

Business Situation

Advance Estimates for the Second Quarter of 2002

THE U.S. economy slowed in the second quarter of 2002, according to the “advance” estimates of the national income and product accounts (NIPAs).

- Real gross domestic product (GDP) increased 1.1 percent after increasing 5.0 percent in the first quarter (table 1 and chart 1).¹
- Gross domestic purchases increased 2.8 percent after increasing 5.6 percent.
- Real disposable personal income increased 3.8 percent after increasing 14.6 percent.

The price index for gross domestic purchases increased

Daniel Larkins and Frederick von Batchelder prepared this article.

2.1 percent after increasing 1.2 percent.

NIPA estimates for the first quarter, along with estimates for 1999–2001, have been revised as part of the annual revision of the accounts.²

The advance estimates for the second-quarter also show the following:

- The deceleration in GDP growth was mainly accounted for by slowdowns in inventory invest-

1. Quarterly estimates in the NIPAs are expressed at seasonally adjusted annual rates. Quarter-to-quarter dollar changes are the differences between the published estimates. Quarter-to-quarter percent changes are annualized and are calculated from unrounded data unless otherwise specified.

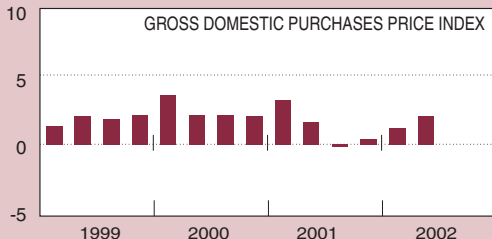
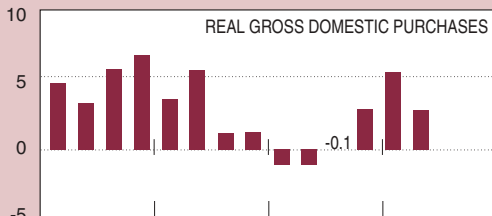
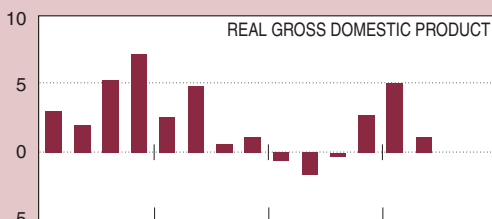
Real estimates are calculated using a chain-type Fisher formula with annual weights for all years and quarterly weights for all quarters; real estimates are expressed both as index numbers (1996=100) and as chained (1996) dollars. Price indexes (1996=100) are also calculated using a chain-type Fisher formula.

2. See Eugene P. Seskin and Stephanie H. McCulla, “Annual Revision of the National Income and Product Accounts: Annual Estimates, 1999–2001, and Quarterly Estimates, 1999:I–2002:I” in this issue.

CHART 1

Selected Measures: Change From Preceding Quarter

Percent



Note—Percent change at annual rate from preceding quarter; based on seasonally adjusted estimates.

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Table 1. Real Gross Domestic Product, Real Gross Domestic Purchases, and Real Final Sales to Domestic Purchasers

[Seasonally adjusted at annual rates]

