

# Comparison of BEA Estimates of Personal Income and IRS Estimates of Adjusted Gross Income

New Estimates for 1999  
Revised Estimates for 1998

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THIS article presents a comparison of the Bureau of Economic Analysis (BEA) measure of personal income and the Internal Revenue Service (IRS) measure of adjusted gross income (AGI) of individuals by type of income. The article explains the major definitional and statistical differences between the two measures, describes some uses of the measures, and presents a partial reconciliation of the measures that is prepared by converting the BEA measure of personal income by type of income to the same definitional basis as the IRS measure. It also discusses the sources of the "AGI gap"—the unexplained difference remaining between the BEA estimate of AGI and the IRS AGI—the trends in the AGI gap for 1959–99, and the sources of the revision to the AGI gap for 1998.<sup>1</sup>

The BEA measure of personal income and the IRS measure of AGI are both widely used measures of household income. Personal income, which is prepared as an integral part of the national income and product accounts (NIPA's), is often used in assessing trends in output, consumer spending, saving, and investment. AGI, which is the income concept used in the Federal income tax, is often used to estimate individual income tax revenue and the income tax burden of households.

Personal income is the income received by persons from participation in production, from both government and business transfer payments, and from government interest (which is treated like a

transfer payment). "Persons" consists of individuals, nonprofit institutions that primarily serve individuals, private noninsured welfare funds, and private trust funds. Personal income is calculated as the sum of wage and salary disbursements, other labor income, proprietors' income with inventory valuation and capital consumption adjustments, rental income of persons with capital consumption adjustment, personal dividend income, personal interest income, and transfer payments to persons, less personal contributions for social insurance.<sup>2</sup>

AGI is the Federal income tax concept closest to net income. It approximates income less the costs of producing income. In general, gross income for Federal income tax purposes includes all income that is received in the form of money, property, and services that is not expressly exempt from taxation. Expressly exempt income includes the cost basis of pension, annuity, or individual retirement account distributions; tax-exempt interest; part of social security and railroad retirement benefits; part of qualified foreign earned income; and part of the gain from sale of principal residence. For 1999, the allowable adjustments to gross income to derive AGI included the deduction for one-half of self-employment tax, contributions to self-employed retirement plans, contributions to individual retirement accounts, alimony paid, and other adjustments.<sup>3</sup>

In general, personal income is a more comprehensive measure than AGI. It includes income that is generally taxed, such as wages and salaries, rental income, self-employment earnings, dividends, and interest; income that is partly taxed, such as social security benefit payments; and sev-

1. Annual and quarterly estimates of personal income are published monthly in table 2.1 of the national income and product accounts (NIPAs) in the section "BEA Current and Historical Data" of the SURVEY OF CURRENT BUSINESS (monthly estimates are shown in table B.1). Estimates of IRS AGI are published annually in *Statistics of Income—Individual Income Tax Returns*. The estimates of the relationship between total personal income and total AGI are presented annually in NIPA table 8.28, most recently for 1997–99 on page 24 of the September 2001 SURVEY. All the estimates are available on BEA's Web site at <www.bea.doc.gov> and on STAT-USA's Web site at <www.stat-usa.gov>. The reconciliation by type of income for 1959–97 is available on request; for information, write to the Government Division (BE-57), Bureau of Economic Analysis, U.S. Department of Commerce, Washington, DC 20230.

2. See U.S. Bureau of Economic Analysis, *National Income and Product Accounts of the United States, 1929–97: Volume 1* (Washington, DC: U.S. Government Printing Office, September 2001): M-8.

eral types of income that are not taxed, such as tax-exempt interest and nontaxable transfer payments, including Medicare, Medicaid, and welfare benefit payments. Personal income includes income independent of whether or how it is reported to the IRS. Personal income also includes other types of income, such as employer contributions to private and government employee retirement plans, the investment income of these plans, and imputed income related to home ownership. However, personal income excludes net gains from the sale of assets—capital gains, retirement benefits, and personal contributions for social insurance.

Although the two series are based on different concepts and serve different purposes, they are often used in conjunction. In particular, personal income, which is available much sooner than AGI, is frequently used as an extrapolator for AGI (this article provides information that can be used to adjust the BEA measure to bring it closer in definition to AGI).

The revised estimates for 1998 reflect the incorporation of the results of the annual revision of the NIPA's that was released in July 2001 and of updated estimates of AGI for 1998 from the *Statistics of Income Bulletin*.<sup>4</sup> The new estimates for 1999 incorporate the newly available IRS estimates of AGI for 1999.

This article is organized into four sections. The first section discusses the derivation of the BEA estimates of AGI and the AGI gap by type of income. The second section discusses the sources of the AGI gap. The third section discusses some specific trends in the AGI gap by type of income for 1959–99. The fourth section discusses the sources of revision to the AGI gap for 1998.

### BEA Estimates of AGI

Personal income and AGI each include items that the other omits. Tables 1 and 2 show the reconcili-

3. Other adjustments included student-loan interest deduction, medical savings account deduction, moving expenses, self-employed health insurance deduction, penalty on early withdrawal of savings, forestation or reforestation expenses, foreign housing exclusion, repayments of supplemental unemployment compensation, certain expenses of qualified performing artists, contributions to section 501(c)(18) pension plans, deduction for clean-fuel vehicles, employee business expenses of fee-basis State or local government officials, and jury duty pay that was repaid to employers and reported as taxable income. On the IRS form 1040 for 1999, the types of income that had to be reported for the calculation of gross income are shown in lines 7 through 21, and allowable adjustments are shown in lines 23 through 31.

4. See Brent R. Moulton, Eugene P. Seskin, and David F. Sullivan, "Annual Revision of the National Income and Product Accounts: Annual Estimates, 1998–2000 and Quarterly Estimates, 1998:I–2001:I," *SURVEY* 81 (August 2001): 7–32. For AGI data, see Internal Revenue Service, *Statistics of Income Bulletin* (Washington, DC: U.S. Government Printing Office, Spring 2001).

ation between personal income and AGI by type of income for 1998–99. In these tables, the reconciliation items that convert personal income to the IRS definition of AGI are shown in three groups.

