CHAPTER 1: INTRODUCTION

(Updated: December 2023)

What are the NIPAs? How did the NIPAs originate? How have the NIPAs evolved? How are the NIPA estimates used? How useful are the NIPA estimates? How are the NIPA estimates prepared? Why are the NIPA estimates revised? Where are the NIPA estimates available?

What are the NIPAs?

The National Income and Product Accounts (NIPAs) are one of the three major elements of the U.S. national economic accounts. The NIPAs present the value and composition of national output and the types of incomes generated in its production. (For information on the concepts and definitions underlying the NIPAs, see "<u>Chapter 2</u>: <u>Fundamental Concepts</u>.")

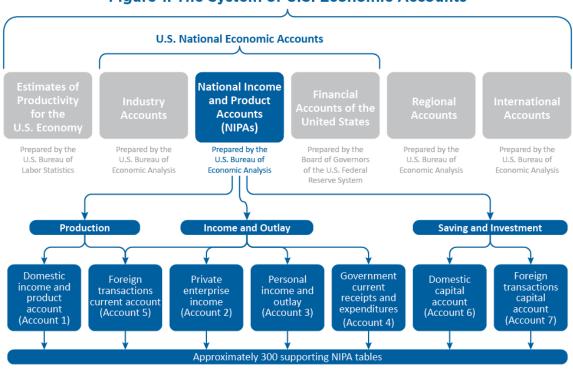
The other major elements of the U.S. national economic accounts are the Industry Economic Accounts (IEAs), which are also prepared by the Bureau of Economic Analysis (BEA), and the Financial Accounts of the United States, (formerly the flow of funds accounts), which are prepared by the U.S. Board of Governors of the Federal Reserve System. The IEAs 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 gross domestic product (GDP) by industry accounts, which measure the contribution of each private industry and of government to GDP.¹ The financial accounts record the acquisition of nonfinancial and financial assets (and the incurrence of liabilities) throughout the U.S. economy, the sources of the funds used to acquire those assets, and the value of assets held and of liabilities owed.²

In addition, BEA prepares two other sets of U.S. economic accounts: the international accounts, which consist of the International Transactions Accounts (formerly known as balance of payments accounts) and the International Investment Position accounts; and the Regional Economic Accounts (REAs), which consist of the

¹ See Mary L. Streitwieser, "<u>Measuring the Nation's Economy</u>: <u>An Industry Perspective/A Primer on BEA's Industry Accounts</u>," and U.S. Bureau of Economic Analysis, <u>*Concepts and Methods of the U.S. Input-Output Accounts*</u>; both are available on BEA's website at <u>www.bea.gov.</u>

² See U.S. Board of Governors of the Federal Reserve System, *Guide to the Flow of Funds Accounts* (Board of Governors, Washington, DC, 2006); and see Albert M. Teplin, "The U.S. Flow of Funds Accounts and Their Uses," *Federal Reserve Bulletin* (July 2001): 431–441.

estimates of GDP by state and by metropolitan area, of state personal income, and of local area personal income.³ Finally, the U.S. Bureau of Labor Statistics prepares estimates of productivity for the U.S. economy (which are partly based on the estimates of GDP). Altogether, the system of U.S. economic accounts presents a coherent, comprehensive, and consistent picture of U.S. economic activity (see Figure 1).





The NIPAs provide information to help answer three basic questions. First, what is the output of the economy—its size, its composition, and its use? Second, what are the sources and uses of national income? Third, what are the sources of saving, which provides for investment in future production? The NIPA estimates are presented in a set of integrated accounts that show U.S. production, income, consumption, investment, and saving. The conceptual framework of the accounts is illustrated by seven summary accounts, and detailed estimates are provided in approximately 300 supporting NIPA tables. The NIPA information is supplemented by a set of fixed-asset accounts, which show the U.S. stock of fixed assets and consumer durable goods.⁴

The NIPAs feature some of the most closely watched economic statistics that influence the decisions made by government officials, businesses, and households.

U.S. Bureau of Economic Analysis

³ For more information on BEA's international or regional estimates, go to <u>www.bea.gov</u>; select "Resources" and then "Methodologies."

