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Five Things You Need to Know About the U.S. Economy

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Disclaimer

The views I will express today are my own and do not necessarily reflect the positions of the Federal Reserve Bank of St. Louis or the Federal Reserve System.

The Big Picture

- The economy is basically at full employment with an unemployment rate of 5%.
- Real GDP growth has averaged about 2% during this expansion; the FOMC's long-run projection is 1.8%.
- Underlying inflation is close to the FOMC's 2% target.

What We Thought We Knew.

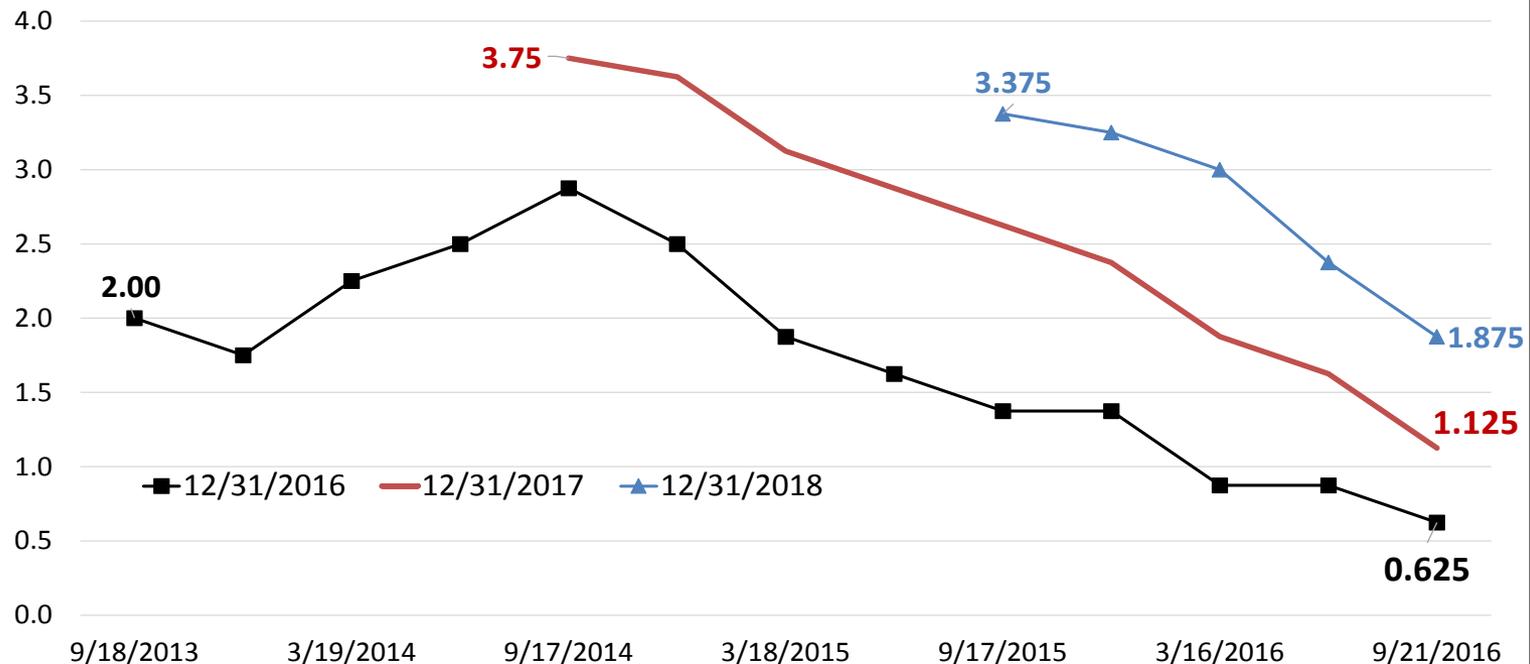
- Like most forecasters, we assumed that the economy would steadily converge to our long-run projections for key economic variables.
- But over the short run, we thought that there would be a burst of above-trend growth that would drive the unemployment rate lower than most expected.
- We also thought that the combination of stronger growth and very easy policy would cause inflation to temporarily overshoot the 2% target.

A Towel-Throwing Exercise!

- We got the unemployment projection right.
- But an oil shock temporarily lowered inflation below the Fed's target; it is slowly—very slowly!—returning to target.
- There was a burst of strong real GDP growth over the second half of 2013 and in the middle of 2014, but it didn't last.
- The cyclical dynamics have played out—and we're still stuck at 2% growth.

FOMC Participants keep marking down their fed funds rate target projections.

Historical Projections for the FOMC's Federal Funds Target on Dec. 31, 2016, Dec. 31, 2017, and Dec. 31, 2018 According to the Median FOMC Participant Percent



SOURCE: Federal Reserve Summary of Economic Projections.

