

Results of the 2011 Flexible Annual Revision of the National Income and Product Accounts

Brent R. Moulton

Associate Director for National Economic Accounts

Bureau of Economic Analysis

July 29, 2011



NIPA annual revision

- 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

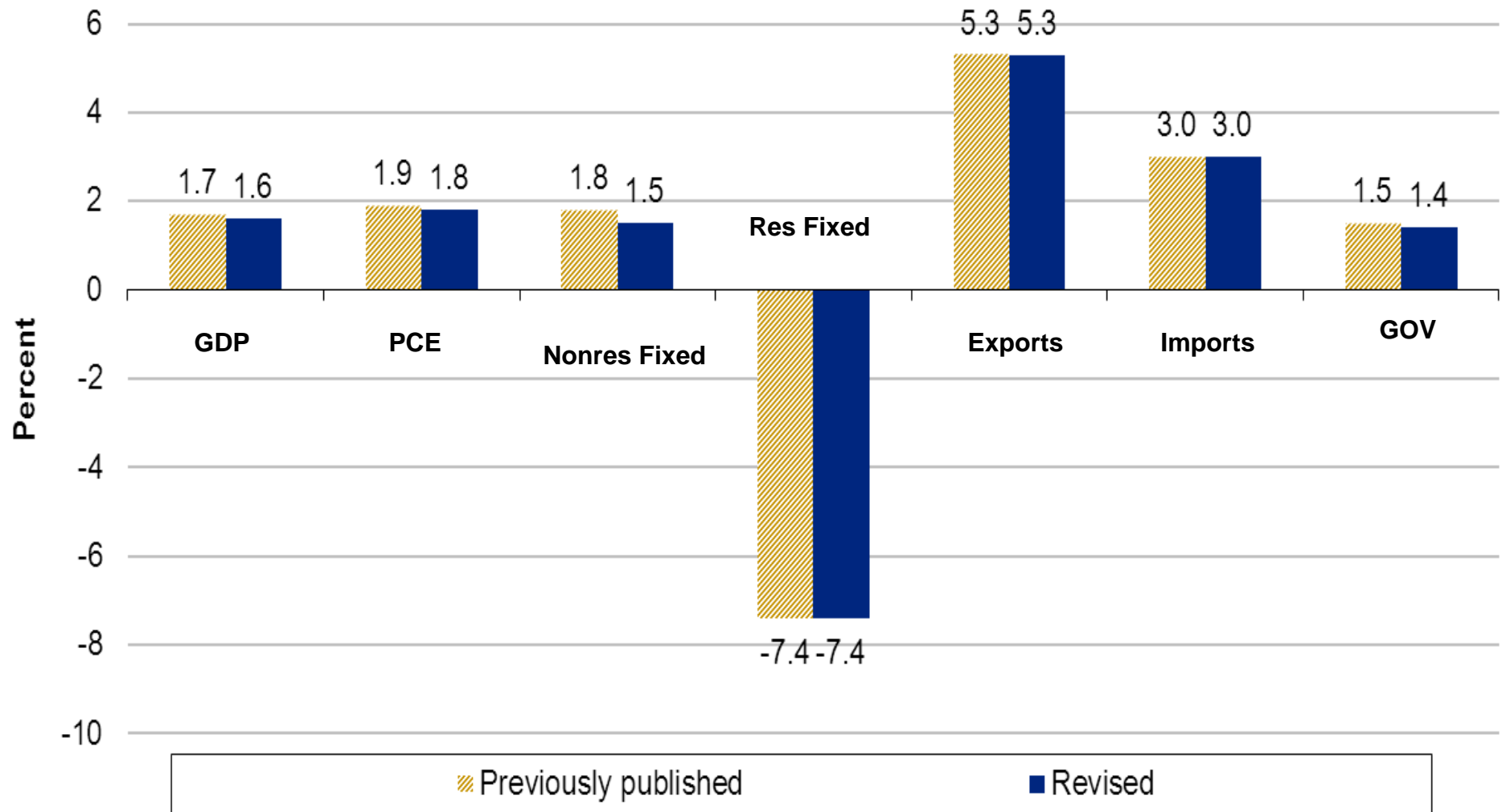
- Most series, including national income and personal income, were revised for 2008–10.
- Some series, including GDP, personal consumption expenditures, and fixed investment were revised back to 2003.
- The reference year remains 2005.
- Components with revisions for 2005 resulted in revisions to the indexes and chained-dollar estimates *for the entire historical time span*.
- Revisions to percent changes before the first quarter of 2003 were small.
 - Affected only by rounding and interpolation.



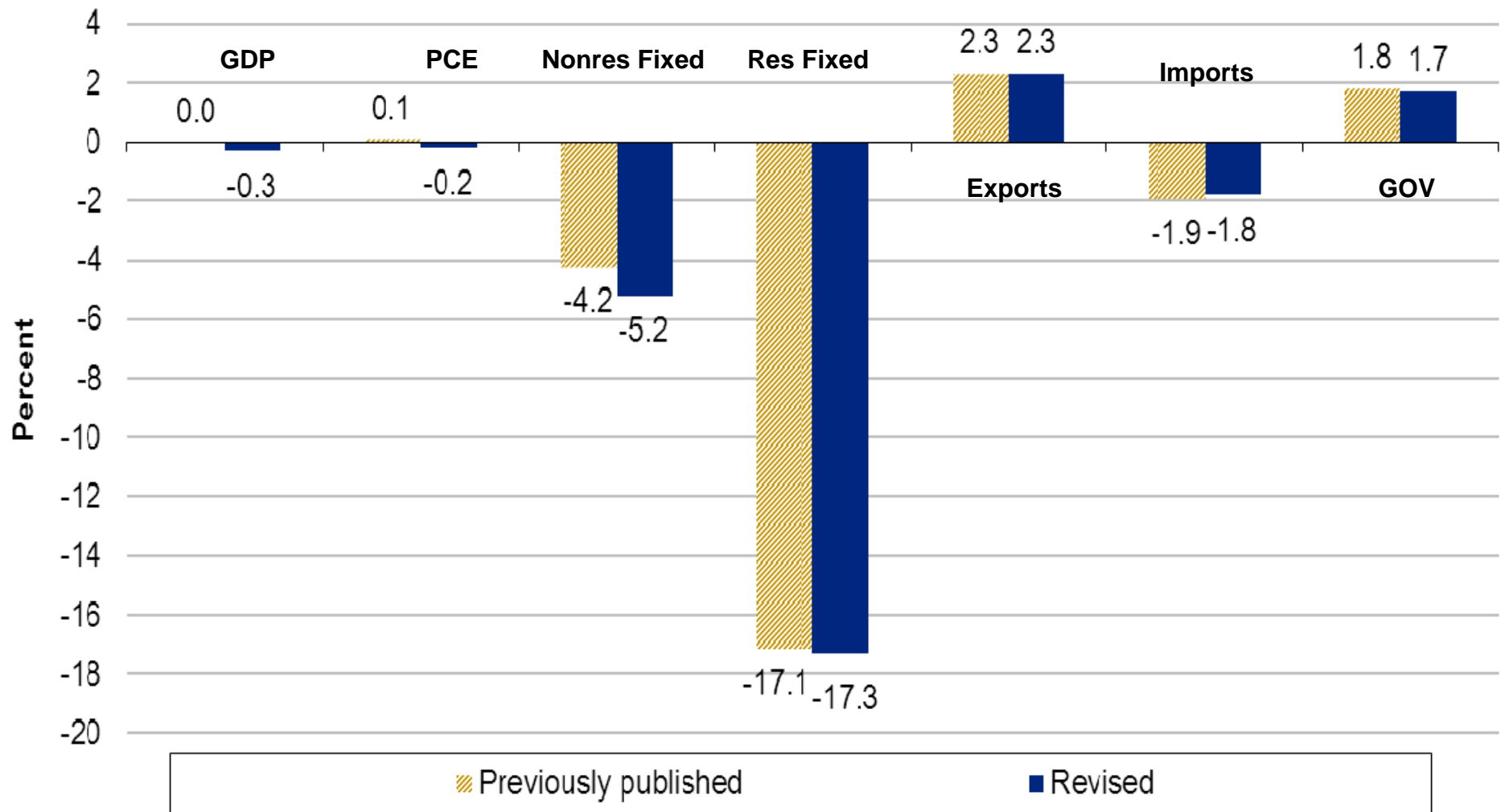
New and revised source data

- Census Bureau surveys:
 - Annual survey of manufactures
 - Annual retail trade survey
 - Annual wholesale trade survey
 - Services annual survey
 - Construction spending (value put in place)
 - Government finances
- Bureau of Labor Statistics: wage and salary data
- Internal Revenue Service: tabulations of tax returns for corporations and for sole proprietorships and partnerships
- Office of Management and Budget: federal government budget data
- BEA: international transactions accounts

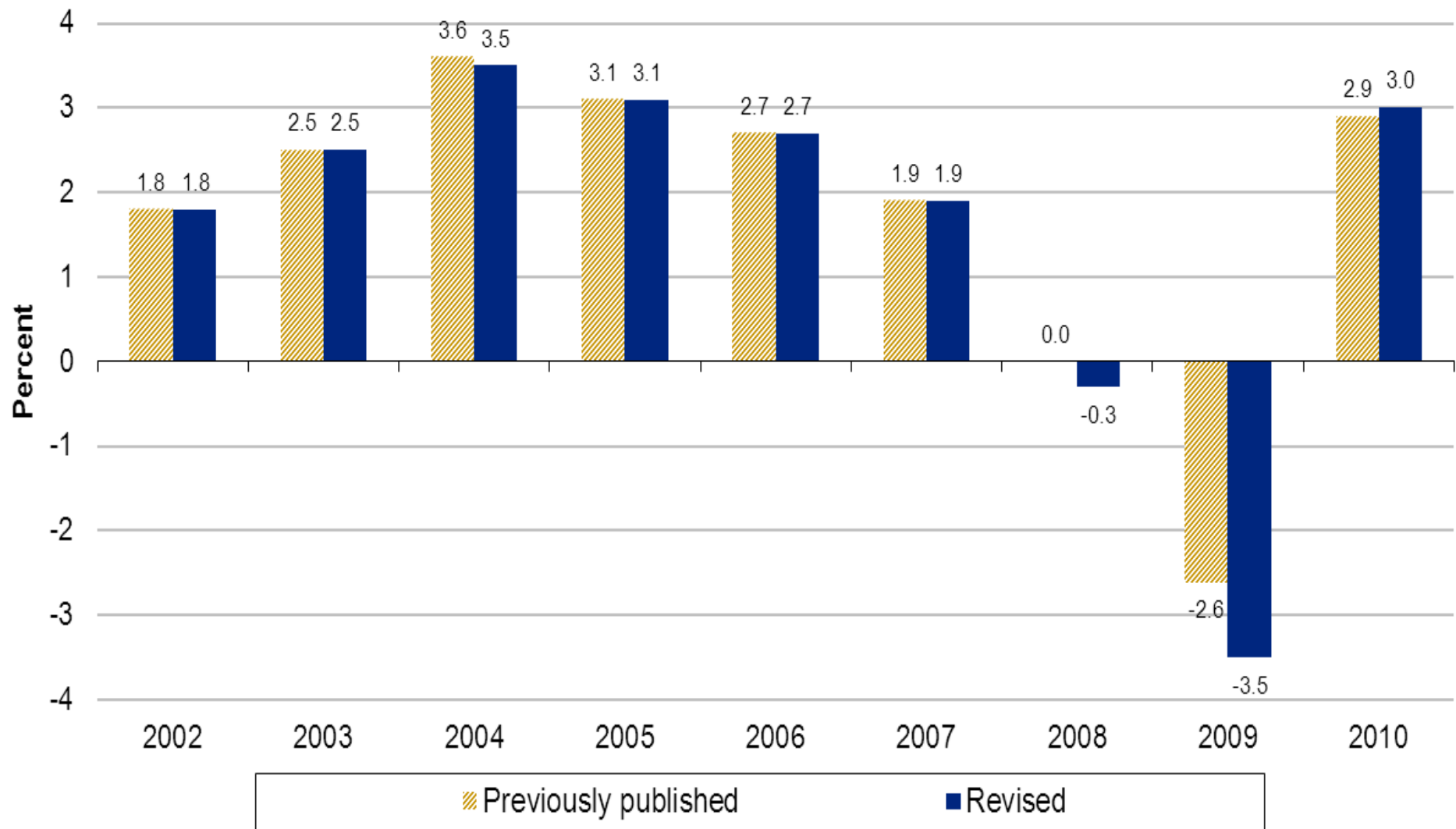
Average annual rates of change of real GDP and its major components, 2002 to 2010



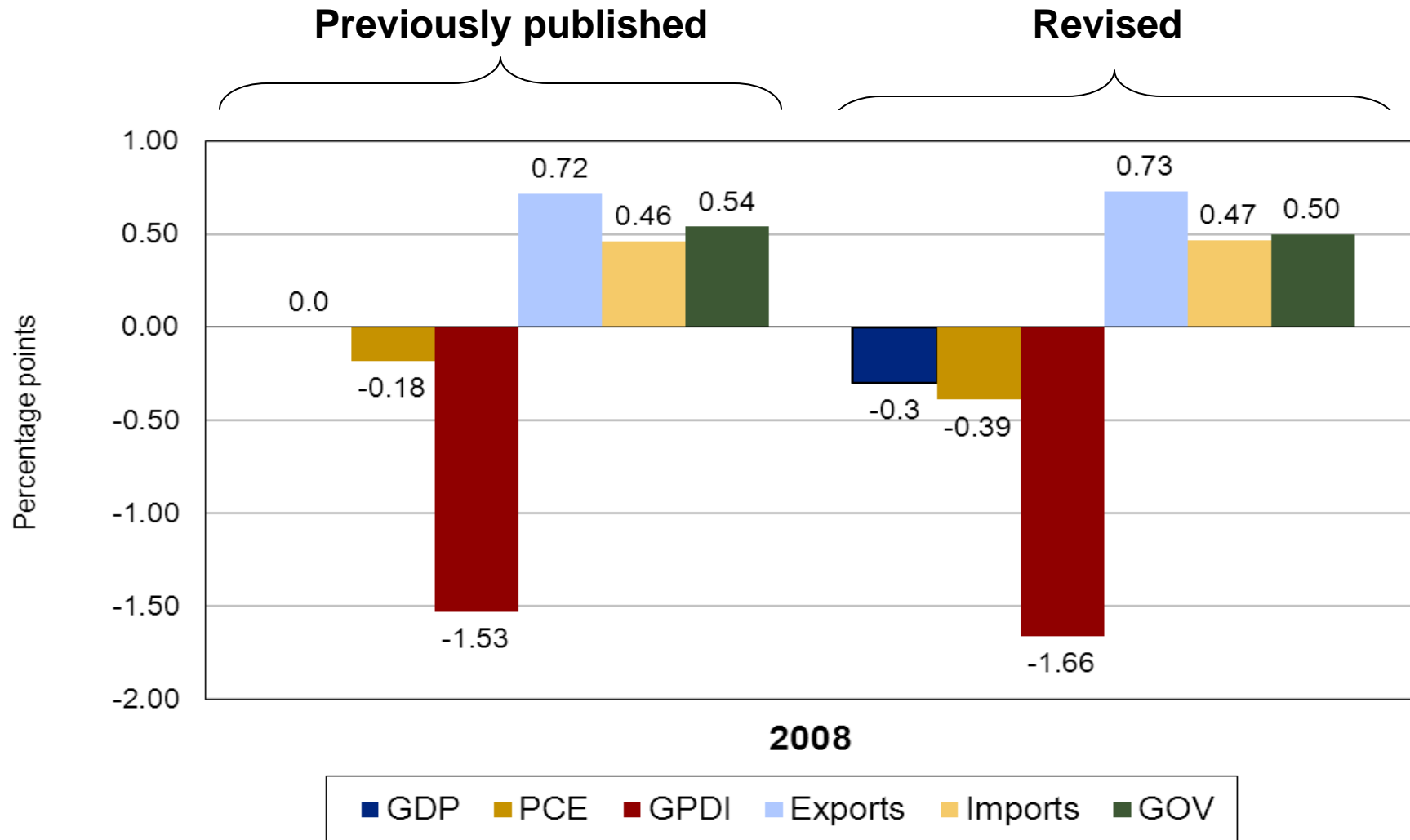
Average annual rates of change of real GDP and its major components, 2007 to 2010



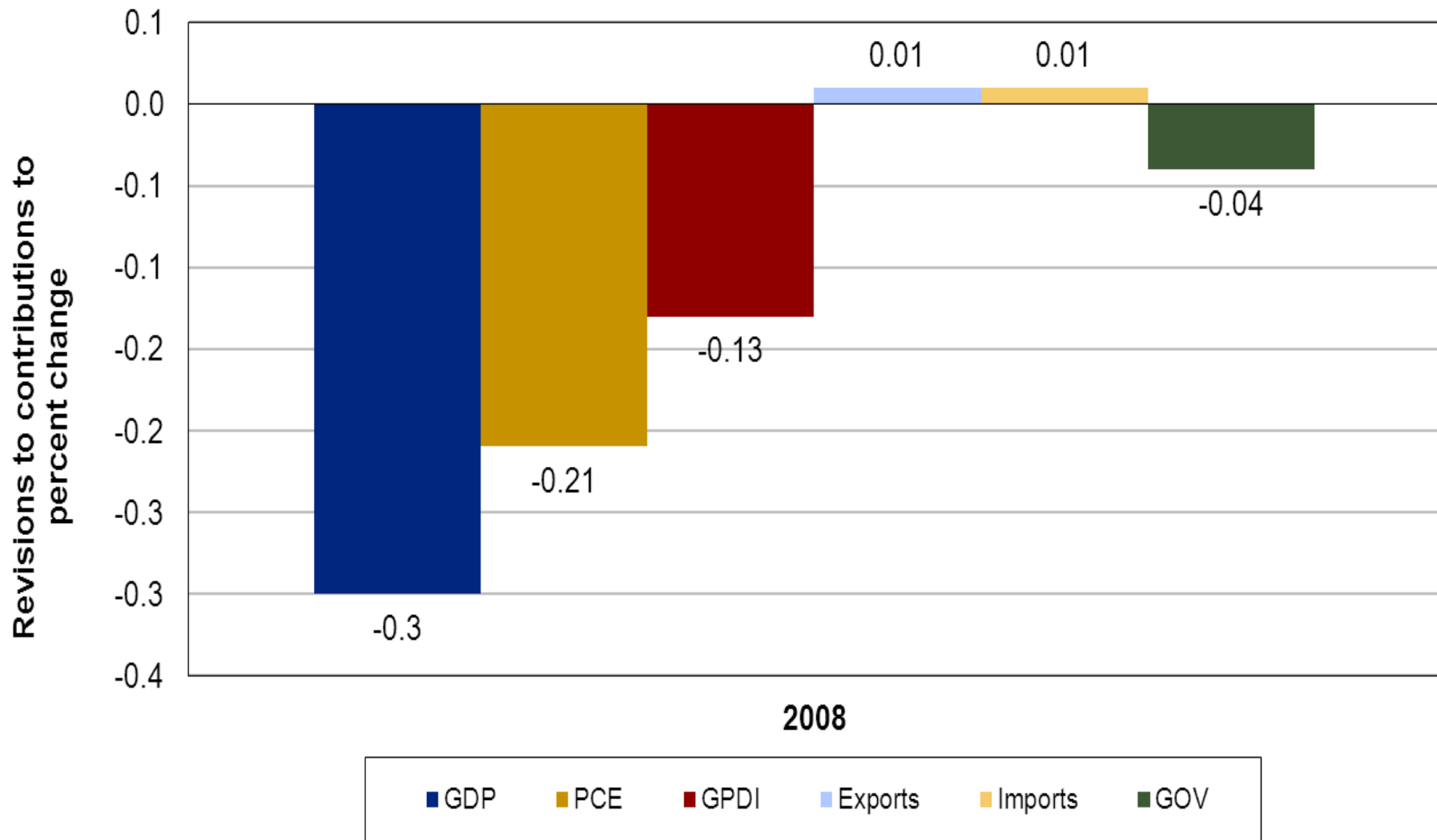
Annual rates of change of real GDP, 2002 to 2010



