

Source Data Acceleration & Impacts on GDP



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BEA Advisory Committee Meeting
Washington, DC
November 18, 2016

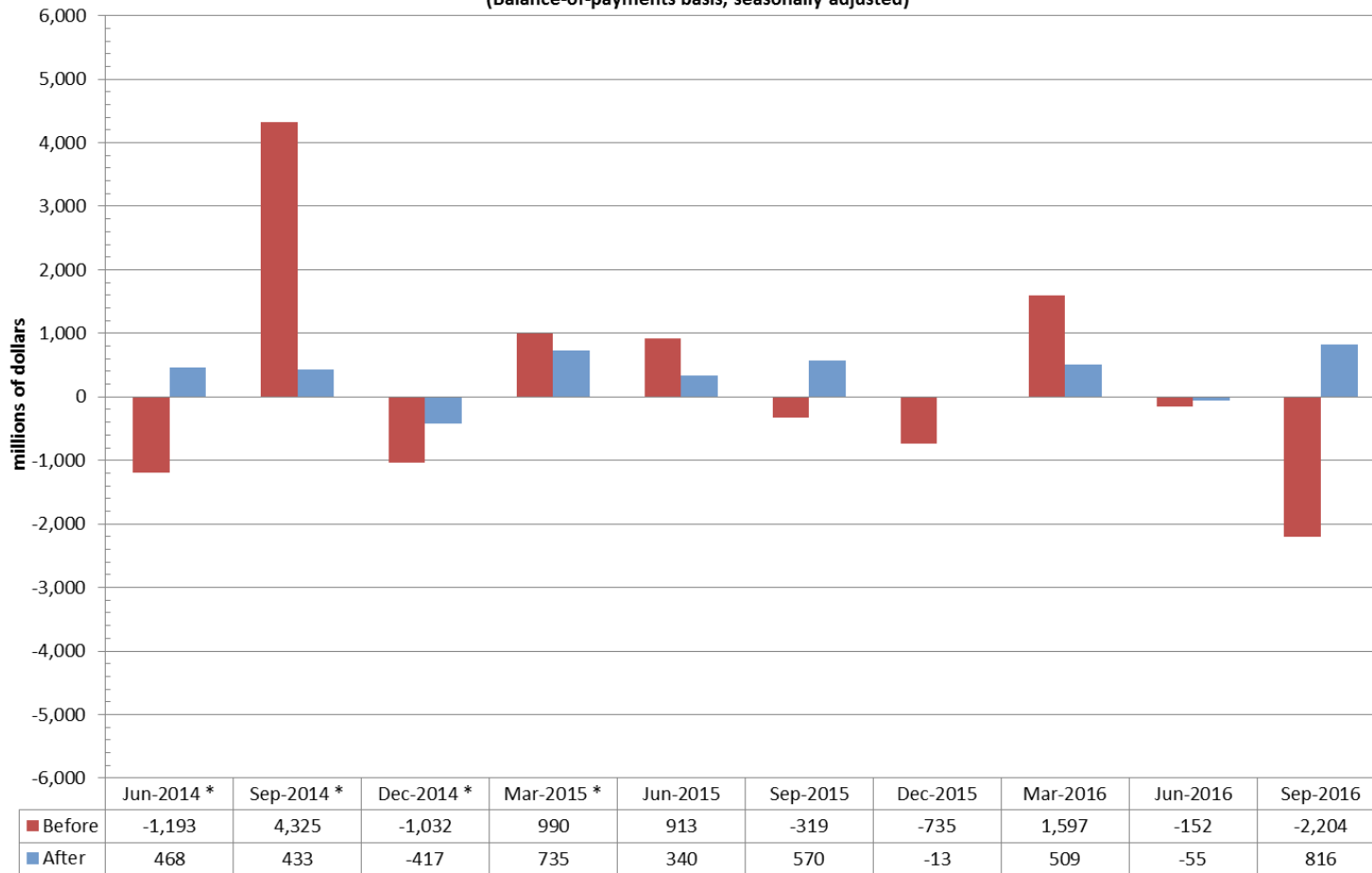
- U.S. World Leader – GDP released 30 days after the reference quarter
 - Possible only because of the high quality, timely data provided to BEA by Census and BLS
 - Historically BEA prepared projections for the third month of the quarter, including:
 - Exports and imports of goods
 - Wholesale & retail inventories
 - Nondurable goods manufacturing inventories
 - Construction statistics

- BEA & Census begin publishing advance monthly foreign trade statistics July, 2015
- Advance statistics available at an aggregate level