**THE FIVE THINGS
YOU NEED TO KNOW
ABOUT THE U.S.
ECONOMY**

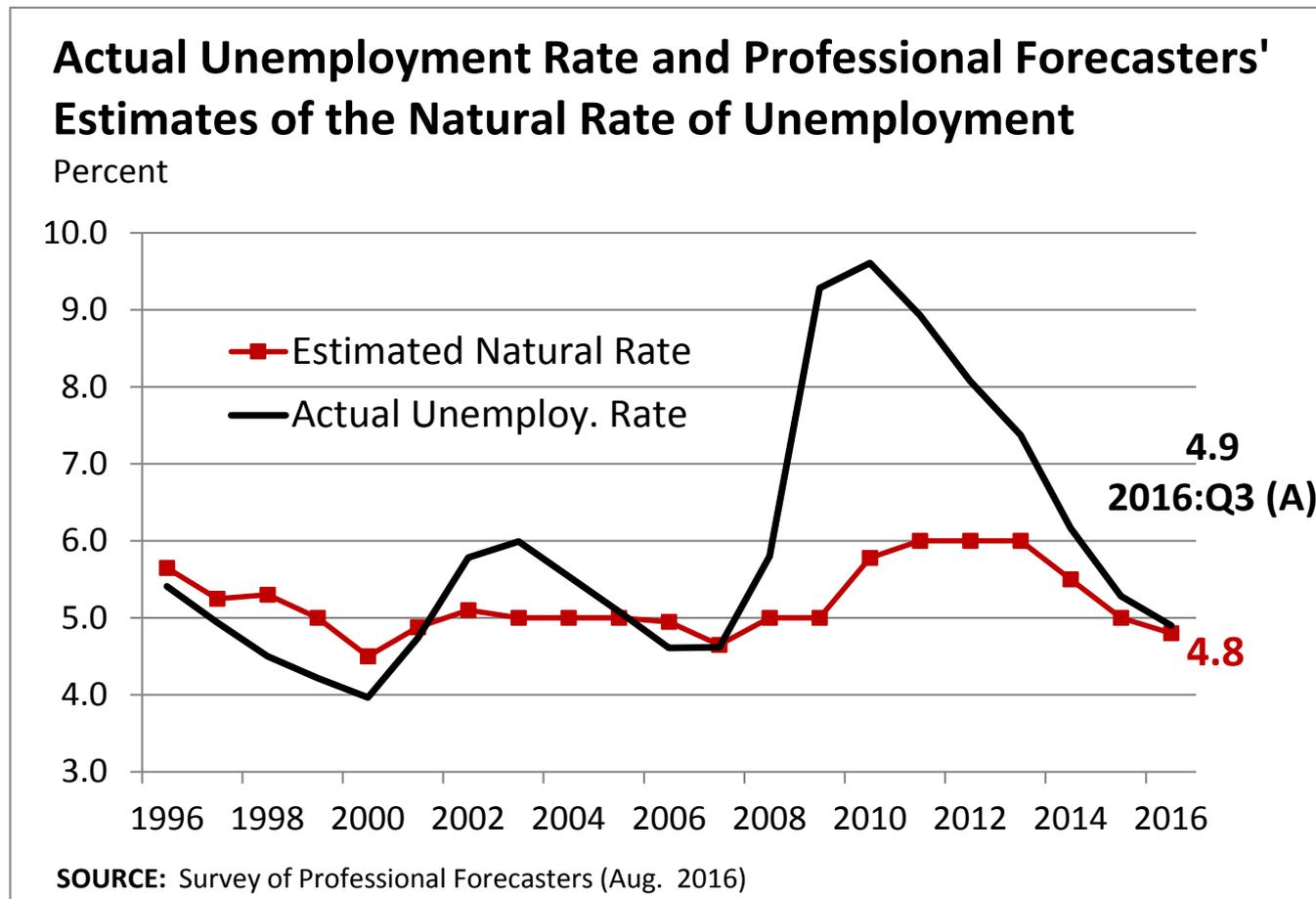
The Five Things You Need To Know

1. The economy is basically at full employment.
2. We're in a period of slow real GDP growth.
3. Labor productivity growth stinks—and that's a problem.
4. Low inflation seems likely for the forecastable future (2-3 years).
5. The U.S. has a long-term debt problem.

#1: We're at Full Employment

- In the aftermath of the Great Recession, the U.S. unemployment rate peaked at 10% in October 2009.
- The recession was particularly difficult for some workers (e.g., those employed in the housing, finance, and manufacturing industries).
- But now we're into the eighth year of the expansion, and the unemployment rate is basically at its natural rate.

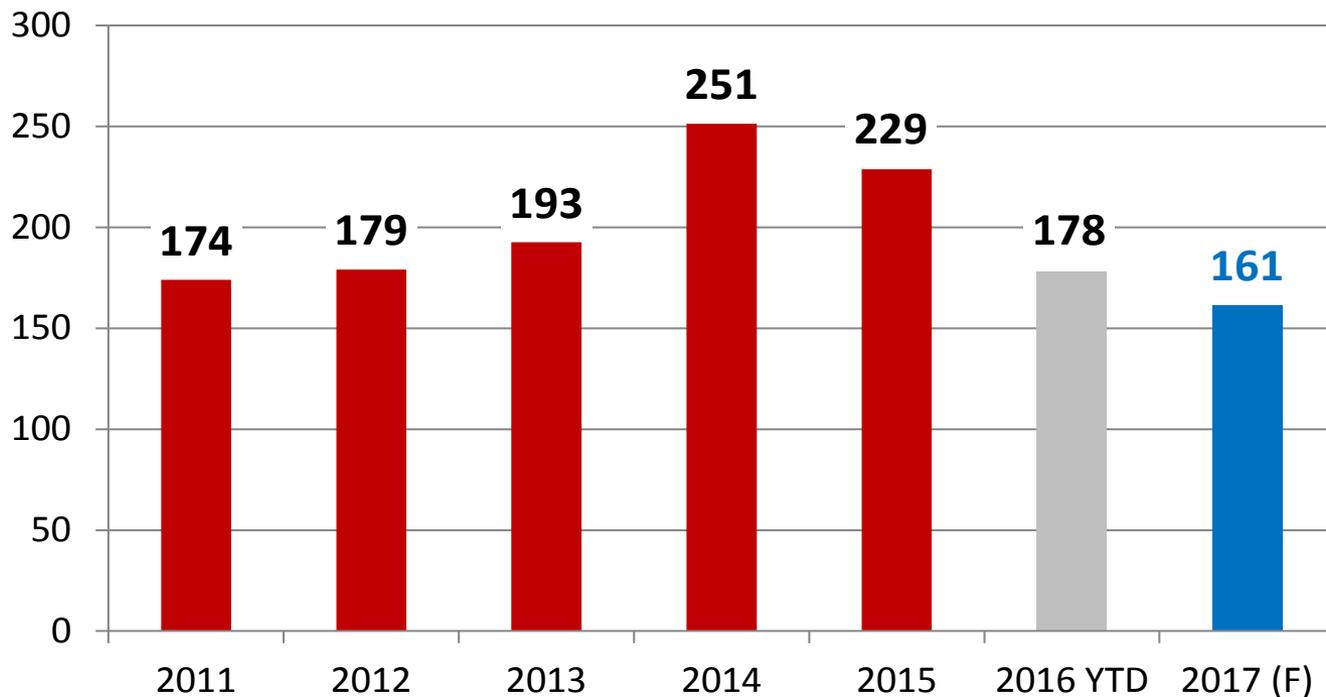
Professional forecasters: The economy is basically at full employment.



For the past several years, average monthly job gains have been brisk.

U.S. Average Monthly Employment Gains, 2011-2017 (F)

Thousands of jobs per month for year indicated



SOURCE: Bureau of Labor Statistics and Survey of Professional Forecasters (Aug. 2016).

Estimates of the economy's trend job growth vary, not surprisingly.

