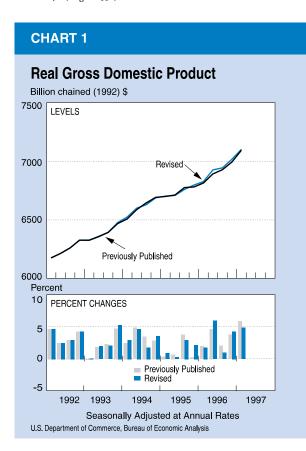
# Annual Revision of the National Income and Product Accounts

- Annual Estimates, 1993–96
- Quarterly Estimates, 1993:1-1997:1

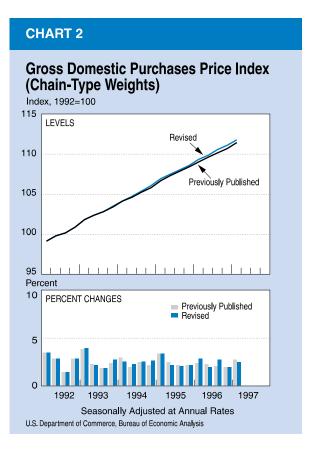
By Robert P. Parker and Eugene P. Seskin

**I** N THIS issue of the SURVEY OF CURRENT BUSINESS, the Bureau of Economic Analysis (BEA) presents revised estimates of the national income and product accounts (NIPA'S) for 1993–96 and the first quarter of 1997.<sup>1</sup> As is usual in annual NIPA revisions, these estimates incorporate source data that are more complete, more detailed, and otherwise more appropriate than were previously incorporated. In addition, several methodological changes have been made.

<sup>1.</sup> This annual revision covers 4 years rather than the usual 3 years because last year, only a "limited" annual revision was undertaken; see "Annual Revision of the National Income and Product Accounts," Survey of Current Business 76 (August 1996): 8–12.



The first section of this article discusses the impact of the revisions on several measures of economic activity, and the second section provides a summary of the revisions and the major source data underlying them. The third section describes the changes in the methodology used to prepare the estimates, and the fourth section describes the presentational changes in the NIPA tables. Appendix A shows, in current dollars, the revised annual estimates and the revisions for the five summary accounts of the NIPA's. Tables presenting most of the revised monthly, quarterly, and annual NIPA estimates and the "advance" estimates for the second quarter of 1997 follow this



article (a list of these tables is shown on page 36). In addition, summary NIPA tables for 1929–96 are presented, beginning on page 148.

The presentation of the revised estimates and related estimates will continue in subsequent issues of the Survey. The September Survey will contain a list of the principal source data and estimating methods used in preparing the current-dollar and real estimates of GDP as well as reconciliation tables 8.20-8.26 that show the relationships between a number of NIPA measures and the source data (for example, tax return tabulations) from which the measures are derived or to which they are closely related. It will also present revised estimates of fixed reproducible tangible wealth in the United States. The October SURVEY will present tables 3.15–3.17 (government expenditures by function), tables 3.18-3.20 (government sector reconciliation tables), and tables 9.1-9.6 (seasonally unadjusted estimates); it will also present revised real inventories, sales, and inventory-sales ratios for manufacturing and trade. The November Sur-VEY will present revised and updated estimates of gross product by industry.

#### Impact of the Revisions

The revised estimates show that the U.S. economy grew at about the same rate as that shown by the previously published estimates (chart 1).<sup>2</sup> From the fourth quarter of 1992 to the first quarter of 1997, the growth rate (average annual rate of change) for real gross domestic product (GDP) was revised up 0.1 percentage point to 2.8 percent (table 1). The small upward revision was more than accounted for by upward revisions to personal consumption expenditures (PCE) for services and to the change in business inventories. These upward revisions were largely offset by downward revisions to PCE for goods, to private investment in structures, and to government consumption expenditures and gross investment. In the revised estimates, the major components contributing to growth were the same as in the previous estimates. Increases in PCE, gross private domestic investment, and exports more than offset an increase in imports and a decrease in government consumption expenditures

<sup>2.</sup> The revisions presented in this article were calculated as the difference between the revised estimates and the most recently published estimates, including the estimates of selected series described in the May 1997 SURVEY; for further details, see the tables beginning on pages  $_{30}$  and D-2 of that issue.

Table 1.—Revisions to Real GDP and its Major Components Over the Period 1992:	V-1997:I
[Billions of chained (1992) dollars, seasonally adjusted annual rates]	

		(1992) dollar	s, seasonany	aujusteu ani	idai iatooj				
		Previously published Revised							n change
	1992:IV		Change fro to 19			Change fro to 1	om 1992:IV 997:I		
		1997:l	Dollar	Percent (annual rate)	1997:I	Dollar Percent (annual rate)		Dollar	Percent
Gross domestic product	6,327.1	7,094.4	767.3	2.7	7,101.6	774.5	2.8	7.2	0.1
Personal consumption expenditures	4,282.3	4,798.0	515.6	2.7	4,818.1	535.7	2.8	20.1	.1
Durable goods	505.0	646.4	141.4	6.0	637.8	132.8	5.6	-8.6	4
Nondurable goods	1,339.8	1,464.9	125.1	2.1	1,457.8	118.0	2.0	-7.1	1
Services	2,437.6	2,688.2	250.5	2.3	2,723.9	286.3	2.6	35.7	.3
Gross private domestic investment	812.2	1,141.0	328.9	8.3	1,149.2	337.1	8.5	8.2	.2
Fixed investment	805.8	1,091.9	286.1	7.4	1,079.0	273.2	7.1	-12.9	3
Nonresidential	569.1	813.0	243.9	8.8	808.9	239.9	8.6	-4.0	2
Structures	165.6	203.0	37.4	4.9	195.9	30.3	4.0	-7.1	9
Producers' durable equipment	403.5	611.7	208.1	10.3	616.6	213.1	10.5	4.9	.2
Residential	236.7	281.1	44.4	4.1	273.3	36.6	3.4	-7.8	7
Change in business inventories	5.6	48.6	43.0		63.7	58.1		15.1	
Net exports of goods and services	-40.0	-120.7	-80.7		-126.3	-86.3		-5.6	
Exports	649.1	885.3	236.1	7.6	922.7	273.5	8.6	37.4	1.0
Goods	461.0	664.6	203.6	9.0	686.2	225.2	9.8	21.6	.8
Services	188.2	222.4	34.2	4.0	238.9	50.8	5.8	16.6	1.8
Imports	689.1	1,006.0	316.8	9.3	1,048.9	359.8	10.4	43.0	1.1
Goods	561.8	853.4	291.7	10.3	891.3	329.5	11.5	37.8	1.2
Services	127.4	153.2	25.8	4.4	158.4	31.1	5.3	5.2	.9
Government consumption expenditures and gross									
investment	1,272.5	1,273.8	1.3	0	1,260.5	-12.0	2	-13.3	2
Federal	534.0	459.2	-74.8	-3.5	452.8	-81.2	-3.8	-6.3	3
National defense	376.8	301.2	-75.6	-5.1	303.9	-73.0	-4.9	2.6	.2
Nondefense	157.1	157.2	.1	0	148.5	-8.7	-1.3	-8.8	-1.3
State and local	738.5	815.7	77.2	2.4	807.7	69.2	2.1	-8.0	3
Addenda:									
Gross domestic purchases	6,367.0	7,209.8	842.8	3.0	7,220.9	853.8	3.0	11.0	0
Final sales of domestic product	6,320.7	7,045.8	725.0	2.6	7,034.1	713.4	2.5	-11.7	1
Gross national product	6,334.6	7,070.4	735.8	2.6	7,091.8	757.2	2.7	21.3	.1
Gross domestic income	6,263.0	7,180.4	917.4	3.3	7,159.2	896.2	3.2	-21.2	1
	.,	,			,		•·		

and gross investment; previously, government spending had shown a slight increase.

In the revised estimates, the percent change from the preceding year for real GDP was unrevised at 2.3 percent for 1993, at 3.5 percent for 1994, and at 2.0 percent for 1995. For 1996, the percent change was revised up from 2.4 percent to 2.8 percent. On a fourth-quarter-to-fourthquarter basis, the increase during 1993 was revised up from 2.2 percent to 2.4 percent; the increase during 1994 was revised down from 3.5 percent to 3.3 percent; the increase during 1995 was revised up from 1.3 percent to 1.6 percent; and the increase during 1996 was revised up from 3.1 percent to 3.2 percent.

Another measure of real output can be calculated by using the GDP implicit price deflator to deflate current-dollar gross domestic income (GDI), which measures the costs incurred and the incomes earned in the production of GDP. The revised estimates of "real GDI" show slightly less growth from the fourth quarter of 1992 to the first quarter of 1997 than the previously published estimates; the growth in real GDI was revised down 0.1 percentage point to 3.2 percent. As a result, the difference between the growth in real GDP and the growth in real GDI over this period was reduced from 0.6 percentage point to 0.4 percentage point. As discussed in the box "The Statistical Discrepancy" on page 19, BEA continues to view the GDP estimates as more reliable than the GDI estimates because the source data underlying GDP are more reliable.

The revised estimates show about the same increase in prices for 1993-95 as previously indicated and a slightly higher price increase for 1996 (chart 2). From the fourth quarter of 1992 to the first quarter of 1997, the average annual rates of increase in the price indexes for both GDP and gross domestic purchases were unrevised at 2.4 percent and 2.3 percent, respectively (table 2). Among major components, the largest upward revisions were 0.4 percentage point to the price indexes for State and local government consumption expenditures and gross investment, for private nonresidential structures, and for residential structures; the largest downward revision was 1.3 percentage points to the price index for producers' durable equipment.

#### Summary of the Revisions

The revisions reflect the incorporation of new and revised source data for the current-dollar estimates and for the prices and quantities used to prepare the chained-dollar estimates; they also reflect the introduction of changes in methodology. This section describes the revisions to the annual current-dollar, price, and chained-dollar estimates and then briefly describes the revisions to the quarterly estimates.

		Previously	published	Rev	ised	
	1992:IV	1997:I	Percent change from 1992:IV to 1997:I (annual rate)	1997:I	Percent change from 1992:IV to 1997:I (annual rate)	Revision in percent change, per- centage point
Gross domestic product	100.88	111.43	2.4	111.78	2.4	0
Less: Exports of goods and services Plus: Imports of goods and services	99.98 100.42	103.69 101.39	.9 .2	99.90 97.42	0 –.7	9 9
Equals: Gross domestic purchases	100.92	111.09	2.3	111.32	2.3	0
Personal consumption expenditures Durable goods Nondurable goods Services	101.10 100.23 100.72 101.48	111.62 103.70 108.95 114.83	2.4 .8 1.9 3.0	112.21 103.27 108.90 116.02	2.5 .7 1.9 3.2	.1 –.1 0 .2
Gross private domestic investment Fixed investment Nonresidential Structures Producers' durable equipment Residential Change in business inventories	100.50 100.11 100.91 99.77 101.46	106.78 104.11 114.55 100.33 113.55	1.4 .9 3.0 .1 2.7	104.52 100.31 116.11 94.72 115.68		5 9 .4 -1.3 .4
Government consumption expenditures and gross investment Federal National defense Nondefense State and local	100.59 100.17 99.57 101.61 100.89	112.52 113.95 112.53 117.21 111.57	2.7 3.1 2.9 3.4 2.4	113.74 114.10 113.14 116.44 113.54	2.9 3.1 3.3 2.8	.2 0 .2 1 .4
Addenda: Final sales of domestic product Gross national product	100.88 100.87	111.45 111.43	2.4 2.4	111.85 111.73	2.5 2.4	.1 0

Table 2.—Revisions to Chain-Type Price Indexes Over the Period 1992:IV-1997:I [Index numbers (1992=100), seasonally adjusted]

#### Annual current-dollar estimates

Table 3 summarizes the current-dollar revisions to major NIPA components. It provides a guide to the major revisions by identifying the subcomponent series for which revisions were \$2.0 billion or more for any of the years covered by this annual revision and by listing the major source data that underlie the revised estimates. It should be noted that the incorporation of new and revised source data usually results in a revision to the level of an estimate not only for the year into which they are directly incorporated, but usually also to the levels for subsequent years.

The data from the following sources had the largest impact on the revisions: Census Bureau annual surveys of State and local governments (for 1993–96), of manufacturing, of merchant wholesale trade, of retail trade (for 1994 and 1995), and of services (for 1994–96); Census Bureau surveys of the value of construction put in place (for 1993–96); Federal Government budget data (for fiscal years 1994–97); Internal Revenue Service (IRS) tabulations of tax returns for corporations and for sole proprietorships and partnerships (for 1994 and 1995); Bureau of Labor

Statistics (BLS) tabulations of wages and salaries of employees covered by State unemployment insurance (for 1996); U.S. Department of Agriculture farm statistics (for 1994–96); BEA balance of payments accounts and capital stock statistics (for 1993–96); and BEA price data for semiconductors and telephone switching equipment (for 1993–96) and for mainframe computers (for 1995 and 1996).

*Gross domestic product* (*GDP*).—The level of current-dollar *GDP* was revised up for all 4 years: \$5.1 billion, or 0.1 percent, for 1993; \$11.3 billion, or 0.2 percent, for 1994; \$11.6 billion, or 0.2 percent, for 1995; and \$59.9 billion, or 0.8 percent, for 1996. These revisions were about average in comparison with previous annual NIPA revisions.

Among the major components, for 1993, upward revisions to nonresidential structures, to personal consumption expenditures (PCE) for services, and to net exports of goods and services more than offset a downward revision to government consumption expenditures and gross investment. For 1994, upward revisions to PCE for services, to nonresidential structures, and to net exports more than offset downward revisions

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# Table 3.--NIPA Revisions: Selected Component Detail and Major Source Data

			ons of de			
NIPA component		Revision			Revised	Major source data incorporated <sup>1</sup>
	1993	1994	1995	1996	1996 level	
Gross domestic product	5.1	11.3	11.6	59.9	7,636.0	
Personal consumption expenditures	5.1	16.1	32.8	56.2	5,207.6	
Goods	1.3	-2.7	-8.0	-8.0	2,169.2	
Of which:						
Motor vehicles and parts Of which:	.1	1.3	7.0	8.8	261.3	
New autos	1	1	2.5	4.7	86.1	Revised data on optional equipment percentages from trade sources for model years 1995 and 1996; new price data and optional equipment percentages for domestic autos for
Net purchases of used autos	6	-2.0	3	.4	55.3	model year 1997. Revised stock of autos held by consumers from trade sources for 1994; new stock data for 1995 and 1996; Census Bureau annual retail trade survey data on sales of goods and gross margin of used car dealers for 1994 and 1995; revised Census Bureau monthly re-
Other motor vehicles	.7	3.3	5.6	4.8	82.1	tail sales data for 1996. Recreational vehicles: Census Bureau annual retail trade survey data for 1994 and 1995; revised Census Bureau monthly retail sales data for 1996. Trucks: Revised Census Bureau annual survey of manufactures (ASM) commodity ship- ments data for 1993; new ASM shipments data for 1994 and 1995; BEA estimates for used truck transactions from a variety of data sources for 1995 and 1996; revised ex-
Goods other than motor vehicles and parts	1.2	-4.0	-15.0	-16.8	1,907.9	ports and imports for 1993–96.
Of which: Other durable goods	.1	-2.1	-3.1	-4.6	120.6	Census Bureau annual retail trade survey sales data for 1994 and 1995; revised Census
Food	1.1	-1.2	-12.1	-16.2	756.1	Bureau monthly sales data for 1996.
Other nondurable goods	.2	0	1.6	4.7	380.1	
Services	3.8	18.8	40.8	64.1	3,038.4	
Housing Of which:	4	6.1	6.6	7.8	787.2	
Owner-occupied nonfarm dwellings—space rent	2	4.4	3.7	3.9	558.3	Census Bureau 1995 American housing survey data on housing units for 1994 and 1995; Census Bureau current population survey data on housing units for 1996.
Tenant-occupied nonfarm dwellings-rent	2	1.5	3.0	4.4	193.6	Census Bureau 1995 American housing survey data on housing units and rental values for 1994 and 1995; Census Bureau current population survey data on housing units for 1996.
Household operation Of which:	.3	4.8	6.5	6.4	315.9	
Telephone and telegraph	.4	2.8	4.6	5.1	96.9	Census Bureau annual survey of communications services data on residential and nonresi- dential long-distance service revenue for 1993–95; trade source cellular telephone reve- nue data for 1996.
Transportation Of which:	.6	4.9	10.6	13.8	218.4	
User-operated transportation User-operated transportation Repair, greasing, washing, parking, storage, rental, and leasing.	.4 .4	3.8 3.4	9.1 7.5	10.9 9.1	173.9 140.1	Revised trade source data on auto repair at franchised car dealers for 1993; new trade source data for 1994 and 1995; BLS consumer expenditure survey data for rental and leasing of vehicles for 1994 and 1995; revised Census Bureau service annual survey
Medical care	-1.8	-7.5	-11.4	-7.7	808.1	(SAS) data for 1994; new SAS data for 1995 and 1996.
Of which: Hospitals	-3.3	-7.9	-12.4	-9.9	325.1	
Öf which:		-				
Nonprofit	-2.6	-5.7	-8.7	-7.4		Trade source expense data for FY 1994 and FY 1995 for 1993–95; trade source community hospital expense data for 1996.
Government	5 0	-1.8 1.1	-3.8 4.7	-3.9 6.1	70.7 69.1	for 1993 and 1994; new <i>GF</i> tabulations for FY 1995 and FY 1996 for 1994–96. Revised Census Bureau service annual survey (SAS) data for 1994; new SAS data for
Health insurance	1.9	-2.0	-7.7	-7.9	56.3	for 1993; preliminary HCFA data for 1994 and 1995; BLS consumer expenditure survey data on paid premiums for 1994 and 1995; BLS employment cost index survey data on
						health insurance premiums and BLS tabulations of wages and salaries covered by State unemployment insurance for 1995 and 1996.
Other services Of which:	5.2	10.5	28.5	43.9	908.9	
Personal care Of which:	.6	1.7	3.7	2.8	56.1	
Other	.6	1.3	2.4	1.8	30.4	Revised Census Bureau service annual survey (SAS) data for 1994; new SAS data for 1995 and 1996.
Personal business	3.4	8.5	15.7	28.1	421.1	1950 and 1950.
Of which: Brokerage charges and investment counseling	.1	.1	1.8	5.7	47.2	Revised Federal Reserve Board (FRB) data on securities held by households for 1993 and 1994; new FRB data on securities held by households for 1995 and 1996; revised Securities and Exchange Commission data on income and expenses of registered broker-deal-
Services furnished without payment by financial intermediaries except life insurance carriers and private noninsured pension plans.	.3	5.5	10.9	13.3	169.9	ers for 1995 and 1996; BLS tabulations of wages and salaries of employees covered by State unemployment insurance for 1995 and 1996. Revised IRS tabulations of corporate tax return data for 1993; new IRS tabulations for 1994 and 1995; Federal Deposit Insurance Corporation data, National Credit Union Administra- tion data, Office of Thrift Supervision data, trade source data on investment companies for 1995 and 1996.
Expense of handling life insurance	2.7	1.6	1.4	5.7	79.9	Revised IRS tabulations of corporate tax return data for 1993; new IRS tabulations for 1994 and 1995; trade source expense data for 1993–95; BLS tabulations of wages and sala- ries covered by State unemployment insurance for 1995 and 1996.
Recreation Of which:	1.7	.3	8.2	10.2	189.4	
Commercial participant amusements	.1	1.3	4.5	5.8	46.2	Revised Census Bureau service annual survey (SAS) data for 1994; casino gambling data from trade source for 1994 and 1995; new SAS data for 1995 and 1996.

