report</i> Issue
	<b>SIC</b>	
Wireless telecommunications .....	4812	July 1999
Telephone communications, except radio telephone .....	4813	July 1995
Television broadcasting .....	4833	July 2002
Grocery stores .....	5411	July 2000
Meat and fish (seafood) markets .....	5421	July 2000
Fruit and vegetable markets .....	5431	July 2000
Candy, nut, and confectionery stores ...	5441	July 2000



Title	Code	PPI Detailed Report Issue
<b>SIC</b>		
Retail bakeries .....	5461	July 2000
Miscellaneous food stores .....	5499	July 2000
New car dealers .....	5511	July 2000
Gasoline service stations .....	5541	January 2002
Boat dealers .....	5551	January 2002
Recreational vehicle dealers .....	5561	January 2002
Miscellaneous retail .....	59	January 2001
Security brokers, dealers, and investment bankers .....	6211	January 2001
Investment advice .....	6282	January 2003
Life insurance carriers .....	6311	January 1999
Property and casualty insurance .....	6331	July 1998
Insurance agencies and brokerages .....	6412	January 2003
Operators and lessors of nonresidential buildings .....	6512	January 1996
Real estate agents and managers .....	6531	January 1996
Prepackaged software .....	7372	January 1998
Data processing services .....	7374	January 2002
Home health care services .....	8082	January 1997
Legal services .....	8111	January 1997
Engineering design, analysis, and consulting services .....	8711	January 1997
Architectural design, analysis, and consulting services .....	8712	January 1997
Premiums for property and casualty insurance .....	9331	July 1998
<b>NAICS</b>		
New Industrial building construction .....	236211	January 2008
New warehouse building construction ..	236221	July 2005
New school construction .....	236222	July 2006
New office construction .....	236223	January 2007
New health care building construction...	236224	January 2013
Concrete contractors, nonresidential building work .....	23811X	July 2008
Roofing contractors, nonresidential building work .....	23816X	July 2008
Electrical contractors, nonresidential building work .....	23821X	July 2008
Plumbing / HVAC contractors, nonresidential building work .....	23822X	July 2008
Merchant wholesalers, durable goods ..	423	July 2005
Merchant wholesalers, nondurable goods .....	424	July 2005
Electronics and appliance stores .....	443	January 2004
Building material and garden equipment and supplies dealers.....	444	January 2004
Sporting goods, hobby, book, and music stores .....	451	January 2004
General merchandise stores .....	452	January 2004
Miscellaneous store retailers .....	453	January 2004
Pipeline transportation of natural gas....	486210	June 2022
Internet service providers .....	518111	July 2005
Internet publishing and web search portals .....	519130	January 2010
Commercial banking .....	522110	January 2005
Savings institutions .....	522120	January 2005
Direct health and medical insurance carriers .....	524114	July 2004

Title	Code	PPI Detailed Report Issue
<b>NAICS</b>		
Construction, mining, and forestry machinery and equipment rental and leasing .....	532412	January 2005
Management consulting services .....	541610	January 2007
Security guards and patrol services .....	561612	July 2005
Offices of dentists .....	621210	January 2011
Blood and organ banks .....	621991	January 2007
Amusement and theme parks .....	713110	July 2006
Golf courses and country clubs .....	713910	July 2006
Fitness and recreational sports centers .	713940	July 2005
Commercial machinery repair and maintenance.....	811310	July 2007

## Weights

Weights for most commodity groupings of the PPI, as well as, weights for commodity-based aggregate indexes calculated from commodity groupings, such as FD-ID indexes, currently reflect 2017 values of shipments as reported in the *Census of Manufactures* and other sources. From January 2018 to December 2022, PPI weights were derived from 2012 shipment values. Industry indexes now are calculated under the 2022 NAICS structure utilizing 2017 value of shipment weights and 2012 net output ratios. The periodic update of the value weights used to calculate the PPI is done to more accurately reflect changes in production and marketing patterns in the economy.

Net output values of shipments are used as weights for industry indexes. Net output values refer to the value of shipments from establishments within the industry to buyers outside the industry. However, weights for commodity indexes are based on gross shipment values, including values of shipments between establishments within the same industry. As a result, broad commodity grouping indexes, such as the PPI for All Commodities (which is composed of major commodity groupings 01 through 15), are affected by the multiple counting of price change at successive stages of processing, which can lead to exaggerated or misleading signals about inflation. The intermediate demand by commodity type FD-ID indexes partially correct for this defect, but industry indexes, final demand FD-ID indexes, and intermediate demand by production flow FD-ID indexes consistently correct for this at all levels of aggregation. Therefore, industry and FD-ID indexes are more appropriate than broad commodity groupings for analysis of general price trends.

## Price Index Reference Base

Effective with publication of January 1988 data, many important PPI series (including most commodity groups and individual items) were placed on a new reference base, 1982 = 100. From 1971 through 1987, the standard reference base for most PPI series was 1967 = 100. Except for rounding differences, the shift to the new reference base did not alter any previously published percent changes for affected PPI series. (See “Calculating Index Changes,” below.) The 1982

reference base is not used for commodity indexes with a base later than December 1981 or for industry net output indexes and their products. The FD-ID indexes typically have a reference base of November 2009 = 100.

For further information on the underlying concepts and methodology of the Producer Price Index, see chapter 14, “Producer Prices,” in the *BLS Handbook of Methods*. This chapter can be downloaded from the BLS Web site at [www.bls.gov/opub/hom/homch14.htm](http://www.bls.gov/opub/hom/homch14.htm).

## Calculating Index Changes

Each PPI measures price changes from a reference period that equals 100.0. An increase of 5.5 percent from the reference period in the Final Demand Goods Price Index, for example, is shown as 105.5. This change also can be expressed in dollars, as follows: prices received by domestic producers of a sample of final demand goods have risen from \$100 in November 2009 to \$105.50. Likewise, a current index of 90.0 would indicate that prices received by producers of final demand goods are 10 percent lower than they were in November 2009.

Movements of price indexes from one month to another are usually expressed as percent changes, rather than as changes in index points. Index point changes are affected by the level of the index in relation to its base period, whereas percent changes are not. The following example shows the computation of index point and percent changes.

### *Index point change*

Final Demand Goods Price Index	107.5
Less previous index	104.0
Equals index point change	3.5

### *Index percent change*

Index point change	3.5
Divided by the previous index	104.0
Equals	0.034
Result multiplied by 100	0.034 x 100
Equals percent change	3.4

## Seasonally Adjusted and Unadjusted Data

Because price data are used for different purposes by different groups, BLS publishes seasonally adjusted and unadjusted changes each month. Seasonally adjusted data are preferred for analyzing general price trends in the economy because these data eliminate the effect of changes that normally occur at about the same time, and in about the same magnitude, every year—such as price movements resulting from normal weather patterns, regular production and marketing cycles, model changeovers, seasonal discounts, and holidays. For these reasons, seasonally adjusted data more clearly reveal underlying trends. Unadjusted data are of primary interest to users who need information that can be related to actual dollar values of transactions. Individuals requiring this information include marketing specialists, purchasing agents, budget and cost analysts, contract specialists, and commodity traders. It is the unadjusted data

that are generally cited when escalating long-term contracts such as purchasing agreements or real estate leases. For more information, see *Price Adjustment Guide for Contracting Parties*, on the Web at: [www.bls.gov/ppi/publications/price-adjustment-guide-for-contracting-parties.htm](http://www.bls.gov/ppi/publications/price-adjustment-guide-for-contracting-parties.htm).

Seasonal adjustment is accomplished using X-13 ARIMA, a software package published by the U.S. Census Bureau. Each year, the seasonal status of most commodity indexes is reevaluated to reflect more recent price behavior. Industry net output indexes are not seasonally adjusted. For time series that exhibit seasonal pricing patterns, new seasonal factors are estimated and applied to the unadjusted data from the prior 5 years. Updated seasonally adjusted indexes replace the most recent 5 years of seasonal data.

Seasonal factors may be applied to series using either a direct or an aggregative method. Generally, commodity indexes are seasonally adjusted using direct seasonal adjustment, which produces a more complete elimination of seasonal movements than does the aggregative method. However, the direct seasonal adjustment process may not yield figures that possess additive consistency. Thus, a seasonally adjusted index for a broad category that is directly adjusted may not be logically consistent with all seasonally adjusted indexes for its components. Seasonal movements for FD-ID indexes are derived indirectly through an aggregative method that combines movements of a wide variety of subproduct class (six-digit) series.

Seasonally adjusted indexes can become problematic when previously stable and predictable price patterns abruptly change. If the new pattern persists, the seasonal adjustment method will eventually reflect it; if the pattern keeps shifting, however, seasonally adjusted data will become chronically troublesome. This problem occurs relatively infrequently for farm and food-related products, but has more often affected manufactured products such as automobiles and steel.

Since January 1988, the PPI has used Intervention Analysis Seasonal Adjustment methods to enhance the calculation of seasonal factors. With this technique, outlier values that may distort the seasonal pattern are removed from the data prior to applying the standard seasonal factor estimation procedure. For example, a possible economic cause for large price movements for petroleum-based products might have been the COVID-19 pandemic. In this case, intervention techniques allowed for better estimates of seasonally adjusted data. On the whole, very few series have required intervention. Out of over 400 seasonally adjusted commodity series, 69 were subject to intervention in 2023.

For more information relating to seasonal adjustment methods, see “PPI and CPI Seasonal Adjustment: an Update” in the July 2010 *Monthly Labor Review*, and “PPI and CPI Seasonal Adjustment During the COVID-19 Pandemic” in the May 2022 *Monthly Labor Review*.

## Producer Price Index Data on the Internet

In 1995, the BLS began posting PPI series, news releases, and technical information to the internet. There were more than 13 million instances of PPI data being downloaded from the BLS website during 2022.

## Retrieving PPI data from the PPI Web site

PPI data can be obtained online ([www.bls.gov/ppi](http://www.bls.gov/ppi)). On this page, under the tab labeled “Featured PPI databases” links provide the following methods of data retrieval:

- **Top Picks** is a form-based application for both Industry Data and Commodity Data that allows the user to quickly obtain PPI time series data by selecting the high-level aggregate and other commonly requested time series, including the All Commodities Index and the FD-ID indexes (for example, Final Demand). Within each list, any one—or all—of the time series shown can be selected. A user can modify the date range and output options after executing the query, using the reformat button above the data output table.
- **One-Screen Data Search and Multi-Screen Data Search** are form-based query applications for both Industry Data and Commodity Data designed for users unfamiliar with the PPI coding structure. These applications guide a user through the PPI classification by listing index titles and do not require knowledge of commodity or industry codes. Data retrieved are based on a query formulated by selecting data characteristics from lists provided. Two options are available to create customized tables, depending on a user’s browser capability. The one-screen option is a JavaScript application that uses a single screen to guide a user through the available time series data. The second option is a multiple-screen, non-Java-based application. Both methods allow a user to browse the PPI coding structure and select multiple series. Users can modify the date range and output options after executing the query using the reformat button above the data output table.
- **Series Report** is a form-based application that allows users to input multiple, formatted PPI time series identifiers (commodity or industry codes) as inputs in extracting data according to a specified set of date ranges and output options. This application provides the most efficient path for users who are familiar with the format of PPI time series identifiers. There are five alphabetic prefixes used to create unique PPI time series identifiers: WP, WD, PC, PD, and ND. Each provides the user access to a different PPI database. Adding either a “u” (not seasonally adjusted) or an “s” (seasonally adjusted) to the end of these prefixes further specifies the type of data needed.

### EXAMPLES

**For commodity and FD-ID indexes**, series identifiers combine a “wpu” prefix (not seasonally adjusted) or a “wps” prefix (seasonally adjusted) with a commodity code.

<u>Commodity code</u>	<u>Provides data for:</u>
wps141101	Passenger cars, seasonally adjusted
wpu141101	Passenger cars, not seasonally adjusted
wpufd4	Final demand, not seasonally adjusted
wpsid63	Services for intermediate demand, seasonally adjusted

**For discontinued commodity indexes**, series identifiers combine a “wdu” prefix (not seasonally adjusted) or a “wds” prefix (seasonally adjusted) with a commodity code.

<u>Commodity code</u>	<u>Provides data for:</u>
wds019	Other farm products, seasonally adjusted
wdu0635	Preparations, ethical (prescription), not seasonally adjusted
wdusi138011	Stainless steel mill products, not seasonally adjusted

**Current price indexes grouped by industry according to NAICS** have series identifiers that begin with the prefix “pcu.” After the prefix, there are 12 digits (the 6-digit industry code is listed twice) followed by up to 7 alphanumeric characters identifying product detail. Dashes are used as placeholders for higher-level industry group codes.

<u>Industry-product code, current NAICS series</u>	<u>Provides data for:</u>
pcu325---325---	Chemical manufacturing
pcu336110336110	Automobile and light duty motor vehicle manufacturing
pcu621111621111411	Offices of physicians, one- and two-physician practices and single-specialty group practices, general/family practice

**Discontinued industry-product codes based on SIC** combine a “pdu” prefix and “#” between the fourth and fifth characters of the product code. Series identifiers for the discontinued dataset use underscores as placeholders to complete a reference to an SIC industry group code of fewer than four digits. (All PPI industry-based indexes organized by SIC were discontinued with the introduction of NAICS in 2004.)

<u>Industry-product code, discontinued SIC series</u>	<u>Provides data for:</u>
pdu28_#	Chemicals and allied products
pdu331_#	Blast furnaces, steel works, and rolling and finishing mills
pdu3711#111	Passenger cars

**Price indexes for discontinued series grouped by industry according to NAICS** have identifiers that begin with the prefix “ndu”. After the prefix, there are 12 numeric digits (the 6-digit industry code is listed twice), and up to 7 additional alphanumeric characters that identify product detail. Dashes are used as placeholders for higher-level group codes.

*Industry-product code,  
discontinued NAICS series*  
ndu212231212231  
ndu2122312122312  
ndu212231212231214

*Provides data for*  
Lead and zinc ore mining  
Lead, zinc concentrates  
Lead concentrates

- **Text Files** are best suited for users requiring access to either a large volume of time series data or other PPI-related documentation, such as seasonal factor tables and relative importance tables. The text files can be accessed at [download.bls.gov/](http://download.bls.gov/) or directly from links on the “PPI Databases” page or the PPI homepage. Data and documentation available for download include the following:

Industry Data	<u>Directory:</u> <a href="http://pub.time.series/pc">/pub/time.series/pc</a>
Industry Data - Discontinued (NAICS basis)	<a href="http://pub.time.series/nd">/pub/time.series/nd</a>
(SIC basis)	<a href="http://pub.time.series/pd">/pub/time.series/pd</a>
Commodity Data (incl. FD-ID)	<a href="http://pub.time.series/wp">/pub/time.series/wp</a>
Commodity Data – Discontinued	<a href="http://pub.time.series/wd">/pub/time.series/wd</a>
Special requests	<a href="http://pub.special.requests/ppi">/pub/special.requests/ppi</a>

### Additional information

The PPI homepage ([www.bls.gov/ppi](http://www.bls.gov/ppi)) contains additional information regarding PPI data and methodology. The “PPI Publications” section of the homepage provides PPI news releases, both current and archived, as well as general PPI information. The “PPI Tables” section provides relative importance and seasonal factor tables. The remaining sections offer special notices and publications pertaining to PPI methodology and applications.

For questions or comments regarding PPI data classification, methodology, or data availability on the Internet, call or e-mail the Section of Index Analysis and Public Information at (202) 691-7705 or [ppi-info@bls.gov](mailto:ppi-info@bls.gov). If you are deaf, hard of hearing, or have a speech disability, please dial 7-1-1 to access telecommunications relay services.

**Table 1. Producer price index percentage changes and weights for Final Demand-Intermediate Demand groupings, seasonally adjusted**  
[May 2023]

Grouping	Commodity code		Relative Importance Dec. 2022 <sup>1</sup>	Unadjusted 12-month percent change <sup>2</sup> May 2022 to May 2023 <sup>P</sup>	Seasonally adjusted 1-month percent change <sup>2</sup>				
	Group code	Item code			Dec. to Jan.	Jan. to Feb. <sup>P</sup>	Feb. to Mar. <sup>P</sup>	Mar. to Apr. <sup>P</sup>	Apr. to May <sup>P</sup>
<b>Final Demand</b>									
Final demand.....	FD	4	100.000	1.1	0.4	-0.1	-0.4	0.2	-0.3
Final demand goods.....	FD	41	30.653	-2.4	1.3	-0.4	-1.1	0.2	-1.6
Final demand foods.....	FD	411	5.940	0.3	-1.3	-2.3	0.3	-0.4	-1.3
Finished consumer foods <sup>3</sup> .....	FD	4111	4.511	1.7	-1.3	-2.7	0.8	-0.5	-1.3
Finished consumer foods, crude.....	FD	41113	0.606	-11.5	-17.4	-18.9	4.0	2.0	-16.3
Finished consumer foods, processed.....	FD	41112	3.905	2.5	1.2	-0.6	0.4	-0.8	0.4
Government purchased foods.....	FD	4112	0.406	0.5	0.0	-1.4	0.3	-1.0	-0.3
Foods for export.....	FD	4113	1.023	-6.6	-2.1	-1.3	-1.9	0.1	-2.0
Final demand energy.....	FD	412	5.853	-18.1	5.4	-0.8	-6.0	0.8	-6.8
Finished consumer energy goods <sup>3</sup> .....	FD	4121	4.451	-14.7	5.7	0.0	-6.6	2.4	-6.6
Government purchased energy.....	FD	4122	0.942	-27.6	6.9	-3.2	-4.9	-4.5	-7.9
Energy for export.....	FD	4123	0.460	-31.8	0.9	-3.8	-2.2	-5.0	-7.0
Final demand goods less foods and energy.....	FD	413	18.859	2.6	0.6	0.3	0.2	0.1	0.1
Finished goods less foods and energy <sup>3</sup> .....	FD	4131	10.768	4.9	0.7	0.3	0.3	0.1	0.3
Finished consumer goods less foods and energy.....	FD	41311	5.731	4.7	0.7	0.5	0.3	0.0	0.3
Nondurable consumer goods less foods and energy.....	FD	413111	3.441	5.7	0.8	0.7	0.3	0.2	0.3
Durable consumer goods.....	FD	413112	2.290	3.2	0.5	0.2	0.2	-0.1	0.2
Private capital equipment.....	FD	41312	5.037	5.2	0.7	0.2	0.4	0.1	0.4
Private capital equipment for manufacturing industries.....	FD	413121	1.222	6.1	0.9	0.3	0.4	0.1	0.7
Private capital equipment for nonmanufacturing industries.....	FD	413122	3.815	4.9	0.7	0.2	0.4	0.1	0.3
Government purchased goods, excluding foods and energy.....	FD	4132	1.967	1.6	0.3	0.2	0.0	0.0	-0.1
Government purchased goods excluding foods, energy, and capital equipment.....	FD	41321	1.160	1.1	0.4	0.2	-0.3	0.0	-0.3
Government purchased capital equipment.....	FD	41322	0.807	2.3	0.1	0.2	0.3	0.0	0.1
Goods for export, excluding foods and energy.....	FD	4133	6.124	-1.0	0.6	0.4	0.1	0.3	-0.3
Final demand services.....	FD	42	66.677	2.7	0.0	0.1	-0.1	0.3	0.2
Final demand trade services <sup>4</sup> .....	FD	423	19.700	2.9	-0.8	-0.2	-0.6	0.6	1.0
Trade of finished goods <sup>3</sup> .....	FD	4231	17.049	2.9	-0.9	-0.1	-0.7	0.4	1.2
Trade of personal consumption goods.....	FD	42311	13.855	3.4	-0.4	-0.1	-0.9	0.5	1.2
Trade of private capital equipment.....	FD	42312	3.194	0.4	-3.0	-0.4	0.3	0.0	0.9
Trade of government purchased goods.....	FD	4232	0.750	3.3	-1.5	-0.3	-0.4	1.7	0.4
Trade of government purchased goods, excluding capital equipment.....	FD	42321	0.457	4.0	-0.2	-0.5	-0.1	2.6	0.1
Trade of government purchased capital equipment.....	FD	42322	0.293	2.3	-3.5	0.0	-0.9	0.3	0.9
Trade of exports.....	FD	4233	1.901	2.8	-0.3	-0.7	0.4	1.3	0.2
Final demand transportation and warehousing services.....	FD	422	5.213	-6.8	-0.5	-0.8	-0.7	-2.4	-1.4
Transportation of passengers for final demand.....	FD	4221	1.275	1.9	2.3	-1.1	1.3	-2.9	-1.1
Transportation of private passengers.....	FD	42211	0.860	1.9	2.3	-1.1	1.3	-2.9	-1.1
Transportation of government passengers.....	FD	42212	0.103	1.8	2.3	-1.1	1.3	-2.9	-1.1
Transportation of passengers for export.....	FD	42213	0.312	1.9	2.3	-1.1	1.3	-2.9	-1.1
Transportation and warehousing of goods for final demand.....	FD	4222	3.938	-9.6	-1.4	-0.7	-1.4	-2.3	-1.6
Transportation and warehousing of finished goods <sup>3</sup> .....	FD	42221	2.567	-10.4	-1.6	-0.7	-1.4	-2.4	-1.7
Transportation and warehousing of personal consumption goods.....	FD	422211	2.063	-10.1	-1.5	-0.7	-1.4	-2.4	-1.6
Transportation and warehousing of private capital equipment.....	FD	422212	0.504	-11.7	-1.9	-0.8	-1.5	-2.6	-1.8
Transportation and warehousing of government purchased goods.....	FD	42222	0.233	-7.0	-0.9	-0.4	-1.2	-2.0	-1.6
Transportation and warehousing of exports.....	FD	42223	1.138	-8.3	-1.1	-0.5	-1.3	-1.9	-1.3
Final demand services less trade, transportation, and warehousing.....	FD	421	41.763	3.7	0.5	0.4	0.3	0.4	0.1
Finished services less trade, transportation, and warehousing <sup>3</sup> .....	FD	4211	36.505	3.5	0.4	0.3	0.4	0.4	0.0
Finished consumer services less trade, transportation, and warehousing.....	FD	42111	32.158	3.6	0.4	0.3	0.4	0.5	0.0
Private capital investment services less trade, transportation, and warehousing.....	FD	42112	4.347	3.2	0.4	0.0	0.3	-0.2	0.6
Government purchased services less trade, transportation, and warehousing.....	FD	4212	2.674	2.8	0.9	0.1	0.0	0.6	0.0
Gov. purchased services less trade, transportation, and warehousing, excl. capital investment.....	FD	42121	2.515	2.9	0.8	0.1	0.0	0.6	0.0
Government purchased capital investment services less trade, transportation, and warehousing.....	FD	42122	0.159	1.1	1.4	0.6	0.0	-0.5	0.3
Services for export less trade, transportation, and warehousing.....	FD	4213	2.584	7.1	1.7	1.5	-0.5	0.5	0.5
Final demand construction.....	FD	43	2.670	10.9	1.9	0.0	0.1	-0.3	0.2
Construction for private capital investment.....	FD	431	1.856	11.6	1.9	0.0	0.1	-0.3	0.1
Construction for government.....	FD	432	0.814	9.7	1.8	0.1	0.2	-0.2	0.2
<b>Special Groupings of Final Demand</b>									
Final demand less exports.....	FD	49101	86.458	1.5	0.4	-0.1	-0.4	0.2	-0.3
Final demand less government.....	FD	49102	92.111	1.3	0.4	0.0	-0.3	0.3	-0.3

See footnotes at end of table.

