

2020 Annual Update of the National Income and Product Accounts

Supplemental Tables

Released July 30, 2020

Table A1. Revisions to Real GDP, Expanded Detail, Over the Period 2014–2019
[Billions of chained dollars]

Line	Real GDP and its major components	Previously published chained (2012) dollars				Revised chained (2012) dollars				Revision in change	
		2014	2019	Change for 2014 – 2019		2014	2019	Change for 2014 – 2019		Dollar	Percent change (percentage point)
				Dollar	Percent (annual rate)			Dollar	Percent (annual rate)		
1	Gross domestic product	16,912.0	19,073.1	2,161.0	2.4	16,912.0	19,091.7	2,179.6	2.5	18.6	0.1
2	Personal consumption expenditures	11,497.4	13,280.1	1,782.7	2.9	11,497.4	13,240.2	1,742.8	2.9	–39.8	0.0
3	Goods	3,905.1	4,754.6	849.4	4.0	3,905.1	4,760.5	855.3	4.0	5.9	0.0
4	Durable goods	1,301.6	1,766.4	464.8	6.3	1,301.6	1,774.6	473.0	6.4	8.2	0.1
5	Motor vehicles and parts	439.4	542.7	103.2	4.3	439.4	532.4	93.0	3.9	–10.3	–0.4
6	Furnishings and durable household equipment	291.6	405.7	114.1	6.8	291.6	410.1	118.5	7.1	4.4	0.3
7	Recreational goods and vehicles	364.7	569.3	204.6	9.3	364.7	590.6	225.9	10.1	21.3	0.8
8	Other durable goods	206.4	263.4	57.0	5.0	206.4	260.6	54.2	4.8	–2.8	–0.2
9	Nondurable goods	2,605.3	3,002.9	397.6	2.9	2,605.3	3,001.5	396.2	2.9	–1.4	0.0
10	Food and beverages purchased for off-premises consumption	871.4	988.4	117.1	2.6	871.4	982.0	110.7	2.4	–6.4	–0.2
11	Clothing and footwear	356.1	407.0	50.9	2.7	356.1	412.0	55.9	3.0	5.0	0.3
12	Gasoline and other energy goods	430.0	448.6	18.7	0.9	430.0	444.9	15.0	0.7	–3.7	–0.2
13	Other nondurable goods	947.4	1,142.1	194.7	3.8	947.4	1,145.0	197.6	3.9	2.9	0.1
14	Services	7,594.9	8,562.9	968.0	2.4	7,594.9	8,520.5	925.6	2.3	–42.4	–0.1
15	Household consumption expenditures (for services)	7,249.6	8,201.2	951.6	2.5	7,249.6	8,167.8	918.2	2.4	–33.5	–0.1
16	Housing and utilities	2,039.9	2,184.3	144.3	1.4	2,039.9	2,193.0	153.1	1.5	8.7	0.1
17	Health care	1,892.8	2,249.3	356.5	3.5	1,892.8	2,232.9	340.1	3.4	–16.4	–0.1
18	Transportation services	374.3	438.9	64.6	3.2	374.3	442.5	68.1	3.4	3.5	0.2
19	Recreation services	450.5	509.8	59.3	2.5	450.5	503.2	52.7	2.2	–6.6	–0.3
20	Food services and accommodations	741.3	858.2	116.9	3.0	741.3	842.2	100.9	2.6	–16.0	–0.4
21	Financial services and insurance	817.9	856.7	38.7	0.9	817.9	857.9	39.9	1.0	1.2	0.1
22	Other services	934.4	1,123.8	189.4	3.8	934.4	1,114.4	180.0	3.6	–9.3	–0.2
23	Final consumption expenditures of nonprofit institutions serving households (NPISHs)	345.3	362.4	17.1	1.0	345.3	354.0	8.6	0.5	–8.5	–0.5
24	Gross output of nonprofit institutions	1,266.2	1,434.0	167.8	2.5	1,266.2	1,418.3	152.1	2.3	–15.7	–0.2
25	Less: Receipts from sales of goods and services by nonprofit institutions	920.9	1,072.9	152.0	3.1	920.9	1,066.2	145.3	3.0	–6.7	–0.1
26	Gross private domestic investment	2,959.2	3,421.3	462.1	2.9	2,959.2	3,442.6	483.4	3.1	21.2	0.2
27	Fixed investment	2,869.2	3,335.8	466.6	3.1	2,869.2	3,371.7	502.5	3.3	35.9	0.2
28	Nonresidential	2,365.3	2,748.1	382.8	3.0	2,365.3	2,776.8	411.5	3.3	28.7	0.3
29	Structures	538.8	517.8	–21.0	–0.8	538.8	547.7	8.9	0.3	29.9	1.1

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Table A1. Revisions to Real GDP, Expanded Detail, Over the Period 2014–2019
[Billions of chained dollars]

Line	Real GDP and its major components	Previously published chained (2012) dollars				Revised chained (2012) dollars				Revision in change	
		2014	2019	Change for 2014 – 2019		2014	2019	Change for 2014 – 2019		Dollar	Percent change (percentage point)
				Dollar	Percent (annual rate)			Dollar	Percent (annual rate)		
30	Equipment	1,101.1	1,271.3	170.2	2.9	1,101.1	1,267.7	166.6	2.9	–3.6	0.0
31	Information processing equipment	370.2	517.9	147.6	6.9	370.2	493.9	123.6	5.9	–24.0	–1.0
32	Computers and peripheral equipment	102.9	129.3	26.3	4.7	102.9	130.7	27.8	4.9	1.5	0.2
33	Other	267.7	391.0	123.3	7.9	267.7	363.8	96.1	6.3	–27.2	–1.6
34	Industrial equipment	216.5	241.1	24.6	2.2	216.5	249.1	32.6	2.8	8.0	0.6
35	Transportation equipment	265.0	277.2	12.2	0.9	265.0	285.7	20.7	1.5	8.5	0.6
36	Other equipment	248.9	251.3	2.4	0.2	248.9	250.1	1.3	0.1	–1.2	–0.1
37	Intellectual property products	724.8	969.2	244.5	6.0	724.8	968.2	243.4	6.0	–1.1	0.0
38	Software	305.3	455.6	150.3	8.3	305.3	449.3	144.0	8.0	–6.4	–0.3
39	Research and development	346.9	434.5	87.6	4.6	346.9	440.5	93.6	4.9	6.0	0.3
40	Entertainment, literary, and artistic originals	72.7	85.9	13.2	3.4	72.7	83.7	11.0	2.9	–2.2	–0.5
41	Residential	504.1	593.8	89.7	3.3	504.1	601.5	97.4	3.6	7.7	0.3
42	Change in private inventories	86.3	67.0	–19.3	---	86.3	48.5	–37.8	---	–18.4	---
43	Farm	–3.5	–11.1	–7.5	---	–3.5	–16.9	–13.4	---	–5.8	---
44	Nonfarm	90.1	75.3	–14.8	---	90.1	62.2	–27.9	---	–13.0	---
45	Net exports of goods and services	–577.2	–953.9	–376.6	---	–577.2	–917.6	–340.4	---	36.2	---
46	Exports	2,365.3	2,532.9	167.6	1.4	2,365.3	2,546.6	181.3	1.5	13.7	0.1
47	Goods	1,642.7	1,786.2	143.5	1.7	1,642.7	1,782.5	139.8	1.6	–3.7	–0.1
48	Services	722.7	752.5	29.8	0.8	722.7	767.6	44.9	1.2	15.1	0.4
49	Imports	2,942.5	3,486.8	544.3	3.5	2,942.5	3,464.2	521.7	3.3	–22.6	–0.2
50	Goods	2,472.2	2,923.4	451.2	3.4	2,472.2	2,923.4	451.2	3.4	0.0	0.0
51	Services	471.0	562.4	91.3	3.6	471.0	543.1	72.1	2.9	–19.3	–0.7
52	Government consumption expenditures and gross investment	3,033.4	3,299.0	265.6	1.7	3,033.4	3,303.9	270.4	1.7	4.8	0.0
53	Federal	1,183.8	1,275.5	91.7	1.5	1,183.8	1,277.2	93.4	1.5	1.7	0.0
54	National defense	728.4	773.4	45.0	1.2	728.4	780.2	51.7	1.4	6.8	0.2
55	Consumption expenditures	586.0	613.7	27.8	0.9	586.0	613.8	27.8	0.9	0.1	0.0
56	Gross investment	142.4	159.9	17.5	2.3	142.4	166.9	24.4	3.2	7.0	0.9
57	Nondefense	455.2	502.0	46.8	2.0	455.2	497.1	41.9	1.8	–4.9	–0.2
58	Consumption expenditures	339.0	373.2	34.1	1.9	339.0	362.8	23.8	1.4	–10.3	–0.5
59	Gross investment	116.2	128.9	12.7	2.1	116.2	134.6	18.4	3.0	5.7	0.9
60	State and local	1,848.6	2,022.3	173.7	1.8	1,848.6	2,025.5	176.9	1.8	3.2	0.0
61	Consumption expenditures	1,523.1	1,654.6	131.5	1.7	1,523.1	1,653.3	130.2	1.7	–1.4	0.0
62	Gross investment	325.5	367.6	42.1	2.5	325.5	372.2	46.8	2.7	4.6	0.2
Addenda											
63	Gross domestic income ¹	17,191.1	18,985.6	1,794.6	2.0	17,188.6	19,080.2	1,891.6	2.1	97.0	0.1
64	Average of GDP and GDI ²	17,051.5	19,029.3	1,977.8	2.2	17,050.3	19,085.9	2,035.6	2.3	57.8	0.1
65	Final sales of domestic product	16,822.3	18,987.9	2,165.6	2.5	16,822.3	19,021.1	2,198.8	2.5	33.2	0.0
66	Gross domestic purchases	17,487.7	19,994.6	2,506.9	2.7	17,487.7	19,981.0	2,493.3	2.7	–13.6	0.0
67	Gross national product	17,146.5	19,351.3	2,204.8	2.4	17,146.5	19,338.4	2,191.9	2.4	–12.9	0.0
68	Disposable personal income ³	12,844.3	14,978.5	2,134.3	3.1	12,843.7	14,882.5	2,038.8	3.0	–95.5	–0.1

1. Gross domestic income deflated by the implicit price deflator for gross domestic product.

2. The arithmetic average of gross domestic product and of gross domestic income, deflated by the implicit price deflator for GDP.

