

# Completion of the Comprehensive Revision of the National Income and Product Accounts, 1929–96

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THE BUREAU of Economic Analysis (BEA) has completed its most recent comprehensive revision of the national income and product accounts (NIPA's) with the release of the following estimates: Revised NIPA estimates for 1929–58 and revised estimates of reproducible tangible wealth for 1929–95, both of which reflect the definitional and statistical changes that were incorporated last year into the NIPA estimates beginning with 1959; and newly available and revised NIPA estimates of selected series for 1959–96 that reflect the work undertaken to complete the 1929–58 NIPA and 1929–95 wealth estimates. The article “Improved Estimates of Fixed Reproducible Tangible Wealth, 1929–95” in this issue presents the revised wealth estimates; this article describes the NIPA revisions.

The summary NIPA tables (beginning on page 10) present the revised estimates for 1929–96 for the major NIPA aggregates. The revised 1929–58 estimates reflect the definitional and statistical changes incorporated last year into the 1959–96 estimates, including BEA's improved measures of output and prices, the change that recognizes government investment, and an improved methodology for calculating depreciation.<sup>1</sup> The 1959–96 estimates, which were released in January 1996 and subsequently updated, are revised primarily so that they will be consistent with the newly available wealth estimates. (A set of tables presenting the revised and newly available NIPA estimates for 1991–95 begins on page 30; the estimates for more recent periods are shown in the “Selected NIPA Tables” beginning on page D-2.)

Table 1 of this article shows revisions to the rates of change for various NIPA aggregates for selected years and recent quarters; table 2 shows the

revisions to the levels of the major components of the summary NIPA's for selected years.

*Revisions to change.*—Revisions to average annual rates of change for 1929–58 in real gross domestic product (GDP), real disposable personal income, and GDP prices primarily reflect the use of the new chain-type measures. For 1929–58, real GDP increases at an average annual rate of 3.4 percent, 0.6 percentage point higher than the previously published rate. Real disposable personal income (DPI) increases at an average annual rate of 2.9 percent, 0.3 percentage point higher than the previously published rate. The new chain-type GDP price index increases at an average annual rate of 1.9 percent, 0.5 percentage point lower than the rate of the previously published implicit price deflator. In current dollars, the average annual rates of change for 1929–58 in both GDP and DPI are unrevised—at 5.3 percent and 4.9 percent, respectively. Beginning with 1959, when the revisions primarily reflect the incorporation of information from the revised wealth estimates, there are no revisions to the average annual rates of change in current-dollar GDP, real GDP, real DPI, and GDP prices for 1959–92, for 1992–96, and for the most recent quarters.

*Revisions to level.*—Revisions to the levels of current-dollar GDP for 1929–58 reflect only the incorporation of the new treatment of government investment. These revisions increase current-dollar GDP for all years—\$0.7 billion, or 0.7 percent, for 1929 and \$12.6 billion, or 2.8 percent, for 1958. The revisions to the current surplus or deficit of government for 1929–58, which also reflect this new treatment, amount to \$2.0 billion for 1929 and \$12.9 billion for 1958; the revised surpluses for those years are \$3.0 billion and \$2.0 billion, respectively. Beginning with 1959, there are no revisions to the annual estimates of current-dollar GDP, but there

1. For a description of these changes, see Robert P. Parker and Eugene P. Seskin, “Improved Estimates of the National Income and Product Accounts: Results of the Comprehensive Revision,” SURVEY OF CURRENT BUSINESS 76 (January/February 1996): 1–31.

are revisions to the quarterly estimates of the change in farm business inventories for 1967–94.

For all periods, the major current-dollar revisions affected the following NIPA series: The capital consumption adjustment (CCAdj), the consumption of fixed capital, and the components of national and personal income that depend on these two series. The revisions for 1929–58 reflect the full incorporation of the revised wealth estimates; revisions beginning with 1959 reflect only those revisions to the wealth estimates that were not incorporated into the NIPA estimates in January 1996.

