Table A.—Summary National Income and Product Accounts, 1994

[Billions of dollars]

Account 1.—National Income and Product Account

Line			Line		
1	Compensation of employees	4,012.0	36	Personal consumption expenditures (2–3)	4,717.0
2	Wage and salary accruals	3,254.0	37	Durable goods	579.5
3	Disbursements (2–7)	3,240.7	38	Nondurable goods	1,428.4
4	Wage accruals less disbursements (3–8 and 5–5)	13.3	39	Services	2,709.1
5	Supplements to wages and salaries	758.0			
6	Employer contributions for social insurance (3–16)	353.0	40	Gross private domestic investment (5–1)	1,007.9
7	Other labor income (2–8)	405.0	41	Fixed investment	946.6
			42	Nonresidential	660.6
8	Proprietors' income with inventory valuation and capital consumption adjustments (2–9).	471.6	43	Structures	184.5
			44	Producers' durable equipment	476.1
9	Rental income of persons with capital consumption adjustment (2–10).	124.4	45	Residential	286.0
			46	Change in business inventories	61.2
10	Corporate profits with inventory valuation and capital consumption adjustments.	570.5	47	Net exports of goods and services	–90.9
			48	Exports (4–1)	721.2
11	Corporate profits with inventory valuation adjustment	519.1	49	Imports (4–4)	812.1
12	Profits before tax	535.1			
13	Profits tax liability (3–13)	186.6	50	Government consumption expenditures and gross investment (3–1 and 5–2).	1,313.0
14	Profits after tax	348.5	51	Federal	510.2
15	Dividends (2–12)	216.2	52	National defense	349.2
16	Undistributed profits	132.3	53	Nondefense	161.0
17	Inventory valuation adjustment	–16.1	54	State and local	802.8
18	Capital consumption adjustment	51.4			
19	Net interest (2–15)	412.3			
20	**National income**	**5,590.7**			
21	Business transfer payments	30.5			
22	To persons (2–19)	23.7			
23	To the rest of the world (4–9)	6.8			
24	Indirect business tax and nontax liability (3–14)	568.5			
25	Less: Subsidies less current surplus of government enterprises (3–7).	26.6			
26	Consumption of fixed capital (5–7)	777.5			
27	Private (5–8)	638.6			
28	Government (5–9)	138.8			
29	General government (5–10)	118.2			
30	Government enterprises (5–11)	20.6			
31	**Gross national income**	**6,940.6**			
32	Less: Receipts of factor income from the rest of the world (4–2).	176.5			
33	Plus: Payments of factor income to the rest of the world (4–5)	168.3			
34	**Gross domestic income**	**6,932.4**			
35	Statistical discrepancy (5–14)	14.6			
	GROSS DOMESTIC PRODUCT	**6,947.0**		**GROSS DOMESTIC PRODUCT**	**6,947.0**

Account 2.—Personal Income and Outlay Account

Line			Line		
1	Personal tax and nontax payments (3–12)	739.1	7	Wage and salary disbursements (1–3)	3,240.7
2	Personal outlays	4,842.1	8	Other labor income (1–7)	405.0
3	Personal consumption expenditures (1–36)	4,717.0			
4	Interest paid by persons (2–17)	110.9	9	Proprietors' income with inventory valuation and capital consumption adjustments (1–8).	471.6
5	Personal transfer payments to the rest of the world (net) (4–7).	14.2			
			10	Rental income of persons with capital consumption adjustment (1–9).	124.4
6	Personal saving (5–4)	210.6			
			11	Personal dividend income	204.8
			12	Dividends (1–15)	216.2
			13	Less: Dividends received by government (3–6)	11.4
			14	Personal interest income	668.1
			15	Net interest (1–19)	412.3
			16	Net interest paid by government (3–5)	144.9
			17	Interest paid by persons (2–4)	110.9
			18	Transfer payments to persons	954.7
			19	From business (1–22)	23.7
			20	From government (3–3)	930.9
			21	Less: Personal contributions for social insurance (3–17)	277.5
	PERSONAL TAXES, OUTLAYS, AND SAVING	**5,791.8**		**PERSONAL INCOME**	**5,791.8**

Table A.—Summary National Income and Product Accounts, 1994—Continued

[Billions of dollars]

Account 3.—Government Receipts and Expenditures Account

Line			Line		
1	Consumption expenditures (1–50)	1,107.0	12	Personal tax and nontax payments (2–1)	739.1
2	Transfer payments	947.3	13	Corporate profits tax liability (1–13)	186.6
3	To persons (2–20)	930.9			
4	To the rest of the world (net) (4–8)	16.4	14	Indirect business tax and nontax liability (1–24)	568.5
5	Net interest paid (2–16)	144.9	15	Contributions for social insurance	630.5
			16	Employer (1–6)	353.0
6	*Less:* Dividends received by government (2–13)	11.4	17	Personal (2–21)	277.5
7	Subsidies less current surplus of government enterprises (1–25).	26.6			
8	*Less:* Wage accruals less disbursements (1–4)	0			
9	Current surplus or deficit (–), national income and product accounts (5–12).	–89.8			
10	Federal	–186.7			
11	State and local	96.8			
	GOVERNMENT CURRENT EXPENDITURES AND SURPLUS.	**2,124.7**		**GOVERNMENT RECEIPTS**	**2,124.7**

Account 4.—Foreign Transactions Account

Line			Line		
1	Exports of goods and services (1–48)	721.2	4	Imports of goods and services (1–49)	812.1
2	Receipts of factor income (1–32)	176.5	5	Payments of factor income (1–33)	168.3
3	Capital grants received by the United States (net) (5–13)	0	6	Transfer payments to the rest of the world (net)	37.3
			7	From persons (net) (2–5)	14.2
			8	From government (net) (3–4)	16.4
			9	From business (1–23)	6.8
			10	Net foreign investment (5–3)	–120.0
	RECEIPTS FROM THE REST OF THE WORLD	**897.7**		**PAYMENTS TO THE REST OF THE WORLD**	**897.7**

Account 5.—Gross Saving and Investment Account

Line			Line		
1	Gross private domestic investment (1–40)	1,007.9	4	Personal saving (2–6)	210.6
2	Gross government investment (1–50)	205.9	5	Wage accruals less disbursements (private) (1–4)	13.3
3	Net foreign investment (4–10)	–120.0	6	Undistributed corporate profits with inventory valuation and capital consumption adjustments.	167.6
			7	Consumption of fixed capital (1–26)	777.5
			8	Private (1–27)	638.6
			9	Government (1–28)	138.8
			10	General government (1–29)	118.2
			11	Government enterprises (1–30)	20.6
			12	Government current surplus or deficit (–), national income and product accounts (3–9).	–89.8
			13	Capital grants received by the United States (net) (4–3)	0
			14	Statistical discrepancy (1–35)	14.6
	GROSS INVESTMENT	**1,093.8**	15	**GROSS SAVING AND STATISTICAL DISCREPANCY**	**1,093.8**

