An Introduction to the National Income and Product Accounts

Methodology Papers: U.S. National Income and Product Accounts



U.S. DEPARTMENT OF COMMERCE

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September 2007 www.bea.gov

Acknowledgments

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Preface

This paper provides a comprehensive explanation of the conceptual basis and framework of the U.S. national income and product accounts (NIPAs). It describes the structure and purpose of the U.S. economic accounts, discusses the relationship between business and financial accounting and national economic accounting, and presents a derivation of the seven NIPA summary accounts from generalized production, income and outlay, and capital accounts for each sector of the economy.

This paper updates and replaces "An Introduction to National Economic Accounting" (MP1), which was published in March 1985.

Comments about this paper are invited. Please contact the BEA National Economic Accounts Directorate, 1441 L St. NW, BE–6, Washington, DC 20230 or by e-mail at <GDPniwd@BEA.gov>.

An Introduction to the National Income and Product Accounts

The national income and product accounts (NIPAs) produced by the Bureau of Economic Analysis (BEA) have become a mainstay of modern macroeconomic analysis for the U.S. economy. In fact, the Commerce Department in 2000 named the NIPAs, and their marquee measure, gross domestic product (GDP), "its achievement of the century." Because these accounts provide a detailed picture of economic activity at a given time, as well as a consistently defined series of measures over time, they are indispensable to researchers, forecasters, government officials, academics, and investors who use them for a wide array of academic, public policy, and other purposes.

Given the importance of the NIPAs, users often seek a detailed explanation of the concepts that underlie them. The goal of this methodology paper is to present the conceptual basis and framework of the U.S. NIPAs.² Specifically, the paper demonstrates how the seven accounts that summarize the NIPAs are derived from conventional accounting statements—in particular, the balance sheet, income statements, and the statement of cash flow familiar to business accounting. In deriving the summary accounts, the paper also illustrates how they reflect the activity occurring within the entire economy.³

The rest of this paper is organized as follows:

I. Overview of the NIPAs: A look at what these accounts measure, a discussion of the larger system of national economic accounts into which the NIPAs fit, and a look at the key concepts underlying the NIPA estimates
II. Underlying economic accounts: A look at the theoretical derivation of economic accounts for a representative business firm from familiar financial accounting statements
representative business in in from familiar financial accounting statements
III. Economic accounts for sectors: A discussion of how economic accounts are derived for each sec-
tor of the economy—household, business, and government—from the theoretical economic accounts
derived in section IIPage 1-
IV. NIPA summary accounts: A discussion of the derivation of the NIPA summary accounts from the
theoretical economic accounts for each sector

^{1.} See "GDP: One of the Great Inventions of the 20th Century," Survey of Current Business 80 (January 2000): 6-14.

^{2.} New users of the NIPAs may find it beneficial to first review "Measuring the Economy: A Primer on GDP and the National Income and Product Accounts" on www.bea.gov>.

^{3.} Information on the data and estimating methods underlying the NIPAs is available in component methodologies available on BEA's Web site at <www.bea.gov>.

I. Overview of the NIPAs

THE NIPAs are a set of economic accounts that provide detailed measures of the value and composition of national output and the incomes generated in the production of that output. Essentially, the NIPAs provide a detailed snapshot of the myriad transactions that make up the economy—buying and selling goods and services, hiring of labor, investing, renting property, paying taxes, and the like. More specifically, the seven summary accounts of the NIPAs simplify both the transactors and transactions in the economy. The transactors of the domestic economy are grouped into three distinct groups, or sectors—persons, businesses, and government; a fourth sector for the rest of the world is added to cover transactions between the Nation and foreigners. The seven summary accounts of the NIPAs show the contribution of each sector to the output of the economy, their income and outlays, and their saving and investment.

The best-known NIPA measure is GDP, which is defined as the market value of the goods and services produced by labor and property located in the United States. The NIPAs calculate GDP as the sum of familiar final expenditure components: Personal consumption expenditures, private investment, government spending (consumption and investment) and net exports. However, GDP is just one of many economic measures presented in the NIPAs, which include seven summary accounts and nearly 300 tables of supporting data.

National Economic Accounts System

The NIPAs are part of an integrated system of national economic accounts that also includes the industry accounts and the flow of funds accounts. BEA's industry accounts consist of the input-output (I-O) accounts, which trace the flow of goods and services among industries in the production process and which show the value added by each industry and the detailed commodity composition of national output, and the GDP by industry accounts, which measure the contribution of each private industry and of government to GDP.

The Federal Reserve Board's flow of funds accounts record the value of tangible and financial assets acquired and the value of liabilities incurred throughout the U.S. economy, and the sources of the funds used to acquire the assets.⁵

In addition, BEA prepares two other sets of U.S. economic accounts: The international accounts, which consist of the international transactions (balance of payments) accounts and the international investment position accounts; and the regional accounts, which consist of the estimates of GDP by state, of state personal income, and of local area personal income. Finally, the Bureau of Labor Statistics prepares estimates of productivity for the U.S. economy (which are partially based on estimates of GDP). Altogether, the system of U.S. economic accounts presents a coherent, comprehensive, and consistent picture of U.S. economic activity.

An internationally accepted conceptual framework for these accounts is found in the System of National Accounts 1993 (SNA). The SNA provides a set of guidelines for national statistical offices compiling national economic accounts. Along with national accountants from many countries, BEA actively participated in developing these guidelines.

Many of the major improvements made to the NIPAs in recent years are consistent with the guidelines provided by the SNA. These include the adoption of chain-type quantity and price indexes, the capitalization of software, and the recognition of the implicit services provided by commercial banks. BEA is currently participating in the international effort to update these guidelines to take account of changes in the economic environment.⁶

The remainder of this section discusses the concepts underlying the NIPAs.

^{4.} See U.S. Bureau of Economic Analysis, "Concepts and Methods of the U.S. Input-Output Accounts," September 2006, at <www.bea.gov/bea/mp.htm>; and see Brian C. Moyer, Mark A. Planting, Mahnaz Fahim Nader, and Sherlene K.S. Lum, "Preview of the Comprehensive Revision of the Annual Industry Accounts: Integrating the Annual Input-Output Accounts and the Gross-Domestic-Product-by-Industry Accounts, Survey 84 (March 2004): 38–51.

^{5.} See U.S. Board of Governors of the Federal Reserve System, *Guide to the Flow of Funds Accounts*, Board of Governors, Washington, D.C., 2006; and see Albert M. Teplin, "The U.S. Flow of Funds Accounts and Their Uses," *Federal Reserve Bulletin* (July 2001): 431–441.

^{6.} See Commission of the European Communities, International Monetary Fund, Organization for Economic Co-operation and Development, United Nations, and the World Bank, *System of National Accounts 1993* (Brussels/Luxembourg, New York, Paris, and Washington, DC, 1993). For more on the SNA and the relationship between it and the NIPAs, see Charles Ian Mead, Karin E. Moses, and Brent R. Moulton, "The NIPAs and the System of National Accounts," Survey 84 (December 2004): 17–32.

Estimating Concepts and Conventions

Production boundary. One of the fundamental questions that must be addressed in preparing national economic accounts is how to define the production boundary—that is, what parts of the myriad human activities are to be included in or excluded from the measure of the economy's production. According to the SNA, "Economic production may be defined as an activity carried out under the control and responsibility of an institutional unit that uses inputs of labor, capital, and goods and services to produce outputs of goods or services. There must be an institutional unit that assumes responsibility for the process and owns any goods produced as outputs or is entitled to be paid, or otherwise compensated, for the services provided."

Under this definition, certain natural processes may be included in or excluded from production, depending upon whether they are under the ownership or control of an entity in the economy. For example, the growth of trees in an uncultivated forest is not included in production, but the harvesting of the trees from that forest is included.

The general definition of the production boundary may then be restricted by functional considerations. In the SNA (and in the U.S. accounts), certain household activities—such as housework, do-it-yourself projects, and care of family members—are excluded, partly because by nature these activities tend to be self-contained and have limited impact on the rest of the economy and because their inclusion could diminish the usefulness of the accounts for long-standing analytical purposes, such as business cycle analysis.⁸

In the NIPAs, the production boundary is further restricted by practical considerations about whether the productive activity can be accurately valued or measured. For example, illegal activities, such as gambling and prostitution in some states, should in principle be included in measures of production. However, these activities are excluded from the U.S. accounts because they are by their very nature conducted out of sight of public scrutiny and so data are not available to measure them.

Finally, the production boundary is sometimes altered in order to accommodate innovations and structural changes in the economy. For example, in the 1999 comprehensive revision of the NIPAs, the value of U.S. production was increased by a change in definition that recognized business and government expenditures for software as fixed investment rather than as intermediate purchases for business and as consumption

expenditures for government.9

Market value. Goods and services in the NIPAs are measured at market prices; the value of output is equal to the market price of the good or service times the quantity of the good or service produced during the year. In cases where market prices do not fully reflect the value of a good or service or where services are provided without an actual exchange, the value of the good or service produced may be "imputed" from similar market transactions, as described below. In cases where there are no similar market transactions available to impute a value, such as for goods or services that are provided for free (or at insignificant prices) by government and nonprofit institutions, the market price is estimated based on the costs of production.

Imputations. Imputations are made to include in the accounts the value of certain goods and services that have no observable price and are often not associated with any observable transaction. ¹⁰

For example, in their role as an intermediary between borrowers and lenders, banks provide services for which they do not charge an explicit price. However, they are compensated for these services through the payment of higher interest rates by borrowers and the receipt of lower interest rates by savers. To keep GDP invariant to whether or not a price is explicit or implicit, the value of the service reflected by such exchanges is imputed. Imputations are also made to keep GDP invariant to institutional arrangements. For example, unlike the provision for payment of housing services to a renter by a landlord, the provision of housing services to an occupant that owns the housing does not involve an exchange between two or more transactors. However, excluding the value of such services would cause variations in GDP that would depend only on variations in institutional arrangements. Therefore, the NIPAs include an imputation of the value of the services provided by owner-occupied housing.11

Final versus intermediate products. In the NIPAs, production represents unduplicated output. That is, GDP is designed to avoid double counting the value of goods and services that are inputs into the production of other goods and services and that are not used in future production. These intermediate inputs are already reflected in the market value of the final

^{7.}*SNA 1993*: paragraph 6.15. 8. *SNA 1993*, paragraph 6.22.

