## Improved Estimates of the National Income and Product Accounts for 1929–99: Results of the Comprehensive Revision

By Brent R. Moulton

The bureau of eonomic analysis (BEA) has ■ completed most of its 11th comprehensive revision of the national income and product accounts (NIPA's) with the release of revised NIPA estimates for 1929-58 and of estimates of fixed assets and consumer durable goods for 1998 (new) and for 1925–97 (revised). These estimates incorporate the definitional, statistical, and presentational improvements that were introduced last October into the revised estimates beginning with 1959.1 In addition, BEA has released revised estimates beginning with 1959 that incorporate corrections and a previously announced improvement in methodology. The article "Fixed Assets and Consumer Durable Goods: Revised Estimates for 1925-98"in this issue presents the estimates of fixed assets and consumer durable goods; this article describes the revised NIPA estimates.

A list of the data series released in October 1999 and published in the December 1999 issue of the Survey of Current Business that have been corrected or revised is shown on page 32. NIPA tables that present annual estimates for 1995–99 and quarterly estimates for 1997:I–1999:IV begin on page 36.<sup>2</sup> Tables that present estimates of gross domestic product (GDP) and other major NIPA series for 1929–99 begin on page 126. For further informa-

tion on the availability of the revised estimates, see the box on page 12.

Tables 1–3 of this article show annual levels, percent changes, and revisions to percent changes for current-dollar GDP, for real GDP, and for the chain-type price indexes for 1929–98.

Revisions to change.—For 1929–58, the average annual growth rate of real GDP was unrevised at 3.4 percent. The largest revision to an annual growth rate of real GDP was +0.5 percentage point for 1947, reflecting a revision to Federal Government consumption expenditures and gross investment, which, in turn, reflected a revision to the change in inventories of the Commodity Credit Corporation. Other revisions to annual growth rates of real GDP were 0.4 percentage point or less in absolute value and primarily reflected revisions to the change in private inventories and to Federal Government consumption and investment. The revisions to the change in private inventories reflected the new methodology for construction inventories that eliminated the double-count of construction work-in-progress and unsold finished structures.<sup>3</sup> For 1939–47, revisions to real Federal nondefense consumption and investment reflected the use of additional detailed information on prices of Commodity Credit Corporation inventory changes.

Beginning with 1959, the revisions to real GDP reflected a correction to real "services furnished without payment by financial intermediaries." This correction affected real GDP and prices, but it did not affect current-dollar GDP. The average annual growth rate of real GDP over 1959–98 was unrevised at 3.4 percent. For specific years, the revisions were more notable. The largest revision to the annual growth rate of GDP was +0.4 percentage point for 1976; the growth rate for 1993 was revised up 0.3 percentage point. The growth rates for 1974, 1991, 1992, and 1997 were

<sup>1.</sup> For the definitional changes, including the recognition of business and government expenditures for software as investment and the reclassification of government employee retirement plans, see Brent R. Moulton, Robert P. Parker, and Eugene P. Seskin, "A Preview of the 1999 Comprehensive Revision of the National Income and Product Accounts: Definitional and Classificational Changes," Survey of Current Business 79 (August 1999): 7-20. For the statistical changes, including the incorporation of the 1992 benchmark input-output accounts, the improved estimates of the real value of unpriced bank services, and the incorporation of geometric-mean-type consumer price indexes, see Brent R. Moulton and Eugene P. Seskin, "A Preview of the 1999 Comprehensive Revision of the National Income and Product Accounts: Statistical Changes," SURVEY 79 (October 1999): 6-17. For the presentational changes that were made to reflect the definitional and statistical changes, see Brent R. Moulton and David F. Sullivan, "A Preview of the 1999 Comprehensive Revision of the National Income and Product Accounts: New and Redesigned Tables," SURVEY 79 (September 1999): 15-28. For a discussion of the major sources of the revisions to the NIPA aggregates for 1959–98, see Eugene P. Seskin, "Improved Estimates of the National Income and Product Accounts for 1959-98: Results of the Comprehensive Revision, Survey 79 (December 1999): 15-43.

<sup>2.</sup> NIPA tables 3.15–3.17, showing government expenditures by function, are not yet available and will be introduced in an article in a subsequent issue of the Survey.

<sup>3.</sup> See Moulton and Seskin, "Statistical Changes," 10.

each revised down 0.3 percentage point. The components of real GDP and GDP prices that were revised as a result of this correction were personal consumption expenditures (PCE), exports of services, Federal Government nondefense consumption expenditures, and State and local government consumption expenditures.

Revisions to the chain-type price indexes reflected many of the same changes in methodology that affected estimates of real GDP. For 1929–58, the average annual growth rate of the gross domestic purchases price index was unrevised at 1.9 percent; revisions to annual growth rates ranged from -0.4 percentage point for 1940 to +0.2 percentage point for 1942. Beginning with 1959, the growth rates of prices were revised in the opposite direction of the revisions to real GDP growth rates that resulted from the correction to real "services furnished without payment by financial intermediaries"; current-dollar GDP and its components were not revised. For 1959-98, the average annual growth rate of gross domestic purchases prices was unrevised at 4.1 percent; revisions to annual growth rates ranged from -0.3 percentage point for 1976 to +0.4 percentage point for 1974.

For 1977–98, the growth rates of real gross product of nonfinancial corporate business and of its price index were revised, reflecting a previously announced improvement in methodology in which a new industry-based price index is used for deflation. Previously, the implicit price deflator for goods and structures in GDP was used to deflate this aggregate. The new index better reflects the changing industrial composition of this

sector, in which the production of services has become increasingly important, and it provides better measures of productivity, costs, and profits per unit of gross product. For 1977–98, the average annual growth rate of real gross product of nonfinancial corporate business was revised down from 4.1 percent to 3.7 percent; the downward revision reflects the tendency for prices of services, which were not included in the previous deflator, to increase faster than prices of goods.

