

The North American Industry Classification System in BEA's Economic Accounts

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DURING the next several years, the Bureau of Economic Analysis (BEA) will incorporate a new economic classification system—the North American Industry Classification System (NAICS)—into the estimates of the national, industry, regional, and international accounts.¹ NAICS—which replaces the Standard Industrial Classification (SIC) system—is organized on a more conceptually consistent basis, better reflects new and emerging industries, adds new classifications for the high-tech and services industries, and provides more comparable industry statistics with our North American trading partners Canada and Mexico.

NAICS is just one of several U.S. classification systems that were revamped in the late 1990s: New U.S. standards were also developed for data on oc-

cupations, metropolitan areas, race and ethnicity, and foreign trade classifications for enterprises.² In addition, work is currently under way on a new North American classification system for products.³ Developing a classification system like NAICS is always a work in progress, and in order to better measure the rapidly evolving new economy, NAICS will continue to be updated.

NAICS is an economic classification system that groups establishments into industries and that provides the framework for collecting, analyzing, and disseminating economic data on an industry

1. BEA has already published NAICS-based industry estimates of foreign direct investment in the United States. See the box “NAICS Implementation in BEA's Estimates of International Investment.”

2. See “1998 Standard Occupational Classification,” *Federal Register* 64 (September 30, 1999): 189, 53,135–53,163; “Standards for Defining Metropolitan and Micropolitan Statistical Areas,” *Federal Register* 65 (December 27, 2000): 249, 82,227–82,238; “1997 Standards for Federal Data on Race and Ethnicity,” *Federal Register* 66 (January 16, 2001): 10, 3,829–3,831; and Bureau of Economic Analysis, *Guide to Industry and Foreign Trade Classifications for International Surveys* (October 1997).

3. See “Initiative to Create a Product Classification System, Phase I: Exploratory Effort to Classify Service Products,” *Federal Register* 64 (April 16, 1999): 73, 18,984–18,989; and the box “The North American Product Classification System.”

The North American Product Classification System

The United States, Canada, and Mexico are developing the North American Product Classification System (NAPCS) as a companion to the North American Industry Classification System (NAICS). Like NAICS, this product classification system will emphasize new and emerging technologies and services. For nearly 100 years, the United States has had detailed classifications and has collected and published detailed data on manufacturing products in monthly and annual census surveys and in quinquennial economic censuses, but comparable detailed classifications for services products have never been prepared.

In February 1999, the three North American countries began identifying products in the following four NAICS

sectors for initial testing as part of the 2002 Economic Census: Information; Professional, Scientific, and Technical Services; Finance and Insurance; and Administrative and Support and Waste Management and Remediation Services.

In the summer of 2001, they will begin work to identify products in another five NAICS sectors: Educational Services; Health Care and Social Assistance; Arts, Entertainment, and Recreation; Accommodation and Food Services; and Transportation and Warehousing.

For more information, see “Initiative to Create a Product Classification System, Phase I: Exploratory Effort to Classify Service Products,” *Federal Register* 64 (April 16, 1999): 73, 18,984–18,989.

basis. NAICS differs substantially from the SIC because it is based on a single economic principle in which, to the extent feasible, economic units that use similar production processes are classified in the same industry. In contrast, the SIC has no dominant organizing principle, and its structure has not materially changed since its inception in the late 1930s; its focus has been mainly on manufacturing and other goods-producing industries with considerably less detail on the services-providing industries, and it has been updated infrequently. NAICS updates industry classification for the new millennium and also strives to standardize industry classifications among the United States, Canada, and Mexico. It has been developed over a number of years by staff from the major statistical agencies of the three countries.

