



National Economic Indicators

May 7, 2018

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The Federal Reserve Bank of Richmond

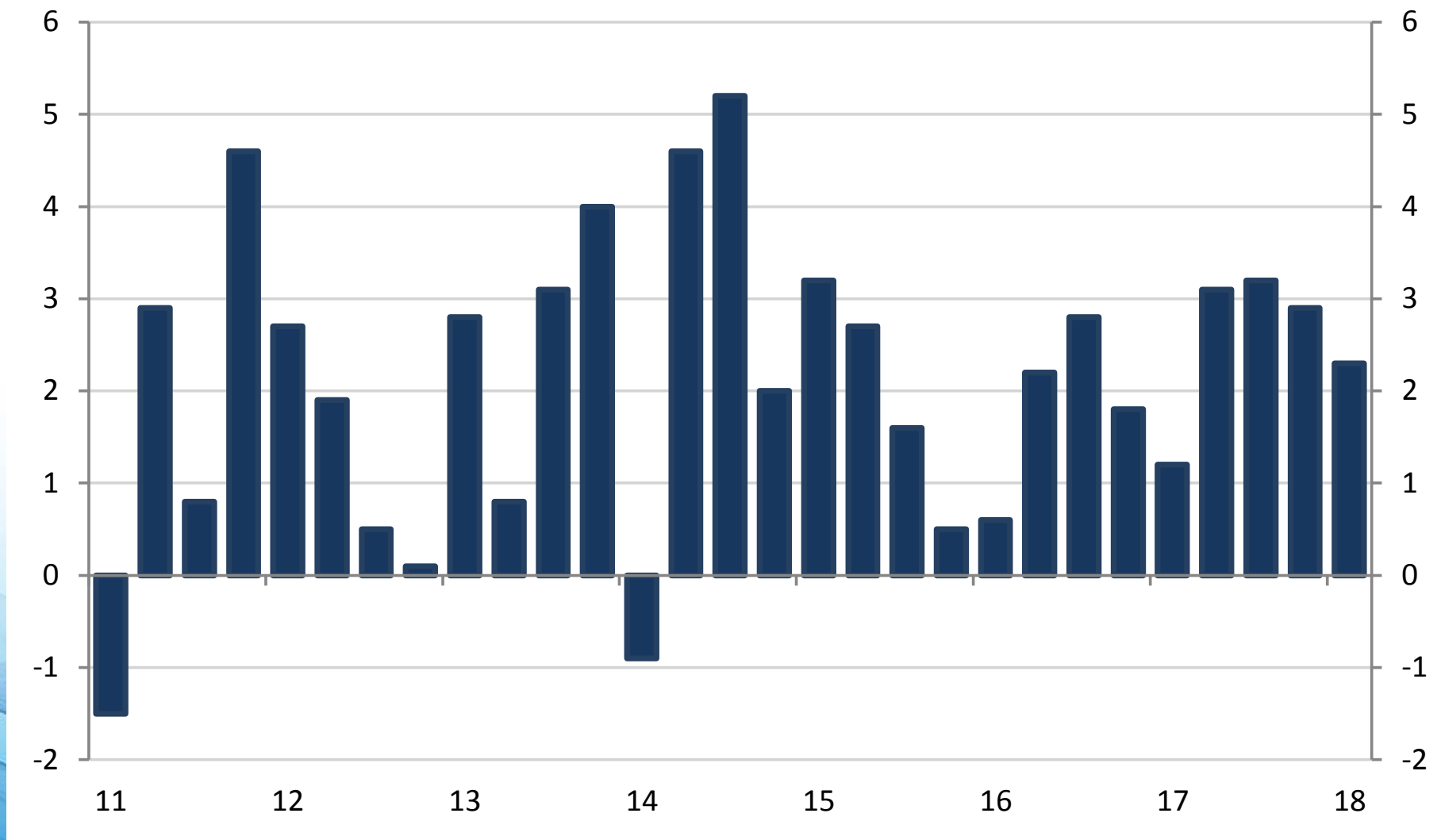
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Summary

- Economy moving along nicely, but there are some clouds
 - Labor market strong historically, but softer employment growth
 - Softer Q1 numbers after several robust quarters
 - However, strong growth forecasts throughout 2018
- Inflation starting to rear its head
 - Weak early 2017 inflation readings dissipate
 - Pick-up in nominal wage growth
 - Policy still expansionary
- Large cloud on the horizon: tariffs and trade disputes

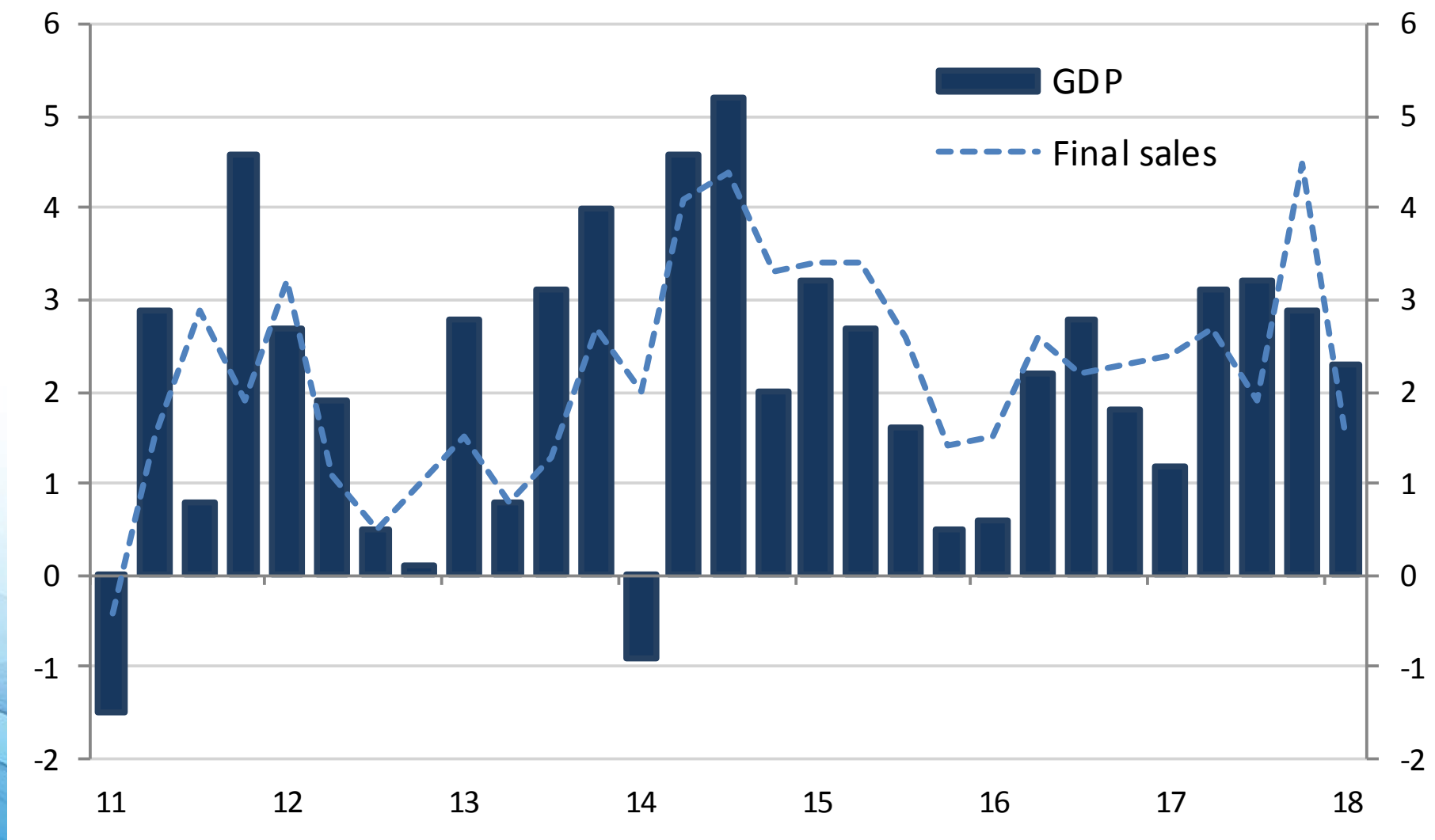
Real Gross Domestic Product

Quarterly percent change, SAAR



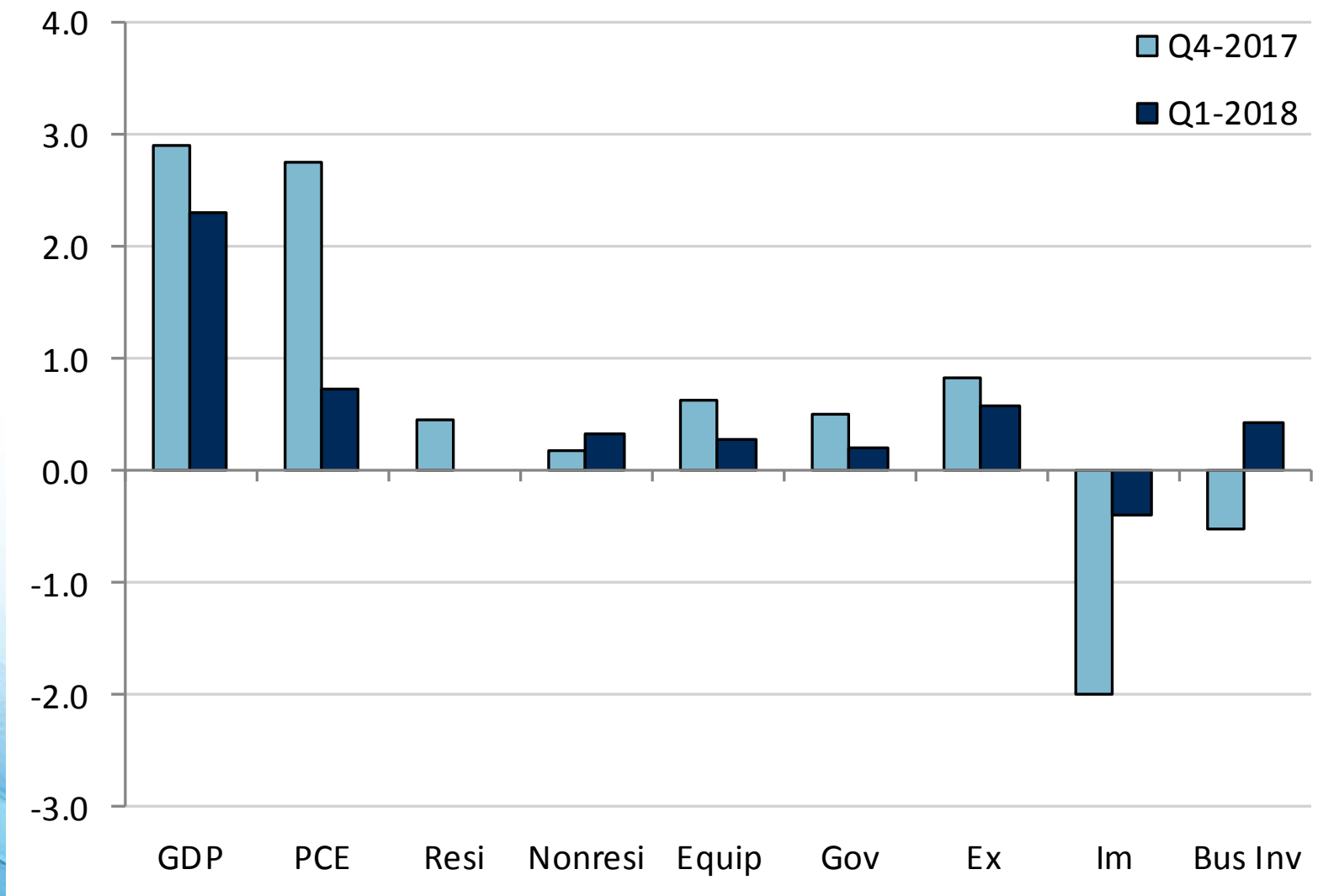
Real Gross Domestic Product and Final Sales