NOTE.—Numbers in parentheses indicate accounts and items of counterentry in the accounts. For example, line 3 of account 1 is shown as "Disbursements (2–7)"; the counterentry is in account 2, line 7.

services, and structures from business and from the rest of the world by general government; payments by general government to households in the form of compensation of employees; the consumption of general government fixed capital, which represents the value of the current services of fixed assets of general government; net purchases of fixed assets by government enterprises; inventory change of government enterprises; and a deduction for general government sales—primarily tuition payments for higher education and charges for medical care. Of this total, gross investment is net purchases of new and used structures and equipment by general government and government enterprises; all other transactions are consumption expenditures. Government consumption expenditures and gross investment excludes purchases by government enterprises (except for fixed assets), transfer payments, interest paid or received by government, subsidies, and transactions in financial assets and in nonproduced assets, such as land.

Compensation of employees (1-1) is the income accruing to employees as remuneration for their work. It is the sum of wage and salary accruals and of supplements to wages and salaries.

Wage and salary accruals (1-2) consists of the monetary remuneration of employees, including the compensation of corporate officers; commissions, tips, and bonuses; voluntary employee contributions to certain deferred compensation plans, such as 401(k) plans; and receipts in kind that represent income. Wage and salary accruals consists of *disbursements* (1-3) and *wage accruals less disbursements* (1-4). Disbursements is wages and salaries as just defined except that retroactive wage payments are recorded when paid rather than when earned. Accruals less disbursements is the difference between wages earned, or accrued, and wages paid, or disbursed. In the NIPA's, wages accrued is the appropriate measure for national income, and wages disbursed is the appropriate measure for personal income.

Supplements to wages and salaries (1-5) consists of employer contributions for social insurance and other labor income. *Employer contributions for social insurance* (1-6) consists of employer payments under the following Federal and State and local government programs: Old-age, survivors, and disability insurance (social security); hospital insurance; unemployment insurance; railroad retirement; government employee retirement; pension benefit guaranty; veterans life insurance; publicly administered workers' compensation; military medical insurance; and temporary disability insurance. *Other labor income* (1-7) consists of employer payments (including payments in kind) to private pension and profit-sharing plans, private group health

and life insurance plans, privately administered workers' compensation plans, supplemental unemployment benefit plans, corporate directors' fees, and several minor categories of employee compensation, including judicial fees to jurors and witnesses, compensation of prison inmates, and marriage fees to justices of the peace.

Proprietors' income with inventory valuation and capital consumption adjustments (1-8) is the current-production income (including income in kind) of sole proprietorships and partnerships and of tax-exempt cooperatives. The imputed net rental income of owner-occupants of farm dwellings is included; the imputed net rental income of owner-occupants of nonfarm dwellings is included in rental income of persons (described below). Proprietors' income excludes dividends and monetary interest received by nonfinancial business and rental incomes received by persons not primarily engaged in the real estate business; these incomes are included in dividends, net interest, and rental income of persons. (See "inventory valuation adjustment" and "capital consumption adjustment.")

Rental income of persons with capital consumption adjustment (1-9) is the net current-production income of persons from the rental of real property except for the income of persons primarily engaged in the real estate business; the imputed net rental income of owner-occupants of nonfarm dwellings; and the royalties received by persons from patents, copyrights, and rights to natural resources. (See "capital consumption adjustment.")

Corporate profits with inventory valuation and capital consumption adjustments (1-10) is the net current-production income of organizations treated as corporations in the NIPA's. These organizations consist of all entities required to file Federal corporate tax returns, including mutual financial institutions and cooperatives subject to Federal income tax; private noninsured pension funds; nonprofit institutions that primarily serve business; Federal Reserve banks; and federally sponsored credit agencies. With several differences, this income is measured as receipts less expenses as defined in Federal tax law. Among these differences: Receipts exclude capital gains and dividends received, expenses exclude depletion and capital losses and losses resulting from bad debts, inventory withdrawals are valued at replacement cost, and depreciation is on a consistent accounting basis and is valued at replacement cost using depreciation profiles based on empirical evidence on used-asset prices that generally suggest a geometric pattern of price declines. Because national income is defined as the income of U.S. residents, its profits component includes income earned abroad by U.S. corporations and excludes income earned

in the United States by the rest of the world. (See "inventory valuation adjustment" and "capital consumption adjustment.")

Profits before tax (1–12) is the income of organizations treated as corporations in the NIPA's except that it reflects the inventory- and depreciation-accounting practices used for Federal income tax returns. It consists of profits tax liability, dividends, and undistributed corporate profits.

Profits tax liability (1–13) is the sum of Federal, State, and local income taxes on all income subject to taxes; this income includes capital gains and other income excluded from profits before tax. The taxes are measured on an accrual basis, net of applicable tax credits.

Profits after tax (1–14) is profits before tax less profits tax liability. It consists of dividends and undistributed corporate profits. *Dividends* (1–15) is payments in cash or other assets, excluding the corporations' own stock, that are made by corporations located in the United States and abroad to stockholders who are U.S. residents. The payments are measured net of dividends received by U.S. corporations. Dividends paid to State and local government social insurance funds and general government are included. *Undistributed profits* (1–16) is corporate profits after tax less dividends.

Inventory valuation adjustment (IVA) (1–17) for corporations is the difference between the cost of inventory withdrawals as valued in the source data used to determine profits before tax and the cost of withdrawals valued at replacement cost. It is needed because inventories as reported in the source data are often charged to cost of sales (that is, withdrawn) at their acquisition (historical) cost rather than at their replacement cost (the concept underlying the NIPA's). As prices change, companies that value inventory withdrawals at acquisition cost may realize profits or losses. Inventory profits, a capital-gains-like element in profits, result from an increase in inventory prices, and inventory losses, a capital-loss-like element in profits, result from a decrease in inventory prices. In the NIPA's, inventory profits or losses are shown as adjustments to business income (corporate profits and nonfarm proprietors' income); they are shown as the IVA with the sign reversed. No adjustment is needed to farm proprietors' income because farm inventories are measured on a current-market-cost basis.

Net interest (1–19) is the interest paid by private business less the interest received by private business, plus the interest received from the rest of the world less the interest paid to the rest of the world. Interest payments on mortgage and home improvement loans and on home equity loans are counted as interest paid by business because home ownership is treated as a business in the NIPA's. In addition to monetary interest, net interest includes imputed interest, which is paid by corporate financial business and is measured as the difference between the property income received on depositors' or policyholders' funds and the amount of property income paid out explicitly. The imputed interest paid by life insurance carriers and noninsured pension plans attributes their investment income to persons in the period it is earned. The imputed interest payments by financial intermediaries other than life insurance carriers and private noninsured pension plans to persons, governments, and to the rest of the world have imputed service charges as counterentries in GDP and in net receipts of factor income from the rest of the world; they are included in personal consumption expenditures, in government consumption expenditures and gross investment, and in exports of goods and services, respectively.