The change from SIC to NAICS is considerably more sweeping than the past updates to the SIC, and its implementation is considerably more complex. Reflecting the varying implementation schedules of BEA's source data agencies, the conversion of BEA's industry estimates to a NAICS basis will take place over a period of 4 to 5 years. During this transition, BEA will be receiving some source data on an SIC basis and some on a NAICS basis; BEA will therefore need to convert the data from NAICS to SIC and vice versa. Such conversions add more time and more complexity to the preparation of BEA's estimates. Moreover, there will be discontinuity in time-series comparability between SIC-based estimates and NAICS-based estimates; for example, in NAICS, the aggregate "Manufacturing" comprises a different set of industries than it is in the SIC. In addition, NAICS itself will be revised for 2002, and the implementation of the different versions of NAICS will add to the complexity of the conversion.

The remainder of this article is divided into five sections. In the next section, the development and principles of NAICS are discussed. The second section describes the structure of NAICS and compares it with the structure of the 1987 SIC. The third section briefly describes the upcoming revisions to NAICS, including the first major revision—NAICS 2002—that will be introduced in the 2002 Economic Census and related economic accounts. The fourth section presents a broad overview of the NAICS implementation plans for BEA and for its source data agencies, mainly the Bureau

of the Census, the Bureau of Labor Statistics (BLS), and the Internal Revenue Service (IRS). The article concludes with some general observations about the implementation of NAICS, including the effects of the lengthy transition period and of the discontinuities in time series.

Development and principles of NAICS

The U.S. SIC system for classifying establishments by industry was initially developed in the 1930s. Although there have been numerous revisions to the SIC, the latest in 1987, the basic structure of the SIC has remained largely unchanged for some 60 years. During that period, the United States has moved from an economy dominated by manufacturing to an economy that is more services oriented and that is characterized by rapid technological change and increased globalization. The share of gross domestic product (GDP) accounted for by private goods-producing industries declined from 54 percent in 1930 to 38 percent in 1999, while the share of private services-providing industries increased from 35 percent to 53 percent. Moreover, since the passage of the North American Free Trade Agreement eliminated tariffs and other barriers to trade among the three North American countries, cross-border flows of goods, services, and capital investment have grown considerably. Canada has long been the United States' most important trading partner, and in 1997, Mexico surpassed Japan as the second-largest export market for U.S. goods.

In recognition of these changes, the U.S. Office of Management and Budget (OMB)—the U.S. Government agency responsible for the standardization of economic and social statistics—Statistics Canada, and Mexico's Instituto Nacional de Estadística, Geografía e Informática (INEGI) agreed to work together to develop the conceptual basis and structure for a common North American industry classification system. In 1991, OMB convened an international conference in Williamsburg, Virginia, to begin examining a number of proposals for a taxonomy to measure the industry dimensions of the U.S. economy and its neighbors' economies in the 21st century.

In 1992, OMB established the Economic Classification Policy Committee (ECPC), which was chaired by BEA with representatives from the Census Bureau and BLS. The ECPC studied alternative

economic concepts (for example, supply versus demand) to derive the principles of a new industry classification system with an innovative, conceptually consistent taxonomy for industry statistics. A series of international meetings and signed agreements among officials of the major statistical agencies of the three countries in 1994–97 resulted in the adoption of the following four criteria upon which NAICS was based.

Adopt a single organizing principle.—NAICS would be erected on a production-oriented, or supply-based, conceptual framework in which producing units that use identical or similar production processes would be grouped together.⁴ A single organizing principle facilitates explaining why data are grouped one way and not another and provides an overall philosophy to guide decision-making during the construction and maintenance of the system. It has been argued that the supply-based, or production-oriented, concept is the best single organizing principle for an industry taxonomy because typical uses of industry data include measurement and analyses of productivity at the industry or sector level, comparisons of the capital intensity of production across different economies, and marketing analyses for products or services that are inputs to particular production processes.⁵ NAICS use of the single production-oriented concept ensures that information on inputs and outputs, on industrial performance and productivity, on unit labor costs and employment, and on other statistics related to structural change are consistent across the entire dimension of the U.S. economy as well as, in this case, across the economies of Canada and Mexico, our North American trading partners.