The first group (lines 3–9) consists of the portion of personal income that is not included in AGI. Most transfer payments to persons from governments and all transfer payments to persons from business are nontaxable (line 3).<sup>5</sup> The taxable portion of transfer payments to persons from governments consists primarily of unemployment compensation benefit payments and a portion of social security and railroad retirement benefit payments.

Most of the components of the NIPA category "other labor income" (line 4), primarily so-called fringe benefits, are nontaxable.<sup>6</sup> The nontaxable components are employer payments (including payments in kind) to private pension and profit-sharing plans, to publicly administered government employee retirement plans, to private group health and life insurance plans, to privately administered workers' compensation plans, and to supplemental unemployment benefit plans. Employer payments are nontaxable, but some benefit payments—such as pension benefit payments (line 13) and supplemental unemployment benefit payments (part of line 15) are taxable. Taxable components of other labor income also include other fees and payments.

In the NIPA's, the investment income of life insurance carriers and pension plans is included in personal income in the year it is accrued. Investment income of life insurance carriers attributed to persons is included in personal interest income.<sup>7</sup> Investment income of pension plans—rents, dividends, and interest—is recorded as being received directly by persons in the corresponding components of personal income.

The second group of reconciliation items (lines 11–15) consists of the portion of AGI that is excluded from personal income. Personal contributions for social insurance (line 11) includes payments by employees, by the self-employed, and by individuals who participate in the following gov-

5. NIPA table 3.12 shows government transfer payments to persons, which include benefit payments from social insurance funds—such as old-age, survivors, and disability insurance (social security), hospital insurance, supplementary medical insurance, and unemployment insurance—and from certain other programs. NIPA table 8.16 shows business transfer payments to persons, which consist primarily of liability payments for personal injury and of corporate gifts to nonprofit institutions.

6. NIPA table 6.11C shows other labor income by industry group and by type.  
7. See NIPA table 8.20 (line 53).

ernment programs: Old-age, survivors, and disability insurance (social security), hospital insurance, supplementary medical insurance, unemployment insurance, railroad retirement, veterans life insurance, and temporary disability insurance.<sup>8</sup>

“Gains, net of losses, from sale of property”—capital gains—(line 12) includes net gain from sale of property held for personal use or for investment (capital assets) and of property of a business nature (business assets).

Taxable pension benefit payments from pension plans (line 13), which is in AGI, is excluded from personal income because in the NIPA’s, pension benefit payments are treated as transactions within the personal sector.

The third group of reconciliation items (lines 17–21 and 25–27) consists of reallocations among types of income. These reallocations do not affect the total AGI gap, but they affect the AGI gap by type of income. The types of income used for reconciliation purposes in tables 1 and 2 represent the types of income that are common to both personal income and AGI. However, certain types of personal income and of AGI, such as interest distributed by regulated investment companies—mutual funds—(line 20) and partnership income (line 26), are classified differently in the two income measures. These income types are reallocated, when possible, to make the BEA and IRS estimates of AGI comparable by type of income. The reallocations of personal income types are shown in lines 17–21, and the reallocation of AGI types are shown in lines 25–27.

8. See NIPA table 3.6.

Table 1.—Comparison of Personal Income by Type of Income, 1998

[Billions of dollars]

Line		Personal income	Wage and salary disbursements	Proprietors' income with IVA and CCA <sup>adj</sup>		Rental income of persons with CCA <sup>adj</sup>	Personal dividend income	Personal interest income	Taxable pensions and annuities	Taxable unemployment compensation	Taxable social security benefits <sup>1</sup>	Other personal income <sup>2</sup>	Income not included in personal income
				Farm	Nonfarm								
1	Personal income.....	7,426.0	4,192.8	25.6	598.2	138.6	348.3	964.4	( <sup>3</sup> ) 3.0	19.9	71.0	1,064.1	0.0
2	Less: Portion of personal income not included in adjusted gross income.....	2,627.9	101.9	6.5	9.6	101.4	239.9	739.5	0.0	0.0	0.0	1,377.5	51.5
3	Nontaxable transfer payments.....	889.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	889.0	0.0
4	Other labor income except fees.....	487.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	487.9	0.0
5	Imputed income in personal income <sup>4</sup> .....	320.3	11.0	0.4	7.3	80.4	0.0	221.2	0.0	0.0	0.0	0.0	0.0
6	Investment income retained by life insurance carriers and pension plans <sup>5</sup> .....	42.7.9	0.0	0.0	0.0	1.3	51.3	375.3	0.0	0.0	0.0	0.0	0.0
7	Investment income received by nonprofit institutions or retained by fiduciaries.....	65.8	0.0	0.0	0.4	6.0	21.0	37.8	0.0	0.0	0.0	0.7	0.0
8	Differences in accounting treatment between NIPA's and tax regulations, net.....	95.8	0.0	6.1	2.0	13.7	19.1	55.0	0.0	0.0	0.0	0.0	0.0
9	Other personal income exempt or excluded from adjusted gross income.....	341.2	90.9	0.0	0.0	0.0	148.6	50.2	0.0	0.0	0.0	0.0	( <sup>6</sup> ) 51.5
10	Plus: Portion of adjusted gross income not included in personal income.....	1,325.5	20.7	0.0	3.8	3.0	0.0	0.0	356.3	0.0	0.0	315.5	626.2
11	Personal contributions for social insurance.....	316.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	316.3	0.0
12	Gains, net of losses, from sale of property.....	444.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	444.5
13	Taxable pensions <sup>7</sup> .....	356.3	0.0	0.0	0.0	0.0	0.0	0.0	356.3	0.0	0.0	0.0	0.0
14	Small business corporation income.....	115.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	115.2
15	Other types of income.....	93.2	20.7	0.0	3.8	3.0	0.0	0.0	0.0	0.0	0.0	-0.9	66.5
16	Plus: Reallocation by type of NIPA income.....	0.0	10.4	-0.0	-0.7	0.0	56.6	-56.6	-7.7	0.0	0.0	-2.0	0.0
17	Fees in other labor income.....	0.0	2.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-2.7	0.0
18	Fiduciaries' share of partnership income <sup>8</sup> .....	0.0	0.0	-0.0	-0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.7	0.0
19	Interest received by nonfarm proprietors.....	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20	Interest distributed by regulated investment companies.....	0.0	0.0	0.0	0.0	0.0	56.6	-56.6	0.0	0.0	0.0	0.0	0.0
21	Taxable disability income payments.....	0.0	7.7	0.0	0.0	0.0	0.0	0.0	-7.7	0.0	0.0	0.0	0.0
22	Equals: BEA-derived adjusted gross income.....	6,123.7	4,122.0	19.1	591.7	40.3	165.0	168.4	351.6	19.9	71.0	-0.0	574.7
23	Adjusted gross income of IRS (as reported).....	5,416.0	3,879.8	-7.9	202.4	22.4	118.5	178.3	280.7	16.8	68.7	81.6	574.7
24	Plus: Reallocation by type of IRS income.....	0.0	0.0	0.2	75.0	6.4	0.0	0.0	0.0	0.0	0.0	-81.6	0.0
25	Estate or trust income.....	0.0	0.0	0.0	3.1	6.4	0.0	0.0	0.0	0.0	0.0	-9.5	0.0
26	Partnership income.....	0.0	0.0	0.2	72.0	0.0	0.0	0.0	0.0	0.0	0.0	-72.2	0.0
27	Other reallocations.....	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
28	Adjusted gross income of IRS (reallocated).....	5,416.0	3,879.8	-7.7	277.4	28.8	118.5	178.3	280.7	16.8	68.7	0.0	574.7
29	Adjusted income gap (line 22—line 28).....	707.7	242.2	26.8	314.3	11.5	46.5	-9.9	70.9	3.1	2.3	-0.0	0.0
30	Percent distribution of AGI gap.....	100.0	34.2	3.8	44.4	1.6	6.6	-1.4	10.0	0.4	0.3		
31	Relative AGI gap <sup>9</sup> .....	11.6	5.9	140.5	53.1	28.4	28.2	-5.9	20.2	15.5	3.3		
32	Addendum: Misreporting adjustments included in personal income.....	337.4	97.0		252.4	1.2		-13.1					

