Overview of the 2009 NIPA Comprehensive Revision

Brent Moulton
NIPA Users’ Briefing
Washington, DC
June 11, 2009
BEA prepares comprehensive revisions about every five years.

Opportunity to make improvements to the accounts as outlined in BEA’s strategic plan.

Information on revision is available in the *Survey of Current Business* and at [www.bea.gov](http://www.bea.gov).
BEA’s strategic objectives

- **BEA’s mission:**
  
  “to promote a better understanding of the U.S. economy by providing the most timely, relevant, and accurate economic accounts data possible in an objective and cost-effective manner.”

- **We improve accuracy by:**
  - incorporating benchmark data,
  - integrating our accounts,
  - filling data gaps.

- **We keep the accounts relevant by:**
  - updating tables and classifications,
  - using new sources of information,
  - tracking new types of transactions.
Overview (1): Changes in definitions and presentation

- Classification of personal consumption expenditures (PCE).
- New treatment of disasters.
- Insurance services of government enterprises.
- Classification of investment in structures.
- Reference year for chain-type measures – 2005.
- Terminology – vintages of current quarterly GDP estimates.
PCE reclassification: Why?

- **Consistency**
  - International systems (COICOP / COPNI)
  - Available source data (NAICS)
  - Better price match

- **Relevance**
  - Remove antiquated categories.
  - Introduce relevant sectors.
  - Separate household spending and nonprofit institutions serving households (NPISH).
PCE reclassification: What’s new?

- New structures for presenting PCE
  - Function – by type of expenditure
  - Product – by durability (Goods / Services)

- Full time series on new basis
  - 1929 Annually, 1947 Quarterly, 1959 Monthly

- No change in the production boundary

## PCE by function: Old to new

<table>
<thead>
<tr>
<th>Old</th>
<th>2002</th>
<th>New</th>
<th>2002</th>
</tr>
</thead>
<tbody>
<tr>
<td>Personal consumption expenditures</td>
<td>7350.7</td>
<td>Personal consumption expenditures</td>
<td>7350.7</td>
</tr>
<tr>
<td>Food and tobacco</td>
<td>1091.1</td>
<td>Household consumption expenditures</td>
<td>7188.0</td>
</tr>
<tr>
<td>Clothing, accessories, and jewelry</td>
<td>407.0</td>
<td>Food and beverages purchased for off-premise consumption</td>
<td>589.1</td>
</tr>
<tr>
<td>Personal care</td>
<td>96.7</td>
<td>Clothing and footwear</td>
<td>310.4</td>
</tr>
<tr>
<td>Housing</td>
<td>1123.1</td>
<td>Housing and utilities</td>
<td>1291.5</td>
</tr>
<tr>
<td>Household operation</td>
<td>747.4</td>
<td>Furnishings, household equipment and routine household maintenance</td>
<td>347.6</td>
</tr>
<tr>
<td>Medical care</td>
<td>1441.2</td>
<td>Health</td>
<td>1334.2</td>
</tr>
<tr>
<td>Personal business</td>
<td>547.0</td>
<td>Transportation</td>
<td>819.6</td>
</tr>
<tr>
<td>Transportation</td>
<td>882.2</td>
<td>Communication</td>
<td>160.0</td>
</tr>
<tr>
<td>Recreation</td>
<td>629.9</td>
<td>Recreation</td>
<td>659.3</td>
</tr>
<tr>
<td>Education and research</td>
<td>190.2</td>
<td>Education</td>
<td>156.4</td>
</tr>
<tr>
<td>Religious and welfare activities</td>
<td>200.1</td>
<td>Food services and accommodations</td>
<td>442.7</td>
</tr>
<tr>
<td>Foreign travel and other, net</td>
<td>-5.1</td>
<td>Financial services and insurance</td>
<td>573.7</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Other goods and services</td>
<td>508.9</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Net foreign travel and expenditures abroad by U.S. residents</td>
<td>-5.1</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Final consumption expenditures of NPISH</td>
<td>162.7</td>
</tr>
</tbody>
</table>

Billions of Current-dollars, pre-benchmark

[www.bea.gov](http://www.bea.gov)
PCE by function: Old to new

Old
1. Personal consumption expenditures
2. Food and tobacco
3. Clothing, accessories, and jewelry
4. Personal care
5. Housing
6. Household operation
7. Medical care
8. Personal business
9. Transportation
10. Recreation
11. Education and research
12. Religious and welfare activities
13. Foreign travel and other, net

