

Results of the 2015 Annual Revision of the National Income and Product Accounts

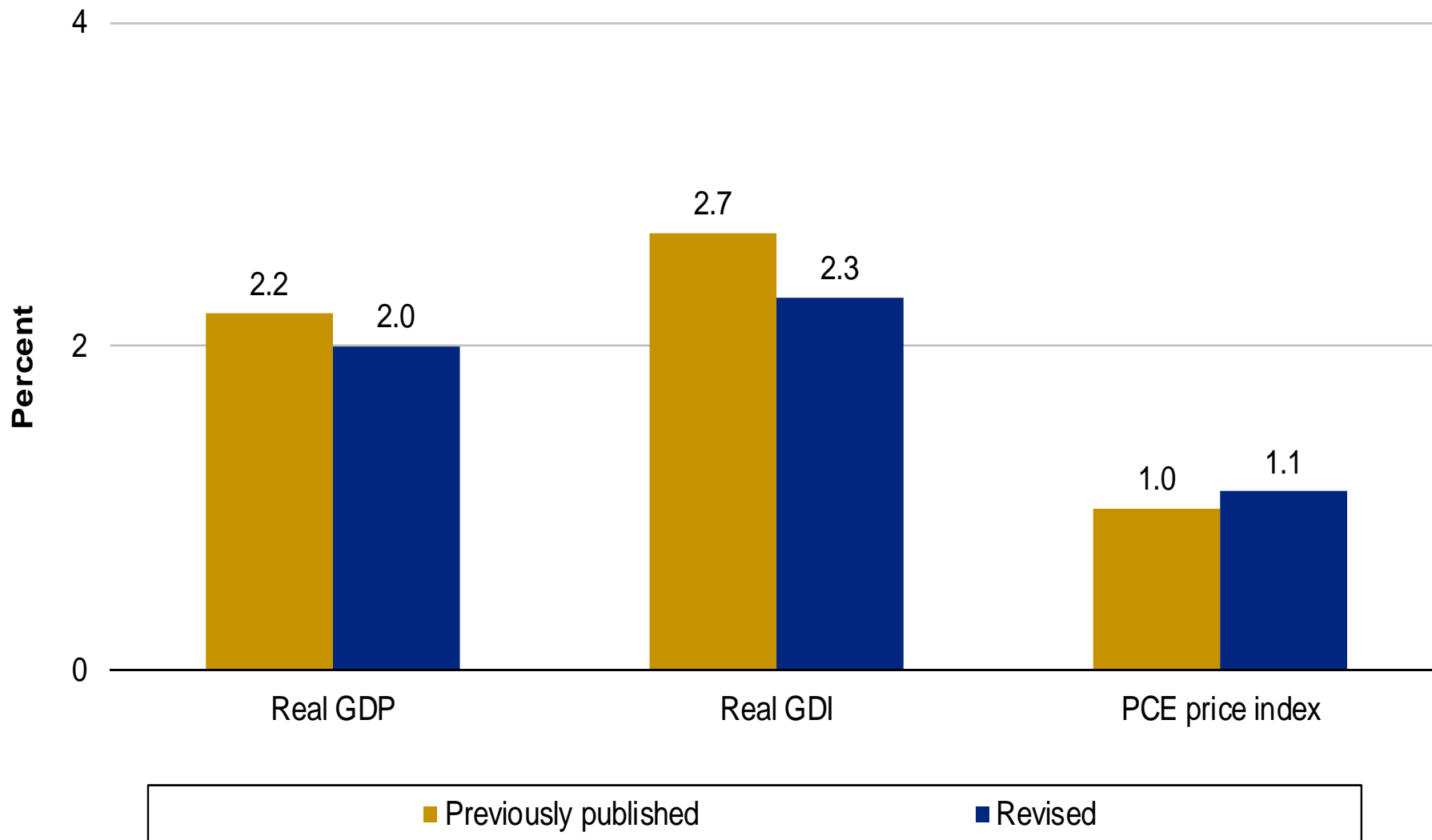
Bureau of Economic Analysis



Results of the 2015 NIPA AR

- Average growth rates of GDP and GDI from 2011Q4 to 2015Q1 both revised down:
 - -0.2 percentage point revision to GDP; -0.4 percentage point revision to GDI
- Major sources of revisions:
 - New and revised source data
 - Services Annual Survey, Government Finance Survey, American Housing Survey, Economic Census and Annual Survey of Manufactures, Retail and Wholesale trade surveys, IRS business income tax data
 - Methodology improvements
 - Seasonal adjustment
 - PPIs for financial services

Average annual rates of change 2011Q4 to 2015Q1



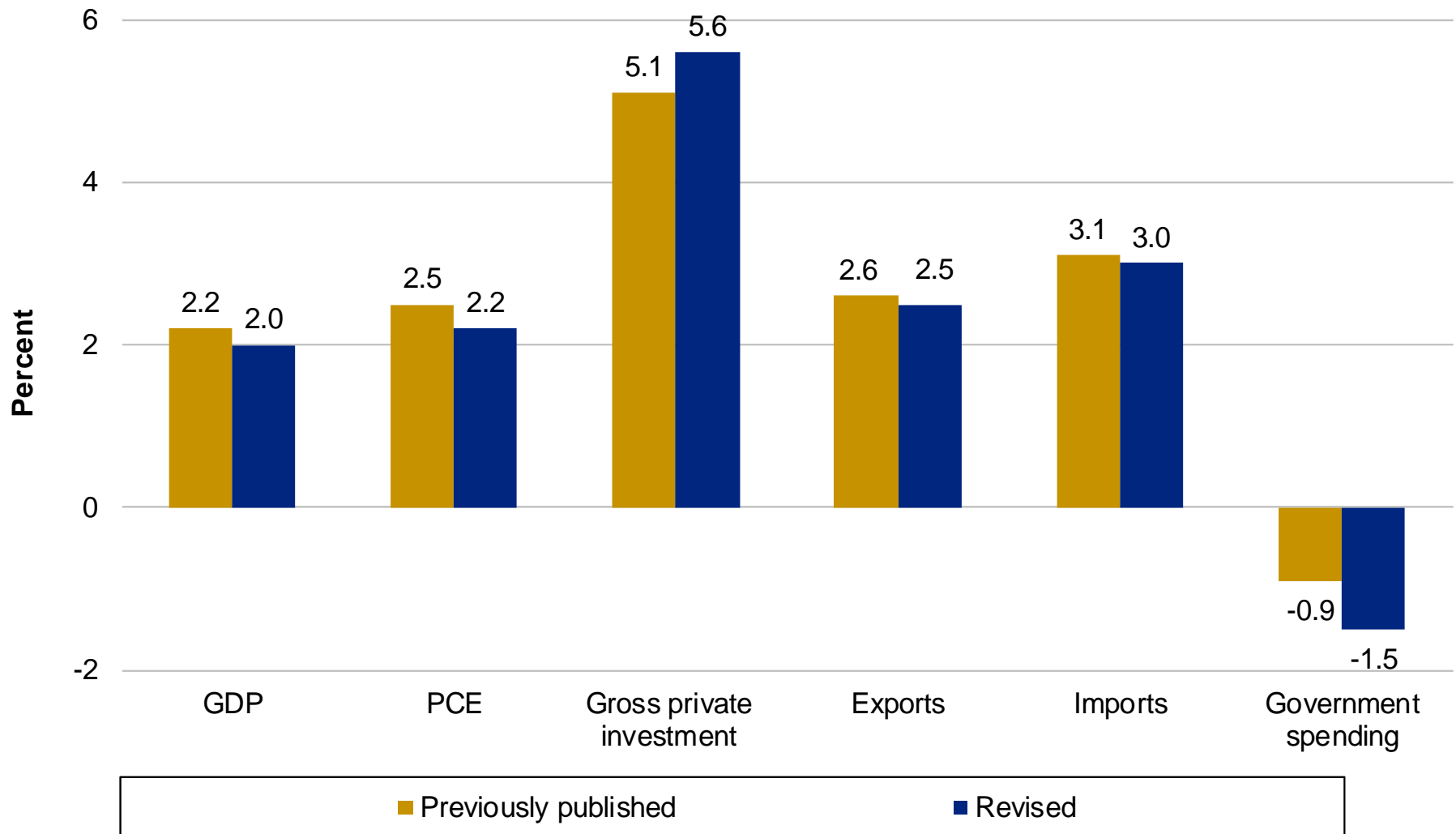
| | | | | | | | | | |
|---------------------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| Connecticut..... | 540,404 | 549,369 | 555,698 | 564,592 | 573,478 | 583,505 | 593,768 | 604,266 | 615,000 |
| Maine..... | 149,878 | 151,695 | 154,786 | 157,218 | 160,592 | 164,327 | 168,254 | 172,381 | 176,707 |
| Massachusetts..... | 87,820 | 88,864 | 89,997 | 91,156 | 92,314 | 93,473 | 94,632 | 95,791 | 96,950 |
| New Hampshire..... | 255,219 | 258,874 | 260,997 | 265,314 | 268,864 | 272,218 | 275,572 | 278,926 | 282,280 |
| Rhode Island..... | 44,479 | 45,279 | 46,079 | 46,757 | 47,435 | 48,113 | 48,791 | 49,469 | 50,147 |
| Vermont..... | 35,185 | 35,845 | 36,505 | 37,165 | 37,825 | 38,485 | 39,145 | 39,805 | 40,465 |
| New York..... | 18,809 | 19,271 | 19,733 | 20,195 | 20,657 | 21,119 | 21,581 | 22,043 | 22,505 |
| Pennsylvania..... | 1,698,411 | 1,724,210 | 1,750,009 | 1,775,808 | 1,801,607 | 1,827,406 | 1,853,205 | 1,879,004 | 1,904,803 |
| District of Columbia..... | 33,893 | 34,000 | 34,107 | 34,214 | 34,321 | 34,428 | 34,535 | 34,642 | 34,749 |
| Virginia..... | 1,238,000 | 1,248,000 | 1,258,000 | 1,268,000 | 1,278,000 | 1,288,000 | 1,298,000 | 1,308,000 | 1,318,000 |
| West Virginia..... | 12,778 | 12,800 | 12,822 | 12,844 | 12,866 | 12,888 | 12,910 | 12,932 | 12,954 |
| Wisconsin..... | 1,388,000 | 1,398,000 | 1,408,000 | 1,418,000 | 1,428,000 | 1,438,000 | 1,448,000 | 1,458,000 | 1,468,000 |
| Wyoming..... | 15,000 | 15,000 | 15,000 | 15,000 | 15,000 | 15,000 | 15,000 | 15,000 | 15,000 |