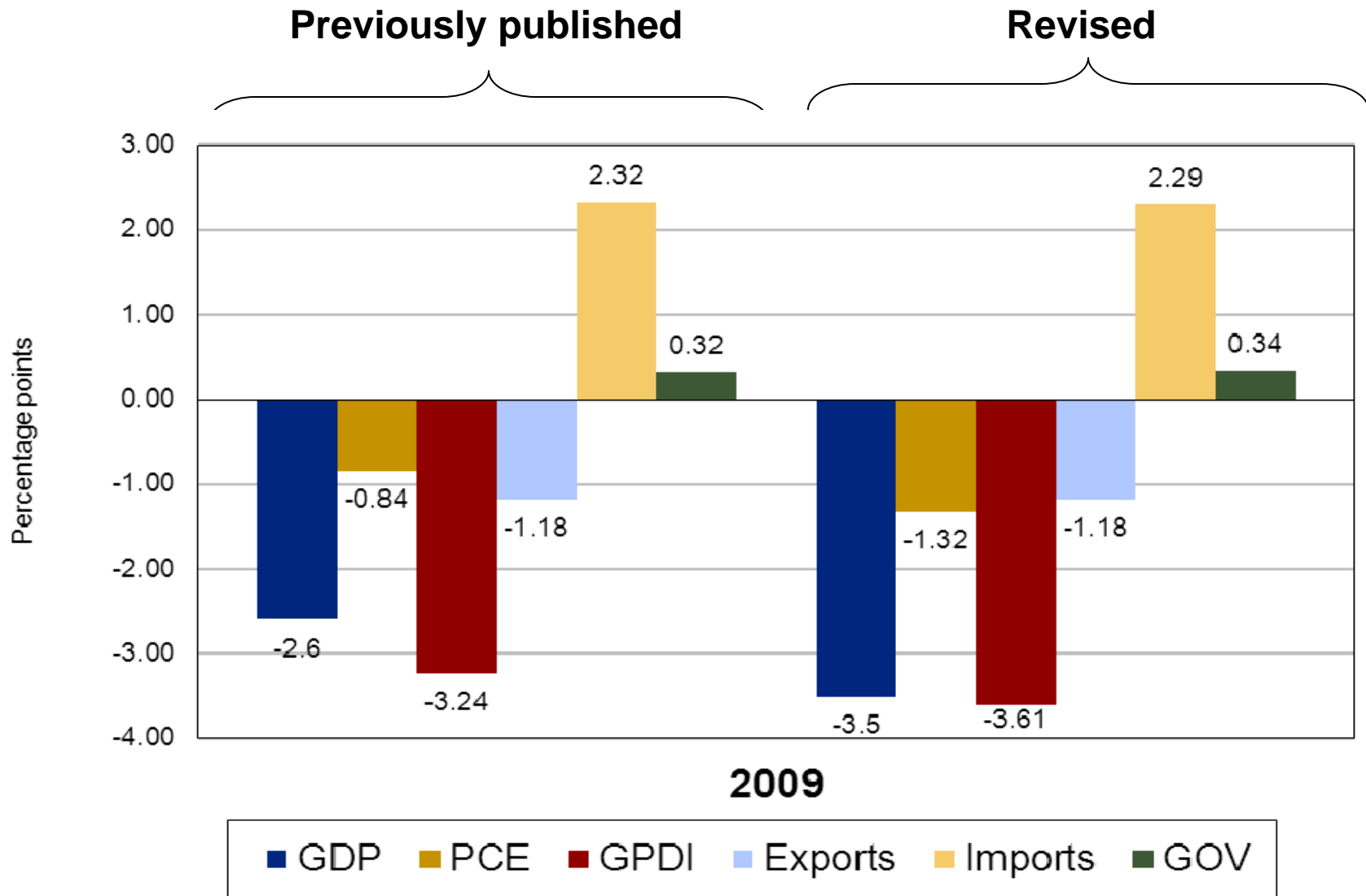
Percent change in real GDP and contributions to percent change - 2008



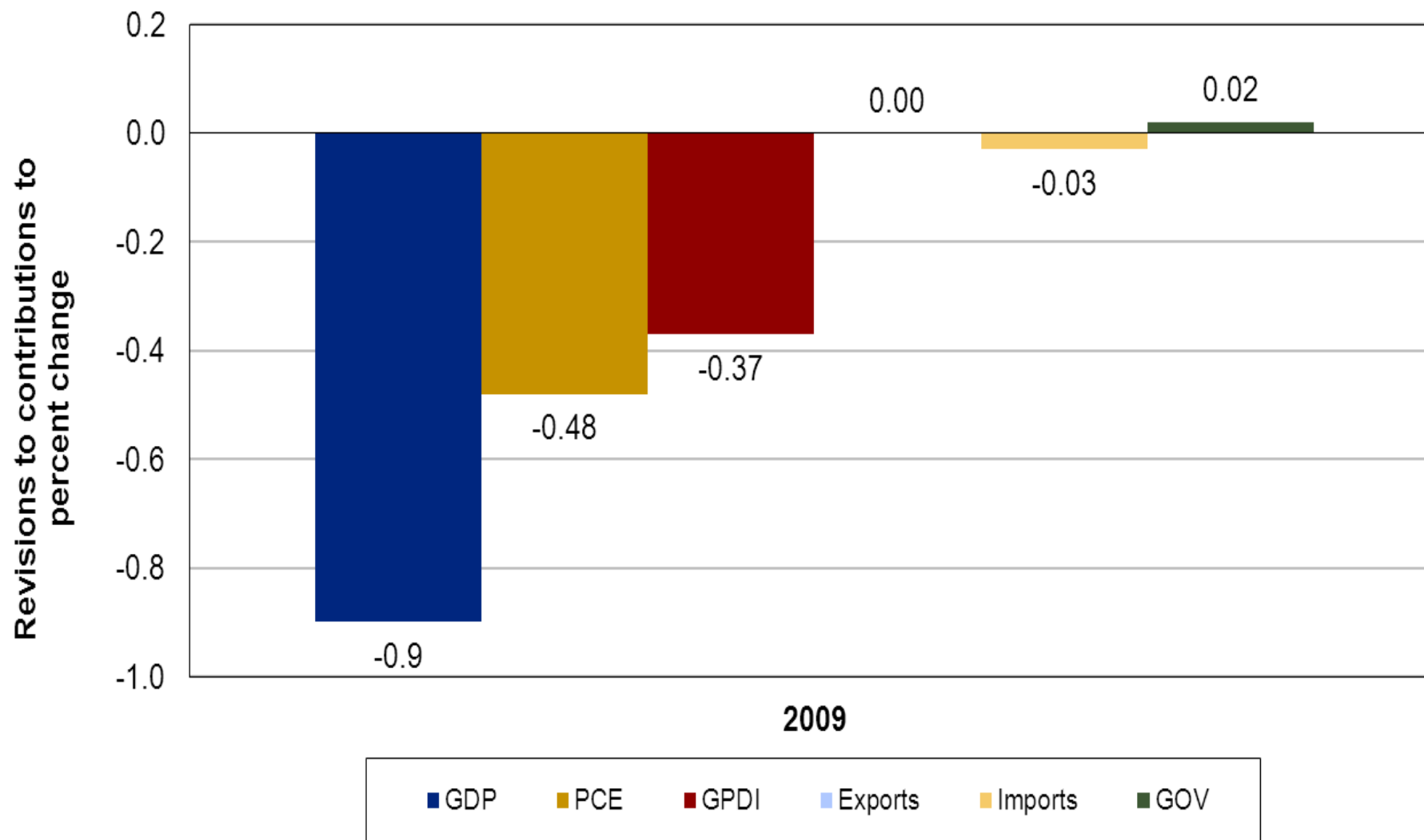
Revisions to percent change in real GDP and contributions to percent change - 2008



Percent change in real GDP and contributions to percent change - 2009



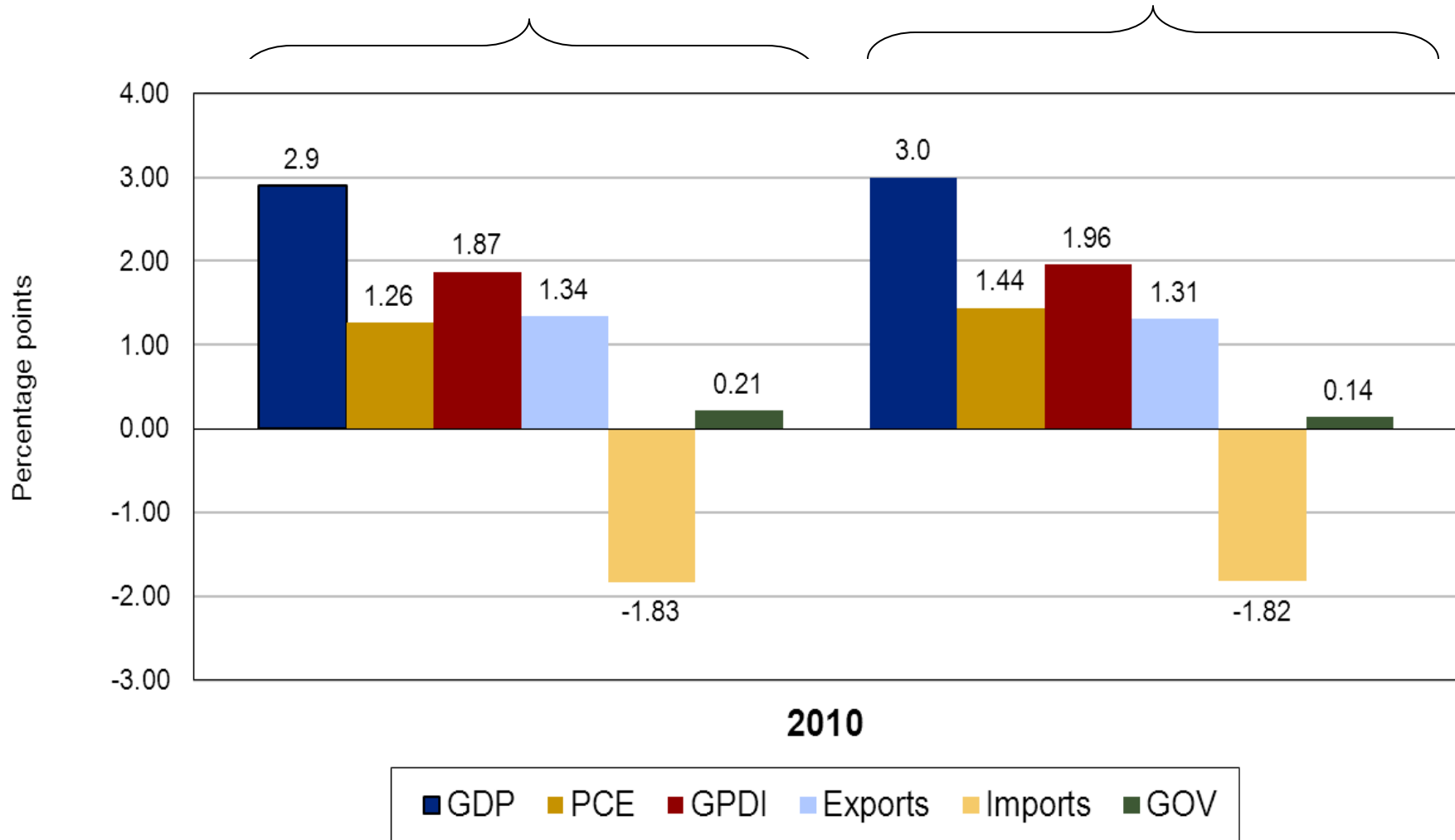
Revisions to percent change in real GDP and contributions to percent change - 2009



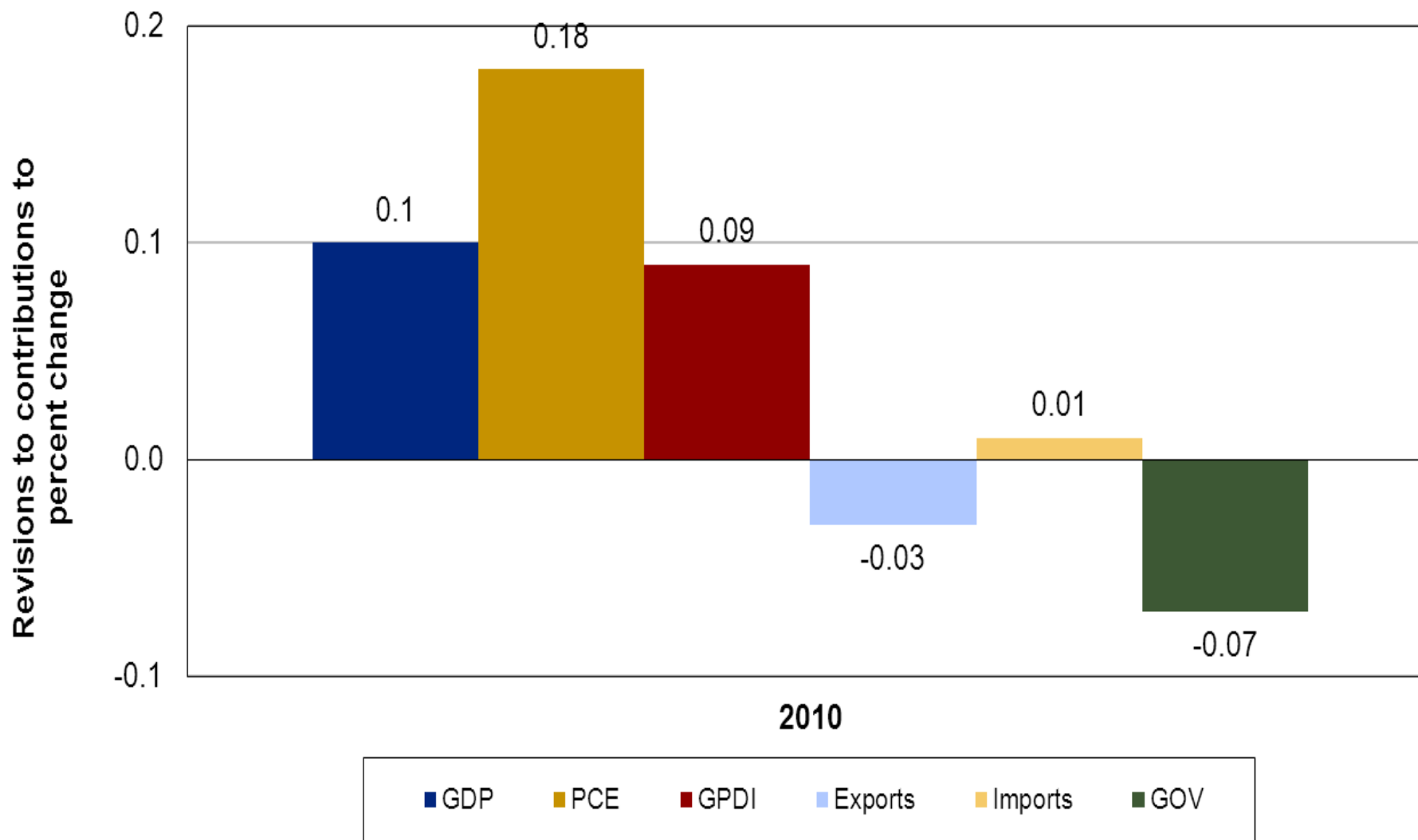
Percent change in real GDP and contributions to percent change - 2010

Previously published

Revised

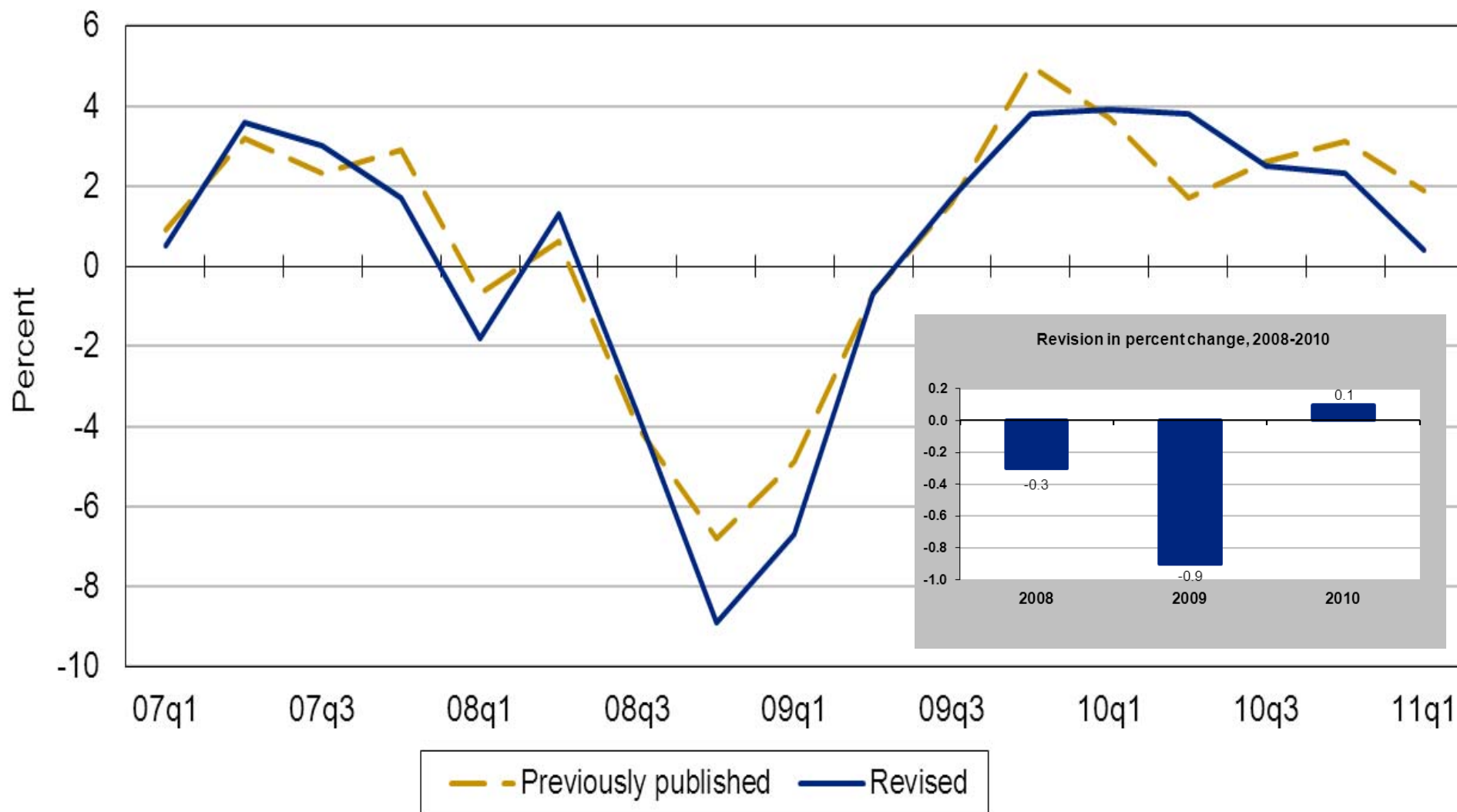


Revisions to percent change in real GDP and contributions to percent change - 2010



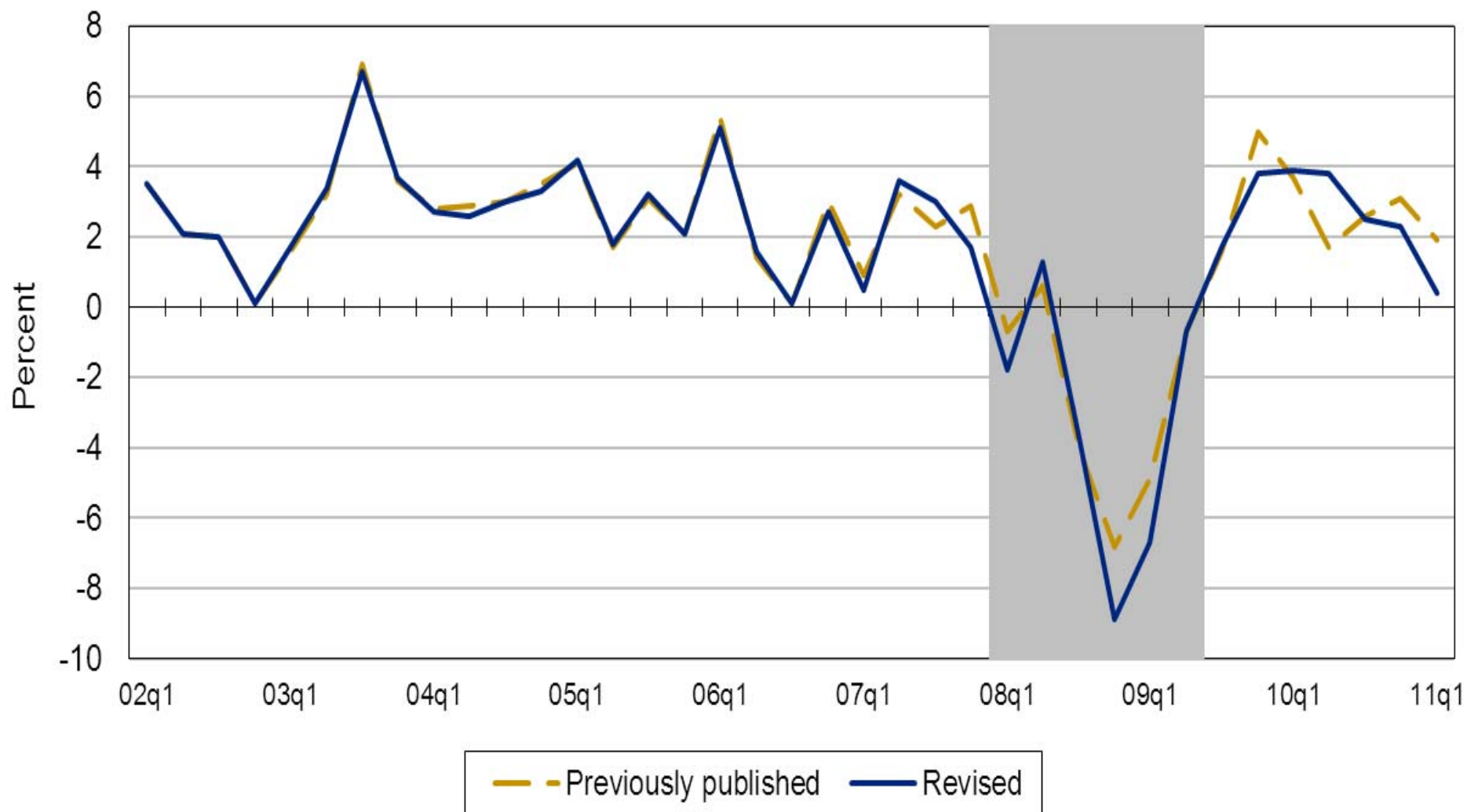
Real gross domestic product

[Percent change from preceding period, SAAR, 2007Q1 – 2011Q1]