# Table 3.--NIPA Revisions: Selected Component Detail and Major Source Data--Continued

·	Billions of dollars			ollars		
NIPA component		Revision	in level		Revised	Major source data incorporated <sup>1</sup>
	1993	1994	1995	1996	1996 level	
Other	1.6	-1.0	3.7	4.4	143.2	Revised Census Bureau <i>Government Finances (GF)</i> tabulations on lotteries, spectator sports, and high school recreation for FY 1994 for 1993 and 1994; new <i>GF</i> tabulations for FY 1995 and FY 1996 for 1994–96; revised Census Bureau service annual survey (SAS) data for 1994; new SAS data for 1995 and 1996.
Religious and welfare activities	0	0	2.4	5.8	150.5	BLS consumer expenditure survey data for day care for 1994 and 1995; BLS tabulations of wages and salaries of employees covered by State unemployment insurance for 1995 and 1996
Net foreign travel Foreign travel by U.S. residents	.2 0	.6 .5	-3.1 9	-4.6 1.2	-27.8 54.9	Revised BEA balance of payments accounts estimates for 1993–96; Department of Trans- portation international passenger fares data for 1995 and 1996.
Less: Expenditures in the United States by nonresidents.	1	2	2.1	5.8	82.7	
Fixed investment	5.2	-8.3	-20.1	-10.8	1,090.7	
Nonresidential structures	4.6	4.3	.9	.9	215.2	
Nonresidential buildings, excluding farm Of which:	2.5	2.6 2.2	2.0	7.1	156.1	Prevised Consults Purchau value of construction put in place data for 1002.06
Commercial structures Other	3.0 .4	1.1	2.9 .8	5.2 2.5	77.6 46.4	Revised Census Bureau value of construction put in place data for 1993–96.
Utilities Of which:	.8	-1.7	-5.3	-8.3	33.3	
Electric light and power	.8 0	.7 _1.2	-2.8 -2.1	-6.1 -3.2	11.0 4.7	Energy Information Administration and Rural Utility Services data for 1994 and 1995; trade source capital expenditures data for 1996. Trade source capital expenditures data for 1994 and 1995; Energy Information Administra-
Mining exploration, shafts, and wells	1.0	3.2	4.3	1.8	16.1	tion data on the proportion of capital expenditures that are structures for 1994 and 1995.
Of which: Petroleum and natural gas	.9	3.0	4.3	2.3	14.8	Trade source survey data on drilling costs for 1994 and 1995; revised trade source data on
5						footage drilled for 1993–96.
Nonresidential producers' durable equipment Of which:	.7	-10.9	-16.4	-10.6	566.2	
Information processing and related equipment	2	-8.3	-10.4	-10.9	195.1	Revised Census Bureau annual survey of manufactures (ASM) product shipments data for 1993; new ASM data for 1994 and 1995; revised Census Bureau monthly industry shipments data for 1996; revised BEA tabulations of imports and exports for 1993–96.
Computers and peripheral equipment Communication equipment	1 9	-2.7 -3.3	2.0 6.7	1.8 –7.1	78.7 65.9	
Other	.8	-2.3 4	-5.7 -3.0	-5.6 -1.4	50.5 127.5	
Of which: Special industry machinery, n.e.c.	0	-2.2	-3.6	-1.2	32.8	
Transportation and related equipment Of which:	.7	1.5	.8	5.0	134.5	
Autos	.5	1.0	.1	3.0	45.3	and 1996; new price data and optional equipment percentages for domestic autos for model year 1997.
Other equipment	3	-4.7	-5.6	-5.0	113.7	Revised Census Bureau annual survey of manufactures (ASM) product shipments data for 1993; new ASM data for 1994 and 1995; revised Census Bureau monthly industry shipments data for 1996; revised BEA tabulations of imports and exports for 1993–96.
Residential fixed investment Structures	1 1	-1.7 -1.6	-4.7 -4.7	-1.3 -1.3	309.2 301.7	
Of which: Single-family structures	0	0	.7	3.9	159.1	Revised Census Bureau value of construction put in place data for 1995 and 1996.
Brokers' commissions on sale of structures	0 –.2	-1.9	.7 –2.5	3.9 –3.1	36.3	Revised DEA tabulations of the values of new and existing homes for 1993-and 1996. Revised BEA tabulations of the values of new and existing homes for 1993-96; revised trade source data on existing home sales for 1995 and 1996, revised Census Bureau data on new home sales for 1995 and 1996.
Change in business inventories	1	1.7	-6.9	10.5	25.9	
Farm Nonfarm Change in book value	0 1 1.5	7 2.5 6.3	-5.3 -1.5 -2.5	4.8 5.7 2.6	2.9 23.0 28.2	Revised USDA data for 1993 and 1994; new USDA data for 1995 and 1996.
Of which: Manufacturing	1.6	5.2	-3.7	4.4	8.9	Revised Census Bureau annual survey of manufactures (ASM) inventory book value data for 1993; new ASM data for 1994 and 1995; revised Census Bureau monthly inventory
Wholesale trade Of which:	.1	5	-2.1	-2.5	3.0	data for 1996; new Federal budget data on defense aircraft purchases for 1993–96.
Or which: Merchant wholesalers	0	1	-2.8	-2.3	1.9	new ATS data for 1994 and 1995; revised Census Bureau monthly inventory data for
Retail trade	.5	1.4	3.3	.8	6.2	1996.
Of which: Automotive	2	2.6	3.5	1.5	-1.9	1993; new ARTS data for 1994 and 1995; revised BEA estimates based on inventory
Inventory valuation adjustment	-1.6	-3.8	.9	3.2	-5.1	data from trade sources for 1996.
Of which: Manufacturing	-1.0	-2.3	6	.1	1.7	Revised annual survey of manufactures (ASM) information on accounting methods used for inventory reporting for 1993; new ASM information for 1994 and 1995; revised data on
Retail trade Of which:	0	-1.0	2.4	.7	-2.1	cost of inventories, revised BEA unit labor cost indexes for 1993-96.
Other retail trade	1	0	2.1	.3	-2.3	Revised annual trade surveys (ATS) information on accounting methods used for inventory reporting for 1993; new ATS information for 1994 and 1995; revised data on cost of inventories for 1993–96.
Net exports of goods and services	2.0	3.5	8.7	3.9	-94.8	Revised BEA balance of payments accounts estimates and revised territorial adjustment for 1993–96; revised NIPA gold for 1996.

# Table 3.—NIPA Revisions: Selected Component Detail and Major Source Data—Continued

		Billi	ons of de	ollars		
NIPA component		Revision	in level		Revised	Major source data incorporated <sup>1</sup>
	1993	1994	1995	1996	1996 level	
Exports	.8	2.1	11.0	15.7	870.9	
Goods Services	.1 .6	.5 1.5	2.5 8.7	2.6 13.0	617.5 253.3	
Imports	.6 –1.2 0	-1.4 2	2.5	11.8	965.7 809.0	
Goods Services	-1.3	-1.1	.5 1.8	6.8 5.0	156.7	
Government consumption expenditures and gross investment.	-7.0	-1.7	-2.8	.3	1,406.7	
Federal consumption expenditures and gross investment	-4.3	-6.2	-7.0	-3.1	520.0	
National defense Consumption expenditures <i>Of which</i> :	-2.0 -2.4	-2.8 -4.2	9 -3.7	5.7 1.8	352.8 305.7	
Services Compensation of general government employees, except force-account construction.	-1.6 0	-3.4 .7	-4.0 .9	.4 5.8	275.6 135.2	
Of which:. Military	1.5	1.3	2.0	7.4	85.8	Revised allocation of FY 1994 Federal budget data for 1993 and 1994; revised allocation of FY 1995 Federal budget data for 1994 and 1995; revised FY 1996 Federal budget data
Consumption of general government fixed	3	-1.1	-3.0	-1.6	57.3	for 1995 and 1996; preliminary FY 1997 Federal budget data for 1996. Perpetual inventory calculations at current cost, based on gross investment and on invest-
capital. Other services	-1.4	-3.1	-1.8	-3.9	83.0	ment prices for 1993–96. See also entries for gross investment. Revised allocation of FY 1994 Federal budget data for 1993 and 1994; revised allocation of FY 1995 Federal budget data for 1994 and 1995; revised FY 1996 Federal budget data for 1995 and 1996; preliminary FY 1997 Federal budget data for 1996; revised Military
Gross investment	.4	1.4	2.7	3.8	47.0	Assistance Program data for 1993–96.
Of which: Equipment	.1	.4	1.7	2.1	40.2	Revised Department of Defense contract control data reports for 1993–96; revised allocation of FY 1994 Federal budget data for 1993 and 1994; revised allocation of FY 1995 Fed- eral budget data for 1994 and 1995; revised FY 1996 Federal budget data for 1995 and
Nondefense	-2.2	-3.3	-6.0	-8.7	167.3	1996; preliminary FY 1997 Federal budget data for 1996.
Of which: Consumption expenditures	-2.2	-3.3	-6.6	-9.5	145.7	
Of which: Services	-1.8	-3.1	-5.6	-7.7	139.2	
Of which:						
Other services	-2.2	-2.9	-5.0	-8.0	50.4	Revised allocation of FY 1994 Federal budget data for 1993 and 1994; revised allocation of FY 1995 Federal budget data for 1994 and 1995; revised FY 1996 Federal budget data for 1994 and 1995; revised FY 1996 Federal budget data
State and local consumption expenditures and gross	-2.8	4.4	4.3	3.4	886.7	for 1995 and 1996; preliminary FY 1997 Federal budget data for 1996.
investment. Consumption expenditures	3.7	12.1	16.0	16.9	730.9	
Of which: Services	3.2	10.9	15.8	17.3	637.5	
Of which:	2.0	6.2	9.3	10.7	547.2	Revised BLS tabulations of wages and salaries of employees covered by State unemploy-
Compensation of general government employees, except force-account construction.	2.0	0.2	9.5	10.7	547.2	ment insurance for 1993 and 1994; new BLS tabulations for 1995 and 1996; revised Census Bureau <i>Government Finances (GF)</i> tabulations for FY 1993 and FY 1994 for 1993 and 1994; new <i>GF</i> tabulations for FY 1995 and FY 1996 for 1994–96; Social Secu- rity Administration data for 1993–96.
Other services	1.3	4.7	6.5	7.0		Revised Census Bureau <i>Government Finances (GF)</i> tabulations for FY 1993 and FY 1994 for 1993 and 1994; new <i>GF</i> tabulations for FY 1995 and FY 1996 for 1994–96.
Gross investment Structures	-6.5 -5.2	-7.7 -5.6	-11.7 -9.0	-13.6 -10.4	155.7 128.5	
Equipment	-1.2	-2.1	-2.7	-3.2	27.3	for 1993 and 1994; new <i>GF</i> tabulations for FY 1995 and FY 1996 for 1994–96; Census Bureau value of construction put in place data for 1993–96. Revised Census Bureau <i>Government Finances</i> ( <i>GF</i> ) tabulations for FY 1993 and FY 1994 for 1993 and 1994; new <i>GF</i> tabulations for FY 1995 and FY 1996 for 1994–96.
Gross domestic product	5.1	11.3	11.6	59.9	7,636.0	
Plus: Net receipts of factor income	8.1	12.0	12.3	10.6	1.7	Revised BEA balance of payments accounts estimates for 1993–96.
Receipts of factor income from the rest of the world	10.1	13.1	14.5	5.9	234.3	
Payments of factor income to the rest of the world	2.0	1.1	2.2	-4.7	232.6	
Equals: Gross national product	13.3	23.3	23.9	70.6	7,637.7	
Less: Statistical discrepancy <sup>2</sup>	-6.2	-19.9	-26.7	15.2	-59.9	
Equals: Gross national income	19.5	43.2	50.7	55.3	7,697.6	
Compensation of employees	5.4	2.2	-7.3	-21.6	4,426.9	
Wage and salary accruals	-1.3	-3.3	9.4	3.5	3,633.6	
Wage and salary declars	-1.1 -1.1	-0.0 -1.1 8	-1.1 -2.3	2.4 1.0	3,632.5 2,989.9	Revised BLS tabulations of wage and salaries of employees covered by State unemploy-
Wage accruals less disbursements	2	-2.2	10.4	1.1	1.1	ment insurance for 1994 and 1995; new BLS tabulations for 1996; revised USDA data on farm wages for 1993 and 1994; new USDA data for 1995 and 1996; new balance of pay- ments data for rest-of-the-world wage and salary accruals for 1993–96. Revised BLS tabulations of wage and salaries of employees covered by State unemploy-
Supplements to wages and salaries	6.6	5.6	-16.6		793.3	ment insurance for 1994 and 1995; new BLS tabulations for 1996.
Supplements to wayes and saidnes	0.0	0.0	0.01	-20.1	1 193.3	