3. Disposable personal income deflated by the implicit price deflator for personal consumption expenditures.

Table A2. Revisions to Real GDP, Expanded Detail, Over the Period 2014Q4 – 2015Q4
[Billions of chained dollars]

Line	Real GDP and its major components	Previously published chained (2012) dollars				Revised chained (2012) dollars				Revision in change	
		2014 Q4	2015 Q4	Change for 2014Q4 – 2015Q4		2014 Q4	2015 Q4	Change for 2014Q4 – 2015Q4		Dollar	Percent change (percent -age points)
				Dollar	Percent (annual rate)			Dollar	Percent (annual rate)		
1	Gross domestic product	17,143.0	17,468.9	325.9	1.9	17,143.0	17,514.1	371.0	2.2	45.2	0.3
2	Personal consumption expenditures	11,695.0	12,030.2	335.3	2.9	11,695.0	12,055.4	360.4	3.1	25.1	0.2
3	Goods	3,984.4	4,133.7	149.4	3.7	3,984.4	4,136.5	152.1	3.8	2.7	0.1
4	Durable goods	1,343.3	1,421.1	77.8	5.8	1,343.3	1,423.3	80.0	6.0	2.2	0.2
5	Motor vehicles and parts	452.1	469.3	17.2	3.8	452.1	471.7	19.6	4.3	2.5	0.5
6	Furnishings and durable household equipment	302.0	328.3	26.3	8.7	302.0	329.1	27.1	9.0	0.7	0.3
7	Recreational goods and vehicles	376.3	398.4	22.1	5.9	376.3	397.3	21.0	5.6	-1.1	-0.3
8	Other durable goods	213.5	226.7	13.2	6.2	213.5	226.5	13.0	6.1	-0.2	-0.1
9	Nondurable goods	2,643.6	2,716.4	72.8	2.8	2,643.6	2,716.9	73.4	2.8	0.6	0.0
10	Food and beverages purchased for off-premises consumption	876.3	886.5	10.2	1.2	876.3	887.7	11.4	1.3	1.2	0.1
11	Clothing and footwear	363.7	370.4	6.7	1.8	363.7	370.6	6.9	1.9	0.2	0.1
12	Gasoline and other energy goods	437.2	451.5	14.2	3.3	437.2	449.8	12.6	2.9	-1.6	-0.4
13	Other nondurable goods	966.2	1,008.2	42.0	4.3	966.2	1,008.4	42.3	4.4	0.3	0.1
14	Services	7,713.9	7,903.1	189.2	2.5	7,713.9	7,924.9	211.0	2.7	21.9	0.2
15	Household consumption expenditures (for services)	7,372.2	7,555.1	183.0	2.5	7,372.2	7,575.5	203.3	2.8	20.4	0.3
16	Housing and utilities	2,057.6	2,094.4	36.7	1.8	2,057.6	2,097.5	39.9	1.9	3.2	0.1
17	Health care	1,945.2	2,013.3	68.1	3.5	1,945.2	2,016.8	71.6	3.7	3.4	0.2
18	Transportation services	378.5	394.4	15.9	4.2	378.5	394.2	15.7	4.1	-0.2	-0.1
19	Recreation services	458.1	478.6	20.5	4.5	458.1	478.3	20.2	4.4	-0.4	-0.1
20	Food services and accommodations	756.0	782.6	26.6	3.5	756.0	783.2	27.2	3.6	0.6	0.1
21	Financial services and insurance	825.4	833.8	8.4	1.0	825.4	837.5	12.1	1.5	3.7	0.5
22	Other services	953.8	962.5	8.7	0.9	953.8	972.4	18.6	2.0	9.9	1.1
23	Final consumption expenditures of nonprofit institutions serving households (NPISHs)	341.9	348.1	6.2	1.8	341.9	349.6	7.7	2.2	1.5	0.4
24	Gross output of nonprofit institutions	1,290.3	1,311.5	21.2	1.6	1,290.3	1,312.4	22.1	1.7	0.9	0.1
25	Less: Receipts from sales of goods and services by nonprofit institutions	948.7	963.7	15.0	1.6	948.7	963.0	14.3	1.5	-0.6	-0.1
26	Gross private domestic investment	3,021.9	3,067.1	45.2	1.5	3,021.9	3,092.7	70.9	2.3	25.6	0.8
27	Fixed investment	2,941.2	2,971.9	30.7	1.0	2,941.2	2,991.8	50.6	1.7	19.9	0.7
28	Nonresidential	2,415.5	2,393.2	-22.2	-0.9	2,415.5	2,412.8	-2.6	-0.1	19.6	0.8
29	Structures	551.0	491.1	-59.8	-10.9	551.0	510.6	-40.4	-7.3	19.4	3.6

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Table A2. Revisions to Real GDP, Expanded Detail, Over the Period 2014Q4 – 2015Q4
[Billions of chained dollars]

Line	Real GDP and its major components	Previously published chained (2012) dollars				Revised chained (2012) dollars				Revision in change	
		2014 Q4	2015 Q4	Change for 2014Q4 – 2015Q4		2014 Q4	2015 Q4	Change for 2014Q4 – 2015Q4		Dollar	Percent change (percent -age points)
				Dollar	Percent (annual rate)			Dollar	Percent (annual rate)		
30	Equipment	1,116.9	1,137.9	21.0	1.9	1,116.9	1,133.6	16.7	1.5	-4.3	-0.4
31	Information processing equipment	379.3	405.7	26.4	7.0	379.3	403.8	24.5	6.5	-1.9	-0.5
32	Computers and peripheral equipment	104.7	102.2	-2.5	-2.4	104.7	101.3	-3.4	-3.2	-0.9	-0.8
33	Other	275.1	305.2	30.1	10.9	275.1	304.3	29.2	10.6	-1.0	-0.3
34	Industrial equipment	215.3	217.6	2.3	1.0	215.3	217.4	2.1	1.0	-0.2	0.0
35	Transportation equipment	271.6	292.1	20.5	7.6	271.6	289.4	17.8	6.6	-2.7	-1.0
36	Other equipment	250.5	224.7	-25.8	-10.3	250.5	225.2	-25.2	-10.1	0.5	0.2
37	Intellectual property products	746.6	768.3	21.7	2.9	746.6	771.3	24.7	3.3	3.0	0.4
38	Software	311.9	326.2	14.3	4.6	311.9	327.1	15.2	4.9	0.9	0.3
39	Research and development	360.2	366.0	5.8	1.6	360.2	368.1	7.9	2.2	2.1	0.6
40	Entertainment, literary, and artistic originals	74.4	76.3	1.9	2.6	74.4	76.3	1.9	2.6	0.0	0.0
41	Residential	525.2	573.0	47.9	9.1	525.2	573.6	48.5	9.2	0.6	0.1
42	Change in private inventories	82.0	86.0	4.0	---	82.0	91.4	9.4	---	5.4	---
43	Farm	-4.4	0.2	4.6	---	-4.4	-1.2	3.2	---	-1.4	---
44	Nonfarm	87.0	85.1	-1.9	---	87.0	91.8	4.9	---	6.8	---
45	Net exports of goods and services	-617.9	-752.8	-134.9	---	-617.9	-754.5	-136.6	---	-1.7	---
46	Exports	2,400.3	2,363.2	-37.1	-1.5	2,400.3	2,363.5	-36.8	-1.5	0.3	0.0
47	Goods	1,672.2	1,620.8	-51.4	-3.1	1,672.2	1,624.1	-48.1	-2.9	3.3	0.2
48	Services	728.7	740.3	11.6	1.6	728.7	737.7	9.1	1.2	-2.6	-0.4
49	Imports	3,018.2	3,116.0	97.8	3.2	3,018.2	3,118.0	99.8	3.3	2.0	0.1
50	Goods	2,539.5	2,621.5	81.9	3.2	2,539.5	2,620.2	80.7	3.2	-1.3	0.0
51	Services	479.8	495.5	15.7	3.3	479.8	498.2	18.4	3.8	2.7	0.5
52	Government consumption expenditures and gross investment	3,043.4	3,113.6	70.2	2.3	3,043.4	3,110.0	66.6	2.2	-3.6	-0.1
53	Federal	1,175.5	1,188.6	13.1	1.1	1,175.5	1,190.5	15.0	1.3	1.8	0.2
54	National defense	716.6	713.9	-2.7	-0.4	716.6	714.0	-2.6	-0.4	0.1	0.0
55	Consumption expenditures	574.2	572.2	-2.0	-0.3	574.2	572.1	-2.0	-0.4	0.0	-0.1
56	Gross investment	142.4	141.7	-0.7	-0.5	142.4	141.8	-0.6	-0.4	0.1	0.1
57	Nondefense	458.6	474.2	15.6	3.4	458.6	476.0	17.4	3.8	1.8	0.4
58	Consumption expenditures	340.7	354.5	13.8	4.0	340.7	353.4	12.7	3.7	-1.1	-0.3
59	Gross investment	117.9	119.7	1.8	1.5	117.9	122.6	4.7	4.0	2.9	2.5
60	State and local	1,866.6	1,923.3	56.7	3.0	1,866.6	1,918.0	51.4	2.8	-5.3	-0.2
61	Consumption expenditures	1,535.2	1,586.4	51.2	3.3	1,535.2	1,579.3	44.1	2.9	-7.1	-0.4
62	Gross investment	331.4	336.8	5.4	1.6	331.4	338.7	7.3	2.2	1.8	0.6
Addenda											
63	Gross domestic income ¹	17,470.9	17,701.9	231.0	1.3	17,467.3	17,704.5	237.2	1.4	6.2	0.1
64	Average of GDP and GDI ²	17,307.0	17,585.4	278.4	1.6	17,305.2	17,609.3	304.1	1.8	25.7	0.2
65	Final sales of domestic product	17,062.8	17,373.8	311.0	1.8	17,062.8	17,413.3	350.5	2.1	39.5	0.3
66	Gross domestic purchases	17,757.1	18,207.7	450.5	2.5	17,757.1	18,254.9	497.7	2.8	47.2	0.3
67	Gross national product	17,363.8	17,699.5	335.7	1.9	17,363.8	17,741.3	377.5	2.2	41.8	0.3
68	Disposable personal income ³	13,089.7	13,478.6	388.9	3.0	13,089.1	13,490.5	401.4	3.1	12.5	0.1

1. Gross domestic income deflated by the implicit price deflator for gross domestic product.

2. The arithmetic average of gross domestic product and of gross domestic income, deflated by the implicit price deflator for GDP.

3. Disposable personal income deflated by the implicit price deflator for personal consumption expenditures.

Table A3. Revisions to Real GDP, Expanded Detail, Over the Period 2015Q4 – 2016Q4
 [Billions of chained dollars]

Line	Real GDP and its major components	Previously published chained (2012) dollars				Revised chained (2012) dollars				Revision in change	
		2015 Q4	2016 Q4	Change for 2015Q4 – 2016Q4		2015 Q4	2016 Q4	Change for 2015Q4 – 2016Q4		Dollar	Percent change (percentage points)
				Dollar	Percent (annual rate)			Dollar	Percent (annual rate)		
1	Gross domestic product	17,468.9	17,824.2	355.3	2.0	17,514.1	17,876.2	362.1	2.1	6.8	0.1
2	Personal consumption expenditures	12,030.2	12,365.3	335.1	2.8	12,055.4	12,380.0	324.6	2.7	-10.4	-0.1
3	Goods	4,133.7	4,284.2	150.5	3.6	4,136.5	4,286.7	150.2	3.6	-0.3	0.0
4	Durable goods	1,421.1	1,525.4	104.3	7.3	1,423.3	1,522.2	98.9	7.0	-5.4	-0.3
5	Motor vehicles and parts	469.3	502.4	33.1	7.1	471.7	504.7	32.9	7.0	-0.2	-0.1
6	Furnishings and durable household equipment	328.3	350.7	22.4	6.8	329.1	351.4	22.3	6.8	-0.1	0.0
7	Recreational goods and vehicles	398.4	447.8	49.4	12.4	397.3	439.9	42.6	10.7	-6.8	-1.7
8	Other durable goods	226.7	227.8	1.1	0.5	226.5	228.7	2.2	1.0	1.1	0.5
9	Nondurable goods	2,716.4	2,765.2	48.8	1.8	2,716.9	2,770.7	53.7	2.0	4.9	0.2
10	Food and beverages purchased for off-premises consumption	886.5	922.3	35.8	4.0	887.7	924.4	36.7	4.1	0.9	0.1
11	Clothing and footwear	370.4	373.7	3.3	0.9	370.6	375.9	5.3	1.4	2.0	0.5
12	Gasoline and other energy goods	451.5	446.9	-4.6	-1.0	449.8	446.4	-3.5	-0.8	1.1	0.2
13	Other nondurable goods	1,008.2	1,017.3	9.1	0.9	1,008.4	1,018.5	10.1	1.0	1.0	0.1
14	Services	7,903.1	8,092.2	189.2	2.4	7,924.9	8,104.3	179.3	2.3	-9.9	-0.1
15	Household consumption expenditures (for services)	7,555.1	7,736.7	181.5	2.4	7,575.5	7,745.2	169.7	2.2	-11.8	-0.2
16	Housing and utilities	2,094.4	2,124.3	30.0	1.4	2,097.5	2,128.0	30.5	1.5	0.6	0.1
17	Health care	2,013.3	2,098.3	85.0	4.2	2,016.8	2,099.8	83.0	4.1	-2.0	-0.1
18	Transportation services	394.4	412.5	18.1	4.6	394.2	412.3	18.1	4.6	0.0	0.0
19	Recreation services	478.6	488.1	9.5	2.0	478.3	486.9	8.7	1.8	-0.8	-0.2
20	Food services and accommodations	782.6	793.5	10.9	1.4	783.2	794.9	11.7	1.5	0.9	0.1
21	Financial services and insurance	833.8	816.9	-16.9	-2.0	837.5	823.2	-14.3	-1.7	2.5	0.3
22	Other services	962.5	1,014.1	51.6	5.4	972.4	1,010.3	37.8	3.9	-13.8	-1.5
23	Final consumption expenditures of nonprofit institutions serving households (NPISHs)	348.1	355.7	7.6	2.2	349.6	359.1	9.5	2.7	1.9	0.5
24	Gross output of nonprofit institutions	1,311.5	1,365.2	53.7	4.1	1,312.4	1,368.7	56.3	4.3	2.6	0.2
25	Less: Receipts from sales of goods and services by nonprofit institutions	963.7	1,010.1	46.4	4.8	963.0	1,010.0	47.0	4.9	0.6	0.1
26	Gross private domestic investment	3,067.1	3,114.0	46.9	1.5	3,092.7	3,130.1	37.4	1.2	-9.5	-0.3
27	Fixed investment	2,971.9	3,053.7	81.8	2.8	2,991.8	3,062.2	70.5	2.4	-11.4	-0.4
28	Nonresidential	2,393.2	2,451.2	58.0	2.4	2,412.8	2,457.4	44.5	1.8	-13.4	-0.6
29	Structures	491.1	512.1	21.0	4.3	510.6	528.5	17.9	3.5	-3.0	-0.8