See the footnotes at the end of table 2.

Taxable interest received by mutual funds is reallocated from NIPA personal interest income to AGI personal dividend income because the IRS requires that this interest be reported as dividends. Only the portion that is taxable to individuals is reallocated; the interest paid by mutual funds to pension plans, IRA and Keogh plans, and holders of State and local government securities is tax-exempt.<sup>9</sup> Because of the difficulties of allocating

total interest paid by regulated investment companies to these categories, this estimate of the amount reallocated from interest to dividends is an approximation; the separate estimates of BEA-derived AGI for interest and for dividends are therefore less reliable than the combined estimates.

Partnership income as reported in AGI requires a reallocation by type of income. The current-production income (including income in kind) of sole proprietorships and partnerships and of tax-exempt cooperatives is classified either as farm proprietors' income or as nonfarm proprietors' income for reconciliation purposes.

9. Estimates of taxable interest received by individuals from mutual funds are primarily based on IRS tabulations of U.S. Income Tax Return for Regulated Investment Companies (form 1120-RIC). The form 1120 RIC distributions are adjusted for distributions currently not taxable to individuals using the mutual fund shares from the Federal Reserve Board. For more information on the reconciliation items in tables 1 and 2, see Thae S. Park, "Comparison of BEA Estimates of Personal Income and IRS Estimates of Adjusted Gross Income," SURVEY 80 (February 2000): 18.

Table 2.—Comparison of Personal Income by Type of Income, 1999

[Billions of dollars]