^{9.} See Brent R. Moulton, Robert P. Parker, and Eugene P. Seskin, "Preview of the 1999 Comprehensive Revision of the National Income and Product Accounts: Definitional and Classificational Changes," Survey 79 (August 1999): 8–11.

^{10.} The SNA's definition of an imputation is restricted to estimates of goods and services for which there is no observable exchange. Estimates for which there is an observable exchange but no observable price are referred to simply as estimates. See paragraphs 1.72–1.75 and 3.34 of the SNA.

^{11.} The imputations in the NIPAs are presented in NIPA table 7.12.

product and are therefore excluded so that the measure of output is an unduplicated total. This is done using either the final expenditures approach or the value added approach, as described below.

Alternative approaches to measuring GDP. GDP measures output as the "market value of final goods and services"—that is, as the sum of personal consumption expenditures, gross private domestic investment, government consumption expenditures and gross investment, and net exports of goods and services. This is known as the "expenditures" or "product side" approach to measuring GDP. Another way to measure GDP is as the sum of the charges generated in the production of the final goods and services. Because the market price of a final good or service reflects all the charges associated with producing that good or service, an "income-side" measure of output, gross domestic income (GDI), can be derived as the sum of the charges against production. Specifically, GDI is measured as the sum of compensation of employees (the return to labor), taxes on production less subsidies (a nonincome charge against production), net operating surplus (the net return to capital and entrepreneurship), and consumption of fixed capital (the using up of capital).

In theory, GDP and GDI are equal. In practice, the differences in the data used to derive the two measures lead to a discrepancy. This "statistical discrepancy" is defined in the NIPAs as GDP less GDI. Because the source data used to derive product-side measures of output are based on more comprehensive surveys and censuses, BEA considers them more reliable. Therefore, the statistical discrepancy appears as a component on the income side of the account.

Another way to measure output, used by BEA's I-O accounts, is known as the "value added" approach. In these accounts, value added is defined as the difference between an industry's total output—that is, its sales plus the change in inventories arising from production—and its intermediate purchases from other industries. When value added is aggregated across all industries in the economy, industry sales to and purchases from each other cancel out, and the remainder is industry sales to final users, or GDP.¹²

Geographic coverage. In the NIPAs, and in the I-O accounts, the "U.S. estimates" cover the 50 states and the District of Columbia. This treatment aligns GDP with other U.S. statistics, such as population and employment. Transactions between the United States and Puerto Rico, the U.S. territories, and the Northern Mariana Islands are included in the "rest-of-the-

world" sector.13

In the NIPAs, a distinction is made between "domestic" measures and "national" measures. Domestic measures cover activities that take place within the geographic borders of the United States. For example, GDP measures the value of goods and services produced by labor and capital located in the United States. In contrast, national measures cover activities that are performed using resources supplied by U.S. residents.14 For example, gross national product (GNP) measures the value of goods and services produced by labor and capital supplied by U.S. residents. Thus, for an assembly plant that is owned by a U.S. auto company and located in Great Britain, a portion of the value of its output is included in GNP, but none of its output is included in GDP. And, for an assembly plant that is owned by a Japanese auto company and located in the United States, all of its output is included in GDP, but only a portion of its output is included in GNP.

Capital, investment, and depreciation. Economic production as defined above covers all final goods and services produced during a given period. Nondurable goods and services are generally consumed fully within a year. In contrast, durable goods—such as equipment and software—and structures provide services over longer periods of time. In the NIPAs, purchases of new durable goods and structures by businesses or government for use in production are treated as gross fixed investment, as are purchases of new residential housing. Purchases of durable goods by individuals, on the other hand, are treated as consumption in the NIPAs, rather than as investment, in accordance with the NIPA convention that nonmarket household production is outside the scope of GDP. 15

Both consumption and investment contribute to GDP in the NIPAs, but the distinction is important because investment implies a stock of fixed assets, or capital, which in turn implies depreciation, or a

^{12.} In the I-O accounts, "all industries" includes government industries (such as the U. S. Postal Service) and certain "special industries" (such as owner-occupied housing).

^{13.} However, in BEA's international transactions accounts, Puerto Rico, the U.S. territories, and the Northern Mariana Islands are treated as part of the United States. See NIPA table 4.3B, "Relation of Foreign Transactions in the National Income and Product Accounts to the Corresponding Items in the International Transactions Accounts."

^{14. &}quot;U.S. residents" includes individuals, governments, business enterprises, trusts, associations, nonprofit organizations, 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 residing 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.

^{15.} Households are treated as businesses for the purpose of recording the ownership of and investment in housing.

decline in the value of the stock of capital over time.¹⁶

More specifically, depreciation, or the consumption of fixed capital, is defined as the deductions from the capital stock over the period due to age, wear and tear, accidental damage, and obsolescence. Thus, depreciation is a charge against production—that is, it reflects an amount that would need to be set aside to eventually replace fixed assets as they are used up in the production process—and is therefore a component of the NIPAs income-side measure of output. Its inclusion in GDI ensures that the measure fully reflects the incomeside value of final goods and services, but it also suggests that the measure overstates the capabilities of the

economy to produce goods and services for consumption or to add to the capital stock. Thus, "net" measures that are provided in the NIPAs—that is, measures that exclude depreciation, such as net domestic product (NDP) and net domestic investment—are preferred for many analyses. Nevertheless, GDP remains the most commonly cited statistic of the overall level of economic activity.

Inventories. A key component of investment, and thus GDP, is the change in private inventories, which reflects the value of goods that have been produced but not yet sold. For a given period, additions to inventories reflect production in that period and so are included in GDP, while withdrawals from inventories reflect production in past periods and so are excluded from GDP.

In the NIPAs, additions to, less withdrawals from, inventories is measured as ending period less beginning period inventories and recorded as a single item, "change in inventories."

^{16.} BEA prepares separate accounts for fixed assets and consumer durables, available at <www.bea.gov>. In these accounts, purchases of consumer durables are treated as investment in assets, and these assets depreciate over time. BEA's use of the term "capital" in reference to this stock of fixed assets is different from the conventional use of the term to refer to financial holdings.

II. Underlying Economic Accounts

ANY of the important concepts that are used in the NIPAs can be understood by relating a theoretical set of economic accounts for a business firm to its financial statements. This section will briefly review fundamental accounting principles and common financial statements before illustrating how they relate to the NIPAs.

Fundamental Accounting Principles

The formal practice of financial accounting has a much longer history than that of national economic accounting. ¹⁷ Thus, it is no surprise that national economic accounting is based on many of the same fundamental principles that were first adopted in financial accounting. However, differences between the two fields still exist as each serves a separate purpose.

The purpose of financial accounting is to provide a set of financial statements that convey information on the financial position, the results of operations, and the manner in which cash flows through an individual business. The financial position includes the resources available to a business (assets), the claims of creditors on these resources (liabilities), and the claims of business owners on these resources (owners' equity). The results of operations include the income received by a business (revenue), the costs incurred while earning this income (expenses), and the profits earned by a business (net earnings).

One of the most fundamental principles used in both financial and national economic accounting is double-entry bookkeeping. In double-entry bookkeeping, activities that affect the resources available to a business are reflected at least twice in a general ledger: At least once on the right side as a source of financing (credit) and at least once on the left side as a use of financing (debit). The advantage of double-entry bookkeeping is that it provides a means to validate the values entered into a general ledger because the sum of entries on each side should equal.

Double-entry bookkeeping in national economic accounting has a somewhat different role than double-entry bookkeeping in financial accounting. The national accounts are designed to measure all transac-

tions in the economy from the perspective of both participants in a transaction—for example, both the buyer and the seller. Each transaction is recorded as a payment by one sector and a receipt by another—for example, corporate income tax is a payment by a corporation and a receipt of the government.¹⁸ This system not only provides a means to validate the values entered into a set of national economic accounts, but it also provides alternative ways to calculate a measure when a complete set of information is not available for one of the sectors that is involved in a set of exchanges.

Another fundamental principle used in both financial and national economic accounting is that related revenues and expenses must be recorded during the same accounting period. To ensure this, the accrual accounting method is usually used. This method records the sale of goods or assets when ownership passes, the sale of services when they are provided, the generation of output when goods and services are produced, and the consumption of intermediate goods and services when they are used. The accrual accounting method differs from the cash accounting method, which records revenues when cash is actually received and expenses when cash is actually paid.

In financial accounting, assets and depreciation are commonly (but not invariably) valued at historical costs, which are the actual prices that were paid in their acquisition. Historical costs are commonly used in financial accounting because they are regarded as relatively objective, since they are supported by verifiable historical transactions, and relatively conservative, since they do not include holding gains (or losses) that have not been realized.¹⁹

In national economic accounting, assets and depreciation are valued at current costs, which are the actual or estimated market prices that prevail at the time assets are valued or depreciation occurs. Current costs are used in national economic accounting because they serve as the best practical approximation to the economic notion of opportunity costs. Opportunity costs

^{17.} Many of the formal accounting practices used in financial accounting, such as double-entry bookkeeping, can be traced all the way back to merchants and bankers in Florence, Venice, and Genoa during the thirteenth and fifteenth centuries. In contrast, the formal accounting framework for national accounting was introduced by Richard Stone in 1940 (See Angus Deaton, "Stone, Richard John Nicholas" in J. Eatwell, M. Milgate and P. Newman, eds., *The New Palgrave: A Dictionary of Economics*, Macmillian: London, 1987, vol. 4: 509–512).

^{18.} A fully articulated set of national accounts actually leads to a quadruple-entry system. However, transactions are usually recorded only twice in the national income and product accounts (NIPAs) because the changes in assets or liabilities that are associated with the changes in the revenues and expenses are recorded in the Federal Reserve Board flow of funds accounts.

^{19.} Additional detail on financial accounting practices can be found in many of the standard textbooks on the subject, such as John J. Wild, *Financial Accounting: Information for Decisions* (McGraw-Hill College, 2006) and as Jerry J. Weygandt, Donald K. Kieso, and Paul D. Kimmel, *Financial Accounting: Tools for Decision Making, with Annual Report* (John Wiley & Sons Inc., 2003).

are the foregone benefits that could have been secured with the next best alternative use of a resource, which serves as one of the most fundamental concepts used in economic analysis.

Common Financial Statements

The two principal statements that summarize the activities that are recorded in the general ledger of a business are the balance sheet and the income statement. Although the form of these statements often differs across businesses, their purposes are the same. A balance sheet shows the financial position of a business at a given point in time. An income statement shows the operating results of a business during an accounting period between two balance sheets.

