

The 2022 Annual Update of the National Economic Accounts

The U.S. Bureau of Economic Analysis (BEA) released its annual update of the National Economic Accounts (NEAs), which include the National Income and Product Accounts (NIPAs) and the Industry Economic Accounts (IEAs), on September 29. As part of BEA's ongoing efforts to harmonize the production and publication of the NIPAs, the IEAs, and the Regional Economic Accounts (REAs), improvements incorporated as part of the NEA annual update impacted all three sets of accounts, and each account reflected the same update period. The annual update of the REAs was released on September 30.

This is the first time BEA has produced and published annual updates of the NIPAs, IEAs, and REAs concurrently. In the past, publication of the updated statistics was spread over multiple months beginning with July and ending in October. Following the synchronization of the quarterly NIPA, IEA, and REA statistics introduced in September 2020, coordinating the annual updates for these three major dimensions of gross domestic product (GDP) was an important next step to provide consistency across the accounts and give users a more complete view of the U.S. economy.¹

The update of the NEAs covered the first quarter of 2017 through the first quarter of 2022 and resulted in revisions to GDP, GDP by industry, gross domestic income (GDI), and related components. The reference year for index numbers and chained-dollar estimates remains 2012.

The impacts of the annual update on the NIPA and IEA estimates are summarized in the tables and charts provided in this article. Refer to [“Information on Updates to the National Economic Accounts”](#) for additional background materials and results. (In particular, the [“Summary of Results”](#) tables include detail on quarterly revisions through 2021 and revisions to selected time spans.)

Sources of Revision

The updated NIPA and IEA estimates reflect the incorporation of newly available and revised source data—the primary driver of this year's revisions—as well as the adoption of improved estimating methods and, for quarterly and monthly measures, the incorporation of updated seasonal adjustment factors.

Major source data

The major source data incorporated into the NIPAs as part of this year's update are summarized in table 1, and additional information on the NIPA components affected by the incorporation of newly available and revised source data is provided in the table “[NIPA Revisions: Components Detail and Major Source Data and Conceptual Changes Incorporated, 2017–2021](#),” available on the “[Updates](#)” page on BEA's website. The major source data underlying the GDP by industry estimates are presented in tables C1–C3 of appendix C.

Source data that affected the estimates include the following:

- New U.S. Census Bureau (Census) Service Annual Survey (SAS) data for 2020 and revised SAS data for 2017 through 2019, which replaced previously incorporated SAS data. Most notably, SAS data impacted estimates of consumer spending for services and estimates of private fixed investment in intellectual property products as well as gross output for private services-producing industries.
- Revised Internal Revenue Service (IRS) tabulations of tax returns for corporations and for sole proprietorships for 2019 and new IRS tabulations of tax returns data for 2020 for corporations, sole proprietorships, and partnerships, which affected estimates of corporate profits, proprietors' income, and net interest.
- New Census Annual Survey of Manufactures (ASM) data for 2020 and revised ASM data for 2019, which replaced Census monthly industry shipments and inventories data, and revised monthly industry shipments and inventories data for 2017–2021, all of which impacted estimates of private investment in equipment and inventories as well as gross output for manufacturing industries.
- New Census Annual Retail Trade Survey (ARTS) data for 2020, which replaced Census Monthly Retail Trade Survey (MRTS) data, and revised ARTS data for 2017–2019, both of which impacted estimates of consumer spending for goods and private inventory investment in the NIPAs and estimates of retail trade output in the IEAs.
- Revised U.S. Bureau of Labor Statistics (BLS) Quarterly Census of Employment and Wages (QCEW) data for 2017–2021, which impacted estimates of private and government compensation.
- Revised U.S. Department of Agriculture (USDA) farm statistics for 2017–2021, which impacted estimates of farm output, inventory investment, and proprietors' income.
- Revised BEA International Transactions Accounts (ITAs) data for 2017–2021, which impacted estimates of exports and imports of goods and services and income flows with the rest of the world.
- Revised Census Annual Survey of State and Local Government Finances (GF) data for fiscal years 2017–2019 and newly available GF data for 2020, which impacted estimates of state and local government spending.

Table 1. Summary of Major Source Data Incorporated

Agency	Data	Years covered and vintage
Census Bureau	Annual Capital Expenditures Survey	2019 (revised) 2020 (new)
	Annual Wholesale Trade Survey	2017-2019 (revised) 2020 (new)
	Annual Retail Trade Survey	2017-2019 (revised) 2020 (new)
	Annual Survey of Manufactures	2019 (revised) 2020 (new)
	Monthly indicators of manufactures, merchant wholesale trade, and retail trade	2017-2021 (revised)
	Service Annual Survey	2017-2019 (revised) 2020 (new)
	Annual Survey of State and Local Government Finances	Fiscal years 2017-2019 (revised) Fiscal year 2020 (new)
	Value of Construction Put in Place Survey	2017-2021 (revised)
	Quarterly Services Survey	2017-2021 (revised)
	Current Population Survey/Housing Vacancy Survey	2017-2020 (revised) 2021 (new)
Office of Management and Budget	Federal budget	Fiscal year 2021 (revised) Fiscal year 2022 (new)
Internal Revenue Service	Tabulations of tax returns for corporations and for sole proprietorships	2019 (revised) 2020 (new)
	Tabulations of tax returns for partnerships	2020 (new)
Bureau of Labor Statistics	Quarterly Census of Employment and Wages	2017-2021 (revised)
	Occupational Employment Statistics program	2021 (new)
Department of Agriculture	Farm statistics	2017-2021 (revised)
Bureau of Economic Analysis	International Transactions Accounts	2017-2021 (revised)

Methodology improvements

The annual update incorporated improvements to estimating methodologies² and to the presentation of the estimates, including the following:

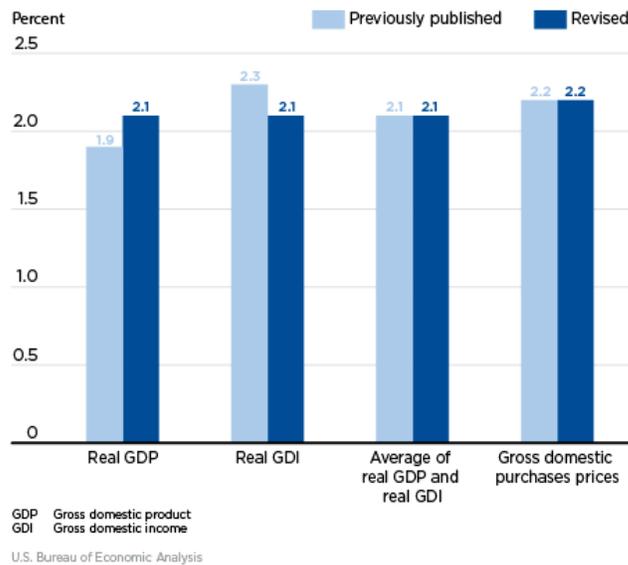
- BEA improved the supply-use framework to reflect transactions related to ventilator production by auto manufacturers and ventilator purchases by the federal government in 2020 in response to the COVID-19 pandemic. This change resulted in a modification of the composition of gross output for the motor vehicle industry and the composition of government investment in the second and third quarters of 2020 to account for the production and purchase of these ventilators.
- The classification of subsidies introduced as part of the response to the COVID-19 pandemic is improved by distinguishing between “subsidies on products” and “other subsidies on production;” select column and row labels in the supply-use tables (SUTs) have been updated accordingly. This change better aligns BEA's SUTs with international standards and primarily affects gross output valued at basic prices in the supply table and value added at basic prices in the use table.
- BEA improved the deflator for consumer spending and for private fixed investment for used auto and used light truck margin estimates. The consumer price index for used autos and used light trucks replaced the margin producer price index (PPI) for used vehicles sold at new car dealers.
- As with every annual update, the revised estimates incorporate updated quarterly and monthly seasonal factors that capture changes in seasonal patterns that emerge over time. The updated seasonal factors reflect a mix of data that are seasonally adjusted by source agencies as well as data directly adjusted by BEA.

Updates to Annual NIPA Measures, 2017–2021

GDP and expenditure components

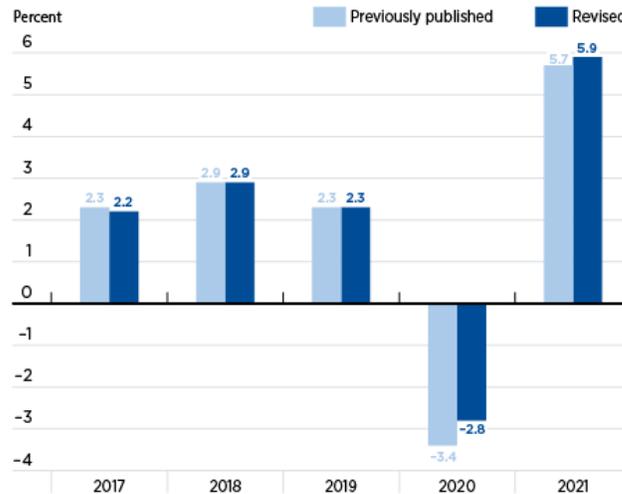
The general picture of economic growth from 2016 to 2021 was unchanged, and updates to the percent change in real GDP and related aggregates were small (table 2A and chart 1). The revisions to real GDP and its components primarily reflect revisions to current-dollar measures; price measures were not significantly revised.

Chart 1. Percent Change over the Period 2016 to 2021



Details on the revisions to the percent change in real GDP are presented in table 2A, and details on the contributions to those revisions are presented in table 2B. Details on revisions, and contributions to revisions, for each expenditure component of real GDP are presented in appendix A (tables A1–A12). As noted above, the major source data incorporated for each component of GDP and GDI are presented in the annual update table “[NIPA Revisions: Components Detail and Major Source Data and Conceptual Changes Incorporated, 2017–2021](#).”

Chart 2. Change in Real GDP



GDP Gross domestic product
 U.S. Bureau of Economic Analysis

- The downward revision to real GDP growth for 2017 was primarily led by a downward revision to consumer spending on services; a downward revision to state and local government spending also contributed (table 2B and chart 2).³ Within consumer services, the revision was led by spending on financial services, based on revised data from the Federal Reserve Board's (FRB's) Financial Accounts of the United States and by expenditures by nonprofit institutions serving households, based on revised SAS data from Census (appendix table A2). The revision to state and local government was based primarily on revised data from the Census GF survey.
- For 2018, real GDP growth was unrevised, primarily reflecting an upward revision to state and local government spending, based on revised Census GF data, that was offset by an upward revision to imports (a subtraction in the calculation of GDP) based on revised ITA data (table 2B).
- For 2019, real GDP growth was unrevised, reflecting upward revisions to state and local government spending, based on new GF data, and to exports, based on revised ITA data. These upward revisions were offset by downward revisions to consumer spending, led by financial services, based primarily on revised FRB data from the Financial Accounts of the United States, and to nonresidential fixed investment—led by transportation equipment—based on revised ASM data (table 2B and appendix tables A2 and A4).
- The revisions showed a smaller decrease in real GDP for 2020, led by an upward revision to consumer spending on both services and goods (table 2B). Revisions to “other” services, health care, and recreation primarily reflect newly available SAS and revised Quarterly Services Survey (QSS) data, both from Census. Revisions to recreational goods and vehicles as well as furnishings and durable household equipment primarily reflect newly available ARTS data from Census and revised trade source data (appendix table A2).
- The upward revision to real GDP growth for 2021 was led by upward revisions to consumer spending on services, exports of services, and federal government spending that were partly offset by downward revisions to nonresidential fixed investment and state and local government spending (table 2B). Within consumer spending on services, the revision was led by “other” services, based primarily on revised QSS data and revised trade data from BEA's ITAs (appendix table A2). Within exports, the upward revision to services was led by “other business services,” based on revised data from BEA's ITAs (appendix table A8). The downward revision to nonresidential fixed investment was largely due to revisions to equipment, based on revised monthly shipments data from Census' Manufacturers' Shipments, Inventories, and Orders Survey (appendix table A4).

Table 2A. Real Gross Domestic Product (GDP): Percent Change from Preceding Period

Line number	Series	Share of current-dollar GDP	Change from preceding period					Revision in percent change					
			Percent	Percent (annual rate)					(Percentage points)				
				2021	2017	2018	2019	2020	2021	2017	2018	2019	2020
1	Gross domestic product	100.0	2.2	2.9	2.3	-2.8	5.9	-0.1	0.0	0.0	0.6	0.2	
2	Personal consumption expenditures	68.2	2.4	2.9	2.0	-3.0	8.3	0.0	0.0	-0.2	0.8	0.4	
3	Goods	23.6	3.9	3.9	3.1	5.2	12.2	0.0	-0.1	-0.3	0.6	0.0	
4	Durable goods	8.8	6.4	6.8	3.8	10.0	18.5	0.1	-0.2	-0.5	2.3	0.4	
5	Nondurable goods	14.7	2.6	2.5	2.8	2.7	8.8	-0.1	0.0	-0.1	-0.4	-0.3	
6	Services	44.6	1.7	2.4	1.5	-6.6	6.3	-0.1	0.0	-0.2	0.9	0.5	
7	Gross private domestic investment	17.6	4.1	5.7	2.8	-5.3	9.0	0.1	0.0	-0.6	0.2	-0.8	
8	Fixed investment	17.7	4.1	4.9	2.5	-2.3	7.4	0.0	0.1	-0.7	0.4	-0.4	
9	Nonresidential	13.0	4.1	6.5	3.6	-4.9	6.4	0.0	0.1	-0.7	0.4	-1.0	
10	Structures	2.6	4.4	4.1	2.3	-10.1	-6.4	0.2	0.1	0.3	2.4	1.6	
11	Equipment	5.1	2.8	6.6	1.3	-10.5	10.3	0.0	0.2	-2.0	-2.2	-2.8	
12	Intellectual property products	5.3	5.6	8.1	7.3	4.8	9.7	-0.1	0.0	0.1	2.0	-0.3	
13	Residential	4.8	4.0	-0.6	-1.0	7.2	10.7	0.0	0.0	-0.1	0.4	1.5	
14	Change in private inventories	-0.1	---	---	---	---	---	---	---	---	---	---	
15	Net exports of goods and services	-3.7	---	---	---	---	---	---	---	---	---	---	
16	Exports	10.9	4.3	2.8	0.5	-13.2	6.1	0.2	0.0	0.6	0.4	1.6	
17	Goods	7.5	4.1	4.2	0.1	-10.1	7.4	0.0	0.0	0.2	0.1	-0.2	
18	Services	3.4	4.5	0.2	1.2	-18.8	3.3	0.5	0.0	1.3	1.0	4.8	
19	Imports	14.6	4.5	4.2	1.1	-9.0	14.1	0.1	0.1	-0.1	-0.1	0.1	
20	Goods	12.2	4.5	5.1	0.5	-5.8	14.5	0.0	0.0	0.0	-0.2	-0.1	
21	Services	2.4	4.6	0.5	4.0	-22.0	12.3	0.3	0.5	0.1	0.6	0.8	
22	Government consumption expenditures and gross investment	17.8	0.4	1.7	3.3	2.6	0.6	-0.1	0.3	1.1	0.1	0.1	
23	Federal	6.9	0.4	3.0	3.9	6.2	2.3	0.1	0.0	0.1	1.2	1.7	
24	National defense	3.9	0.9	3.3	5.3	2.9	-1.2	0.0	-0.1	0.1	0.0	-0.3	
25	Nondefense	3.0	-0.3	2.5	1.9	11.2	7.3	0.2	0.0	0.3	3.1	4.5	
26	State and local	10.9	0.4	0.9	3.0	0.4	-0.5	-0.2	0.5	1.7	-0.5	-0.9	

Note. Percent changes are from [NIPA table 1.1.1](#) and shares are from [NIPA table 1.1.10](#).

Table 2B. Real Gross Domestic Product: Contributions to Percent Change

Line number	Series	Contributions to percent change					Revision in contributions to percent change				
		(Percentage points)					(Percentage points)				
		2017	2018	2019	2020	2021	2017	2018	2019	2020	2021
	Percent change at annual rate:										
1	Gross domestic product	2.2	2.9	2.3	-2.8	5.9	-0.1	0.0	0.0	0.6	0.2
	Percentage points at annual rates:										
2	Personal consumption expenditures	1.62	1.95	1.34	-2.01	5.54	-0.03	-0.01	-0.14	0.54	0.27
3	Goods	0.82	0.83	0.66	1.07	2.72	0.00	-0.01	-0.05	0.11	0.03
4	Durable goods	0.45	0.48	0.27	0.70	1.46	0.01	-0.01	-0.03	0.16	0.07
5	Nondurable goods	0.37	0.35	0.39	0.37	1.26	-0.01	0.00	-0.01	-0.05	-0.05
6	Services	0.80	1.12	0.69	-3.08	2.83	-0.03	-0.01	-0.09	0.44	0.25
7	Gross private domestic investment	0.70	0.99	0.49	-0.95	1.55	0.02	0.01	-0.11	0.04	-0.17
8	Fixed investment	0.69	0.84	0.44	-0.40	1.30	0.00	0.02	-0.11	0.07	-0.07
9	Nonresidential	0.54	0.86	0.48	-0.67	0.83	0.01	0.01	-0.11	0.06	-0.14
10	Structures	0.13	0.13	0.07	-0.32	-0.19	0.00	0.01	0.01	0.07	0.04
11	Equipment	0.16	0.37	0.07	-0.59	0.52	0.00	0.01	-0.12	-0.11	-0.17
12	Intellectual property products	0.25	0.36	0.34	0.23	0.50	0.00	0.00	0.01	0.09	-0.01
13	Residential	0.15	-0.02	-0.04	0.28	0.47	0.00	0.00	0.00	0.02	0.08
14	Change in private inventories	0.00	0.15	0.05	-0.55	0.24	0.01	-0.01	0.00	-0.03	-0.11
15	Net exports of goods and services	-0.15	-0.29	-0.11	-0.26	-1.25	0.01	-0.02	0.07	0.03	0.15
16	Exports	0.51	0.35	0.06	-1.54	0.64	0.02	0.00	0.07	0.03	0.17
17	Goods	0.32	0.34	0.01	-0.76	0.52	0.00	0.00	0.01	0.00	0.00
18	Services	0.19	0.01	0.05	-0.78	0.12	0.02	0.00	0.05	0.03	0.17
19	Imports	-0.66	-0.63	-0.17	1.28	-1.89	-0.01	-0.01	0.00	0.00	-0.01
20	Goods	-0.53	-0.62	-0.06	0.67	-1.61	0.00	0.00	0.01	0.02	0.00
21	Services	-0.13	-0.01	-0.11	0.61	-0.28	-0.01	-0.01	0.00	-0.02	-0.02
22	Government consumption expenditures and gross investment	0.08	0.29	0.58	0.45	0.11	-0.01	0.05	0.20	0.02	0.02
23	Federal	0.03	0.19	0.25	0.41	0.17	0.01	-0.01	0.00	0.08	0.13
24	National defense	0.04	0.13	0.20	0.12	-0.05	0.00	0.00	0.00	0.01	-0.01
25	Nondefense	-0.01	0.07	0.05	0.30	0.22	0.00	0.00	0.01	0.09	0.14
26	State and local	0.05	0.10	0.32	0.04	-0.06	-0.02	0.06	0.18	-0.06	-0.10

Note. Contributions are from [NIPA table 1.1.2](#).