# Table 3.--NIPA Revisions: Selected Component Detail and Major Source Data--Continued

		Billi	ons of do	ollars		
NIPA component		Revision	in level		Revised 1996	Major source data incorporated <sup>1</sup>
	1993	1994	1995	1996	level	
Employer contributions for social insurance Federal social insurance funds	2.4 .7	2.8 7	.5 -4.7	3.5 -3.5	385.7 326.6	Revised BLS tabulations of employer contributions to the unemployment trust fund for 1993; new BLS tabulations for 1994–96; monthly Treasury statement data on contributions to the military retirement fund for 1995 and 1996; revised data on social security taxable wages data from the Social Security Administration for 1993–96.
State and local social insurance funds	1.8	3.5	5.2	6.9	59.0	Revised Census Bureau Government Finances (GF) tabulations for FY 1993 and FY 1994 for 1993 and 1994; new GF tabulations for FY 1995 and FY 1996 for 1994–96;
Other labor income Pension and profit-sharing plans	4.2 3.5	2.8 4.1	–17.2 	–28.6 	407.6 94.8	BLS tabulations of data on employer contributions to pension and profit-sharing plans for 1993; BLS pension and wage cost per hour data for 1994–96.
Group health and life insurance Workers' compensation	-2.1 2.7	-3.2 1.8			270.2 37.0	BLS data on employer costs for health and life insurance for 1993–96. Trade source data on net premiums and employer costs for self-insurance for 1993–95.
Proprietors' income with IVA and CCAdj	14.9	7.2	2.9	-7.0	520.3	
Farm Of which:	1.3	2.6	-4.5	-7.5	37.2	
Proprietors' income with IVA	1.3	2.6	-4.4	-7.4	45.0	Revised USDA data for 1993 and 1994; new USDA data for 1995 and 1996; revised IRS tabulations of corporate tax return data for 1993; new IRS tabulations for 1994 and 1995.
Nonfarm	13.6	4.7	7.3	.5	483.1	
Proprietors' income	11.7	3.5	4.2	-1.9	455.3	Revised IRS tabulations of sole proprietorship and partnership tax return data for 1993; new IRS tabulations for 1994 and 1995.
CCAdj	2.3	.8	1.8	1.7	28.0	Capital consumption allowances: Revised IRS tabulations of sole proprietorship and partner- ship tax return data for 1993; new IRS tabulations for 1994 and 1995. Consumption of fixed capital: Revised BEA fixed investment and price estimates for 1993– 96.
Rental income of persons with CCAdj	3.5	12.3	21.1	31.3	146.3	
Of which: Rental income of persons	3.5	12.3	21.1	31.2	193.3	Revised Federal Reserve Board mortgage debt outstanding data for 1993–96; revised Cen- sus Bureau <i>Government Finances</i> FY 1993 and FY 1994 data and new FY 1995 and FY 1996 data on property taxes for 1993–96; revised USDA data on rent on farms owned by nonoperator landlords for 1993 and 1994; new USDA data for 1995 and 1996; revised IRS tabulations of individual income tax data on royalty income for 1993; new IRS tab- ulations for 1994 and 1995; ISLS consumer expenditure survey data on maintenance and repairs for 1994 and 1995; trade source data on property insurance for 1994 and 1995; Census Bureau American housing survey owner- and tenant-occupied units and mean rent data for 1995; Housing and Urban Development survey of mortgage lending activity data for 1995 and 1996; Census Bureau current population survey data on owner- and tenant-occupied units for 1996.
Corporate profits with IVA and CCAdj	.7	16.4	45.2	65.7	735.9	
Profits before tax	1.1	3.9	23.7	36.7	676.6	Revised IRS tabulations of corporate tax return data for 1993; new IRS tabulations for 1994 and 1995; regulatory agency and public financial reports profits data for 1996.
Of which:         Construction         Manufacturing         Transportation         Communications         Electric, gas, and sanitary services         Wholesale trade         Retail trade         Finance, insurance, and real estate         Financial         Services         Rest of the world         Receipts from the rest of the world         Less: Payments to the rest of the world         IVA	-3 84 -5 -8 -87 -81 -65 43 42 -19 1.6	.9 9.7 1 2.7 -3.9 -23.6 -25.0 1.4 6.0 9.1 8.3 -2.8 15.2	3.0 33.8 -7.4 2.2 -19.9 -21.5 1.6 7.6 7.6 10.0 9.1 -1.0 3.8 17.6	2.7 37.1 -9.4 1.2 -26.0 -28.4 2.4 11.1 13.9 6.5 -7.4 6.5 -7.4 22.6	19.2 204.5 12.3 35.9 44.3 37.8 50.6 108.6 103.5 5.1 59.0 95.9 132.7 36.7 -2.5 61.8	Revised BEA balance of payments accounts estimates for 1993–96. Capital consumption allowances: Revised IRS tabulations of corporate tax return data for 1993; new IRS tabulations for 1994 and 1995. Consumption of fixed capital: Revised BEA fixed investment and price estimates for 1993–96.
Net interest	3.6	17.4	21.5	21.8	425.1	
Net monetary interest	-5.8	16.8	1.8	2.7	-4.1	
Monetary interest paid Domestic business	5 -6.1	57.8 61.2			1,923.2 1,360.0	Revised IRS tabulations of corporate tax return data for 1993; new IRS tabulations for 1994 and 1995; new IRS tabulations of sole proprietorship and partnership tax return data for 1994 and 1995; revised Federal Reserve Board flow-of-funds accounts data, trade source data on investment companies, Federal Deposit Insurance Corporation data, Office of Thrift Supervision data, and Housing and Urban Development survey of mortgage lending activity data for 1995 and 1996; revised USDA data on interest paid by farmers for 1993 and 1994; new USDA data for 1995 and 1996.
Of which: Financial corporations Nonfinancial corporations	-1.5 -5.0	41.5 13.3			588.4 345.9	
Nonfinancial corporations Sole proprietorships and other private business Persons	-5.0 5 7	8.1 -6.3	-3.2	 -1.1	345.9 122.3 145.2	Revised Federal Reserve Board consumer credit data for 1993–96.
Government Of which:	.2	-1.9	-3.9	-4.1	317.7	
Federal	.1	-1.4	-4.0	-4.9	253.1	Revised allocation of FY 1994 Federal budget data for 1993 and 1994; revised allocation of FY 1995 Federal budget data for 1994 and 1995; revised FY 1996 Federal budget data for 1995 and 1996; preliminary FY 1997 Federal budget data for 1996; revised BEA bal-
Rest of the world	6.1	4.8			100.3	ance of payments accounts estimates for 1993–96. Revised BEA balance of payments accounts estimates for 1993–96.

# Table 3.--NIPA Revisions: Selected Component Detail and Major Source Data--Continued

			ons of do	-		
NIPA component		Revision			Revised	Major source data incorporated <sup>1</sup>
	1993	1994	1995	1996	1996 level	
Of which: To business and persons	6.0	4.8			96.1	
Less: Monetary interest received Domestic business	5 5.6	57.8 49.6			1,923.2 1,272.4	Revised IRS tabulations of corporate tax return data for 1993; new IRS tabulations for 1994 and 1995; new IRS tabulations of sole proprietorship and partnership tax return data for 1994 and 1995; revised Federal Reserve Board flow-of-funds accounts data, Federal De- posit Insurance Corporation data, and Office of Thrift Supervision data for 1995 and 1996.
Of which: Financial corporations Nonfinancial corporations Financial sole proprietorships and partnerships Persons Government Of which:	2.6 .1 2.9 –6.7 .4	29.6 14.2 5.8 3.7 4.9		-20.0 18.2	1,020.7 223.0 28.7 332.1 142.1	
State and local Rest of the world	.6 .2	4.9 4	11.7	16.9	117.4 176.7	Revised Census Bureau <i>Government Finances (GF)</i> tabulations for FY 1993 and FY 1994 for 1993 and 1994; new <i>GF</i> tabulations for FY 1995 and FY 1996 for 1994–96. Revised BEA balance of payments accounts estimates for 1993–96.
Net imputed interest	9.4	.6	19.8	19.0	429.1	
Interest paid (by domestic financial corporate business) Banks, credit agencies, and investment companies	9.4 .3	1.8 6.7			498.8 265.1	Revised IRS tabulations of corporate tax return data for 1993; new IRS tabulations for 1994 and 1995; revised Federal Deposit Insurance Corporation data, National Credit Union Ad- ministration data, Office of Thrift Supervision data, and trade source data on investment companies for 1995 and 1996.
Life insurance carriers and private noninsured pension plans.	9.1	-4.9	7.6	4.2	233.7	
Less: Interest received	9.4	1.8			498.8	Revised Federal Reserve Board (FRB) flow-of-funds accounts assets data for 1993 and 1994; new FRB data for 1995 and 1996; Federal Deposit Insurance Corporation data for 1995 and 1996.
Of which: Persons From banks, credit agencies, and investment companies.	9.5 .3	.6 5.5	18.5 10.9	17.6 13.3	403.6 169.9	
From life insurance carriers and private noninsured pension plans.	9.1	-4.9	7.6	4.2	233.7	
Consumption of fixed capital	-1.8	-7.3	-14.3	-15.4	830.1	
Private consumption of fixed capital Corporate	-1.5 9 6 2.4 .7	-6.1 -4.1 -2.0 10.0 11.1	-11.4 -7.0 -4.4 8.2	-13.7 -5.6 -8.1 10.8	682.7 452.3 230.5 709.9 514.1	Revised BEA fixed investment and price estimates for 1993–96. Revised IRS tabulations of corporate tax return data for 1993; new IRS tabulations for 1994 and 1995; revised BEA fixed investment estimates for 1993–96.
Noncorporate	1.7	-1.1	-2.3		195.8	Revised IRS tabulations of sole proprietorship and partnership tax return data for 1993–90. IRS tabulations for 1994 and 1995; revised BEA fixed investment estimates for 1993–96.
Less: Private CCAdj Corporate Noncorporate Of which:	3.9 1.6 2.3	16.1 15.2 .9	19.6 17.6 2.0	24.4 22.6 2.0	27.1 61.8 –34.6	
Nonfarm proprietors' income	2.3	.8	1.8	1.7	28.0	
Government consumption of fixed capital Of which:	4	-1.3	-2.9	-1.7	147.4	
General government	4 - <b>6.8</b>	-1.2 - <b>5.1</b>	-2.9 - <b>18.3</b>	-1.7 - <b>19.6</b>	125.1 613.0	
Indirect business tax and nontax liability	-7.5 -1.3	-4.0 6.1	-12.7 2.3	-13.1 5.3	604.8 95.8	Treasury Department income tax collections data for 1994–96.
State and local	-6.2	-10.1	-15.0	-18.4	508.9 33.6	Revised Census Bureau <i>Government Finances (GF)</i> tabulations for FY 1993 and FY 1994 for 1993 and 1994; new <i>GF</i> tabulations for FY 1995 and FY 1996 for 1994–96; revised Census Bureau quarterly tax revenue data 1993 and 1994; new tax revenue data for 1995 and 1996.
Of which: Payments to persons	0	1.1	2.4	3.0	26.0	Revised IRS tabulations of corporate tax return data on corporate gifts for 1993 and 1994:
Less: Subsidies less current surplus of government	6	1.1	7.0	7.9	25.4	new IRS tabulations of opportate state team data on explorate gints of and issert, new IRS tabulations for 1995; trade source data on medical malpractice losses and on insured losses on auto liabilities for personal injury for 1994 and 1995; Federal Bureau of Investigation uniform crime report data on unrecovered thefts for 1994 and 1995.
enterprises. Of which: Federal	-1.7	5	5.1	6.8	37.7	Revised allocation of FY 1994 Federal budget data for 1993 and 1994; revised allocation of
	1.1	.0	0.1	0.0	51.7	FY 1995 Federal budget data for 1994 and 1995; revised FY 1996 Federal budget data for 1995 and 1996; preliminary FY 1997 Federal budget data for 1996. For consumption of enterprise fixed capital: Perpetual-inventory calculations at current cost based on gross investment and on investment prices for 1993–96. See also entries for gross investment.

to nonresidential producers' durable equipment (PDE) and to PCE for goods. For 1995, upward revisions to PCE for services and to exports of goods and services more than offset downward revisions to PDE, to PCE for goods, to the change in business inventories (CBI), and to government consumption expenditures and gross investment and an upward revision to imports of goods and services. For 1996, upward revisions to PCE for services, to exports of goods and services, and to the CBI more than offset downward revisions to PDE and to PCE for goods and an upward revision to imports of goods and services.

PCE for goods.—PCE for goods was revised up \$1.3 billion for 1993 and down \$2.7 billion for 1994, \$8.0 billion for 1995, and \$8.0 billion for

1996. For 1993, an upward revision to "goods other than motor vehicles and parts" accounted for the revision; for 1994-96, downward revisions to this category more than offset upward revisions to motor vehicles and parts. The revisions to "goods other than motor vehicles and parts" resulted from the incorporation of revised annual retail sales data for 1994 and 1995 and revised monthly sales data for 1996 from the Census Bureau. Within this category, the largest downward revisions were to food for 1995 and 1996 and to "other durable goods" for 1994-96; "other nondurable goods" was revised up for 1995 and 1996.

Motor vehicles and parts was revised up \$7.0 billion for 1995 and \$8.8 billion for 1996, reflecting upward revisions to "other motor vehicles"

		Billi	ons of do	ollars		
NIPA component	1002	Revision		1000	Revised 1996	Major source data incorporated <sup>1</sup>
	1993	1994	1995	1996	level	
Addenda: Gross domestic income	11.4	31.1	38.4	44.7	7,695.9	
National income	28.3	55.5	83.4	90.3	6,254.5	See entries under "gross national income."
Personal income Wage and salary disbursements, other labor income, proprietors' income with IVA and CCAdj, and rental income of persons with CCAdj.	23.6 21.5	29.8 21.2	38.4 5.7	45.7 -1.9	6,495.2 4,706.7	See entries under "gross national income" and additional sources below.
Wage and salary disbursements Other labor income Proprietors' income with IVA and CCAdj Rental income of persons with CCAdj Personal dividend income	-1.1 4.2 14.9 3.5 -1.5	-1.1 2.8 7.2 12.3 5.2	-1.1 -17.2 2.9 21.1 37.1	2.4 -28.6 -7.0 31.3 60.6	3,632.5 407.6 520.3 146.3 291.2	Revised IRS tabulations of corporate tax return data for 1993; new IRS tabulations for 1994 and 1995; regulatory agency and public financial statements data on dividends for 1996.
Personal interest income Net interest Domestic business Rest of the world	5.9	4.4 17.4 12.1 5.3	1.8 21.5 16.9 4.7	-2.5 21.8 22.6 8	735.7 425.1 516.7 -91.7	See entries under "net interest." See entries under "net interest."
Net interest paid by government Federal	.4 5	-6.7 -1.4 -5.3 -6.3 -1.6	-16.5 -4.3 -12.2 -3.2 -7.6	-23.1 -6.3 -16.8 -1.1 -11.7	165.4 227.1 -61.7 145.2	See entries under "net interest." See entries under "net interest."
Transfer payments to persons From business From government Of which:	0 1.2	1.1 -2.9	2.4 -10.0	3.0 -14.7	1,068.0 26.0 1,042.0	See first entry under "business transfer payments."
State and local Medical care Other State and local	.4 0 .4	-3.1 -1.8 -1.3	-11.0 -7.2 -3.8	-14.1 -10.9 -3.2	294.8 159.9 134.9	Health Care Financing Administration tabulations of medicaid data for 1995 and 1996. Revised Census Bureau <i>Government Finances (GF)</i> tabulations for FY 1993 and FY 1994 for 1993 and 1994; new <i>GF</i> tabulations for FY 1995 and FY 1996 for 1994–96; Depart- ment of Health and Human Services tabulations of family assistance and other categor- ical assistance data for 1995 and 1996.
Less: Personal contributions for social insurance	.7	6	-1.4	-1.2	306.3	
Less: Personal tax and nontax payments Federal	.1 –1.0	7.7 .9	.8 –9.1	23.1 13.6	886.9 686.7	Social Security Administration contributions data for 1993–96; Treasury Department persona income tax collections data for 1995 and 1996.
State and local	1.2	6.8	10.0	9.4	200.2	Revised Census Bureau Government Finances (GF) tabulations for FY 1993 and FY 1994 for 1993 and 1994; new GF tabulations for FY 1995 and FY 1996 for 1994–96; revised Census Bureau quarterly tax revenue data for 1993 and 1994; new Census Bureau tax revenue data for 1995 and 1996.
Equals: Disposable personal income	23.5	22.1	37.6	22.6	5,608.3	Tevenue dula for 1930 and 1930.
Less: Personal outlays Personal consumption expenditures Interest paid by persons Personal transfer payments to the rest of the world (net)	4.9 5.1 –.7 .5	9.8 16.1 –6.3 0	29.6 32.8 -3.2 1	54.8 56.2 -1.1 4	5,368.8 5,207.6 145.2 15.9	See entries under "personal consumption expenditures." See entries under "net interest." Revised BEA balance of payments accounts estimates for 1993–96.
Equals: Personal saving	18.6	12.3	8.0	-32.0	239.6	
<ol> <li>In these descriptions, "new" indicates this is the first time that data porated into the component estimate for the given year, and "revised" ind were incorporated previously.</li> <li>The statistical discrepancy is gross national product (GNP) less gr</li> </ol>	licates that	data from	the speci	fic source	CCA FY	Bureau of Labor Statistics tj Capital consumption adjustment Fiscal year Internal Revenue Service

2. The statistical discrepancy is gross national product (GNP) less gross national income (GNI); it is also the difference between gross domestic product (GDP) and gross domestic income (GDI), which is GNI less net receipts of factor income. It arises because the product-side measures of GNP and GDP are estimated independently from the income-side measures of GNI and GDI. BEA Bureau of Economic Analysis

Internal Revenue Service

IVA Inventory valuation adjustment NIPA National income and product accounts USDA U.S. Department of Agriculture n.e.c. Not elsewhere classified

and to purchases of new autos. The revisions to "other motor vehicles" were more than accounted for by revisions to trucks, which reflected newly incorporated Census Bureau annual survey of manufactures data and revised exports and imports data from the annual revision of the balance of payments accounts (BPA's). The revision to new autos reflected newly incorporated data on prices and optional equipment from trade sources.

PCE for services.—PCE for services was revised up for all 4 years: \$3.8 billion for 1993, \$18.8 billion for 1994, \$40.8 billion for 1995, and \$64.1 billion for 1996. For 1993, an upward revision to "other services" more than offset a downward revision to medical care services. For 1994–96, upward revisions to "other services," to transportation services, to housing services, and to household operation services more than offset downward revisions to medical care services.

The upward revision to "other services" for 1993 was primarily accounted for by "expense of handling life insurance" and by recreation services, reflecting the incorporation of information from regular sources. For 1994–96, the upward revisions to "other services" reflected revisions to "services furnished without payment by financial intermediaries except life insurance carriers and private noninsured pension plans,"<sup>3</sup> to recreation services, to personal care, to "expense of handling life insurance," and for 1995 and 1996, to religious and welfare activities—all reflecting newly incorporated information from regular sources. Net foreign travel was revised down for 1995 and 1996, reflecting the annual revision of the BPA's.<sup>4</sup>

The downward revision to medical care services for 1993 reflected a downward revision to hospital services that more than offset an upward revision to health insurance. For 1994–96, downward revisions to hospital services and to health insurance more than offset upward revisions to nursing home services. Nonprofit hospitalswhose consumption expenditures are measured as their current operating expenses—was revised down, reflecting newly incorporated trade source expense data, and government hospitals-whose consumption expenditures are measured as payments by persons—was revised down, reflecting new and revised data from Census Bureau surveys of State and local governments. The revisions to health insurance reflected revisions to premiums for medical and hospitalization insurance that were based on BLS data and revisions to benefits that were based on preliminary estimates provided by the Health Care Financing Administration. The revisions to nursing home services reflected newly incorporated information from regular sources.