Focus on new industries and technologies.—NAICS would give special attention to developing production-oriented classifications for new and emerging industries, service industries in general, and industries engaged in the production of advanced technologies. Thus, NAICS would be better suited for

measuring an economy that has shifted from a predominately goods-producing economy to one characterized by services and high-tech industries.

Be more responsive to structural change and users.—NAICS would be periodically reviewed and refined to account for structural changes in the economy and to incorporate proposals from data users. In addition, adjustments would be made for sectors in which the United States, Canada, and Mexico have incompatible industry-classification definitions in order to produce a common industry system for all three countries. The SIC has been updated infrequently and thus has not kept pace with the rapidly evolving new economy.

Promote international comparability of statistics.—Given that we live in a world of increasing globalization, NAICS would strive for the compatibility of statistics not only among United States, Canada, and Mexico, but also with Europe and the United Nations.⁶

The structure of NAICS

Like that of the SIC, the structure of NAICS is hierarchical, going from highly aggregated groups to the most detailed groups (table 1). At the top of the NAICS structure, there are 20 “sectors,” compared with 11 “divisions” in the SIC. At the most detailed level, NAICS uses a six-digit code for “national industries” that are unique to each of the three countries.

Table 1.—NAICS Hierarchy and SIC Hierarchy

NAICS terminology	NAICS code	SIC terminology	SIC code
Sector	Two-digit	Division	Letter
Subsector	Three-digit	Major group	Two-digit
Industry group	Four-digit	Industry group	Three-digit
NAICS industry	Five-digit	Industry	Four-digit
National industry	Six-digit	—	—

The structure of NAICS was an improvement over that of the SIC in several important respects.

● To better address the new, emerging, and advanced technology industries, particularly among the services industries, the Services divi-

4. See Executive Office of the President, Office of Management and Budget, *North American Industry Classification System, United States, 1997* (Washington DC: Berman Press, 1998). For an overview, see Jack E. Triplett, “Economic Concepts for Economic Classification,” *SURVEY OF CURRENT BUSINESS* 73 (November 1993): 45–49; see also Joel Popkin, “An Alternative Framework for Analyzing Industrial Output,” *SURVEY* 73 (November 1993): 50–56.

5. See Triplett, “Economic Concepts,” 48.

6. See Department of International Economic and Social Affairs, Statistical Office, United Nations, *International Standard Industrial Classification of All Economic Activities*, Statistical Papers, Series M, No. 4., Rev. 3 (New York: United Nations, 1990).

sion in the SIC was split into eight new sectors in NAICS (table 2).

- Responding to the surge in information technology and its use in production techniques, NAICS includes a new Information sector that combines the following SIC categories: Publishing activity from Manufacturing; communications from Transportation, Communications, Electric, Gas, and Sanitary Services; and motion picture and sound recording, information services and data processing, and libraries from Services.

- NAICS corrected several structural and conceptual flaws in the SIC. For example, the production of prepackaged computer software, clearly a manufacturing process, was moved out of the business services industry and into manufacturing. NAICS refined the Manufacturing sector; publishing, logging, and some auxiliary service establishments⁷ were moved out of manufacturing, and retail bakeries,⁸ dental laboratories, and

7. In the 1987 SIC, auxiliary service establishments were defined as establishments primarily engaged in performing management or support services for other establishments of the same enterprise, and they were classified to industries on the basis of the classification of the establishments they served. In NAICS, these establishments are classified on the basis of their primary activity. This change moves a number of these establishments out of manufacturing and into a variety of other industries.

8. In NAICS, establishments classified in the Manufacturing sector are defined as those engaged in the mechanical, physical, or chemical transformation of materials, substances, or components into new products. For example, bakeries, formerly in retail trade in the SIC, are classified in manufacturing because they transform materials into new products that are sold from the same premises.