National income is revised for all periods to reflect the revisions to the CCAdj for proprietors' income with inventory adjustment (IVA) and CCAdj, for rental income of persons with CCAdj, and for corporate profits with IVA and CCAdj. For 1929–58, the revisions to national income are primarily accounted for by the revisions to rental income of persons with CCAdj; for 1929, national income is revised up \$1.2 billion, or 1.4 percent, but the revisions for other years are smaller—less than 1.0 percent. Beginning with 1959, the revisions to national income are primarily accounted for by revisions to nonfarm proprietors' income and to corporate profits with IVA and CCAdj. The revisions to corporate profits with IVA and CCAdj, which reflect the revised CCAdj estimates, are substantial. For 1959, the revision to the corporate profits with IVA and CCAdj is \$2.7 billion, or 5.3 percent, and the revisions increase to \$26.6 billion, or 6.6 percent, for 1992. For 1996, the revision is about \$16 billion, or 2.5 percent.

For all periods, the revisions to personal income, as well as to DPI and personal saving, reflect only the revisions to the proprietors' income and rental income components. Personal saving and DPI are revised up slightly for all but the most recent years. The personal saving rate—personal saving as a percentage of DPI—is revised up for all years. For 1929, it is revised up 1.3 percentage points to 4.3 percent, and for 1958, it is revised up 0.8 percentage point to 8.2 percent. Beginning with 1959, revisions to the personal saving rate are much smaller—up 0.3 percentage point to 5.3 percent and to 6.2 percent for 1987 and 1992, respectively. The saving rate is unrevised for 1996.

Within GDP and gross domestic income, the revisions to national income are largely offset by revisions to the consumption of fixed capital. Thus, revisions to the statistical discrepancy—the difference between GDP (the “product-side” measure of output) and gross domestic income (the “income-side” measure of output)—are small; for recent years, the revisions are less than \$1 billion.

*Data availability.*—Revised and newly available series for all periods, as well as the unrevised series, are available online through STAT-USA's Economic Bulletin Board and Internet services and on diskette from BEA. Later this year, BEA will publish *National Income and Product Accounts of the United States, 1929–94*, which will include revisions for 1993–94 from this year's annual NIPA revision as well as the full set of NIPA tables and definitions. The availability of the volume will be announced in the SURVEY OF CURRENT BUSINESS.


*Tables 1 and 2 follow.* 

Table 1.—Revised and Previously Published Gross Domestic Product and Disposable Personal Income, 1929–96

[Percent change from preceding period]

	1929–58	1929–47	1947–58	1959–92	1992–96	1996	Seasonally adjusted at annual rates			
							1996: I	1996: II	1996: III	1996: IV
<b>Based on chained (1992) dollars</b>										
<b>Gross domestic product:</b>										
Revised .....	3.4	3.3	3.4	3.2	2.6	2.4	2.0	4.7	2.1	3.8
Previously published .....	2.8	2.4	3.5	3.2	2.6	2.4	2.0	4.7	2.1	3.8
<b>Disposable personal income:</b>										
Revised .....	2.9	2.4	3.8	3.4	2.4	2.9	2.0	1.4	4.9	2.6
Previously published .....	2.6	1.9	3.7	3.4	2.5	2.9	2.0	1.3	4.8	2.6
<b>Based on current dollars</b>										
<b>Gross domestic product:</b>										
Revised .....	5.3	4.9	6.1	7.9	5.0	4.4	4.2	6.5	3.8	5.4
Previously published .....	5.3	4.7	6.2	7.9	5.0	4.4	4.2	6.5	3.8	5.4
<b>Disposable personal income:</b>										
Revised .....	4.9	4.1	6.2	8.1	4.8	5.0	4.2	4.4	6.5	5.2
Previously published .....	4.9	4.1	6.2	8.1	4.9	5.0	4.2	4.3	6.4	5.1
<b>Addendum:</b>										
<b>Gross domestic product price index:</b>										
Revised .....	1.9	1.5	2.6	4.6	2.4	2.1	2.3	2.2	2.0	1.9
Previously published <sup>1</sup> .....	2.4	2.2	2.6	4.6	2.4	2.1	2.3	2.2	2.0	1.9

1. For 1929 to 1958, the previously published price indexes were implicit price deflators.

NOTE.—The revised 1929–58 estimates reflect the definitional and statistical changes incorporated last year into the 1959–96 estimates including BEA's improved measures of output and prices, the change that recognizes investment, and an improved methodology for calculating

depreciation. The 1959–96 estimates, which already had been revised in January 1996 to reflect these improvements, have now been revised primarily so that they will be consistent with the newly available wealth estimates presented beginning on page 69 of this issue of the Survey.