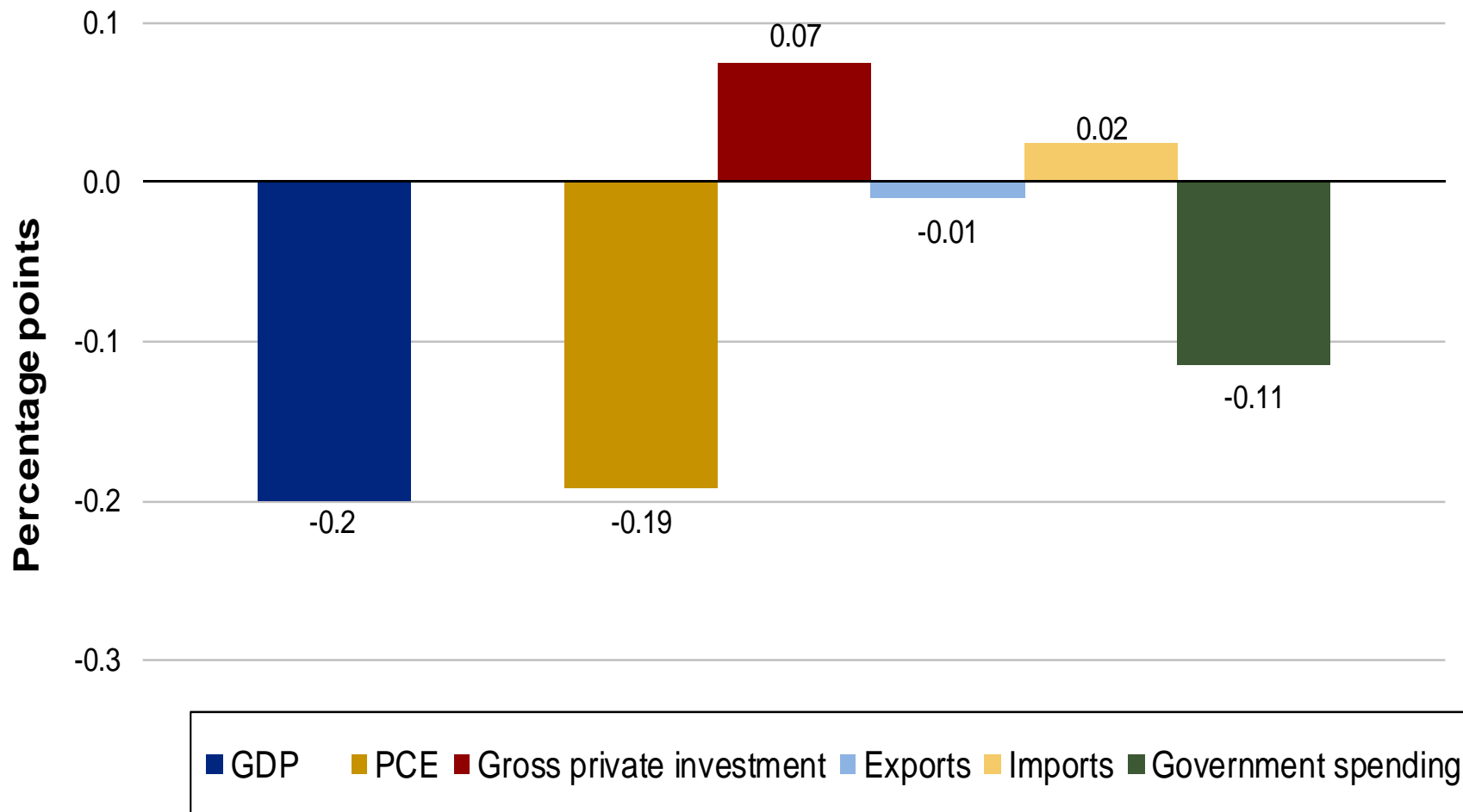
Gross Domestic Product

Average annual rates of change for real GDP

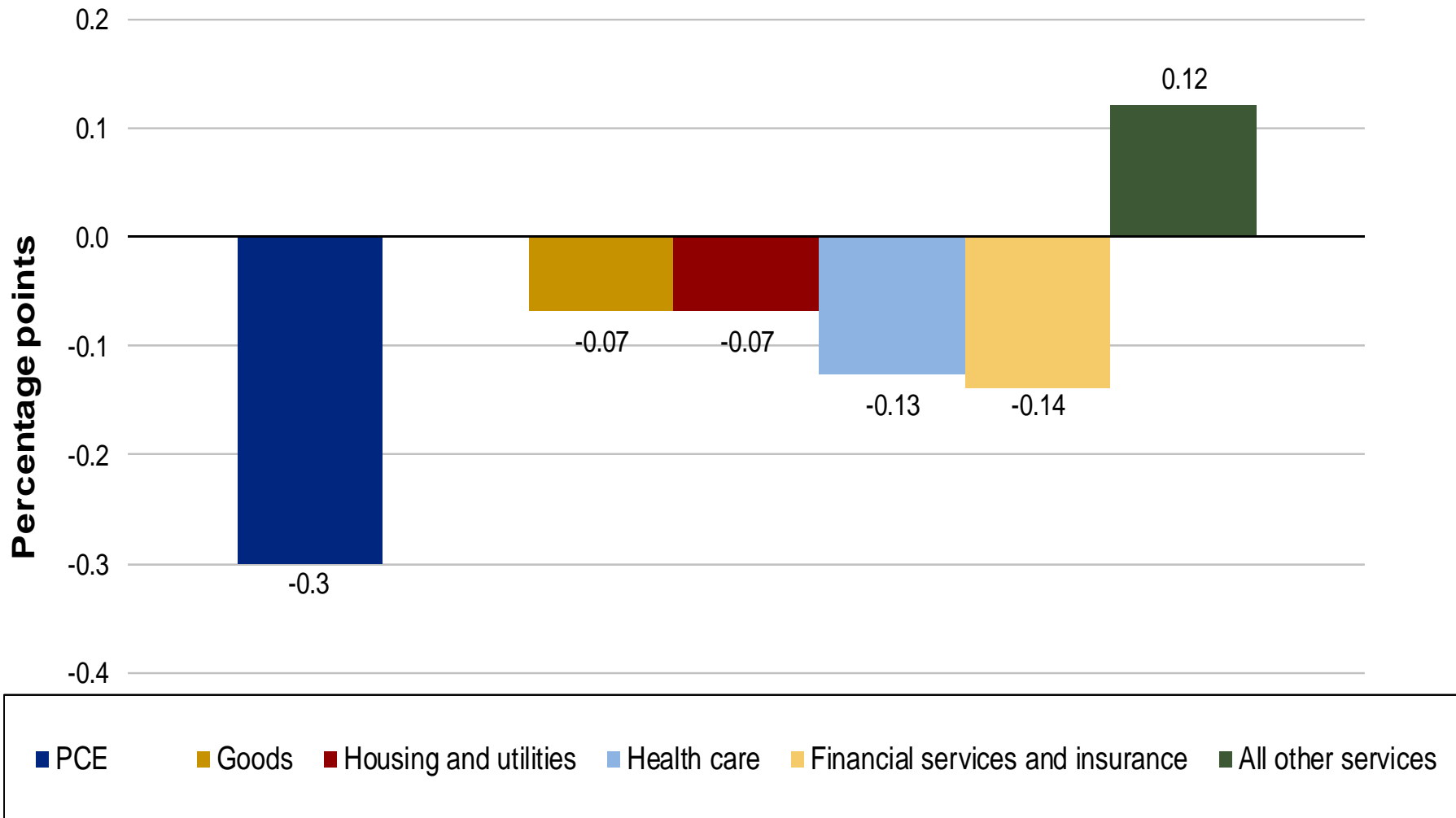
2011Q4 to 2015Q1



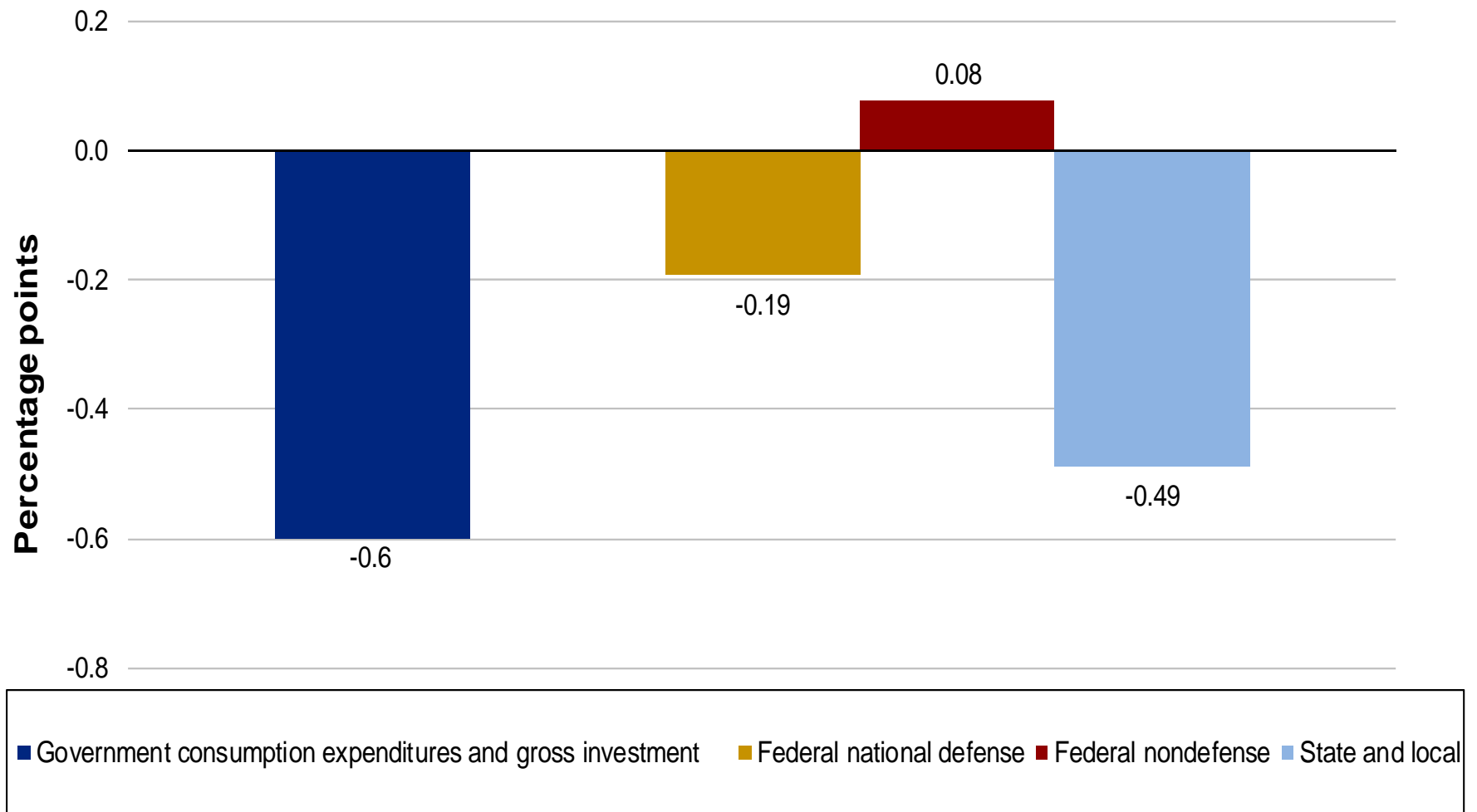
Contributions to revision of real GDP 2011Q4 to 2015Q1



