### BEA's Mid-Decade Strategic Plan: A Progress Report

N APRIL 1995, the Bureau of Economic Analysis (BEA) finalized the development of a strategic plan for maintaining and improving its national, regional, and international accounts.<sup>1</sup> The final version of the plan was based on a comprehensive review of the accounts conducted in 1994 and a draft plan developed in coordination with the public and with other statistical agencies. The Mid-Decade Strategic Plan places needed improvements to the accounts in the context of a comprehensive multiyear plan that will enable BEA to continue to provide timely, accurate, and relevant information to its users. The first section of this progress report summarizes the strategic plan, the second section reports on the accomplishments to date, and the final section discusses work plans for the next year. As work on specific projects is completed, additional progress reports will appear in the SURVEY OF CURRENT BUSINESS.

#### Summary of the Plan

In the plan, the needed improvements to the accounts are grouped into three major areas: New and improved measures of output; better measures of investment, saving, and wealth; and improved coverage of international transactions.

*New and improved output measures.*—Improved measures of output are critical for informed national debate on such issues as the economy's long-term growth potential and the impact of technological changes on economic growth and productivity. In addition, the improvements will result in more accurate measures of growth in real GDP and prices, which may have important implications for the Federal budget.

To improve the output measures, the plan includes the following actions: Introduction of a weighting scheme for calculating real GDP that eliminates the bias in the estimates that results from the "substitution effect"; extension of the use of quality-adjusted prices in real GDP; development of an improved conceptual basis for the measurement of the output of difficult-tomeasure goods and services; acquisition of more reliable and more comprehensive source data for the measurement of output; modification of estimating procedures in order to reduce the revisions to the initial quarterly and annual estimates of GDP; incorporation of a new industry classification system that provides an updated and more consistent framework for analyzing the structure and organization of production; and modernization of the GDP and related accounts to improve their analytical usefulness and their international comparability.

Better measures of investment, saving, and wealth. —Improvements in these measures will provide a broader and more accurate picture of the Nation's investment, saving, and capital stock and will allow for an integrated analysis of such issues as productivity, domestic and international capital flows, returns on investment, and capital formation.

To provide better measures of investment, saving, and wealth, the plan includes the following actions: Expansion of the definition of the investment component of GDP to include spending on structures and durable equipment by government and spending on computer software; development of improved measures of depreciation and capital stock; and better integration of real and financial accounts.

Improved coverage of international transactions. —Improvements will provide necessary information to fill large gaps in BEA's coverage of international transactions caused by rapid growth and integration in world markets and rapid advances in computer and communications technology. Such improvements are especially important in improving the data used for trade, investment, and monetary policy and for financial regulation.

To improve the coverage of international transactions, the plan includes the following actions: Extension and revision of existing surveys, and development of new estimating methods, to

<sup>1.</sup> For a detailed description of the plan and its development, see "Mid-Decade Strategic Review of BEA'S Economic Accounts: Maintaining and Improving Their Performance," SURVEY OF CURRENT BUSINESS 75 (February 1995): 36–66; and "Mid-Decade Strategic Review of BEA'S Economic Accounts: An Update," SURVEY 75 (April 1995): 48–56.

cover new products, services, and financial instruments; development of new surveys; and extension of data exchanges with the statistical agencies of other countries and with central banks.

#### Accomplishments to Date

#### New and improved output measures

As part of the comprehensive revision of the national income and product accounts (NIPA'S) released in January 1996, BEA implemented the following major improvements to the output measures:

- Chain-type measures of real output and prices that use weights of adjacent years replaced fixed-weighted measures, which use weights of a single year for all periods. The chain-type measures allow for the effects of changes over time in relative prices and in the composition of output; thus, they eliminate the substitution bias that results from using fixed-weighted measures.
- Quality-adjusted prices of exports and imports for semiconductors were prepared and incorporated into the accounts. (Quality-adjusted measures of the output and prices of the semiconductor industry are being incorporated into the improved estimates of GDP by industry, which will be released this summer.)