Prices

Revisions to BEA's various price measures, such as gross domestic purchases, GDP, and personal consumption expenditures (PCE), were small and reflect revised and newly available source data and, for the most recent year (2021), the regular incorporation of annual weights (tables 3A-3B).

- The percent change in the gross domestic purchases price index—a measure of the prices paid by consumers, businesses, and governments—was unrevised for 2017–2019 and was revised up for 2020–2021.
- The percent change in GDP prices was unrevised for 2017–2020 and was revised up for 2021.
- The percent change in PCE prices was unrevised for 2017–2019, was revised down for 2020, and was revised up for 2021.

Table 3A. Prices for Gross Domestic Purchases: Percent Change from Previous Period

Line number	Series	Change from preceding period					Revision in percent change				
		Percent (annual rate)					(Percentage points)				
		2017	2018	2019	2020	2021	2017	2018	2019	2020	2021
1	Gross domestic purchases	1.9	2.3	1.5	1.3	4.2	0.0	0.0	0.0	0.1	0.3
2	Personal consumption expenditures	1.8	2.1	1.5	1.1	4.0	0.0	0.0	0.0	-0.1	0.1
3	Goods	0.3	0.8	-0.4	-0.7	4.9	0.0	0.1	0.1	0.0	-0.1
4	Durable goods	-2.3	-1.5	-1.0	-0.9	5.6	0.0	0.2	0.2	-0.1	-0.7
5	Nondurable goods	1.6	1.9	-0.1	-0.7	4.5	0.0	0.0	0.0	0.0	0.2
6	Services	2.5	2.8	2.4	2.0	3.6	0.0	0.0	0.0	-0.1	0.3
7	Gross private domestic investment	1.7	1.9	1.6	1.3	3.6	0.0	0.0	0.0	0.1	0.3
8	Fixed investment	1.7	1.9	1.6	1.4	4.0	0.0	0.0	0.0	0.2	0.1
9	Nonresidential	0.9	0.8	1.3	0.8	1.7	0.1	0.0	0.0	0.2	0.1
10	Structures	2.5	1.5	4.1	1.3	4.1	-0.1	-0.1	0.0	-0.2	-1.5
11	Equipment	0.0	0.1	0.1	-0.5	0.4	0.1	0.0	0.0	-0.1	0.1
12	Intellectual property products	0.9	1.2	0.9	1.8	1.6	0.1	0.1	0.0	0.4	0.6
13	Residential	4.5	5.6	2.9	3.3	11.1	0.0	0.0	0.0	0.0	0.1
14	Change in private inventories	---	---	---	---	---					
15	Government consumption expenditures and gross investment	2.3	3.7	1.7	1.9	5.3	-0.1	0.0	0.0	0.5	0.8
16	Federal	1.8	2.9	1.8	1.1	3.4	-0.1	0.0	0.0	0.0	-0.2
17	National defense	1.6	2.8	1.6	1.1	3.7	0.0	0.1	0.0	0.0	0.0
18	Nondefense	2.2	3.1	2.1	1.1	3.0	-0.2	-0.1	-0.1	-0.1	-0.5
19	State and local	2.6	4.1	1.6	2.4	6.5	0.0	0.0	-0.1	0.8	1.4
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20	Gross domestic purchases:										
21	Food	-0.1	0.5	1.0	3.4	3.0	0.0	0.0	0.0	0.0	0.4
22	Energy goods and services	8.7	8.1	-2.2	-8.6	20.4	0.0	0.0	0.0	0.1	-0.1
23	Excluding food and energy	1.8	2.3	1.7	1.4	3.9	0.0	0.0	0.0	0.0	0.3
24	Personal consumption expenditures:										
25	Food and beverages purchased for off-premises consumption	-0.1	0.5	1.0	3.4	3.2	0.0	0.0	0.0	0.0	0.1
26	Energy goods and services	8.7	8.0	-2.1	-8.5	20.8	0.0	0.0	0.0	0.0	0.5
27	Excluding food and energy	1.7	2.0	1.7	1.3	3.5	0.0	0.0	0.0	-0.1	0.2
28	Gross domestic product (GDP)	1.9	2.4	1.8	1.3	4.5	0.0	0.0	0.0	0.0	0.3
29	Exports of goods and services	2.6	3.4	-0.5	-2.4	11.5	0.0	0.0	0.0	0.1	-0.3
30	Imports of goods and services	2.2	2.7	-1.6	-2.2	7.4	0.0	-0.1	0.0	0.0	0.0

Note. Most percent changes are from [NIPA table 1.6.7](#); percent changes for PCE for food and energy goods and services and for PCE excluding food and energy are from [NIPA table 2.3.7](#). GDP, export, and import prices are from [NIPA table 1.1.7](#).

Table 3B. Contributions to Prices for Gross Domestic Purchases

Line number	Series	Contribution to percent change in prices					Revision in contributions to percent change				
		(Percentage points)					(Percentage points)				
		2017	2018	2019	2020	2021	2017	2018	2019	2020	2021
	Percent change at annual rate:										
1	Gross domestic purchases	1.9	2.3	1.5	1.3	4.2	0	0	0	0.1	0.3
	Percentage points at annual rates:										
2	Personal consumption expenditures	1.21	1.41	0.98	0.72	2.64	0.00	0.00	0.01	-0.06	0.10
3	Goods	0.06	0.16	-0.08	-0.16	1.07	0.00	0.01	0.02	-0.01	-0.08
4	Durable goods	-0.16	-0.11	-0.07	-0.07	0.44	0.00	0.01	0.01	-0.01	-0.08
5	Nondurable goods	0.23	0.27	-0.01	-0.09	0.63	0.00	0.00	0.00	0.00	0.01
6	Services	1.15	1.25	1.06	0.88	1.56	0.00	-0.02	-0.01	-0.04	0.16
7	Gross private domestic investment	0.28	0.32	0.28	0.22	0.61	0.00	0.00	0.00	0.01	0.05
8	Fixed investment	0.28	0.32	0.28	0.23	0.68	0.00	0.00	0.00	0.02	0.00
9	Nonresidential	0.11	0.11	0.17	0.10	0.21	0.00	0.00	0.00	0.01	0.01
10	Structures	0.07	0.05	0.12	0.04	0.11	-0.01	0.00	0.00	0.00	-0.03
11	Equipment	0.00	0.01	0.01	-0.03	0.02	0.00	0.00	0.00	-0.01	0.00
12	Intellectual property products	0.04	0.05	0.04	0.09	0.08	0.00	0.00	0.00	0.02	0.03
13	Residential	0.17	0.21	0.11	0.13	0.47	0.00	0.00	0.00	0.00	0.00
14	Change in private inventories	0.00	0.00	0.00	-0.01	-0.07	0.00	0.00	0.00	0.00	0.05
15	Government consumption expenditures and gross investment	0.40	0.62	0.29	0.33	0.93	0.00	0.00	0.00	0.08	0.15
16	Federal	0.12	0.18	0.12	0.08	0.23	0.00	0.00	0.00	0.01	-0.01
17	National defense	0.06	0.10	0.06	0.05	0.15	0.00	0.00	0.00	0.01	0.00
18	Nondefense	0.06	0.08	0.05	0.03	0.09	0.00	0.00	-0.01	0.00	-0.01
19	State and local	0.28	0.44	0.17	0.26	0.70	0.00	0.01	0.00	0.09	0.17
	Addenda										
20	Gross domestic purchases										
21	Food	-0.01	0.02	0.05	0.17	0.15	0.00	0.00	0.00	0.00	0.01
22	Energy goods and services	0.22	0.21	-0.06	-0.22	0.46	0.00	0.00	0.00	0.01	0.00
23	Excluding food and energy	1.67	2.11	1.56	1.33	3.57	-0.01	0.00	0.00	0.04	0.29

Note. Contributions are from [NIPA table 1.6.8](#).

Income

Revisions to the components of national income and GDI primarily reflect the incorporation of revised IRS Statistics of Income (SOI) data, new and revised QCEW data, revised ITA data, and data from the U.S. Department of the Treasury (Treasury) (table 4).

- The downward revision for 2017 reflects small revisions across several components.
- The downward revision for 2018 primarily reflects a revision to farm proprietors' income based on new USDA Agricultural Resource Management Survey data.
- The upward revision for 2019 primarily reflects upward revisions to financial and nonfinancial corporate profits and to net interest payments, based on revised SOI data for domestic profits and revised ITA data for profits from the rest of the world.
- The upward revision for 2020 was led by a downward revision to subsidies, as pandemic-related tax credits were revised down by over \$100 billion, based on data from the Treasury's Office of Tax Analysis on claims filed for tax credits to fund paid sick leave (as part of the Families First Coronavirus Response Act), and Employee Retention Credits (as part of the Coronavirus Aid, Relief, and Economic Security Act).⁴ Upward revisions to net interest payments, compensation of employees, and corporate profits also contributed.
- The revision for 2021 reflects downward revisions to several income components including wages and salaries, primarily based on QCEW data; farm proprietors' income, primarily based on data from the USDA Economic Research Service's February Farm Income Forecast; corporate profits, particularly profits received by the rest of the world, based on ITA data; and net interest.

One of the most notable impacts of the annual update is on the statistical discrepancy (table 5 and chart 3). In theory, GDI should equal GDP, but in practice, they differ because their components are estimated using largely independent source data; the statistical discrepancy had increased significantly for 2021 in the previously published estimates. The upward revision to GDP and the downward revision to GDI for 2021 resulted in a sizeable revision to the discrepancy (from $-\$537.3$ billion to $-\$128.9$ billion). With the revision, the statistical discrepancy as a percent of GDP is -0.6 percent; the average, without regard to sign, over the last 20 years, is 0.8 percent.

Table 4. National Income by Type of Income

[Billions of dollars]

Line number	Series	Level					Revision in level					Revision in change				
		2017	2018	2019	2020	2021	2017	2018	2019	2020	2021	2017	2018	2019	2020	2021
1	National income	16,766.8	17,661.7	18,327.9	17,894.6	19,785.5	-8.1	-11.6	54.9	183.9	-152.4	-8.1	-3.5	66.5	129	-336.4
2	Compensation of employees	10,424.4	10,957.9	11,448.1	11,592.7	12,538.5	-1.8	-1.6	0.4	20.6	-60.2	-1.7	0.1	2	20.2	-80.8
3	Wages and salaries	8,474.4	8,900.0	9,324.6	9,457.4	10,290.1	-0.3	-0.5	1.1	13.3	-53.7	-0.2	-0.2	1.6	12.2	-67
4	Government	1,348.2	1,402.0	1,450.5	1,494.5	1,544.1	0.2	0.6	0.2	0	8.7	0.2	0.4	-0.3	-0.3	8.8
5	Other	7,126.2	7,498.1	7,874.1	7,962.9	8,746.0	-0.5	-1.1	0.8	13.3	-62.3	-0.5	-0.5	1.9	12.5	-75.6
6	Supplements to wages and salaries	1,950.0	2,057.9	2,123.5	2,135.4	2,248.4	-1.5	-1.1	-0.6	7.3	-6.5	-1.5	0.3	0.4	7.9	-13.8
7	Employer contributions for employee pension and insurance funds	1,345.3	1,433.1	1,472.9	1,476.2	1,550.3	-1.2	-1.2	-1.7	11.9	23.9	-1.2	0	-0.5	13.6	12
8	Employer contributions for government social insurance	604.7	624.8	650.7	659.1	698.1	-0.3	0	1.1	-4.5	-30.4	-0.3	0.3	1	-5.6	-25.8
9	Proprietors' income with IVA and CCAdj	1,504.6	1,568.7	1,601.4	1,643.1	1,753.6	-1.2	-11.7	2.5	-6.9	-68.3	-1.2	-10.5	14.2	-9.4	-61.4
10	Farm	39.1	29.2	29.1	45.2	51.3	-0.4	-9.7	-9.3	-25	-46.4	-0.4	-9.4	0.5	-15.7	-21.4
11	Nonfarm	1,465.5	1,539.5	1,572.3	1,597.9	1,702.2	-0.8	-2	11.8	18.1	-21.9	-0.9	-1.1	13.8	6.2	-40
12	Rental income of persons with CCAdj	650.6	680.0	698.2	719.8	723.8	-2.1	-1.9	6.1	8.3	-2.6	-2.2	0.2	8	2.1	-10.8
13	Corporate profits with IVA and CCAdj	2,128.6	2,311.9	2,402.2	2,260.1	2,771.1	-0.3	7	34.4	16.3	-34.7	-0.3	7.3	27.4	-18.1	-51
14	Taxes on corporate income	297.3	297.7	297.4	288.9	388.2	-15	16.1	-4.8	13.3	7	-14.9	31.1	-20.9	18	-6.3
15	Profits after tax with IVA and CCAdj	1,831.2	2,014.3	2,104.7	1,971.2	2,382.8	14.6	-9.2	39.1	3.1	-41.8	14.7	-23.8	48.3	-36	-44.8
16	Net dividends	1,264.1	1,338.4	1,531.2	1,541.3	1,659.3	0	0	144.8	146.5	240.7	0	0	144.8	1.6	94.2
17	Undistributed profits with IVA and CCAdj	567.1	675.9	573.5	429.9	723.6	14.6	-9.2	-105.7	-143.4	-282.4	14.7	-23.8	-96.5	-37.8	-139
18	Net interest and miscellaneous payments	609.0	594.1	571.2	665.8	644.1	-3.5	-4.6	13	47	-42	-3.5	-1.1	17.6	34	-89
19	Taxes on production and imports	1,367.4	1,461.4	1,530.0	1,526.3	1,663.4	1.1	-0.3	-2.3	-8.4	22.3	1.1	-1.4	-2	-6	30.6
20	Less: Subsidies	59.9	63.3	73.0	657.3	481.9	0	0	0	-104.1	-11.1	0	0	0	-104.1	93
21	Business current transfer payments (net)	148.7	158.9	164.0	144.1	171.0	-0.4	0.9	1.7	-14.5	7	-0.4	1.3	0.9	-16.2	21.5
22	To persons (net)	48.3	50.1	55.1	44.1	71.0	-0.5	-0.2	-0.8	-15.8	4	-0.5	0.3	-0.6	-14.9	19.8
23	To government (net)	99.7	104.8	97.5	97.5	97.4	0.1	1	1.7	-0.3	2.1	0	1	0.7	-2	2.4
24	To the rest of the world (net)	0.7	4.1	11.4	2.5	2.7	0	0	0.8	1.6	0.9	0	0	0.8	0.8	-0.7
25	Current surplus of government enterprises	-6.5	-7.9	-14.2	-0.1	2.1	0.1	0.7	-0.9	17.3	15	0.1	0.6	-1.7	18.3	-2.3

CCAdj Capital consumption adjustment

IVA Inventory valuation adjustment

Note. Dollar levels are from [NIPA table 1.12](#).

Table 5. Relation of Gross Domestic Product, Gross Domestic Income, Gross National Income, National Income, and Personal Income

[Billions of dollars]

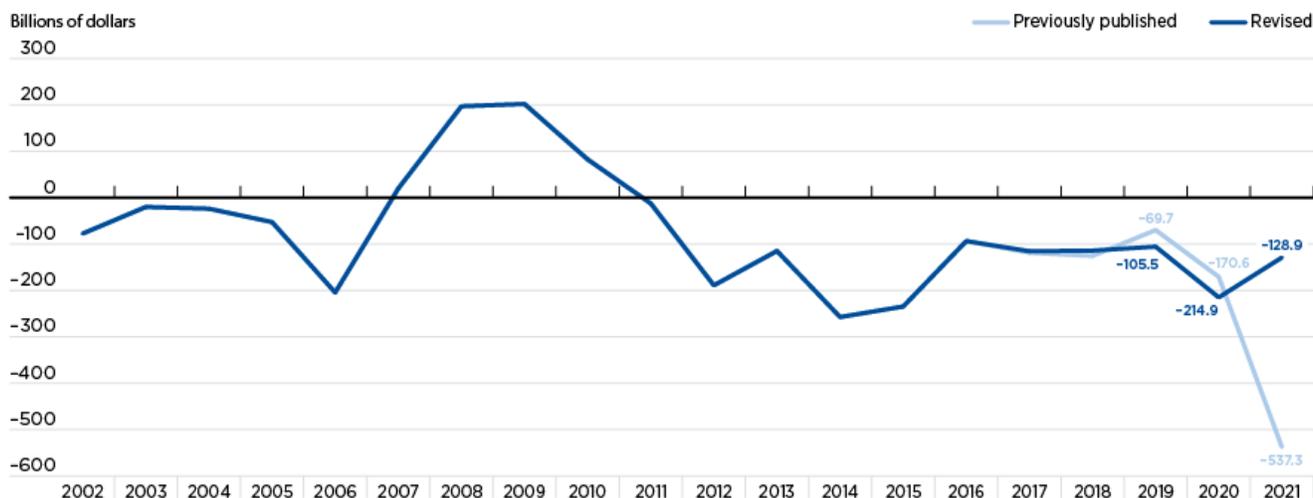
Line number	Series	Level					Revision in level					Revision in change				
		2017	2018	2019	2020	2021	2017	2018	2019	2020	2021	2017	2018	2019	2020	2021
1	Gross domestic product	19,477.3	20,533.1	21,381.0	21,060.5	23,315.1	-2.3	5.9	8.4	166.7	319.0	-2.3	8.2	2.5	158.3	152.3
2	Less: Statistical discrepancy	-115.3	-114.0	-105.5	-214.9	-128.9	3.6	11.5	-35.9	-44.4	408.4	3.7	7.9	-47.3	-8.5	452.8
3	Equals: Gross domestic income	19,592.6	20,647.0	21,486.5	21,275.4	23,444.0	-5.9	-5.6	44.3	211.1	-89.4	-5.9	0.3	49.8	166.8	-300.5
4	Plus: Income receipts from the rest of the world	1,031.1	1,138.7	1,172.2	971.3	1,087.0	-1.6	-3.5	11.9	-21.6	-58.0	-1.6	-1.8	15.3	-33.5	-36.4
5	Less: Income payments to the rest of the world	738.2	848.4	894.2	774.3	913.9	0.0	0.4	0.2	3.7	21.3	0.0	0.4	-0.2	3.5	17.6
6	Equals: Gross national income	19,885.6	20,937.4	21,764.5	21,472.4	23,617.1	-7.5	-9.4	55.9	185.7	-168.7	-7.5	-1.9	65.3	129.8	-354.4
7	Less: Consumption of fixed capital	3,118.7	3,275.6	3,436.6	3,577.8	3,831.6	0.6	2.2	1.0	1.9	-16.3	0.6	1.6	-1.1	0.9	-18.2
8	Equals: National income	16,766.8	17,661.7	18,327.9	17,894.6	19,785.5	-8.1	-11.6	54.9	183.9	-152.4	-8.1	-3.5	66.5	129.0	-336.4
9	Less:															
10	Corporate profits with IVA and CCAdj	2,128.6	2,311.9	2,402.2	2,260.1	2,771.1	-0.3	7.0	34.4	16.3	-34.7	-0.3	7.3	27.4	-18.1	-51.0
11	Taxes on production and imports less subsidies	1,307.6	1,398.1	1,457.1	869.0	1,181.5	1.1	-0.3	-2.3	95.8	33.4	1.1	-1.5	-2.0	98.1	-62.4
12	Contributions for government social insurance, domestic	1,298.9	1,361.6	1,424.6	1,450.0	1,540.8	0.1	1.1	3.2	-9.5	-52.6	0.2	1.0	2.0	-12.6	-43.1
13	Net interest and miscellaneous payments on assets	609.0	594.1	571.2	665.8	644.1	-3.5	-4.6	13.0	47.0	-42.0	-3.5	-1.1	17.6	34.0	-89.0
14	Business current transfer payments (net)	148.7	158.9	164.0	144.1	171.0	-0.4	0.9	1.7	-14.5	7.0	-0.4	1.3	0.9	-16.2	21.5
15	Current surplus of government enterprises	-6.5	-7.9	-14.2	-0.1	2.1	0.1	0.7	-0.9	17.3	15.0	0.1	0.6	-1.7	18.3	-2.3
16	Plus: Personal income receipts on assets	2,703.5	2,862.2	3,119.0	3,095.4	3,202.4	-4.4	-6.1	151.0	183.3	261.1	-4.4	-1.7	157.1	32.3	77.8
17	Plus: Personal current transfer receipts	2,855.7	2,976.6	3,144.8	4,231.2	4,617.3	-0.7	0.3	5.7	-10.0	19.5	-0.6	0.9	5.4	-15.7	29.5
18	Equals: Personal income	16,839.8	17,683.8	18,587.0	19,832.3	21,294.8	-10.4	-22.2	162.6	204.7	202.1	-10.4	-11.8	184.8	42.1	-2.7

CCAdj Capital consumption adjustment

IVA Inventory valuation adjustment

Note. Dollar levels are from [NIPA table 1.7.5](#).

