

BUREAU OF ECONOMIC ANALYSIS ECONOMICS & STATISTICS ADMINISTRATION U.S. DEPARTMENT OF COMMERCE

# Measuring the Nation's Economy Contents

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### **Message from the Director**

The Bureau of Economic Analysis (BEA) strives to provide the most timely, relevant, and accurate economic data to the public. BEA's economic accounts are designed to enable government officials, business leaders, academic researchers, and the American public to follow and understand the performance of the U.S. economy.

Integrity, quality, responsiveness, and innovation are the hallmarks of BEA's work. Success depends on your trust in the data BEA produces.

BEA takes pride in its work and is eager to help you understand these statistics and how they can be used. So, if you have any questions or suggestions, I encourage you to contact me or any BEA staff member.

J. Steven Landefeld, Director

**Bureau of Economic Analysis** 

#### **About BEA**

The U.S. Bureau of Economic Analysis is one of the world's leading statistical agencies. Located within the U.S. Department of Commerce, BEA is responsible for preparing the national economic accounts of the United States.

The accounts, which cover national, international, regional, and industry data, present essential information on such key issues as economic growth, regional economic development, the relationships among industries, and the nation's position in the world economy.

BEA obtains data from a wide range of government and private sources, conducts research and analysis, develops estimation procedures, and provides its statistics to the public.

The national economic accounts provide a comprehensive, up-to-date picture of U.S. economic activity. These closely watched statistics are key ingredients in critical decisions affecting monetary policy, tax and budget projections, and business investment plans.

## **BEA's Web site: www.bea.gov**

#### 1 U.S. Economy at a Glance

BEA produces some of the most closely watched economic statistics that provide a comprehensive, up-to-date picture of the U.S. economy. The data on this Web site are the most recent indicators, charts, and maps drawn from featured BEA economic accounts.

#### 2 Current Releases

The latest economic indicators are listed front and center on the home page, in their respective account areas. Select the side bar links to review past releases by subject and date, or to check the schedule of future release dates.

#### RSS Information

BEA news releases are now available as RSS (Really Simple Syndication) feeds. RSS allows you to keep up with the most recent news releases. Feeds are read through a program called a news reader or aggregator, providing real time updates.

## **Survey of Current**Business

The monthly journal Survey of Current Business is the definitive source of information about BEA's economic accounts. Articles in the Survey present the latest national, international, regional, and industry estimates; describe the methods used to prepare the estimates; and discuss major revisions and other relevant information. Each issue includes numerous tables and charts that present various



estimates in historical context. The Survey also provides updates of key research and other important initiatives at BEA. You can access the Survey on BEA's Web site or subscribe to the printed version by contacting the U.S. Government Printing Office at (202) 512-1800.

#### Interactive Data Tables

You can view, download, and print BEA data using BEA's interactive tables, charts, or maps. The data are highly customizable. For example, you can create broad time-series tables

or focus on a specific year, quarter, industry, or country. Most interactive tables can be downloaded as a comma separated value (.csv) file or spreadsheet and can be displayed in a file optimized for easy printing. In some areas of the site, you can choose to display data graphically in bar or line charts or in a map.



#### 6 BEA Papers

Formal papers and presentations by BEA staff are available on BEA's Web site. Working papers—research papers and analytical presentations that may later be developed into formal papers or presentations—are also available.

## Frequently Asked Questions

If you need more information, you can browse BEA's frequently asked questions. Questions can be grouped by national, international, regional, and industry account areas. The FAQs also include questions about specific occurrences (such as hurricanes) and how to use BEA's Web site.

## 8 Subscribe to News Updates

Too busy to check the Web site? Subscribe to receive free email updates of selected news releases via the e-mail subscription service.

#### 9 Search Engine

You can perform a keyword or advanced search from any page

on the site. Search results can be sorted by date or relevance. The search engine clusters search results by topic and allows you to preview a resulting document directly within the results page.

#### 10 Of Interest

Watch BEA's "of interest" section for the latest news and special information featured on BEA's Web site.

For more information, go to www. bea.gov and click on "National"

### **U.S. Economic Accounts**

BEA prepares the U.S. national, international, regional, and industry accounts. These accounts present a broad, integrated picture of the U.S. economy according to international standards for such accounts.

### **National Economic Accounts**

The national economic accounts tell us about the structure and growth of the U.S. economy. The core of these accounts is the national income and product accounts (NIPAs). The NIPAs are organized into seven summary accounts.