table continues on next page

Table A3. Revisions to Real GDP, Expanded Detail, Over the Period 2015Q4 – 2016Q4
 [Billions of chained dollars]

Line	Real GDP and its major components	Previously published chained (2012) dollars				Revised chained (2012) dollars				Revision in change	
		2015 Q4	2016 Q4	Change for 2015Q4 – 2016Q4		2015 Q4	2016 Q4	Change for 2015Q4 – 2016Q4		Dollar	Percent change (percentage points)
				Dollar	Percent (annual rate)			Dollar	Percent (annual rate)		
30	Equipment	1,137.9	1,122.0	-15.9	-1.4	1,133.6	1,108.7	-24.9	-2.2	-9.0	-0.8
31	Information processing equipment	405.7	426.0	20.4	5.0	403.8	418.1	14.3	3.5	-6.0	-1.5
32	Computers and peripheral equipment	102.2	104.3	2.1	2.1	101.3	103.1	1.8	1.8	-0.3	-0.3
33	Other	305.2	324.1	18.9	6.2	304.3	317.2	13.0	4.3	-5.9	-1.9
34	Industrial equipment	217.6	217.0	-0.6	-0.3	217.4	214.9	-2.5	-1.2	-1.9	-0.9
35	Transportation equipment	292.1	266.3	-25.8	-8.8	289.4	268.0	-21.3	-7.4	4.5	1.4
36	Other equipment	224.7	219.7	-5.0	-2.2	225.2	214.1	-11.1	-4.9	-6.1	-2.7
37	Intellectual property products	768.3	819.2	50.9	6.6	771.3	820.8	49.5	6.4	-1.4	-0.2
38	Software	326.2	354.9	28.7	8.8	327.1	355.7	28.6	8.7	-0.1	-0.1
39	Research and development	366.0	386.2	20.2	5.5	368.1	387.0	18.9	5.1	-1.4	-0.4
40	Entertainment, literary, and artistic originals	76.3	79.0	2.7	3.5	76.3	79.1	2.8	3.6	0.1	0.1
41	Residential	573.0	595.5	22.4	3.9	573.6	597.6	24.0	4.2	1.6	0.3
42	Change in private inventories	86.0	44.8	-41.2	---	91.4	52.3	-39.1	---	2.1	---
43	Farm	0.2	-7.4	-7.6	---	-1.2	-7.3	-6.1	---	1.5	---
44	Nonfarm	85.1	50.1	-35.0	---	91.8	57.3	-34.5	---	0.5	---
45	Net exports of goods and services	-752.8	-834.6	-81.8	---	-754.5	-806.3	-51.8	---	30.0	---
46	Exports	2,363.2	2,388.1	24.9	1.1	2,363.5	2,397.9	34.3	1.5	9.4	0.4
47	Goods	1,620.8	1,660.7	39.9	2.5	1,624.1	1,665.0	40.8	2.5	1.0	0.0
48	Services	740.3	728.8	-11.5	-1.6	737.7	733.9	-3.8	-0.5	7.7	1.1
49	Imports	3,116.0	3,222.7	106.7	3.4	3,118.0	3,204.2	86.2	2.8	-20.6	-0.6
50	Goods	2,621.5	2,703.1	81.6	3.1	2,620.2	2,700.8	80.6	3.1	-1.0	0.0
51	Services	495.5	519.2	23.7	4.8	498.2	505.1	6.9	1.4	-16.8	-3.4
52	Government consumption expenditures and gross investment	3,113.6	3,159.3	45.7	1.5	3,110.0	3,156.6	46.6	1.5	0.8	0.0
53	Federal	1,188.6	1,189.9	1.3	0.1	1,190.5	1,191.2	0.7	0.1	-0.5	0.0
54	National defense	713.9	708.1	-5.8	-0.8	714.0	709.0	-5.0	-0.7	0.9	0.1
55	Consumption expenditures	572.2	572.7	0.5	0.1	572.1	574.9	2.8	0.5	2.2	0.4
56	Gross investment	141.7	135.3	-6.4	-4.5	141.8	134.0	-7.8	-5.5	-1.4	-1.0
57	Nondefense	474.2	481.1	6.9	1.5	476.0	481.5	5.5	1.2	-1.4	-0.3
58	Consumption expenditures	354.5	358.2	3.7	1.0	353.4	354.3	0.8	0.2	-2.8	-0.8
59	Gross investment	119.7	123.0	3.3	2.7	122.6	127.4	4.8	3.9	1.5	1.2
60	State and local	1,923.3	1,967.4	44.1	2.3	1,918.0	1,963.4	45.5	2.4	1.3	0.1
61	Consumption expenditures	1,586.4	1,617.5	31.1	2.0	1,579.3	1,611.0	31.7	2.0	0.7	0.0
62	Gross investment	336.8	349.9	13.1	3.9	338.7	352.4	13.7	4.1	0.6	0.2
Addenda											
63	Gross domestic income ¹	17,701.9	17,865.2	163.3	0.9	17,704.5	17,917.6	213.1	1.2	49.8	0.3
64	Average of GDP and GDI ²	17,585.4	17,844.7	259.3	1.5	17,609.3	17,896.9	287.6	1.6	28.3	0.1
65	Final sales of domestic product	17,373.8	17,763.5	389.7	2.2	17,413.3	17,807.9	394.6	2.3	4.9	0.1
66	Gross domestic purchases	18,207.7	18,635.1	427.4	2.3	18,254.9	18,663.2	408.3	2.2	-19.1	-0.1
67	Gross national product	17,699.5	18,068.4	368.9	2.1	17,741.3	18,138.7	397.3	2.2	28.4	0.1
68	Disposable personal income ³	13,478.6	13,696.7	218.1	1.6	13,490.5	13,734.8	244.3	1.8	26.2	0.2

1. Gross domestic income deflated by the implicit price deflator for gross domestic product.

2. The arithmetic average of gross domestic product and of gross domestic income, deflated by the implicit price deflator for GDP.

3. Disposable personal income deflated by the implicit price deflator for personal consumption expenditures.

Table A4. Revisions to Real GDP, Expanded Detail, Over the Period 2016Q4 – 2017Q4
 [Billions of chained dollars]

Line	Real GDP and its major components	Previously published chained (2012) dollars				Revised chained (2012) dollars				Revision in change	
		2016 Q4	2017 Q4	Change for 2016Q4 – 2017Q4		2016 Q4	2017 Q4	Change for 2016Q4 – 2017Q4		Dollar	Percent change (percentage points)
				Dollar	Percent (annual rate)			Dollar	Percent (annual rate)		
1	Gross domestic product	17,824.2	18,322.5	498.2	2.8	17,876.2	18,359.4	483.3	2.7	-15.0	-0.1
2	Personal consumption expenditures	12,365.3	12,729.7	364.4	2.9	12,380.0	12,733.7	353.7	2.9	-10.7	0.0
3	Goods	4,284.2	4,499.8	215.6	5.0	4,286.7	4,508.3	221.6	5.2	6.0	0.2
4	Durable goods	1,525.4	1,643.5	118.1	7.7	1,522.2	1,645.7	123.5	8.1	5.3	0.4
5	Motor vehicles and parts	502.4	532.6	30.2	6.0	504.7	534.1	29.4	5.8	-0.8	-0.2
6	Furnishings and durable household equipment	350.7	385.2	34.5	9.8	351.4	386.8	35.4	10.1	0.9	0.3
7	Recreational goods and vehicles	447.8	492.4	44.6	10.0	439.9	490.6	50.7	11.5	6.1	1.5
8	Other durable goods	227.8	238.7	10.9	4.8	228.7	239.5	10.8	4.7	-0.1	-0.1
9	Nondurable goods	2,765.2	2,866.7	101.5	3.7	2,770.7	2,873.2	102.5	3.7	1.0	0.0
10	Food and beverages purchased for off-premises consumption	922.3	957.2	34.9	3.8	924.4	957.2	32.8	3.5	-2.1	-0.3
11	Clothing and footwear	373.7	385.5	11.8	3.2	375.9	389.0	13.1	3.5	1.3	0.3
12	Gasoline and other energy goods	446.9	448.0	1.1	0.3	446.4	448.5	2.2	0.5	1.0	0.2
13	Other nondurable goods	1,017.3	1,065.4	48.1	4.7	1,018.5	1,067.8	49.3	4.8	1.2	0.1
14	Services	8,092.2	8,254.9	162.7	2.0	8,104.3	8,251.9	147.6	1.8	-15.1	-0.2
15	Household consumption expenditures (for services)	7,736.7	7,906.2	169.5	2.2	7,745.2	7,903.9	158.7	2.0	-10.8	-0.2
16	Housing and utilities	2,124.3	2,150.0	25.7	1.2	2,128.0	2,153.3	25.3	1.2	-0.4	0.0
17	Health care	2,098.3	2,146.9	48.6	2.3	2,099.8	2,146.0	46.2	2.2	-2.5	-0.1
18	Transportation services	412.5	430.2	17.7	4.3	412.3	431.8	19.4	4.7	1.8	0.4
19	Recreation services	488.1	483.6	-4.5	-0.9	486.9	482.2	-4.7	-1.0	-0.2	-0.1
20	Food services and accommodations	793.5	817.7	24.2	3.1	794.9	814.8	19.9	2.5	-4.3	-0.6
21	Financial services and insurance	816.9	838.8	21.9	2.7	823.2	840.8	17.6	2.1	-4.3	-0.6
22	Other services	1,014.1	1,051.8	37.7	3.7	1,010.3	1,047.5	37.2	3.7	-0.5	0.0
23	Final consumption expenditures of nonprofit institutions serving households (NPISHs)	355.7	349.6	-6.2	-1.7	359.1	348.8	-10.3	-2.9	-4.1	-1.2
24	Gross output of nonprofit institutions	1,365.2	1,372.6	7.3	0.5	1,368.7	1,372.9	4.3	0.3	-3.1	-0.2
25	Less: Receipts from sales of goods and services by nonprofit institutions	1,010.1	1,024.2	14.1	1.4	1,010.0	1,025.4	15.4	1.5	1.3	0.1
26	Gross private domestic investment	3,114.0	3,262.1	148.2	4.8	3,130.1	3,256.7	126.6	4.0	-21.6	-0.8
27	Fixed investment	3,053.7	3,210.7	157.0	5.1	3,062.2	3,209.2	147.0	4.8	-10.0	-0.3
28	Nonresidential	2,451.2	2,584.2	133.0	5.4	2,457.4	2,576.4	119.0	4.8	-13.9	-0.6
29	Structures	512.1	519.9	7.8	1.5	528.5	528.4	-0.1	0.0	-7.9	-1.5