Chart 3. Statistical Discrepancy



U.S. Bureau of Economic Analysis

Measures of personal income were also impacted by newly available and revised SOI data (table 6):

- Personal income was revised down for 2017, as most components—particularly personal interest income—were revised down.
- For 2018, the downward revision to personal income was led by a downward revision to farm proprietors' income, based on revised USDA data.
- For 2019–2021, the revisions were due primarily to upward revisions to personal dividend income, based on revised IRS SOI data for 2019, newly available SOI data for 2020, and more complete annual company financial reports and newly available Quarterly Financial Report data from Census for 2021.
- The personal saving rate (personal saving as a percentage of disposable personal income) was unrevised for 2017–2018, was revised up for 2019–2020, and was revised down for 2021. For 2019, there was an upward revision to personal income and a downward revision to personal outlays. For 2020, the upward revision to income more than offset upward revisions to personal outlays and personal current taxes. For 2021, upward revisions to outlays and taxes more than offset the upward revision to income.

Table 6. Personal Income and Its Disposition

[Billions of dollars]

Line number	Series	Level					Revision in level					Revision in change				
		2017	2018	2019	2020	2021	2017	2018	2019	2020	2021	2017	2018	2019	2020	2021
1	Personal income	16,839.8	17,683.8	18,587.0	19,832.3	21,294.8	-10.4	-22.2	162.6	204.7	202.1	-10.4	-11.8	184.8	42.1	-2.7
2	Compensation of employees	10,424.4	10,957.9	11,448.1	11,592.7	12,538.5	-1.8	-1.6	0.4	20.6	-60.2	-1.7	0.1	2.0	20.2	-80.8
3	Wages and salaries	8,474.4	8,900.0	9,324.6	9,457.4	10,290.1	-0.3	-0.5	1.1	13.3	-53.7	-0.2	-0.2	1.6	12.2	-67.0
4	Private industries	7,126.2	7,498.1	7,874.1	7,962.9	8,746.0	-0.5	-1.1	0.8	13.3	-62.3	-0.5	-0.5	1.9	12.5	-75.6
5	Government	1,348.2	1,402.0	1,450.5	1,494.5	1,544.1	0.2	0.6	0.2	0.0	8.7	0.2	0.4	-0.3	-0.3	8.8
6	Supplements to wages and salaries	1,950.0	2,057.9	2,123.5	2,135.4	2,248.4	-1.5	-1.1	-0.6	7.3	-6.5	-1.5	0.3	0.4	7.9	-13.8
7	Proprietors' income with IVA and CCAdj	1,504.6	1,568.7	1,601.4	1,643.1	1,753.6	-1.2	-11.7	2.5	-6.9	-68.3	-1.2	-10.5	14.2	-9.4	-61.4
8	Farm	39.1	29.2	29.1	45.2	51.3	-0.4	-9.7	-9.3	-25.0	-46.4	-0.4	-9.4	0.5	-15.7	-21.4
9	Nonfarm	1,465.5	1,539.5	1,572.3	1,597.9	1,702.2	-0.8	-2.0	11.8	18.1	-21.9	-0.9	-1.1	13.8	6.2	-40.0
10	Rental income of persons with CCAdj	650.6	680.0	698.2	719.8	723.8	-2.1	-1.9	6.1	8.3	-2.6	-2.2	0.2	8.0	2.1	-10.8
11	Personal income receipts on assets	2,703.5	2,862.2	3,119.0	3,095.4	3,202.4	-4.4	-6.1	151.0	183.3	261.1	-4.4	-1.7	157.1	32.3	77.8
12	Personal interest income	1,549.0	1,608.9	1,658.1	1,647.3	1,658.6	-4.5	-6.1	6.1	33.0	17.9	-4.4	-1.7	12.3	26.9	-15.1
13	Personal dividend income	1,154.6	1,253.4	1,460.9	1,448.1	1,543.9	0.1	0.1	144.9	150.3	243.2	0.0	0.0	144.8	5.4	92.9
14	Personal current transfer receipts	2,855.7	2,976.6	3,144.8	4,231.2	4,617.3	-0.7	0.3	5.7	-10.0	19.5	-0.6	0.9	5.4	-15.7	29.5
15	Government social benefits to persons	2,807.4	2,926.5	3,089.7	4,187.1	4,546.4	-0.2	0.4	6.6	5.8	15.5	-0.1	0.6	6.2	-0.7	9.7
16	Other current transfer receipts, from business (net)	48.3	50.1	55.1	44.1	71.0	-0.5	-0.2	-0.8	-15.8	4.0	-0.5	0.3	-0.6	-14.9	19.8
17	Less: Contributions for government social insurance	1,298.9	1,361.6	1,424.6	1,450.0	1,540.8	0.1	1.1	3.2	-9.5	-52.6	0.2	1.0	2.0	-12.6	-43.1
18	Less: Personal current taxes	2,048.6	2,074.9	2,198.4	2,236.4	2,661.7	-0.4	-1.4	-6.7	40.8	76.5	-0.4	-1.0	-5.3	47.6	35.7
19	Equals: Disposable personal income (DPI)	14,791.2	15,608.9	16,388.6	17,595.9	18,633.1	-10.0	-20.8	169.3	163.9	125.5	-10.0	-10.8	190.1	-5.5	-38.4
20	Less: Personal outlays	13,717.5	14,428.6	14,942.0	14,603.6	16,389.8	-7.3	-10.2	-39.5	59.1	163.4	-7.4	-2.9	-29.3	98.6	104.4
21	Equals: Personal saving	1,073.8	1,180.3	1,446.6	2,992.3	2,243.4	-2.7	-10.6	208.8	104.8	-37.9	-2.7	-8.0	219.5	-104.0	-142.8
22	Personal saving as a percentage of DPI (percent)	7.3	7.6	8.8	17.0	12.0	0.0	0.0	1.2	0.4	-0.3	0.0	0.0	1.2	-0.8	-0.7

CCAdj Capital consumption adjustment

IVA Inventory valuation adjustment

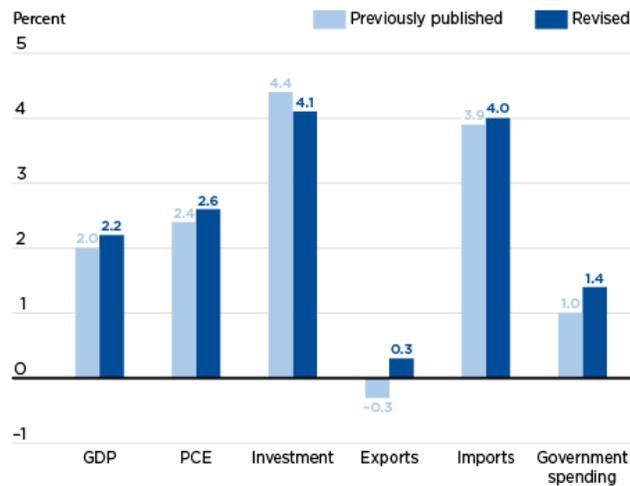
Note. Dollar levels are from [NIPA table 2.1](#).

Updates to Quarterly NIPA Measures

GDP and GDI

From the fourth quarter of 2016 to the first quarter of 2022, real GDP was revised up 0.2 percentage point, from an increase of 2.0 percent to an increase of 2.2 percent (chart 4). Real GDI over the same period was revised down, from 2.6 percent to 2.3 percent, and the average of GDP and GDI was revised from 2.3 percent to 2.2 percent.

Chart 4. Average Annual Rates of Change for Real GDP, 2016:Q4 to 2022:Q1



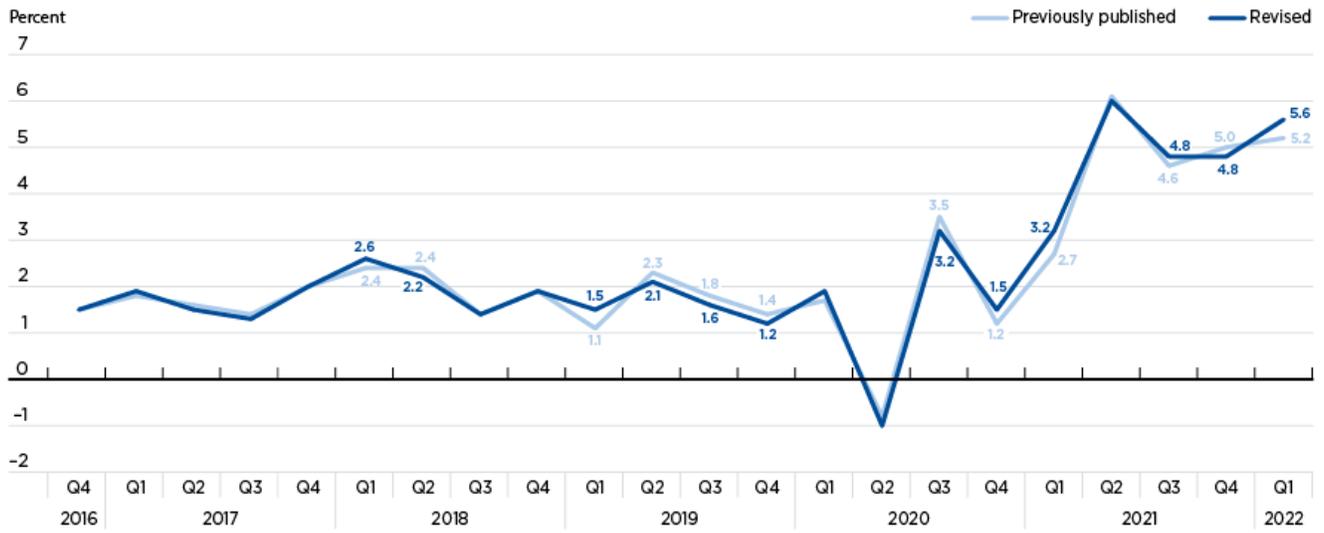
GDP Gross domestic product
PCE Personal consumption expenditures

U.S. Bureau of Economic Analysis

Prices

From the fourth quarter of 2016 to the first quarter of 2022, the average annual rate of increase in the price index for gross domestic purchases was 2.6 percent, revised up 0.1 percentage point from the previously published estimates. From the fourth quarter of 2016 to the first quarter of 2022, the average annual rate of increase in the price index for PCE was 2.7 percent, revised up 0.1 percentage point. The increase in the “core” PCE price index, which excludes food and energy, was 2.4 percent, the same as previously published. Quarterly revisions in the index primarily reflect updated BLS consumer price indexes as well as BEA's improved deflator for used motor vehicles (chart 5).

Chart 5. Percent Change in Price Index for PCE Excluding Food and Energy

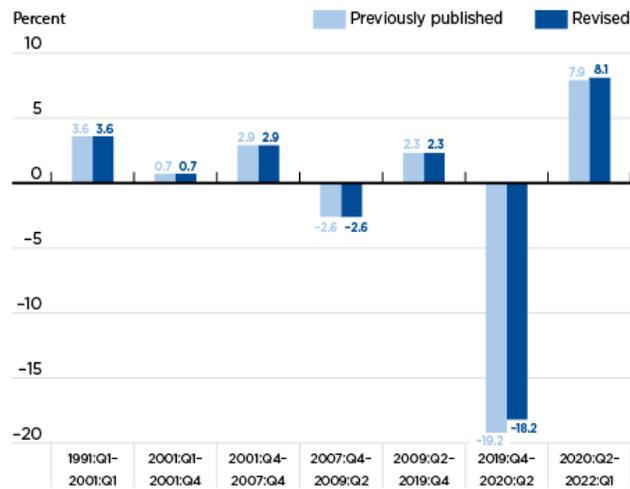


PCE Personal consumption expenditures
U.S. Bureau of Economic Analysis

Business cycles

For the period of expansion from the second quarter of 2009 to the fourth quarter of 2019, real GDP increased at an average annual rate of 2.3 percent, unrevised from the previously published estimate (chart 6). The rate of growth in real GDI over the period was revised up from 2.4 percent to 2.5 percent. The percent change in real GDP during the pandemic-related recession from the fourth quarter of 2019 to the second quarter of 2020 was revised up, decreasing 18.2 percent, compared with 19.2 percent in the previously published estimates. The recovery from the second quarter of 2020 to the first quarter of 2021 was stronger than previously estimated, at 8.1 percent, rather than 7.9 percent.

Chart 6. Average Annual Rates of Change for Real GDP



GDP Gross domestic product
U.S. Bureau of Economic Analysis

GDP and expenditure components

Chart 7 illustrates the revisions to real GDP for each quarter; the chart excludes 2020 because the magnitude of the pandemic-related changes in GDP in that year obscures the changes in other years. Table 7 presents the changes in 2020.

- The revisions did not reverse the direction of change in real GDP for any quarter of the revision period, and the general pattern is similar to the previously published estimates (chart 7).
- The largest revision for 2018 was to the third quarter; the upward revision was led by inventory investment, primarily in the wholesale and manufacturing industries.
- For 2019, the largest revision was to the third quarter. The upward revision (0.8 percentage point) was led by private investment in structures, in particular, petroleum and natural gas drilling.
- In the second quarter of 2020, the revision of 1.3 percentage points was led by consumer spending on services, based on newly available SAS data.
- In the third quarter of 2020, the revision of 1.5 percentage points was led by nonfarm inventory investment, primarily by manufacturing and wholesale industries.
- In the third quarter of 2021, the revision of 0.4 percentage point was led by consumer spending, particularly spending on food services, based on updated data from Census' MRTS.
- Real GDP was unrevised for the first quarter of 2022, as downward revisions to consumer spending and to private fixed equipment investment were offset by upward revisions to private inventory investment, federal government spending, and state and local government spending; imports were revised down.

Chart 7. Percent Change in Real GDP

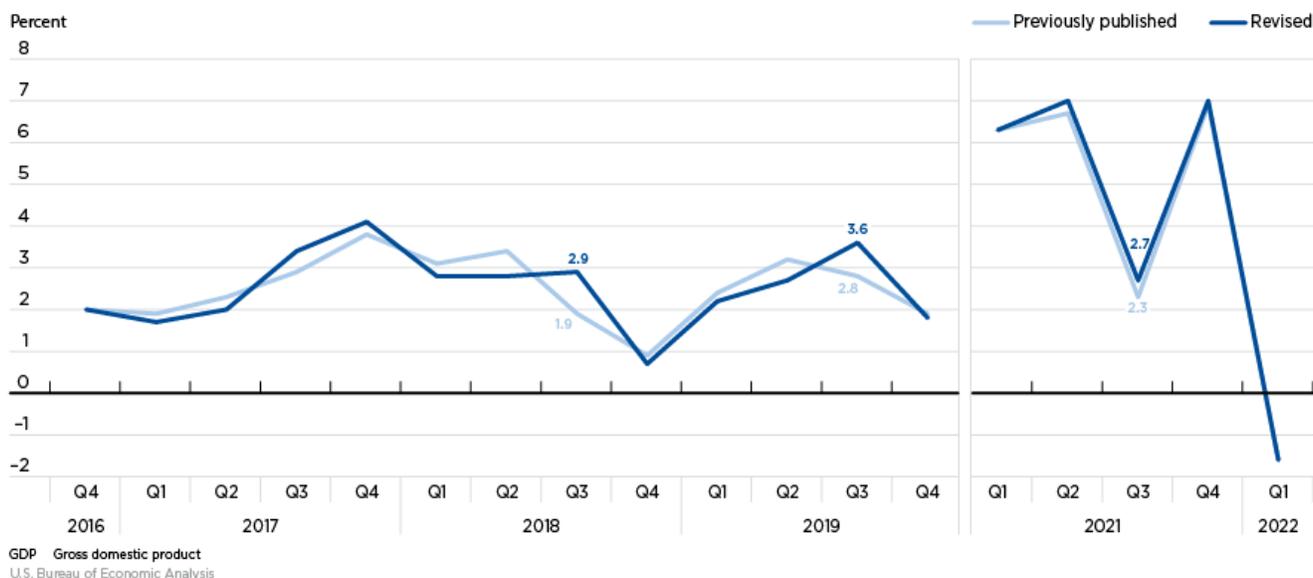


Table 7. Real Gross Domestic Product: Percent Change from Preceding Period, 2020

Series	Previously published	Revised	Revision
	Percent (annual rate)		
2020 Q1	-5.1	-4.6	0.5
2020 Q2	-31.2	-29.9	1.3
2020 Q3	33.8	35.3	1.5
2020 Q4	4.5	3.9	-0.6

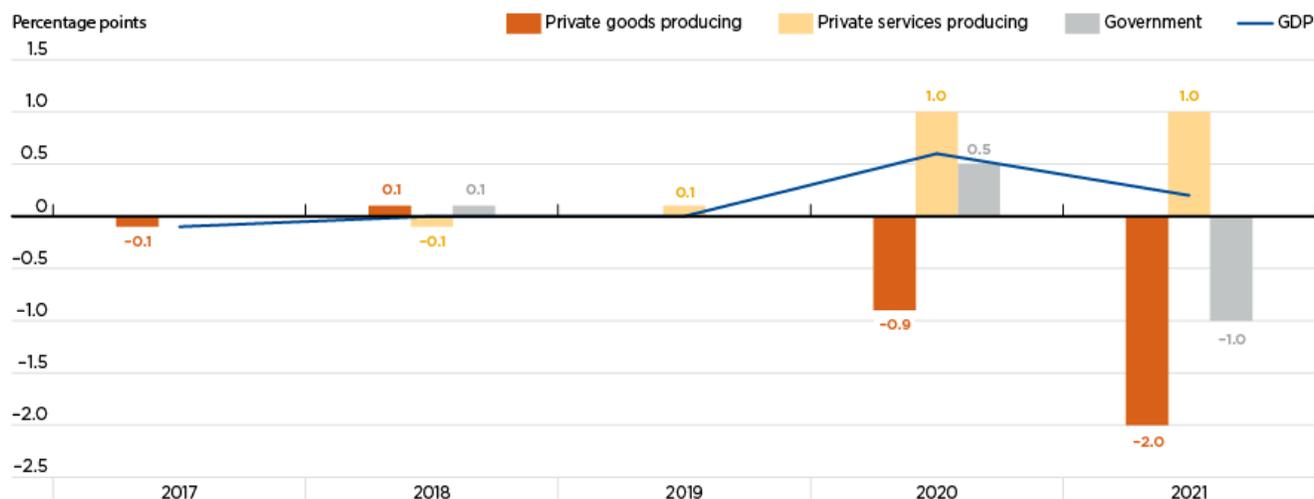
Note. Percent changes are from [NIPA table 1.1.1](#).