Line	Personal income	Wage and salary disbursements	Proprietors' income with IVA and CCAj		Rental income of persons with CCAj	Personal dividend income	Personal interest income	Taxable pensions and annuities	Taxable unemployment compensation	Taxable social security benefits <sup>1</sup>	Other personal income <sup>2</sup>	Income not included in personal income	
			Farm	Nonfarm									
1	Personal income .....	7,777.3	4,472.2	26.6	645.4	147.7	343.1	950.0	( <sup>3</sup> ) 3.0	20.7	77.2	1,091.3	0.0
2	Less: Portion of personal income not included in adjusted gross income .....	2,726.1	110.8	4.9	-3.6	110.5	250.7	772.5	0.0	0.0	0.0	1,425.3	55.0
3	Nontaxable transfer payments .....	917.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	917.7	0.0
4	Other labor income except fees .....	507.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	507.0	0.0
5	Imputed income in personal income <sup>4</sup> .....	348.7	11.4	0.5	7.7	90.5	0.0	238.8	0.0	0.0	0.0	0.0	0.0
6	Investment income retained by life insurance carriers and pension plans <sup>5</sup> .....	441.4	0.0	0.0	0.0	1.4	58.6	381.4	0.0	0.0	0.0	0.0	0.0
7	Investment income received by nonprofit institutions or retained by fiduciaries .....	64.7	0.0	0.0	0.4	5.9	20.4	37.4	0.0	0.0	0.0	0.7	0.0
8	Differences in accounting treatment between NIPA's and tax regulations, net .....	89.5	0.0	4.4	-11.6	12.7	21.4	62.6	0.0	0.0	0.0	0.0	0.0
9	Other personal income exempt or excluded from adjusted gross income .....	357.1	99.5	0.0	0.0	0.0	150.2	52.4	0.0	0.0	0.0	0.0	( <sup>3</sup> ) 55.0
10	Plus: Portion of adjusted gross income not included in personal income .....	1,475.1	21.0	0.0	3.9	3.1	0.0	0.0	385.0	0.0	0.0	336.1	726.1
11	Personal contributions for social insurance .....	337.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	337.1	0.0
12	Gains, net of losses, from sale of property .....	505.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	505.4
13	Taxable pensions <sup>7</sup> .....	384.9	0.0	0.0	0.0	0.0	0.0	0.0	384.9	0.0	0.0	0.0	0.0
14	Small business corporation income .....	120.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	120.7
15	Other types of income .....	126.9	21.0	0.0	3.9	3.1	0.0	0.0	0.0	0.0	0.0	-1.0	99.9
16	Plus: Reallocation by type of NIPA income .....	0.0	11.0	-0.0	-0.7	0.0	54.3	-54.3	-8.2	0.0	0.0	-2.1	0.0
17	Fees in other labor income .....	0.0	2.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-2.8	0.0
18	Fiduciaries' share of partnership income <sup>8</sup> .....	0.0	0.0	-0.0	-0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.7	0.0
19	Interest received by nonfarm proprietors .....	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20	Interest distributed by regulated investment companies .....	0.0	0.0	0.0	0.0	0.0	54.3	-54.3	0.0	0.0	0.0	0.0	0.0
21	Taxable disability income payments .....	0.0	8.2	0.0	0.0	0.0	0.0	0.0	-8.2	0.0	0.0	0.0	0.0
22	Equals: BEA-derived adjusted gross income .....	6,526.3	4,393.4	21.7	652.2	40.2	146.7	123.2	379.7	20.7	77.2	-0.0	671.1
23	Adjusted gross income of IRS (as reported) .....	5,851.6	4,173.9	-5.3	201.6	22.3	129.7	166.1	309.4	17.6	76.5	88.6	671.1
24	Plus: Reallocation by type of IRS income .....	0.0	0.0	0.4	81.9	6.3	0.0	0.0	0.0	0.0	0.0	-88.6	0.0
25	Estate or trust income .....	0.0	0.0	0.0	3.0	6.3	0.0	0.0	0.0	0.0	0.0	-9.3	0.0
26	Partnership income .....	0.0	0.0	0.4	78.9	0.0	0.0	0.0	0.0	0.0	0.0	-79.3	0.0
27	Other reallocations .....	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
28	Adjusted gross income of IRS (reallocated) .....	5,851.6	4,173.9	-4.9	283.5	28.6	129.7	166.1	309.4	17.6	76.5	0.0	671.1
29	Adjusted income gap (line 22—line 28) .....	674.7	219.5	26.6	368.7	11.7	17.0	-42.9	70.3	3.1	0.7	-0.0	-0.0
30	Percent distribution of AGI gap .....	100.0	32.5	3.9	54.7	1.7	2.5	-6.4	10.4	0.5	0.1	.....	.....
31	Relative AGI gap <sup>9</sup> .....	10.3	5.0	122.6	56.5	29.0	11.6	-34.8	18.5	14.9	0.9	.....	.....
32	Addendum: Misreporting adjustments included in personal income .....	369.7	103.6	.....	278.5	1.1	.....	-13.5	.....	.....	.....	.....	.....

1. Taxable social security benefits also include the social security equivalent benefit portion of tier 1 railroad retirement benefits.

2. Consists primarily of other labor income and the nontaxable transfer payments to persons, less personal contributions for social insurance.

3. Consists of tier 2 railroad retirement benefits that are taxed in the same manner as benefits paid under private employer retirement plans.

4. Consists of the imputations included in personal income shown in NIPA table 8.21 (line 53), except for employer contributions for health and life insurance premiums (line 146). In this table, these premiums are included in line 4.

5. Consists of imputed interest received by persons from life insurance carriers shown in NIPA table 8.20 (line 53) and investment income of private and government employee pension plans.

6. Statutory adjustments or specific adjustments ("above-the-line deductions") from gross income taken to arrive at AGI.

7. Consists of the taxable portion of private and government employee retirement plan benefit payments.

8. Consists of partnership income retained by fiduciaries.

9. Adjusted gross income gap (line 29) as a percentage of the BEA-derived AGI (line 22).

AGI Adjusted gross income

BEA Bureau of Economic Analysis

CCAj Capital consumption adjustment

IVA Inventory valuation adjustment

IRS Internal Revenue Service

NIPAs National income and product accounts

## The AGI Gap

The estimates of the BEA-derived AGI differ significantly from the IRS estimates of AGI. The "AGI gap" is defined as the difference between the total BEA-derived AGI (line 22) and total IRS AGI (line 23), and the AGI gap for each type of income (line 29) is the difference between the BEA-derived AGI for that type of income (line 22) and the reallocated IRS AGI for that type of income (line 28). The percent distribution of the AGI gap by type of income is shown in line 30, and the relative AGI gap for each type of income, which is the AGI gap for that type of income (line 29) as a percentage of the BEA-derived AGI for that type of income (line 22), is shown in line 31.

The AGI gap results from several sources. First, the source data used to estimate personal income and its components contain errors. Reliable data are unavailable to estimate some items, such as income earned by individuals who are not required to file income tax returns. Some of the differences between the definitions of personal income and AGI are unknown.<sup>10</sup>

Second, the IRS estimates of total AGI and its components are affected by sampling and measurement errors. The IRS estimates are based on a stratified probability sample of unaudited individual income tax returns that are not adjusted for misreporting (however, the sample returns are edited for consistent statistical definitions and for incorrect or missing entries in order to make them consistent with other entries on the returns and with accompanying schedules).

Third, the estimates of BEA-derived AGI include both explicit and implicit adjustments for tax-return misreporting.<sup>11</sup> Explicit adjustments are made for the effects of tax-return misreporting on the source data used to prepare the estimates of wage and salary disbursements, nonfarm proprietors' income, royalty income, and personal interest income (line 32).<sup>12</sup> Implicit adjustments are also embedded in the source data used for some

components of personal income because the source data are from the payers of the income. For example, the estimates of wage and salary disbursements are based on tabulations of wages and salaries of employees covered by State unemployment insurance from the Bureau of Labor Statistics (BLS), on wages from the Office of Personnel Management, and on wages from a variety of other sources; these estimates are then adjusted for coverage differences. Personal dividend income is based primarily on tabulations of corporate income tax returns, adjusted for understatement of income on tax returns and for conceptual differences. Transfer payments are based on budget data from the Federal Government and from State and local governments rather than on individual tax return data.<sup>13</sup>

