Lies, Damned Lies & Economic Forecasts

Kevin Webb, CFA
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Cantor Fitzgerald, LLP
Lies, Damned Lies & Economic Forecasts

Agenda

1. What’s the big deal?
2. Experts kNOw better than the rest of us, right?
3. Financial/Economic experts kNOw better, right?
4. A framework for thinking about economic forecasts
5. Updated economic forecasts
Philosophy, Strategy & Tactics

Where Does this Fit?

Investment Philosophy is a coherent way of thinking about markets (how they work), efficiency, risk, return & investor behaviour.

A plan of action or policy designed to achieve one or more goals – usually under conditions of uncertainty.

Resources, skills and methods used to achieve or advance the goal of a strategy.

The difference between strategy and tactics: Strategy is done above the shoulders, Tactics are done below the shoulders.

The intersection of philosophy, strategy & tactics is the world of portfolio management.
What Should I Benchmark?

**Prudence Person**
Investments shall be made with judgment and care, under circumstances then prevailing, which persons of prudence, discretion and intelligence exercise in the management of their own affairs, not for speculation, but for investment, considering the probable safety of their capital as well as the probable income to be derived.

**Prudent Investor**
A U.S. law that sets the standard of fiduciary duty for those entrusted with the responsibility of managing others' money, such as trustees and estate administrators. It requires that a trustee weigh risk versus reward when making investment decisions, taking into account the income that may be generated by the investment as well as the probable safety of the invested capital.

**Prudent Investor vs Prudent Man/Person**
1. Trust accounts are judged on their entire portfolio, rather than whether the investment was prudent at the time of purchase.
2. Diversification is explicitly required under the Prudent Investor Act.
3. Suitability is deemed more important than individual investments.
4. Fiduciaries are allowed to delegate investment management to qualified third parties.
What Should I Benchmark?

General Objectives
“The primary objectives, in priority order...

1. Safety
Safety of principal is the foremost objective... The goal will be to mitigate credit risk and interest rate risk.

2. Liquidity
The investment portfolio shall remain sufficiently liquid to meet all operating requirements that may be reasonably anticipated.

3. Return
The investment portfolio shall be designed with the objective of attaining a market rate of return throughout budgetary and economic cycles, taking into account the investment risk constraints of safety and liquidity needs.”

Benchmark Suitability
Gain/Loss is not listed! Why not?

For the background and concepts behind this visualization see the presentation “Understanding Benchmarks: Concepts” by Kevin Webb, CFA


noun
a thing predicted; a forecast: *a prediction that the Greeks would destroy the Persian empire.*

• the action of predicting something: *the prediction of future behavior.*

ORIGIN
mid 16th cent.: from Latin *praedictio(n-)*, from *praedicere* ‘make known beforehand’ (see *predict*).

noun
a prediction or estimate of future events, especially coming weather or a financial trend.

forecaster ˈfôrˌkastər| noun: a person who predicts or estimates a future event or trend: economic forecasters are predicting a downturn.

Verb
(past and past participle *forecast* or *forecasted*) [with obj.]
predict or estimate (a future event or trend): *rain is forecast for eastern Ohio* | [with obj. and infinitive]: *coal consumption is forecast to increase.*
Experts kNOw better, right?

Variety magazine, 1955.

Rock n’ roll? It will be gone by June

http://www.buzzfeed.com/lukelewis/26-shockingly-bad-predictions#.fanwK6eXE
Experts kNOw better, right?

A Decca Records executive to the band’s manager, Brian Epstein, following an audition in 1962. He continued: “We don’t like your boys’ sound. Groups are out. Four-piece groups with guitars, particularly, are finished.”
Experts kNOw better, right?

Y2K is a crisis without precedent in human history


http://www.buzzfeed.com/lukelewis/26-shockingly-bad-predictions#.fanwK6eXE
Experts kNOw better, right?

Next Christmas the iPod will be dead, finished, gone, kaput

Alan Sugar, 2005.

http://www.buzzfeed.com/lukelewis/26-shockingly-bad-predictions#.fanwK6eXE
Experts kNOw better, right?

There's no chance that the iPhone is going to get any significant market share. No chance

Microsoft CEO
Steve Ballmer,
2007.

http://www.buzzfeed.com/lukelewis/26-shockingly-bad-predictions#.fanwK6eXE
"The only function of economic forecasting is to make astrology look respectable." - John Kenneth Galbraith
Financial experts know better, right?