**Table 1. Producer price index percentage changes and weights for Final Demand-Intermediate Demand groupings, seasonally adjusted — Continued**  
[May 2023]

Grouping	Commodity code		Relative Importance Dec. 2022 <sup>1</sup>	Unadjusted 12-month percent change <sup>2</sup> May 2022 to May 2023 <sup>P</sup>	Seasonally adjusted 1-month percent change <sup>2</sup>				
	Group code	Item code			Dec. to Jan.	Jan. to Feb. <sup>P</sup>	Feb. to Mar. <sup>P</sup>	Mar. to Apr. <sup>P</sup>	Apr. to May <sup>P</sup>
Final demand less foods, food and nonalcoholic beverages for immediate consumption, and energy <sup>5</sup> .....	FD	49103	87.791	2.8	0.2	0.2	0.0	0.2	0.2
Final demand less foods and energy <sup>5</sup> .....	FD	49104	88.207	2.8	0.2	0.2	0.0	0.2	0.2
Final demand less foods and food and nonalcoholic beverages for immediate consumption <sup>5</sup> .....	FD	49105	93.644	1.0	0.5	0.1	-0.4	0.3	-0.3
Final demand less foods <sup>5</sup> .....	FD	49106	94.060	1.1	0.5	0.1	-0.4	0.2	-0.3
Final demand less energy.....	FD	49107	94.147	2.7	0.1	0.0	0.0	0.2	0.1
Final demand less trade services.....	FD	49108	80.300	0.6	0.7	0.0	-0.3	0.1	-0.6
Final demand less distributive services <sup>6</sup> .....	FD	49109	76.362	1.1	0.8	0.0	-0.3	0.2	-0.6
Final demand goods less energy.....	FD	49111	24.799	2.0	0.2	-0.3	0.2	0.0	-0.3
Final demand goods less foods.....	FD	49112	24.712	-2.9	1.9	0.0	-1.4	0.3	-1.6
Final demand services less trade services.....	FD	49113	46.976	2.5	0.4	0.2	0.2	0.1	-0.1
Final demand distributive services <sup>6</sup> .....	FD	49114	23.638	0.9	-0.9	-0.3	-0.7	0.1	0.6
Final demand goods plus final demand distributive services <sup>6</sup> .....	FD	49115	54.290	-1.1	0.3	-0.3	-0.9	0.1	-0.6
Final demand less foods, energy, and trade services <sup>5</sup> .....	FD	49116	68.507	2.8	0.5	0.3	0.2	0.1	0.0
Private and government purchased capital equipment.....	FD	49117	5.844	4.8	0.6	0.2	0.4	0.1	0.4
Private and government purchased capital investment services.....	FD	49118	8.497	1.2	-1.1	-0.1	0.2	-0.2	0.6
Total private and government purchased capital investment.....	FD	49119	14.341	3.7	-0.1	0.0	0.2	-0.1	0.4
Total finished <sup>3</sup> .....	FD	49201	78.567	1.8	0.3	0.0	-0.3	0.3	-0.2
Total finished less foods, food and nonalcoholic beverages for immediate consumption, and energy <sup>3,5</sup> .....	FD	49202	69.193	3.2	0.1	0.1	0.0	0.2	0.3
Total finished less foods and energy <sup>3,5</sup> .....	FD	49203	69.605	3.2	0.1	0.1	0.0	0.2	0.3
Total finished less foods and food and nonalcoholic beverages for immediate consumption <sup>3,5</sup> .....	FD	49204	73.644	1.8	0.4	0.1	-0.4	0.3	-0.2
Total finished less foods <sup>3,5</sup> .....	FD	49205	74.056	1.8	0.4	0.1	-0.4	0.3	-0.2
Total finished less energy <sup>3</sup> .....	FD	49206	74.116	3.2	0.0	0.0	0.1	0.2	0.2
Finished goods <sup>3</sup> .....	FD	49207	19.730	-0.9	1.5	-0.4	-1.3	0.5	-1.7
Finished goods less energy <sup>3</sup> .....	FD	49208	15.279	4.0	0.1	-0.5	0.4	-0.1	-0.1
Finished goods, excluding foods <sup>3,5</sup> .....	FD	49209	15.219	-1.5	2.3	0.2	-1.9	0.8	-1.8
Finished services <sup>3</sup> .....	FD	49210	56.981	2.7	0.0	0.1	0.0	0.2	0.3
Private capital investment services.....	FD	49211	8.045	1.2	-1.1	-0.2	0.2	-0.2	0.6
Finished distributive services <sup>3,6</sup> .....	FD	49212	19.616	1.2	-1.0	-0.2	-0.8	0.1	0.8
Finished services less trade services <sup>3</sup> .....	FD	49213	39.932	2.6	0.3	0.2	0.3	0.2	-0.1
Finished services less distributive services <sup>3,6</sup> .....	FD	49214	37.365	3.5	0.4	0.3	0.4	0.3	0.0
Total private capital investment (goods, services, and construction).....	FD	49215	14.938	3.6	-0.1	0.0	0.3	-0.1	0.5
Finished goods plus finished distributive services <sup>3,6</sup> .....	FD	49216	39.346	0.0	0.2	-0.3	-1.1	0.3	-0.5
Total exports.....	FD	49301	13.542	-1.2	0.4	0.1	-0.3	0.0	-0.5
Goods for export.....	FD	49302	7.607	-3.8	0.3	-0.1	-0.3	0.0	-0.9
Services for export.....	FD	49303	5.935	2.5	0.6	0.3	-0.3	0.1	0.0
Total government purchases.....	FD	49401	7.889	-1.8	1.2	-0.4	-0.6	-0.4	-1.0
Government purchased goods.....	FD	49402	3.315	-7.7	2.2	-1.0	-1.4	-1.4	-2.3
Government purchased services.....	FD	49403	3.760	2.3	0.3	0.0	-0.1	0.5	0.0
Total government purchased capital investment (goods, services, construction).....	FD	49404	2.073	4.8	0.4	0.1	0.1	-0.1	0.3
Government purchases, defense.....	FD	49405	2.344	-4.6	1.3	-0.6	-0.5	-1.2	-1.2
Government purchases, non-defense.....	FD	49406	5.545	-0.7	1.2	-0.4	-0.7	0.0	-0.8
Personal consumption.....	FD	49501	63.629	1.4	0.5	0.0	-0.5	0.4	-0.4
Personal consumption goods (finished consumer goods).....	FD	49502	14.693	-3.0	1.7	-0.6	-1.9	0.6	-2.4
Personal consumption goods less energy.....	FD	49503	10.242	3.4	-0.2	-0.9	0.5	-0.2	-0.4
Personal consumption goods less foods.....	FD	49504	10.182	-4.6	3.0	0.2	-2.9	1.1	-2.8
Personal consumption nondurable goods less foods.....	FD	49508	7.892	-6.4	3.8	0.3	-3.8	1.4	-3.7
Personal consumption services.....	FD	49505	48.936	3.0	0.1	0.1	-0.1	0.3	0.2
Personal consumption less trade services.....	FD	49506	49.774	0.8	0.7	0.0	-0.4	0.4	-0.8
Personal consumption less distributive services <sup>6</sup> .....	FD	49507	47.711	1.3	0.8	0.0	-0.3	0.5	-0.8
Personal consumption less foods and energy.....	FD	49510	54.667	3.2	0.2	0.2	0.0	0.3	0.2
Personal consumption less foods, energy, and trade services <sup>4</sup> .....	FD	49511	40.812	3.0	0.4	0.3	0.3	0.2	-0.1
Personal consumption less foods, energy, and distributive services <sup>6</sup> .....	FD	49512	38.749	3.8	0.5	0.3	0.4	0.4	0.0
Personal consumption goods plus personal consumption distributive services <sup>6</sup> .....	FD	49509	30.611	-0.7	0.5	-0.4	-1.4	0.4	-0.7
<b>Intermediate Demand by Commodity Type</b>									
<b>Processed goods</b>									
Processed goods for intermediate demand.....	ID6	1	100.000	-7.1	1.1	-0.4	-1.0	-0.5	-1.5
Materials and components for manufacturing.....	ID6	11	42.908	-5.9	0.0	0.0	-0.5	0.3	-0.2
Materials for manufacturing.....	ID6	111	26.996	-10.4	-0.3	-0.1	-0.9	0.3	-0.3
Materials for food manufacturing.....	ID6	1111	4.432	-6.9	0.3	-2.4	0.0	-1.1	-2.4
Materials for nondurable manufacturing.....	ID6	1112	12.302	-10.2	0.0	-0.3	-1.8	0.0	-1.4
Materials for durable manufacturing.....	ID6	1113	10.262	-11.5	-0.9	1.0	-0.1	1.4	1.8
Components for manufacturing.....	ID6	112	15.912	3.1	0.6	0.3	0.2	0.2	0.0

See footnotes at end of table.

**Table 1. Producer price index percentage changes and weights for Final Demand-Intermediate Demand groupings, seasonally adjusted — Continued**  
[May 2023]

Grouping	Commodity code		Relative Importance Dec. 2022 <sup>1</sup>	Unadjusted 12-month percent change <sup>2</sup> May 2022 to May 2023 <sup>P</sup>	Seasonally adjusted 1-month percent change <sup>2</sup>				
	Group code	Item code			Dec. to Jan.	Jan. to Feb. <sup>P</sup>	Feb. to Mar. <sup>P</sup>	Mar. to Apr. <sup>P</sup>	Apr. to May <sup>P</sup>
Components for nondurable manufacturing.....	ID6	1121	0.793	1.4	-0.4	0.1	-0.3	0.2	-0.3
Components for durable manufacturing.....	ID6	1122	15.119	3.2	0.6	0.3	0.2	0.2	0.0
Materials and components for construction.....	ID6	12	10.348	-0.2	0.1	-0.1	0.4	0.1	-0.1
Materials for construction.....	ID6	121	4.574	-3.0	-0.5	0.1	0.1	0.1	0.0
Components for construction.....	ID6	122	5.774	1.9	0.5	-0.2	0.7	0.1	-0.2
Processed fuels and lubricants for intermediate demand.....	ID6	13	19.830	-21.4	4.9	-1.6	-3.9	-2.8	-6.9
Processed fuels and lubricants to manufacturing industries.....	ID6	131	5.016	-15.9	1.9	-3.4	-0.5	-4.3	-4.7
Processed fuels and lubricants to nonmanufacturing industries.....	ID6	132	14.814	-23.2	6.0	-1.0	-4.9	-2.3	-7.6
Containers for intermediate demand.....	ID6	14	3.107	1.7	-0.1	-0.3	-0.8	-0.2	0.4
Supplies for intermediate demand.....	ID6	15	23.807	0.7	0.4	-0.2	-0.1	-0.2	-0.3
Supplies to manufacturing industries.....	ID6	151	3.173	0.5	-0.3	0.1	0.0	0.1	-0.2
Supplies to nonmanufacturing industries.....	ID6	152	20.634	0.8	0.5	-0.2	-0.1	-0.2	-0.4
Supplies to nonmanufacturing industries, feeds.....	ID6	1521	2.363	-3.7	-0.5	-2.2	-1.3	-1.6	-2.0
Supplies to nonmanufacturing industries, other than feeds.....	ID6	1522	18.271	1.3	0.6	0.0	0.1	-0.1	-0.2
<b>Unprocessed goods</b>									
Unprocessed goods for intermediate demand.....	ID6	2	100.000	-27.5	-4.7	-4.9	-4.6	1.6	-4.8
Unprocessed foodstuffs and feedstuffs.....	ID6	21	36.058	-13.7	-5.8	-1.0	-0.7	-1.5	-3.0
Unprocessed nonfood materials.....	ID6	22	63.942	-34.2	-4.1	-7.2	-7.1	3.7	-6.0
Unprocessed nonfood materials except fuel.....	ID6	221	45.514	-22.0	0.4	1.8	-4.0	6.8	-6.9
Unprocessed nonfood materials except fuel to manufacturing industries.....	ID6	2211	43.610	-23.2	0.3	1.9	-4.2	7.1	-7.2
Unprocessed nonfood materials except fuel to nonmanufacturing industries.....	ID6	2212	1.904	11.0	3.5	0.9	0.0	0.1	0.0
Unprocessed fuel.....	ID6	222	18.428	-65.8	-14.6	-31.8	-20.0	-11.5	-0.7
Unprocessed fuel to manufacturing industries.....	ID6	2221	0.982	-24.2	-3.6	-9.8	-7.9	0.9	1.2
Unprocessed fuel to nonmanufacturing industries.....	ID6	2222	17.446	-67.9	-15.3	-33.3	-21.0	-12.7	-0.9
<b>Services</b>									
Services for intermediate demand.....	ID6	3	100.000	3.9	1.0	0.2	-0.2	0.7	0.2
Trade services for intermediate demand <sup>4</sup> .....	ID6	33	18.127	0.8	0.8	-0.8	0.9	1.6	0.2
Trade services for manufacturing industries.....	ID6	331	8.929	2.3	2.0	-0.9	1.9	1.5	0.0
Trade services for nonmanufacturing industries.....	ID6	332	9.198	-0.6	-0.3	-0.8	-0.1	1.7	0.4
Transportation and warehousing services for intermediate demand.....	ID6	32	14.516	-2.7	0.5	0.0	-0.9	-1.1	-0.9
Transportation of passengers for intermediate demand.....	ID6	321	1.069	1.8	2.3	-1.1	1.3	-2.9	-1.1
Transportation of passengers for manufacturing industries.....	ID6	3211	0.127	1.9	2.3	-1.1	1.3	-2.9	-1.1
Transportation of passengers for nonmanufacturing industries.....	ID6	3212	0.942	1.8	2.3	-1.1	1.3	-2.8	-1.1
Transportation and warehousing of goods for intermediate demand.....	ID6	322	13.447	-3.0	0.4	0.1	-1.1	-1.0	-0.9
Transportation and warehousing of goods for manufacturing industries.....	ID6	3221	2.941	-6.0	-1.0	-0.3	-1.1	-1.7	-1.1
Transportation and warehousing of goods for nonmanufacturing industries.....	ID6	3222	10.506	-2.2	0.7	0.2	-1.1	-0.8	-0.8
Services less trade, transportation, and warehousing for intermediate demand.....	ID6	31	67.357	6.6	1.1	0.5	-0.4	0.9	0.4
Services less trade, transportation, and warehousing for manufacturing industries.....	ID6	311	2.068	4.6	1.2	0.3	0.2	0.5	0.1
Services less trade, transportation, and warehousing for nonmanufacturing industries.....	ID6	312	65.288	6.7	1.1	0.5	-0.4	0.9	0.4
<b>Construction</b>									
Construction for intermediate demand.....	ID6	4	100.000	4.4	0.8	0.2	0.4	0.7	1.7
<b>Special Groupings of Intermediate Demand by Commodity Type</b>									
Processed materials less foods and feeds.....	ID6	9111	90.968	-7.3	1.2	-0.2	-1.1	-0.4	-1.5
Processed foods and feeds.....	ID6	9112	9.032	-4.7	0.2	-2.1	-0.2	-1.1	-1.9
Processed energy goods.....	ID6	9113	19.830	-21.4	4.9	-1.6	-3.9	-2.8	-6.9
Processed materials less energy.....	ID6	9118	80.170	-3.0	0.1	-0.1	-0.3	0.1	-0.2
Processed materials less foods and energy.....	ID6	9115	71.138	-2.8	0.1	0.2	-0.3	0.3	0.0
Intermediate distributive services <sup>7</sup> .....	ID6	9116	31.574	-0.9	0.6	-0.4	0.1	0.5	-0.2
Processed goods plus intermediate distributive services.....	ID6	9117	-	-5.4	1.0	-0.4	-0.7	-0.2	-1.1
Unprocessed materials less agricultural products.....	ID6	9211	58.389	-35.1	-4.4	-7.7	-7.1	4.0	-6.1
Unprocessed energy materials <sup>8</sup> .....	ID6	9212	43.623	-43.2	-7.0	-10.9	-11.1	5.4	-7.8
Unprocessed materials less energy.....	ID6	9213	56.377	-13.6	-3.0	-0.5	-0.6	-0.4	-3.1
Unprocessed nonfood materials less energy <sup>9</sup> .....	ID6	9216	20.319	-13.6	2.1	0.3	-0.6	1.5	-3.3
<b>Intermediate Demand by Production Flow</b>									
<b>Stage 4 Intermediate Demand</b>									
Stage 4 intermediate demand.....	ID5	4	100.000	1.5	1.0	0.0	-0.2	0.4	-0.2
Inputs to stage 4 goods producers.....	ID5	41	30.237	-0.1	0.4	-0.2	0.3	0.1	-0.2
Goods.....	ID5	411	22.423	-1.2	0.1	0.0	-0.3	0.0	-0.2

See footnotes at end of table.

**Table 1. Producer price index percentage changes and weights for Final Demand-Intermediate Demand groupings, seasonally adjusted — Continued**  
[May 2023]