Table 2.—Revisions to Summary National Income and Product Accounts, 1929–96

[Billions of dollars]

	1929	1947	1958	1959	1987	1992	1995	1996
<b>Account 1.—National Income and Product Account</b>								
Proprietors' income with inventory valuation and capital consumption adjustments .....	0.4	0.1	0.1	1.3	12.2	14.3	7.8	9.0
Farm .....	.1	.1	.3	0	-8	-9	-1.1	-1.7
Nonfarm .....	.3	0	-2	1.3	13.0	15.2	8.9	10.7
Rental income of persons with capital consumption adjustment .....	.7	1.5	3.0	-5	-7	-1.2	-10.5	-11.8
Corporate profits with inventory valuation and capital consumption adjustments .....	.1	.2	.4	2.7	23.5	26.6	18.2	16.2
Other national income <sup>1</sup> .....	0	0	0	0	0	0	0	0
<b>National Income</b> .....	<b>1.2</b>	<b>1.8</b>	<b>3.5</b>	<b>3.5</b>	<b>34.9</b>	<b>39.6</b>	<b>15.4</b>	<b>13.3</b>
Business transfer payments, indirect business tax and nontax liability, less subsidies less current surplus of government enterprises .....	.2	.4	.9	0	0	0	0	0
Consumption of fixed capital .....	-3	8.8	9.8	-4.0	-36.1	-40.7	-14.8	-12.8
Private .....	-1.1	-1.9	-3.8	-4.0	-36.1	-40.7	-14.8	-12.8
Government .....	.8	10.7	13.6	0	0	0	0	0
Gross national income .....	.7	10.2	12.4	-5	-1.2	-1.2	.6	.5
Statistical discrepancy .....	0	.1	.2	.5	1.2	1.1	-6	-5
<b>Gross national product</b> .....	<b>.7</b>	<b>10.3</b>	<b>12.6</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
Less: Receipts of factor income from the rest of the world .....	0	0	0	0	0	0	0	0
Plus: Payments of factor income to the rest of the world .....	0	0	0	0	0	0	0	0
<b>GROSS DOMESTIC PRODUCT</b> .....	<b>.7</b>	<b>10.3</b>	<b>12.6</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
Government consumption expenditures and gross investment .....	.7	10.3	12.6	0	0	0	0	0
Federal .....	.2	9.0	9.8	0	0	0	0	0
State and local .....	.5	1.3	2.8	0	0	0	0	0
Other gross domestic product <sup>2</sup> .....	0	0	0	0	0	0	0	0
<b>GROSS DOMESTIC PRODUCT</b> .....	<b>.7</b>	<b>10.3</b>	<b>12.6</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>

NOTE.—The revised 1929–58 estimates reflect the definitional and statistical changes incorporated last year into the 1959–96 estimates including BEA's improved measures of output and prices, the change that recognizes investment, and an improved methodology for calculating

depreciation. The 1959–96 estimates, which already had been revised in January 1996 to reflect these improvements, have now been revised primarily so that they will be consistent with the newly available wealth estimates presented beginning on page 69 of this issue of the Survey.

