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Federal statistics: The Bureau of Economic Analysis

by Allan H. Young

What is your economic IQ? Try answering these questions:

- Is direct investment of U.S. corporations in foreign countries larger or smaller than direct investment of foreign corporations in the United States?

- From 1980 to 1987, did federal tax receipts as a percentage of GNP increase, decrease, or stay about the same?

- Has the 1970s pattern of more rapid growth in nonmetropolitan counties than in metropolitan counties continued in the 1980s?

The answers can be found in the economic intelligence prepared by the U.S. Bureau of Economic Analysis (BEA) (and at the end of this article).

Information from BEA is necessary for most types of economic analysis, whether their focus is international, national, or regional. This article describes BEA's program, tells how to obtain BEA's outputs, and looks at some issues BEA faces.

BEA's program

BEA's work centers on the preparation of the nation's economic accounts. These accounts, designed as a consistent and comprehensive record of the nation's economic transactions, portray what is going on in the economy. A brief description of these accounts follows.

International economic accounts show the transactions of U.S. residents with residents of other countries. These accounts, often referred to as the balance of payments

Continued on page 4 column 1

Two approaches to life insurance cost illustrations

by William A. Stoltzmann
and Stephen H. Frankel

(Ed. note: At the June meeting of the National Association of Insurance Commissioners, the American Council of Life Insurance proposed that a "range" approach to insurance and annuity sales illustrations be considered [and adopted] by the NAIC. This approach would allow agents to illustrate at greater than current interest

Stoltzmann, for the "range" approach:

In December 1987 the NAIC adopted a model regulation that would limit illustrations of policy benefits to those provided by the company's current scales for interest rates, expenses charges and mortality costs. This step was a response to concerns about unrealistically favorable illustrations of policy values using high interest rates over long periods. As the following discussion indicates, the policy's expense levels and mortality costs can also have a significant effect on the values being illustrated. Because information about those

Continued on page 2 column 2

assumptions if they also show an illustration at correspondingly less than current interest assumptions. The maximum range would be 2% above and below current.

There has been debate on this "range" approach. Here we give a "pro" view and a "con" view.)

Frankel, for the current-scale limit: Sales illustrations should be limited to assumptions that are less than or equal to current. In my opinion, a current scale limitation provides discipline and structure because current scale generally represents what is actually being paid today. Any other approach is arbitrary and will eliminate much of the discipline and structure. As a result, agents will tend to emphasize the highest values their company allows to be shown. Abuses can and will occur. Policyowner complaints and lawsuits, which are already on the rise due to declining interest rates and loss of policy loan

Continued on page 3 column 1

In this issue:

Two approaches to life insurance cost illustrations William A. Stoltzmann and Stephen H. Frankel _____	1
Federal statistics: The Bureau of Economic Analysis Allan H. Young _____	1
Minority recruiting Linda M. Kahn _____	5
Editorial: New horizons for corporate actuaries Richard K. Kischuk _____	6
Society makes excellent 'investment' in China Diana Montgomery _____	8

Report from the Administration and Finance Committee Michael J. Cowell _____	9
Nonroutine actions of the Board of Governors Anthony T. Spano _____	11
Long-term-care riders to life insurance Abraham Gootzeit _____	11
Survey gauges interest in serving on committees Darryl Leach _____	12
Competition editor a real puzzler Deborah Poppel _____	13
Letters to Editor _____	14
Actucrossword, Actucroscopic _____	15,16

Bureau cont'd

accounts, provide a detailed picture of exports and imports of merchandise and services — including services such as travel and transportation, and income earned on capital. In addition, these accounts record private and official capital flows — both portfolio and direct investment. As an adjunct to the accounts, BEA maintains a data base on multinational corporations, from which tabulations are prepared of financial and operating information on U.S. companies in foreign countries and foreign companies in the United States.

- National economic accounts consist of the national income and product accounts (NIPA), the input-output accounts, and the capital finance and balance sheet accounts. The NIPAs display the value of national output (GNP) and its composition, both in terms of expenditures by households, business, government, and foreigners and in terms of incomes — wages, profits, and interest — earned in its production.