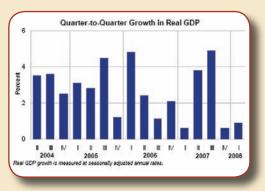
- 1. The domestic income and product account shows the production of all sectors of the economy. The right (product) side of the account shows gross domestic product (GDP) measured as the sum of goods and services sold to final users and the left (income) side of the account shows GDP as measured by the incomes earned in production—gross domestic income—plus the "statistical discrepancy" (the difference between the two measures).
- The private enterprise income account provides additional information on the sources and uses of the income of private businesses and other private enterprises.
- 3. The *personal income and outlay account* shows the sources and uses of income received by persons.
- The government receipts and expenditures account summarizes the transactions for the federal government and for state and local governments.
- 5. The foreign transactions current account provides information on receipts and payments associated with trade in goods and services with the rest of the world and other activities not involving transfers of assets.

- 6. The *domestic capital account* presents information on saving and investment for the economy.
- 7. The foreign transactions capital account provides information on transactions with the rest of the world that are linked to the acquisition or disposition of assets.

Among the most closely watched measures of U.S. economic activity shown in the NIPAs are gross domestic product (GDP), personal income and outlays, and corporate profits. In addition to the NIPAs, BEA also prepares estimates of the stocks of fixed assets and consumer durable goods. To view or download the national accounts estimates in interactive tables, visit BEA's Web site at www.bea.gov and click on "National."

#### Gross domestic product (GDP)

GDP is the most comprehensive measure available of U.S. economic activity. It measures the value of the goods and services produced by labor and property located in the United States. Quarterly changes in "real"



(inflation-adjusted) GDP are considered the primary measure of growth in the U.S. economy.

GDP is estimated as the sum of final-expenditure components: Personal consumption expenditures (consumer spending), gross private domestic investment (business investment in structures, equipment and software, and inventories), net exports (exports of goods and services less imports of goods and services) and government consumption expenditures and gross investment (government spending). Estimates are provided of the contributions of each of these components to U.S. economic growth.

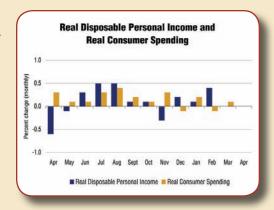
The quarterly estimates of GDP and most other NIPA series are released on the following schedule: "Advance" estimates are released near the end of the first month after the end of the quarter; as more detailed and more comprehensive data become available, "preliminary" and "final" estimates are released near the end of the second and third months, respectively.

## How are GDP and related NIPA estimates used?

- By the Administration and Congress to prepare the federal budget projections and to formulate fiscal policy
- By the Federal Reserve Board to formulate monetary policy
- By the business community to plan financial and investment strategies
- By academia to undertake macroeconomic research

#### Personal income and outlays

The monthly estimates of personal income and outlays measure the income U.S. residents receive and how they spend or save it. *Personal income* is the income received by persons from all sources—that is, from participation in production (such as compensation of employees, income from self-employment, and rental income) and from current transfer receipts from both government (such as Social Security and Medicare



benefits) and business (such as pension benefits). *Personal outlays* consists largely of personal consumption expenditures, mainly purchases of goods and services by individuals from business and government.

Personal income less personal current taxes equals disposable personal income (DPI). DPI measures the income that is available to be either spent or saved. DPI less personal outlays equals personal saving and personal saving as a percentage of DPI is the personal saving rate.

The estimates of personal income and outlays for the month are released about one month after the end of that month and are subject to revision in the next few months.

## How are the estimates of personal income and outlays used?

- To track the path of overall U.S. economic activity
- To study the relationships among income, spending, and saving
- In econometric models to project consumer behavior

#### Corporate profits

The quarterly estimates of corporate profits provide a comprehensive, consistent measure of the income earned from current production by U.S. corporations. Income consists of receipts that arise from current production less associated expenses. Because of the focus on current production,



receipts exclude dividend income and capital gains and expenses exclude bad debts, depletion, and capital losses.

The NIPA estimates of corporate profits are on an economic-accounting basis; they contain adjustments to the value of inventories and of depreciation to account for the effects of price changes on profits. In this and other ways, they differ from the financial accounting of profits that underlies corporate annual reports and the tax accounting of profits that is reported on corporate tax returns. BEA prepares estimates of corporate profits before and after tax and by industry.

