Results of the 2010 Annual Revision of the National Income and Product Accounts

Bureau of Economic Analysis
July 30, 2010
BEA revises estimates each year in order to:

- incorporate most complete and reliable source data,
- provide a more detailed picture of the economy, and
- make improvements to methods used for preparing the estimates.
Period covered by revisions

- For most series, including GDP, national income, personal income, and their components, 2007–09 (and first quarter of 2010) were open to revision.

- A few series were revised for earlier periods as part of methodological changes or improvements to tables.
New and revised source data

- Census Bureau surveys:
  - Services annual survey
  - Annual survey of manufactures
  - Annual retail trade survey
  - Annual wholesale trade survey
  - Construction value put in place
  - Government finances
- Bureau of Labor Statistics – wage and salary data
- Internal Revenue Service:
  - Corporate income taxes
  - Sole proprietors and partnerships
- Federal Government budget data
- BEA international transactions accounts
Changes in methodology

- Expansion of the Census quarterly services survey (QSS).
  - PCE for health care, transportation, recreation, and other services.
  - Percentage of PCE services covered by QSS will increase from 16% to 39%, starting with 2010Q1.
Changes in methodology

▪ Quality-adjusted communications equipment price indexes from the Federal Reserve Board.
  ▪ Used for equipment and software investment, exports, and imports.

▪ Within residential fixed investment, new quarterly indicator for improvements.
  ▪ Based on retail sales of building material and garden supply dealers data and payroll data for residential remodelers.
Changes in methodology

- Improved measures that adjust GDP and GNP for changes in the “terms of trade.”
  - Known as “command-basis GDP.”
  - Shows effect of changes in relative prices of imports and exports on purchasing power of the nation’s income.
  - Tables revamped with revised estimates from 1929 (tables 1.8.3 and 1.8.6).

- Expanded information on saving and investment (table 5.1).
  - Shows more complete information on national saving and investment by sector.
Changes in methodology

- Changes from revisions to international transactions accounts released in June:
  - Migrants’ transfers removed from capital account beginning with 1982 (the first year these transactions were recognized).
  - Reclassification of goods and services within exports and imports incorporated on a “best-level” basis beginning with 2007.
Average annual rates of change of real GDP and its major components, 2006 to 2009

<table>
<thead>
<tr>
<th>Category</th>
<th>Revised</th>
<th>Previously published</th>
</tr>
</thead>
<tbody>
<tr>
<td>GDP</td>
<td>0.0</td>
<td>-0.2</td>
</tr>
<tr>
<td>PCE</td>
<td>0.6</td>
<td>0.3</td>
</tr>
<tr>
<td>Res Fixed</td>
<td>1.2</td>
<td>1.6</td>
</tr>
<tr>
<td>Imports</td>
<td>2.2</td>
<td>1.9</td>
</tr>
<tr>
<td>Nonres Fixed</td>
<td>-20.7</td>
<td>-21.9</td>
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<tr>
<td>Exports</td>
<td>-5.3</td>
<td>-4.8</td>
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<tr>
<td>GOV</td>
<td></td>
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</table>
Annual rates of change of real GDP, 2006 to 2009

<table>
<thead>
<tr>
<th>Year</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>2006</td>
<td>2.7</td>
</tr>
<tr>
<td>2007</td>
<td>2.1</td>
</tr>
<tr>
<td>2008</td>
<td>1.9</td>
</tr>
<tr>
<td>2009</td>
<td>-2.4</td>
</tr>
</tbody>
</table>

Previously published
Revised
Percent change in real GDP and Contributions to percent change - 2007

Previously published

Revised

2007

- GDP
- PCE
- GPDI
- Exports
- Imports
- GOV
GDP percent change for 2008 is 0.0.
Percent change in real GDP and Contributions to percent change - 2009

Previously published

Revised

2009

<table>
<thead>
<tr>
<th>Component</th>
<th>Previously Published</th>
<th>Revised</th>
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</thead>
<tbody>
<tr>
<td>GDP</td>
<td>-2.4</td>
<td>2.32</td>
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<tr>
<td>PCE</td>
<td>-3.45</td>
<td>0.32</td>
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<tr>
<td>GPDI</td>
<td>-1.18</td>
<td>-1.18</td>
</tr>
<tr>
<td>Exports</td>
<td>-0.42</td>
<td>-0.84</td>
</tr>
<tr>
<td>Imports</td>
<td>-1.18</td>
<td>-3.24</td>
</tr>
<tr>
<td>GOV</td>
<td>0.37</td>
<td>0.00</td>
</tr>
</tbody>
</table>