	Billions of chained (1996) dollars					Percent change from preceding quarter			
	Level	Change from preceding quarter							
		2002	2001		2002		2001		2002
	II	III	IV	I	II	III	IV	I	II
Gross domestic product	9,387.9	-6.7	62.4	114.4	24.7	-0.3	2.7	5.0	1.1
Less: Exports of goods and services	1,059.5	-50.8	-26.2	8.8	28.9	-17.3	-9.6	3.5	11.7
Plus: Imports of goods and services	1,557.1	-46.6	-19.8	29.9	80.0	-11.8	-5.3	8.5	23.5
Equals: Gross domestic purchases	9,844.8	-1.3	69.5	132.9	66.6	-0.1	2.9	5.6	2.8
Less: Change in private inventories	1.0	-3.5	-36.6	69.5	29.9
Equals: Final sales to domestic purchasers	9,833.9	1.6	102.0	72.1	39.5	0.1	4.3	3.0	1.6
Personal consumption expenditures	6,544.2	22.9	93.1	49.8	30.4	1.5	6.0	3.1	1.9
Durable goods	981.7	10.2	69.4	-16.1	5.8	4.6	33.6	-6.3	2.4
Nondurable goods	1,918.6	6.0	16.7	36.4	-2.8	1.3	3.6	7.9	-0.6
Services	3,669.2	8.2	19.1	25.6	27.0	0.9	2.1	2.9	3.0
Private fixed investment.....	1,577.5	-17.8	-37.3	-2.0	1.1	-4.3	-8.9	-0.5	0.3
Nonresidential	1,183.6	-19.3	-35.3	-18.0	-4.8	-6.0	-10.9	-5.8	-1.6
Structures	234.2	1.9	-23.6	-9.5	-9.0	2.9	-30.1	-14.2	-14.0
Equipment and software	960.6	-23.5	-6.1	-6.6	6.9	-9.2	-2.5	-2.7	2.9
Residential	388.2	0.3	-3.3	12.6	4.6	0.4	-3.5	14.2	5.0
Government consumption expenditures and gross investment	1,704.8	-4.7	41.2	22.8	7.5	-1.1	10.5	5.6	1.8
Federal	608.6	1.7	18.3	10.6	10.8	1.2	13.5	7.4	7.4
National defense	396.0	4.1	12.5	10.5	7.5	4.6	14.3	11.6	8.0
Nondefense	212.6	-2.4	5.9	0.2	3.3	-4.5	12.1	0.4	6.3
State and local	1,096.3	-6.1	23.0	12.2	-3.0	-2.3	8.9	4.6	-1.1
Addendum: Final sales of domestic product	9,377.1	-3.8	94.4	54.5	-2.3	-0.2	4.2	2.4	-0.1

Note. Chained (1996) dollar series are calculated as the product of the chain-type quantity index and the 1996 current-dollar value of the corresponding series, divided by 100. Because the formula for the chain-type quantity indexes uses weights of more than one period, the corresponding chained-dollar estimates usually are not additive. Chained (1996) dollar levels and residuals, which measure the extent of nonadditivity in each table, are shown in NIPA tables 1.2, 1.4, and 1.6. Percent changes are calculated from unrounded data. Percent changes in major aggregates are shown in NIPA table S.1. (See “National Income and Product Accounts Tables” in this issue.)

ment, consumer spending, and government spending.³ Imports (which are subtracted in the calculation of GDP) accelerated sharply.

- A swing from inventory liquidation to inventory accumulation contributed 1.15 percentage points to GDP growth in the second quarter; a sharp cut in the pace of liquidation had contributed 2.60 percentage points to growth in the first quarter (table 2).
- Consumer spending contributed 1.30 percentage points to second-quarter growth after contributing 2.22 percentage points to first-quarter growth. Consumer purchases of nondurable goods

3. In this article, "consumer spending" is shorthand for the NIPA series "personal consumption expenditures," "government spending" is shorthand for "government consumption expenditures and gross investment," and "inventory investment" is shorthand for "change in private inventories."

Table 2. Contributions to Percent Change in Real Gross Domestic Product
[Seasonally adjusted at annual rates]