The preliminary estimates of corporate profits for the quarter are released near the end of the second month after the end of that quarter, as part of the release of the preliminary GDP estimates. Revised estimates are released one month later as part of the

release of the final GDP estimates.

## Fixed assets and consumer durable goods

The annual estimates of fixed assets and consumer durable goods are BEA's featured measure of U.S. fixed nonfinancial wealth. *Fixed assets* are the stocks of structures (for example, commercial buildings) and equipment and software (for example, communications equipment) owned by business and by government. Estimates are prepared by type of asset and by industry. *Consumer durable goods* are the stocks of durable goods (goods with an average life of at least three years, for example, automobiles) owned by persons.

The estimates of fixed assets and consumer durable goods for the year are available about eight months after the end of that year.

## How are the estimates of corporate profits used?

- By Wall Street to track overall U.S. corporate financial health
- By industry analysts to track industry financial health
- By macroeconomic forecasters to project investment in plant and equipment
- By government policymakers to project tax receipts

## How are the estimates of fixed assets and consumer durable goods used?

- By researchers in studies of national income and wealth
- By the Federal Reserve Board in preparing the flow-of-funds accounts
- To calculate rates of return for corporations and make international comparisons of profitability
- By researchers to prepare alternative estimates of personal savings

For more information, go to www.bea.gov and click on "International"

### **International Economic Accounts**

The international economic accounts tell us about the relationship between the U.S. economy and the global economy. They provide information on international transactions, trade in goods and services, international services, the U.S. international investment position, and direct investment and the activities of multinational companies. In support of this program, BEA conducts a number of mandatory surveys of international services and of direct investment.

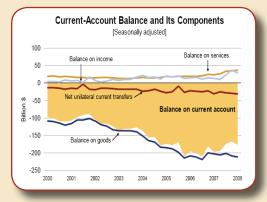
## International transactions accounts (balance of payments)

The international transactions accounts (ITAs) present annual and quarterly estimates that summarize the transactions between the United States and foreign countries. They consist of a current account, a capital account, and a financial account.

The current account records exports of goods and services (for example, wheat shipped from the United States to Russia or legal services provided by a U.S. firm to a client in Japan) and receipts of income on U.S.-owned assets abroad (for example, the income earned by a U.S. company from the operations of a plant it owns in Canada) as credits—that is, with a plus sign. It records imports of goods and services and payments of income on foreign-owned assets in the United States as debits—that is, with a minus sign. Unilateral transfers (such as gifts to other countries) are recorded on a net basis. The sum of the credits and debits in the current account is the currentaccount balance.

The capital account records capital transfers, such as debt forgiveness.

The financial account records net acquisitions of U.S.-owned assets abroad (for example, the funds a U.S. company uses to





acquire a British company) and of foreignowned assets in the United States. Net acquisitions abroad are recorded as debits and net acquisitions into the United States are recorded as credits. The sum of the credits and debits in the financial account is *net financial flows*.

Preliminary ITA estimates for the quarter are released about two and a half months after the end of that quarter and preliminary es-

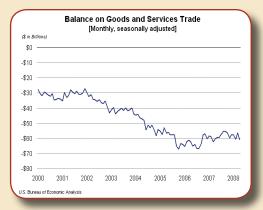
#### How are the ITAs used?

- To assess the impact of international trade and investment (globalization) on the U.S. economy
- To analyze the balances on transactions between the United States and other areas and countries
- By business managers to assess market size and market share

timates for the year are released about two and a half months after the end of that year. Revised estimates are released three months after the preliminary estimates.

#### Trade in goods and services

The monthly estimates of U.S. trade in goods and services provide up-to-date information on U.S. exports to and imports from foreign countries. The goods estimates, which are largely prepared by the U.S. Census Bureau, are available by detailed product and by selected countries and areas. The service estimates, which are prepared by BEA, are available by major category. The difference between exports and imports is the overall balance on trade in goods and services for the United States.



Preliminary trade estimates for the month are jointly released by BEA and the Census Bureau about six weeks after the end of that month. Revised estimates are released one month after the preliminary estimates.