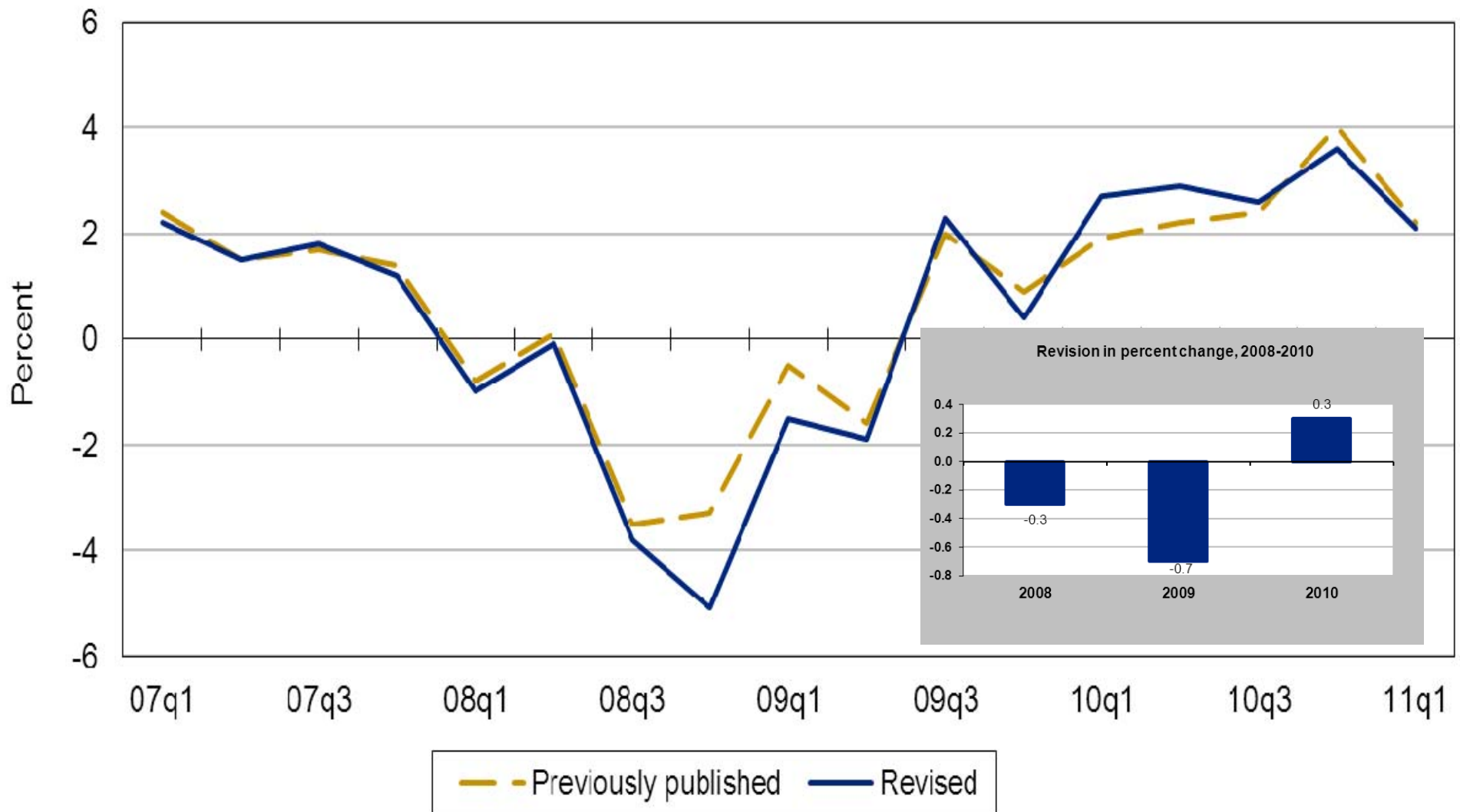
Real gross domestic product

[Percent change from preceding period, SAAR, 2002Q1-2011Q1]



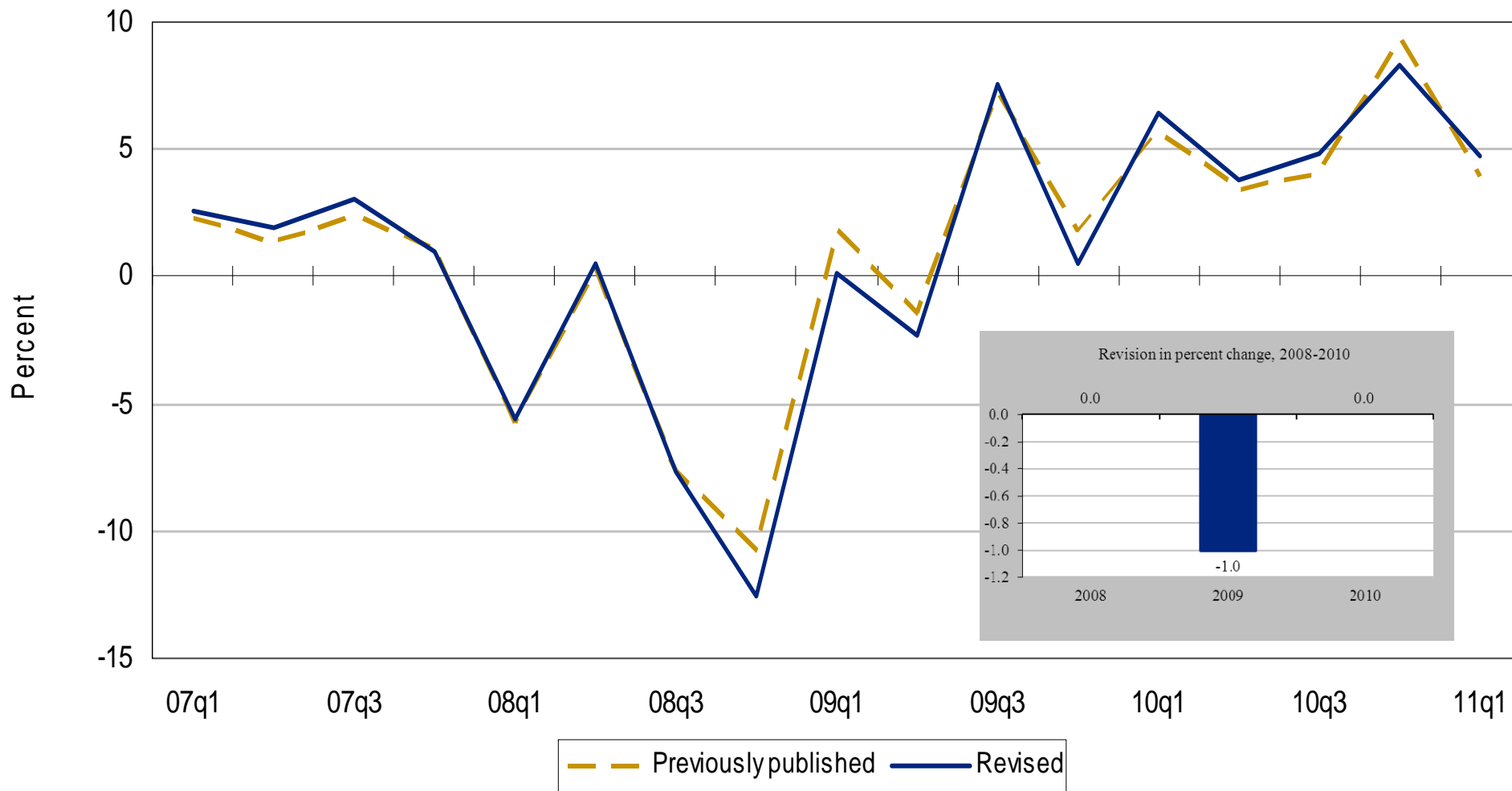
Real personal consumption expenditures

[Percent change from preceding period, SAAR]



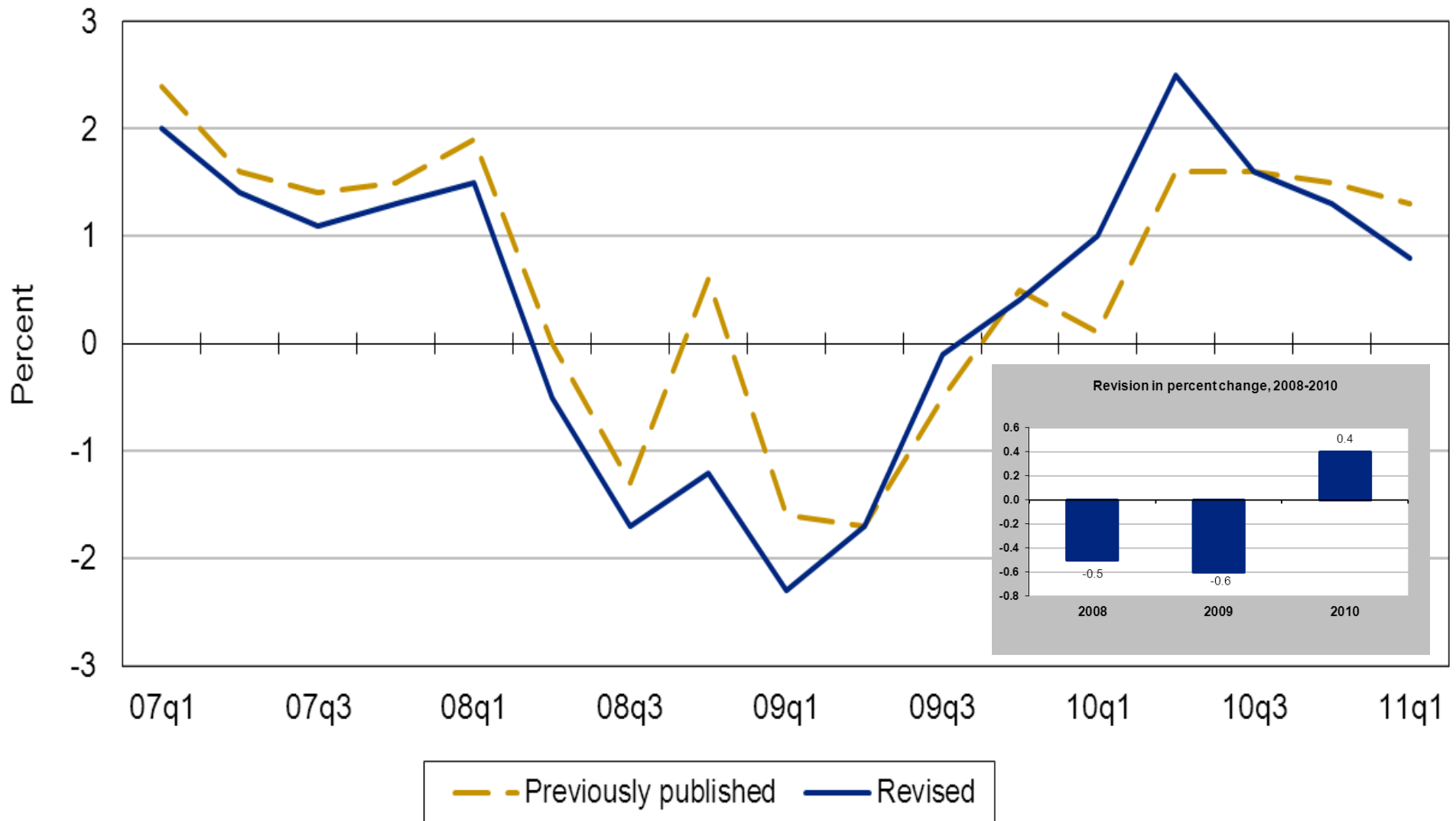
Real PCE for goods

[Percent change from preceding period, SAAR]



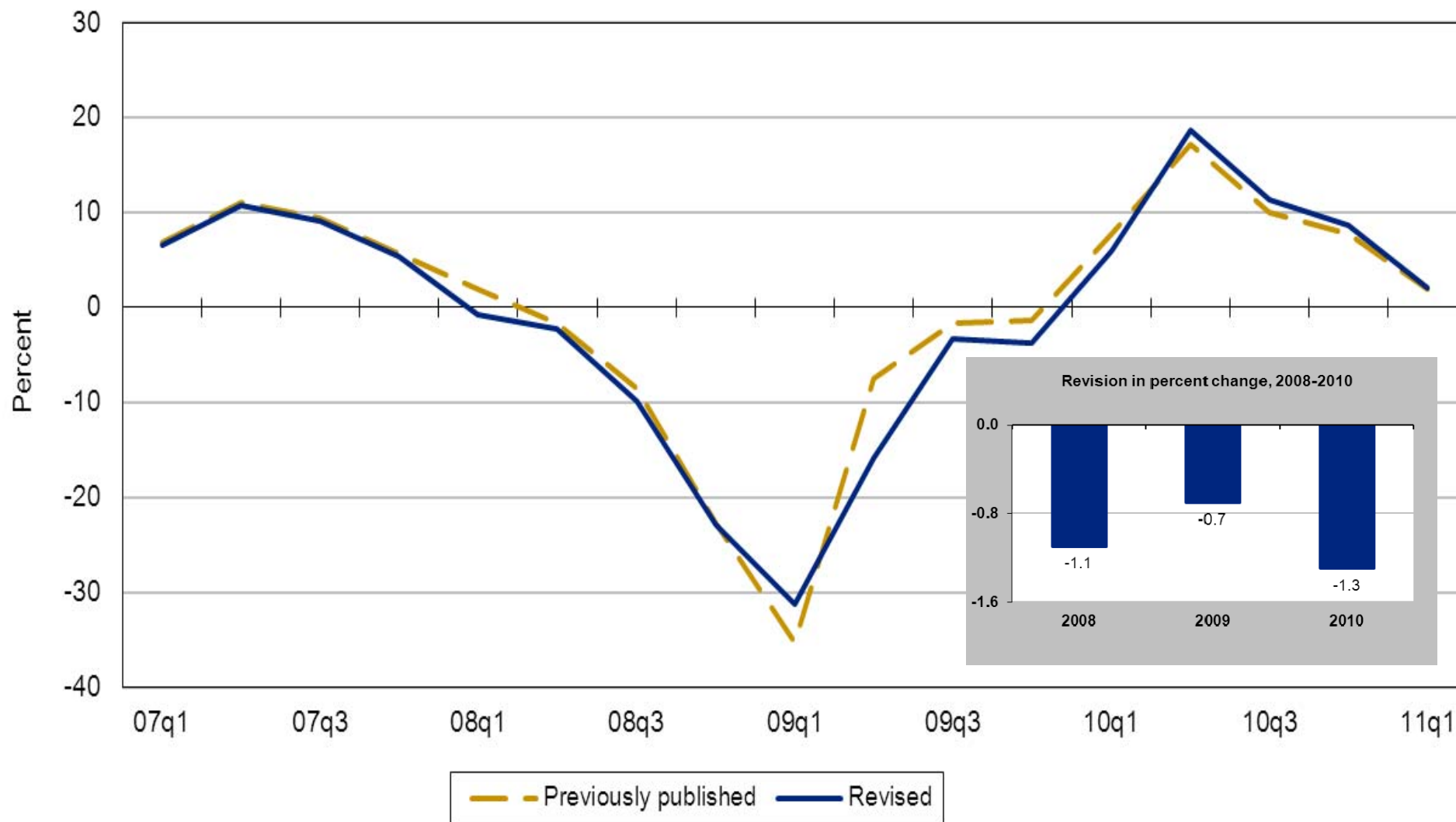
Real PCE for services

[Percent change from preceding period, SAAR]



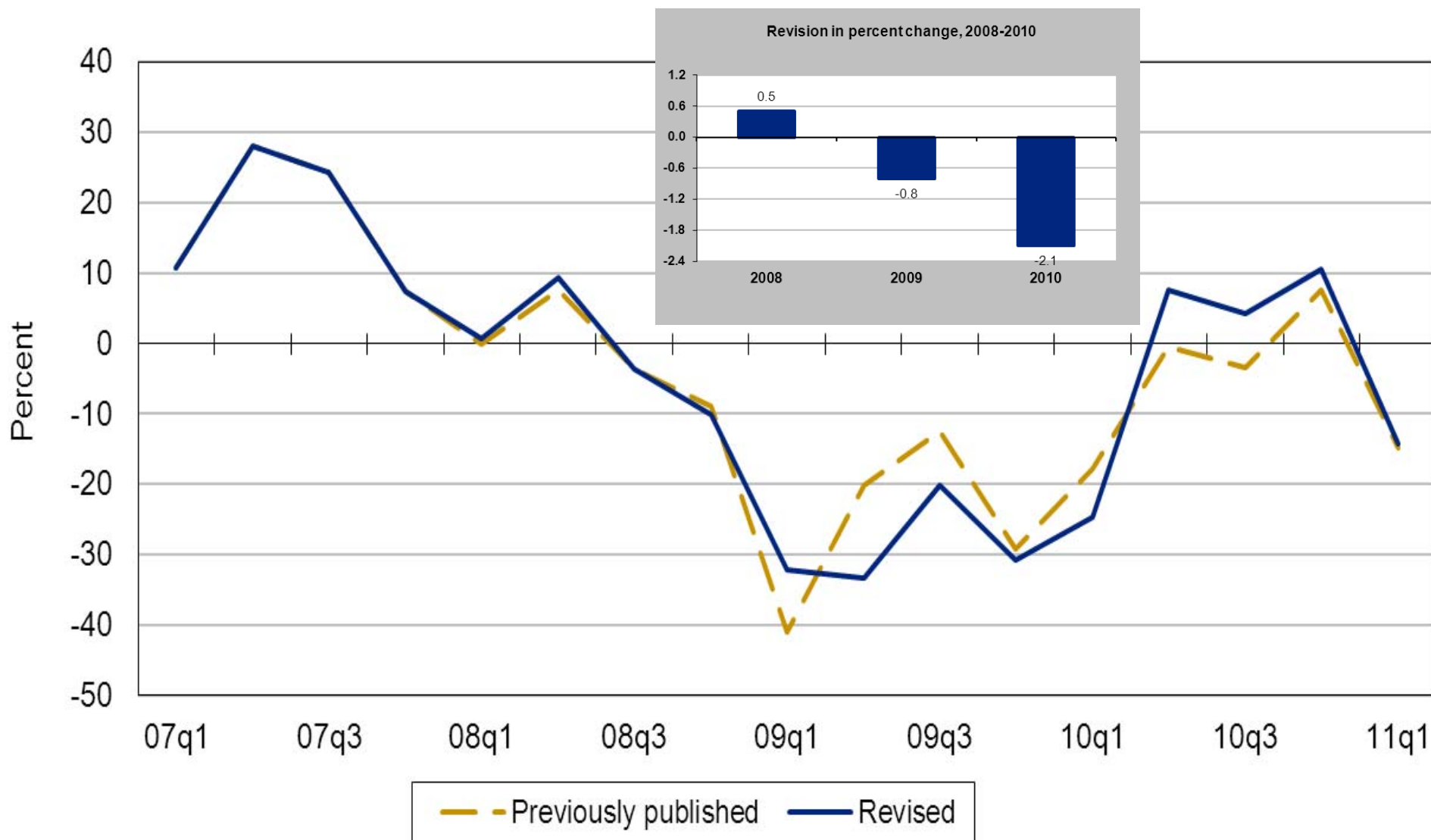
Real nonresidential fixed investment

[Percent change from preceding period, SAAR]