Two additional statements are usually required to supplement the information provided on the balance sheet and income statement. The first, a statement of cash flows, shows how cash streams through a business during an accounting period. Its purpose is to allow for an assessment of a business' ability to settle liabilities, pay dividends, and respond favorably to unanticipated events. The second, a statement of owners' equity, shows how the claims of owners on the assets of a business change during an accounting period. Its purpose is to show how the change in retained earnings between two consecutive balance sheets is related to net earnings. Sometimes this demonstration occurs at the end of an income statement, in which case, the result is presented as a single statement of income and retained earnings.

The rest of this section introduces the financial statements of a representative business firm and then derives the set of economic accounts that underlie the NIPAs.

Balance sheet

The basic identity underlying the balance sheet is that the business firm's assets less its liabilities are equal to owners' equity—that is,

Assets - liabilities = owners' equity.

Since owners' equity is conceptually the residual claim of the corporation's owners on assets once all liabilities have been met, its value is simply equal to the value of the corporation's assets less the value of its liabilities. Thus, if total assets increase without an offsetting increase in total liabilities, then owners' equity rises; if total assets decrease without an offsetting decrease in total liabilities, then owners' equity falls.

On the balance sheet, there are several categories of assets, liabilities, and owners' equity, which is called stockholders' equity in the case of a corporation (table 1).

Current assets. These are resources that are usually converted into cash or used within the period of a

year.²⁰ They include cash and cash equivalents, accounts receivable, inventories, and short-term investments. Cash and cash equivalents include coins, currency, and undeposited checks; money orders; demand deposits at banks; and certain highly liquid investments. Accounts receivable are short-term credits that have been extended to customers to cover goods and services that the corporation has already provided but for which payment has not yet been received. These credits are included on the balance sheet because related revenue and expenses need to be reflected during the same accounting period. Short-term investments consist of other types of assets, such as securities of other corporations, that are expected to be converted back into cash within the time period that is used to define current assets.

Fixed assets. These consist of assets that are used in a productive capacity, have physical substance, are relatively long-lived, and provide future benefits that are readily measurable. They mainly consist of plant, equipment, and land, and they are usually valued at historical costs less accumulated depreciation.

Long-term investments. These consist of financial assets, such as securities of other corporations, that are expected to be converted into cash or used after the period of time that is used to measure current assets.

Current liabilities. These consist of obligations that are either due upon demand or expected to be due within the same period of time that is used to define current assets. Current liabilities include accounts payable and short-term liabilities, such as the principal that must be paid during the current period on long-term debts. Accounts payable are short-term

Table 1. Balance Sheet, December 31, 20__ (In thousands)

Assats	
Assets Current assets:	
Cash and cash equivalents	280
Accounts receivable	300
Inventories	10
Short-term assets	10
Total current assets	600
Fixed assets	1.390
Long-term investments	190
Total assets	2,180
Liabilities and stockholders' equity	
Current liabilities:	000
Current liabilities: Accounts payable	200
Current liabilities:	200 70
Current liabilities: Accounts payable	
Current liabilities: Accounts payable Short-term liabilities	270 270
Current liabilities: Accounts payable. Short-term liabilities. Total current liabilities. Long-term liabilities.	270 270
Current liabilities: Accounts payable	270 310
Current liabilities: Accounts payable	270 310 260
Current liabilities: Accounts payable	70

^{20.} The period of time that is used to define current assets is either the period of a year or an operating cycle, whichever is longer. An operating cycle is the average period of time between the initial purchase of intermediate goods and services and the collection of accounts receivable for the related sales of products.

debts that have been assumed by the business for goods and services already received but for which payment has not yet been made.

Long-term liabilities. These consist of long-term obligations, such as note and bond payments, that are not expected to be due until after the period of time that is used to define current liabilities.

Stockholders' equity. The ownership stake of stockholders includes the amount shareholders paid for their stocks (capital stock) and the retained earnings of the corporation. Retained earnings are net earnings that have been saved by the corporation for future use or investment.

Income and retained earnings

The basic identity underlying the statement of income and retained earnings is that the business firm's net earnings are equal to its revenue less its expenses—that is,

Net earnings = revenue - expenses.

However, the statement does not derive net earnings by subtracting all expenses from all revenue in a single step. Rather, it derives net income through a series of steps to provide a useful set of intermediate income measures to investors and creditors.

Gross profits. This measure is derived by subtracting the costs of goods and services sold from sales, which are measured net of discounts and returns (table 2). Although various accounting conventions may be used to record the costs of goods and services sold, the purpose of this measure is to account for the costs that can be directly linked to the production of goods and services.²¹ These expenses include purchases of intermediate goods and services, labor costs of production

Table 2. Statement of Income and Retained Earnings, For Year Ending December 31, 20__

(In thousands)

Sales, net of discounts and returns	2,630 (1,770)
Gross profits Operating expenses	860 (460)
Operating income	400 10
Net earnings before interest and taxes	410 10 (20)
Net earnings before taxes	400 (150)
Net earnings after taxes Dividends paid.	250 (110)
Additions to retained earnings	140

Note. Negative numbers in a running total are shown in parentheses.

workers, depreciation of plants and equipment used in production, and changes in inventories (beginning-ofperiod less end-of-period).

Operating income. This measure is derived by subtracting operating expenses and depreciation from gross profits. Operating expenses consist of the costs that are associated with the general operations of the corporation but cannot be directly linked to the production of goods and services. These expenses include labor costs of administrative staff, property taxes, depreciation of office buildings and equipment, inspection fees, charitable contributions, and royalty payments.

Other income. This consists of income that is received from activities that are not associated with normal business activities, such as gains (net of losses) on sales of securities and fixed assets.

Net earnings before interest and taxes. This measure is derived by adding other income to operating income

Net earnings after taxes. This measure is derived by adding interest receipts, subtracting interest payments, and then subtracting income taxes from net earnings before interest and taxes.

Additions to retained earnings. This measure is derived by subtracting dividends paid to shareholders from net earnings after taxes.

Cash flows

The statement of cash flows begins by separately deriving the net cash flows associated with the operating, investing, and financial activities of the corporation (table 3). Afterwards, these three measures are summed to arrive at the net increase in cash.

Table 3. Statement of Cash Flows, For Year Ending December 31, 20_

(In thousands)

Cash flows from operating activities: Net earnings after taxes. Adjustments to reconcile net earnings after taxes to cash	250
provided by operating activities: Depreciation of plant and equipment	170
Increase in current assets. Decrease in current liabilities.	(30) 10
Net cash provided by operating activities	400
Cash flows from investing activities: Sales of fixed assets Sales of securities	10 0 (100) (30)
Net cash used in investment activities	(120)
Cash flows from financing activities: Issues of bonds. Issues of capital stock. Retirements of bonds. Dividend payments	40 50 (120) (110)
Net cash used in financing activities	(140)
Net increase in cash	140
Cash and cash equivalents at beginning of year	140 280

 $\ensuremath{\mathsf{Note}}.$ Negative numbers in a running total are shown in parentheses

^{21.} An accurate determination of the costs that can be directly linked to the production of goods and services is one of the more difficult tasks in financial accounting. As a result, many corporations simply rely on fixed ratios to allocate a certain percentage of expenses to this category.

Net cash flows provided by operating activities.

This measure is indirectly derived by applying a series of adjustments to the accrual-based measure of net earnings after taxes to arrive at the cash-based measure of net cash flows.²² These adjustments include adding depreciation, subtracting increases in current assets, and adding decreases in current liabilities.

Net cash flows used in investment activities. This measure is directly derived by subtracting cash outflows from cash inflows. Cash inflows in this section of the statement include sales of fixed assets, along with sales of securities that have been issued by other corporations. Cash outflows in this section of the statement include purchases of fixed assets, along with purchases of securities that have been issued by other corporations.

Net cash flows used in financing activities. This measure is directly derived by subtracting cash outflows from cash inflows. Cash inflows in this section of the statement include the issuance of bonds and securities. Cash outflows in this section of the statement include the retirement of bonds and dividends paid to stockholders.

Financial Statements, Economic Accounts for the Business Sector, and the NIPAs

The three financial statements discussed above are related to four economic accounts that provide the

building blocks for the key measures of the business sector in the NIPAs.

The first economic account, a production account, shows the contribution that is made by the business firm to GDP. The second account, an enterprise income account, shows how net income from production and income from the ownership of financial assets is used to fund the payment of interest to the business firm's creditors. The third account, an income and outlay account, shows how the business income that remains after interest and certain types of transfer payments have been made is either retained by the business firm or used to pay income taxes to the government or dividends to the business firm's owners. The fourth account, a capital account, shows how the retained income of the business is used to purchase fixed assets.

All four of these economic accounts can be conceptually derived from the information in the business firm's financial statements. In particular, the first three of these accounts are directly related to the statement of income and retained earnings. The last of these accounts is directly related to the portion of the statement of cash flows that deals with fixed assets and depreciation.

The derivation of each economic account from the financial statements of the business firm can be easily seen by first creating a ledger that organizes transactions into measures that appear in each of the respective accounts (table 4). Afterwards, national accounting identities are used to define the accounts, and few of the items in the ledger are adjusted or moved to the other side of the account to create the final measures.

Table 4. Detailed Ledger for Sources and Uses of Revenue, For year ending December 31, 20___

	(111 1110)	200100)		
Uses		Sources		
Charges against revenue in the production account:		Revenue in the production account:		
Compensation of employees	1,610	Sales, net of discounts 1	2,740	
Wages and salaries	1,380			
Supplements to wages and salaries	230			
Purchases of intermediate goods and services	400			
Changes in inventories	10			
Taxes on production and imports 1	160			
Depreciation	170			
Charges against revenue in the enterprise income account:		Revenue in the enterprise income account:		
Interest and miscellaneous payments	20	Interest receipts	10	
Current transfer payments (net)	10	Dividend receipts	20	
Charges against revenue in the income and outlay account:				
Taxes on corporate income	150			
Dividend payments	110			
Undistributed corporate profits ²	130			
Charges against revenue	2,770	Revenue	2,770	

^{1.} This item differs from "sales, net of discounts" in table 2 because it includes sales and excise taxes.

^{22.} Business firms may also calculate net cash flows from operating activities using a more direct method that lists major classes of gross receipts and gross expenditures. However, the indirect method presented in this paper is more commonly used.