## How are the trade estimates used?

- By trade policy officials to negotiate international trade agreements
- By trade association officials to identify key export markets and to assist in deliberations trade of agreements
- By business managers to assess market size and market share and to judge market direction

#### International services

The annual estimates of U.S. international sales and purchases of services provide detailed information on two types of transactions. The first type consists of U.S. exports and imports of services recorded in the international transactions accounts. The second consists of (a) sales of services to foreign residents by affiliates owned by U.S. companies and located abroad and (b) purchases of services by U.S. residents from affiliates owned by foreign companies and located in the United States. Thus, the second type of transaction, "sales through affiliates," is distinguished from the first type, "cross-border trade," by the fact that it is not a transaction between a U.S. resident and a foreign resident.

BEA prepares estimates of U.S. cross-border trade in private services and of sales of services through majority-owned U.S. and foreign affiliates of multinational companies. The inclusion of both cross-border trade and sales through affiliates recognizes the way that multinational companies fashion their worldwide operations and the importance of proximity to customers in the delivery of services.

The annual estimates of international services—for the preceding year for cross-border services and for the year before that

## How are the estimates of international services used?

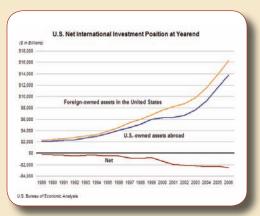
- To assess the size and composition of trade in services by country and type of service
- To compare the prevalence of cross-border trade in services to sales of services between and within businesses
- By trade policy officials to negotiate international trade agreements
- By business managers to assess market size, market share and market trends

for sales of services through affiliates—are usually published in a fall issue of the Survey OF CURRENT BUSINESS.

## International investment position accounts

International investment position accounts show the cumulative value of U.S.-owned assets abroad and of foreign-owned assets in the United States at the end of each year. U.S.-owned assets consist of accumulated stocks of U.S. official assets (e.g., gold reserves), other U.S. government assets (e.g., U.S. government loans to foreign governments), direct investment (U.S. ownership of foreign business enterprises), portfolio investment (U.S. holdings of foreign stocks and bonds), and other private investment (e.g., U.S. loans to foreigners). U.S.-owned assets abroad less foreign-owned assets in the United States equals the net international investment position of the United States.

Annual international investment position estimates are released in June of the following year.



## How are the international investment position accounts used?

- To analyze the size and composition of U.S. investment abroad and of foreign investment in the United States.
- To assess the impact of international investment (globalization) on the U.S. economy.



## Direct investment and the activities of multinational companies

The annual estimates of U.S. direct investment abroad and offoreign direct investment in the United States provide information on transactions between parent companies and their affiliates, on related positions, and on the financial and operating characteristics of the firms involved. Direct investment is defined as ownership by the investor of at least 10 percent of a foreign business.

The direct investor is known as the parent company and the foreign business is known as an affiliate. The combined operations of the parent and its affiliates constitute a multinational company. (Examples of direct investment by a parent company include providing funds for the acquisition of a foreign company or for the expansion of an existing facility in a foreign country.)

BEA produces two broad sets of direct-investment data. The first set consists of international transactions data, which are included in the ITAs and direct investment position data, which are included in the international investment position accounts. The international transactions data cover transactions between affiliates and their parent companies. The direct investment position data measure the level of U.S. direct investment abroad and of foreign direct investment in the United States. The second set consists of financial and operating data for multinational companies. These data



cover the overall activities of their affiliates abroad and foreign-owned U.S. companies.

#### U.S. direct investment abroad

The international transactions data on foreign affiliates' transactions with their U.S. parent companies include capital flows, which measure the funds that U.S. parents provide to their foreign affiliates, and income, which measures the return on those funds. The direct investment position data are stock data and are cumulative; they measure the total outstanding level of U.S. direct investment abroad.

The financial and operating data cover overall activities—such as sales, value added, employment, and capital expenditures—of foreign affiliates and their U.S. parent companies. BEA also produces a separate set of financial and operating data for majority-owned foreign affiliates (U.S. ownership exceeds 50 percent) and their U.S. parents.

Summary estimates of the finances and operations of U.S. multinational companies

for the year are usually released about 16 months after the end of that year. Detailed estimates are usually released about two or three months later.