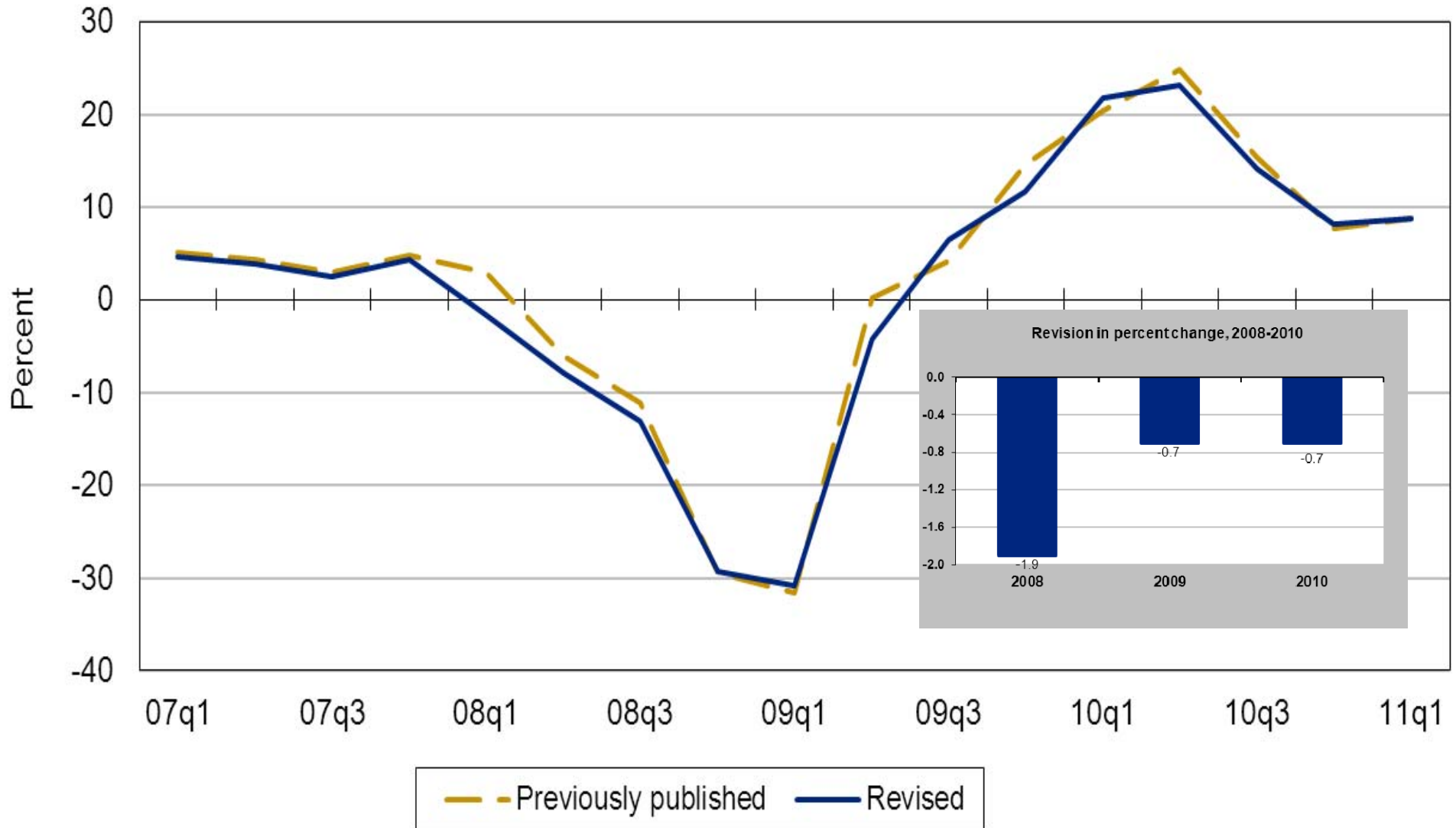
Real nonresidential structures

[Percent change from preceding period, SAAR]



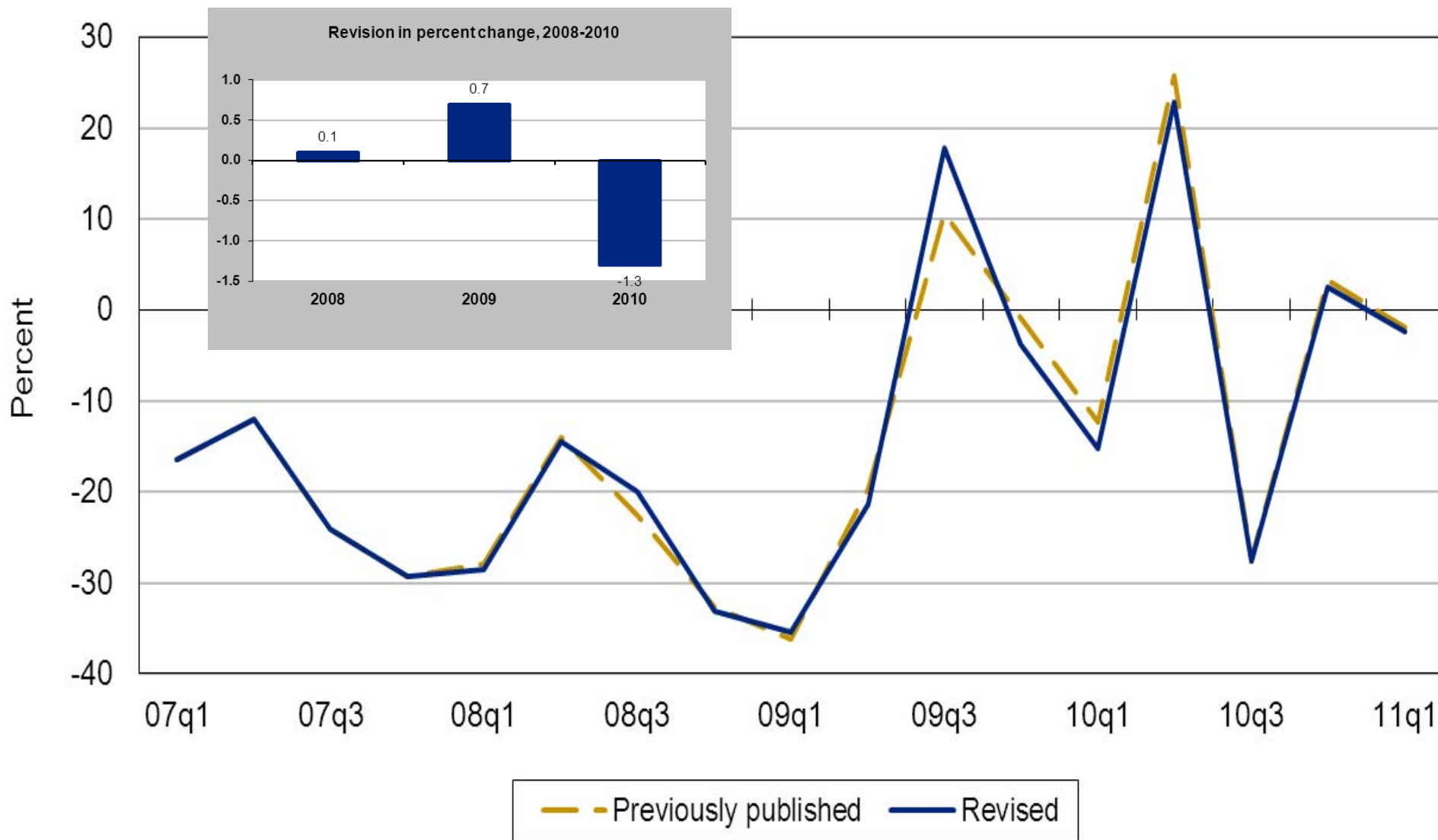
Real nonresidential equip. & software

[Percent change from preceding period, SAAR]



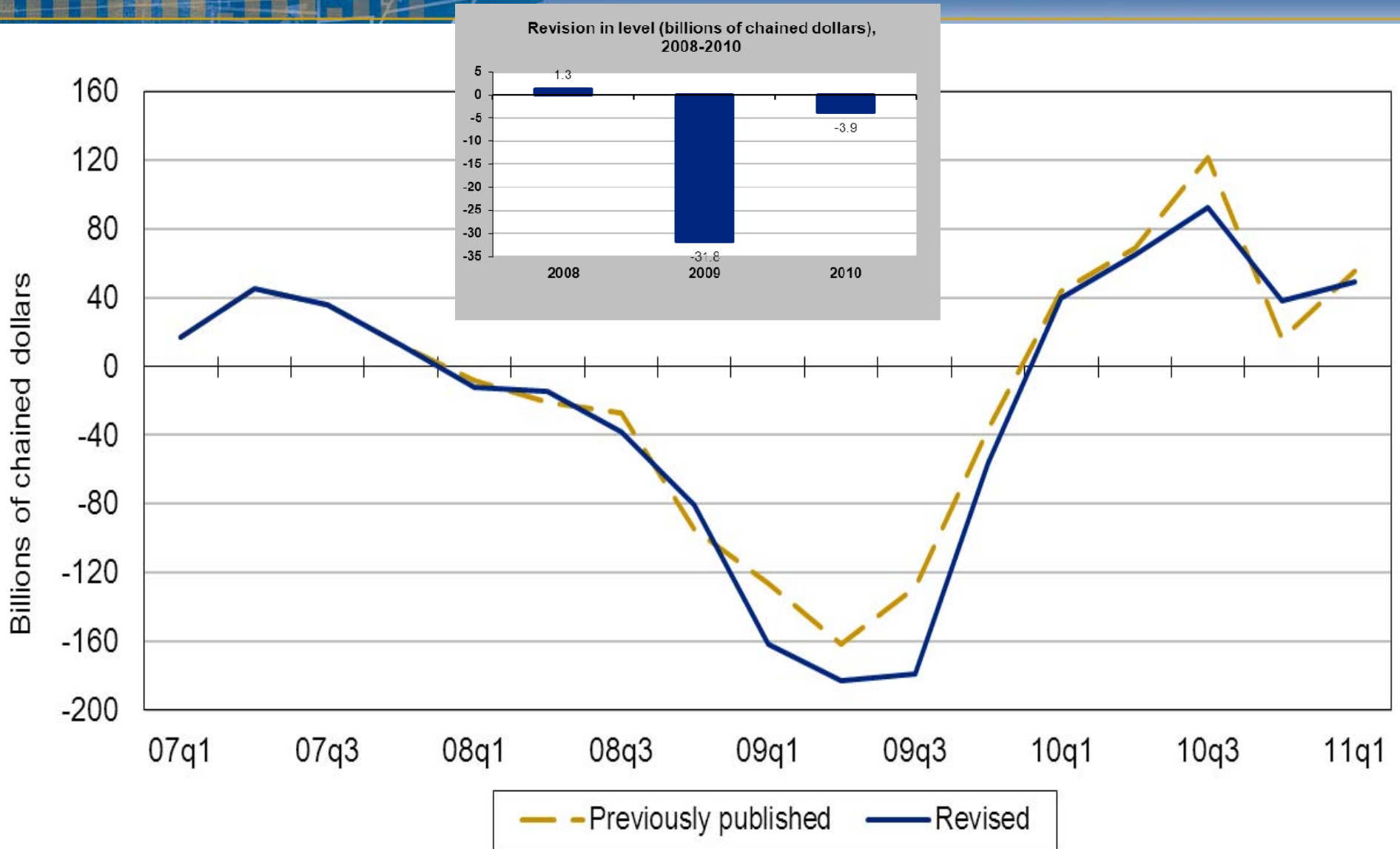
Real residential fixed investment

[Percent change from preceding period, SAAR]



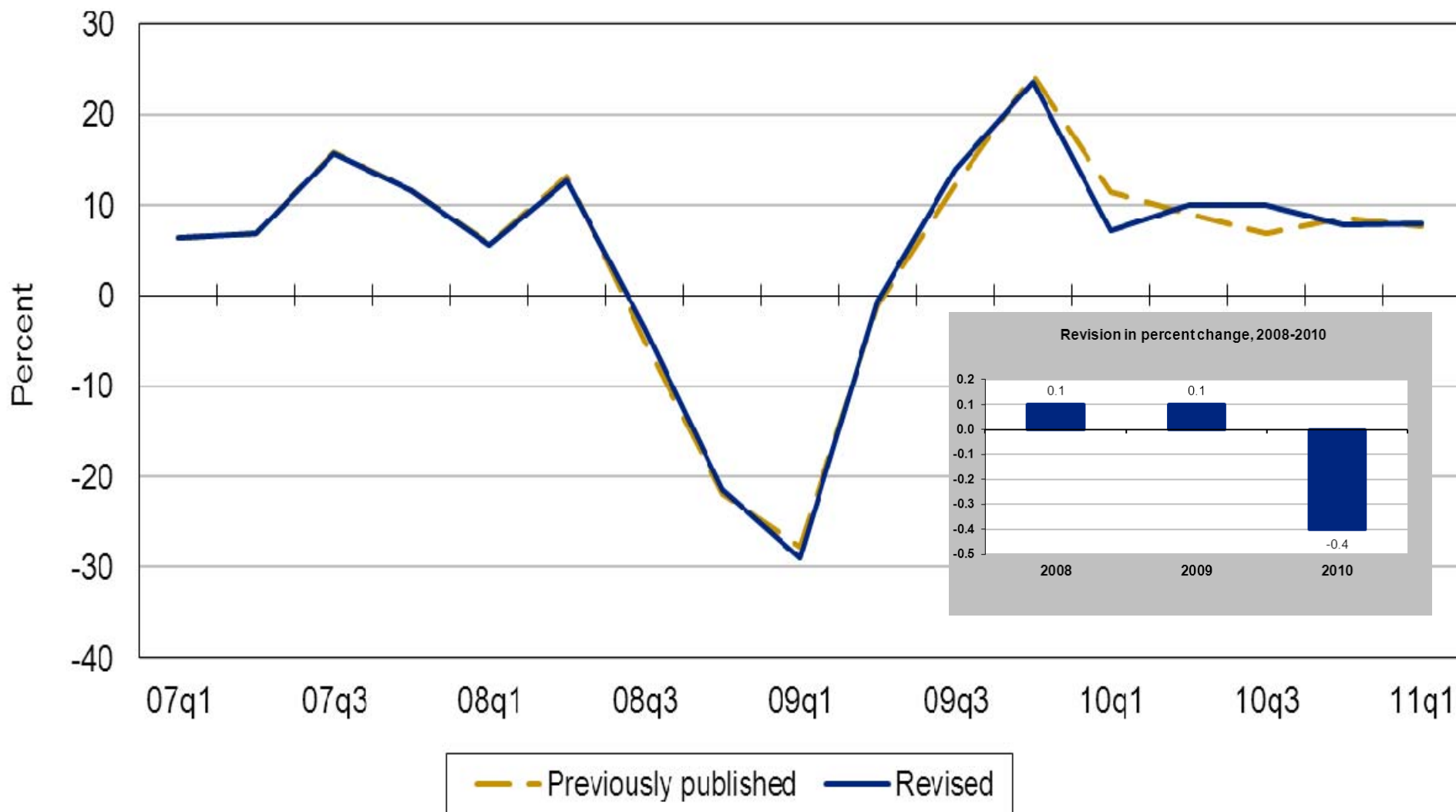
Real change in private inventories

[Billions of chained dollars, SAAR]



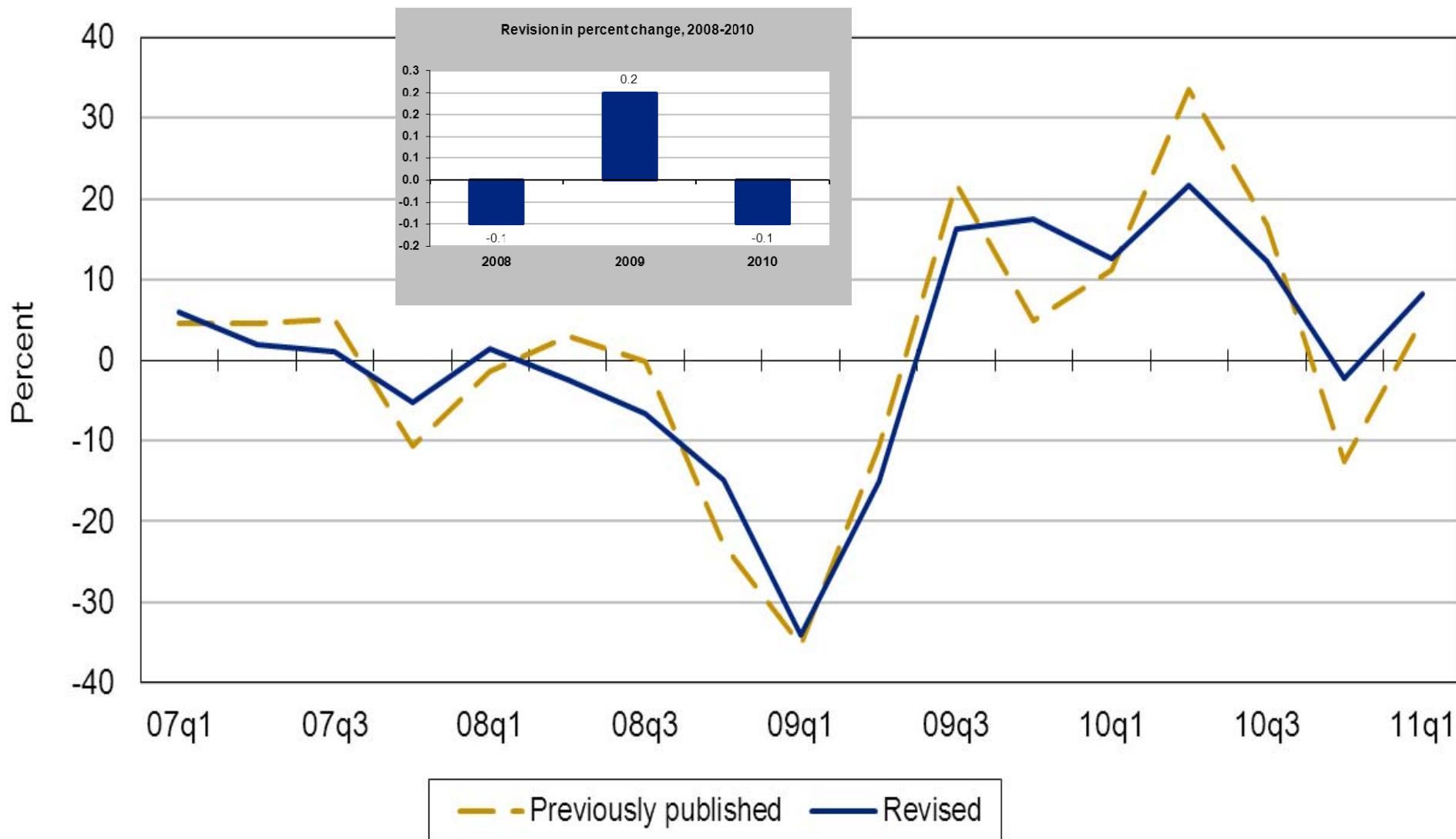
Real exports of goods and services

[Percent change from preceding period, SAAR]



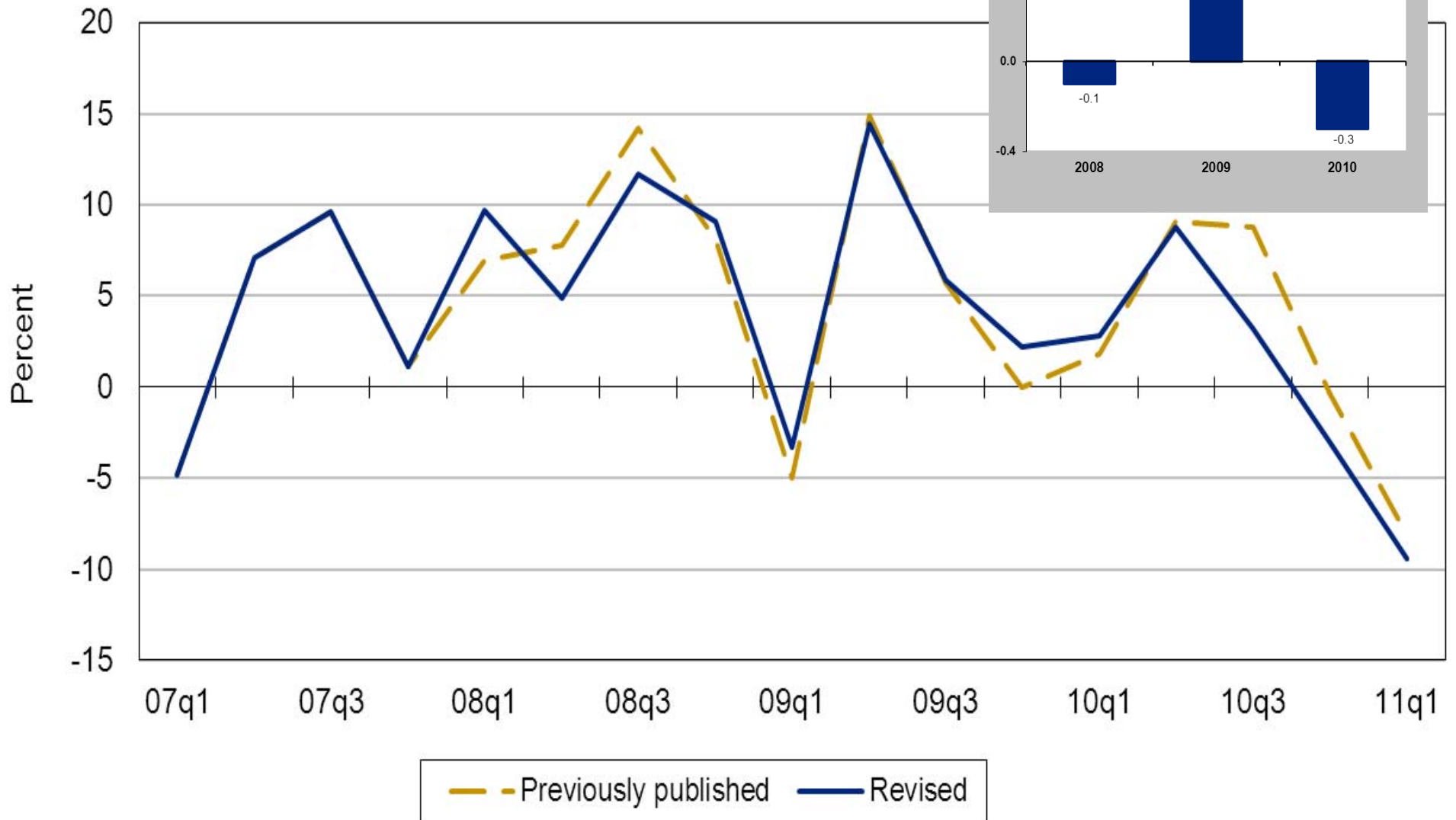
Real imports of goods and services

[Percent change from preceding period, SAAR]