Quarterly percent change, SAAR



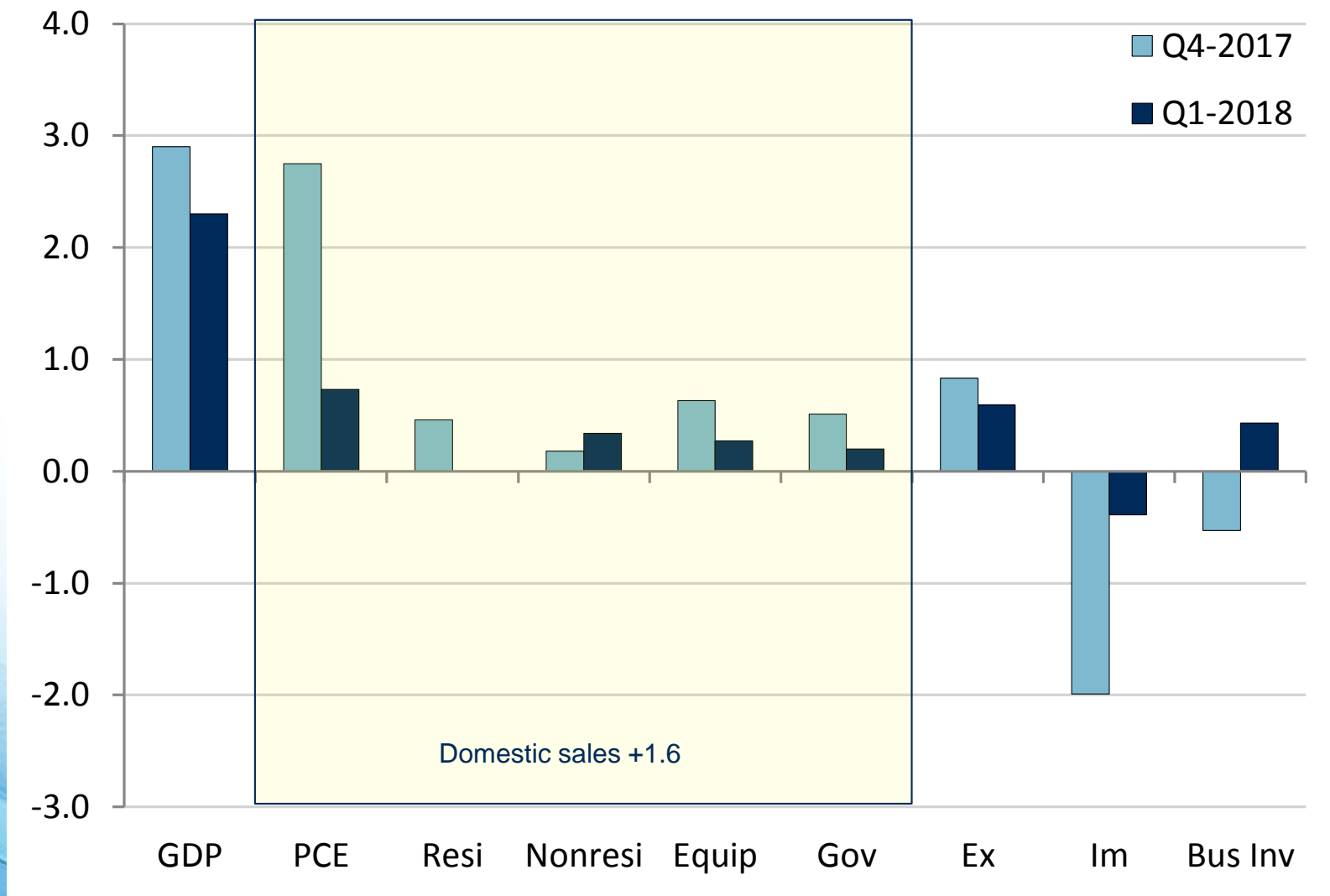
Contributions to Real GDP Growth

Percent contribution to qtrly GDP change



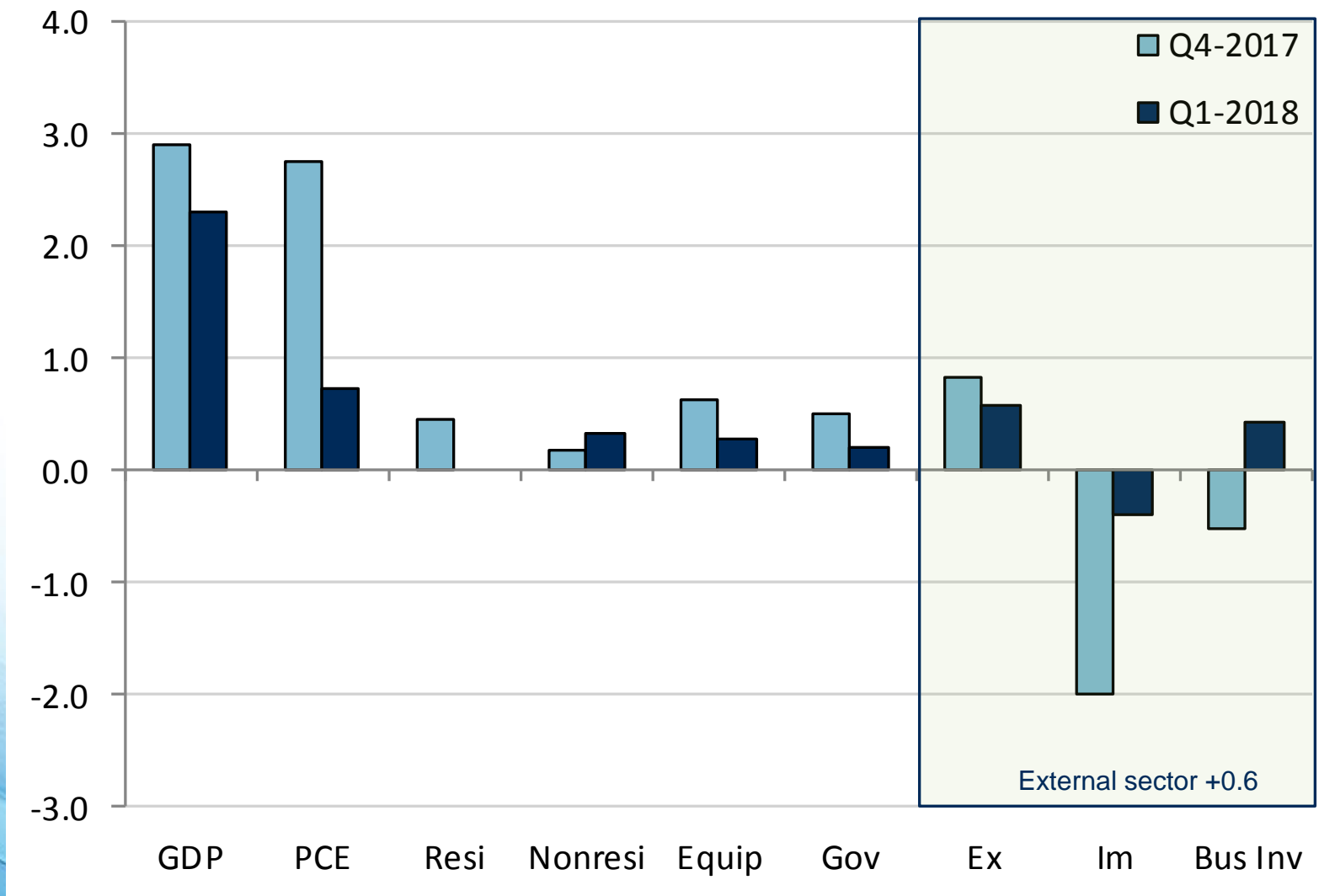
Contributions to Real GDP Growth

Percent contribution to qtrly GDP change



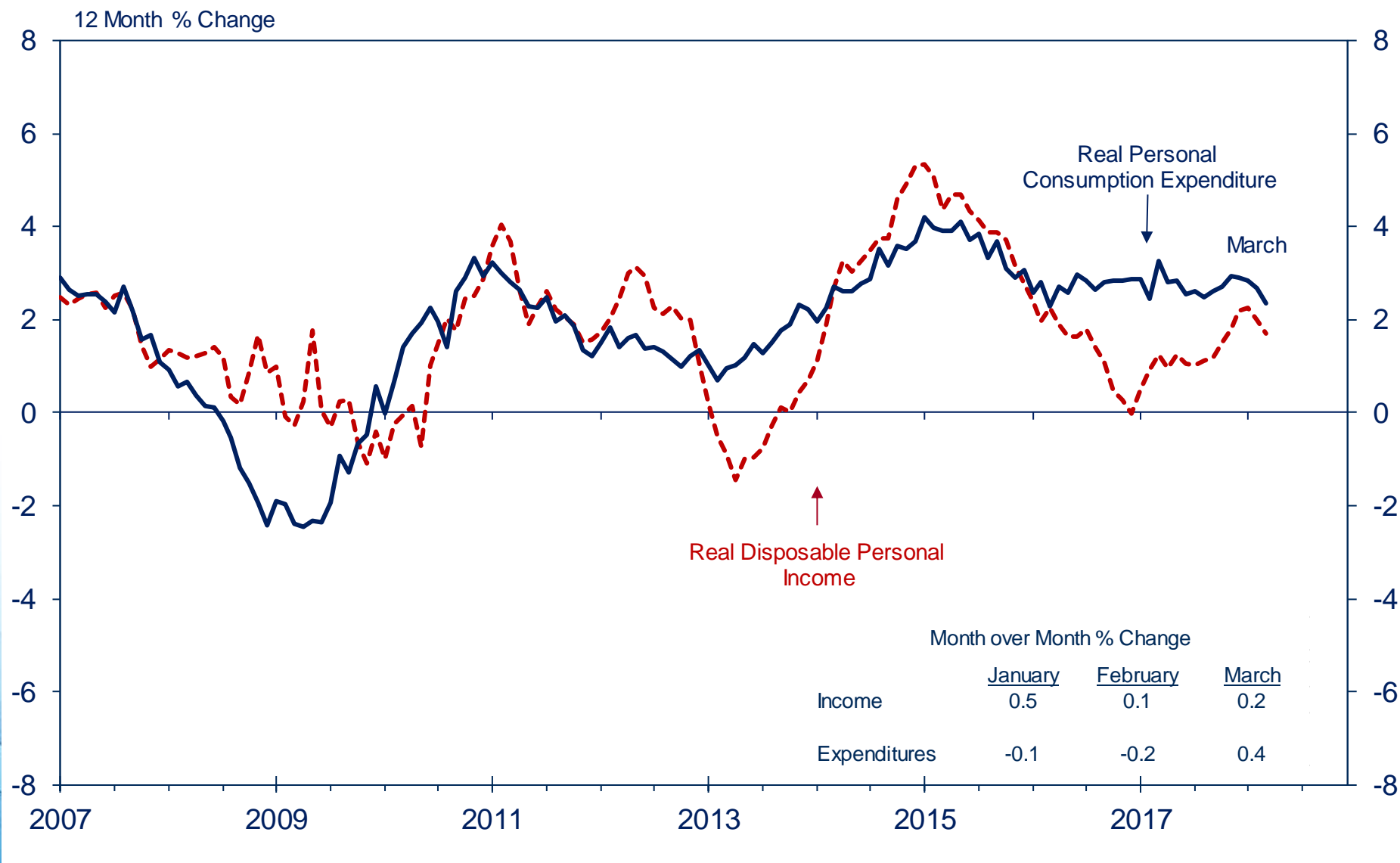
Contributions to Real GDP Growth

Percent contribution to qtrly GDP change



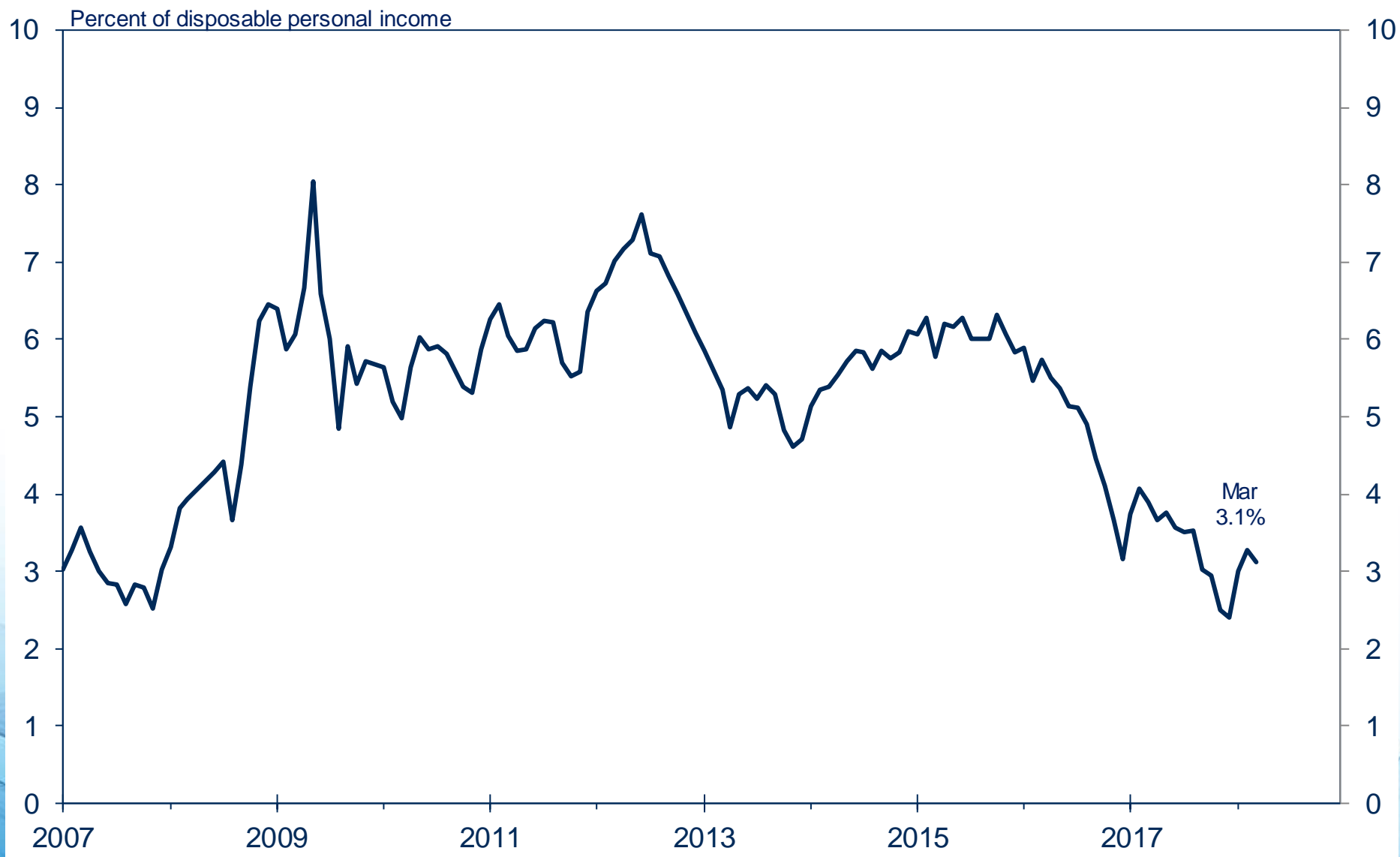
External sector +0.6

Consumer Spending and Income



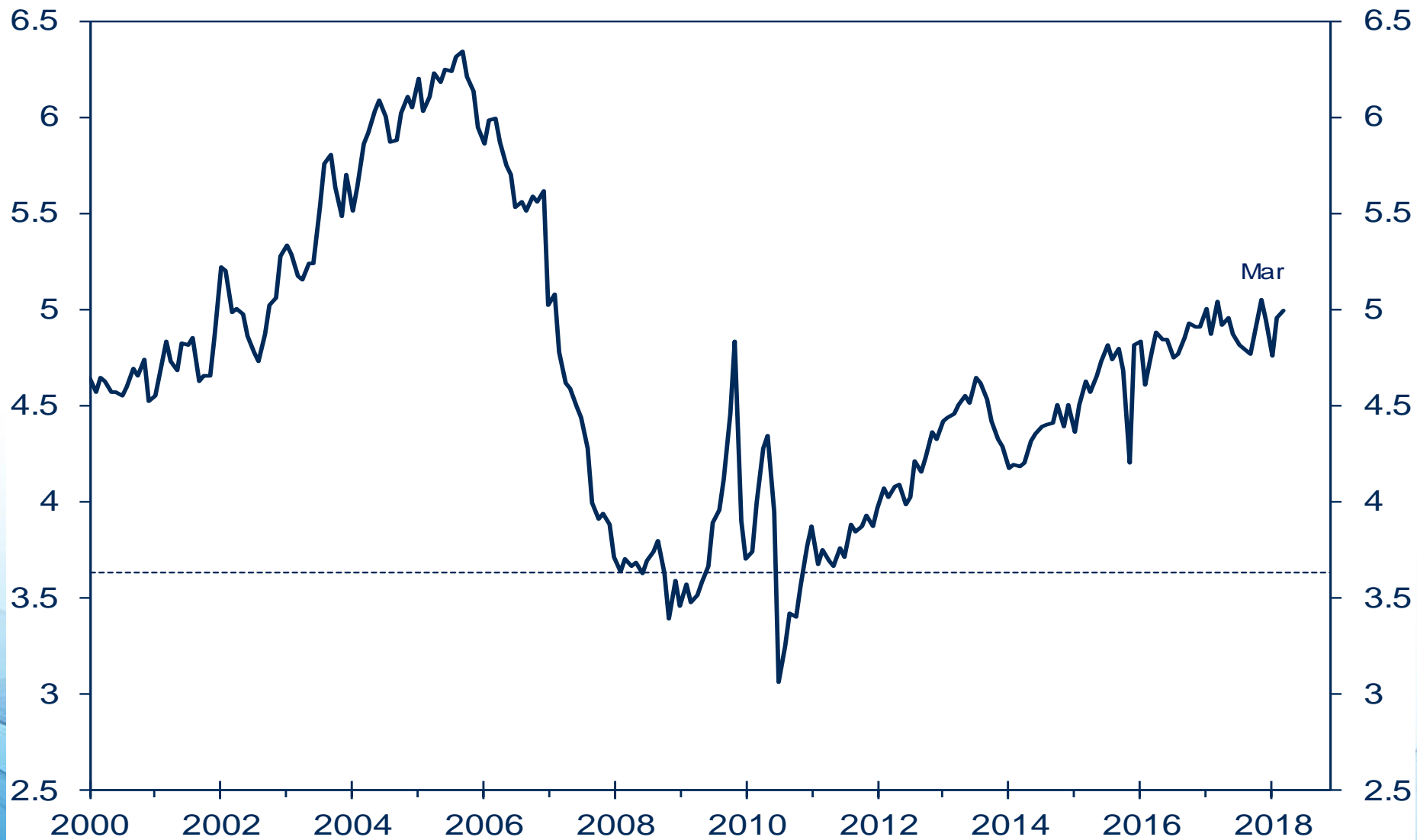
Note: Income has been adjusted to account for temporary fiscal actions in 2008 and 2012-2013.