Table 2.—NAICS Structure and SIC Structure

NAICS sector	SIC division
11 Agriculture, forestry, fishing and hunting	A. Agriculture, forestry, and fishing
21 Mining	B. Mining
22 Utilities	
23 Construction	C. Construction
31-33 Manufacturing	D. Manufacturing
42 Wholesale trade	F. Wholesale trade
44-45 Retail trade	G. Retail trade
48-49 Transportation and warehousing	E. Transportation, communications, electric, gas, and sanitary services
51 Information	
52 Finance and insurance	H. Finance, insurance, and real estate
53 Real estate and rental and leasing	
54 Professional, scientific, and technical services	I. Services
55 Management of companies and enterprises	
56 Administrative and support and waste management and remediation services	
61 Educational services	
62 Health care and social assistance	
71 Arts, entertainment, and recreation	
72 Accommodation and food services	
81 Other services (except public administration)	
92 Public administration	J. Public administration
99 Unclassified establishments	K. Nonclassifiable establishments

tire retreading were moved in. As a result of these changes, the NAICS Manufacturing sector is about 4 percent smaller (in terms of the number of establishments and paid employees) than the SIC Manufacturing division.⁹

- In order to better measure tourism activity, NAICS created a new Accommodation and Food Services sector by combining hotels and other lodging places from SIC Services and eating and drinking places from SIC Retail Trade.

- In order to eliminate the mixture of economic concepts in the SIC, NAICS redefined wholesale and retail trade. In the SIC, trade establishments were classified according to the type of customer: For wholesale trade, mainly to businesses; and for retail trade, mainly to consumers. In NAICS, trade establishments are classified according to their production process: An establishment is in retail trade if it is located and designed to attract a high volume of walk-in customers, it uses mass-media advertising to attract customers, and it has extensive displays of merchandise; an establishment is classified in wholesale trade if it operates from a warehouse or office, it displays little or no merchandise, and it does not normally direct advertising to the general public.

- To classify all industries on a production-concept basis, NAICS assigned the establishments that were formerly known as auxiliaries to the industry of their primary activity rather than to the industry they serve. Further, the new sector "Management of Companies and Enterprises" groups establishments (except government establishments) that administer, oversee, and manage other establishments of the company or enterprise (establishments known as central administrative offices, corporate offices, or district and regional offices).

The complete structure of NAICS—including detailed definitions, index items, illustrative examples, cross references, and bridges to the 1987 SIC—is available in print, on a CD-ROM, and on the Internet.¹⁰

Updating NAICS

One of the criticisms of the SIC system was that it was infrequently revised and thus did not keep pace with structural changes in the U.S. economy. The United States, Canada, and Mexico are com-

9. See the 1997 Economic Census results at <www.census.gov>.

10. To order *North American Industry Classification System: United States, 1997* in print or on CD-ROM, call the Commerce Department's National Technical Information Service (NTIS) at 800-553-6847 or 703-605-6000, or visit the NTIS Web site at <www.ntis.gov/product/naics.htm>. Visit the U.S. Government NAICS Web site at <www.census.gov/epcd/www/naics.html>.

mitted to reviewing and potentially refining NAICS on a 5-year cycle. Work on the first revision began almost immediately after the original NAICS was adopted in April 1997.

One of the innovations of NAICS, and one that European statistical agencies and the United Nations Statistical Commission wish to emulate, is the inclusion of an Information sector that is meant to capture the notions of the “information age” and the “global information economy.” Yet, even as this sector was being completed for NAICS 1997, rapid changes in information technology continued. For example, NAICS 1997 does not specifically recognize industries involved in Internet service provision, Web search portals, or Internet publishing and broadcasting. In addition, business-to-consumer and business-to-business electronic market transactions were evolving rapidly, and the traditional distinctions between wholesale and retail trade were becoming blurred. Finally, work on the classification of construction, wholesale trade, retail trade, and public administration was not completed for NAICS 1997, because the three countries had not reached full agreement on them during the first round of NAICS negotiations.