The upward revisions to transportation services for 1994–96 were primarily to motor vehicle "repair, greasing, washing, parking, storage, rental, and leasing," reflecting newly incorporated trade source data, Census Bureau receipts data, and BLS data on consumer expenditures for automobile rental and leasing.

The upward revisions to housing services for 1994–96 were for rent of both owner-occupied and tenant-occupied dwellings, reflecting the incorporation of Census Bureau biennial American housing survey data on housing units and rental values.

The upward revisions to household operation services for 1994–96 were primarily accounted for by telephone and telegraph, reflecting newly incorporated Census Bureau annual communications services survey data on residential and nonresidential long-distance service revenue and newly incorporated trade source data on cellular telephone revenue.

*Nonresidential structures.*—Nonresidential structures was revised up for all 4 years: \$4.6 billion for 1993, \$4.3 billion for 1994, \$0.9 billion for 1995, and \$0.9 billion for 1996. For 1993, the revision was primarily accounted for by commercial structures, reflecting revised Census Bureau data on the value of construction put in place. For 1994, the revision reflected an upward revision to commercial structures from the revised Census Bureau data and an upward revision to petroleum and natural gas exploration structures, which reflected newly incorporated trade source data on drilling and exploration costs and on drilling footage. For 1995 and 1996, upward revisions to petroleum and natural gas struc-

<sup>3.</sup> This PCE category consists of imputed payments made by persons to depository institutions—that is, commercial banks, mutual savings banks, savings and loan associations, credit unions, and regulated investment companies—to purchase checking, bookkeeping, and investment services for which they do not pay an explicit service charge. For additional information, see U.S. Department of Commerce, Bureau of Economic Analysis, *Personal Consumption Expenditures*, Methodology Paper Series MP-6 (Washington, dc: U.S. Government Printing Office, 1990): 11–12.

<sup>4.</sup> The "net foreign travel" component of PCE consists of expenditures by U.S. residents for travel abroad *less* expenditures in the United States by nonresidents. The expenditures abroad by U.S. residents are added to PCE because PCE is defined to include all expenditures for goods and services by U.S. residents, regardless of where those goods and services are produced. Expenditures in the United States by nonresidents are subtracted from PCE because these expenditures are included in the source data used to estimate the other components of PCE.

Conceptually, the expenditures by U.S. residents for travel abroad are part of PCE, but they are not part of U.S. production. To correctly measure U.S. production, entries are made in the imports component of GDP in order to offset the entry in PCE for these expenditures. Expenditures in the United States by nonresidents are included in the exports component of GDP because these expenditures represent final sales of U.S. production.

tures and to commercial structures were offset by downward revisions to utilities—specifically, to electric light and power and to gas—reflecting newly incorporated data from a variety of regular sources.

Nonresidential producers' durable equipment (PDE). —Nonresidential PDE was revised up \$0.7 billion for 1993 and down \$10.9 billion for 1994, \$16.4 billion for 1995, and \$10.6 billion for 1996. For 1994–96, the downward revisions were widespread among the components of PDE, reflecting the introduction of product shipments data from the Census Bureau annual survey of manufactures and revised Census Bureau monthly industry shipments data. For 1996, an upward revision to transportation and related equipment primarily to autos—reflected the incorporation of new price and optional equipment data from trade sources.

*Residential fixed investment.*—Residential fixed investment was revised down for all 4 years: \$0.1 billion for 1993, \$1.7 billion for 1994, \$4.7 billion for 1995, and \$1.3 billion for 1996. For 1995, about half of the revision was accounted for by a downward revision to brokers' commissions on sale of structures, reflecting newly incorporated data on the values of new and existing homes sold.

*Change in business inventories (CBI).*—The CBI was revised down \$0.1 billion for 1993, up \$1.7 billion for 1994, down \$6.9 billion for 1995, and up \$10.5 billion for 1996. The change in farm inventories was unrevised for 1993, revised down \$0.7 billion for 1994 and \$5.3 billion for 1995, and up \$4.8 billion for 1996; the revisions reflected newly incorporated data from the U.S. Department of Agriculture.

The change in nonfarm inventories was revised down \$0.1 billion for 1993, up \$2.5 billion for 1994, down \$1.5 billion for 1995, and up \$5.7 billion for 1996.

For 1994, upward revisions to the change in book value for manufacturing and for retail trade more than offset downward revisions to the inventory valuation adjustment (IVA) for manufacturing and for retail trade. The revision to the change in book value for manufacturing reflected newly incorporated data on inventory book values from the Census Bureau annual survey of manufactures. The revision to the change in book value for retail trade was more than accounted for by inventories of retail automotive dealers, reflecting newly incorporated data on inventory book values from the Census Bureau annual retail trade survey. The revision to the IVA reflected the incorporation of data on unit labor costs, commodity weights, and valuation methods from regular sources.

For 1995, downward revisions to the change in book value for manufacturing and for merchant wholesalers offset upward revisions to the change in book value for retail trade—specifically, retail automotive dealers—and to the IVA for retail trade. The revisions reflected newly incorporated data from Census Bureau annual surveys.

For 1996, upward revisions to the change in book value for manufacturing and to the IVA more than offset a downward revision to the change in book value for merchant wholesalers. The revisions reflected newly incorporated data on inventory book values from Census Bureau monthly surveys and an improved timing adjustment for weapons systems (see the section "Changes in Methodology").

*Net exports of goods and services.*—Net exports of goods and services was revised up for all 4 years: \$2.0 billion for 1993, \$3.5 billion for 1994, \$8.7 billion for 1995, and \$3.9 billion for 1996. The upward revisions for 1993 and 1994 were primarily accounted for by upward revisions to exports of services and downward revisions to imports of services. The upward revisions for 1995 and 1996 reflected upward revisions to exports of goods and services that more than offset upward revisions to imports of services.

For all 4 years, the revisions to exports of goods primarily reflected revisions to the territorial adjustment, which were based on newly incorporated data from Puerto Rico and the U.S. Virgin Islands.<sup>5</sup> The remaining revisions to exports and imports of goods and services mainly reflected the annual revision of the BPA's; for 1996, the upward revision to imports of goods was more than accounted for by imports of petroleum, reflecting a correction to source data. (For more information about the revisions to the BPA's, see the section "Changes in Methodology.")

*Government consumption expenditures and gross investment.*—Government consumption expenditures and gross investment was revised down \$7.0 billion for 1993, \$1.7 billion for 1994, \$2.8 billion for 1995, and up \$0.3 billion for 1996.

<sup>5.</sup> The territorial adjustment for goods converts exports and imports of goods from a BPA basis, in which Puerto Rico and U.S. territories are treated as part of the United States, to a NIPA basis, in which Puerto Rico and U.S. territories are treated as part of the "rest of the world." Similar adjustments are also made for services and for factor income.

Federal Government consumption expenditures and gross investment was revised down for all 4 years. For 1993 and 1994, the revisions were primarily accounted for by downward revisions to defense and nondefense "other services," reflecting corrections. For 1995, downward revisions to defense and nondefense "other services" and to defense consumption of general government fixed capital more than offset an upward revision to gross investment for national defense. The revisions to "other services" and to gross investment for national defense reflected revised Federal budget data for fiscal years 1995 and 1996; the revision to consumption of general government fixed capital reflected revised BEA estimates of prices—particularly equipment prices—and revised BEA estimates of investment. For 1996, downward revisions to defense and nondefense "other services" more than offset upward revisions to national defense compensation of employees and to gross investment for national defense; the revisions primarily reflected revised Federal budget data for fiscal year 1996 and preliminary budget data for fiscal year 1997.

State and local government consumption expenditures and gross investment was revised down for 1993 and up for 1994-96. For 1993, a downward revision to gross investmentprimarily to structures—more than offset an upward revision to consumption expenditures; these revisions reflected the incorporation of new and revised data from Census Bureau surveys of State and local governments, revised Census Bureau data on the value of construction put in place, and revised BLS tabulations of wages and salaries of employees covered by State unemployment insurance. For 1994–96, upward revisions to consumption expenditures-both to compensation of employees (primarily to employer contributions for employee retirement) and to "other services"-more than offset downward revisions to gross investment-mainly to structures but also to equipment; these revisions reflected the incorporation of data from regular sources.

*Net receipts of factor income.*—Net receipts of factor income from the rest of the world, which is excluded from GDP but included in gross national product, was revised up for all 4 years: \$8.1 billion for 1993, \$12.0 billion for 1994, \$12.3 billion for 1995, and \$10.6 billion for 1996. Receipts of factor income was revised up for all 4 years, and payments of factor income was revised up for 1993–95 and down for 1996. The revisions to receipts of factor income primarily reflected

the incorporation of data from the Treasury Department's benchmark survey of U.S. portfolio investment abroad as part of the annual revision of the BPA's. (For more information about revisions to the BPA's, see the section "Changes in Methodology.")

*Gross national product* (*GNP*).—The level of *GNP* was revised up for all 4 years: \$13.3 billion, or 0.2 percent, for 1993; \$23.3 billion, or 0.3 percent, for 1994; \$23.9 billion, or 0.3 percent, for 1995; and \$70.6 billion, or 0.9 percent, for 1996. Reflecting the upward revisions to net receipts of factor income, the revisions to *GNP* for all 4 years were slightly larger than those to *GDP*.

*Gross domestic income* (*GDI*).—The level of *GDI* was revised up for all 4 years: \$11.4 billion, or 0.2 percent, for 1993; \$31.1 billion, or 0.5 percent, for 1994; \$38.4 billion, or 0.5 percent, for 1995; and \$44.7 billion, or 0.6 percent, for 1996 (see the addenda to table 3).

For 1993, the upward revision to GDI reflected upward revisions to nonfarm proprietors' income with IVA and capital consumption adjustment (CCAdj), compensation of employees, net interest, and rental income of persons with CCAdj. Nonfactor incomes were revised down, and corporate profits with IVA and CCAdj and consumption of fixed capital (CFC) were revised little. For 1994–96, the upward revisions to GDI reflected upward revisions to all the major components except nonfactor incomes and consumption of fixed capital, which were revised down for these 3 years, and compensation of employees and farm proprietors' income, which were revised down for 1995 and 1996.

Statistical discrepancy.—The statistical discrepancy is the difference between GDP and GDI.<sup>6</sup> (For additional information about the statistical discrepancy, see the accompanying box.) For 1993–95, the revisions to GDI were larger than those to GDP, and the statistical discrepancy was revised from \$58.8 billion to \$52.6 billion for 1993, from \$34.5 billion to \$14.6 billion for 1994, and from -\$1.5 billion to -\$28.2 billion for 1995. For 1996, the revision to GDI was smaller than that to GDP, and the statistical discrepancy was revised from -\$75.1 billion to -\$59.9 billion. As a percentage of GDP, the statistical discrepancy was revised down 0.1 percentage point to 0.8 percent for 1993, down 0.3 percentage point to 0.2 percent for 1994, up 0.4 percentage point to 0.4 percent

<sup>6.</sup> The statistical discrepancy is also the difference between GNP and gross national income. GNP and GDP as well as gross national income and GDI differ by net receipts of factor incomes from the rest of the world.

#### The Statistical Discrepancy

Gross domestic product (GDP) measures output as the sum of final expenditures—consumer spending, private investment, net exports, and government consumption and investment. Gross domestic income (GDI) measures output as the sum of the costs incurred and the incomes earned in the production of GDP. In theory, GDP should equal GDI; in practice, they differ because their components are estimated using largely independent and less-than-perfect source data. In the national income and product accounts (NIPA's), the difference between GDP and GDI is called the "statistical discrepancy"; it is recorded in the NIPA's as an "income" component that reconciles GDI with GDP (see NIPA table 1.9).

Recently, there has been considerable public debate about the growth rate of the U.S. economy because since the early 1990's, growth measured by real GDI has increased faster than growth measured by real GDI. Some analysts maintain that the higher rate of growth of real GDI is more consistent with declines in the unemployment rate and with anecdotal information about increases in productivity in services-producing industries. This debate has important implications for market participants and policymakers.

BEA views GDP as a more reliable measure of output than GDI, because it considers the source data underlying the estimates of GDP to be more accurate. For example, most of the annual source data used for estimating GDP are based on complete enumerations, such as Federal Government budget data, or are regularly adjusted to complete enumerations, such as the guinguennial economic censuses and census of governments. In addition, all the expenditure components of GDP are revised every 5 years to reflect BEA's benchmark inputoutput accounts, which are prepared within an internally consistent framework that tracks the input and output flows in the economy. For GDI, only the annual tabulations of employment tax returns and Federal Government budget data are complete enumerations, and only farm proprietors' income and State and local government budget data are regularly adjusted to complete enumerations. For most of the remaining components of GDI, the annual source data are tabulations of samples of income tax returns.

To improve the accuracy of the components of GDI that are based on tabulations of income tax return information and of employment tax returns, BEA adjusts the tax return data for misreporting, largely using information from audit studies conducted by the Internal Revenue Service. For 1994, the major adjustments were to wages and salaries (\$74.0 billion), to nonfarm proprietors' income (\$199.1 billion), and to corporate profits (\$78.1 billion). Because the Census Bureau uses tax return information in the preparation of the economic censuses, BEA also adjusts the sales and receipts data from the censuses used in estimating GDP. These adjustments are smaller than those for GDI primarily because the adjustments to GDI for misreporting of wages and salaries on employment tax returns and misreporting of deductions on income tax returns do not affect the sales or receipts data from the censuses. Consequently, errors in the misreporting adjustments have a greater impact on the estimates of GDI than on the estimates of GDP.

 $_{\rm BEA}$  also views  $_{\rm GDP}$  to be more accurate than  $_{\rm GDI}$  because more of the critical annual source data are available on a timely basis. For

example, for this year's annual revision, preliminary 1996 results and final 1995 results were available for more of the GDP source data; among the source data used for GDI, final 1995 tabulations of corporate income tax returns were not available.

The relative accuracy of GDP and GDI is also affected by the extent to which each measure has components for which there are no direct source data. The estimates of GDP for 1996 are missing direct source data for several components of consumer spending for services, of exports and imports of services, of home improvements, and of State and local government spending. Estimates of GDI for 1996 are missing direct source data for most of other labor income, of nonfarm proprietors' income, of corporate profits of small businesses, of interest paid and received, and of depreciation. Past trends in these series indicate that it is more difficult to project the missing data for the components of GDI than of GDP. Conversely, there also are new rapidly growing services, such as Internet and cellular phone services, for which gaps in source data are likely to cause larger errors in GDP than in GDI because GDI would likely include the associated wages and salaries though not the business incomes. However, it is BEA'S view that overall, the missing source data for GDI is more of a problem than the missing source data for GDP.

In addition to the adjustments for tax return misreporting, adjustments are made to conform the accounting concepts underlying the source data to the accounting concepts underlying the NIPA's. The major NIPA-accounting adjustment to the estimates of GDP is the inventory valuation adjustment, which converts inventories valued at historical cost to replacement cost; however, errors in this adjustment do not significantly affect the difference between GDP and GDI, because a similar adjustment is also made to business incomes in GDI. For the estimates of GDI, there are many NIPA-accounting adjustments. BEA is concerned most about the accuracy of the adjustment that restates business incomes and depreciation to conform to the NIPA definition of investment, because the adjustment does not appear to correctly account for purchases of software. In the NIPA's, these purchases are treated as intermediate inputs; for tax return reporting, a large amount is treated as investment. Errors in the adjustment for these purchases would likely result in an overstatement of GDI that is large and growing.

BEA will continue to work to reduce the size of the statistical discrepancy, but it is highly unlikely that it can be eliminated completely; source data from sample surveys reflect sampling errors, and source data from complete enumerations reflect nonresponse errors. Currently, BEA is developing estimates of business purchases of software that are treated as investment in tax returns in order to improve the present adjustments for this type of difference; BEA also is evaluating a recent Census Bureau report on a potentially large understatement of the reported value of exports. As part of BEA's Strategic Plan for improving the national economic accounts, BEA is also working with other agencies to close several of the data gaps. These efforts include developing annual surveys of transportation, finance, insurance, and real estate; extending the annual wholesale trade survey to cover all inventories; improving the coverage of nonresidential reconstruction in the value-put-in-place survey; expanding the monthly establishment series to cover hours and earnings of all workers; developing complete and consistent surveys of fringe benefits; and speeding up the availability of the surveys on State and local governments.

<sup>1.</sup> For a discussion of this issue, see "Economic Report of the President" (Washington DC: U.S. Government Printing Office, 1997): 72–74.

for 1995, and down 0.2 percentage point to 0.8 percent for 1996.

Although GDI and GDP are largely estimated using different source data, some of the revisions to both measures are directly related because certain components are included in both measures. In this annual revision, a significant portion of the revisions to both GDI and GDP is accounted for by such components: Compensation of general government employees (in compensation of employees in GDI and in government consumption expenditures in GDP), imputed interest paid to persons (in net interest in GDI and in PCE in GDP), owner- and tenant-occupied rent (in rental income of persons in GDI and in PCE in GDP), farm CBI (in proprietors' income in GDI and in CBI in GDP), the IVA (in business incomes in GDI and in CBI in GDP), and general government CFC (in CFC in GDI and in government consumption expenditures in GDP). For 1993, the revisions to these components amounted to less than \$1.0 billion; for 1994, these revisions were \$12.1 billion; for 1995, \$18.5 billion; and for 1996, \$42.4 billion.