Personal Saving Rate

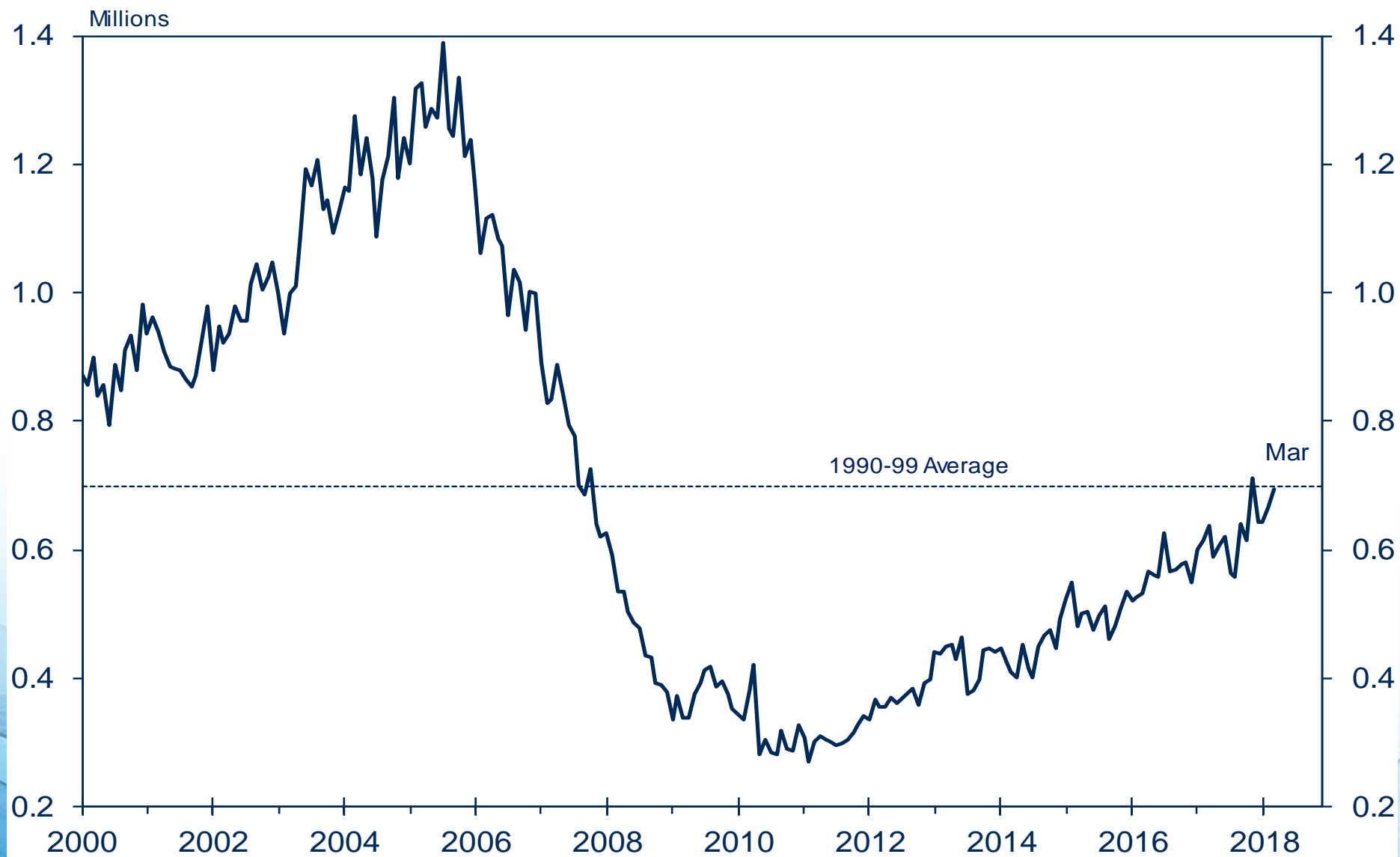


Note: Income has been adjusted to account for temporary events

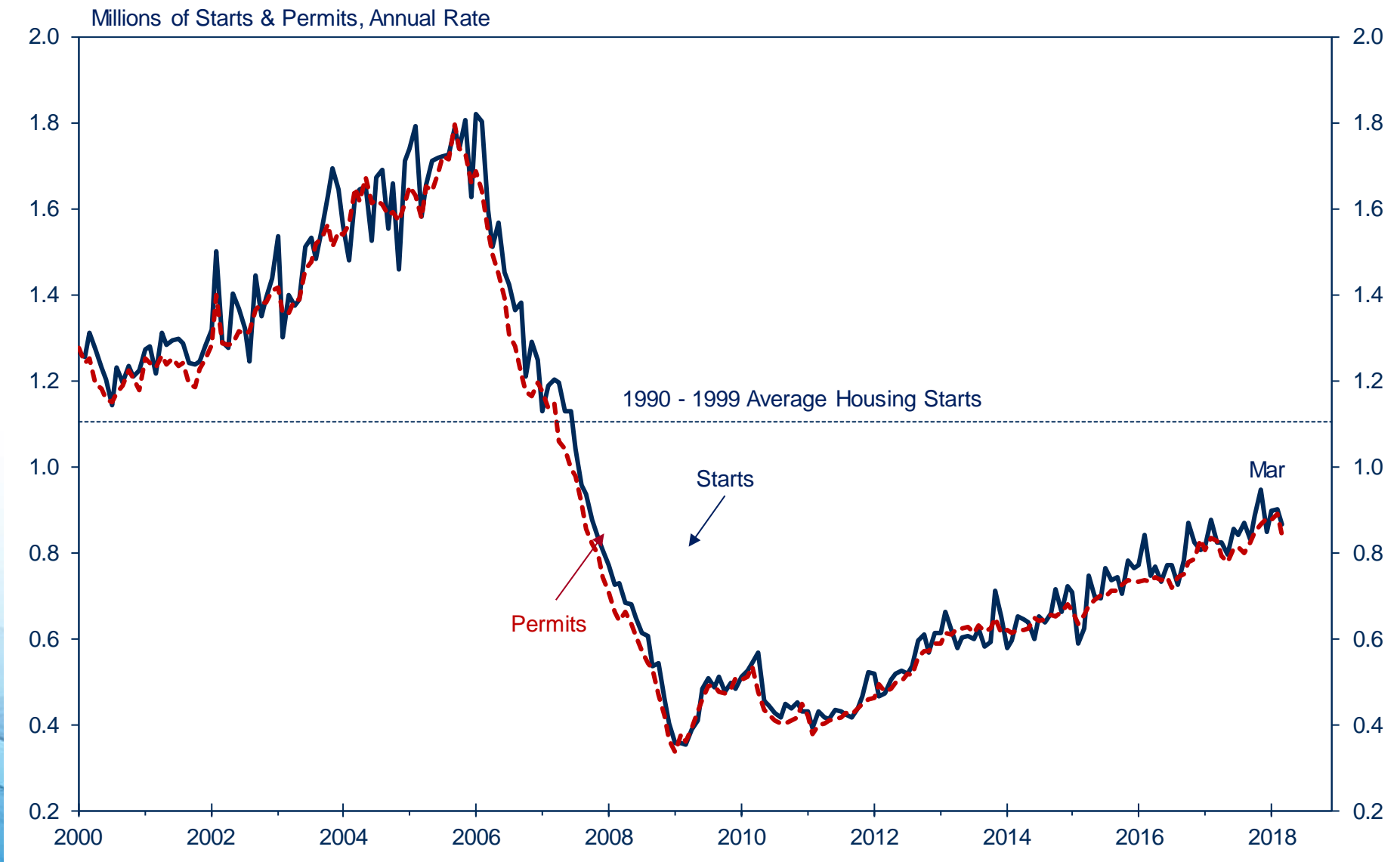
Existing Single-Family Home Sales



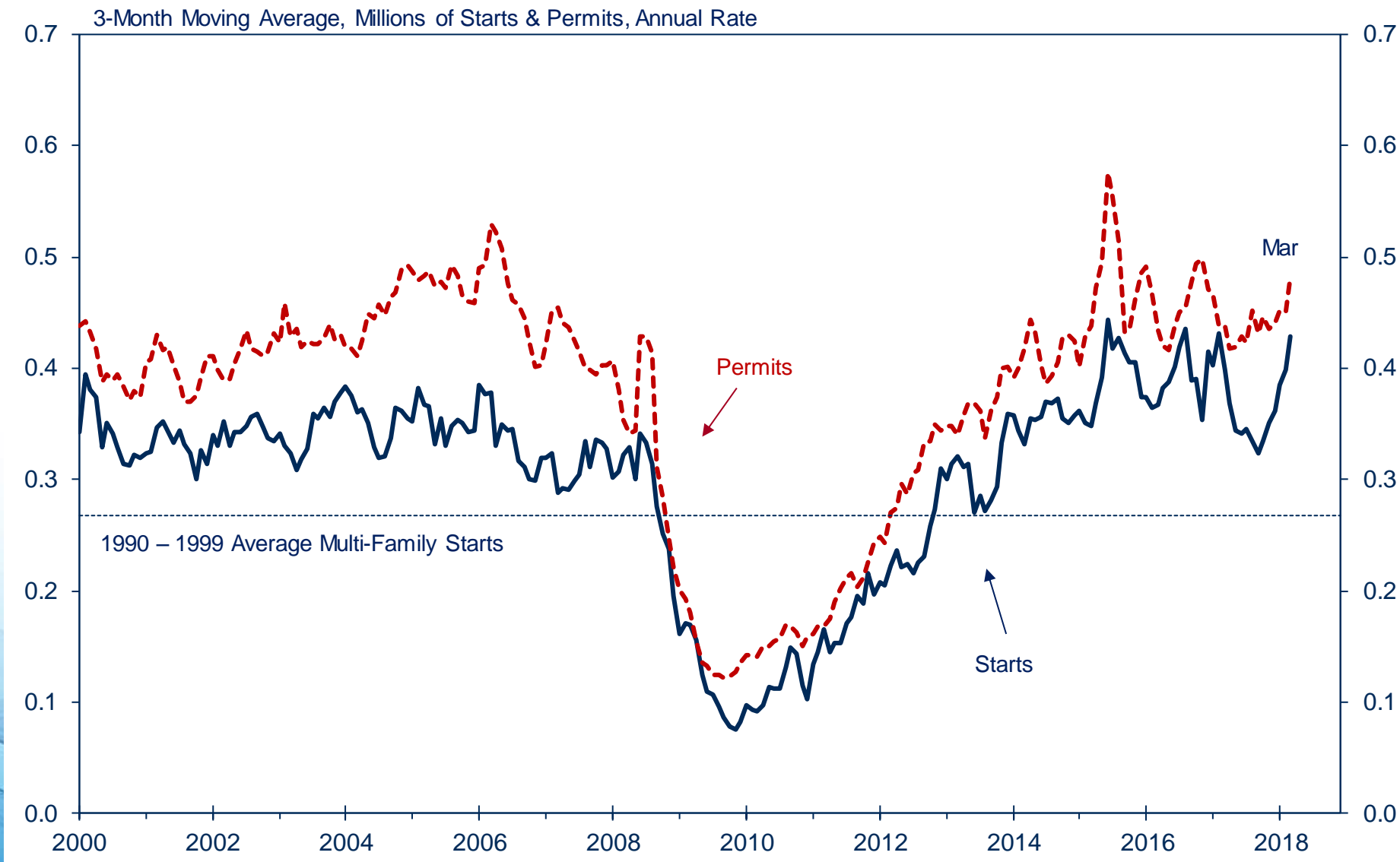
New Single-Family Home Sales



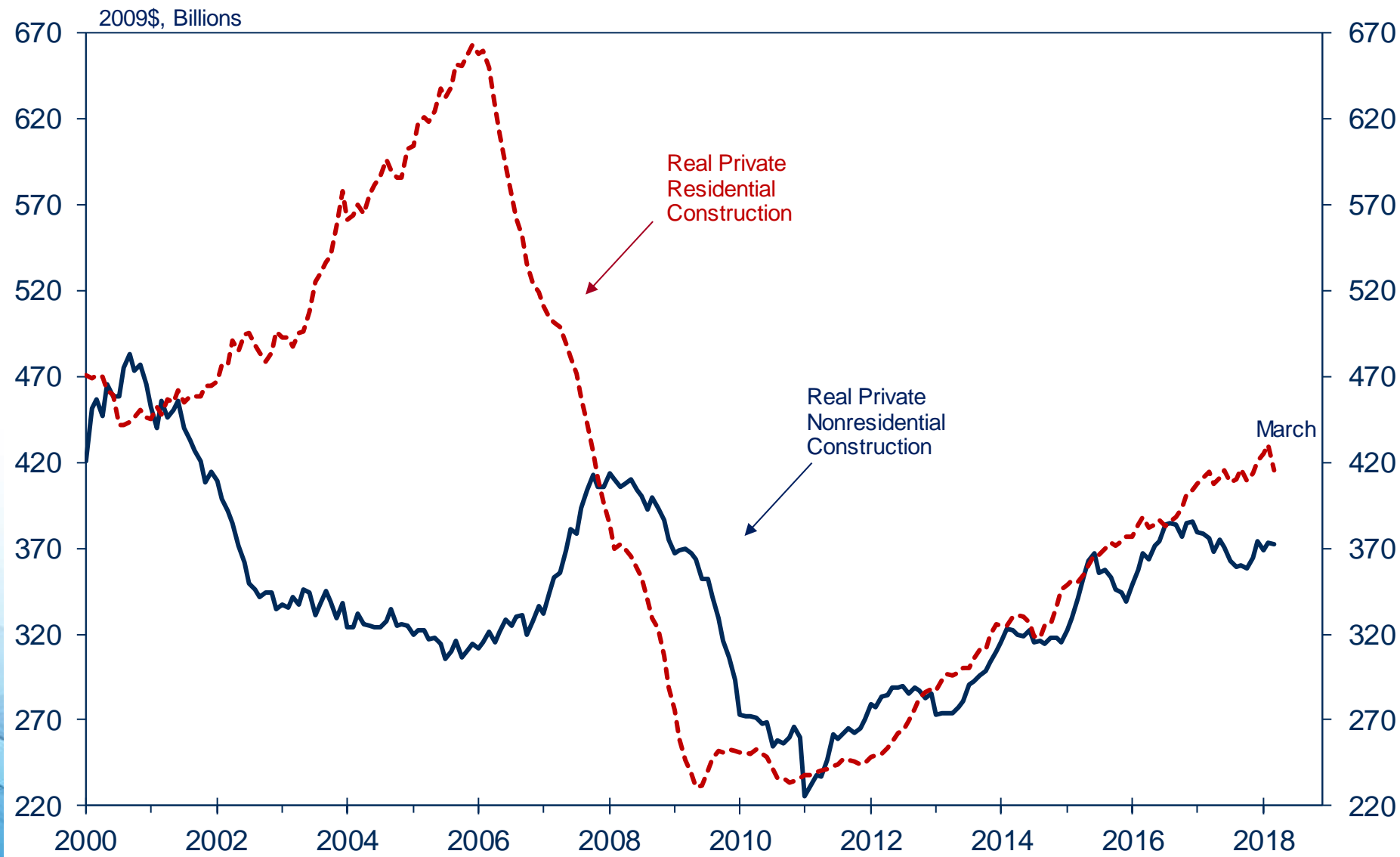
Private Single-Family Housing Starts & Permits



Private Multi-Family Housing Starts & Permits



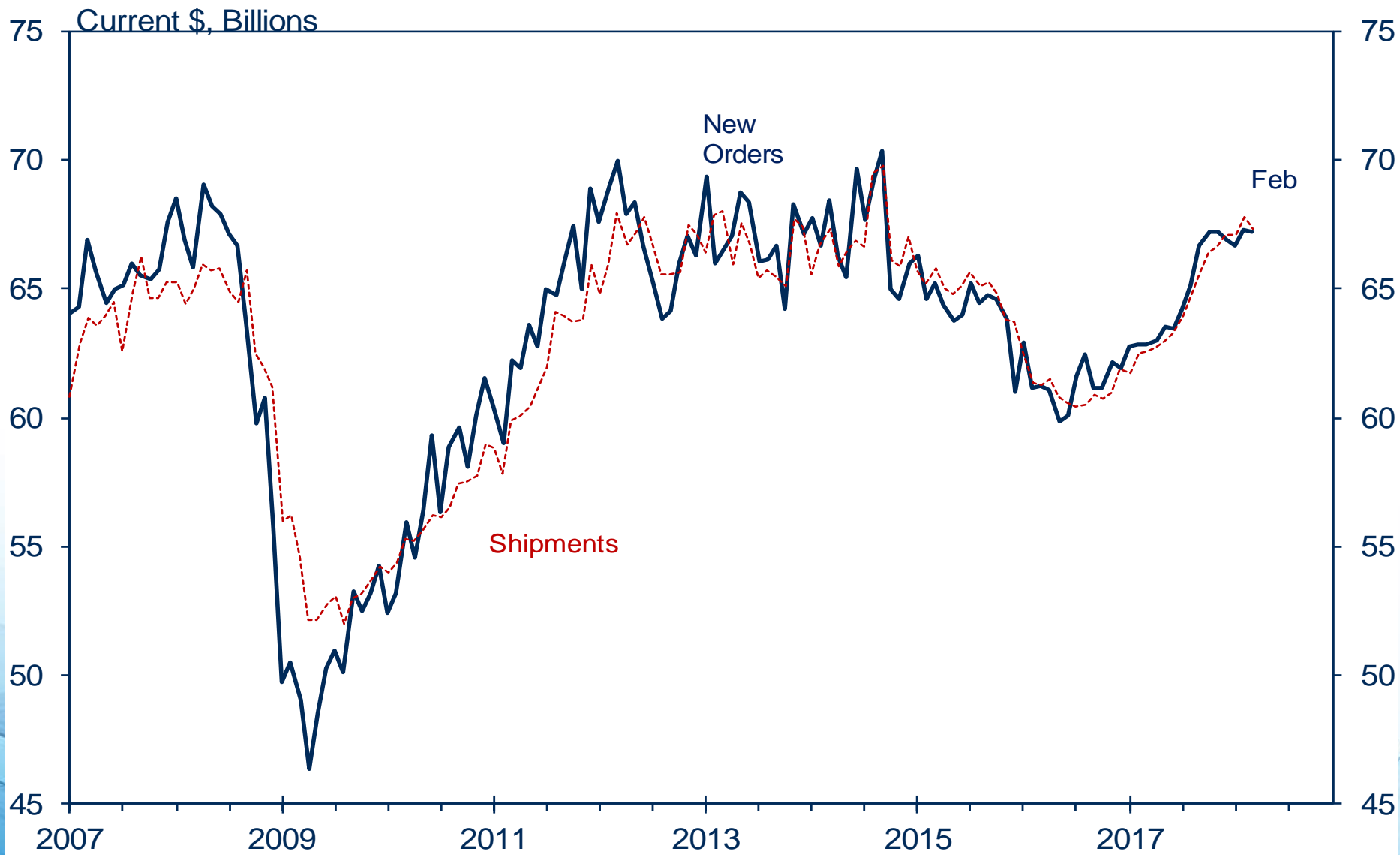
Real Private Construction Put In Place



Notes: Private nonresidential construction deflated using the price index for private fixed investment in nonresidential structures and private residential construction deflated using the private residential investment chain price index.