The first revision of NAICS—including a new Construction sector, a revised Information sector, and U.S. changes to retail and wholesale trade to reflect e-commerce activity—was completed in January 2001 and will be implemented beginning with the 2002 Economic Census and related economic accounts.¹¹

Plans call for a second review of NAICS in 2007. This review will again look at changes that would be designed to keep pace with structural changes in the economy. Likely candidates include the Information sector and the distributive industries, wholesale and retail trade and transportation and warehousing, where there is continued rapid change in technology and in its application to production activity and to economic transactions. Further, the rapidly growing biotechnology industries, which are not directly covered in NAICS 1997 or in NAICS 2002, may need to be more formally recognized in NAICS 2007.

In addition, the statistical agencies of the three North American countries, Eurostat (the European Union statistical agency), and the Statistical Commission of the United Nations are investigat-

ing the feasibility of “converging” the NAICS, the Nomenclature of Economic Activities in the European Community (NACE), and the International Standard Industrial Classification (ISIC) by the year 2007.¹² However, it is too early to tell whether this effort will affect the NAICS 2007 revision.

NAICS implementation

The implementation of NAICS by the U.S. statistical agencies will be a complex and time-consuming process, particularly for BEA, which assembles many pieces of economic information that are collected and compiled by numerous other statistical agencies and private organizations. The mosaic of the U.S. economy that BEA produces is highly dependent on the timing and quality of the source data. Thus, BEA's schedule for implementing NAICS depends on the implementation schedules of the source data agencies, chiefly the Census Bureau, BLS, and the IRS.

Table 3 presents the current NAICS implementation schedules for the major source data provided to BEA by the Census Bureau, IRS, and BLS. For example, the NAICS-based data from the 1997 Economic Census is being released in 1999–2001, and NAICS-based data for Producer Price Indexes from BLS will not be released until 2004. Moreover, BLS is skipping implementation of NAICS 1997 and will be going directly to releasing NAICS-2002-based data for all of its program areas.

12. For information on NACE, go to <europa.eu.int/eurostat.html>. For information on the ISIC, go to <www.un.org/Depts/unsd/class>.

Table 3.—NAICS Implementation Schedules of BEA's Major Source-Data Agencies

Data source	Data year(s) released ¹	Year of release
Census Bureau:		
Quinquennial economic census	1997	1999–2001
Annual survey of manufactures	1998	2000
Service annual survey	1998–99	2001
Annual wholesale and retail trade surveys	1992–99	2001
Monthly manufacturers' shipments, inventories, and orders	1992–2001	2001
Monthly wholesale and retail trade	1992–2001	2001
Annual capital expenditures survey	1998–99	2001
IRS:		
<i>Statistics of Income</i>	1998	2000
BLS:		
Unemployment insurance-covered employment and wages (ES-202)	2001	2002
Current employment statistics (BLS-790)	2003	2003
Producer price indexes	2004	2004

11. For a complete description of the changes to NAICS for NAICS 2002, see “North American Industry Classification System—Update for 2002,” *Federal Register* 65 (April 20, 2000): 77, 21,242–21,282; and “North American Industry Classification System—Revision for 2002,” *Federal Register* 66 (January 16, 2001): 10, 3,826–3,827.

1. The period for which the first NAICS-based industry data will become available from BEA's major source-data agencies. NOTE.—For BLS data, the conversions will be directly to NAICS 2002; for the other source data, the conversions are to NAICS 1997.
IRS Internal Revenue Service
BLS Bureau of Labor Statistics

Thus, there will be a difficult 4-year transition period for the NAICS conversion, both for BEA as a user of these source data and for BEA's data users. Because not all the data will be released at the same time or will be on a consistent NAICS basis, BEA will have to convert some NAICS-based source data back to an SIC basis for several years. For example, the source data used to prepare the estimates of GDP by industry that were released in December 2000 were on different classification bases. The source data from BLS that were used to derive the estimates of employee compensation, which accounts for about 57 percent of total GDP by industry group, were on the SIC 1987 basis. Much of the other major source data—such as those from the Census Bureau's 1997 Economic Census, the 1998 Annual Survey of Manufactures, and the 1999 Service Annual Survey (preliminary) and from the IRS' *Statistics of Income* for 1997 and 1998—were compiled on the NAICS 1997 basis; all of these data had to be converted back to the SIC basis by the source agency or by BEA on the basis of information provided by the source agency.¹³ Full implementation of NAICS in the GDP by industry estimates will require the implementation of NAICS in both the NIPA's and the benchmark

input-output (I-O) accounts, which in turn, will depend on implementation by the source data agencies.