Grouping	Commodity code		Relative Importance Dec. 2022 <sup>1</sup>	Unadjusted 12-month percent change <sup>2</sup> May 2022 to May 2023 <sup>P</sup>	Seasonally adjusted 1-month percent change <sup>2</sup>				
	Group code	Item code			Dec. to Jan.	Jan. to Feb. <sup>P</sup>	Feb. to Mar. <sup>P</sup>	Mar. to Apr. <sup>P</sup>	Apr. to May <sup>P</sup>
Foods.....	ID5	4111	3.300	-7.2	-0.1	-1.2	-2.1	-0.3	-2.1
Energy.....	ID5	4112	0.220	-22.8	-6.1	-0.7	6.3	-14.2	-10.5
Goods excluding foods and energy.....	ID5	4113	18.903	0.2	0.2	0.3	-0.1	0.2	0.2
Services.....	ID5	412	7.814	3.0	1.5	-0.7	2.1	0.5	-0.2
Trade services.....	ID5	4123	5.817	3.4	1.7	-1.0	2.9	0.7	-0.2
Transportation and warehousing services.....	ID5	4122	0.515	-4.4	0.1	-0.8	-0.6	-1.5	-1.2
Transportation of passengers.....	ID5	41221	0.077	1.9	2.3	-1.1	1.3	-2.9	-1.1
Transportation and warehousing of goods.....	ID5	41222	0.438	-5.5	-0.3	-0.7	-1.0	-1.2	-1.2
Services less trade, transportation, and warehousing.....	ID5	4121	1.482	4.2	1.0	0.3	0.1	0.5	0.1
Inputs to stage 4 services producers.....	ID5	42	54.970	3.9	1.4	0.0	-0.6	0.5	-0.1
Goods.....	ID5	421	13.984	-0.5	1.8	-0.5	-0.8	-0.7	-0.7
Foods.....	ID5	4211	2.360	-5.2	0.1	-1.6	0.1	-1.4	-1.0
Energy.....	ID5	4212	4.133	-3.5	4.3	-0.7	-2.7	-1.4	-1.7
Goods excluding foods and energy.....	ID5	4213	7.491	2.5	0.7	0.0	0.1	-0.1	-0.1
Services.....	ID5	422	40.934	5.5	1.2	0.2	-0.5	1.0	0.2
Trade services.....	ID5	4223	4.078	3.8	0.6	-1.0	0.6	1.6	0.0
Transportation and warehousing services.....	ID5	4222	3.742	2.4	1.7	0.4	-0.5	-0.8	-1.4
Transportation of passengers.....	ID5	42221	0.490	1.9	2.3	-1.1	1.3	-2.9	-1.1
Transportation and warehousing of goods.....	ID5	42222	3.252	2.5	1.6	0.7	-0.7	-0.4	-1.4
Services less trade, transportation, and warehousing.....	ID5	4221	33.114	6.2	1.3	0.4	-0.6	1.1	0.4
Construction.....	ID5	423	0.052	4.4	0.8	0.2	0.4	0.7	1.7
Inputs to stage 4 construction producers.....	ID5	43	14.792	-3.1	0.7	0.0	-0.2	0.4	-0.9
Goods.....	ID5	431	10.801	-2.9	0.8	0.1	-0.4	0.4	-1.1
Energy.....	ID5	4312	0.855	-29.3	5.9	0.4	-7.7	3.5	-11.8
Goods excluding foods and energy.....	ID5	4313	9.946	0.4	0.3	0.1	0.4	0.1	-0.1
Services.....	ID5	432	3.991	-3.6	0.3	-0.4	0.3	0.5	-0.4
Trade services.....	ID5	4323	1.692	-5.9	1.2	-0.7	1.3	1.4	-0.5
Transportation and warehousing services.....	ID5	4322	0.725	-10.8	-1.5	-0.9	-1.4	-2.4	-1.8
Transportation of passengers.....	ID5	43221	0.015	1.9	2.3	-1.1	1.3	-2.9	-1.1
Transportation and warehousing of goods.....	ID5	43222	0.710	-11.1	-1.6	-0.9	-1.4	-2.4	-1.8
Services less trade, transportation, and warehousing.....	ID5	4321	1.574	4.2	0.3	0.3	0.1	0.7	0.2
<b>Stage 3 Intermediate Demand</b>									
Stage 3 intermediate demand.....	ID5	3	100.000	-6.5	0.2	-0.3	-0.7	-0.1	-1.0
Inputs to stage 3 goods producers.....	ID5	31	45.352	-9.9	-1.4	-0.2	-0.1	-0.3	-0.9
Goods.....	ID5	311	35.807	-11.7	-2.1	-0.2	-0.4	-0.6	-1.1
Foods.....	ID5	3111	11.906	-15.9	-5.4	-1.7	-0.2	-2.2	-3.2
Energy.....	ID5	3112	1.292	-30.4	-0.5	-2.3	2.5	-6.0	-5.7
Goods excluding foods and energy.....	ID5	3113	22.609	-8.1	-0.4	0.7	-0.6	0.6	0.2
Services.....	ID5	312	9.545	-2.1	1.2	-0.4	0.6	0.5	-0.3
Trade services.....	ID5	3123	5.175	-0.2	2.7	-0.5	1.8	1.9	0.1
Transportation and warehousing services.....	ID5	3122	3.002	-8.1	-1.2	-0.7	-1.2	-2.1	-1.5
Transportation of passengers.....	ID5	31221	0.144	1.9	2.3	-1.1	1.3	-2.9	-1.1
Transportation and warehousing of goods.....	ID5	31222	2.858	-8.6	-1.4	-0.7	-1.3	-2.1	-1.5
Services less trade, transportation, and warehousing.....	ID5	3121	1.368	5.2	1.1	0.4	0.2	0.7	0.3
Inputs to stage 3 services producers.....	ID5	32	53.518	-3.0	1.6	-0.3	-1.2	0.0	-1.1
Goods.....	ID5	321	10.628	-23.1	5.0	-2.2	-3.5	-3.1	-6.8
Foods.....	ID5	3211	0.090	2.8	2.4	-1.7	-1.0	-2.7	0.4
Energy.....	ID5	3212	6.619	-33.9	7.8	-3.4	-5.3	-4.9	-10.9
Goods excluding foods and energy.....	ID5	3213	3.919	0.5	0.4	0.1	-0.3	-0.1	-0.5
Services.....	ID5	322	42.317	3.8	0.8	0.2	-0.6	0.8	0.2
Trade services.....	ID5	3223	2.614	3.3	-0.8	0.2	-1.2	2.8	0.2
Transportation and warehousing services.....	ID5	3222	10.018	-1.8	1.2	0.3	-1.1	-0.5	-0.5
Transportation of passengers.....	ID5	32221	0.021	1.4	0.0	0.0	0.2	-0.3	0.0
Transportation and warehousing of goods.....	ID5	32222	9.997	-1.8	1.2	0.3	-1.1	-0.5	-0.5
Services less trade, transportation, and warehousing.....	ID5	3221	29.685	5.8	0.8	0.2	-0.4	1.1	0.5
Construction.....	ID5	323	0.573	4.4	0.8	0.2	0.4	0.7	1.7
Inputs to stage 3 construction producers.....	ID5	33	1.131	-10.0	-0.3	-1.2	-0.1	-0.4	-0.3
Goods.....	ID5	331	0.566	-5.5	-0.4	-0.2	-0.4	-0.2	-0.3
Goods excluding foods and energy.....	ID5	3313	0.566	-5.5	-0.4	-0.2	-0.4	-0.2	-0.3
Services.....	ID5	332	0.565	-12.8	0.0	-2.2	0.2	-0.5	-0.3
Trade services.....	ID5	3323	0.521	-13.7	-0.1	-2.4	0.3	-0.6	-0.4
Transportation and warehousing services.....	ID5	3322	0.015	0.8	0.4	-0.3	-1.0	-0.2	-0.1
Transportation and warehousing of goods.....	ID5	33222	0.015	0.8	0.4	-0.3	-1.0	-0.2	-0.1
Services less trade, transportation, and warehousing.....	ID5	3321	0.029	6.2	2.0	0.0	0.0	0.6	0.3
<b>Stage 2 Intermediate Demand</b>									

See footnotes at end of table.



**Table 1. Producer price index percentage changes and weights for Final Demand-Intermediate Demand groupings, seasonally adjusted — Continued**  
[May 2023]

Grouping	Commodity code		Relative Importance Dec. 2022 <sup>1</sup>	Unadjusted 12-month percent change <sup>2</sup> May 2022 to May 2023 <sup>P</sup>	Seasonally adjusted 1-month percent change <sup>2</sup>				
	Group code	Item code			Dec. to Jan.	Jan. to Feb. <sup>P</sup>	Feb. to Mar. <sup>P</sup>	Mar. to Apr. <sup>P</sup>	Apr. to May <sup>P</sup>
Stage 2 intermediate demand.....	ID5	2	100.000	-9.8	-0.9	-1.4	-2.5	1.3	-1.4
Inputs to stage 2 goods producers.....	ID5	21	54.274	-21.1	-2.4	-3.7	-4.1	1.9	-3.0
Goods.....	ID5	211	40.812	-27.8	-3.4	-5.1	-5.5	2.2	-4.4
Foods.....	ID5	2111	4.355	-8.2	-2.4	-0.8	-2.9	-0.4	-2.1
Energy.....	ID5	2112	21.042	-44.1	-6.6	-10.3	-11.0	4.7	-8.3
Goods excluding foods and energy.....	ID5	2113	15.415	-7.3	0.5	0.3	-0.1	0.3	-0.9
Services.....	ID5	212	13.197	6.2	0.8	0.3	-0.2	1.2	0.7
Trade services.....	ID5	2123	5.150	5.8	0.3	-1.0	0.2	3.1	1.3
Transportation and warehousing services.....	ID5	2122	4.488	2.1	0.4	0.6	-0.4	-0.8	0.0
Transportation of passengers.....	ID5	21221	0.168	1.8	2.2	-1.1	1.3	-2.8	-1.1
Transportation and warehousing of goods.....	ID5	21222	4.320	2.2	0.4	0.6	-0.5	-0.7	0.0
Services less trade, transportation, and warehousing.....	ID5	2121	3.559	12.6	1.8	2.0	-0.6	1.0	0.6
Construction.....	ID5	213	0.265	4.4	0.8	0.2	0.4	0.7	1.7
Inputs to stage 2 services producers.....	ID5	22	45.725	6.3	1.0	1.3	-0.7	0.6	0.4
Goods.....	ID5	221	5.072	-2.3	0.8	-0.3	-0.6	-0.3	-1.1
Foods.....	ID5	2211	0.055	-11.5	-1.5	-2.3	-2.8	-1.0	-2.0
Energy.....	ID5	2212	0.357	-29.0	7.6	-1.6	-6.8	-2.5	-12.2
Goods excluding foods and energy.....	ID5	2213	4.660	0.2	0.3	-0.1	-0.1	-0.1	-0.2
Services.....	ID5	222	39.767	7.8	1.0	1.5	-0.8	0.7	0.5
Trade services.....	ID5	2223	2.238	6.0	-4.0	-0.7	-3.6	1.0	2.9
Transportation and warehousing services.....	ID5	2222	2.862	-13.8	-0.8	-0.8	-2.2	-1.8	-0.9
Transportation of passengers.....	ID5	22221	0.390	1.9	2.3	-1.1	1.3	-2.9	-1.1
Transportation and warehousing of goods.....	ID5	22222	2.472	-16.0	-1.3	-0.8	-2.8	-1.6	-0.8
Services less trade, transportation, and warehousing.....	ID5	2221	34.667	9.9	1.5	1.8	-0.5	0.9	0.5
Construction.....	ID5	223	0.886	4.4	0.8	0.2	0.4	0.7	1.7
<b>Stage 1 Intermediate Demand</b>									
Stage 1 intermediate demand.....	ID5	1	100.000	-3.6	0.7	-0.4	-0.4	0.0	-0.9
Inputs to stage 1 goods producers.....	ID5	11	33.533	-8.5	0.5	-0.2	-0.7	-0.3	-1.2
Goods.....	ID5	111	24.780	-11.5	0.0	-0.1	-1.2	-0.8	-1.6
Foods.....	ID5	1111	3.351	-13.5	-0.4	-0.9	-4.4	-0.8	-3.1
Energy.....	ID5	1112	3.963	-20.6	1.4	-1.6	-0.7	-7.1	-7.6
Goods excluding foods and energy.....	ID5	1113	17.466	-9.1	-0.2	0.3	-0.7	0.6	-0.1
Services.....	ID5	112	8.752	0.2	2.0	-0.4	0.7	1.3	-0.2
Trade services.....	ID5	1123	5.298	-0.8	2.9	-1.0	1.3	1.9	-0.2
Transportation and warehousing services.....	ID5	1122	0.599	2.0	-0.1	0.7	-1.4	-0.8	0.8
Transportation of passengers.....	ID5	11221	0.103	1.9	2.3	-1.1	1.3	-2.9	-1.1
Transportation and warehousing of goods.....	ID5	11222	0.496	2.0	-0.6	1.1	-2.0	-0.4	1.3
Services less trade, transportation, and warehousing.....	ID5	1121	2.855	2.2	0.7	0.4	0.0	0.4	-0.3
Construction.....	ID5	113	0.001	4.4	0.8	0.2	0.4	0.7	1.7
Inputs to stage 1 services producers.....	ID5	12	53.646	0.6	0.9	-0.4	-0.3	0.2	-0.7
Goods.....	ID5	121	16.434	-6.3	2.0	-0.8	-1.2	-0.6	-2.5
Foods.....	ID5	1211	0.115	-31.7	-2.4	-16.3	6.2	3.0	-26.6
Energy.....	ID5	1212	5.528	-22.1	4.7	-2.1	-3.6	-2.4	-6.9
Goods excluding foods and energy.....	ID5	1213	10.791	4.1	0.7	0.1	0.0	0.3	0.0
Services.....	ID5	122	37.209	4.2	0.5	-0.2	0.0	0.6	0.2
Trade services.....	ID5	1223	3.617	2.7	-0.2	0.1	0.2	1.3	0.1
Transportation and warehousing services.....	ID5	1222	4.373	0.4	1.4	-0.4	-0.2	-1.5	-0.8
Transportation of passengers.....	ID5	12221	1.342	1.9	2.3	-1.1	1.3	-2.9	-1.1
Transportation and warehousing of goods.....	ID5	12222	3.031	-0.3	1.0	-0.1	-0.8	-0.8	-0.6
Services less trade, transportation, and warehousing.....	ID5	1221	29.219	5.0	0.4	-0.2	0.0	0.8	0.3
Construction.....	ID5	123	0.003	4.4	0.8	0.2	0.4	0.7	1.7
Inputs to stage 1 construction producers.....	ID5	13	12.821	-6.3	0.4	-0.8	0.0	-0.5	-1.2
Goods.....	ID5	131	9.208	-2.9	0.7	-0.4	-0.1	-0.4	-1.3
Energy.....	ID5	1312	0.934	-35.7	5.4	-3.8	-3.8	-5.2	-13.0
Goods excluding foods and energy.....	ID5	1313	8.274	2.2	0.2	0.0	0.3	0.1	0.0
Services.....	ID5	132	3.613	-12.5	-0.4	-1.7	0.3	-0.6	-0.9
Trade services.....	ID5	1323	2.667	-11.7	0.4	-2.1	0.9	0.0	-0.7
Transportation and warehousing services.....	ID5	1322	0.854	-12.9	-2.2	-0.8	-1.7	-2.8	-1.9
Transportation and warehousing of goods.....	ID5	13222	0.854	-12.9	-2.2	-0.8	-1.7	-2.8	-1.9
Services less trade, transportation, and warehousing.....	ID5	1321	0.092	8.5	0.6	-0.2	0.5	1.1	0.3
<b>Special Groupings of Intermediate Demand by Production Flow</b>									
Total goods inputs to stage 4 intermediate demand.....	ID5	9411	47.208	-1.4	0.8	-0.1	-0.5	-0.2	-0.6
Total services inputs to stage 4 intermediate demand.....	ID5	9412	52.739	4.2	1.2	0.0	0.0	0.8	0.1
Total construction inputs to stage 4 intermediate demand.....	ID5	9413	0.052	4.4	0.8	0.2	0.4	0.7	1.7
Total foods inputs to stage 4 intermediate demand.....	ID5	9414	5.660	-6.4	0.0	-1.4	-1.2	-0.8	-1.6

See footnotes at end of table.

**Table 1. Producer price index percentage changes and weights for Final Demand-Intermediate Demand groupings, seasonally adjusted — Continued**  
 [May 2023]

Grouping	Commodity code		Relative Importance Dec. 2022 <sup>1</sup>	Unadjusted 12-month percent change <sup>2</sup> May 2022 to May 2023 <sup>p</sup>	Seasonally adjusted 1-month percent change <sup>2</sup>				
	Group code	Item code			Dec. to Jan.	Jan. to Feb. <sup>p</sup>	Feb. to Mar. <sup>p</sup>	Mar. to Apr. <sup>p</sup>	Apr. to May <sup>p</sup>
Total energy goods inputs to stage 4 intermediate demand.....	ID5	9415	5.208	-10.1	4.1	-0.5	-3.3	-1.1	-3.8
Total goods less foods and energy inputs to stage 4 intermediate demand. ....	ID5	9416	36.340	0.7	0.3	0.2	0.1	0.1	0.1
Total goods inputs to stage 3 intermediate demand.....	ID5	9311	47.001	-14.4	-0.5	-0.6	-1.1	-1.2	-2.4
Total services inputs to stage 3 intermediate demand.....	ID5	9312	52.427	2.2	0.9	0.1	-0.4	0.8	0.1
Total construction inputs to stage 3 intermediate demand.....	ID5	9313	0.573	4.4	0.8	0.2	0.4	0.7	1.7
Total foods inputs to stage 3 intermediate demand.....	ID5	9314	11.996	-15.8	-5.4	-1.7	-0.2	-2.2	-3.2
Total energy goods inputs to stage 3 intermediate demand.....	ID5	9315	7.911	-33.3	6.4	-3.2	-4.1	-5.1	-10.0
Total goods less foods and energy inputs to stage 3 intermediate demand. ....	ID5	9316	27.094	-7.0	-0.3	0.6	-0.6	0.4	0.1
Total goods inputs to stage 2 intermediate demand.....	ID5	9211	45.884	-25.4	-2.9	-4.5	-4.9	1.9	-4.0
Total services inputs to stage 2 intermediate demand.....	ID5	9212	52.964	7.4	0.9	1.2	-0.6	0.8	0.6
Total construction inputs to stage 2 intermediate demand.....	ID5	9213	1.151	4.4	0.8	0.2	0.4	0.7	1.7
Total foods inputs to stage 2 intermediate demand.....	ID5	9214	4.410	-8.3	-2.4	-0.8	-2.9	-0.4	-2.1
Total energy goods inputs to stage 2 intermediate demand.....	ID5	9215	21.399	-43.9	-6.4	-10.2	-10.9	4.5	-8.4
Total goods less foods and energy inputs to stage 2 intermediate demand. ....	ID5	9216	20.075	-5.7	0.4	0.2	-0.1	0.2	-0.8
Total goods inputs to stage 1 intermediate demand.....	ID5	9111	50.422	-8.4	0.8	-0.4	-1.0	-0.7	-1.8
Total services inputs to stage 1 intermediate demand.....	ID5	9112	49.574	1.7	0.7	-0.3	0.2	0.6	0.0
Total construction inputs to stage 1 intermediate demand.....	ID5	9117	0.004	4.4	0.8	0.2	0.4	0.7	1.7
Total foods inputs to stage 1 intermediate demand.....	ID5	9114	3.466	-14.1	-0.4	-1.4	-4.1	-0.7	-3.8
Total energy goods inputs to stage 1 intermediate demand.....	ID5	9115	10.425	-23.1	3.4	-2.1	-2.5	-4.4	-7.7
Total goods less foods and energy inputs to stage 1 intermediate demand. ....	ID5	9116	36.531	-2.9	0.2	0.2	-0.3	0.4	-0.1

<sup>1</sup> Comprehensive relative importance figures are initially computed after the publication of December indexes and are recalculated after final December indexes are available. Individual items and subtotals may not add exactly to totals because of rounding differences.

<sup>2</sup> All indexes are subject to revision for 4 months after their originally scheduled publication to incorporate late reports and corrections by survey respondents. In addition, seasonally adjusted indexes are subject to change for up to 5 years due to the recalculation of seasonal factors published each January.

<sup>3</sup> PPI defines Total finished as including only the personal consumption and private capital investment portions of final demand.

<sup>4</sup> Trade indexes measure changes in margins received by wholesalers and retailers.

<sup>5</sup> The PPI definition of foods does not include food and beverages for immediate consumption. PPI defines food and beverages for immediate consumption as the service of preparing meals, snacks, and beverages to customer order for immediate on-premises and off-premises consumption.

<sup>6</sup> Distributive services include transportation, warehousing, and trade of goods.

<sup>7</sup> Includes intermediate trade, transportation, and warehousing services.

<sup>8</sup> Includes crude petroleum.

<sup>9</sup> Excludes crude petroleum.

<sup>p</sup> Preliminary

"/" Data not available.

**Table 2. Producer price index percentage changes for selected commodity groupings by Final Demand-Intermediate Demand category, seasonally adjusted**  
[May 2023]

Grouping	Commodity code		Unadjusted 12-month percent change <sup>1</sup>	Seasonally adjusted 1-month percent change <sup>1</sup>				
	Group code	Item code		May 2022 to May 2023 <sup>P</sup>	Dec. to Jan.	Jan. to Feb. <sup>P</sup>	Feb. to Mar. <sup>P</sup>	Mar. to Apr. <sup>P</sup>
<b>Final Demand</b>								
Final demand.....	FD	4	1.1	0.4	-0.1	-0.4	0.2	-0.3
Final demand goods.....	FD	41	-2.4	1.3	-0.4	-1.1	0.2	-1.6
Final demand foods.....	FD	411	0.3	-1.3	-2.3	0.3	-0.4	-1.3
Fresh fruits and melons <sup>2</sup> .....	01	11	0.9	5.8	-6.7	-3.2	2.4	-2.5
Fresh and dry vegetables <sup>2</sup> .....	01	13	22.7	-33.5	-13.7	-7.5	35.1	-15.8
Grains.....	01	2	-20.0	-1.6	0.8	-7.4	2.7	-5.4
Eggs for fresh use <sup>2</sup> .....	01	7107	-64.6	-12.7	-41.3	33.2	-35.8	-53.4
Oilseeds.....	01	8301	-12.3	-4.9	0.6	-4.2	0.5	-1.2
Bakery products <sup>2</sup> .....	02	11	8.4	0.4	0.5	0.5	0.1	0.3
Milled rice <sup>2</sup> .....	02	13	17.0	3.3	0.7	0.4	-0.3	-0.8
Pasta products <sup>2</sup> .....	02	1402	8.5	8.9	1.3	0.0	-8.4	0.0
Beef and veal.....	02	2101	11.3	7.5	-1.3	1.4	-3.1	0.7
Pork.....	02	2104	-9.9	-2.2	-2.3	3.2	-6.5	-4.1
Processed young chickens.....	02	2203	-20.5	-3.7	-2.2	2.2	-1.3	-0.6
Processed turkeys <sup>2</sup> .....	02	2206	-21.6	0.0	-2.2	-10.7	-6.8	-8.9
Finfish and shellfish.....	02	23	-2.3	0.2	-0.6	0.9	-1.8	1.6
Dairy products.....	02	3	-8.6	-1.6	-2.0	-1.8	-0.3	-1.0
Processed fruits and vegetables <sup>2</sup> .....	02	4	14.5	1.2	1.0	0.8	0.2	1.3
Confectionery end products <sup>2</sup> .....	02	55	5.4	-0.6	1.6	0.3	0.3	0.4
Soft drinks <sup>2</sup> .....	02	62	16.3	6.4	-0.8	0.0	-1.0	3.2
Roasted coffee <sup>2</sup> .....	02	6301	8.3	-0.3	-0.2	-0.4	0.4	0.2
Shortening and cooking oils <sup>2</sup> .....	02	78	-19.3	-2.1	-2.4	-2.2	-0.8	-2.8
Frozen specialty food <sup>2</sup> .....	02	85	8.7	0.7	0.0	1.0	0.2	1.0
Final demand energy.....	FD	412	-18.1	5.4	-0.8	-6.0	0.8	-6.8
Liquefied petroleum gas <sup>2</sup> .....	05	32	-60.0	2.0	1.4	-11.4	-5.1	-16.1
Residential electric power.....	05	41	8.2	1.5	0.7	-1.0	-0.2	0.8
Residential natural gas.....	05	51	-7.2	11.2	-8.6	-7.3	-5.0	-1.6
Gasoline.....	05	71	-28.5	7.5	2.8	-11.6	8.6	-13.8
Home heating oil and distillates.....	05	7302	-43.4	1.3	-17.7	-4.1	-5.6	-13.4
No. 2 diesel fuel.....	05	7303	-38.3	11.0	-4.6	-6.3	-3.7	-13.7
Final demand goods less foods and energy.....	FD	413	2.6	0.6	0.3	0.2	0.1	0.1
Alcoholic beverages.....	02	61	4.2	0.1	0.1	-0.1	0.1	0.7
Pet food <sup>2</sup> .....	02	9402	14.3	0.2	0.1	5.8	0.0	0.0
Women's, girls', and infants' apparel <sup>2</sup> .....	03	8106	-1.5	0.0	-1.6	0.0	0.0	0.1
Men's and boys' apparel <sup>2</sup> .....	03	8107	8.1	0.1	0.2	0.2	0.0	4.3
Textile housefurnishings <sup>2</sup> .....	03	82	2.8	0.1	0.0	0.2	-0.1	0.0
Footwear.....	04	3	8.5	0.3	0.8	-0.6	0.5	0.0
Industrial chemicals.....	06	1	-13.6	1.0	0.4	-3.3	-0.2	-1.9
Pharmaceutical preparations.....	06	38	2.7	0.8	0.4	0.0	0.2	0.0
Soaps and detergents <sup>2</sup> .....	06	71	13.0	1.1	0.2	0.1	0.0	0.1
Cleaning and polishing products <sup>2</sup> .....	06	72	4.7	0.2	1.3	0.2	0.3	0.0
Cosmetics and other toiletries <sup>2</sup> .....	06	75	6.1	1.1	1.8	0.6	0.2	0.0
Tires <sup>2</sup> .....	07	1201	9.0	3.0	0.0	0.0	0.3	-0.3
Consumer, institutional, and commercial products, n.e.c. <sup>2</sup> .....	07	2B	3.0	0.4	0.2	-0.3	0.2	0.1
Sanitary paper products <sup>2</sup> .....	09	1501	10.2	0.9	0.4	0.0	0.0	0.4
Iron and steel scrap.....	10	12	-20.4	1.3	11.1	5.2	4.1	-8.0
Agricultural machinery and equipment.....	11	1	6.0	0.3	-0.2	0.3	0.2	0.3
Construction machinery and equipment <sup>2</sup> .....	11	2	9.1	3.4	0.3	0.3	0.3	0.1
Metal cutting machine tools <sup>2</sup> .....	11	37	4.1	0.3	1.1	0.1	0.0	0.5
Metal forming machine tools.....	11	38	5.6	-0.2	-0.1	0.1	0.1	1.7
Tools, dies, jigs, fixtures, and industrial molds <sup>2</sup> .....	11	39	4.2	0.8	0.1	0.1	0.2	0.2
Pumps, compressors, and equipment.....	11	41	10.7	1.4	-0.1	0.4	0.0	1.6
Industrial material handling equipment <sup>2</sup> .....	11	44	6.6	1.6	0.6	0.0	0.0	0.4
Electronic computers and computer equipment <sup>2</sup> .....	11	5	-0.1	1.4	0.2	-0.1	-0.8	-1.3
Textile machinery and equipment <sup>2</sup> .....	11	62	-0.1	0.0	0.0	0.0	0.0	0.0
Paper industries machinery <sup>2</sup> .....	11	64	7.6	0.8	0.0	0.3	0.2	0.0
Printing trades machinery and equipment <sup>2</sup> .....	11	65	2.9	0.5	-0.1	0.2	0.9	0.0
Transformers and power regulators <sup>2</sup> .....	11	74	5.8	-0.1	0.2	0.6	0.5	0.3
Communication and related equipment.....	11	76	2.4	0.1	-0.1	0.3	0.1	0.0
Electronic components and accessories.....	11	78	0.1	-0.6	0.1	0.0	-0.5	-1.2
X-ray and electromedical equipment <sup>2</sup> .....	11	7905	3.4	1.2	0.0	0.0	0.0	0.3
Oil field and gas field machinery <sup>2</sup> .....	11	91	7.2	0.8	0.0	0.3	0.1	0.0
Mining machinery and equipment <sup>2</sup> .....	11	92	9.8	0.4	0.0	0.0	4.1	0.0
Office and store machines and equipment <sup>2</sup> .....	11	93	0.0	0.0	0.0	0.0	0.0	0.0