New
1. Personal consumption expenditures
2. Household consumption expenditures
   - Food and beverages purchased for off-premise consumption
3. Clothing and footwear
4. Housing and utilities
   - Furnishings, household equipment and routine household maintenance
5. Health
6. Transportation
7. Communication
8. Recreation
9. Education
10. Food services and accommodations
11. Financial services and insurance
12. Other goods and services
13. Net foreign travel and expenditures abroad by U.S. residents
14. Final consumption expenditures of NPISH

www.bea.gov
PCE by product: Old to new

Old

1 Durable goods
2 Motor vehicles and parts
3 Furniture and household equipment
4 Other
5 Nondurable goods
6 Food
7 Clothing and shoes
8 Gasoline, fuel oil, and other energy goods
9 Other
10 Services
11 Housing
12 Household operation
13 Transportation
14 Medical care
15 Recreation
16 Other

New

1 Goods
2 Durable goods
3 Motor vehicles and parts
4 Furnishings and durable household equipment
5 Recreational goods and vehicles
6 Other durable goods
7 Nondurable goods
8 Food and beverages purchased for off-premise consumption
9 Clothing and footwear
10 Gasoline and other energy goods
11 Other non-durable goods
12 Services
13 Household consumption expenditures
14 Housing and utilities
15 Health care
16 Transportation services
17 Recreational services
18 Food services and accommodations
19 Financial services and insurance
20 Other services
21 Final consumption expenditures of nonprofit institutions serving households
22 Gross output of nonprofit institutions
23 Less: Receipts from sales of goods and services by nonprofit institutions
PCE by product: Old to new

Old
1 Durable goods
2 Motor vehicles and parts
3 Furniture and household equipment
4 Other
5 Nondurable goods
6 Food
7 Clothing and shoes
8 Gasoline, fuel oil, and other energy goods
9 Other
10 Services
11 Housing
12 Household operation
13 Transportation
14 Medical care
15 Recreation
16 Other

New
1 Goods
2 Durable goods
3 Motor vehicles and parts
4 Furnishings and durable household equipment
5 Recreational goods and vehicles
6 Other durable goods
7 Nondurable goods
8 Food and beverages purchased for off-premise consumption
9 Clothing and footwear
10 Gasoline and other energy goods
11 Other non-durable goods
12 Services
13 Household consumption expenditures
14 Housing and utilities
15 Health care
16 Transportation services
17 Recreational services
18 Food services and accommodations
19 Financial services and insurance
20 Other services
21 Final consumption expenditures of nonprofit institutions serving households
22 Gross output of nonprofit institutions
23 Less: Receipts from sales of goods and services by nonprofit institutions
PCE price index changes

- PCE excluding food and energy
  - Will include Food services
    - Prices less volatile than Food purchased for off-premise consumption

- Core CPI not changing
  - Will develop new PCE-CPI comparison
    - Tentative re-release in late Fall 2009
PCE price index changes

Percent change from previous month, annual rate

Food and alcoholic beverages at home
Purchased meals and beverages
New treatment of disasters

- **Current treatment** – distorts current production measures of national income & personal income.

- **New treatment** – better relates income to current economic activity.

- **Example** – 2005:III – Hurricanes Katrina and Rita (*based on published data*)
  - National income revised from -6.4% to +7.7% (annual rate).
  - Personal income revised from +4.2% to +8.3%. 
Current treatment of disasters

- Losses of capital assets recorded as an increase in consumption of fixed capital (CFC, or “depreciation”).

- Insurance payouts recorded as current transfer payments.

- Leading to swings in the measures of current income from production.
• **CFC** defined as the decline in the current value stock of fixed assets as a result of physical deterioration, normal obsolescence or normal accidental damage.

• **Insurance payments for disaster losses** are not financed from current revenue of insurance companies.

• Recipients generally use insurance payments to pay for rebuilding (investment), not for current consumption.

• NIPAs more in line with updated international guidelines (*System of National Accounts 2008*).
New treatment

- **Record loss of fixed assets**
  - as other changes in volume of assets,
  - **NOT CFC.**

- **Record insurance payouts**
  - as capital transfer payments/receipts,
  - **NOT as a charge against current production expenses/income.**
Effects in 2005:III

- GDP unrevised.

- Net operating surplus revised upward.
  - CFC revised downward.

- Personal income revised upward.
  - Proprietors’ income and rental income of persons revised upward.
  - Downward revision to personal current transfers.
Calculating disaster effects

- BEA will continue to provide the effects of catastrophic disasters on a quarterly basis.

  - As “other changes in volume of assets” in the fixed asset account.