	2001		2002	
	III	IV	I	II
Percent change at annual rate:				
Gross domestic product	-0.3	2.7	5.0	1.1
Percentage points at annual rates:				
Personal consumption expenditures	0.97	4.05	2.22	1.30
Durable goods	0.36	2.45	-0.55	0.20
Nondurable goods	0.25	0.73	1.57	-0.12
Services	0.35	0.87	1.20	1.22
Gross private domestic investment	-0.81	-2.88	2.53	1.19
Fixed investment	-0.72	-1.49	-0.07	0.04
Nonresidential	-0.73	-1.33	-0.66	-0.18
Structures	0.10	-1.12	-0.44	-0.41
Equipment and software	-0.83	-0.21	-0.22	0.24
Residential	0.02	-0.16	0.60	0.22
Change in private inventories	-0.09	-1.39	2.60	1.15
Net exports of goods and services	-0.24	-0.28	-0.75	-1.77
Exports	-1.94	-0.99	0.33	1.07
Goods	-1.49	-0.56	-0.23	0.95
Services	-0.45	-0.42	0.56	0.12
Imports	1.70	0.70	-1.08	-2.84
Goods	1.17	0.37	-0.40	-2.83
Services	0.53	0.33	-0.68	0
Government consumption expenditures and gross investment	-0.21	1.85	1.04	0.33
Federal	0.07	0.80	0.47	0.47
National defense	0.18	0.54	0.46	0.33
Nondefense	-0.11	0.26	0.01	0.14
State and local	-0.28	1.05	0.56	-0.14

NOTE. More detailed contributions to percent change in real gross domestic product are shown in NIPA table 8.2. Contributions to percent change in major components of real gross domestic product are shown in tables 8.3 through 8.6.

decreased after a sharp increase, more than offsetting an upturn in durable goods; purchases of services increased about the same as in the first quarter.

- Government spending contributed 0.33 percentage point to growth after contributing 1.04 percentage points. Federal Government spending increased about the same as in the first quarter, but State and local government spending turned down.
- Final sales of domestic product—GDP less inventory investment—changed little after increasing.
- Inventory stocks edged up after substantial liquidation in each of the preceding five quarters.
- The production of goods and of structures turned down; in contrast, the production of services increased somewhat more than in the first quarter (table 3).
- Imports increased much more than exports.⁴
- The personal saving rate increased to 4.0 percent from 3.5 percent.⁵
- Real final sales of computers turned up. Computer prices declined less than in the first quarter; software prices decreased slightly in both quarters.

Motor vehicles. Real motor vehicle output increased 6.2 percent after increasing 9.9 percent. Final sales to domestic purchasers increased moderately after decreasing substantially. Inventories increased more than in the first quarter; they had declined substantially in the fourth quarter.

Consumer purchases of motor vehicles changed little after decreasing. Although interest rates on new-car loans at commercial banks and at finance companies

4. Imports of goods and services are included in gross domestic purchases but not in GDP. Exports of goods and services are included in GDP but not in gross domestic purchases.

5. The personal saving rate is measured as personal saving as a percentage of current-dollar disposable personal income. The second-quarter estimate of the national saving rate (which is measured as gross saving as a percentage of gross national product) will be available at the end of August along with the "preliminary" estimate of second-quarter GDP.

Table 3. Real Gross Domestic Product by Type of Product
[Seasonally adjusted at annual rates]

	Billions of chained (1996) dollars					Percent change from preceding quarter			
	Level	Change from preceding quarter				2001		2002	
	2002	2001	2002	2001	2002	III	IV	I	II
	II	III	IV	I	II	III	IV	I	II
Gross domestic product	9,387.9	-6.7	62.4	114.4	24.7	-0.3	2.7	5.0	1.1
Goods	3,664.8	-13.8	37.9	72.6	-6.0	-1.5	4.3	8.3	-0.7
Services	4,943.4	21.2	38.2	34.1	40.2	1.8	3.2	2.8	3.3
Structures	780.9	-14.9	-11.3	11.6	-11.2	-7.1	-5.6	6.1	-5.6
Addenda:									
Motor vehicle output	345.7	8.0	12.4	7.9	5.2	10.7	16.3	9.9	6.2
Gross domestic product less motor vehicle output	9,042.7	-14.0	51.2	106.9	20.1	-0.6	2.3	4.9	0.9
Final sales of computers						-5.3	28.9	-7.8	9.1
Gross domestic product less final sales of computers						-0.2	2.6	5.1	1.0

NOTE. See note to table 1 for an explanation of chained (1996) dollar series. Chained (1996) dollar levels and residuals for most items are shown in NIPA table 1.4. Detail on motor vehicle output is shown in NIPA table 8.9B.

increased somewhat, other financial factors specific to motor vehicle purchases were favorable. Manufacturers continued to offer sales-incentive programs on a broad selection of new models, and new motor-vehicle prices decreased for the second quarter in a row.