Source: Census Bureau via Haver Analytics

Core Capital Goods



Notes: Core capital goods are nondefense capital goods excluding aircraft.

Source: Census Bureau via Haver Analytics



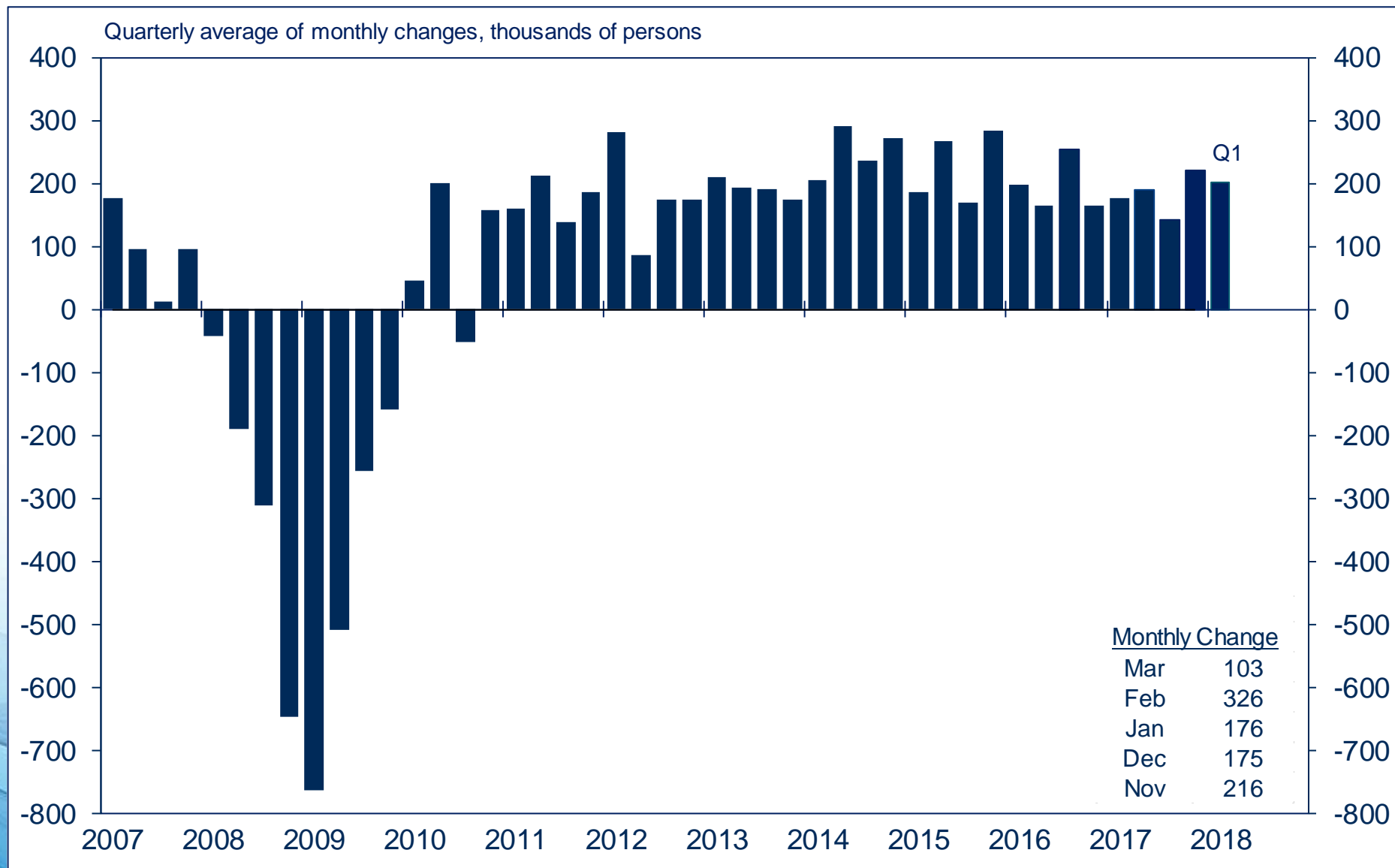
Progress on “the Dual Mandate”

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Nonfarm Payroll Employment



Notes: White bar on the right is based on an incomplete quarter

Source: Bureau of Labor Statistics via Haver Analytics

ISM: Business Survey Indexes

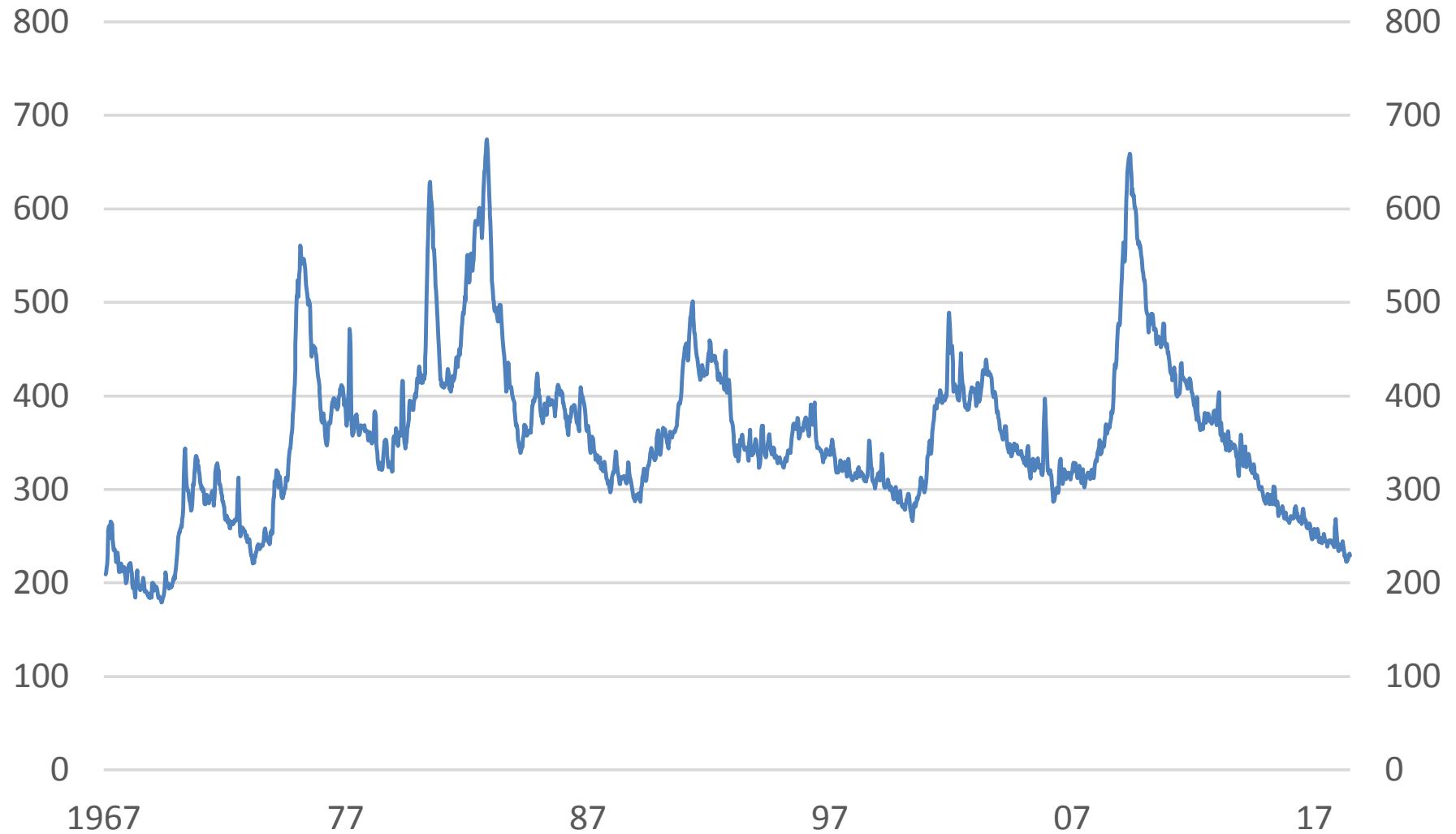
MANUFACTURING BUSINESS:

NON-MANUFACTURING BUSINESS:

	<u>Mar.</u>	<u>Apr.</u>		<u>Feb.</u>	<u>Mar.</u>
Purchasing Managers Index	59.3	57.3	Non-Manufacturing Index	59.5	58.8
Production	61.0	57.2	Business Activity	62.8	60.6
New Orders	61.9	61.2	New Orders	64.8	59.5
Employment	57.3	54.2	Employment	55.0	56.6
Supplier Deliveries	60.6	61.1	Supplier Deliveries	55.5	58.5
Inventories	55.5	52.9	Inventories	53.5	53.5
Prices	78.1	79.3	Prices	61.0	61.5
Backlog of Orders	59.8	62.0	Backlog of Orders	56.0	56.5
New Export Orders	58.7	57.7	New Export Orders	59.5	58.0
Imports	59.7	57.8	Imports	50.0	55.0

Initial Unemployment Claims

(000s) 4 week moving average

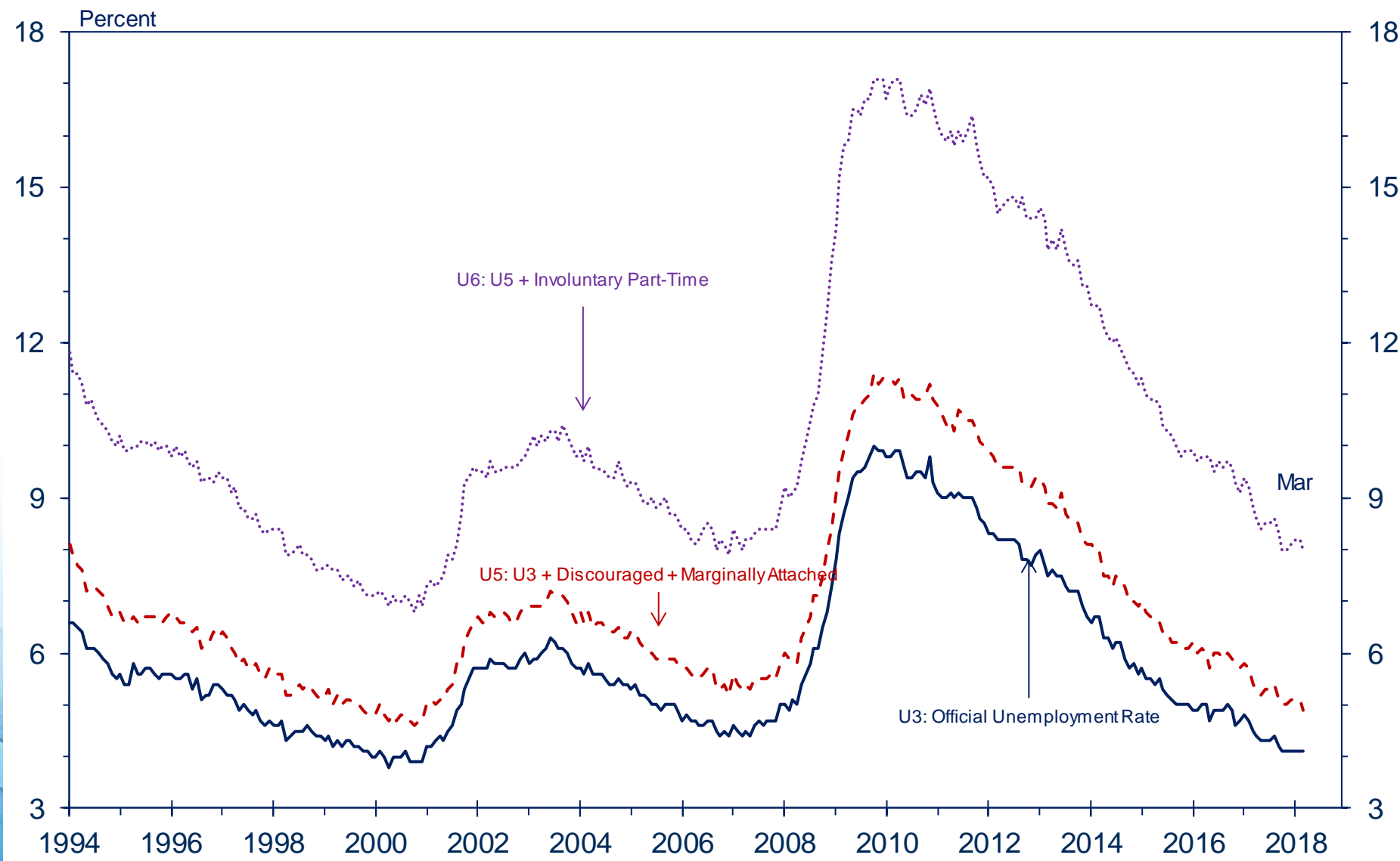


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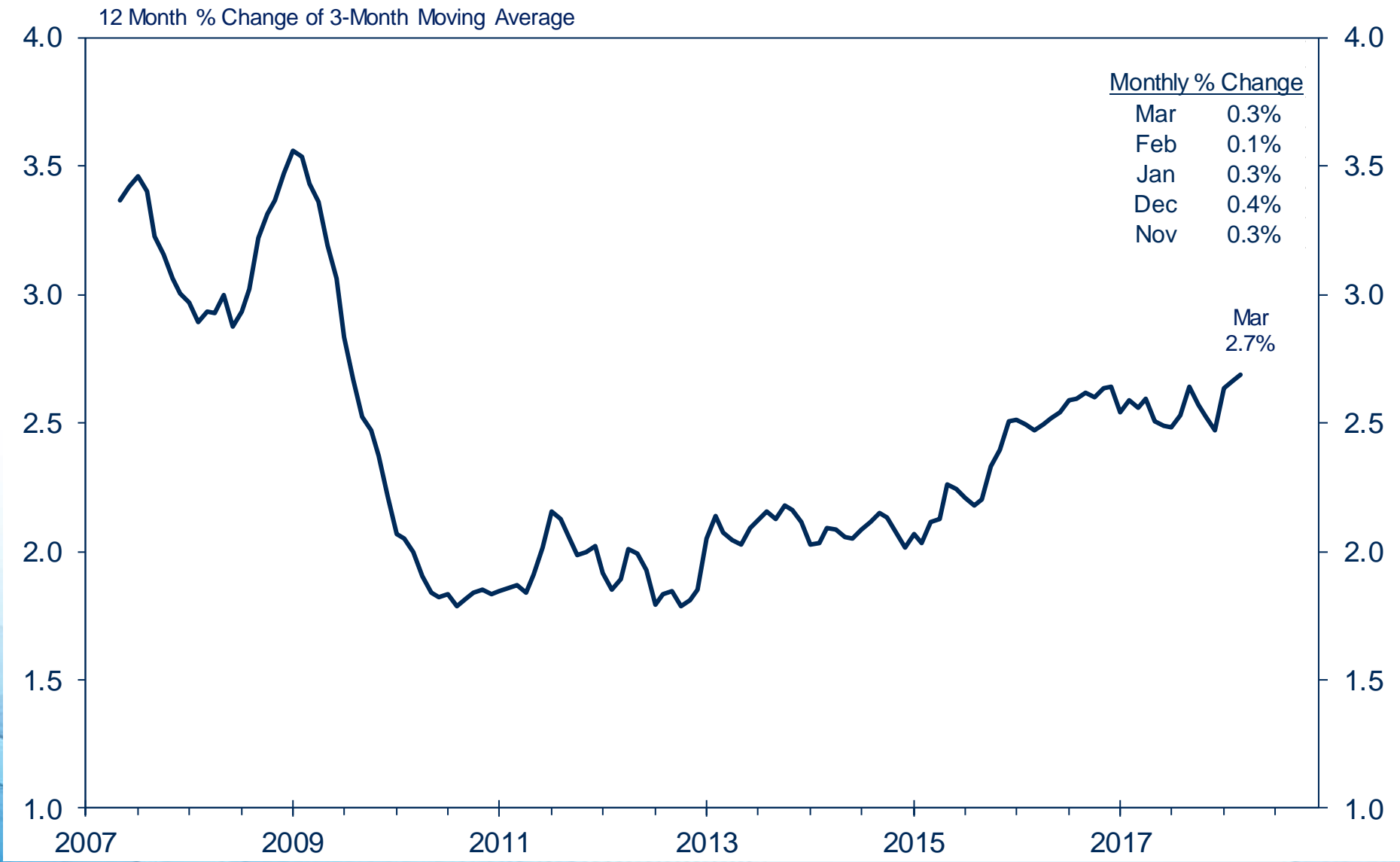
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Source: Bureau of Labor Statistics via Haver Analytics

Measures of Labor Utilization



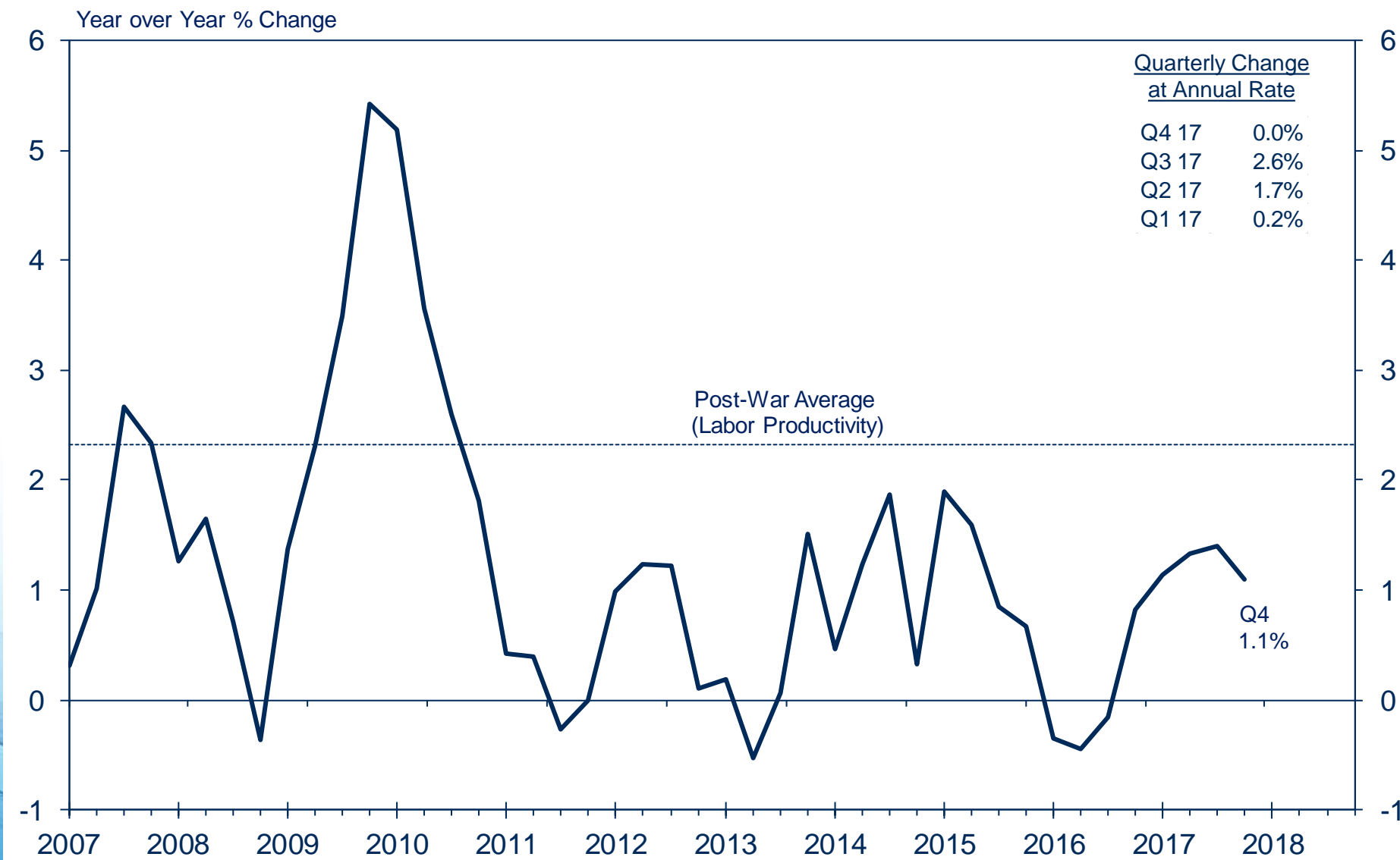
Average Hourly Earnings



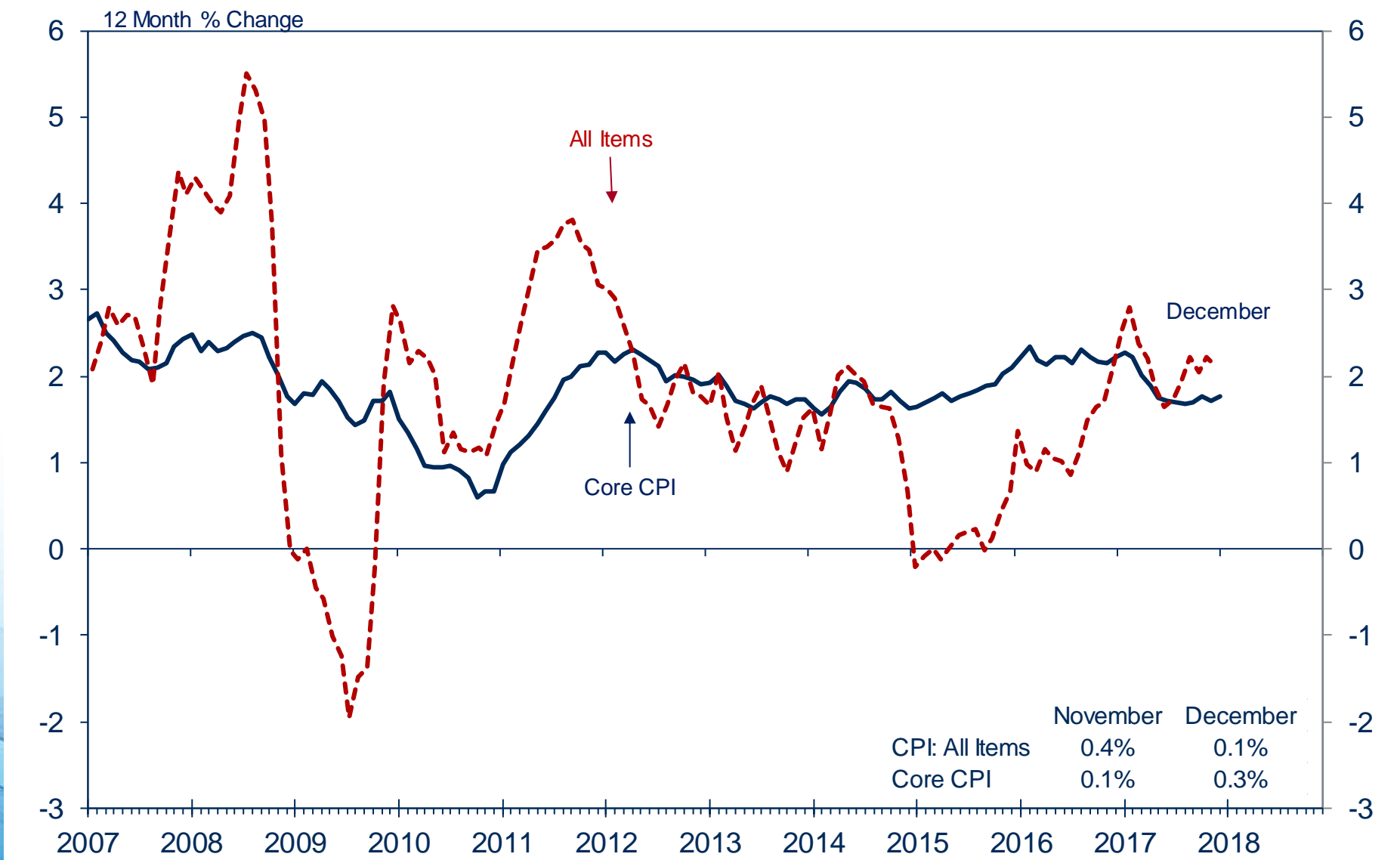
Monthly % Change	
Mar	0.3%
Feb	0.1%
Jan	0.3%
Dec	0.4%
Nov	0.3%

