Results of the 2019 Annual Update of the National Income and Product Accounts
Released July 26, 2019
Real GDP growth

<table>
<thead>
<tr>
<th>Year</th>
<th>Previously Published</th>
<th>Revised</th>
</tr>
</thead>
<tbody>
<tr>
<td>2014</td>
<td>2.5</td>
<td>2.5</td>
</tr>
<tr>
<td>2015</td>
<td>2.9</td>
<td>2.9</td>
</tr>
<tr>
<td>2016</td>
<td>1.6</td>
<td>1.6</td>
</tr>
<tr>
<td>2017</td>
<td>2.2</td>
<td>2.4</td>
</tr>
<tr>
<td>2018</td>
<td>2.9</td>
<td>2.9</td>
</tr>
</tbody>
</table>
• Update covers 2014–2018
• Benefits of new 5-year revision span
  o Incorporates revised source data for earlier years
    ▪ State and local government finances
    ▪ Federal Reserve Board Financial Accounts
    ▪ National Science Foundation Business R&D
    ▪ Scanner data
  o Improves seasonal adjustment
New and revised source data

- Quarterly Census of Employment and Wages
- Occupational Employment Statistics
- Producer Price Index
- Consumer Price Index

- Annual Capital Expenditures Survey
- Annual Retail Trade Survey
- Annual Survey of State and Local Government Finances
- Annual Wholesale Trade Survey
- Service Annual Survey
- Quarterly Services Survey

- International Transactions Accounts

- Office of Management and Budget: Federal budget
- Internal Revenue Service: Tax returns for corporations, sole proprietorships, and partnerships
- Department of Agriculture: Farm statistics
Real GDI growth

<table>
<thead>
<tr>
<th>Year</th>
<th>Previously Published</th>
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</tr>
</thead>
<tbody>
<tr>
<td>2014</td>
<td>3.2</td>
<td>3.2</td>
</tr>
<tr>
<td>2015</td>
<td>2.6</td>
<td>2.7</td>
</tr>
<tr>
<td>2016</td>
<td>0.8</td>
<td>0.8</td>
</tr>
<tr>
<td>2017</td>
<td>2.3</td>
<td>2.1</td>
</tr>
<tr>
<td>2018</td>
<td>2.3</td>
<td>2.5</td>
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</table>
Average annual rates of change for real GDP 2013 Q4 to 2018 Q4

<table>
<thead>
<tr>
<th>Component</th>
<th>Previously published</th>
<th>Revised</th>
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<tbody>
<tr>
<td>GDP</td>
<td>2.4</td>
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<tr>
<td>PCE</td>
<td>3.0</td>
<td>3.0</td>
</tr>
<tr>
<td>Investment</td>
<td>3.9</td>
<td>3.6</td>
</tr>
<tr>
<td>Exports</td>
<td>1.8</td>
<td>1.6</td>
</tr>
<tr>
<td>Imports</td>
<td>4.4</td>
<td>4.4</td>
</tr>
<tr>
<td>Government spending</td>
<td>1.0</td>
<td>1.3</td>
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</table>
Recent contractions and expansions
[Average annual rates of change]

<table>
<thead>
<tr>
<th>Period</th>
<th>Percent</th>
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</thead>
<tbody>
<tr>
<td>1990 Q3 to 1991 Q1</td>
<td>-2.7</td>
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<tr>
<td>1991 Q1 to 2001 Q1</td>
<td>3.6</td>
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<tr>
<td>2001 Q1 to 2001 Q4</td>
<td>0.6</td>
</tr>
<tr>
<td>2001 Q4 to 2007 Q4</td>
<td>2.9</td>
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<tr>
<td>2007 Q4 to 2009 Q2</td>
<td>-2.7</td>
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<tr>
<td>2009 Q2 to 2018 Q4</td>
<td>2.3</td>
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</tbody>
</table>

Previously published
Revised
Average of real GDP growth rates by quarter, 2014 to 2018

<table>
<thead>
<tr>
<th>Quarter</th>
<th>Previously Published</th>
<th>Revised</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q1</td>
<td>1.6</td>
<td>1.8</td>
</tr>
<tr>
<td>Q2</td>
<td>3.6</td>
<td>3.2</td>
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<tr>
<td>Q3</td>
<td>2.8</td>
<td>2.9</td>
</tr>
<tr>
<td>Q4</td>
<td>1.7</td>
<td>1.8</td>
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</tbody>
</table>
Final sales to private domestic purchasers
[Percent change from preceding period, SAAR]
PCE excluding food and energy price index
[Percent change from preceding period, SAAR]
Personal income and outlays 2013 Q4 to 2018 Q4
[Average annual growth rate]

- Personal income: 4.4%, 4.7%
- Disposable personal income: 4.5%, 4.8%
- Personal outlays: 4.4%, 4.5%
- Real disposable personal income: 3.1%, 3.4%
- Personal saving rate*: 7.0%, 7.2%

*Average over 2014 Q1 to 2018 Q4

Previously published
Revised
Statistical Improvements
• 2014–2017: New quality-adjusted prices for cellphones jointly developed by BEA and the Federal Reserve Board (FRB) based on data from the International Data Corporation on new cellphones
  o Replaces annual FRB quality-adjusted price index, which was based on prices for used cellphones
• 2018 and later: BLS aggregate CPI for telephone hardware, calculators, and other consumer items, which includes quality-adjusted prices for smartphones
• Impacts on
  o Consumer spending on telephone and related equipment
  o Consumer spending on cellular telephone services
  o Private fixed investment in communication equipment
  o Imports of other household goods
Other methodology improvements

• Incorporation of newly identified private source data
  o Consumption expenditures for video streaming and rental, based on data from HarrisX
  o Consumption expenditures on tobacco, including purchases of vaping products, based on data from Nielsen

• Prices
  o New quality-adjusted prices for electromedical equipment in investment and foreign trade
  o Improved prices for exports and imports of telecommunication, computer, and information services

• Expanded use of Census quarterly services statistics
  o Air transportation
Gross Domestic Product
2014: Contributions to revision to GDP growth

Real GDP growth was unrevised at 2.5 percent
Real GDP growth was unrevised at 2.9 percent.

- GDP: 0.0
- PCE: -0.02
- Investment: 0.02
- Exports: -0.02
- Imports: 0.02
- Government spending: 0.02
Real GDP growth was unrevised at 1.6 percent.
Real GDP growth was revised from 2.2 to 2.4 percent.
Real GDP growth was unrevised at 2.9 percent

- GDP: 0.0
- PCE: 0.25
- Investment: -0.15
- Exports: -0.10
- Imports: 0.02
- Government spending: 0.04

2018: Contributions to revision to GDP growth
Real GDP growth was revised from 3.0 to 2.2 percent (SAAR)
Real GDP growth was revised from 2.3 to 3.5 percent (SAAR)

- GDP: 1.2
- PCE: 0.48
- Investment: 0.66
- Exports: 0.40
- Imports: -0.31
- Government spending: 0.01
Real GDP growth was revised from 4.2 to 3.5 percent (SAAR)
Real GDP growth was revised from 2.2 to 1.1 percent (SAAR)
Gross Domestic Income
National income revision in level

-3.0

4.9

-5.3

-47.2

16.5

2014 2015 2016 2017 2018

Billions of dollars

National income Proprietors’ income Net interest Compensation Corporate profits
Personal saving rate
[Personal saving rate as a percentage of disposable personal income]