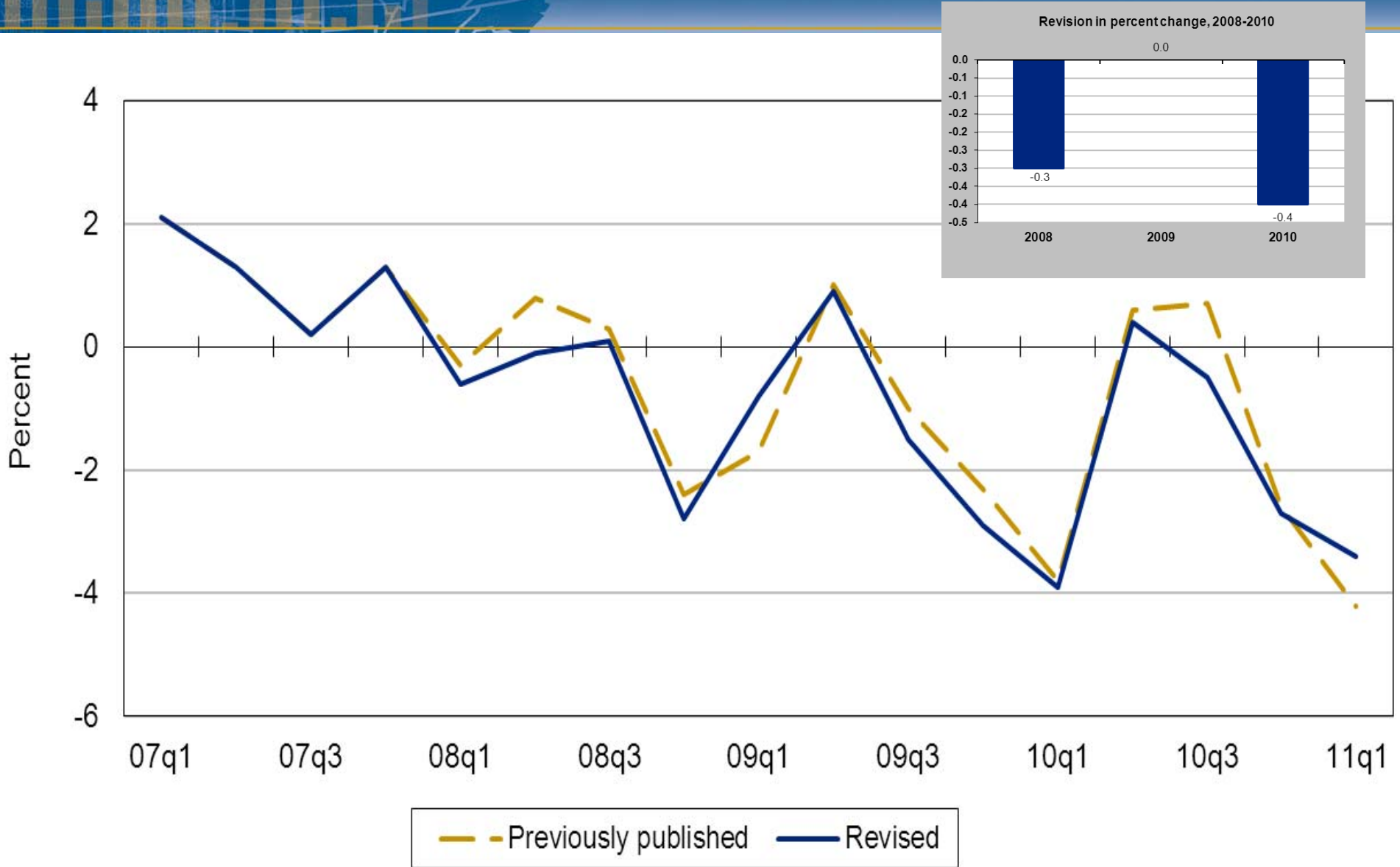
Real federal government spending

[Percent change from preceding period, SAAR]

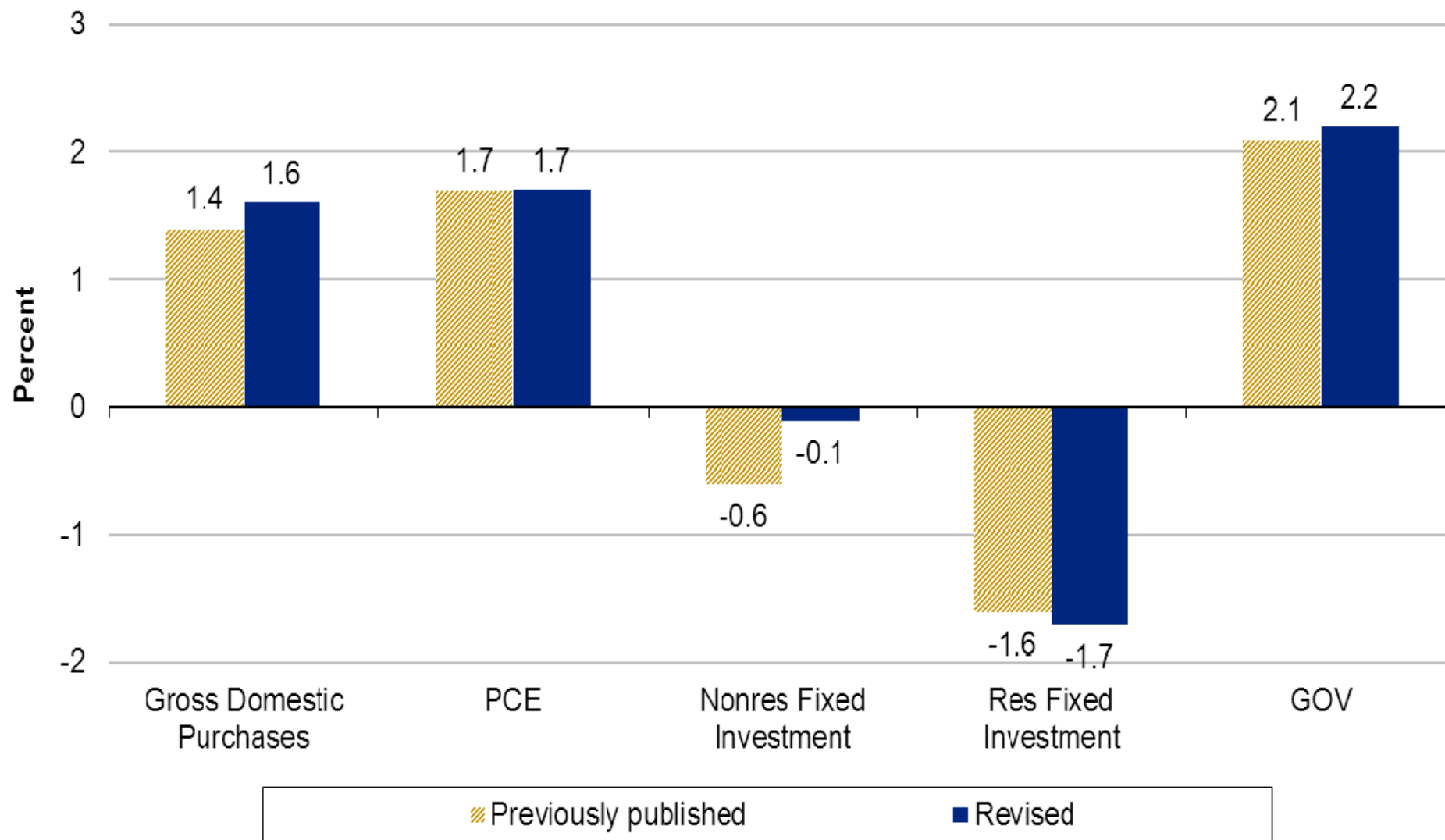


Real state and local government spending

[Percent change from preceding period, SAAR]

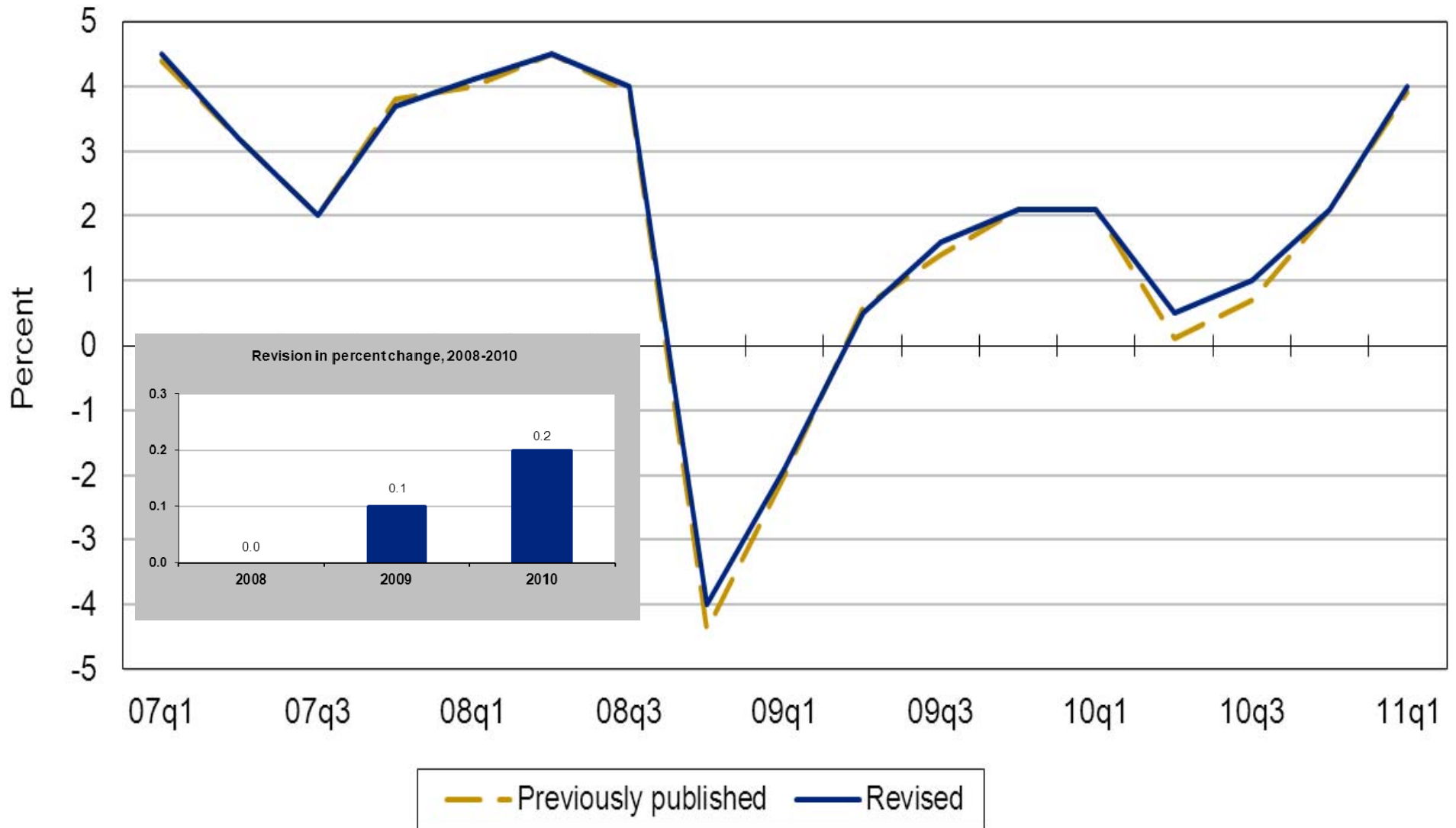


Average annual rates of change of the gross domestic purchases price index and its components, 2007 to 2010



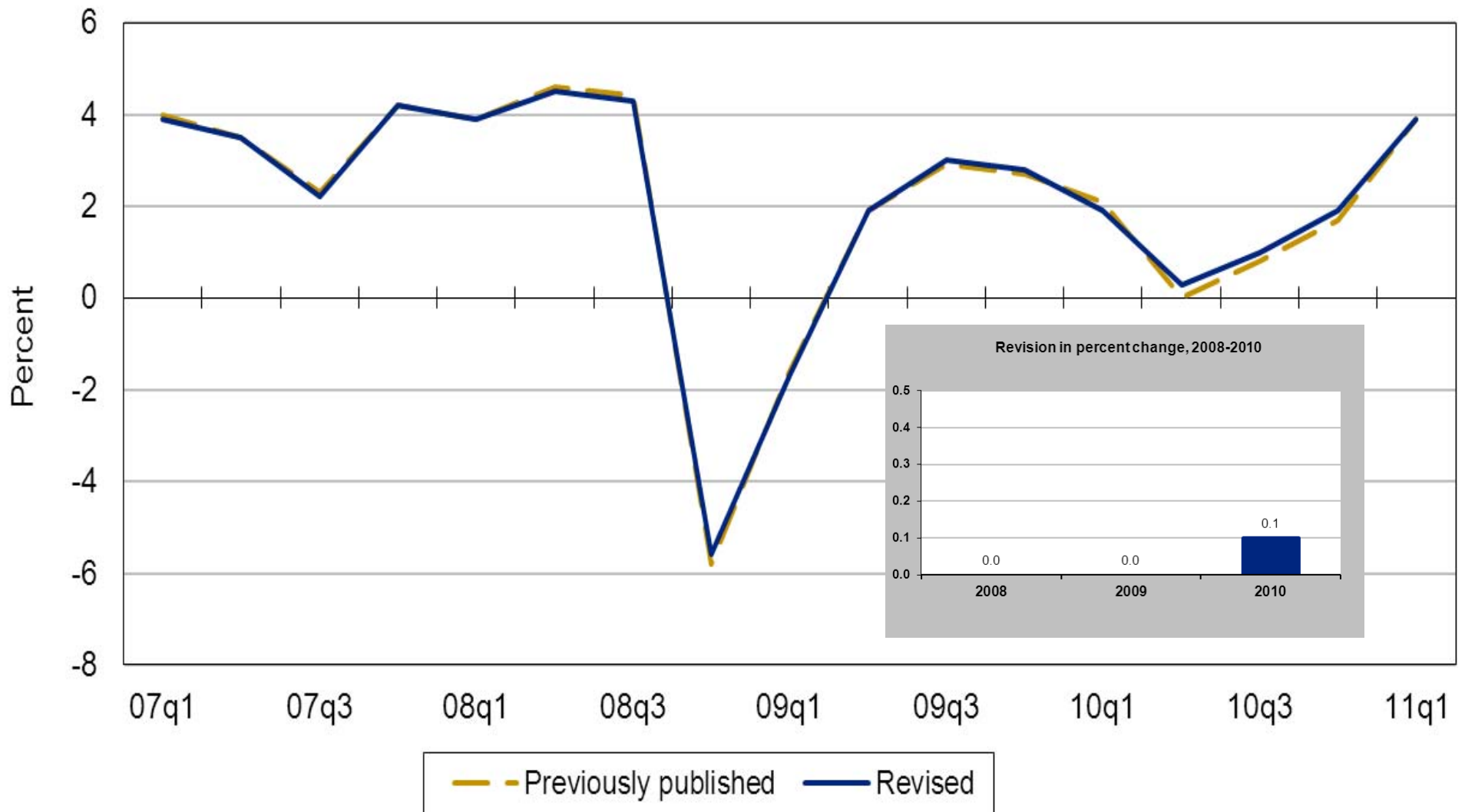
Price index for gross domestic purchases

[Percent change from preceding period, SAAR]



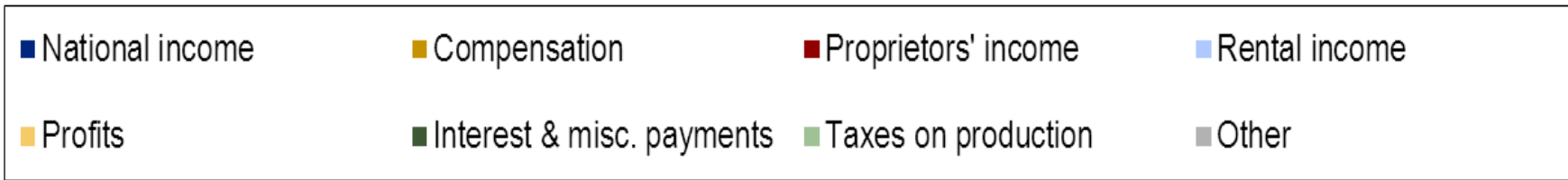
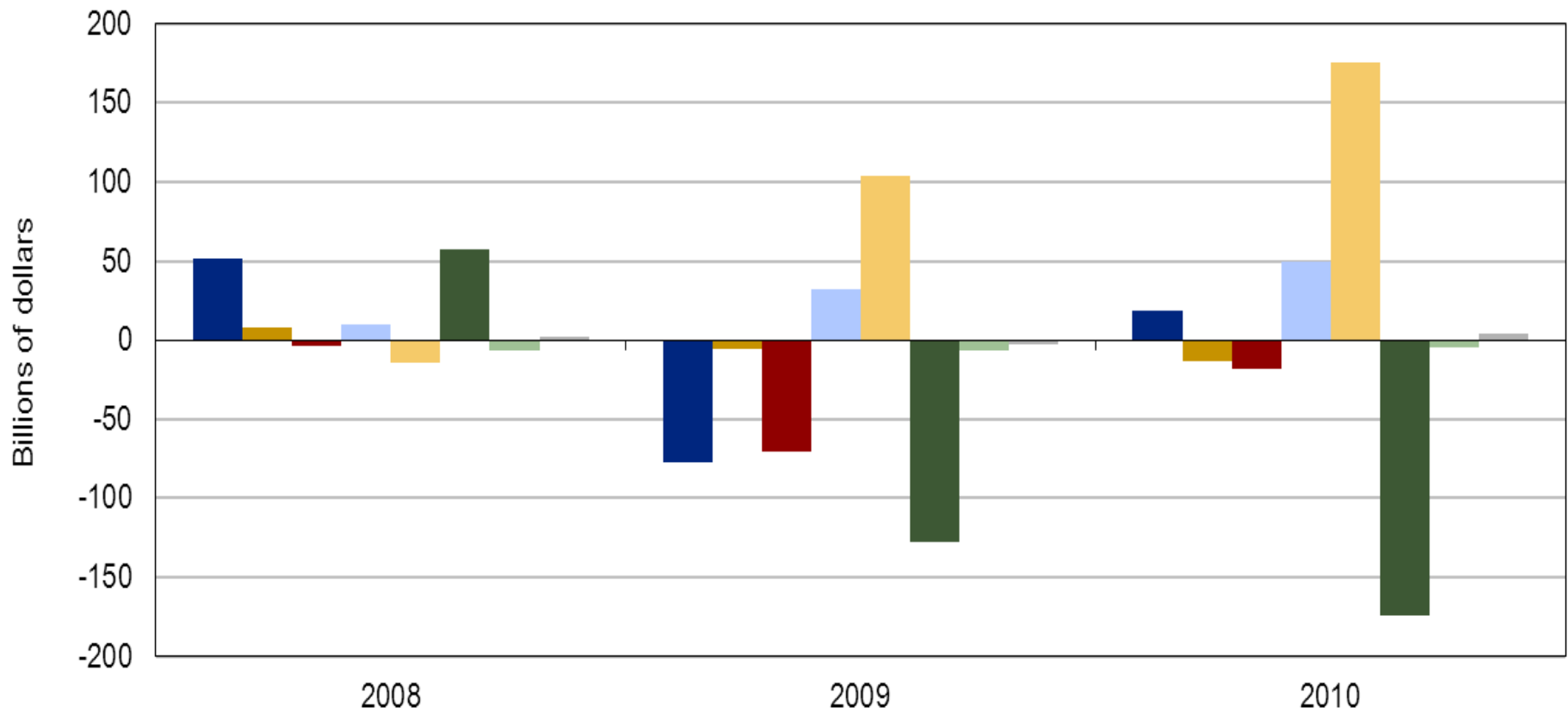
Price index for PCE

[Percent change from preceding period, SAAR]