Fourth, each July, the personal income estimates for the most recent 3 years are revised to incorporate source data that are more complete, more detailed, and otherwise more appropriate than those that were previously incorporated, and about every 5 years, the estimates for all years are subject to a comprehensive revision that incorporates substantial definitional and statistical changes.<sup>14</sup> The IRS estimates of AGI are based on a sample from all individual income tax returns, except tentative and amended returns, processed during a calendar year.<sup>15</sup> The AGI estimates are in-

12. The major source data for these adjustments are the 1988 Taxpayer Compliance Measurement Program (TCMP) and Census Bureau "exact match" files for 1996. The TCMP provides a measure of noncompliance for individuals who file tax returns. Through the TCMP, the IRS develops noncompliance ratios. Explicit adjustments for misreporting on tax returns for nonfarm proprietors' income are determined by multiplying noncompliance ratios times IRS tabulations of levels of business net income as reported on tax returns. The IRS compiles these net income tabulations annually, but noncompliance ratios have been held constant since 1988, the last year for which there was a TCMP. Exact match studies provide data on persons who did not file income tax returns. Nonfiler adjustments are based on matching information supplied on the annual income supplement of the Current Population Survey (CPS) with individual income tax returns. Respondents who report income on the CPS but who cannot be matched to a tax return are considered nonfilers. The latest nonfiler adjustments are based on Census Bureau tabulations of unreported income from the 1996 Exact Match Study.

For additional information about the calculation of these adjustments, see Robert P. Parker, "Improved Adjustments for Misreporting of Tax Return Information Used To Estimate the National Income and Product Accounts, 1977," SURVEY 64 (June 1984): 17-25; "The Comprehensive Revision of the U.S. National Income and Product Accounts: A Review of Revisions and Major Statistical Changes," SURVEY 71 (December 1991): 39-40; "Improved Estimates of the National Income and Product Accounts for 1959-95: Results of the Comprehensive Revision," SURVEY 76 (January/February 1996): 24-25; and Moulton, Seskin, and Sullivan, "Annual Revision of the National Income and Product Accounts," 27.

13. Information from IRS audit studies shows misreporting of these payments on individual income tax returns.

14. For major improvements that were introduced in the most recent comprehensive revision, see Moulton, Parker, and Seskin, "A Preview of the 1999 Comprehensive Revision," 7-20.

15. According to the IRS, tentative returns are excluded from the population because the revised returns may have been sampled later, and amended returns are excluded because the original returns have already been subjected to sampling. A small percentage of returns are not identified as tentative or amended until after sampling; these returns, along with those that contained no income information, are excluded in calculating estimates. For more details, see *Statistics of Income—Individual Income Tax Returns 1998*: 19.

10. Although some individuals who are not required to file tax returns do so mostly to secure refunds of withheld tax or to receive refunds from earned income tax credit or child tax credit, income earned by low-income individuals who are not required to file returns is probably the largest known missing reconciliation item. The filing requirements are generally based on gross income, filing status, marital status, age, and to a lesser extent, on dependency and blindness.

11. The estimates of personal income are mainly based on source data from the payers of the income. AGI data are used only for the estimates of nonfarm sole proprietors' income and royalty payments in rental income of persons. For these components, BEA adjusts for misreporting of tax return information by taxpayers. Thus, the AGI gap for these components largely reflects the explicit misreporting adjustments (line 32 in tables 1 and 2) added to the source data. See "Updated Summary NIPA Methodologies," SURVEY 81 (October 2001): 29-32 and the text on the CD-ROM *State Personal Income, 1929-98*. Information on methodology is also available on BEA's Web site.

tended to represent all the returns filed for a tax liability year from January 1 to December 31, but about 2 to 3 percent of the returns processed in a calendar year are for tax liability years ending other than on December 31 or for previous years. Unlike personal income, AGI estimates are not updated to incorporate newly available data.

### The AGI Gap by Type of Income for 1959–99

Table 3 shows the estimates of the AGI gap for total income and for each type of income for 1959–99, and table 4 shows the relative AGI gap for total income and for each type of income for 1959–99. Over this period, the relative AGI gap for total income averaged about 11 percent, ranging from a low of about 9 percent in the late 1960s to a high of 13 1/2 percent in 1984.

By type of income, the relative AGI gap for wage and salary disbursements is the smallest, primarily because income tax withholding at the source is required for most wage and salary disbursements. The relative AGI gap for wage and salary disbursements averaged about 3 percent over the period.

The trends in the relative AGI gaps for non-wage incomes partly offset each other (see the addenda in table 4). For nonwage incomes subject to the requirements for filing information returns by employers, the trend in the combined relative AGI gap is generally downward, declining from about 39 percent in 1959 to about 7 percent in 1999.<sup>16</sup>

The combined relative AGI gap for incomes not subject to the filing requirements (the second

16. Employers and other payers of income, including partnerships and non-profit organizations, are required to file information returns with the IRS for certain payments made during the year in the course of the employers' trade or business. Personal dividend income and personal interest income are the primary examples of nonwage incomes subject to the requirements for filing information returns. In recent years, estimating the AGI gap for these types of income has been difficult because the taxable portion of interest received by individuals from mutual funds is reallocated from personal interest income to personal dividend income (line 19 in tables 1 and 2), because the allocation of income received from private noninsured pension plans (part of line 6) between interest and dividends is based on incomplete data, and because some individuals may have inadvertently reported income from mutual funds as interest rather than as dividends on their tax returns. Thus, tables 3 and 4 show the AGI gap for personal dividend and personal interest income combined and the AGI gaps for each of these types of income.

Beginning with 1984, taxes have been withheld on taxable pension benefit payments unless the recipient elects not to have the tax withheld and on interest and dividends if the recipient fails to furnish a correct taxpayer identification number or has interest or dividends that were underreported on past returns.