⁴ See U.S. Bureau of Economic Analysis, *Fixed Assets and Consumer Durable Goods in the United States*, <u>1925-97</u>, (September 2003), available on BEA's website at <u>www.bea.gov.</u>

Foremost among these estimates is GDP, the most widely recognized measure of the nation's production. In particular, the quarterly estimates of inflation-adjusted GDP provide the most comprehensive picture of current economic conditions in the United States. Other key NIPA estimates include the monthly estimates of personal income and outlays, which provide current information on consumer income, spending, and saving, and the quarterly estimates of corporate profits, which provide an economic measure of U.S. corporate financial performance.

How did the NIPAs originate?

Prior to the development of official statistics in the 1930s, there were only fragmentary and sometimes conflicting data on the state of the economy. This lack of comprehensive economic data hampered efforts to develop policies to combat the Great Depression. In response to this need, and in keeping with the economic identity that "income equals production," the U.S. Department of Commerce commissioned future Nobel Laureate Simon Kuznets to develop estimates of national income to serve as an indicator of both U.S. income and U.S. output.⁵ He coordinated the work of a group of researchers at the National Bureau of Economic Research and of his staff at the Commerce Department, and initial estimates were presented in a 1934 report to the U.S. Senate, *National Income*, *1929–32*. Shortly thereafter, work began on monthly measures that could track income developments more quickly. These measures of income payments to individuals were first published in 1938 and were the predecessor of BEA's personal income shad dropped 11 percent from a post-Great Depression peak in August 1937 to the recession trough in March 1938. Annual statistics could not track these developments.

Similar efforts occurred internationally. In 1928, the League of Nations held the International Conference Relating to Economic Statistics to encourage countries to develop internationally comparable official statistics. As in the United States, the Great Depression underscored the urgency of developing reliable economic measures and in 1939 the League of Nations published national income estimates for 26 countries. As with the United States' measures, the usefulness of the measures was quickly recognized.

The planning needs for a wartime economy in the United States in the early 1940s highlighted the need for a measure of national production that could answer questions that national income measures could not address, such as the tradeoffs associated with mobilizing for war. Annual estimates of "gross national expenditure," which gradually evolved to gross national product (GNP), were introduced early in 1942 to provide information about major categories of expenditures in the economy; the measure also

⁵ The proposition that for a country as a whole, goods and services produced must equal incomes earned by its residents is precisely true only for a closed economy. In the 1930s, when statistical measures were being formulated and international flows were relatively small, the identity was retained by using a measure of production derived from labor and capital supplied by U.S. residents wherever the production takes place—that is, gross national product rather than gross domestic product.

served as a complement to the estimates of national income.⁶ Over time, both the income and expenditure measures were refined and expanded. The first U.S. national income and product statistics were presented as part of a complete and consistent double-entry accounting system in the summer of 1947. The accounts presented a framework for classifying and recording the economic transactions among major sectors: households, businesses, government, and international (termed "rest of the world"). This framework placed the GNP statistics in the broader context of the economy as a whole and provided a more complete picture of how the economy works.⁷

International efforts also continued, and after the war, the League's Committee of Statistical Experts formed a Sub-Committee on National Income Statistics, which produced a report in 1947, written by Sir Richard Stone.⁸ This report was the foundation of the modern-day *System of National Accounts* (SNA)—the internationally accepted guidelines for the compilation of national accounts.

How have the NIPAs evolved?

The evolution of the NIPAs from their earliest origins in the 1930s to their current form exemplifies the balance between theoretically ideal measures, the availability of source data and other resources, and the economic questions of the day. Put another way, the NIPAs evolved, and continue to evolve, in an effort to produce the best possible measures of the economy that are at once accurate, reliable, and relevant.

The improvements BEA introduced into its accounts over the years have reflected its own experience, research and strategic planning, and the recommendations of scholars and other experts. For example, in the 1950s, there were two major reviews of the accounts, one by the National Bureau of Economic Research and another by the Conference on Research in Income and Wealth.⁹ In 1971, BEA published a special volume commemorating its 50th anniversary that contained recommendations contributed by some of the country's most prominent economists.¹⁰ Also in the 1970s, reports were prepared by the Advisory Committee on Gross National Product Data Improvement and by the Conference on Research in Income and Wealth; in 1982, the General Accounting

⁶ Until 1991, GNP was the featured measure of U.S. production. For an explanation of the difference between GNP and GDP, see the section "Geographic coverage" in <u>Chapter 2</u>.

