Preview of Revised NIPA Estimates for 2002

Effects of Incorporating the 2002 Benchmark I-O Accounts Proposed Definition and Statistical Changes

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THIS article presents preliminary revised estimates of the major aggregates and components of gross domestic product (GDP) for 2002. These estimates reflect the newly available benchmark input-output (I-O) accounts for 2002, which were published in the October 2007 SURVEY OF CURRENT BUSINESS and revised in January 2008.[1] This article also identifies some of the proposals that are being considered for the upcoming comprehensive revision of the national income and product accounts (NIPAs), which BEA plans to release in 2009.

The benchmark I-O accounts are the most important statistical source of information for comprehensive revisions of the NIPAs. The I-O accounts are used to establish the NIPA level of GDP for the benchmark year, and they provide critical information for estimating GDP for periods after the benchmark year. Specifically, the I-O accounts provide estimates of the total sales (or gross output) of each industry and commodity. In addition, the I-O accounts provide estimates of the division of gross output between final sales and intermediate purchases for each industry and commodity. As a result, estimates of GDP reflect final sales only, without double counting inputs, such as the semiconductors that go into computers or the flour that goes into bread. GDP thus represents the unduplicated total of output sold to final users.

The same benchmark year information is the basis for annual and quarterly estimates of GDP for subsequent years; these estimates are derived mainly from source data measuring total sales (for example, manufacturing shipments and wholesale and retail sales). In addition, information from the I-O accounts on the distribution of final sales across final-demand components is used in the allocation of final sales in annual and quarterly estimates.

These preliminary revised estimates for 2002 provide the foundation for the major GDP components. The estimates will be incorporated into the NIPA estimates of GDP in the upcoming comprehensive revision, but they do not reflect the definition changes and other statistical improvements that will also be incorporated. Highlights of this preliminary revision include the following:

- The revised estimate of GDP for 2002 is $202.3 billion, or 1.9 percent, higher than the presently published estimate.
- The introduction of a new classification system for personal consumption expenditures affects the composition of PCE among its components but does not affect the total estimate of PCE.

Comprehensive revisions of the NIPAs, which occur roughly every 5 years, incorporate the best and final source data for all of the components in the accounts and thus make the series consistent for all time periods. The next comprehensive revision is scheduled to be released in July 2009. Traditionally, comprehensive revisions have also included changes in definitions and statistical methods designed to adapt the accounts to an ever changing economy (see the box "NIPA Revision Cycle"). The most recent strategic plan emphasizes BEA's efforts to provide new and improved measures of output, services, investment, prices, saving, and fixed assets; to update industry and other classification systems; to improve the consistency and integration of the economic accounts; and to increase the consistency of the accounts with international guidelines.[2]

Definition changes are changes to the composition or classification of the components in the accounts. They are primarily made to adapt the NIPAs to a changing economy; an example is the recognition of the implicit services provided by property and casualty insurance providers in the 2003 comprehensive revision.[3] Statistical changes are changes in estimating procedures that are generally made to incorporate new

1. Ricky L. Stewart, Jessica Brede Stone, and Mary L. Streitwieser, "U.S. Benchmark Input-Output Accounts, 2002," SURVEY 87 (October 2007): 19–48. Revised estimates are available on the BEA Web site. A description of the revisions is available at <www.bea.gov/industry/Make_Use_table_revisions.htm>.

2. For detailed information on the international guidelines for national accounts, see Commission of the European Communities, International Monetary Fund, Organisation for Economic Co-operation and Development, United Nations, and the World Bank, System of National Accounts 1993 (Brussels/Luxembourg, New York, Paris, and Washington, DC, 1993).

3. In the 2003 comprehensive revision, definition changes more than accounted for the $14.1 billion downward revision to GDP for the benchmark year 1997.

measures or techniques or to incorporate data from new sources; an example is the adoption of new price indexes in 2003, which improved the deflation of nonresidential structures and of photocopying equipment.