Compensation of employees.—Compensation of employees was revised up \$5.4 billion for 1993 and \$2.2 billion for 1994 and down \$7.3 billion for 1995 and \$21.6 billion for 1996. For 1993, the revision was more than accounted for by an upward revision to supplements to wages and salaries, primarily to other labor income. Within other labor income, upward revisions to pension and profit-sharing plans and to workers' compensation more than offset a downward revision to group health and life insurance. The revision to pension and profit-sharing plans reflected newly incorporated Department of Labor tabulations of tax return data on employer contributions to such plans. The revision to workers' compensation reflected newly incorporated trade source data on net premiums and employer costs for self-insurance, and the revision to group health and life insurance reflected BLS data on employer costs for insurance.

For 1994, the revision to compensation of employees reflected an upward revision to supplements to wages and salaries that more than offset a downward revision to wage and salary accruals, which is measured as the sum of wage and salary disbursements and the "wage accruals less disbursements" (wALD) adjustment.<sup>7</sup> The upward revision to supplements was to both other labor income and employer contributions for social insurance. Within other labor income, the pattern of revisions was similar to that for 1993; the revision to employer contributions was more than accounted for by State and local social insurance funds (for employee retirement) and reflected the incorporation of data from regular sources. The downward revision to wages and salaries and to WALD reflected the incorporation of revised BLS tabulations of wages and salaries of employees covered by State unemployment insurance.

For 1995, the revision to compensation of employees reflected downward revisions to supplements to wages and salaries and to private wage and salary disbursements that more than offset an upward revision to WALD. The downward revision to supplements was more than accounted for by other labor income.<sup>8</sup>

For 1996, the revision to compensation of employees was more than accounted for by a downward revision to supplements to wages and salaries. Within supplements, a downward revision to other labor income more than offset an upward revision to employer contributions for social insurance. The revision to employer contributions was more than accounted for by State and local social insurance funds (for employee retirement).

*Proprietors' income with IVA and CCAdj.*— Proprietors' income with IVA and CCAdj was revised up \$14.9 billion for 1993, \$7.2 billion for 1994, \$2.9 billion for 1995, and down \$7.0 billion for 1996. For 1993, the upward revision was mostly accounted for by the nonfarm component, and for 1994, it was accounted for by both the nonfarm and farm components. For 1995, an upward revision to the nonfarm component more than offset a downward revision to the farm component, and for 1996, the downward revision was more than accounted for by the farm component.

The revisions to farm proprietors' income primarily reflected newly incorporated information from the U.S. Department of Agriculture. The revisions to nonfarm proprietors' income reflected newly incorporated IRS tabulations of sole proprietorship and partnership tax return data and an improvement in the adjustment that removes corporate partnership income from nonfarm proprietors' income. The ccAdj for nonfarm proprietors' income was revised up for all 4 years (see "Consumption of fixed capital").

<sup>7.</sup> For a discussion of the WALD adjustment, see "Improved Estimates of the National Income and Product Accounts for 1959–95: Results of the Comprehensive Revision," SURVEY 76 (January/February 1996): 23–24.

<sup>8.</sup> For 1995 and 1996, the revisions cannot be attributed to the same level of component detail as those for 1993 and 1994, because separate estimates were not prepared.

Rental income of persons with ccAdj.—Rental income of persons with ccAdj was revised up for all 4 years: \$3.5 billion for 1993, \$12.3 billion for 1994, \$21.1 billion for 1995, and \$31.3 billion for 1996. The revisions were to rental income of persons (without ccAdj) and resulted from upward revisions to rental payments, reflecting the incorporation of Census Bureau biennial American housing survey data on housing units and rental values, and from downward revisions to several categories of expenses—most notably property taxes and mortgage interest—reflecting the incorporation of data from regular sources.

*Corporate profits with 1vA and ccAdj.*—Corporate profits with 1vA and ccAdj was revised up for all 4 years: \$0.7 billion for 1993, \$16.4 billion for 1994, \$45.2 billion for 1995, and \$65.7 billion for 1996. A revision to the ccAdj accounted for most of the revision for 1995 and 1996 (see "Consumption of fixed capital"). Most of the rest of the upward revisions for 1995 and 1996 were accounted for by corporate profits before tax, but the 1vA was also revised up.

The revisions to profits before tax for all 4 years primarily reflected upward revisions to domestic profits of manufacturing industries and to rest-of-the-world profits that more than offset downward revisions to domestic profits of financial corporations. The revisions to domestic profits primarily reflected newly incorporated IRS tabulations of corporate tax return data for 1994 and 1995 and other data from regular sources. The revisions to rest-of-the-world profits were primarily accounted for by upward revisions to receipts from U.S. investment abroad; however, for 1996, a downward revision to payments on foreign investment in the United States also contributed. The revisions to rest-of-the-world profits reflected the incorporation of the annual revision of the BPA's.

*Net interest.*—Net interest was revised up for all 4 years: \$3.6 billion for 1993, \$17.4 billion for 1994, \$21.5 billion for 1995, and \$21.8 billion for 1996. Net monetary interest was revised down for 1993 and up for 1994–96. Net imputed interest was revised up for all 4 years.

For 1993, the upward revision to net imputed interest more than offset the downward revision to net monetary interest. The revision to net imputed interest was primarily due to an upward revision to interest paid by private noninsured pension plans, reflecting revised estimates of their investment income that are based on Federal Reserve Board flow-of-funds data. The revision to net monetary interest reflected a downward revision to monetary interest paid by domestic business and an upward revision to monetary interest received by domestic business—both of which reflected revised IRS tabulations of corporate, sole proprietorship, and partnership tax return data; these revisions were partly offset by an upward revision to rest-of-the-world monetary interest paid, reflecting the annual revision of the BPA's.

For 1994, the revision to net interest was accounted for by an upward revision to net monetary interest. Monetary interest paid by and received by domestic business were both revised up, reflecting revised IRS tabulations of tax return data. Rest-of-the-world monetary interest paid was revised up, reflecting the annual revision of the BPA's.

For 1995 and 1996, the revisions to net interest were primarily accounted for by upward revisions to net imputed interest and reflected the revised 1994 levels and newly incorporated regular source data, mainly reports from financial regulatory agencies.<sup>9</sup>

*Consumption of fixed capital (CFC).*—CFC—that is, the charge for the using up of private and government fixed capital—was revised down for all 4 years: \$1.8 billion for 1993, \$7.3 billion for 1994, \$14.3 billion for 1995, and \$15.4 billion for 1996. The revisions were primarily accounted for by the private component of CFC and reflected the incorporation of revised BEA estimates of fixed investment and prices.

Private capital consumption allowances—that is, tax-return-based depreciation for corporations and nonfarm proprietorships and historical-cost depreciation (using consistent service lives) for farm proprietorships, rental income of persons, and nonprofit institutions—was revised up for all 4 years: \$2.4 billion for 1993, \$10.0 billion for 1994, \$8.2 billion for 1995, and \$10.8 billion for 1996. The revisions for 1993–95 reflected newly incorporated IRS tabulations of corporate tax return data. The revision for 1996 reflected revised BEA projections, which are based on attributing the amounts of fixed investment to the various tax-return-depreciation patterns and service lives.

Private ccAdj, which is derived as the difference between private capital consumption allowances and private CFC, was revised up for all 4 years:

<sup>9.</sup> For 1995 and 1996, the revisions cannot be attributed to the same level of component detail as those for 1993 and 1994, because for 1995, the scope of the 1996 annual revision was limited and because for 1996, the quarterly estimates are prepared at a less detailed level.

\$3.9 billion for 1993, \$16.1 billion for 1994, \$19.6 billion for 1995, and \$24.4 billion for 1996.

*Nonfactor incomes.*—Nonfactor incomes was revised down for all 4 years: \$6.8 billion for 1993, \$5.1 billion for 1994, \$18.3 billion for 1995, and \$19.6 billion for 1996. The revisions reflected downward revisions to indirect business taxes for all 4 years and, for 1994–96, upward revisions to subsidies less current surplus of government enterprises, which is subtracted in aggregating nonfactor incomes.

For 1993, the downward revision to indirect business taxes was both to Federal and to State and local indirect business taxes. For 1994–96, the revisions to indirect business taxes reflected downward revisions to State and local indirect business taxes that more than offset upward revisions to Federal indirect business taxes. The revisions to State and local indirect business taxes were more than accounted for by property taxes and reflected new and revised data from Census Bureau annual surveys of State and local tax revenues. The revisions to Federal indirect business taxes reflected newly incorporated data for Federal excise taxes and Federal indirect business nontaxes from the Treasury Department.

For 1995 and 1996, the revisions to subsidies less current surplus of government enterprises were primarily accounted for by the Federal Government component—specifically by the current surplus of government enterprises for the Postal Service—reflecting newly incorporated budget data.

*National income.*—National income—income that originates from production—was revised up for all 4 years: \$28.3 billion for 1993, \$55.5 billion for 1994, \$83.4 billion for 1995, and \$90.3 billion for 1996. These revisions reflected the previously described revisions to compensation of employees, proprietors' income, rental income of persons, corporate profits, and net interest.

*Personal income and its disposition.*—Personal income—income received by persons from participation in production, government and business transfer payments, and government interest—was revised up for all 4 years: \$23.6 billion for 1993, \$29.8 billion for 1994, \$38.4 billion for 1995, and \$45.7 billion for 1996. These revisions partly reflected the previously described revisions to the components of national income that are included in personal income—wage and salary disbursements, other labor income, proprietors' income, and rental income of persons.

They also reflected revisions to components of personal income—personal dividend income and personal interest income—that are derived from related components of national income. Finally, they reflected revisions to transfer payments to persons and to personal contributions for social insurance.

Personal dividend income—which consists of dividend income received by persons from all sources without regard to the source of income of the paying corporation and which equals net dividends less dividends received by government was revised down \$1.5 billion for 1993 and up \$5.2 billion for 1994, \$37.1 billion for 1995, and \$60.6 billion for 1996. These revisions reflected newly incorporated IRS tabulations of corporate tax return data, the revision of the BPA's, and data from publicly available corporate financial reports; the revisions for 1995 and 1996 primarily reflected revisions to dividends paid by regulated investment companies (see the section "Changes in Methodology").

Personal interest income-which consists of monetary and imputed interest received by persons from all sources and which equals net interest plus interest paid by persons and interest paid by government less interest received by government—was revised up \$2.9 billion for 1993, \$4.4 billion for 1994, \$1.8 billion for 1995, and down \$2.5 billion for 1996. These revisions reflected not only the previously described revisions to net interest but also the revisions to net interest paid by government and to interest paid by persons. For 1993, the revision to personal interest income was more than accounted for by the upward revision to net interest. For 1994 and 1995, the upward revisions to net interest were partly offset by downward revisions to net interest paid by government and to interest paid by persons. For 1996, the upward revision to net interest was more than offset by downward revisions to net interest paid by government and to interest paid by persons. The revisions to government interest were primarily accounted for by State and local government interest received, reflecting new and revised data from Census Bureau surveys of State and local governments; for 1995 and 1996, the revisions to Federal Government interest reflected the incorporation of Federal budget data on the distribution of interest paid. The revisions to interest paid by persons reflected revised data on consumer credit from the Federal Reserve Board.

Transfer payments to persons was revised up \$1.3 billion for 1993 and down \$1.6 billion for 1994, \$7.6 billion for 1995, and \$11.7 billion for

1996. The downward revisions were more than accounted for by payments from government specifically State and local government medical care transfer payments—reflecting newly incorporated data from the Health Care Financing Administration on payments for medicaid. "Other State and local" transfer payments was also revised down for 1994-96, largely reflecting new and revised data from Census Bureau surveys of State and local governments. Transfer payments from business was unrevised for 1993 and revised up \$1.1 billion for 1994, \$2.4 billion for 1995, and \$3.0 billion for 1996. The revisions primarily reflected the incorporation of IRS tabulations of corporate tax return data on corporate contributions and trade source data on business liability insurance payments.

Personal contributions for social insurance which is subtracted in calculating personal income—was revised up \$0.7 billion for 1993 and down \$0.6 billion for 1994, \$1.4 billion for 1995, and \$1.2 billion for 1996.

Personal tax and nontax payments was revised up for all 4 years: \$0.1 billion for 1993, \$7.7 billion for 1994, \$0.8 billion for 1995, and \$23.1 billion for 1996. For 1994, payments to State and local governments accounted for the revision. For 1995, an upward revision to payments to State and local governments more than offset a downward revision to Federal Government tax payments. For 1996, payments both to the Federal Government and to State and local governments accounted for the upward revision. The revisions to State and local tax and nontax payments reflected new and revised data from Census Bureau surveys of State and local governments. The revisions to Federal Government tax payments reflected newly incorporated data from the Treasury Department.

Reflecting the revisions to personal income and to personal tax and nontax payments, disposable personal income (DPI) was revised up for all 4 years: \$23.5 billion for 1993, \$22.1 billion for 1994, \$37.6 billion for 1995, and \$22.6 billion for 1996.

Personal outlays—PCE, interest paid by persons, and personal transfer payments to the rest of the world (net)—was revised up for all 4 years: \$4.9 billion for 1993, \$9.8 billion for 1994, \$29.6 billion for 1995, and \$54.8 billion for 1996. For all 4 years, upward revisions to PCE more than offset downward revisions to interest paid by persons.

Personal saving—the difference between DPI and personal outlays—was revised up \$18.6 billion for 1993, \$12.3 billion for 1994, \$8.0 billion for 1995, and down \$32.0 billion for 1996. The revised estimates show that personal saving was about \$10 billion lower for 1996 than it was for 1993; in the previously published estimates, savings had been about \$40 billion higher. The revisions to the personal saving rate (personal saving as a percentage of DPI) were similar to those for personal saving; it was revised up from 4.8 percent to 5.1 percent for 1993, from 3.9 percent to 4.2 percent for 1994, and from 4.6 percent to 4.8 percent for 1995, and it was revised down from 4.9 percent to 4.3 percent for 1996.

*Gross saving and investment.*—Gross saving was revised up \$14.9 billion for 1993, \$23.3 billion for 1994, \$13.2 billion for 1995, and down \$8.1 billion for 1996 (see appendix A, account 5). Gross saving as a percentage of GNP was revised up 0.2 percentage point to 14.4 percent for 1993, 0.3 percentage point to 15.5 percent for 1994, and 0.1 percentage point to 16.0 percent for 1995; it was revised down 0.3 percentage point to 16.6 percent for 1996.

For 1993, an upward revision to gross private saving more than offset a downward revision to the government surplus or deficit. Within gross private saving, the revision was more than accounted for by the upward revision to personal saving. The revision to the government deficit reflected a downward revision to the State and local government surplus that more than offset an upward revision to the Federal Government surplus or deficit.

For 1994, the revision to gross saving was more than accounted for by an upward revision to gross private saving. Within gross private saving, upward revisions to undistributed corporate profits with IVA and CCAdj and to personal saving more than offset downward revisions to corporate CFC and to WALD. The revision to undistributed profits with IVA and CCAdj reflected upward revisions to the corporate CCAdj and to undistributed profits-profits after tax less dividends paid—that more than offset a downward revision to the corporate IVA. The upward revision to undistributed profits reflected an upward revision (of \$12.6 billion) to profits after tax that more than offset an upward revision (of \$5.2 billion) to dividends paid. (Because most dividends are paid to persons, the revision to dividend income also resulted in a corresponding upward revision to personal saving.)

For 1995, an upward revision to gross private saving more than offset a downward revision to the government surplus or deficit. Within gross private saving, upward revisions to undistributed profits with IVA and CCAdj, to personal saving, and to WALD more than offset downward revisions to corporate and noncorporate CFC. The revision to the government deficit reflected a downward revision to the Federal Government surplus or deficit that more than offset an upward revision to the State and local government surplus.

For 1996, a downward revision to gross private saving more than offset an upward revision to the government surplus or deficit. Within gross private saving, downward revisions to personal saving and to corporate and noncorporate CFC more than offset an upward revision to undistributed profits with IVA and CCAdj. The revision to the government deficit reflected upward revisions to the Federal Government surplus or deficit and to the State and local government surplus.

Gross investment—which is the sum of gross private domestic investment (GPDI), gross government investment, and net foreign investment—was revised up \$8.6 billion for 1993 and \$3.4 billion for 1994, down \$13.7 billion for 1995, and up \$7.1 billion for 1996. For 1993, upward revisions to net foreign investment and to GPDI more than offset a downward revision to gross government investment. For 1994, an upward revision to net foreign investment more than offset downward revisions to GPDI and to gross government investment. For 1995, downward revisions to GPDI and to gross government investment more than offset an upward revision to net foreign investment. For 1996, an upward revision to net foreign investment more than offset downward revisions to gross government investment and to GPDI.

#### Annual price estimates

Revisions to the chain-type price indexes result from the incorporation of newly available and revised source data, the regularly scheduled incorporation of weights for the most recent year (1996) into the chain formula, and the introduction of methodological changes, which affect both the use of source data and the weights. In this annual revision, the source data for price indexes that are used for deflation and the source data that affect implicit prices were revised; the implicit prices are derived from current-dollar estimates and from the quantity data that are used in quantity extrapolation and direct valuation. In addition, a change was made to the weights for prices in the chain formula. (See the section "Changes in Methodology.") Finally, the prices used for deflation reflected updated seasonal adjustment factors.