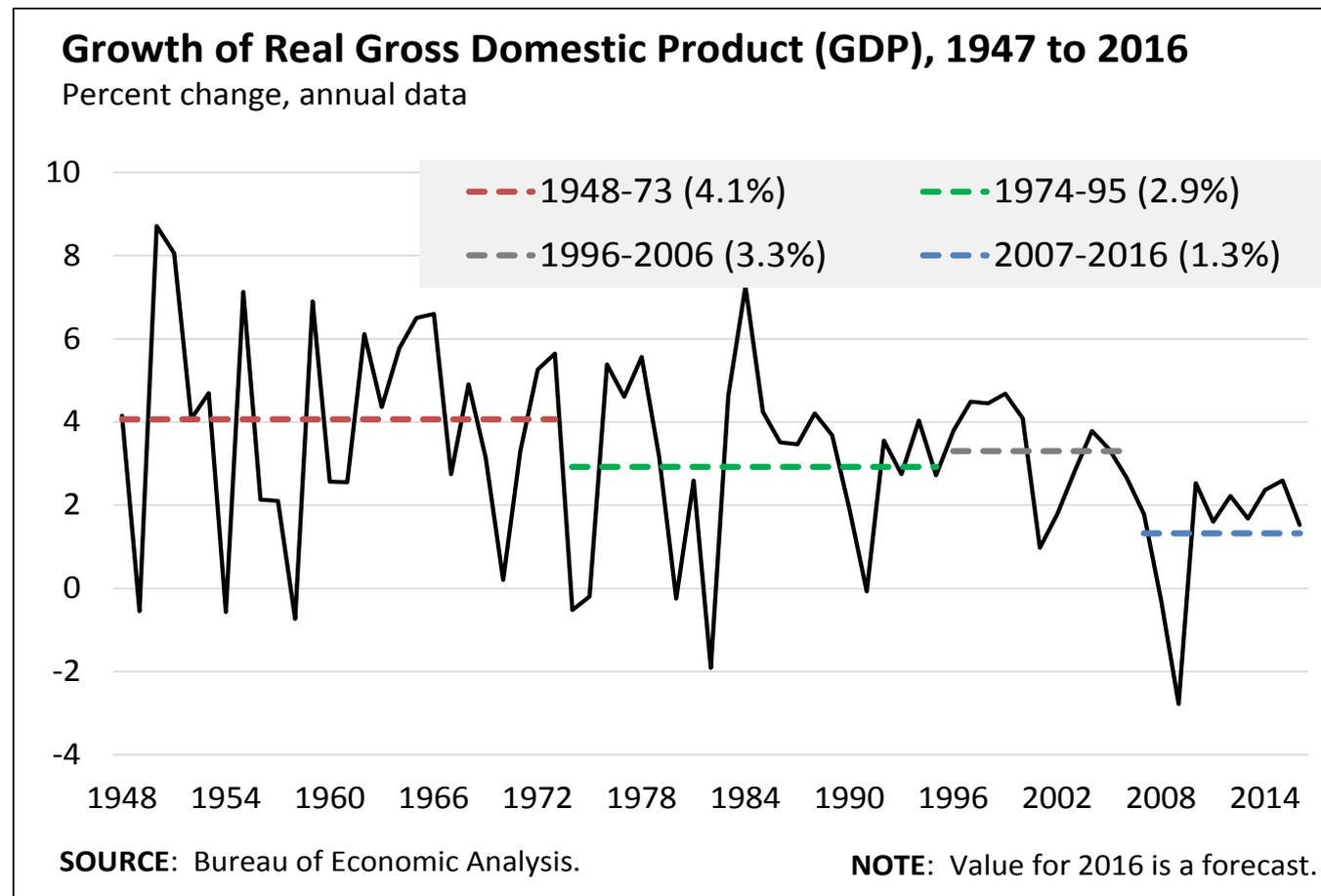
Estimates of the Long-Run Trend in Monthly Jobs Growth

	Lower Bound	Upper Bound	Mid-Point
SF Fed (2016)	50,000	110,000	80,000
Aaronson, et. al. (2014)	50,000	75,000	62,500
Chicago Fed (2016)	2015	2016	2020
Time-Varying	60,000	50,000	70,000
	<u>Avg., 2021-2026</u>		
CBO (Aug. 2016)	64,000		

#2: U.S. GDP Growth in the Slow Lane

- During this expansion, real GDP growth rate has averaged about 2%—the weakest since the 1930s.
- Prior to the Great Recession and financial crisis, real GDP growth averaged 3% per year.
- Many aspects of our future society depend crucially on how high the sustainable growth rate of real GDP turns out to be:
 - Labor market conditions, business opportunities, and tax revenues to finance govt. programs, etc.

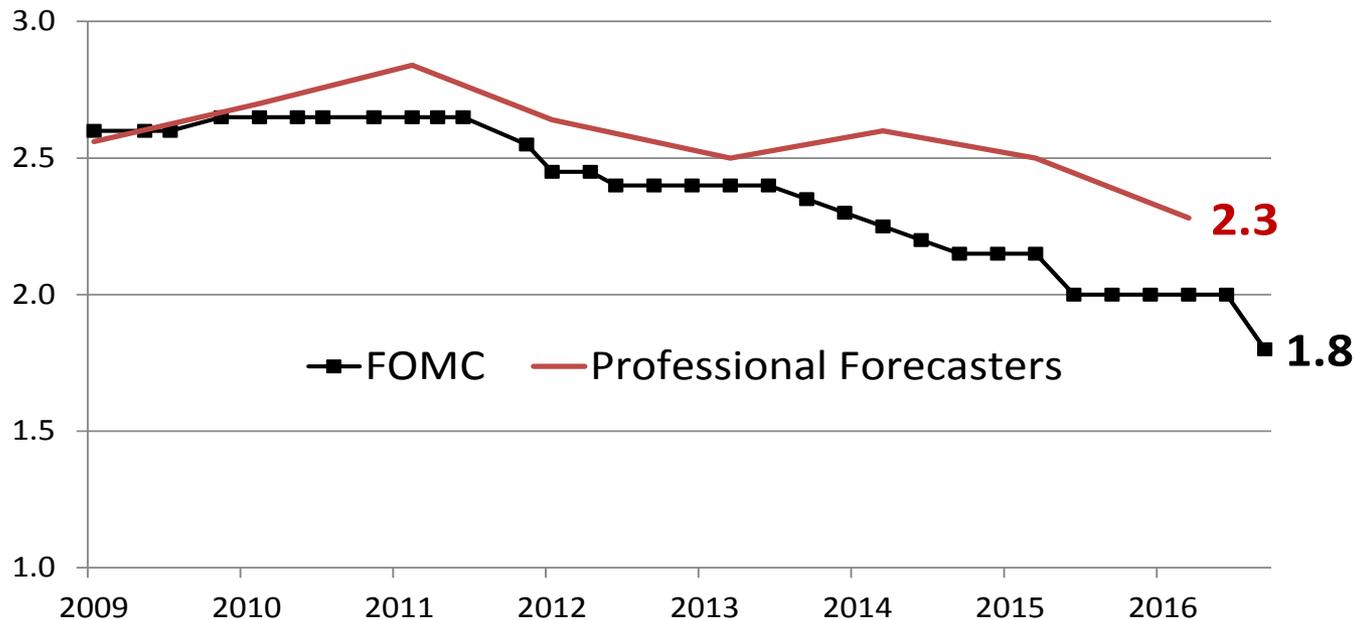
Growth of real GDP is volatile and the trend growth changes over time.