Business transfer payments (1–21) consists of payments *to persons* (1–22) and *to the rest of the world* (1–23) by private business for which no current services are performed. Business transfer payments to persons consists primarily of liability payments for personal injury and of corporate gifts to nonprofit institutions. Business transfer payments to the rest of the world is nonresident taxes—taxes paid by domestic corporations to foreign governments.

Indirect business tax and nontax liability (1–24) consists of (1) tax liabilities that are chargeable to business expense in the calculation of profit-type incomes and (2) certain other business liabilities to general government agencies that are treated like taxes. Indirect business taxes includes taxes on sales, property, and production. Employer contributions for social insurance are not included. Taxes on corporate incomes are not included; these taxes cannot be calculated until profits are known, and in that sense, they are not a business expense. Nontaxes includes regulatory and inspection fees, special assessments, fines and forfeitures, rents and royalties, and donations. Nontaxes generally excludes business purchases from general government agencies of goods and services that are similar to those provided by the private sector. Government receipts from the sales of such products are netted against government consumption expenditures.

Subsidies less current surplus of government enterprises (1–25). *Subsidies* is the monetary grants paid by government agencies to private business and to government enterprises at another level of government. The *current surplus of government enterprises* is their current operating revenue and subsidies received from other levels of government less their current expenses. In the calculation of their current surplus, no deduction is made for net interest paid. The current surplus of government enterprises is not counted as a profit-type income, and

therefore, it is not counted as a factor charge. Subsidies and current surplus are shown as a combined entry because deficits incurred by some government enterprises may result from selling goods to business at below-market prices in lieu of giving them subsidies.

Consumption of fixed capital (1–26) is a charge for the using up of private and government fixed capital located in the United States. It is based on studies of prices of used equipment and structures in resale markets. For general government and for nonprofit institutions that primarily serve individuals, it is recorded in government consumption expenditures and in personal consumption expenditures, respectively, as the value of the current services of the fixed capital assets owned and used by these entities. *Private capital consumption allowances* consists of tax-return-based depreciation charges for corporations and nonfarm proprietorships and of historical-cost depreciation (calculated by BEA using a geometric pattern of price declines) for farm proprietorships, rental income of persons, and nonprofit institutions. *Private capital consumption adjustment* is the difference between private capital consumption allowances and private consumption of fixed capital.

Receipts of factor income from the rest of the world (1–32) consists of receipts by U.S. residents of interest and dividends, of reinvested earnings of foreign affiliates of U.S. corporations, and of compensation paid to U.S. residents by foreigners.

Payments of factor income to the rest of the world (1–33) consists of payments to foreign residents of interest and dividends, of reinvested earnings of U.S. affiliates of foreign corporations, and of compensation paid to foreigners by U.S. residents.

Statistical discrepancy (1–35) is GDP less GDI or GNP less GNI. It is recorded in the NIPA's as an "income" component that reconciles the income and product sides of the accounts. As noted above, it arises because the two sides are estimated using independent and imperfect data.[4]

Personal Income and Outlay Account

Personal income is 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

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4. For additional details, see the box "The Statistical Discrepancy," in Robert P. Parker and Eugene P. Seskin, "Annual Revision of the National Income and Product Accounts," SURVEY OF CURRENT BUSINESS 77 (August 1997): 19.

income, and transfer payments to persons, less personal contributions for social insurance.

Wage and salary disbursements (see 1–3).

Other labor income (see 1–7).

Proprietors' income with inventory valuation and capital consumption adjustments (see 1–8).

Rental income of persons with capital consumption adjustment (see 1–9).

Personal dividend income (2–11) is the dividend income of persons from all sources. It equals net dividends paid by corporations (see 1–15) less *dividends received by government* (2–13). Dividends received by government consists of dividends received by State and local governments, primarily by their retirement systems.

Personal interest income (2–14) is the interest income (monetary and imputed) of persons from all sources. It equals net interest (see 1–19) plus *net interest paid by government* (2–16) plus *interest paid by persons* (2–17). The last item consists of all interest paid by individuals except mortgage interest, which is reflected in net rental income of persons.

Transfer payments to persons is income payments to persons for which no current services are performed. It consists of business transfer payments to persons (see 1–22) and *government transfer payments* (2–20). Government transfer payments includes benefits from the following social insurance funds: Old-age, survivors, and disability insurance (social security); hospital insurance; supplementary medical insurance; unemployment insurance; government employee retirement; railroad retirement; pension benefit guaranty; veterans life insurance; workers' compensation; military medical insurance; and temporary disability insurance. Government transfer payments also includes benefits from certain other programs: Veterans benefits other than life insurance, food stamps, black lung, supplemental security income, public assistance (including medical care and family assistance), and educational assistance. Government payments to nonprofit institutions excluding payments for work under research and development contracts are also included.

Personal contributions for social insurance (2–21) includes payments by employees, self-employed, and other individuals who participate in the following government programs: Old-age, survivors, and disability insurance (social security); hospital insurance; supplementary medical insurance; unemployment insurance; government employee retirement; railroad retirement; veterans life insurance; and temporary disability insurance.

Personal tax and nontax payments (2–1) is tax payments (net of refunds) by U.S. residents that are not chargeable to business expense and certain other personal

payments to government agencies (except government enterprises) that are treated like taxes. Personal taxes includes taxes on income, including realized net capital gains; on transfers of estates and gifts; and on personal property. Nontaxes includes donations and fees, fines, and forfeitures. Personal contributions for social insurance is not included. Taxes paid by U.S. residents to foreign governments and taxes paid by foreigners to the U.S. Government are both included in transfer payments.

Personal outlays (2–2) is the sum of personal consumption expenditures (see 1–36), interest paid by persons (see 2–17), and *personal transfer payments to the rest of the world (net)* (2–5). The last item is personal remittances in cash and in kind to the rest of the world less such remittances from the rest of the world.

Personal saving (2–6) is personal income less the sum of personal outlays and personal tax and nontax payments. It is the current saving of individuals (including proprietors and partnerships), nonprofit institutions that primarily serve individuals, life insurance carriers, private noninsured welfare funds, and private trust funds. Personal saving may also be viewed as the sum of the net acquisition of financial assets (such as cash and deposits, securities, and the change in the net equity of individuals in life insurance and in private noninsured pension plans) and the change in physical assets less the sum of net borrowing and of consumption of fixed capital.