Table 4 presents BEA's intended schedule for NAICS conversion based on the published NAICS implementation schedules of the source data agencies. In 1999, BEA was one of the first U.S. statistical agencies to release NAICS-based data—its estimates of foreign direct investment in the United States (FDIUS) from the 1997 benchmark survey (see the box "NAICS Implementation in BEA's Estimates of International Investment"). In 2000, all NAICS-based source data that BEA received were converted back to an SIC basis, because NAICS-based data from the 1997 Economic Census had not yet been released in total. As a part of this year's annual NIPA revision, BEA will release NAICS-based estimates for inventories and sales for manufacturing and trade. In 2002, BEA will release NAICS-based FDIUS balance of payments data for 1997–2001, benchmark I-O accounts for 1997, and State personal income estimates for 2001 (the income estimates will be on a NAICS-2002 basis). BEA will complete the NIPA conversion to NAICS in its 2003 comprehensive revision based on the 1997 I-O accounts. The NIPA comprehensive revision, which BEA expects to release in late 2003, will be followed by benchmark revisions of its other major industry-based series—fixed assets, GDP by industry, gross state product by industry, the annual I-O accounts, and balance of payments data for U.S. direct investment abroad.

13. Sherlene K.S. Lum and Brian C. Moyer, "Gross Domestic Product by Industry for 1997–99," *SURVEY* 80 (December 2000): 28.

Table 4.—BEA's NAICS Implementation Schedule

Data series	Data year(s) released ¹	Year of release	Overlap year ²
FDIUS operations data	1997	1999	1997
Inventories and sales for manufacturing and trade	1997–2000	2001	1997
State personal income and earnings by industry ³	2001	2002	none
Benchmark I-O accounts	1997	2002	none
FDIUS balance of payments data	1997–2001	2002	1997
USDIA operations data	1999	2002	1999
NIPA's	2000–2002	2003	2000
Fixed assets	1997–2002	2004	1997
GDP by industry	2000–2002	2004	2000
Gross state product	2000–2002	2004	2000
Annual I-O accounts	2000–2001	2004	none
USDIA balance of payments	1999–2003	2004	1999

1. The period for which NAICS-based data will first become available.

2. The year for which BEA will release estimates on both a NAICS and an SIC basis.

3. State personal income and earnings by industry are the only BEA estimates that will convert directly to NAICS 2002; other conversions are first to NAICS 1997.

FDIUS Foreign direct investment in the United States

GDP Gross domestic product

I-O Input-output

NIPA National income and product accounts

USDIA U.S. direct investment abroad

Effects on BEA's data users

The implementation of NAICS will be highly beneficial to the users of BEA's data. First, to the extent feasible, data on inputs and outputs, on industry performance and productivity, and on unit labor costs and employment will be consistently categorized across the U.S. economy and across the economies of Canada and Mexico. Second, these data will be organized on the basis of a single economic principle—similarity in production processes. Third, the data will be classified according to the current economic infrastructure of the United States, will better capture new and emerging technologies, and will specify greater detail in the services side of the economy.