In addition, in cooperation with the Census Bureau and the Bureau of Labor Statistics (BLS) as well as with Statistics Canada and Mexico's Instituto Nacional de Estadistica, Geografia e Informatica, BEA has nearly completed work on an improved industrial classification system—the North American Industrial Classification System. The proposed new system, which will provide the basis for modernizing BEA's industry accounts, has been published for public comment in the *Federal Register.*<sup>2</sup>

Finally, BEA has begun work with BLS and with other researchers to develop improved measures of output and prices that incorporate the effects of quality change on computer software, telecommunications equipment, and health services.

## Better measures of investment, saving, and wealth

As part of the recent comprehensive revision of the NIPA's, BEA implemented the following improvements to the measures of investment and saving:

- A more comprehensive and consistent treatment of investment and capital by treating government purchases of structures and equipment symmetrically with the treatment for private purchases; and
- A new methodology for calculating depreciation that improves the empirical basis of the estimates. (Estimates of capital stock that reflect the improved estimates of depreciation will be released later this year.)

#### Improved coverage of international transactions

BEA has also moved ahead on implementing the following improvements in the coverage of international transactions involving new products and services.

- BEA conducted, and is currently processing and analyzing the results of, its first benchmark survey of international trade in financial services; the results will introduced into the annual revision of the international transaction accounts to be released on June 20, 1996. (See "Looking Ahead" on page ii of this issue.)
- BEA has redesigned its surveys of U.S. direct investment abroad, thus completing the first phase of the collection of detailed data on the growing volume of international trade in services by U.S. multinational companies with their affiliates outside of the United States.
- With the assistance of the Census Bureau, the Customs Bureau, and the International Trade Commission, the classification system for U.S. foreign imports was revised to provide for separate categories of computer software as a first step in developing estimates of the full market value of imports of computer software.

### **Future Work Plans**

The completion of the strategic plan by the year 2000 will require additional resources. As an initial step, BEA has reallocated resources from existing programs and has requested additional

<sup>2.</sup> The most recent set of proposals appeared in the May 28, 1996, issue. For more information, contact Jack E. Triplett, Chairman, Economic Classification Policy Committee, Bureau of Economic Analysis (BE-42), U.S. Department of Commerce, Washington, dc 20230.

funds in the budget for fiscal year 1997. In 1995, BEA transferred the business cycle indicators (which includes the index of leading indicators) program to a private organization, the Conference Board. In 1996, BEA has scaled back its work in the areas of regional projections, pollution abatement and control expenditures, and foreign direct investment. The regional projections program and the pollution abatement and control program are being phased out, and the preparation of establishment-level data on foreign direct investment, which is a joint BEA-Census Bureau project, will be done on a 5-year cycle rather than on an annual cycle.<sup>3</sup>

BEA is moving to implement more of the improvements proposed in the strategic plan. The highest priority is being given to the following projects, which are grouped by the three major areas of the plan.

#### New and improved output measures

In order to extend the use of quality-adjusted prices in the measurement of real GDP, BEA will continue to work with BLS on the prices of "high-tech" products, such as computer software, modems, fax machines, and other telecommunications equipment. BEA plans to work with the Census Bureau to extend their work on the quality adjustment of construction from residential to nonresidential structures. BEA will also extend its conceptual and empirical work with BLS and with other researchers on developing new concepts and methods for measuring difficult-tomeasure services, such as insurance, finance, and medical care.

To acquire more reliable source data and thereby to improve the reliability of the estimates of real GDP, BEA will work with the Census Bureau to improve the coverage of those components of GDP that have accounted for a large share of the revisions. In part, these revisions arise because the source data that are used for the current estimates of certain components are inadequate or are available only with a substantial lag; as a result, BEA has been forced to use partial data, proxy indicators, and projections of past trends. Initially, BEA and the Census Bureau will work to extend existing surveys or to develop new surveys in the following areas: New and expanding service industries; retail and wholesale trade, in which the nature of the business and the methods of distribution are constantly changing; and construction, in which a large volume of rebuilding and remodeling activity is unrecorded.