Two new price indexes were introduced in this annual revision. First, BEA developed a quality-adjusted price index for telephone switching equipment, which was used to deflate the telephone switching equipment component of producers' durable equipment beginning with 1993. Second, beginning with 1995, the BLS producer price index for skilled- and intermediatecare facilities was used to deflate the for-profit nursing home component of PCE. Other newly available or revised price index information included revised price indexes for computers and peripheral equipment, semiconductors, airline transportation, life insurance, foreign travel by U.S. residents, multifamily residential structures, and defense goods and services.

Newly available source data resulted in revisions to the implicit prices for the following components: Four types of PCE services—automobile insurance, health insurance, brokerage and investment charges, and "services furnished without payment by financial intermediaries except life insurance carriers and private noninsured pension plans"; petroleum and natural gas exploration (nonresidential structures); and Federal Government and State and local government compensation of employees. The revisions to most of these prices reflected revisions to the current-dollar estimates. For example, currentdollar government compensation was revised primarily to reflect revisions to retirement contributions; because there were no corresponding revisions to the hours-worked data that are used for quantity extrapolation of the real estimates, the cost of purchased services of employees by government was revised up.

The level of the chain-type price index for gross domestic purchases was revised up for all 4 years: 0.02 index point to 102.48 for 1993, 0.10 index point to 104.85 for 1994, 0.21 index point to 107.52 for 1995, and 0.29 index point to 109.86 for 1996. Reflecting these revisions in level, the annual percent increase in the index was unrevised at 2.5 percent for 1993 and was revised up 0.1 percentage point for each of the following 3 years—to 2.3 percent for 1994, to 2.5 percent for 1995, and to 2.2 percent for 1996 (table 4).

The revisions to the chain-type price index for GDP for 1993–95 were similar to those for gross domestic purchases. For 1996, the price index for GDP was revised up 0.53 index point to 110.22, and the annual percent increase in the index was revised up 0.2 percentage point to 2.3 percent.

# Table 4.—Revisions to Percent Change in GDP, Real GDP, and Price Indexes (Chain-type Weights)

[Percent change from preceding year]

			1993			1994			1995			1996	
	1992	Pre- viously pub- lished	Revised	Revision	Pre- viously pub- lished	Revised	Revision	Pre- viously pub- lished	Revised	Revision	Pre- viously pub- lished	Revised	Revision
					Current dollars								
Gross domestic product	5.5	4.9	5.0	0.1	5.8	5.9	0.1	4.6	4.6	0	4.4	5.1	0.7
Personal consumption expenditures Durable goods Nondurable goods Services	6.2 7.3 3.5 7.5	5.6 8.6 3.6 6.0	5.7 8.5 3.7 6.2	.1 –.1 .1 .2	5.5 9.5 4.4 5.3	5.8 9.3 4.2 5.9	.3 –.2 –.2 .6	4.8 4.4 3.9 5.3	5.1 5.0 3.3 6.1	.3 .6 –.6 .8	4.6 4.2 4.0 5.0	5.0 4.3 4.0 5.7	.4 .1 0 .7
Gross private domestic fixed investment	6.1 1.9 –6.9 6.3 18.0	8.6 7.3 1.6 9.9 11.6	9.2 8.3 4.2 10.0 11.5	.6 1.0 2.6 .1 –.1	12.3 11.4 4.9 14.1 14.3	10.6 9.4 4.6 11.3 13.7	-1.7 -2.0 3 8 6	7.7 10.7 10.8 10.6 .7	6.5 9.4 8.7 9.7 3	-1.2 -1.3 -2.1 9 -1.0	7.1 7.1 7.3 7.0 7.1	8.2 8.1 7.3 8.4 8.5	1.1 1.0 0 1.4 1.4
Change in business inventories													
Net exports of goods and services Exports Imports	6.3 7.5	2.9 7.7	3.0 7.5	 .1 –.2	9.3 12.9	9.5 12.9			13.5 11.4	 1.2 .5	5.9 5.7	6.4 6.8	 .5 1.1
Government consumption expenditures and gross investment Federal National defense Nondefense State and local	3.1 1.0 –2.0 9.5 4.6	2.1 -1.0 -3.5 5.0 4.4	1.6 -1.8 -4.0 3.6 4.0	5 8 5 -1.4 4	1.9 -1.2 -2.9 2.8 4.0	2.3 -1.6 -3.2 2.1 4.9	.4 4 3 7 .9	3.3 0 –1.8 4.1 5.4	3.2 1 -1.3 2.4 5.4	1 1 .5 -1.7 0	3.5 1.3 .4 2.9 4.9	3.8 2.1 2.4 1.4 4.8	.3 .8 2.0 -1.5 1
		Chained (1992) dollars											
Gross domestic product	2.7	2.3	2.3	0	3.5	3.5	0	2.0	2.0	0	2.4	2.8	0.4
Personal consumption expenditures Durable goods Nondurable goods Services	2.8 5.8 1.5 2.9	2.8 7.3 2.0 2.4	2.9 7.2 2.2 2.5	.1 1 .2 .1	3.1 7.2 3.1 2.2	3.3 7.1 2.9 2.7	.2 –.1 –.2 .5	2.3 3.2 2.3 2.2	2.4 4.0 1.6 2.5	.1 .8 –.7 .3	2.5 5.4 1.4 2.4	2.6 4.0 1.4 2.7	.1 -1.4 0 .3
Gross private domestic fixed investment Nonresidential Structures Producers' durable equipment Residential	5.7 1.9 –6.8 6.2 16.6	6.8 6.4 –1.7 10.0 7.6	7.6 7.6 1.0 10.5 7.6	.8 1.2 2.7 .5 0	10.1 9.8 1.5 13.2 10.8	10.6 8.0 1.0 11.0 10.1	.5 –1.8 –.5 –2.2 –.7	6.0 9.5 7.3 10.4 –2.3	5.1 9.0 4.3 10.8 –3.8	9 5 -3.0 .4 -1.5	6.8 7.4 4.9 8.3 5.3	8.3 9.2 4.8 10.9 5.9	1.5 1.8 1 2.6 .6
Change in business inventories													
Net exports of goods and services Exports Imports	6.6 7.5	 2.9 9.2	2.9 8.9	0 –.3	 8.2 12.0	 8.2 12.2	0 .2	 8.9 8.0	 11.1 8.9	 2.2 .9	6.5 6.4	8.3 9.1	 1.8 2.7
Government consumption expenditures and gross investment Federal National defense Nondefense State and local	.5 –2.1 –5.5 7.2 2.4	2 -3.6 -5.4 1.0 2.2	9 -4.2 -5.7 7 1.5	7 6 3 -1.7 7	1 -3.8 -5.2 7 2.5	0 -3.8 -4.9 -1.1 2.6	.1 0 .3 4 .1	0 -3.6 -5.2 2 2.4	0 -3.3 -4.3 -1.4 2.1	0 .3 .9 –1.2 –.3	.8 –1.1 –1.8 .3 2.0	.5 –1.3 –1.5 –.9 1.6	3 2 .3 -1.2 4
						Chain-t	ype price i	indexes					
Gross domestic product	2.8	2.6	2.6	0	2.3	2.4	0.1	2.5	2.5	0	2.1	2.3	0.2
Personal consumption expenditures Durable goods Nondurable goods Services	3.3 1.5 2.0 4.4	2.6 1.3 1.5 3.6	2.7 1.2 1.5 3.6	.1 1 0 0	2.4 2.1 1.3 3.0	2.4 2.0 1.3 3.1	0 1 0 .1	2.4 1.2 1.6 3.0	2.6 1.0 1.7 3.5	.2 –.2 .1 .5	2.2 5 2.6 2.6	2.4 4 2.6 2.9	.2 .1 0 .3
Gross private domestic fixed investment Nonresidential Structures Producers' durable equipment Residential	.4 .1 1 .2 1.2	1.7 .9 3.3 1 3.7	1.5 .7 3.3 4 3.7	2 2 0 3 0	1.9 1.4 3.3 .7 3.1	1.8 1.2 3.6 .3 3.3	1 2 .3 4 .2	1.6 1.0 3.3 .2 3.1	1.3 .4 4.2 –1.0 3.6	3 6 .9 -1.2 .5	.9 .5 2.3 –.1 1.8	1 -1.0 2.3 -2.3 2.4	-1.0 -1.5 0 -2.2 .6
Change in business inventories													
Net exports of goods and services Exports Imports	3 0	1 -1.3		 .2 .1	 1.1 .8	 1.2 .6		 3.1 2.7	2.2 2.2	9 5		1.8 2.2	1.9 2.0
Government consumption expenditures and gross investment Federal National defense Nondefense State and local	2.6 3.2 3.7 2.1 2.2	2.3 2.6 2.1 4.0 2.1	2.5 2.5 1.8 4.3 2.5	.2 –.1 –.3 .3 .4	2.0 2.7 2.3 3.5 1.5	2.3 2.3 1.8 3.3 2.3	.3 –.4 –.5 –.2 .8	3.3 3.8 3.5 4.3 3.0	3.3 3.3 3.1 3.9 3.2	0 5 4 4 .2	2.7 2.4 2.2 2.6 2.9	3.3 3.4 3.9 2.3 3.2	.6 1.0 1.7 –.3 .3
Addendum: Gross domestic purchases	2.8	2.5	2.5	0	2.2	2.3	.1	2.4	2.5	.1	2.1	2.2	.1

The largest contributor to the upward revisions to GDP prices was PCE for services. The revisions to the percent changes in the price index for PCE services were not large (0.1 percentage point for 1994, 0.5 percentage point for 1995, and 0.3 percentage point for 1996), but PCE for services is the largest major component of GDP. Within PCE services, the following detailed components contributed the most to the revision: "Other" user-operated transportation (for 1994 and 1995), airline transportation (for 1996), health insurance (for 1996), brokerage and investment counseling (for 1995 and 1996), "services furnished without payment by financial intermediaries except life insurance carriers and private noninsured pension plans" (for 1994 and 1995), "expense of handling life insurance" (for 1995 and 1996), and foreign travel by U.S. residents (for 1996).

By major component of GDP, the largest upward revisions were to the price index for State and local government consumption and investment; the annual percent change was revised up 0.4 percentage point for 1993, 0.8 percentage point for 1994, 0.2 percentage point for 1995, and 0.3 percentage point for 1996; these revisions reflected revised current-dollar estimates of compensation of employees and a correction to the prices for highway structures. The largest downward revisions were to PDE prices; the annual percent change was revised down 0.3 percentage point for 1993, 0.4 percentage point for 1994, 1.2 percentage points for 1995, and 2.2 percentage points for 1996; these revisions reflected revised prices for computers and peripheral equipment and the newly introduced deflator for telephone switching equipment. In addition, there were large downward revisions to the prices for exports and imports of goods and services for 1995 and 1996. For 1995, the annual percent change was revised down 0.9 percentage point for exports and 0.5 percentage point for imports. For 1996, the annual percent change was revised down 1.9 percentage points for exports and 2.0 percentage points for imports; the revisions to the prices of exports and imports reflected revised prices for computers and peripheral equipment and for semiconductors.

The slightly larger upward revision for 1996 to the price index for GDP than to the price index for gross domestic purchases reflected the revisions to export and import prices. (The chain-type price index for gross domestic purchases reflects only the prices of PCE, GPDI, and government spending.) Although the revisions to export and import prices were similar for 1996, they were not offsetting in GDP, because imports have a larger (negative) weight.

### Annual real GDP estimates

In general, revisions to real GDP reflect four factors: (1) Revisions to the current-dollar components of GDP for which chained-dollar estimates are prepared by deflation, (2) revisions to the prices used in deflation, (3) revisions to the quantities used to estimate components of real GDP by extrapolation or direct valuation, and (4) revisions resulting from the use of revised and updated weights in the calculation of real GDP.

For the GDP components for which chaineddollar estimates are prepared by extrapolation or direct valuation, the current- and chained-dollar estimates are based on independent source data; consequently, the corresponding revisions are unrelated.<sup>10</sup> Thus, differences between currentdollar and chained-dollar revisions to these components are reflected as revisions to their "implicit" prices. In this annual revision, the revisions to the current-dollar GDP estimates are larger than those to the chained-dollar GDP estimates, reflecting upward revisions to the implicit prices.

For 1993, upward revisions to the annual changes in PCE for goods and for services, in nonresidential structures, and in PDE and a downward revision to the change in imports of goods and services were offset by downward revisions to the changes in Federal Government and in State and local government consumption expenditures and gross investment. For 1994, upward revisions to the annual changes in PCE for services, in the CBI, and in State and local government expenditures and gross investment were offset by downward revisions to the changes in PCE for goods, in nonresidential structures, in PDE, and in residential structures and by an upward revision to the change in imports of goods and services. For 1995, upward revisions to the annual changes in PCE for services, in PDE, in exports of goods and services, and in Federal Government consumption expenditures and gross investment were offset by downward revisions to the changes in PCE for goods, in nonresidential structures. in residential structures, in the CBI, in State and local government consumption expenditures and gross investment and by an upward revision to the change in imports of goods and services. For 1996, the upward revi-

<sup>10.</sup> For a detailed listing of these components, see table 2 in "Updated Summary Methodologies," in the August 1996 SURVEY, pages 97–103. An updated version of this table will appear in the September 1997 SURVEY.

sion to the increase in real GDP was more than accounted for by upward revisions to the changes in PCE services, in PDE, in the CBI, and in exports of goods and services.

*Revisions to the components of real* GDP.—The annual percent change in real PCE was revised up for all 4 years: 0.1 percentage point to 2.9 percent for 1993, 0.2 percentage point to 3.3 percent for 1994, 0.1 percentage point to 2.4 percent for 1995, and 0.1 percentage point to 2.6 percent for 1996. For 1993, the upward revision was accounted for by PCE for nondurable goods (mainly food) and by PCE for services (mainly personal business services). For 1994–96, the upward revisions were more than accounted for by PCE for services; the 1995 revision, by recreational services; and the 1996 revision, by personal business services.

The change in nonresidential fixed investment was revised up 1.2 percentage points to 7.6 percent for 1993, down 1.8 percentage points to 8.0 percent for 1994, down 0.5 percentage point to 9.0 percent for 1995, and up 1.8 percentage points to 9.2 percent for 1996. For 1993, both structures and PDE were revised up; for 1994, they were revised down. For 1995, a downward revision to structures more than offset an upward revision to PDE, and for 1996, an upward revision to PDE more than offset a downward revision to structures. Within structures, nonresidential buildings, utilities, and petroleum and natural gas well drilling and exploration accounted for most of the upward revision for 1993; utilities more than accounted for the downward revision for 1994; nonresidential buildings and utilities more than accounted for the downward revision for 1995; and utilities and petroleum and natural gas well drilling and exploration more than accounted for the downward revision for Within PDE, the upward revision was 1996. widespread for 1993; "other equipment," computers and peripheral equipment, communications equipment, and special industry machinery accounted for most of the downward revision for 1994; computers and peripheral equipment more than accounted for the upward revision for 1995; and computers and peripheral equipment, autos, and special industry machinery more than accounted for the upward revision for 1996.

The change in residential investment was unrevised at 7.6 percent for 1993, was revised down 0.7 percentage point to 10.1 percent for 1994, was revised down 1.5 percentage points to -3.8 percent for 1995, and was revised up 0.6 percentage

point to 5.9 percent for 1996. Brokers' commissions accounted for most of the downward revision for 1994; improvements accounted for much of the downward revision for 1995; and single-family structures and improvements more than accounted for the upward revision for 1996.

The change in inventory investment was revised up \$3.1 billion (chained dollars) for 1993, down \$1.4 billion for 1994, down \$7.1 billion for 1995, and up \$16.8 billion for 1996. The revisions for 1993–95 were mainly accounted for by nonfarm inventory investment; farm inventory investment accounted for most of the revision for 1996. Within nonfarm inventory investment, retail trade more than accounted for the upward revision for 1993 and the downward revision for 1994; manufacturing accounted for most of the downward revision for 1995 and more than accounted for the upward revision for 1996.

The change in exports of goods and services was unrevised at 2.9 percent for 1993 and at 8.2 percent for 1994 and was revised up 2.2 percentage points to 11.1 percent for 1995 and 1.8 percentage points to 8.3 percent for 1996. For 1995, the upward revision was mainly accounted for by "other capital goods, except automotive," travel, and "other private services." For 1996, "other capital goods, except automotive" accounted for most of the upward revision.

The change in imports of goods and services was revised down 0.3 percentage point to 8.9 percent for 1993 and was revised up 0.2 percentage point to 12.2 percent for 1994, 0.9 percentage point to 8.9 percent for 1995, and 2.7 percentage points to 9.1 percent for 1996. The downward revision was widespread for 1993; computers, peripherals, and parts more than accounted for the upward revision for 1994; computers, peripherals, and parts and "other capital goods, except automotive" accounted for most of the upward revision for 1995; and "other capital goods, except automotive" accounted for most of the upward revision for 1996.

The change in government consumption expenditures and gross investment was revised down 0.7 percentage point to -0.9 percent for 1993, was revised up 0.1 percentage point to 0.0 percent for 1994, was unrevised at 0.0 percent for 1995, and was revised down 0.3 percentage point to 0.5 percent for 1996. Federal nondefense "other services" and State and local investment in structures accounted for most of the downward revision for 1993; State and local consumption of "other services" more than accounted for the upward revision for 1994; and Federal nondefense

"other services" and State and local compensation of employees accounted for most of the downward revision for 1996.