Exports and imports of goods
Foods, feeds, and beverages
Industrial supplies and materials
Capital goods, except automotive
Automotive vehicles, engines, and parts
Consumer goods, except food and automotive
Other goods

Advance Foreign Trade Statistics

Projection Error Before and After Incorporation of Census Advance Report Data
Exports of General Merchandise
 (Balance-of-payments basis, seasonally adjusted)

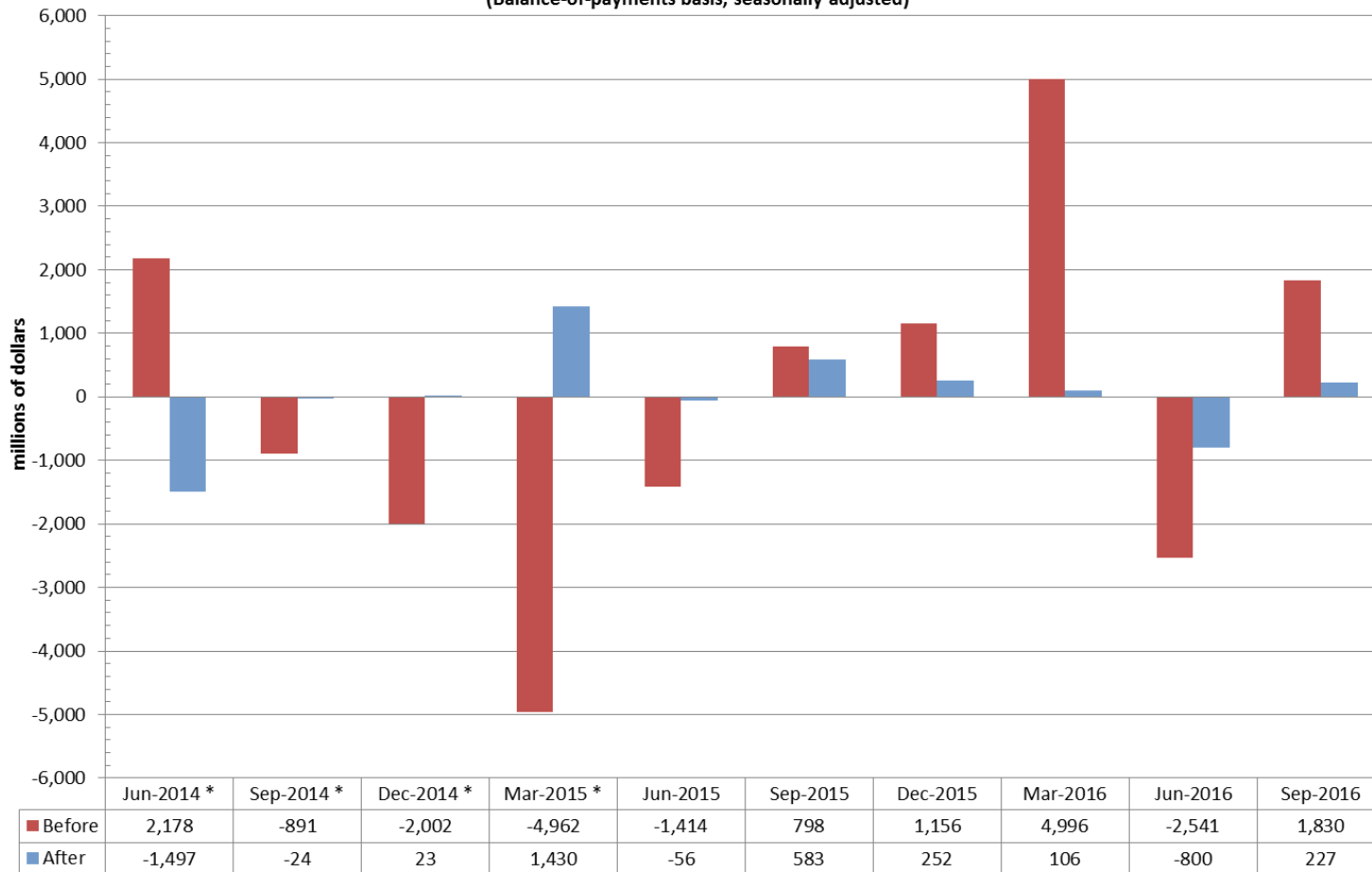


* The Census Advance Report on U.S. International Trade in Goods was introduced with June 2015 data, so these values are simulated for all prior periods.