The input-output accounts trace the flow of goods and services among industries in the production process. They also show the value added by each industry and the detailed commodity composition of national output.

The capital finance and balance sheet accounts are prepared at the Federal Reserve Board. They are consistent with BEA's accounts, with some exceptions, and incorporate BEA's measures of capital stock.

- Regional economic accounts show total personal income and its components — wages and salaries, transfer payments, etc. — for each state and county. This year, a more comprehensive measure — gross state product, the regional counterpart to GNP — was added for each state for the period 1963-86.

BEA's statistical and analytical measures supplement the economic accounts. These include a system of monthly business cycle indicators, including the composite index of leading indicators; a quarterly econometric model for use within the federal government; measures of expenditures to reduce pollution; and projections of regional economic activity.

BEA's outputs are based largely on information collected and compiled by other organizations. Much information comes from surveys conducted

by other federal statistical agencies. Administrative records of federal agencies — Department of Defense, Treasury Department, Office of Management and Budget, etc. — are another major source. Trade associations and other private organizations also provide data. Direct surveying by BEA is limited largely to international transactions; BEA surveys provide much of the information on income flows and other service transactions entered in the balance of payments accounts, as well as financial and operating data for the multinational corporate data bank. (The survey of actual and anticipated expenditures by business for new plants and equipment, formerly conducted by BEA, was transferred to the Census Bureau in fiscal year 1989.)

How to obtain BEA's outputs

BEA provides its outputs to users in a variety of ways. The *Survey of Current Business* is the monthly journal of record; it presents the full range of information that BEA provides to the public. For example, the quarterly national income and product account estimates released monthly are presented in 54 tables, which show detailed account entries and related data. Each July, a full set of 132 tables presents the results of annual revisions. In addition, the lead article, the "Business Situation," reviews current economic developments in terms of the NIPAs, and special articles focus on analytical and methodological issues related to the NIPAs. A second publication, *Business Conditions Digest*, presents the system of monthly business cycle indicators and supporting material in more detail. For users who need information quickly, the Commerce Department's Economic Affairs Bulletin Board carries much of the information from the *Survey*, including the "Business Situation" article. The telephone number for information about the bulletin board is (202) 377-1986. BEA's outputs are also available via voice recordings, diskette, and magnetic tape. A copy of *A Users Guide to BEA Information*, which contains program descriptions and a list of recent products and services, may be obtained from the Current Business Analysis Division; call (202) 523-0777.

Issues BEA faces

BEA faces three major issues: (1) maintaining and improving the quality of U.S. economic accounts and related measures, including developing modifi-

cations and extensions that will be necessary in the 1990s and beyond; (2) providing up-to-date, complete documentation of the methodologies used to prepare the estimates; and (3) providing BEA outputs to users promptly and efficiently.

1. There is concern that BEA (and other statistical agencies) may have been unable to maintain the quality of its outputs because of recent federal budgetary restrictions. Given that BEA relies on source data from many federal agencies, budgetary restrictions could affect it either directly, if its own resources were insufficient, or indirectly, if cutbacks elsewhere affected its source data. In addition to BEA, several groups, both governmental and private, have examined this issue. I will briefly sum up what I perceive to be the consensus. (The quality issue is addressed more fully in the references.)

According to a study by the National Association of Business Economists, resources in three of the four major statistical agencies that produce economic data declined in real terms from 1978 to 1988. The Census Bureau is down 4%; the IRS Statistics Division, 12%; and BEA, 12%. The exception is the Bureau of Labor Statistics, for which resources are up somewhat.

By and large, however, the quality of BEA's source data has not deteriorated; therefore, the quality of BEA's outputs in the sense of statistical error (particularly, revisions) has not declined. The primary reason is that BEA's source data have been protected from cutbacks in various agencies, with two exceptions of some consequence. One is income statistics tabulated by the IRS Statistics Division and used in the NIPAs. This division has, for much of the decade, suffered the largest cutback among statistical agencies. The other is certain financial information used in the balance of payments accounts.