Do professional forecasters have rose-colored glasses or is the Fed too bearish?

Projected Long-Term Real GDP Growth According to Professional Forecasters and FOMC (Fed) Policymakers

Percent changes



SOURCE: Survey of Professional Forecasters and Federal Reserve Summary of Economic Projections.

So, what explains the slowdown in the economy's sustainable rate of real GDP growth?

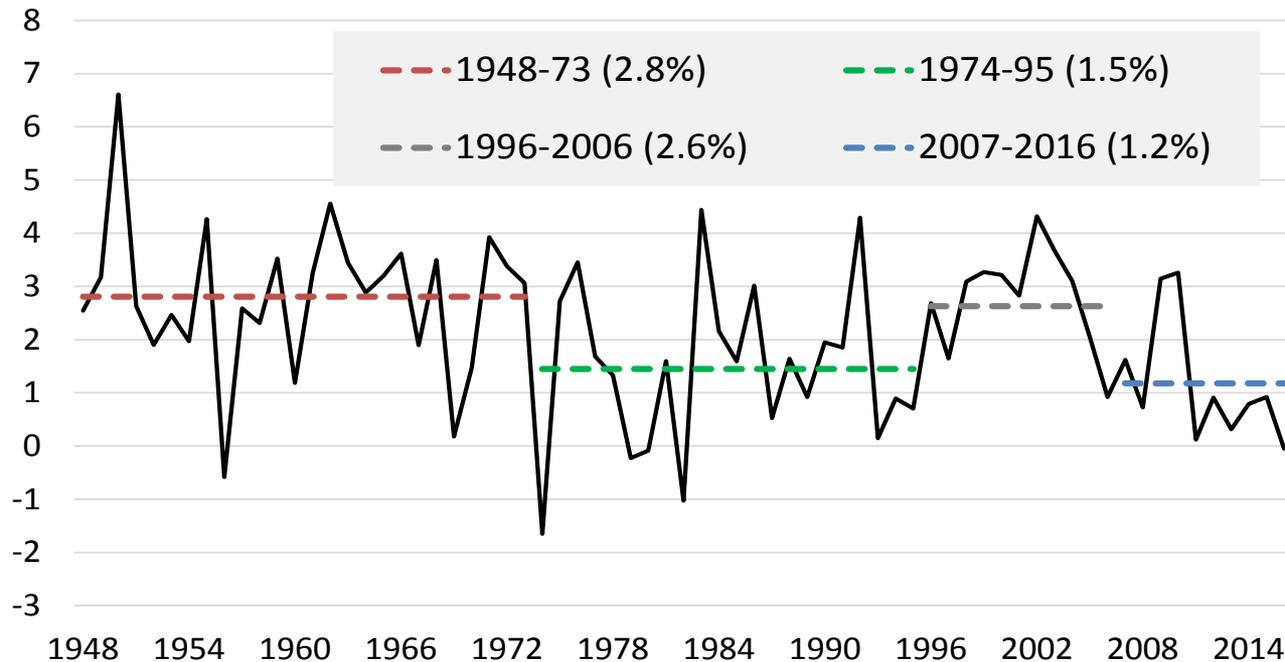
#3: Labor Productivity Growth Stinks

- Labor productivity is the value of output produced (real goods and services) divided by hours worked.
- Few metrics in macroeconomics are more important than the growth rate of productivity.
- Productivity depends on many things: skill levels, technology, investment rates, government policies.
- **IMPORTANT!** Faster productivity growth = faster real GDP growth = faster growth of real wages = rising living standards.

The pattern we saw with GDP growth is the same for labor productivity growth.