Revisions to level.—Revisions to the levels of current-dollar GDP for 1929–58 were generally small and mainly reflected methodological improvements. The revisions ranged from -0.1 percent for 1946 to +0.4 percent for 1932 and mostly reflected revisions to change in private inventories, to government consumption and investment, and to PCE. The revisions to government consumption and investment were mostly to State and local government consumption of fixed capital (CFC) and reflected the use of a shorter service life for depreciating highways and streets. For 1959–98, current-dollar GDP and its components were unrevised.

Revisions to national income ranged from -0.6 percent for 1958 to +0.6 percent for 1933. For 1929–46, the revisions primarily reflected revisions to the capital consumption adjustment (CCAdj) because of corrections to pre–1925 data on fixed assets and prices. For 1947–58, downward revisions to national income reflected a change in the methodology for estimating the rental income from nonfarm nonresidential properties, which

## Availability of Revised Estimates and Related Information

The estimates shown in the NIPA tables beginning on page 36, along with estimates for earlier periods (for most tables, back to 1929 for annual estimates and back to 1946 for quarterly estimates), are available on BEA's Web site at <www.bea.doc.gov> and on STAT-USA's Web site at <www.stat-usa.gov>. These estimates incorporate the March 2000 release of corrections and revisions to the 1959–98 NIPA estimates that were released in October 1999.

Later this year, the data will be available on a CD-ROM. In early 2001, BEA will publish *National Income* and *Product Accounts of the United States, 1929–97*, which will present the full set of NIPA tables, including revised estimates for 1997 from this year's annual NIPA revision, and will describe definitions and statistical conventions. The availability of the CD–ROM and the volume will be announced in the Survey of Current Business and on BEA's Web site.

For information about the comprehensive revision, see the following issues of the Survey:

- Definitional and classificational changes (August 1999).
  - New and redesigned tables (September 1999).
  - Statistical changes (October 1999).
  - Improved estimates of the NIPA's (December 1999).
- Real inventories, sales, and inventory-sales ratios (January 2000).
- Comparison of personal income and IRS adjusted gross income (February 2000).

Other information related to the NIPA estimates will be released as the work is completed. The listing below provides *approximate* schedules for the release of most of the remaining estimates.

Gross product by industry, 1947–98 (June 2000). Government expenditures by function (June 2000).

<sup>4.</sup> See Moulton and Seskin, "Statistical Changes," 13.

<sup>5.</sup> See Moulton and Seskin, "Statistical Changes," 13.

was carried back to 1947. For 1959–98, small revisions to national income reflected revisions to the CCAdj, which in turn resulted from a correction to CFC. This correction also affected current-dollar and real net domestic product, but it did not affect GDP. National income was revised up by small amounts, reflecting upward revisions to profits from current production that, in turn, reflected upward revisions to the corporate CCAdj. For 1998, national income was revised up \$2.4 billion.

Within GDP and gross domestic income, the revisions to the CCAdj were largely offset by revisions to CFC. Thus, revisions to the statistical discrepancy—the difference between GDP (the "product-side" measure of output) and gross domestic income (the "income-side" measure of output)—mainly reflected the revisions to the change in private inventories and to rental income of persons. For 1947–58, the statistical discrepancy was revised up, reflecting downward revisions to gross domestic income that, in turn, reflected downward revisions to rental income.

For 1959–98, gross product of corporate business was revised down, reflecting a correction to the allocation of indirect business tax and nontax liabilities by legal form of organization and by industry.<sup>7</sup> This correction did not affect GDP, gross

domestic income, or national income. The revisions to gross product of corporate business mostly reflected revisions to gross product of nonfinancial corporate business. For 1959–98, current-dollar gross product of nonfinancial corporate business was revised down substantially for all years; the revisions ranged from -3.1 percent for 1961 to -1.4 percent for 1988.

For 1929-58, revisions to personal income ranged from -0.2 percent for 1955 to +0.4 percent for 1943. These revisions mostly reflected the definitional change in the treatment of government employee retirement plans and the methodological change to rental income.<sup>8</sup> Revisions to disposable personal income (DPI) ranged from +0.2 percent for 1955 to +1.1 percent for 1938 and reflected the redefinition of estate and gift taxes as capital transfers and the definitional and methodological changes that affected personal income.9 Revisions to the personal saving rate ranged from +0.3 percentage point for 1955 to +1.1 percentage point for 1938. For 1959–98, personal income, current-dollar DPI, and personal outlays were unrevised, but real DPI and real PCE were affected by the correction to real "services furnished without payment by financial intermediaries."

<sup>6.</sup> See Moulton and Seskin, "Statistical Changes," 11.

<sup>7.</sup> Current-dollar gross product of corporate business is measured as the sum of the corporate distributions of the components of gross domestic income. Consequently, it represents an "income-side" measure of value added rather than a "product-side" measure.

<sup>8.</sup> See Moulton, Parker, and Seskin, "Definitional and Classificational Changes," 11–12; and Moulton and Seskin, "Statistical Changes," 11.

<sup>9.</sup> See Moulton, Parker, and Seskin, "Definitional and Classificational Changes," 13–14.

Table 1.—Gross Domestic Product: Levels, Percent Change from Preceding Period, and Revision to Percent Change