Business purchases of new autos and new light trucks turned up, and purchases of "other" trucks increased after nine consecutive decreases.⁶

6. "Other" trucks have a gross vehicle weight of over 10,000 pounds; these trucks range from medium-duty general delivery trucks to heavy-duty diesel tractor-trailers.

Inventory accumulation in the first and second quarters roughly offset the rapid liquidation in the fourth quarter of 2001. The inventory-sales ratio for new domestic autos, which is calculated from units data, increased to 2.29 in the second quarter from 2.14 in the first. The ratio had hit a 30-year low of 1.71 in the fourth quarter of 2001.

Prices, next page.

Second-Quarter 2002 Advance NIPA Estimates: Source Data and Assumptions

The "advance" estimate for the second quarter is based on the following major source data; as more and better data become available, the estimates will be revised. (The number of months for which data were available is shown in parentheses.)

Personal consumption expenditures: Sales of retail stores (3), unit auto and truck sales (3), and consumers' shares of new-car and new-truck purchases (2);

Nonresidential fixed investment: Unit auto and truck sales (3), construction put in place (2), manufacturers' shipments of machinery and equipment other than aircraft (3), shipments of civilian aircraft (2), and exports and imports of machinery and equipment (2);

Residential investment: Construction put in place (2), single-family housing starts (3), sales of new houses (3), and sales of existing houses (3);

Change in private inventories: Trade and nondurable

manufacturing inventories (2), durable manufacturing inventories other than semiconductors (3), and unit auto and truck inventories (3);

Net exports of goods and services: Exports and imports of goods and services (2);

Government consumption expenditures and gross investment: Some Federal outlays were available for 2 months, others for 3, State and local construction put in place (2), State and local employment (3), and the employment cost index for the quarter;

GDP prices: Consumer price indexes (3), producer price indexes (3), U.S. import and export price indexes (3), and values and quantities of petroleum imports (2).

BEA made assumptions for source data that were not available. Table A shows the assumptions for key series; a more comprehensive list is available on BEA's Web site at <www.bea.gov>.

Table A. Summary of Major Data Assumptions for Advance Estimates, 2002:II

[Billions of dollars, seasonally adjusted at annual rates]

	2002					
	January	February	March	April	May	June ¹
Private fixed investment:						
Nonresidential structures:						
Buildings:						
Value of new nonresidential construction put in place	185.6	183.2	178.5	178.6	173.0	173.8
Equipment and software:						
Manufacturers' shipments of complete aircraft	40.1	40.8	43.9	39.1	28.8	29.6
Residential structures:						
Value of new residential construction put in place:						
1-unit structures	251.6	260.0	261.7	260.7	260.7	259.7
2-units-or-more	35.4	33.9	33.7	36.2	36.2	36.9
Change in private inventories:						
Change in inventories for nondurable manufacturing	-11.7	-7.9	1.5	0.0	-7.7	2.1
Change in inventories for merchant wholesale and retail industries other than motor vehicles and equipment	-0.2	-29.4	-12.9	-22.9	9.1	-4.5
Net exports: ²						
Exports of goods:						
U.S. exports of goods, international-transactions-accounts basis	660.2	655.9	659.7	682.2	687.1	694.3
Excluding gold	657.7	653.4	657.1	678.8	683.7	690.9
Imports of goods:						
U.S. imports of goods, international-transactions-accounts basis	1,061.8	1,092.1	1,099.0	1,164.0	1,185.5	1,190.3
Excluding gold	1,060.1	1,090.1	1,096.6	1,160.8	1,181.8	1,186.8
Net exports of goods	-401.6	-436.2	-439.2	-481.8	-498.4	-495.9
Excluding gold	-402.4	-436.6	-439.6	-482.1	-498.1	-495.9
Government:						
State and local:						
Structures:						
Value of new construction put in place	193.0	197.2	183.1	183.5	187.3	185.4

1. Assumption.

2. Nonmonetary gold is included in balance-of-payments-basis exports and imports but is not used directly in the estimation of NIPA exports and imports.