NOTE: Projection error here is defined as the difference between the projection for the advance estimate of GDP and the same observation in the second estimate.

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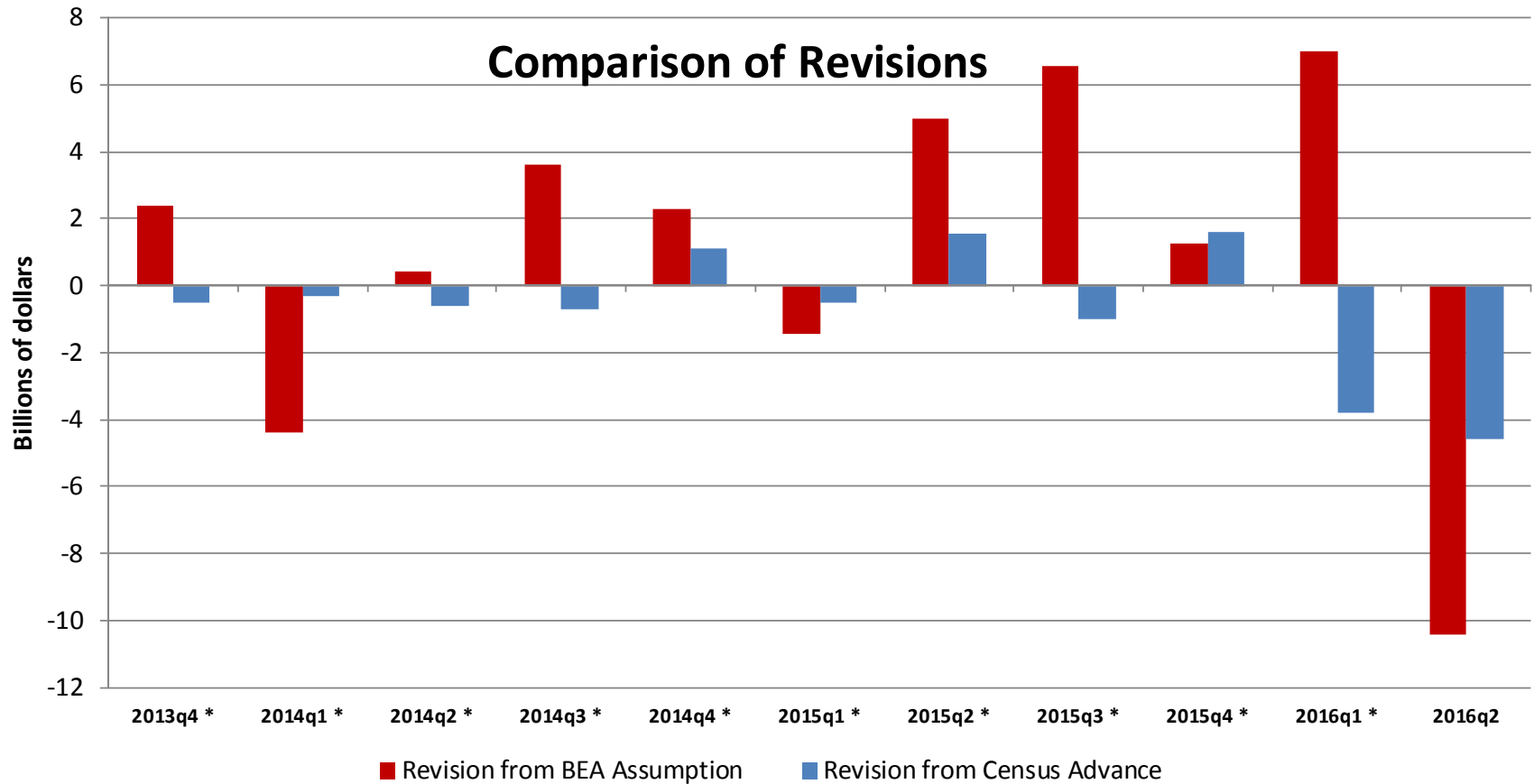