			Billions o	of dollars			, 	Percent	change from	m precedin	g period	Revision to percent change from Preceding period <sup>2</sup>							
Year	Gross domestic product	Personal consump- tion expendi- tures	Gross private domestic invest- ment	Exports of goods and services	Imports of goods and services	Govern- ment <sup>1</sup>	Gross domestic product	Personal consump- tion expendi- tures	Gross private domestic invest- ment	Exports of goods and services	Imports of goods and services	Govern- ment <sup>1</sup>	Gross domestic product	Personal consump- tion expendi- tures	Gross private domestic invest- ment	Exports of goods and services	Imports of goods and services	Govern- ment <sup>1</sup>	
1929	103.7	77.5	16.5	5.9	5.6	9.4													
1930 1931 1932 1933 1934	91.3 76.6 58.8 56.4 66.0	70.2 60.7 48.7 45.9 51.5	10.8 5.9 1.3 1.7 3.7	4.4 2.9 2.0 2.0 2.6	4.1 2.9 1.9 1.9 2.2	10.0 9.9 8.8 8.7 10.6	-12.0 -16.1 -23.2 -4.0 16.9	-9.4 -13.5 -19.7 -5.8 12.0	-34.7 -44.9 -78.6 37.4 111.9	-25.2 -34.6 -32.0 .6 28.8	-25.8 -29.5 -33.5 2 16.1	6.7 -1.0 -11.9 5 21.2	.3 0 .2 0 2	0 0 0 0	1.5 4 2.1 -9.7 -8.3	0 0 0 0	0 0 0 0	1 0 0 .2 1	
1935 1936 1937 1938 1939	73.3 83.7 91.9 86.1 92.0	55.9 62.2 66.8 64.2 67.2	6.7 8.6 12.2 7.1 9.3	2.8 3.0 4.0 3.8 3.9	3.0 3.2 4.0 2.8 3.1	10.9 13.1 12.8 13.8 14.7	11.0 14.2 9.7 –6.3 6.9	8.7 11.2 7.5 –3.9 4.6	81.5 28.9 40.7 –41.8 32.0	8.0 8.2 33.6 -5.6 3.7	33.2 5.8 25.6 –28.2 10.2	3.3 20.0 -1.9 7.5 6.8	0 1 0 .1 1	0 0 0 0	.9 -1.1 .1 .3 3	0 0 0 0	0 0 0 0	1 2 1 0 0	
1940 1941 1942 1943 1944	101.3 126.7 161.8 198.4 219.7	71.2 81.0 88.9 99.7 108.5	13.6 18.1 10.4 6.1 7.8	4.8 5.4 4.3 3.9 4.8	3.4 4.4 4.6 6.3 6.9	15.1 26.6 62.8 94.9 105.5	10.1 25.0 27.7 22.7 10.7	6.0 13.8 9.7 12.2 8.8	46.0 32.8 -42.4 -41.3 27.3	23.0 12.2 –20.5 –8.6 21.0	9.2 29.9 4.0 35.7 9.9	2.2 76.5 136.1 51.2 11.2	0 2 .1 0 1	0 0 0 0	2 8 .2 .6 -1.7	0 0 0 0	0 0 0 0	1 5 5 2 1	
1945 1946 1947 1948 1949	223.0 222.3 244.4 269.6 267.7	119.8 144.2 162.3 175.4 178.8	10.8 31.1 35.0 48.1 36.9	6.7 14.1 18.7 15.5 14.4	7.5 7.0 7.9 10.1 9.2	93.2 39.8 36.4 40.6 46.8	1.5 3 10.0 10.3 7	10.5 20.4 12.5 8.1 2.0	39.0 187.3 12.2 37.6 –23.4	40.6 110.6 32.7 -17.1 -6.9	9.3 -7.6 13.8 26.8 -8.1	-11.7 -57.3 -8.5 11.5 15.1	1 0 .1 0	0 0 0 0	.1 6 .3 .3	0 0 0 0	0 0 0 0	1 1 .1 3 0	
1950 1951 1952 1953 1954	294.3 339.5 358.6 379.9 381.1	192.7 208.6 219.7 233.4 240.5	54.1 60.2 54.0 56.4 53.8	12.3 17.0 16.3 15.2 15.7	11.6 14.6 15.3 16.0 15.4	46.9 68.3 83.9 90.8 86.5	10.0 15.4 5.6 5.9	7.7 8.3 5.3 6.3 3.0	46.6 11.3 -10.2 4.5 -4.6	-14.9 38.6 -3.9 -6.9 3.5	25.5 25.6 4.9 4.7 –3.6	.3 45.6 22.8 8.3 –4.8	0 .1 .1 0 1	0 0 0 0 1	9 0 .2 .3 2	0 0 0 0	0 0 0 0	.1 .4 .1 0	
1955 1956 1957 1958 1959	415.2 438.0 461.5 467.9 507.4	259.0 271.9 287.0 296.6 318.1	69.0 72.0 70.5 64.5 78.5	17.6 21.2 23.9 20.4 20.6	17.2 18.9 19.9 20.0 22.3	86.8 91.8 100.1 106.5 112.5	9.0 5.5 5.4 1.4 8.4	7.7 5.0 5.6 3.3 7.3	28.3 4.3 –2.2 –8.5 21.8	11.7 20.5 12.8 –14.5 1.0	11.5 10.0 5.4 .4 11.5	.4 5.7 9.0 6.4 5.6	.1 0 .1 0	.1 0 .2 –.1	.2 4 0 .1	0 0 0 0	0 0 0 0	.1 0 0 .1	