GDP by Industry

GDP by industry—or value added—which measures an industry's contribution to GDP—was largely unchanged with the annual update for 2017–2019; for 2020–2021, the updated estimates reflect upward revisions to services-producing industries and downward revisions to goods-producing industries. As with the NIPA's expenditure and income estimates, this year's revisions to the IEAs are largely driven by newly available and revised source data.

Revisions to annual percent changes in real GDP by industry for the recent period (years 2017 to 2021 and the first quarter of 2022) are discussed below. Revisions to the percent change in real GDP are presented in table 8 and illustrated in chart 8. Revisions to industry contributions to the percent change in real GDP are presented in table 9.

Chart 8. Revisions to the Percent Change in Real GDP by Industry



GDP Gross domestic product
U.S. Bureau of Economic Analysis

Table 8. Real Gross Domestic Product by Industry Group: Percent Change from Preceding Period

Line number	Series	Share of current-dollar GDP	Change from preceding period					Revision in percent change				
		Percent	Percent (annual rate)					(Percentage points)				
		2021	2017	2018	2019	2020	2021	2017	2018	2019	2020	2021
1	Gross domestic product	100.0	2.2	2.9	2.3	-2.8	5.9	-0.1	0.0	0.0	0.6	0.2
2	Private industries	87.9	2.4	3.2	2.5	-3.1	6.7	-0.1	0.0	0.0	0.7	0.4
3	Agriculture, forestry, fishing, and hunting	0.9	-2.1	2.8	-5.9	2.8	-8.5	-0.6	-0.2	0.2	-11.2	-3.8
4	Mining	1.4	1.4	1.2	12.6	-1.1	-16.3	-0.7	1.0	0.8	9.1	-10.6
5	Utilities	1.6	1.0	-0.3	0.4	3.6	-4.1	-0.2	0.0	-0.8	-0.6	1.5
6	Construction	4.1	3.5	2.2	1.4	-3.8	2.5	-0.1	-0.1	0.0	-0.2	-0.7
7	Manufacturing	10.7	3.3	4.2	1.6	-4.5	6.7	0.0	0.1	-0.2	-1.5	-0.9
8	Durable goods	6.0	4.0	4.8	0.8	-4.5	9.7	-0.2	0.0	0.0	0.4	0.6
9	Nondurable goods	4.7	2.3	3.5	2.7	-4.5	3.0	0.0	0.3	-0.3	-4.1	-2.6
10	Wholesale trade	6.2	0.4	1.0	-0.5	0.0	5.5	-0.1	-0.1	0.0	1.9	2.7
11	Retail trade	6.0	3.2	3.1	2.1	-2.9	2.6	-0.1	-0.1	-0.4	0.0	0.5
12	Transportation and warehousing	3.0	4.2	3.8	1.0	-12.0	7.5	-0.2	0.2	-0.8	1.4	4.8
13	Information	5.6	6.2	8.0	5.9	3.9	13.9	-0.2	0.3	-1.1	0.4	0.7
14	Finance, insurance, real estate, rental, and leasing	21.0	0.3	1.7	2.6	-0.1	4.8	-0.1	0.0	0.6	-0.4	-0.6
15	Finance and insurance	8.4	-1.7	-0.1	3.3	2.7	7.2	0.0	0.0	1.6	-0.3	-2.2
16	Real estate and rental and leasing	12.6	1.6	2.8	2.1	-1.8	3.2	-0.1	0.0	0.0	-0.5	0.3
17	Professional and business services	13.0	4.6	5.7	4.3	-1.2	11.7	-0.1	0.0	-0.3	1.2	1.0
18	Professional, scientific, and technical services	7.9	3.3	6.0	4.3	-0.1	11.1	-0.1	0.0	0.0	1.8	1.8
19	Management of companies and enterprises	1.9	7.2	7.1	7.2	1.7	10.9	-0.1	-0.1	0.1	0.2	2.0
20	Administrative and waste management services	3.2	6.3	4.2	2.6	-5.6	13.6	0.0	0.0	-0.9	0.1	-1.6
21	Educational services, health care, and social assistance	8.6	1.7	2.8	2.9	-2.9	4.6	-0.1	0.0	0.1	3.5	-0.4
22	Educational services	1.2	-1.5	2.5	2.5	-9.9	3.3	-0.1	0.0	-0.3	1.4	2.8
23	Health care and social assistance	7.4	2.3	2.8	3.0	-1.7	4.8	0.0	0.0	0.2	3.8	-1.0
24	Arts, entertainment, recreation, accommodation, and food services	3.9	2.5	1.7	1.9	-27.6	28.3	0.0	-0.1	-0.1	2.2	8.4
25	Arts, entertainment, and recreation	0.9	3.5	3.9	0.9	-36.0	35.2	0.2	0.0	-1.5	-0.6	15.4
26	Accommodation and food services	2.9	2.1	0.8	2.2	-24.6	26.2	-0.1	-0.2	0.3	3.2	6.3
27	Other services, except government	2.0	0.5	2.7	0.3	-9.9	5.4	-0.1	-0.6	0.3	2.5	2.5
28	Government	12.1	1.0	0.9	0.6	-0.4	0.5	0.0	0.1	0.0	0.5	-1.0
29	Federal	3.8	0.6	0.6	0.7	3.1	1.0	-0.1	0.0	0.0	0.3	0.7
30	State and local	8.3	1.1	0.9	0.5	-1.9	0.3	0.0	0.0	-0.1	0.7	-1.7
Addenda												
31	Private goods-producing industries ¹	17.1	2.9	3.4	2.1	-3.8	3.1	-0.1	0.1	0.0	-0.9	-2.0
32	Private services-producing industries ²	70.9	2.3	3.1	2.7	-3.0	7.6	0.0	-0.1	0.1	1.0	1.0
33	Information-communications-technology-producing industries ³	7.6	7.7	10.1	6.7	5.5	12.6	-0.2	-0.1	-0.2	0.8	...

1. Consists of agriculture, forestry, fishing, and hunting; mining; construction; and manufacturing.

2. Consists of utilities; wholesale trade; retail trade; transportation and warehousing; information; finance, insurance, real estate, rental, and leasing; professional and business services; educational services, health care, and social assistance; arts, entertainment, recreation, accommodation, and food services; and other services, except government.

3. Consists of computer and electronic product manufacturing (excluding navigational, measuring, electromedical, and control instruments manufacturing); software publishers; broadcasting and telecommunications; data processing, hosting and related services; internet publishing and broadcasting and web search portals; and computer systems design and related services. For 2021, revision unavailable (...); the annual update is the first estimate for the latest year.

- For 2017, the 0.1 percentage point downward revision to real GDP growth reflected downward revisions to private services-producing industries and government of less than 0.1 percentage point each and to private goods-producing industries of 0.1 percentage point. The direction of change was unrevised for all 22 industry groups.
- For 2018, real GDP growth was unrevised. Upward revisions of 0.1 percentage point to private goods-producing industries and to government were offset by a downward revision of 0.1 percentage point to private services-producing industries. The direction of change was unrevised for all 22 industry groups.
- For 2019, real GDP growth was also unrevised, reflecting small offsetting revisions across industries, notably an upward revision to finance and insurance and a downward revision to information. An upward revision of 0.1 percentage point to private services-producing industries was offset by downward revisions of less than 0.1 percentage point to private goods-producing industries and to government. The direction of change was unrevised for all 22 industry groups.
- For 2020, the 0.6 percentage point upward revision to the decrease in real GDP reflected upward revisions to private services-producing industries and government that were partly offset by a downward revision to private goods-producing industries. The direction of change was unrevised for all 22 industry groups.
 - Private services-producing industries was revised up 1.0 percentage point, primarily reflecting upward revisions to health care and social assistance; professional, scientific, and technical services; wholesale trade; and accommodation and food services.
 - Government was revised up 0.5 percentage point, led by an upward revision to state and local government.
 - Private goods-producing industries was revised down 0.9 percentage point, led by downward revisions to nondurable goods manufacturing and to agriculture, forestry, fishing, and hunting.
- For 2021, the 0.2 percentage point upward revision to real GDP growth reflected an upward revision to private services-producing industries that was partly offset by downward revisions to private goods-producing industries and government. The direction of change was unrevised for all 22 industry groups.
 - Private services-producing industries was revised up 1.0 percentage point, primarily reflecting upward revisions to wholesale trade; accommodation and food services; and professional, scientific, and technical services that were partly offset by downward revisions to finance and insurance; health care and social assistance; and administrative and waste management services.
 - Private goods-producing industries was revised down 2.0 percentage points, led by downward revisions to mining and nondurable goods manufacturing.
 - Government was revised down 1.0 percentage point, reflecting a downward revision to state and local government that was partly offset by an upward revision to federal government.
- In the first quarter of 2022, real GDP was unrevised. Private goods-producing industries was revised up 3.2 percentage points, private services-producing industries was revised down 0.8 percentage point, and government was revised down 0.2 percentage point.

Table 9. Contributions to the Percent Change in Real Gross Domestic Product by Industry Group

Line number	Series	Contributions to percent change					Revision in contributions to percent change				
		(Percentage points)					(Percentage points)				
		2017	2018	2019	2020	2021	2017	2018	2019	2020	2021
	Percent change at annual rate:										
1	Gross domestic product	2.2	2.9	2.3	-2.8	5.9	-0.1	0.0	0.0	0.6	0.2
	Percentage points at annual rates:										
2	Private industries	2.08	2.79	2.23	-2.76	5.83	-0.09	0.00	0.01	0.54	0.36
3	Agriculture, forestry, fishing, and hunting	-0.02	0.02	-0.05	0.02	-0.08	-0.01	-0.01	0.00	-0.08	-0.04
4	Mining	0.02	0.02	0.18	-0.02	-0.21	-0.01	0.02	0.01	0.10	-0.15
5	Utilities	0.02	-0.01	0.01	0.06	-0.07	0.00	0.00	-0.01	0.00	0.03
6	Construction	0.14	0.09	0.06	-0.16	0.10	0.00	-0.01	0.00	-0.01	-0.04
7	Manufacturing	0.37	0.47	0.18	-0.50	0.71	0.00	0.01	-0.02	-0.18	-0.09
8	Durable goods	0.25	0.30	0.05	-0.28	0.57	-0.01	0.00	0.00	0.02	0.03
9	Nondurable goods	0.11	0.17	0.13	-0.22	0.14	0.00	0.01	-0.02	-0.20	-0.12
10	Wholesale trade	0.02	0.06	-0.03	0.00	0.34	-0.01	-0.01	0.00	0.11	0.17
11	Retail trade	0.18	0.17	0.12	-0.16	0.15	-0.01	0.00	-0.02	0.00	0.01
12	Transportation and warehousing	0.13	0.12	0.03	-0.38	0.21	0.00	0.01	-0.03	0.04	0.11
13	Information	0.32	0.41	0.30	0.21	0.75	0.00	0.02	-0.06	0.03	0.04
14	Finance, insurance, real estate, rental, and leasing	0.07	0.36	0.54	-0.01	1.02	-0.02	0.00	0.13	-0.07	-0.14
15	Finance and insurance	-0.14	0.00	0.26	0.22	0.61	-0.01	0.00	0.13	-0.02	-0.16
16	Real estate and rental and leasing	0.21	0.36	0.28	-0.23	0.42	-0.02	-0.01	0.00	-0.05	0.04
17	Professional and business services	0.57	0.71	0.54	-0.15	1.47	-0.01	0.00	-0.03	0.15	0.13
18	Professional, scientific, and technical services	0.25	0.44	0.32	-0.01	0.85	0.00	-0.01	-0.01	0.14	0.14
19	Management of companies and enterprises	0.13	0.13	0.13	0.03	0.21	-0.01	0.00	0.00	0.00	0.04
20	Administrative and waste management services	0.19	0.13	0.08	-0.18	0.41	0.00	0.00	-0.03	0.00	-0.05
21	Educational services, health care, and social assistance	0.15	0.24	0.25	-0.25	0.40	-0.01	0.00	0.00	0.31	-0.03
22	Educational services	-0.02	0.03	0.03	-0.13	0.04	0.00	0.00	-0.01	0.02	0.03
23	Health care and social assistance	0.17	0.21	0.22	-0.13	0.36	-0.01	0.00	0.01	0.28	-0.06
24	Arts, entertainment, recreation, accommodation, and food services	0.11	0.07	0.08	-1.19	0.91	0.01	-0.01	-0.01	0.10	0.27
25	Arts, entertainment, and recreation	0.04	0.04	0.01	-0.41	0.26	0.00	0.00	-0.02	0.00	0.11
26	Accommodation and food services	0.07	0.03	0.07	-0.78	0.65	0.00	0.00	0.01	0.11	0.16
27	Other services, except government	0.01	0.06	0.01	-0.21	0.11	0.00	-0.01	0.01	0.06	0.05
28	Government	0.12	0.11	0.07	-0.04	0.07	-0.01	0.00	0.00	0.08	-0.12
29	Federal	0.03	0.03	0.03	0.12	0.04	0.00	0.01	0.00	0.01	0.03
30	State and local	0.10	0.08	0.05	-0.16	0.03	0.00	0.00	0.00	0.06	-0.14
	Addenda										
31	Private goods-producing industries ¹	0.51	0.61	0.37	-0.66	0.53	-0.02	0.02	0.00	-0.17	-0.30
32	Private services-producing industries ²	1.57	2.18	1.85	-2.10	5.30	-0.07	-0.02	0.00	0.71	0.66
33	Information-communications-technology-producing industries ³	0.51	0.67	0.46	0.39	0.93	-0.01	0.00	-0.02	0.06	...

1. Consists of agriculture, forestry, fishing, and hunting; mining; construction; and manufacturing.

2. Consists of utilities; wholesale trade; retail trade; transportation and warehousing; information; finance, insurance, real estate, rental, and leasing; professional and business services; educational services, health care, and social assistance; arts, entertainment, recreation, accommodation, and food services; and other services, except government.

3. Consists of computer and electronic product manufacturing (excluding navigational, measuring, electromedical, and control instruments manufacturing); software publishers; broadcasting and telecommunications; data processing, hosting and related services; internet publishing and broadcasting and web search portals; and computer systems design and related services. For 2021, revision unavailable (...); the annual update is the first estimate for the latest year.

As noted above, from the fourth quarter of 2016 to the first quarter of 2022, the average annual change in real GDP was revised up from 2.0 to 2.2 percent. Chart 9 illustrates the revisions to the percent change for private goods-producing industries, private services-producing industries, and government over the period. Private services-producing industries increased more than previously estimated over the period, while private goods-producing industries and government increased less.

Chart 9. Average Annual Rates of Change for Real GDP by Industry, 2016:Q4 to 2022:Q1

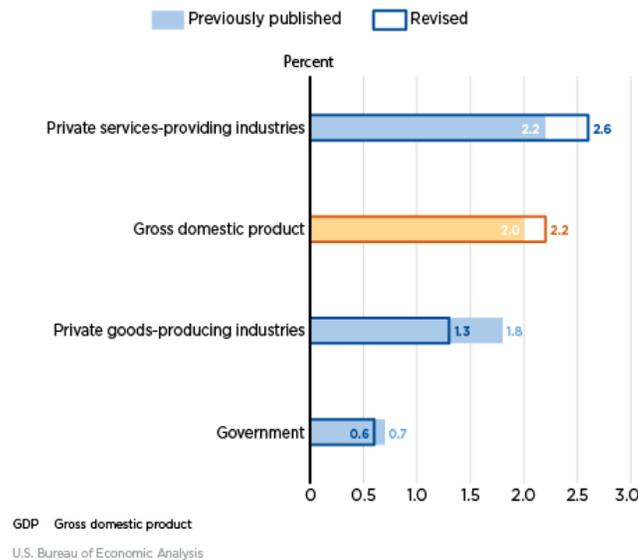
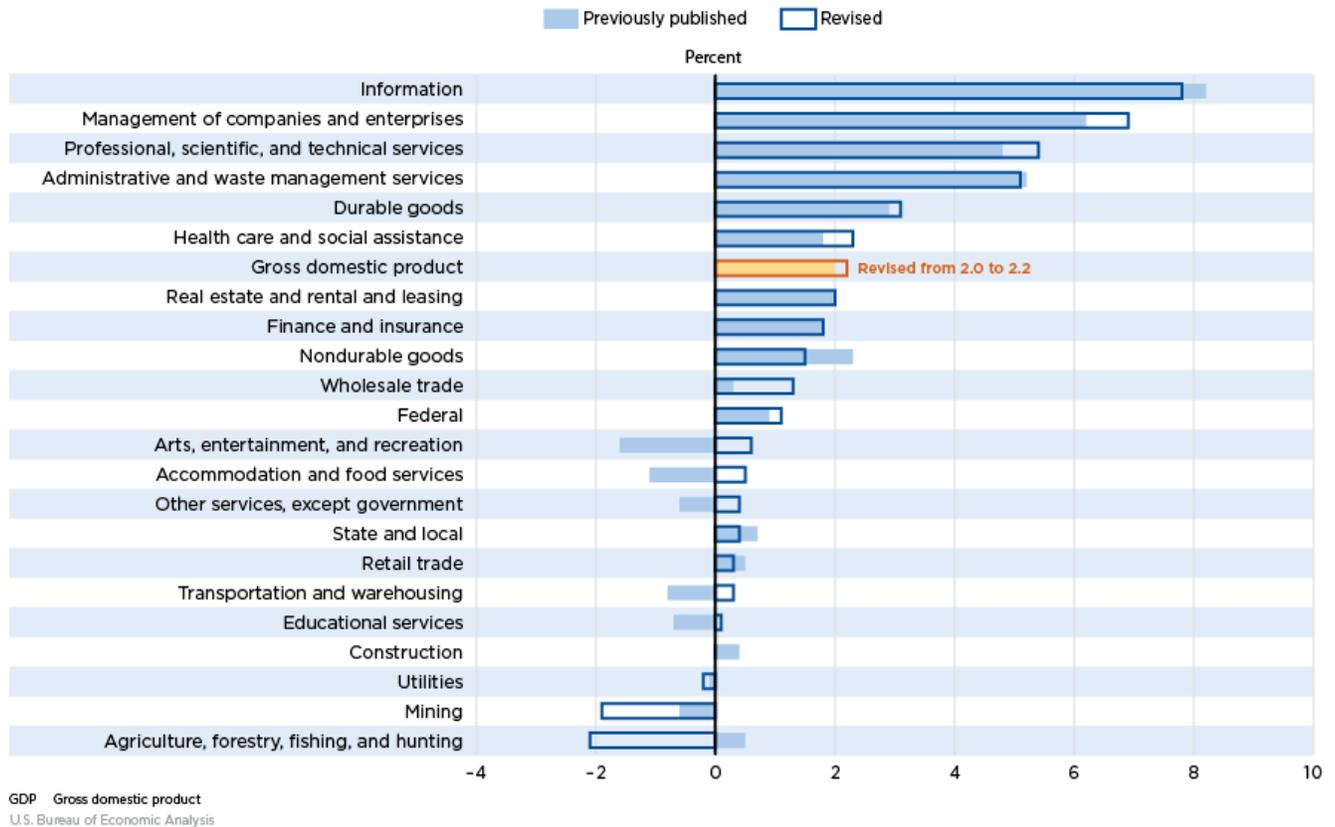


Chart 10 provides detail for 22 industry groups and illustrates that the direction of change over the period from the fourth quarter of 2016 to the first quarter of 2022 was reversed for 6 industries. The updated estimates show an increase over the period, rather than a decrease, for educational services; transportation and warehousing; "other" services, except government; accommodation and food services; and arts, entertainment, and recreation. The updated estimates show a decrease over the period, rather than an increase, for the agriculture, forestry, fishing, and hunting industry group. The largest revisions over the period were to the agriculture, forestry, fishing, and hunting industry group (revised down from 0.5 percent to -2.6 percent) and to the arts, entertainment, and recreation industry group (revised up from -1.6 percent to 0.6 percent).