  - As capital transfer payments for catastrophic losses in the capital account.
Insurance – government enterprises

- Government insurance enterprises:
  - National Flood Insurance Program
  - Federal Crop Insurance Corporation
  - Florida Citizens Property Insurance Corporation
- Will adopt same measure of insurance services that is used for private insurance:
  - = premiums + premium supplements
    - normal losses
- Treatment of disasters same as new treatment being adopted for private insurance.
Transactions with territories

- Puerto Rico and territories are not included in GDP.
  - “Domestic” in international transactions accounts.
- For estimating NIPA exports and imports, BEA makes “territorial adjustments”.
- Similar adjustments will be made for social insurance contributions, benefits, grants, and subsidies.
- Small effects on government saving.
- Long-run goal: Expand GDP coverage to include the territories.
In 2003, BEA adopted a new classification of private investment in structures.
  - New classification began in 1997 (tables 5.4.1–5.4.6 “part B”).
  - Old classification retained for 1929-97 (“part A”).

New classification will be carried back to 1929.
  - Time series will be consistent
  - Based on the newer classifications (“part B” tables).
Other presentational changes

- Reference year for price and quantity measures will be updated to 2005.
  - Currently 2000.

- The three vintages of quarterly GDP estimates will be renamed:
  - “Advance” (no change)
  - “Second” (currently known as “preliminary”)
  - “Third” (currently known as “final”).
Overview (2): Statistical changes

- Incorporate 2002 Benchmark Input-Output Accounts.
- Retail scanner data for consumer electronics.
- Improved retail control method for PCE.
- Census Service Annual Survey (SAS) data for hospital and telecommunications services.
- Seasonal adjustment of petroleum import prices.
- Better coverage of employee compensation—“cafeteria plans.”
- Updated adjustments for underreporting of income.
Input-output accounts provide the benchmark for GDP.
  - Largely based on 5-year economic census.
  - The NIPA comprehensive revision will incorporate these and other data.
  - I-O estimates for 2002 show an upward revision to GDP level of nearly 2 percent.
    - Upward revisions to housing services and equipment and software investment.

For more information, see Survey of Current Business, March 2008. (http://www.bea.gov/)
Scanner data for electronics

- Census retail sales provide source data on sales by type of store.
  - Details on product lines available only every 5 years (for economic census).

- Need spending by type of product to deflate and calculate real PCE.

- BEA will use point-of-sale scanner data to estimate composition of PCE for electronics goods (TVs, audio equipment, cameras, etc.).
Retail Control Group

- “Gasoline and oil” and “tobacco” continue to be estimated independently.
- Will exclude gasoline stations and tobacco stores (Census Retail Trade and Food Services).
- Food and beverage categories not impacted by gasoline and oil volatility.
Service Annual Survey

- Census Bureau SAS data will be used to estimate PCE hospital services and telecommunication services.

- Hospital services currently based on American Hospital Association data.
  - Cover expenses, not receipts.

- Landline telephone services currently based on Federal Communications Commission data.
  - Do not provide product detail or capture broadband telephone services.
Seasonal adjustment

- In 2004, Census Bureau began seasonally adjusting *petroleum imports* (starting with the estimates for 1989).
  - Because of the revision schedule, the NIPAs only carried back the revisions to 2001.
- Prices of petroleum imports are currently *not* seasonally adjusted
  - Residual seasonality for real imports.
- Petroleum prices will now be seasonally adjusted.
  - Also, NIPAs will fully incorporate the seasonally adjusted petroleum imports data.
“Cafeteria plans” – allow employees to use a portion of their salaries on a pretax basis to pay for health insurance, other medical care, or dependent care.

Voluntary – should be included in NIPA wages and salaries.

Wage estimates are based on the BLS Quarterly Census of Employment and Wages (state UI).

Some states do not include cafeteria plan contributions in wage data.

BEA wages will include an estimate of these contributions for states that do not already include them.
In principle, gross national income includes all income from current production, regardless of whether reported on tax returns.

Income estimates include misreporting adjustments:
- Nonfilers
- Underreporting

Underreporting adjustments currently extrapolated from 1980s-era Taxpayer Compliance Measurement Program.

Revised estimates will incorporate new data from the IRS National Research Program.
Beyond July 2009

- Research & development satellite account.
  - Treats R&D as investment.
  - Plan to incorporate in core BEA accounts in 2013.
- Health account
- Flexible annual revisions
- Improved integration
BEA’s Web site provides considerable information:

- FAQs
- Articles from *Survey of Current Business* (four major articles so far).
- Stubs for redesigned tables.

Please visit this Web address:

http://www.bea.gov/national/an1.htm