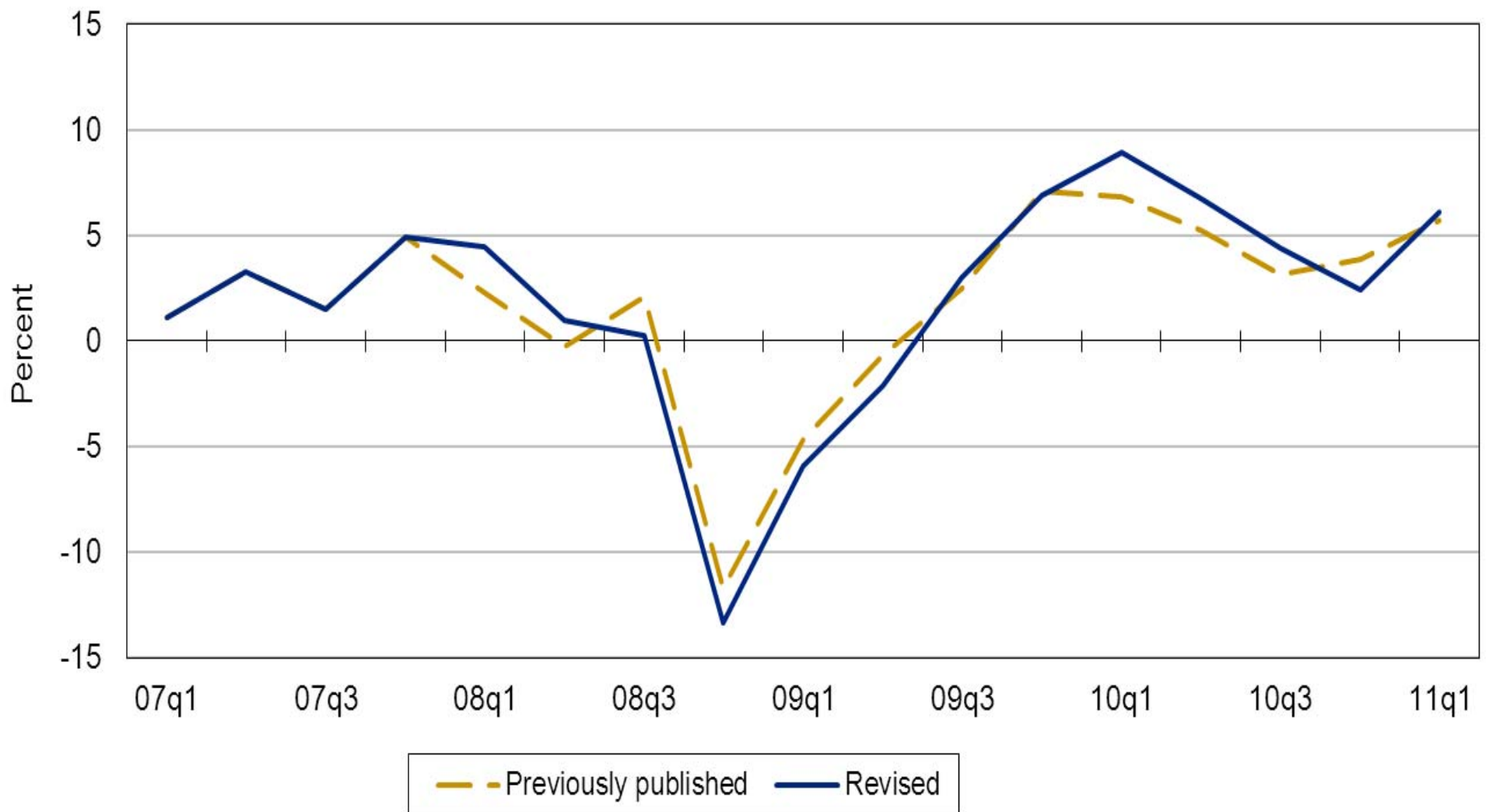
National income

[Revision in level]



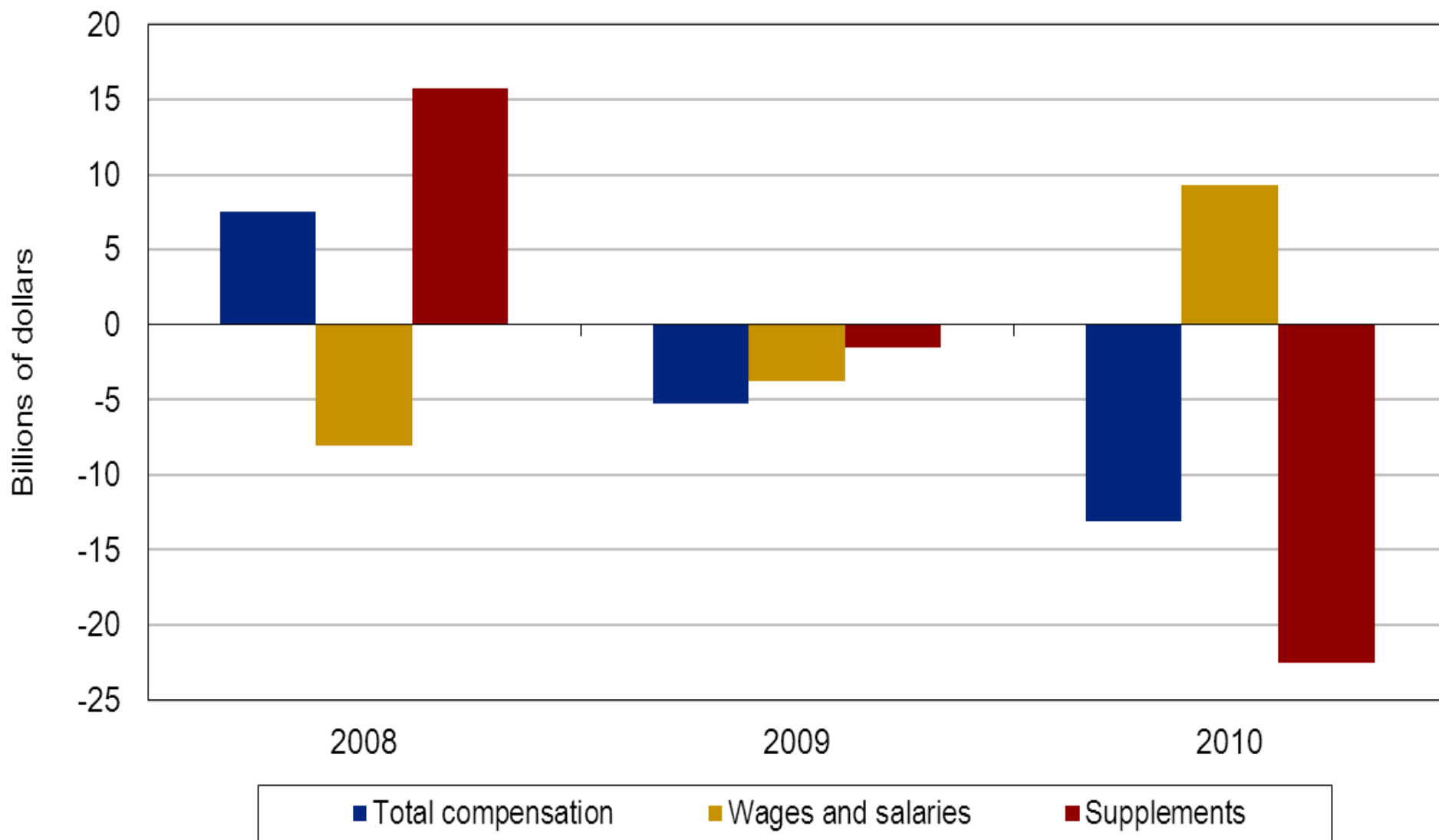
National income

[Percent change from preceding period, SAAR]



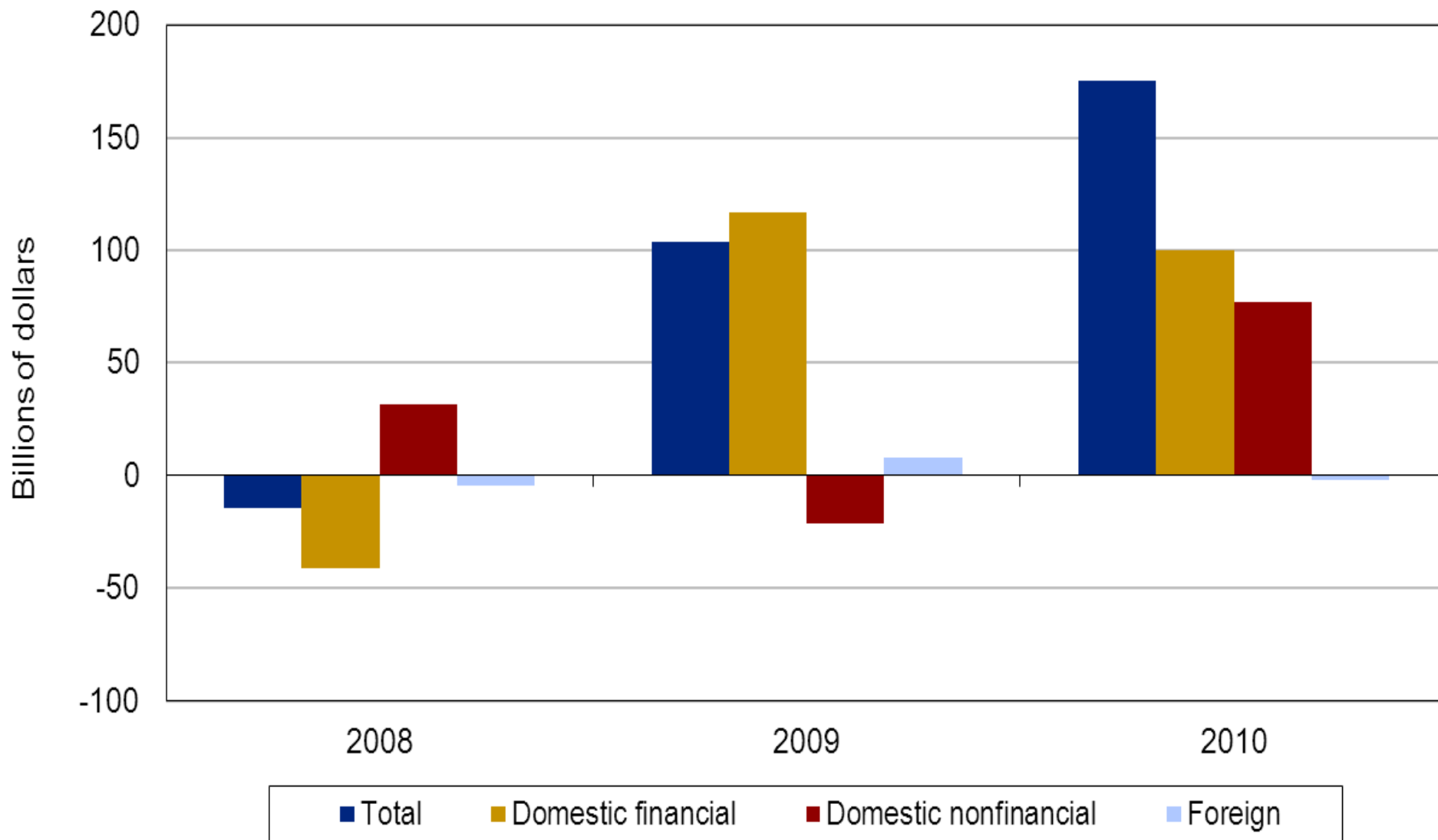
Compensation of employees

[Revision in level]



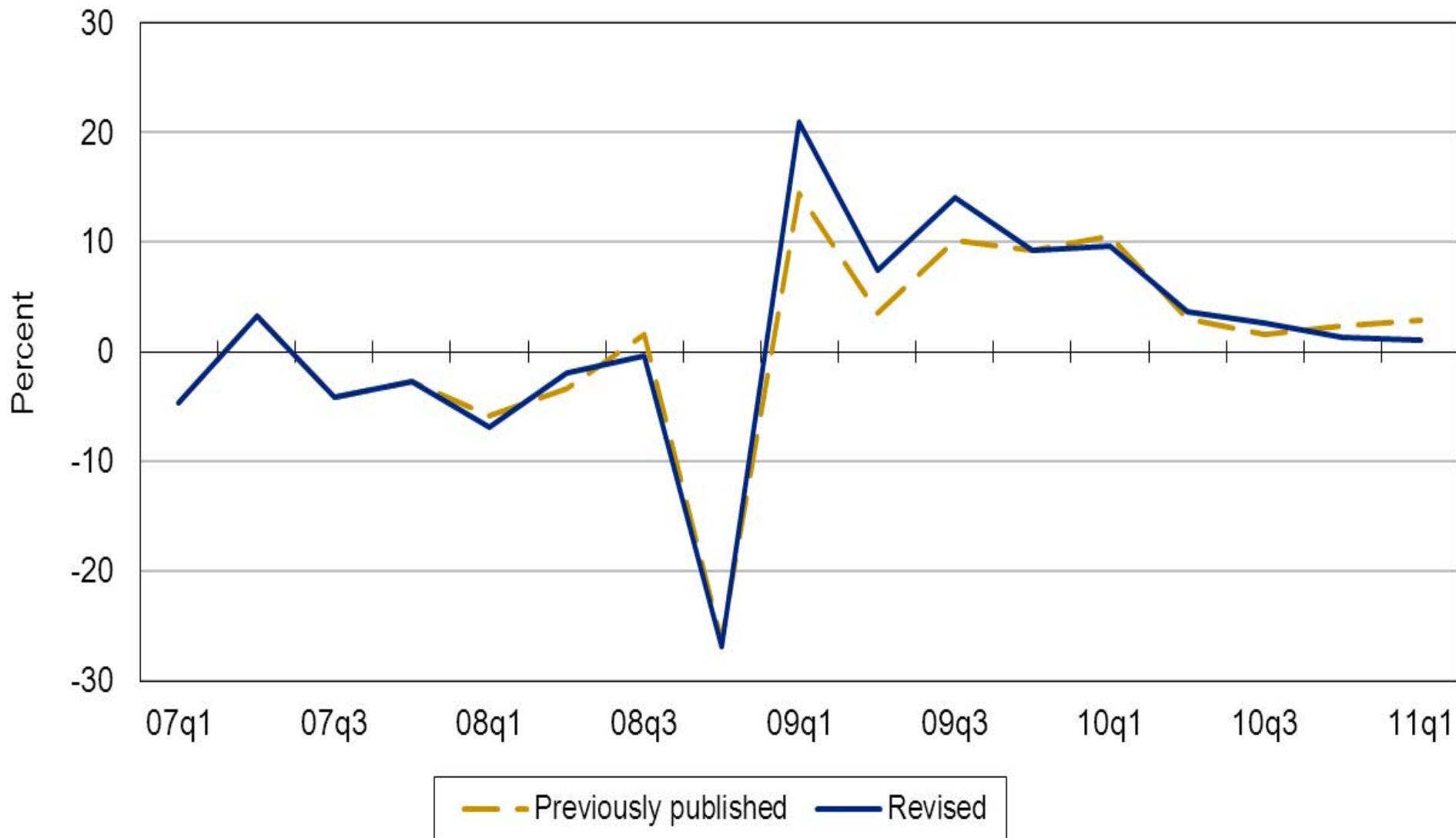
Corporate profits from current production

[Revision in level]



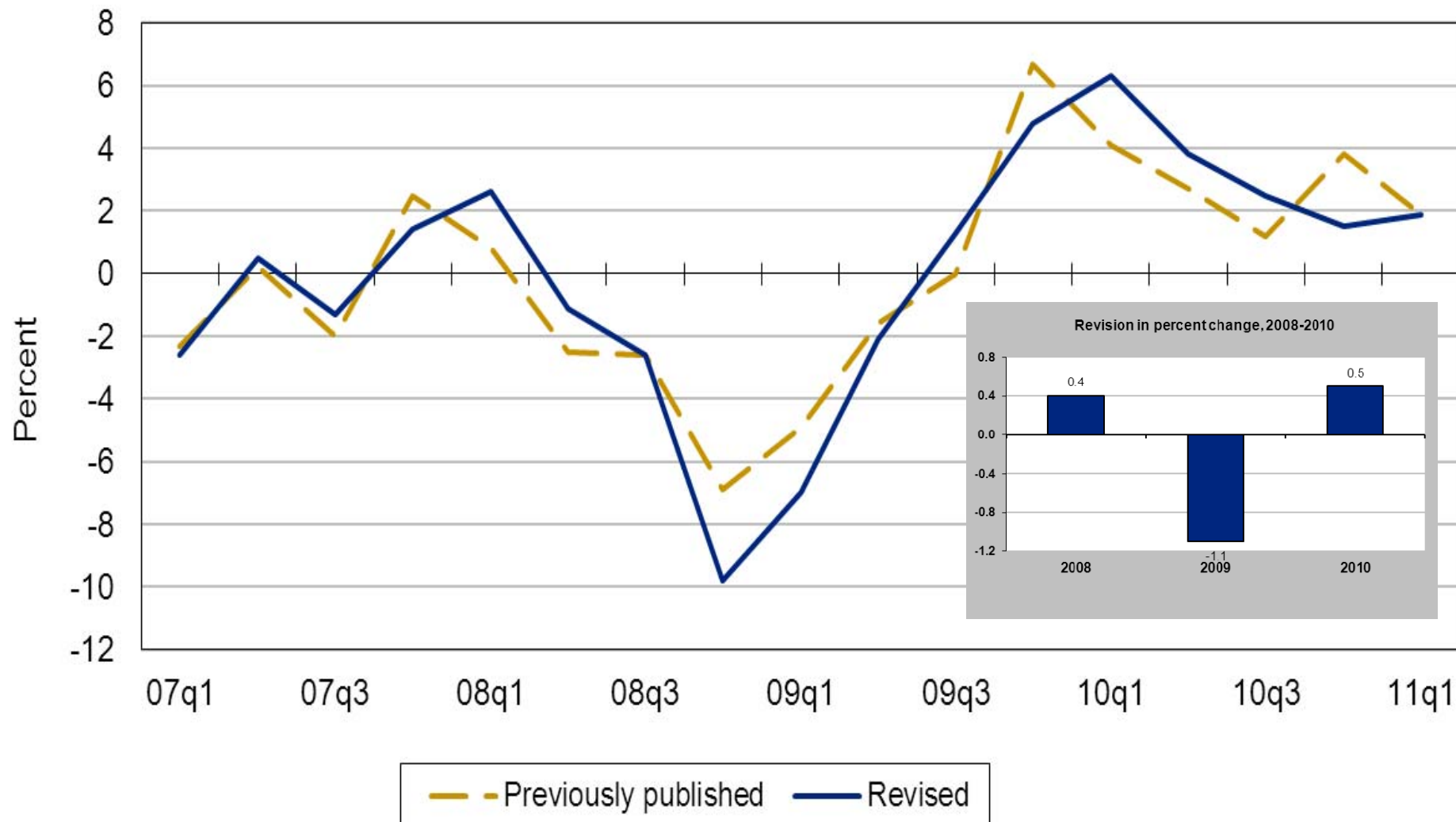
Corporate profits from current production

[Percent change from preceding period, quarterly rate]



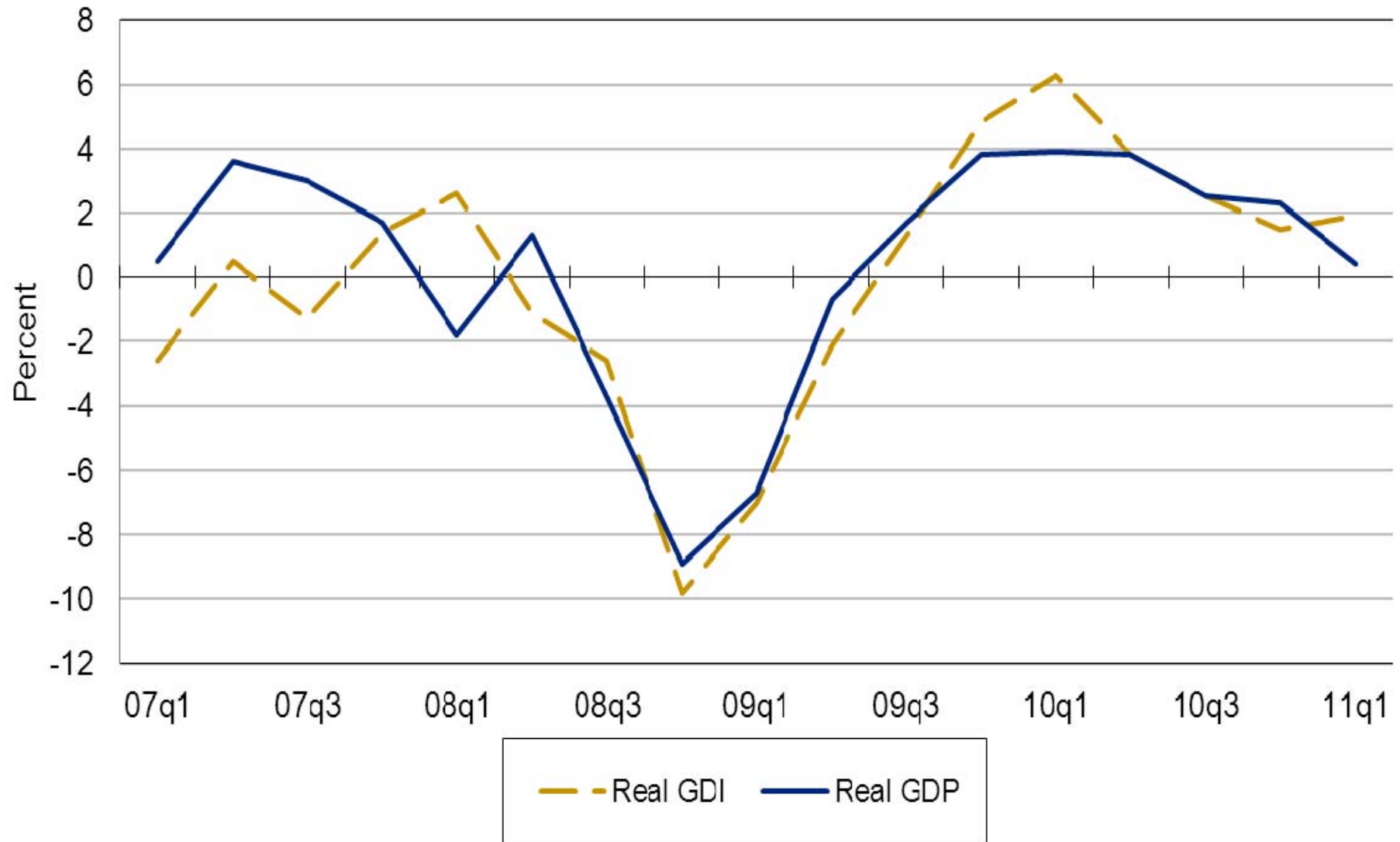
Real gross domestic income

[Percent change from preceding period, SAAR]