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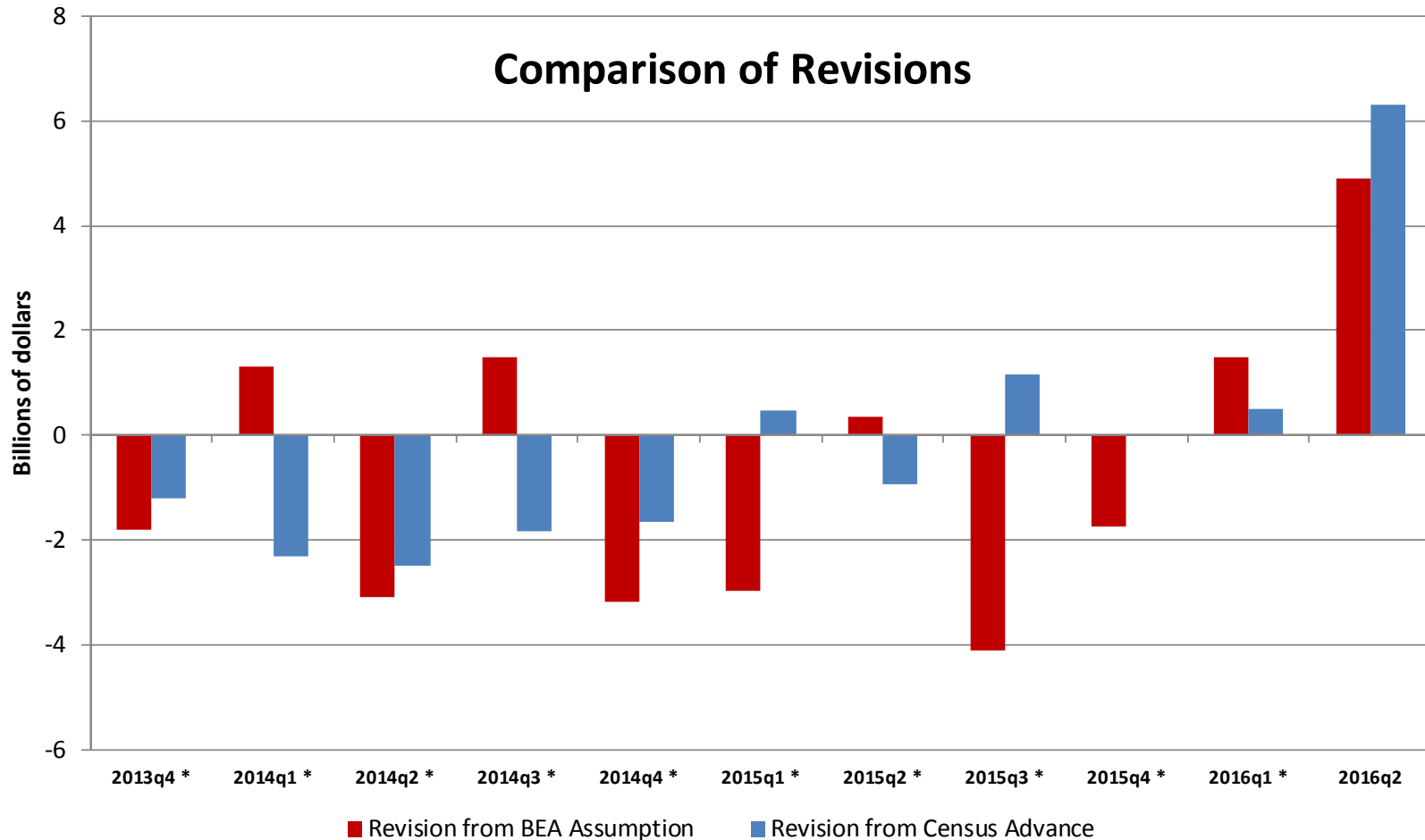
- Advance wholesale and retail inventories released for first time July 2016
 - Inventory change is challenging to project for the missing month

Advance Retail Trade Inventories



* The Census Advance Economic Indicators report, including wholesale and retail inventories, was first introduced with June 2016 data. Quarters denoted with an asterisk reflect simulated revisions.