While the above assessment of BEA's outputs is good, it is not cause for celebration because the statistical error is a limited measure of performance. It does not take into account how well the design of the accounts and the data represent the economy. The bad news is that the statistical system, including BEA, is not keeping pace with changes in the structure of the economy arising from the

Bureau cont'd

increasing role of (1) high technology, (2) services, and (3) imports. If these changes are not addressed more fully and rapidly, the portrayal of the economy by BEA, and by the statistical system in general, will become less useful. Addressing the changes will require, in some instances, new classifications or new concepts and, in others, the collection of additional information in statistical surveys.

Looking ahead, the nation's economic accounts will need to be modified and extended in order to provide information necessary for analysis of emerging societal developments. For example, the accounts now do not provide a comprehensive and consistent accounting for costs of health care or retirement benefits. Neither, in the judgment of some, do they provide an adequate accounting for natural resource use or for environmental costs.

2. Over the years, BEA has not kept up-to-date statements documenting the methodologies used to derive the estimates in the economic accounts. We are remedying this situation. An up-to-date methodological statement for state personal income estimates in the regional accounts was published in 1984. A statement for the NIPAs is in progress; chapters are published serially as completed. To date, five chapters are available. They cover the conceptual basis of the economic accounting; an overview of estimating methods and source data for GNP; and the details for corporate profits, foreign transactions, and government transactions. The entire series is scheduled to be completed in 1990. A statement for the balance of payments accounts will be available early next year. Thus, it's easier for users to develop a thorough understanding of the basis of BEA's work, allowing them to use the accounts more fully and intelligently. (The *Users Guide* contains information on ordering the statements.)

3. BEA makes a substantial effort to provide its outputs to users promptly and efficiently as technology changes. In recent years, many outputs have been placed on diskettes and on the electronic bulletin board operated by Economic Affairs in Commerce. BEA asks users about their needs for particular outputs and the availability to them of various technologies.

Answers to 'IQ' test

1) In 1987, direct investment of U.S. corporations in foreign countries was larger, amounting to \$308.8 billion. \$46.9 billion more than direct investment of foreign corporations in the United States. Such a differential will continue to be the case at the end of 1988. Unlike the direct investment position, the total investment position, which includes both portfolio and direct investment, is negative; that is, foreign investment in the United States is larger.

2) Federal tax receipts were about the same percent of GNP in 1980 and 1987 (20.3% in 1980 and 20.2% in 1987) because Social Security and other payroll taxes increased as income taxes declined.

3) Population and personal income growth rates on average were higher in nonmetropolitan areas than in metropolitan areas during the 1970s. This pattern was reversed in the 1980s when metropolitan areas resumed faster growth rates than nonmetropolitan areas, more like the pattern of the post-World War II decades before 1970.

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Minority Recruiting

by Linda M. Kahn

The Subcommittee on Minority Recruiting, which actively encourages qualified minority students to enter the actuarial profession, has just released its new brochure for use in minority recruiting. This brochure is clear evidence of the contributions that minority members are making to our profession.

In addition to providing scholarships to minority students, we have given support to the summer actuarial program at Howard University in Washington, D.C., for a number of years and to the summer actuarial program that started this last summer at Florida A&M University in Tallahassee, Florida. These intensive summer programs acquaint qualified minority high school students with the actuarial profession, the skills they will need to acquire, and the types of work that an actuary may do. CIGNA and the Equitable Life Assurance Society also sponsor a number of the scholarships, and their representatives take an active part in supporting the summer programs as well.

With the rapidly escalating costs of higher education, your support is urgently needed. We will be mailing a letter soliciting your support in the near future. We hope you will give generously, both of your time and your money. Such a gift will be an investment in our young people and in the future of our profession. If you would like more information about our activities or would like to volunteer your time or services, please call me at (415) 576-3248 or any of our committee members.

Linda M. Kahn, chairperson of the Subcommittee on Minority Recruiting, is Director of Program Management, Pacific Maritime Association.