Contributions to revision of real PCE 2011Q4 to 2015Q1

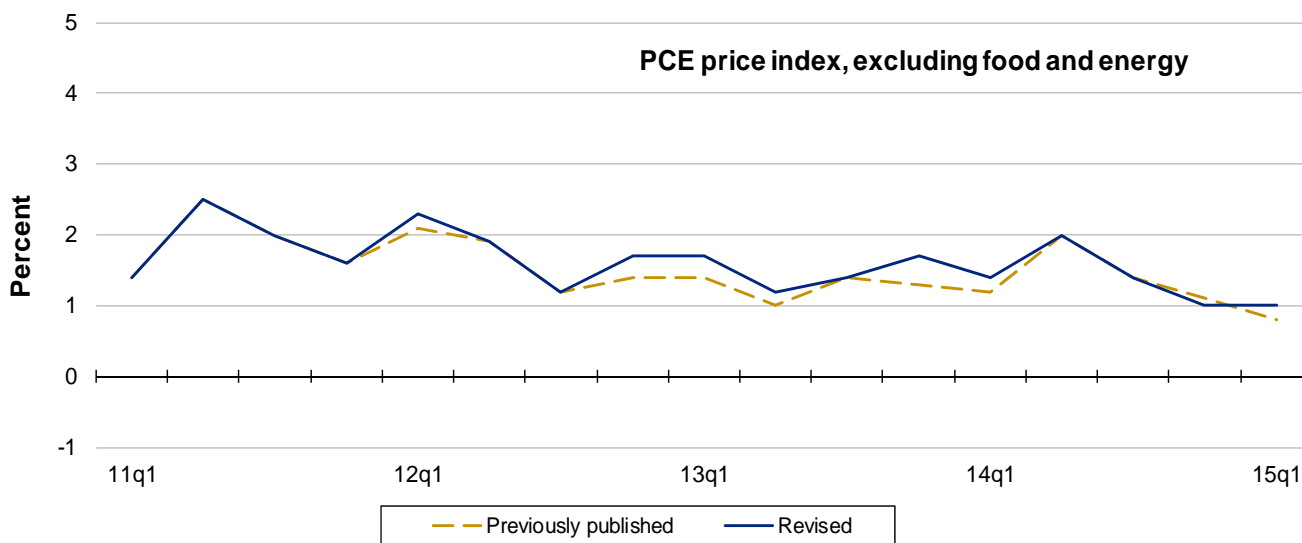
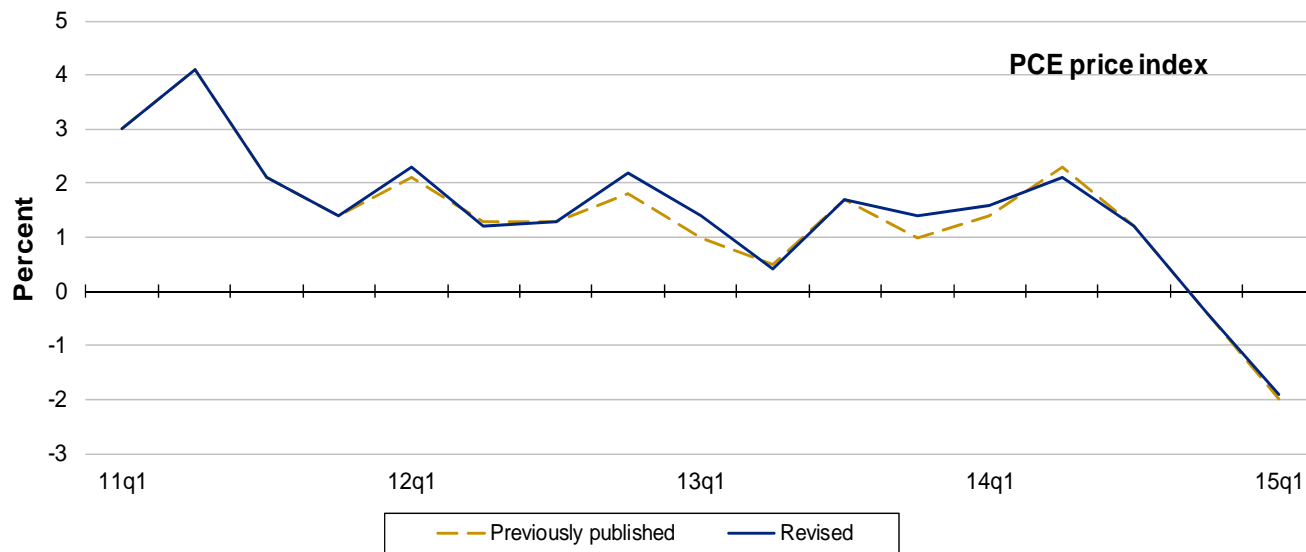


Contributions to revision of real government spending 2011Q4 to 2015Q1



Personal consumption expenditures price index

[Percent change from preceding period, SAAR]

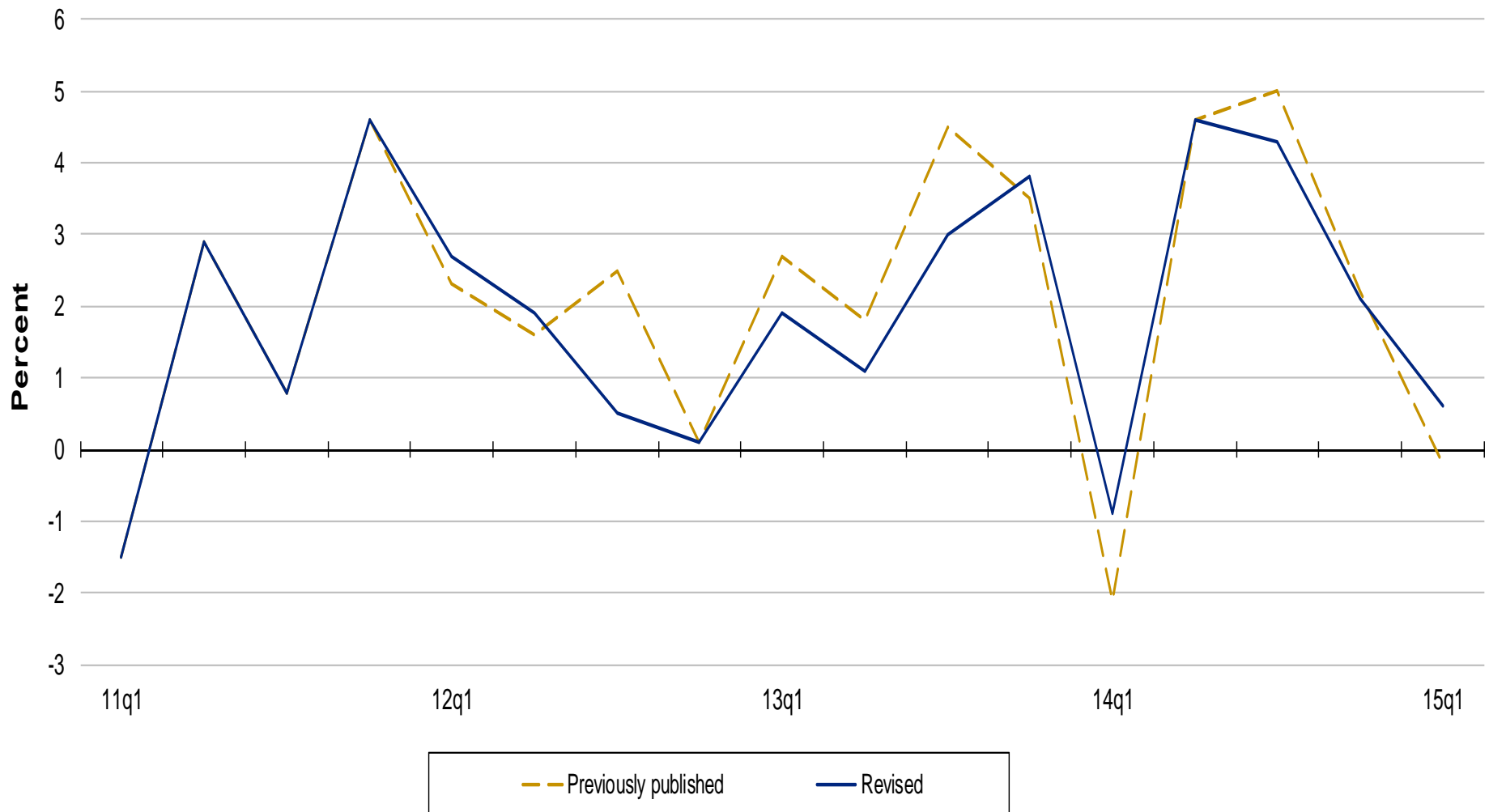


Revisions to GDP quarters

- Revisions to real GDP growth
 - Range from -2.0 (2012Q3) to +1.2 (2014Q1)
- Major sources of revisions:
 - New seasonal adjustment
 - Federal defense, PCE services
 - Updated seasonal factors
 - Prices, shipments, construction, sales, inventories
 - Revised source data
 - Construction spending, services survey, manufacturers' shipments, retail sales