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Table A4. Revisions to Real GDP, Expanded Detail, Over the Period 2016Q4 – 2017Q4
 [Billions of chained dollars]

Line	Real GDP and its major components	Previously published chained (2012) dollars				Revised chained (2012) dollars				Revision in change	
		2016 Q4	2017 Q4	Change for 2016Q4 – 2017Q4		2016 Q4	2017 Q4	Change for 2016Q4 – 2017Q4		Dollar	Percent change (percentage points)
				Dollar	Percent (annual rate)			Dollar	Percent (annual rate)		
30	Equipment	1,122.0	1,217.8	95.8	8.5	1,108.7	1,191.4	82.7	7.5	–13.2	–1.0
31	Information processing equipment	426.0	477.2	51.2	12.0	418.1	458.9	40.8	9.8	–10.4	–2.2
32	Computers and peripheral equipment	104.3	113.8	9.5	9.1	103.1	112.6	9.6	9.3	0.1	0.2
33	Other	324.1	366.8	42.7	13.2	317.2	348.8	31.6	10.0	–11.1	–3.2
34	Industrial equipment	217.0	234.4	17.4	8.0	214.9	233.9	19.0	8.8	1.6	0.8
35	Transportation equipment	266.3	269.9	3.6	1.3	268.0	279.8	11.7	4.4	8.2	3.1
36	Other equipment	219.7	247.4	27.7	12.6	214.1	227.9	13.8	6.5	–13.9	–6.1
37	Intellectual property products	819.2	852.0	32.9	4.0	820.8	860.9	40.1	4.9	7.2	0.9
38	Software	354.9	383.5	28.6	8.1	355.7	386.5	30.8	8.7	2.2	0.6
39	Research and development	386.2	390.9	4.6	1.2	387.0	397.1	10.1	2.6	5.5	1.4
40	Entertainment, literary, and artistic originals	79.0	80.6	1.6	2.0	79.1	79.9	0.9	1.1	–0.8	–0.9
41	Residential	595.5	620.4	24.9	4.2	597.6	625.5	27.9	4.7	3.0	0.5
42	Change in private inventories	44.8	31.1	–13.7	---	52.3	25.3	–27.0	---	–13.3	---
43	Farm	–7.4	–5.2	2.2	---	–7.3	–7.3	0.0	---	–2.2	---
44	Nonfarm	50.1	34.9	–15.1	---	57.3	30.9	–26.4	---	–11.3	---
45	Net exports of goods and services	–834.6	–883.8	–49.2	---	–806.3	–847.0	–40.6	---	8.5	---
46	Exports	2,388.1	2,519.2	131.1	5.5	2,397.9	2,536.2	138.4	5.8	7.2	0.3
47	Goods	1,660.7	1,758.1	97.4	5.9	1,665.0	1,766.4	101.4	6.1	4.0	0.2
48	Services	728.8	763.7	34.9	4.8	733.9	771.9	37.9	5.2	3.0	0.4
49	Imports	3,222.7	3,403.0	180.3	5.6	3,204.2	3,383.2	179.0	5.6	–1.3	0.0
50	Goods	2,703.1	2,865.8	162.7	6.0	2,700.8	2,862.0	161.2	6.0	–1.5	0.0
51	Services	519.2	538.9	19.6	3.8	505.1	525.1	20.0	4.0	0.3	0.2
52	Government consumption expenditures and gross investment	3,159.3	3,186.1	26.8	0.8	3,156.6	3,192.8	36.2	1.1	9.4	0.3
53	Federal	1,189.9	1,209.8	19.9	1.7	1,191.2	1,206.0	14.8	1.2	–5.1	–0.5
54	National defense	708.1	721.4	13.3	1.9	709.0	724.7	15.7	2.2	2.4	0.3
55	Consumption expenditures	572.7	575.3	2.6	0.5	574.9	578.0	3.0	0.5	0.5	0.0
56	Gross investment	135.3	146.2	10.9	8.0	134.0	146.9	12.8	9.6	2.0	1.6
57	Nondefense	481.1	487.7	6.6	1.4	481.5	480.8	–0.7	–0.1	–7.3	–1.5
58	Consumption expenditures	358.2	362.2	4.0	1.1	354.3	352.0	–2.3	–0.6	–6.3	–1.7
59	Gross investment	123.0	125.6	2.6	2.1	127.4	129.0	1.6	1.3	–1.0	–0.8
60	State and local	1,967.4	1,974.5	7.1	0.4	1,963.4	1,984.9	21.4	1.1	14.3	0.7
61	Consumption expenditures	1,617.5	1,625.9	8.4	0.5	1,611.0	1,625.5	14.5	0.9	6.1	0.4
62	Gross investment	349.9	348.6	–1.3	–0.4	352.4	359.3	6.9	2.0	8.2	2.4
Addenda											
63	Gross domestic income ¹	17,865.2	18,310.2	445.0	2.5	17,917.6	18,437.6	519.9	2.9	74.9	0.4
64	Average of GDP and GDI ²	17,844.7	18,316.3	471.6	2.6	17,896.9	18,398.5	501.6	2.8	30.0	0.2
65	Final sales of domestic product	17,763.5	18,270.7	507.2	2.9	17,807.9	18,311.4	503.4	2.8	–3.7	–0.1
66	Gross domestic purchases	18,635.1	19,173.1	538.0	2.9	18,663.2	19,178.8	515.6	2.8	–22.4	–0.1
67	Gross national product	18,068.4	18,580.7	512.3	2.8	18,138.7	18,663.1	524.4	2.9	12.1	0.1
68	Disposable personal income ³	13,696.7	14,162.4	465.7	3.4	13,734.8	14,205.8	471.0	3.4	5.3	0.0

1. Gross domestic income deflated by the implicit price deflator for gross domestic product.
2. The arithmetic average of gross domestic product and of gross domestic income, deflated by the implicit price deflator for GDP.
3. Disposable personal income deflated by the implicit price deflator for personal consumption expenditures.

Table A5. Revisions to Real GDP, Expanded Detail, Over the Period 2017Q4 – 2018Q4
 [Billions of chained dollars]

Line	Real GDP and its major components	Previously published chained (2012) dollars				Revised chained (2012) dollars				Revision in change	
		2017 Q4	2018 Q4	Change for 2017Q4 – 2018Q4		2017 Q4	2018 Q4	Change for 2017Q4 – 2018Q4		Dollar	Percent change (percentage points)
				Dollar	Percent (annual rate)			Dollar	Percent (annual rate)		
1	Gross domestic product	18,322.5	18,783.5	461.1	2.5	18,359.4	18,813.9	454.5	2.5	-6.6	0.0
2	Personal consumption expenditures	12,729.7	13,066.3	336.6	2.6	12,733.7	13,033.4	299.6	2.4	-36.9	-0.2
3	Goods	4,499.8	4,631.8	132.0	2.9	4,508.3	4,639.8	131.6	2.9	-0.4	0.0
4	Durable goods	1,643.5	1,705.2	61.7	3.8	1,645.7	1,714.3	68.6	4.2	6.9	0.4
5	Motor vehicles and parts	532.6	538.5	5.9	1.1	534.1	537.1	3.0	0.6	-3.0	-0.5
6	Furnishings and durable household equipment	385.2	394.0	8.8	2.3	386.8	398.2	11.5	3.0	2.7	0.7
7	Recreational goods and vehicles	492.4	524.8	32.5	6.6	490.6	536.9	46.4	9.5	13.9	2.9
8	Other durable goods	238.7	256.6	17.8	7.5	239.5	252.8	13.3	5.5	-4.6	-2.0
9	Nondurable goods	2,866.7	2,938.9	72.2	2.5	2,873.2	2,938.9	65.7	2.3	-6.5	-0.2
10	Food and beverages purchased for off-premises consumption	957.2	977.2	20.0	2.1	957.2	970.4	13.3	1.4	-6.7	-0.7
11	Clothing and footwear	385.5	400.5	15.0	3.9	389.0	403.7	14.8	3.8	-0.3	-0.1
12	Gasoline and other energy goods	448.0	448.5	0.4	0.1	448.5	446.8	-1.8	-0.4	-2.2	-0.5
13	Other nondurable goods	1,065.4	1,099.2	33.9	3.2	1,067.8	1,104.0	36.2	3.4	2.4	0.2
14	Services	8,254.9	8,462.6	207.7	2.5	8,251.9	8,425.1	173.2	2.1	-34.5	-0.4
15	Household consumption expenditures (for services)	7,906.2	8,075.1	169.0	2.1	7,903.9	8,045.9	142.0	1.8	-27.0	-0.3
16	Housing and utilities	2,150.0	2,172.7	22.7	1.1	2,153.3	2,177.7	24.4	1.1	1.7	0.0
17	Health care	2,146.9	2,192.4	45.5	2.1	2,146.0	2,183.8	37.8	1.8	-7.7	-0.3
18	Transportation services	430.2	429.9	-0.2	-0.1	431.8	432.3	0.5	0.1	0.7	0.2
19	Recreation services	483.6	503.3	19.8	4.1	482.2	499.1	16.8	3.5	-2.9	-0.6
20	Food services and accommodations	817.7	849.4	31.7	3.9	814.8	835.7	20.9	2.6	-10.8	-1.3
21	Financial services and insurance	838.8	844.9	6.1	0.7	840.8	844.3	3.5	0.4	-2.6	-0.3
22	Other services	1,051.8	1,098.7	46.8	4.5	1,047.5	1,088.6	41.2	3.9	-5.6	-0.6
23	Final consumption expenditures of nonprofit institutions serving households (NPISHs)	349.6	386.9	37.3	10.7	348.8	378.9	30.1	8.6	-7.2	-2.1
24	Gross output of nonprofit institutions	1,372.6	1,419.8	47.2	3.4	1,372.9	1,413.3	40.4	2.9	-6.8	-0.5
25	Less: Receipts from sales of goods and services by nonprofit institutions	1,024.2	1,032.2	8.0	0.8	1,025.4	1,034.2	8.8	0.9	0.8	0.1
26	Gross private domestic investment	3,262.1	3,429.5	167.4	5.1	3,256.7	3,448.3	191.6	5.9	24.2	0.8
27	Fixed investment	3,210.7	3,323.0	112.4	3.5	3,209.2	3,338.7	129.4	4.0	17.1	0.5
28	Nonresidential	2,584.2	2,735.8	151.6	5.9	2,576.4	2,742.6	166.2	6.5	14.6	0.6
29	Structures	519.9	533.4	13.5	2.6	528.4	534.9	6.5	1.2	-7.0	-1.4

table continues on next page

Table A5. Revisions to Real GDP, Expanded Detail, Over the Period 2017Q4 – 2018Q4
 [Billions of chained dollars]