This article is the first in a series of articles about the upcoming comprehensive revision of the NIPAs. Forthcoming articles will provide more detailed information on definition changes and statistical changes and will describe the new and redesigned tables.

Preliminary Revised NIPA Estimates for 2002

The incorporation of the 2002 benchmark I-O accounts has an appreciable effect on the estimates of the product side of the NIPAs; the income side is less affected. The revised estimate of GDP for 2002 is $202.3 billion, or 1.9 percent, higher than the presently published estimate (table 1). A large upward revision to PCE was supplemented by smaller upward revisions to gross private domestic investment and government spending; there was a small downward revision to net exports.

Table 1. Gross Domestic Product and Components, 2002

[Billions of dollars]

	Published	Preliminary revised	Revision
Gross domestic product	**10,469.6**	**10,671.9**	**202.3**
Personal consumption expenditures	**7,350.7**	**7,498.8**	**148.1**
Durable goods	923.9	982.3	58.4
Nondurable goods	2,079.6	1,617.1	–462.5
Services	4,347.2	4,899.4	552.3
Gross private domestic investment	**1,582.1**	**1,622.2**	**40.1**
Fixed investment	1,570.2	1,608.4	38.2
Nonresidential	1,066.3	1,098.0	31.7
Structures	279.2	266.8	–12.4
Commercial and health care	116.8	111.3	–5.5
Manufacturing	17.8	22.7	4.9
Power and communication	49.5	51.0	1.5
Mining exploration, shafts, and wells	35.6	30.2	–5.4
Other structures	59.5	51.6	–7.9
Equipment and software	787.1	831.2	44.1
Information processing equipment and software	399.4	417.8	18.4
Computers and peripheral equipment	77.2	79.7	2.5
Software	167.6	181.0	13.4
Other	154.5	157.0	2.5
Industrial equipment	135.7	141.8	6.1
Transportation equipment	126.3	132.0	5.7
Other equipment	125.7	139.6	13.9
Residential	503.9	510.4	6.5
Structures	496.3	502.4	6.1
Permanent site	298.8	298.8	0.0
Single family	265.9	265.9	0.0
Multifamily	33.0	33.0	0.0
Other structures	197.5	203.6	6.1
Equipment	7.6	8.0	0.4
Change in private inventories	11.9	13.7	1.8
Net exports of goods and services	**–424.4**	**–425.6**	**–1.2**
Exports	1,005.9	1,005.9	0.0
Imports	1,430.3	1,431.6	1.2
Government consumption expenditures and gross investment	**1,961.1**	**1,976.5**	**15.4**
Federal	679.7	679.7	0.0
National defense	437.1	437.1	0.0
Nondefense	242.5	242.5	0.0
State and local	1,281.5	1,296.9	15.4

PCE for services was revised up $552.3 billion, PCE for durable goods was revised up $58.4 billion, and PCE for nondurable goods was revised down $462.5 billion. These revisions reflect the following: the incorporation of the comprehensive source data that underlie the benchmark I-O accounts, the incorporation of improved estimating methods for several components of PCE, and the incorporation of an important change to the classification structure used for personal consumption expenditures that affects the composition of PCE for durable goods, nondurable goods, and services but does not affect the total for PCE. Because the new classification structure reclassifies some of the detailed items and component categories of PCE, only the total revisions to durable goods, nondurable goods, and services are presented in table 1. The impact of the new classification system used for PCE and the other changes introduced in the I-O accounts are discussed in the sections "Changes introduced in the 2002 I-O accounts" and "Effects of incorporating the I-O changes."