Government Receipts and Expenditures Account

Personal tax and nontax payments (see 2–1).
Corporate profits tax liability (see 1–13).
Indirect business tax and nontax liability (see 1–24).
Contributions for social insurance (see 1–6 and 2–21).
Consumption expenditures (see 1–50).

Transfer payments (3–2) is transfer payments to persons (see 2–20) and *transfer payments to the rest of the world (net)*(3–4). The latter consists of U.S. Government military and nonmilitary grants in cash and nonmilitary grants in kind to foreign governments and of U.S. Government transfers, mainly retirement benefits, to former residents of the United States.

Net interest paid (3–5). Net interest paid by government is interest paid by government to persons, to business, and to the rest of the world (that is, to foreign businesses, governments, and persons) less interest received by government from persons, from business, and from the rest of the world. Interest paid consists of monetary interest paid on public debt and other financial obligations. Interest received consists of monetary and imputed interest received on loans and investments, in-

cluding on the balances of State and local government social insurance funds.

Dividends received by government (see 2–13).
Subsidies less current surplus of government enterprises (see 1–25).
Wage accruals less disbursements (see 1–4).

Current surplus or deficit (-), national income and product accounts (3–9) is the sum of government receipts (lines 12, 13, 14, and 15 of account 3) less the sum of government expenditures (lines 1, 2, 5, 6, 7, and 8 of account 3). It may also be viewed as the sum of net acquisition of financial assets by general government and government enterprises and net government purchases of land and of rights to government-owned land including oil resources, less net borrowing.

Foreign Transactions Account

Imports of goods and services (see 1–49).
Payments of factor income (see 1–33).
Transfer payments to the rest of the world (see 1–23, 2–5, and 3–4).

Net foreign investment (4–10) is U.S. exports of goods and services, receipts of factor income, and capital grants received by the United States (net) (see below), less imports of goods and services by the United States, payments of factor income, and transfer payments to the rest of the world (net). It may also be viewed as the acquisition of foreign assets by U.S. residents less the acquisition of U.S. assets by foreign residents. It includes the statistical discrepancy in the balance of payments accounts.

Exports of goods and services (see 1–48).
Receipts of factor income (see 1–32).
Capital grants received by the United States (net) (4–3) is mainly the allocation of Special Drawing Rights to the United States.

Gross Saving and Investment Account

Personal saving (see 2–6).
Wage accruals less disbursements (see 1–4).
Undistributed corporate profits with inventory valuation and capital consumption adjustments (see 1–16, 1–17, and 1–18).
Consumption of fixed capital (see 1–26).
Government current surplus or deficit (-), national income and product accounts (see 3–9).
Capital grants received by the United States (net) (see 4–3).
Statistical discrepancy (see 1–35).
Gross private domestic investment (see 1–40).
Gross government investment (see 1–50).
Net foreign investment (see 4–10).

Other definitions

Final sales of domestic product is GDP minus change in business inventories; equivalently, it is the sum of personal consumption expenditures, gross private domestic *fixed* investment, government consumption expenditures and gross investment, and net exports of goods and services.

Gross domestic purchases is the market value of goods and services purchased by U.S. residents, regardless of where those goods and services were produced. It is GDP minus net exports of goods and services; equivalently, it is the sum of personal consumption expenditures, gross private domestic investment, and government consumption expenditures and gross investment.

Final sales to domestic purchasers is gross domestic purchases minus change in business inventories.

Population is the total population of the United States, including the Armed Forces overseas and the institutionalized population. The monthly estimate is the average of Census Bureau survey estimates for the first of the month and the first of the following month; the quarterly and annual estimates are the averages of the relevant monthly estimates.

Personal saving as a percentage of disposable personal income (DPI), frequently referred to as "the personal saving rate," is calculated on a monthly, quarterly, and annual basis as the ratio of personal saving to DPI.

Gross saving as a percentage of gross national product (GNP), sometimes referred to as "the national saving rate," is calculated on a quarterly and annual basis as the ratio of gross saving—the sum of gross private saving, gross government saving, and capital grants received by the United States (net)—to GNP.

U.S. residents are individuals, governments, business enterprises, trusts, associations, and similar institutions that have the center of their economic interest in the United States and that reside or expect to reside in the United States for 1 year or more. (For example, business enterprises resident in the United States include U.S. affiliates of foreign companies.) In addition, U.S. residents include all U.S. citizens who reside outside the United States for less than 1 year and U.S. citizens residing abroad for 1 year or more who meet one of the following criteria: Owners or employees of U.S. business enterprises who reside abroad to further the enterprises' business and who intend to return within a reasonable period; U.S. Government civilian and military employees and members of their immediate families; and students who attend foreign educational institutions.

Foreign residents include international institutions located in the United States, foreign nationals employed by their home Governments in the United States, and foreign affiliates of U.S. companies.

The rest of the world consists of foreign residents who are transactors with U.S. residents.

Real output and related measures

The chain-type quantity and price indexes, in combination with the current-dollar estimates, provide users with the basic data series from which all other analytical tables and presentations of the NIPA's are derived. The chained (1992) dollar estimates provide measures to calculate the percent changes for GDP and its components that are consistent with those calculated from the chain-type quantity indexes. These estimates also provide comparisons of levels over time and reasonable approximations of the relative importance, and the contributions to growth in GDP, of most components for the years close to 1992. The chained (1992) dollar estimates are also used to compute certain key aggregates, such as per capita GDP.

Quantity and price indexes

Changes in current-dollar GDP measure changes in the market value of the goods and services produced in the economy in a particular period. For many purposes, it is necessary to decompose these changes into quantity changes and price changes.

The changes in quantities and prices in the NIPA's are calculated using a Fisher formula that incorporates weights from two adjacent periods. For example, the 1992–93 change in real GDP uses prices for 1992 and 1993 as weights, and the 1992–93 change in prices uses quantities for 1992 and 1993 as weights.[5] These annual changes are "chained" (multiplied) together to form time series of quantity and price. (For more details, see the box "Basic Formulas for Calculating Chain-Type Quantity and Price Indexes.") Because the Fisher formula allows

5. Because the source data available for most components of GDP are measured in dollars rather than in units, the quantities of most of the detailed components used to calculate percent changes are obtained by deflation. For deflation, quantities are approximated by real values (expressed at present with 1992 as the base period) that are calculated by dividing the current-dollar value of the component by its price index, where the price index uses 1992 as the base period.

