Results of the 2014 Annual Revision of the National Income and Product Accounts

Bureau of Economic Analysis
July 30, 2014
Why does BEA revise its estimates?

- Improve accuracy
- Incorporate more complete & reliable data
- Provide more detailed picture of economy
- Improve estimation methods
Revision cycle

- **Current quarterly estimates**
  - 3 consecutive releases: Advance, Second, Third
  - Revise previous quarter during “Second” release
  - Rare methodology changes (Apr – June 2014Q1)

- **Annual revisions**
  - Generally 3 years open to revision, sometimes more
  - Methodology and presentation changes (July 2014)

- **Comprehensive revisions**
  - Benchmark GDP component dollar level
  - Introduce major conceptual changes (July 2013)
## Categories of source data

### Vary by quality, availability, and use

<table>
<thead>
<tr>
<th>Category</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Comprehensive</td>
<td>• In coverage, scope, and NIPA concept</td>
</tr>
<tr>
<td>Adjusted Comprehensive</td>
<td>• In coverage, but require adjustment to conform to NIPA concepts</td>
</tr>
<tr>
<td>Direct Indicator</td>
<td>• Indicate movement in a series but not dollar level</td>
</tr>
<tr>
<td>Indirect Indicator</td>
<td>• Indirectly related to measurement series, but best available information</td>
</tr>
<tr>
<td>Trend-based</td>
<td>• Used when no other data is available</td>
</tr>
</tbody>
</table>
Shares of source data for GDP

**GDP**

**Third current estimate**
- Comprehensive data, 38.5%
- Direct indicator data, 27.8%
- Indirect indicator data, 21.5%
- Trend-based data, 12.2%

**First annual revision**
- Comprehensive data, 73.5%
- Adjusted comprehensive data, 0.5%
- Indirect indicator data, 4.0%
- Direct indicator data, 15.3%
- Trend-based data, 6.7%
Shares of source data for GDI

First annual revision

- Comprehensive data, 53.0%
- Direct indicator data, 15.2%
- Indirect indicator data, 13.4%
- Trend-based data, 18.3%

Second annual revision

- Comprehensive data, 58.3%
- Adjusted comprehensive data, 31.6%
- Direct indicator data, 7.8%
- Indirect indicator data, 0.5%
- Trend-based data, 1.8%
Source data in the 2014 annual revision

- Census Bureau surveys
  - Annual retail and wholesale trade surveys
  - Services annual survey
  - Construction spending (value put in place)
  - Government finances survey
  - Current population/housing vacancy survey
- Bureau of Labor Statistics:
  - Quarterly census of employment and wages
  - Prices
- Internal Revenue Service
  - Corporate and sole proprietorships and partnership tax return
- Office of Management and Budget:
  - Federal government budget – FY 2015
- BEA’s international transactions accounts
Improvements in data & presentation

- Flexible annual revision

- BEA’s ITA revisions 1999-2014Q1
  - Net exports, PCE, national income

- Methodology and presentation improvements
  - Separately identify defined contribution pension plan transactions in a new table 7.25
  - New underlying detail foreign trade tables
Period covered by revisions

- Most components: 2011Q1-2014Q1
- PCE, net exports, and some income components range from 1999Q1-2014Q1
- Reference year remains 2009
- Full period quantity and price index levels revised for GDP and select components
- Revisions for 2014Q1 and Advance 2014Q2 to be released on July 30
Average annual rates of change of real GDP, real GDP, and real DPI, 2009Q2 to 2014Q1

Percent

Real GDP

Real GDI

Real DPI

2.1

2.4

2.5

1.4

1.5

Previously published

Revised
Real gross domestic product
[Percent change from preceding period, SAAR]
Real gross domestic income
[Percent change from preceding period, SAAR]
Real GDI and Real GDP

[Billions of chained (2009) dollars]
Statistical discrepancy as % of GDP
Revisions to percent change in real GDP and to contributions to percent change - 2011

GDP was revised from 1.8 to 1.6.