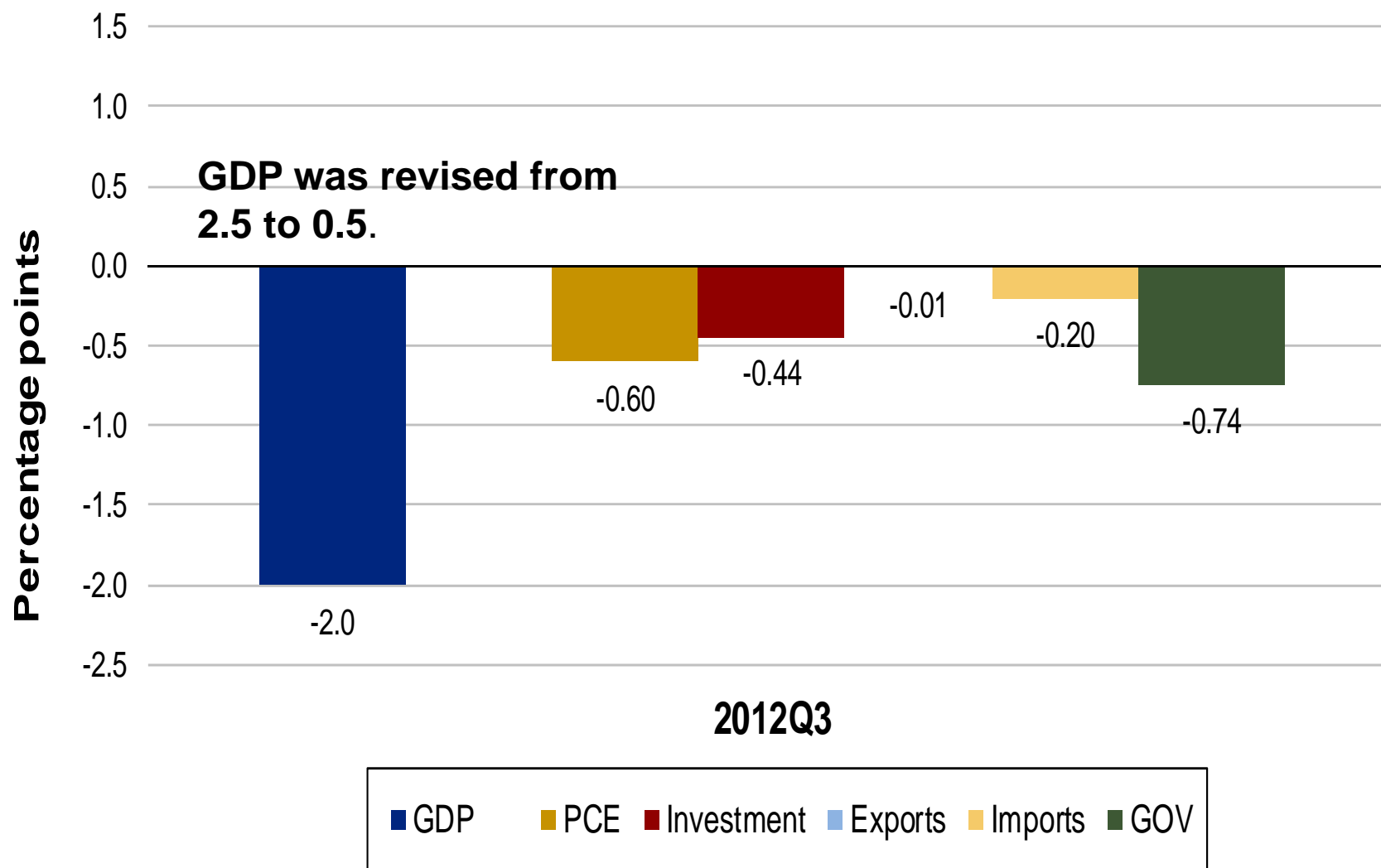
Real gross domestic product

[Percent change from preceding period, SAAR]



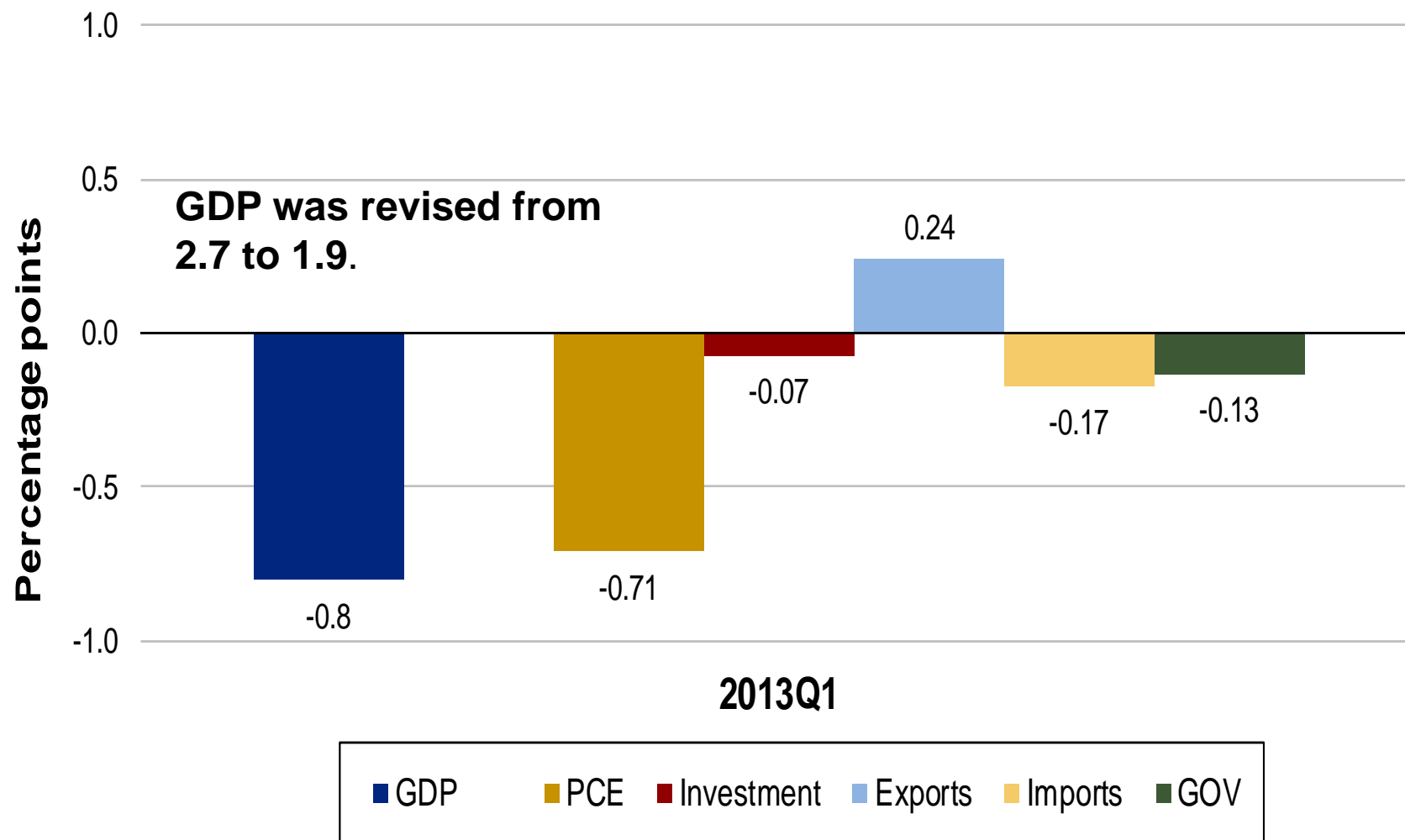
Contributions to the revision to real GDP growth

2012Q3



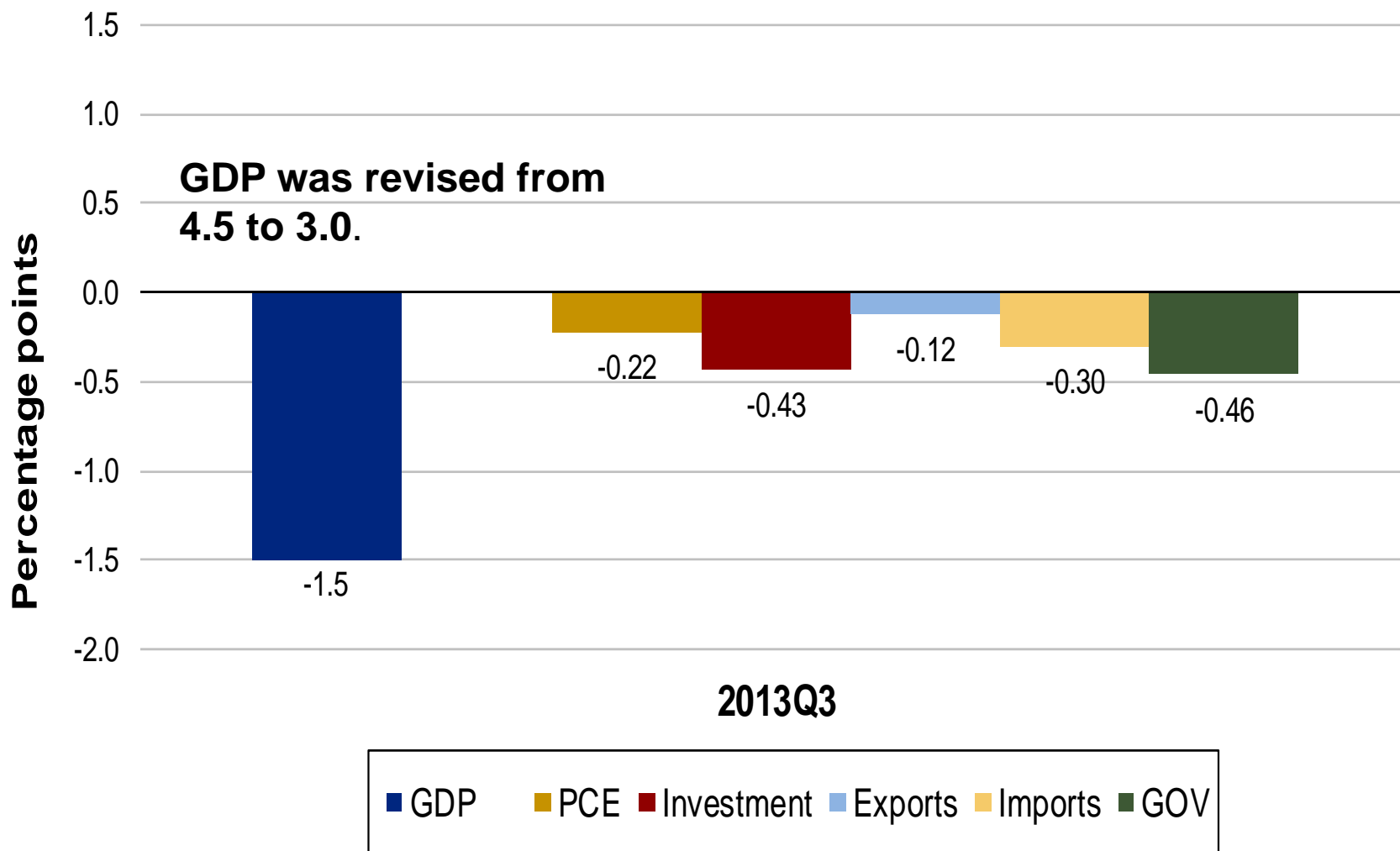
Contributions to the revision to real GDP growth