^{2.} This item differs from retained earnings in table 2 because net capital transfers and gains (net of losses) on the sale of fixed assets and securities are excluded from both sides of the table

Production account for a business firm

The production account for a business firm shows the value of goods and services that can be attributed to the business firm both directly in terms of the goods and services that it produces and indirectly in terms of the costs that it incurs during production (first panel of table 5).

The basic identity underlying the production account is that gross value added is equal to the charges against gross value added and net operating surplus—that is,

Gross value added = charges against gross value added + net operating surplus.

Net operating surplus, which is a profits-like measure, is conceptually the balance on the account that remains once the charges against gross value added have been deducted from gross value added. Thus, if gross value added increases without an offsetting increase in charges against gross value added, then net operating surplus will rise; if gross value added de-

creases without an offsetting decrease in charges against gross value added, then net operating surplus will fall.

Gross output, which appears on the right side of the account, is derived by moving the changes in inventories to the right side of the ledger, with a change in sign so that it represents end-of-period inventories less beginning-of-period inventories, and adding its value to sales. ²³ Gross value added is derived by moving intermediate goods and services to the right side of the ledger and subtracting its value from gross output. Charges against gross value added, which appear on the left side of the account, consist of the compensation of employees, taxes on production and imports,

23. More specifically, only changes in inventories of work in progress and finished goods are added to sales in the derivation of gross output. Changes in materials and supplies inventories are deducted from purchases of intermediate goods and services to derive intermediate consumption. This practice is consistent with showing consumption of materials and supplies when used in production rather than when purchased. Although only work-in-progress and finished goods inventories are added to sales in calculating gross output, all three types of inventories are included in the measure of "changes in private inventories" that is used to calculate GDP in the expenditure approach of calculating GDP.

Table 5. Economic Accounts for a Corporation, For year ending December 31, 20___

	Product	tion Account	
Uses		Sources	
Compensation of employees Wages and salaries Supplements to wages and salaries. Taxes on production and imports. Depreciation Net operating surplus	1,610 1,380 230 160 170 390	Gross output	2,730 2,740 (10) 400
Charges against gross value added and net operating surplus	2,330	Gross value added	2,330
	Enterprise	Income Account	
Uses		Sources	
Interest and miscellaneous payments Current transfer payments. Corporate profits	20 10 390	Net operating surplus Income receipts on assets Interest Dividend receipts	390 30 10 20
Uses of income and corporate profits	420	Sources of income	420
	Income and	Outlay Account	
Uses		Sources	
Taxes on corporate income Equals: Profits after tax Dividend payments Undistributed corporate profits	150 240 110 130	Corporate profits	390
Distributions of income and undistributed corporate profits	390	Sources of income	390
	Canit	al Account	
Changes in assets	Опри	Sources	
Gross investment Net acquisition less disposal of non-produced nonfinancial assets Net lending or net borrowing	90 10 210	Gross saving Undistributed corporate profits Depreciation Net capital transfers	300 130 170 10
Gross investment, net acquisition less disposal of nonproduced nonfinancial assets, and net lending	310	Gross saving and net capital transfers	310

and depreciation.

A few additional points about the measures in this account should be made.

Changes in inventories. This measure differs from that shown in the financial statements of corporations because it is based on the current costs that are used in national accounting rather than the historic costs that are often used in financial accounting.

Changes in inventories are moved to the right side of the account because what is sold by the corporation is often not equal to what is produced during the same accounting period. In particular, if the firm produces more goods than it sells, then the remaining goods are placed into inventories; if the firm produces fewer goods than it sells, then the shortfall is met by withdrawing goods from inventories. The addition of the changes in inventories to sales removes sales of goods that were not produced during the current period and adds produced goods that were not sold during the current period to arrive at a true measure of gross output during the period.

Compensation of employees. This measure, which appears on the left side of the account, consists of the sum of a measure of wages and salaries and a measure for supplements to wages and salaries. Wages and salaries are broadly defined to include commissions, tips, and bonuses; voluntary employee contributions to deferred compensation plans, such as 401(k) plans; employee gains from exercising stock options; and receipts-in-kind that represent income. Supplements to wages and salaries consist of employer contributions to employee pension and insurance plans and of employer contributions for government social insurance.

Taxes on production and imports. These taxes consist of tax liabilities that are incurred in the production of goods and services. They include Federal excise taxes and customs duties and state and local sales taxes, property taxes, motor vehicle licenses, severance taxes, other taxes, and special assessments. All of these items except for sales and excise taxes are included in the measure of operating expenses in the business firm's financial statements. Sales and excise taxes are included in the measure of taxes on production and imports because their value is added to sales on the other side of the ledger so that GDP is valued at the costs to final purchasers.

Consumption of fixed capital (CFC). This measure replaces the measures of depreciation in the individual business accounts. Although the two measures are closely related, they differ in two important ways. First, CFC is based on a consistent set of service lives and empirically based depreciation schedules rather than on the various conventions that are used in financial accounting. Second, CFC is based on the current costs

that are used in national accounting rather than the historical costs that are often used in financial accounting.²⁴

Net operating surplus. This measure is defined as the residual claim against gross value added after the charges directly related to production—that is, compensation of employees, taxes on production and imports (less subsidies), and consumption of fixed capital—have been deducted. It measures the surplus or deficit accruing from production before taking account of any interest and dividends receivable on financial assets owned by the corporation; payments to those with financial claims on the firm, such as interest or dividends payable; and other nonoperating payments, such as current business transfer payments and taxes on corporate income. The net operating surplus reflects the net return to assets that the firm uses in production.

Enterprise income account

The enterprise income account shows how the corporation's operating surplus and its nonoperating income (interest and dividends) are used for interest payments to the providers of financial capital and for transfer payments, leaving a balance for the owners as corporate profits (second panel of table 5).

The basic identity underlying the enterprise income account is that the sources of income are equal to uses of income and corporate profits—that is,

Sources of income = uses of income + corporate profits.

Corporate profits are conceptually the residual charge against income that remains after uses of income have been deducted.

On the right side of the account, the sources of income consist of both the net income from production and income receipts on assets. Net income from production is measured by net operating surplus, which has been carried over from the production account. Income receipts on assets consist of interest receipts from other economic institutions and of dividend receipts.

On the left side of the account, uses of net income consist of interest and miscellaneous payments and of current transfer payments. A few points should be made about the transactions and adjustments that are included in these measures.

^{24.} For additional information on the calculation of CFC, see the chapter entitled "Concepts and Methods" in Bureau of Economic Analysis, *Fixed Assets and Consumer Durable Goods in the United States*, 1925–97 (Washington, DC: U.S. Government Printing Office, September 2003).

Interest receipts. This measure differs from that used in financial accounting because it includes both the monetary receipts that are recorded on financial statements and the imputed receipts that are used in national economic accounting. These imputed interest receipts are included to account for the value of implicit financial services that are provided by commercial banks and by property and casualty insurance companies.²⁵

Interest and miscellaneous payments. This measure differs from the measure of interest payments used in financial accounting in two ways. First it includes any rents or royalties for natural resources paid to government that may be included in the measure of operating surplus in the business firm's financial statements. Rents and royalties related to other items, such as building equipment, or patented research, are excluded from this measure because they are treated as purchases of intermediate goods and services. Second, much like the measure of interest receipts in this account, interest and miscellaneous payments includes imputed interest payments to account for the value of implicit financial services that are provided by commercial banks and by property and casualty insurance companies.

Current transfer payments (net). These payments consist of cash or in-kind payments where nothing is received in return. However, current transfer payments exclude payments that are related to acquisition or disposal of fixed assets, such as capital gains or estate or gift taxes. These types of transfers are classified as capital transfers and included in the capital account. For the business firm, current transfer payments include fines and certain fees paid to government, the portion of insurance premiums that is not a payment for service (net of benefits received), charitable contributions to nonprofit organizations, and various other unrequited payments. With the exception of the adjusted value for insurance premiums, these items are included as in the measure of operating expenses in the firm's financial statements.

Corporate profits. The measure of corporate profits includes adjustments so that it is based on the inventory valuation and depreciation concepts that are used in national economic accounting. ²⁶

Income and outlay account

The income and outlay account shows how corporate profits, which have been carried forward from the enterprise income account, are used to either pay corporate income taxes or dividends to shareholders or are retained by the corporation (third panel of table 5).

The basic identity underlying the income and outlay account is that the sources of income are equal to the distributions of income and undistributed corporate profits—that is,

Sources of income = distributions of income + undistributed corporate profits.

Undistributed corporate profits are the residual charge against income that remains once distributions of income have been made to other economic agents.

Capital account

The capital account shows how saving is used to acquire nonfinancial assets, such as fixed assets and inventories (fourth panel of table 5).

The basic identity underlying the capital account is that the value of gross savings and net capital transfers is equal to the value of gross investment and the value of net lending or borrowing—that is,

Gross saving and net capital transfers =
gross investment + acquisition less
disposal of nonproduced nonfinancial assets
+ net lending or borrowing.

Net lending or borrowing is the residual claim on gross saving once gross investment and acquisition less disposal of nonproduced nonfiancial assets have been deducted. Its value can viewed as the amount available to lend to other units if saving exceeds investment or the amount the corporation is required to borrow to finance investment that cannot be funded from CFC and undistributed profits.

Gross saving, which appears on the right side of the account, consists of both undistributed corporate profits, which have been carried over from the income and outlay account, and CFC. Gross investment, which appears on the left side of the account, consists of both purchases of fixed assets and changes in inventories. Although the structure of the capital account is relatively straightforward, a few additional points should be made about the measures that are shown in this account and their relation to the Federal Reserve Board flow of funds accounts (FFAs).

Net capital transfers. Net capital transfers are cash or in-kind transactions that are related to the acquisition or disposal of fixed assets where one of the parties

^{25.} For a discussion of the treatment of the transactions associated with commercial banks and with property and casualty insurance companies, see Brent R. Moulton and Eugene P. Seskin, "Preview of the 2003 Comprehensive Revision of the National Income and Product Accounts," Survey 83 (June 2003): 17–34

^{26.} Since the more detailed tables of the NIPAs also provide measures of corporate profits that are based on data reported to the Internal Revenue Service, the adjustments that are applied in the derivation of the measures in this account are explicitly mentioned in the title for this measure.

involved in the exchange gets nothing in return. In this account, they consist of investment grants received from the Federal Government.