1960 1961 1962 1963 1964	527.4 545.7 586.5 618.7 664.4	332.3 342.7 363.8 383.1 411.7	78.9 78.2 88.1 93.8 102.1	25.3 26.0 27.4 29.4 33.6	22.8 22.7 25.0 26.1 28.1	113.8 121.5 132.2 138.5 145.1	3.9 3.5 7.5 5.5 7.4	4.5 3.1 6.2 5.3 7.5	.5 9 12.8 6.4 8.9	22.3 3.1 5.3 7.4 14.1	2.3 7 10.0 4.7 7.5	1.2 6.8 8.8 4.8 4.8	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	
1965 1966 1967 1968 1969	720.1 789.3 834.1 911.5 985.3	444.3 481.8 508.7 558.7 605.5	118.2 131.3 128.6 141.2 156.4	35.4 38.9 41.4 45.3 49.3	31.5 37.1 39.9 46.6 50.5	153.7 174.3 195.3 212.8 224.6	8.4 9.6 5.7 9.3 8.1	7.9 8.4 5.6 9.8 8.4	15.9 11.0 –2.1 9.8 10.8	5.4 10.0 6.2 9.5 8.8	12.2 17.5 7.7 16.6 8.5	5.9 13.4 12.0 8.9 5.5	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	
1970 1971 1972 1973 1974	1,039.7 1,128.6 1,240.4 1,385.5 1,501.0	648.9 702.4 770.7 852.5 932.4	152.4 178.2 207.6 244.5 249.4	57.0 59.3 66.2 91.8 124.3	55.8 62.3 74.2 91.2 127.5	237.1 251.0 270.1 287.9 322.4	5.5 8.6 9.9 11.7 8.3	7.2 8.2 9.7 10.6 9.4	-2.6 16.9 16.5 17.8 2.0	15.6 4.1 11.6 38.6 35.5	10.4 11.8 19.0 22.8 39.8	5.6 5.9 7.6 6.6 12.0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	
1975 1976 1977 1978 1979	1,635.2 1,823.9 2,031.4 2,295.9 2,566.4	1,030.3 1,149.8 1,278.4 1,430.4 1,596.3	230.2 292.0 361.3 436.0 490.6	136.3 148.9 158.8 186.1 228.7	122.7 151.1 182.4 212.3 252.7	361.1 384.5 415.3 455.6 503.5	8.9 11.5 11.4 13.0 11.8	10.5 11.6 11.2 11.9 11.6	-7.7 26.8 23.8 20.7 12.5	9.6 9.2 6.7 17.2 22.9	-3.7 23.2 20.7 16.3 19.0	12.0 6.5 8.0 9.7 10.5	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	
1980 1981 1982 1983 1984	2,795.6 3,131.3 3,259.2 3,534.9 3,932.7	1,762.9 1,944.2 2,079.3 2,286.4 2,498.4	477.9 570.8 516.1 564.2 735.5	278.9 302.8 282.6 277.0 303.1	293.8 317.8 303.2 328.6 405.1	569.7 631.4 684.4 735.9 800.8	8.9 12.0 4.1 8.5 11.3	10.4 10.3 7.0 10.0 9.3	-2.6 19.5 -9.6 9.3 30.4	22.0 8.5 -6.7 -2.0 9.4	16.3 8.1 -4.6 8.4 23.3	13.2 10.8 8.4 7.5 8.8	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	
1985 1986 1987 1988 1989	4,213.0 4,452.9 4,742.5 5,108.3 5,489.1	2,712.6 2,895.2 3,105.3 3,356.6 3,596.7	736.3 747.2 781.5 821.1 872.9	303.0 320.3 365.6 446.9 509.0	417.2 452.2 507.9 553.2 589.7	878.3 942.3 997.9 1,036.9 1,100.2	7.1 5.7 6.5 7.7 7.5	8.6 6.7 7.3 8.1 7.2	.1 1.5 4.6 5.1 6.3	0 5.7 14.1 22.2 13.9	3.0 8.4 12.3 8.9 6.6	9.7 7.3 5.9 3.9 6.1	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	
1990 1991 1992 1993 1994	5,803.2 5,986.2 6,318.9 6,642.3 7,054.3	3,831.5 3,971.2 4,209.7 4,454.7 4,716.4	861.7 800.2 866.6 955.1 1,097.1	557.2 601.6 636.8 658.0 725.1	628.6 622.3 664.6 718.5 812.1	1,181.4 1,235.5 1,270.5 1,293.0 1,327.9	5.7 3.2 5.6 5.1 6.2	6.5 3.6 6.0 5.8 5.9	-1.3 -7.1 8.3 10.2 14.9	9.5 8.0 5.8 3.3 10.2	6.6 -1.0 6.8 8.1 13.0	7.4 4.6 2.8 1.8 2.7	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	
1995 1996 1997 1998	7,400.5 7,813.2 8,300.8 8,759.9	4,969.0 5,237.5 5,524.4 5,848.6	1,143.8 1,242.7 1,383.7 1,531.2	818.6 874.2 968.0 966.3	902.8 963.1 1,056.3 1,115.9	1,372.0 1,421.9 1,481.0 1,529.7	4.9 5.6 6.2 5.5	5.4 5.4 5.5 5.9	4.2 8.7 11.3 10.7	12.9 6.8 10.7 2	11.2 6.7 9.7 5.6	3.3 3.6 4.2 3.3	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0	