⁷ See Rosemary D. Marcuss and Richard E. Kane, "<u>U.S. National Income and Product Statistics: Born of the Great Depression and World War II</u>," *Survey* 87 (February 2007): 32–46.

⁸ Sir Richard Stone subsequently won the Nobel Prize for "having made fundamental contributions to the development of systems of national accounts and hence greatly improved the basis for empirical economic analysis."

⁹ U.S. Congress, Joint Economic Committee, Subcommittee on Economic Statistics, "The National Economic Accounts of the United States: Review, Appraisal, and Recommendations," in *The National Economic Accounts of the United States*, report by the National Accounts Review Committee, National Bureau of Economic Research, 85th Congress, October 1957 and "A Critique of the United States Income and Product Accounts," *Studies in Income and Wealth*, vol. 22. Princeton, JN: Princeton University Press, for the National Bureau of Economic Research, 1958.

¹⁰ "The Economic Accounts of the United States: Retrospect and Prospect," *Survey* 51 (July 1971), Part II, 50th anniversary issue.

Office reviewed quarterly GNP revisions.¹¹ BEA regularly conducts its own reviews; for example, in 1995, BEA began a comprehensive review of its national, international, and regional economic accounts and sought outside advice from experts; this effort was the predecessor of the advisory committee established by BEA in 2000.¹² And in 2004, BEA participated in a Conference on Research in Income and Wealth on "A New Architecture for the U.S. National Accounts," which initiated the development of a comprehensive and fully integrated set of U.S. national accounts that would be integrated with other U.S. economic statistics such as the productivity measures prepared by the Bureau of Labor Statistics and the financial accounts prepared by the Federal Reserve Board.¹³

Since World War II, the U.S. national accounts and the SNA have continued to evolve together: BEA actively participated in the 1993 and 2008 revisions of the SNA, and as part of its mission, BEA supports the goal of international harmonization by adopting the SNA guidelines to the extent feasible. Since 1993, BEA has incorporated many improvements to the NIPAs and its other economic accounts that have resulted in increased consistency with major SNA guidelines on GDP, investment, and saving.¹⁴

As a result of these continuous efforts, at the end of 1999, the Commerce Department named the invention and ongoing development of the NIPAs and its marquee measure GDP as "its greatest achievement of the century."¹⁵ The following are examples of some of the major changes that have been introduced into the NIPAs to keep them accurate and relevant in the face of a changing economy.

• In the early 1950s, BEA developed and began to publish inflation-adjusted, or "real," measures of output in response to inflation concerns that had persisted since WWII and in order to assess trends in national productivity and standards of living. Later in the same decade, BEA introduced measures of personal income by size and by state in response to similar needs for information on the composition of consumer markets. Additionally, BEA introduced quarterly measures of real

¹¹ Office of Federal Statistical Policy and Standards, *Gross National Product Data Improvement Project Report*, report of the Advisory Committee on Gross National Product Data Improvement, Washington, DC: U.S. Department of Commerce, 1977; Murray F. Foss, ed., "The U.S. National Income and Product Accounts: Selected Topics," *Studies in Income and Wealth*, vol. 47, Chicago: University of Chicago Press, for the National Bureau of Economic Research, 1983; and Comptroller General, *The Bureau of Economic Analysis Should Lead Efforts to Improve GNP Estimates* (Washington, DC: General Accounting Office, 1982).

¹² BEA's Advisory Committee papers are available on BEA's website at <u>www.bea.gov</u>. See also "<u>Mid-Decade Strategic Review of BEA's Economic Accounts: Maintaining and Improving Their Performance</u>," *Survey* 75 (February 1995): 36-66, and "<u>Mid-Decade Strategic Review of BEA's Economic Accounts: An Update</u>," *Survey* 75 (April 1995): 48-55.

¹³ Dale W. Jorgenson, J. Steven Landefeld, and William D. Nordhaus, eds., "A New Architecture for the U.S. National Accounts," *Studies in Income and Wealth*, vol. 66, Chicago: University of Chicago Press, for the National Bureau of Economic Research, 2006.