## How are the data on U.S. direct investment abroad used?

- To measure the current-dollar value of and returns on U.S. direct investment abroad
- To measure the share of U.S. and foreign gross domestic product, employment, exports and imports of goods, capital stock, and research and development accounted for by the U.S. multinational companies
- To analyze the characteristics of firms, industries, and countries that influence the decision to undertake direct investment abroad

## Foreign direct investment in the United States

International transactions data on U.S. affiliates' transactions with their foreign parent companies include capital flows, which measure the funds that foreign parents provide to their U.S. affiliates, and income, which measures the return on those funds. The direct investment position estimates are stock data and are cumulative; they measure the total outstanding level of foreign direct investment in the United States.

The financial and operating data cover the overall activities—such as sales, value added, employment, and capital expenditures—of the U.S. affiliates. BEA also produces data on outlays by foreign direct investors to acquire or establish U.S. businesses and selected data on the operations of the newly acquired or established affiliates. In addition, in a joint project with the Census Bureau, BEA periodically publishes detailed industry data on foreign-owned establishments (plants) in the United States.



Summary estimates of the finances and operations of U.S. affiliates of foreign companies for the year are usually released about 16 months after the end of that year. Detailed estimates are released somewhere between two and four months later. The estimates of new foreign direct investment for the year are usually released about six months after the end of that year.

## How are the data on foreign direct investment in the United States used?

- To measure the value of and returns on foreign direct investment in the United States
- To measure the share of U.S. gross domestic product, employment, exports and imports of goods, and research and development accounted for by U.S. affiliates of foreign companies
- To analyze the differences between foreign- and domestically-owned establishments for such characteristics as wage rates, plant size, capital intensity, domestic content, profitability, and productivity
- To analyze the extent of foreign direct investment in individual U.S. states and industries

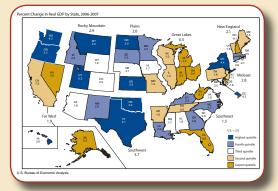
For more information, go to www. bea.gov and click on "Regional"

### **Regional Economic Accounts**

The regional economic accounts tell us about the geographic distribution of U.S. economic activity and growth. They provide estimates of gross domestic product (GDP) for states and metropolitan areas, personal income for states and local areas, and regional economic multipliers for any county or group of counties.

#### **GDP** by State

The annual estimates of GDP by state measure the value added to U.S. production by the labor and property in each state. GDP by state is the state counterpart of gross domestic product (GDP), the featured and most comprehensive measure of U.S. production. Thus, these estimates provide a framework for analyzing the contributions of regions and states to U.S. economic activity. Comparisons of real (inflation-adjusted) GDP-by-state growth with employment growth can be used to track changes in labor productivity.



GDP by state is measured as the sum of the distributions by industry and state of the costs incurred and the income earned in producing GDP by state (such as employee compensation, business taxes, and corporate profits). Thus, the GDP-by-state estimates are consistent with the GDP-by-industry estimates in the industry accounts as well as with the GDP estimates in the national accounts.

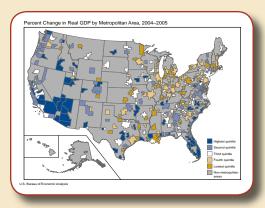
Advance GDP-by-state estimates for the year are released about six months after the end of the year, along with revisions for the preceding three years.

## How are the estimates of GDP by state and metropolitan area used?

- To analyze the state and local economic impacts of national or state economic trends
- By state and local governments to project tax revenues, the need for public services, and to promote economic development opportunities in their states and local areas
- By federal government agencies to allocate funds to states and to project energy and water uses for states and cities
- By academic researchers to conduct applied economic research
- By businesses, trade associations and labor organizations to conduct market research

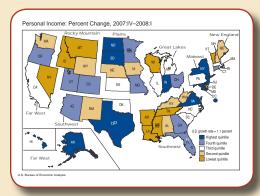
#### **GDP** by Metropolitan Area

Annual estimates of GDP for metropolitan statistical areas are also prepared. As the most comprehensive measures of economic activity available for metropolitan areas, these estimates provide a framework for analyzing the areas' contributions to state and U.S. economic growth by industry. The Bureau prepares GDP-by-metropolitan-area estimates in millions of current and chained dollars for 61 North American Industry Classification System (NAICS) industries.



#### State personal income

The annual and quarterly estimates of state personal income measure the income received by or on behalf of the residents of the state. They are the state counterpart of the national estimates of personal income and they provide a consistent framework for analyzing and comparing individual state economies.