Government consumption expenditures and gross investment.
 Revised percent change less the previously published percent change.

Table 2.—Real Gross Domestic Product: Levels, Percent Change from Preceding Period, and Revision to Percent Change

		E	Billions of o								m precedir			Revision to percent change from Preceding period <sup>2</sup>							
Year	Gross domestic product	Personal con- sumption expendi- tures	Gross private domestic invest- ment	Exports of goods and services	Imports of goods and services	Govern- ment <sup>1</sup>	Residual	Gross domestic product	Personal con- sumption expendi- tures	Gross private domestic invest- ment	Exports of goods and services	Imports of goods and services	Govern- ment <sup>1</sup>	Gross domestic product	Personal con- sumption expendi- tures	Gross private domestic invest- ment	Exports of goods and services	Imports of goods and services	Govern- ment <sup>1</sup>		
1929	822.2	625.7	93.6	35.8	46.3	110.1	3.3														
1930 1931 1932 1933 1934	751.5 703.6 611.8 603.3 668.3	592.3 574.3 523.0 511.0 546.9	62.5 39.2 11.8 17.5 31.6	29.6 24.6 19.3 19.4 21.5	40.3 35.1 29.2 30.4 31.0	121.3 126.6 122.4 118.0 133.0	-35.5 -32.2	-8.6 -6.4 -13.0 -1.4 10.8	-5.3 -3.0 -8.9 -2.3 7.0	-33.3 -37.2 -69.8 47.5 80.6	-17.3 -16.9 -21.7 .5 11.2	-13.0 -12.8 -17.0 4.2 2.2	10.2 4.3 -3.3 -3.6 12.8	.4 0 .3 2 2	.1 .1 0 0 1	2.0 1 3.9 -18.6 -11.2	.1 1 0 0 0	0 0 0 0	1 0 .1 0		
1935 1936 1937 1938 1939	728.3 822.5 865.8 835.6 903.5	580.6 639.6 663.5 652.6 689.0	58.4 74.9 93.6 61.9 79.6	22.7 23.9 30.1 29.8 31.4	40.7 40.2 45.2 35.2 36.9	137.0 158.9 153.2 164.6 179.7	-29.4	9.0 12.9 5.3 –3.5 8.1	6.2 10.2 3.7 –1.6 5.6	85.1 28.2 25.0 -33.9 28.6	5.5 5.0 26.0 -1.0 5.6	31.0 -1.2 12.5 -22.3 5.0	3.0 16.0 -3.6 7.5 9.1	.1 2 .1 .1	.1 0 1 0 0	1.1 -1.9 .5 .9 -1.0	0 0 0 0	0 0 0 0	1 1 0 .2 .3		
1940 1941 1942 1943 1944	980.7 1,148.8 1,360.0 1,583.7 1,714.1	724.9 776.7 758.3 779.1 801.7	110.9 135.4 71.6 42.3 52.2	35.7 36.7 24.1 20.1 21.6	37.8 46.5 42.2 53.2 55.7	182.4 303.0 711.1 1,059.9 1,195.6	-35.4 -56.5 -162.9 -264.5 -301.3	8.5 17.1 18.4 16.5 8.2	5.2 7.2 –2.4 2.7 2.9	39.3 22.2 –47.2 –41.0 23.6	13.5 2.7 –34.3 –16.6 7.5	2.4 22.9 -9.2 26.1 4.6	1.5 66.1 134.7 49.1 12.8	1 0 4 .2	0 .1 0 1 0	7 -1.1 .3 .9 -1.1	0 0 0 1 0	0 1 0 0 0	0 .7 -5.6 1 .6		
1945 1946 1947 1948 1949	1,693.3 1,505.5 1,495.1 1,560.0 1,550.9	851.8 956.9 976.4 998.1 1,025.3	69.0 175.0 168.6 215.3 164.3	30.5 66.5 75.9 59.8 59.2	59.2 49.1 46.6 54.4 52.5	1,041.0 359.7 307.1 328.9 367.3	-239.8 -3.5 13.7 12.3 -12.7	-1.2 -11.1 7 4.3 6	6.3 12.3 2.0 2.2 2.7	32.1 153.7 -3.6 27.7 -23.7	41.5 117.7 14.2 –21.3 –1.0	6.3 -17.1 -5.0 16.7 -3.5	-12.9 -65.5 -14.6 7.1 11.7	1 1 .5 .1	.1 0 0 0 0	.5 -3.4 .3 .6 .7	0 0 0 1 1	0 0 .1 0	3 0 2.2 .2 .3		
1950 1951 1952 1953 1954	1,686.6 1,815.1 1,887.3 1,973.9 1,960.5	1,090.9 1,107.1 1,142.4 1,197.2 1,221.9	232.5 233.2 211.1 221.0 210.8	51.8 63.5 60.6 56.5 59.3	62.0 64.5 70.1 76.7 72.9	367.4 500.0 605.1 647.5 602.9	6.0 -24.2 -61.8 -71.6 -61.5	8.7 7.6 4.0 4.6 7	6.4 1.5 3.2 4.8 2.1	41.5 .3 -9.5 4.7 -4.6	-12.5 22.6 -4.7 -6.7 4.9	18.2 3.9 8.8 9.4 -4.9	0 36.1 21.0 7.0 –6.9	2 0 .3 0	0 0 0 1 0	-1.9 2 1.0 .1	0 0 0 1 0	0 0 0 0	.3 .1 .2 .1 .1		
1955 1956 1957 1958 1959	2,099.5 2,141.1 2,183.9 2,162.8 2,319.0	1,310.4 1,348.8 1,381.8 1,393.0 1,470.7	262.1 258.6 247.4 226.5 272.9	65.6 76.5 83.1 71.8 72.4	81.7 88.4 92.1 96.4 106.6	580.4 580.8 606.7 626.2 661.4	-37.3 -35.2 -43.0 -58.3 -51.8	7.1 2.0 2.0 -1.0 7.2	7.2 2.9 2.5 .8 5.6	24.4 -1.3 -4.3 -8.4 20.5	10.6 16.6 8.7 –13.7	12.1 8.1 4.2 4.7 10.5	-3.7 .1 4.4 3.2 5.6	0 0 .1 0	0 0 .1 0	3 .2 .3 .4	0 0 0 0	.1 0 0 1	.1 2 0 0		