Gross private domestic investment was revised up $40.1 billion, mainly reflecting an upward revision to fixed investment. Nonresidential fixed investment was revised up substantially, as an upward revision to equipment and software more than offset a downward revision to nonresidential structures. The upward revision of $44.1 billion to equipment and software reflected an upward revision of $18.4 billion to information processing equipment and software (primarily software), an upward revision of $13.9 billion in "other" equipment, and smaller upward revisions to industrial equipment and transportation equipment.[4] The downward revision to structures of $12.4 billion reflected downward revisions that were fairly evenly distributed among commercial and health care, mining exploration, shafts, and wells, and "other" structures and that were not fully offset by upward revisions to manufacturing and power and communication.[5]

Residential investment was revised up $6.5 billion, primarily reflecting an upward revision to structures. Within structures, "other" structures was revised up $6.1 billion, and single-family structures was not revised.[6]

4. "Other" equipment consists primarily of furniture and fixtures; agricultural, construction, mining and oilfield, and service industry machinery; and electrical equipment not elsewhere classified.

5. "Other" nonresidential structures consists primarily of religious, educational, vocational, lodging, railroads, farm, and amusement and recreational structures, net purchases of used structures, and brokers' commissions on the sale of structures.

6. "Other" residential structures consists primarily of manufactured homes, improvements, dormitories, net purchases of used structures, and brokers' commission on the sale of residential structures.

Net exports of goods and services was revised down $1.2 billion, reflecting an upward revision to imports.[7]

Government spending was revised up $15.4 billion because of an upward revision to state and local government spending; federal spending was not revised.

The income side of the I-O accounts has little aggregate impact on the NIPAs because the I-O accounts use the published NIPA estimates of total compensation and taxes on production and imports (TOPI) and because the I-O accounts do not provide any separate data on profits and other property-type income, which are included in the residual "other value added." The NIPA estimates of compensation and TOPI will be revised in the upcoming comprehensive revision.

The I-O accounts and the NIPAs

The recently released 2002 benchmark I-O estimates incorporated detailed data that were not available for the last comprehensive revision of the NIPAs. These data included estimates of inventories, of receipts and expenses, of sales by detailed commodity and by merchandise line, of final industry and product shipments from the 2002 Economic Census, and of trade margins from both the Economic Census and the 2002 annual surveys of merchant wholesale and retail trade.[8] In addition, the detailed commodity-flow method was used to prepare the I-O estimates of PCE and of private equipment and software.[9] This method enables the use of data from the economic censuses that are more detailed than the data available from annual surveys and

7. The treatment of certain foreign transactions on a NIPA basis differs from the treatment of these transactions in the I-O accounts. NIPA exports and imports include, and the I-O accounts exclude, the value of U.S. goods that are returned to the United States from other countries, foreign goods that are reexported from the United States to other countries, and certain transactions between foreigners that involved U.S. intermediaries. These adjustments do not cause differences between the NIPA and I-O estimates of net exports. For more information, see appendix E in Stewart, Stone, and Streitweiser, 58.

8. The 2003 comprehensive revision did incorporate preliminary sales for retail trade and product shipments for computers from the 2002 Economic Census.

9. The commodity-flow method first converts domestic sales, which is the value of sales of commodities produced by domestic firms at producers' prices, to domestic supply, which is the value of sales to domestic purchasers at producers' prices and, therefore, includes imports and excludes exports. Then, it allocates domestic supply among domestic purchasers—that is, persons, business, and government.

NIPA Revision Cycle

The comprehensive revision of the NIPAs marks the culmination of an estimating cycle that typically takes 5 years. The cycle begins with three "current" estimates for each quarter, continues with annual revisions of the estimates for the 3 most recent years, and concludes with the comprehensive revision. This cycle reflects the time-dependent nature of the quantity and quality of the source data on which the NIPAs rely.

The release schedule for GDP and related estimates is planned to allow for the incorporation of revised or newly available source data. For GDP and most other NIPA series, "advance" quarterly estimates (based on incomplete monthly data) are released near the end of the first month after the end of the quarter. These estimates are revised in the next 2 months to incorporate revised and newly available monthly and quarterly data.

Similarly, annual estimates of GDP that are first available as the sum of the quarterly estimates for the preceding year are usually revised in the annual revision in July and in the next two annual revisions. These annual revisions incorporate newly available annual source data and quarterly data that are released too late to be used in the "current" quarterly estimates. The monthly, quarterly, and annual data are usually based on sample surveys.