Two other methods, quantity extrapolation and direct base-year valuation, are also used to calculate the real values for a small number of the most detailed GDP components. For quantity extrapolation, the real values are obtained by extrapolating the base-year current-dollar estimates in both directions from the base period (1992) by quantity indicators; for example, the real values for mining exploration, shafts, and wells structures are extrapolated using oilwell footage drilled. For direct-base-year valuation, the real values are obtained by multiplying base-year prices by quantity data for each period; for example, the real values of natural gas inventories are calculated using quantities and prices of natural gas stocks.

for the effects of changes in relative prices and in the composition of output over time, the resulting quantity or price changes are not affected by the substitution bias associated with the fixed-weighted formula previously used to calculate changes in quantities and prices.[6] The Fisher formula also produces results that are not affected by the choice of base periods. In addition, because the changes in quantities and prices calculated in this way are symmetric, the product of a quantity index and the corresponding price index equals the current-dollar index.[7]

Chain-type quantity and price indexes that correspond to most of the current-dollar output, product, and expenditure measures are presented in tables 7.1–7.14 and 7.17–7.20.[8] Percentage changes from the preceding period for GDP and its major components and for other aggregates are presented in table 8.1. Contributions by major components to changes in real GDP are presented in table 8.2, which is discussed in more detail below.

Chained-dollar measures

BEA also prepares measures of real GDP and its components in a dollar-denominated form, designated *"chained (1992) dollar estimates."* For GDP and most other series, these estimates are computed by multiplying the 1992 current-dollar value by a corresponding quantity index number and then dividing by 100.[9] For example, if

a current-dollar GDP component equaled $100 in 1992 and if real output for this component increased 10 percent in 1993, then the chained (1992) dollar value of this component would be $110 ($100 × 1.10) in 1993.

For analyses of changes over time in an aggregate or in a component, the percentage changes calculated from the chained-dollar estimates and from the chain-type quantity indexes are the same; any differences will be small and due to rounding. However, because the relative prices used as weights for any period other than the base period differ from those used for the base period, the chained-dollar values for the detailed GDP components do not necessarily sum to the chained-dollar estimate of GDP or to any intermediate aggregate. A measure of the extent of such differences is provided in most chained-dollar tables by a "residual" line, which indicates the difference between GDP (or an other major aggregate) and the sum of the most detailed components in the table.

For periods close to the base year, when there usually has not been much change in the relative prices that are used as the weights for the chain-type index, the residuals tend to be small, and the chained (1992) dollar estimates can be used to approximate the contributions to growth and to aggregate the detailed estimates.

As one moves further from the base year, the residual tends to become larger, and the chained-dollar estimates become less useful for analyses of contributions to growth. For this reason, most of the chained-dollar detailed component series in this publication are shown beginning with 1982.[10] In general, the use of chained-dollar estimates to calculate component shares or component contributions to real growth may be misleading for periods away from the base year. In particular, for components for which relative prices are changing rapidly, these calculations may be misleading even just a few years from the base year.

To assist users in making valid comparisons across components for periods away from the base year, several changes have been made in the NIPA tables. Table 8.2 provides an accurate measure of the contributions of the major GDP components to the percentage change in real GDP for all periods. This table should be used for periods far from the base period, when the overall residual and the errors in contributions to growth become quite large. This table uses exact formulas for attributing growth to the components of GDP and of other aggregates, but the presentation is limited to the contributions to changes

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6. For a discussion of the advantages of the Fisher index, see Jack E. Triplett, "Economic Theory and BEA's Alternative Quantity and Price Indexes," SURVEY 72 (April 1992): 49–52; and J. Steven Landefeld and Robert P. Parker, "BEA's Chain Indexes, Time Series, and Measures of Long-Term Economic Growth," SURVEY 77 (May 1997): 58–68.

7. For the annual estimates of NIPA aggregates that include the components the "change in business inventories" and "change in Commodity Credit Corporation inventories," this relationship does not hold exactly, because of the price-data conventions used to calculate those components. In addition, for the quarterly estimates, all quarterly chain-type quantities and prices are adjusted to average to the corresponding annual estimates. For details on quarterly calculations, see the box "Basic Formulas for Calculating Chain-Type Quantity and Price Indexes."

8. Indexes are not presented for change in inventories, for net exports, and for most of the "net" series in tables 7.5, 7.7, 7.11, 7.13, and 7.20. Indexes for these series are not meaningful.

9. For change in business inventories (in tables 1.2, 1.4, 1.6, 5.3, 5.11, 8.5, 8.7, and 8.9), real values are calculated as the difference between end-of-period and beginning-of-period chain-weighted stocks of inventories.

The following "real" series are calculated as the current-dollar value of the series divided by an appropriate implicit price deflator: The chained-dollar values of gross national income and gross domestic income (in table 1.10), of command-basis exports of goods and services and receipts of factor income (in table 1.11), of gross and net domestic product of nonfinancial corporate business (in table 1.16), and of disposable personal income (in tables 2.1 and 2.9).

For the following series, real values are calculated as the sum of, or the difference between, chained-dollar series: Net exports (in tables 1.2, 8.5, and 8.7); command-basis gross national product (in table 1.11), foreign travel and other, net (in table 2.5); net foreign travel (in table 2.7); Federal consumption expenditures for durable goods, for nondurable goods, and for Commodity Credit Corporation inventory change (in table 3.8); net investment by major

type (in table 5.3); and Federal defense and nondefense net purchases of used structures (in table 5.15).

10. Chained (1992) dollar estimates for selected series for earlier periods are shown in tables 1.2, 1.4, 1.6, 1.8, 1.10, 1.11, 1.16, 2.9, 5.11, 5.13, and 8.3. Chained (1992) dollar estimates for the remaining detailed series are available through STAT-USA (see the box "Data Availability").

Basic Formulas for Calculating Chain-Type Quantity and Price Indexes

Annual indexes

This box shows the basic calculations used to prepare annual and quarterly chain-type quantity and price indexes. The formula used to calculate the annual change in real GDP and other components of output and expenditures is a Fisher index (Q_t^F) that uses weights for 2 adjacent years (years $t - 1$ and t).

The formula for real GDP in year t relative to its value in year $t - 1$ is

$$Q_t^F = \sqrt{\frac{\sum p_{t-1}q_t}{\sum p_{t-1}q_{t-1}} \times \frac{\sum p_t q_t}{\sum p_t q_{t-1}}},$$

where the p's and q's represent prices and quantities of detailed components in the 2 years.

Because the first term in the Fisher formula is a Laspeyres quantity index (Q_t^L), or

$$Q_t^L = \frac{\sum p_{t-1}q_t}{\sum p_{t-1}q_{t-1}},$$

and the second term is a Paasche quantity index (Q_t^P), or

$$Q_t^P = \frac{\sum p_t q_t}{\sum p_t q_{t-1}},$$

the Fisher formula can also be expressed for year t as the geometric mean of these indexes as follows:

$$Q_t^F = \sqrt{Q_t^L \times Q_t^P}.$$

The percent change in real GDP (or in a GDP component) from year $t - 1$ to year t is calculated as

$$100(Q_t^F - 1.0).$$

Similarly, price indexes are calculated using the Fisher formula

$$P_t^F = \sqrt{\frac{\sum p_t q_{t-1}}{\sum p_{t-1}q_{t-1}} \times \frac{\sum p_t q_t}{\sum p_{t-1}q_t}},$$

which is the geometric mean of a Laspeyres price index (P_t^L) and a Paasche price index (P_t^P), or

$$P_t^F = \sqrt{P_t^L \times P_t^P}.$$

The chain-type quantity index value for period t is

$$I_t^F = I_{t-1}^F \times Q_t^F,$$

and the chain-type price index is calculated analogously. Chain-type real output and price indexes are presented with the base year (b) equal to 100; that is, $I_b = 100$.