#### Quarterly estimates

Revisions to the quarterly (and monthly) NIPA estimates reflect the revisions to the annual estimates from the newly incorporated annual source data, the incorporation of new and revised monthly and quarterly source data (including the updating of seasonal factors that are used to indicate quarterly patterns), and the introduction of any changes in methodology.

With two exceptions, the quarter-to-quarter patterns of changes in the principal measures of real output and prices on the revised basis were not markedly different than those on the previously published basis (table 5). First, the revised estimate of growth in real GDP accelerates from 1.8 percent in the third quarter of 1994 to 3.6 percent in the fourth quarter; the previously published estimate decelerated from 3.5 percent to 2.9 percent. Second, the revised estimate of growth in real GDP decelerates from 2.2 percent in the fourth quarter of 1995 to 1.8 percent in the first quarter of 1996; the previously published estimate accelerated from 0.3 percent to 2.0 percent.

For real GDP, the revisions to the 17 quarterly percent changes (at annual rates) averaged 0.7 percentage point (without regard to sign). The change was revised up for nine quarters and down for eight quarters. The largest upward revi-

sion was 1.9 percentage points—to 2.2 percent for the fourth quarter of 1995; all the major GDP components except imports of goods and services and Federal Government consumption expenditures and gross investment contributed to the revision. The largest downward revision was 1.7 percentage points—to 1.8 percent—for the third quarter of 1994. PCE for goods, gross private domestic investment, and imports accounted for the revision.

For gross domestic purchases prices, the revisions to the 17 quarterly percent changes (at annual rates) averaged 0.2 percentage point (without regard to sign). The change was revised up for nine quarters, was revised down for six quarters, and was unrevised for two quarters. The largest revisions were upward revisions of 0.5 percentage point for the fourth quarter of 1994 and the third quarter of 1996; the sources of these revisions were widespread.

# **Changes in Methodology**

This section describes the changes in methodology—either in the source data or in the methods used to prepare the estimates—that were incorporated into this annual revision.<sup>11</sup> Several of these changes were identified as high priority

<sup>11.</sup> These methodological changes update the two tables that list the principal source data and methods used to prepare the estimates of GDP. An updated version of these tables, which were last published in "Updated Summary Methodologies" in the August 1996 SURVEY (pages 84–103) will be published in the September 1997 SURVEY.

Table 5GDP, Real GDP, the GDP Price Index, and the Gross Domestic Purchases Price Index: Revisions to Percent
Change From Preceding Quarter

		GDP			Real GDP		G	DP price inde	ex	Gross don	ses price	
	Previously published	Revised	Revision	Previously published	Revised	Revision	Previously published	Revised	Revision	Previously published	Revised	Revision
1992:IV	7.3			4.3			2.8			2.6		
1993:I II III IV	3.8 4.0 4.3 7.1	3.9 4.1 4.1 8.1	.1 .1 –.2 1.0	1 1.9 2.3 4.8	.1 2.0 2.1 5.3	.2 .1 –.2 .5	3.8 2.2 1.8 2.3	3.9 2.1 1.8 2.7	.1 1 0 .4	3.1 2.4 1.3 2.2	3.2 2.3 1.4 2.5	.1 –.1 .3
1994:I II III IV	5.3 6.9 6.1 5.3	5.5 7.1 4.4 6.4	.2 .2 –1.7 1.1	2.5 4.9 3.5 2.9	3.0 4.7 1.8 3.6	.5 –.2 –1.7 .7	2.9 1.9 2.4 2.1	2.5 2.2 2.5 2.6	4 .3 .1 .5	2.4 2.3 3.0 2.0	2.0 2.6 3.0 2.5	4 .3 0 .5
1995:I II III IV	3.8 3.1 6.0 2.3	4.2 2.3 5.2 4.5	.4 8 8 2.2	.4 .7 3.8 .3	.9 .3 3.0 2.2	.5 –.4 –.8 1.9	3.3 2.4 2.1 2.1	3.3 2.1 2.0 2.1	0 3 1 0	2.8 2.8 1.6 1.9	3.0 2.5 1.7 1.9	.2 3 .1 0
1996:I II III IV	4.2 6.5 3.8 5.4	4.7 7.7 3.6 6.2	.5 1.2 –.2 .8	2.0 4.7 2.1 3.8	1.8 6.0 1.0 4.3	2 1.3 -1.1 .5	2.3 2.2 2.0 1.9	2.8 1.9 2.7 1.9	.5 3 .7 0	2.3 2.1 1.9 2.6	2.7 1.8 2.4 2.4	.4 3 .5 2
1997:l	8.3	7.4	9	5.9	4.9	-1.0	2.7	2.4	3	2.2	1.9	3

[Percent change at annual rates; based on seasonally adjusted annual rates]

items in BEA's strategic plan for maintaining and improving the Nation's economic accounts.<sup>12</sup>

Net exports of goods and services and net receipts of factor income from the rest of the world.—The major source of the NIPA estimates of foreign transactions is the U.S. balance of payments accounts (BPA's), which are also prepared by BEA. In this year's annual BPA revision, newly available data from regular sources were incorporated, and several improvements in estimating methodologies were introduced.<sup>13</sup> In addition to the revisions to the BPA's, the NIPA's also incorporate revisions to the items that adjust for the differences between the two sets of accounts. (These differences are identified in NIPA table 4.5.)

Payments of factor income and GNP were affected by changes in the methodology for estimating compensation of employees. The BPA's and NIPA's now include newly developed estimates for self-employed professionals and for the earnings of "undocumented" migrant agricultural workers. These changes resulted in upward revisions to payments of factor income for all 4 years: \$2.0 billion for 1993, \$2.3 billion for 1994, \$2.5 billion for 1996.

This annual NIPA revision covers only 4 years, and the BPA revisions were brought—as usual into the NIPA's at their "best level," beginning with the estimates for 1993; the NIPA estimates for earlier years were not revised. (Revisions to the BPA's for years prior to 1993 will be incorporated in the next comprehensive NIPA revision.) As a result, there are discontinuities in the NIPA estimates from 1992 to 1993 (table 6).

For net exports of goods and services and for gdp, the discontinuities are small; for both, the change from 1992 to 1993 is overstated by \$0.2 billion. For net receipts of factor income, GNP, and personal income, the discontinuities are larger; the change from 1992 to 1993 in net receipts of factor income is overstated by \$6.0 billion. For receipts, the 1992–93 change is overstated by \$7.4 billion; this discontinuity reflects the incorporation of data from the Treasury Department's benchmark survey of U.S. portfolio investment abroad. For payments, the change is overstated by \$1.4 billion; this discontinuity is more than accounted for by the BPA methodological change to compensation of employees. For GNP—which includes net exports of goods and services and net receipts of factor income—the change from

1992–1993 is overstated by \$6.2 billion. For personal income, the change is overstated by \$5.9 billion.

Change in the weights used to compute real output and prices for recent periods.—Effective with this annual revision, a new formula is used to compute the chained-dollar estimates and the chain-type price and quantity indexes for the "tail period," which consists of the quarters beginning with the third quarter of the most recently completed year included in the annual revision. For all the NIPA components except the change in business inventories (CBI) and inventory stocks, the tail period for this annual revision begins with the third quarter of 1996; for CBI and inventory stocks, the tail period begins with the first quarter of 1997.

Previously, quarterly chained-dollar estimates and quantity indexes were based on price weights that were annual averages for the most recently completed year, and quarterly price indexes were based on quantity weights that were annual averages for that year. Thus, the resulting estimates were based on changes calculated from Laspeyres indexes. On the revised basis, estimates for the tail period use weights for the current quarter and the preceding quarter, and the resulting estimates

Table 0. Discontinuities in NIFA LOTEINIT Hansactions. 1992-9	Table 6.—Discontinuities	in NIPA For	eign Transactions:	1992-93
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[Billions of dollars]

		1992		1993	Change to 1	
	Pub- lished	Dis- conti- nuity <sup>1</sup>	Ad- justed	Re- vised	Pub- lished	Ad- justed
Net exports of goods and services	-29.5	0.2	-29.3	-60.7	-31.2	-31.4
Exports	639.4	-1.5	637.9	658.6	19.2	20.7
Goods	448.7	0	448.7	459.7	11.0	11.0
Services	190.7	-1.5	189.2	198.9	8.2	9.7
Imports	669.0	-1.7	667.3	719.3	50.3	52.0
Goods	544.9	0	544.9	592.8	47.9	47.9
Services	124.1	-1.7	122.4	126.5	2.4	4.1
Net receipts of factor income	11.1	6.0	17.1	18.7	7.6	1.6
Receipts	137.9	7.4	145.3	150.8	12.9	5.5
Corporate profits	68.0	4.9	72.9	83.3	15.3	10.4
Dividends	39.7	5.0	44.7	39.5	2	–5.2
Other	28.3	–.1	28.2	43.8	15.5	15.6
Interest	68.8	2.5	71.3	66.3	-2.5	–5.0
Compensation of employees	1.1	0	1.1	1.2	.1	.1
Payments	126.8	1.4	128.2	132.1	5.3	3.9
Corporate profits	3.1	1	3.0	9.4	6.3	6.4
Dividends	16.3	.1	16.4	18.6	2.3	2.2
Other	-13.2	2	-13.4	-9.2	4.0	4.2
Interest	122.5	4	122.1	119.4	–3.1	-2.7
Compensation of employees	1.2	1.9	3.1	3.3	2.1	.2
Transfer payments to rest of the world (net)	<b>32.0</b>	<b>3.0</b>	<b>35.0</b>	<b>36.6</b>	<b>4.6</b>	<b>1.6</b>
Addenda:						
GDP	6,244.4	.2		6,558.1	313.7	313.5
GNP	6,255.5	6.2		6,576.8	321.3	315.1
Personal income <sup>2</sup>	5,277.2	5.9		5,519.2	242.0	236.1

1. Consists of the revisions to the U.S. balance of payments accounts that have not been incorporated prior to 1993 in the NIPA's.

2. Consists of receipts less payments of dividends, interest, and compensation of employees.

<sup>12.</sup> See "BEA'S Mid-Decade Strategic Plan: A Progress Report," SURVEY 76 (June 1996): 52–55.

<sup>13.</sup> See Christopher L. Bach, "U.S. International Transactions, Revised Estimates for 1974–96," SURVEY 77 (July 1997): 43–55.

are now Fisher indexes similar to the annual chained-dollar estimates and annual chain-type price and quantity indexes.<sup>14</sup> In next year's annual revision, the estimates for the current tail period—the third quarter of 1996 through the second quarter of 1997—will be revised to incorporate the annual weights for 1996 and 1997.

The use of more up-to-date weights for the current and recent quarters improves the accuracy of the rates of change in real output and prices because it reduces a source of revisions. It also largely eliminates the difference between the rate of change in the chain-type price index for a given series and the rate of change in the corresponding implicit price deflator.

*New prices for deflation.*—The methodology for estimating prices for exports and imports of semiconductors has been revised in two ways. First, the annual BEA-quality-adjusted prices previously used for 1993 and 1994 have been revised to include prices of "dice and wafers," which are included in the end-use category to which these prices are applied. In the revised indexes, which are now used for 1993-96, the prices of dice and wafers are based on corresponding BLS producer price indexes (PPI's). The previously published estimates of semiconductors reflected only prices of microprocessors and memory integrated circuits. Second, the quarterly indicator series used to interpolate between, and extrapolate from, the annual prices for exports in the revised estimates is a weighted sum of detailed PPI's for selected semiconductors. In the previously published estimates, the **BLS** International Price Program index (IPPI) for exports of semiconductors was used. (For imports of semiconductors, the quarterly indicator series continues to be the IPPI for imports of semiconductors.)

BEA has introduced a quality-adjusted annual price index for telephone switching equipment, which is used for deflating estimates of private investment in telephone switching and switchboard equipment. The new index is based on hedonic regression techniques using publicly available data from the filings by regional telephone operating companies with the Federal Communications Commission. The data cover 20 States that account for more than half of the U.S. population. The regressions incorporate the location of the switch, a number of explanatory variables that measure the number of telephone lines of capacity of the switch, the manufacturer and type of the switch, and the year in which the switch was installed. Previously, the BLS PPI for telephone and telegraph apparatus switching equipment was used. (Quarterly estimates of the new quality-adjusted price index are interpolated and extrapolated using the BLS PPI and incorporate a downward adjustment to reflect differences between the new quality-adjusted index and the PPI.)

BEA has improved the deflation procedure for the estimates of nursing home services, a subcomponent of PCE for medical care services. Previously, an annual input-cost index from the Health Care Financing Administration (HCFA) was used to deflate both for-profit and nonprofit nursing home services. A monthly BLS PPI for skilled and intermediate care facilities, which became available in January 1995, now replaces the HCFA cost index for the deflation of for-profit nursing home services. The deflation of nonprofit nursing home services continues to use the HCFA cost index because the appropriate measure for deflating the services of nonprofit establishments is one based on operating expenses. (Interpolation and extrapolation of the HCFA index continues to be done using a BEA composite index of input prices.)

BEA prepared a Fisher chained-type annual price index for large-scale electronic computers (mainframes) that uses shipments of individual models as quantity weights for adjacent years. Some prices are estimated using hedonic regressions that link mainframe prices to various performance characteristics. Previously, the BLS PPI for large-scale electronic computers was The revised index, which decreased at used. a much sharper rate than the previous index, was incorporated into the revised estimates of PDE, government investment, CBI, exports, and imports. (Quarterly estimates continue to be interpolated and extrapolated using the BLS PPI.) In addition, BEA incorporated the BLS IPPI for terminals, storage devices, and peripheral equipment into the annual import price components and the BLS PPI for terminals into the annual domestic price components of computers for 1995 and 1996.

Quarterly and monthly estimates of dividends paid by regulated investment companies.—The dividends component of personal income includes dividends received by persons from regulated investment companies (RIC's), also known as mutual funds. The source of these dividends is

<sup>14.</sup> Monthly estimates in the tail period are also affected. For each of the first two months of an incomplete quarter, the values from the preceding quarter will be used as weights. For the months of completed quarters, the Fisher formula will be used with monthly weights. (Monthly estimates of flows and stocks will be controlled to the quarter.)

primarily interest, dividends, and capital gains that RIC's earn in a given year and that they pass through to their own shareholders before the end of that year. Many RIC's distribute the bulk of their annual earnings just prior to yearend.

Previously, BEA interpolated all dividends, including RIC dividends, using a monthly series on dividend distributions from stockholder reports. In the revised estimates for 1993–96, annual RIC dividends paid from capital gains are held constant in every month of a given year, and all other dividends are interpolated using the previous methodology. This change was made because RIC dividends have grown sharply in recent years, and it was determined that a smooth monthly series was more appropriate for these large, once-a-year transactions.

The method used to extrapolate mutual fund dividends into the months of the current period was also changed. Previously, total dividends were extrapolated using source data on monthly dividends. In the revised series, BEA extrapolates mutual fund dividends separately, using the change in stock market indexes as indicator series.

*Timing adjustments for weapons systems.*—The revised estimates of change in business inventories (CBI) incorporate a timing adjustment for the production and sale (delivery) of B-2 bombers, a major weapons system. The adjustment represents a first step toward improving the consistency of the treatment of these systems in CBI, which is estimated from source data that record production on a put-in-place basis, and in government investment, which is estimated from source data that record the sale when the weapons systems are delivered to the Government.<sup>15</sup>

For many of these systems, companies report inventory book values that are consistent with a delivery basis. However, for long-term contracts, such as those for B-2 bombers, some companies report information on production—shipments and inventory book values—on a put-in-place basis. To correct for this timing inconsistency in the production and delivery of B-2 bombers, an adjustment was incorporated into the revised CBI estimates, based on a BEA analysis of Department of Defense aircraft-procurement budget estimates and B-2 program office delivery reports. In current dollars, the largest annual and quarterly adjustments, which affect manufacturing durable goods inventories, subtracted \$2.1 billion from the CBI estimate for 1996 and subtracted \$4.5 billion from the first-quarter 1996 CBI estimate. These adjustments, which reflected the deliveries of B-2 bombers, offset upward adjustments to earlier periods that recorded the value of work in progress as inventory investment.

#### **Presentational Changes**

As noted in the May 1997 SURVEY, for periods far from the base period (1992), the chained-dollar residuals can become large, and the contributions to the growth of an aggregate that are computed by dividing chained-dollar components by a chained-dollar aggregate can differ significantly from those computed by using BEA's recommended contributions-to-growth formula.<sup>16</sup> Thus, for periods prior to 1982, BEA has discontinued regular publication of most chained-dollar estimates in favor of quantity estimates in index form.<sup>17</sup> BEA is expanding the presentation of quantity indexes by adding them to several tables that previously included only price indexes. The following tables have been expanded: Tables 7.5, PCE by type of product; table 7.7, private purchases of structures by type; table 7.8, private purchases of PDE by type; table 7.12, national defense consumption expenditures and gross investment by type; and table 7.13, gross government fixed investment by type. Each table is now divided into two sections: The first section presents the quantity indexes; the second section presents the price indexes. In addition, this new format is now used for the tables that previously presented both quantity indexes and price indexes-tables 7.4, 7.6, 7.9, 7.10, 7.11B (relabeled 7.11), and 7.14. This new format allows the line stubs to show the structure of the data in an easier-to-read format.