Comprehensive NIPA revisions are carried out at about 5-year intervals and are timed to incorporate the benchmark I-O accounts, which provide the levels of the components of GDP for the benchmark year. The I-O accounts incorporate the most comprehensive and complete source data available—primarily data from the every-5-year economic census, the census of governments, and the every-10-year censuses of population and housing.

Flexible annual revisions

Traditionally, comprehensive revisions have also incorporated changes in definition, concepts, and statistical methods designed to better measure a constantly evolving economy. Comprehensive revisions also opened up the entire time series to revision. In the future, BEA will embrace a new "flexible annual revisions" approach, which will allow BEA to incorporate these kinds of changes in annual revisions.

There are several advantages to this approach: Users will be provided more up-to-date data, the results of important revisions will be delivered earlier, and users will have fewer major changes to grapple with at once. In addition, because flexible annual revisions will occur in the summer, they will satisfy requests from users that BEA avoid major revisions at the end of calendar years.

Schedule

BEA will release a regular annual revision in July 2008, revising estimates for 2005–2007. In 2009, BEA will release a comprehensive revision that will incorporate the 2002 benchmark I-O and various conceptual and statistical changes. It will revise the entire time series back to 1929. In 2010, flexible annual revisions will begin.

the use of improved estimates of the sales of businesses in the mining, manufacturing, and wholesale trade industries that have no employees and are thus excluded from the economic censuses. The 2002 I-O estimates of foreign transactions also reflected the results of the 2006 and 2007 annual revisions of the U.S. international transactions accounts (ITAs).[10]

Changes in the 2002 I-O accounts

In addition to the use of more comprehensive and more recent source data, the benchmark I-O accounts incorporate other changes in definitions, statistical methods, and presentation. The new information that is contained in the I-O accounts will be incorporated into the NIPAs as part of the comprehensive revision.

Several changes were introduced in the 2002 benchmark I-O accounts that impacted the NIPAs. Notable among these changes were the introduction of a new classification system for personal consumption expenditures, the incorporation of the 2002 North American Industry Classification System (NAICS), and statistical changes in two areas—royalties and personal consumption expenditures.

Classification system. Consumer buying patterns are influenced by changes in incomes, demographics, and tastes and preferences, by technological innovations, and by new government programs and legislation. The new classification system used for PCE allows the national economic accounts to better reflect these changes. The current system used in the NIPAs to classify consumer expenditures by function and product were introduced in 1947 and 1954, respectively. While numerous changes have been made to the detailed items and commodities included in the existing classification structure, there have been very few changes to the major categories of expenditures since 1947 or to the product categories since 1954.

The classification system for PCE introduced in the 2002 benchmark I-O accounts reflects the changes that have occurred in consumer buying patterns and brings the classification of consumption expenditures closer to the recommendations of the System of National Accounts.[11] This new structure maintains the current detailed items but makes numerous changes to commodities and commodity categories as well as to the functional aggregates and to the type-of-product aggregates. Specifically, the functional classification structure incorporates the following:

- Distinct aggregate components for household consumption expenditures and final consumption expenditures of nonprofit institutions serving households (NPISHs) that facilitate analysis and continue BEA's efforts to provide separate information on the income and outlays of households and NPISHs.[12]
- New categories—communication, food services and accommodations, financial services and insurance, and other goods and services—that reflect the increasing importance of certain types of expenditures.
- Reorganized and redistributed commodities among category level aggregates that will better reflect buying patterns and the increased significance of certain types of expenditures.

These changes do not change the total level of PCE; however, they do change the composition of expenditures among durable goods, nondurable goods, and services (table 4). Table 2 shows the new and old PCE classifications by function at the major category level; table 3 shows the new and old PCE structures by product at the major product level.