Prices

The price index for gross domestic purchases, which measures the prices of goods and services purchased by U.S. residents, increased 2.1 percent in the second quarter after increasing 1.2 percent in the first. The step-up was more than accounted for by a sharp upturn in the price of energy goods and services. Prices of gross domestic purchases less food and energy increased 1.3 percent after increasing 1.4 percent (table 4 and chart 2). About 0.3 percentage point of the first-quarter increase in the price index was accounted for by a Federal pay raise.⁷

Prices of personal consumption expenditures (PCE) increased 2.5 percent after increasing 1.1 percent. Energy prices increased sharply after decreasing, reflecting upturns in the prices of gasoline and oil, of electricity and gas, and of fuel oil and coal; the swing was most pronounced in gasoline and oil prices. Food prices increased less than in the first quarter; the biggest contributor to the slowdown was a downturn in the price of fresh vegetables. Other PCE prices increased about as much as in the first quarter.

Prices paid by government increased 2.6 percent, a percentage point less than in the first quarter. Prices

7. In the NIPAs, an increase in the rate of Federal employee compensation is treated as an increase in the price of employee services purchased by the Federal Government.

Table 4. Price Indexes

[Percent change at annual rates; based on seasonally adjusted index numbers (1996=100)]

	2001		2002	
	III	IV	I	II
Gross domestic product	2.2	-0.5	1.3	1.2
Less: Exports of goods and services	-1.9	-3.8	-0.8	2.6
Plus: Imports of goods and services	-17.0	4.7	-1.6	10.1
Equals: Gross domestic purchases	-0.2	0.4	1.2	2.1
Less: Change in private inventories				
Equals: Final sales to domestic purchasers	-0.1	0.5	1.1	2.2
Personal consumption expenditures	-0.1	0.8	1.1	2.5
Durable goods	-2.7	-1.5	-4.2	-2.9
Nondurable goods	-1.4	-3.5	0.2	4.6
Services	1.1	3.5	2.7	2.7
Private fixed investment	-0.2	-0.1	-1.5	-0.2
Nonresidential	-1.1	-1.6	-2.0	-1.2
Structures	-0.3	-1.6	-3.6	0
Equipment and software	-1.5	-1.6	-1.5	-1.5
Residential	2.5	3.7	0	2.1
Government consumption expenditures and gross investment	-0.3	-0.3	3.6	2.6
Federal	0.5	-0.4	8.4	1.9
National defense	0.6	-1.1	7.3	1.7
Nondefense	0.4	0.7	10.4	2.4
State and local	-0.8	-0.3	1.1	3.0
Addenda:				
Gross domestic purchases:				
Food	3.5	2.3	2.4	0.4
Energy	-21.6	-33.0	-8.7	30.0
Less food and energy	0.6	2.0	1.4	1.3
Personal consumption expenditures:				
Food	3.5	2.4	2.4	0.5
Energy goods and services ¹	-21.3	-32.1	-9.1	29.5
Less food and energy	0.7	2.7	1.4	1.7

1. Consists of gasoline, fuel oil, and other energy goods and of electricity and gas.
Note. Percent changes in major aggregates are shown in NIPA table 8.1. Index numbers are shown in tables 7.1, 7.2, and 7.4.

paid by the Federal Government slowed sharply after a first-quarter increase that reflected the annual pay raise for civilian and military personnel. Prices paid by State and local governments increased 3.0 percent after increasing 1.1 percent.