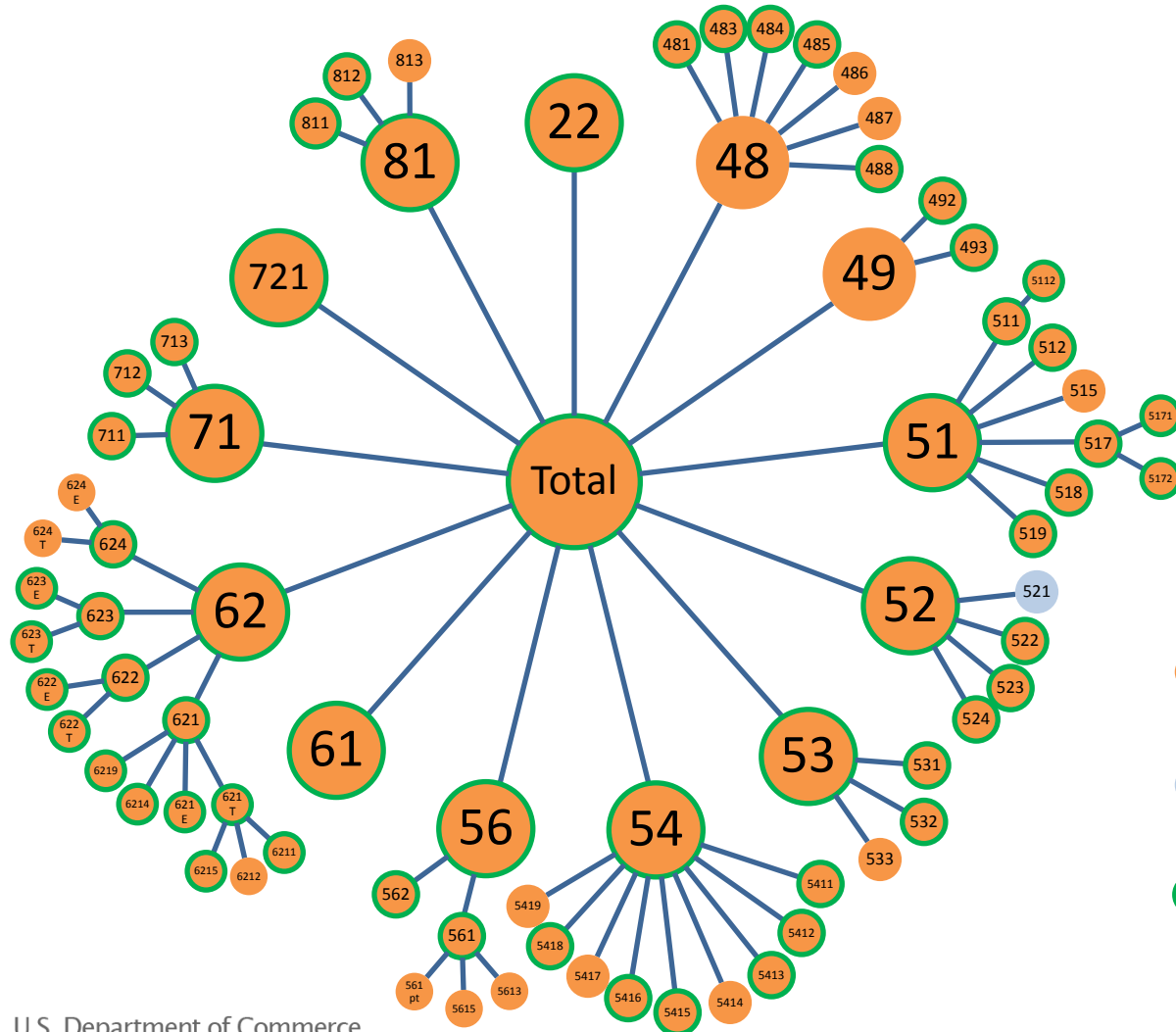
Advance Wholesale Trade Inventories



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- February 2017 first release of “advance” QSS statistics – will be reflected in February 28th GDP release (2nd estimate 2016Q4)
- Simulated “Advance” statistics beginning with 2014Q3
- Revisions potentially shift from 3rd to 2nd GDP estimate.