Table 3.—The BEA and IRS Measures of AGI and the AGI Gap by Type of Income, 1959–99

[Billions of dollars]

Year	BEA-derived AGI	IRS AGI	AGI gap	Wage and salary disbursements	Proprietors' income		Rental income of persons	Personal dividend and personal interest income			Taxable pension and annuities	Taxable unemployment compensation	Taxable social security benefits
					Farm	Nonfarm		Total	Personal dividend income	Personal interest income			
1959	339.1	305.1	34.0	7.7	7.1	9.7	-0.1	7.9	0.8	7.1	1.7	0.0	0.0
1960	351.4	315.5	36.0	8.8	6.4	10.1	0.0	8.7	1.2	7.6	1.9	0.0	0.0
1961	365.8	329.9	36.0	7.5	5.6	11.5	0.4	8.9	1.2	7.7	2.1	0.0	0.0
1962	387.8	348.7	39.1	9.1	6.2	11.8	0.4	9.4	1.2	8.2	2.2	0.0	0.0
1963	409.2	368.8	40.4	8.3	7.0	12.6	0.7	9.4	1.3	8.1	2.4	0.0	0.0
1964	442.2	396.7	45.6	10.2	6.3	14.1	0.8	11.4	2.0	9.5	2.8	0.0	0.0
1965	479.8	429.2	50.6	11.7	7.1	14.2	1.2	13.3	2.3	11.0	3.2	0.0	0.0
1966	521.7	468.5	53.3	13.5	7.3	15.9	1.0	12.0	0.5	11.5	3.5	0.0	0.0
1967	555.4	504.8	50.6	11.0	5.7	16.6	0.9	12.4	0.5	11.9	4.0	0.0	0.0
1968	609.3	554.4	54.9	13.6	5.5	17.0	0.7	13.7	0.9	12.9	4.3	0.0	0.0
1969	663.3	603.5	59.7	12.4	7.7	18.7	0.7	15.2	0.7	14.5	5.0	0.0	0.0
1970	699.3	631.7	67.6	13.1	9.3	20.5	0.9	17.7	1.0	16.7	6.1	0.0	0.0
1971	744.8	673.6	71.2	13.3	8.3	23.7	0.8	18.3	1.4	16.9	7.1	0.0	0.0
1972	825.5	746.0	79.5	10.8	10.9	28.8	1.6	19.2	2.0	17.2	8.2	0.0	0.0
1973	926.1	827.1	99.0	16.4	16.7	32.2	1.5	23.5	3.4	20.1	8.6	0.0	0.0
1974	1,005.4	905.5	99.8	8.8	17.8	38.1	0.4	25.2	2.7	22.5	9.5	0.0	0.0
1975	1,048.0	947.8	100.2	13.6	12.6	42.2	0.1	21.1	1.0	20.0	10.7	0.0	0.0
1976	1,169.1	1,053.9	115.2	13.2	11.7	53.6	-0.4	25.3	3.8	21.5	11.8	0.0	0.0
1977	1,297.6	1,158.5	139.1	19.3	9.9	61.3	1.8	34.5	6.2	28.3	12.3	0.0	0.0
1978	1,469.6	1,302.4	167.1	24.7	13.0	73.5	2.2	38.9	7.3	31.6	14.9	0.0	0.0
1979	1,658.5	1,465.4	193.1	19.7	15.3	84.6	3.9	50.6	9.2	41.4	18.5	0.4	0.0
1980	1,831.6	1,613.7	217.9	21.3	19.6	89.2	7.1	56.5	12.5	44.1	23.4	0.8	0.0
1981	2,016.3	1,772.6	243.7	21.0	21.3	90.5	12.5	68.7	22.4	46.3	28.8	0.9	0.0
1982	2,094.7	1,852.1	242.6	16.5	17.5	95.5	15.5	62.1	18.4	43.7	33.5	2.0	0.0
1983	2,225.7	1,942.6	283.1	23.5	29.5	109.9	15.6	62.7	23.4	39.3	39.3	2.6	0.0
1984	2,473.3	2,139.9	333.4	27.5	28.8	141.4	19.9	62.7	28.9	33.7	47.2	1.3	4.6
1985	2,629.9	2,306.0	323.9	41.8	25.0	147.2	22.4	34.8	22.1	12.7	48.2	1.4	3.2
1986	2,848.3	2,481.7	366.6	55.1	29.5	147.2	19.5	45.3	19.7	25.6	65.7	1.2	3.1
1987	3,125.4	2,773.8	351.6	76.3	32.6	121.6	15.1	45.7	27.5	18.1	55.0	2.6	2.8
1988	3,415.8	3,083.0	332.8	80.0	36.6	122.9	8.3	37.9	23.1	14.8	42.4	1.9	2.8
1989	3,658.6	3,256.4	402.3	108.2	31.0	127.4	3.9	71.6	40.9	30.7	54.8	2.4	3.0
1990	3,813.2	3,405.4	407.8	112.8	28.4	134.4	4.4	67.4	42.0	25.4	54.3	2.8	3.0
1991	3,864.4	3,464.5	399.9	100.4	30.9	139.3	7.4	65.3	43.8	21.5	49.8	3.6	3.2
1992	4,108.3	3,629.1	479.2	127.3	32.4	165.1	12.0	72.9	32.7	40.2	56.6	8.3	4.5
1993	4,260.0	3,723.3	536.7	145.4	39.0	200.5	10.1	71.5	31.6	39.9	56.7	7.3	6.1
1994	4,485.7	3,907.5	578.2	154.3	28.5	223.5	12.7	84.0	50.5	33.5	63.4	3.9	8.0
1995	4,766.4	4,189.4	577.0	162.8	37.3	246.4	15.5	35.9	35.2	0.7	67.7	2.6	8.8
1996	5,151.6	4,536.0	615.6	188.0	32.1	278.1	13.4	24.5	45.4	-20.9	69.2	3.2	7.2
1997	5,594.3	4,970.0	624.3	208.6	30.6	292.9	12.0	0.2	48.4	-48.3	70.4	3.2	6.5
1998	6,123.7	5,416.0	707.7	242.2	26.8	314.3	11.5	36.6	46.5	-9.9	70.9	3.1	2.3
1999	6,526.3	5,851.6	674.7	219.5	26.6	368.7	11.7	-25.9	17.0	-42.9	70.3	3.1	0.7

AGI Adjusted gross income  
BEA Bureau of Economic Analysis  
IRS Internal Revenue Service

addenda item in table 4) increased from about 32 percent in 1959 to a high of 80 percent in 1984. It was 57 percent in 1999.