¹⁴ For more information, see Stephanie H. McCulla, Karin E. Moses, and Brent R. Moulton, "<u>The National Income and Product Accounts and the System of National Accounts 2008: Comparison and Research Plans.</u>" *Survey* 95 (June 2015). For the latest edition of the SNA, see http://unstats.un.org/unsd/nationalaccount/SNA2008.asp

¹⁵ "<u>GDP: One of the Great Inventions of the 20th Century</u>," Survey 80 (January 2000): 6–14.

GNP to meet the need for more timely data that indicated the pace of inflationary or deflationary changes.

- In the 1960s, GNP components were benchmarked to BEA's input-output accounts to better integrate the U.S. economic estimates. Interest payments to individuals were excluded from GNP to better reflect productive activity.
- In the 1970s, BEA introduced economic measures of capital consumption that were valued at replacement cost rather than historical cost to better reflect the depletion of capital assets and to enhance the picture of the Nation's productive capacity.
- In the 1980s, BEA significantly expanded its coverage of international trade in services in response to the growing size and diversity of these global transactions.
- In the 1990s, BEA introduced more accurate measures of real output and of prices, developed estimates of investments in computer software, instituted the treatment of government purchases of structures, equipment, and software as investment, and incorporated improved measures of high-tech products.
- In the 2000s, BEA introduced improved measures of insurance and banking services, a new treatment of government as a producer of goods and services, a new treatment of disasters to better reflect the distinctions between current and capital transactions, a new improved format for presenting the NIPAs, and an updated classification system for personal consumption expenditures to provide more useful categories for analysis of spending by households and nonprofit institutions serving households.
- In 2013, BEA expanded the asset boundary in the accounts by recognizing expenditures by business, government, and nonprofits institutions serving households for research and development and expenditures by private enterprises for the creation of entertainment, literary, and artistic originals as fixed investment to allow better measurement of the effects of innovation and intangible assets on the economy. BEA also began measuring pension income on an accrual basis.
- In 2018, BEA completed a multi-year initiative to improve its seasonal adjustment in the NIPAs, and it introduced measures of GDP and GDI and their major components that are not seasonally adjusted.
- In 2020, as part of BEA's ongoing efforts to harmonize the production and publication of the NIPAs, the IEAs, and the Regional Economic Accounts, BEA synchronized the production and release of quarterly NIPA, IEA, and REA statistics.
- In 2022 and 2023, BEA took the final steps in harmonizing its accounts by concurrently producing and publishing annual and comprehensive updates, respectively, of the NIPA, IEA, and REA statistics.

How are the NIPA estimates used?

The NIPAs provide government policymakers, business decision-makers, academics and other researchers, and the general public with information that enables

them to follow and understand the performance of the U.S. economy. The following are among the principal uses of the NIPA estimates.

- Since their inception in the 1930s and 1940s, the NIPAs have become the mainstay of modern macroeconomic analysis. They provide comprehensive and consistent time series that can be used for measuring the long-term path of the U.S. economy, for analyzing trends and identifying factors in economic growth and productivity, and for tracking cyclical fluctuations in economic activity.
- The NIPAs provide the basis for macroeconomic forecasting models. These mathematical models are developed using historical NIPA estimates and other variables with the aim of predicting short-term economic activity or long-term economic trends.
- Key NIPA estimates serve as primary indicators of the current condition of the U.S. economy. In particular, the releases of the quarterly estimates of GDP and its components, of the quarterly estimates of corporate profits, and of the monthly estimates of personal income and personal consumption expenditures are closely anticipated and followed by Wall Street investors and analysts, the news media, and the general public.
- The NIPA estimates provide critical inputs to the formulation and execution of macroeconomic policy and to the assessment of the effects of these policies. They are used by the White House and by Congress in formulating fiscal policy and by the Federal Reserve Board in formulating monetary policy.
- The NIPA estimates are used by the White House and Congress in preparing the federal budget and tax projections.
- The NIPA estimates are used in comparisons of the U.S. economy with the economies of other nations. Comparable international statistics facilitate assessments of relative economic performance among nations, and they provide the basis for tracking and analyzing the global economy.
- Detailed NIPA estimates can be used in examining interrelationships between various sectors of the economy. For example, estimates of benefits paid under government assistance programs track flows of transfer payments from governments to households.
- The NIPA estimates are used by businesses and individuals in planning financial and investment strategies. Such planning heavily depends on the near- and long-term prospects for economic growth.
- The NIPAs are an important data source for the other national economic accounts and other economic statistics. For example, the NIPA estimates of owneroccupied housing, of motor vehicle output, and of bank-service charges are among the primary source data used in preparing the I-O accounts. In addition, the NIPA estimates are used in various analytical measures; for example, business-sector output is used as the numerator in the Bureau of Labor Statistics' estimates of productivity for the U.S. economy.
- The NIPA framework provides the basis for developing analytical tools such as satellite accounts, which are supplementary accounts that focus on a particular aspect of economic activity or on the activities of a specific sector or segment of

the economy. For example, the NIPAs provide the structural and statistical basis for the travel and tourism satellite accounts.