1960 1961 1962 1963 1964	2,376.7 2,432.0 2,578.9 2,690.4 2,846.5	1,510.8 1,541.2 1,617.3 1,684.0 1,784.8	272.8 271.0 305.3 325.7 352.6	87.5 88.9 93.7 100.7 114.2	108.0 107.3 119.5 122.7 129.2	661.3 693.2 735.0 752.4 767.1	-47.7 -55.0 -52.9 -49.7 -43.0	2.5 2.3 6.0 4.3 5.8	2.7 2.0 4.9 4.1 6.0	0 7 12.7 6.7 8.3	20.8 1.7 5.4 7.5 13.3	1.3 7 11.3 2.7 5.3	0 4.8 6.0 2.4 2.0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 .1 1 0	0 0 0 0	0 0 0 0		
1965 1966 1967 1968 1969	3,028.5 3,227.5 3,308.3 3,466.1 3,571.4	1,897.6 2,006.1 2,066.2 2,184.2 2,264.8	402.0 437.3 417.2 441.3 466.9	116.5 124.3 127.0 136.3 143.7	142.9 164.2 176.2 202.4 213.9	791.1 862.1 927.1 956.6 952.5	-35.8 -38.1 -53.0 -49.9 -42.6	6.4 6.6 2.5 4.8 3.0	6.3 5.7 3.0 5.7 3.7	14.0 8.8 -4.6 5.8 5.8	2.0 6.7 2.2 7.3 5.4	10.6 14.9 7.3 14.9 5.7	3.1 9.0 7.5 3.2 4	0 0 0 0 1	0 0 0 0 1	0 0 0 0	0 0 0 0 1	0 0 0 0	0 0 0 0 1		
1970 1971 1972 1973 1974	3,578.0 3,697.7 3,898.4 4,123.4 4,099.0	2,317.5 2,405.2 2,550.5 2,675.9 2,653.7	436.2 485.8 543.0 606.5 561.7	159.3 160.4 173.5 211.4 231.6	223.1 235.0 261.3 273.4 267.2	931.1 913.8 914.9 908.3 924.8	-43.0 -32.5 -22.2 -5.3 -5.6	.2 3.3 5.4 5.8 6	2.3 3.8 6.0 4.9 8	-6.6 11.4 11.8 11.7 -7.4	10.8 .7 8.1 21.9 9.5	4.3 5.3 11.2 4.6 –2.3	-2.3 -1.9 .1 7 1.8	0 .2 .1 .1 3	0 .3 .1 .1 4	0 0 0 0	0 .2 .1 .1 3	0 0 0 0	0 .1 .1 .1 3		
1975 1976 1977 1978 1979	4,084.4 4,311.7 4,511.8 4,760.6 4,912.1	2,710.9 2,868.9 2,992.1 3,124.7 3,203.2	462.2 555.5 639.4 713.0 735.4	230.0 243.6 249.7 275.9 302.4	237.5 284.0 315.0 342.3 347.9	942.5 943.3 952.7 982.2 1,001.1	-23.7 -15.6 -7.1 7.1 17.9	4 5.6 4.6 5.5 3.2	2.2 5.8 4.3 4.4 2.5	-17.7 20.2 15.1 11.5 3.1	7 5.9 2.5 10.5 9.6	-11.1 19.6 10.9 8.7 1.7	1.9 .1 1.0 3.1 1.9	1 .4 .1 2 2	1 .4 .1 3 3	0 0 0 0	1 .3 .1 1 2	0	1 .2 .1 1 1		
1980 1981 1982 1983 1984	4,900.9 5,021.0 4,919.3 5,132.3 5,505.2	3,193.0 3,236.0 3,275.5 3,454.3 3,640.6	655.3 715.6 615.2 673.7 871.5	334.8 338.6 314.6 306.9 332.6	324.8 333.4 329.2 370.7 461.0	1,020.9 1,030.0 1,046.0 1,081.0 1,118.4	-2.8 -12.9	2 2.5 -2.0 4.3 7.3	3 1.3 1.2 5.5 5.4	-10.9 9.2 -14.0 9.5 29.3	10.7 1.1 -7.1 -2.4 8.4	-6.6 2.6 -1.3 12.6 24.3	2.0 .9 1.5 3.3 3.5	2 0 1 .1	3 1 2 .2	0 0 0 0	2 1 1 .2 0	0 0 0 0	1 0 1 0 0		
1985 1986 1987 1988 1989	5,717.1 5,912.4 6,113.3 6,368.4 6,591.8	3,820.9 3,981.2 4,113.4 4,279.5 4,393.7	863.4 857.7 879.3 902.8 936.5	341.6 366.8 408.0 473.5 529.4	490.7 531.9 564.2 585.6 608.8	1,190.5 1,255.2 1,292.5 1,307.5 1,343.5	-8.6 -16.6 -15.7 -9.3 -2.5	3.8 3.4 3.4 4.2 3.5	5.0 4.2 3.3 4.0 2.7	9 7 2.5 2.7 3.7	2.7 7.4 11.2 16.1 11.8	6.5 8.4 6.1 3.8 3.9	6.5 5.4 3.0 1.2 2.8	1 0 1 0	0 0 2 1	0 0 0 0	1 0 2 0 .1	0 0 0 0	0 0 0 0 .1		
1990 1991 1992 1993 1994	6,707.9 6,676.4 6,880.0 7,062.6 7,347.7	4,474.5 4,466.6 4,594.5 4,748.9 4,928.1	907.3 829.5 899.8 977.9 1,107.0	575.7 613.2 651.0 672.7 732.8	632.2 629.0 670.8 731.8 819.4	1,387.3 1,403.4 1,410.0 1,398.8 1,400.1	-4.7 -7.3 -4.5 -3.9 9	1.8 5 3.0 2.7 4.0	1.8 2 2.9 3.4 3.8	-3.1 -8.6 8.5 8.7 13.2	8.7 6.5 6.2 3.3 8.9	3.8 5 6.6 9.1 12.0	3.3 1.2 .5 8 .1	.1 3 3 .3	0 3 3 .4 0	0 0 0 0	0 3 2 .3 0	0 0 0 0	0 0 1 .1 0		
1995 1996 1997 1998	7,543.8 7,813.2 8,144.8 8,495.7	5,075.6 5,237.5 5,417.3 5,681.8	1,140.6 1,242.7 1,385.8 1,547.4	808.2 874.2 983.1 1,004.6	886.6 963.1 1,095.2 1,222.2	1,406.4 1,421.9 1,453.7 1,478.8	.1	2.7 3.6 4.2 4.3	3.0 3.2 3.4 4.9	3.0 9.0 11.5 11.7	10.3 8.2 12.5 2.2	8.2 8.6 13.7 11.6	.5 1.1 2.2 1.7	0 1 3 0	0 1 3 0	0 0 0 0	0 1 2 0	0 0 0 0	0 0 1 0		