Stock prices have reached what looks like a permanently high plateau

Economist Irving Fisher in October 1929, three days before the stock market crash that triggered the Great Depression.

http://www.buzzfeed.com/lukelewis/26-shockingly-bad-predictions#.fanwK6eXE
Financial experts know better, right?

Franklin Raines (CEO of Fannie Mae), 10th June 2004: "These subprime assets are so riskless that their capital for holding them should be under 2 percent."

Financial experts know better, right?

Joseph Cassano (Head of Financial Products at AIG), 2007: "It is hard for us, without being flippant, to even see a scenario within any kind of realm of reason that would see us losing one dollar in any of these Credit Default Swap transactions."

Financial experts kNOw better, right?

In December 2007, Goldman Sachs chief investment strategist Abby Joseph Cohen made a Fisher-like prediction of her own. She suggested the S&P 500 would hit 1,675 by the end of 2008, a climb of 14% — it actually ended below 900.
Financial experts kNOw better, right?

Ben Bernanke, 10th January 2008 - "The Federal Reserve is currently not forecasting a recession."

Donald Luskin (US investment guru), 14th September 2008: "Anyone who says we’re in a recession, or heading into one—especially the worst one since the Great Depression—is making up his own private definition of 'recession'."
Coin Flipping as Insight

Are Coin Flips Really Random?
“Generate a long series of coin flips producing heads and tails with 50% odds each and fill up sheets of paper. If the series is long enough you may get eight heads or eight tails in a row, perhaps even ten of each. Yet you know that in spite of these wins the conditional odds of getting a head or a tail is still 50%.”
The Flip Side of the Coin

“DR. THEODORE P. HILL asks his mathematics students at the Georgia Institute of Technology to go home and either flip a coin 200 times and record the results, or merely pretend to flip a coin and fake 200 results. The following day he runs his eye over the homework data, and to the students' amazement, he easily fingers nearly all those who faked their tosses.”

Hurricanes & The Iliad

Technically the Trojan Horse is not mentioned in The Iliad

Hurricane Rita Final

Hurricane Rita Storm Track (2005)

Tropical
- Depression
- Storm
- Cat 1
- Cat 2
- Cat 3
- Cat 4
- Cat 5

Hurricane

11 PM Sat Sep 24

11 PM Sat Sep 17

Fri Oct 12 2007 01:35 PM EDT

LawrencevilleWeather.com
Chalcas the wise

“...Chalcas the wise, the Grecian priest and guide, That sacred seer, whose comprehensive view, The past, the present, and the future knew...”
Wall Street Journal Economic Forecast Survey

Economic Forecasting Survey
The Wall Street Journal surveys a group of more than 60 economists on more than 10 major economic indicators on a monthly basis.

- Updated Monthly
- Includes Identities
- Spreadsheet Data

Economic Indicators

- 10 Year Note

GDP (quarterly)
GDP (annual)
CPI
Oil Prices
Unemployment
Nonfarm Payrolls
Federal Funds Rate
10 Year Note
Home Prices
Housing Starts
Recession Probability

Download data for December 2015
Edition 2015-12-01

http://projects.wsj.com/econforecast/#ind=tenyear&r=16
History Alone

10Yr Treasury Yield: 12/31/03 - 12/31/08

Analysis by Kevin Webb, CFA (kwebb@cantor.com). WSJ and Bloomberg forecasts as published. Econ data from FRED.
Forecast Alone

10Yr Treasury Yield: 12/31/03 - 12/31/08

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Analysis by Kevin Webb, CFA (kwebb@cantor.com). WSJ and Bloomberg forecasts as published. Econ data from FRED.
Chalcas Chart: Dec-08 to Dec-13 on Dec-11

10Yr Treasury Yield: 12/31/08 - 12/31/13

Analysis by Kevin Webb, CFA (kwebb@cantor.com). WSJ and Bloomberg forecasts as published. Econ data from FRED.
Let’s Focus. How did they do? Your Guess?

10Yr Treasury Yield: 12/31/11 - 12/31/13

Wall Street Journal Survey Min Forecast: 12-2011
Wall Street Journal Survey 25th Percentile Forecast: 12-2011
Wall Street Journal Survey Median Forecast: 12-2011
Wall Street Journal Survey 75th Percentile Forecast: 12-2011
Wall Street Journal Survey Max Forecast: 12-2011

Analysis by Kevin Webb, CFA (kwebb@cantor.com). WSJ and Bloomberg forecasts as published. Econ data from FRED.
How did “they” do? Did You Remember?

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Who did the best?

