A Guide to the Bureau of Economic Analysis



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

### **Measuring the Nation's Economy**

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### **Message From the Director**

The Bureau of Economic Analysis (BEA) produces some of the world's most important economic statistics. Our economic accounts enable government officials, business leaders, academic researchers, and the American public to follow and understand the U.S. economy. And understanding today's economy is more important than ever before.

While our mission is to provide the most timely and accurate economic statistics, we are always looking to the future. BEA is developing a set of research and development (R&D) statistics to more fully and accurately reflect the impact of R&D spending on the U.S. economy. We are also establishing a set of health care account statistics to show spending by type of disease and treatment as well as health care spending patterns over time on a real, or inflation-adjusted, basis.

As we continue to move our accounts forward—keeping our statistics relevant for our customers—we will consider designing a new suite of statistics to help American businesses grow and remain competitive. We are also researching a set of household economic statistics to more clearly connect the well-being of the American family to the state of the economy.

Integrity, quality, responsiveness, and innovation are hallmarks of BEA's work. Success depends on your trust in the data BEA produces. We take pride in our work and are eager to help you understand these statistics and how they can be used.

Brin C. Moy-

Brian C. Moyer, Director Bureau of Economic Analysis

### **About BEA**

The U.S. Bureau of Economic Analysis is one of the world's leading statistical agencies. BEA promotes a better understanding of the U.S. economy by providing timely, relevant, and objective economic data.

Our accounts cover national, international, regional, and industry data. These closely watched statistics present information on key issues such as U.S. economic growth, regional economic development, interindustry relationships, and the nation's position in the world economy. BEA's economic statistics include such vital measures as gross domestic product (GDP), personal income and outlays, corporate profits, personal income and GDP by state and metropolitan area, balance of payments, and GDP by industry.

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

The BEA Web site provides the most accurate and timely statistics for its visitors. The latest economic statistics can be accessed on the right-hand navigation bar of the home page. Selecting the latest economic news release links will provide detailed versions of the releases along with supporting tables, highlights, and technical notes.

#### 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 the BEA Web site are the most recent indicators, charts, and maps drawn from featured BEA economic accounts.

#### 2 Current Releases

Select this link to review current and past releases by subject and date. Each economic news release is also listed on the home page within its respective account area.

#### 3 Media

The media section provides journalists and other news professionals with a snapshot of the most current release information as well as quick links to additional resources.

#### 4 Survey of Current Business

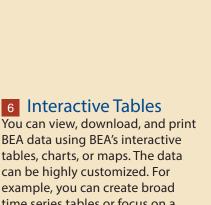
BEA's monthly journal, the SURVEY OF CURRENT BUSINESS, is the definitive source of information about BEA's economic accounts. Articles in the SURVEY present the latest national, international, regional, and industry statistics; describe the methods used to prepare the statistics; and discuss



major revisions and other relevant information. Each issue includes numerous tables and charts that present various statistics 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.

#### 5 Papers by Topic

Formal papers and presentations by BEA staff are grouped according to topic—as well as by author. Working papers—research papers and analytical presentations that may later be developed into formal papers or presentations—are also available.



can be highly customized. 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.

#### 7 FAQs

If you need more information, you can browse BEA's frequently asked questions (FAQs). Questions are 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 Of Interest

Watch this area for the latest BEA news and new Web site features.

#### 9 Stay Connected

Real GDP

(1)

8

9

+2.0% in Q3 2011

al Income

+0.4% in October 2011

U.S. Int'l Transactions

News Release Schedule

Of Interest...

(charts and video)

Stay Connected

Services

available

Int'l Trade in Goods and Services

Deficit decreased to \$43.5 billion in October 2011(p) from \$44.2 billion in September 2011

Current-account deficit decreased \$1.6 billion to \$118.0 billion in Q2 2011(p).

Latest Release: Int'l Trade in Goods and

November Survey of Current Business now

BEA Director on CSPAN's Washington Journal

NIPA profits compared with S&P 500 profits

Email Subscription Service

RSS Feed

News Releases | Jobs

ounts

ut Multipliers

onal Income and Outlays

fits . Fixed Assets . Research and

ds and Services ® International sition ® Direct Investment and ns and Related Materials

State and Local Area Personal

dustry & Input-Output Accounts)

eral Reserve Financial Accounts Accounts

Research and Development Satellite Accounts \* Supplemental

Too busy to check the BEA Web site? Stay abreast of statistical releases and other news from BEA by signing up for e-mail alerts, our RSS feed, and our Twitter feeds.