To modernize its national and regional accounts, BEA will improve their structure and organization. Specifically, work is underway to provide (1) clearer and separate pictures of the activities of nonprofit institutions and of households and (2) a more comprehensive picture of the activities of Federal and State and local governments and the enterprises (such as hospitals and tollroad authorities) associated with them. These improvements will help bring the U.S. accounts more closely in line with international economic accounting guidelines. Finally, work will proceed to update and better integrate BEA'S input-output accounts, GDP by industry estimates, and gross state product by industry estimates.

# Better measures of investment, saving, and wealth

To prepare estimates of investment in software and to improve the estimates of depreciation and capital stock, BEA will extend the empirical work on used-asset prices to other assets. The improved estimates of depreciation that were released in January 1996 incorporated information on the general pattern of depreciation based on a survey of studies of used-asset prices; direct information on used-asset prices was incorporated only for automobiles and for computers and peripheral equipment.

#### Improved coverage of international transactions

BEA has progressed in closing many of the gaps in the coverage of international transactions by exchanging data with other countries and, in cooperation with the Treasury Department and the Federal Reserve System, by improving the coverage of surveys. Nevertheless, gaps remain in some areas, and new gaps are emerging in others. In the coverage of goods and services, two of the largest remaining gaps are in financial services and in computer software. In the capital accounts, large gaps remain in the coverage of U.S. portfolio investments abroad and foreign portfolio investments in the United States. In addition, new gaps are emerging as a result of the growth in new financial instruments that are not separately identified or that are not fully covered by the existing data collection system.

For international trade in services, BEA will conduct, process, and integrate data from the revised surveys of U.S. direct investment abroad

<sup>3.</sup> The last set of regional projections is presented in "Metropolitan Area and BEA Economic Area Projections of Economic Activity and Population to 2005" in this issue.

in order to provide information on the growing trade in "affiliated" services by type. The benchmark and quarterly surveys of foreign direct investment in the United States will also be revised to collect similar detail by type of service.

For nonfinancial services, BEA will develop a pilot quarterly survey for the most important services that are covered by the existing annual survey of nonfinancial services.

For computer software, BEA will use newly collected product information and new methodologies to incorporate estimates of the full market value of trade in computer software.

For portfolio investments, BEA will work with the Treasury Department and the Federal Reserve System to improve the capture of information on long-term securities and associated income. For foreign investment in the United States, BEA will incorporate the results of the Treasury Department's 1994 quinquennial survey to improve coverage of foreign holdings of U.S. stocks and bonds and associated income. For U.S. investment abroad, BEA will incorporate the results of the Treasury Department's new benchmark survey into the accounts (the last benchmark survey of U.S. portfolio investment abroad was conducted in 1943). This survey will provide estimates that more accurately reflect the enormous growth in the size of, and the changes in the composition of, U.S. holdings abroad; this information will be highly useful to monetary authorities and to market participants. In turn, the updated picture of holdings will be the basis

for developing more accurate estimates of income earned on those holdings. In addition, BEA will work with the Treasury Department and the Federal Reserve System to strengthen the existing system for collecting data on portfolio investment by expanding coverage, improving compliance, and eliminating gaps and overlaps in coverage between foreign direct investment and portfolio investment.

To further improve coverage of U.S. portfolio investment abroad, BEA and the Treasury Department will participate in a survey of portfolio investment that will be conducted under the auspices of the International Monetary Fund. The many countries taking part in this effort have committed to using a set of common definitions that will provide the basis for consistent data collection. In turn, this consistency in data collection will facilitate data exchanges among the participating countries that will enable them to fill existing gaps in coverage, particularly for portfolio investments made directly with unaffiliated foreign residents.

For financial derivatives, BEA will develop measures of new financial instruments that cut across both the direct and indirect channels of investment. BEA will work with the Treasury Department and the Federal Reserve System to develop estimates of cross-border transactions and positions in financial derivatives. The estimates will attempt to build upon existing surveys, which will be modified and extended whenever possible, in order to minimize cost and respondent burden.