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<tr>
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<th>Forecaster</th>
<th>Fed Funds Rate</th>
<th>10Yr Treasury Yield</th>
<th>Unemployment Rate</th>
<th>CPI YoY</th>
<th>GDP</th>
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Who did the best the next time? Not the same firms.

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Analysis by Kevin Webb, CFA (kwebb@cantor.com). WSJ and Bloomberg forecasts as published. Econ data from FRED.
What about the FED? 12/18/2013 Forecasts
What about the FED? 12/17/2014 Forecasts
What about the FED? 12/16/2015 Forecasts
What about the FED? 12/14/2016 Forecasts
Which forecaster should you follow?
The average/median forecast

“If you’re looking for an economic forecast, the best place to turn is the average or aggregate prediction rather than that of any one economist. … This property— group forecasts beat individual ones— has been found to be true in almost every field in which it has been studied.”


“The group mean forecasts from a series of surveys are on the average over time more accurate than most of the corresponding sets of individual predictions. This is a strong conclusion, which applies to all variables and predictive horizons covered and is consistent with evidence for different periods and from other studies.” - Zarnowitz, Victor (January 1992). _Business Cycles: Theory, History, Indicators, and Forecasting_ (p. 457). University of Chicago Press. Downloadable from [http://www.nber.org/books/zarn92-1](http://www.nber.org/books/zarn92-1)
Required for planning purposes...

“Nobel laureate Kenneth Arrow has warned, "[O]ur knowledge of the way things work, in society or in nature, comes trailing clouds of vagueness. Vast ills have followed a belief in certainty."

“... The young statisticians in the Weather Division ... finding that prevailing techniques were not significantly more reliable than the null ... sent a memo to the General of the Air Corps suggesting that the group be disbanded. Six months later ... ‘The general is well aware that your forecasts are no good. However, they are required for planning purposes.’ The group remained intact.”
For fools rush in where angels fear to tread

“He who lives by the crystal ball soon learns to eat ground glass.”

Chalcas Chart: Dec-14 to Dec-20 on Dec-17

Fed Funds Rate: 12/31/14 - 12/31/20

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Chalcas Chart: Dec-14 to Dec-20 on Dec-17

10Yr Treasury Yield: 12/31/14 - 12/31/20

- Actual 10Yr Treasury Yield
- Wall Street Journal Survey Min Forecast: 12-2017
- Wall Street Journal Survey Median Forecast: 12-2017
- Wall Street Journal Survey 75th Percentile Forecast: 12-2017
- Wall Street Journal Survey Max Forecast: 12-2017

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CPI YoY: 12/31/14 - 12/31/20

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Chalcas Chart: Dec-14 to Dec-20 on Dec-17

Unemployment Rate: 12/31/14 - 12/31/20

- Recession (NBER)
- Actual Unemployment Rate
- Wall Street Journal Survey Min Forecast: 12-2017
- Wall Street Journal Survey Median Forecast: 12-2017
- Wall Street Journal Survey 75th Percentile Forecast: 12-2017
- Wall Street Journal Survey Max Forecast: 12-2017

Analysis by Kevin Webb, CFA (kwebb@cantor.com). WSJ and Bloomberg forecasts as published. Econ data from FRED.
Chalcas Chart: Dec-14 to Dec-20 on Dec-17

Crude Oil: 12/31/14 - 12/31/20

Analysis by Kevin Webb, CFA (kwebb@cantor.com). WSJ and Bloomberg forecasts as published. Econ data from FRED.
Chalcas Chart: Dec-14 to Dec-20 on Dec-17

GDP: 12/31/14 - 12/31/18

- Recession (NBER)
- Actual GDP
- Wall Street Journal Survey Min Forecast: 12-2017
- Wall Street Journal Survey Median Forecast: 12-2017
- Wall Street Journal Survey 75th Percentile Forecast: 12-2017
- Wall Street Journal Survey Max Forecast: 12-2017

Analysis by Kevin Webb, CFA (kwebb@cantor.com). WSJ and Bloomberg forecasts as published. Econ data from FRED.
Fed Funds Visual Accuracy Test

Fed Funds Rate: 12/31/11 - 12/31/17

- Actual Fed Funds Rate
- Recession (NBER)
- Wall Street Journal Survey Median Forecast: 12-2011
- Wall Street Journal Survey Median Forecast: 12-2012
- Wall Street Journal Survey Median Forecast: 12-2013
- Wall Street Journal Survey Median Forecast: 12-2014