Mar
2.7%

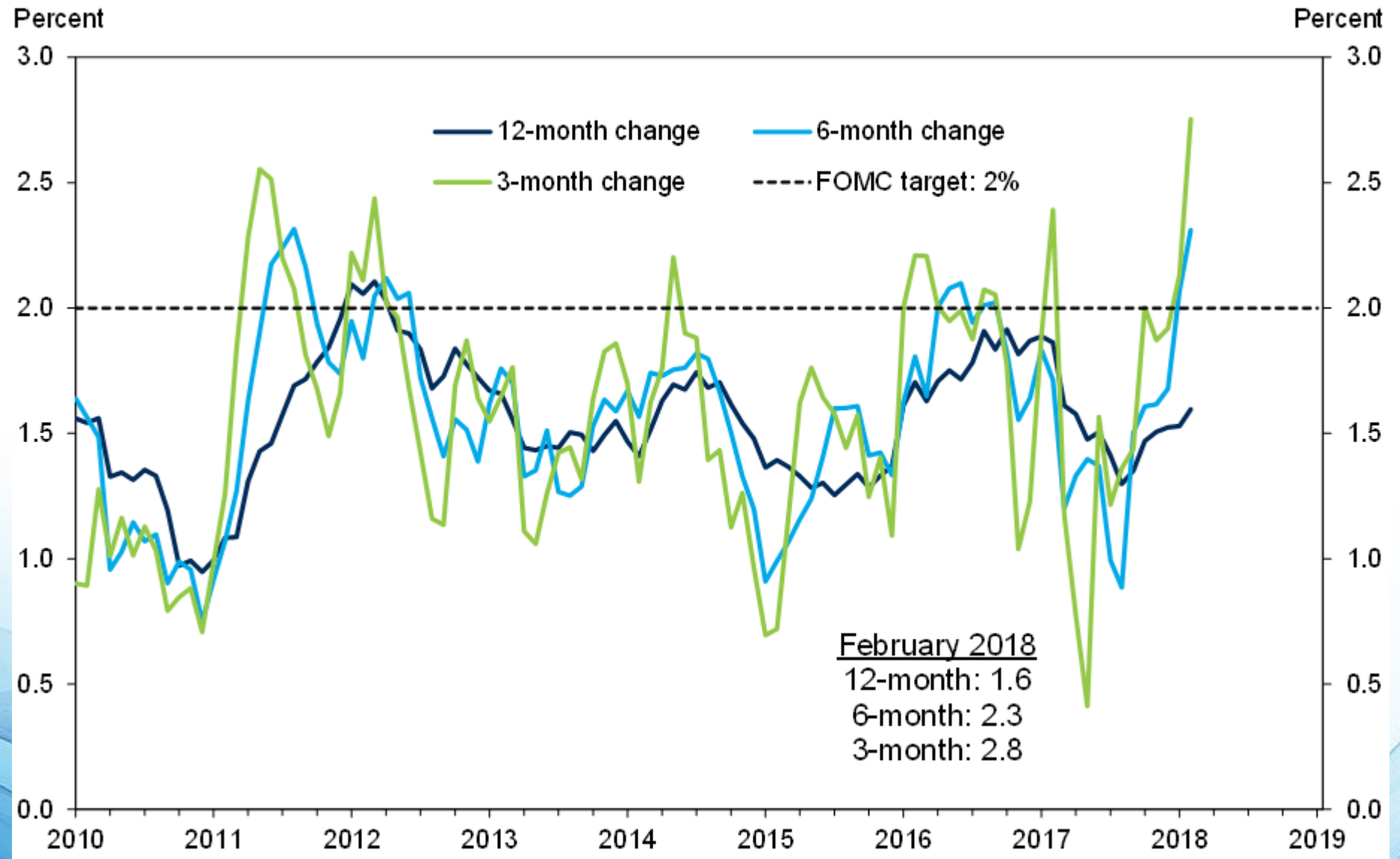
Labor Productivity, Nonfarm Business



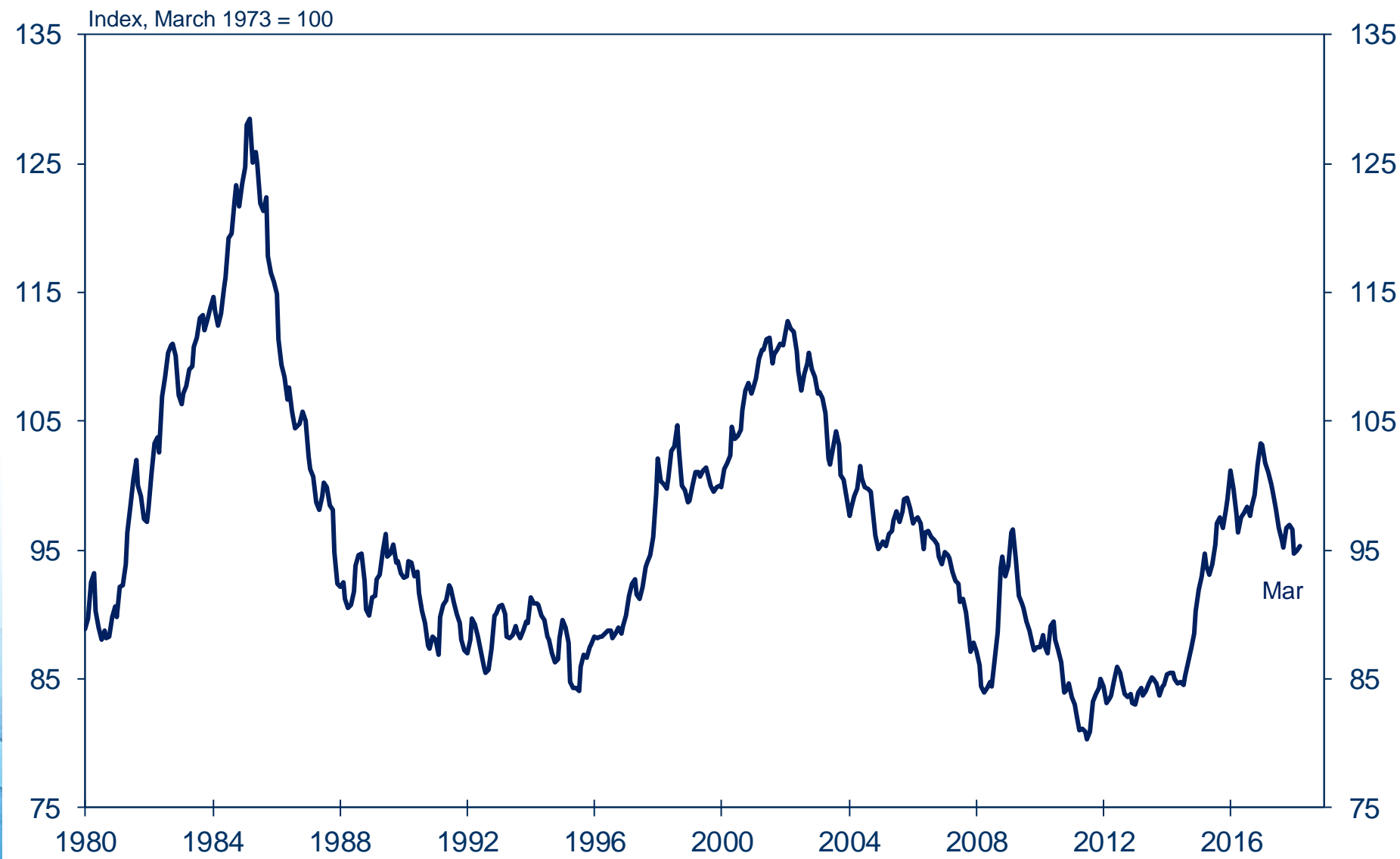
Consumer Price Indexes



Core Personal Consumption Expenditure Price Indexes



Exchange Value of the USD



Notes: Measured as the real broad trade-weighted exchange value of the United States Dollar.