Gross investment. This measure differs from the measure of purchases of fixed assets in two ways. First, gross investment does not include purchases of land, which are treated as an acquisition of a nonproduced nonfinancial asset (discussed below). Second, since the national accounts treat software expenditures as investment, gross investment includes expenditures related to the purchase or "in-house" development of software used in production.²⁷

Acquisition less disposal of nonproduced nonfinancial assets. Nonproduced nonfinancial assets consist of nonfinancial assets that are necessary for production but have not themselves been produced. These assets primarily consist of natural resources, such as land, electromagnetic spectrum, and offshore drilling rights.

Relation to the FFAs. Although the measure of net lending or borrowing that is presented in this account is calculated as the residual claim on gross saving once gross investment and acquisition less disposal of nonproduced nonfinancial assets have been deducted, its value can also be calculated by subtracting the acquisition of financial liabilities from the acquisition of financial assets. This alternative calculation works because saving that is not spent on purchases of fixed assets results in the acquisition of financial assets, and borrowing that is used to finance the purchase of fixed assets results in the acquisition of financial liabilities.

The measure of net lending or borrowing links the NIPAs to the FFAs. In particular, the economic accounts that underlie the FFAs begin by subtracting the acquisition of financial liabilities from the acquisition of financial assets to arrive at a measure of net lending or borrowing, which in principle should equal the measure that is calculated in the NIPAs. In practice, these measures differ because they are calculated from different source data and reflect differences in methodologies. The remaining economic accounts then record changes in the value of financial assets and liabilities to finally arrive at a measure for the change in net wealth.²⁸ As a result, the NIPAs and the FFAs jointly show how the changes in net wealth between balance sheets are related to income from production, much like what is done in financial statements.²⁹

^{27.} For a discussion of the treatment of software investment in the NIPAs, see Brent R. Moulton, Robert P. Parker, and Eugene P. Seskin, "A Preview of the 1999 Comprehensive Revision of the National Income and Product Accounts: Definitional and Classification Changes," Survey 79 (August 1999): 7–20.

^{28.} Because of data limitations, the set of balance sheets provided in the FFAs do not cover all sectors in the economy.

^{29.} BEA and the Federal Reserve Board have been working together to further integrate the NIPAs and the FFAs. One outcome of these efforts is the development of a set of integrated accounts that use consistent terminology for a consistently defined set of sectors. For more on this topic see, Charlotte Anne Bond, Teran Martin, Susan Hume McIntosh, and Charles Ian Mead, "Integrated Macroeconomic Accounts for the United States," SURVEY 87 (February 2007): 14–31.

III. Economic Accounts for Sectors

▶ HIS section presents a detailed discussion of the economic accounts for each of the three sectors that contribute to domestic output in the economy—business, households and institutions, and general government. The economic accounts for each sector consist of an aggregation of the individual economic accounts for all related institutions. However, two specific types of manipulations are involved in the aggregation of the accounts for each sector. First, the details provided on the individual accounts are expanded to separately identify the transactions that are made with the other sectors of the economy and the rest of the world. Second, a few types of accounting entries are offset against one another to avoid double counting in important measures presented in the accounts.

Business Sector

The NIPA business sector consists of 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 enterprises organized for profit, and certain other types of entities. These other types include mutual financial institutions, private noninsured pension funds, cooperatives, nonprofit organizations (that is, entities classified as such by the Internal Revenue Service in determining income tax liability) that primarily serve business, Federal Reserve Banks, federally sponsored credit agencies, and government enterprises.

Since the primary role of business in the economy is to employ resources in the production of final goods and services, most domestic output is produced within this sector.

The structure of the accounts for the business sector is similar to the economic accounts for an individual business firm. However, one notable exception is that the enterprise income and the income and outlay accounts for individual businesses are combined into a single account for the business sector by including measures of taxes on corporate income, of dividend payments, and of undistributed corporate profits as components of the measure of corporate profits on the left side of the account (second panel of table 6). In addition, many of the measures in the accounts for the business sector require further explanation.

Subsidies. This measure, which appears on the left side of the production account, consists of monetary grants from government to private business or to gov-

ernment enterprises at a different level of government (as defined below). Since subsidies are equivalent to negative taxes on production and imports, they are netted against these taxes on the left side of the production account in the calculation of net operating surplus.

Net operating surplus of private enterprises. This measure includes the operating surplus of both incorporated and unincorporated businesses. For corporations, net operating surplus is generally thought to

Table 6. Economic Accounts for Business

Productio	n Account		
Uses	Sources		
Compensation of employees Wages and salaries Supplements to wages and salaries Taxes on production and imports	Gross output Sales Changes in inventories Less: Intermediate goods and services		
Less: Subsidies Consumption of fixed capital Net operating surplus Private enterprises Current surplus of government enterprises			
Charges against gross value added and net operating surplus	Gross value added		
Business Enterpri	se Income Account		
Uses	Sources		
Income payments on assets Interest and miscellaneous payments Dividend payments to the rest of the world Reinvested earnings on foreign direct investment in the United States Current transfer payments To persons To government To the rest of the world Current surplus of government enterprises Proprietors' income with inventory valuation and capital consumption adjustments Rental income of other private business with capital consumption adjustment Corporate profits with inventory valuation and capital consumption adjustments Less: Taxes on corporate income To government To the rest of the world Equals: Profits after tax Net dividends Undistributed corporate profits with inventory valuation and capital consumption adjustments	Net operating surplus Income receipts on assets Interest Dividends received from the rest of the world Reinvested earnings on U.S. direct investment abroad		
Uses of enterprise income	Sources of income		
Capital	Account		
Changes in assets	Sources		
Gross investment Acquisition less disposal of non-produced nonfinancial assets Net lending or net borrowing	Gross saving Undistributed corporate profits with inventory valuation and capital consumption adjustments Consumption of fixed capital Net capital transfers		
Gross investment, net acquisition less disposal of nonproduced nonfinancial assets, and net	Gross saving and net capital transfers		

reflect the net return to assets used in production. However, for some unincorporated businesses, net operating surplus may also reflect the value of uncompensated labor contributed by owners. Because this measure reflects a mixture of returns to capital and labor, the SNA refers to this balance as "mixed income" in the case of unincorporated household enterprises. However, the NIPAs use the term operating surplus for all types of business.

Current surplus of government enterprises. The current surplus of government enterprises consists of the net earnings of government agencies that cover a substantial portion of their operating costs by selling goods and services to the public and that maintain their own separate accounts. Typical examples of government enterprises include the U.S. Postal Service, state and local utility companies, and state and local transit authorities. Although many state universities and public parks maintain separate financial records, they are not treated as government enterprises in the accounts because their admissions charges and fees usually cover only a small portion of their operating expenses. Rather, such institutions are treated as part of general government.

The treatment of the current surplus of government enterprises in the accounts is similar to that of net operating surplus of private corporations. In particular, the current surplus is included on the left side of the production account. The only difference in treatment is that the entire value of the current surplus is distributed to the general government. In other words, general government, as the ultimate owner of government enterprises, is assumed to have access to the resources derived from the current surplus of, and to be responsible for investment in, those enterprises.

Reinvested earnings on direct investment. Two additional measures that relate to net income receipts from the rest of the world appear in the income and outlay account for business. The first, reinvested earnings on U.S. direct investment abroad, consists of U.S. investors' claims on current-period undistributed earnings of foreign businesses in which they own or control 10 percent or more of the business. This measure is included as part of income receipts on assets on the right side of the account. The second, reinvested earnings on foreign direct investment in the United States, consists of the foreign investors' claims on the current-period undistributed earnings of domestic U.S. businesses in which they own or control 10 percent or more of the business. This measure is included as part of the income payments on assets on the left side of the account. These flows are included in the account to attribute the earnings of foreign direct investment enterprises to the country of the controlling parent enterprise, regardless of whether the earnings are actually distributed to the parent or are retained and reinvested by the subsidiary.

Proprietors' income. This measure consists of the net earnings of sole proprietorships, partnerships, and tax-exempt cooperatives that are based on the inventory valuation and depreciation concepts that are used in national economic accounting.³⁰ Sole proprietorships are businesses that are owned and managed by single individuals who are personally liable for all business debts. For tax purposes, the owners and their businesses are treated as single tax entities. Partnerships are businesses that are owned and managed by two or more persons where at least one person is personally liable for all business debts.³¹ For tax purposes, the net earnings of partnerships are "passed through" to owners who report and pay taxes on this income in their personal income tax returns.

The treatment of proprietors' income in the accounts is similar to the treatment of corporate profits. In particular, proprietors' income is included on the left side of the business enterprise income account. Although sole proprietors and partnerships may retain net earnings for future use or investment, a simple accounting convention is used to record the distribution of their income, because of data limitations. In particular, proprietors' income is treated as being distributed entirely to owners in the household and institutions sector, which is consistent with the tax treatment of such income. This treatment is similar to the way the current surplus of government enterprises is attributed to their owners in the government sector.

Rental income of other private business. This measure consists of the income earned from the rental of properties by landlords who are not sole proprietors or associated with a partnership or corporation and of the royalties received by persons from patents, copyrights, and rights to natural resources. It excludes the rental income of owner-occupants, which is discussed in the section on households and institutions. As with proprietors' income, the rental income of other private business is calculated by using the depreciation concept that is used in national accounting. For tax purposes, the rental income of persons is reported on Schedule E of an individual income tax return. For the economic accounts of the business sector, this income is treated in the same manner as proprietors' income.

Net dividends. Dividend payments and receipts

^{30.} Since the more detailed tables of the NIPAs also provide measures of proprietors' income that are based on data reported to the Internal Revenue Service, the adjustments that are applied in the derivation of the measures in this account are explicitly mentioned in the title for this measure.

^{31.} The term "persons" in this context is defined by the Uniform Partnership Act and covers a broad set of legal entities, including individuals, business trusts, estates, and trusts.

between domestic businesses are offset against one another to avoid the double counting of corporate profits in the NIPAs. As a result, the measure of net dividends that appears at the bottom of the business enterprise income account consists of dividend payments made by corporations located in the United States and abroad to stockholders who are U.S. residents less the dividend payments received by U.S. corporations.

Households and Institutions Sector

The NIPA households and institutions sector consists of households and nonprofit institutions serving households (NPISHs). The activities of these two different types of entities are combined into a single sector in the NIPAs because NPISHs provide services to households and because data on nonprofits institutions have traditionally been weak.³²

As the primary role of households and institutions serving households in the economy is to earn income for consumption or saving by providing resources for production, most of the income that is generated in production is distributed to this sector. Most sales of final goods and services are also made to this sector.