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10Yr Treasury Yield Visual Accuracy Test

10Yr Treasury Yield: 12/31/11 - 12/31/17

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CPI YoY Visual Accuracy Test

CPI YoY: 12/31/11 - 12/31/17

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Unemployment Rate Visual Accuracy Test

Unemployment Rate: 12/31/11 - 12/31/17

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GDP Visual Accuracy Test

GDP: 12/31/11 - 12/31/16

Analysis by Kevin Webb, CFA (kwebb@cantor.com). WSJ and Bloomberg forecasts as published. Econ data from FRED.
Crude Oil Visual Accuracy Test

Analysis by Kevin Webb, CFA (kwebb@cantor.com). WSJ and Bloomberg forecasts as published. Econ data from FRED.
Monetary Policy

Monetary policy is the Federal Reserve's actions, as a central bank, to achieve three goals specified by Congress: maximum employment, stable prices, and moderate long-term interest rates in the United States.

The Federal Reserve conducts the nation's monetary policy by managing the level of short-term interest rates and influencing the availability and cost of credit in the economy. Monetary policy directly affects interest rates; it indirectly affects stock prices, wealth, and currency exchange rates. Through these channels, monetary policy influences spending, investment, production, employment, and inflation in the United States.

Learn more

Federal Open Market Committee

FOMC Calendar
About the FOMC
Transcripts and other historical materials
Rules and Authorizations
FAQs
FOMC Longer-Run Goals and Monetary Policy Strategy (PDF)
Communications Policies: Committee (PDF) | Staff (PDF)

Recent Documents
FOMC Statement: PDF | HTML
Released December 13, 2017
Projection Materials: PDF | HTML
Released December 13, 2017
Press Conference
December 13, 2017
FOMC Minutes: PDF | HTML
Released January 3, 2018

Upcoming Dates
Jan. 30-31 FOMC Meeting
Two-day meeting
Feb. 21 FOMC Minutes
Meeting of Jan. 30-31
March 20-21 FOMC Meeting
Two-day meeting
Press Conference
April 11 FOMC Minutes
Meeting of March 20-21
NOTE: Each shaded circle indicates the value (rounded to the nearest 1/8 percentage point) of an individual participant’s judgment of the midpoint of the appropriate target range for the federal funds rate or the appropriate target level for the federal funds rate at the end of the specified calendar year or over the longer run. One participant did not submit longer-run projections for the federal funds rate.

Federal Reserve

Economic projections of Federal Reserve Board members and Federal Reserve Bank presidents under their individual assessments of projected appropriate monetary policy, December 2017

Advance release of table 1 of the Summary of Economic Projections to be released with the FOMC minutes

<table>
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<tr>
<th>Percent</th>
<th>Median¹</th>
<th>Central tendency²</th>
<th>Range³</th>
<th>Longer run</th>
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Note: Projections of change in real gross domestic product (GDP) and projections for both measures of inflation are percent changes from the fourth quarter of the previous year to the fourth quarter of the year indicated. PCE inflation and core PCE inflation are the percentage rates of change in, respectively, the price index for personal consumption expenditures (PCE) and the price index for PCE excluding food and energy. Projections for the unemployment rate are for the average civilian unemployment rate in the fourth quarter of the year indicated. Each participant’s projections are based on his or her assessment of appropriate monetary policy. Longer-run projections represent each participant’s assessment of the rate to which each variable would be expected to converge under appropriate monetary policy and in the absence of further shocks to the economy. The projections for the federal funds rate are the value of the midpoint of the projected appropriate target range for the federal funds rate or the projected appropriate target level for the federal funds rate at the end of the specified calendar year or the longer run. The September projections were made in conjunction with the meeting of the Federal Open Market Committee on September 19–20, 2017. One participant did not submit longer-run projections for the change in real GDP, the unemployment rate, or the federal funds rate in conjunction with the September 19–20, 2017, meeting, and one participant did not submit such projections in conjunction with the December 12–13, 2017, meeting.

1. For each period, the median is the middle projection when the projections are arranged from lowest to highest. When the number of projections is even, the median is the average of the two middle projections.
2. The central tendency excludes the three highest and three lowest projections for each variable in each year.
3. The range for a variable in a given year includes all participants’ projections, from lowest to highest, for that variable in that year.
4. Longer-run projections for core PCE inflation are not collected.

Change in real GDP
- Median of projections
- Central tendency of projections
- Range of projections

Actual

Unemployment rate

PCE inflation

NOTE: Definitions of variables and other explanations are in the notes to the projections table. The data for the actual values of the variables are annual.

