

# BEA Advisory Meeting

Friday, November 14, 2003

## **Overview of the 2003**

## **Comprehensive Revision of the**

## **National Income and Product Accounts**

### **Bureau of Economic Analysis**

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# How will the NIPAs be improved?

- Changes in definitions and classifications
- Changes in presentation (tables)
- Changes in source data and statistical methods
  
- Information on the 2003 comprehensive revision is available in *Survey of Current Business* and at [www.bea.gov](http://www.bea.gov)

# Major Changes in Definitions and Classifications

- Measure of insurance services
- Measure of banking services
- Services produced by general government
- Definition of business sector
- Broader definition of national income

# Measure of insurance services

- Only a portion of insurance premium is a payment for *services* rendered by the insurance carrier. (The other portion is needed for paying claims.)
- Current treatment: Value of insurance services measured as premiums receivable less *actual* insured losses incurred.
- Actual losses can be volatile when major catastrophes (Hurricane Andrew, terrorist attacks of 9-11) occur.

# Example: Measure of insurance services

	Premiums	Insured Losses	Investment Income
Year 1	100	70	15
Year 2	100	50	15
Year 3	100	60	15
Year 4	100	90	15

- Current measure: Value of insurance services for years 1, 2, 3, and 4 = 30, 50, 40, 10.

# Measure of insurance services

- New treatment:
  - In calculating insurance services the value of investment income on policyholder funds will be added to the value of the premiums.
  - In calculating insurance services, “normal” losses will be deducted instead of actual losses.
- Returning to our example - in year 4:  
If “normal losses” = 60, then value of insurance services =  $100 - 60 + 15 = 55$ .

# Commercial banks - Implicit services

- Banks provide services such as processing checks, disbursing or transferring funds, and bookkeeping.
- These services are not all paid for by explicit fees. A portion of the services are paid for by lending funds at a higher interest rate than is paid to depositors.
- Current treatment: Value of implicit services imputed as interest banks receive from loans and securities less interest paid on deposits and other liabilities.
- Who consumes these services? Value of implicit services assigned only to *depositors*.

# Banks - Services to borrowers

- Value of implicit services of commercial banks will now be allocated to borrowers as well as to depositors, reflecting *intermediation* services.
- Depositor / borrower split will be based on a *reference rate* of interest.
- The new treatment moves consumption of services from final demand to intermediate consumption, because businesses tend to be net borrowers, households tend to be net lenders.
- Consequently, banking components of GDP will be revised down.



# Services produced by general government

- Current treatment: Consumption expenditures of general government are viewed as “purchases”: Compensation of employees, consumption of fixed capital, purchased goods and services (net of sales).
- Government’s production of services using labor, capital, and intermediate inputs not recognized.

# Government output - New treatment

- New treatment explicitly recognizes services produced by government.
- Treatment will parallel the concepts of output and intermediate inputs of private business.
- New treatment doesn't change the value of GDP.
- The *distribution* of GDP by type of product will change. Services output will increase, and goods output will decrease.

# Definition of Business Sector

- Owner-occupied housing and rental value of nonprofit fixed assets are reclassified from the *business* sector to the *households and institutions* sector.
- Definition of business sector is now consistent with that used by BLS for productivity statistics.
- Business-like treatment of owner-occupied housing is retained (within households and institutions sector).

# Broader definition of national income

- Current definition of national income consists of *factor incomes* -- incomes accruing to labor and property owners.
- National income will now also include *nonfactor incomes* - indirect taxes, business transfer payments, and the current surplus of government enterprises.
- Will improve consistency with the international guidelines in the United Nation's *System of National Accounts*, which does not distinguish between factor and nonfactor incomes.

# Changes in Presentation

- Updated NIPA summary accounts.
- New percent change and contributions tables.
- North American Industry Classification System (NAICS).
- Classification of investment in structures.
- Tables for households and nonprofit institutions.
- New table organization and numbering system.
- The new reference year will be 2000.

# Updated NIPA summary accounts

- The accounting relationships underlying the NIPAs are explained through summary accounts that show double entry accounting relationships for major NIPA aggregates such as GDP, saving.
- The current presentation has largely been in place for 45 years and does not reflect the latest international guidelines.
- Seven summary accounts will replace the five-account summary currently shown.

# Updated NIPA summary accounts

## *Account 1: Domestic Income and Product Account*

- In account 1, the left (income) side of the account is simplified and now includes only domestic components of income.
- “Taxes on production and imports” replaces “indirect business tax and nontax liabilities” (less most nontaxes).
- A new aggregate, “operating surplus,” summarizes income from production accruing to property-owners.
- The product (right) side of the account features GDP and is unchanged.

# Updated NIPA summary accounts

## *Account 2: The Private Enterprise Income Account*

- The right side of the account presents the sources of income received by private enterprises.
- The left side of the account presents the uses of private enterprise income (e.g., interest paid, dividends paid, profits, proprietors' income).



# Updated NIPA summary accounts

## *Account 3: The Personal Income and Outlays Account*

- Broader measure of “compensation received” includes employer contributions for government social insurance (doesn’t affect personal income).
- “Other labor income” renamed “employer contributions for employee pension and insurance funds.”
- Most “nontax” payments reclassified as personal current transfer payments--affects disposable personal income, but not personal income or saving.