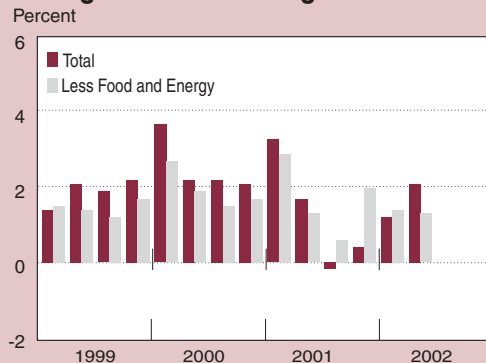
Prices of private nonresidential fixed investment decreased for the fourth consecutive quarter. Prices of nonresidential structures were unchanged, as modest increases in the prices of most types of structures were offset by a drop in the price index for oil and gas well exploration and drilling. Prices of equipment and software decreased 1.5 percent—about the same as in each of the preceding four quarters. Prices of information processing equipment and software decreased somewhat less than in the first quarter, while prices of transportation equipment decreased somewhat more.

Prices of residential investment increased after no change. Prices of single-family and multifamily structures turned up, and prices of “other” structures increased more than in the first quarter.

The GDP price index, which measures the prices paid for goods and services produced in the United States, increased 1.2 percent—0.9 percentage point less than the price index for gross domestic purchases. The GDP index, unlike the index for gross domestic purchases, includes the prices of exports and excludes the prices of imports. Import prices and export prices both increased in the second quarter, but the increase in import prices (which was dominated by petroleum prices) was much more pronounced.

CHART 2

Gross Domestic Purchases Prices: Change From Preceding Quarter



Note—Percent change at annual rate from preceding quarter; based on seasonally adjusted index numbers (1996=100).

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Personal Income

Real disposable personal income (DPI) increased 3.8 percent after increasing 14.6 percent. Personal income, which is only available in current dollars, increased about the same as in the first quarter, but personal tax payments fell much less than in the first quarter (chart 3 and table 5).

An upturn in personal interest income and a step-up in rental income of persons were roughly offset by a slowdown in transfer payments and a downturn in farm proprietors' income.

The upturn in interest income mainly reflected faster accumulation of interest-bearing assets. The increase in interest income was the first since the fourth quarter of 2000. The step-up in rental income primarily reflected a slowdown in expenses, specifically, in closing costs associated with mortgage originations.

The slowdown in transfer payments followed a sharp acceleration in the first quarter when cost-of-

living adjustments boosted payments for social security and other Federal programs. The downturn in farm proprietors' income reflected a downturn in crop and livestock prices.

Wage and salary disbursements increased a little more than in the first quarter. A step-up in disbursements in private industries was mostly offset by a slowdown in government.

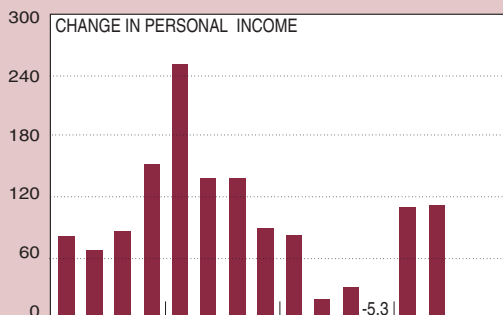
Personal contributions for social insurance, which is subtracted in calculating personal income, increased less than in the first quarter, when the social security taxable earnings base increased from \$80,400 to \$84,900 and the premium for Medicare supplementary medical insurance increased from \$50 per month to \$54 per month.

Personal tax and nontax payments decreased much less than in the first quarter. In the first quarter, Federal withholding had been reduced as a result of the 10-percent tax bracket and other provisions of the Eco-

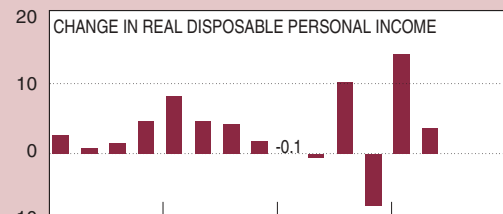
CHART 3

Selected Personal Income and Saving Measures

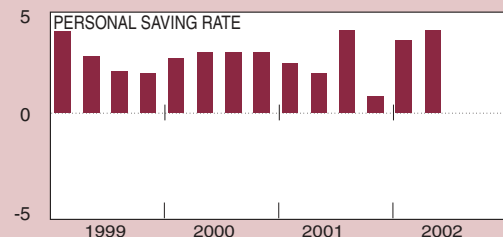
Billion \$



Percent



Percent



Note—Changes are from preceding quarter; based on seasonally adjusted annual rates.