Chart 10. Average Annual Rates of Change for Real GDP by Industry Group, 2016:Q4 to 2022:Q1



Notable industry revisions

As shown in Table 9, most industries show minimal or no revisions for 2017 and 2018, small revisions for 2019, and larger revisions for 2020. Revisions for 2019 and 2020 mainly reflect the incorporation of new and revised IRS SOI data. The sources of revision are more mixed for 2021, notably:

- For the mining industry, revisions throughout the update period were primarily to the oil and gas extraction industry; revisions for 2021 reflect the incorporation of revised data from the Energy Information Administration (EIA).
- For nondurable-goods manufacturing, revisions were primarily to the petroleum and coal products manufacturing industry and reflect the incorporation of revised EIA data.
- For wholesale trade, revisions for 2021 reflect the incorporation of benchmarked Census Monthly Wholesale Trade Survey data as well as the incorporation of revised BLS PPIs.
- For the health care and social assistance industry group, revisions were primarily to ambulatory health care services and hospitals. Revisions for 2020 largely reflect revised subsidies data in addition to newly available IRS SOI data. For 2021, the revisions largely reflect the incorporation of revised Census QSS data as well as BLS PPIs.
- For the accommodation and food services industry group, revisions were led by the food services and drinking places industry, and revisions for 2021 reflect revised Census MRTS data as well as BLS QCEW wage data.

Data Availability

Annual NIPA estimates for 1929 forward and quarterly estimates for 1947 forward are available on BEA's website in more than [350 interactive data tables](#) that are arranged in roughly the same order as the 7 summary accounts presented in appendix table B. The tables can be downloaded in a variety of formats, customized by date and by frequency, and displayed in charts.¹

Data on industry value added, gross output, and intermediate inputs are available in the industry interactive tables. Annual industry estimates are available for 1947 onward. In addition, more detailed annual statistics at the 138-industry level are available as part of the underlying detail for the IEAs for 1997 onward. Quarterly statistics are available at the 71-industry level for the first quarter of 2005 onward.

In addition to these data, the industry estimates include a selection of input-output statistics including new SUTs and direct and total requirements tables for 2021 and revised tables for 2017–2020. The supply table presents the total supply of goods and services from both domestic and foreign producers available for use in the domestic economy. The use table shows the use of this supply by domestic industries as intermediate inputs and by final users, including exports. The tables also show value added by industry.

The entire time series of industry statistics is available interactively on the BEA website. The GDP by industry section includes real, nominal, and price statistics for value added, gross output, intermediate inputs, and KLEMS (K–capital, L–labor, E–energy, M–materials, and S–purchased services) statistics as well as access to the underlying detail tables. The input-output section includes an annual time series of SUTs as well as total requirements tables. The 2007 and 2012 benchmark tables are also available as integrated parts of the time series.

The integrated macroeconomic accounts published jointly by BEA and the FRB, which relate production, income and spending, capital formation, financial transactions, and asset revaluations to changes in net worth for the major sectors of the U.S. economy, will be released later this year.

1. For a detailed description of the NIPA table numbering system, see the FAQ [“How are the NIPA tables organized?”](#) on BEA's website.

Appendix A: Impacts of the Annual Update on GDP Expenditure Components

Table A1. Real Personal Consumption Expenditures: Percent Change from Preceding Period

Line number	Series	Change from preceding period					Revision in percent change				
		Percent (annual rate)					(Percentage points)				
		2017	2018	2019	2020	2021	2017	2018	2019	2020	2021
1	Personal consumption expenditures	2.4	2.9	2.0	-3.0	8.3	0.0	0.0	-0.2	0.8	0.4
2	Goods	3.9	3.9	3.1	5.2	12.2	0.0	-0.1	-0.3	0.6	0.0
3	Durable goods	6.4	6.8	3.8	10.0	18.5	0.1	-0.2	-0.5	2.3	0.4
4	Motor vehicles and parts	4.9	3.7	-1.5	1.6	15.8	0.1	-0.4	-0.3	-1.7	0.8
5	Furnishings and durable household equipment	7.6	8.4	3.4	13.4	14.2	0.0	0.2	-0.1	5.8	-0.2
6	Recreational goods and vehicles	9.3	10.4	11.2	24.3	20.1	0.2	-0.5	-1.0	6.1	0.9
7	Other durable goods	3.0	5.6	3.9	-2.3	31.1	0.1	0.3	-0.6	-0.8	-1.2
8	Nondurable goods	2.6	2.5	2.8	2.7	8.8	-0.1	0.0	-0.1	-0.4	-0.3
9	Food and beverages purchased for off-premises consumption	3.6	2.2	2.1	5.7	3.7	0.0	-0.1	0.1	-1.9	-0.7
10	Clothing and footwear	1.9	2.7	3.1	-5.0	26.1	-0.1	-0.1	0.1	-1.0	-0.6
11	Gasoline and other energy goods	-0.5	-0.5	-0.3	-13.2	11.6	0.0	0.1	-0.2	0.5	1.9
12	Other nondurable goods	3.0	3.5	4.3	6.8	7.8	0.0	0.1	-0.3	1.0	-0.2
13	Services	1.7	2.4	1.5	-6.6	6.3	-0.1	0.0	-0.2	0.9	0.5
14	Household consumption expenditures (for services)	1.8	2.3	1.7	-7.5	7.5	0.0	0.0	-0.3	1.1	0.6
15	Housing and utilities	0.2	1.5	0.9	0.9	1.1	0.0	0.0	0.0	-0.1	0.0
16	Health care	2.1	2.6	3.5	-7.4	7.3	-0.1	0.0	0.2	1.0	0.1
17	Transportation services	3.9	4.2	3.3	-24.9	15.9	0.1	0.0	-0.1	0.9	3.6
18	Recreation services	1.5	1.8	1.5	-26.1	16.6	-0.2	-0.2	0.2	4.0	0.0
19	Food services and accommodations	2.7	2.9	1.9	-21.0	23.5	0.2	0.1	-0.2	0.9	0.6
20	Financial services and insurance	1.6	1.4	-3.1	1.6	3.9	-0.3	-0.1	-2.0	1.3	0.8
21	Other services	3.6	3.6	3.9	-7.3	9.0	0.0	0.0	-0.3	2.6	1.6
22	Final consumption expenditures of nonprofit institutions serving households	-0.6	4.2	-3.4	12.9	-14.6	-1.0	0.1	0.8	-3.3	-1.1
23	Gross output of nonprofit institutions	0.7	2.6	1.4	-1.7	0.9	-0.2	-0.1	0.4	0.9	0.3
24	Less: Receipts from sales of goods and services by nonprofit institutions	1.2	2.1	3.3	-6.9	7.7	0.0	0.0	0.3	2.5	0.5

Note. Percent changes are from [NIPA table 2.3.1](#).

Table A2. Real Personal Consumption Expenditures: Contributions to Percent Change

Line number	Series	Contributions to percent change					Revision in contributions to percent change				
		(Percentage points)					(Percentage points)				
		2017	2018	2019	2020	2021	2017	2018	2019	2020	2021
	Percent change at annual rate:										
1	Personal consumption expenditures (PCE)	2.4	2.9	2.0	-3.0	8.3	0.0	0.0	-0.2	0.8	0.4
	Percentage points at annual rates:										
2	Goods	1.21	1.23	0.97	1.6	4.06	0.00	-0.01	-0.07	0.17	0.04
3	Durable goods	0.66	0.71	0.39	1.04	2.18	0.01	-0.02	-0.05	0.24	0.11
4	Motor vehicles and parts	0.18	0.14	-0.06	0.06	0.62	0.00	-0.01	-0.02	-0.06	0.07
5	Furnishings and durable household equipment	0.18	0.2	0.08	0.34	0.42	0.00	0.00	-0.01	0.15	0.02
6	Recreational goods and vehicles	0.25	0.28	0.31	0.68	0.7	0.01	-0.01	-0.02	0.16	0.05
7	Other durable goods	0.05	0.09	0.06	-0.03	0.45	0.00	0.01	-0.01	-0.01	-0.02
8	Nondurable goods	0.55	0.52	0.58	0.55	1.89	-0.01	0.01	-0.02	-0.08	-0.06
9	Food and beverages purchased for off-premises consumption	0.26	0.16	0.15	0.41	0.3	0.00	-0.01	0.00	-0.14	-0.06
10	Clothing and footwear	0.05	0.08	0.08	-0.14	0.66	-0.01	0.00	0.00	-0.03	-0.02
11	Gasoline and other energy goods	-0.01	-0.01	-0.01	-0.28	0.23	0.00	0.00	-0.01	0.01	0.04
12	Other nondurable goods	0.24	0.29	0.35	0.56	0.7	0.00	0.01	-0.02	0.08	-0.02
13	Services	1.17	1.65	1.01	-4.59	4.23	-0.05	-0.01	-0.14	0.62	0.38
14	Household consumption expenditures (for services)	1.19	1.52	1.12	-4.98	4.76	-0.02	-0.01	-0.16	0.73	0.4
15	Housing and utilities	0.03	0.26	0.17	0.17	0.21	0.00	0.00	0.00	-0.02	0
16	Health care	0.36	0.43	0.59	-1.27	1.21	-0.01	-0.01	0.04	0.17	0.03
17	Transportation services	0.13	0.14	0.11	-0.84	0.42	0.01	0.00	-0.01	0.03	0.1
18	Recreation services	0.06	0.08	0.06	-1.06	0.51	-0.01	0.00	0.01	0.16	0.02
19	Food services and accommodations	0.19	0.2	0.13	-1.48	1.37	0.02	0.01	-0.01	0.06	0.06
20	Financial services and insurance	0.12	0.11	-0.26	0.12	0.32	-0.03	-0.01	-0.16	0.10	0.06
21	Other services	0.3	0.29	0.32	-0.62	0.72	0.00	-0.01	-0.03	0.22	0.14
22	Final consumption expenditures of nonprofit institutions serving households	-0.02	0.13	-0.11	0.39	-0.53	-0.03	0.00	0.03	-0.11	-0.03
23	Gross output of nonprofit institutions	0.08	0.3	0.16	-0.19	0.1	-0.03	-0.01	0.05	0.10	0.03
24	Less: Receipts from sales of goods and services by nonprofit institutions	0.1	0.17	0.27	-0.59	0.63	0.00	-0.01	0.02	0.20	0.05

Note. Contributions are from [NIPA table 2.3.2](#).

Table A3. Real Private Fixed Investment: Percent Change from Preceding Period

Line number	Series	Change from preceding period					Revision in percent change				
		Percent (annual rate)					(Percentage points)				
		2017	2018	2019	2020	2021	2017	2018	2019	2020	2021
1	Private fixed investment	4.1	4.9	2.5	-2.3	7.4	0.0	0.1	-0.7	0.4	-0.4
2	Nonresidential	4.1	6.5	3.6	-4.9	6.4	0.0	0.1	-0.7	0.4	-1.0
3	Structures	4.4	4.1	2.3	-10.1	-6.4	0.2	0.1	0.3	2.4	1.6
4	Commercial and health care	3.2	1.3	1.5	3.2	-7.6	0.0	0.0	0.0	4.6	0.0
5	Manufacturing	-13.5	-1.8	5.6	-9.5	-0.7	-0.1	0.0	0.0	3.9	0.5
6	Power and communication	-4.6	-5.7	7.4	-1.7	-8.4	0.0	0.0	0.0	3.0	5.8
7	Mining exploration, shafts, and wells	40.4	27.8	-0.3	-38.4	14.0	1.4	0.9	1.3	-0.9	2.7
8	Other structures	3.9	1.4	-0.6	-12.9	-17.8	0.0	0.0	-0.1	0.9	-0.4
9	Equipment	2.8	6.6	1.3	-10.5	10.3	0.0	0.2	-2.0	-2.2	-2.8
10	Information processing equipment	7.1	7.8	2.6	1.3	9.8	0.3	0.2	-1.1	-5.5	-4.8
11	Computers and peripheral equipment	6.7	13.6	1.8	11.6	7.7	1.0	0.0	-1.4	1.4	-5.2
12	Other	7.3	5.4	3.0	-3.2	10.8	0.0	0.2	-1.0	-8.6	-4.6
13	Industrial equipment	4.5	5.9	3.4	-8.2	11.9	0.3	0.1	1.2	-3.3	-2.1
14	Transportation equipment	-1.4	5.1	-3.2	-30.6	15.7	-0.4	0.2	-6.0	4.6	1.1
15	Other equipment	0.1	7.1	2.6	-7.0	5.5	0.1	0.2	-1.7	-5.4	-3.0
16	Intellectual property products	5.6	8.1	7.3	4.8	9.7	-0.1	0.0	0.1	2.0	-0.3
17	Software	10.8	11.6	7.0	8.7	12.8	-0.1	0.3	0.0	1.3	-0.5
18	Research and development	1.9	6.2	8.7	3.4	8.7	-0.1	-0.2	0.4	2.5	0.4
19	Entertainment, literary, and artistic originals	3.3	3.4	1.3	-5.6	-0.1	0.2	0.1	-0.9	1.3	-4.2
20	Residential	4.0	-0.6	-1.0	7.2	10.7	0.0	0.0	-0.1	0.4	1.5
21	Structures	4.0	-0.6	-1.0	7.2	10.7	0.0	0.0	-0.1	0.4	1.5
22	Permanent site	4.4	1.8	-4.4	7.1	19.4	0.0	0.0	0.0	1.2	1.8
23	Single family	6.7	2.8	-6.3	6.2	22.4	0.0	0.0	0.0	-0.1	4.1
24	Multifamily	-4.4	-2.0	4.3	10.6	6.9	0.0	0.0	0.0	6.4	-7.8
25	Other structures	3.6	-2.6	1.7	7.3	4.0	0.0	0.0	-0.2	-0.2	1.1
26	Equipment	6.6	1.7	0.8	7.1	9.1	0.0	0.3	0.0	0.5	-0.4

Note. Percent changes are from [NIPA table 5.3.1](#).

Table A4. Real Private Fixed Investment: Contributions to Percent Change

Line number	Series	Contributions to percent change					Revision in contributions to percent change				
		(Percentage points)					(Percentage points)				
		2017	2018	2019	2020	2021	2017	2018	2019	2020	2021
	Percent change at annual rate:										
1	Private fixed investment	4.1	4.9	2.5	-2.3	7.4	0.0	0.1	-0.7	0.4	-0.4
	Percentage points at annual rates:										
2	Nonresidential	3.19	5.01	2.76	-3.85	4.75	0.03	0.07	-0.61	0.33	-0.78
3	Structures	0.78	0.73	0.41	-1.83	-1.07	0.03	0.02	0.04	0.42	0.22
4	Commercial and health care	0.17	0.07	0.08	0.18	-0.44	0.00	0.00	0.00	0.25	-0.02
5	Manufacturing	-0.33	-0.04	0.11	-0.20	-0.01	-0.01	0.00	0.00	0.08	0.01
6	Power and communication	-0.18	-0.21	0.25	-0.06	-0.31	0.00	0.00	0.00	0.11	0.19
7	Mining exploration, shafts, and wells	0.97	0.86	-0.01	-1.28	0.27	0.03	0.03	0.05	-0.05	0.06
8	Other structures	0.14	0.05	-0.02	-0.46	-0.57	0.00	0.00	0.00	0.03	-0.02
9	Equipment	0.96	2.17	0.42	-3.36	2.96	0.02	0.06	-0.67	-0.65	-0.96
10	Information processing equipment	0.78	0.84	0.28	0.13	1.01	0.03	0.02	-0.12	-0.58	-0.61
11	Computers and peripheral equipment	0.21	0.42	0.06	0.36	0.26	0.03	0.00	-0.04	0.04	-0.19
12	Other	0.57	0.42	0.22	-0.23	0.74	0.00	0.02	-0.07	-0.62	-0.44
13	Industrial equipment	0.30	0.40	0.23	-0.56	0.76	0.02	0.01	0.08	-0.23	-0.16
14	Transportation equipment	-0.13	0.44	-0.28	-2.45	0.83	-0.04	0.01	-0.52	0.53	0.05
15	Other equipment	0.01	0.49	0.18	-0.49	0.36	0.01	0.02	-0.12	-0.38	-0.24
16	Intellectual property products	1.46	2.11	1.94	1.33	2.86	-0.01	0.00	0.02	0.55	-0.04
17	Software	1.12	1.24	0.77	0.99	1.55	-0.01	0.02	-0.01	0.16	-0.04
18	Research and development	0.25	0.78	1.13	0.48	1.31	0.00	-0.03	0.05	0.36	0.09
19	Entertainment, literary, and artistic originals	0.08	0.09	0.03	-0.14	0.00	0.00	0.00	-0.02	0.03	-0.09
20	Residential	0.90	-0.13	-0.22	1.58	2.69	0.00	0.00	-0.02	0.09	0.46
21	Structures	0.87	-0.14	-0.23	1.56	2.66	0.00	0.00	-0.02	0.09	0.47
22	Permanent site	0.43	0.19	-0.44	0.67	2.09	0.00	0.00	0.00	0.12	0.25
23	Single family	0.52	0.22	-0.51	0.47	1.95	0.00	0.00	0.00	0.00	0.40
24	Multifamily	-0.09	-0.04	0.08	0.20	0.14	0.00	0.00	0.00	0.12	-0.15
25	Other structures	0.44	-0.32	0.21	0.89	0.57	0.00	0.01	-0.02	-0.03	0.22
26	Equipment	0.02	0.01	0.00	0.03	0.04	0.00	0.00	0.00	0.01	0.00

Note. Contributions are from [NIPA table 5.3.2](#).