How useful are the NIPA estimates?

The usefulness of the NIPA estimates is determined by how effective they are in meeting the above needs. This effectiveness may be summarized in terms of four characteristics: accuracy, reliability, relevance, and integrity.

<u>Accuracy</u>. Accuracy may be described in terms of how close the estimates come to measuring the concepts they are designed to measure. In the case of GDP, the estimate is accurate when it captures all production for final use but does not include production for intermediate use. In order to keep pace with innovations in the economy, such as the development of new online services, BEA must periodically review and update the definitions and methodologies of the NIPA aggregates and components to ensure that they represent complete and consistent estimates.

<u>Reliability</u>. Reliability refers to the size and frequency of revisions to the NIPA estimates. An important indicator of reliability is the effectiveness of the initial estimates of GDP in providing a useful picture of U.S. economic activity. The results of periodic studies have confirmed that the initial estimates provide a reliable indication of whether economic growth is positive or negative, whether growth is accelerating or decelerating, whether growth is high or low relative to trend, and where the economy is in relation to the business cycle.¹⁶

<u>Relevance</u>. Relevance has two dimensions. First, relevance refers to the length of time before the estimates become available. Estimates that are not available soon enough for the intended use are not relevant. However, there is an implicit tradeoff between timeliness and accuracy, so BEA has developed a release cycle for the estimates that addresses this tradeoff (see the section "Why are the NIPA estimates revised?"). Second, relevance refers to the ability of the accounts to provide summary and detailed estimates in analytical frameworks that help answer the questions being asked about the economy. Issues of relevance change as the economy changes, as policy concerns evolve, and as economic theory advances; as discussed above, BEA's accounts have evolved over time in order to maintain their relevance.

<u>Integrity.</u> One critical factor underlying the usefulness of the accounts is confidence on the part of users that the NIPA estimates represent a truthful picture of the economy. That is, the preparation and release of the estimates must reflect the best methods and technical judgments available, free from any political or other inappropriate influence.

¹⁶ For more information, see Dennis J. Fixler, Eva de Francisco, and Danit Kanal, "<u>Revisions to GDP, GDI,</u> <u>and Their Major Components</u>," *Survey* 100 (January 2021).

In recognition of the importance of its statistics and the trust placed in their integrity, BEA strives to make its processes open and transparent and its releases objective and timely. For example, the NIPA estimates that are designated as "principal economic indicators"—GDP, personal income and outlays, and corporate profits—are prepared in accordance with Statistical Policy Directive Number 3 of the Office of Management and Budget, which provides standards for data collection, estimation, and evaluation and for the timely and orderly release of these sensitive economic statistics. BEA employs such standards in the preparation of all of its estimates.

As Alan Greenspan, former Chair of the Federal Reserve Board, stated about the national economic accounts, and specifically the estimates of GDP:

Though these estimates have a profound influence on markets when published and are the basis for federal budget projections and political rhetoric, I do not recall a single instance when the integrity of the estimates was called into question by informed observers. This is so despite the fact that, for many of the published preliminary figures, judgmental estimates for data not yet available are made, many of which affect the message of the accounts. It is a testament to the professionalism of the analysts that these judgments are never assumed to be driven by political imperatives. This cannot be said of statistical operations of all countries, and I think it is fair to say that the consequent ability of people to make decisions with greater confidence in the information at their disposal has contributed, in at least a small way, to our nation's favorable economic performance.¹⁷

How are the NIPA estimates prepared?

The NIPA estimation process starts with identifying and obtaining source data that are appropriate as the basis for the estimates. These data largely originate from public sources, such as government surveys and administrative data, and they are supplemented by data from private sources, such as data from trade associations. (For more information, see "Chapter 3: Principal Source Data.")