Line	Real GDP and its major components	Previously published chained (2012) dollars				Revised chained (2012) dollars				Revision in change	
		2017 Q4	2018 Q4	Change for 2017Q4 – 2018Q4		2017 Q4	2018 Q4	Change for 2017Q4 – 2018Q4		Dollar	Percent change (percentage points)
				Dollar	Percent (annual rate)			Dollar	Percent (annual rate)		
30	Equipment	1,217.8	1,279.2	61.4	5.0	1,191.4	1,274.8	83.4	7.0	22.0	2.0
31	Information processing equipment	477.2	504.2	26.9	5.6	458.9	483.9	25.0	5.5	-1.9	-0.1
32	Computers and peripheral equipment	113.8	122.7	8.9	7.8	112.6	123.8	11.1	9.9	2.2	2.1
33	Other	366.8	384.5	17.7	4.8	348.8	361.8	12.9	3.7	-4.8	-1.1
34	Industrial equipment	234.4	242.5	8.1	3.4	233.9	251.7	17.9	7.6	9.8	4.2
35	Transportation equipment	269.9	289.6	19.8	7.3	279.8	298.0	18.3	6.5	-1.5	-0.8
36	Other equipment	247.4	254.9	7.5	3.0	227.9	249.2	21.3	9.3	13.8	6.3
37	Intellectual property products	852.0	931.3	79.3	9.3	860.9	941.5	80.6	9.4	1.3	0.1
38	Software	383.5	428.0	44.6	11.6	386.5	432.6	46.1	11.9	1.5	0.3
39	Research and development	390.9	422.7	31.9	8.2	397.1	430.0	32.9	8.3	1.0	0.1
40	Entertainment, literary, and artistic originals	80.6	85.2	4.6	5.7	79.9	83.4	3.4	4.3	-1.1	-1.4
41	Residential	620.4	593.0	-27.4	-4.4	625.5	601.0	-24.5	-3.9	2.9	0.5
42	Change in private inventories	31.1	93.0	61.9	---	25.3	92.3	67.0	---	5.1	---
43	Farm	-5.2	-13.7	-8.5	---	-7.3	-12.2	-4.9	---	3.6	---
44	Nonfarm	34.9	103.0	68.1	---	30.9	100.8	70.0	---	1.8	---
45	Net exports of goods and services	-883.8	-983.0	-99.2	---	-847.0	-937.3	-90.3	---	9.0	---
46	Exports	2,519.2	2,528.5	9.3	0.4	2,536.2	2,548.8	12.5	0.5	3.2	0.1
47	Goods	1,758.1	1,782.5	24.4	1.4	1,766.4	1,787.9	21.5	1.2	-2.9	-0.2
48	Services	763.7	751.7	-11.9	-1.6	771.9	765.2	-6.7	-0.9	5.3	0.7
49	Imports	3,403.0	3,511.6	108.6	3.2	3,383.2	3,486.0	102.8	3.0	-5.7	-0.2
50	Goods	2,865.8	2,962.0	96.3	3.4	2,862.0	2,957.9	95.9	3.4	-0.3	0.0
51	Services	538.9	552.0	13.1	2.4	525.1	533.8	8.7	1.7	-4.4	-0.7
52	Government consumption expenditures and gross investment	3,186.1	3,234.9	48.8	1.5	3,192.8	3,240.2	47.4	1.5	-1.5	0.0
53	Federal	1,209.8	1,242.1	32.4	2.7	1,206.0	1,241.6	35.6	3.0	3.3	0.3
54	National defense	721.4	750.6	29.2	4.0	724.7	755.1	30.4	4.2	1.2	0.2
55	Consumption expenditures	575.3	595.7	20.4	3.5	578.0	595.1	17.2	3.0	-3.2	-0.5
56	Gross investment	146.2	155.1	8.9	6.1	146.9	160.4	13.6	9.2	4.6	3.1
57	Nondefense	487.7	491.3	3.5	0.7	480.8	486.4	5.5	1.1	2.0	0.4
58	Consumption expenditures	362.2	365.1	2.9	0.8	352.0	355.7	3.7	1.1	0.8	0.3
59	Gross investment	125.6	126.2	0.7	0.5	129.0	130.9	1.8	1.4	1.2	0.9
60	State and local	1,974.5	1,991.4	16.9	0.9	1,984.9	1,997.1	12.3	0.6	-4.6	-0.3
61	Consumption expenditures	1,625.9	1,643.1	17.3	1.1	1,625.5	1,643.1	17.6	1.1	0.3	0.0
62	Gross investment	348.6	348.2	-0.4	-0.1	359.3	354.0	-5.3	-1.5	-4.9	-1.4
Addenda											
63	Gross domestic income ¹	18,310.2	18,739.3	429.1	2.3	18,437.6	18,876.3	438.7	2.4	9.6	0.1
64	Average of GDP and GDI ²	18,316.3	18,761.4	445.1	2.4	18,398.5	18,845.1	446.6	2.4	1.5	0.0
65	Final sales of domestic product	18,270.7	18,678.3	407.7	2.2	18,311.4	18,705.9	394.5	2.2	-13.1	0.0
66	Gross domestic purchases	19,173.1	19,724.2	551.0	2.9	19,178.8	19,715.2	536.4	2.8	-14.7	-0.1
67	Gross national product	18,580.7	19,028.0	447.3	2.4	18,663.1	19,065.5	402.4	2.2	-44.9	-0.2
68	Disposable personal income ³	14,162.4	14,715.2	552.8	3.9	14,205.8	14,732.3	526.5	3.7	-26.3	-0.2

1. Gross domestic income deflated by the implicit price deflator for gross domestic product.
2. The arithmetic average of gross domestic product and of gross domestic income, deflated by the implicit price deflator for GDP.
3. Disposable personal income deflated by the implicit price deflator for personal consumption expenditures.

Table A6. Revisions to Real GDP, Expanded Detail, Over the Period 2018Q4 – 2019Q4
 [Billions of chained dollars]

Line	Real GDP and its major components	Previously published chained (2012) dollars				Revised chained (2012) dollars				Revision in change	
		2018 Q4	2019 Q4	Change for 2018Q4 – 2019Q4		2018 Q4	2019 Q4	Change for 2018Q4 – 2019Q4		Dollar	Percent change (percentage points)
				Dollar	Percent (annual rate)			Dollar	Percent (annual rate)		
1	Gross domestic product	18,783.5	19,222.0	438.4	2.3	18,813.9	19,254.0	440.0	2.3	1.6	0.0
2	Personal consumption expenditures	13,066.3	13,413.8	347.5	2.7	13,033.4	13,353.7	320.3	2.5	-27.2	-0.2
3	Goods	4,631.8	4,814.7	182.9	3.9	4,639.8	4,811.8	172.0	3.7	-10.9	-0.2
4	Durable goods	1,705.2	1,806.1	100.9	5.9	1,714.3	1,811.7	97.4	5.7	-3.5	-0.2
5	Motor vehicles and parts	538.5	554.8	16.3	3.0	537.1	539.2	2.1	0.4	-14.2	-2.6
6	Furnishings and durable household equipment	394.0	411.6	17.6	4.5	398.2	417.3	19.1	4.8	1.5	0.3
7	Recreational goods and vehicles	524.8	588.3	63.4	12.1	536.9	613.0	76.0	14.2	12.6	2.1
8	Other durable goods	256.6	267.2	10.6	4.1	252.8	263.7	10.9	4.3	0.3	0.2
9	Nondurable goods	2,938.9	3,025.7	86.8	3.0	2,938.9	3,018.2	79.3	2.7	-7.5	-0.3
10	Food and beverages purchased for off-premises consumption	977.2	995.8	18.6	1.9	970.4	987.1	16.6	1.7	-2.0	-0.2
11	Clothing and footwear	400.5	412.8	12.3	3.1	403.7	418.0	14.3	3.5	1.9	0.4
12	Gasoline and other energy goods	448.5	446.5	-2.0	-0.4	446.8	441.6	-5.2	-1.2	-3.2	-0.8
13	Other nondurable goods	1,099.2	1,152.3	53.1	4.8	1,104.0	1,152.5	48.5	4.4	-4.6	-0.4
14	Services	8,462.6	8,639.1	176.5	2.1	8,425.1	8,584.9	159.8	1.9	-16.7	-0.2
15	Household consumption expenditures (for services)	8,075.1	8,283.2	208.1	2.6	8,045.9	8,237.0	191.1	2.4	-17.0	-0.2
16	Housing and utilities	2,172.7	2,193.4	20.8	1.0	2,177.7	2,199.1	21.3	1.0	0.6	0.0
17	Health care	2,192.4	2,275.9	83.5	3.8	2,183.8	2,260.2	76.4	3.5	-7.1	-0.3
18	Transportation services	429.9	443.9	14.0	3.2	432.3	447.8	15.6	3.6	1.6	0.4
19	Recreation services	503.3	517.0	13.7	2.7	499.1	506.7	7.6	1.5	-6.1	-1.2
20	Food services and accommodations	849.4	865.9	16.5	1.9	835.7	847.0	11.3	1.3	-5.3	-0.6
21	Financial services and insurance	844.9	865.6	20.7	2.5	844.3	865.8	21.4	2.5	0.7	0.0
22	Other services	1,098.7	1,142.7	44.0	4.0	1,088.6	1,130.5	41.8	3.8	-2.2	-0.2
23	Final consumption expenditures of nonprofit institutions serving households (NPISHs)	386.9	357.1	-29.8	-7.7	378.9	349.5	-29.4	-7.8	0.4	-0.1
24	Gross output of nonprofit institutions	1,419.8	1,437.9	18.1	1.3	1,413.3	1,422.1	8.8	0.6	-9.3	-0.7
25	Less: Receipts from sales of goods and services by nonprofit institutions	1,032.2	1,082.7	50.5	4.9	1,034.2	1,074.9	40.7	3.9	-9.8	-1.0
26	Gross private domestic investment	3,429.5	3,363.4	-66.1	-1.9	3,448.3	3,413.3	-35.0	-1.0	31.1	0.9
27	Fixed investment	3,323.0	3,325.9	2.9	0.1	3,338.7	3,387.2	48.5	1.5	45.6	1.4
28	Nonresidential	2,735.8	2,725.7	-10.1	-0.4	2,742.6	2,781.5	38.9	1.4	48.9	1.8
29	Structures	533.4	500.1	-33.3	-6.2	534.9	545.1	10.2	1.9	43.5	8.1

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Table A6. Revisions to Real GDP, Expanded Detail, Over the Period 2018Q4 – 2019Q4
[Billions of chained dollars]