Source: Board of Governors via Haver Analytics

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TIPS Inflation Compensation



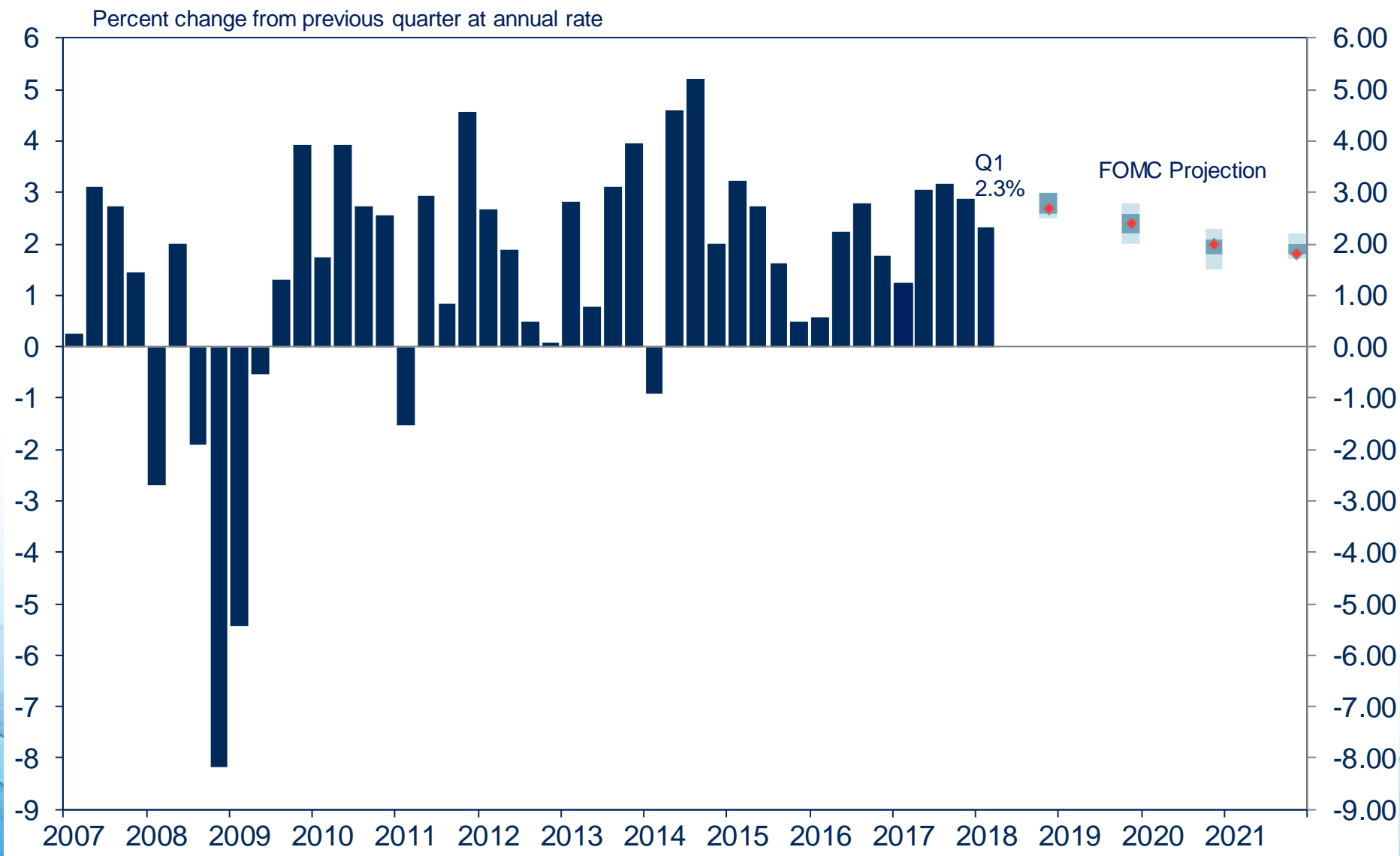


FOMC Meeting Participants' Forecasts

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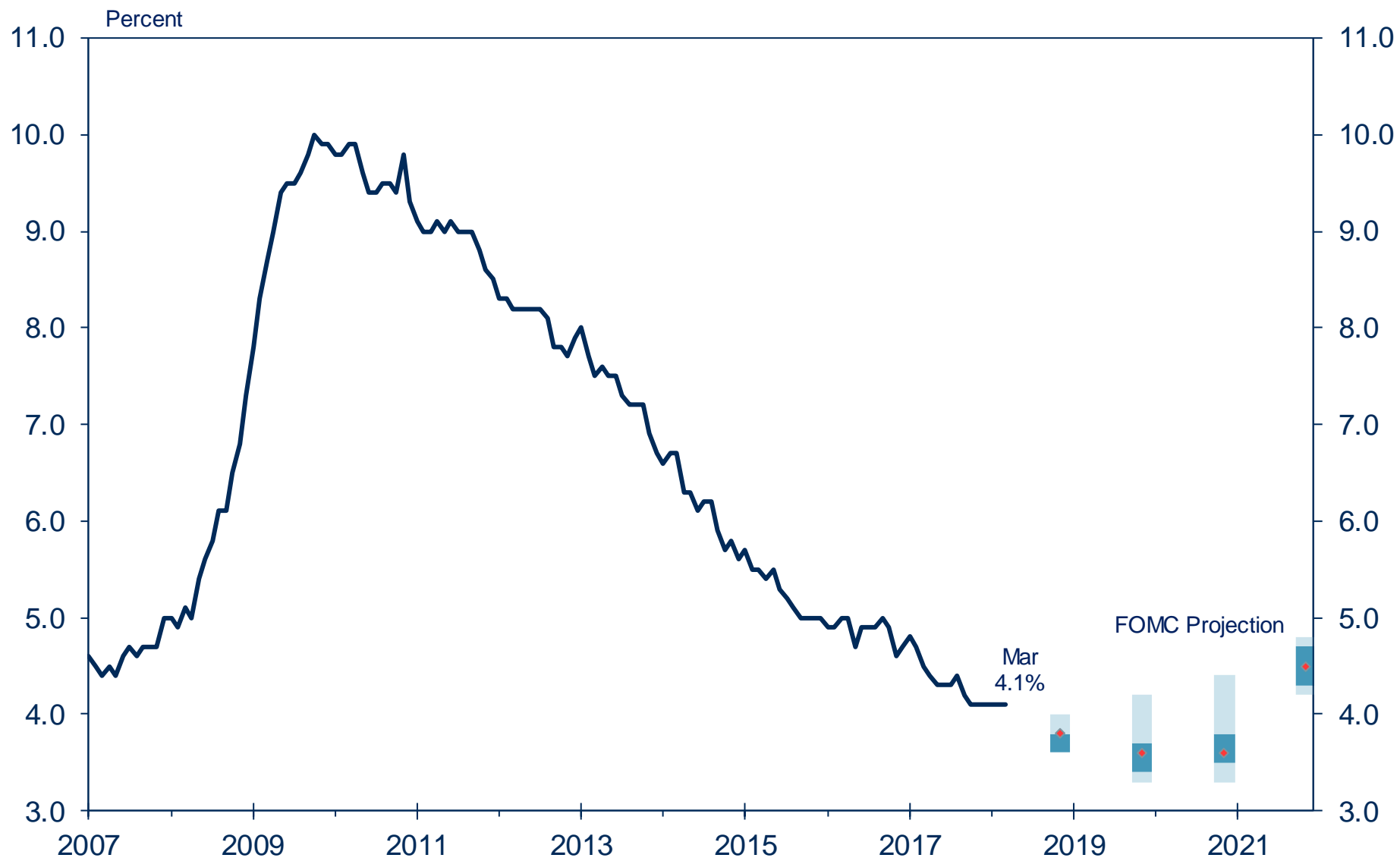
Real Gross Domestic Product



Note: Projection is the median, central tendency, and range from the March 2018 Summary of Economic Projections. Red dots indicate median projections. Projections of change in real gross domestic product (GDP) are from the fourth quarter of the previous year to the fourth quarter of the year indicated.

Source: Bureau of Economic Analysis via Haver Analytics & Federal Reserve Board

Unemployment Rate



Notes: FOMC projection is the median, range, and central tendency for the Q4 levels, from the March 2018 meeting. Red dots indicate median projections

Source: Bureau of Labor Statistics & Board of Governors via Haver Analytics

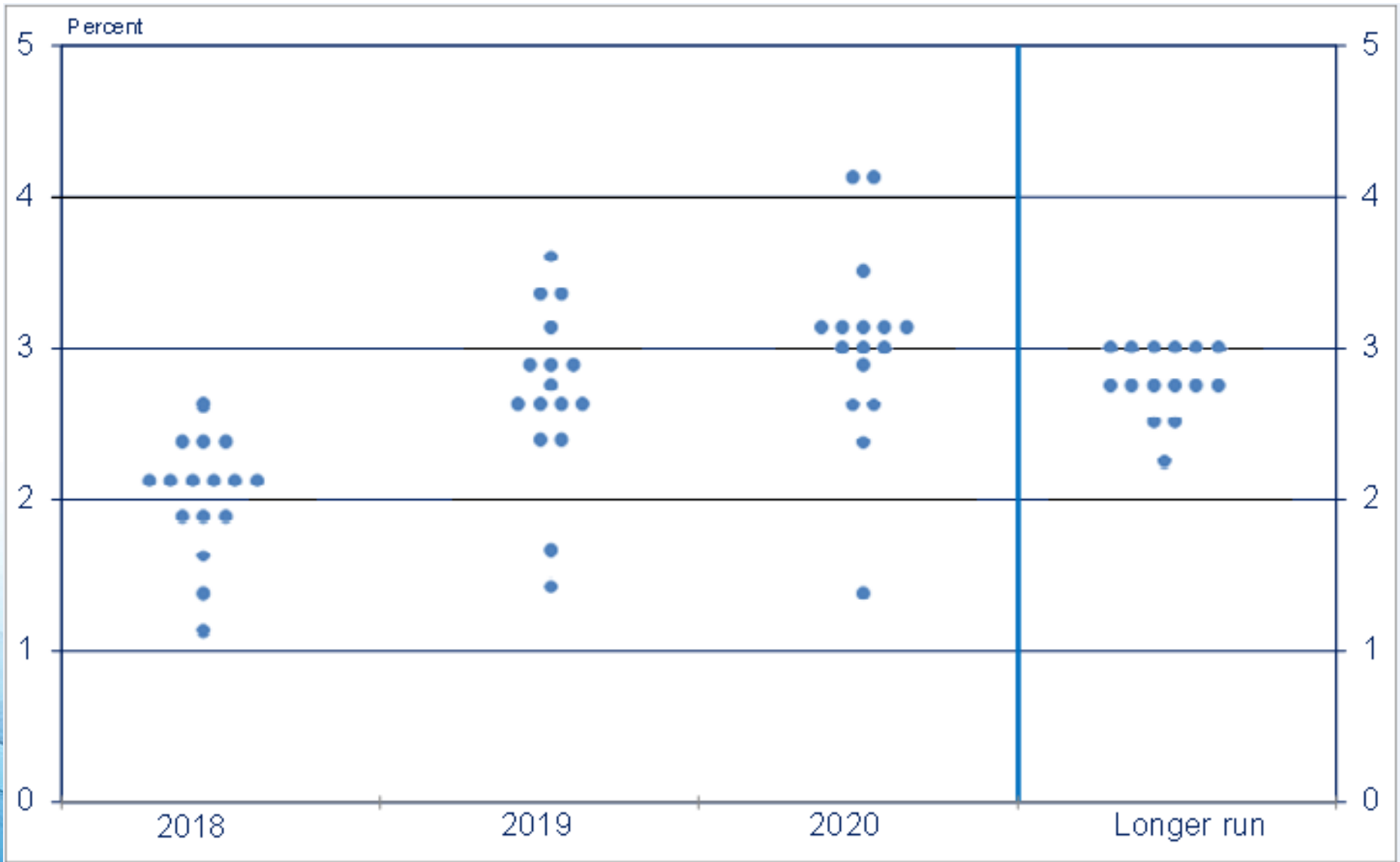
Personal Consumption Expenditure Price Index



Notes: FOMC projection is the median, range, and central tendency for Q4/Q4 percent changes, from the March 2018 meeting. Red dots indicate median projections.

Source: Bureau of Economic Analysis & Board of Governors via Haver Analytics

Summary of Economic Projections: Federal Funds Rate

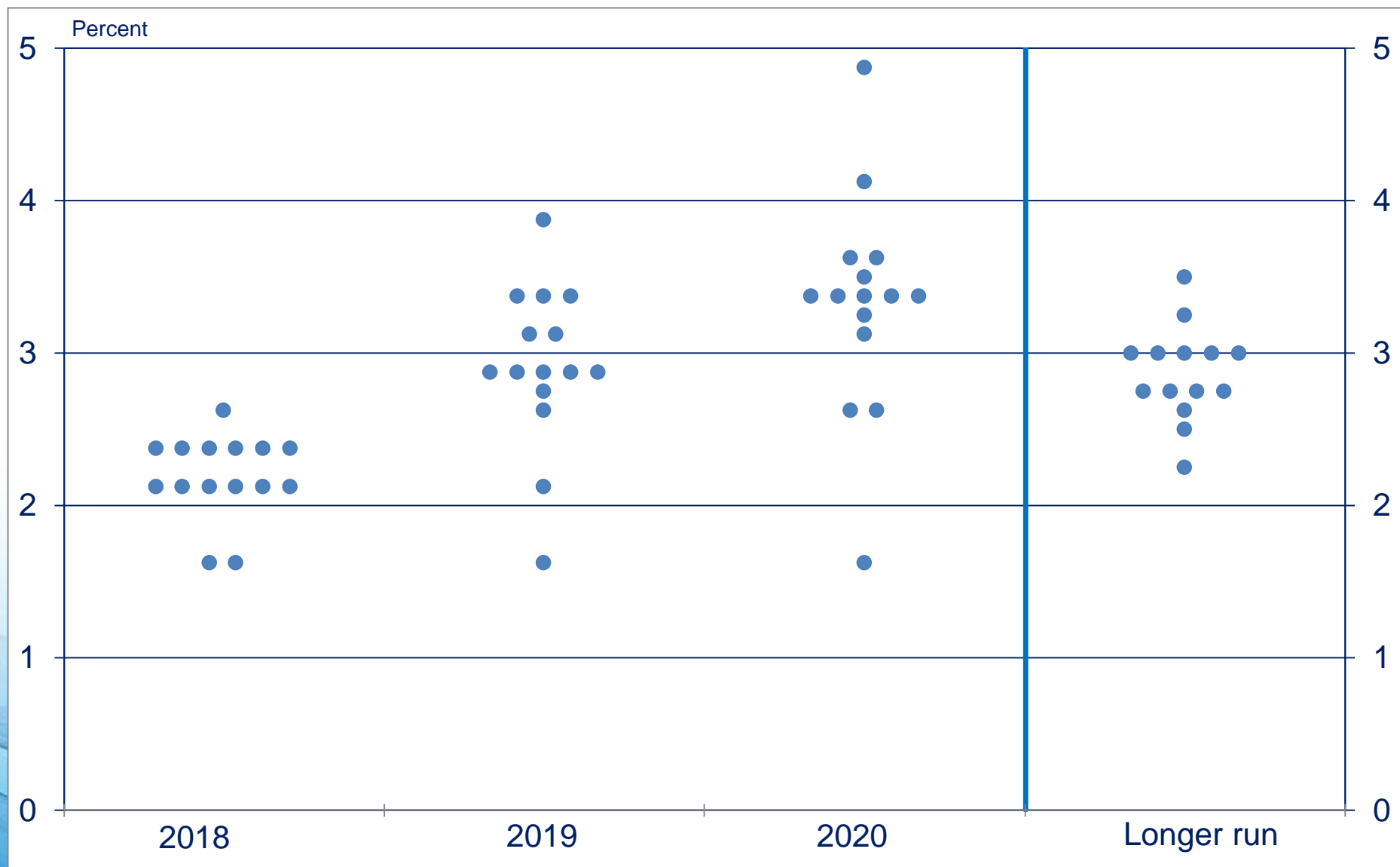


Note: Each dot in the chart represents the value of an FOMC participant's judgment of the midpoint of the appropriate target range (or the appropriate target level) for the federal funds rate at the end of the calendar year.

Projections made for the December 2017 meeting.

Source: Board of Governors

Summary of Economic Projections: Federal Funds Rate



Note: Each dot in the chart represents the value of an FOMC participant's judgment of the midpoint of the appropriate target range (or the appropriate target level) for the federal funds rate at the end of the calendar year.

Projections made for the March 2018 meeting.