**Sources of the Revision to the AGI Gap for 1998**

Table 5 shows the revisions to personal income, reconciliation items, BEA-derived AGI, AGI of IRS, and the AGI gap for 1998. The AGI gap was revised up \$12.3 billion for 1998 (line 29), raising the relative AGI gap by 0.2 percentage point (line 31). An upward revision of \$29.8 billion to personal income that carried through to increase the AGI gap was partly offset by a downward revision of \$12.6 billion to reconciliation items unrelated to the revisions to personal income or to AGI and by a downward revision of \$5.0 billion to AGI that carried through to reduce the AGI gap.

The \$29.8 billion upward revision to personal income that carried through to the AGI gap

reflected a \$35.1 billion upward revision to total personal income (line 1) that was partly offset by a revision of \$5.3 billion to reconciliation items, mostly to other labor income (line 4).<sup>17</sup> The \$5.3 billion revision to other labor income was mostly accounted for by revisions to employer contributions to pension and profit-sharing plans that reflected newly available data from IRS form 5500. Other offsetting revisions were small and included imputed income in personal income (line 5), part of differences in accounting treatment

17. Other large revisions to personal income for 1998 included a \$23.6 billion upward revision to personal interest income, primarily reflecting revised IRS tabulations of tax return data for corporations; a \$3.2 billion upward revision to rental income of persons with capital consumption adjustment (CCAdj), reflecting revised source data from the Federal Reserve Board and the U.S. Department of Agriculture; a \$3.0 billion upward revision to nonfarm proprietors' income with CCAdj, primarily reflecting revised IRS data; a \$2.1 billion upward revision to wage and salary disbursements, primarily reflecting revised BLS tabulations of wages and salaries of employees covered by State unemployment insurance; and a \$2.8 billion downward revision to personal dividend income, primarily reflecting revised IRS tabulations of corporate tax return data. See Moulton, Seskin, and Sullivan, "Annual Revision of the National Income and Product Accounts," 23.

**Table 4.—The Relative AGI Gap by Type of Income, 1959–99**  
[Percent]

Year	Total	Wage and salary disbursements	Proprietors' income		Rental income of persons	Personal dividend and interest income			Taxable pensions and annuities	Taxable unemployment compensation	Taxable social security benefits	Addenda	
			Farm	Nonfarm		Total	Personal dividend income	Personal interest income				The sum of income items except wages, subject to the requirements for filing information returns <sup>1</sup>	The sum of income items not subject to the requirements for filing information returns <sup>2</sup>
1960	10.2	3.3	66.1	27.1	1.0	37.4	10.8	60.0	54.1	0.0	0.0	39.6	32.7
1961	9.8	2.7	59.0	29.1	10.1	36.3	10.7	57.5	53.5	0.0	0.0	38.7	33.0
1962	10.1	3.1	61.5	28.4	9.3	34.5	10.3	53.3	48.5	0.0	0.0	36.5	33.1
1963	9.9	2.7	68.0	29.5	17.0	31.2	9.9	46.8	47.4	0.0	0.0	33.6	35.4
1964	10.3	3.0	66.6	30.1	19.0	34.1	14.1	48.3	47.2	0.0	0.0	36.1	35.1
1965	10.5	3.3	63.8	28.8	25.8	35.5	15.1	49.4	47.0	0.0	0.0	37.2	34.5
1966	10.2	3.4	60.6	30.2	21.6	30.7	3.4	46.6	44.0	0.0	0.0	32.9	34.9
1967	9.1	2.6	59.3	29.8	19.8	29.9	3.2	44.5	44.2	0.0	0.0	32.4	33.2
1968	9.0	2.9	59.2	28.6	15.9	30.0	5.5	43.4	41.8	0.0	0.0	32.2	31.6
1969	9.0	2.4	64.6	30.5	15.0	30.1	4.5	42.5	42.1	0.0	0.0	32.4	34.9
1970	9.7	2.4	73.0	32.9	19.0	31.9	6.2	43.1	43.5	0.0	0.0	34.2	38.5
1971	9.6	2.3	75.5	35.3	15.9	31.2	8.4	40.5	43.2	0.0	0.0	33.8	39.5
1972	9.6	1.7	69.1	38.6	25.2	30.2	10.6	38.5	42.8	0.0	0.0	33.2	42.7
1973	10.7	2.3	65.7	39.7	20.2	31.6	15.3	38.5	39.5	0.0	0.0	33.4	44.3
1974	9.9	1.1	73.8	43.2	6.4	29.5	11.5	36.3	36.2	0.0	0.0	31.0	47.3
1975	9.6	1.7	72.7	45.5	1.8	24.4	4.6	31.5	33.9	0.0	0.0	26.9	47.1
1976	9.9	1.5	72.2	48.6	-6.8	25.8	13.6	30.7	32.4	0.0	0.0	27.5	48.7
1977	10.7	2.0	89.7	49.1	21.8	29.7	18.7	34.1	29.6	0.0	0.0	29.7	50.6
1978	11.4	2.2	73.2	51.6	22.9	29.9	19.5	34.0	31.3	0.0	0.0	30.3	52.3
1979	11.6	1.6	83.9	54.7	37.0	32.0	21.6	35.9	33.1	30.7	0.0	32.3	56.5
1980	11.9	1.6	106.8	57.4	52.5	28.7	24.3	30.2	35.1	27.0	0.0	30.2	61.9
1981	12.1	1.4	156.2	62.5	69.6	27.8	32.7	26.0	35.7	27.3	0.0	29.8	70.4
1982	11.6	1.0	228.1	64.8	81.1	22.9	26.1	21.8	35.8	21.8	0.0	26.1	73.8
1983	12.7	1.4	146.4	64.5	97.1	23.7	32.5	20.4	36.0	27.1	0.0	27.3	75.0
1984	13.5	1.5	198.6	68.0	123.7	21.8	37.3	16.1	37.0	17.8	0.0	26.6	79.7
1985	12.3	2.1	202.5	66.2	134.2	12.8	28.6	6.5	33.6	17.6	25.0	20.1	77.4
1986	12.9	2.6	135.4	64.7	190.6	16.5	24.2	13.2	37.9	15.0	22.6	24.5	75.6
1987	11.2	3.4	102.0	51.9	139.4	16.2	29.2	9.7	30.6	17.2	18.1	21.6	61.1
1988	9.7	3.3	101.0	45.2	83.4	12.6	23.0	7.4	23.4	13.9	16.4	16.5	52.7
1989	11.0	4.2	96.2	44.3	51.2	19.2	33.4	12.2	27.1	16.8	14.6	21.6	49.6
1990	10.7	4.2	96.2	43.9	39.7	18.0	34.4	10.1	25.4	15.5	13.2	20.3	48.2
1991	10.3	3.6	105.0	44.6	47.9	18.5	36.2	9.3	22.0	13.5	13.1	19.4	49.7
1992	11.7	4.3	103.7	46.1	48.5	23.3	29.5	19.9	23.3	21.0	16.2	22.8	50.6
1993	12.6	4.8	107.7	50.4	37.4	25.3	28.4	23.3	22.6	21.0	19.9	23.7	54.2
1994	12.9	4.8	132.2	51.6	38.7	28.7	38.0	21.0	23.6	16.0	17.2	25.2	54.3
1995	12.1	4.8	125.5	53.2	41.6	12.6	27.1	0.5	23.4	11.9	16.2	17.7	56.4
1996	12.0	5.3	126.8	54.1	33.8	8.3	30.3	-14.4	22.5	14.3	12.0	15.2	55.9
1997	11.2	5.5	126.0	53.6	29.9	0.1	28.7	-39.1	21.3	15.5	9.5	11.3	55.0
1998	11.6	5.9	140.5	53.1	28.4	11.0	28.2	-5.9	20.2	15.5	3.3	14.6	54.1
1999	10.3	5.0	122.6	56.5	29.0	-9.6	11.6	-34.8	18.5	14.9	0.9	6.5	57.0