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Table 5. Personal Income and Its Disposition

[Billions of dollars; seasonally adjusted at annual rates]

	Level	Change from preceding quarter			
	2002	2001		2002	
	II	III	IV	I	II
Wage and salary disbursements.....	5,001.3	-3.1	-22.3	33.8	36.1
Private industries.....	4,153.1	-14.4	-30.4	18.6	28.3
Goods-producing industries.....	1,122.4	-10.0	-16.7	-1.1	0.2
Manufacturing.....	767.2	-13.7	-13.5	-4.1	1.4
Distributive industries.....	1,113.5	-1.5	-12.2	7.3	7.6
Service industries.....	1,917.3	-3.0	-1.5	12.5	20.5
Government.....	848.2	11.3	8.1	15.2	7.8
Other labor income.....	603.6	4.2	3.9	14.5	12.8
Proprietors' income with IVA and CCAAdj.....	750.2	5.8	-1.1	17.1	1.8
Farm.....	8.6	0.9	-0.1	2.5	-13.1
Nonfarm.....	741.6	4.9	-1.0	14.6	14.9
Rental income of persons with CCAAdj.....	154.6	6.5	-1.5	2.0	13.3
Personal dividend income.....	430.3	5.0	6.3	6.4	6.6
Personal interest income.....	1,085.2	-10.8	-13.5	-3.0	15.3
Transfer payments to persons.....	1,280.1	23.4	22.5	47.0	28.1
Less: Personal contributions for social insurance.....	383.8	0.9	-0.4	8.2	2.9
Personal income.....	8,921.5	30.0	-5.3	109.5	111.1
Less: Personal tax and nontax payments.....	1,131.7	-154.2	127.8	-167.6	-10.4
Equals: Disposable personal income.....	7,789.8	184.2	-133.0	277.1	121.5
Less: Personal outlays.....	7,481.9	23.5	107.6	66.7	85.6
Equals: Personal saving.....	307.9	160.6	-240.7	210.5	35.9
Addenda: Special factors in personal income:					
In private wages and salaries:					
Effects of the September 11 terrorist attacks.....	0	-3.3	3.3	0	0
In government wages and salaries:					
Federal pay raise.....	9.0	0	0	8.4	0.6
Effects of the September 11 terrorist attacks.....	3.5	0.9	2.8	-0.5	0.3
In transfer payments to persons:					
Social security retroactive payments.....	0	0	1.8	-1.8	0
Cost-of-living adjustments in Federal transfer programs.....	13.5	0	0.7	12.8	0
Correction for error in indexing for social security and supplemental security income benefits.....	0.1	4.2	-3.7	-0.5	0.1
In personal tax and nontax payments:					
Federal tax law changes.....	-42.9	0	0	-42.6	-0.3
Refunds and State tax law changes.....	-1.1	4.6	2.2	-0.2	0.2

NOTE: Most dollar levels are in NIPA table 2.1.
IVA Inventory valuation adjustment.
CCAAdj Capital consumption adjustment.

conomic Growth and Tax Relief and Reconciliation Act of 2001 and as a result of the indexation provisions of the current tax law; Federal nonwithheld taxes (payments of estimated taxes plus final settlements less refunds) had been reduced on the basis of Federal budget

projections for 2002. A first-quarter decrease in State and local income taxes had reflected adjustments to account for anticipated lower nonwithheld taxes for 2002 and to account for the effects of Federal income tax law changes.