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> 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), which are organized into seven summary accounts.

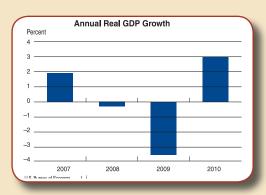
- The domestic income and product account shows the production of all sectors of the economy. The product side of the account shows gross domestic product (GDP) measured as the sum of goods and services sold to final users, and the income side of the account shows GDP as measured by the incomes earned in production—gross domestic income (GDI) plus the "statistical discrepancy" (the difference between GDP and GDI).
- 2. The private enterprise income account provides information on the sources of income received by private businesses and other private enterprises and the distribution of this income among the various types of private enterprises.
- 3. The *personal income and outlay account* shows the sources of income received by persons and the uses of that income for spending, taxes, or saving.
- 4. The *government receipts and expenditures account* summarizes the transactions of federal, state, and local governments.
- 5. The foreign transactions current account summarizes the current transactions of the United States with the rest of the world. The account provides information on the receipts and payments associated with foreign trade and on other transactions that do not involve the transfers of assets.

- 6. The *domestic capital account* shows the relationship between saving and investment for the economy.
- 7. The foreign transactions capital account provides information on transactions of the United States with the rest of the world that are linked to the acquisition or disposition of nonproduced nonfinancial assets and capital transfers.

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

#### Gross domestic product

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 in the United States. The change in "real" (inflationadjusted) GDP is considered the primary measure of growth in the U.S. economy.



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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). The contributions of each of these components to U.S. economic growth are also provided.

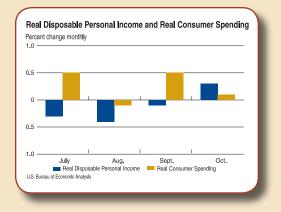
The quarterly GDP and most other NIPA statistics are released on the following schedule: advance statistics are released about 1 month after the end of the quarter; as more detailed and more comprehensive data become available, second and third statistics are released about 2 and 3 months after the end of the quarter, respectively.

#### How are GDP and related NIPA statistics 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

Monthly statistics 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 of consumer spending, personal interest payments, and personal transfer payments.



Personal income less personal current taxes equals *disposable personal income* (DPI). DPI measures the income that is available to spend or save. DPI less personal outlays equals *personal saving*, and personal saving as a percentage of DPI is the *personal saving rate*.

Personal income and outlays statistics for a month are released about 1 month after the end of that month and are subject to revision in each of the next few months.

How are the personal income and outlays statistics used?

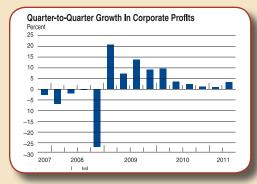
- To track the path of overall U.S. economic activity
- To study the relationships among income, spending, and saving
- To project consumer behavior using econometric models

#### Corporate profits

The quarterly estimate of corporate profits provides 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 estimate of corporate profits is on an economic accounting basis. It contains adjustments to the value of inventories and

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of depreciation to account for the effects of price changes. In this and other ways, NIPA profits differ from the financial accounting of profits that underlies corporate annual reports and the tax accounting of profits that are reported on corporate tax returns. BEA prepares corporate profits statistics before and after tax and by industry.

In general, the preliminary corporate profits statistics for a quarter are released about 2 months after the end of the quarter as part of the second GDP estimate. Revised statistics are released 1 month later as part of the third GDP estimate.

### How are the corporate profits statistics 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

### Fixed assets and consumer durable goods accounts

The annual statistics for net stock of fixed assets and consumer durable goods are BEA's featured measures of U.S. fixed nonfinancial wealth. Fixed assets are produced assets (such as buildings, equipment, or software) owned by business and government that are used repeatedly or continuously in the process of production for more than 1 year. Consumer durable goods are commodities purchased by consumers that can be used repeatedly or continuously over a prolonged period. Statistics for net stock, investment, depreciation, other changes in volume of assets, and average age of net stock are generally prepared by type of asset, by industry, and by legal form of organization.