Government consumption expenditures and gross investment.
 Revised percent change less the previously published percent change.
 NOTE.—Users are cautioned that particularly for components for which relative prices are changing rapidly, the

use of chained-dollar estimates to calculate component shares or component contributions to real growth may be misleading, even just a few years from the base year. For accurate estimates of the contributions to percent changes in real GDP, use NIPA table 8.2.

Table 3.—Chain-Type Price Indexes for Gross Domestic Product, Percent Change from Preceding Period, and Revision to Percent Change

	able 3			rice index			1022 00	Illestic				receding		Revision to Percent Change  Revision to percent change from Preceding period <sup>2</sup>							
Year	Gross domes- tic product	Per- sonal con- sump- tion expend- itures	Gross private domes- tic in- vest- ment	Exports of goods and services	Imports of goods and	Govern- ment <sup>1</sup>	Gross domestic pur- chases	Gross domes- tic product	Per- sonal con- sump- tion expend- itures	Gross private domes- tic in- vest- ment	Exports of goods and	Imports of goods and services	Govern- ment <sup>1</sup>	Gross domestic pur- chases	Gross domes- tic product	Per- sonal con- sump- tion expend- itures	Gross private domes- tic in- vest- ment	Exports of goods and	Imports of goods and services	Govern- ment <sup>1</sup>	Gross domestic pur- chases
1929 1930 1931 1932 1933 1934	12.62 12.13 10.91 9.67 9.42 9.89	12.38 11.85 10.57 9.32 8.99 9.41	17.26 16.52 15.10 12.60 11.42 11.37	15.02 11.82 10.25	12.00 10.23 8.27 6.63 6.35 7.21	8.72 8.45 8.01 7.30 7.54 8.10	12.33 11.82 10.65 9.41 9.15 9.60	-3.9 -10.0 -11.4 -2.6 4.9	-4.3 -10.8 -11.8 -3.5 4.6	-4.3 -8.6 -16.6 -9.3 4	-9.5 -21.4 -13.2 .1 15.9	-14.7 -19.2 -19.8 -4.2 13.6	-3.1 -5.1 -8.9 3.2 7.5	-4.2 -9.9 -11.6 -2.7 4.9	0 0 0 0	0 0 0 0 .1	0 .1 .7 1.6	0 0 0 0 0	0 0 0 0	0 0 1 .2	0 0 0 0 .1 .1
1935 1936 1937 1938 1939	10.07 10.19 10.56 10.35 10.21	9.63 9.72 10.07 9.84 9.75	11.19 11.30 12.16 11.76 11.67	12.18 12.55 13.30 12.68 12.46	7.33 7.85 8.76 8.09 8.49	8.13 8.41 8.56 8.57 8.38	9.77 9.90 10.28 10.07 9.96	1.9 1.2 3.6 –1.9 –1.4	2.4 .9 3.6 -2.3 -1.0	-1.6 1.0 7.5 -3.2 8	2.4 3.0 6.0 -4.6 -1.8	1.7 7.0 11.6 –7.6 5.0	.4 3.4 1.8 0 –2.2	1.8 1.3 3.8 –2.0 –1.1	0 0 0 0 1	0 0 0 0	.1 0 0 .1 .1	0 0 0 0 0	0 0 0 0	.1 0 1 2 4	0 0 0 0
1940 1941 1942 1943 1944	10.29 10.96 11.86 12.52 12.81	9.83 10.43 11.72 12.80 13.53	11.95 12.83 14.20 14.76 15.20	13.49 14.75 17.86 19.56 22.02	9.06 9.57 10.96 11.80 12.39	8.26 8.77 8.82 8.95 8.82	10.02 10.66 11.51 12.15 12.41	.8 6.5 8.2 5.5 2.3	.8 6.2 12.3 9.2 5.7	2.4 7.3 10.7 4.0 3.0	8.3 9.3 21.1 9.5 12.6	6.7 5.6 14.5 7.6 5.0	-1.4 6.2 .6 1.4 -1.4	.6 6.4 8.0 5.5 2.2	3 0 .2 1 3	0 0 0 0	1 1 .1 0	0 0 0 0	0 0 0 0	-2.2 .5 .9 1 6	4 .1 .2 1 3
1945 1946 1947 1948 1949	13.15 14.71 16.32 17.26 17.27	14.07 15.07 16.62 17.57 17.44	15.60 17.31 20.53 22.23 22.54 23.00	21.88 21.17 24.61 25.91 24.34 23.70	12.74 14.21 17.02 18.50 17.63	8.95 11.06 11.86 12.35 12.73	12.76 14.36 15.92 16.86 16.89	2.7 11.8 11.0 5.8 0	4.0 7.2 10.3 5.7 7	2.6 11.0 18.6 8.3 1.4	6 -3.2 16.2 5.3 -6.1	2.8 11.5 19.8 8.7 –4.7	1.4 23.6 7.2 4.2 3.1	2.8 12.5 10.9 5.9	.1 1 3 1	0 0 0 0 0	0 0 1.6 1 1	0 0 0 0	0 0 0 0	.2 5 -2.7 4 2	.1 1 3 1 0
1951 1952 1953 1954	17.41 18.60 18.98 19.24 19.45	17.66 18.85 19.23 19.50 19.68	24.97 25.45 25.49 25.66 26.03	26.78 26.98 26.90	22.63 21.81 20.88 21.16 21.05	13.65 13.85 14.02 14.33	18.31 18.65 18.87 19.10	.8 6.8 2.1 1.3 1.1	1.3 6.7 2.0 1.4 .9	2.1 8.6 1.9 .2 .7	13.0 .7 3 -1.3	20.9 -3.6 -4.3 1.4	7.0 1.5 1.2 2.2 4.3	1.2 7.1 1.9 1.2 1.2	1 0 0 0 1	0 0 0 0 1	3 1 .3 1	0 0 0	0 0 0	3 .2 0 1 2	1 0 0 .1 1