Although the structure of the accounts for households and institutions is similar to that for businesses, there are enough differences to warrant a separate discussion for each of the new accounts.

Production account

The production account for households and institutions records the value of three different types of output: The rental services provided to homeowners by owner-occupied housing, compensation paid to domestic workers, and nonprofit services that are provided to households. The rest of this section discusses the accounting conventions that are used to record the value of each type of output and the effects that these conventions have on the measure of net operating surplus.

Owner-occupied housing services. As the rental of tenant-occupied housing is counted as a sale of a service and is part of the business sector's output, the services provided by owner-occupied housing must also be counted in GDP. Otherwise, the value of GDP would change every time a housing unit switched be-

tween tenant occupied and owner occupied. To avoid this problem an imputation is included in the production account to treat owner-occupied housing in the same manner as rental property in the NIPAs. Although this is done by simply treating homeowners as if they were landlords that rented their own homes to themselves, the actual conventions that are used to record the value of owner-occupied housing are intricate.

On the right side of the account, a measure for space rent is included in the measure of gross output (first panel of table 7). As there are well-developed rental markets for housing, the imputation for space rent is based on the rents that are charged by landlords for equivalent types of property. Spending by homeowners on closing costs, repairs, and property insurance is included in the measure of intermediate goods and services, which is subtracted from gross output to arrive at gross value added, as is done with the similar business expenses for owners of rental property.

On the left side of the account, property taxes paid by homeowners are included in the measure of taxes on production and imports. The measures for subsidies and consumption of fixed capital also include the relevant values for owner-occupied housing. The account is kept in balance by the measure of net operating surplus, which is used for mortgage interest payments and to generate rental income for owner-occupied housing.

Domestic services. The value of compensation that is paid for domestic services is included in the measures of gross output and gross value added on the right side of the account. This value is also included in the measure of compensation on the left side of the account

Nonprofit services. Since nonprofit institutions serving households (NPISHs) often rely on contributions, government grants, and income receipts on assets to cover many of their expenses, sales are not a good measure of the value of their gross output. As a result, the NIPAs value their gross output by the expenses that they incur in production.

On the right side of the account, the value of gross output is calculated as the sum of the compensation of employees, intermediate goods and services, taxes on production and imports (less subsidies), CFC, and mortgage interest. The measure of intermediate goods and services, which is subtracted from gross output to arrive at gross value added, also includes the relevant values for NPISHs.

On the left side of the account, the measures for compensation of employees, taxes on production and imports (less subsidies), CFC, and net interest include the relevant values for NPISHs. These last three types

^{32.} By combining the activities of households and of nonprofit institutions serving households into a single consolidated account, transactions between these separate types of entities did not need to be presented. However, due to increased data availability in more recent years, information on the incomes and outlays for each of these types of entities is available in NIPA table 2.9. For a discussion of NIPA table 2.9, see Charles Ian Mead, Clinton P. McCully, and Marshall B. Reinsdorf, "Income and Outlays of Households and of Nonprofit Institutions Serving Households," Survey 83 (April 2003): 13–17

of expenses make up the rental value of fixed assets that are owned and used by NPISHs.

Enterprise income account

The enterprise income account for households and institutions shares the same structure as the corresponding account for the business firm, but the account for households and institutions is limited to transactions associated with owner-occupied housing and nonresidential assets owned by NPISHs (second panel of table 7).

Income and outlay account

The income and outlay account for households and institutions resembles the corresponding account for business. However, the sources and uses of income that are recorded in the two related accounts differ substantially. Whereas the primary sources of income for business are sales revenues, the primary sources of income for households and institutions are income receipts that are associated with the provision of resources for production (third panel of table 7). The primary use of income for households and institutions is personal consumption expenditures, which has no counterpart for business.

Another difference between the two related accounts involves the particular accounting entries that are offset against one another to avoid double counting. For business, dividend payments and receipts between domestic businesses are offset against one another. For households and institutions, payments of charitable contributions by households are offset against the receipts of such contributions by NPISHs. As a result, such contributions are excluded from the related account, avoiding a source of double counting in personal income.

addition to the offsetting for charitable contributions, revenues from sales by NPISHs are deducted from the total expenditures of households and institutions in the measure of personal consumption expenditures that appears on the left side of the account. This practice avoids double counting in GDP because the value of such sales are already reflected in the measures of consumption expenditures or are considered intermediate goods and services in the NIPAs.

Two additional points should be mentioned before turning to a more detailed discussion of the measures in the account. First, because of data limitations, most of the transactions in this account are recorded on a cash basis rather than an accrual basis.³³ Second, payments that are made in households' behalf by business

and government are included as both a source and a use of income in this account, even though such receipts and payments are usually excluded from household budgets. For instance, employer-paid health insurance premiums are included in supplements to wages and salaries and the medical care that is paid for by employer health plans is included in personal consumption expenditures.34 Payments made on

Table 7. Economic Accounts for Households and Institutions

Production	n Account
Uses	Sources
Compensation of employees, paid Wages and salaries Supplements to wages and salaries Taxes on production and imports Less: Subsidies Consumption of fixed capital Net operating surplus	Gross output ¹ Less: Intermediate goods and services ²
Charges against gross value added and net operating surplus	Gross value added
Enterprise Inc	come Account
Uses	Sources
Interest and miscellaneous payments Current transfer payments Rental income of households and institutions with capital consumption adjustment	Net operating surplus Interest receipts
Interest payments, transfer payments, and rental income of persons	Sources of income
Income and O	utlay Account
Uses	Sources
Personal current taxes Personal outlays Personal consumption expenditures Interest payments Current transfer payments To government To the rest of the world Personal saving	Compensation of employees, received Wages and salaries Domestic Rest of the world Supplements to wages and salaries Proprietors' income with inventory valuation and capital consumption adjustments Rental income of households and institutions with capital consumption adjustment Income receipts on assets Interest received Dividends received Current transfer receipts From government From business Less: Contributions for government social insurance
Current taxes, outlays, and saving	Personal income
Capital A	Account
Uses	Sources
Gross investment Net lending or borrowing	Personal saving Net capital transfers Consumption of fixed capital
Gross investment and net lending	Gross saving

Consists of the sum of wages and salaries paid for domestic services, space rent for owner-occupied housing, and expenses of nonprofit institutions serving households for nonprofit services. The expenses of nonprofit institutions consist of compensation of employees, intermediate goods and services, taxes on production and imports (less subsidies), consumption of fixed capital, and mortgage interest.
 Consists of the spending of homeowners that would be treated as business expenses by owners of rental property, and purchases of intermediate goods and services by nonprofit institutions serving households.

^{33.} Most business transactions, such as interest payments and receipts, are likely to be recorded on an accrual basis.

^{34.} For further examples of payments made in households' behalf, see the BEA methodology paper Personal Consumption Expenditures at <www.bea.gov/bea/mp.htm>.

households' behalf are included on both sides of the account because they represent sources and uses of income

Compensation of employees. Although a general definition for compensation of employees was given in the discussion of the economic accounts for a corporation, there are two notable characteristics about the related measure that appears on the right side of the income and outlay account for households and institutions. First, this measure consists of compensation that is received from all sectors within the domestic economy and the rest of the world, including payments from other households and institutions. Second, this measure includes both receipts-in-kind that represent income as well as employer contributions to employee pension and insurance plans and employer contributions for government social insurance.

Proprietors' income. This measure consists of the net earnings of sole proprietors and partnerships, which is treated in the accounts as being distributed by business to households.

Rental income of persons. This measure consists of both the rental income associated with owner-occupied housing and nonresidential fixed assets owned by NPISHs and the rental income of other private business, which is treated as being distributed by businesses to households.

Current transfer receipts. Current transfer receipts from government, which are called government social benefits in the NIPAs, primarily consist of payments that are received by households from social insurance funds and government programs. These funds and programs include social security, hospital insurance, unemployment insurance, railroad retirement, workers' compensation, food stamps, medical care, family assistance, and education assistance. Current transfer receipts from business consist of liability payments for personal injury that are received by households, net insurance settlements that are received by households, and charitable contributions that are received by NPISHs.

Contributions for government social insurance. This item consists of payments made by employers, employees, self-employed, and other individuals that participate in government programs. These programs include social security, hospital insurance, supplemental medical insurance, unemployment insurance, railroad retirement, veterans' life insurance, and temporary disability insurance. Although contributions to such programs constitute a use of income, they are deducted from the sources of income on the right side of the account. This practice is followed so that personal income includes only government social benefits received by the sector rather than both benefits

and contributions associated with the same programs.

Personal current taxes. This item, which appears on the left side of the account, consists of taxes that are paid by households. These include Federal and state income taxes and state and local taxes on property other than homes, motor vehicle license payments, and other personal license payments. State and local property taxes on homes are excluded from this measure because they are treated as taxes on production.

Personal consumption expenditures (PCE). This measure is simply defined as the value of final goods and services that are purchased by persons. However, there are three noteworthy characteristics about this measure. First, purchases of homes by households and of fixed assets by NPISHs are excluded from PCE because they are classified as fixed investment. Second, although some analysts consider consumer durable goods to be investment, the NIPAs included them in PCE.³⁵ Purchases of consumer durable goods are included in PCE because they are primarily used for nonmarket household production, which is considered outside the scope of GDP and the NIPAs. Third, PCE includes the value of services provided by NPISHs for the benefit of households as a whole. The value of these services is indirectly calculated by subtracting sales from the measure of NPISHs' output for the reasons mentioned above.

Current transfer payments. Current transfer payments to general government in this account primarily consist of donations, fees, and fines that are paid by households and NPISHs to Federal, state, and local governments. Current transfer payments to the rest of the world in this account primarily consist of cash and in-kind transfers to foreign residents by households and NPISHs.

Personal saving. This measure is the difference between current income and current outlays and taxes—that is, personal consumption expenditures, interest payments, current transfer payments, and current taxes. This measure is conceptually equivalent to undistributed corporate profits in the sense that both measures represent current income that is retained for future use or investment.