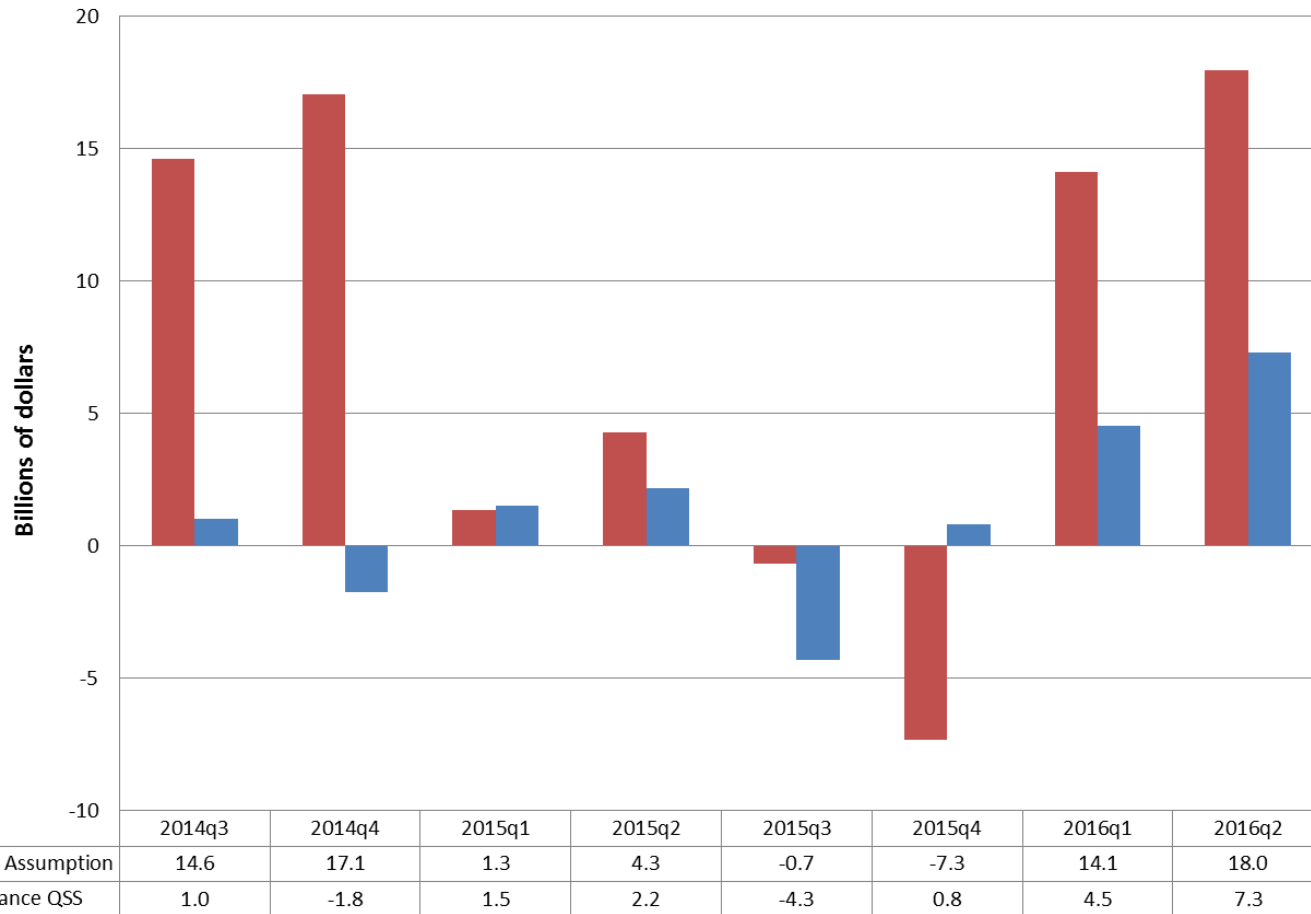
Advance QSS Planned Coverage



- Key**
- industry chosen for clearance
 - goal clearance industry
 - industry selected for publication