The state estimates provide detailed information by type of income (such as wages and salaries, dividend income, and Social Security benefits) that is comparable across all states and with the nation as a whole. Estimates of compensation and of earnings by place of work indicate the economic activity of business and government within the state, while estimates of personal income by place of residence provide a measure of the fiscal capacity of the state.

BEA also prepares annual state estimates of disposable personal income (personal income less current personal taxes), per capita personal income (personal income divided by total population), and employment. State disposable personal income provides a measure of the income available for spend-

ing and saving and state per capita personal income is an indicator of the economic well-being of the residents of a state.

The estimates of state personal income for the quarter are released about three months after the end of that quarter. Preliminary annual estimates of state personal income are released about three months after the end of that year. Revised and more detailed annual estimates are released about six months later.

#### Local area personal income

The annual estimates of personal income for local areas measure the income received by or on behalf of the residents of the area. BEA prepares estimates for counties, metropolitan areas, micropolitan areas, metropolitan divisions and combined statistical areas, and BEA economic areas. These estimates provide a consistent framework for analyzing and comparing individual local area economies. BEA also prepares annual estimates of per capita personal income for local areas, which is an indicator of the economic well-being of the residents of an area.

## How are estimates of state and local area personal income used?

- To measure and track the levels and types of incomes that are received by people who live or work in a state, county, metropolitan area, or BEA economic area
- By federal government agencies to allocate funds to states and in economic models, such as those to project energy use
- By state governments to measure the economic base of state planning areas and to project tax revenues and public utility needs
- By academic researchers to conduct theoretical and applied economic research
- By businesses, trade associations, and labor organizations to conduct market research



The local area estimates also provide detailed information by type of income that is comparable across all local areas and with the state estimates. Estimates of compensation and of earnings by place of work indicate the economic activity of business and government within the area and estimates of personal income by place of residence provide a measure of fiscal capacity of the area.

The estimates of personal income for metropolitan areas for the year are released about eight months after the end of the year. Annual county estimates of compensation by industry are released about 12 months after the end of the year. The annual estimates of personal income for counties are released about 16 months after the end of the year.

On the "Regional" Web page, you may obtain a quick summary of the economy of a state or local area through BEA's Regional Facts, or BEARFacts. BEARFacts are computergenerated narratives for states, counties, metropolitan statistical areas (MSAs), and BEA economic areas that describe the area's personal income using current estimates, growth rates, and a breakdown of the sources of personal income.

## Regional input-output multipliers

BEA prepares economic multipliers for states and local area economies. The multipliers are produced by the Bureau's Regional Input-Output Modeling System (RIMS II) using state and local personal income data and national input-output accounts data. RIMS multipliers can be used not only to estimate industry-wide impacts but also the impacts on each of the 20 industry sectors in RIMS II.

RIMS multipliers are used to study how changes in the production of one or more industries are likely to affect other industries in the study region. For example, they can be used to estimate how an increase in an industry's production will affect the production of other industries in the region or how a decrease in the number of jobs in an industry are likely to affect the number of jobs in other industries. Impacts can also be estimated in terms of labor earnings and value added.

Multipliers can be ordered and interactively retrieved from the BEA Web site. A fee is charged to cover the cost of preparing multipliers. Detailed information on RIMS II is available on BEA's Web site.

## How are the regional multipliers used?

- To estimate the economic impacts of a wide range of projects, such as building a new sports facility or expanding an airport
- To assess the effects of natural disasters, such as hurricane damage
- By federal, state, and local government agencies to study the local impact of regulations on specific industries or of actions, such as closing a military base
- By state and local governments to estimate the economic impacts of firms locating within their state or the impact of tourism on the local area economy

For more information, go to www. bea.gov and click on "Industry"

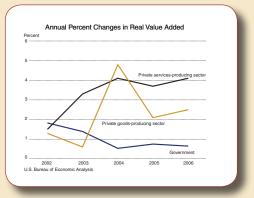
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### **Industry Economic Accounts**

The industry accounts tell us about the relationships among the industries that make up the U.S. economy. They consist of the annual industry accounts, the benchmark input-output accounts and the U.S. travel and tourism satellite accounts.

#### Annual industry accounts

The annual industry accounts for the United States consist of the integrated gross domestic product-by-industry and annual input-output accounts. These accounts provide detailed, consistent information on the changing structure of the U.S. economy. By tracking the detailed flows of goods and services in the economy, these accounts show the contributions of private industries and government to gross domestic product (GDP), the featured and most comprehensive measure of U.S. production.