Growth of Labor Productivity, 1948 to 2016

Percent change, annual data

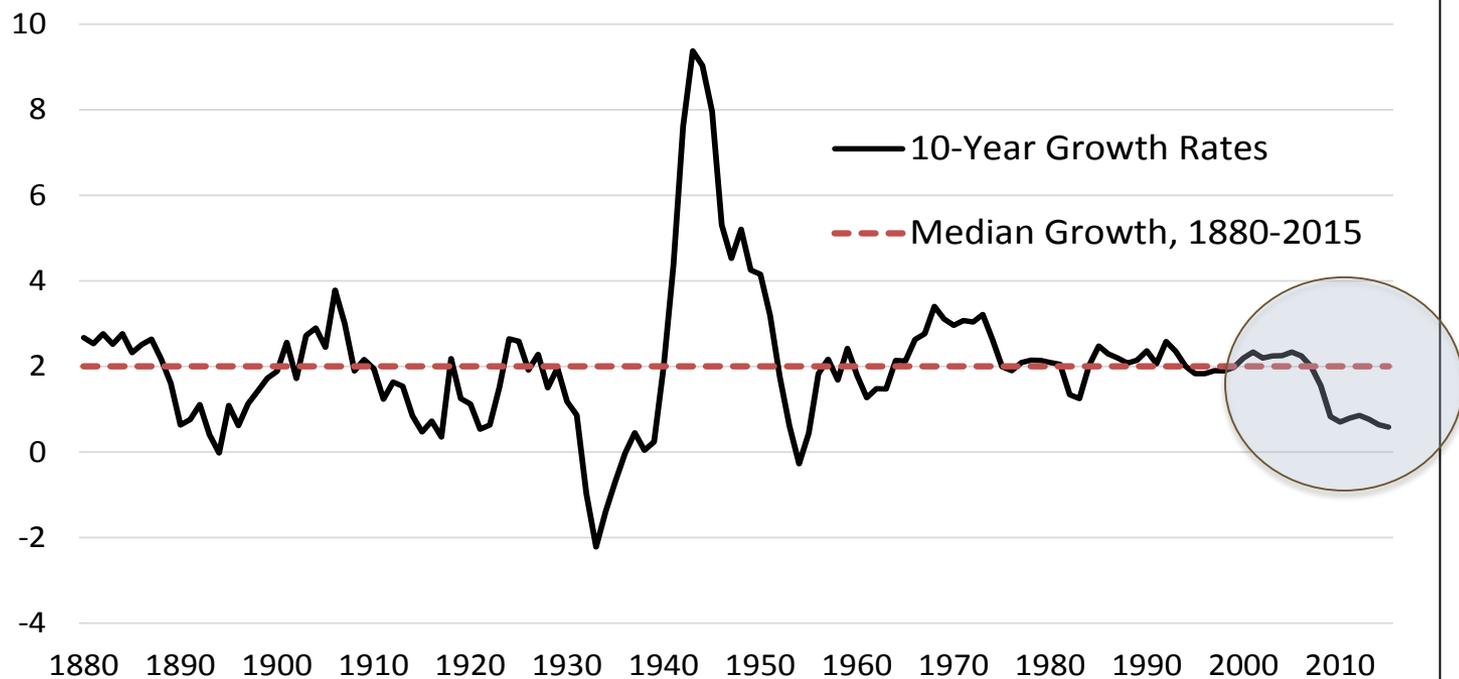


NOTE: Labor productivity is output per hour in the nonfarm business sector.

Real per capita GDP growth over the past 10 years is well below its long-run median.

10-Year Growth Rates of Real Per Capita GDP, 1880 to 2015

Annualized rates of change

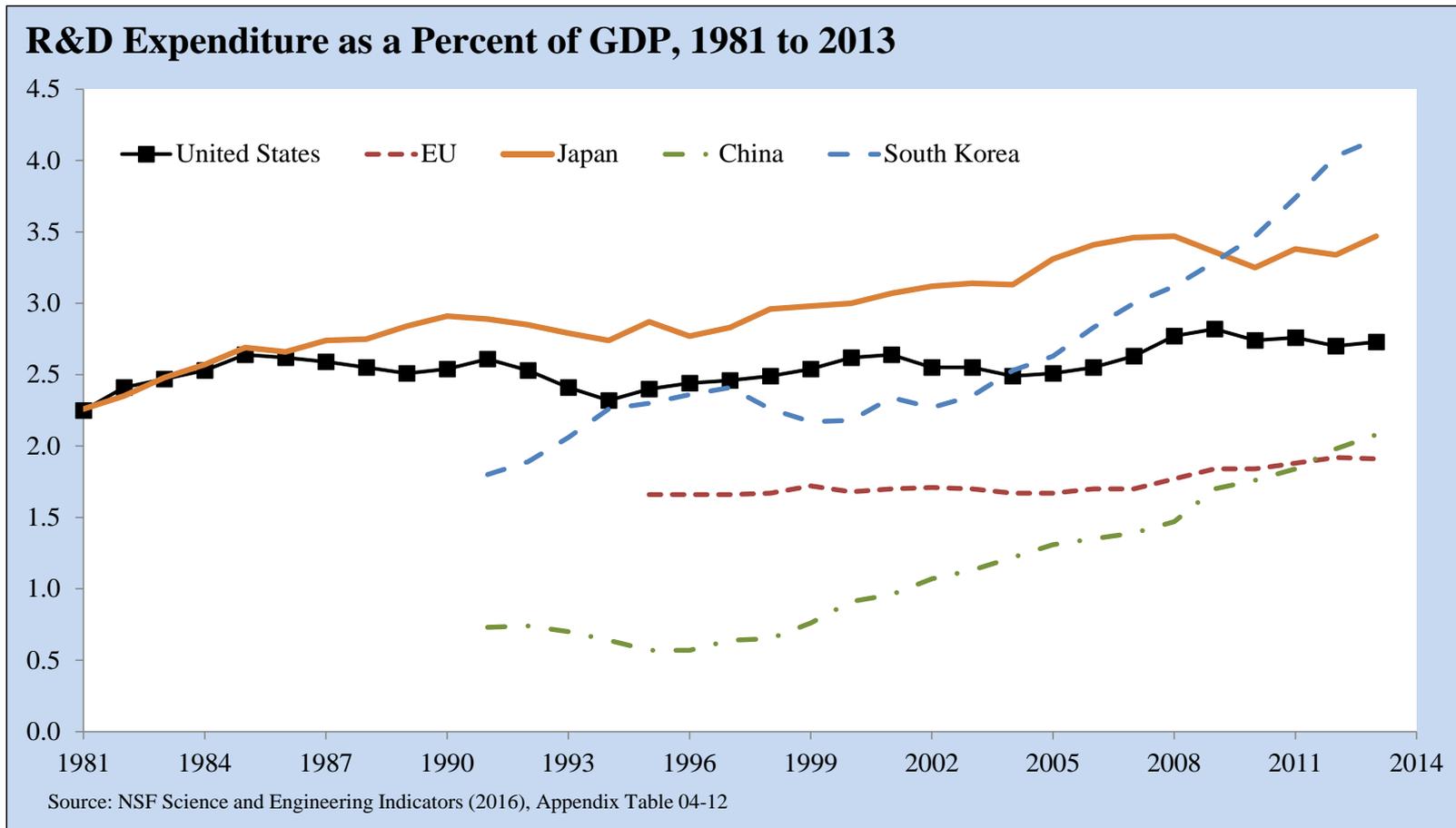


SOURCE: Fernald and Jones (2014) and BEA.