The current-dollar change from year $t - 1$ to year t expressed as a ratio is equal to the product of the Fisher price and quantity indexes:[1]

$$\frac{\sum p_t q_t}{\sum p_{t-1}q_{t-1}} = P_t^F \times Q_t^F.$$

Quarterly indexes

The same formulas are used to calculate the quarterly indexes for the most recent quarters, called the "tail" period; quarterly data are substituted for annual data. The tail period begins in the third quarter of the most recent complete year that is included in an annual or comprehensive NIPA revision, so the specific quarters covered change annually. Modified formulas are used to calculate the indexes for the other quarters, called the "historical" period. Quarterly quantity data are used for the quantity indexes, and quarterly price data are used for the price indexes, but the weights—prices for a quantity index and quantities for a price index—are annual data.

The weights that are used for the indexes in the historical period depend on the quarter being estimated. For each quarter, the weights for the closest 2 years are used: For the first and second quarters of a year, the weights are from that year and the preceding year; while for the third and fourth quarters, the weights are from that year and the next year.

All quarterly chain-type indexes for completed years that have been included in an annual or comprehensive revision are adjusted so that the quarterly indexes average to the corresponding annual index. When an additional year is completed between annual revisions, the annual index is computed as the average of the quarterly indexes, so no adjustment is required to make the quarterly and annual indexes consistent. For example, until the 1998 annual revision is released, the chain-type indexes for the year 1997 are derived by averaging the four quarterly indexes for 1997.

Chained-dollar estimates

The chained-dollar value (CD_t^F) is calculated by multiplying the index value by the base-period current-dollar value $(\sum p_b q_b)$ and dividing by 100.[2] For period t,

$$CD_t^F = \sum p_b q_b \times I_t^F / 100.$$

Implicit price deflators

The implicit price deflator (IPD_t^F) for period t is calculated as the ratio of the current-dollar value to the corresponding chained-dollar value, multiplied by 100, as follows:

$$IPD_t^F = \frac{\sum p_t q_t}{CD_t^F} \times 100.$$

1. See also footnote 7 in the text.
2. For exceptions to this procedure, see footnote 9 in the text.

from the preceding year or quarter and to changes in the major components of GDP. (For details, see the box "Calculation of Component Contributions to the Change in GDP.")

For some analytical purposes, it may be desirable to calculate contributions to growth for more than a single quarter or year, to calculate contributions to growth for aggregates other than GDP, or to work with real estimates that are denominated in dollars. Two articles in the SURVEY provide information on how to prepare chained-dollar series with different base periods that permit the calculation of close approximations of contributions to real growth or of relative changes for any period.[11] These articles show how to calculate a chained-dollar series for any period by using the percent changes in the chain-type indexes to compute chained-dollar series indexed to the current dollars of whatever base period is appropriate for the analysis. In addition, these articles provide a number of chained-dollar series over frequently cited time periods, such as decades and business cycles. In computing these series, different base periods were used, depending upon the time period analyzed; for example, for decades and business cycles, the midpoints of the pe-

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11. See Landefeld and Parker, "BEA's Chain Indexes," 63–66; and J. Steven Landefeld and Robert P. Parker, "Preview of the Comprehensive Revision of the National Income and Product Accounts: BEA's New Featured Measures of Output and Prices," SURVEY 75 (July 1995): 31–38.

riods were used. Tables 1.2A, 1.2B, and 1.2C present annual estimates of real GDP and its major components in chained (1937) dollars, chained (1952) dollars, and chained (1972) dollars, respectively. However, users should be aware that contributions calculated from these tables are approximations and may produce misleading results for periods far from those base periods or when relative prices are changing rapidly, such as during the energy crisis of 1973–75.

In this publication, the presentation of chained-dollar estimates before 1982 has been limited to key aggregates, but the presentation of detailed quantity indexes, which are accurate for all periods, has been greatly expanded in tables 7.3–7.20. For GDP and its major components and for other measures of output, annual growth rates beginning with 1930 and quarterly growth rates beginning with the second quarter of 1947 are presented in table 8.1. In addition, the annual growth rates for major NIPA aggregates for 1970 to the present are shown each month in "Historical Tables" under "National Data" in the section "BEA Current and Historical Data" in the SURVEY.

Price indexes

BEA's featured aggregate price measure is the price index for gross domestic purchases, which measures the prices paid for goods and services *purchased* by U.S. res-

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Calculation of Component Contributions to the Change in GDP

Changes from preceding period

The contributions to the change in real GDP provide a measure of the composition of GDP growth that is not affected by the nonadditivity of the GDP components. Two formulas for the contributions of components to the percent change in real GDP are used—one for years following the base year, and the other for the base year and for years preceding the base year.

For years following the base year, the contribution to the percent change in real GDP in year t attributable to the quantity change in component i ($C\%\Delta_{i,t}$) is

$$C\%\Delta_{i,t} = 100 \times \frac{(p_{i,t-1}P_t^P + p_{i,t}) \times (q_{i,t} - q_{i,t-1})}{2 \times IPD_t^F \times CD_{t-1}^F},$$

where CD_{t-1}^F is the chained-dollar GDP in year $t - 1$;

IPD_t^F is the implicit price deflator for GDP in year t;

$p_{i,t}$ is the price of component i in year t;

P_t^P is the Paasche price index for GDP in year t;

and

$q_{i,t}$ is the quantity of component i in year t.

For the base year and years preceding the base year, $C\%\Delta_{i,t}$ is

$$C\%\Delta_{i,t} = 100 \times \frac{((p_{i,t}/P_t^L) + p_{i,t-1}) \times (q_{i,t} - q_{i,t-1})}{2 \times IPD_{t-1}^F \times CD_{t-1}^F},$$

where P_t^L is the Laspeyres price index for GDP in year t.

Because these contributions to the percent change are additive, they can be used to calculate the contributions to subaggregates as well as the contributions of the detailed components.

The formula used for the contributions for years after the base period can also be used for the most recent quarters (the "tail" period), except the quarterly results are expressed at annual rates.[1]

Changes over other periods

Users can also prepare close approximations of contributions to real GDP growth or to the growth of other aggregates using chain-type annual-weighted indexes. In effect, users compute a chained-dollar series for a particular period using the percent changes in the chain-type annual-weighted indexes to compute chained-dollar series indexed to the current dollars of the base period appropriate for the analysis. (For references to additional information on these calculations, see footnote 11 in the text.)