Since personal saving is the residual claim on current income, its value can be negative over a number of accounting periods. Such an occurrence is perhaps better understood by considering that current income is not the only source of funds that can be used to

^{35.} In the NIPAs, consumer durable goods are defined as tangible commodities that have an average life of three or more years. Although consumer durable goods are treated as consumption in the NIPAs, the value of the stock of such goods is included in the BEA's tables of fixed assets and consumer durable goods. In addition, the value of the stock of consumer durable goods is included in the net worth measures that are maintained in the Federal Reserve Board's FFAs.

finance current consumption. In particular, households and institutions can finance current consumption by using savings from previous periods, by selling financial or fixed assets, or by borrowing. Indeed, in the short-run, an individual household's saving is unlikely to be positive when it makes a major purchase, such as an automobile; even at the aggregate level, personal saving may become negative when an unusually large number of households and institutions make such purchases.

As often noted, personal saving, along with personal income, exclude capital gains. Nevertheless personal saving is still a useful measure for examining the funds that are made available by households and institutions to finance new investment. This is because capital gains represent changes in the value of existing assets and are not a source of new funds for the economy as a whole.

Despite its usefulness, the NIPA measure of personal saving may not be the appropriate measure for some types of analyses that focus on households and institutions. For example, analyses that examine whether households are saving enough for retirement may be better off focusing on households stocks of net wealth, which can be used to finance future consumption.³⁶

Capital account

The structure of the capital account for households and institutions is almost identical to that for the business sector. Investment in this sector consists of the purchase of housing. Net capital transfers in this sector are equal to transfer receipts, which consist of assets that are brought into the United States by immigrants, less transfer payments, which consist of assets removed from the United States by emigrants and of estate taxes that are paid to general government.

General Government Sector

The NIPA general government sector consists of all Federal Government and state and local government agencies except government enterprises.

Governments play many roles in the economy, and the NIPAs provide measures related to at least four of these roles. These include providing nonmarket services for consumption by the general public, investing in assets to provide infrastructure for the economy, providing social benefits to individuals in society, and contributing to domestic saving and investment.

Many of the measures that appear in the general government accounts have already been addressed in the previous sections. For instance, the measure of per-

sonal current taxes that appears as a source of income for general government is the same as the measure of personal income taxes that appear as a use of income for households and institutions.³⁷ The structure of the accounts for the general government sector also resembles that for households and institutions. However, there is no enterprise income account for government enterprises, because of limitations in source data. There are also enough differences between the remaining accounts to warrant a separate discussion for each new account.

Production account

Because governments primarily rely on tax receipts and transfer payments to cover their expenditures, sales are not a good measure of the value of their gross output. As a result, gross output for general government is measured by the expenditures that are made to provide goods and services for public consumption, but it excludes expenditures for other purposes—for example, social benefits paid to persons, interest payments, and subsidies.

Gross output for general government, which appears on the right side of the account, is calculated as the sum of compensation of employees, purchases of intermediate goods and services, and CFC (as a partial measure of the services of government capital; first panel of table 8). Since purchases of intermediate goods and services are subtracted from gross output to arrive at gross value added, the account is kept in balance by including compensation of employees and CFC on the left side of the account.

BEA recognizes that the inclusion of a measure of net operating surplus in the production account for general government would improve consistency within a full set of national accounts; this practice would also involve choosing a model and using independent source data to estimate the value of a net return to fixed assets. Since the advisory group that has been tasked to recommend updates to the SNA has called for research on to how to measure such a net return in a set of national economic accounts, the production account for this sector presently only includes a measure of CFC, which is an incomplete measure of the cost of capital services derived from such goods.

Income and outlay account

The income and outlay account for general government resembles the corresponding account for households and institutions. However, the nature of income receipts and expenditures that are recorded in the two

^{36.} For a further discussion of usefulness of personal saving in particular types of analyses, see Marshall B. Reinsdorf, "Alternative Measures of Personal Savings," Survey 87 (February 2007): 7–13.

^{37.} Since each measure in the summary accounts of the NIPAs has a counter-entry, additional examples of such relationships can be found in table 9.

Table 8. Economic Accounts for General Government

11000	aotion Aocount		
Uses	Sources		
Compensation of employees, paid Wages and salaries Supplements to wages and salaries Consumption of fixed capital	Gross output ¹ Less: Intermediate goods and services		
Charges against gross value added	Gross value added		
Income a	and Outlay Account		
Uses	Sources		
Consumption expenditures Current transfer payments	Current tax receipts Personal current taxes		

Uses	Sources
Consumption expenditures Current transfer payments Government social benefits To persons To the rest of the world Other current transfer payments to the rest of the world Interest payments Subsidies Less: Wage accruals less disbursements Government saving	Current tax receipts Personal current taxes Taxes on production and imports Taxes on corporate income Taxes from the rest of the world Contributions for government social insurance Income receipts on assets Interest and miscellaneous receipts Dividends Current transfer receipts From business (net) From persons Current surplus of government enterprises
Current expenditures and net saving	Current receipts

Capital Account		
Uses	Sources	
Gross investment Acquisition less disposal of non-produced nonfinancial assets Net lending or borrowing	Government saving Net capital transfers Consumption of fixed capital	
Gross investment and net lending	Gross saving	

^{1.} Consists of compensation of employees, intermediate goods and services, and consumption of fixed capital.

accounts differ. Whereas the primary sources of income for households and institutions are income receipts from providing resources for production, the primary sources of income for the general government are current tax receipts and contributions for government social insurance (second panel of table 8). General government also does not use income receipts mainly for financing consumption expenditures. Rather, much of the income received by general government is also used to provide current transfer payments to households.

Another difference between the two accounts involves the particular accounting entries that are offset against one another to avoid double counting. For households, payments and receipts of charitable contributions between households and institutions are offset against one another. For general government, income payments and receipts between the Federal Government and the state and local governments, which are called grants-in-aid in the NIPAs, are offset against one another. As a result, grants-in-aid are excluded from the measures of the consolidated government account, though they are included in the separate ac-

counts for the Federal Government and for state and local governments. This practice avoids a potential source of double counting in the measures of government receipts and expenditures.

In addition to the offsetting of grants-in-aid, revenue from sales to other sectors is deducted from the total expenditures of general government in the formation of the measure of government consumption expenditures. As with the offsetting of the sales of NPISHs against the expenditures of households and institution expenditures, this practice avoids double counting in GDP because such sales are already reflected in the measures of PCE and exports or are considered purchases of intermediate goods and services by business.

Government consumption expenditures. This item, which appears on the right side of the account, provides a measure of the value of services produced by government for the benefit of society as a whole. Examples of such services include national defense, public education, and police and fire protection. The value of government consumption expenditures is indirectly calculated by subtracting own-account investment, which is counted as part of government gross investment, and sales to other sectors from the measure of government gross output for the reason mentioned above.

Wage accruals less disbursements. This item consists of wages and salaries earned less wages and salaries paid. It is subtracted from expenditures on the left side of account so that the measure of net government saving on an accounting basis is comparable to that of personal saving. This can be understood by noting that the wages and salaries in government consumption expenditures are on an accrual basis..

Net government saving. This item is the residual claim on government current receipts once current expenditures have been deducted. This measure reflects, among other factors, the transactions that are covered (for example, transactions of government employee retirement plans) and the time at which transactions are recorded that make it different from measures of surpluses or deficits that are included in government budgets.³⁸

Capital account

The structure of the capital account for general government is almost identical to that for households and institutions. In fact, the only structural difference is

^{38.} For a more detailed discussion of the relationship between the Federal deficits or surpluses and NIPA net saving, see Mary L. Roy and Andrew P. Cairns, "Federal Budget Estimates for Fiscal Year 2009," SURVEY 87 (March 2007): 10–21.

that the account for the general government includes a measure for the net acquisition of nonproduced nonfinancial assets from the business sector.

Although the structure of the related accounts is similar to those of the business sector, the measure of

gross investment differs because it excludes changes in inventories. Although their inclusion would improve overall consistency in the NIPAs, a complete set of data that could be used to construct such a related measure is not available.

IV. NIPA Summary Accounts

T HIS section provides the conceptual framework for the NIPA summary accounts:

- The domestic income and product account
- The private enterprise income account
- The personal income and outlay account
- The government receipts and expenditures account
- The foreign transactions current account
- The domestic capital account
- The foreign transactions capital account

Since the personal income and outlay account and the government receipts and expenditure account are identical to the related income and outlay accounts that were presented for each of the related sectors in the last section, only the remaining accounts need further discussion.

Domestic income and product account

This account mainly consists of an aggregation of the underlying production accounts for all domestic sectors. However, a major difference between the related accounts is that the right side of the domestic income and product account measures GDP by using the expenditure approach rather than the value-added approach (first panel of table 9). This means that GDP is calculated in the NIPAs as the sum of PCE, gross private domestic investment, net exports of goods and services, and government consumption expenditures and gross investment. Longtime users of the accounts are familiar with this derivation of GDP.

Although measures of gross output, intermediate goods and services, and gross value added by sector are not presented in the domestic income and product account, measures of gross value added by sector can be found in NIPA table 1.3.5. In addition, measures of gross output, intermediate goods and services, and gross value added by industry can be found in the BEA's industry accounts.

GDI, which appears on the left side of the account, includes a measure of wage and salary accruals. However, the account also provides measures for wage and salary disbursements and for wage accruals less disbursements to identify counter-entries in the complete set of summary accounts.

Although most of the measures that appear in the domestic income and product account have already been introduced, a few of the new measures should be explained.

Gross private domestic investment. This item, which appears on the right side of the account, consists of the sum of gross private fixed investment and change in private inventories. Gross private fixed investment consists of purchases of fixed assets by businesses and NPISHs and of the construction of new housing for households.

Net exports of goods and services. This measure is defined as exports less imports. Exports are added on the right side of the account because they are part of the value of final goods and services produced in the United States that are not included in the other measures of final expenditures in the account. Imports, which include purchases of both final and intermediate goods and services, are subtracted on the right side of the account because they are produced outside of the United States but are included in the other measures of final expenditures.

Statistical discrepancy. Although the value of GDI should equal the value of GDP, in practice, the values of these measures often differ. This is because each is calculated using a different set of methodologies and data sources. The statistical discrepancy that appears on the left side of the account shows how much the two measures differ.