See footnotes at end of table.

**Table 2. Producer price index percentage changes for selected commodity groupings by Final Demand-Intermediate Demand category, seasonally adjusted — Continued**  
 [May 2023]

Grouping	Commodity code		Unadjusted 12-month percent change <sup>1</sup>	Seasonally adjusted 1-month percent change <sup>1</sup>				
	Group code	Item code		May 2022 to May 2023 <sup>P</sup>	Dec. to Jan.	Jan. to Feb. <sup>P</sup>	Feb. to Mar. <sup>P</sup>	Mar. to Apr. <sup>P</sup>
Household furniture <sup>2</sup> .....	12	1	4.2	0.8	0.5	0.1	-0.3	0.0
Commercial furniture <sup>2</sup> .....	12	2	6.7	-0.7	0.6	0.4	-0.2	0.3
Floor coverings <sup>2</sup> .....	12	3	3.7	0.7	0.1	-0.3	0.5	0.0
Household appliances <sup>2</sup> .....	12	4	3.2	0.0	0.3	-0.4	0.2	1.7
Home electronic equipment <sup>2</sup> .....	12	5	3.5	0.3	0.7	0.0	0.0	0.0
Lawn and garden equipment excl. garden tractors <sup>2</sup> .....	12	66	5.9	0.3	0.1	0.0	0.3	0.0
Passenger cars.....	14	1101	-0.6	0.7	0.2	-0.4	-0.8	-0.3
Light motor trucks.....	14	1105	4.4	0.6	-0.1	0.5	-0.4	0.2
Heavy motor trucks <sup>2</sup> .....	14	1106	1.9	0.1	0.6	0.0	0.1	0.2
Motor vehicles parts <sup>2</sup> .....	14	12	2.4	0.4	-0.1	0.3	0.2	0.1
Truck trailers <sup>2</sup> .....	14	14	0.1	-1.3	-0.6	0.0	0.5	-0.2
Travel trailers and campers <sup>2</sup> .....	14	16	2.2	0.0	0.0	0.1	0.0	0.0
Aircraft.....	14	21	4.5	0.3	0.4	0.6	0.5	0.5
Ships <sup>2</sup> .....	14	31	1.4	0.3	-0.4	0.6	0.1	0.8
Railroad equipment <sup>2</sup> .....	14	4	1.8	0.1	0.1	0.8	0.0	0.0
Toys, games, and children's vehicles <sup>2</sup> .....	15	11	2.2	1.1	0.0	0.1	0.0	0.0
Sporting and athletic goods <sup>2</sup> .....	15	12	11.3	0.7	1.3	-0.5	-0.3	0.4
Cigarettes <sup>2</sup> .....	15	21	11.7	1.7	2.1	0.0	0.0	1.8
Mobile homes <sup>2</sup> .....	15	5	-4.3	-1.3	-0.6	-0.3	0.0	0.1
Medical, surgical & personal aid devices.....	15	6	3.1	0.8	0.0	0.3	-0.3	0.6
Jewelry, platinum and karat gold <sup>2</sup> .....	15	9402	4.3	1.7	-2.0	0.9	1.5	1.1
Costume jewelry and novelties <sup>2</sup> .....	15	9404	7.0	4.1	0.9	0.0	1.1	0.0
Final demand services.....	FD	42	2.7	0.0	0.1	-0.1	0.3	0.2
Final demand trade services <sup>3</sup> .....	FD	423	2.9	-0.8	-0.2	-0.6	0.6	1.0
Machinery and equipment parts and supplies wholesaling <sup>2</sup> .....	57	1102	3.5	1.8	-1.5	5.0	-1.9	-1.3
Machinery and vehicle wholesaling <sup>2</sup> .....	57	1103	2.4	-4.7	-0.3	-2.3	1.0	1.2
Professional and commercial equipment wholesaling <sup>2</sup> .....	57	1104	4.5	1.3	1.2	5.0	-2.9	-0.1
Furnishings wholesaling <sup>2</sup> .....	57	2	5.6	0.4	-0.5	1.1	0.9	0.0
Chemicals and allied products wholesaling <sup>2</sup> .....	57	5	3.3	4.0	-3.4	-2.3	2.7	-0.7
Paper and plastics products wholesaling <sup>2</sup> .....	57	6	4.0	-2.4	0.5	0.3	0.7	0.7
Apparel wholesaling <sup>2</sup> .....	57	7	14.8	5.6	4.5	-5.7	7.3	-0.9
Food and alcohol wholesaling <sup>2</sup> .....	57	8	9.9	-0.4	-0.8	0.6	4.1	2.4
Food and alcohol retailing.....	58	1	15.7	-1.0	3.0	1.1	-1.1	1.5
Health, beauty, and optical goods retailing <sup>2</sup> .....	58	2	-0.2	4.1	0.6	-1.0	-0.6	-1.0
Apparel, jewelry, footwear, and accessories retailing.....	58	3	0.4	2.0	-1.7	0.8	-4.2	3.4
Computer hardware, software, and supplies retailing <sup>2</sup> .....	58	4	-20.4	-1.6	-15.1	2.2	0.3	-1.6
TV, video, and photographic equipment and supplies retailing.....	58	5	-7.0	14.1	-12.7	6.8	1.3	-1.2
Automobiles retailing (partial).....	58	6101	-19.9	-6.9	0.4	-0.8	-2.8	5.0
Automotive parts, including tires, retailing <sup>2</sup> .....	58	6102	7.4	1.4	-0.9	-1.9	-3.8	2.1
RVs, trailers, and campers retailing <sup>2</sup> .....	58	8	-43.8	16.0	-4.1	9.1	-5.7	-5.8
Sporting goods, including boats, retailing.....	58	9	-2.9	-2.9	-0.5	-0.4	3.1	-4.0
Lawn, garden, and farm equipment and supplies retailing <sup>2</sup> .....	58	A	18.7	0.6	0.6	12.4	1.5	-2.4
Furniture retailing <sup>2</sup> .....	58	B	-2.6	4.4	5.8	-2.7	1.1	3.2
Flooring and floor coverings retailing <sup>2</sup> .....	58	C	-2.7	1.7	1.7	0.9	-0.1	1.6
Hardware, building materials, and supplies retailing.....	58	D	-23.7	-0.5	-5.0	0.5	-2.6	-0.3
Major household appliances retailing.....	58	E	-2.3	1.0	12.2	-8.4	3.3	-4.1
Fuels and lubricants retailing.....	58	F	8.5	-11.6	-1.0	-12.9	-1.1	11.3
Cleaning supplies and paper products retailing <sup>2</sup> .....	58	G	19.3	2.3	7.9	-0.1	6.0	-1.9
Book retailing <sup>2</sup> .....	58	H	0.2	5.2	-4.3	-0.8	0.0	-0.2
Final demand transportation and warehousing services.....	FD	422	-6.8	-0.5	-0.8	-0.7	-2.4	-1.4
Rail transportation of freight and mail <sup>2</sup> .....	30	11	0.5	1.1	-0.9	-0.2	-0.2	-0.9
Truck transportation of freight <sup>2</sup> .....	30	12	-13.6	-2.2	-0.9	-1.6	-3.0	-2.1
Air transportation of freight <sup>2</sup> .....	30	14	-7.2	1.0	0.7	-2.8	0.3	-0.3
Courier, messenger, and U.S. postal services.....	30	16	5.1	2.2	0.1	-0.4	0.1	0.1
Rail transportation of passengers.....	30	21	1.4	-0.2	0.1	0.1	-0.1	0.1
Airline passenger services.....	30	22	1.9	2.3	-1.1	1.3	-2.9	-1.1
Final demand services less trade, transportation, and warehousing.....	FD	421	3.7	0.5	0.4	0.3	0.4	0.1
Sales of books.....	33	11	7.1	1.5	0.2	0.2	1.1	0.0
Sales and subscriptions of periodicals and newspapers.....	33	12	2.2	-0.7	0.5	-0.5	0.0	0.3
Application software publishing <sup>2</sup> .....	34	2	-0.2	0.7	-0.7	0.5	-0.4	0.7
Advertising space sales in periodicals, newspapers, directories, and mailing lists <sup>2</sup> .....	36	1	3.7	1.1	0.6	0.9	0.0	0.0
Residential wired telecommunication services <sup>2</sup> .....	37	11	7.4	0.0	0.2	0.4	1.3	1.6
Wireless telecommunication services.....	37	2	1.1	0.0	0.2	0.1	0.1	-0.2
Cable and satellite subscriber services.....	37	3	10.7	0.7	-0.5	1.5	0.2	0.1
Internet access services <sup>2</sup> .....	37	4	0.2	0.9	0.3	0.8	-0.2	-0.5

See footnotes at end of table.

**Table 2. Producer price index percentage changes for selected commodity groupings by Final Demand-Intermediate Demand category, seasonally adjusted — Continued**  
 [May 2023]

Grouping	Commodity code		Unadjusted 12-month percent change <sup>1</sup>	Seasonally adjusted 1-month percent change <sup>1</sup>				
	Group code	Item code		May 2022 to May 2023 <sup>P</sup>	Dec. to Jan.	Jan. to Feb. <sup>P</sup>	Feb. to Mar. <sup>P</sup>	Mar. to Apr. <sup>P</sup>
Bundled wired telecommunications access services <sup>2</sup> .....	37	5	8.5	4.2	-0.4	1.3	0.0	-1.4
Consumer loans (partial).....	39	12	4.4	1.8	3.2	-4.7	3.0	-0.4
Deposit services (partial) <sup>2</sup> .....	39	2	19.1	-1.9	-2.1	4.5	0.5	-1.1
Other credit intermediation, incl. trust services (partial) <sup>2</sup> .....	39	3	-3.0	0.1	1.7	0.0	0.2	1.3
Securities brokerage, dealing, investment advice, and related services <sup>2</sup> ...	40	1	28.9	0.3	4.5	-0.3	-0.4	3.2
Portfolio management <sup>2</sup> .....	40	2	-6.9	3.7	-0.2	-3.9	4.0	-2.9
Life insurance <sup>2</sup> .....	41	1101	0.1	-0.4	0.0	0.0	0.0	0.0
Disability insurance, including accidental death <sup>2</sup> .....	41	1102	-0.3	0.0	0.0	0.0	0.0	0.0
Health and medical insurance.....	41	1103	2.9	1.1	0.3	0.2	0.2	0.1
Property and casualty insurance <sup>2</sup> .....	41	1104	5.2	1.2	0.2	0.3	0.1	0.1
Annuities <sup>2</sup> .....	41	2	-0.8	-0.1	0.0	0.3	0.2	0.0
Residential property sales and leases, brokerage fees and commissions..	43	21	3.2	-0.1	-0.5	0.5	0.3	1.5
Passenger car rental.....	44	1	-7.3	-2.5	-1.4	-1.0	2.5	-4.2
Legal services.....	45	1	5.9	1.6	1.0	0.3	0.2	-0.2
Tax preparation and planning.....	45	2102	9.4	-0.1	0.6	0.2	0.4	0.6
Architectural and engineering services.....	45	3	3.7	0.0	0.4	0.0	0.7	0.2
Management, scientific, and technical consulting services.....	45	4	1.0	1.1	-1.3	0.2	0.1	0.2
Arrangement of flights (partial).....	47	1	5.8	-1.2	1.0	0.7	0.0	0.0
Arrangement of vehicle rentals and lodging <sup>2</sup> .....	47	2	7.5	3.0	1.3	0.7	1.6	-1.3
Arrangement of cruises and tours <sup>2</sup> .....	47	3	9.1	0.1	-6.6	-1.9	2.3	2.2
Physician care.....	51	1101	0.8	-0.6	0.1	0.1	0.1	0.1
Medical laboratory and diagnostic imaging care <sup>2</sup> .....	51	1102	0.0	0.6	-0.1	0.0	0.0	0.0
Home health and hospice care.....	51	1103	4.2	0.3	0.1	0.4	1.0	0.1
Hospital outpatient care <sup>2</sup> .....	51	1104	2.1	0.8	0.3	0.3	0.7	0.2
Dental care.....	51	1105	3.3	0.0	1.9	0.1	0.0	0.0
Hospital inpatient care.....	51	2101	4.5	0.3	0.2	0.7	0.5	0.3
Nursing home care.....	51	2102	7.0	1.0	0.8	0.5	0.2	0.1
Traveler accommodation services.....	53	11	6.9	-5.4	-3.1	6.2	1.0	-0.5
Food and beverages for immediate consumption services (partial) <sup>2</sup> .....	54	1	2.8	0.9	0.6	0.1	0.4	0.0
Motor vehicle repair and maintenance (partial).....	55	2	5.3	0.9	0.0	1.0	0.4	0.1
Membership dues and admissions and recreation facility use fees (partial) <sup>2</sup> .....	56	1	7.1	2.5	0.8	0.3	0.1	-1.2
Recreational activity instruction fees (partial) <sup>2</sup> .....	56	2	0.3	0.0	0.0	0.0	0.0	0.1
Gaming receipts (partial) <sup>2</sup> .....	56	3	0.5	1.7	0.6	0.4	-1.7	0.2
Mining services <sup>2</sup> .....	60	1	5.1	0.5	0.5	1.1	-0.8	-0.4
Final demand construction.....	FD	43	10.9	1.9	0.0	0.1	-0.3	0.2
New warehouse building construction <sup>2</sup> .....	80	1101	7.6	0.0	-0.3	-0.2	-0.3	0.4
New school building construction <sup>2</sup> .....	80	1102	10.9	1.6	0.0	0.2	-0.4	0.0
New office building construction <sup>2</sup> .....	80	1103	14.5	3.9	0.1	0.2	0.1	0.1
New industrial building construction <sup>2</sup> .....	80	1104	10.4	1.3	0.1	0.2	-1.1	0.0
New health care building construction <sup>2</sup> .....	80	1105	11.9	1.7	0.1	0.1	-0.4	0.0
<b>Intermediate Demand by Commodity Type</b>								
Processed goods for intermediate demand.....	ID6	1	-7.1	1.1	-0.4	-1.0	-0.5	-1.5
Processed foods and feeds.....	ID6	9112	-4.7	0.2	-2.1	-0.2	-1.1	-1.9
Meats.....	02	21	2.6	2.4	-1.0	1.9	-3.2	-0.9
Processed poultry.....	02	22	-24.8	1.2	-3.6	1.0	-1.8	-2.7
Dairy products.....	02	3	-8.6	-1.6	-2.0	-1.8	-0.3	-1.0
Processed fruits and vegetables <sup>2</sup> .....	02	4	14.5	1.2	1.0	0.8	0.2	1.3
Refined sugar and byproducts <sup>2</sup> .....	02	53	11.6	0.5	2.4	0.4	0.1	1.3
Fats and oils <sup>2</sup> .....	02	7	-24.2	0.2	-6.1	-4.4	-5.1	-3.7
Prepared animal feeds.....	02	9	-0.2	-0.8	-1.8	0.1	-1.4	-1.4
Processed materials less foods and feeds.....	ID6	9111	-7.3	1.2	-0.2	-1.1	-0.4	-1.5
Synthetic fibers <sup>2</sup> .....	03	1	3.6	2.0	-0.9	-0.3	0.1	-1.3
Processed yarns and threads <sup>2</sup> .....	03	2	-13.6	-3.0	-0.2	-0.2	-1.0	-1.0
Finished fabrics <sup>2</sup> .....	03	4	1.4	0.0	0.3	0.0	-0.1	-0.2
Liquefied petroleum gas <sup>2</sup> .....	05	32	-60.0	2.0	1.4	-11.4	-5.1	-16.1
Commercial electric power.....	05	42	10.2	2.1	1.7	-2.6	-0.1	1.8
Industrial electric power.....	05	43	7.8	7.0	-3.9	-0.5	-1.7	1.5
Commercial natural gas.....	05	52	-16.1	11.9	-11.0	-9.8	-6.2	-6.4
Industrial natural gas.....	05	53	-19.7	6.8	-10.3	-7.0	-6.2	-6.7
Natural gas to electric utilities.....	05	54	-23.4	7.4	1.6	-6.2	-5.4	-11.3
Gasoline.....	05	71	-28.5	7.5	2.8	-11.6	8.6	-13.8
Jet fuel <sup>2</sup> .....	05	7203	-46.0	14.0	-5.3	-6.1	-13.2	-12.5
No. 2 diesel fuel.....	05	7303	-38.3	11.0	-4.6	-6.3	-3.7	-13.7
Residual fuels <sup>2</sup> .....	05	74	-31.6	-17.4	-5.4	13.2	-1.0	11.3

See footnotes at end of table.