#### GDP-by-industry accounts

The GDP-by-industry accounts provide annual estimates of value added, the industry counterpart of GDP. Value added is measured as an industry's gross output (sales or receipts and other operating income, commodity taxes, and inventory change) minus the intermediate inputs that are used in the production process (energy, raw materials, semi-finished goods, and purchased services). BEA prepares estimates of each industry's gross output and intermediate inputs and of the composition of the income earned in producing value added (for example, employee compensation, business taxes, and corporate profits).

The GDP-by-industry estimates show the industrial composition of the U.S. economy. This detailed information provides the basis for comparing the performance of each industry relative to those of other industries and to the economy as a whole and for identifying each industry's contribution to U.S. economic growth.

Annual GDP-by-industry estimates are released about four months after the end of each year. More detailed estimates are available about seven months later.



## How are the GDP-by-industry estimates used?

- To study changes in the returns to labor and capital by industry
- To study production, capacity, and productivity across industries
- To compare price changes across industries



#### Annual input-output accounts

The annual input-output (I-O) accounts provide detailed information on the flows of goods and services that make up the production processes of industries. They show how industries interact as they provide inputs to and use outputs from each other to produce GDP.

The annual I-O accounts are presented in a series of make tables and use tables and supplementary requirements tables that are similar to those described below for the benchmark I-O accounts. Estimates are published for 65 industries.

The annual I-O accounts are available about 11 months after the end of each year.

## How are the annual I-O accounts used?

- To study production capacity and productivity across industries
- To examine the direct and indirect effects of a strike or a natural disaster on the U.S. economy
- By the U.S. International Trade Commission to measure the impact of trade policies
- By trade associations to assess cross-industry impacts of economic and regulatory changes

## Benchmark input-output accounts

The benchmark input-output (I-O) accounts provide the most comprehensive information available on the flows of goods and services to industries for use in their production processes and to final users in the economy. These accounts are prepared at five-year intervals and are based on detailed data from the quinquennial economic censuses conducted by the U.S. Bureau of the Census. Detailed estimates are published for nearly 500 industries.

At the heart of the I-O accounts are two basic national-accounting tables. The *make table* shows the detailed commodities (goods and services) that are produced by industries. The *use table* shows the detailed commodities that are used by industries (for example, steel) and those that are consumed by final users (for example, automobiles). The I-O accounts also include four *requirements tables* that facilitate the analysis of relationships between industry production

## How are the benchmark I-O accounts used?

- To estimate the direct and indirect effects of changes in final uses on industries and commodities (for example, to estimate the effects of a strike or a natural disaster on the U.S. economy); to estimate the effects of an increase in U.S. exports or in employment
- By business in macroeconomic and microeconomic forecasting models
- To provide the data and framework used to estimate GDP and its components for the preparation of other economic statistics, such as the travel and tourism satellite accounts

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and final demand. Additional tables include the *import matrix* and *bridge tables* between the I-O accounts and the national income and product accounts.

The I-O accounts for a benchmark year are available about five years after that year.

## U.S. travel and tourism satellite accounts

Annual U.S. travel and tourism satellite accounts present a detailed picture of the travel and tourism industries and their roles in the U.S. economy. These accounts are based on the I-O benchmark accounts and they are consistent with the integrated annual industry accounts.

The travel and tourism accounts show the output of travel and tourism industries by industry and the expenditures by tourists, or visitors, by commodity. They also provide estimates of the income generated by travel and tourism and of employment in the travel and tourism industries. These accounts are prepared with the support of the Office of Travel and Tourism Industries of the U.S. International Trade Administration.

BEA also prepares quarterly estimates of output, prices, and employment in the tourism industries.

Annual travel and tourism accounts are available about six months after the end of each year. More detailed estimates are available about 12 months later. Quarterly estimates of tourism output and prices are released about six months after the end of each quarter. Tourism employment estimates are released about six months later.

## How are the travel and tourism satellite accounts used?

- To determine the shares of the goods and services that were sold to visitors and the shares that were sold to local residents
- To examine the relationship among travel and tourism industries and to compare these industries with other manufacturing and service industries
- To determine the expenditures of tourists
- To assess the impact of specific events on travel and tourism, such as that of September 11, 2001



#### **BEA Research**

Maintaining GDP accounts that accurately depict economic growth in the U.S. in all its complexity requires continuous economic research. For example, business investment, household purchases, and financial transactions constantly change as supply and demand rise and fall and take on new forms. Members of the BEA research staff work with their statistics-producing colleagues as well as with business people and academic economists to refine the GDP statistics and present the economic story in new ways that address the questions of the day.