2013Q1



Contributions to the revision to real GDP growth

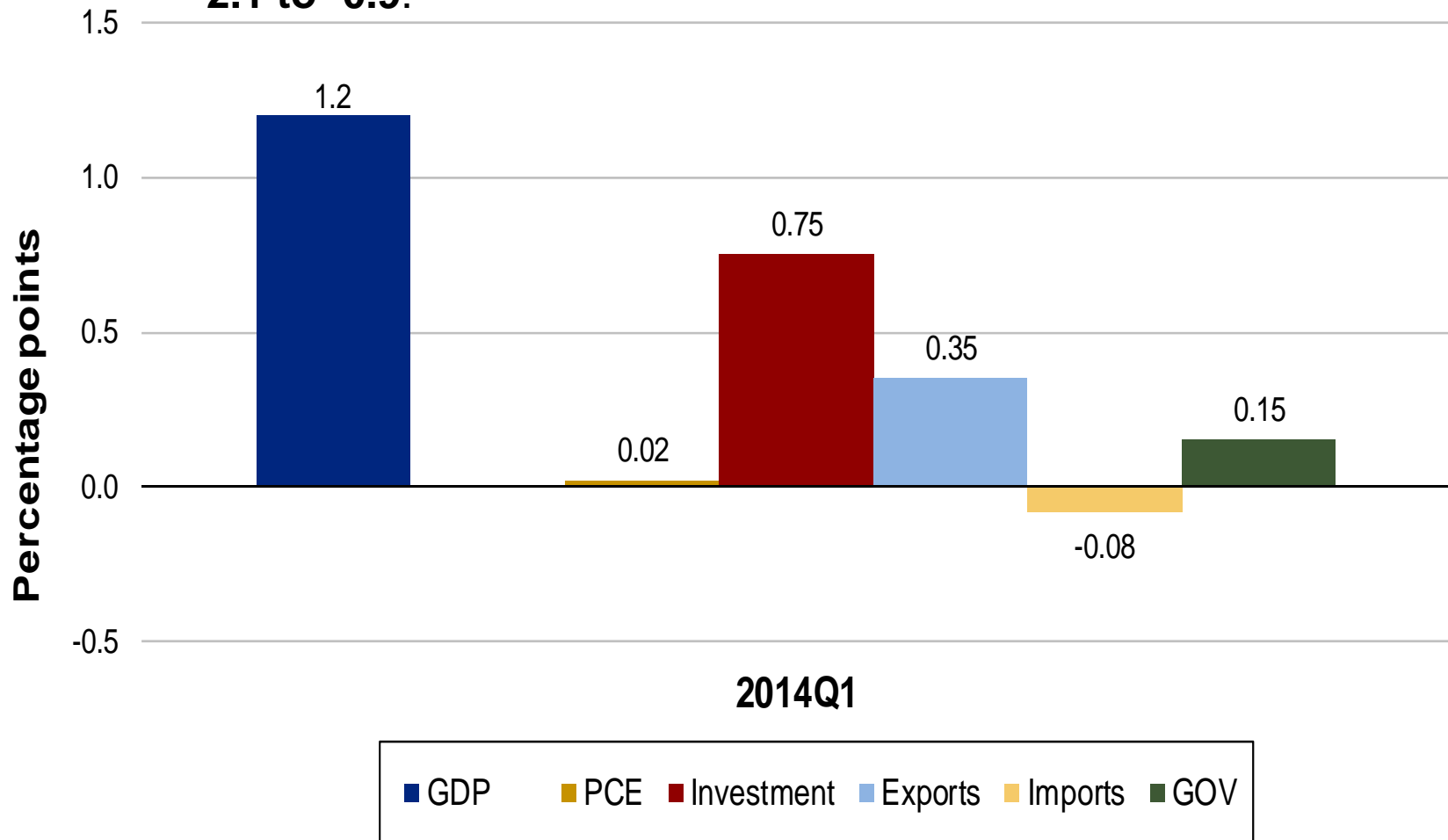
2013Q3



Contributions to the revision to real GDP growth

2014Q1

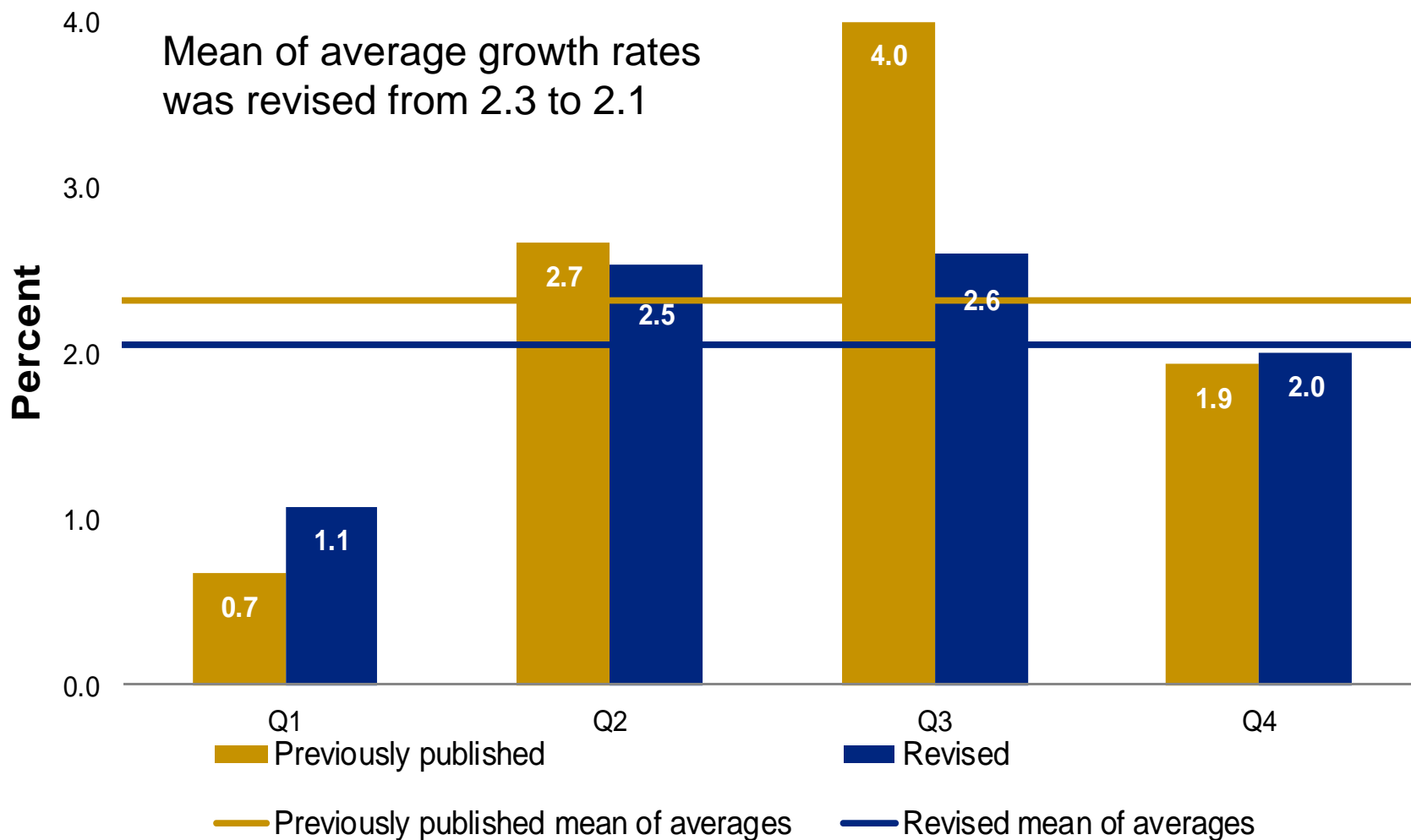
GDP was revised from
-2.1 to -0.9.



Is there residual seasonality in GDP?

- Indirect seasonal adjustment of GDP
 - Seasonally adjusted source data, when possible
 - BEA adjusts some source data
 - Source data revision schedules
- New seasonal patterns can emerge over time
- Recent pattern in quarterly growth rates show low Q1s and high Q3s
- Annual revision has dampened these swings

Average of real GDP growth rates by quarter 2012Q1 to 2015Q1



Gross Domestic Income

Gross Domestic Income

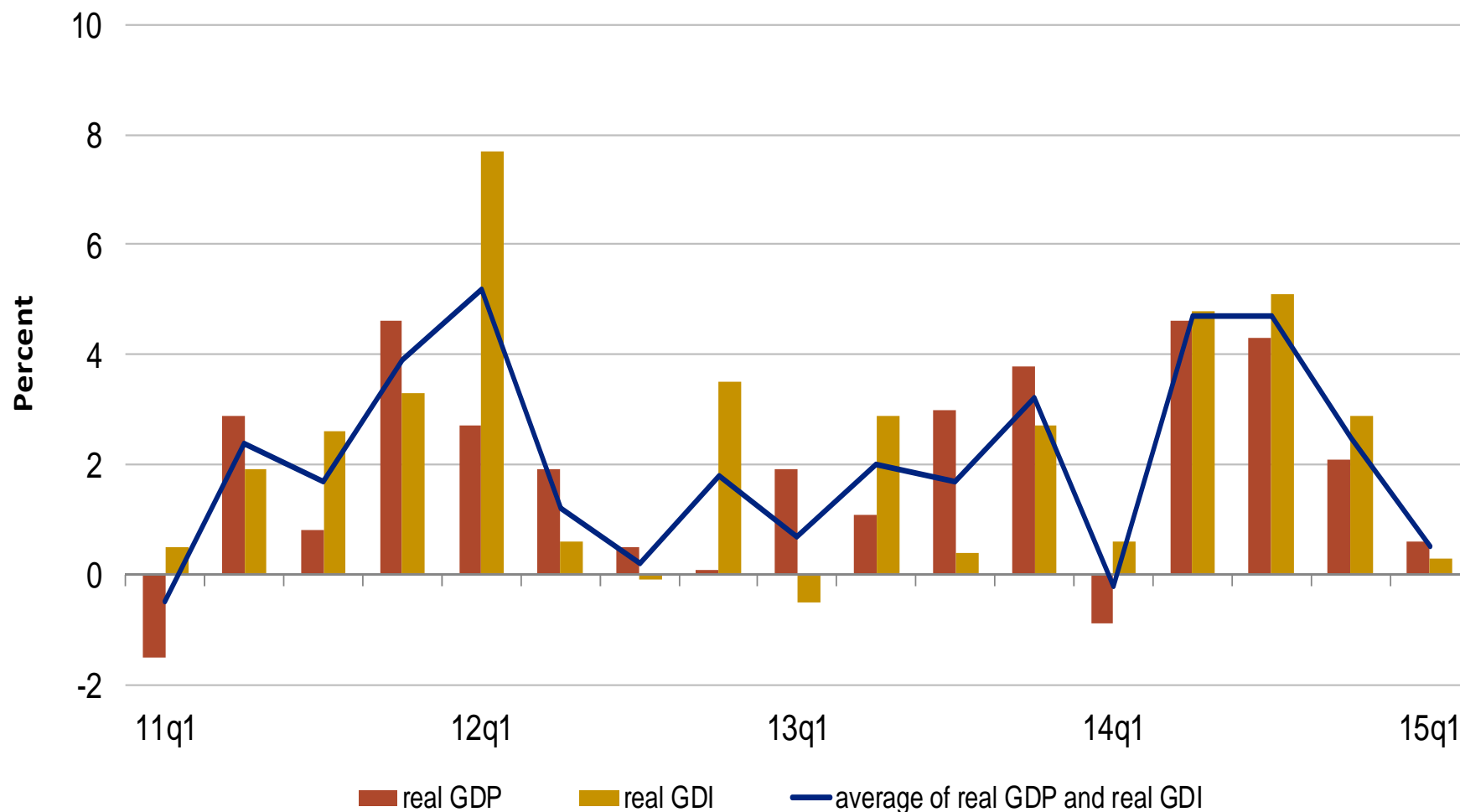
- GDI = GDP in concept
 - Incomes earned in production EQUAL the value of the final expenditures of goods and services produced