**Table 2. Producer price index percentage changes for selected commodity groupings by Final Demand-Intermediate Demand category, seasonally adjusted — Continued**  
 [May 2023]

Grouping	Commodity code		Unadjusted 12-month percent change <sup>1</sup>	Seasonally adjusted 1-month percent change <sup>1</sup>				
	Group code	Item code		May 2022 to May 2023 <sup>P</sup>	Dec. to Jan.	Jan. to Feb. <sup>P</sup>	Feb. to Mar. <sup>P</sup>	Mar. to Apr. <sup>P</sup>
Finished lubricants <sup>2</sup> .....	05	76	14.1	-0.5	0.3	0.1	-0.9	0.1
Lubricating oil base stocks <sup>2</sup> .....	05	78	-23.7	-21.4	3.3	-3.0	3.7	-12.7
Asphalt.....	05	8102	-27.2	2.9	-2.9	3.3	13.1	9.6
Basic inorganic chemicals <sup>2</sup> .....	06	13	6.0	2.0	-0.2	-0.4	-1.6	-1.2
Basic organic chemicals.....	06	14	-16.7	0.8	0.6	-3.9	0.1	-2.1
Prepared paint <sup>2</sup> .....	06	21	4.5	0.1	0.1	-0.2	0.3	0.2
Paint materials <sup>2</sup> .....	06	22	10.5	-1.7	-2.5	3.2	-0.5	2.0
Medicinal and botanical chemicals <sup>2</sup> .....	06	31	1.8	0.4	-0.4	0.5	0.1	0.0
Biological products, including diagnostics.....	06	37	4.0	1.3	0.7	0.4	0.2	-0.2
Fats and oils, inedible <sup>2</sup> .....	06	4	-23.1	-2.1	-5.4	-2.6	-2.9	-4.2
Nitrogenates.....	06	5201	-45.6	-10.4	-12.1	-9.9	-9.0	-8.0
Phosphates.....	06	5202	-24.4	-0.3	-2.5	-5.0	2.0	-4.7
Other agricultural chemicals <sup>2</sup> .....	06	53	-7.7	-1.9	1.2	0.0	-0.3	-0.4
Plastic resins and materials.....	06	6	-10.4	-1.0	1.4	0.2	2.3	-0.7
Industrial gases <sup>2</sup> .....	06	7903	0.5	3.0	0.0	1.0	-0.8	-1.9
Adhesives and sealants <sup>2</sup> .....	06	7904	9.2	0.2	0.8	0.3	0.7	0.2
Synthetic rubber <sup>2</sup> .....	07	1102	-7.5	-1.9	-0.2	-1.4	1.4	-1.3
Tires <sup>2</sup> .....	07	1201	9.0	3.0	0.0	0.0	0.3	-0.3
Plastic construction products <sup>2</sup> .....	07	21	-1.6	-0.2	-1.1	0.1	-0.2	-0.7
Unsupported plastic film, sheet, other shapes <sup>2</sup> .....	07	22	-1.6	-1.2	-0.2	-1.5	0.1	-0.4
Parts for manufacturing from plastics <sup>2</sup> .....	07	26	0.6	-0.3	-1.7	-0.1	-0.4	-0.6
Plastic packaging products <sup>2</sup> .....	07	2A	-0.3	-2.0	-0.6	-0.2	0.0	0.3
Softwood lumber.....	08	11	-40.4	-9.8	-1.0	-4.0	6.2	-3.1
Hardwood lumber <sup>2</sup> .....	08	12	-17.8	7.6	-1.7	-1.3	-0.7	0.8
Millwork.....	08	2	-5.2	-0.4	0.0	-1.0	-1.1	-0.6
Plywood <sup>2</sup> .....	08	3	-21.4	-1.3	-1.6	-1.0	-0.3	-0.6
Paper <sup>2</sup> .....	09	13	3.7	-0.3	0.7	-0.4	1.2	-1.9
Paperboard <sup>2</sup> .....	09	14	0.0	-0.5	-1.0	-0.9	-1.0	-0.2
Paper boxes and containers <sup>2</sup> .....	09	1503	3.6	0.0	-0.3	-0.8	-0.4	0.7
Building paper and board <sup>2</sup> .....	09	2	-33.9	-6.1	-0.8	0.8	2.1	1.8
Commercial printing <sup>2</sup> .....	09	47	6.7	1.4	0.1	0.4	-0.3	0.0
Foundry and forge shop products <sup>2</sup> .....	10	15	2.2	1.5	0.6	0.1	1.0	-0.2
Steel mill products <sup>2</sup> .....	10	17	-18.9	-2.4	2.3	0.9	3.6	5.2
Primary nonferrous metals <sup>2</sup> .....	10	22	-6.2	3.1	1.5	-5.2	0.9	4.4
Secondary nonferrous metals <sup>2</sup> .....	10	24	-6.4	1.3	0.6	0.3	-0.4	-0.6
Aluminum mill shapes <sup>2</sup> .....	10	2501	-15.2	2.3	1.7	-0.3	-1.4	0.0
Copper and brass mill shapes <sup>2</sup> .....	10	2502	-5.5	2.2	2.0	0.1	-0.9	-2.1
Nonferrous wire and cable <sup>2</sup> .....	10	26	-2.9	2.8	-2.7	-0.8	-0.1	-1.7
Nonferrous foundry shop products.....	10	28	3.4	-0.3	0.8	-0.3	-0.4	-0.1
Metal containers <sup>2</sup> .....	10	3	-1.8	-1.8	-0.3	-0.3	0.2	0.3
Hardware <sup>2</sup> .....	10	4	4.1	0.9	0.1	0.2	0.0	0.0
Plumbing fixtures and brass fittings.....	10	5	2.5	0.3	-0.8	0.4	-0.6	0.8
Heating equipment <sup>2</sup> .....	10	6	5.8	0.3	-0.1	1.1	0.3	-0.4
Fabricated structural metal products.....	10	7	-1.8	0.4	-0.3	0.4	0.0	-0.5
Bolts, nuts, screws, rivets, and washers <sup>2</sup> .....	10	81	7.4	1.0	1.6	0.4	0.5	0.3
Lighting fixtures <sup>2</sup> .....	10	83	4.9	0.3	0.1	1.5	0.0	0.6
Fabricated ferrous wire products <sup>2</sup> .....	10	88	-2.8	-0.3	-0.5	-0.5	-0.1	0.0
Other miscellaneous metal products <sup>2</sup> .....	10	89	3.9	0.2	0.9	-0.3	0.1	0.0
Fluid power equipment.....	11	43	13.7	1.1	0.6	0.4	6.5	-0.1
Mechanical power transmission equipment <sup>2</sup> .....	11	45	8.5	0.9	-0.1	0.0	0.2	0.1
Air conditioning and refrigeration equipment.....	11	48	7.7	-0.2	0.1	1.7	0.0	0.7
Metal valves, except fluid power.....	11	4902	7.6	0.7	-0.1	0.1	-0.1	1.3
Ball and roller bearings <sup>2</sup> .....	11	4905	5.9	0.0	-0.1	2.3	-0.2	0.0
Wiring devices <sup>2</sup> .....	11	71	14.8	8.3	0.5	0.5	0.2	0.0
Motors, generators, motor generator sets <sup>2</sup> .....	11	73	7.6	0.6	1.4	0.0	0.5	0.0
Switchgear, switchboard, and industrial controls equip. <sup>2</sup> .....	11	75	10.7	0.3	0.2	0.2	0.2	0.1
Electronic components and accessories.....	11	78	0.1	-0.6	0.1	0.0	-0.5	-1.2
Internal combustion engines <sup>2</sup> .....	11	94	5.7	4.0	0.0	0.0	0.3	-0.1
Machine shop products <sup>2</sup> .....	11	95	5.8	0.1	0.5	0.1	0.2	0.5
Flat glass <sup>2</sup> .....	13	11	8.0	-0.5	3.5	0.0	0.1	-1.1
Cement.....	13	22	13.6	3.6	1.3	0.7	-1.2	0.6
Concrete products.....	13	3	12.5	1.2	0.4	0.8	-0.1	1.1
Asphalt felts and coatings <sup>2</sup> .....	13	6	3.6	-2.4	-0.2	0.1	1.8	0.8
Paving mixtures and blocks.....	13	94	4.9	-1.0	1.9	1.2	-0.9	-2.0
Motor vehicle parts <sup>2</sup> .....	14	12	2.4	0.4	-0.1	0.3	0.2	0.1
Aircraft engines and engine parts.....	14	23	3.9	0.3	0.4	0.1	0.3	0.2

See footnotes at end of table.

**Table 2. Producer price index percentage changes for selected commodity groupings by Final Demand-Intermediate Demand category, seasonally adjusted — Continued**  
 [May 2023]

Grouping	Commodity code		Unadjusted 12-month percent change <sup>1</sup>	Seasonally adjusted 1-month percent change <sup>1</sup>				
	Group code	Item code		May 2022 to May 2023 <sup>P</sup>	Dec. to Jan.	Jan. to Feb. <sup>P</sup>	Feb. to Mar. <sup>P</sup>	Mar. to Apr. <sup>P</sup>
Aircraft parts and auxiliary equipment, n.e.c.....	14	25	6.0	0.7	1.9	1.0	0.0	0.1
Medical, surgical, and personal aid devices.....	15	6	3.1	0.8	0.0	0.3	-0.3	0.6
Unprocessed goods for intermediate demand.....	ID6	2	-27.5	-4.7	-4.9	-4.6	1.6	-4.8
Unprocessed foodstuffs and feedstuffs.....	ID6	21	-13.7	-5.8	-1.0	-0.7	-1.5	-3.0
Wheat <sup>2</sup> .....	01	21	-31.6	-3.6	5.9	-9.3	4.0	-3.3
Corn.....	01	2202	-17.9	-1.2	-0.2	-7.5	2.4	-6.0
Slaughter cattle.....	01	31	22.3	1.2	-0.6	4.1	8.0	-0.5
Slaughter hogs.....	01	32	-24.9	-14.0	-0.1	-3.3	-8.0	-4.9
Slaughter chickens.....	01	4102	-18.1	-9.4	5.6	1.8	-0.1	-0.4
Slaughter turkeys.....	01	42	16.0	2.3	-2.7	-0.9	-2.4	-2.2
Raw milk.....	01	6	-21.3	-2.9	-5.3	-3.3	-3.8	4.8
Hay and hayseeds <sup>2</sup> .....	01	81	-12.3	-11.0	10.5	-5.0	-15.3	3.4
Oilseeds.....	01	8301	-12.3	-4.9	0.6	-4.2	0.5	-1.2
Raw cane sugar and byproducts <sup>2</sup> .....	02	5201	11.4	3.2	1.3	2.3	-0.2	-2.5
Unprocessed nonfood materials.....	ID6	22	-34.2	-4.1	-7.2	-7.1	3.7	-6.0
Raw cotton <sup>2</sup> .....	01	51	-43.8	2.9	-2.4	-5.1	-0.3	-3.2
Hides and skins.....	04	1	-4.6	-4.7	0.3	4.9	3.0	3.9
Coal.....	05	1	7.4	2.8	0.8	-4.0	4.2	1.6
Natural gas <sup>2</sup> .....	05	31	-75.4	-17.6	-38.7	-25.5	-18.4	-2.0
Crude petroleum <sup>2</sup> .....	05	61	-30.8	-1.2	3.3	-7.1	12.1	-10.2
Logs, bolts, timber, pulpwood, and woodchips <sup>2</sup> .....	08	5	-2.7	-0.5	-0.9	-1.1	-0.7	-0.1
Recyclable paper <sup>2</sup> .....	09	12	-55.0	-3.7	7.4	-0.4	6.4	5.8
Iron ores <sup>2</sup> .....	10	11	-1.5	0.9	1.0	-0.5	-1.3	-11.1
Iron and steel scrap.....	10	12	-20.4	1.3	11.1	5.2	4.1	-8.0
Nonferrous metal ores <sup>2</sup> .....	10	21	-3.2	10.8	-5.0	4.0	0.6	-1.4
Copper base scrap <sup>2</sup> .....	10	2301	-7.1	2.8	0.9	0.2	-0.3	-3.8
Aluminum base scrap.....	10	2302	-25.3	0.0	-1.7	-4.5	-1.4	4.0
Construction sand, gravel, and crushed stone.....	13	21	10.7	3.5	0.9	-0.1	0.0	0.1
Services for intermediate demand.....	ID6	3	3.9	1.0	0.2	-0.2	0.7	0.2
Trade services for intermediate demand <sup>3</sup> .....	ID6	33	0.8	0.8	-0.8	0.9	1.6	0.2
Machinery and equipment parts and supplies wholesaling <sup>2</sup> .....	57	1102	3.5	1.8	-1.5	5.0	-1.9	-1.3
Building materials, paint, and hardware wholesaling.....	57	3	-6.4	-2.5	-2.0	-1.8	0.7	-1.5
Metals, minerals, and ores wholesaling <sup>2</sup> .....	57	4	-5.5	15.0	2.1	10.4	2.1	-0.3
Chemicals and allied products wholesaling <sup>2</sup> .....	57	5	3.3	4.0	-3.4	-2.3	2.7	-0.7
Paper and plastics products wholesaling <sup>2</sup> .....	57	6	4.0	-2.4	0.5	0.3	0.7	0.7
Food wholesaling <sup>2</sup> .....	57	8101	10.1	-0.5	-1.0	0.9	4.6	2.8
Automotive parts, including tires, retailing <sup>2</sup> .....	58	6102	7.4	1.4	-0.9	-1.9	-3.8	2.1
Hardware, building material, and supplies retailing.....	58	D	-23.7	-0.5	-5.0	0.5	-2.6	-0.3
Transportation and warehousing services for intermediate demand.....	ID6	32	-2.7	0.5	0.0	-0.9	-1.1	-0.9
Rail transportation of freight and mail <sup>2</sup> .....	30	11	0.5	1.1	-0.9	-0.2	-0.2	-0.9
Truck transportation of freight <sup>2</sup> .....	30	12	-13.6	-2.2	-0.9	-1.6	-3.0	-2.1
Water transportation of freight <sup>2</sup> .....	30	13	5.0	-2.2	1.3	-2.4	-0.6	2.9
Air transportation of freight <sup>2</sup> .....	30	14	-7.2	1.0	0.7	-2.8	0.3	-0.3
U.S. Postal Service <sup>2</sup> .....	30	1601	10.0	4.0	0.0	0.0	0.0	0.0
Courier and messenger services, except air mail.....	30	1602	4.0	-0.3	0.3	-0.2	0.1	0.7
Air mail and package delivery services, excluding by USPS.....	30	1603	-3.2	3.3	-0.1	-1.4	0.0	-0.7
Pipeline transportation <sup>2</sup> .....	30	17	5.4	0.3	1.2	0.0	-1.1	0.2
Transportation of passengers (partial).....	30	2	1.9	2.3	-1.1	1.3	-2.9	-1.1
Services related to water transportation.....	31	1	3.2	1.0	1.1	-1.1	-0.1	1.2
Arrangement of freight and cargo <sup>2</sup> .....	31	31	-32.9	-5.2	-2.1	-6.4	-4.1	-2.0
Warehousing, storage, and related services <sup>2</sup> .....	32	1	12.0	2.8	2.9	-0.3	0.0	-3.8
Services less trade, transportation, and warehousing for intermediate demand.....	ID6	31	6.6	1.1	0.5	-0.4	0.9	0.4
Network compensation from broadcast TV, cable TV, radio <sup>2</sup> .....	35	-	2.2	0.2	-0.8	1.1	0.0	0.3
Advertising space sales in periodicals and newspapers <sup>2</sup> .....	36	11	2.6	0.4	0.7	1.0	0.0	0.0
Advertising space sales in directories and mail lists <sup>2</sup> .....	36	12	9.7	5.3	0.0	0.0	0.0	0.0
Television advertising time sales.....	36	2	-20.9	-1.9	-7.6	-2.9	2.8	-1.6
Radio advertising time sales.....	36	3	-8.3	-9.8	10.7	-1.6	-1.2	3.9
Internet advertising sales <sup>2</sup> .....	36	6	-	0.5	0.0	0.0	0.0	0.0
Business wired telecommunication services <sup>2</sup> .....	37	12	3.7	-0.1	1.2	0.1	0.7	0.1
Wireless telecommunication services.....	37	2	1.1	0.0	0.2	0.1	0.1	-0.2
Cable and satellite subscriber services.....	37	3	10.7	0.7	-0.5	1.5	0.2	0.1
Bundled wired telecommunication access services <sup>2</sup> .....	37	5	8.5	4.2	-0.4	1.3	0.0	-1.4
Data processing and related services <sup>2</sup> .....	38	1	0.7	0.2	0.4	0.3	-0.1	0.1
Business loans (partial).....	39	11	80.7	8.7	10.8	-5.8	2.8	3.2

See footnotes at end of table.

**Table 2. Producer price index percentage changes for selected commodity groupings by Final Demand-Intermediate Demand category, seasonally adjusted — Continued**  
 [May 2023]

Grouping	Commodity code		Unadjusted 12-month percent change <sup>1</sup>	Seasonally adjusted 1-month percent change <sup>1</sup>				
	Group code	Item code		May 2022 to May 2023 <sup>P</sup>	Dec. to Jan.	Jan. to Feb. <sup>P</sup>	Feb. to Mar. <sup>P</sup>	Mar. to Apr. <sup>P</sup>
Deposit services (partial) <sup>2</sup> .....	39	2	19.1	-1.9	-2.1	4.5	0.5	-1.1
Other credit intermediation, incl. trust services (partial) <sup>2</sup> .....	39	3	-3.0	0.1	1.7	0.0	0.2	1.3
Securities brokerage, dealing, investment advice, and related services <sup>2</sup> .....	40	1	28.9	0.3	4.5	-0.3	-0.4	3.2
Portfolio management <sup>2</sup> .....	40	2	-6.9	3.7	-0.2	-3.9	4.0	-2.9
Investment banking <sup>2</sup> .....	40	3	-4.1	0.3	2.1	1.5	-1.1	1.5
Life insurance <sup>2</sup> .....	41	1101	0.1	-0.4	0.0	0.0	0.0	0.0
Health and medical insurance.....	41	1103	2.9	1.1	0.3	0.2	0.2	0.1
Property and casualty insurance <sup>2</sup> .....	41	1104	5.2	1.2	0.2	0.3	0.1	0.1
Annuities <sup>2</sup> .....	41	2	-0.8	-0.1	0.0	0.3	0.2	0.0
Commissions from sales of insurance <sup>2</sup> .....	42	1	1.0	0.7	0.0	0.0	0.0	0.1
Nonresidential real estate rents <sup>2</sup> .....	43	11	1.6	1.7	-4.2	-1.7	2.6	-0.3
Nonresidential property sales and leases <sup>2</sup> .....	43	12	-1.2	-0.6	-1.1	-0.6	-0.8	-0.4
Residential property management fees <sup>2</sup> .....	43	22	1.3	0.7	-0.5	-0.1	0.3	0.7
Passenger car rental.....	44	1	-7.3	-2.5	-1.4	-1.0	2.5	-4.2
Truck, utility trailer, and RV rental and leasing <sup>2</sup> .....	44	2	2.8	-0.7	-0.6	0.7	0.2	-0.4
Construction, mining, and forestry machinery and equipment rental and leasing <sup>2</sup> .....	44	3	8.4	1.4	0.0	0.0	0.8	0.3
Legal services.....	45	1	5.9	1.6	1.0	0.3	0.2	-0.2
Accounting services (partial).....	45	2	7.2	1.2	1.2	1.0	0.7	0.1
Architectural and engineering services.....	45	3	3.7	0.0	0.4	0.0	0.7	0.2
Management, scientific, and technical consulting services.....	45	4	1.0	1.1	-1.3	0.2	0.1	0.2
Advertising and related services (partial) <sup>2</sup> .....	45	5	0.9	0.1	0.2	0.2	0.0	0.0
Permanent placement services <sup>2</sup> .....	46	1	3.7	-0.1	-2.5	1.2	2.4	0.1
Executive search services <sup>2</sup> .....	46	2	0.5	1.1	-0.7	0.7	-1.1	-1.8
Staffing services.....	46	3	1.1	0.0	-0.2	0.6	0.9	0.2
Security guard services <sup>2</sup> .....	48	1	9.4	1.1	0.1	0.3	0.1	2.1
Janitorial services <sup>2</sup> .....	49	1	2.2	0.7	-0.1	0.2	0.5	0.0
Waste collection.....	50	1	12.7	1.3	1.6	1.1	1.1	0.7
Traveler accommodation services.....	53	11	6.9	-5.4	-3.1	6.2	1.0	-0.5
Commercial and industrial machinery and equipment repair and maintenance.....	55	1	8.9	-0.6	-0.4	1.0	1.4	0.4
Aircraft repair and maintenance.....	55	4	4.5	-0.5	1.8	0.7	0.4	0.2
Metal treatment services <sup>2</sup> .....	59	1	5.4	2.5	0.0	0.1	0.7	0.4
Construction for intermediate demand.....	ID6	4	4.4	0.8	0.2	0.4	0.7	1.7
Maintenance and repair of non-residential buildings (partial) <sup>2</sup> .....	80	2	4.4	0.8	0.2	0.4	0.7	1.7
<b>Intermediate Demand by Production Flow</b>								
Stage 4 intermediate demand.....	ID5	4	1.5	1.0	0.0	-0.2	0.4	-0.2
Stage 4 intermediate demand goods.....	ID5	9411	-1.4	0.8	-0.1	-0.5	-0.2	-0.6
Grains.....	01	2	-20.0	-1.6	0.8	-7.4	2.7	-5.4
Meats.....	02	21	2.6	2.4	-1.0	1.9	-3.2	-0.9
Unprocessed and packaged fish.....	02	23	-2.3	0.2	-0.6	0.9	-1.8	1.6
Dairy products.....	02	3	-8.6	-1.6	-2.0	-1.8	-0.3	-1.0
Commercial electric power.....	05	42	10.2	2.1	1.7	-2.6	-0.1	1.8
Industrial electric power.....	05	43	7.8	7.0	-3.9	-0.5	-1.7	1.5
Gasoline.....	05	71	-28.5	7.5	2.8	-11.6	8.6	-13.8
No. 2 diesel fuel.....	05	7303	-38.3	11.0	-4.6	-6.3	-3.7	-13.7
Basic organic chemicals.....	06	14	-16.7	0.8	0.6	-3.9	0.1	-2.1
Prepared paint <sup>2</sup> .....	06	21	4.5	0.1	0.1	-0.2	0.3	0.2
Medicinal and botanical chemicals <sup>2</sup> .....	06	31	1.8	0.4	-0.4	0.5	0.1	0.0
Biological products, including diagnostics.....	06	37	4.0	1.3	0.7	0.4	0.2	-0.2
Pharmaceutical preparations.....	06	38	2.7	0.8	0.4	0.0	0.2	0.0
Plastic construction products <sup>2</sup> .....	07	21	-1.6	-0.2	-1.1	0.1	-0.2	-0.7
Unsupported plastic film, sheet, and other shapes <sup>2</sup> .....	07	22	-1.6	-1.2	-0.2	-1.5	0.1	-0.4
Parts for manufacturing from plastics <sup>2</sup> .....	07	26	0.6	-0.3	-1.7	-0.1	-0.4	-0.6
Plastic packaging products <sup>2</sup> .....	07	2A	-0.3	-2.0	-0.6	-0.2	0.0	0.3
Lumber.....	08	1	-33.8	-3.5	-1.3	-2.9	3.3	-1.6
Millwork.....	08	2	-5.2	-0.4	0.0	-1.0	-1.1	-0.6
Paper boxes and containers <sup>2</sup> .....	09	1503	3.6	0.0	-0.3	-0.8	-0.4	0.7
Commercial printing <sup>2</sup> .....	09	47	6.7	1.4	0.1	0.4	-0.3	0.0
Steel mill products <sup>2</sup> .....	10	17	-18.9	-2.4	2.3	0.9	3.6	5.2
Nonferrous wire and cable <sup>2</sup> .....	10	26	-2.9	2.8	-2.7	-0.8	-0.1	-1.7
Fabricated structural metal products.....	10	7	-1.8	0.4	-0.3	0.4	0.0	-0.5
Other miscellaneous metal products <sup>2</sup> .....	10	89	3.9	0.2	0.9	-0.3	0.1	0.0
Air conditioning and refrigeration equipment.....	11	48	7.7	-0.2	0.1	1.7	0.0	0.7
Wiring devices <sup>2</sup> .....	11	71	14.8	8.3	0.5	0.5	0.2	0.0

See footnotes at end of table.