Line	Real GDP and its major components	Previously published chained (2012) dollars				Revised chained (2012) dollars				Revision in change	
		2018 Q4	2019 Q4	Change for 2018Q4 – 2019Q4		2018 Q4	2019 Q4	Change for 2018Q4 – 2019Q4		Dollar	Percent change (percentage points)
				Dollar	Percent (annual rate)			Dollar	Percent (annual rate)		
30	Equipment	1,279.2	1,255.6	-23.6	-1.8	1,274.8	1,258.0	-16.8	-1.3	6.8	0.5
31	Information processing equipment	504.2	516.5	12.3	2.4	483.9	492.9	9.0	1.9	-3.3	-0.5
32	Computers and peripheral equipment	122.7	132.4	9.6	7.9	123.8	134.4	10.6	8.6	1.0	0.7
33	Other	384.5	385.7	1.1	0.3	361.8	358.3	-3.5	-1.0	-4.6	-1.3
34	Industrial equipment	242.5	237.2	-5.3	-2.2	251.7	245.3	-6.4	-2.6	-1.2	-0.4
35	Transportation equipment	289.6	271.1	-18.5	-6.4	298.0	283.0	-15.1	-5.1	3.4	1.3
36	Other equipment	254.9	248.1	-6.8	-2.7	249.2	248.5	-0.8	-0.3	6.1	2.4
37	Intellectual property products	931.3	982.0	50.7	5.4	941.5	985.2	43.7	4.6	-7.0	-0.8
38	Software	428.0	470.3	42.3	9.9	432.6	461.8	29.2	6.8	-13.0	-3.1
39	Research and development	422.7	433.7	11.0	2.6	430.0	445.3	15.4	3.6	4.3	1.0
40	Entertainment, literary, and artistic originals	85.2	86.7	1.5	1.7	83.4	84.3	0.9	1.1	-0.5	-0.6
41	Residential	593.0	603.1	10.1	1.7	601.0	610.5	9.5	1.6	-0.6	-0.1
42	Change in private inventories	93.0	13.1	-79.9	---	92.3	-1.1	-93.3	---	-13.4	---
43	Farm	-13.7	-7.7	6.0	---	-12.2	-15.6	-3.5	---	-9.5	---
44	Nonfarm	103.0	19.0	-84.0	---	100.8	11.5	-89.3	---	-5.3	---
45	Net exports of goods and services	-983.0	-900.7	82.3	---	-937.3	-861.5	75.8	---	-6.6	---
46	Exports	2,528.5	2,536.4	7.8	0.3	2,548.8	2,557.8	9.1	0.4	1.2	0.1
47	Goods	1,782.5	1,782.3	-0.2	0.0	1,787.9	1,786.8	-1.1	-0.1	-0.9	-0.1
48	Services	751.7	758.6	6.9	0.9	765.2	774.0	8.8	1.1	1.9	0.2
49	Imports	3,511.6	3,437.1	-74.5	-2.1	3,486.0	3,419.3	-66.7	-1.9	7.8	0.2
50	Goods	2,962.0	2,861.5	-100.5	-3.4	2,957.9	2,872.2	-85.7	-2.9	14.8	0.5
51	Services	552.0	570.4	18.5	3.3	533.8	546.5	12.7	2.4	-5.8	-0.9
52	Government consumption expenditures and gross investment	3,234.9	3,331.1	96.1	3.0	3,240.2	3,337.5	97.3	3.0	1.2	0.0
53	Federal	1,242.1	1,295.1	52.9	4.3	1,241.6	1,301.1	59.5	4.8	6.6	0.5
54	National defense	750.6	783.3	32.7	4.4	755.1	797.1	41.9	5.6	9.2	1.2
55	Consumption expenditures	595.7	618.7	23.0	3.9	595.1	623.0	27.8	4.7	4.8	0.8
56	Gross investment	155.1	165.0	9.9	6.4	160.4	174.8	14.4	9.0	4.5	2.6
57	Nondefense	491.3	511.5	20.2	4.1	486.4	504.1	17.8	3.7	-2.5	-0.4
58	Consumption expenditures	365.1	381.3	16.2	4.4	355.7	366.8	11.1	3.1	-5.2	-1.3
59	Gross investment	126.2	130.2	3.9	3.1	130.9	137.7	6.8	5.2	2.9	2.1
60	State and local	1,991.4	2,035.0	43.6	2.2	1,997.1	2,035.6	38.5	1.9	-5.2	-0.3
61	Consumption expenditures	1,643.1	1,662.8	19.7	1.2	1,643.1	1,659.2	16.1	1.0	-3.6	-0.2
62	Gross investment	348.2	372.1	23.9	6.9	354.0	376.4	22.4	6.3	-1.5	-0.6
Addenda											
63	Gross domestic income ¹	18,739.3	19,134.5	395.2	2.1	18,876.3	19,230.7	354.5	1.9	-40.7	-0.2
64	Average of GDP and GDI ²	18,761.4	19,178.2	416.8	2.2	18,845.1	19,242.4	397.3	2.1	-19.5	-0.1
65	Final sales of domestic product	18,678.3	19,183.2	504.9	2.7	18,705.9	19,226.6	520.7	2.8	15.8	0.1
66	Gross domestic purchases	19,724.2	20,103.1	378.9	1.9	19,715.2	20,099.6	384.5	1.9	5.5	0.0
67	Gross national product	19,028.0	19,515.5	487.4	2.6	19,065.5	19,509.6	444.1	2.3	-43.4	-0.3
68	Disposable personal income ³	14,715.2	15,090.9	375.7	2.6	14,732.3	14,964.5	232.2	1.6	-143.4	-1.0

1. Gross domestic income deflated by the implicit price deflator for gross domestic product.
2. The arithmetic average of gross domestic product and of gross domestic income, deflated by the implicit price deflator for GDP.
3. Disposable personal income deflated by the implicit price deflator for personal consumption expenditures.

Table A7. Revisions to Real GDP, Expanded Detail, Over the Period 2014Q4 – 2019Q4
 [Billions of chained dollars]

Line	Real GDP and its major components	Previously published chained (2012) dollars				Revised chained (2012) dollars				Revision in change	
		2014 Q4	2019 Q4	Change for 2014Q4 – 2019Q4		2014 Q4	2019 Q4	Change for 2014Q4 – 2019Q4		Dollar	Percent change (percentage points)
				Dollar	Percent (annual rate)			Dollar	Percent (annual rate)		
1	Gross domestic product	17,143.0	19,222.0	2,078.9	2.3	17,143.0	19,254.0	2,110.9	2.3	32.0	0.0
2	Personal consumption expenditures	11,695.0	13,413.8	1,718.8	2.8	11,695.0	13,353.7	1,658.7	2.7	-60.1	-0.1
3	Goods	3,984.4	4,814.7	830.3	3.9	3,984.4	4,811.8	827.5	3.8	-2.9	-0.1
4	Durable goods	1,343.3	1,806.1	462.8	6.1	1,343.3	1,811.7	468.4	6.2	5.6	0.1
5	Motor vehicles and parts	452.1	554.8	102.7	4.2	452.1	539.2	87.1	3.6	-15.6	-0.6
6	Furnishings and durable household equipment	302.0	411.6	109.7	6.4	302.0	417.3	115.3	6.7	5.7	0.3
7	Recreational goods and vehicles	376.3	588.3	212.0	9.3	376.3	613.0	236.7	10.3	24.7	1.0
8	Other durable goods	213.5	267.2	53.7	4.6	213.5	263.7	50.2	4.3	-3.5	-0.3
9	Nondurable goods	2,643.6	3,025.7	382.2	2.7	2,643.6	3,018.2	374.7	2.7	-7.5	0.0
10	Food and beverages purchased for off-premises consumption	876.3	995.8	119.5	2.6	876.3	987.1	110.7	2.4	-8.8	-0.2
11	Clothing and footwear	363.7	412.8	49.1	2.6	363.7	418.0	54.3	2.8	5.2	0.2
12	Gasoline and other energy goods	437.2	446.5	9.3	0.4	437.2	441.6	4.4	0.2	-4.9	-0.2
13	Other nondurable goods	966.2	1,152.3	186.1	3.6	966.2	1,152.5	186.4	3.6	0.2	0.0
14	Services	7,713.9	8,639.1	925.2	2.3	7,713.9	8,584.9	870.9	2.2	-54.3	-0.1
15	Household consumption expenditures (for services)	7,372.2	8,283.2	911.1	2.4	7,372.2	8,237.0	864.8	2.2	-46.2	-0.2
16	Housing and utilities	2,057.6	2,193.4	135.8	1.3	2,057.6	2,199.1	141.4	1.3	5.6	0.0
17	Health care	1,945.2	2,275.9	330.7	3.2	1,945.2	2,260.2	315.0	3.0	-15.7	-0.2
18	Transportation services	378.5	443.9	65.4	3.2	378.5	447.8	69.3	3.4	3.9	0.2
19	Recreation services	458.1	517.0	58.9	2.4	458.1	506.7	48.6	2.0	-10.3	-0.4
20	Food services and accommodations	756.0	865.9	109.9	2.8	756.0	847.0	91.0	2.3	-18.9	-0.5
21	Financial services and insurance	825.4	865.6	40.2	1.0	825.4	865.8	40.3	1.0	0.1	0.0
22	Other services	953.8	1,142.7	188.9	3.7	953.8	1,130.5	176.7	3.5	-12.2	-0.2
23	Final consumption expenditures of nonprofit institutions serving households (NPISHs)	341.9	357.1	15.2	0.9	341.9	349.5	7.6	0.4	-7.6	-0.5
24	Gross output of nonprofit institutions	1,290.3	1,437.9	147.7	2.2	1,290.3	1,422.1	131.8	2.0	-15.8	-0.2
25	Less: Receipts from sales of goods and services by nonprofit institutions	948.7	1,082.7	134.0	2.7	948.7	1,074.9	126.3	2.5	-7.7	-0.2
26	Gross private domestic investment	3,021.9	3,363.4	341.5	2.2	3,021.9	3,413.3	391.5	2.5	49.9	0.3
27	Fixed investment	2,941.2	3,325.9	384.7	2.5	2,941.2	3,387.2	446.0	2.9	61.3	0.4
28	Nonresidential	2,415.5	2,725.7	310.3	2.4	2,415.5	2,781.5	366.0	2.9	55.7	0.5
29	Structures	551.0	500.1	-50.8	-1.9	551.0	545.1	-5.8	-0.2	45.0	1.7

table continues on next page

Table A7. Revisions to Real GDP, Expanded Detail, Over the Period 2014Q4 – 2019Q4
[Billions of chained dollars]