- Statistical discrepancy
 - Shows the difference (GDP – GDI) in practice

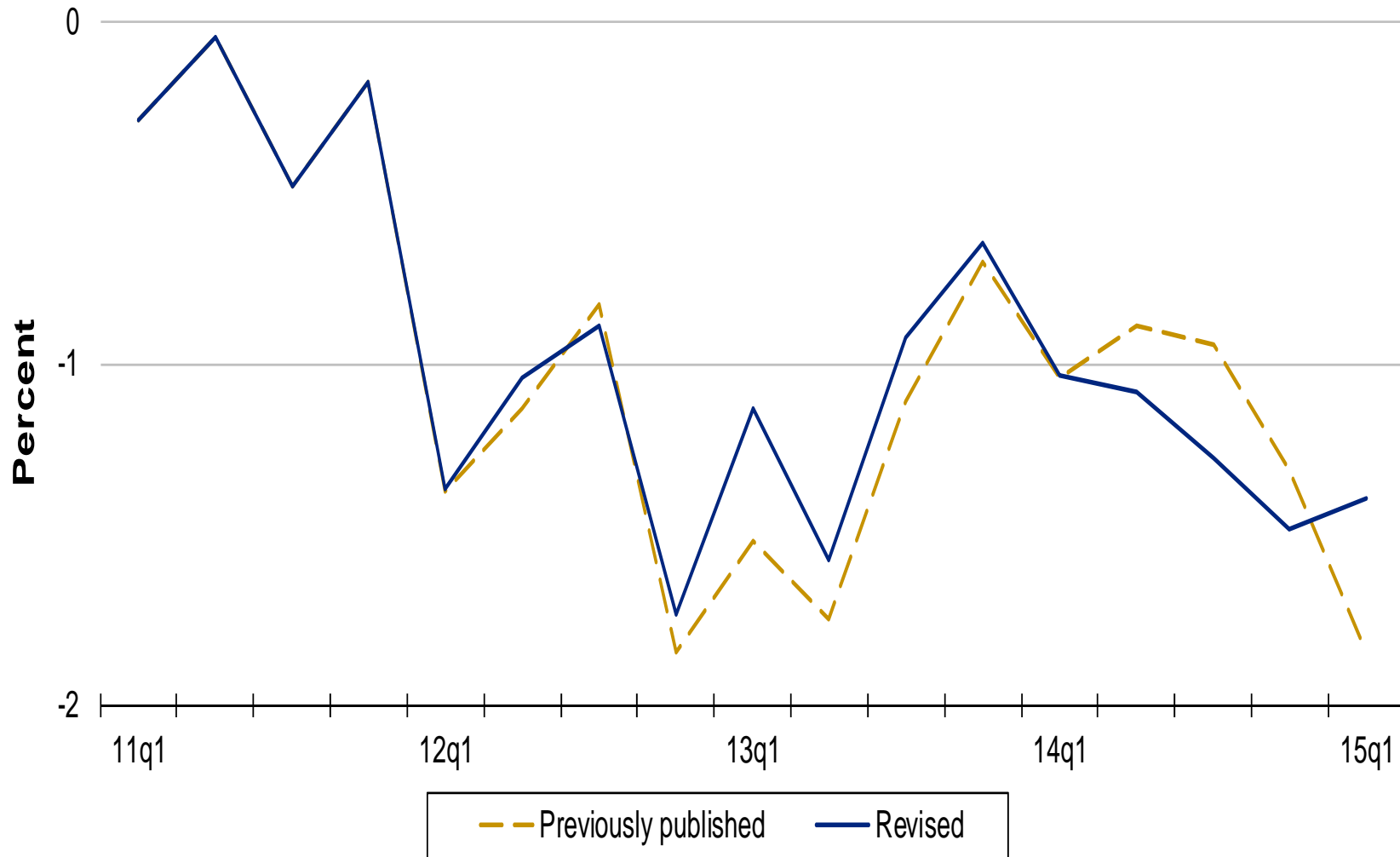
- New statistic “Average of GDP and GDI”
 - Simple average of the two
 - Helps reflect timing and measurement variations in GDP and GDI

Real GDP and real GDI growth rates

[Percent change from preceding period, SAAR]