**Table 2. Producer price index percentage changes for selected commodity groupings by Final Demand-Intermediate Demand category, seasonally adjusted — Continued**  
[May 2023]

Grouping	Commodity code		Unadjusted 12-month percent change <sup>1</sup>	Seasonally adjusted 1-month percent change <sup>1</sup>				
	Group code	Item code		May 2022 to May 2023 <sup>P</sup>	Dec. to Jan.	Jan. to Feb. <sup>P</sup>	Feb. to Mar. <sup>P</sup>	Mar. to Apr. <sup>P</sup>
Electronic components and accessories.....	11	78	0.1	-0.6	0.1	0.0	-0.5	-1.2
Miscellaneous electrical machinery and equipment <sup>2</sup> .....	11	79	3.9	0.7	-0.3	0.0	0.0	0.2
Internal combustion engines <sup>2</sup> .....	11	94	5.7	4.0	0.0	0.0	0.3	-0.1
Machine shop products <sup>2</sup> .....	11	95	5.8	0.1	0.5	0.1	0.2	0.5
Concrete ingredients and related products.....	13	2	11.5	3.5	1.0	0.1	-0.3	0.3
Concrete products.....	13	3	12.5	1.2	0.4	0.8	-0.1	1.1
Prepared asphalt, tar roofing and siding products <sup>2</sup> .....	13	61	3.0	-3.1	-0.3	0.1	2.3	0.8
Paving mixtures and blocks.....	13	94	4.9	-1.0	1.9	1.2	-0.9	-2.0
Motor vehicle parts <sup>2</sup> .....	14	12	2.4	0.4	-0.1	0.3	0.2	0.1
Aircraft engines and engine parts.....	14	23	3.9	0.3	0.4	0.1	0.3	0.2
Aircraft parts and auxiliary equipment, n.e.c.....	14	25	6.0	0.7	1.9	1.0	0.0	0.1
Medical, surgical and personal aid devices.....	15	6	3.1	0.8	0.0	0.3	-0.3	0.6
Stage 4 intermediate demand services.....	ID5	9412	4.2	1.2	0.0	0.0	0.8	0.1
Truck transportation of freight <sup>2</sup> .....	30	12	-13.6	-2.2	-0.9	-1.6	-3.0	-2.1
Courier, messenger, and U.S. postal services.....	30	16	5.1	2.2	0.1	-0.4	0.1	0.1
Airline passenger services.....	30	22	1.9	2.3	-1.1	1.3	-2.9	-1.1
Warehousing, storage, and related services <sup>2</sup> .....	32	1	12.0	2.8	2.9	-0.3	0.0	-3.8
Advertising space sales in periodicals and newspapers <sup>2</sup> .....	36	11	2.6	0.4	0.7	1.0	0.0	0.0
Data processing and related services <sup>2</sup> .....	38	1	0.7	0.2	0.4	0.3	-0.1	0.1
Business loans (partial).....	39	11	80.7	8.7	10.8	-5.8	2.8	3.2
Deposit services (partial) <sup>2</sup> .....	39	2	19.1	-1.9	-2.1	4.5	0.5	-1.1
Securities brokerage, dealing, investment advice, and related services <sup>2</sup> .....	40	1	28.9	0.3	4.5	-0.3	-0.4	3.2
Portfolio management <sup>2</sup> .....	40	2	-6.9	3.7	-0.2	-3.9	4.0	-2.9
Investment banking <sup>2</sup> .....	40	3	-4.1	0.3	2.1	1.5	-1.1	1.5
Insurance.....	41	11	3.5	0.8	0.2	0.2	0.2	0.0
Annuities <sup>2</sup> .....	41	2	-0.8	-0.1	0.0	0.3	0.2	0.0
Nonresidential real estate rents <sup>2</sup> .....	43	11	1.6	1.7	-4.2	-1.7	2.6	-0.3
Nonresidential property sales and leases <sup>2</sup> .....	43	12	-1.2	-0.6	-1.1	-0.6	-0.8	-0.4
Nonresidential property management fees <sup>2</sup> .....	43	13	-1.1	-0.5	-4.4	-1.2	0.4	0.2
Residential property management fees <sup>2</sup> .....	43	22	1.3	0.7	-0.5	-0.1	0.3	0.7
Construction, mining, and forestry machinery and equipment rental and leasing <sup>2</sup> .....	44	3	8.4	1.4	0.0	0.0	0.8	0.3
Legal services.....	45	1	5.9	1.6	1.0	0.3	0.2	-0.2
Advertising agency services <sup>2</sup> .....	45	51	0.9	0.1	0.2	0.2	0.0	0.0
Accounting services (partial).....	45	2	7.2	1.2	1.2	1.0	0.7	0.1
Architectural and engineering services.....	45	3	3.7	0.0	0.4	0.0	0.7	0.2
Management, scientific, and technical consulting services.....	45	4	1.0	1.1	-1.3	0.2	0.1	0.2
Staffing services.....	46	3	1.1	0.0	-0.2	0.6	0.9	0.2
Janitorial services <sup>2</sup> .....	49	1	2.2	0.7	-0.1	0.2	0.5	0.0
Commercial and industrial machinery and equipment repair and maintenance.....	55	1	8.9	-0.6	-0.4	1.0	1.4	0.4
Machinery and equipment parts and supplies wholesaling <sup>2</sup> .....	57	1102	3.5	1.8	-1.5	5.0	-1.9	-1.3
Building materials, paint, and hardware wholesaling.....	57	3	-6.4	-2.5	-2.0	-1.8	0.7	-1.5
Metals, minerals, and ores wholesaling <sup>2</sup> .....	57	4	-5.5	15.0	2.1	10.4	2.1	-0.3
Chemicals and allied products wholesaling <sup>2</sup> .....	57	5	3.3	4.0	-3.4	-2.3	2.7	-0.7
Paper and plastics products wholesaling <sup>2</sup> .....	57	6	4.0	-2.4	0.5	0.3	0.7	0.7
Food and alcohol wholesaling <sup>2</sup> .....	57	8	9.9	-0.4	-0.8	0.6	4.1	2.4
Hardware and building materials and supplies retailing.....	58	D	-23.7	-0.5	-5.0	0.5	-2.6	-0.3
Metal treatment services <sup>2</sup> .....	59	1	5.4	2.5	0.0	0.1	0.7	0.4
Stage 3 intermediate demand.....	ID5	3	-6.5	0.2	-0.3	-0.7	-0.1	-1.0
Stage 3 intermediate demand goods.....	ID5	9311	-14.4	-0.5	-0.6	-1.1	-1.2	-2.4
Slaughter cattle.....	01	31	22.3	1.2	-0.6	4.1	8.0	-0.5
Slaughter hogs.....	01	32	-24.9	-14.0	-0.1	-3.3	-8.0	-4.9
Slaughter poultry.....	01	4	-13.0	-7.1	4.0	1.3	-0.5	-0.7
Raw milk.....	01	6	-21.3	-2.9	-5.3	-3.3	-3.8	4.8
Commercial electric power.....	05	42	10.2	2.1	1.7	-2.6	-0.1	1.8
Industrial electric power.....	05	43	7.8	7.0	-3.9	-0.5	-1.7	1.5
Gasoline.....	05	71	-28.5	7.5	2.8	-11.6	8.6	-13.8
Jet fuel <sup>2</sup> .....	05	7203	-46.0	14.0	-5.3	-6.1	-13.2	-12.5
No. 2 diesel fuel.....	05	7303	-38.3	11.0	-4.6	-6.3	-3.7	-13.7
Finished lubricants <sup>2</sup> .....	05	76	14.1	-0.5	0.3	0.1	-0.9	0.1
Lubricating oil base stocks <sup>2</sup> .....	05	78	-23.7	-21.4	3.3	-3.0	3.7	-12.7
Asphalt.....	05	8102	-27.2	2.9	-2.9	3.3	13.1	9.6
Basic inorganic chemicals <sup>2</sup> .....	06	13	6.0	2.0	-0.2	-0.4	-1.6	-1.2
Basic organic chemicals.....	06	14	-16.7	0.8	0.6	-3.9	0.1	-2.1
Paints and allied products <sup>2</sup> .....	06	2	5.8	-0.3	-0.3	0.5	0.1	0.5

See footnotes at end of table.

**Table 2. Producer price index percentage changes for selected commodity groupings by Final Demand-Intermediate Demand category, seasonally adjusted — Continued**  
 [May 2023]

Grouping	Commodity code		Unadjusted 12-month percent change <sup>1</sup>	Seasonally adjusted 1-month percent change <sup>1</sup>				
	Group code	Item code		May 2022 to May 2023 <sup>P</sup>	Dec. to Jan.	Jan. to Feb. <sup>P</sup>	Feb. to Mar. <sup>P</sup>	Mar. to Apr. <sup>P</sup>
Agricultural chemicals and chemical products.....	06	5	-21.3	-3.0	-3.2	-4.1	-2.8	-2.8
Plastic resins and materials.....	06	6	-10.4	-1.0	1.4	0.2	2.3	-0.7
Synthetic rubber <sup>2</sup> .....	07	1102	-7.5	-1.9	-0.2	-1.4	1.4	-1.3
Unsupported plastic film, sheet, and other shapes <sup>2</sup> .....	07	22	-1.6	-1.2	-0.2	-1.5	0.1	-0.4
Paper <sup>2</sup> .....	09	13	3.7	-0.3	0.7	-0.4	1.2	-1.9
Paperboard <sup>2</sup> .....	09	14	0.0	-0.5	-1.0	-0.9	-1.0	-0.2
Converted paper and paperboard products <sup>2</sup> .....	09	15	5.5	0.2	0.1	-0.5	0.0	0.3
Commercial printing <sup>2</sup> .....	09	47	6.7	1.4	0.1	0.4	-0.3	0.0
Foundry and forge shop products <sup>2</sup> .....	10	15	2.2	1.5	0.6	0.1	1.0	-0.2
Steel mill products <sup>2</sup> .....	10	17	-18.9	-2.4	2.3	0.9	3.6	5.2
Nonferrous mill shapes <sup>2</sup> .....	10	25	-9.5	2.2	1.7	-0.1	-0.9	-0.5
Nonferrous foundry shop products.....	10	28	3.4	-0.3	0.8	-0.3	-0.4	-0.1
Metal containers <sup>2</sup> .....	10	3	-1.8	-1.8	-0.3	-0.3	0.2	0.3
Structural, architectural, and pre-engineered metal products.....	10	74	-4.9	1.0	-0.4	0.5	0.0	-0.6
Bolts, nuts, screws, rivets, and washers <sup>2</sup> .....	10	81	7.4	1.0	1.6	0.4	0.5	0.3
Other miscellaneous metal products <sup>2</sup> .....	10	89	3.9	0.2	0.9	-0.3	0.1	0.0
General purpose machinery and equipment.....	11	4	8.6	0.8	0.3	0.6	0.9	0.6
Electrical machinery and equipment.....	11	7	3.7	0.6	0.0	0.2	0.0	-0.3
Construction sand, gravel, and crushed stone.....	13	21	10.7	3.5	0.9	-0.1	0.0	0.1
Cement.....	13	22	13.6	3.6	1.3	0.7	-1.2	0.6
Motor vehicle parts <sup>2</sup> .....	14	12	2.4	0.4	-0.1	0.3	0.2	0.1
Aircraft and aircraft equipment.....	14	2	4.7	0.4	0.7	0.6	0.4	0.4
Stage 3 intermediate demand services.....	ID5	9312	2.2	0.9	0.1	-0.4	0.8	0.1
Rail transportation of freight and mail <sup>2</sup> .....	30	11	0.5	1.1	-0.9	-0.2	-0.2	-0.9
Courier, messenger, and U.S. postal services.....	30	16	5.1	2.2	0.1	-0.4	0.1	0.1
Arrangement of freight and cargo <sup>2</sup> .....	31	31	-32.9	-5.2	-2.1	-6.4	-4.1	-2.0
Freight forwarding <sup>2</sup> .....	31	3201	-3.3	2.0	-0.1	-0.2	0.5	0.0
Warehousing, storage, and related services <sup>2</sup> .....	32	1	12.0	2.8	2.9	-0.3	0.0	-3.8
Advertising space sales in periodicals, newspapers, directories, and mailing lists <sup>2</sup> .....	36	1	3.7	1.1	0.6	0.9	0.0	0.0
Wired telephone services <sup>2</sup> .....	37	1	4.4	-0.1	0.7	0.2	0.8	0.6
Bundled wired telecommunications access services <sup>2</sup> .....	37	5	8.5	4.2	-0.4	1.3	0.0	-1.4
Data processing and related services <sup>2</sup> .....	38	1	0.7	0.2	0.4	0.3	-0.1	0.1
Business loans (partial).....	39	11	80.7	8.7	10.8	-5.8	2.8	3.2
Deposit services (partial) <sup>2</sup> .....	39	2	19.1	-1.9	-2.1	4.5	0.5	-1.1
Securities brokerage, dealing, investment advice, and related services <sup>2</sup> .....	40	1	28.9	0.3	4.5	-0.3	-0.4	3.2
Insurance.....	41	11	3.5	0.8	0.2	0.2	0.2	0.0
Nonresidential real estate rents <sup>2</sup> .....	43	11	1.6	1.7	-4.2	-1.7	2.6	-0.3
Legal services.....	45	1	5.9	1.6	1.0	0.3	0.2	-0.2
Accounting services (partial).....	45	2	7.2	1.2	1.2	1.0	0.7	0.1
Architectural and engineering services.....	45	3	3.7	0.0	0.4	0.0	0.7	0.2
Management, scientific, and technical consulting services.....	45	4	1.0	1.1	-1.3	0.2	0.1	0.2
Advertising agency services <sup>2</sup> .....	45	51	0.9	0.1	0.2	0.2	0.0	0.0
Staffing services.....	46	3	1.1	0.0	-0.2	0.6	0.9	0.2
Aircraft repair maintenance.....	55	4	4.5	-0.5	1.8	0.7	0.4	0.2
Machinery and equipment parts and supplies wholesaling <sup>2</sup> .....	57	1102	3.5	1.8	-1.5	5.0	-1.9	-1.3
Building materials, paint, and hardware wholesaling.....	57	3	-6.4	-2.5	-2.0	-1.8	0.7	-1.5
Metals, minerals, and ores wholesaling <sup>2</sup> .....	57	4	-5.5	15.0	2.1	10.4	2.1	-0.3
Chemicals and allied products wholesaling <sup>2</sup> .....	57	5	3.3	4.0	-3.4	-2.3	2.7	-0.7
Paper and plastics products wholesaling <sup>2</sup> .....	57	6	4.0	-2.4	0.5	0.3	0.7	0.7
Food wholesaling <sup>2</sup> .....	57	8101	10.1	-0.5	-1.0	0.9	4.6	2.8
Metal treatment services <sup>2</sup> .....	59	1	5.4	2.5	0.0	0.1	0.7	0.4
Stage 2 intermediate demand.....	ID5	2	-9.8	-0.9	-1.4	-2.5	1.3	-1.4
Stage 2 intermediate demand goods.....	ID5	9211	-25.4	-2.9	-4.5	-4.9	1.9	-4.0
Corn.....	01	2202	-17.9	-1.2	-0.2	-7.5	2.4	-6.0
Oilseeds.....	01	83	-12.3	-4.9	0.6	-4.2	0.5	-1.2
Prepared animal feeds.....	02	9	-0.2	-0.8	-1.8	0.1	-1.4	-1.4
Coal.....	05	1	7.4	2.8	0.8	-4.0	4.2	1.6
Natural gas <sup>2</sup> .....	05	31	-75.4	-17.6	-38.7	-25.5	-18.4	-2.0
Liquefied petroleum gas <sup>2</sup> .....	05	32	-60.0	2.0	1.4	-11.4	-5.1	-16.1
Crude petroleum <sup>2</sup> .....	05	61	-30.8	-1.2	3.3	-7.1	12.1	-10.2
No. 2 diesel fuel.....	05	7303	-38.3	11.0	-4.6	-6.3	-3.7	-13.7
Industrial chemicals.....	06	1	-13.6	1.0	0.4	-3.3	-0.2	-1.9
Plastic resins and materials.....	06	6	-10.4	-1.0	1.4	0.2	2.3	-0.7
Plastic products <sup>2</sup> .....	07	2	-0.3	-0.6	-0.5	-0.3	0.1	-0.6
Logs, bolts, timber, pulpwood, and wood chips <sup>2</sup> .....	08	5	-2.7	-0.5	-0.9	-1.1	-0.7	-0.1

See footnotes at end of table.

**Table 2. Producer price index percentage changes for selected commodity groupings by Final Demand-Intermediate Demand category, seasonally adjusted — Continued**  
 [May 2023]

Grouping	Commodity code		Unadjusted 12-month percent change <sup>1</sup>	Seasonally adjusted 1-month percent change <sup>1</sup>				
	Group code	Item code		May 2022 to May 2023 <sup>P</sup>	Dec. to Jan.	Jan. to Feb. <sup>P</sup>	Feb. to Mar. <sup>P</sup>	Mar. to Apr. <sup>P</sup>
Paper <sup>2</sup> .....	09	13	3.7	-0.3	0.7	-0.4	1.2	-1.9
Paperboard, excluding corrugated paperboard <sup>2</sup> .....	09	1411	1.3	-0.4	-1.0	-0.1	-0.7	0.0
Commercial printing <sup>2</sup> .....	09	47	6.7	1.4	0.1	0.4	-0.3	0.0
Iron and steel scrap.....	10	12	-20.4	1.3	11.1	5.2	4.1	-8.0
Steel mill products <sup>2</sup> .....	10	17	-18.9	-2.4	2.3	0.9	3.6	5.2
Nonferrous mill shapes <sup>2</sup> .....	10	25	-9.5	2.2	1.7	-0.1	-0.9	-0.5
Electrical machinery and equipment.....	11	7	3.7	0.6	0.0	0.2	0.0	-0.3
Electronic components and accessories.....	11	78	0.1	-0.6	0.1	0.0	-0.5	-1.2
Stage 2 intermediate demand services.....	ID5	9212	7.4	0.9	1.2	-0.6	0.8	0.6
Rail transportation of freight and mail <sup>2</sup> .....	30	11	0.5	1.1	-0.9	-0.2	-0.2	-0.9
Truck transportation of freight <sup>2</sup> .....	30	12	-13.6	-2.2	-0.9	-1.6	-3.0	-2.1
U.S. Postal Service <sup>2</sup> .....	30	1601	10.0	4.0	0.0	0.0	0.0	0.0
Courier and messenger services, except air.....	30	1602	4.0	-0.3	0.3	-0.2	0.1	0.7
Air mail and package delivery services, excluding by USPS.....	30	1603	-3.2	3.3	-0.1	-1.4	0.0	-0.7
Pipeline transportation <sup>2</sup> .....	30	17	5.4	0.3	1.2	0.0	-1.1	0.2
Airline passenger services.....	30	22	1.9	2.3	-1.1	1.3	-2.9	-1.1
Arrangement of freight and cargo <sup>2</sup> .....	31	31	-32.9	-5.2	-2.1	-6.4	-4.1	-2.0
Television advertising time sales.....	36	21	-20.9	-1.9	-7.6	-2.9	2.8	-1.6
Wireless telecommunication services.....	37	2	1.1	0.0	0.2	0.1	0.1	-0.2
Data processing and related services <sup>2</sup> .....	38	1	0.7	0.2	0.4	0.3	-0.1	0.1
Securities brokerage, dealing, investment advice, and related services <sup>2</sup> .....	40	1	28.9	0.3	4.5	-0.3	-0.4	3.2
Portfolio management <sup>2</sup> .....	40	2	-6.9	3.7	-0.2	-3.9	4.0	-2.9
Investment banking <sup>2</sup> .....	40	31	-4.1	0.3	2.1	1.5	-1.1	1.5
Insurance.....	41	11	3.5	0.8	0.2	0.2	0.2	0.0
Commissions from sales of insurance <sup>2</sup> .....	42	11	1.0	0.7	0.0	0.0	0.0	0.1
Legal services.....	45	1	5.9	1.6	1.0	0.3	0.2	-0.2
Accounting services (partial).....	45	2	7.2	1.2	1.2	1.0	0.7	0.1
Management, scientific, and technical consulting services.....	45	4	1.0	1.1	-1.3	0.2	0.1	0.2
Advertising agency services <sup>2</sup> .....	45	51	0.9	0.1	0.2	0.2	0.0	0.0
Staffing services.....	46	3	1.1	0.0	-0.2	0.6	0.9	0.2
Security guard services <sup>2</sup> .....	48	1	9.4	1.1	0.1	0.3	0.1	2.1
Janitorial services <sup>2</sup> .....	49	1	2.2	0.7	-0.1	0.2	0.5	0.0
Traveler accommodation services.....	53	1	6.9	-5.4	-3.1	6.2	1.0	-0.5
Commercial and industrial machinery and equipment repair and maintenance.....	55	1	8.9	-0.6	-0.4	1.0	1.4	0.4
Hardware and building materials and supplies retailing.....	58	D	-23.7	-0.5	-5.0	0.5	-2.6	-0.3
Stage 1 intermediate demand.....	ID5	1	-3.6	0.7	-0.4	-0.4	0.0	-0.9
Stage 1 intermediate demand goods.....	ID5	9111	-8.4	0.8	-0.4	-1.0	-0.7	-1.8
Prepared animal feeds.....	02	9	-0.2	-0.8	-1.8	0.1	-1.4	-1.4
Commercial electric power.....	05	42	10.2	2.1	1.7	-2.6	-0.1	1.8
Industrial electric power.....	05	43	7.8	7.0	-3.9	-0.5	-1.7	1.5
Commercial natural gas.....	05	52	-16.1	11.9	-11.0	-9.8	-6.2	-6.4
Industrial natural gas.....	05	53	-19.7	6.8	-10.3	-7.0	-6.2	-6.7
Gasoline.....	05	71	-28.5	7.5	2.8	-11.6	8.6	-13.8
No. 2 diesel fuel.....	05	7303	-38.3	11.0	-4.6	-6.3	-3.7	-13.7
Industrial chemicals.....	06	1	-13.6	1.0	0.4	-3.3	-0.2	-1.9
Prepared paint <sup>2</sup> .....	06	21	4.5	0.1	0.1	-0.2	0.3	0.2
Plastic construction products <sup>2</sup> .....	07	21	-1.6	-0.2	-1.1	0.1	-0.2	-0.7
Recyclable paper <sup>2</sup> .....	09	12	-55.0	-3.7	7.4	-0.4	6.4	5.8
Paper <sup>2</sup> .....	09	13	3.7	-0.3	0.7	-0.4	1.2	-1.9
Converted paper and paperboard products <sup>2</sup> .....	09	15	5.5	0.2	0.1	-0.5	0.0	0.3
Iron and steel scrap.....	10	12	-20.4	1.3	11.1	5.2	4.1	-8.0
Steel mill products <sup>2</sup> .....	10	17	-18.9	-2.4	2.3	0.9	3.6	5.2
Primary nonferrous metals <sup>2</sup> .....	10	22	-6.2	3.1	1.5	-5.2	0.9	4.4
Nonferrous scrap.....	10	23	-16.5	-0.2	-3.3	-2.6	-0.4	2.0
Nonferrous wire and cable <sup>2</sup> .....	10	26	-2.9	2.8	-2.7	-0.8	-0.1	-1.7
Fabricated structural metal products.....	10	7	-1.8	0.4	-0.3	0.4	0.0	-0.5
General purpose machinery and equipment.....	11	4	8.6	0.8	0.3	0.6	0.9	0.6
Construction sand, gravel, and crushed stone.....	13	21	10.7	3.5	0.9	-0.1	0.0	0.1
Stage 1 intermediate demand services.....	ID5	9112	1.7	0.7	-0.3	0.2	0.6	0.0
Truck transportation of freight <sup>2</sup> .....	30	12	-13.6	-2.2	-0.9	-1.6	-3.0	-2.1
Airline passenger services.....	30	22	1.9	2.3	-1.1	1.3	-2.9	-1.1
Advertising space sales in periodicals, newspapers, directories, and mailing lists <sup>2</sup> .....	36	1	3.7	1.1	0.6	0.9	0.0	0.0
Business wired telecommunication services <sup>2</sup> .....	37	12	3.7	-0.1	1.2	0.1	0.7	0.1
Wireless telecommunication services.....	37	2	1.1	0.0	0.2	0.1	0.1	-0.2

See footnotes at end of table.