# Updated NIPA summary accounts

## *Account 4: The Government Receipts and Expenditures Account*

- Components reclassified as current receipts that were formerly subtractions from current expenditures:
  - Interest receipts
  - Dividend receipts
  - Current surplus of government enterprises
- The government surplus or deficit is renamed “net government saving.”

# Updated NIPA summary accounts

## *Account 5: The Foreign Transactions Current Account*

- “Net foreign investment” has been renamed “balance on the current account, national income and product accounts,”

# Updated NIPA summary accounts

## *Account 6: The Domestic Capital Account*

- Formerly the gross saving and investment account.
- Features several new aggregates:
  - Net saving
  - Net lending or borrowing (-), national income and product accounts

# Updated NIPA summary accounts

## *Account 7: The Foreign Transactions Capital Account*

- The right side features capital transfer payments to the ROW (net) and net lending or borrowing (-), NIPAs.
- The left side features the balance on current account, NIPAs.
- Improves consistency with BEA's international transactions accounts.

# New percent change and contributions tables

- 17 new percent change tables will be introduced.
- 4 new contributions to percent change tables will be introduced.
- 2 new tables of percent shares of GDP, GDI
- New tables are detailed in Table 2 of article in the August 2003 *Survey of Current Business*.

# North American Industry Classification System (NAICS)

- Industry distribution of income and employment reflecting 1997 North American Industry Classification System (NAICS).
- NAICS estimates will cover 1998 forward. The estimates will use the Standard Industrial Classification (SIC) system through 2000.
- The two systems overlap for 1998-2000.
- Work is underway to carry NAICS GDP by industry estimates backward.

# Classification of investment in structures

- Estimates of investment in private and government structures will reflect changes in the Census Bureau's classification of the value of construction put in place, beginning with 1997.



# New accounts for households and for nonprofit institutions

- The NIPA “personal” sector consolidates households and nonprofit institutions.
- A new table will present separate accounts for households and for nonprofit institutions serving households.
- Another new table will reconcile the nonprofit estimates to IRS data.
- See April 2003 issue of *Survey*.

# New NIPA table organization

- The new organization groups together tables that display different types of estimates (such as current dollars, percent changes, or quantity indexes) using similar formats.
- A new numbering system highlights the type of estimate displayed in a table.
- Table numbers are displayed “x.y.z,” where *x* is the NIPA table section, *y* is the table number, and *z* is the type of estimate presented.

# Table numbers: “z” = type of estimate

1. Percent change from the preceding period in real estimates (most at annual rates)
2. Contributions to percent change
3. Real estimates, quantity indexes
4. Price indexes
5. Current dollars
6. Real estimates, chained dollars
7. Percent change in prices
8. Contributions to percent change in prices
9. Implicit price deflators
10. Percentage shares of GDP

# Change in the reference year

- Real estimates and price indexes will be based in the year 2000.
- The change in reference year does not, by itself, lead to changes in growth rate of chain-type measures of GDP, prices.

# Major Statistical Changes

- “Benchmark” data sources.
- “Annual” data sources.
- Profits extrapolation will adjust for effects of stock options.
- New BEA-developed price indexes for nonresidential structures, photocopy equipment.

# New and Revised Data Sources

“Benchmark” data sources:

- BEA’s benchmark 1997 Input-Output Accounts.

“Annual” data sources include:

- Census Bureau survey data
- Federal Government budget data
- ITA data
- BLS tabulations of wages and salaries
- IRS tabulations.

# Adjusting extrapolation of profits for stock options

- Treatment of stock options in NIPAs follows IRS treatment:
  - When exercised, options are wage and salary income to recipient and expense to corporation.
- Data used for extrapolating profits generally do not include stock options as an expense, leading to large revisions when IRS data become available.
- Adjustment for the exercise of options will be made to estimates of profits for most recent year.
- Based on a BEA analysis of information in footnotes of selected S&P 500 corporations.

# Price Indexes

## Selected Nonresidential Structures

- Currently, BEA deflates nonresidential buildings with an indirect index based on a cost index from a trade source and on the Census Bureau price deflator for single-family houses under construction.
- BEA will produce annual price indexes for four building types—warehouses, factories, office buildings, and schools.
- Indexes include adjustments for quality change.
- New PPIs, currently being developed by BLS, will be used when they become available.



# Price Indexes

## Photocopying Equipment

- BEA has developed a hedonic price index for photocopying equipment for 1992-2001. It will be used to deflate annual estimates of both domestic and imported photocopying equipment.
- The new price index declined at an average annual rate of 7.2 percent over 1992-2002.

# Questions for the Committee

- What additional information would be useful?
- What areas would you like to see more work done?
- What would be priorities for the next comprehensive revision?

# BEA contacts by topic

- Banking and insurance - Dennis Fixler
- Changes in definitions and classifications
  - Brent Moulton
  - Eugene Seskin
- Statistical changes (private) - Carol Moylan
- Statistical changes (government) - Brooks Robinson
- Changes in tables - David Sullivan
- Web site: <http://www.bea.gov>