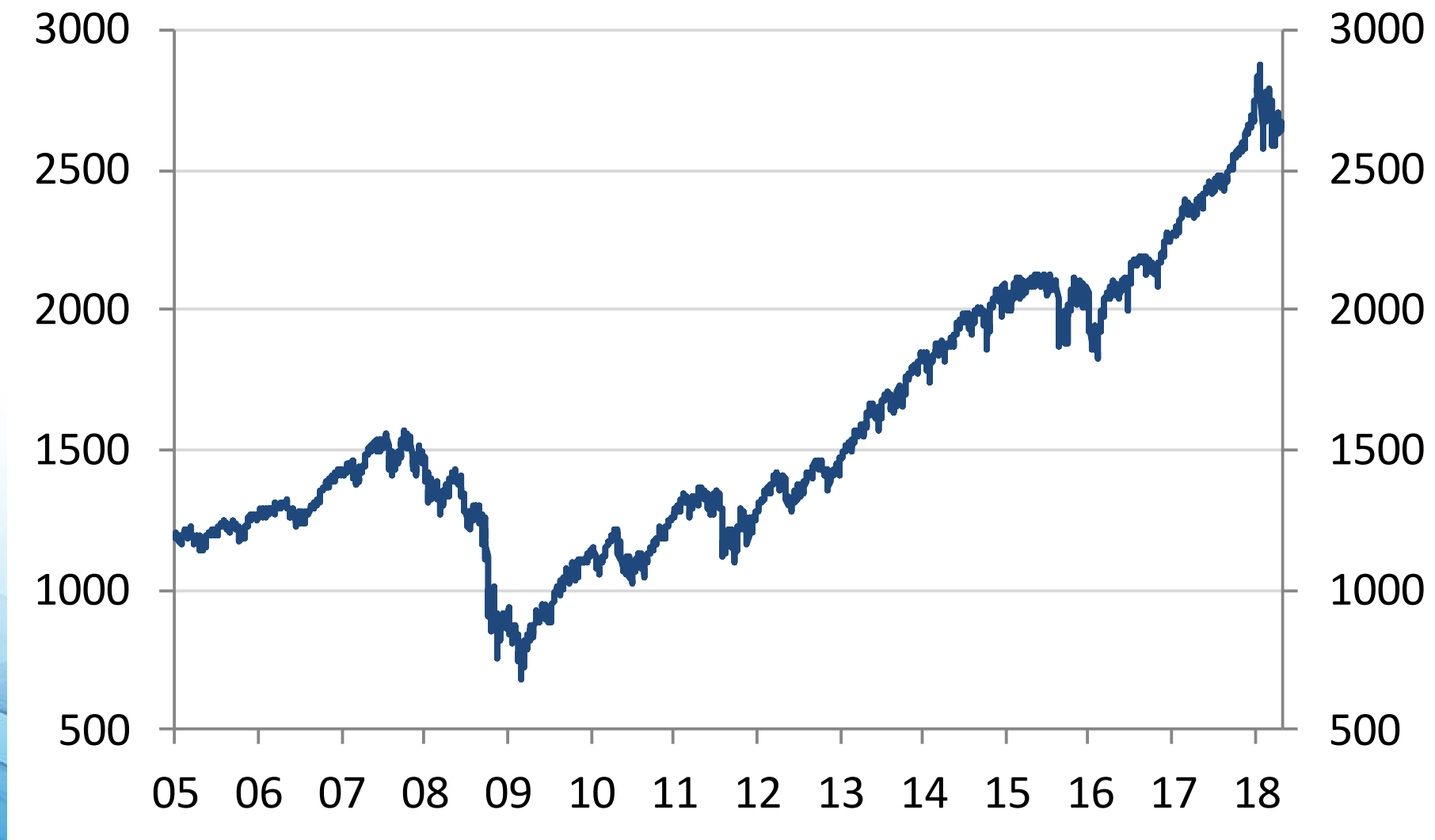
Source: Board of Governors

Capital Market Rates



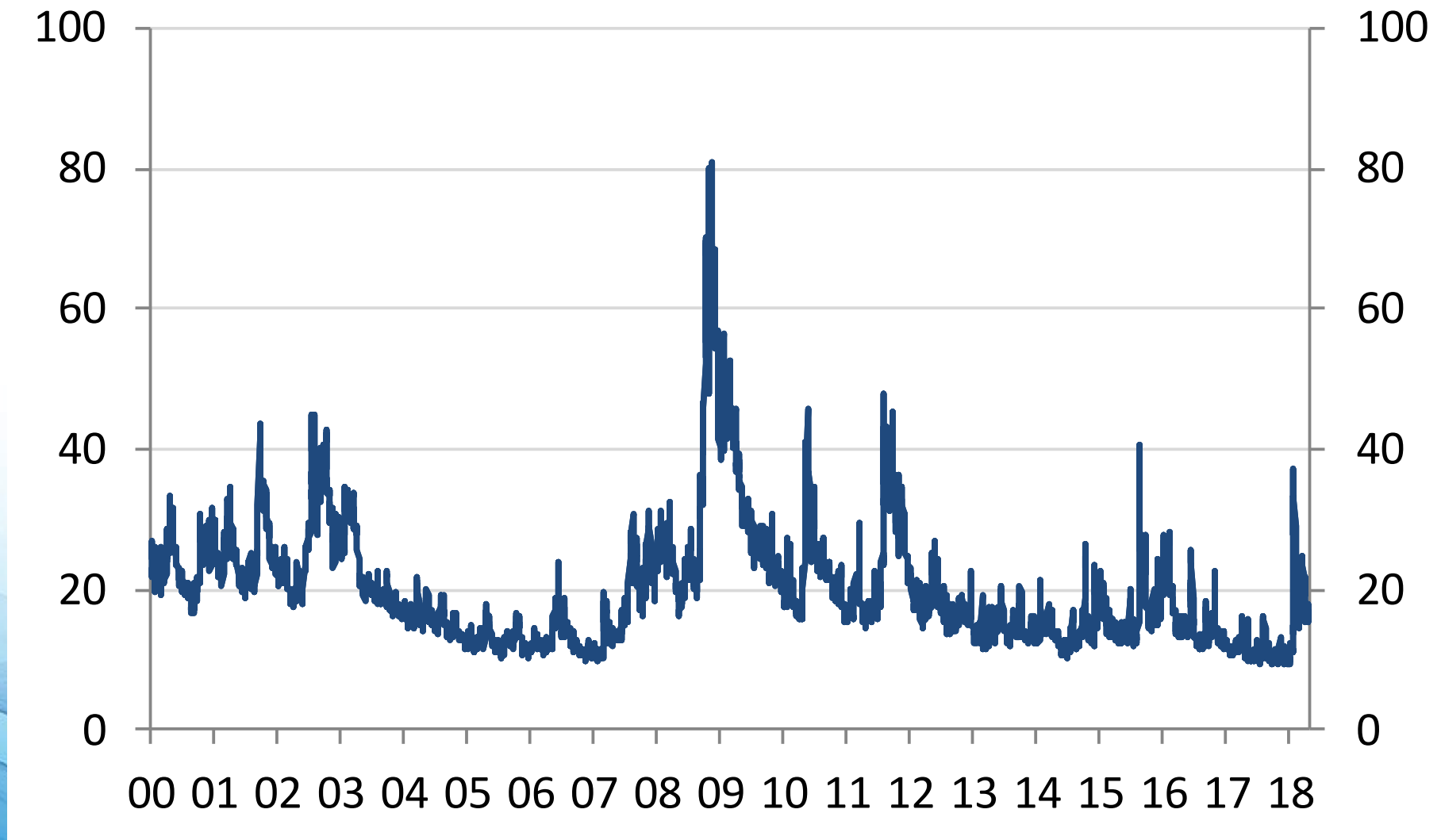
S&P 500

Index (1941-43=10)



CBOE Volatility Index (VIX)

Imputed volatility over the next 30 days



Crude Oil Prices



Notes: Spot and Futures Prices are for Brent Crude Oil.

Source: Financial Times & New York Mercantile Exchange via Haver Analytics & Bloomberg



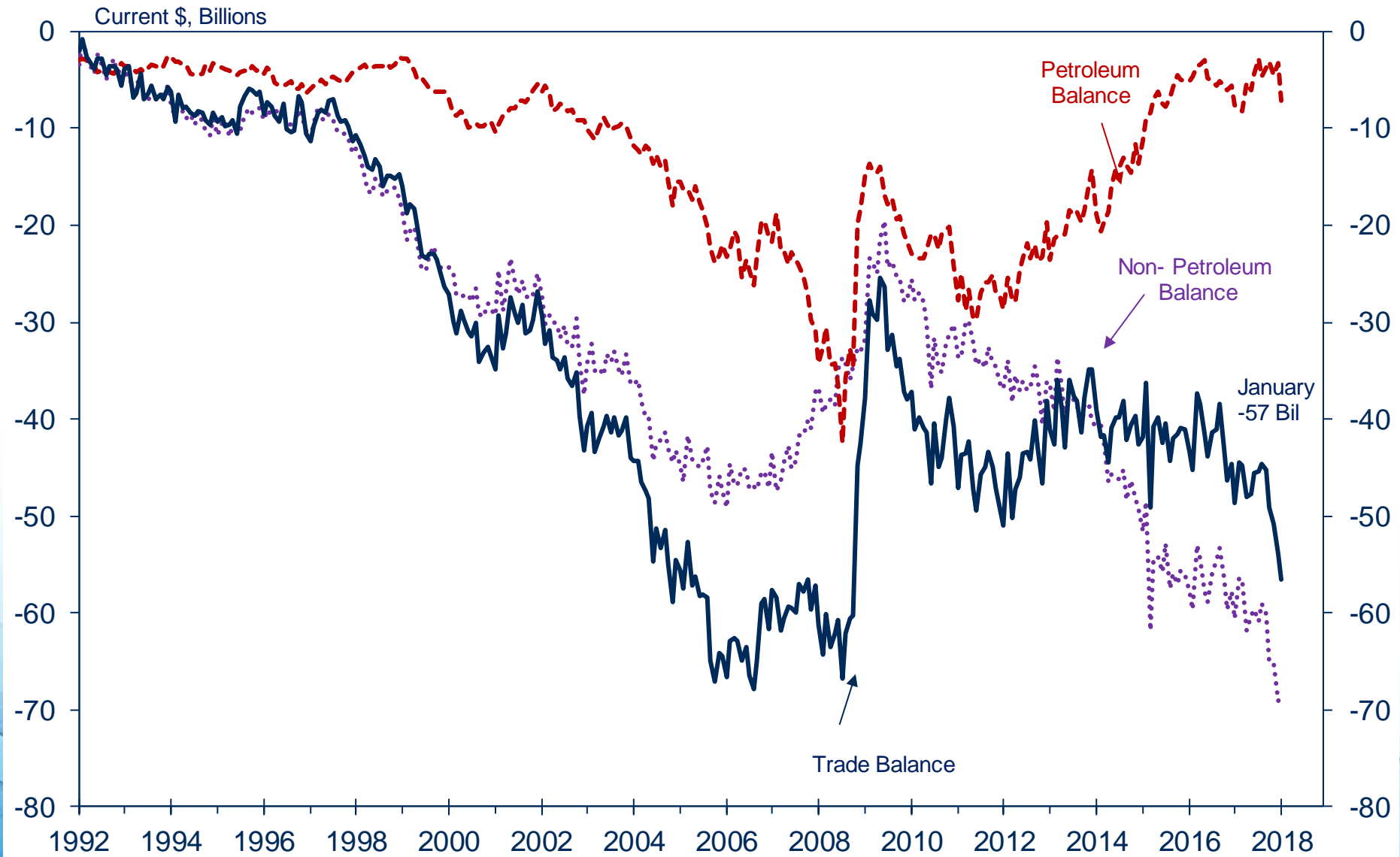
Trade and Tariffs

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Balance of International Trade

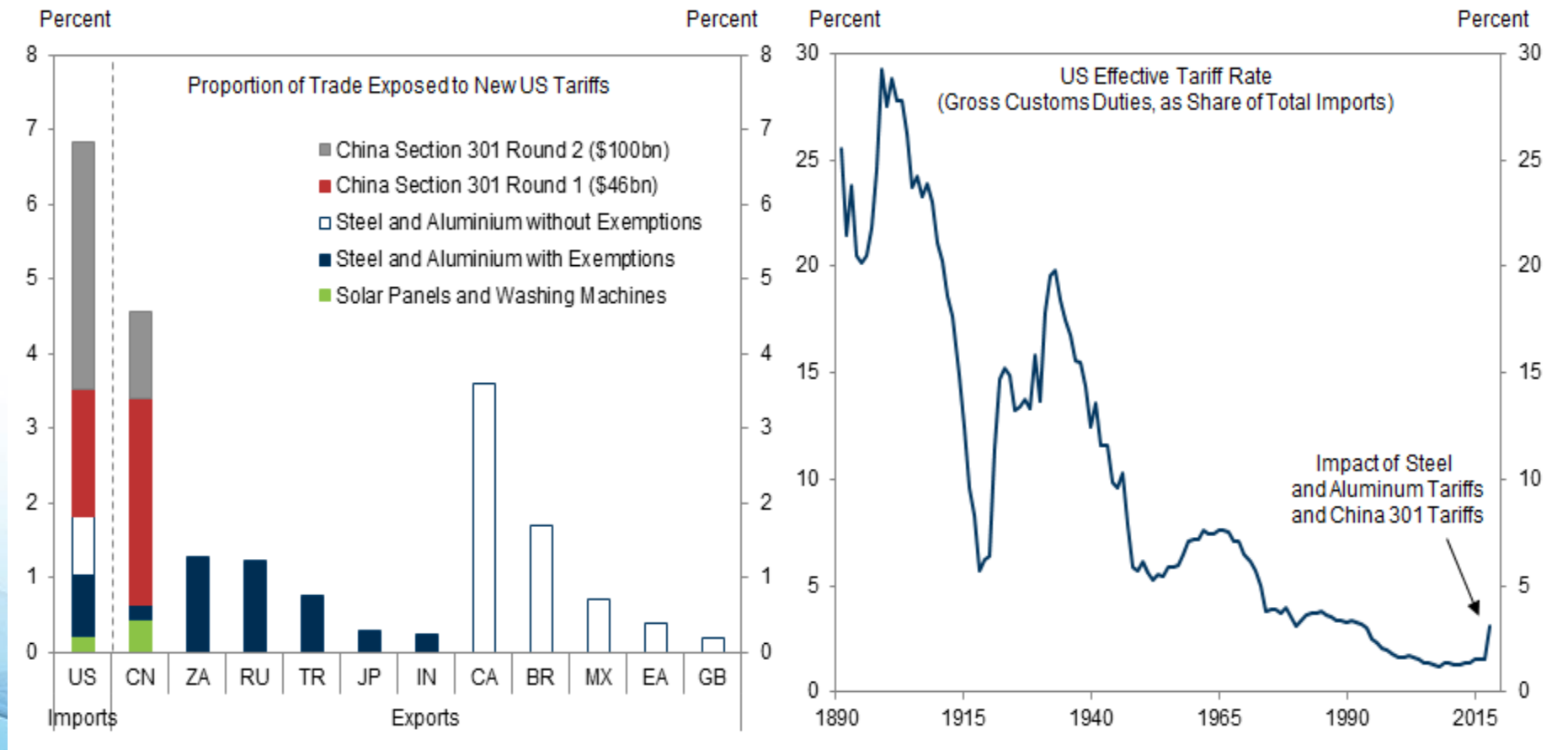


Note: Customs Value of Trade Balance

Tariffs: The “War of Words” so far

- January 23, 2018
 - Tariffs on solar panels (50%) and washing machines (20%)
- March 23, 2018
 - Tariffs on steel (25%) and aluminum (20%)
 - National security justification (“Section 232”)
 - NAFTA and main trading partners exempted until May 1
- April 3, 2018
 - Tariffs on 1300 goods imported from China (25%)
 - Unfair trade and intellectual property rights (“Section 301”)
- April 4, 2018
 - China responds with tariffs on 250 US goods (10-25%)

Tariffs: Some Perspective



Trade, Tariffs and the Economy

- *Size* of the trade balance depends on domestic saving and investment
- *Pattern* of trade depends on a country's endowments which change slowly
- Much of political discussion about trade and its effects is beside the point
 - Tariffs are unambiguously harmful to the economy, even harm protected industry in the longer run
 - Focus should be on technological change, adjustment, and social policy responses



Determinants of Trade: *Size*

- *Size* of the trade balance depends on domestic savings and investment
 - High saver countries have trade balance surpluses (GY, CH, JP), low saver countries have deficits (US, AU)
- Importantly, a trade deficit in and of itself is not a bad thing, a function of a capital account surplus.
 - Trade deficit can be said differently as “vital capital-creating, job-generating foreign investment surplus for a better America.”
 - But it may be a symptom of macroeconomic ill that should be addressed with macroeconomic policy tools



Determinants of Trade: *Pattern*

- *Composition* of trade determined by:
 - Endowments: capital, labor, natural resources
 - Productivity
 - Policy: tax regime, tariffs, regulation
- Endowments can be affected by policy, but change slowly
 - Technological change
 - Immigration
 - Free capital movement, FDI
 - Human capital investment



The Economics of Tariffs

- Tariffs/trade restrictions distort efficient allocation of resources and prevent structural change
 - Raise prices and reduce demand possibly up to the point where even the protected industries are hurt
 - For instance, steel-using companies employ many more people than steel-producing ones
- Tariffs are usually the result of rent-seeking behavior in declining industries
 - Can be addressed by productivity- and process improvement to move up the value chain; social policy

Questions/comments