**Table 2.—Revisions to Summary National Income and Product Accounts, 1929–96 —Continued**

[Billions of dollars]

	1929	1947	1958	1959	1987	1992	1995	1996
<b>Account 2.—Personal Income and Outlay Account</b>								
Proprietors' income with inventory valuation and capital consumption adjustments .....	0.4	0.1	0.1	1.3	12.2	14.3	7.8	9.0
Rental income of persons with capital consumption adjustment .....	.7	1.5	3.0	–5	–7	–1.2	–10.5	–11.8
Other personal income <sup>3</sup> .....	0	0	0	0	0	0	0	0
<b>PERSONAL INCOME</b> .....	<b>1.0</b>	<b>1.7</b>	<b>3.1</b>	<b>.9</b>	<b>11.4</b>	<b>13.0</b>	<b>–2.7</b>	<b>–2.8</b>
Less: Personal tax and nontax payments .....	0	0	0	0	0	0	0	0
Disposable personal income .....	1.1	1.6	3.1	.9	11.5	13.0	–2.7	–2.8
Less: Personal outlays .....	0	0	0	0	0	0	0	0
Personal saving .....	1.0	1.7	3.1	.9	11.5	13.0	–2.7	–2.8
<b>PERSONAL TAXES, OUTLAYS, AND SAVING</b> .....	<b>1.0</b>	<b>1.7</b>	<b>3.1</b>	<b>.9</b>	<b>11.5</b>	<b>13.0</b>	<b>–2.7</b>	<b>–2.8</b>
<b>Account 3.—Government Receipts and Expenditures Account</b>								
Consumption expenditures .....	–2.1	5.7	–13.8	0	0	0	0	0
Subsidies less current surplus of government enterprises .....	.1	.4	.9	0	0	0	0	0
Other consumption expenditures <sup>4</sup> .....	0	0	0	0	0	0	0	0
Current surplus or deficit (–), national income and product accounts .....	2.0	–6.1	12.9	0	0	0	0	0
Federal .....	0	–7.4	3.0	0	0	0	0	0
State and local .....	0	0.3	9.9	0	0	0	0	0
<b>GOVERNMENT CURRENT EXPENDITURES AND SURPLUS</b> .....	<b>–2.1</b>	<b>.1</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>GOVERNMENT RECEIPTS</b> .....	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Account 4.—Foreign Transactions Account</b>								
<b>RECEIPTS FROM THE REST OF THE WORLD</b> .....	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>PAYMENTS TO THE REST OF THE WORLD</b> .....	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Account 5.—Gross Saving and Investment Account</b>								
Gross private domestic investment .....	0	0	0	0	0	0	0	0
Gross government investment .....	2.8	4.6	26.5	0	0	0	0	0
Net foreign investment .....	0	0	0	0	0	0	0	0
<b>GROSS INVESTMENT</b> .....	<b>2.8</b>	<b>4.6</b>	<b>26.5</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
Personal saving .....	1.0	1.7	3.1	.9	11.5	13.0	–2.7	–2.8
Undistributed corporate profits with inventory valuation and capital consumption adjustments .....	.1	.2	.4	2.6	23.4	26.6	18.1	16.1
Consumption of fixed capital .....	–3	8.8	9.8	–4.0	–36.1	–40.7	–14.8	–12.8
Private .....	–1.1	–1.9	–3.8	–4.0	–36.1	–40.7	–14.8	–12.8
Government .....	.8	10.7	13.6	0	0	0	0	0
Government current surplus or deficit, national income and product accounts .....	2.0	–6.1	12.9	0	0	0	0	0
Other saving <sup>5</sup> .....	0	0	0	0	0	0	0	0
Statistical discrepancy .....	0	.1	.2	.5	1.2	1.1	–6	–5
<b>GROSS SAVING AND STATISTICAL DISCREPANCY</b> .....	<b>2.8</b>	<b>4.6</b>	<b>26.5</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>

1. Consists of compensation of employees and net interest.

2. Consists of personal consumption expenditures, gross private domestic investment, and net export of goods and services.

3. Consists of wage and salary disbursements, other labor income, personal dividend income, personal interest income, and transfer payments to persons, less personal contributions for social insurance.

4. Consists of transfer payments and net interest paid, less dividends received by government and wage accruals less disbursements.

5. Consists of wage accruals less disbursements (private), and capital grants received by the United States (net).