The fixed assets and consumer durable goods statistics for the most recent year are available about 8 months after the end of that year.

#### How are the fixed assets and consumer durable goods statistics 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 saving

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 rest of the world. 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 statistics that summarize the transactions between the United States and foreign countries. The ITAs 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 current 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 current-account balance.

The capital account mainly records capital transfers, such as debt forgiveness and disaster-related insurance settlements.

The financial account records net acquisitions of U.S.-owned assets abroad (for

00 -	Balance on income
50 -	Balance on services
0 -	
-50 -	Net unilateral current transfers Balance on current account
00 -	
50 -	
200 -	Balance on goods



example, the funds a U.S. company uses to acquire a British company) and of foreignowned assets in the United States (for example, the funds deposited by a French company in a U.S. bank). Net acquisitions abroad are recorded as debits and net acquisitions in the United States are recorded as credits. The sum of the credits and debits in the financial account is *net financial flows*.

Preliminary ITA statistics for the quarter are

#### 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

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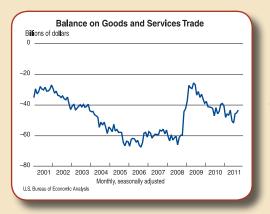


released about  $2^{1/2}$  months after the end of that quarter, and preliminary statistics for the year are released about  $2^{1/2}$  months after the end of that year. Revised statistics are released 3 months after the preliminary statistics.

#### Trade in goods and services

The monthly statistics on U.S. trade in goods and services provide up-to-date information on U.S. exports to and imports from foreign countries. The goods statistics, which are largely prepared by the U.S. Census Bureau, are available by detailed product category and by country and area. The services statistics, 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 statistics for a month are jointly released by BEA and the Census



### How are the trade statistics used?

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

Bureau about 6 weeks after the end of that month. Revised statistics are released 1 month after the preliminary statistics.

#### International services

The annual statistics on U.S. international 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) services supplied to foreign residents by majority-owned affiliates of U.S. companies located abroad and (b) services supplied to U.S. residents by majority-owned affiliates of foreign companies located in the United States. Thus, the second type of transaction, "services supplied through affiliates," is distinguished from the first type, "cross-border trade," by the fact that it is not made up of transactions between U.S. and foreign residents. The inclusion of both cross-border trade and services supplied 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 detailed annual statistics on international services—for the preceding year for crossborder services and for the year before that

### How are the international services statistics 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 that of services supplied through affiliates
- By trade policy officials to negotiate international trade agreements
- By business managers to assess market size, market share, and market trends

for services supplied through affiliates—are usually published in the October 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 (for example, gold reserves), other U.S. government assets (for example, 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), other private investment (for example, U.S. loans to foreigners), and U.S. holdings of financial derivatives with gross positive fair value. Foreign-owned assets consist of foreign official assets (for example, foreign government holdings of U.S. Treasury securities), direct investment (foreign ownership of U.S. business enterprises), private portfolio investment (private



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 on the U.S. economy



foreign holdings of U.S. stocks and bonds), foreign holdings of U.S. currency, other private investment (for example, foreign loans to U.S. residents), and U.S. holdings of financial derivatives with gross negative fair value. U.S.-owned assets abroad less foreignowned assets in the United States equals the *net international investment position* of the United States.

International investment position statistics for a given year are released in June of the following year.

## Direct investment and the activities of multinational companies

The annual statistics on U.S. direct investment abroad and foreign 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.) CONTENTS

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

#### U.S. direct investment abroad

The international transactions statistics on foreign affiliates' transactions with their U.S. parent companies include financial 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 statistics are cumulative; they measure the total outstanding level of U.S. direct investment abroad.

The financial and operating statistics cover overall activities—such as sales, value added, employment, and capital expenditures—of foreign affiliates and their U.S. parent companies. The most detailed financial and operating statistics cover majorityowned foreign affiliates (U.S. ownership exceeds 50 percent).

Summary statistics on 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 statistics are released later in the year.