1. Consists of personal dividend income, personal interest income, taxable pensions, taxable unemployment compensation, and taxable social security benefits. These types of income have been subject to varying degrees of withholding since 1984.  
2. Consists of farm proprietors' income, nonfarm proprietors' income, and rental income of persons.

Note.—The relative AGI gap is the AGI gap as a percentage of the BEA-derived AGI and is shown in line 31 of tables 1 and 2.  
AGI Adjusted gross income  
BEA Bureau of Economic Analysis

between NIPA's and tax regulations (line 8), part of other personal income exempt or excluded from AGI (line 9), and personal contributions for social insurance (line 11).

Reconciliation items unrelated to personal income or to AGI were revised down \$12.6 billion. Other things being equal, revisions to the unrelated reconciliation items are all carried through to the BEA-derived AGI and the AGI gap.<sup>18</sup>

BEA-derived AGI was revised up \$38.9 billion (line 22), reflecting the upward revisions of \$29.8 billion to personal income that were carried to the BEA-derived AGI, the downward revision of \$12.6 billion to the unrelated reconciliation items, and an upward revision of \$21.7 billion to AGI components (part of line 9 and lines 12, 14, 15) that are added to personal income in the derivation of the BEA-derived AGI. (As explained below, the \$21.7 billion upward revisions to AGI components did not affect the AGI gap, because the revisions were also reflected in the AGI of IRS (line 23).)

The downward revision of \$5.0 billion to AGI that carried through to the AGI gap reflected a \$26.7 billion upward revision to total AGI (line 23), reflecting the replacement of preliminary tabulations with final tabulations, that was largely

18. The reconciliation items shown in lines 3, 6, 7, and 9 are components of personal income, but they are derived in aggregate in the estimation of personal income; similarly, several reconciliation items included in line 15 are components of AGI, but they are also derived in aggregate in the estimation of AGI. Separate estimates of these reconciliation items are prepared only for reconciliation purposes. Thus, revisions to the separately estimated reconciliation items are unrelated to the revisions to personal income or to AGI, so they are carried through to the AGI gap.

offset by a downward revision of \$21.7 billion to the AGI components that are added to personal income to derive BEA AGI.

The \$21.7 billion offsetting revisions to total AGI reflected an upward revision of \$30.3 billion to gains, net of losses, from sale of property (line 12), an upward revision of \$6.8 billion to small business corporation income (line 14), and a downward revision of \$15.4 billion to other AGI components (line 15 and part of line 9).

Table 5.—Sources of Revision to the AGI Gap, 1998  
[Billions of dollars]

Line <sup>1</sup>		1998
1	Personal income.....	35.1
2	Less: Portion of personal income not included in adjusted gross income.....	16.0
3	Nontaxable transfer payments.....	7.0
4	Other labor income except fees.....	5.3
5	Imputed income in personal income.....	-0.2
6	Investment income of life insurance carriers and pension plans.....	-7.8
7	Investment income received by nonprofit institutions or retained by fiduciaries.....	5.7
8	Differences in accounting treatment between NIPA's and tax regulations, net.....	6.9
9	Other personal income exempt or excluded from adjusted gross income.....	-0.9
10	Plus: Portion of adjusted gross income not included in personal income.....	19.9
11	Personal contributions for social insurance.....	0.1
12	Gains, net of losses, from sale of property.....	30.3
13	Taxable pensions.....	-3.7
14	Small business corporation income.....	6.8
15	Other types of income.....	-13.7
22	Equals: BEA-derived adjusted gross income.....	38.9
23	Adjusted gross income of IRS.....	26.7
29	Adjusted gross income (AGI) gap.....	12.3
31	Relative AGI gap (percent).....	0.2

1. Line numbers in this table correspond to those in table 1.  
AGI Adjusted gross income  
BEA Bureau of Economic Analysis  
IRS Internal Revenue Service  
NIPA's National income and product accounts