Advance Quarterly Services Survey

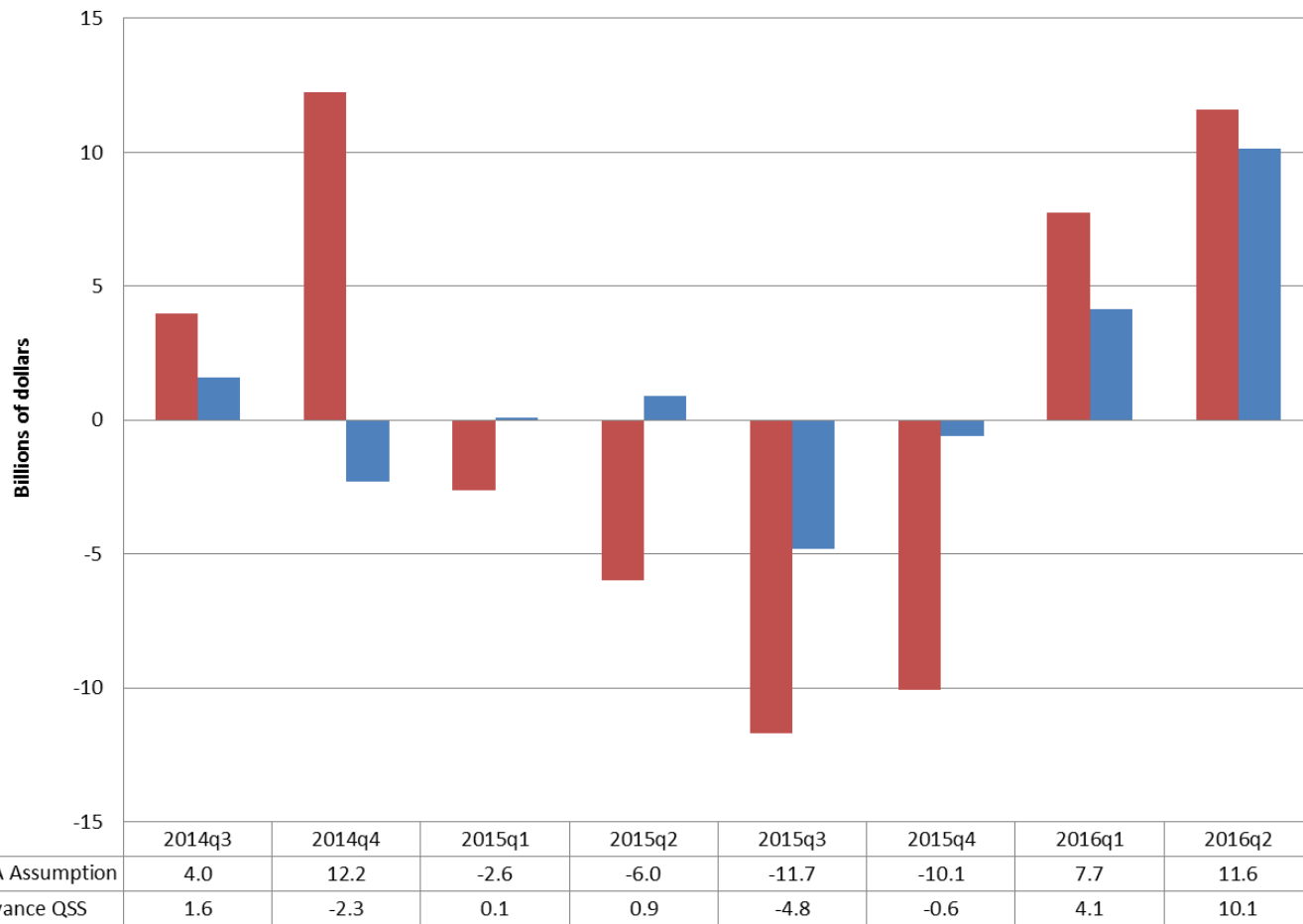
**Comparison of Revisions
Health Care Services**



Note: Revision from Advance QSS reflects unpublished data that were used to simulate "second estimate" statistics for all periods above.

Advance Quarterly Services Survey

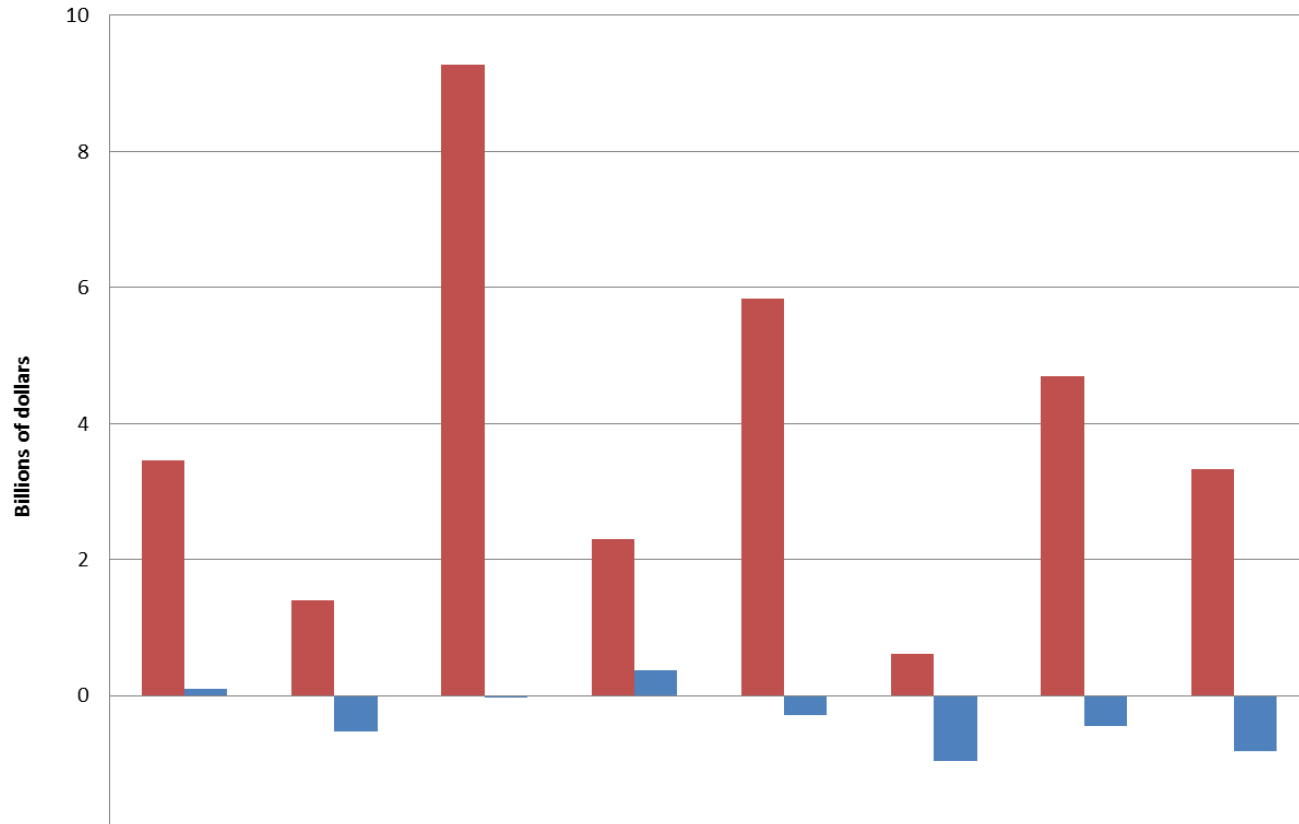
**Comparison of Revisions
Nonprofit Hospitals**