Line	Real GDP and its major components	Previously published chained (2012) dollars				Revised chained (2012) dollars				Revision in change	
		2014 Q4	2019 Q4	Change for 2014Q4 – 2019Q4		2014 Q4	2019 Q4	Change for 2014Q4 – 2019Q4		Dollar	Percent change (percentage points)
				Dollar	Percent (annual rate)			Dollar	Percent (annual rate)		
30	Equipment	1,116.9	1,255.6	138.7	2.4	1,116.9	1,258.0	141.1	2.4	2.4	0.0
31	Information processing equipment	379.3	516.5	137.2	6.4	379.3	492.9	113.6	5.4	-23.6	-1.0
32	Computers and peripheral equipment	104.7	132.4	27.7	4.8	104.7	134.4	29.7	5.1	2.0	0.3
33	Other	275.1	385.7	110.6	7.0	275.1	358.3	83.2	5.4	-27.4	-1.6
34	Industrial equipment	215.3	237.2	21.9	2.0	215.3	245.3	30.0	2.6	8.1	0.6
35	Transportation equipment	271.6	271.1	-0.4	0.0	271.6	283.0	11.4	0.8	11.9	0.8
36	Other equipment	250.5	248.1	-2.4	-0.2	250.5	248.5	-2.0	-0.2	0.4	0.0
37	Intellectual property products	746.6	982.0	235.4	5.6	746.6	985.2	238.6	5.7	3.1	0.1
38	Software	311.9	470.3	158.4	8.6	311.9	461.8	149.9	8.2	-8.5	-0.4
39	Research and development	360.2	433.7	73.5	3.8	360.2	445.3	85.1	4.3	11.6	0.5
40	Entertainment, literary, and artistic originals	74.4	86.7	12.3	3.1	74.4	84.3	9.9	2.5	-2.4	-0.6
41	Residential	525.2	603.1	77.9	2.8	525.2	610.5	85.4	3.1	7.4	0.3
42	Change in private inventories	82.0	13.1	-68.9	---	82.0	-1.1	-83.0	---	-14.1	---
43	Farm	-4.4	-7.7	-3.3	---	-4.4	-15.6	-11.2	---	-7.9	---
44	Nonfarm	87.0	19.0	-68.0	---	87.0	11.5	-75.4	---	-7.5	---
45	Net exports of goods and services	-617.9	-900.7	-282.8	---	-617.9	-861.5	-243.6	---	39.2	---
46	Exports	2,400.3	2,536.4	136.1	1.1	2,400.3	2,557.8	157.6	1.3	21.5	0.2
47	Goods	1,672.2	1,782.3	110.1	1.3	1,672.2	1,786.8	114.6	1.3	4.5	0.0
48	Services	728.7	758.6	29.9	0.8	728.7	774.0	45.3	1.2	15.4	0.4
49	Imports	3,018.2	3,437.1	418.9	2.6	3,018.2	3,419.3	401.1	2.5	-17.7	-0.1
50	Goods	2,539.5	2,861.5	322.0	2.4	2,539.5	2,872.2	332.7	2.5	10.7	0.1
51	Services	479.8	570.4	90.7	3.5	479.8	546.5	66.7	2.6	-24.0	-0.9
52	Government consumption expenditures and gross investment	3,043.4	3,331.1	287.6	1.8	3,043.4	3,337.5	294.0	1.9	6.4	0.1
53	Federal	1,175.5	1,295.1	119.6	2.0	1,175.5	1,301.1	125.6	2.1	6.1	0.1
54	National defense	716.6	783.3	66.7	1.8	716.6	797.1	80.5	2.2	13.8	0.4
55	Consumption expenditures	574.2	618.7	44.5	1.5	574.2	623.0	48.8	1.6	4.2	0.1
56	Gross investment	142.4	165.0	22.6	3.0	142.4	174.8	32.4	4.2	9.8	1.2
57	Nondefense	458.6	511.5	52.9	2.2	458.6	504.1	45.5	1.9	-7.4	-0.3
58	Consumption expenditures	340.7	381.3	40.6	2.3	340.7	366.8	26.1	1.5	-14.5	-0.8
59	Gross investment	117.9	130.2	12.3	2.0	117.9	137.7	19.8	3.1	7.5	1.1
60	State and local	1,866.6	2,035.0	168.4	1.7	1,866.6	2,035.6	169.0	1.7	0.6	0.0
61	Consumption expenditures	1,535.2	1,662.8	127.7	1.6	1,535.2	1,659.2	124.0	1.6	-3.6	0.0
62	Gross investment	331.4	372.1	40.7	2.3	331.4	376.4	45.0	2.6	4.3	0.3
Addenda											
63	Gross domestic income ¹	17,470.9	19,134.5	1,663.6	1.8	17,467.3	19,230.7	1,763.4	1.9	99.8	0.1
64	Average of GDP and GDI ²	17,307.0	19,178.2	1,871.3	2.1	17,305.2	19,242.4	1,937.2	2.1	65.9	0.0
65	Final sales of domestic product	17,062.8	19,183.2	2,120.4	2.4	17,062.8	19,226.6	2,163.8	2.4	43.3	0.0
66	Gross domestic purchases	17,757.1	20,103.1	2,346.0	2.5	17,757.1	20,099.6	2,342.5	2.5	-3.5	0.0
67	Gross national product	17,363.8	19,515.5	2,151.7	2.4	17,363.8	19,509.6	2,145.8	2.4	-5.9	0.0
68	Disposable personal income ³	13,089.7	15,090.9	2,001.2	2.9	13,089.1	14,964.5	1,875.5	2.7	-125.7	-0.2

1. Gross domestic income deflated by the implicit price deflator for gross domestic product.

2. The arithmetic average of gross domestic product and of gross domestic income, deflated by the implicit price deflator for GDP.

3. Disposable personal income deflated by the implicit price deflator for personal consumption expenditures.

Table A8. Revisions to Real GDP, Expanded Detail, Over the Period 2009Q2 – 2019Q4
 [Billions of chained dollars]

Line	Real GDP and its major components	Previously published chained (2012) dollars				Revised chained (2012) dollars				Revision in change	
		2009 Q2	2019 Q4	Change for 2009Q2 – 2019Q4		2009 Q2	2019 Q4	Change for 2009Q2 – 2019Q4		Dollar	Percent change (percentage points)
				Dollar	Percent (annual rate)			Dollar	Percent (annual rate)		
1	Gross domestic product	15,134.1	19,222.0	4,087.9	2.3	15,134.1	19,254.0	4,119.8	2.3	32.0	0.0
2	Personal consumption expenditures	10,417.3	13,413.8	2,996.5	2.4	10,417.3	13,353.7	2,936.4	2.4	-60.1	0.0
3	Goods	3,359.6	4,814.7	1,455.0	3.5	3,359.6	4,811.8	1,452.2	3.5	-2.9	0.0
4	Durable goods	954.0	1,806.1	852.1	6.3	954.0	1,811.7	857.7	6.3	5.6	0.0
5	Motor vehicles and parts	337.0	554.8	217.9	4.9	337.0	539.2	202.3	4.6	-15.6	-0.3
6	Furnishings and durable household equipment	222.2	411.6	189.5	6.0	222.2	417.3	195.1	6.2	5.7	0.2
7	Recreational goods and vehicles	238.2	588.3	350.1	9.0	238.2	613.0	374.8	9.4	24.7	0.4
8	Other durable goods	159.0	267.2	108.2	5.1	159.0	263.7	104.7	4.9	-3.5	-0.2
9	Nondurable goods	2,413.7	3,025.7	612.0	2.2	2,413.7	3,018.2	604.5	2.2	-7.5	0.0
10	Food and beverages purchased for off-premises consumption	822.9	995.8	172.9	1.8	822.9	987.1	164.2	1.7	-8.8	-0.1
11	Clothing and footwear	314.8	412.8	98.0	2.6	314.8	418.0	103.2	2.7	5.2	0.1
12	Gasoline and other energy goods	440.0	446.5	6.5	0.1	440.0	441.6	1.6	0.0	-4.9	-0.1
13	Other nondurable goods	840.4	1,152.3	312.0	3.1	840.4	1,152.5	312.2	3.1	0.2	0.0
14	Services	7,057.5	8,639.1	1,581.6	1.9	7,057.5	8,584.9	1,527.3	1.9	-54.3	0.0
15	Household consumption expenditures (for services)	6,775.2	8,283.2	1,508.0	1.9	6,775.2	8,237.0	1,461.8	1.9	-46.2	0.0
16	Housing and utilities	1,938.4	2,193.4	255.0	1.2	1,938.4	2,199.1	260.6	1.2	5.6	0.0
17	Health care	1,736.6	2,275.9	539.2	2.6	1,736.6	2,260.2	523.5	2.5	-15.7	-0.1
18	Transportation services	318.1	443.9	125.8	3.2	318.1	447.8	129.7	3.3	3.9	0.1
19	Recreation services	407.5	517.0	109.5	2.3	407.5	506.7	99.2	2.1	-10.3	-0.2
20	Food services and accommodations	654.4	865.9	211.5	2.7	654.4	847.0	192.6	2.5	-18.9	-0.2
21	Financial services and insurance	816.5	865.6	49.1	0.6	816.5	865.8	49.3	0.6	0.1	0.0
22	Other services	904.4	1,142.7	238.2	2.3	904.4	1,130.5	226.1	2.1	-12.2	-0.2
23	Final consumption expenditures of nonprofit institutions serving households (NPISHs)	283.3	357.1	73.8	2.2	283.3	349.5	66.2	2.0	-7.6	-0.2
24	Gross output of nonprofit institutions	1,146.6	1,437.9	291.3	2.2	1,146.6	1,422.1	275.5	2.1	-15.8	-0.1
25	Less: Receipts from sales of goods and services by nonprofit institutions	864.2	1,082.7	218.4	2.2	864.2	1,074.9	210.7	2.1	-7.7	-0.1
26	Gross private domestic investment	1,872.3	3,363.4	1,491.1	5.7	1,872.3	3,413.3	1,541.0	5.9	49.9	0.2
27	Fixed investment	2,073.9	3,325.9	1,252.0	4.6	2,073.9	3,387.2	1,313.3	4.8	61.3	0.2
28	Nonresidential	1,693.2	2,725.7	1,032.5	4.6	1,693.2	2,781.5	1,088.3	4.8	55.7	0.2
29	Structures	509.0	500.1	-8.8	-0.2	509.0	545.1	36.2	0.7	45.0	0.9

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Table A8. Revisions to Real GDP, Expanded Detail, Over the Period 2009Q2 – 2019Q4
 [Billions of chained dollars]

Line	Real GDP and its major components	Previously published chained (2012) dollars				Revised chained (2012) dollars				Revision in change	
		2009 Q2	2019 Q4	Change for 2009Q2 – 2019Q4		2009 Q2	2019 Q4	Change for 2009Q2 – 2019Q4		Dollar	Percent change (percentage points)
				Dollar	Percent (annual rate)			Dollar	Percent (annual rate)		
30	Equipment	627.8	1,255.6	627.8	6.8	627.8	1,258.0	630.2	6.8	2.4	0.0
31	Information processing equipment	238.2	516.5	278.2	7.6	238.2	492.9	254.7	7.2	-23.6	-0.4
32	Computers and peripheral equipment	78.5	132.4	53.9	5.1	78.5	134.4	55.9	5.3	2.0	0.2
33	Other	159.8	385.7	225.9	8.8	159.8	358.3	198.5	8.0	-27.4	-0.8
34	Industrial equipment	163.4	237.2	73.8	3.6	163.4	245.3	81.9	3.9	8.1	0.3
35	Transportation equipment	63.3	271.1	207.8	14.9	63.3	283.0	219.7	15.3	11.9	0.4
36	Other equipment	161.9	248.1	86.2	4.2	161.9	248.5	86.6	4.2	0.4	0.0
37	Intellectual property products	568.6	982.0	413.4	5.3	568.6	985.2	416.5	5.4	3.1	0.1
38	Software	209.5	470.3	260.8	8.0	209.5	461.8	252.3	7.8	-8.5	-0.2
39	Research and development	297.1	433.7	136.7	3.7	297.1	445.3	148.2	3.9	11.6	0.2
40	Entertainment, literary, and artistic originals	63.5	86.7	23.2	3.0	63.5	84.3	20.8	2.7	-2.4	-0.3
41	Residential	380.4	603.1	222.7	4.5	380.4	610.5	230.1	4.6	7.4	0.1
42	Change in private inventories	-228.3	13.1	241.4	---	-228.3	-1.1	227.3	---	-14.1	---
43	Farm	-9.5	-7.7	1.8	---	-9.5	-15.6	-6.1	---	-7.9	---
44	Nonfarm	-215.3	19.0	234.3	---	-215.3	11.5	226.8	---	-7.5	---
45	Net exports of goods and services	-445.2	-900.7	-455.4	---	-445.2	-861.5	-416.2	---	39.2	---
46	Exports	1,707.9	2,536.4	828.5	3.8	1,707.9	2,557.8	850.0	3.9	21.5	0.1
47	Goods	1,140.2	1,782.3	642.1	4.3	1,140.2	1,786.8	646.6	4.4	4.5	0.1
48	Services	566.9	758.6	191.7	2.8	566.9	774.0	207.1	3.0	15.4	0.2
49	Imports	2,153.1	3,437.1	1,283.9	4.6	2,153.1	3,419.3	1,266.2	4.5	-17.7	-0.1
50	Goods	1,738.0	2,861.5	1,123.6	4.9	1,738.0	2,872.2	1,134.3	4.9	10.7	0.0
51	Services	411.4	570.4	159.1	3.2	411.4	546.5	135.1	2.7	-24.0	-0.5
52	Government consumption expenditures and gross investment	3,313.2	3,331.1	17.9	0.1	3,313.2	3,337.5	24.3	0.1	6.4	0.0
53	Federal	1,289.7	1,295.1	5.4	0.0	1,289.7	1,301.1	11.5	0.1	6.1	0.1
54	National defense	836.4	783.3	-53.1	-0.6	836.4	797.1	-39.3	-0.5	13.8	0.1
55	Consumption expenditures	654.5	618.7	-35.8	-0.5	654.5	623.0	-31.6	-0.5	4.2	0.0
56	Gross investment	181.7	165.0	-16.7	-0.9	181.7	174.8	-6.9	-0.4	9.8	0.5
57	Nondefense	453.3	511.5	58.2	1.2	453.3	504.1	50.8	1.0	-7.4	-0.2
58	Consumption expenditures	341.4	381.3	39.9	1.1	341.4	366.8	25.4	0.7	-14.5	-0.4
59	Gross investment	112.0	130.2	18.1	1.4	112.0	137.7	25.7	2.0	7.5	0.6
60	State and local	2,024.9	2,035.0	10.1	0.0	2,024.9	2,035.6	10.7	0.1	0.6	0.1
61	Consumption expenditures	1,637.6	1,662.8	25.2	0.1	1,637.6	1,659.2	21.6	0.1	-3.6	0.0
62	Gross investment	387.3	372.1	-15.2	-0.4	387.3	376.4	-10.9	-0.3	4.3	0.1
Addenda											
63	Gross domestic income ¹	14,944.2	19,134.5	4,190.3	2.4	14,946.5	19,230.7	4,284.3	2.4	93.9	0.0
64	Average of GDP and GDI ²	15,039.2	19,178.2	4,139.1	2.3	15,040.3	19,242.4	4,202.1	2.4	63.0	0.1
65	Final sales of domestic product	15,343.9	19,183.2	3,839.4	2.1	15,343.9	19,226.6	3,882.7	2.2	43.3	0.1
66	Gross domestic purchases	15,588.8	20,103.1	4,514.3	2.5	15,588.8	20,099.6	4,510.9	2.4	-3.5	-0.1
67	Gross national product	15,257.3	19,515.5	4,258.2	2.4	15,257.3	19,509.6	4,252.3	2.4	-5.9	0.0
68	Disposable personal income ³	11,689.8	15,090.9	3,401.1	2.5	11,689.5	14,964.5	3,275.1	2.4	-126.0	-0.1