Congressional Budget Office

Budget and Economic Data

CBO regularly publishes data to accompany some of its key reports. These data have been published in the [Budget and Economic Outlook and Updates](https://www.cbo.gov/about/products/budget-economic-data) and in their associated supplemental material, except for that from the [Long-Term Budget Outlook](https://www.cbo.gov/about/products/budget-economic-data).

### BUDGET
- 10-Year Budget Projections
- Long-Term Budget Projections
- Historical Budget Data
- 10-Year Trust Fund Projections
- Detailed Revenue Projections
- Spending Projections, by Budget Account
- Estimates of Automatic Stabilizers

### ECONOMIC
- 10-Year Economic Projections
- Potential GDP and Underlying Inputs

#### 10-Year Economic Projections
Projections of output, prices, labor market measures, interest rates, and income.

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### Output

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| Percentage change, annual rate | 3.4               | 3.9               | 4.0               | 4.0               | 3.9               | 3.9               | 4.0               | 4.0               | 4.0               | 4.0               | 4.0               | 4.0               | 4.0               |

| Potential GDP | 18,231               | 18,761               | 19,314               | 20,117               | 20,857               | 21,642               | 22,439               | 23,233               | 24,087               | 25,149               | 26,149               | 27,190               | 28,272               |
| Percentage change, annual rate | 2.7               | 3.4               | 3.7               | 3.8               | 3.9               | 4.0               | 4.0               | 4.0               | 4.0               | 4.0               | 4.0               | 4.0               | 4.0               |

| Real GDP | 18,397               | 18,935               | 19,512               | 20,319               | 21,144               | 21,925               | 22,709               | 23,558               | 24,409               | 25,417               | 26,438               | 27,502               | 28,639               |
| Percentage change, annual rate | 2.6               | 2.7               | 3.6               | 4.0               | 3.9               | 4.0               | 4.0               | 4.0               | 4.0               | 4.0               | 4.0               | 4.0               | 4.0               |

| Real GNP | 18,570               | 19,115               | 19,692               | 20,510               | 21,254               | 22,038               | 22,822               | 23,652               | 24,504               | 25,446               | 26,488               | 27,553               | 28,656               |
| Percentage change, annual rate | 2.3               | 2.6               | 3.5               | 4.0               | 3.9               | 4.0               | 4.0               | 4.0               | 4.0               | 4.0               | 4.0               | 4.0               | 4.0               |

| Real Potential GDP | 18,573               | 19,113               | 19,693               | 20,513               | 21,254               | 22,038               | 22,822               | 23,652               | 24,504               | 25,446               | 26,488               | 27,553               | 28,656               |
| Percentage change, annual rate | 1.6               | 1.9               | 2.8               | 3.7               | 3.6               | 3.5               | 3.5               | 3.5               | 3.5               | 3.5               | 3.5               | 3.5               | 3.5               |

### Prices

**Price Index, Personal Consumption Expenditures (PCE) 2009=100**
- 2009=100: 109.5
- Percentage change, annual rate: 0.4

**Price Index, PCE, Excluding food and energy 2009=100**
- 2009=100: 109.5
- Percentage change, annual rate: 1.4

**Consumer Price Index, All Urban Consumers (CPI-U) 1982-84=100**
- 2009=100: 237.0
- Percentage change, annual rate: 0.1

**CPI-U, Excluding Food and Energy 1982-84=100**
- 2009=100: 242.2
- Percentage change, annual rate: 1.8

**GDP Price Index**
- 2009=100: 110.0
- Percentage change, annual rate: 1.1

**Employment Cost Index (ECI), Private Wages and Salaries December 2005=100**
- 2009=100: 123.3
- Percentage change, annual rate: 2.3

**Employment Cost Index (ECI), Private Wages and Salaries December 2005=100**
- 2009=100: 123.3
- Percentage change, annual rate: 2.3