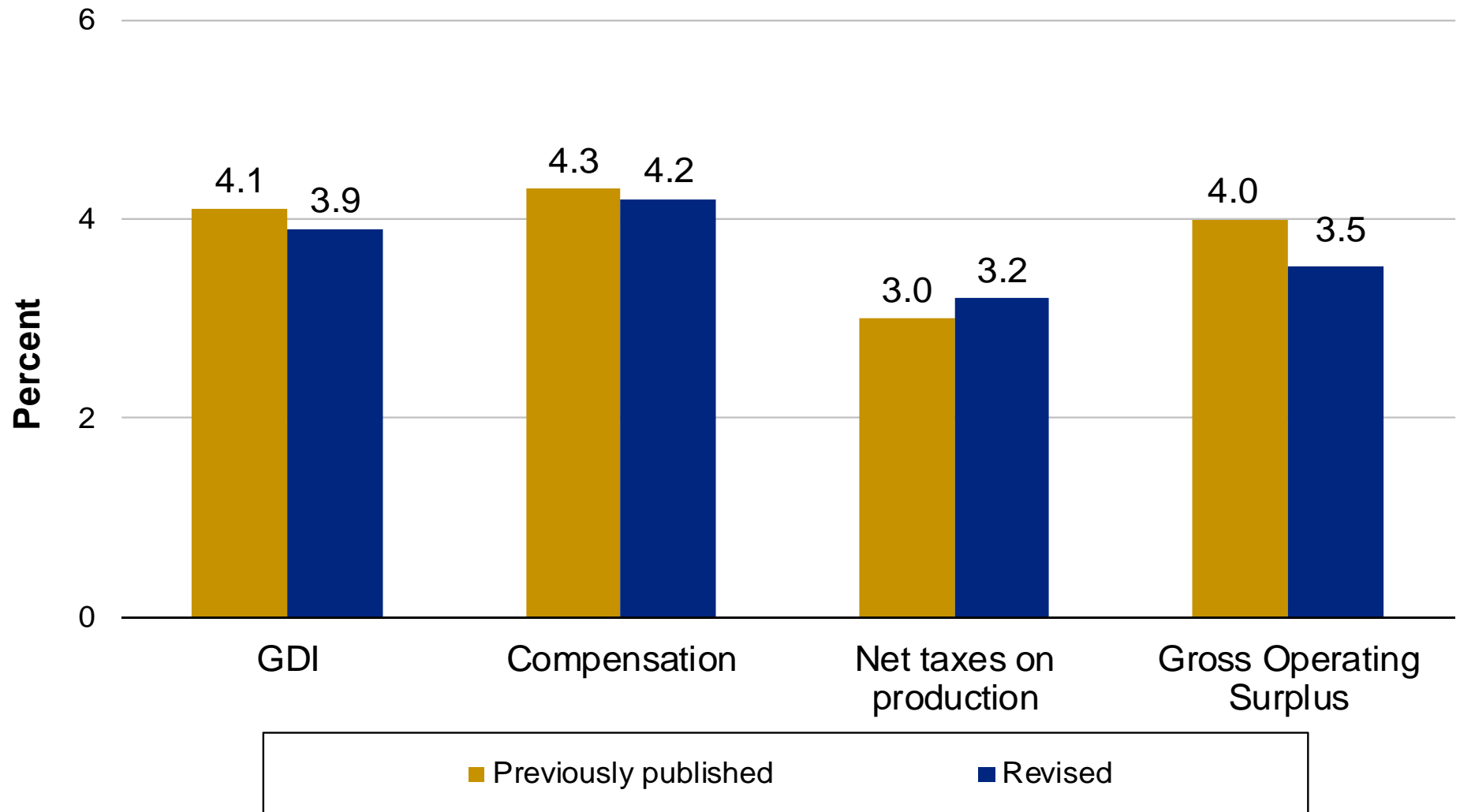


Statistical discrepancy as a percent of GDP

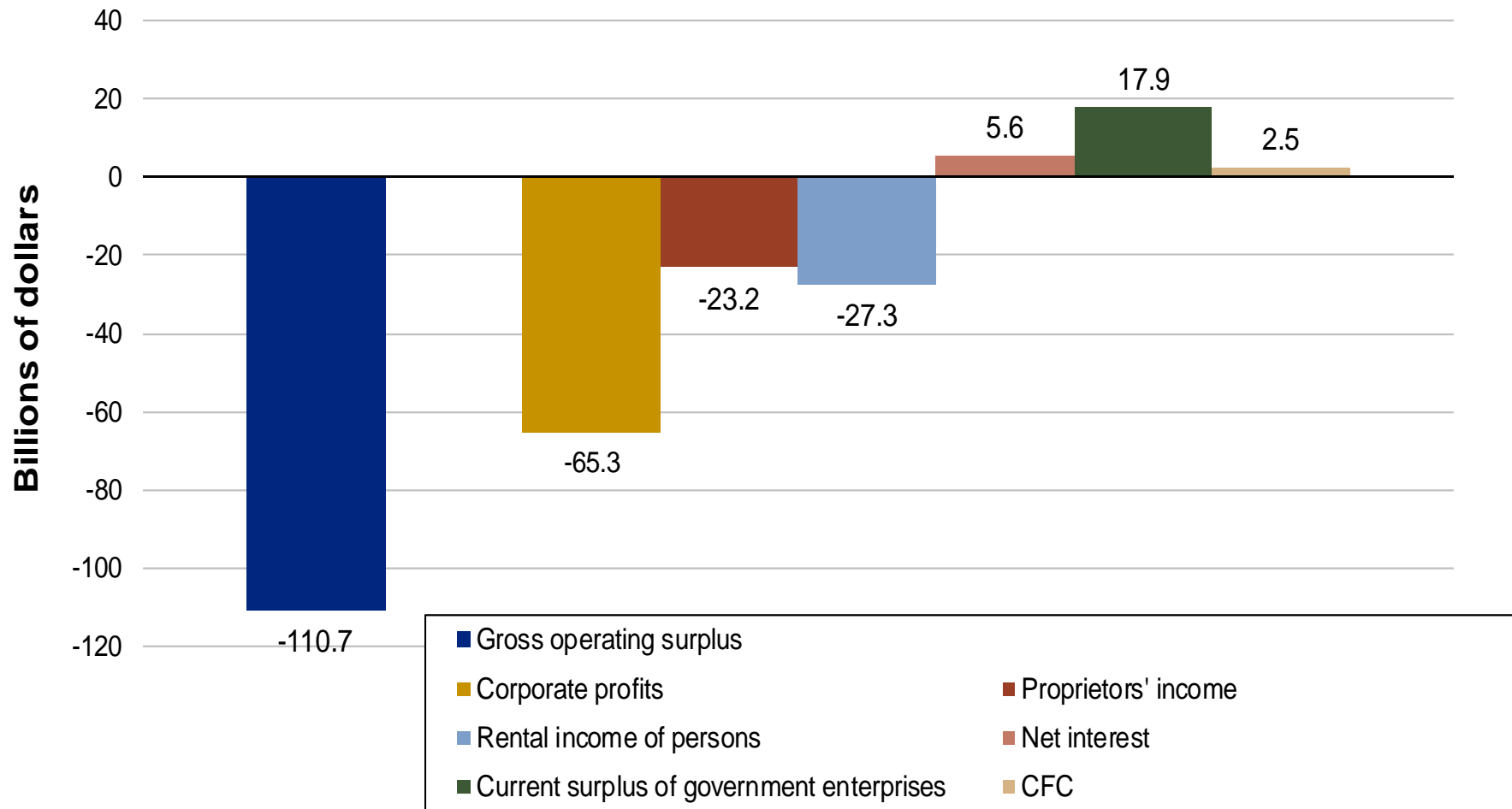


Average annual rates of change for nominal GDI

2011Q4 to 2015Q1

Contributions to the revision to GOS 2011Q4 to 2015Q1



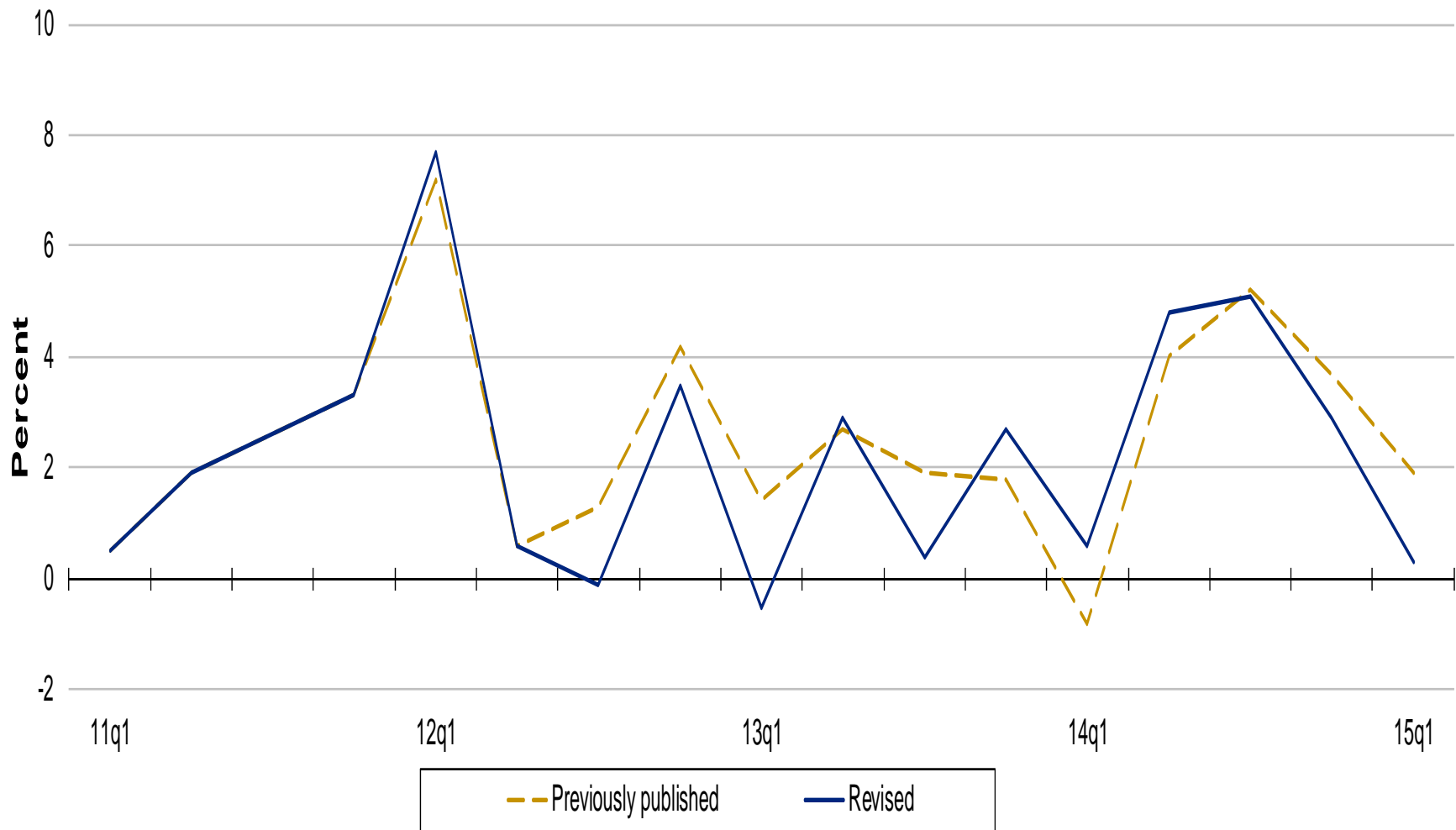


Revisions to GDI quarters

- Revisions to real GDI growth
 - Range from -1.9 (2013Q1) to +1.4 (2014Q1)
- Major sources of revisions:
 - Interpolation of revised annual estimates
 - Seasonal adjustment of corporate profits and interest indicators
 - Revised quarterly source data

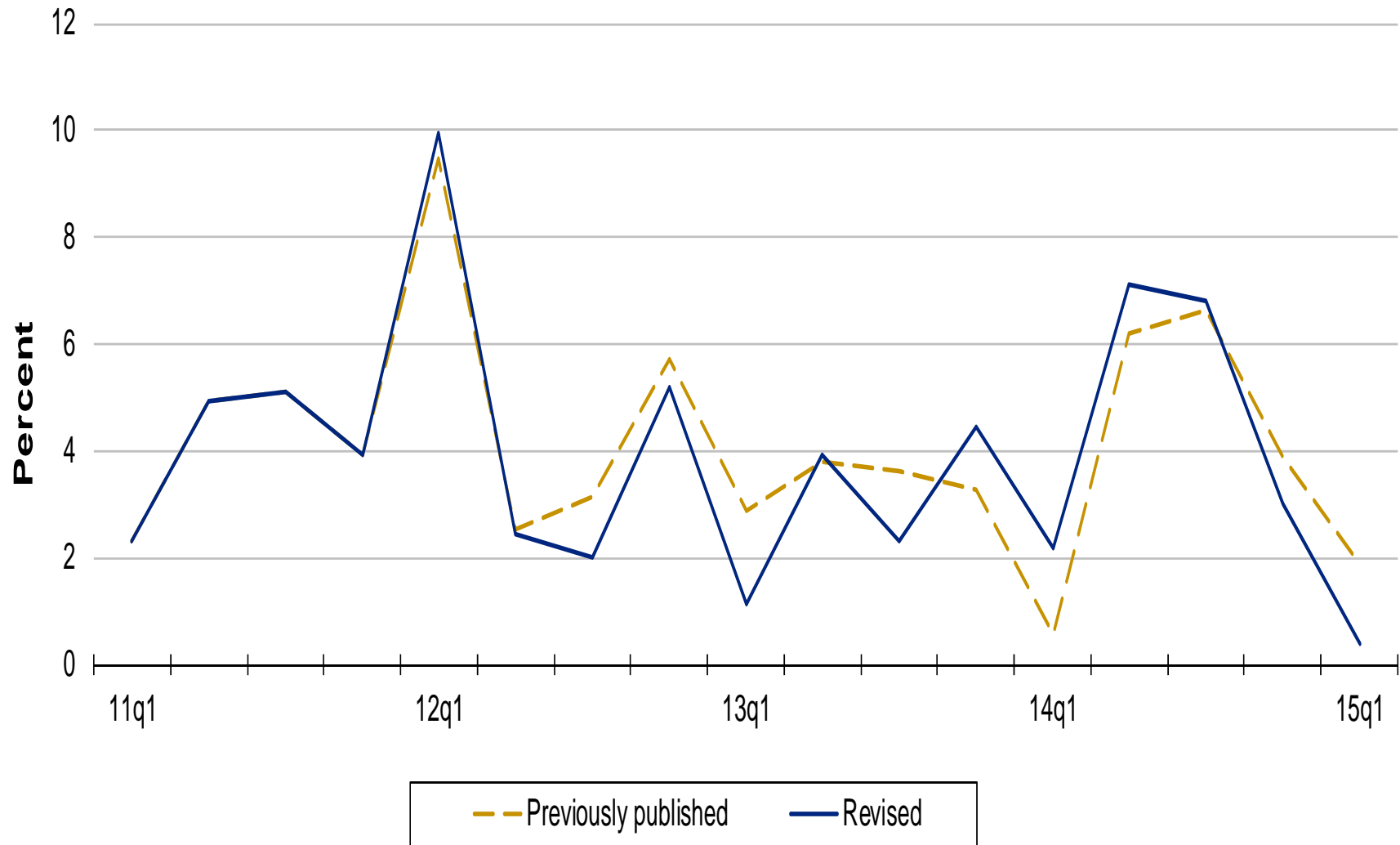
Real gross domestic income

[Percent change from preceding period, SAAR]



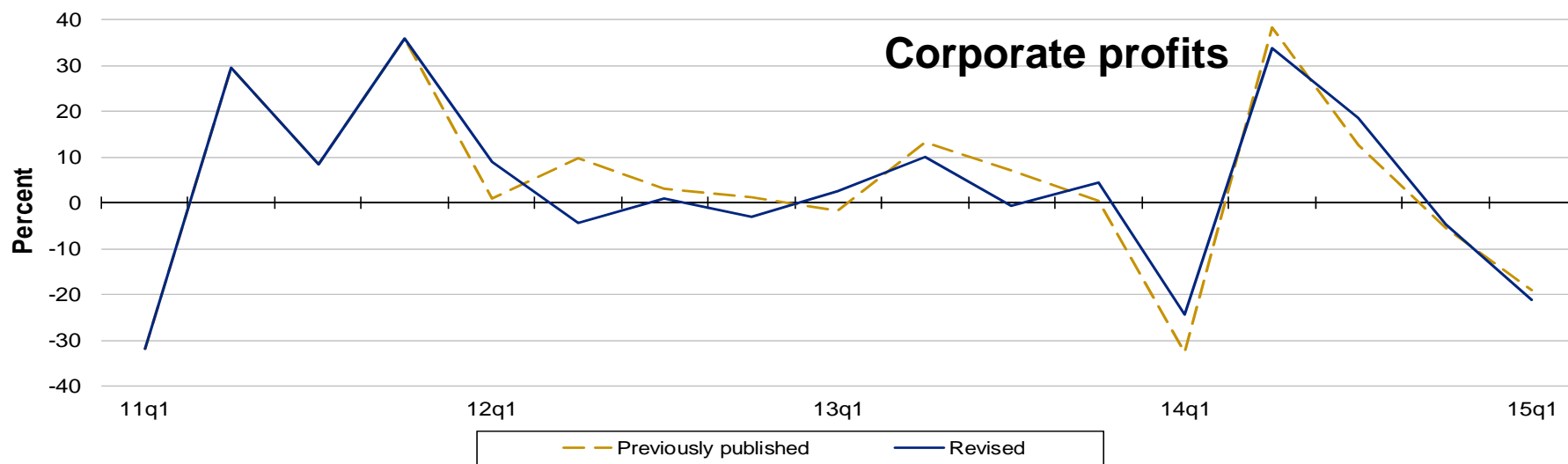
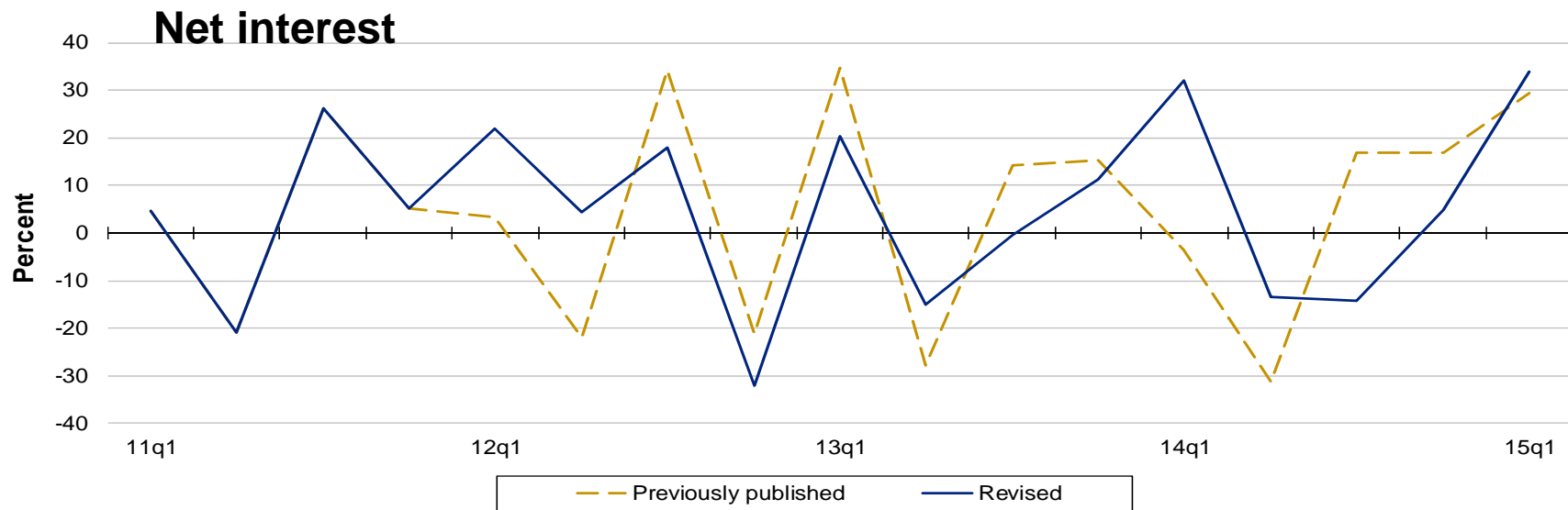
Nominal gross domestic income