Percentage points
Real gross domestic product

[Percent change from preceding period, SAAR]
Real gross domestic product
[Percent change from preceding period, SAAR, 1989-2009]

Percent

Previously published
Revised
Real personal consumption expenditures

[Percent change from preceding period, SAAR]
Real PCE for goods

[Percent change from preceding period, SAAR]

Revised

Revision in percent change, 2007-2009

-0.3
-0.4
-0.1
0.0
0.1
0.2
-0.2
-0.3
-0.4
-0.5
-0.6

2007 2008 2009

Previously published Revised
Real PCE for services
[Percent change from preceding period, SAAR]

Revision in percent change, 2007-2009

Previously published  Revised

06q1 06q3 07q1 07q3 08q1 08q3 09q1 09q3 10q1

Percent
Real nonresidential structures

[Percent change from preceding period, SAAR]
Real nonresidential equip. & software

[Percent change from preceding period, SAAR]
Real residential fixed investment

[Percent change from preceding period, SAAR]

Revision in percent change, 2007-2009

Percent change from preceding period, SAAR
Real change in private inventories

[Billions of chained dollars, SAAR]
Real exports of goods and services

[Percent change from preceding period, SAAR]
Real imports of goods and services

[Percent change from preceding period, SAAR]
Real federal government spending

[Percent change from preceding period, SAAR]
Real state and local government spending

[Percent change from preceding period, SAAR]
Average annual rates of change of the gross domestic purchases price index and its components, 2006 to 2009

- Gross Domestic Purchases: 2.0, 2.0
- PCE: 2.1, 2.1
- Nonres Fixed Investment: 1.3, 0.7
- Res Fixed Investment: -1.7
- GOV: 2.9, 3.0

Previously published vs. Revised
Price index for gross domestic purchases
[Percent change from preceding period, SAAR]

Revision in percent change, 2007-2009

-0.2

Previously published  Revised

06q1 06q3 07q1 07q3 08q1 08q3 09q1 09q3 10q1
Price index for PCE
[Percent change from preceding period, SAAR]

PCE price index revision in percent change for 2007-2009 is 0.0.
National income

[Revision in level]
National income
[Percent change from preceding period, SAAR]
Compensation of employees

[Revision in level]

Billions of dollars

2007  2008  2009

Total compensation  Wages and salaries  Supplements

www.bea.gov
Corporate profits from current production

[Revision in level]
Corporate profits from current production

[Percent change from preceding period, quarterly rate]

Percent

0 5 10 15 20

06q1 06q3 07q1 07q3 08q1 08q3 09q1 09q3 10q1

Previously published
Revised

www.bea.gov
Real gross domestic income

[Percent change from preceding period, SAAR]
Real GDI and Real GDP

[Percent change from preceding period, SAAR]
Statistical discrepancy as % of GDP

Revision in percent of GDP, 2007-2009

-0.70 -0.50 -0.30 -0.10 0.10 0.30 0.50

2007 2008 2009

Previously published Revised

Percent of GDP

06q1 06q3 07q1 07q3 08q1 08q3 09q1 09q3 10q1
Personal income
[Percent change from preceding period, SAAR]
Real disposable personal income (DPI)

[Percent change from preceding period, SAAR]

Previously published
Revised
Personal saving as a percentage of DPI

Percent

06q1 06q3 07q1 07q3 08q1 08q3 09q1 09q3 10q1

Previously published  Revised
Personal saving as a percentage of DPI

The chart shows the percentage of Personal Income (PI) saved over time, with data points from 1990q1 to 2010q1. The chart includes two lines: the solid blue line represents previously published data, while the dashed yellow line indicates revised data. The data fluctuates over time, with notable increases and decreases in the saving rate.
Gross (national) saving as a percentage of gross national income
Selected components of national saving

[Revision in level]
Command-basis GNP

[Percent change from preceding period, SAAR]
Effect of New Quality-Adjusted Prices Indexes for Communication Equipment on Percent Change in the Price Index for GDP

<table>
<thead>
<tr>
<th>Year</th>
<th>GDP</th>
<th>GDP excluding new price indexes</th>
<th>Contribution of new price indexes</th>
</tr>
</thead>
<tbody>
<tr>
<td>2007</td>
<td>2.94</td>
<td>2.98</td>
<td>-0.04</td>
</tr>
<tr>
<td>2008</td>
<td>2.16</td>
<td>2.24</td>
<td>-0.08</td>
</tr>
<tr>
<td>2009</td>
<td>0.94</td>
<td>0.99</td>
<td>-0.05</td>
</tr>
</tbody>
</table>

Notes: GDP, GDP excluding new price indexes, and contribution of new price indexes.
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