1. Gross domestic income deflated by the implicit price deflator for gross domestic product.

2. The arithmetic average of gross domestic product and of gross domestic income, deflated by the implicit price deflator for GDP.

3. Disposable personal income deflated by the implicit price deflator for personal consumption expenditures.

Table B1. Revisions to the Chain-Type Price Indexes Over the Period 2014–2019

Line	Chain-type price indexes	Index numbers (2012=100)			Revision in percent change (percentage points)
		2014	2019	Percent change for 2014 – 2019 (annual rate)	
1	Gross domestic product	103.647	112.318	1.6	0.0
2	Less: Exports of goods and services	100.272	98.751	–0.3	0.0
3	Plus: Imports of goods and services	97.854	89.986	–1.7	0.0
4	<i>Equals:</i> Gross domestic purchases	103.138	110.329	1.4	0.0
5	Personal consumption expenditures	102.830	109.851	1.3	0.0
6	Goods	98.920	94.785	–0.9	0.0
7	Durable goods	95.429	86.463	–2.0	0.0
8	Nondurable goods	100.599	99.212	–0.3	0.0
9	Services	104.804	117.744	2.4	0.1
10	Gross private domestic investment	102.922	108.998	1.2	0.0
11	Fixed investment	103.172	109.799	1.3	0.0
12	Nonresidential	101.469	104.256	0.5	–0.1
13	Structures	107.198	118.709	2.1	–0.4
14	Equipment	99.169	97.888	–0.3	0.0
15	Intellectual property products	100.791	103.683	0.6	–0.1
16	Residential	111.118	134.182	3.8	–0.1
17	Change in private inventories	---	---	---	---
18	Government consumption expenditures and gross investment	104.435	113.439	1.7	0.0
19	Federal	102.632	111.110	1.6	–0.1
20	National defense	102.056	109.256	1.4	0.0
21	Nondefense	103.593	114.014	1.9	–0.2
22	State and local	105.645	114.969	1.7	0.0
Addenda					
23	Gross domestic purchases excluding food and energy	103.373	111.746	1.6	0.0
24	Gross national product	103.635	112.279	1.6	0.0
25	PCE excluding food and energy	103.122	111.875	1.6	0.0
26	Market-based PCE	102.079	107.487	1.0	0.0
27	Market-based PCE excluding food and energy	102.284	109.409	1.4	0.0

Table B2. Revisions to the Chain-Type Price Indexes Over the Period 2014 Q4–2019 Q4

Line	Chain-type price indexes	Index numbers (2012=100)			Revision in percent change (percentage points)
		2014Q4	2019Q4	Percent change for 2014 Q4 – 2019 Q4 (annual rate)	
1	Gross domestic product	104.078	112.989	1.7	0.0
2	Less: Exports of goods and services	98.812	98.350	–0.1	0.0
3	Plus: Imports of goods and services	95.942	89.426	–1.4	0.0
4	<i>Equals:</i> Gross domestic purchases	103.431	110.925	1.4	0.0
5	Personal consumption expenditures	102.992	110.529	1.4	0.0
6	Goods	97.913	94.817	–0.6	0.1
7	Durable goods	94.510	85.774	–1.9	0.0
8	Nondurable goods	99.548	99.673	0.0	0.0
9	Services	105.570	118.781	2.4	0.1
10	Gross private domestic investment	103.617	109.287	1.1	–0.1
11	Fixed investment	103.764	110.099	1.2	–0.1
12	Nonresidential	101.930	104.342	0.5	–0.1
13	Structures	109.460	119.668	1.8	–0.4
14	Equipment	99.148	97.722	–0.3	0.0
15	Intellectual property products	100.667	103.606	0.6	–0.2
16	Residential	112.320	135.468	3.8	0.0
17	Change in private inventories	---	---	---	---
18	Government consumption expenditures and gross investment	104.829	114.022	1.7	–0.1
19	Federal	103.085	111.281	1.5	–0.2
20	National defense	102.355	109.741	1.4	–0.1
21	Nondefense	104.289	113.691	1.7	–0.3
22	State and local	106.003	115.811	1.8	0.0
Addenda					
23	Gross domestic purchases excluding food and energy	103.896	112.342	1.6	0.0
24	Gross national product	104.058	112.950	1.7	0.0
25	PCE excluding food and energy	103.646	112.568	1.7	0.1
26	Market-based PCE	102.086	108.070	1.1	0.0
27	Market-based PCE excluding food and energy	102.681	109.993	1.4	0.0

Table C. Changes from Preceding Period in Real Gross Domestic Product and Real Gross Domestic Income: Annually, 2014–2019, and Quarterly, 2014 Q4–2019 Q4

Year	Chained (2012) dollars			Percent change			Difference GDP–GDI
	GDP	GDI ¹	Average	GDP	GDI	Average	
2014	16,912.0	17,188.6	17,050.3	2.5	3.2	2.9	–0.7
2015	17,432.2	17,659.0	17,545.6	3.1	2.7	2.9	0.4
2016	17,730.5	17,817.7	17,774.1	1.7	0.9	1.3	0.8
2017	18,144.1	18,266.1	18,205.1	2.3	2.5	2.4	–0.2
2018	18,687.8	18,740.4	18,714.1	3.0	2.6	2.8	0.4
2019	19,091.7	19,080.2	19,085.9	2.2	1.8	2.0	0.4

1. Gross domestic income deflated by the implicit price deflator for gross domestic product.

Quarter	Chained (2012) dollars			Percent change			Difference GDP–GDI
	GDP	GDI ¹	Average	GDP	GDI	Average	
2014Q4	17,143.0	17,467.3	17,305.2	2.3	3.4	2.8	–1.1
2015Q1	17,305.8	17,590.1	17,447.9	3.8	2.8	3.3	1.0
2015Q2	17,422.8	17,653.5	17,538.2	2.7	1.5	2.1	1.2
2015Q3	17,486.0	17,688.5	17,587.2	1.5	0.8	1.1	0.7
2015Q4	17,514.1	17,704.5	17,609.3	0.6	0.4	0.5	0.2
2016Q1	17,613.3	17,801.1	17,707.2	2.3	2.2	2.2	0.1
2016Q2	17,668.2	17,726.9	17,697.5	1.3	–1.7	–0.2	3.0
2016Q3	17,764.4	17,826.3	17,795.4	2.2	2.3	2.2	–0.1
2016Q4	17,876.2	17,917.6	17,896.9	2.5	2.1	2.3	0.4
2017Q1	17,977.3	18,084.6	18,030.9	2.3	3.8	3.0	–1.5
2017Q2	18,054.1	18,233.8	18,143.9	1.7	3.3	2.5	–1.6
2017Q3	18,185.6	18,309.1	18,247.4	2.9	1.7	2.3	1.2
2017Q4	18,359.4	18,437.6	18,398.5	3.9	2.8	3.4	1.1
2018Q1	18,530.5	18,601.5	18,566.0	3.8	3.6	3.7	0.2
2018Q2	18,654.4	18,636.7	18,645.6	2.7	0.8	1.7	1.9
2018Q3	18,752.4	18,846.9	18,799.6	2.1	4.6	3.3	–2.5
2018Q4	18,813.9	18,876.3	18,845.1	1.3	0.6	1.0	0.7
2019Q1	18,950.3	18,979.5	18,964.9	2.9	2.2	2.6	0.7
2019Q2	19,020.6	19,036.1	19,028.3	1.5	1.2	1.3	0.3
2019Q3	19,141.7	19,075.1	19,108.4	2.6	0.8	1.7	1.8
2019Q4	19,254.0	19,230.7	19,242.4	2.4	3.3	2.8	–0.9

1. Gross domestic income deflated by the implicit price deflator for gross domestic product.

Table D. Revisions to Cyclical Fluctuations in Real Gross Domestic Product, 1948–2019

Contractions				
Period	(Average annual rate of change; in percent)	(Percentage points, annual rate)	(Percent change; not annual rate)	(Percentage points, not annual rate)
		Revision in percent change		Revision in percent change
1948 Q4 – 1949 Q4	–1.5	---	–1.5	---
1953 Q2 – 1954 Q2	–2.4	---	–2.4	---
1957 Q3 – 1958 Q2	–3.9	---	–3.0	---
1960 Q2 – 1961 Q1	–0.2	---	–0.1	---
1969 Q4 – 1970 Q4	–0.2	---	–0.2	---
1973 Q4 – 1975 Q1	–2.5	---	–3.1	---
1980 Q1 – 1980 Q3	–4.3	---	–2.2	---
1981 Q3 – 1982 Q4	–2.0	---	–2.5	---
1990 Q3 – 1991 Q1	–2.7	---	–1.4	---
2001 Q1 – 2001 Q4	0.6	---	0.4	---
2007 Q4 – 2009 Q2	–2.7	---	–4.0	---

Note: Periods of contraction and expansion reflect business cycle dates as determined by the National Bureau of Economic Research.

Expansions				
Period	(Average annual rate of change; in percent)	(Percentage points, annual rate)	(Percent change; not annual rate)	(Percentage points, not annual rate)
		Revision in percent change		Revision in percent change
1949 Q4 – 1953 Q2	7.6	---	29.3	---
1954 Q2 – 1957 Q3	4.0	---	13.7	---
1958 Q2 – 1960 Q2	5.5	---	11.4	---
1961 Q1 – 1969 Q4	4.9	---	51.9	---
1970 Q4 – 1973 Q4	5.1	---	16.1	---
1975 Q1 – 1980 Q1	4.3	---	23.2	---
1980 Q3 – 1981 Q3	4.3	---	4.3	---
1982 Q4 – 1990 Q3	4.3	---	38.2	---
1991 Q1 – 2001 Q1	3.6	---	42.6	---
2001 Q4 – 2007 Q4	2.9	---	18.7	---
2009 Q2 – 2019 Q4	2.3	0.0	27.2	0.2

Note: Periods of contraction and expansion reflect business cycle dates as determined by the National Bureau of Economic Research.