PCE source data and methodologies. In addition to introducing a new classification system, the 2002 benchmark I-O accounts improved the estimates of

Table 2. Current and New Classifications for Personal Consumption Expenditures by Type of Function

Current classification	New classification
	Household consumption expenditures
Food and tobacco	Food and beverages purchased for off-premise consumption
Clothing, accessories, and jewelry	Clothing and footwear
Personal care	Housing and utilities
Housing	Furnishings, household equipment, and routine household maintenance
Household operation	Health care
Medical care	Transportation
Personal business	Communication
Transportation	Recreation
Recreation	Education
Education and research	Food services and accommodations
Religious and welfare activities	Financial services and insurance
Foreign travel and other, net	Other goods and services
	Net foreign travel and expenditures abroad by U.S. residents (net)
	Final consumption expenditures of nonprofit institutions

10. For the upcoming comprehensive revision of the NIPAs, the estimates for 2002 (and earlier years) will also reflect the results of the 2007 annual revision of the ITAs.

11. The new functional classification reflects a combination of the Classification of Individual Consumption by Purpose (COICOP) and the Classification of the Purposes of Nonprofit Institutions Serving Households (COPNI) systems used in the SNA.

12. As part of the 2003 comprehensive revision of the NIPAs, BEA introduced an annual table that separates the income and outlays of households from those of NPISHs. This information can be used to answer questions about differences in economic behavior of households and nonprofit institutions in the U.S. economy. For more information, see Charles Ian Mead, Clinton P. McCully, and Marshall B. Reinsdorf, "Income and Outlays of Households and of Nonprofit Institutions Serving Households," SURVEY 83 (April 2003): 13–17.

Table 3. Current and New Classifications for Personal Consumption Expenditures by Major Type of Product

Current classification	New classification
Durable goods	**Durable goods**
Motor vehicles and parts	Motor vehicles and parts
Furniture and household equipment	Furnishings and durable household equipment
Other	Recreational goods and vehicles
	Other durable goods
Nondurable goods	**Nondurable goods**
Food	Food and beverages purchased for off-premise consumption
Gasoline, fuel oil, and other energy goods	Clothing and footwear
Gasoline and oil	Gasoline and other energy goods
Fuel oil and coal	Other nondurable goods
Other	
Services	**Services**
Housing	Household consumption expenditures
Household operation	Housing and utilities
Electricity and gas	Health care
Other household operation	Transportation services
Transportation	Recreation services
Medical care	Food services and accommodations
Recreation	Financial services and insurance
Other	Other services
	Final consumption expenditures on nonprofit institutions serving households
	Addenda:
	Energy goods and services[1]
	Personal consumption expenditures excluding food and energy[2]

1. Consists of gasoline, fuel oil, and other energy goods and of electricity and gas.
2. Food excludes purchased meals and beverages, which is classified in food services.

PCE for telecommunications, air transportation, and "food away from home." The changes reflect the results of extensive research into new source data and estimation methodologies; like the new classification structure, these changes better reflect changes to household purchasing patterns.

For telecommunications, a new methodology was adopted that estimates and redistributes to intermediate expenditures those telecommunication expenses that are reimbursed by businesses to employees for their use of personal telephones and Internet services for business purposes. In previous I-O accounts, consumer spending on telecommunications was based on historical expenditure levels that included the business use of personal (household) telecommunications services within household expenditures; the business use was not treated as an intermediate expenditure.

For the 2002 benchmark I-O accounts, information from the Current Population Survey's Work at Home Supplement and from the Federal Communications Commission (FCC) on household expenditures on local, long distance, and cellular telephone services was used to estimate personal telephone service expenditures by workers at home. This estimate was then combined with information from the Consumer Expenditure Survey from the Bureau of Labor Statistics (BLS) to estimate the portion of telephone service expenditures attributable to work activities and reimbursed to households.[13] Estimates of reimbursed personal Internet service expenses were similarly derived. Both of these reimbursed expenses for business use were removed from PCE and redistributed as inputs or expenses of intermediate industries.