Ideally, the source data for each detailed component of the NIPAs would correspond exactly to the concepts and structure of the accounts. Additionally, these data would be accurate, would have the needed coverage, would have the appropriate time of recording and valuation, and would be available quickly. In practice, the source data will never meet all of these criteria. Thus, BEA must develop estimating methods that adjust the data to the required concepts and that fill gaps in coverage and timing. (For more information, see "Chapter 4: Estimating Methods.")

¹⁷ "<u>GDP: One of the Great Inventions of the 20th Century</u>," 13.

Why are the NIPA estimates revised?

BEA revises the NIPA estimates for two related reasons. First, as noted earlier, the NIPAs serve a multitude of purposes, some of which require frequent and immediately available estimates and others of which require consistent, long-term time series. Second, much of the source data that BEA uses to prepare the estimates are part of statistical programs that provide, over time, more complete or otherwise better coverage—for example, monthly surveys that are superseded by an annual survey that is drawn from a larger sample or that collects more detailed information. To address this implicit tradeoff between estimates that are the most timely possible and estimates that are the most accurate possible, BEA has developed a release cycle for the NIPA estimates. This cycle progresses from current quarterly estimates, which are released soon after the end of the quarter and which are based on limited source data, to comprehensive-update estimates, which are released about every 5 years and which incorporate the most extensive source data available.

For GDP and most other NIPA series, the set of three current quarterly estimates are released on the following schedule. "Advance" estimates are released near the end of the first month after the end of the quarter. Most of these estimates are based on initial data from monthly surveys for either 2 or 3 months of the quarter; where source data are not yet available, the estimates are generally based on previous trends and judgment (see the box "Source Data and Key Assumptions for the Advance Estimates of GDP for the First Quarter of 2014" in the section "Source data for the current estimates" in <u>Chapter</u> 3).¹⁸

"Second" and "third" quarterly estimates are released near the end of the second and third months, respectively; these estimates incorporate new and revised data from the monthly surveys and other monthly and quarterly source data that have subsequently become available. The current quarterly estimates provide the first look at the path of U.S. economic activity.¹⁹

Annual updates of the NIPAs are released each September.²⁰ These updates incorporate source data that are based on more extensive annual surveys, on annual data from other sources, and on later revisions to the monthly and quarterly source data, and

¹⁸ Information on the assumptions used for unavailable source data is provided in a technical note that is posted with the GDP news release on BEA's website. Within a few days after the release, a detailed "Key Source Data and Assumptions" file is posted on the website. Additionally, in the middle of each month, an analysis of the current quarterly estimate of GDP and related series, including information on key source data and assumptions, is made available in the <u>Survey of Current Business</u> article "GDP and the Economy." ¹⁹ Unless noted otherwise, annual data are presented on a calendar-year basis (i.e., covering January

through December). Quarterly data are also presented on a calendar basis (i.e., the first quarter (Q1) covers January, February, and March; Q2 covers April, May, and June; Q3 covers July, August, and September; and Q4 covers October, November, and December).

²⁰ Prior to the 2022 concurrent release of the NIPAs, IEAs, and REAS, the annual update of the NIPAs was typically released in July; the release of all three accounts spanned several months from July to October. The timing was shifted to September to allow a concurrent release of the three accounts.

they generally cover the 5 previous calendar years.²¹ These revised NIPA estimates improve the quality of the picture of U.S. economic activity, though the overall picture is generally similar to that shown by the current quarterly estimates.

Comprehensive updates are carried out at about 5-year intervals and may result in revisions that extend back for many years.²² These estimates incorporate the best available source data, such as data from the quinquennial U.S. Economic Census. Comprehensive updates also provide the opportunity to make definitional, statistical, and presentational changes that improve and modernize the accounts to keep pace with the ever-changing U.S. economy. Thus, these NIPA estimates represent the most accurate and relevant picture of U.S. economic activity.

Where are the NIPA estimates available?

Information on the NIPA estimates is provided in BEA news releases, in BEA's monthly journal, the *Survey of Current Business*, and on BEA's website at <u>www.bea.gov</u>. News releases provide the earliest information on the current quarterly NIPA estimates and the annual and comprehensive revisions of the NIPAs. These releases, which contain a brief description of the estimates and summary data tables, are posted on BEA's website by 8:30 on the morning of the release in accordance with a previously published schedule.