The Modern Growth Model

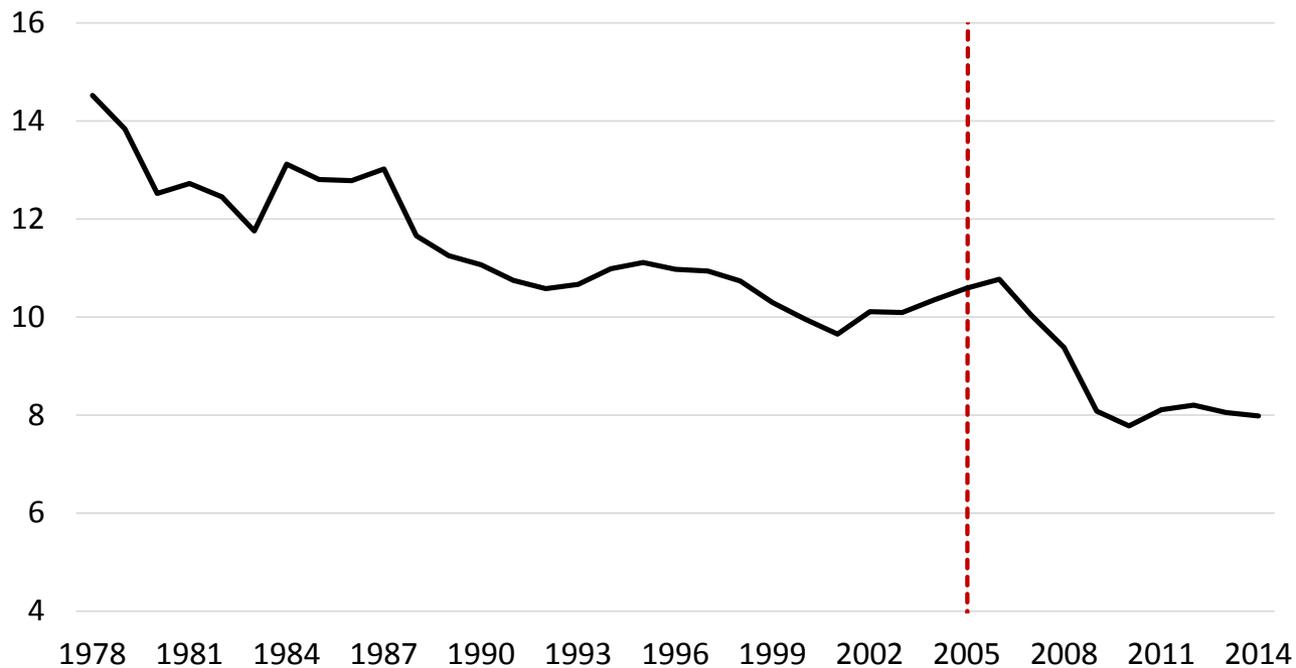
- Long-run growth arises from a discovery of new ideas according to Fernald and Jones (AER, 2014).
- Four factors underpin the growth model:
 - Capital-output ratio
 - Human capital per person
 - R&D intensity
 - Number of people in the economy
- F&H argue that the second and third factors explain about 80% of economic growth from 1950 to 2007.

Emerging economies invest in more R&D than do larger, developed economies.



Business dynamism (new startups) has declined sharply since 2006.

The Percentage of U.S. Firms One-Year Old or Less as a Percent of Total Firms, 1977-2014



SOURCE: U.S. Census Bureau

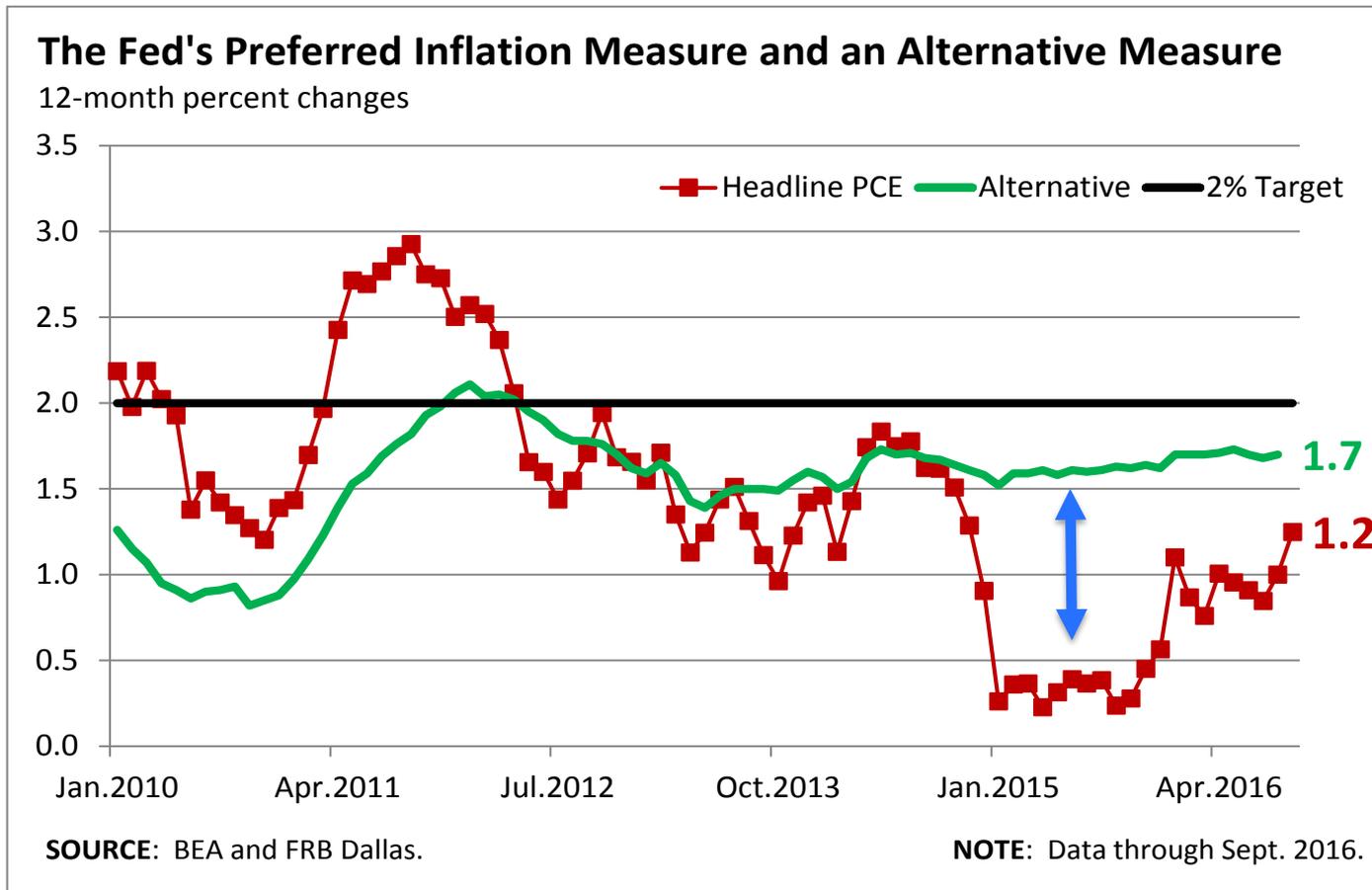
Possible explanations for the marked slowdown in labor productivity growth .

1. It's a head-fake: bad data or we can't measure new innovations accurately.
2. We've run out of new "big ideas"—i.e., all the low-hanging fruit has been picked.
3. Government policies are hindering not helping.
4. It's being delayed—just wait!