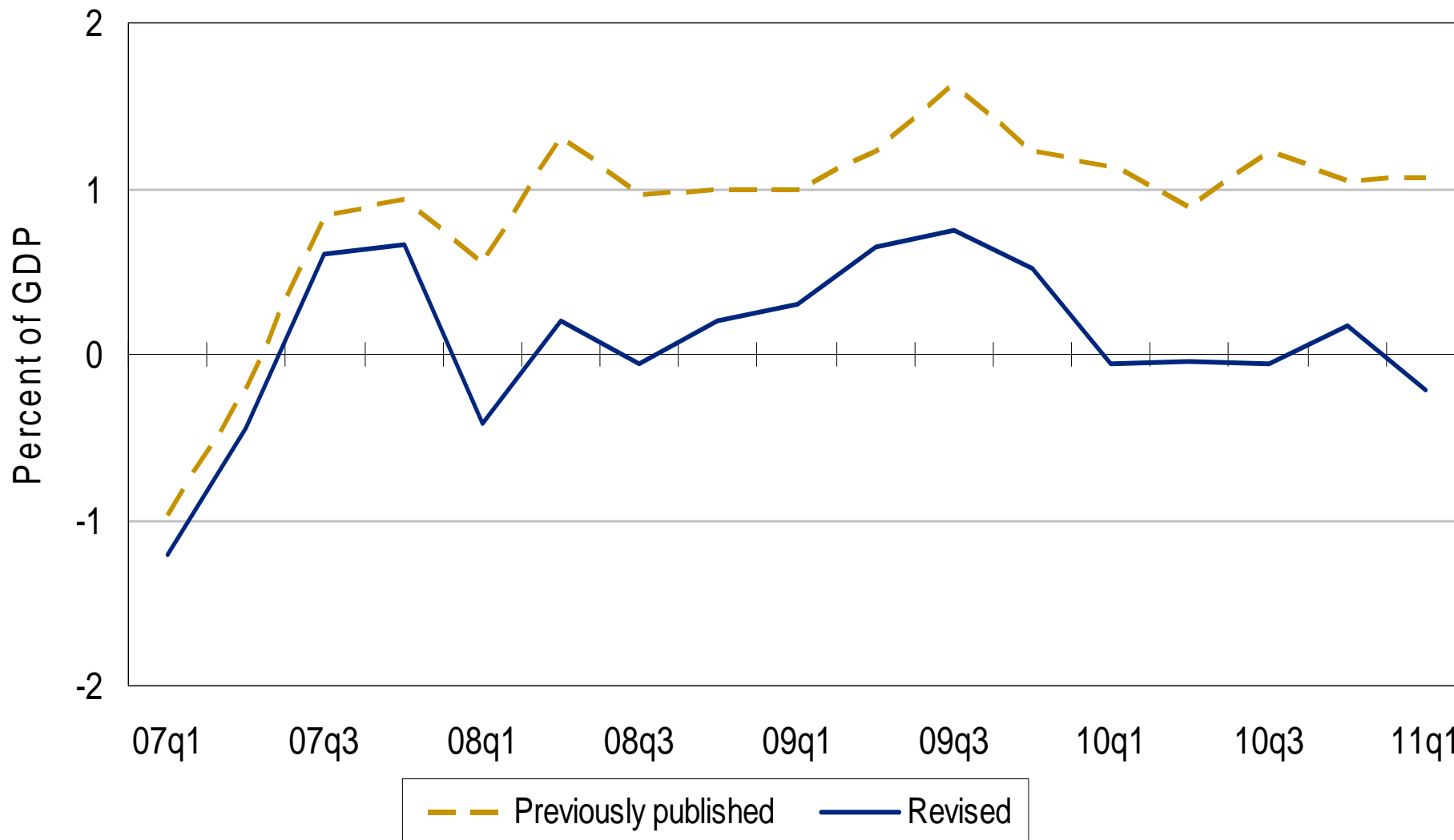


Real GDI and Real GDP

[Percent change from preceding period, SAAR]

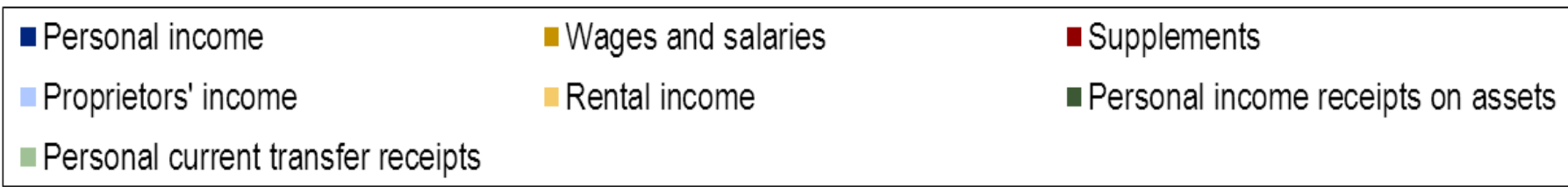
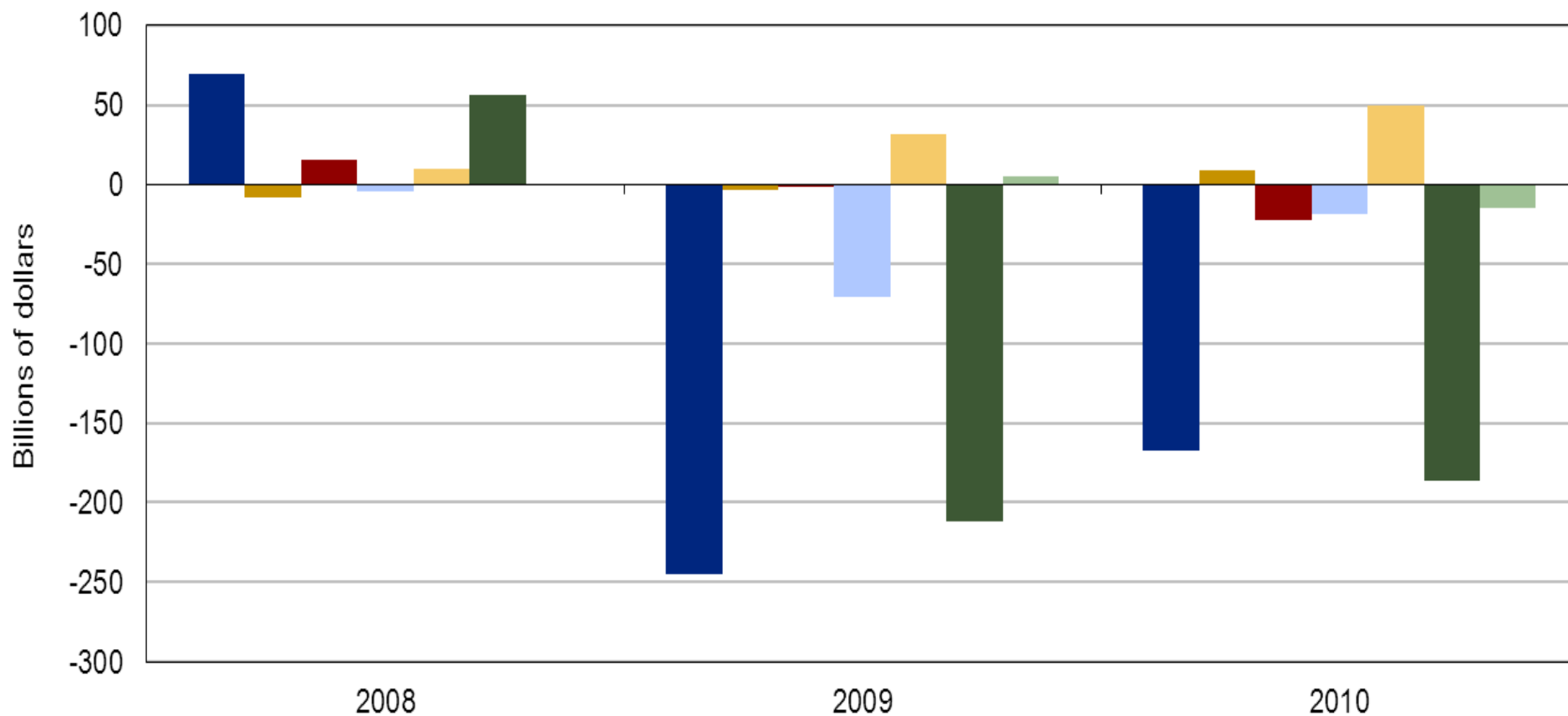


Statistical discrepancy as % of GDP



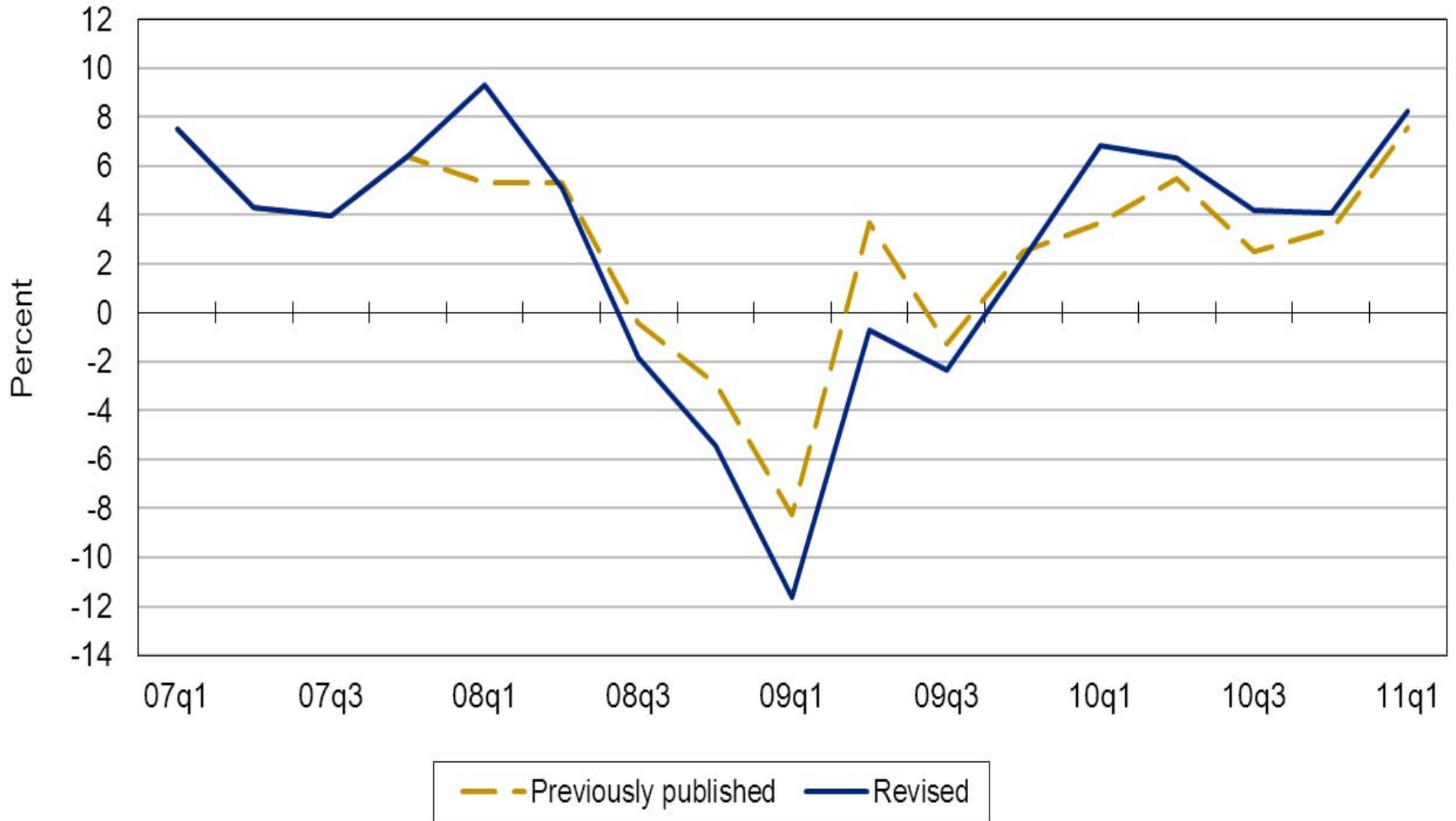
Personal income and its components

[Revision in level]



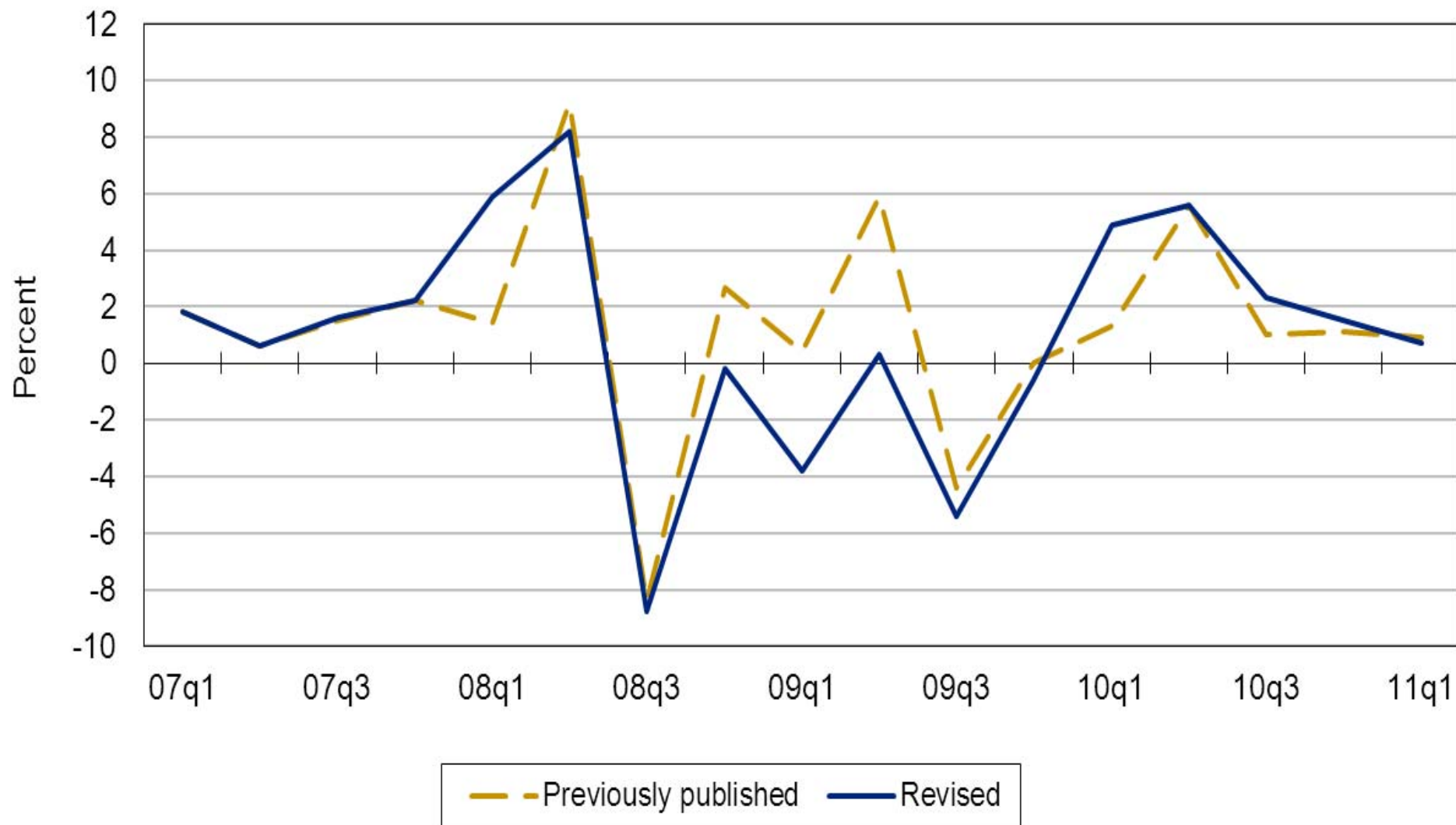
Personal income

[Percent change from preceding period, SAAR]

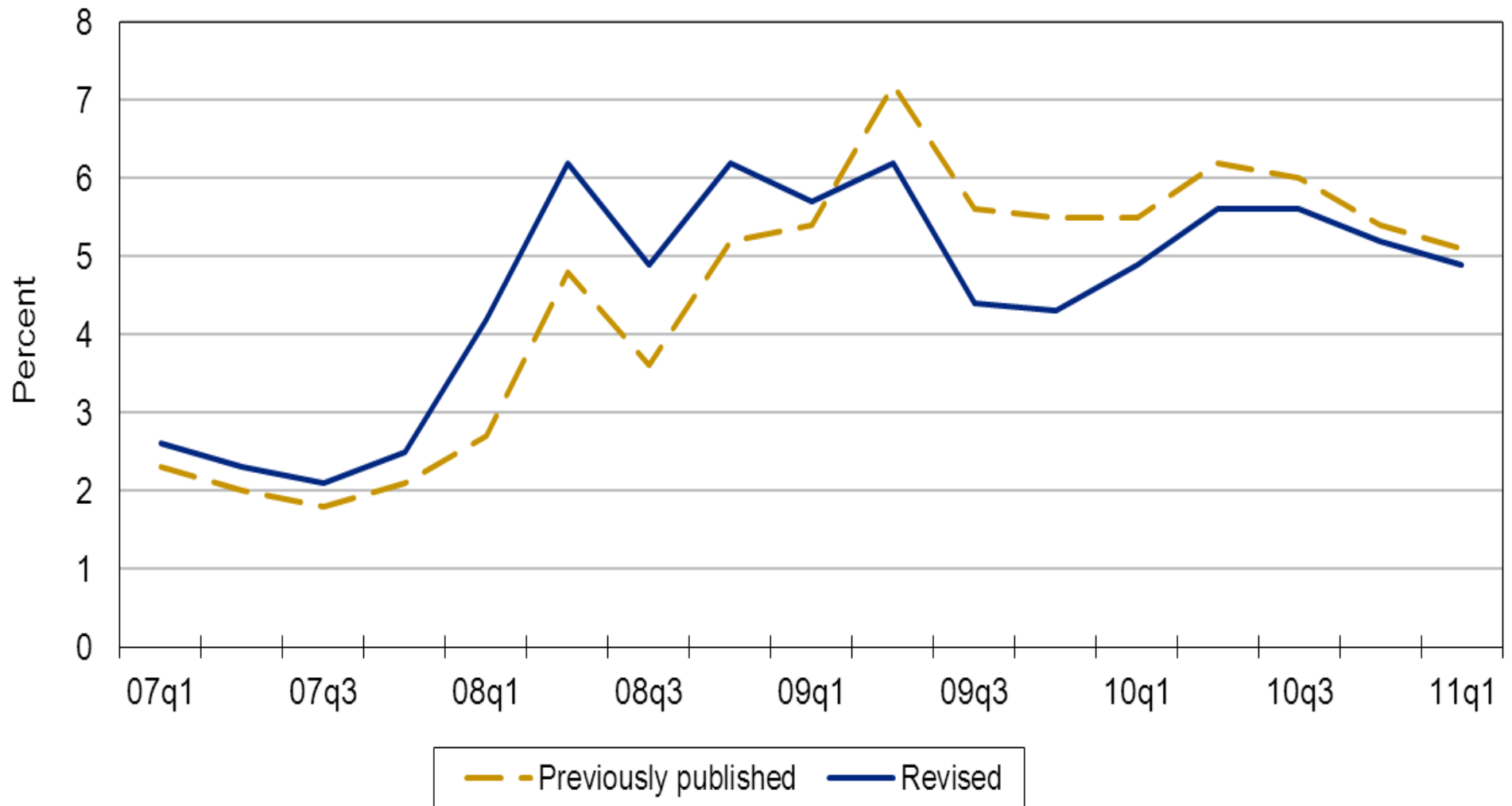


Real disposable personal income (DPI)