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

- To measure the 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 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 statistics on U.S. affiliates' transactions with their foreign parent companies include financial 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 statistics are cumulative; they measure the total outstanding level of foreign direct investment in the United States.

The financial and operating statistics cover the overall activities—such as sales, value added, employment, and capital expenditures—of U.S. 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 statistics on 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 statistics are released later in the year.

#### How are the foreign direct investment in the United States statistics 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-owned and domestically owned establishments for such characteristics as wage rates, plant size, capital intensity, domestic content, profitability, and productivity
- To analyze trends in employment by foreign-owned firms in individual U.S. states and industries

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> 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 statistics on 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

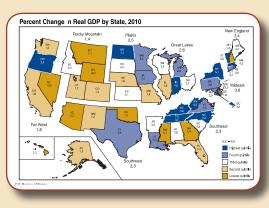
The annual GDP by state statistics measure the value added to U.S. production by the labor and property in each state. GDP by state is the conceptual counterpart of gross domestic product, the featured measure of economic activity in the national accounts. Thus, these statistics provide a framework for analyzing the contributions of regions and states to U.S. economic activity.

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 statistics are consistent with the GDP by industry statistics in the inaccounts as well as with dustry the GDP statistics in the national accounts.

The advance GDP by state statistics for the year are released along with revisions for the preceding 3 years.

#### How are the GDP by state and metropolitan area statistics 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



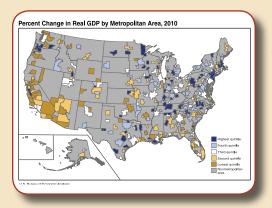
#### GDP by metropolitan area

Annual statistics on GDP for metropolitan statistical areas are also prepared. As the most comprehensive measures of economic activity for metropolitan areas, these statistics provide a framework for analyzing the areas' contributions to state and U.S. economic growth by industry.

The advance GDP by metropolitan area statistics for the year are released along with revisions for the preceding 3 years.

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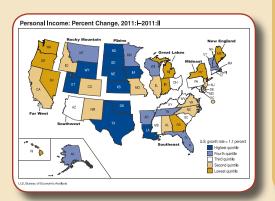


#### State personal income

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

The state statistics 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. Statistics of compensation and of earnings by place of work indicate the economic activity and industrial structure of business and government within the state, while statistics of personal income by place of residence provide a measure of the fiscal capacity of the state.

BEA also prepares annual state statistics on disposable personal income (personal income less personal current 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 spending and saving, and state per capita personal



income is an indicator of the economic wellbeing of the residents of a state.

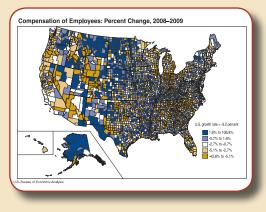
The state personal income statistics for the quarter are released 3 months after the end of that quarter. Preliminary annual statistics of state personal income are released 3 months after the end of that year. Revised and more detailed annual statistics are released 6 months later.

#### Local area personal income

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

#### How are the state and local area personal income statistics 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 statistics also provide detailed information by type of income that is comparable across all local areas and with the state statistics. Statistics on compensation and on earnings by place of work indicate the economic activity and industrial structure of business and government within the area. Statistics on personal income by place of residence provide a measure of the fiscal capacity of the area.

On the BEA Web site under "Regional," users may obtain a quick summary of the economy of a state or local area through BEA's Regional Facts, or BEARFacts. BEARFacts are computer-generated narratives for states, counties, metropolitan statistical areas, and BEA economic areas that describe an area's personal income using current statistics, 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 II 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 II 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 is 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

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

### **Industry Economic Accounts**

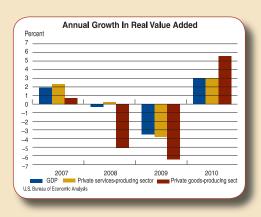
The industry accounts tell us about the relationships among the industries that make up the U.S. economy. They consist of the annual industry accounts, the benchmark input-output accounts, and the U.S. travel and tourism satellite accounts.

#### Annual industry accounts

The annual industry accounts for the United States consist of the 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 statistics on 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, semifinished goods, and purchased services). BEA prepares statistics on each industry's gross output and intermediate inputs and on the composition of the income earned in producing output (for example, employee compensation, business taxes, and corporate profits).