2011

-0.2
-0.19

0.04
0.03

-0.25
-0.20
-0.15
-0.10
-0.05
0.00
0.05
0.10

GDP PCE Investment Exports Imports GOV
Revisions to percent change in real GDP and to contributions to percent change - 2012

GDP was revised from 2.8 to 2.3.
Revisions to percent change in real GDP and to contributions to percent change - 2013

GDP was revised from 1.9 to 2.2.
Revisions to percent change in real GDP and to contributions to percent change – 2012Q1

GDP was revised from 3.7 to 2.3.

-1.4
-0.53
-0.37
-0.17
-0.28

2012Q1

GDP PCE Investment Exports Imports GOV
Revisions to percent change in real GDP and to contributions to percent change – 2013Q1

GDP was revised from 1.1 to 2.7.

<table>
<thead>
<tr>
<th>Percentage points</th>
<th>2013Q1</th>
</tr>
</thead>
<tbody>
<tr>
<td>GDP</td>
<td>1.6</td>
</tr>
<tr>
<td>PCE</td>
<td>0.91</td>
</tr>
<tr>
<td>Investment</td>
<td>0.41</td>
</tr>
<tr>
<td>Exports</td>
<td>0.06</td>
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<tr>
<td>Imports</td>
<td>0.14</td>
</tr>
<tr>
<td>GOV</td>
<td>0.07</td>
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</tbody>
</table>
GDP was revised from 2.5 to 1.8.
Real personal consumption expenditures
[Percent change from preceding period, SAAR]
Real PCE for goods
[Percent change from preceding period, SAAR]
Real PCE for services
[Percent change from preceding period, SAAR]

<table>
<thead>
<tr>
<th>Period</th>
<th>Previously published</th>
<th>Revised</th>
</tr>
</thead>
<tbody>
<tr>
<td>10q1</td>
<td>0.0</td>
<td></td>
</tr>
<tr>
<td>11q1</td>
<td>-0.3</td>
<td>-0.3</td>
</tr>
<tr>
<td>12q1</td>
<td>0.7</td>
<td></td>
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<tr>
<td>13q1</td>
<td>-0.4</td>
<td>0.7</td>
</tr>
<tr>
<td>14q1</td>
<td>0.0</td>
<td>0.2</td>
</tr>
</tbody>
</table>

Revision in percent change, 2010-2013

- 2010: 0.0%
- 2011: -0.3%
- 2012: -0.3%
- 2013: 0.7%
Real nonresidential structures

[Percent change from preceding period, SAAR]
Real nonresidential equipment

[Percent change from preceding period, SAAR]
Real private intellectual property products

[Percent change from preceding period, SAAR]

Revision in percent change, 2010-2013

Previously published
Revised
Change in real 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]

Revision in percent change, 2010-2013

Previously published Revised

<table>
<thead>
<tr>
<th>Year</th>
<th>Percent Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>2010</td>
<td>0.0</td>
</tr>
<tr>
<td>2011</td>
<td>-0.1</td>
</tr>
<tr>
<td>2012</td>
<td>-0.4</td>
</tr>
<tr>
<td>2013</td>
<td>-0.5</td>
</tr>
</tbody>
</table>

Percent

Previously published Revised

<table>
<thead>
<tr>
<th>Quarter</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>10q1</td>
<td></td>
</tr>
<tr>
<td>11q1</td>
<td></td>
</tr>
<tr>
<td>12q1</td>
<td></td>
</tr>
<tr>
<td>13q1</td>
<td></td>
</tr>
<tr>
<td>14q1</td>
<td></td>
</tr>
</tbody>
</table>
Real state and local government spending

[Percent change from preceding period, SAAR]
Price index for gross domestic purchases

[Percent change from preceding period, SAAR]
Price index for PCE
[Percent change from preceding period, SAAR]
Price index for PCE, excluding food and energy

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

[Revisions in level]
Corporate profits from current production

[Percent change from preceding period, quarterly rate]
Personal income
[Percent change from preceding period, SAAR]
Personal income and its components

[Revisions in level]
Personal saving as a percentage of DPI

Revision in percentage points, 2010-2013

Percent

Previously published Revised

0.0 0.3 1.6 0.4 0
0.2 0.4 0.6 0.8 1
1.2 1.4 1.6 1.8

2010 2011 2012 2013

Revision in percentage points, 2010-2013