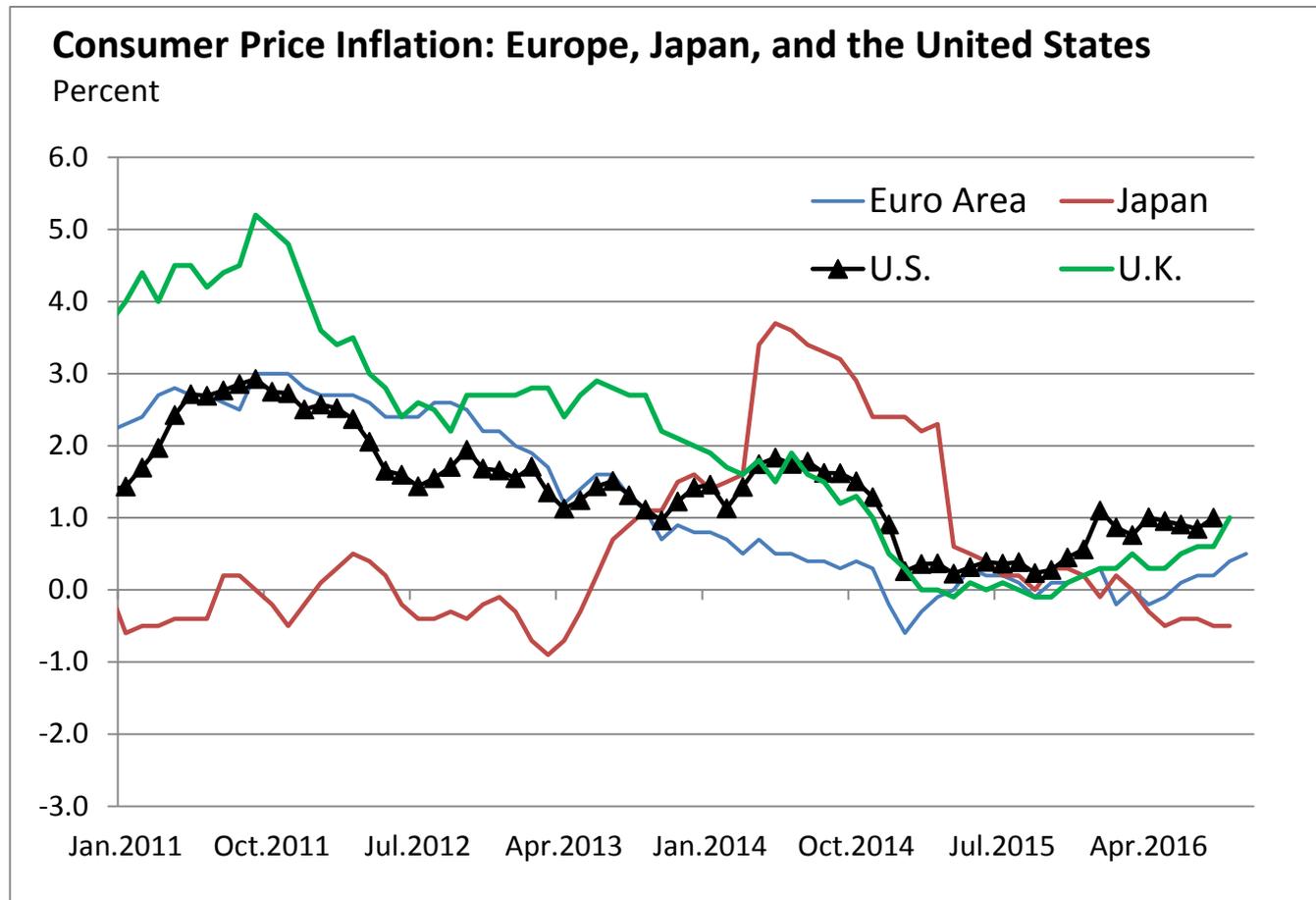
#4: Low Inflation is the New Normal

- The Fed's preferred inflation measure has been below the 2% target rate since mid-2012.
- A key tenet of central bank practice is that an inflation target anchors inflation expectations.
- If the target is viewed as credible by the public, then inflation should deviate very little from the target.
- There may be periods when sharp changes in some prices cause inflation to deviate from the target.

Falling oil prices lowered headline inflation but not many other prices.



Low inflation is a feature of the largest, most developed economies.



#5: The Long-Term Debt Problem

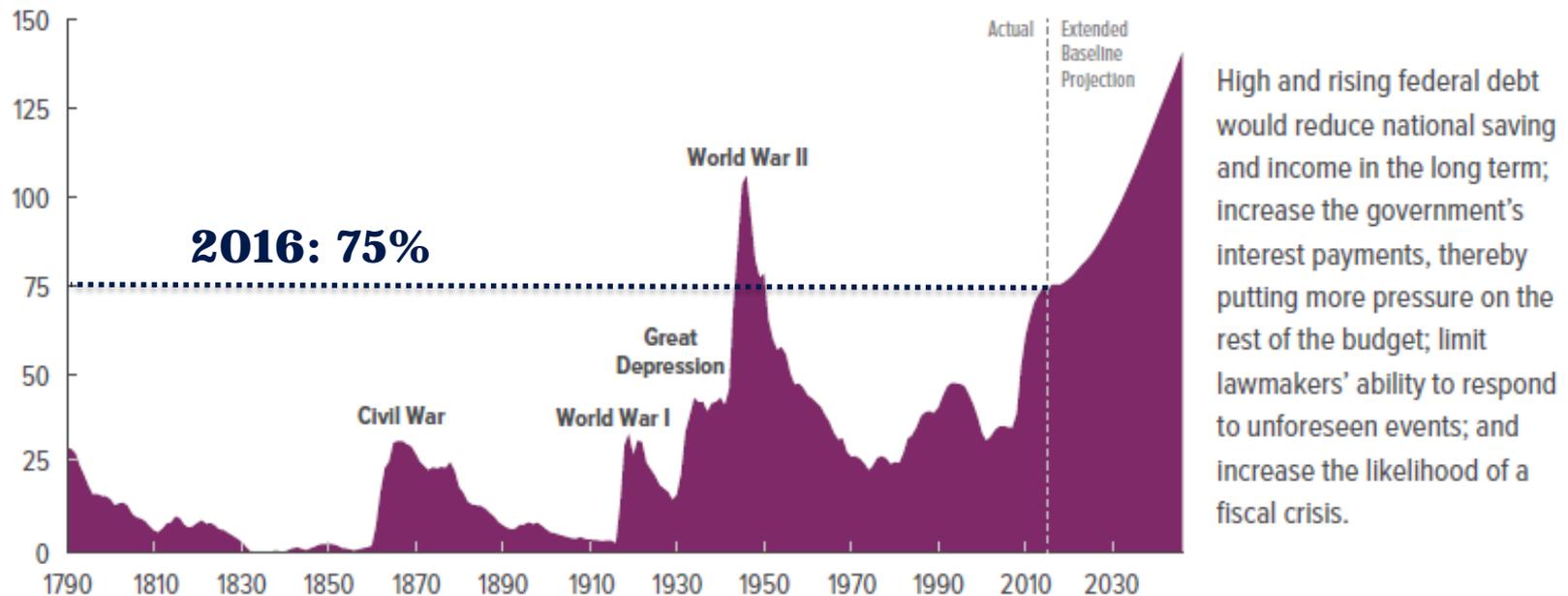
- The U.S. budget deficit rose from about 1% of GDP in 2007 to nearly 10% in 2009. It's now about 3%.
- However, the yearly deficit isn't a good measure of fiscal health over the long run. Need to look at debt.
- The aging of the baby boomers means that, under existing policies, debt/GDP ratios will skyrocket.
- From an economic standpoint, rising debt implies higher future taxes and/or sharply lower benefits.