Table A5. Change in Real Private Inventories by Industry
(Billions of Chained (2012) dollars)

Line number	Series	Level					Revision in level				
		2017	2018	2019	2020	2021	2017	2018	2019	2020	2021
1	Change in private inventories	36.3	66.1	73.1	-54.6	-19.4	2.7	0.4	-2.0	-12.3	13.2
2	Farm	-7.0	-10.1	-18.7	-8.4	-3.9	-0.5	-0.9	-1.5	-0.7	19.0
3	Mining, utilities, and construction	-13.7	-11.2	14.6	0.7	-9.5	1.2	-0.1	0.6	4.8	-10.2
4	Manufacturing	5.0	18.6	46.5	-28.6	-46.1	-0.1	0.0	-0.4	-19.0	-10.7
5	Durable-goods industries	-1.0	12.2	28.8	-10.8	-28.3	0.1	-0.2	2.5	-5.1	5.1
6	Nondurable-goods industries	6.6	6.2	17.3	-18.7	-17.5	-0.2	0.2	-3.4	-14.7	-17.7
7	Wholesale trade	30.2	33.2	21.6	-24.4	26.2	1.7	0.1	0.2	-10.2	-8.1
8	Durable-goods industries	20.2	33.3	11.2	-28.4	31.8	0.8	0.4	-1.0	-2.9	-0.2
9	Nondurable-goods industries	9.8	-0.7	10.4	4.3	-5.9	0.8	-0.3	1.2	-7.5	-8.2
10	Retail trade	15.9	25.3	9.4	-7.1	-12.5	-0.8	0.2	-1.3	11.4	6.6
11	Motor vehicle and parts dealers	12.7	18.3	5.2	-17.0	-45.3	0.5	-1.0	-1.3	5.5	0.5
12	Food and beverage stores	2.0	1.6	0.6	1.0	-0.3	0.0	0.0	0.2	-0.1	-0.2
13	General merchandise stores	-3.1	2.0	-1.8	0.6	10.2	0.0	0.1	0.0	-2.0	2.8
14	Other retail stores	4.7	3.9	5.4	7.4	22.5	-1.3	1.0	-0.3	8.3	3.7
15	Other industries	3.2	6.7	-1.4	11.0	25.8	1.2	0.9	0.2	0.9	17.3
16	Residual	2.0	3.8	1.5	3.6	1.1	0.1	0.3	0.8	1.2	1.2

Note. Levels are from [NIPA table 5.7.6B](#). The chained-dollar series are calculated as the period-to-period change in end-of-period inventories. Because the formula for the chain-type quantity indexes uses weights of more than one period, chained-dollar estimates are usually not additive.

Table A6. Change in Real Private Inventories by Industry
(Billions of Chained (2012) dollars)

Line number	Series	Change from preceding period					Revision in change				
		2017	2018	2019	2020	2021	2017	2018	2019	2020	2021
1	Change in private inventories	0.6	29.8	7.0	-127.7	35.2	2.7	-2.3	-2.4	-10.3	25.5
2	Farm	-0.2	-3.1	-8.7	10.3	4.5	-0.5	-0.4	-0.6	0.8	19.7
3	Mining, utilities, and construction	-21.9	2.5	25.7	-13.9	-10.2	1.2	-1.3	0.7	4.2	-15.0
4	Manufacturing	3.1	13.6	27.9	-75.1	-17.4	-0.1	0.1	-0.4	-18.5	8.2
5	Durable-goods industries	13.3	13.2	16.7	-39.6	-17.5	0.1	-0.2	2.7	-7.6	10.2
6	Nondurable-goods industries	-12.2	-0.4	11.1	-35.9	1.2	-0.2	0.4	-3.6	-11.3	-2.9
7	Wholesale trade	15.4	3.0	-11.6	-46.0	50.6	1.7	-1.5	0.1	-10.5	2.2
8	Durable-goods industries	16.5	13.1	-22.2	-39.5	60.2	0.8	-0.5	-1.3	-1.9	2.7
9	Nondurable-goods industries	-1.6	-10.5	11.1	-6.1	-10.2	0.8	-1.1	1.5	-8.7	-0.7
10	Retail trade	-8.7	9.4	-16.0	-16.5	-5.4	-0.8	1.0	-1.5	12.8	-4.8
11	Motor vehicle and parts dealers	-5.1	5.6	-13.0	-22.2	-28.4	0.5	-1.5	-0.3	6.8	-5.0
12	Food and beverage stores	0.4	-0.4	-1.0	0.4	-1.3	0.0	0.0	0.2	-0.3	-0.1
13	General merchandise stores	-2.3	5.2	-3.8	2.4	9.5	0.0	0.1	-0.1	-2.0	4.8
14	Other retail stores	-1.7	-0.8	1.5	2.0	15.1	-1.3	2.3	-1.3	8.6	-4.6
15	Other industries	11.7	3.6	-8.1	12.4	14.8	1.2	-0.3	-0.6	0.7	16.4

Note. Level changes are calculated from [NIPA table 5.7.6B](#). The chained-dollar series are calculated as the period-to-period change in end-of-period inventories. Because the formula for the chain-type quantity indexes uses weights of more than one period, chained-dollar estimates are usually not additive.

Table A7. Real Exports of Goods and Services: Percent Change from Preceding Period

Line number	Series	Change from preceding period					Revision in percent change				
		Percent (annual rate)					(Percentage points)				
		2017	2018	2019	2020	2021	2017	2018	2019	2020	2021
1	Exports of goods and services	4.3	2.8	0.5	-13.2	6.1	0.2	0.0	0.6	0.4	1.6
2	Exports of goods	4.1	4.2	0.1	-10.1	7.4	0.0	0.0	0.2	0.1	-0.2
3	Foods, feeds, and beverages	0.4	-0.1	-1.3	4.9	-4.7	0.0	0.0	0.0	0.0	4.3
4	Industrial supplies and materials	8.7	6.7	3.4	-2.9	1.9	0.0	0.0	-0.1	0.0	-0.3
5	Capital goods, except automotive	2.5	4.7	-2.6	-16.2	10.9	0.0	0.0	0.5	0.0	-0.5
6	Automotive vehicles, engines, and parts	4.7	-0.2	2.3	-20.8	10.6	0.0	0.0	0.2	0.4	-1.1
7	Consumer goods, except food and automotive	3.4	3.2	-0.6	-15.3	26.4	0.0	0.0	0.0	0.0	-0.9
8	Other	-2.7	4.7	-3.1	-1.8	-1	0.0	0.0	-0.2	0.0	-4.1
9	Exports of services	4.5	0.2	1.2	-18.8	3.3	0.5	0.0	1.3	1.0	4.8
10	Transport	3.7	6.6	-2.2	-36.5	6.7	-0.1	0.0	0.0	0.3	6.7
11	Travel (for all purposes including education)	-0.1	-0.1	-2.7	-63.3	-6.3	0.0	0.0	-0.2	0.0	2.0
12	Charges for the use of intellectual property n.e.c.	2.6	-5	5.1	-6.9	3.6	0.0	0.0	6.0	-4.1	7.5
13	Other business services	7.6	0.4	2.9	0	4.3	1.0	0.0	1.0	2.3	4.1
14	Government goods and services n.e.c.	9.4	7.9	0.3	-3.9	1.6	4.4	-0.5	0.4	1.2	2.4
15	Other	-12.6	-24.1	-23.8	-18.2	28.7	0.0	0.0	0.0	8.3	44.1

n.e.c. Not elsewhere classified

Note. Percent changes are from [NIPA table 4.2.1](#).

Table A8. Real Exports of Goods and Services: Contributions to Percent Change

Line number	Series	Contributions to percent change					Revision in contributions to percent change				
		(Percentage points)					(Percentage points)				
		2017	2018	2019	2020	2021	2017	2018	2019	2020	2021
	Percent change at annual rate:										
1	Exports of goods and services	4.3	2.8	0.5	-13.2	6.1	0.20	0.00	0.60	0.40	1.60
	Percentage points at annual rate:										
2	Exports of goods	2.68	2.73	0.07	-6.53	4.96	0.00	0.00	0.11	0.04	-0.10
3	Foods, feeds, and beverages	0.02	-0.01	-0.07	0.26	-0.32	0.00	0.00	0.00	0.00	0.38
4	Industrial supplies and materials	1.55	1.32	0.71	-0.57	0.43	0.00	0.00	-0.01	0.00	-0.04
5	Capital goods, except automotive	0.58	1.03	-0.58	-3.56	2.25	0.00	0.00	0.11	0.01	-0.10
6	Automotive vehicles, engines, and parts	0.31	-0.01	0.14	-1.35	0.60	0.00	0.00	0.01	0.04	-0.14
7	Consumer goods, except food and automotive	0.29	0.26	-0.05	-1.26	2.03	0.00	0.00	0.00	0.01	-0.08
8	Other	-0.08	0.13	-0.09	-0.05	-0.03	0.00	0.00	-0.01	0.00	-0.12
9	Exports of services	1.59	0.07	0.40	-6.71	1.10	0.19	-0.01	0.42	0.28	1.63
10	Transport	0.14	0.24	-0.08	-1.31	0.17	0.00	0.00	0.00	0.02	0.17
11	Travel (for all purposes including education)	0.00	-0.01	-0.22	-5.00	-0.20	0.00	0.00	-0.02	0.04	0.14
12	Charges for the use of intellectual property n.e.c.	0.13	-0.25	0.23	-0.34	0.19	0.00	0.00	0.27	-0.21	0.38
13	Other business services	1.28	0.06	0.50	0.00	0.90	0.16	-0.01	0.17	0.41	0.87
14	Government goods and services n.e.c.	0.08	0.07	0.00	-0.03	0.02	0.04	0.00	0.00	0.02	0.03
15	Other	-0.03	-0.04	-0.03	-0.02	0.03	0.00	0.00	0.00	0.01	0.04

n.e.c. Not elsewhere classified

Note. Contributions are from [NIPA table 4.2.2](#).

Table A9. Real Imports of Goods and Services: Percent Change from Preceding Period

Line number	Series	Change from preceding period					Revision in percent change				
		Percent (annual rate)					(Percentage points)				
		2017	2018	2019	2020	2021	2017	2018	2019	2020	2021
1	Imports of goods and services	4.5	4.2	1.1	-9.0	14.1	0.0	-0.9	0.6	-3.4	-0.5
2	Imports of goods	4.5	5.1	0.5	-5.8	14.5	0.0	0.0	0.0	-0.2	-0.1
3	Foods, feeds, and beverages	2.3	7.7	2.8	3.2	9.3	0.0	0.0	0.1	-0.1	-0.3
4	Industrial supplies and materials	1.4	0.2	-5.2	-8.4	10.0	0.0	0.0	-0.1	-0.2	0.0
5	Capital goods, except automotive	9.4	8.3	-0.6	-4.0	16.6	0.0	0.0	0.0	-0.2	-0.2
6	Automotive vehicles, engines, and parts	2.8	3.6	1.6	-18.1	10.5	0.0	0.0	-0.2	-0.3	0.3
7	Consumer goods, except food and automotive	4.5	7.6	3.4	-0.5	20.7	0.0	0.0	0.0	-0.1	1.2
8	Other	-0.7	-1.3	11.5	-6.5	7.6	0.0	0.0	0.0	0.0	0.7
9	Imports of services	4.6	0.5	4.0	-22.0	12.3	0.3	0.5	0.1	0.6	0.8
10	Transport	2.5	8.7	2.3	-34.6	29.5	0.0	0.0	0.0	0.0	1.7
11	Travel (for all purposes including education)	7.2	7.4	5.0	-74.3	67.5	0.5	2.1	-0.3	-1.2	4.5
12	Charges for the use of intellectual property n.e.c.	3.8	-5.9	-2.6	11.3	-12.7	0.0	0.0	1.3	9.6	-22.5
13	Other business services	5.5	-4.1	5.4	0.8	6.8	0.5	0.2	0.3	-0.1	4.3
14	Government goods and services n.e.c.	-2.0	-1.6	4.7	0.0	-5.4	-0.1	0.7	-0.8	1.1	-2.0
15	Other	-9.0	-2.2	1.7	-30.7	25.6	0.0	0.0	0.2	-0.1	3.8

n.e.c. Not elsewhere classified

Note. Percent changes are from [NIPA table 4.2.1](#).

Table A10. Real Imports of Goods and Services: Contributions to Percent Change

Line number	Series	Contribution to percent change in real imports					Revision in contributions to percent change				
		(Percentage points)					(Percentage points)				
		2017	2018	2019	2020	2021	2017	2018	2019	2020	2021
	Percent change at annual rate:										
1	Imports of goods and services	4.5	4.2	1.1	-9	14.1	0.1	0.1	-0.1	-0.1	0.1
	Percentage points at annual rate:										
2	Imports of goods	3.63	4.11	0.40	-4.67	12.08	0.01	0.00	-0.03	-0.13	-0.02
3	Foods, feeds, and beverages	0.11	0.36	0.13	0.16	0.52	0.00	0.00	0.00	0.00	-0.02
4	Industrial supplies and materials	0.24	0.04	-0.93	-1.33	1.72	0.00	0.00	0.00	-0.02	-0.03
5	Capital goods, except automotive	2.01	1.79	-0.13	-0.89	3.76	0.01	0.00	0.00	-0.05	-0.10
6	Automotive vehicles, engines, and parts	0.35	0.43	0.19	-2.21	1.13	0.00	0.00	-0.02	-0.03	-0.08
7	Consumer goods, except food and automotive	0.96	1.54	0.69	-0.11	4.59	0.01	0.00	-0.01	-0.03	0.15
8	Other	-0.03	-0.06	0.45	-0.29	0.34	0.00	0.00	0.00	0.00	0.03
9	Imports of services	0.88	0.10	0.75	-4.29	2.06	0.06	0.11	0.03	0.10	0.15
10	Transport	0.08	0.29	0.08	-1.25	0.79	0.00	0.00	0.00	0.00	0.04
11	Travel (for all purposes including education)	0.28	0.30	0.20	-3.20	0.80	0.01	0.09	-0.01	-0.04	0.05
12	Charges for the use of intellectual property n.e.c.	0.06	-0.09	-0.04	0.16	-0.22	0.00	0.00	0.01	0.14	-0.37
13	Other business services	0.50	-0.38	0.46	0.08	0.69	0.05	0.01	0.03	0.00	0.44
14	Government goods and services n.e.c.	-0.02	-0.01	0.03	0.00	-0.05	-0.01	0.01	-0.01	0.01	-0.02
15	Other	-0.02	-0.01	0.00	-0.07	0.05	0.00	0.00	0.00	0.00	0.01

n.e.c. Not elsewhere classified

Note. Contributions are from [NIPA table 4.2.2](#).

**Table A11. Real Government Consumption Expenditures and Gross Investment (CEGI):
Percent Change from Preceding Period**

Line number	Series	Change from preceding period					Revision in percent change				
		Percent (annual rate)					(Percentage points)				
		2017	2018	2019	2020	2021	2017	2018	2019	2020	2021
1	Government consumption expenditures and gross investment	0.4	1.7	3.3	2.6	0.6	-0.1	0.3	1.1	0.1	0.1
2	Consumption expenditures	-0.1	1.2	3.4	2.2	1.3	-0.1	0.0	1.4	0.2	0.3
3	Gross investment	2.6	3.5	3.1	3.9	-2.3	0.0	1.3	0.2	-0.3	-0.5
4	Federal	0.4	3.0	3.9	6.2	2.3	0.1	0.0	0.1	1.2	1.7
5	National defense	0.9	3.3	5.3	2.9	-1.2	0.0	-0.1	0.1	0.0	-0.3
6	Consumption expenditures	0.4	2.8	4.8	2.0	-2.3	0.1	0.0	-0.1	0.1	0.3
7	Gross investment	3.2	5.7	7.2	6.5	3.0	-0.2	0.1	0.7	-0.4	-2.7
8	Nondefense	-0.3	2.5	1.9	11.2	7.3	0.2	0.0	0.3	3.1	4.5
9	Consumption expenditures	-1.3	1.7	1.3	11.5	10.4	0.3	-0.2	-0.1	2.0	6.4
10	Gross investment	2.8	4.7	3.6	10.2	-1.5	-0.1	0.3	1.3	5.9	-0.8
11	State and local	0.4	0.9	3.0	0.4	-0.5	-0.2	0.5	1.7	-0.5	-0.9
12	Consumption expenditures	0.0	0.6	3.3	0.3	0.4	-0.3	0.2	2.1	-0.1	-1.3
13	Gross investment	2.3	2.3	1.4	0.7	-4.8	0.0	2.1	-0.4	-2.4	0.4

Note. Percent changes are from [NIPA table 3.9.1](#).

**Table A12. Real Government Consumption Expenditures and Gross Investment (CEGI):
Contributions to Percent Change**

Line number	Series	Contribution to percent change in real government CEGI					Revision in contributions to percent change				
		(Percentage points)					(Percentage points)				
		2017	2018	2019	2020	2021	2017	2018	2019	2020	2021
	Percent change at annual rate:										
1	Government consumption expenditures and gross investment	0.4	1.7	3.3	2.6	0.6	-0.1	0.3	1.1	0.1	0.1
	Percentage points at annual rate:										
2	Consumption expenditures	-0.07	0.99	2.69	1.78	1.05	-0.08	0.05	1.06	0.16	0.22
3	Gross investment	0.5	0.69	0.62	0.78	-0.47	-0.01	0.25	0.05	-0.06	-0.12
4	Federal	0.16	1.11	1.46	2.33	0.89	0.03	-0.02	0.05	0.44	0.64
5	National defense	0.2	0.73	1.17	0.65	-0.27	0.00	-0.01	0.01	-0.01	-0.06
6	Consumption expenditures	0.07	0.49	0.86	0.36	-0.41	0.01	-0.01	-0.02	0.02	0.07
7	Gross investment	0.13	0.24	0.31	0.29	0.14	-0.01	0.00	0.03	-0.02	-0.12
8	Nondefense	-0.04	0.38	0.29	1.68	1.17	0.03	-0.01	0.04	0.45	0.71
9	Consumption expenditures	-0.15	0.19	0.14	1.27	1.23	0.03	-0.02	-0.02	0.21	0.75
10	Gross investment	0.11	0.19	0.15	0.41	-0.06	0.00	0.02	0.06	0.24	-0.03
11	State and local	0.27	0.57	1.85	0.22	-0.32	-0.12	0.32	1.06	-0.35	-0.56
12	Consumption expenditures	0.01	0.31	1.69	0.14	0.22	-0.12	0.08	1.10	-0.08	-0.61
13	Gross investment	0.26	0.26	0.16	0.08	-0.54	0.00	0.23	-0.04	-0.27	0.05

Note. Contributions are from [NIPA table 3.9.2](#).