[Percent change from preceding period, SAAR]



Interest and corporate profits

[Percent change from previous period, SAAR]



Personal income and outlays

- Revisions to average annual growth 2011Q4 to 2015Q1

| Component | Revision |
|----------------------------|----------|
| Personal income | -0.2 |
| Disposable personal income | -0.3 |
| Personal outlays | -0.2 |
| Real DPI | -0.3 |
| Personal saving rate * | +0.1 |

* average of quarterly revisions over 2012Q1-2014Q4

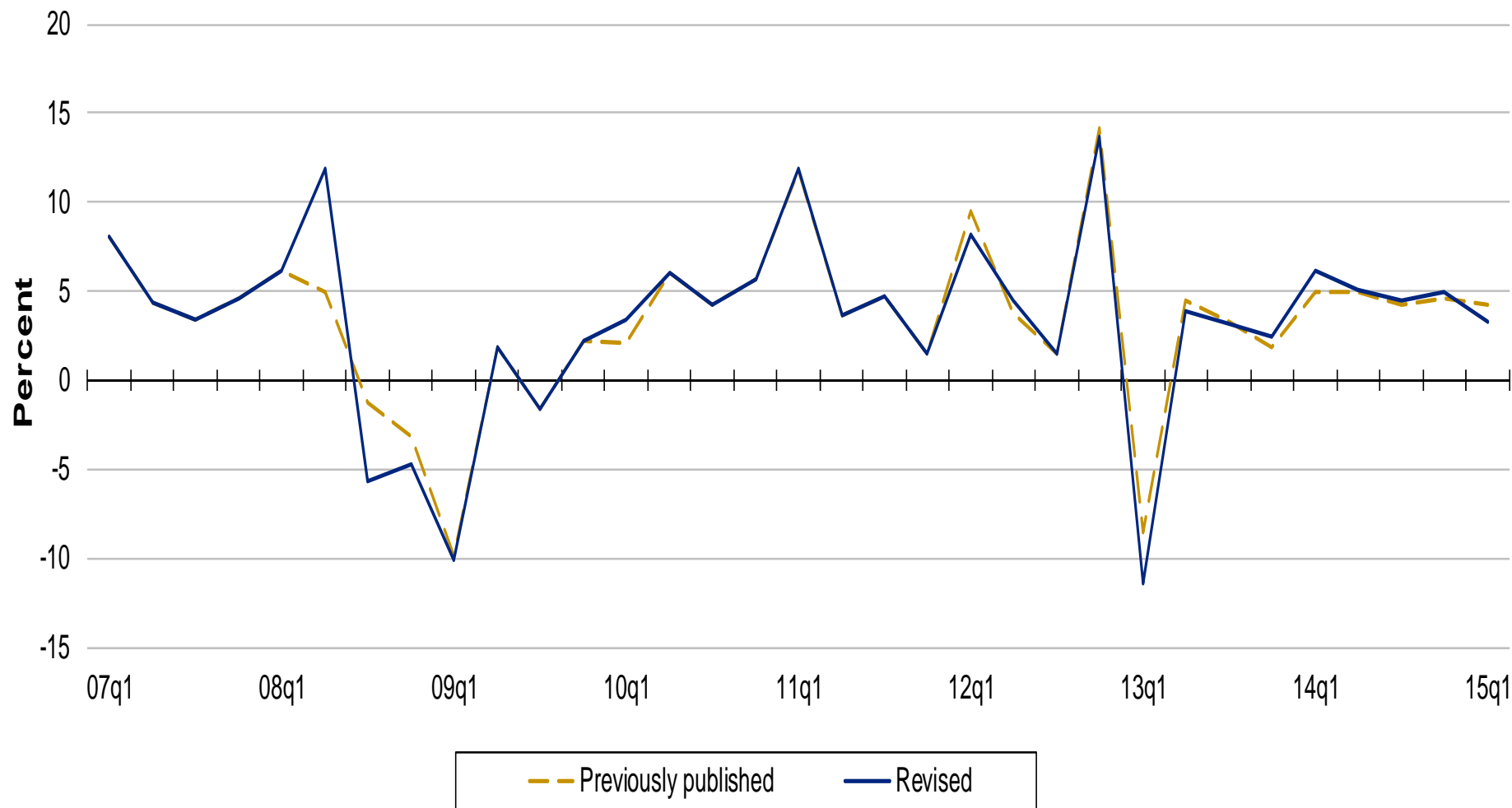
Federal refundable tax credits

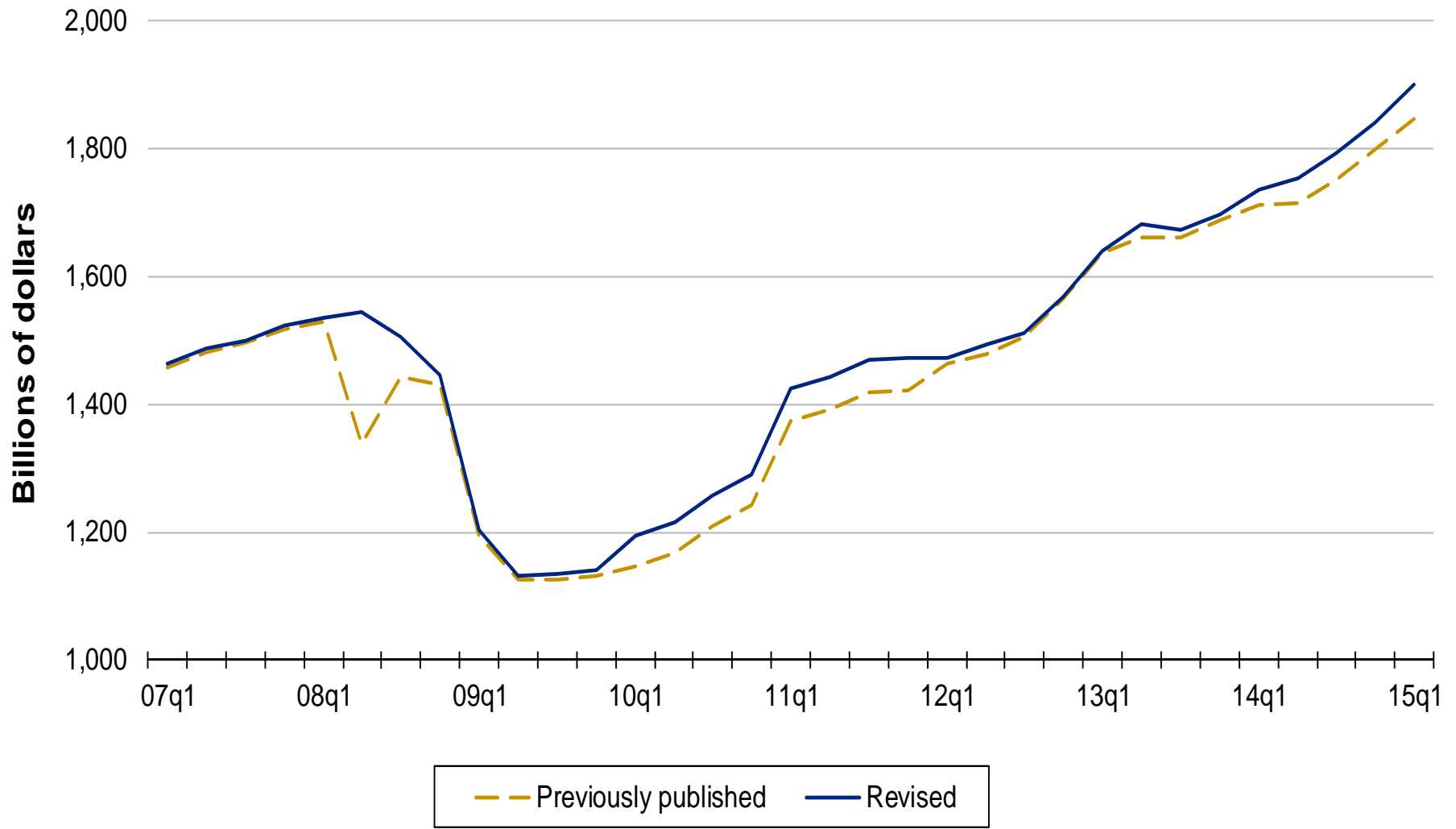
- Move portion of credit that reduces tax liability
- From personal taxes to social benefits to persons
- Offsetting impacts between personal income and personal taxes
- Back to 1976

| Major program | Program dates |
|------------------------------------------------|---------------|
| Earned Income Tax Credit 2008 | 1975–present |
| Additional Child Tax Credit | 1998–present |
| 2008 Economic Stimulus Payments | 2008 |
| American Opportunity Tax Credit | 2009–present |
| Making Work Pay Tax Credit | 2010-2011 |
| Health Insurance Premium Assistance Credits | 2014-present |

Personal income

[Percent change from preceding period, SAAR]







Other notable mentions from the 2015 NIPA annual revision

- Final sales to private domestic purchasers
 - New statistic in GDP news release
 - Measure of private U.S. demand
- Expanded data on rest of world transactions
 - Petroleum exports (in NIPA 4.2 table family)
 - Gross transfers to and from ROW
 - Aligns with BEA's international transactions accounts
 - Incorporated back to 1999