1955 1956 1957 1958 1959	19.74 20.41 21.13 21.64 21.88	20.16 20.77 21.29 21.63	27.54 28.47 28.56 28.78	27.71 28.76 28.50 28.53	21.42 21.66 20.76 20.95	15.79 16.49 16.99 16.99	20.02 20.70 21.18 21.41	1.5 3.4 3.5 2.4 1.1	.4 2.0 3.0 2.5 1.6	1.4 5.8 3.4 .3	.9 3.4 3.8 9 .1	5 1.8 1.1 -4.2 .9	5.7 4.4 3.0 0	3.4 3.4 2.3 1.1	1 .1 1	0 0 0	8 .2 3	0 0 0	0 0 0	.3 0 0	1 .1 0
1960 1961 1962 1963 1964	22.19 22.43 22.74 22.99 23.34	22.00 22.23 22.49 22.75 23.07	28.92 28.84 28.87 28.78 28.95		21.15 21.15 20.90 21.30 21.75	17.19 17.51 17.97 18.39 18.90	21.71 21.94 22.23 22.50 22.85	1.4 1.1 1.4 1.1 1.5	1.7 1.1 1.2 1.2 1.4	.5 3 .1 3	1.2 1.4 1 2 .7	.9 0 -1.2 1.9 2.1	1.2 1.9 2.6 2.4 2.8	1.4 1.1 1.3 1.2 1.6	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0
1965 1966 1967 1968 1969	23.77 24.45 25.21 26.29 27.59	23.41 24.02 24.62 25.58 26.74	29.42 30.03 30.83 31.99 33.51	31.32 32.56 33.23 34.29	22.06 22.57 22.66 23.00 23.60	19.41 20.20 21.05 22.23 23.56	23.26 23.91 24.61 25.66 26.92	1.9 2.8 3.1 4.3 4.9	1.5 2.6 2.5 3.9 4.5	1.6 2.1 2.7 3.8 4.8	3.3 3.1 3.9 2.1 3.2	1.4 2.3 .4 1.5 2.6	2.7 4.1 4.2 5.6 6.0	1.8 2.8 2.9 4.3 4.9	0 1 0 0 .1	0 0 0 0 .1	0 0 0 0	0 0 0 0 .1	0 0 0 0	0 0 0 0 .1	0 0 0 0 .1
1970 1971 1972 1973 1974	29.05 30.52 31.81 33.60 36.60	28.00 29.20 30.22 31.86 35.14	34.93 36.69 38.24 40.31 44.33		25.00 26.53 28.40 33.34 47.70	25.44 27.44 29.49 31.67 34.83	28.37 29.84 31.17 32.99 36.35	5.3 5.0 4.2 5.6 9.0	4.7 4.3 3.5 5.4 10.3	4.2 5.0 4.2 5.4 10.0	4.3 3.4 3.2 13.7 23.7	5.9 6.1 7.0 17.4 43.1	8.0 7.8 7.5 7.4 10.0		0 3 2 1	1 3 1 1	0 0 0 0	0 2 2 1 .4	0 0 0 0	0 2 1 1 .3	0 2 1 1 .4
1975 1976 1977 1978 1979	40.03 42.29 45.02 48.22 52.24	38.01 40.08 42.73 45.78 49.83	49.80 52.57 56.51 61.15 66.71	61.11 63.58 67.48 75.63	51.67 53.22 57.92 62.01 72.62	38.28 40.72 43.55 46.37 50.28	39.69 41.93 44.80 48.02 52.26	9.4 5.7 6.4 7.1 8.3	8.2 5.4 6.6 7.1 8.9	12.3 5.6 7.5 8.2 9.1	10.3 3.2 4.0 6.1 12.1	8.3 3.0 8.8 7.1 17.1	9.9 6.4 7.0 6.5 8.4	7.2 8.8	.1 3 1 .2		0 0 0	0 3 1 .1	0 0 0 0	0 1 0 .1	.1 3 1 .2
1980 1981 1982 1983 1984	57.05 62.37 66.26 68.87 71.44	55.21 60.08 63.48 66.19 68.63	73.01 79.77 83.91 83.73 84.40	91.13	90.45 95.32 92.10 88.65 87.89	55.80 61.30 65.43 68.08 71.61	57.79 63.05 66.71 69.05 71.46	9.2 9.3 6.2 3.9 3.7	10.8 8.8 5.7 4.3 3.7	2 .8	10.2 7.3 .5 .5	24.6 5.4 -3.4 -3.7 9	11.0 9.8 6.7 4.0 5.2	5.8 3.5 3.5	.3 0 .1 2 0	.4 0 .2 2 0	0 0 0 0	.3 0 .2 1 0	0 0 0 0	.2 0 0 1 0	.3 0 .1 1 0
1985 1986 1987 1988 1989	73.69 75.32 77.58 80.22 83.27	70.99 72.72 75.49 78.44 81.86	85.30 87.19 88.86 90.96 93.22	89.62 94.39 96.15	94.46 96.87	73.78 75.08 77.21 79.30 81.89	73.56 75.22 77.70 80.36 83.45	3.2 2.2 3.0 3.4 3.8	3.5 2.4 3.8 3.9 4.4	1.1 2.2 1.9 2.4 2.5	-2.7 -1.5 2.6 5.3 1.9	-3.3 0 5.9 4.9 2.5	3.0 1.8 2.8 2.7 3.3	2.3 3.3 3.4 3.8	.1 0 .1 0 1	.1 0 .1 0	0 0 0 0	0 .1 .1 0	0 0 0 0	0 .1 0 0	0 .1 .1 0 1
1990 1991 1992 1993 1994	86.53 89.66 91.85 94.05 96.01	85.63 88.91 91.62 93.81 95.70	95.08 96.46 96.32 97.70 99.11	97.82 97.82 98.94		85.16 88.04 90.11 92.44 94.84	86.85 89.81 92.03 94.14 96.06	3.9 3.6 2.4 2.4 2.1	4.6 3.8 3.1 2.4 2.0	2.0 1.5 1 1.4 1.4	.7 1.4 3 0 1.1	2.6 5 9 1.0	2.6 2.6		0 .2 .2 3 0	0 .3 .4 3 0	0 0 0 0	0 .3 .3 3 1	0 0 0 0	0 .1 .1 1	0 .2 .3 2 1
1995 1996 1997 1998	98.10 100.00 101.91 103.11	97.90 100.00 101.98 102.93	100.29 100.00 99.84 98.96	100.00 98.47	101.83 100.00 96.45 91.31	97.56 100.00 101.87 103.44	98.20 100.00 101.61 102.35	2.2 1.9 1.9 1.2	2.3 2.1 2.0 .9	1.2 3 2 9	2.4 -1.3 -1.5 -2.3	2.7 -1.8 -3.6 -5.3		1.6	.1 .1 .2 0	.1 .1 .3 0	0 0 0 0	.1 .1 .3 0	0 0 0 0	.1 0 .1 0	0 .1 .2 0

Government consumption expenditures and gross investment.
 Revised percent change less the previously published percent change.

Tables 1 through 3 follow.