Appendix B: Summary National Income and Product Accounts

Table B1. Summary National Income and Product Accounts, 2021

[Billions of dollars]

Account 1. Domestic income and product account					
Line	Series	2021	Line	Series	2021
1	Compensation of employees, paid	12,549.1	15	Personal consumption expenditures (3-3)	15,902.6
2	Wages and salaries	10,300.8	16	Goods	5,496.5
3	Domestic (3-12)	10,283.2	17	Durable goods	2,060.2
4	Rest of the world (5-15)	17.6	18	Nondurable goods	3,436.3
5	Supplements to wages and salaries (3-14)	2,248.4	19	Services	10,406.1
6	Taxes on production and imports (4-15)	1,663.4	20	Gross private domestic investment	4,113.5
7	Less: Subsidies (4-8)	481.9	21	Fixed investment (6-2)	4,132.6
8	Net operating surplus	5,881.8	22	Nonresidential	3,025.0
9	Private enterprises (2-19)	5,879.8	23	Structures	598.2
10	Current surplus of government enterprises (4-28)	2.1	24	Equipment	1,194.0
11	Consumption of fixed capital (6-14)	3,831.6	25	Intellectual property products	1,232.7
			26	Residential	1,107.6
12	Gross domestic income	23,444.0	27	Change in private inventories (6-4)	-19.1
			28	Net exports of goods and services	-861.7
13	Less: Statistical discrepancy (6-20)	-128.9	29	Exports (5-1)	2,539.6
			30	Imports (5-13)	3,401.4
			31	Government consumption expenditures and gross investment (4-1 plus 6-3)	4,160.7
			32	Federal	1,609.2
			33	National defense	904.0
			34	Nondefense	705.1
			35	State and local	2,551.6
14	Gross domestic product	23,315.1	36	Gross domestic product	23,315.1

Account 2. Private enterprise income account					
Line	Series	2021	Line	Series	2021
1	Income payments on assets	3,113.1	19	Net operating surplus, private enterprises (1-9)	5,879.8
2	Interest and miscellaneous payments (2-21 and 3-20 and 4-22 and 5-17)	2,656.1	20	Income receipts on assets	2,652.8
3	Dividend payments to the rest of the world (5-18)	244.9	21	Interest (2-2 and 3-4 and 4-7 and 5-5)	1,783.4
4	Reinvested earnings on foreign direct investment in the United States (5-19)	212.1	22	Dividend receipts from the rest of the world (5-6)	502.6
5	Business current transfer payments (net)	171.0	23	Reinvested earnings on U.S. direct investment abroad (5-7)	366.8
6	To persons (net) (3-24)	71.0			
7	To government (net) (4-25)	97.4			
8	To the rest of the world (net) (5-23 less 5-11 less 2-14)	2.7			
9	Proprietors' income with IVA and CCAdj (3-17)	1,753.6			
10	Rental income of persons with IVA and CCAdj (3-18)	723.8			
11	Corporate profits with IVA and CCAdj	2,771.1			
12	Taxes on corporate income	388.2			
13	To government (4-16)	374.4			
14	To the rest of the world (5-23)	13.8			
15	Profits after tax with IVA and CCAdj	2,382.8			
16	Net dividends (3-21 plus 4-23)	1,659.3			
17	Undistributed corporate profits with IVA and CCAdj (6-12)	723.6			
18	Uses of private enterprise income	8,532.6	24	Sources of private enterprise income	8,532.6

Account 3. Personal income and outlay account					
Line	Series	2021	Line	Series	2021
1	Personal current taxes (4-14)	2,661.7	10	Compensation of employees	12,538.5
2	Personal outlays	16,389.8	11	Wages and salaries	10,290.1
3	Personal consumption expenditures (1-15)	15,902.6	12	Domestic (1-3)	10,283.2
4	Personal interest payments (2-21 and 3-20 and 4-22 and 5-17)	274.4	13	Rest of the world (5-3)	6.9
5	Personal current transfer payments	212.8	14	Supplements to wages and salaries (1-5)	2,248.4
6	To government (4-26)	110.3	15	Employer contributions for employee pension and insurance funds	1,550.3
7	To the rest of the world (net) (5-21 less 5-9)	102.4	16	Employer contributions for government social insurance	698.1
8	Personal saving (6-11)	2,243.4	17	Proprietors' income with IVA and CCAdj (2-9)	1,753.6
			18	Rental income of persons with CCAdj (2-10)	723.8
			19	Personal income receipts on assets	3,202.4
			20	Personal interest income (2-2 plus 3-4 plus 4-7 plus 5-5 less 2-21 less 4-22 less 5-17)	1,658.6
			21	Personal dividend income (2-16 less 4-23)	1,543.9
			22	Personal current transfer receipts	4,617.3
			23	Government social benefits (4-4)	4,546.4
			24	From business (net) (2-6)	71.0
			25	Less: Contributions for government social insurance, domestic (4-19)	1,540.8
9	Personal taxes, outlays, and saving	21,294.8	26	Personal income	21,294.8

Account 4. Government receipts and expenditures account					
Line	Series	2021	Line	Series	2021
1	Consumption expenditures (1-31)	3,353.7	13	Current tax receipts	4,730.1
2	Current transfer payments	4,639.9	14	Personal current taxes (3-1)	2,661.7
3	Government social benefits	4,577.6	15	Taxes on production and imports (1-6)	1,663.4
4	To persons (3-23)	4,546.4	16	Taxes on corporate income (2-13)	374.4
5	To the rest of the world (5-22)	31.2	17	Taxes from the rest of the world (5-10)	30.6
6	Other current transfer payments to the rest of the world (5-22)	62.3	18	Contributions for government social insurance	1,546.2
7	Interest payments (2-21 and 3-20 and 4-22 and 5-17)	866.7	19	From persons (3-25)	1,540.8
8	Subsidies (1-7)	481.9	20	From the rest of the world (5-10)	5.4
9	Net government saving (6-13)	-2,610.5	21	Income receipts on assets	242.0
10	Federal	-2,835.3	22	Interest and miscellaneous receipts (2-2 and 3-4 and 4-7 and 5-5)	126.6
11	State and local	224.9	23	Dividends (2-16 less 3-21)	115.4
			24	Current transfer receipts	211.4
			25	From business (net) (2-7)	97.4
			26	From persons (3-6)	110.3
			27	From the rest of the world (5-10)	3.7
			28	Current surplus of government enterprises (1-10)	2.1
12	Government current expenditures and net saving	6,731.8	29	Government current receipts	6,731.8

Account 5. Foreign transactions current account					
Line	Series	2021	Line	Series	2021
1	Exports of goods and services (1-29)	2,539.6	13	Imports of goods and services (1-30)	3,401.4
2	Income receipts from the rest of the world	1,087.0	14	Income payments to the rest of the world	913.9
3	Wage and salary receipts (3-13)	6.9	15	Wage and salary payments (1-4)	17.6
4	Income receipts on assets	1,080.1	16	Income payments on assets	896.3
5	Interest (2-21 and 3-20 and 4-22)	210.7	17	Interest (2-2 and 3-4 and 4-7)	439.3
6	Dividends (2-22)	502.6	18	Dividends (2-3)	244.9
7	Reinvested earnings on U.S. direct investment abroad (2-23)	366.8	19	Reinvested earnings on foreign direct investment in the United States (2-4)	212.1
8	Current taxes, contributions for government social insurance, and transfer receipts from the rest of the world	176.8	20	Current taxes and transfer payments to the rest of the world	349.6
9	To persons (5-21 less 3-7)	7.0	21	From persons (3-7)	109.4
10	To government (4-17 plus 4-20 plus 4-27)	39.7	22	From government (4-5 plus 4-6)	93.6
11	To business (2-8)	130.1	23	From business (2-8 and 2-14)	146.6
			24	Balance on current account, national income and product accounts (7-1)	-861.4
12	Current receipts from the rest of the world	3,803.5	25	Current payments to the rest of the world and balance on current account, NIPAs	3,803.5

Account 6. Domestic capital account					
Line	Series	2021	Line	Series	2021
1	Gross domestic investment	4,920.5	10	Net saving	356.5
2	Private fixed investment (1-21)	4,132.6	11	Personal saving (3-8)	2,243.4
3	Government fixed investment (1-31)	807.0	12	Undistributed corporate profits with IVA and CCAdj (2-17)	723.6
4	Change in private inventories (1-27)	-19.1	13	Net government saving (4-9)	-2,610.5
5	Capital account transactions (net) (7-2)	3.6	14	Plus: Consumption of fixed capital (1-11)	3,831.6
6	Transfer payments for catastrophic losses (net) (7-3)	3.5	15	Private	3,184.5
7	Other capital account transactions (7-4)	0.1	16	Government	647.1
8	Net lending or net borrowing (-), national income and product accounts (7-5)	-865.0	17	General government	559.5
			18	Government enterprises	87.6
			19	Equals: Gross saving	4,188.1
			20	Statistical discrepancy (1-13)	-128.9
9	Gross domestic investment, capital account transactions (net), and net lending, NIPAs	4,059.1	21	Gross saving and statistical discrepancy	4,059.1

Account 7. Foreign transactions capital account					
Line	Series	2021	Line	Series	2021
			2	Capital account transactions (net) (6-5)	3.6
			3	Transfer payments for catastrophic losses (net) (6-6)	3.5
			4	Other capital account transactions (6-7)	0.1
			5	Net lending or net borrowing (-), national income and product accounts (6-8)	-865.0
1	Balance on current account, NIPAs (5-24)	-861.4	6	Capital account transactions (net) and net lending, NIPAs (6-5)	-861.4

CCAdj Capital consumption adjustment

IVA Inventory valuation adjustment

NIPAs National Income and Product Accounts

Note. The seven summary accounts constitute a double-entry accounting system in which each of the entries in a summary account appears again in that account or in one of the other summary accounts. The numbers in parentheses indicate these "counterentries." In some cases, an entry may be equal to another entry in the summary accounts. For example, supplements to wages and salaries appears in account 1, line 5 and in account 3, line 14. In other cases, an entry may be equal to a combination of other entries (or of parts of other entries). For example, for private enterprise interest payments (account 2, line 2), the counterentry includes parts of private enterprise interest receipts (account 2, line 21), of personal interest income (account 3, line 20), of government interest receipts (account 4, line 22), and of interest payments to the rest of the world (account 5, line 17).

Appendix C: Industry Source Data Tables

Table C1. Principal Data Sources for Industry and Commodity Output and Prices

Industry and commodity	2012 benchmark-year sources	Nonbenchmark-year sources	Source for price indexes
Agriculture, forestry, fishing and hunting			
Farms	BEA NIPA statistics based on USDA ERS data	Farm output from BEA NIPAs based on USDA ERS data	NIPA prices based on USDA price indexes received by farmers
Forestry, fishing, and related activities	For forestry, logging, hunting, and trapping, BEA NIPA farm output; for fishing, commercial landings data from NOAA, Census Bureau 2012 Economic Census NAICS Sector 11, and ERS data	For forestry, logging, hunting, and trapping, BEA NIPA farm output; for fishing, commercial landings data from NOAA, Census Bureau M3 data, and ERS data	BLS PPI, NIPA PCE prices, USDA/National Agricultural Statistics Service unit prices
Mining			
Oil and gas extraction	Census Bureau 2012 Economic Census, NAICS Sector 21, Mining	EIA data on quantities produced and prices	BLS PPI and EIA
Mining, except oil and gas	Census Bureau 2012 Economic Census, NAICS Sector 21, Mining	For coal mining, <i>EIA U.S. Coal Supply and Demand in Review</i> ; for uranium, <i>EIA Uranium Marketing Annual Report</i> ; for all other, USGS Mineral Commodity Summaries and Mineral Industry Survey	EIA, USGS, and BLS PPI
Support activities for mining	Census Bureau 2012 Economic Census, NAICS Sector 21, Mining	For mining exploration, trade source data on drilling costs and footage drilled; all other support activities, USGS <i>Mineral Commodity Summaries</i>	EIA, USGS, BLS PPI, and trade sources
Utilities			
Utilities	For electric power generation, transmission, and distribution; natural gas distribution; and water, sewage, and other systems, Census Bureau 2012 Economic Census	For electric power generation transmission and distribution, EIA forms 861 and 861M; for natural gas distribution, EIA form 176 and <i>Natural Gas Monthly</i> ; for water, sewage, and other systems, Census Bureau SAS	BLS CPI and BLS PPI
Construction			
Residential	Census Bureau VIP survey	Census Bureau VIP survey	Census Bureau price deflator for multi-family home construction, composite price of new single-family houses under construction and the Turner Cost Index, and BEA prices
Nonresidential	Census Bureau VIP survey	Census Bureau VIP survey, DOD expenditures, USDA expenditures, and BLS occupational employment statistics	BLS PPI and BEA composite prices based on trade source data and on the Census Bureau price deflator for single-family houses under construction
Manufacturing			
Manufacturing	Census Bureau 2012 Economic Census, NAICS Sector 31-33, Manufacturing	Census Bureau ASM data, M3 shipments and inventories data, nonemployer survey data, EIA production data, FRB data, and BLS PPI	BLS PPI and NIPA prices based on DOD prices paid for military equipment, and NIPA hedonic prices
Wholesale trade			
Wholesale trade	Census Bureau 2012 Economic Census, NAICS Sector 42, Wholesale Trade; Census Bureau 2012 Annual Wholesale Trade Survey	Census Bureau Monthly Wholesale Trade Survey and Annual Wholesale Trade Survey	BLS PPI and NIPA sales deflators
Retail trade			
Retail trade	Census Bureau 2012 Economic Census, NAICS Sector 44-45, Retail Trade; Census Bureau 2012 ARTS	Census Bureau Monthly Retail Trade Survey and ARTS	BLS PPI and NIPA sales deflators
Transportation and warehousing			
Air transportation	Census Bureau, 2012 Economic Census, NAICS Sector 48-49, Transportation and Warehousing; DOT BTS	Census Bureau SAS data; DOT BTS Air Carrier Financial Statistics (ACFS) and U.S. Air Carrier Traffic Statistics (ACTS); for 2021 only Census Bureau QSS data	BLS PPI
Rail transportation	For rail passenger, Amtrak Annual Report; for rail freight, DOT STB selected earning data	For rail passenger, Amtrak Annual Report; for rail freight, DOT STB selected earning data	BLS PPI
Water transportation	Census Bureau, 2012 Economic Census, NAICS Sector 48-49, Transportation and Warehousing	Census Bureau SAS data; for 2021 only Census Bureau QSS data	For freight, BLS PPI; for passenger, BLS CPI
Truck transportation	Census Bureau, 2012 Economic Census, NAICS Sector 48-49, Transportation and Warehousing	Census Bureau SAS data; for 2021 only Census Bureau QSS data	BLS PPI
Transit and ground passenger transportation	Census Bureau, 2012 Economic Census, NAICS Sector 48-49, Transportation and Warehousing	Census Bureau SAS data; for 2021 only Census Bureau QSS data	NIPA PCE prices
Pipeline transportation	Census Bureau, 2012 Economic Census, NAICS Sector 48-49, Transportation and Warehousing	Census Bureau SAS data; for 2021 only Census Bureau QSS data	BLS PPI
Other transportation and support activities	Census Bureau, 2012 Economic Census, NAICS Sector 48-49, Transportation and Warehousing	Census Bureau SAS data; for 2021 only Census Bureau QSS data	BLS PPI and NIPA PCE prices
Warehousing and storage	Census Bureau, 2012 Economic Census, NAICS Sector 48-49, Transportation and Warehousing	Census Bureau SAS data; for 2021 only Census Bureau QSS data	BLS PPI

Industry and commodity	2012 benchmark-year sources	Nonbenchmark-year sources	Source for price indexes
Information			
Publishing industries, except internet (includes software)	Census Bureau 2012 Economic Census, NAICS Sector 51, Information	Census Bureau SAS data; for 2021 only, Census Bureau QSS data	BLS PPI and BEA price indexes for software
Motion picture and sound recording industries	Census Bureau 2012 Economic Census, NAICS Sector 51, Information	Census Bureau SAS data; for 2021 only, Census Bureau QSS data	NIPA PCE prices
Broadcasting and telecommunications	Census Bureau 2012 Economic Census, NAICS Sector 51, Information	Census Bureau SAS data; for 2021 only, Census Bureau QSS data	BLS PPI
Data processing, internet publishing, and other information services	Census Bureau 2012 Economic Census, NAICS Sector 51, Information	Census Bureau SAS data; for 2021 only, Census Bureau QSS data	BLS PPI and NIPA PCE prices
Finance and insurance			
Federal Reserve banks, credit intermediation, and related activities	Census Bureau 2012 Economic Census, NAICS Sector 52, Finance and Insurance; IRS Statistics of Income; FRB 2012 Annual Report; and FDIC, 2012 Statistics on Banking	Census Bureau SAS data; for 2021 only, Census Bureau QSS data	FRB-priced services and NIPA PCE prices
Securities, commodity contracts, and investments	Census Bureau 2012 Economic Census, NAICS Sector 52, Finance and Insurance; IRS Statistics of Income; and New York Stock Exchange, 2012 Annual Report	Census Bureau SAS data; for 2021 only Census Bureau QSS data; NIPA PCE, BLS QCEW data, and NIPA R&D data	BLS PPI and NIPA PCE prices
Insurance carriers and related activities	AM Best Company statistics; Census Bureau 2012 Economic Census, NAICS Sector 52, Finance and Insurance; American Council of Life Insurers Handbook; BEA NIPA statistics on medical and hospital insurance premiums	For property and casualty insurance, life insurance, and reinsurance, A M Best Company statistics and Census Bureau SAS (for 2021 only, Census Bureau QSS data); for medical and hospitalization insurance, private trade source data and BEA NIPA statistics on medical and hospital insurance premiums	BLS PPI and NIPA PCE prices
Funds, trusts, and other financial vehicles	NIPA imputed service charges for other financial institutions	NIPA imputed service charges for other financial institutions	NIPA PCE prices
Real estate and rental and leasing			
Real estate	Census Bureau 2012 Economic Census, NAICS Sector 53, Real Estate and Rental and Leasing; For residential dwellings, NIPA housing data and USDA data on farm housing; for nonresidential structures, IRS tabulations of business tax returns, NIPA rental value of buildings owned by nonprofit institutions serving households, and NIPA foreign trade statistics	For residential dwellings, NIPA housing data and USDA data on farm housing; for nonresidential structures, IRS tabulations of business tax returns, NIPA rental value of buildings owned by nonprofit institutions serving households, and NIPA foreign trade statistics	For residential dwellings, NIPA PCE prices and NIPA implicit price deflators for farm rents paid; for nonresidential structures, BLS PPI; for real estate managers and agents, BLS PPI and trade source data
Rental and leasing services and lessors of intangible assets	Census Bureau 2012 Economic Census, NAICS Sector 53, Real Estate and Rental and Leasing; for royalties, IRS tabulations of business tax returns	For rental and leasing services, Census Bureau SAS data; for royalties, IRS tabulations of business tax returns	BLS PPI, BTS and construction index, mining, crude oil receipts, and trade source data
Professional, scientific, and technical services			
Legal services	Census Bureau 2012 Economic Census, NAICS Sector 54, Professional, Scientific, and Technical Services	Census Bureau SAS data; for 2021 only Census Bureau QSS data, BLS QCEW data	BLS PPI and NIPA PCE prices
Computer systems design and related services	Census Bureau 2012 Economic Census, NAICS Sector 54, Professional, Scientific, and Technical Services	Census Bureau SAS data; for 2021 only Census Bureau QSS data	BEA price indexes for software
Miscellaneous professional, scientific, and technical services	Census Bureau 2012 Economic Census, NAICS Sector 54, Professional, Scientific, and Technical Services	Census Bureau SAS data; for 2021 only Census Bureau QSS data; NIPA PCE, BLS QCEW data, and NIPA R&D data	BLS PPI, NIPA PCE prices, and BEA price indexes for R&D
Management of companies and enterprises			
Management of companies and enterprises	Census Bureau 2012 Economic Census, NAICS Sector 55, Management of Companies and Enterprises	BLS QCEW data	BLS PPI
Administrative and waste management services			
Administrative and waste management services	Census Bureau 2012 Economic Census, NAICS Sector 56, Administrative and Support and Waste Management and Remediation Services	Census Bureau SAS data; for 2021 only Census Bureau QSS data; BLS QCEW for auxiliary industries	BLS PPI and NIPA PCE prices
Educational Services			
Educational Services	Census Bureau 2012 Economic Census, NAICS Sector 61, Educational Services; Department of Education, National Center for Education Statistics, 2012 Digest of Education Statistics	PCE data for education services based on data from the Department of Education and data from BLS consumer expenditure survey	NIPA PCE prices
Health care and social assistance			
Health care and social assistance	Census Bureau 2012 Economic Census, NAICS Sector 62, Health Care and Social Assistance	Census Bureau SAS data; for 2021 only Census Bureau QSS data	BLS PPI and NIPA PCE prices