The most comprehensive source of the latest vintage of NIPA data is BEA's website presentation of the entire set of NIPA tables, which is updated soon after the news release is posted. The website provides the estimates in an interactive environment that enables users to view and download specified tables for selected time spans and in a variety of formats.²³ In addition, the website provides descriptions of the methodologies underlying the estimates and release schedules for the estimates, as well as articles and working papers that describe BEA's current research. Users can be notified via e-mail, RSS feeds, and Twitter accounts of new data releases.

The current NIPA estimates are also discussed each month in the article "GDP and the Economy" in the *Survey* and are presented in a set of selected NIPA tables. The annual and comprehensive updates are described in *Survey* articles after their release.

²¹ As part of the 2018 comprehensive update of the NIPAs, BEA changed the typical open period for annual updates of the NIPAs from 3 to 5 years. As part of the "flexible" approach to annual updates that BEA introduced in 2010, the open period may be extended beyond 5 years to allow for the incorporation of improvements in methodology. See Pamela A. Kelly, Stephanie H. McCulla, and David B. Wasshausen, "Improved Estimates of the National Income and Product Accounts: Results of the 2018 Comprehensive Update," Survey 98 (September 2018) and "BEA Briefing: Improving BEA's Accounts Through Flexible Annual Revisions," Survey 88 (June 2008): 29–32.

 ²² The following is a list of the 16 NIPA comprehensive updates to date: July 1947, July 1951, July 1954, July 1958, August 1965, January 1976, December 1980, December 1985, December 1991, January 1996, October 1999, December 2003, July 2009, July 2013, July 2018, and September 2023.

²³ Go to <u>www.bea.gov</u>, and click on "Tools" and then on "Interactive Data." Interactive tables for BEA's international, regional and industry economic accounts are also available on the website.

Articles that explain changes in definitions, methodologies, and presentations made in connection with the annual and comprehensive updates and articles on other topics related to the NIPAs are published periodically.

The presentation of the NIPA tables is organized to group tables by major topic, such as the components of GDP, saving and investment, and income. For example, most government sector tables are shown in section 3. To assist users in identifying the type of estimate in a table, BEA developed a table-numbering system that highlights the type of estimate (such as current dollars, quantity indexes, and percent changes) in the table. The system is outlined below.

Table numbers are in the format "X.Y.Z." where "X" indicates the NIPA table section, "Y" indicates the table family within the section, and "Z" indicates the metric, or type, of estimate presented.

The table sections are numbered as follows:

- 1. Domestic Product and Income
- 2. Personal Income and Outlays
- 3. Government Current Receipts and Expenditures
- 4. Foreign Transactions
- 5. Saving and Investment
- 6. Income and Employment by Industry
- 7. Supplemental Tables
- 8. Not Seasonally Adjusted

The table families within each section (character "Y") have table stubs, or lines, that are generally the same.

The metric types (character "Z") are numbered as follows:

- 1. Percent change from preceding period in real estimates (most at annual rates)
- 2. Contributions to percent change in real estimates
- 3. Real estimates, quantity indexes
- 4. Price indexes
- 5. Current dollars
- 6. Real estimates, chained dollars
- 7. Percent change from preceding period in prices
- 8. Contributions to percent change in prices
- 9. Implicit price deflators
- 10. Percentage shares of GDP
- 11. Percent change from quarter one year ago (available only for real GDP)

For example, GDP is presented in table group 1.1; the current-dollar estimates are presented in table 1.1.5, and the chained-dollar estimates are presented in table 1.1.6. The tables that present estimates that are only available in current dollars use only the first two

terms of the numbering system. For example, the table "Government Current Receipts and Expenditures" is numbered 3.1.

For some tables, a letter suffix following the table number indicates that there are different versions of the table for different time periods; for example, table 4.3A shows the relation of foreign transactions in the NIPAs to the corresponding items in the international transactions accounts for the period 1946–85, table 4.3B shows the same relation (with additional detail) for the period 1986-98, and table 4.3C shows the same relation beginning with 1999.

An "<u>Index to the NIPA Tables</u>," which identifies the NIPA table (or tables) for each NIPA series and each topic covered by the NIPAs, and which includes cross references for commonly used business and economic terms to the appropriate NIPA item, is available on BEA's website.