For air transportation, the 2002 benchmark I-O accounts updated the methodology and source data used to prepare estimates of PCE. Previous I-O estimates of PCE for domestic passenger air transportation included only domestic recreational or leisure air travel of U.S. residents. Nonresident travel and personal nonrecreational travel were not included. The 2002 benchmark I-O accounts incorporated nonresident travel data from the U.S. travel and tourism satellite accounts and nonrecreational personal and family business trip activity data from the Bureau of Transportation Statistics 2001 National Household Travel Survey. This resulted in qualitative and quantitative adjustments to include nonresident and nonrecreational domestic air travel in PCE.[14] As a result, the share of domestic passenger air transportation output that is attributed to households (PCE) increased significantly, which in turn increased GDP. Additionally, the estimates of intermediate consumption by business and government of air travel were reduced, and their value added was increased. The nonresident travel correction was included in the I-O accounts as a rest-of-the-world adjustment.

For food away from home, a new methodology was introduced that uses information from the BLS Telephone Point of Purchase Survey combined with the Census Bureau's Economic Census class-of-customer data to estimate household expenditures on food and nonalcoholic beverages in purchased meals. The Economic Census class-of-customer data were used to estimate the portion of overall food service industry sales that stem from households and individuals. The Telephone Point of Purchase Survey data were then used to measure the portion of food service industry sales that represent household expenditures at full service and limited service restaurants. The use of these two data

13. The Current Population Survey is conducted by the Census Bureau for BLS. It provided estimates of the number of wage and salary workers and self-employed workers who worked at home and used a telephone or the Internet. The FCC's Reference Book of Rates, Price Indices, and Household Expenditures for Telephone Service provided the average annual household expenditures on local, long distance, and cellular telephone services, The 2002 Consumer Expenditure Survey provided percentages of those deducting telephone and Internet services as business expenses and the average annual Internet household expenditures.

14. See "Table 3. Demand for Commodities by Type of Visitor" in Peter D. Kuhbach, Mark A. Planting, and Erich H. Strassner, "U.S. Travel and Tourism Satellite Accounts for 1998–2003," SURVEY 84 (September 2004): 58.

sources updated PCE for food and beverages in purchased meals to reflect the differences in pricing and expenditure patterns for food away from home. In previous benchmark I-O accounts, the PCE estimates of food and beverages in purchased meals were based on historical household expenditures data.

NAICS. The 2002 benchmark I-O accounts reflect the 2002 NAICS, which included major changes from the 1997 NAICS to the classification of industries in NAICS sector 51, information. The sector was restructured and new industries were created to account for new services and emerging technologies. Internet publishing and broadcasting was moved from 1997 NAICS 511 and 514 into its own industry, 2002 NAICS 516. This new industry includes electronic publishing by newspapers, periodicals, books, databases, greeting cards, and atlases and maps. "Web search portals" was removed from "other information services" (NAICS 51419), and a new industry, "Internet service providers, Web search portals, and data processing" (NAICS 5180), was created. "On-line information services" was renamed "Internet service providers" to better reflect the activity of this industry.

Royalties. The measurement of royalties output was improved in the 2002 benchmark I-O accounts by using new source data and by improving the estimation methodology. Income from royalties (except copyrighted works) is included in the gross output of the "lessors of nonfinancial intangible assets" industry and is based on information from the Economic Census. Because the source data is not comprehensive, BEA used additional information from corporate income tax returns (from the Internal Revenue Service Statistics of Income (SOI) tabulations) to complete the measures of the income from royalties.

The 2002 I-O accounts used data from the BEA international transactions accounts on royalties and licensing fees to develop a distribution of payments for the use of U.S. intellectual property by type. This distribution was applied to the SOI corporate royalty data in order to estimate and remove copyright receipts from the combined data for copyright and royalty receipts. Additional adjustments were made to account for royalty income from individuals, partnerships, and fiduciaries.