Industry and commodity	2012 benchmark-year sources	Nonbenchmark-year sources	Source for price indexes
Arts, entertainment, and recreation			
Arts, entertainment, and recreation	Census Bureau 2012 Economic Census, NAICS Sector 71, Arts, Entertainment, and Recreation	Census Bureau SAS data; for 2021 only Census Bureau QSS data	BLS PPI and NIPA PCE prices
Accommodation and food services			
Accommodation	Census Bureau 2012 Economic Census, NAICS Sector 72, Accommodation and Food Services	For hotels and motels, PCE; for all other traveler accommodations and bed and breakfasts, BLS QCEW data	BLS PPI and NIPA PCE prices
Food services and drinking places	Census Bureau 2012 Economic Census, NAICS Sector 72, Accommodation and Food Services	Census Bureau ARTS data	NIPA PCE prices
Other services, except government			
Other services, except government	For religious, grant making, civic, and other nonprofit services; personal services and dry cleaning services; and repair and maintenance: 2012 Economic Census taxable revenue and tax-exempt expenses, NIPA PCE, NIPA WS; for private household services, PCE	For religious, grant making, civic, and other nonprofit services, personal services, and dry cleaning services, Census Bureau SAS data, for 2021 only Census Bureau QSS data, PCE, and data from the National Center for Charitable Statistics; for repair and maintenance, BLS QCEW; for private household services, PCE	BLS PPI and NIPA PCE prices
Federal			
General government	Federal budget data; Center for Medicare and Medicaid Services; BLS Current Employment Statistics	NIPA government expenditure statistics; for federal structures, DOD investment expenditures	NIPA prices based on BLS PPI and CPI; for military facilities, DOD data on employment, prices for military construction, and construction cost indexes from trade source data
Government enterprises	U.S. Postal Service receipts; EIA data for electric utilities; FHA data; federal government agency reports for specific federal enterprises	U.S. Postal Service receipts; EIA data for electric utilities; FHA data; government agency data for specific federal enterprises	BLS PPI
State and local			
General government	Census Bureau 2012 Census of Governments; Census Bureau 2012 Government Finances; Census Bureau 2012 Public Employment	NIPA government expenditure statistics	BLS PPI and NIPA PCE prices
Government enterprises	Census Bureau 2012 Census of Governments; Census Bureau 2012 Government Finances; Census Bureau 2012 Public Employment; Alaska Railroad Administration data for Alaskan ferries, watersports, and airports; for electric utilities, EIA data; for state and local government structures, Census Bureau VIP survey	NIPA statistics on government enterprises based on the Census Bureau annual survey of government finances; for Alaskan ferries, watersports, and airports, Alaska Railroad Administration; for electric utilities, EIA data; for state and local government structures, Census Bureau VIP survey	BLS PPI and NIPA PCE prices

ARTS	Annual Retail Trade Survey
ASM	Annual Survey of Manufactures
BEA	Bureau of Economic Analysis
BLS	Bureau of Labor Statistics
BTS	Bureau of Transportation Statistics
CPI	Consumer Price Index
DOD	Department of Defense
DOE	Department of Energy
DOT	Department of Transportation
EIA	Energy Information Administration
ERS	Economic Research Service
FDIC	Federal Deposit Insurance Corporation
FHA	Federal Housing Administration
FRB	Federal Reserve Board
IRS	Internal Revenue Service
ITAs	International Transactions Accounts
M3	Manufacturers' Shipments, Inventories, and Orders

NAICS	North American Industry Classification System
NIPA	National Income and Product Accounts
NOAA	National Oceanic and Atmospheric Administration
PCE	Personal Consumption Expenditures
PPI	Producer Price Index
QCEW	Quarterly Census of Employment and Wages
R&D	Research and development
SAS	Service Annual Survey
SEC	Securities and Exchange Commission
SOI	Statistics of Income
STB	Surface Transportation Board
USDA	United States Department of Agriculture
USGS	United States Geological Survey
VIP	Value of Construction Put in Place Survey

Table C2. Principal Data Sources and Methods for Estimating Intermediate Inputs and Value Added

Intermediate inputs ¹	
Agriculture, forestry, fishing, and hunting	Inputs to the agriculture, forestry, fishing, and hunting industries were estimated from U.S. Department of Agriculture 2012 Census of Agriculture or by extrapolating 2007 benchmark I-O estimates.
Mining	Inputs to the mining industries were estimated primarily from 2012 Economic Census mining sector reports. Detailed expense data used to estimate intermediate inputs included accounting, auditing, and bookkeeping services; advertising and promotional expenses; communication services; legal services; purchased electricity; purchased fuels consumed; rental payments for buildings and other structures; rental payments for machinery and equipment; supplies used and minerals received; and all other operating expenses.
Construction	Inputs to the construction industries were estimated primarily from 2012 Economic Census construction data.
Manufacturing	Inputs to the manufacturing industries were estimated primarily from 2012 Economic Census manufacturing sector reports. Detailed expense data used to estimate intermediate inputs included accounting, auditing, and bookkeeping services; advertising and promotional services; communication services; legal services; management consulting and administrative services; materials, parts, containers, packaging, etc. used; purchased computer services; purchased electricity; purchased fuels; refuse removal services; rental payments for buildings and other structures; rental payments for machinery and equipment; repair and maintenance services of buildings and/or machinery; and all other operating expenses. Inputs were also interpolated using the 2007 benchmark I-O estimates and ASM data.
Wholesale trade, retail trade, and accommodation and food services	Inputs to the wholesale trade, retail trade, and accommodation and food services industries were estimated primarily from the Census Bureau 2012 AWTS and ARTS quinquennial Business Expenses Supplement. Detailed expense data used to estimate intermediate inputs included packaging materials and containers; data processing and other purchased computer services; communication services; repairs and maintenance to machinery and equipment; repairs and maintenance to buildings, structures, and offices; rental payments for machinery and equipment; rental payments for buildings, offices, and stores; purchased electricity; purchased fuels (except motor fuels); water, sewer, refuse removal, and other utility payments; purchased transportation, shipping, and warehousing services; purchased advertising and promotional services; and purchased professional and technical services. Inputs were also interpolated using the 2007 benchmark I-O estimates.
Services, transportation and warehousing, and utilities	For selected Census-covered industries, information from the 2012 SAS on operating expenses was used. Detailed expense data used to estimate intermediate inputs included materials, parts, and supplies (not for resale); purchased electricity; purchased fuels (except motor fuels); rental payments for machinery, equipment, and other tangible items; rental payments for buildings, structures, and land; repairs and maintenance to machinery and equipment; repairs and maintenance to buildings, structures, and offices; advertising and promotional services; printing services; data processing and other purchased computer services; communication services; water, sewer, refuse removal, and other utilities; professional and technical services; and all other operating expenses. For industries not covered by Census, inputs were estimated from a variety of sources, including data from the 2012 SAS on operating expenses, and data from Amtrak, Department of Transportation Surface Transportation Board, Alaska Rail, Department of Energy, and Federal Reserve Board.
Value added	
Compensation of employees	Tabulations of wages and salaries from the Bureau of Labor Statistics QCEW program, and estimates of supplements to wages and salaries from the NIPAs were used; data were adjusted for misreporting and I-O industry definitions. For industries not covered by the QCEW, payroll data from the 2012 Economic Census were used; data were adjusted for misreporting and I-O industry definitions. Benefits data were based on the relationship between the Economic Census, SAS, and Business Expenses Supplement reported benefits and payroll data, applied to the 2012 QCEW wage and salary data. For the remaining industries, benefits were estimated using indirect techniques. All estimates were adjusted to sum to total compensation by industry in the NIPAs.
Taxes on production and imports less subsidies	The estimates by industry were prepared in two parts: For excise and general sales taxes, the values were estimated either as part of each industry's output or directly assigned; for other taxes, assessments and license fees, the estimates were distributed on the basis of a variety of source data, including state government tax collections statistics, the ASM, ARTS, AWTS and SAS. For all other tax liabilities, estimates were distributed to industries using indirect techniques. Subsidies are directly assigned to specific industries based on which industry is collecting the subsidy. All estimates were adjusted to balance to total taxes on production and imports less subsidies, by industry in the national income and product accounts.
Gross operating surplus	For most industries, gross operating surplus reflects a quality-weighted average of a residual estimate (total industry output less total intermediate inputs, compensation of employees, and taxes on production and imports less subsidies) and a direct estimate based on summing up the components of gross operating surplus from the NIPAs, adjusted to an establishment basis. NIPA estimates of gross operating surplus are primarily based on IRS Statistics of Income data. ²

ARTS	Annual Retail Survey
ASM	Annual Survey of Manufactures
AWTS	Annual Wholesale Trade Survey
I-O	Input-Output
NIPAs	National Income and Product Accounts
QCEW	Quarterly Census of Employment and Wages
SAS	Service Annual Survey

1. Estimates for intermediate inputs were adjusted during the process of balancing commodity purchases across industries with commodity output totals.

2. See Dylan G. Rassier, Thomas F. Howells III, Edward T. Morgan, Nicholas R. Empey, and Conrad E. Roesch, "Integrating the 2002 Benchmark Input-Output Accounts with the 2002 Annual Industry Accounts," *Survey of Current Business* 87 (December 2007): 14–22.

Table C3. Principal Data Sources for Quarterly Industry and Commodity Output and Prices

Industry and commodity	Source data for current-dollar statistics	Source for price indexes
Agriculture, forestry, fishing, and hunting		
Farms	Farm output from the BEA NIPAs based on USDA ERS data	NIPA prices based on USDA price indexes received by farmers
Forestry, fishing, and related activities	For forestry, FRB IPI and BLS PPI; for fishing, commercial fishery landings data from NOAA, and Census M3 data	BLS PPI and USDA National Agriculture Statistics Services unit prices
Mining		
Oil and gas extraction	FRB IPI and BLS PPI	BLS PPI
Mining, except oil and gas	FRB IPI and BLS PPI	BLS PPI
Support activities for mining	FRB IPI, BLS PPI, and NIPA fixed investment in mining exploration based on trade source data	BLS PPI and NIPA prices based on trade source data
Utilities		
Utilities	For electric power generation, transmission, and distribution, EIA form 861M; for natural gas distribution, EIA <i>Natural Gas Monthly</i> ; for water, sewage, and other systems, Census Bureau QSS	BLS CPI and BLS PPI
Construction		
Residential	NIPA fixed investment in structures based primarily on Census Bureau VIP survey	Census Bureau price deflator for multi-family home construction, composite price of new single-family houses under construction and the Turner Cost Index, and BEA prices
Nonresidential	NIPA fixed investment in structures based primarily on Census Bureau VIP survey	BEA composite prices based on trade source data and on data from the Bureau of Reclamation and BLS PPI
Manufacturing		
Manufacturing	Census Bureau M3 and NIPA electronic computer shipments; for petroleum products, EIA production data and BLS PPI	BLS PPI and NIPA price indexes based on DOD prices paid for military equipment and NIPA hedonic prices
Wholesale trade		
Wholesale trade	Census Bureau Monthly Wholesale Trade Survey data	BLS PPI and NIPA sales deflators
Retail trade		
Retail trade	Census Bureau Monthly Retail Trade Survey data	BLS PPI and NIPA sales deflators
Transportation and warehousing		
Transportation and warehousing	For air transportation, NIPA PCE and Census Bureau QSS data; for rail transportation, Surface Transportation Board freight earnings data; for water, truck, transit and ground passenger, pipeline transportation, and warehousing, Census Bureau QSS data	For air transportation, BLS PPI; for rail, BLS PPI for rail passenger transportation and BLS PPI for freight; water transportation, BLS PPI, BLS CPI, and trade source data; for truck transportation, BLS PPI; for transit and ground passenger transportation, NIPA PCE prices; for pipeline transportation, BLS PPI; for warehousing, BLS PPI; for other transportation and support activities, NIPA PCE prices and BLS PPI
Information		
Information	Census Bureau QSS data, BLS QCEW, and box office revenues from trade source data	For publishing industries (including software), BEA prices for software and BLS PPI; for information and data processing, NIPA PCE prices and BLS PPI
Finance and insurance		
Federal Reserve banks, credit intermediation, and related activities	Census Bureau QSS data, Federal Deposit Insurance Corporation commercial bank call report data, FBR data, National Credit Union Administration data, and NIPA measures of financial services indirectly measured	NIPA PCE prices
Securities, commodity contracts, and investments	Census Bureau QSS data and Securities and Exchange Commission <i>Financial and Operational Combined Uniform Single Reports</i>	BLS PPI and NIPA PCE prices
Insurance carriers and related activities	NIPA PCE, Census Bureau QSS data, and trade source data	BLS PPI and NIPA PCE prices
Funds, trusts, and other financial vehicles	NIPA PCE and NIPA imputed service charges for other financial institutions	NIPA PCE prices
Real estate and rental and leasing		
Real estate	For residential dwellings, NIPA PCE, and NIPA housing data; for nonresidential structures, NIPA government receipts, NIPA private fixed investment, NIPA brokers' commissions, BEA foreign expenditures from the international transactions accounts, and BLS QCEW data	For residential dwellings, NIPA PCE prices and NIPA implicit price deflators for farm rents paid; for nonresidential structures, BLS PPI and NIPA implicit price deflators for nonprofit imputed rents
Rental and leasing services and lessors of intangible assets	For rental and leasing services, Census Bureau QSS data, NIPA royalty income, and NIPA PCE rental income	BLS PPI and NIPA prices
Professional, scientific, and technical services	Census Bureau QSS data, NIPA PCE data, BLS QCEW data, and NIPA R&D data	For legal services, BLS PPI and NIPA PCE prices; for computer systems design and related services, BEA price indexes for software; for miscellaneous services, BLS PPI, NIPA PCE prices, and BEA price index for R&D
Management of companies and enterprises		
Management of companies and enterprises	BLS QCEW data	BLS PPI
Administrative and waste management services		
Administrative and waste management services	Census Bureau QSS data and BLS QCEW data	BLS PPI and NIPA PCE prices

Industry and commodity	Source data for current-dollar statistics	Source for price indexes
Educational Services		
Educational Services	Census Bureau QSS data and NIPA PCE data	NIPA PCE prices based on trade source data for input costs
Health care and social assistance	Census Bureau QSS data	For ambulatory health care services, NIPA PCE prices based on BLS CPI and BLS PPI; for hospitals and nursing and residential care facilities, NIPA PCE prices based on BLS CPI and Center for Medicare and Medicaid Services; for social assistance, NIPA PCE prices based on trade source data
Arts, entertainment, and recreation		
Arts, entertainment, and recreation	Census Bureau QSS data	BLS PPI and NIPA PCE prices
Accommodation and food services		
Accommodation and food services	Census Bureau QSS data and Monthly Retail Trade Survey data	For accommodation, BLS PPI and NIPA PCE prices; for food services, NIPA PCE prices
Other services, except government		
Other services, except government	For repair and maintenance, personal services, and grantmaking, civic, professional, and similar organizations, Census Bureau QSS data; for religious, labor, and political organizations, NIPA PCE data; for private households, NIPA compensation	BLS PPI and NIPA PCE prices
Federal		
General government	NIPA government expenditures statistics	NIPA prices based on BLS PPI, BLS CPI, DOD data on employment prices, BLS employment cost indexes, and construction cost indexes from trade source data
Government enterprises	U.S. Postal Service quarterly reports, EIA monthly data for electric utility sales and revenue data for publicly owned utilities, and NIPA PCE data for broader aggregates for other components	BLS PPI and NIPA PCE prices
State and local		
General government	NIPA government expenditures statistics	NIPA PCE prices
Government enterprises	NIPA statistics on government enterprises based on the Census Bureau Annual Survey of Government Finances; for Alaskan ferries, water ports, and airports, Alaska Railroad Administration; for electric utilities, EIA data; for state and local government structures, Census Bureau VIP Survey	BLS PPI and NIPA PCE prices

BEA	Bureau of Economic Analysis
BLS	Bureau of Labor Statistics
CPI	Consumer Price Index
DOD	Department of Defense
EIA	Energy Information Administration
ERS	Economic Research Service
FRB	Federal Reserve Board
IPI	Industrial production index
M3	Manufacturers' Shipments, Inventories, and Orders
NAICS	North American Industry Classification System

NIPA	National Income and Product Accounts
NOAA	National Oceanic and Atmospheric Administration
PCE	Personal Consumption Expenditures
PPI	Producer Price Index
QCEW	Quarterly Census of Employment and Wages
QSS	Quarterly Services Survey
R&D	Research and development
USDA	United States Department of Agriculture
VIP	Value of Construction Put in Place Survey

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1. For more information, see [“GDP and the Economy: Third Estimates for the Second Quarter of 2020,”](#) *Survey of Current Business* 100 (October 2020).
 2. More detailed information on the methodologies for preparing the estimates are available on BEA's website. For information on the methodology used for preparing annual and quarterly NIPA estimates, see [NIPA Handbook: Concepts and Methods of the National Income and Product Accounts](#) on BEA's website; the handbook is updated each year after the annual update of the NIPAs to reflect improvements to source data and methods. For information on the methodology used for preparing the annual industry statistics, see Donald D. Kim, Erich H. Strassner, and David B. Wasshausen, [“Industry Economic Accounts: Results of the Comprehensive Revision and Revised Statistics for 1997–2012,”](#) *Survey* 94 (February 2014). For information on the methodology used for preparing the 2012 benchmark input-output tables, see [Concepts and Methods of the U.S. Input-Output Accounts](#) on the BEA website. For information on the methodology used for preparing the quarterly statistics, see Erich H. Strassner and David B. Wasshausen, [“New Quarterly Gross Domestic Product by Industry Statistics,”](#) *Survey* 94 (May 2014).
 3. In this article, “consumer spending” refers to “personal consumption expenditures,” “inventory investment” refers to “change in private inventories,” and “government spending” refers to “government consumption expenditures and gross investment.”
 4. Previously published estimates were based on projections prepared by the Congressional Budget Office (CBO), the Joint Committee on Taxation, and Treasury's Office of Tax Analysis. CBO noted that the use of these tax credits was lower than initially projected, in part because subsequent legislation limited the eligibility for the credits. For instance, businesses that received forgivable loans as part of the Paycheck Protection Program were restricted in their ability to claim Employee Retention Credits.

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- *Communications:* Jeannine Aversa (Chief, Communications Division), Danielle Helta (Managing Editor and Chief, Publications Services Branch), and Connie O'Connell (Chief, Public Affairs and Outreach Branch). Angelic Brown, Ryan Byrnes, Thomas B. Dail, Gianna Marrone, Ann McDonel, Susanne Palacios, and Tanya Shen.
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- *Investment and international trade:* Michael Armah (Chief) and Rebecca E. Pocase and Greg J. Prunchak (Section Chiefs). Hussein S. Charara, Brett Edgerton, Jeremy P. Elder, Linda Fawaz, David T. Hill, Brian Lindberg, Trinity Manning-Pickett, Tyler Mathes, David F. Mendez, Dominique Schein, and Meghan Scott.
- *Income and value added:* Jennifer Lee (Chief) and Howard Krakower and Brian Smith (Section Chiefs). Richard Cao, Elizabeth T. Driscoll, Brad Fowler, Teresa Gilmore, Velma Henry, Marina Kotzavekiaris, Jay Maharath, Kate Pinard, Bonnie A. Retus, Becky Todd, and Dennis Weikel.
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