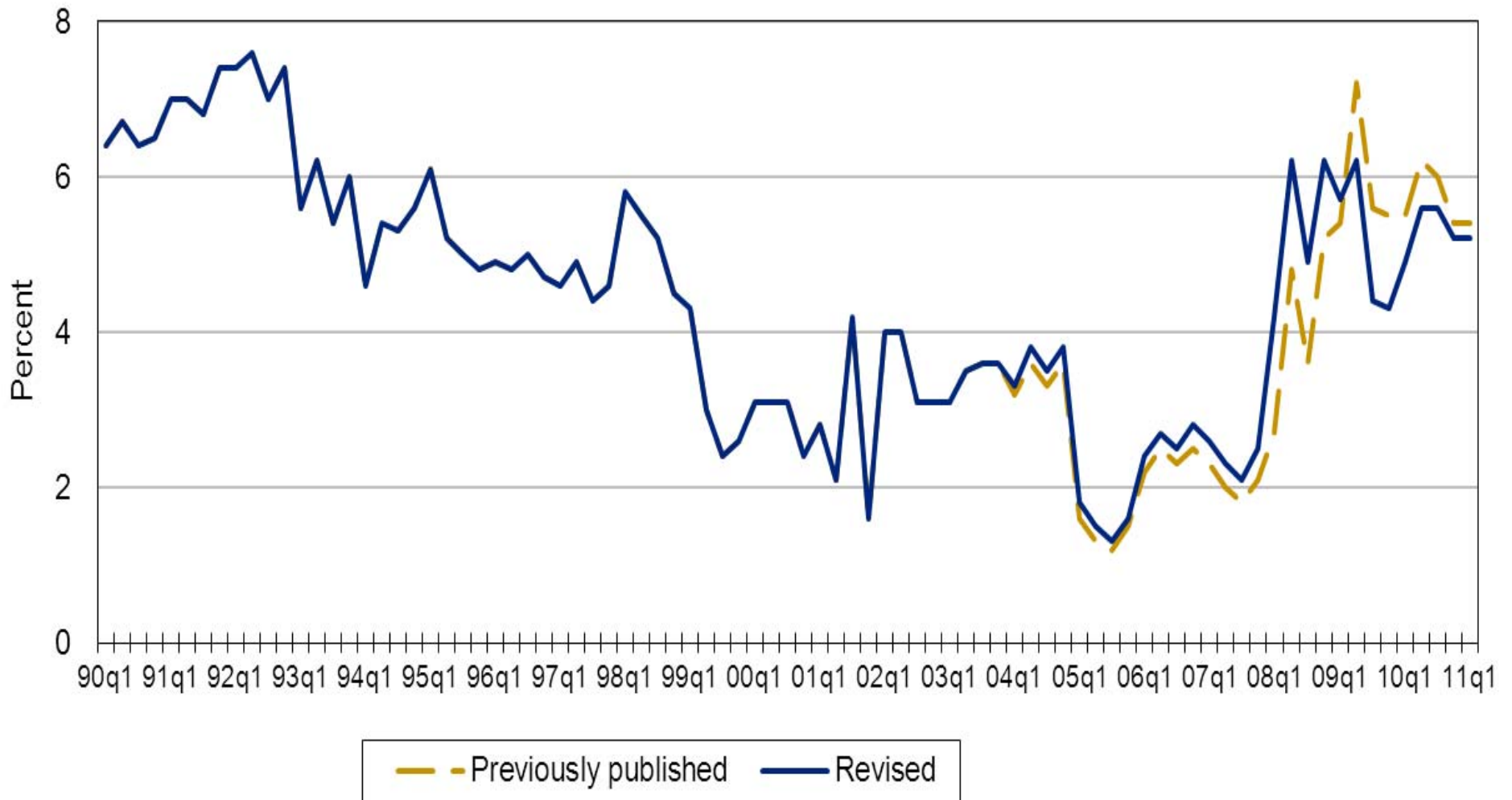
[Percent change from preceding period, SAAR]



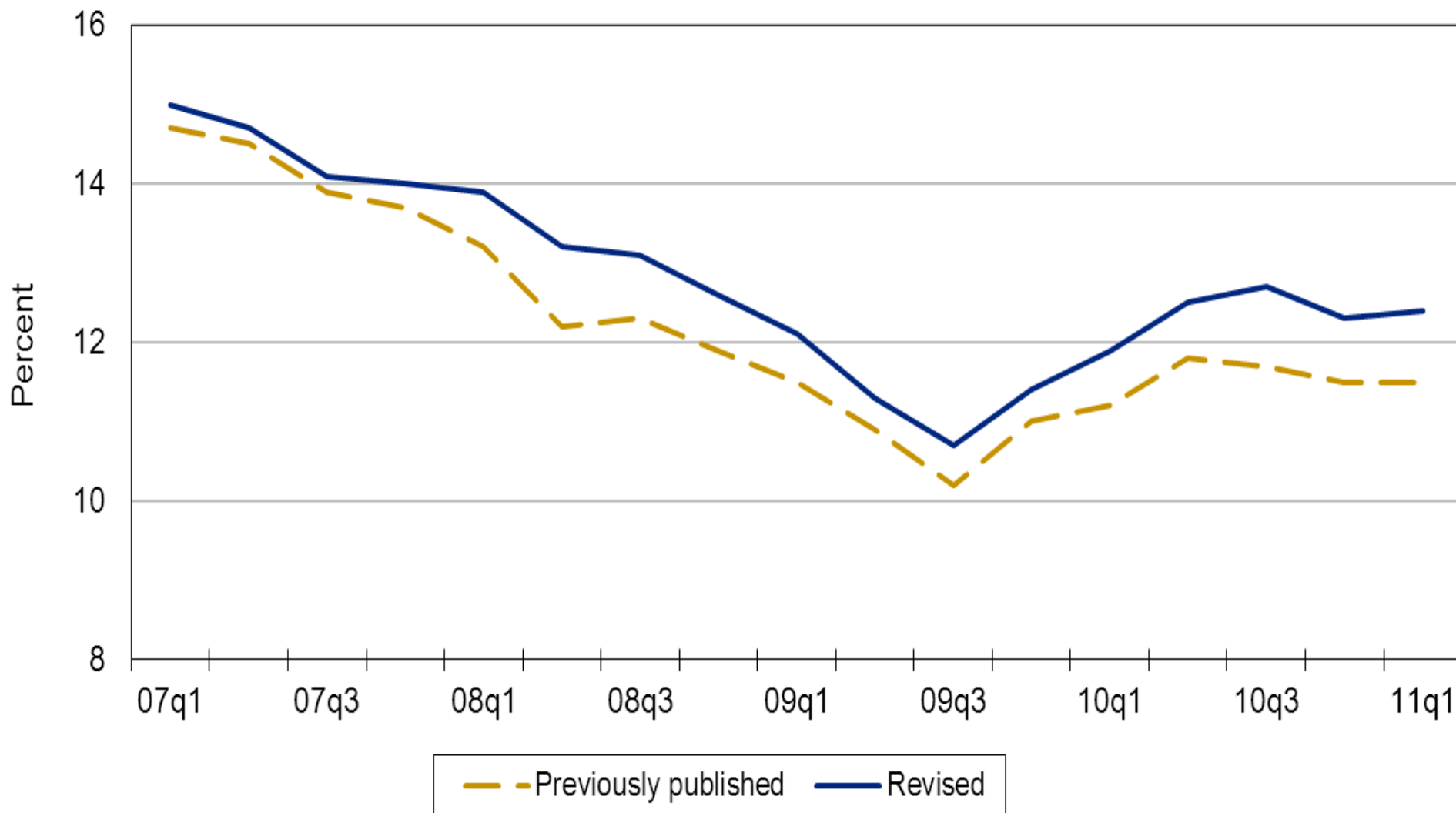
Personal saving as a percentage of DPI



Personal saving as a percentage of DPI

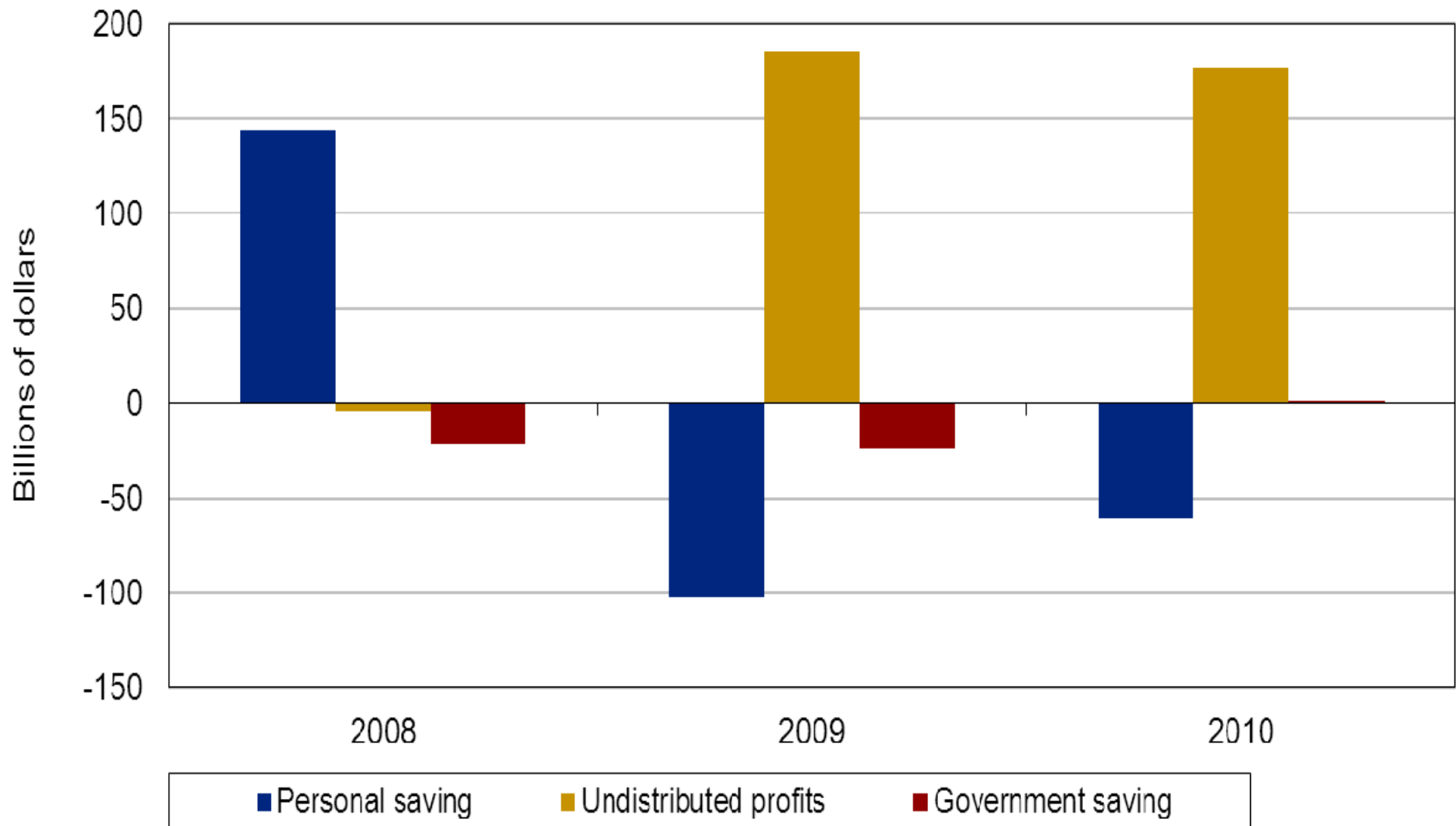


Gross (national) saving as a percentage of gross national income



Selected components of national saving

[Revision in level]



PCE: Incorporation of revised ARTS and SAS

- Revised back to 2003.
- Census Bureau annual retail trade survey (ARTS) and service annual survey (SAS) have been benchmarked to the 2007 Economic Census.

PCE: New merchandise-line data

- Revised back to 2003.
- New merchandise-line (M-L) data from 2007 Economic Census captures changing patterns of consumer spending.

Comparison of PCE commodities using new M-L indicators [Change from 2002-2007]

	Previously published	Revised
Dishes & glassware	+20%	-14%
Software (inc. downloads)	+50%	+254%
Newspapers & magazines	+30%	-4%

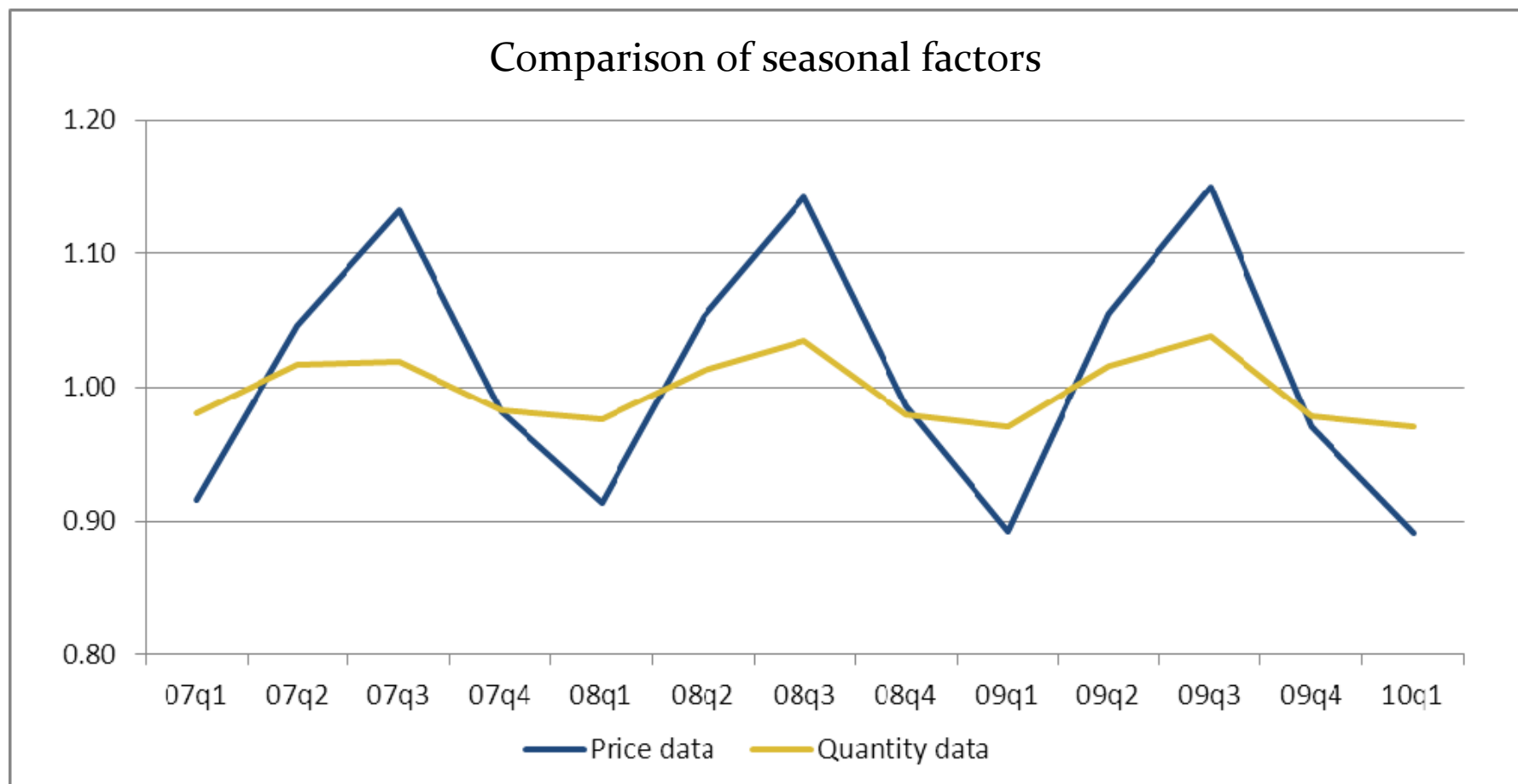


PCE: Additional improvements

- Medical and hospitalization insurance services.
 - Incorporation of annual AM Best data.
 - Allows for more frequent updates to the estimates.
- Retail control.
 - Removal of food services.
 - Improves the allocation of industry sales to PCE commodities.

Imports of petroleum: New seasonal adjustment

- Revised back to 2007.
- Direct seasonal adjustment of quantity data.





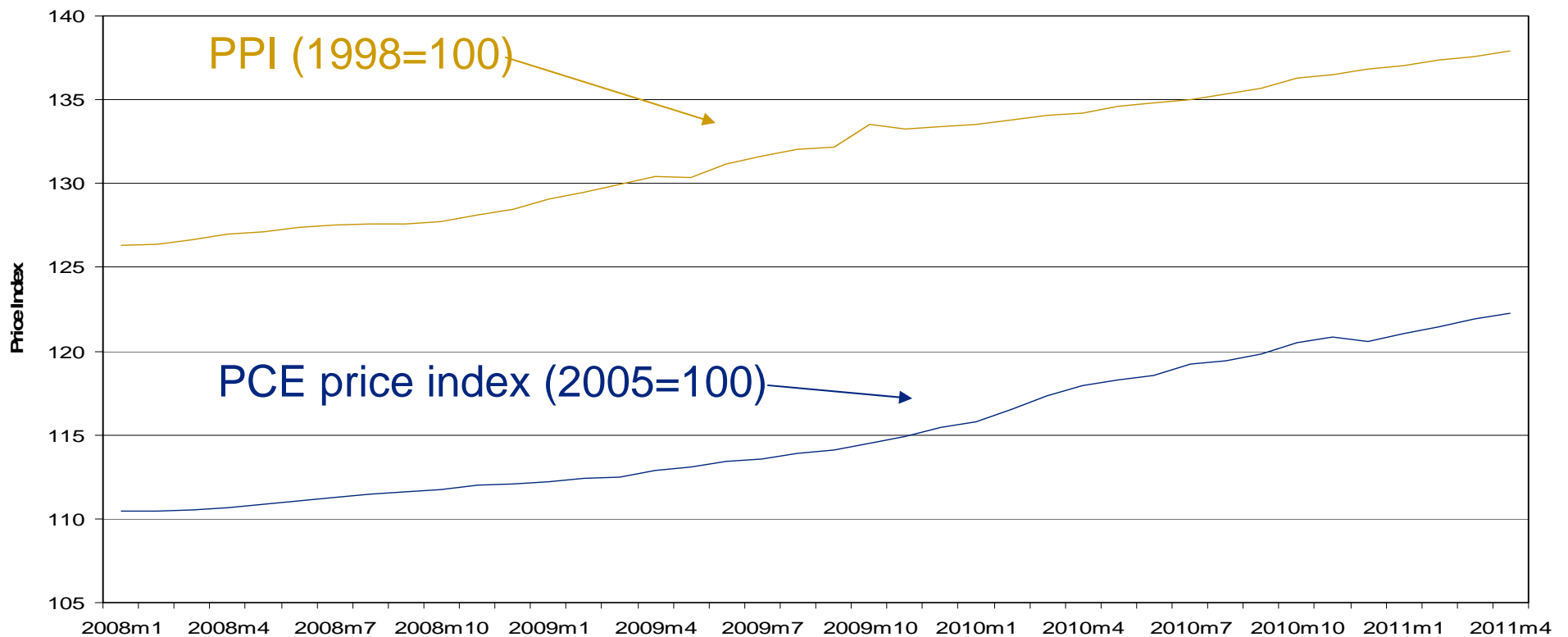
Communication equipment: Updated prices

- Impacts private fixed investment, exports, and imports of communication equipment.
- Revised back to 2003.
- Incorporate quality-adjusted Federal Reserve Board price indexes for several types of communication equipment.

PCE: Improved P&C insurance prices

- Revised back to 2008.
- New deflators based on BLS PPIs.

Price indexes for motor vehicle insurance, 2008-2011





PCE: Expanded use of QSS data

- PCE for portfolio management and investment advice services.
 - Begins with the first quarter of 2011.
 - Based on Census quarterly services survey (QSS) data on “other financial investment activities.”



Mortgage Interest Paid: Improved Methodology

- Incorporation of up-to-date monthly mortgage servicing data on actual loans
- More accurate picture of loan performance in the mortgage market
- Improved estimates of rental income of persons
- Also reflected in estimates of net interest and personal interest income
- Revised back to 2008

Government social benefits: Updated presentation

- New presentation will focus on the largest and most significant programs.

Current presentation	New presentation
Social benefits to persons	Social benefits to persons
OASDHI	Social security
Unemployment insurance	Medicare
Veterans benefits	Medicaid
Family assistance	Unemployment insurance
Other	Veterans benefits
	Other

- Affects NIPA tables 2.1, 2.6, 3.12, and some personal income and outlays news release tables.

Results of the 2011 Flexible Annual Revision of the National Income and Product Accounts

Brent R. Moulton

Associate Director for National Economic Accounts

Bureau of Economic Analysis

July 29, 2011