Effects of incorporating the I-O changes

The 2002 benchmark I-O accounts introduced significant changes to the components of PCE and to estimates of income by industry.

PCE. Like the I-O accounts, the introduction of the new PCE classification in the NIPAs will change the distribution of PCE among commodities, commodity categories, and the types of expenditure and product aggregates; however, it will not change the total level of PCE (table 4). Durable goods was revised up $35.9 billion, mostly because of the reclassification of certain nondurable goods to durable goods. For example, the reclassification of "sporting equipment, supplies, guns, and ammunition" from nondurable goods to durable goods boosted durable goods $12.6 billion. Services was revised up $380.6 billion, mostly because of the reclassification of $389.2 billion for "purchased meals and beverages" from nondurable goods to services. Nondurable goods was revised down $416.4 billion, mostly because of the reclassification of certain nondurable goods, such as those noted above, to durable goods and services.

In addition, the NIPA estimates were affected by the incorporation of benchmark I-O estimates that were based on more comprehensive, revised, and newly available source data and that used improved estimating methods. For example, PCE for housing and utilities was revised up $134.6 billion, primarily reflecting newly available data from the Residential Finance Survey for owner-occupied homes. Final consumption expenditures of nonprofit institutions serving households was revised up $39.6 billion, primarily reflecting an improved estimation method for religious organizations and newly available Census Bureau data for hospital services, social services, social advocacy, and grantmaking and giving services. PCE for recreational goods and vehicles was revised up $24.0 billion, primarily reflecting newly available Census Bureau data

Table 4. Personal Consumption Expenditures, 2002

[Billions of dollars]

	Published estimates	Reclassified	Revision due to reclassification	Preliminary revised	Revision due to other changes
Personal consumption expenditures	**7,350.7**	**7,350.7**	**0.0**	**7,498.8**	**148.1**
Durable goods	**923.9**	**959.8**	**35.9**	**982.3**	**22.5**
Motor vehicles and parts		413.6		391.9	–21.7
Furnishings and durable household equipment		205.8		223.2	17.4
Recreational goods and vehicles		228.2		249.7	24.0
Other durable goods		112.3		117.5	5.2
Nondurable goods	**2,079.6**	**1,663.2**	**–416.4**	**1,617.1**	**–46.1**
Food and beverages purchased for off-premise consumption		589.1		570.0	–19.1
Clothing and footwear		293.6		275.5	–18.1
Gasoline and other energy goods		178.7		177.5	–1.2
Other nondurable goods		601.8		594.1	–7.7
Services	**4,347.2**	**4,727.8**	**380.6**	**4,899.4**	**171.7**
Household consumption expenditures for services		4,565.1		4,697.1	132.0
Housing and utilities		1,277.3		1,412.0	134.6
Health care		1,099.0		1,082.5	–15.9
Transportation services		241.4		257.5	16.0
Recreational services		282.3		274.9	–13.5
Food services and accommodations		442.7		438.8	–3.9
Insurance and other financial services		573.7		567.7	–6.0
Other services		648.7		663.9	15.2
Final consumption expenditures of nonprofit institutions serving households		162.7		202.3	39.6

for these goods. In contrast, PCE for motor vehicles and parts was revised down $21.7 billion, primarily reflecting newly available Census Bureau data for autos and trucks.

NAICS. The implementation of the 2002 NAICS will not affect the NIPA estimates of final expenditures, because these estimates are not prepared by industry. However, this implementation will have a minor impact on the distribution of estimates of national income across industries. For example, Internet publishing and broadcasting (NAICS 516) will be moved from publishing industries (including software) to information and data processing services.

Proposed Changes to the NIPAs

In addition to the incorporation of the new classification structure for PCE and the updated NAICS introduced in the 2002 benchmark I-O accounts, BEA is considering implementing several definition changes and statistical changes in the upcoming comprehensive revision of the NIPAs. These changes will not be reflected in the I-O accounts until their next release. These changes will likely include a new treatment of disasters and updated measures of the misreported income of nonfarm proprietors and misreported wages and salaries.