**Refiners' Acquisition Cost of Crude Oil, Imported Dollars per barrel**
- 2009=100: 46.5

**Price of Crude Oil, West Texas Intermediate (WTI) Dollars per barrel**
- 2009=100: 48.7

**Price of Natural Gas, Henry Hub Dollars per MMBtu**
- 2009=100: 2.6

**FHFA House Price Index, Purchase Only 1991Q1=100**
- 2009=100: 219.2

**Nominal Exchange Rate Index (Export Weighted) 1970Q1=100**
- 2009=100: 169.0

### Labor

**Unemployment Rate, Civilian, 16 Years or Older**
- 2009=100: 5.3

**Noninstitutional Population, Civilian, 16 Years or Older**
- 2009=100: 250.8

**Labor Force, Civilian, 16 Years or Older**
- 2009=100: 148.8

**Labor Force Participation Rate, 16 Years or Older**
- 2009=100: 62.7

**Employment, Civilian, 16 Years or Older (Household Survey)**
- 2009=100: 148.8

**Employment, Total Nonfarm (Establishment Survey)**
- 2009=100: 148.8

**Labor Productivity Index (Nonfarm Business Sector)**
- 2009=100: 148.8

### Congressional Budget Office

https://www.cbo.gov/about/products/budget-economic-data
2. June 2017 Baseline Forecast—Data Release (Calendar Year)

### Interest Rates

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### Components of GDP (Real)

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<td>-1.6</td>
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<td>-1.7</td>
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<td><strong>Change in private inventories</strong></td>
<td>Billions of 2009 dollars</td>
<td>84</td>
<td>22</td>
<td>33</td>
<td>45</td>
<td>37</td>
<td>32</td>
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<td>0.6</td>
<td>-0.4</td>
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<td>0.3</td>
<td>0.4</td>
<td>0.5</td>
<td>0.5</td>
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<td><strong>Government Consumption Expenditures and Gross Investment</strong></td>
<td>Billions of 2009 dollars</td>
<td>2,884</td>
<td>2,907</td>
<td>2,906</td>
<td>2,930</td>
<td>2,955</td>
<td>2,980</td>
<td>3,005</td>
<td>3,030</td>
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<td>0.7</td>
<td>0.7</td>
<td>0.6</td>
<td>0.7</td>
</tr>
<tr>
<td><strong>Federal</strong></td>
<td>Billions of 2009 dollars</td>
<td>1,114</td>
<td>1,121</td>
<td>1,116</td>
<td>1,114</td>
<td>1,114</td>
<td>1,120</td>
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<td>1,144</td>
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<td>0.6</td>
<td>-0.4</td>
<td>-0.2</td>
<td>0.0</td>
<td>0.2</td>
<td>0.3</td>
<td>0.3</td>
<td>0.2</td>
<td>0.3</td>
<td>0.4</td>
<td>0.5</td>
<td>0.5</td>
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<tr>
<td><strong>State and local</strong></td>
<td>Billions of 2009 dollars</td>
<td>1,788</td>
<td>1,785</td>
<td>1,788</td>
<td>1,814</td>
<td>1,838</td>
<td>1,861</td>
<td>1,883</td>
<td>1,903</td>
<td>1,923</td>
<td>1,941</td>
<td>1,959</td>
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<td>1.0</td>
<td>1.0</td>
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<tr>
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<td>-7.8</td>
<td>-7.9</td>
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<tr>
<td><strong>Exports</strong></td>
<td>Billions of 2009 dollars</td>
<td>2,121</td>
<td>2,128</td>
<td>2,163</td>
<td>2,198</td>
<td>2,257</td>
<td>2,331</td>
<td>2,412</td>
<td>2,497</td>
<td>2,586</td>
<td>2,681</td>
<td>2,782</td>
<td>2,889</td>
<td>3,001</td>
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<td>1.6</td>
<td>1.6</td>
<td>2.7</td>
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<td>3.7</td>
<td>3.8</td>
<td>3.8</td>
<td>3.9</td>
</tr>
<tr>
<td><strong>Imports</strong></td>
<td>Billions of 2009 dollars</td>
<td>2,681</td>
<td>2,691</td>
<td>2,809</td>
<td>2,896</td>
<td>2,965</td>
<td>3,048</td>
<td>3,147</td>
<td>3,240</td>
<td>3,336</td>
<td>3,455</td>
<td>3,568</td>
<td>3,676</td>
<td>3,798</td>
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<td>4.6</td>
<td>1.1</td>
<td>4.4</td>
<td>3.1</td>
<td>2.4</td>
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<td>3.6</td>
<td>3.3</td>
<td>3.0</td>
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</tr>
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</table>

Source: Congressional Budget Office.

Actual values reflect data released as of early April 2017. Projected values are shaded.

CCAdj = capital consumption adjustment; FHFA = Federal Housing Finance Agency; IVA = inventory valuation adjustment; MMBtu = 1 million British thermal units.

https://www.cbo.gov/about/products/budget-economic-data
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Quarterly, 1968:Q4 to 2017:Q4

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