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1. The formulas must be modified for other quarters and for the most recent year because for these periods, chained output is calculated in a slightly different manner.

idents. This index is derived from the prices of personal consumption expenditures (PCE), gross private domestic investment, and government consumption expenditures and gross investment. In contrast, the GDP price index measures the prices paid for goods and services *produced* by the U.S. economy and is derived from the prices of PCE, gross private domestic investment, net exports, and government consumption expenditures and gross investment. Thus, the two indexes differ with respect to coverage of the prices of exported and imported goods and services. Price changes in goods and services produced abroad and sold in the United States are reflected in the gross domestic purchases measure but not in the GDP measure; price changes in goods and services produced by the U.S. economy and sold abroad are reflected in the GDP price measure but not in the gross domestic purchases price measure. For example, a change in the price of imported petroleum that is fully passed on to U.S. consumers would be fully reflected in the price index for gross domestic purchases but not in the GDP price index, because imports are subtracted in deriving GDP.

Implicit price deflators

BEA also prepares another price index, the implicit price deflator (IPD), which is calculated as the ratio of the current-dollar value to the corresponding chained-dollar value, multiplied by 100 (see the box "Basic Formulas for Calculating Chain-Type Quantity and Price Indexes"). The values of the IPD are very close to the values of the corresponding chain-type price index for all periods.[12]

Implicit price deflators for GDP and its major components are presented as index numbers in table 7.1, and percentage changes from the preceding period for these measures are presented in table 8.1.

Command-basis GNP and terms of trade

BEA also prepares a measure of "real" output—*command-basis GNP* (see table 1.11). Command-basis GNP is a measure of the goods and services produced by the U.S. economy in terms of their purchasing power. GNP and command-basis GNP differ in how their real values are prepared: In estimating real GNP, the current-dollar values of the detailed components of exports of goods and services are deflated by export prices, the current-dollar values of the detailed components of imports of goods and services are deflated by import prices, and the current-dollar value of most factor income is deflated by the implicit price deflator for final sales to

domestic purchasers. In estimating command-basis GNP, the current-dollar value of the sum of exports of goods and services and of receipts of factor income is deflated by the implicit price deflator for the sum of imports of goods and services and of payments of factor income.

The *terms of trade* is a measure of the relationship between the prices that are received by U.S. producers for exports of goods and services and the prices that are paid by U.S. purchasers for imports of goods and services. It is measured by the following ratio, with the decimal point shifted two places to the right: In the numerator, the IPD for the sum of exports of goods and services and of receipts of factor income; in the denominator, the IPD for the sum of imports of goods and services and of payments of factor income. Changes in the terms of trade reflect the interaction of several factors, including movements in exchange rates, changes in the composition of traded goods and services, and changes in producers' profit margins. For example, if the U.S. dollar depreciates against a foreign currency, a foreign manufacturer may choose to absorb this cost by reducing the profit margin on the product it sells to the United States, or it may choose to raise the price of the product and risk a loss in market share.

Classifications of production

In the NIPA's, production is classified by the type of product, by the sector, by the legal form of organization, and by industry.

Type of product

Type of product classifications—goods (durable and nondurable), services, and structures—are presented for GDP and the components of final sales of domestic product. Goods are products that can be stored or inventoried, services are products that cannot be stored and are consumed at the place and time of their purchase, and structures are products that are usually constructed at the location where they will be used and that typically have long economic lives. If a product has characteristics of more than one of these classifications, it is classified on the basis of the dominant characteristic.

Accordingly, the following products are included in goods: Restaurant meals; expenditures abroad by U.S. residents except for travel; replacement parts whose installation cost is minimal; dealers' margins on used equipment; and movable household appliances, such as refrigerators, even when they are included in the purchase price of a new home.

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12. The two measures of the price level differ only because of the factors cited in footnote 7.

The following products are included in services: Food (that is included in airline transportation and hospital charges), natural gas and electricity (except in exports and imports of goods and services); office supplies (that are included in current operating expense of nonprofit institutions); foreign travel by U.S. residents; expenditures in the United States by foreigners; repair services, which include the cost of parts (except replacement parts whose installation cost is minimal); defense research and development; and exports and imports of certain goods, primarily military equipment purchased and sold by the Federal Government.[13]

The following products are included in structures: Mobile homes; certain types of installed equipment, such as elevators, heating, and air conditioning systems; brokers' commissions on sale of structures; architectural and engineering fees included in the value of structures; land development costs; and mining exploration, shafts, and wells.

In personal consumption expenditures, exports, imports, and government consumption expenditures and gross investment, durable goods have an average life of at least 3 years. In fixed investment, producers' durable equipment consists of goods that have an average life of at least 1 year. In change in business inventories, goods held by manufacturing and trade establishments are classified as durable goods or nondurable goods in accordance with the classification of the industry of the establishment holding the inventories. Inventories held by construction establishments are classified as durable goods; inventories held by all other establishments are classified as nondurable goods.

Sector

In the NIPA's, a breakdown of GDP is also shown in terms of the three sectors of the economy—business, households and institutions, and general government.

Business: Production by all entities that produce goods and services for sale at a price intended at least to approximate the costs of production, corporate and noncorporate private entities organized for profit, and certain other entities that are treated as business in the NIPA's. These entities include mutual financial institutions, private noninsured pension funds, cooperatives, nonprofit organizations (that is, entities classified as nonprofit by the Internal Revenue Service (IRS) in determining income tax liability) that primarily serve business, Federal Reserve banks, federally sponsored credit agencies, and

government enterprises.[14] Business production also includes the services of owner-occupied housing and of buildings and equipment owned and used by nonprofit institutions that primarily serve individuals. Gross product of the business sector is measured as GDP less the gross product of households and institutions and of general government.[15]

Households and institutions: Production by households, consisting of families and unrelated individuals, and by nonprofit institutions that primarily serve individuals. Gross product of households and institutions is measured by the compensation paid to domestic workers and to the employees of these nonprofit institutions.

General government: Production of all Federal Government and State and local government agencies except government enterprises. Gross product of general government is measured as the sum of the compensation of the employees of these agencies and of the consumption of fixed capital.

Legal form of organization

For the domestic business sector, income and its components are shown for four legal forms of organizations—corporate business, sole proprietorships and partnerships, other private business, and government enterprises (employee compensation only).

Corporate business: All entities required to file Federal corporate tax returns (IRS Form 1120 series). These entities include mutual financial institutions and cooperatives subject to Federal income tax, private noninsured pension funds, nonprofit institutions that primarily serve business, Federal Reserve banks, and Federally sponsored credit agencies.