Treatment of disasters. Disasters—such as hurricanes, earthquakes, and other major catastrophes—affect economic activity because production is interrupted, and buildings and other assets that are damaged or destroyed must be replaced. These effects are reflected in GDP and in the NIPAs. However, the actual destruction caused by the disaster is not production and should not directly affect either GDP or the income measures of the NIPAs, which are intended to reflect only the value of production and the income related to production and transfers. A change to the measurement of insurance services output as part of the 2003 comprehensive revision of the NIPAs ensured that such disasters would not affect GDP.[15] However, the value of the losses and the insurance payments that cover or partially cover them are reflected in the income measures of the NIPAs. During the 2009 comprehensive revision of the NIPAs, the treatment of these losses and of the insurance payments will be changed to eliminate their impact on current-period income.

Currently in the NIPAs, the value of the damage or destruction of fixed assets due to disasters is recorded as consumption of fixed capital (depreciation) during the period in which the disaster occurred. The insurance payouts related to the disaster—including payouts to cover losses of fixed assets, consumer durable goods, or business interruption—are recorded as current transfer payments (by business) and as current transfer receipts (of business and of persons). To the extent that losses are insured, the entries for consumption of fixed capital and transfer receipts cancel each other, but the incurrence of losses that are not covered reduces the NIPA measures of national income and its components, including corporate profits, proprietors' income, rental income of persons, and personal income.

BEA plans to change this treatment in the upcoming comprehensive revision of the NIPAs. The value of damages and destruction will be recorded as "other changes in the volume of assets" in NIPA "Table 5.9. Changes in Net Stock of Produced Assets." This entry will not affect any of the current-period measures of production or income. The value of insurance payouts will be recorded as capital transfer payments (and receipts) in "Account 6. Domestic Capital Account," rather than as current transfer payments (and receipts). Because insurance payouts and receipts among domestic sectors will offset each other at the national level, only payments to and from the rest of the world will affect this account. Two subcomponents will be added to the account to provide detail: (1) capital account transactions (net) on the income side of the account will include transfer payments for catastrophic losses and (2) other capital account transactions. The new treatment will eliminate the large swings in NIPA measures of income that result from disasters, make the income side treatment of disasters consistent with the product side treatment, and bring the NIPAs in line with the recommendations of the SNA.

Misreporting. BEA adjusts the NIPA measures of income, primarily nonfarm proprietors' income and wages and salaries, to account for income that meets IRS filing requirements but is either underreported or not reported on tax returns. Measures of underreported income are derived from IRS studies based on the taxpayer compliance measurement program (TCMP) and the National Research Program. These IRS studies provide comparisons of reported income to income measures corrected by audits. Measures of nonreported income are based on exact-match studies conducted by the Census Bureau, which match the validated social security numbers of those who reported self-employment income in the Current Population Survey with the social security numbers of those who

15. As part of the 2003 NIPA comprehensive revision, BEA changed its measure of property and casualty insurance output to use expected losses, rather than actual losses, in the calculation of insurance output. As a result, the large insurance payouts covering the actual destruction and damage caused by major catastrophic events no longer affect the estimates of GDP.

did not file tax returns. Published measures of income reflect adjustments for underreporting that have been extrapolated since 1988 (the date of the last TCMP study). Published income measures also reflect adjustments for nonreporting that include the results of exact-match studies for 1996 and 1999 and that have been extrapolated for subsequent years.

In the upcoming comprehensive revision of the NIPAs, BEA will update estimates of underreported income by incorporating updated estimates of underreported income for 1985 and 1988, projected estimates for 1992 (from TCMP reports), and the results of the National Research Program for 2001. In addition, BEA will update estimates of nonreported income by incorporating the results of exact-match studies for 2003 and 2004. Estimates of nonfarm proprietors' income will be revised, beginning with 1984 estimates; estimates of wages and salaries will be revised, beginning with 1978 estimates.