BEA views GDP as a more reliable measure of output than GDI because it considers the source data underlying GDP to be more timely and accurate. For instance, most of the annual source data used for estimating GDP are based on complete enumerations, such as Federal Government budget data, or are regularly adjusted to such enumerations, such as the quinquennial economic and government censuses. GDP is also based largely on the detailed benchmark inputoutput accounts that are available every five years. For GDI, only the annual tabulations of employment tax returns and Federal Government budget data are based on complete enumerations, and only farm proprietors' income and state and local government budget data are adjusted to complete enumeration. Most of the remaining components of GDI are calculated using tabulations of samples of tax returns, which become available for a given year with a more

considerable lag than much of the data that is used to estimate GDP.³⁹

Private enterprise income account

There are two main differences between the private enterprise income account and the business enterprise income account that was presented in the last section. First, the private enterprise income account consists of an aggregation of the private income accounts for both the business and the households and institutions sectors (second panel of table 9). Second, the private enterprise income account excludes interest and transfer transactions and the surplus associated with government enterprises, which are shown in the government receipts and expenditures account.

As noted earlier, the right side of the private enterprise income account shows the sources of income as the net operating surplus and income receipts of businesses on assets (such as financial assets and equity in other businesses). The left side of the account shows the uses of income as income payments on assets (such as holders of financial liabilities and equity claims of other businesses), business current transfer payments, and income that accrues to the owners of business (namely proprietors' income, rental income of persons, and corporate profits). Corporate profits, a widely used measure in the United States, is distributed to government (taxes on corporate income) and to shareholders (net dividends), or is retained by the corporations (undistributed corporate profits).

Foreign transactions current account

This account shows the current payments received from the United States by the rest of the world and the current receipts received by the United States from the rest of the world. The balance on this account is equal to U.S. exports of goods and services and income receipts from the rest of the world less U.S. imports of goods and services, income payments to the rest of the world, and current tax and net current transfer payments made to the rest of the world. This balance is

closely related to the current account in the international transactions accounts. The current account balance can be viewed as the acquisition of foreign assets by U.S. residents less the acquisition of U.S. assets by foreign residents.

Domestic capital account

This account consists of an aggregation of the capital accounts for each sector that contributes to domestic output, where net saving is equal to the sum of personal saving, undistributed corporate profits, wage accruals less disbursements, and net government saving. However, there are two notable differences between this account and those presented for each individual sector.

The first difference is that the domestic capital account combines the measures of net capital transfers and of acquisitions and disposals of nonproduced nonfinancial assets into a single measure of "capital account transactions" on the left side of the account (sixth panel of table 9). This practice simplifies the structure of the domestic capital account and the system of counter-entries in the summary accounts.

The second difference is that the domestic capital account includes the statistical discrepancy on the right side of the account. The measures of saving that are carried forward into this account are ultimately based on measures of income that is generated from production. By including the statistical discrepancy, the measure of saving at the bottom of the account becomes more consistent with the measure of the value of final goods and services that BEA believes is more accurate.

Foreign transactions capital account

This account subtracts net capital transactions with the rest of the world from the balance on the foreign transactions current account to derive the net lending or borrowing position that the United States has with the rest of the world. The measures of net capital transactions and of net lending or borrowing in this account are identical to those included in the domestic capital account.

^{39.} For a further discussion of the statistical discrepancy, see Robert B. Parker and Eugene P. Seskin, "Annual Revision of the National Income and Product Accounts," Survey 77 (August, 1997): 6–35.

Table 9. Summary National Income and Product Accounts, 2006

[Billions of dollars]

Account 1. Domestic Income and Product Account

Line			Line		
2 3 4 5 6 7 8 9	Compensation of employees, paid	7,454.8 6,032.2 6,024.7 7.5 1,422.6 967.3 49.7 3,225.3 3,239.2 -13.9 1,615.2	16 17 18 19 20 21 22 23 24 25	Personal consumption expenditures (3–3) Durable goods Nondurable goods Services. Gross private domestic investment. Fixed investment (6–2) Nonresidential Structures Equipment and software Residential Change in private inventories (6–4)	9,224.5 1,048.9 2,688.0 5,487.6 2,209.2 2,162.5 1,397.7 405.1 992.6 764.8 46.7
12	Gross domestic income	13,212.8	26 27 28	Net exports of goods and services	-762.0 1,467.6 2,229.6
13	Statistical discrepancy (6–19)	-18.1	29 30 31 32 33	Government consumption expenditures and gross investment (4–1 and 6–3) Federal	2,523.0 932.5 624.3 308.2 1,590.5
14	GROSS DOMESTIC PRODUCT	13,194.7	34	GROSS DOMESTIC PRODUCT	13,194.7

Account 2. Private Enterprise Income Account

Line			Line		
3 4 5 6 7 8 9	Income payments on assets. Interest and miscellaneous payments (3–20 and 4–21) Dividend payments to the rest of the world (5–14). Reinvested earnings on foreign direct investment in the United States (5–15) Business current transfer payments (net) To persons (net) (3–24). To the rest of the world (net) (5–19) Proprietors' income with inventory valuation and capital consumption adjustments (3–17). Rental income of persons with capital consumption adjustment (3–18). Corporate profits with inventory valuation and capital consumption adjustments Taxes on corporate income To government (4–17). To the rest of the world (5–19). Profits after tax with inventory valuation and capital consumption adjustments Net dividends (3–21 and 4–22). Undistributed corporate profits with inventory valuation and capital consumption adjustments (6–10).	91.4 71.1 90.2 27.2 60.6 2.5 1,006.7 54.5 1,553.7	19 20 21 22 23	Net operating surplus (1–9) Income receipts on assets Interest (3–20) Dividend receipts from the rest of the world (5–6) Reinvested earnings on U.S. direct investment abroad (5–7)	3,239.2 2,575.3 2,155.5 167.2 252.6
18	USES OF PRIVATE ENTERPRISE INCOME	5,814.5	24	SOURCES OF PRIVATE ENTERPRISE INCOME	5,814.5

Account 3. Personal Income and Outlay Account

Line			Line		
2 3 4 5 6 7	Personal current taxes (4–15) Personal outlays Personal consumption expenditures (1–15) Personal interest payments (3–20) Personal current transfer payments To government (4–25) To the rest of the world (net) (5–17) Personal saving (6–9)	1,354.3 9,590.3 9,224.5 238.0 127.8 78.9 48.9	12 13 14 15 16 17 18 19 20 21 22 23 24	Compensation of employees, received. Wage and salary disbursements. Domestic (1–3 less 5–11)	7,440.8 6,018.2 6,015.3 2.9 1,422.6 970.7 451.8 1,006.7 54.5 1,796.5 1,100.2 696.3 1,612.5 1,585.3 27.2 927.6
9	PERSONAL TAXES, OUTLAYS, AND SAVING	10,983.4	26	PERSONAL INCOME	10,983.4

Account 4. Government Receipts and Expenditures Account

Line			Line		
2 3 4 5 6 7 8 9	Consumption expenditures (1–29). Current transfer payments	2,089.3 1,618.3 1,588.7 1,585.3 3,3 29.6 372.9 49.7 0.0 -195.4 -220.0 24.6	15 16 17 18 19 20 21 22 23 24 25	Current tax receipts. Personal current taxes (3–1) Taxes on production and imports (1–6). Taxes on corporate income (2–13). Taxes from the rest of the world (5–18). Contributions for government social insurance (3–25). Income receipts on assets. Interest and miscellaneous receipts (2–2 and 3–20). Dividends (3–21). Current transfer receipts. From business (net) (2–7). From persons (3–6). Current surplus of government enterprises (1–10).	2,769.8 1,354.3 967.3 435.5 12.6 927.6 111.9 109.3 2.6 139.5 60.6 78.9 -13.9
13	GOVERNMENT CURRENT EXPENDITURES AND NET SAVING	3,934.8	27	GOVERNMENT CURRENT RECEIPTS	3,934.8

Account 5. Foreign Transactions Current Account

Line			Line		
	Exports of goods and services (1–27) Income receipts from the rest of the world. Wage and salary receipts (3–13) Income receipts on assets Interest (3–20). Dividends (2–22). Reinvested earnings on U.S. direct investment abroad (2–23)	1,467.6 691.4 2.9 688.6 268.8 167.2 252.6	10 11 12 13 14 15 16 17 18	Imports of goods and services (1–28) Income payments to the rest of the world. Wage and salary payments (1–3). Income payments on assets. Interest (3–20). Dividends (2–3). Reinvested earnings on foreign direct investment in the United States (2–4) Current taxes and transfer payments to the rest of the world (net). From persons (net) (3–7). From government (net) (4–5 and 4–6 less 4–18). From business (net) (2–8 and 2–14). Balance on current account, national income and product accounts (7–1)	2,229.6 633.4 9.4 624.0 461.5 91.4 71.1 90.1 48.9 20.3 20.9 -794.1
8	CURRENT RECEIPTS FROM THE REST OF THE WORLD	2,159.0	21	CURRENT PAYMENTS TO THE REST OF THE WORLD AND BALANCE ON CURRENT ACCOUNT	2,159.0

Account 6. Domestic Capital Account

Line			Line		
1 2 3 4 5 6	Gross domestic investment	2,642.9 2,162.5 433.8 46.7 3.9 -798.0	9 10 11 12	Net saving Personal saving (3–8) Undistributed corporate profits with inventory valuation and capital consumption adjustments (2–17). Wage accruals less disbursements (private) (1–4). Net government saving (4–10) Plus: Consumption of fixed capital (1–11) Private Government General government General government Government enterprises.	251.7 38.8 400.9 7.5 -195.4 1,615.2 1,347.5 267.7 223.6 44.1
7	GROSS DOMESTIC INVESTMENT, CAPITAL ACCOUNT TRANSACTIONS, AND NET LENDING	1,848.8	19	Equals: Gross saving Statistical discrepancy (1–13) GROSS SAVING AND STATISTICAL DISCREPANCY	1,866.9 -18.1 1,848.8

Account 7. Foreign Transactions Capital Account

Line			Line		
			2	Capital account transactions (net) (6–5) Net lending or net borrowing (–), national income and product accounts (6–6)	3.9 -798.0
1	BALANCE ON CURRENT ACCOUNT, NATIONAL INCOME AND PRODUCT ACCOUNTS (5-20)	-794.1	4	CAPITAL ACCOUNT TRANSACTIONS (NET) AND NET LENDING, NATIONAL INCOME AND PRODUCT ACCOUNTS	-794.1

Nore. Numbers in parentheses indicate accounts and items of counterentry in the accounts. For example, line 5 of account 1 is shown as "Supplements to wages and salaries (3–14)"; the counterentry is shown in account 3, line 14.