**Table 2. Producer price index percentage changes for selected commodity groupings by Final Demand-Intermediate Demand category, seasonally adjusted — Continued**  
 [May 2023]

Grouping	Commodity code		Unadjusted 12-month percent change <sup>1</sup>	Seasonally adjusted 1-month percent change <sup>1</sup>				
	Group code	Item code		May 2022 to May 2023 <sup>p</sup>	Dec. to Jan.	Jan. to Feb. <sup>p</sup>	Feb. to Mar. <sup>p</sup>	Mar. to Apr. <sup>p</sup>
Bundled wired telecommunications access services <sup>2</sup> .....	37	5	8.5	4.2	-0.4	1.3	0.0	-1.4
Business loans (partial).....	39	11	80.7	8.7	10.8	-5.8	2.8	3.2
Deposit services (partial) <sup>2</sup> .....	39	2	19.1	-1.9	-2.1	4.5	0.5	-1.1
Securities brokerage, dealing, investment advice, and related services <sup>2</sup> .....	40	1	28.9	0.3	4.5	-0.3	-0.4	3.2
Portfolio management <sup>2</sup> .....	40	2	-6.9	3.7	-0.2	-3.9	4.0	-2.9
Investment banking <sup>2</sup> .....	40	3	-4.1	0.3	2.1	1.5	-1.1	1.5
Insurance.....	41	11	3.5	0.8	0.2	0.2	0.2	0.0
Nonresidential real estate rents <sup>2</sup> .....	43	11	1.6	1.7	-4.2	-1.7	2.6	-0.3
Architectural and engineering services.....	45	3	3.7	0.0	0.4	0.0	0.7	0.2
Management consulting services.....	45	41	1.0	1.1	-1.3	0.2	0.1	0.2
Waste collection.....	50	1	12.7	1.3	1.6	1.1	1.1	0.7
Traveler accommodation services.....	53	11	6.9	-5.4	-3.1	6.2	1.0	-0.5
Commercial and industrial machinery and equipment repair and maintenance.....	55	1	8.9	-0.6	-0.4	1.0	1.4	0.4
Machinery and equipment parts and supplies wholesaling <sup>2</sup> .....	57	1102	3.5	1.8	-1.5	5.0	-1.9	-1.3
Building materials, paint, and hardware wholesaling.....	57	3	-6.4	-2.5	-2.0	-1.8	0.7	-1.5
Metals, minerals, and ores wholesaling <sup>2</sup> .....	57	4	-5.5	15.0	2.1	10.4	2.1	-0.3
Chemicals and allied products wholesaling <sup>2</sup> .....	57	5	3.3	4.0	-3.4	-2.3	2.7	-0.7
Paper and plastics products wholesaling <sup>2</sup> .....	57	6	4.0	-2.4	0.5	0.3	0.7	0.7
Hardware and building materials and supplies retailing.....	58	D	-23.7	-0.5	-5.0	0.5	-2.6	-0.3
Mining services <sup>2</sup> .....	60	1	5.1	0.5	0.5	1.1	-0.8	-0.4

<sup>1</sup> All indexes are subject to revision for 4 months after their originally scheduled publication to incorporate late reports and corrections by survey respondents. In addition, seasonally adjusted indexes are subject to change for up to 5 years due to the recalculation of seasonal factors published each January.

<sup>2</sup> Seasonal tests did not indicate the presence of seasonality. Data shown is not seasonally adjusted.

<sup>3</sup> Trade indexes measure changes in margins received by wholesalers and retailers.

p Preliminary

"-" Data not available.

NOTE: The term "(partial)" denotes incomplete coverage of the index category.

**Table 3. Producer price indexes for Final Demand-Intermediate Demand groupings, seasonally adjusted**  
 [May 2023, Index base Nov. 2009=100, unless otherwise indicated]

Grouping	Other index base	Commodity code		Seasonally adjusted index <sup>1</sup>				
		Group code	Item code	Jan. 2023	Feb. 2023 <sup>p</sup>	Mar. 2023 <sup>p</sup>	Apr. 2023 <sup>p</sup>	May 2023 <sup>p</sup>
<b>Final Demand</b>								
Final demand.....		FD	4	141.326	141.253	140.739	141.032	140.584
Final demand goods.....		FD	41	145.005	144.426	142.869	143.096	140.871
Final demand foods.....		FD	411	154.842	151.245	151.638	150.972	148.956
Finished consumer foods <sup>2</sup> .....	00/82	FD	4111	272.399	265.167	267.176	265.809	262.392
Finished consumer foods, crude.....	00/82	FD	411113	349.218	283.175	294.603	300.528	251.532
Finished consumer foods, processed.....	00/82	FD	41112	263.895	262.299	263.402	261.346	262.288
Government purchased foods.....		FD	4112	154.335	152.235	152.744	151.188	150.741
Foods for export.....		FD	4113	159.896	157.894	154.856	155.040	151.973
Final demand energy.....		FD	412	153.549	152.339	143.144	144.274	134.411
Finished consumer energy goods <sup>2</sup> .....	00/82	FD	4121	237.226	237.203	221.519	226.859	211.849
Government purchased energy.....		FD	4122	173.424	167.816	159.667	152.444	140.376
Energy for export.....		FD	4123	149.450	143.830	140.634	133.554	124.177
Final demand goods less foods and energy.....		FD	413	139.699	140.161	140.445	140.639	140.741
Finished goods less foods and energy <sup>2</sup> .....	00/82	FD	4131	244.404	245.250	246.026	246.167	247.004
Finished consumer goods less foods and energy.....	00/82	FD	41311	271.851	273.120	273.815	273.923	274.684
Nondurable consumer goods less foods and energy.....	00/82	FD	413111	350.804	353.149	354.203	354.746	355.890
Durable consumer goods.....	00/82	FD	413112	190.495	190.803	191.161	190.905	191.306
Private capital equipment.....	00/82	FD	41312	209.620	210.057	210.870	211.034	211.901
Private capital equipment for manufacturing industries.....	00/82	FD	413121	223.911	224.606	225.482	225.757	227.400
Private capital equipment for nonmanufacturing industries.....	00/82	FD	413122	205.340	205.701	206.496	206.627	207.265
Government purchased goods, excluding foods and energy.....		FD	4132	136.298	136.533	136.482	136.455	136.276
Government purchased goods excluding foods, energy, and capital equipment.....		FD	41321	146.413	146.656	146.273	146.218	145.763
Government purchased capital equipment.....		FD	41322	121.659	121.882	122.229	122.236	122.390
Goods for export, excluding foods and energy.....		FD	4133	137.115	137.603	137.711	138.169	137.709
Final demand services.....		FD	42	138.439	138.589	138.519	138.867	139.193
Final demand trade services <sup>3</sup> .....		FD	423	151.282	150.990	150.109	150.955	152.502
Trade of finished goods <sup>2</sup> .....		FD	4231	150.036	149.839	148.789	149.435	151.154
Trade of personal consumption goods.....		FD	42311	150.022	149.905	148.516	149.307	151.121
Trade of private capital equipment.....		FD	42312	148.397	147.847	148.308	148.305	149.585
Trade of government purchased goods.....		FD	4232	158.605	158.125	157.472	160.208	160.844
Trade of government purchased goods, excluding capital equipment.....		FD	42321	162.949	162.180	161.973	166.181	166.316
Trade of government purchased capital equipment.....		FD	42322	150.592	150.552	149.237	149.746	151.127
Trade of exports.....		FD	4233	160.204	159.072	159.728	161.735	161.997
Final demand transportation and warehousing services.....		FD	422	155.624	154.422	153.340	149.641	147.477
Transportation of passengers for final demand.....		FD	4221	139.760	138.202	140.030	135.998	134.509
Transportation of private passengers.....		FD	42211	139.753	138.198	140.022	135.998	134.512
Transportation of government passengers.....		FD	42212	139.493	137.952	139.762	135.773	134.301
Transportation of passengers for export.....		FD	42213	139.801	138.228	140.070	136.004	134.502
Transportation and warehousing of goods for final demand.....		FD	4222	160.958	159.903	157.691	154.142	151.726
Transportation and warehousing of finished goods <sup>2</sup> .....		FD	42221	159.565	158.389	156.107	152.328	149.759
Transportation and warehousing of personal consumption goods.....		FD	422211	159.877	158.733	156.487	152.770	150.250
Transportation and warehousing of private capital equipment.....		FD	422212	158.305	157.001	154.575	150.539	147.774
Transportation and warehousing of government purchased goods.....		FD	42222	158.480	157.921	156.023	152.927	150.455
Transportation and warehousing of exports.....		FD	42223	165.891	165.000	162.867	159.733	157.664
Final demand services less trade, transportation, and warehousing.....		FD	421	130.863	131.332	131.694	132.260	132.351
Finished services less trade, transportation, and warehousing <sup>2</sup> .....		FD	4211	131.184	131.569	132.035	132.585	132.640
Finished consumer services less trade, transportation, and warehousing.....		FD	42111	130.480	130.906	131.375	132.023	131.972
Private capital investment services less trade, transportation, and warehousing.....		FD	42112	137.778	137.844	138.294	138.077	138.962
Government purchased services less trade, transportation, and warehousing.....		FD	4212	122.382	122.559	122.514	123.204	123.211
Gov. purchased services less trade, transportation, and warehousing, excl. capital investment.....		FD	42121	122.924	123.066	123.020	123.796	123.780
Government purchased capital investment services less trade, transportation, and warehousing.....		FD	42122	108.726	109.386	109.370	108.825	109.149
Services for export less trade, transportation, and warehousing.....		FD	4213	136.719	138.749	138.057	138.726	139.444
Final demand construction.....		FD	43	176.527	176.569	176.804	176.326	176.602
Construction for private capital investment.....		FD	431	180.849	180.864	181.054	180.541	180.806
Construction for government.....		FD	432	168.440	168.539	168.871	168.467	168.766
<b>Final Demand Special Groupings</b>								
Final demand less exports.....	04/10	FD	49101	138.876	138.780	138.260	138.584	138.187
Final demand less government.....	04/10	FD	49102	139.246	139.220	138.747	139.104	138.737
Final demand less foods, food and nonalcoholic beverages for immediate consumption, and energy <sup>1</sup> .....	04/10	FD	49103	138.302	138.523	138.512	138.832	139.076
Final demand less foods and energy <sup>4</sup> .....	04/10	FD	49104	137.989	138.201	138.214	138.505	138.779
Final demand less foods and food and nonalcoholic beverages for immediate consumption <sup>4</sup> .....	04/10	FD	49105	138.874	139.000	138.386	138.758	138.338

See footnotes at end of table.

**Table 3. Producer price indexes for Final Demand-Intermediate Demand groupings, seasonally adjusted — Continued**

[May 2023, Index base Nov. 2009=100, unless otherwise indicated]

Grouping	Other index base	Commodity code		Seasonally adjusted index <sup>1</sup>				
		Group code	Item code	Jan. 2023	Feb. 2023 <sup>P</sup>	Mar. 2023 <sup>P</sup>	Apr. 2023 <sup>P</sup>	May 2023 <sup>P</sup>
Final demand less foods <sup>4</sup> .....	04/10	FD	49106	138.479	138.602	138.045	138.387	138.033
Final demand less energy.....	04/10	FD	49107	138.691	138.689	138.723	138.960	139.105
Final demand less trade services.....	01/10	FD	49108	137.385	137.361	136.933	137.102	136.223
Final demand less distributive services <sup>5</sup> .....	01/10	FD	49109	136.540	136.560	136.208	136.535	135.721
Final demand goods less energy.....	01/10	FD	49111	141.505	141.081	141.386	141.391	141.032
Final demand goods less foods.....	04/10	FD	49112	139.811	139.874	137.945	138.353	136.133
Final demand services less trade services.....	04/10	FD	49113	132.034	132.342	132.566	132.728	132.607
Final demand distributive services <sup>5</sup> .....	04/10	FD	49114	149.716	149.312	148.245	148.397	149.303
Final demand goods plus final demand distributive services <sup>5</sup> .....	04/10	FD	49115	144.861	144.362	143.031	143.223	142.328
Final demand less foods, energy, and trade services <sup>4</sup> .....	08/13	FD	49116	126.816	127.136	127.360	127.503	127.457
Private and government purchased capital equipment.....	08/13	FD	49117	126.384	126.644	127.116	127.202	127.675
Private and government purchased capital investment services.....	08/13	FD	49118	132.119	131.922	132.139	131.835	132.608
Total private and government purchased capital investment.....	08/13	FD	49119	133.151	133.152	133.461	133.283	133.874
Total finished <sup>2</sup> .....	01/10	FD	49201	139.697	139.653	139.168	139.578	139.271
Total finished less foods, food and nonalcoholic beverages for immediate consumption, and energy <sup>2, 4</sup> .....	12/10	FD	49202	137.592	137.773	137.819	138.098	138.495
Total finished less foods and energy <sup>2, 4</sup> .....	01/10	FD	49203	138.419	138.606	138.653	138.935	139.331
Total finished less foods and food and nonalcoholic beverages for immediate consumption <sup>2, 4</sup> .....	12/10	FD	49204	137.604	137.772	137.201	137.670	137.452
Total finished less foods <sup>2, 4</sup> .....	01/10	FD	49205	138.979	139.153	138.580	139.055	138.835
Total finished less energy <sup>2</sup> .....	01/10	FD	49206	139.223	139.176	139.282	139.507	139.776
Finished goods <sup>2</sup> .....	00/82	FD	49207	257.800	256.759	253.408	254.634	250.365
Finished goods less energy <sup>2</sup> .....	00/82	FD	49208	251.098	249.760	250.866	250.600	250.285
Finished goods, excluding foods <sup>2, 4</sup> .....	00/82	FD	49209	253.291	253.882	249.128	251.033	246.551
Finished services <sup>2</sup> .....	01/10	FD	49210	136.877	137.013	136.983	137.322	137.705
Private capital investment services.....	04/10	FD	49211	142.183	141.943	142.234	141.886	142.710
Finished distributive services <sup>2, 5</sup> .....	04/10	FD	49212	148.091	147.781	146.604	146.705	147.873
Finished services less trade services <sup>2</sup> .....	04/10	FD	49213	131.782	132.042	132.390	132.615	132.501
Finished services less distributive services <sup>2, 5</sup> .....	04/10	FD	49214	130.516	130.855	131.348	131.794	131.814
Total private capital investment (goods, services, and construction).....	04/10	FD	49215	141.048	141.022	141.381	141.184	141.844
Finished goods plus finished distributive services <sup>2</sup> .....	04/10	FD	49216	145.816	145.365	143.831	144.233	143.563
Total exports.....	04/10	FD	49301	140.196	140.274	139.859	139.915	139.193
Goods for export.....	00/82	FD	49302	235.593	235.334	234.581	234.567	232.425
Services for export.....	04/10	FD	49303	148.673	149.070	148.676	148.822	148.806
Total government purchases.....	04/10	FD	49401	137.709	137.104	136.220	135.723	134.427
Government purchased goods.....	00/82	FD	49402	240.218	237.728	234.372	231.041	225.742
Government purchased services.....	04/10	FD	49403	130.881	130.871	130.683	131.391	131.336
Total government purchased capital investment (goods, services, construction).....	08/13	FD	49404	131.233	131.414	131.506	131.393	131.744
Government purchases, defense.....	05/15	FD	49405	124.403	123.677	123.114	121.604	120.164
Government purchases, non-defense.....	05/15	FD	49406	132.139	131.608	130.663	130.663	129.554
Personal consumption.....	01/10	FD	49501	139.305	139.257	138.580	139.128	138.600
Personal consumption goods (finished consumer goods).....	00/82	FD	49502	278.314	276.625	271.450	273.141	266.622
Personal consumption goods less energy.....	00/82	FD	49503	272.691	270.239	271.511	270.974	269.907
Personal consumption goods less foods.....	00/82	FD	49504	278.873	279.557	271.358	274.339	266.546
Personal consumption nondurable goods less foods.....	00/82	FD	49508	317.584	318.433	306.412	310.838	299.384
Personal consumption services.....	04/10	FD	49505	135.544	135.738	135.658	136.102	136.415
Personal consumption less trade services.....	04/10	FD	49506	136.047	136.015	135.518	136.005	134.896
Personal consumption less distributive services <sup>5</sup> .....	04/10	FD	49507	135.423	135.431	134.995	135.632	134.571
Personal consumption less foods and energy.....	04/14	FD	49510	127.035	127.260	127.227	127.605	127.905
Personal consumption less foods, energy, and trade services <sup>3</sup> .....	04/14	FD	49511	123.589	123.914	124.258	124.530	124.416
Personal consumption less foods, energy, and distributive services <sup>5</sup> .....	04/14	FD	49512	123.099	123.486	123.936	124.370	124.351
Personal consumption goods plus personal consumption distributive services <sup>5</sup> .....	08/13	FD	49509	134.831	134.321	132.413	132.927	131.965
<b>Intermediate Demand by Commodity Type</b>								
<b>Processed goods</b>								
Processed goods for intermediate demand.....	00/82	ID6	1	264.488	263.471	260.823	259.574	255.622
Materials and components for manufacturing.....	00/82	ID6	11	236.983	237.020	235.888	236.594	236.109
Materials for manufacturing.....		ID6	111	149.277	149.089	147.792	148.289	147.845
Materials for food manufacturing.....	00/82	ID6	1111	260.918	254.712	254.696	251.921	245.821
Materials for nondurable manufacturing.....	00/82	ID6	1112	279.658	278.938	273.834	273.740	269.995
Materials for durable manufacturing.....	00/82	ID6	1113	278.869	281.705	281.457	285.319	290.491
Components for manufacturing.....	00/82	ID6	112	186.393	186.869	187.211	187.657	187.567
Components for nondurable manufacturing.....		ID6	1121	147.368	147.529	147.030	147.306	146.926
Components for durable manufacturing.....		ID6	1122	131.437	131.783	132.059	132.377	132.328
Materials and components for construction.....	00/82	ID6	12	349.391	349.132	350.556	350.880	350.464
Materials for construction.....		ID6	121	165.520	165.644	165.776	165.950	165.899
Components for construction.....		ID6	122	178.161	177.820	179.005	179.153	178.817
Processed fuels and lubricants for intermediate demand.....	00/82	ID6	13	274.432	270.082	259.614	252.322	234.988
Processed fuels and lubricants to manufacturing industries.....	00/82	ID6	131	279.615	270.083	268.647	257.064	244.965

See footnotes at end of table.