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

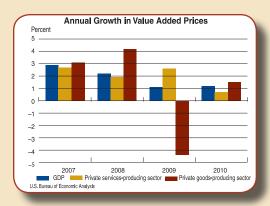
Annual GDP by industry statistics are released about 4 months after the end of each year. More detailed statistics are available about 7 months later.



### How are the GDP by industry statistics 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

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#### 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. Statistics 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 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 5-year intervals and are based on detailed data from the quinquennial economic censuses conducted by the U.S. Census Bureau. Detailed statistics 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 and

### 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) and to estimate the effects of an increase in U.S. exports on 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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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 5 years after that year.

### U.S. travel and tourism satellite accounts

U.S. travel and tourism satellite accounts present a detailed picture of the travel and tourism activity and its role in the U.S. economy. These accounts are based on the I-O benchmark accounts and are consistent with the annual industry accounts.

These accounts measure consumption expenditures by visitors and the effect travel and tourism has on U.S. production. They also provide statistics 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 prepares quarterly statistics of output, prices, and employment in the travel and tourism industries about 6 months after the end of the quarter. These statistics rely on information from BEA's quarterly GDP accounts.

More detailed annual statistics are available about 6 months after the end of the year.

## How are the U.S. 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 the events of September 11, 2001





### **BEA Research**

Economic research at BEA is conducted by staff in each of the four directorates and by staff in the Office of the Chief Economist and in the Office of the Chief Statistician. BEA economists produce numerous working papers and regularly contribute at professional meetings. BEA economists also produce a wide variety of methodological and statistical reports to support the U.S. System of National Accounts.

Within BEA, roughly 60 Ph.D. economists are actively involved in research on issues of interest to BEA. BEA encourages these researchers to engage in independent research related to BEA statistics and supports publication of their work in professional journals and other academic venues.

BEA also supports research by academics on these issues through the Special Sworn Employee program by making data available, by supporting National Science Foundation (NSF) proposals that deal with issues of interest to BEA, and by supporting a fellowship program with the American Statistical Association and NSF. For more information, please visit www.bea.gov.

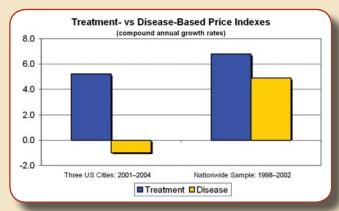
Two major research products are underway.

#### R&D satellite account

It is broadly understood by business people and economists that business spending on R&D constitutes a form of investmentspending that expands the production of 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 has been updated to include data up to the end of December 2007. It is part of the broader Innovation account, which includes business investment in a variety of intangible assets. Research continues on R&D price indexes and depreciation measures in preparation for incorporation into the core accounts in 2013.

#### GDP health care account

Health economists have long argued that measuring the cost of treating specific diseases is an important first step in identifying what portion of the rise in health care costs comes from increases in real services versus increases in prices. While existing data provide information on the flow of payments in this sector, they do not provide information on the uses of these funds. The BEA health research initiative aims to develop a satellite account on health care that will address this and other issues. BEA research staff is studying ways to measure U.S. spending on health care for specific diseases instead of by type of treatment, using data from Medicare, Medicaid, and commercial insurers. Areas of interest include geographic variation in health spending and price changes in the prescription drug industry. 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.



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### **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. Areas of new and rapidly growing economic activities arising from innovative and advancing technologies are emphasized. The committee provides recommendations from the perspectives of the economics profession, business, and government.

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#### International Economic Accounts

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#### **Regional Economic Accounts**

Gross domestic product by state accounts: *gdpbystate@bea.gov* Gross domestic product by metropolitan area accounts: *gdpbymetro@bea.gov* State and local area personal income accounts: *reis@bea.gov* Regional Input-Output Modeling System (RIMS II) regional multiplier estimates: *rims@bea.gov* 

#### Industry Economic Accounts

Input-output accounts and GDP by industry accounts: *industryeconomicaccounts@bea.gov* Travel and tourism satellite accounts: *travelandtourism@bea.gov*  CONTENTS

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