How does research and development (R&D) contribute to economic growth? How much are people paying for the treatment of different types of diseases? Questions such as these are being addressed by BEA. Other research projects include an investigation of energy use patterns throughout the economy as energy prices rise and improved measurement of the income of the growing population of retired Americans.

These four major projects are underway or ready to be undertaken:

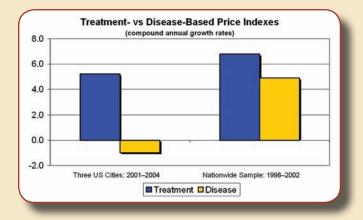
#### **R&D** satellite account

It is broadly understood by business people and economists that business spending on R&D constitutes a form of investment spending that expands the production infrastructure and adds to GDP growth for years. BEA worked with the National Science Foundation to produce, in 2006, the first U.S. R&D satellite account, which continues to provide estimates of the contribution of R&D to U.S. economic growth. (A satellite account is an extension of the GDP accounts that provides new estimates of selected aspects of economic growth not covered in the traditional GDP account because either the processes are insufficiently understood or the data necessary to produce regular statistics are lacking.) This satellite account will be extended to include business investment in other types of innovation as well, within a broadened "innovation" satellite account.



#### GDP health care account

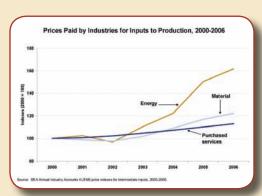
Health economists have long argued that measuring the cost of treating specific conditions is an important first step in identifying how much of the rising health care costs stem from increases in real services vs. how much is due to price increases. While existing data

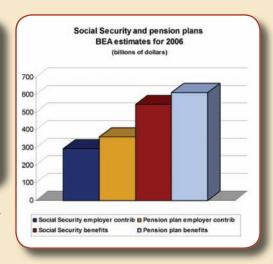


Accurately depicting
U.S. economic growth
requires continuous
economic research.

provide useful information on the flow of payments in this sector, they do not provide information on the uses of these funds. There is little information, for example, on what's happened to the cost of treating cancer during the past decade. This omission makes it difficult to assess the costs and benefits of health care spending.

BEA research staff are studying ways to measure U.S. spending on healthcare for specific diseases instead of by type of treatment. These measures will help inform public policy decisions about the efficacy of health care financing. BEA is working with the Centers for Medicare and Medicaid Services of the U.S. Department of Health and Human Services and health economists in academia to produce new statistics.



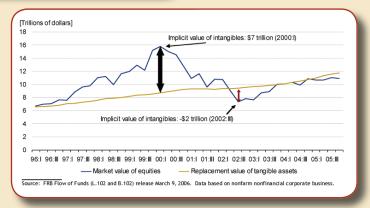


#### GDP energy-use account

Recent increases in world commodity prices, most notably energy prices, will affect U.S. production methods and overall U.S. economic growth. At present, the GDP statistics for each industry contain only limited information on energy use. BEA and the Energy Information Administration of the U.S. Department of Energy plan to combine statistics to produce the first GDP energy-use account.

#### GDP retirement-income account

BEA is conducting research to refine GDP measures of household purchasing power. The object is to develop the first-ever GDP statistics on private-pension retirement income as it is earned by the retiree. Present GDP retirement-income statistics are limited to the investment income earned by the retirement funds companies maintain and do not accurately measure additions to household wealth. Another newly-developed statistic will place that income in the state in which the retiree resides (rather than in the state in which the company formerly employing the retiree is located).



### **Advisory Committee**

The *BEA Advisory Committee* meets twice yearly to advise the Director of BEA on matters related to the development and improvement of BEA's national, regional, industry, and international economic accounts, especially in areas of new and rapidly growing economic activities arising from innovative and advancing technologies, and provides recommendations from the perspectives of the economics profession, business, and government.

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Regional Input-Output Modeling System (RIMS II) regional multiplier estimates: rims@bea.gov

#### **Industry Economic Accounts**

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Benchmark industry input-output accounts: benchmarkio@bea.gov Travel and tourism satellite accounts: industrysatellites@bea.gov

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