**Table 3. Producer price indexes for Final Demand-Intermediate Demand groupings, seasonally adjusted — Continued**

[May 2023, Index base Nov. 2009=100, unless otherwise indicated]

Grouping	Other index base	Commodity code		Seasonally adjusted index <sup>1</sup>				
		Group code	Item code	Jan. 2023	Feb. 2023 <sup>P</sup>	Mar. 2023 <sup>P</sup>	Apr. 2023 <sup>P</sup>	May 2023 <sup>P</sup>
Processed fuels and lubricants to nonmanufacturing industries.....	00/82	ID6	132	273.115	270.401	257.060	251.119	232.107
Containers for intermediate demand.....	00/82	ID6	14	314.548	313.548	310.933	310.342	311.438
Supplies for intermediate demand.....	00/82	ID6	15	253.558	253.112	252.941	252.462	251.582
Supplies to manufacturing industries.....	00/82	ID6	151	247.301	247.463	247.516	247.651	247.109
Supplies to nonmanufacturing industries.....	00/82	ID6	152	252.517	251.980	251.776	251.205	250.280
Supplies to nonmanufacturing industries, feeds.....	00/82	ID6	1521	254.135	248.542	245.403	241.584	236.831
Supplies to nonmanufacturing industries, other than feeds.....	00/82	ID6	1522	254.339	254.455	254.630	254.477	254.041
<b>Unprocessed goods</b>								
Unprocessed goods for intermediate demand.....	00/82	ID6	2	282.034	268.262	255.845	259.975	247.425
Unprocessed foodstuffs and feedstuffs.....	00/82	ID6	21	241.081	238.617	237.061	233.435	226.361
Unprocessed nonfood materials.....	00/82	ID6	22	299.565	278.141	258.340	267.951	251.953
Unprocessed nonfood materials except fuel.....	00/82	ID6	221	330.164	336.257	322.879	344.852	321.216
Unprocessed nonfood materials except fuel to manufacturing industries.....	00/82	ID6	2211	305.769	311.558	298.566	319.889	296.937
Unprocessed nonfood materials except fuel to nonmanufacturing industries.....	00/82	ID6	2212	342.839	345.782	345.850	346.134	346.186
Unprocessed fuel.....	00/82	ID6	222	227.395	154.971	123.973	109.752	108.959
Unprocessed fuel to manufacturing industries.....	00/82	ID6	2221	263.510	237.722	218.889	220.815	223.413
Unprocessed fuel to nonmanufacturing industries.....	00/82	ID6	2222	231.846	154.728	122.160	106.624	105.617
<b>Services</b>								
Services for intermediate demand.....		ID6	3	144.295	144.601	144.265	145.313	145.557
Trade services for intermediate demand <sup>5</sup> .....		ID6	33	170.039	168.622	170.142	172.796	173.139
Trade services for manufacturing industries.....	12/12	ID6	331	156.157	154.816	157.791	160.094	160.107
Trade services for nonmanufacturing industries.....	12/12	ID6	332	150.547	149.329	149.170	151.647	152.239
Transportation and warehousing services for intermediate demand.....		ID6	32	157.878	157.876	156.452	154.707	153.359
Transportation of passengers for intermediate demand.....		ID6	321	139.555	138.015	139.824	135.836	134.365
Transportation of passengers for manufacturing industries.....		ID6	3211	139.775	138.203	140.044	135.981	134.479
Transportation of passengers for nonmanufacturing industries.....		ID6	3212	139.590	138.054	139.859	135.880	134.412
Transportation and warehousing of goods for intermediate demand.....		ID6	322	159.919	160.061	158.332	156.793	155.454
Transportation and warehousing of goods for manufacturing industries.....	12/12	ID6	3221	134.184	133.727	132.257	129.973	128.575
Transportation and warehousing of goods for nonmanufacturing industries.....	12/12	ID6	3222	142.480	142.773	141.239	140.155	139.042
Services less trade, transportation, and warehousing for intermediate demand.....		ID6	31	134.903	135.631	135.102	136.310	136.822
Services less trade, transportation, and warehousing for manufacturing industries.....		ID6	311	126.515	126.904	127.149	127.812	127.997
Services less trade, transportation, and warehousing for nonmanufacturing industries.....		ID6	312	135.170	135.910	135.355	136.581	137.104
<b>Construction</b>								
Construction for intermediate demand.....		ID6	4	142.462	142.751	143.362	144.436	146.922
<b>Intermediate Demand by Commodity Type Special Groupings</b>								
Processed materials less foods and feeds.....	00/82	ID6	9111	265.430	264.851	261.983	260.901	257.036
Processed foods and feeds.....	00/82	ID6	9112	255.542	250.250	249.745	246.876	242.070
Processed energy goods.....	00/82	ID6	9113	275.706	271.336	260.819	253.493	236.079
Processed materials less energy.....	00/82	ID6	9118	258.525	258.355	257.696	257.975	257.420
Processed materials less foods and energy.....	00/82	ID6	9115	258.409	258.901	258.223	258.908	258.902
Intermediate distributive services <sup>6</sup> .....	04/10	ID6	9116	163.221	162.500	162.589	163.385	162.994
Processed goods plus intermediate distributive services.....	04/10	ID6	9117	149.019	148.421	147.394	147.114	145.440
Unprocessed materials less agricultural products.....	00/82	ID6	9211	301.737	278.498	258.769	269.064	252.758
Unprocessed energy materials <sup>7</sup> .....	00/82	ID6	9212	240.250	213.987	190.329	200.617	184.975
Unprocessed materials less energy.....	00/82	ID6	9213	296.024	294.515	292.694	291.623	282.486
Unprocessed nonfood materials less energy <sup>8</sup> .....	00/82	ID6	9216	459.408	460.913	458.313	465.229	449.924
<b>Intermediate Demand by Production Flow</b>								
<b>Stage 4 Intermediate Demand</b>								
Stage 4 intermediate demand.....		ID5	4	147.752	147.713	147.364	147.916	147.583
Inputs to stage 4 goods producers.....		ID5	41	146.370	146.123	146.593	146.735	146.435
Goods.....		ID5	411	140.691	140.734	140.305	140.243	139.940
Foods.....		ID5	4111	157.912	156.004	152.663	152.214	149.039
Energy.....		ID5	4112	168.881	167.732	178.345	152.986	136.964
Goods excluding foods and energy.....		ID5	4113	137.901	138.254	138.170	138.400	138.683
Services.....		ID5	412	165.274	164.059	167.523	168.347	168.055
Trade services.....		ID5	4123	176.411	174.642	179.630	180.824	180.543
Transportation and warehousing services.....		ID5	4122	139.949	138.894	138.046	136.001	134.369
Transportation of passengers.....		ID5	41221	139.800	138.227	140.070	136.004	134.501
Transportation and warehousing of goods.....		ID5	41222	149.245	148.222	146.791	145.006	143.241
Services less trade, transportation, and warehousing.....		ID5	4121	127.758	128.169	128.359	128.959	129.078
Inputs to stage 4 services producers.....		ID5	42	144.370	144.438	143.642	144.389	144.313

See footnotes at end of table.

**Table 3. Producer price indexes for Final Demand-Intermediate Demand groupings, seasonally adjusted — Continued**  
 [May 2023, Index base Nov. 2009=100, unless otherwise indicated]

Grouping	Other index base	Commodity code		Seasonally adjusted index <sup>1</sup>				
		Group code	Item code	Jan. 2023	Feb. 2023 <sup>P</sup>	Mar. 2023 <sup>P</sup>	Apr. 2023 <sup>P</sup>	May 2023 <sup>P</sup>
Goods.....		ID5	421	148.624	147.906	146.769	145.690	144.650
Foods.....		ID5	4211	150.817	148.379	148.583	146.469	145.038
Energy.....		ID5	4212	148.272	147.174	143.170	141.133	138.729
Goods excluding foods and energy.....		ID5	4213	147.272	147.312	147.447	147.255	147.142
Services.....		ID5	422	142.738	143.068	142.384	143.738	143.980
Trade services.....		ID5	4223	159.575	158.052	158.939	161.432	161.427
Transportation and warehousing services.....		ID5	4222	151.790	152.470	151.781	150.641	148.561
Transportation of passengers.....		ID5	42221	139.238	137.681	139.507	135.479	133.992
Transportation and warehousing of goods.....		ID5	42222	154.557	155.619	154.501	153.845	151.657
Services less trade, transportation, and warehousing.....		ID5	4221	138.973	139.461	138.616	140.099	140.608
Construction.....		ID5	423	142.462	142.751	143.362	144.436	146.922
Inputs to stage 4 construction producers.....		ID5	43	162.425	162.410	162.096	162.745	161.266
Goods.....		ID5	431	166.799	166.992	166.347	166.964	165.166
Energy.....		ID5	4312	169.365	170.120	156.959	162.455	143.227
Goods excluding foods and energy.....		ID5	4313	170.362	170.504	171.102	171.243	171.156
Services.....		ID5	432	151.180	150.648	151.157	151.883	151.203
Trade services.....		ID5	4323	169.018	167.814	169.956	172.419	171.493
Transportation and warehousing services.....		ID5	4322	154.276	152.954	150.844	147.184	144.502
Transportation of passengers.....		ID5	43221	145.718	144.082	145.999	141.769	140.205
Transportation and warehousing of goods.....		ID5	43222	155.302	153.980	151.762	148.096	145.373
Services less trade, transportation, and warehousing.....		ID5	4321	129.395	129.742	129.860	130.767	131.075
<b>Stage 3 Intermediate Demand</b>								
Stage 3 intermediate demand.....		ID5	3	149.329	148.923	147.866	147.664	146.152
Inputs to stage 3 goods producers.....		ID5	31	160.316	159.940	159.704	159.149	157.686
Goods.....		ID5	311	156.404	156.126	155.563	154.660	152.981
Foods.....		ID5	3111	178.849	175.729	175.452	171.523	165.981
Energy.....		ID5	3112	152.950	149.409	153.144	143.931	135.796
Goods excluding foods and energy.....		ID5	3113	151.397	152.518	151.566	152.418	152.722
Services.....		ID5	312	164.625	163.897	164.932	165.753	165.220
Trade services.....		ID5	3123	170.540	169.692	172.665	175.899	176.084
Transportation and warehousing services.....		ID5	3122	155.595	154.477	152.667	149.408	147.238
Transportation of passengers.....		ID5	31221	148.845	147.171	149.132	144.805	143.206
Transportation and warehousing of goods.....		ID5	31222	155.749	154.662	152.647	149.451	147.253
Services less trade, transportation, and warehousing.....		ID5	3121	131.472	131.942	132.183	133.070	133.472
Inputs to stage 3 services producers.....		ID5	32	140.157	139.760	138.103	138.163	136.607
Goods.....		ID5	321	140.221	137.190	132.379	128.225	119.448
Foods.....		ID5	3211	165.560	162.682	161.088	156.817	157.507
Energy.....		ID5	3212	148.762	143.682	136.011	129.298	115.210
Goods excluding foods and energy.....		ID5	3213	136.635	136.825	136.409	136.255	135.582
Services.....		ID5	322	140.020	140.309	139.453	140.609	140.902
Trade services.....		ID5	3223	190.038	190.402	188.078	193.406	193.807
Transportation and warehousing services.....		ID5	3222	162.936	163.384	161.603	160.813	159.964
Transportation of passengers.....		ID5	32221	104.459	104.455	104.637	104.374	104.373
Transportation and warehousing of goods.....		ID5	32222	163.440	163.890	162.100	161.306	160.453
Services less trade, transportation, and warehousing.....		ID5	3221	131.216	131.458	130.941	132.385	132.985
Construction.....		ID5	323	142.462	142.751	143.362	144.436	146.922
Inputs to stage 3 construction producers.....		ID5	33	139.955	138.289	138.164	137.678	137.258
Goods.....		ID5	331	135.156	134.933	134.384	134.159	133.797
Goods excluding foods and energy.....		ID5	3313	172.221	171.936	171.237	170.950	170.489
Services.....		ID5	332	164.226	160.617	160.982	160.119	159.573
Trade services.....		ID5	3323	168.815	164.801	165.254	164.241	163.605
Transportation and warehousing services.....		ID5	3322	115.819	115.475	114.368	114.123	113.989
Transportation and warehousing of goods.....		ID5	33222	122.251	121.888	120.720	120.461	120.320
Services less trade, transportation, and warehousing.....		ID5	3321	124.402	124.417	124.438	125.237	125.656
<b>Stage 2 Intermediate Demand</b>								
Stage 2 intermediate demand.....		ID5	2	139.636	137.687	134.240	135.928	134.054
Inputs to stage 2 goods producers.....		ID5	21	132.967	128.041	122.775	125.107	121.341
Goods.....		ID5	211	132.457	125.711	118.758	121.328	115.965
Foods.....		ID5	2111	171.173	169.828	164.917	164.231	160.765
Energy.....		ID5	2112	106.496	95.500	84.975	88.948	81.539
Goods excluding foods and energy.....		ID5	2113	147.020	147.484	147.401	147.890	146.508
Services.....		ID5	212	147.925	148.434	148.112	149.916	150.941
Trade services.....		ID5	2123	165.194	163.559	163.949	169.049	171.331
Transportation and warehousing services.....		ID5	2122	167.761	168.703	168.015	166.685	166.632
Transportation of passengers.....		ID5	21221	140.016	138.514	140.285	136.386	134.951
Transportation and warehousing of goods.....		ID5	21222	169.426	170.488	169.680	168.473	168.486
Services less trade, transportation, and warehousing.....		ID5	2121	133.188	135.816	134.983	136.394	137.211
Construction.....		ID5	213	142.462	142.751	143.362	144.436	146.922

See footnotes at end of table.



**Table 3. Producer price indexes for Final Demand-Intermediate Demand groupings, seasonally adjusted — Continued**

[May 2023, Index base Nov. 2009=100, unless otherwise indicated]

Grouping	Other index base	Commodity code		Seasonally adjusted index <sup>1</sup>				
		Group code	Item code	Jan. 2023	Feb. 2023 <sup>P</sup>	Mar. 2023 <sup>P</sup>	Apr. 2023 <sup>P</sup>	May 2023 <sup>P</sup>
Inputs to stage 2 services producers.....		ID5	22	143.055	144.849	143.770	144.604	145.133
Goods.....		ID5	221	147.452	147.050	146.127	145.736	144.194
Foods.....		ID5	2211	128.745	125.845	122.376	121.206	118.746
Energy.....		ID5	2212	183.039	180.143	167.983	163.751	143.752
Goods excluding foods and energy.....		ID5	2213	145.677	145.472	145.320	145.191	144.873
Services.....		ID5	222	142.111	144.204	143.071	144.048	144.786
Trade services.....		ID5	2223	183.820	182.551	175.978	177.731	182.945
Transportation and warehousing services.....		ID5	2222	153.007	151.760	148.367	145.694	144.416
Transportation of passengers.....		ID5	22221	140.205	138.639	140.475	136.426	134.930
Transportation and warehousing of goods.....		ID5	22222	155.964	154.771	150.403	147.972	146.730
Services less trade, transportation, and warehousing.....		ID5	2221	140.205	142.714	141.996	143.213	143.896
Construction.....		ID5	223	142.462	142.751	143.362	144.436	146.922
<b>Stage 1 Intermediate Demand</b>								
Stage 1 intermediate demand.....		ID5	1	146.835	146.285	145.668	145.608	144.283
Inputs to stage 1 goods producers.....		ID5	11	149.369	149.051	147.992	147.610	145.794
Goods.....		ID5	111	149.033	148.827	147.023	145.828	143.461
Foods.....		ID5	1111	170.412	168.924	161.489	160.203	155.291
Energy.....		ID5	1112	143.572	141.333	140.313	130.350	120.458
Goods excluding foods and energy.....		ID5	1113	150.537	151.033	149.951	150.854	150.672
Services.....		ID5	112	154.126	153.480	154.542	156.493	156.221
Trade services.....		ID5	1123	170.092	168.398	170.550	173.874	173.514
Transportation and warehousing services.....		ID5	1122	157.830	158.885	156.669	155.381	156.701
Transportation of passengers.....		ID5	11221	139.773	138.200	140.043	135.978	134.475
Transportation and warehousing of goods.....		ID5	11222	160.506	162.203	159.004	158.421	160.427
Services less trade, transportation, and warehousing.....		ID5	1121	108.469	108.955	108.991	109.417	109.069
Construction.....		ID5	113	142.462	142.751	143.362	144.436	146.922
Inputs to stage 1 services producers.....		ID5	12	144.311	143.771	143.277	143.561	142.626
Goods.....		ID5	121	150.786	149.554	147.805	146.887	143.226
Foods.....		ID5	1211	223.778	187.329	199.008	204.983	150.432
Energy.....		ID5	1212	171.486	167.818	161.810	157.925	146.969
Goods excluding foods and energy.....		ID5	1213	148.784	148.877	148.951	149.336	149.268
Services.....		ID5	122	140.922	140.675	140.711	141.500	141.715
Trade services.....		ID5	1223	169.220	169.316	169.622	171.818	171.976
Transportation and warehousing services.....		ID5	1222	145.186	144.611	144.363	142.241	141.123
Transportation of passengers.....		ID5	12221	139.689	138.118	139.959	135.896	134.395
Transportation and warehousing of goods.....		ID5	12222	163.603	163.492	162.118	160.791	159.755
Services less trade, transportation, and warehousing.....		ID5	1221	135.895	135.664	135.714	136.768	137.176
Construction.....		ID5	123	142.462	142.751	143.362	144.436	146.922
Inputs to stage 1 construction producers.....		ID5	13	163.124	161.818	161.827	161.052	159.171
Goods.....		ID5	131	165.279	164.559	164.399	163.693	161.626
Energy.....		ID5	1312	164.819	158.517	152.442	144.560	125.768
Goods excluding foods and energy.....		ID5	1313	168.028	167.971	168.523	168.671	168.590
Services.....		ID5	132	158.876	156.125	156.547	155.598	154.164
Trade services.....		ID5	1323	165.458	162.037	163.441	163.457	162.355
Transportation and warehousing services.....		ID5	1322	128.570	127.532	125.391	121.839	119.506
Transportation and warehousing of goods.....		ID5	13222	132.989	131.915	129.701	126.026	123.614
Services less trade, transportation, and warehousing.....		ID5	1321	136.040	135.801	136.485	137.923	138.371
<b>Intermediate Demand by Production Flow Special Groupings</b>								
Total goods inputs to stage 4 intermediate demand.....	04/10	ID5	9411	145.229	145.076	144.404	144.178	143.366
Total services inputs to stage 4 intermediate demand.....	04/10	ID5	9412	146.400	146.462	146.416	147.654	147.757
Total construction inputs to stage 4 intermediate demand.....	04/10	ID5	9413	141.282	141.568	142.174	143.239	145.705
Total foods inputs to stage 4 intermediate demand.....	04/10	ID5	9414	151.468	149.380	147.602	146.463	144.090
Total energy goods inputs to stage 4 intermediate demand.....	04/10	ID5	9415	139.778	139.039	134.485	132.987	127.901
Total goods less foods and energy inputs to stage 4 intermediate demand.....	04/10	ID5	9416	146.143	146.379	146.501	146.621	146.733
Total goods inputs to stage 3 intermediate demand.....	04/10	ID5	9311	144.586	143.652	142.082	140.441	137.133
Total services inputs to stage 3 intermediate demand.....	04/10	ID5	9312	143.220	143.304	142.774	143.848	143.997
Total construction inputs to stage 3 intermediate demand.....	04/10	ID5	9313	141.282	141.568	142.174	143.239	145.705
Total foods inputs to stage 3 intermediate demand.....	04/10	ID5	9314	159.084	156.309	156.052	152.552	147.668
Total energy goods inputs to stage 3 intermediate demand.....	04/10	ID5	9315	146.535	141.781	135.950	128.994	116.060
Total goods less foods and energy inputs to stage 3 intermediate demand.....	04/10	ID5	9316	143.108	144.016	143.190	143.833	143.962
Total goods inputs to stage 2 intermediate demand.....	04/10	ID5	9211	127.552	121.762	115.744	117.895	113.171
Total services inputs to stage 2 intermediate demand.....	04/10	ID5	9212	143.957	145.683	144.738	145.914	146.723
Total construction inputs to stage 2 intermediate demand.....	04/10	ID5	9213	141.282	141.568	142.174	143.239	145.705
Total foods inputs to stage 2 intermediate demand.....	04/10	ID5	9214	171.640	170.260	165.339	164.641	161.168
Total energy goods inputs to stage 2 intermediate demand.....	04/10	ID5	9215	105.125	94.449	84.125	87.924	80.530
Total goods less foods and energy inputs to stage 2 intermediate demand.....	04/10	ID5	9216	138.335	138.626	138.532	138.857	137.788
Total goods inputs to stage 1 intermediate demand.....	04/10	ID5	9111	135.376	134.811	133.470	132.564	130.120

See footnotes at end of table.

**Table 3. Producer price indexes for Final Demand-Intermediate Demand groupings, seasonally adjusted — Continued**

[May 2023, Index base Nov. 2009=100, unless otherwise indicated]

Grouping	Other index base	Commodity code		Seasonally adjusted index <sup>1</sup>				
		Group code	Item code	Jan. 2023	Feb. 2023 <sup>p</sup>	Mar. 2023 <sup>p</sup>	Apr. 2023 <sup>p</sup>	May 2023 <sup>p</sup>
Total services inputs to stage 1 intermediate demand.....	04/10	ID5	9112	143.623	143.147	143.384	144.255	144.279
Total construction inputs to stage 1 intermediate demand.....	04/10	ID5	9117	141.282	141.568	142.174	143.239	145.705
Total foods inputs to stage 1 intermediate demand.....	04/10	ID5	9114	161.499	159.288	152.740	151.699	145.928
Total energy goods inputs to stage 1 intermediate demand.....	04/10	ID5	9115	153.981	150.782	146.946	140.456	129.637
Total goods less foods and energy inputs to stage 1 intermediate demand.....	04/10	ID5	9116	127.337	127.551	127.228	127.716	127.611

<sup>1</sup> All indexes are subject to revision for 4 months after their originally scheduled publication to incorporate late reports and corrections by survey respondents. In addition, seasonally adjusted indexes are subject to change for up to 5 years due to the recalculation of seasonal factors published each January.

<sup>2</sup> PPI defines Total finished as including only the personal consumption and private capital investment portions of final demand.

<sup>3</sup> Trade indexes measure changes in margins received by wholesalers and retailers.

<sup>4</sup> The PPI definition of foods does not include food and beverages for immediate consumption. PPI defines food and beverages for immediate consumption as the service of preparing meals, snacks, and beverages to customer order for immediate on-premises and off-premises consumption.

<sup>5</sup> Distributive services include transportation, warehousing, and trade of goods.

<sup>6</sup> Includes intermediate trade, transportation, and warehousing services.

<sup>7</sup> Includes crude petroleum.

<sup>8</sup> Excludes crude petroleum.

p Preliminary

“-” Data not available.