These important benefits are accompanied by some costs, mainly the breaks in time series be-

cause of the switch from SIC-based estimates to NAICS-based estimates. Because of NAICS' adherence to the production-oriented organizing principle, many industries that were in certain sectors under the SIC were moved to quite different sectors under NAICS. These changes result in breaks in the time series that users have come to rely on for budget projections, econometric forecasting, trend analyses, productivity studies, seasonal adjustment, and analyses of current economic conditions.¹⁴

To minimize the impact of the breaks in classification, the Census Bureau reported the 1997 Economic Census on both a NAICS basis and an SIC basis, and internal Census Bureau studies are under way to consider recoding the 1992 Economic Census on a NAICS basis. A "bridge table" for the United States on the Census Bureau's NAICS Web site will enable users to convert some time series from a NAICS basis to an SIC basis and vice versa. BEA does not plan to publish time series for esti-

mates before 1997 on a NAICS basis for most of its economic data, but such breaks are not totally unprecedented; for example, BEA's data on real gross output for 1977–87 are on an SIC 1972 basis and the data for 1987–99 are on an SIC 1987 basis.

A second major cost will be the difficult transition period, when some U.S. statistical agencies will have implemented NAICS, and others will not have. As mentioned above, NAICS implementation will generally occur from 1999 through 2004. Both the Census Bureau and BEA will implement NAICS 1997 first and then convert to NAICS 2002 after the 2002 Economic Census. In contrast, BLS will go directly to NAICS 2002. These staggered schedules will add to the time it normally takes BEA to prepare its estimates.

Another cost is the disruption to the U.S. statistical system as it copes with potential future refinements to NAICS. Indeed, reflecting the pace of technological change in the new economy, structural changes may occur more quickly than in the past, leading to an ever-continuing task of classifying and reclassifying new and emerging industries. Keeping pace will be a challenge for BEA analysts and for its data users alike. 

14. However, for most of the NIPA aggregate estimates—such as personal income, inventories, and corporate profits—time-series comparability will be maintained; breaks will occur in the subcomponents of the major aggregates. For other BEA series, such as GDP by industry and wages and salaries by industry, time-series breaks will occur.

NAICS Implementation in BEA's Estimates of International Investment

BEA collects source data on foreign direct investment in the United States (FDIUS) and U.S. direct investment abroad (USDIA) and has implemented the North American Industry Classification System (NAICS) in its quarterly, annual, and quinquennial benchmark surveys of direct investment. A NAICS-based classification system was first used in the FDIUS benchmark survey for 1997.

BEA had to adapt the 1997 NAICS classifications for use in its direct investment surveys because the surveys collect data at the enterprise level, but NAICS was developed to classify establishments within an enterprise. Because many direct investment enterprises are active in several industries, it is not meaningful to classify all their data in a single industry if that industry is defined too narrowly. Accordingly, the NAICS-based international survey industry (ISI) classifications are limited to 197 industries, compared with 1,170 industries in NAICS 1997. The ISI classifications are roughly equivalent to the NAICS four-digit industries.

Before the implementation of the NAICS, the ISI classifications consisted of 137 industries that BEA had adapted from the 1987 Standard Industrial Classification (SIC) system.

The preliminary results from the 1997 benchmark survey of FDIUS, which covered the operations of U.S. affiliates of

foreign direct investors, were published in the August 1999 issue of the SURVEY OF CURRENT BUSINESS; selected items for 1997—including gross product, sales, net income, employment, and employee compensation of U.S. affiliates—were published on both NAICS-based and SIC-based ISI classifications, so users could compare the two distributions and evaluate the impact of the change in classification system. NAICS-based estimates from the survey of [U.S. businesses newly acquired or established by foreign direct investors](#) were published in the June 2000 SURVEY, and NAICS-based estimates from the annual survey of the [operations of U.S. affiliates of foreign direct investors](#) were published in the August 2000 SURVEY. NAICS-based estimates from the quarterly survey of FDIUS, which covers the flows and positions that enter the U.S. international transactions accounts and the U.S. international investment position, will be published for 1997 forward in the summer of 2002.

For USDIA, the NAICS was used first in the benchmark survey for 1999; preliminary results will be published in 2002. NAICS-based estimates from the annual survey of the operations of U.S. parent companies and their foreign affiliates will be published in 2003, and NAICS-based estimates from the quarterly survey of USDIA will be published for 1999–2003 in the summer of 2004.