In addition, the following four new tables showing output indexes have been added: Table 7.17, real GDP by major type of product; table 7.18, real auto output; table 7.19, real truck output; and table 7.20, gross and net investment by major type.

As part of the most recent comprehensive NIPA revision, BEA had expanded the detail provided

<sup>15.</sup> Ships are an exception to the delivery-basis recording of purchases of weapons systems. Ship construction (or conversion) in private shipyards is included in government investment on a put-in-place basis rather than a delivery basis. For additional information, see U.S. Department of Commerce, Bureau of Economic Analysis, *Government Transactions*, Methodology Paper Series MP-5 (Washington, DC: U.S. Government Printing Office, 1988): 8–9 and 34–35.

<sup>16.</sup> See "BEA'S Chain Indexes, Time Series, and Measures of Long-Term Economic Growth," SURVEY 77 (May 1997): 58–68.

<sup>17.</sup> Chained-dollar estimates for the earlier periods are available electronically on sTAT-USA's bulletin board and Internet site (see the box "Data Availability"); in addition, approximate chained-dollar estimates can be calculated for flow-type series by multiplying the published output index by the dollar value of the series for 1992.

#### Data Availability

NIPA estimates beginning with 1929, including the revised estimates presented in this article, are available on computer diskettes for \$40.00, product no. NDN0139. To order using MasterCard or Visa, contact the BEA Order Desk at 1-800-704-0415 (outside the United States, call 202-606-9666). To order by mail, send a check payable to "Bureau of Economic Analysis BE-53" to BEA Order Desk (BE-53), Bureau of Economic Analysis, Washington, DC 20230. These estimates are also available through the Commerce Department's STAT-USA Economic Bulletin Board (EBB) and Internet services; for information, call 202-482-1986, or access the STAT-USA Internet site at http://stat-usa.gov.

for the earlier years of some tables in the government sector for which only a shorter "A" format had been available. Because a single format (previously designated "B") now applies to all periods, the "A" and "B" designations have been eliminated from tables 3.7, 3.8, 3.9, and 7.11.

In addition, a few changes to table stubs have been made. The line items in table 3.12, line 36 and table 2.1, line 22 now include assistance programs operating under the Personal Responsibility and Work Opportunity Reconciliation Act of 1996. Thus, the stub has been changed to "Family assistance" to reflect the inclusion of both aid to families with dependent children and this new program. In table 2.1, line 4, the stub "Commodity-producing industries" has been changed to "Goods-producing industries" to indicate more clearly that the wage and salary disbursements of service-producing industries are not included in that line item; no changes in the estimates are associated with this renaming.

Appendix A follows.

# Appendix A.—Revisions to the National Income and Product Accounts

[Billions of dollars]

	19	93	19	94	19	95	19	96		
	Revised	Revision	Revised	Revision	Revised	Revision	Revised	Revision		
Account 1.—National Income and Product Account										
Compensation of employees	3,814.9	5.4	4,012.0	2.2	4,215.4	-7.3	4,426.9	-21.6		
Wage and salary accruals Disbursements	3,094.0 3,089.6	-1.3 -1.1	3,254.0 3,240.7	-3.3 -1.1	3,442.6 3,429.5	9.4 -1.1	3,633.6 3,632.5	3.5 2.4		
Wage accruals less disbursement	4.4	2	13.3	-2.2	13.1	10.4	1.1	1.1		
Supplements to wages and salaries	720.8	6.6	758.0	5.6	772.9	-16.6	793.3	-25.1		
Employer contributions for social insurance Other labor income	335.7 385.1	2.4 4.2	353.0 405.0	2.8 2.8	366.0 406.8	.5 17.2–	385.7 407.6	3.5 –28.6		
Proprietors' income with inventory valuation and capital consumption adjustments	450.8	14.9	471.6	7.2	489.0	2.9	520.3	-7.0		
Rental income of persons with capital consumption adjustment	105.7	3.5	124.4	12.3	132.8	21.1	146.3	31.3		
Corporate profits with inventory valuation and capital consumption adjustments	492.8	.7	570.5	16.4	650.0	45.2	735.9	65.7		
Corporate profits with inventory valuation adjustment	456.9	8	519.1	1.2	598.4	27.6	674.1	43.1		
Profits before tax	465.4	1.1	535.1	3.9 8.7	622.6	23.7	676.6	36.7 -4.0		
Profits tax liability Profits after tax	165.2 300.2	1.4	186.6 348.5	-0.7	213.2 409.4	-5.5 29.2	229.0 447.6	-4.0 40.8		
Dividends	195.8	-1.5	216.2	5.2	264.4	37.0	304.8	60.6		
Undistributed profits	104.5	1.3	132.3	7.5	145.0	-7.8	142.8	-19.8		
Inventory valuation adjustment Capital consumption adjustment	-8.5 36.0	-1.9 1.6	-16.1 51.4	-2.8 15.2	-24.3 51.6	3.8 17.6	-2.5 61.8	6.4 22.6		
Net interest	402.5	3.6	412.3	17.4	425.1	21.5	425.1	21.8		
National income	5,266.8	28.3	5,590.7	55.5	5,912.3	83.4	6,254.5	90.3		
Business transfer payments	28.2	.1	30.5	.4	32.2	1.4	33.6	1.4		
To persons	22.1	0	23.7	1.1	25.0	2.4	26.0	3.0		
To the rest of the world	6.0 532.5	0	6.8	7 -4.0	7.3 582.8	–.9 –12.7	7.6 604.8	–1.6 –13.1		
Indirect business tax and nontax liability Less: Subsidies less current surplus of government enterprises	31.1	-7.5 6	568.5 26.6	-4.0	25.2	7.0	25.4	7.9		
Consumption of fixed capital Private	727.9 594.5	-1.8 -1.5	777.5 638.6	-7.3 -6.1	796.8 653.0	-14.3 -11.4	830.1 682.7	-15.4 -13.7		
Government	133.4	4	138.8	-1.3	143.8	-2.9	147.4	-1.7		
General government	114.3	4	118.2	-1.2	122.4	-2.9	125.1	-1.7		
Government enterprises	19.1	0	20.6	1	21.4	.1	22.3	1		
Gross national income	6,524.2	19.5	6,940.6	43.2	7,298.9	50.7	7,697.6	55.3		
Statistical discrepancy	52.6	-6.2	14.6	-19.9	-28.2	-26.7	-59.9	15.2		
Gross national product	6,576.8	13.3	6,955.2	23.3	7,270.6	23.9	7,637.7	70.6		
Less: Receipts of factor income from the rest of the world	150.8	10.1	176.5	13.1	222.8	14.5	234.3	5.9		
Plus: Payments of factor income to the rest of the world GROSS DOMESTIC PRODUCT	132.1 6.558.1	2.0 <b>5.1</b>	168.3 6.947.0	1.1 <b>11.3</b>	217.5 <b>7,265.4</b>	2.2 11.6	232.6 <b>7,636.0</b>	-4.7 <b>59.9</b>		
Personal consumption expenditures	4,459.2	5.1	4,717.0	16.1	4,957.7	32.8	5,207.6	56.2		
Durable goods	4,459.2	5	579.5	-1.4	4,957.7	2.1	634.5	2.4		
Nondurable goods	1,370.7	1.8	1,428.4	-1.3	1,475.8	-10.1	1,534.7	-10.4		
Services	2,558.4	3.8	2,709.1	18.8	2,873.4	40.8	3,038.4	64.1		
Gross private domestic investment	876.2	5.1	1,007.9	-6.5	1,038.2	-27.1	1,116.5	5		
Fixed investment Nonresidential	855.7 604.1	5.2 5.3	946.6 660.6	-8.3 -6.6	1,008.1 723.0	-20.1	1,090.7	–10.8 –9.7		
Structures	176.4	4.6	184.5	-0.0	200.6	-15.5 .9	781.4	-9.7		
Producers' durable equipment	427.7	.7	476.1	-10.9	522.4	-16.4	566.2	-10.6		
Residential	251.6	1	286.0	-1.7	285.1	-4.7	309.2	-1.3		
Change in business inventories	20.5	1	61.2	1.7	30.1	-6.9	25.9	10.5		
Net exports of goods and services	-60.7	2.0	-90.9	3.5	-86.0	8.7	-94.8	3.9		
Exports	658.6	.8	721.2	2.1	818.4	11.0	870.9	15.7		
Imports	719.3	-1.2	812.1	-1.4	904.5	2.5	965.7	11.8		
Government consumption expenditures and gross investment	1,283.4	-7.0	1,313.0	-1.7	1,355.5	-2.8	1,406.7	.3		
Federal	518.3	-4.3	510.2	-6.2	509.6	-7.0	520.0	-3.1		
National defense	360.7	-2.0	349.2	-2.8	344.6	9	352.8	5.7		
Nondefense State and local	157.7 765.0	-2.2 -2.8	161.0 802.8	-3.3 4.4	165.0 846.0	-6.0 4.3	167.3 886.7	-8.7 3.4		
GROSS DOMESTIC PRODUCT	6,558.1	5.1	6,947.0	11.3	7,265.4	11.6	7,636.0	59.9		

# Appendix A.—Revisions to the National Income and Product Accounts—Continued

[Billions of dollars]

	19	93	19	94	19	95	19	96		
	Revised	Revision	Revised	Revision	Revised	Revision	Revised	Revision		
Account 2.—Personal Income and Outlay Account										
Personal tax and nontax payments	690.0	.1	739.1	7.7	795.1	.8	886.9	23.1		
Personal outlays Personal consumption expenditures Interest paid by persons Personal transfer payments to the rest of the world (net)	4,580.7 4,459.2 108.2 13.3	4.9 5.1 –.7 .5	4,842.1 4,717.0 110.9 14.2	9.8 16.1 –6.3 0	5,101.1 4,957.7 128.5 14.8	29.6 32.8 -3.2 1	5,368.8 5,207.6 145.2 15.9	54.8 56.2 –1.1 –.4		
Personal saving	248.5	18.6	210.6	12.3	254.6	8.0	239.6	-32.0		
PERSONAL TAXES, OUTLAYS, AND SAVING	5,519.2	23.6	5,791.8	29.8	6,150.8	38.4	6,495.2	45.7		
Wage and salary disbursements	3,089.6	-1.1	3,240.7	-1.1	3,429.5	-1.1	3,632.5	2.4		
Other labor income	385.1	4.2	405.0	2.8	406.8	-17.2	407.6	-28.6		
Proprietors' income with inventory valuation and capital consumption adjustments	450.8	14.9	471.6	7.2	489.0	2.9	520.3	-7.0		
Rental income of persons with capital consumption adjustment	105.7	3.5	124.4	12.3	132.8	21.1	146.3	31.3		
Personal dividend income Dividends Less: Dividends received by government	185.3 195.8 10.5	-1.5 -1.5 0	204.8 216.2 11.4	5.2 5.2 0	251.9 264.4 12.5	37.1 37.0 –.1	291.2 304.8 13.6	60.6 60.6 –.1		
Personal interest income Net interest Net interest paid by government Interest paid by persons	651.0 402.5 140.3 108.2	2.9 3.6 –.1 –.7	668.1 412.3 144.9 110.9	4.4 17.4 –6.7 –6.3	718.9 425.1 165.2 128.5	1.8 21.5 –16.5 –3.2	735.7 425.1 165.4 145.2	-2.5 21.8 -23.1 -1.1		
Transfer payments to persons From business From government	912.0 22.1 889.8	1.3 0 1.2	954.7 23.7 930.9	-1.6 1.1 -2.9	1,015.0 25.0 990.0	-7.6 2.4 -10.0	1,068.0 26.0 1,042.0	-11.7 3.0 -14.7		
Less: Personal contributions for social insurance	260.3	.7	277.5	6	293.1	-1.4	306.3	-1.2		
PERSONAL INCOME	5,519.2	23.6	5,791.8	29.8	6,150.8	38.4	6,495.2	45.7		
Account 3.—Government Recei	pts and Ex	penditures	Account							
Consumption expenditures	1,078.9	9	1,107.0	4.6	1,142.1	5.7	1,182.4	9.3		
Transfer payments To persons To the rest of the world (net)	907.1 889.8 17.3	1.2 1.2 0	947.3 930.9 16.4	-3.0 -2.9 1	1,001.5 990.0 11.5	-10.0 -10.0 0	1,058.3 1,042.0 16.3	-14.8 -14.7 1		
Net interest paid	140.3	1	144.9	-6.7	165.2	-16.5	165.4	-23.1		
Less: Dividends received by government	10.5	0	11.4	0	12.5	1	13.6	1		
Subsidies less current surplus of government enterprises	31.1	6	26.6	1.5	25.2	7.0	25.4	7.9		
Less: Wage accruals less disbursements	0	0	0	0	0	0	0	0		
Current surplus or deficit (-), national income and product accounts Federal State and local	-163.2 -250.7 87.4	-2.5 4.9 -7.5	-89.8 -186.7 96.8	.7 3.5 –2.9	-71.4 -174.4 103.1	-4.7 -12.7 8.1	-5.1 -110.5 105.3	29.0 16.6 12.3		
GOVERNMENT CURRENT EXPENDITURES AND SURPLUS	1,983.7	-2.9	2,124.7	-2.8	2,250.2	-18.2	2,412.7	8.3		
Personal tax and nontax payments	690.0	.1	739.1	7.7	795.1	.8	886.9	23.1		
Corporate profits tax liability	165.2	1.4	186.6	-8.7	213.2	-5.5	229.0	-4.0		
Indirect business tax and nontax liability	532.5	-7.5	568.5	-4.0	582.8	-12.7	604.8	-13.1		
Contributions for social insurance Employer Personal	596.0 335.7 260.3	3.1 2.4 .7	630.5 353.0 277.5	2.2 2.8 –.6	659.1 366.0 293.1	9 .5 -1.4	692.0 385.7 306.3	2.3 3.5 –1.2		
GOVERNMENT RECEIPTS	1,983.7	-2.9	2,124.7	-2.8	2,250.2	-18.2	2,412.7	8.3		
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# Appendix A.—Revisions to the National Income and Product Accounts—Continued

[Billions of dollars]

	19	93	1994		1995		19	96	
	Revised	Revision	Revised	Revision	Revised	Revision	Revised	Revision	
Account 4.—Foreign Transactions Account									
Exports of goods and services	658.6	.8	721.2	2.1	818.4	11.0	870.9	15.7	
Receipts of factor income	150.8	10.1	176.5	13.1	222.8	14.5	234.3	5.9	
Capital grants received by the United States (net)	0	0	0	0	0	0	0	0	
RECEIPTS FROM THE REST OF THE WORLD	809.4	10.9	897.7	15.2	1,041.2	25.6	1,105.1	21.5	
Imports of goods and services	719.3	-1.2	812.1	-1.4	904.5	2.5	965.7	11.8	
Payments of factor income	132.1	2.0	168.3	1.1	217.5	2.2	232.6	-4.7	
Transfer payments to the rest of the world (net) From persons (net) From government (net) From business	36.6 13.3 17.3 6.0	.5 .5 0 0	37.3 14.2 16.4 6.8	9 0 1 7	33.6 14.8 11.5 7.3	-1.0 1 0 9	39.8 15.9 16.3 7.6	-2.1 4 1 -1.6	
Net foreign investment	-78.6	9.6	-120.0	16.4	-114.4	21.9	-132.9	16.6	
PAYMENTS TO THE REST OF THE WORLD	809.4	10.9	897.7	15.2	1,041.2	25.6	1,105.1	21.5	
Account 5.—Gross Saving	ving and Investment Account								
Gross private domestic investment	876.2	5.1	1,007.9	-6.5	1,038.2	-27.1	1,116.5	5	
Gross government investment	204.5	-6.1	205.9	-6.4	213.4	-8.5	224.3	-9.0	
Net foreign investment	-78.6	9.6	-120.0	16.4	-114.4	21.9	-132.9	16.6	
GROSS INVESTMENT	1,002.1	8.6	1,093.8	3.4	1,137.2	-13.7	1,207.9	7.1	
Personal saving	248.5	18.6	210.6	12.3	254.6	8.0	239.6	-32.0	
Wage accruals less disbursements (private)	4.4	2	13.3	-2.2	13.1	10.4	1.1	1.1	
Undistributed corporate profits with inventory valuation and capital consumption adjustments	131.9	.9	167.6	19.8	172.4	13.7	202.1	9.2	
Consumption of fixed capital Private Government General government Government enterprises	727.9 594.5 133.4 114.3 19.1	-1.8 -1.5 4 4 0	777.5 638.6 138.8 118.2 20.6	-7.3 -6.1 -1.3 -1.2 1	796.8 653.0 143.8 122.4 21.4	-14.3 -11.4 -2.9 -2.9 .1	830.1 682.7 147.4 125.1 22.3	-15.4 -13.7 -1.7 -1.7 1	
Government current surplus or deficit (-), national income and product accounts	-163.2	-2.5	-89.8	.7	-71.4	-4.7	-5.1	29.0	
Capital grants received by the United States (net)	0	0	0	0	0	0	0	0	
Statistical discrepancy	52.6	-6.2	14.6	-19.9	-28.2	-26.7	-59.9	15.2	
GROSS SAVING AND STATISTICAL DISCREPANCY	1,002.1	8.6	1,093.8	3.4	1,137.2	-13.7	1,207.9	7.1	