Note: Revision from Advance QSS reflects unpublished data that were used to simulate "second estimate" statistics for all periods above.

Advance Quarterly Services Survey

**Comparison of Revisions
Physician Services**



	2014q3	2014q4	2015q1	2015q2	2015q3	2015q4	2016q1	2016q2
Revision from BEA Assumption	3.5	1.4	9.3	2.3	5.8	0.6	4.7	3.3
Revision from Advance QSS	0.1	-0.5	0.0	0.4	-0.3	-1.0	-0.4	-0.8

Note: Revision from Advance QSS reflects unpublished data that were used to simulate "second estimate" statistics for all periods above.

Beyond Acceleration...

- Improved harmonization of quarterly GDP Statistics
- Big Data
- Other?

- July 2016 marked the first [near] coincident quarterly GDP by industry and quarterly GDP by State
- Re-examined processes:
 - Accelerated delivery of GDP by industry data
 - Integrated regional staff into GDP by industry review

- “Advance” GDP by Industry statistics
- Back-to-back NIPA 3rd estimate/Industry/Regional GDP release

- Prepare internal “advance” quarterly I-O tables primarily to inform featured NIPA final demand
 - Advance quarterly I-O process would be markedly different from current quarterly process
 - Reliant on t-1 statistics
 - Incorporate best available output indicators
 - Evaluate nominal and real I-O ratios
 - Allow final demand to “float”

Many different possibilities here, including:

- Balance Use table with “preliminary” final demand (FD) controls from NIPA then identify issues during balancing and adjust FD as needed
- Weighted-least squares approach
 - Attach quality-weights to all elements of the use table, including FD, and balance.
 - Final demand not a hard control under this approach

- Accelerate industry and regional by about 30 days
 - Re-think current processes
 - More highly integrated approach
 - Jointly develop industry-level gross operating surplus statistics within an I-O framework
 - Industry level gross output would inform NIPA industry-level income components
 - Output indicators largely available in time (QSS, M3, MRTS, MWTS, and VPIP)
 - Benefit from I-O and regional analysis
 - Customers receive full suite of quarterly GDP statistics within a few days of each other

BEA Use Table



		INDUSTRIES						FINAL USES					Total Commodity Output and Value Added
		Mining and Construction	Manufacturing	Trade and Transportation	Utilities	Finance, Insurance, and Real Estate	Other	Personal Consumption Expenditure	Private Fixed Investment	Change in Private Inventories	Net Exports	Government Consumption and Investment	
COMMODITIES	Mining and Construction												
	Manufacturing												
	Trade and Transportation												
	Utilities												
	Finance, Insurance, and Real Estate												
	Other												
VALUE ADDED	Compensation												
	Taxes on Production and Imports												
	Gross Operating Surplus												
Total Industry Output and Final Uses													

Committee Member Thoughts?



- What are your priorities regarding quarterly GDP?
- What's most beneficial to you and to BEA customers?
- Setting aside SA issues, what are leading weaknesses in the quarterly GDP statistics?