Sole proprietorships: All entities that would be required to file IRS Schedule C (Profits or Loss from Business) or Schedule F (Farm Income and Expenses) if the proprietor met the filing requirements, together with owner-occupied farm housing.

Partnerships: All entities required to file Federal partnership income tax returns, IRS Form 1065 (U.S. Partnership Return of Income).

Other private business: All entities that would be required to report rental and royalty income on the individual income tax return in IRS Schedule E (Supplemental Income and Loss) if the individual met the filing requirements, tax-exempt cooperatives, owner-occupied nonfarm housing, and buildings and equipment owned

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13. These certain goods are classified as services only for exports and imports.

14. For more detail on government enterprises, see the section "Legal form of organization."

15. Gross product of financial and of nonfinancial corporations are also shown in the NIPA tables. They are calculated as the costs incurred and the incomes earned from production.

and used by nonprofit institutions that primarily serve individuals.

Government enterprises: Government agencies that cover a substantial proportion of their operating costs by selling goods and services to the public and that maintain their own separate accounts. A "mixed" treatment of government enterprises is used in the NIPA's: Some types of transactions are recorded as if they were part of the business sector, and others are recorded as if they were part of the general government sector.

Government enterprises are treated like other businesses and included in the NIPA business sector: (1) Their sales to final users are recorded as sales by private businesses, (2) their purchases of materials and business services are considered intermediate, and (3) their compensation payments and consumption of fixed capital are deducted in calculating their income. Within the business sector, government enterprises are classified as noncorporate businesses.

Government enterprises are treated like other government agencies: (1) Their interest payments are combined with those of general government rather than those of business, (2) their investment in equipment and structures is combined with general government investment rather than with business investment in gross private domestic investment, and (3) their profit-like income, the current surplus of government enterprises (see definition on page M–8), accrues to general government.

Industry

Industrial distributions are presented for national income and its components, capital consumption allowances, employment and hours, and the change in business inventories and the stock of business inventories.[16] The classification underlying the distributions of private activities is based on the Standard Industrial Classification (SIC).[17]

The industry distributions in most of the tables in "Income, Employment, and Product by Industry" (category 6) are shown as follows: Estimates for 1929–48 based on the 1942 SIC are shown in tables designated as part A; estimates for 1948–87 based on the 1972 SIC are shown

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16. An industrial distribution of fixed investment based on data collected from establishments is prepared as part of the procedure used to estimate capital stock. Industrial distributions of gross product are also prepared; for further information, see Sherlene K.S. Lum and Robert E. Yuskavage, "Gross Product by Industry, 1947–96," SURVEY 77 (November 1997): 20–34.

17. Office of Management and Budget, Statistical Policy Division, *Standard Industrial Classification Manual, 1987* (Washington, DC: U.S. Government Printing Office (GPO), 1988); Office of Management and Budget, Statistical Policy Division, *Standard Industrial Classification Manual, 1972* (Washington, DC: GPO, 1972); and Bureau of the Budget, *Standard Industrial Classification Manual, 1942* (Washington, DC: GPO, 1942).

as part B; and estimates for 1987 forward based on the 1987 SIC are shown as part C. The industry distributions based on the 1987 SIC reflect the corresponding shift of most of the NIPA source data. The estimates for earlier years have not been adjusted to the 1987 SIC, because of a lack of adequate source data. Instead, the estimates for 1948 are shown on the basis of both the 1942 and 1972 SIC, and the estimates for 1987 are shown on the basis of both the 1972 and the 1987 SIC.

Industrial distributions of government activities are not provided; instead, they are combined into a single category. For most series, separate estimates are shown for the activities of the Federal Government, of State and local governments, and of government enterprises. Expenditures by the Federal Government and by State and local governments are also shown by type and by function.

The industrial distributions for private activities are based on data collected from "establishments" or from "companies" (also called enterprises or firms). Establishments, as defined in the SIC, are economic units, generally at a single physical location, where business is conducted or where services or industrial operations are performed. Companies consist of one or more establishments owned by the same legal entity or group of affiliated entities. Establishments are classified into an SIC industry on the basis of their principal product or service, and companies are classified into an SIC industry on the basis of the principal SIC industry of all their establishments. Because large multiestablishment companies typically own establishments that are classified in different SIC industries, the industrial distribution of the same economic activity on an establishment basis can differ significantly from that on a company basis. For example, employment of steel-manufacturing companies differs from employment of steel-manufacturing establishments because the employment of these companies includes the employment of establishments that are not classified in steel manufacturing and because it excludes the employment of establishments that manufacture steel but are not owned by steel-manufacturing companies.

Industrial distributions on a consistent establishment or company basis are not available for all NIPA components. As a result, the industrial distribution of national income reflects a mix of establishment and company data. For the following series, the industrial distributions are based on establishment data: Compensation of employees, employment, hours, inventories, rental income of persons, farm proprietors' income, farm net interest, and farm noncorporate capital consumption allowances. For nonfarm proprietors, industrial distributions of proprietors' income, net interest, and capital consumption allowances are based on company data; these data are regarded

as being substantially the same as if they were based on establishment data because nearly all unincorporated companies own only one establishment (and the few multiestablishment companies usually own establishments in the same SIC industry). For corporations, industrial distributions of profits, nonfarm net interest, and capital consumption allowances are based on company data.

In addition, individual industry series are not fully comparable over time. Historical comparability is affected primarily by two factors. First, the composition of industries may change because of changes in the SIC basis that is used for the estimates. This factor affects estimates based on establishment data and on company data.

Second, historical comparability is affected because the industrial classification of the same establishment or company may change over time. This factor affects company-based estimates much more than establishment-based estimates. The classification of a company may change as a result of the following: Shifts in the level of consolidation of entities for which company reports are filed; mergers and acquisitions; and other shifts in principal activities, especially for large diversified firms.

In addition to the SIC industrial distributions of private activities, some NIPA tables show the following special SIC groupings, the titles of which correspond to the 1987 SIC:

Financial industries consists of the following SIC industries: Depository institutions, nondepository institutions, security and commodity brokers, insurance carriers, regulated investment companies, small business investment companies, and real estate investment trusts.[18]

Nonfinancial industries consists of all other private industries.

Goods-producing industries consists of the following SIC divisions: Agriculture, forestry, and fishing; mining; construction; and manufacturing.

Distributive industries consists of the following SIC divisions: Transportation (excluding the U.S. Postal Service); communications; electric, gas, and sanitary services; wholesale trade; and retail trade.

Service industries consists of the rest-of-the-world sector and the following SIC divisions: Finance, insurance, and real estate; and services.

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18. Regulated investment companies, small business investment companies, and real estate investment trusts are included in the SIC classification "holding and other investment offices" and are not shown separately in the NIPA tables.