Rising debt: This trend is not our friend!

Figure 1-1.

Federal Debt Held by the Public

Percentage of Gross Domestic Product



High and rising federal debt would reduce national saving and income in the long term; increase the government's interest payments, thereby putting more pressure on the rest of the budget; limit lawmakers' ability to respond to unforeseen events; and increase the likelihood of a fiscal crisis.

Source: Congressional Budget Office. For details about the sources of data used for past debt held by the public, see Congressional Budget Office, *Historical Data on Federal Debt Held by the Public* (July 2010), www.cbo.gov/publication/21728.

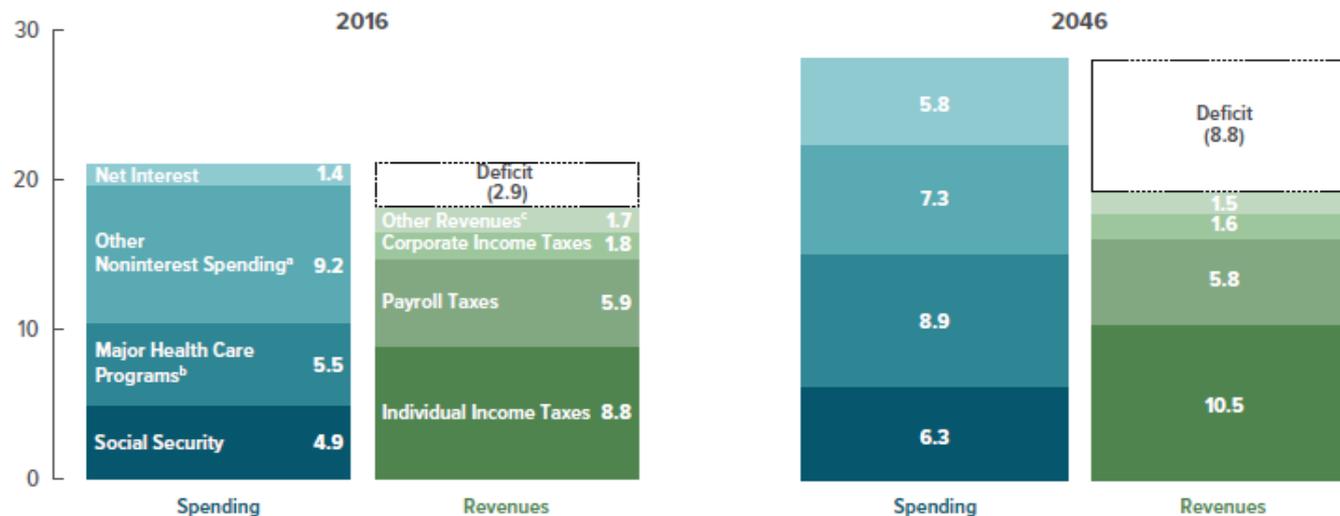
The extended baseline generally reflects current law, following CBO's 10-year baseline budget projections through 2026 and then extending most of the concepts underlying those baseline projections for the rest of the long-term projection period.

What's in your future? Higher taxes and less spending on your favorite programs.

Summary Figure 1.

The Federal Budget Under the Extended Baseline

Percentage of Gross Domestic Product



Source: Congressional Budget Office.

The extended baseline generally reflects current law, following CBO's 10-year baseline budget projections through 2026 and then extending most of the concepts underlying those baseline projections for the rest of the long-term projection period.

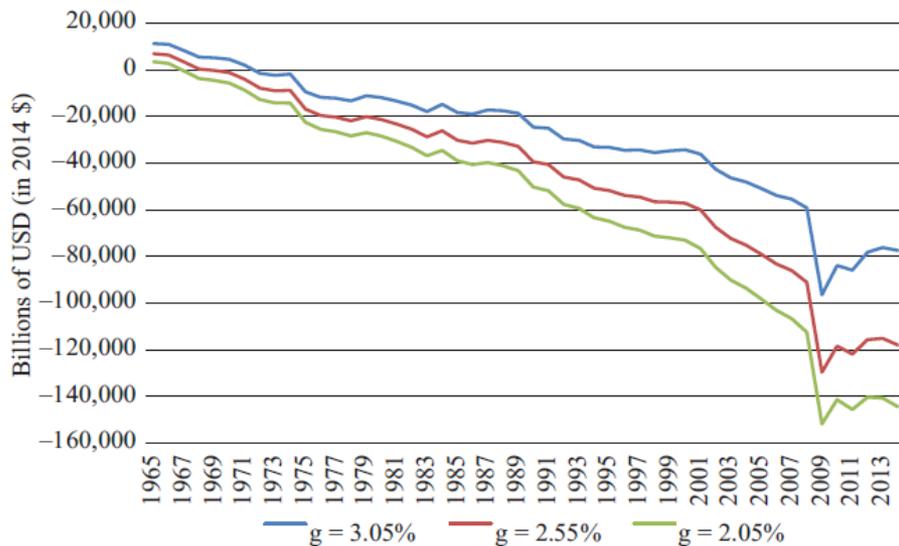
- a. Consists of all federal spending other than that for Social Security, the major health care programs, and net interest.
- b. Consists of spending on Medicare (net of offsetting receipts), Medicaid, and the Children's Health Insurance Program, as well as outlays to subsidize health insurance purchased through the marketplaces established under the Affordable Care Act and related spending.
- c. Consists of excise taxes, remittances to the Treasury from the Federal Reserve System, customs duties, estate and gift taxes, and miscellaneous fees and fines.

But the really bad news is that it will get worse beyond 2046.

Estimates of the long-run fiscal imbalance under different scenarios.

Figure 16

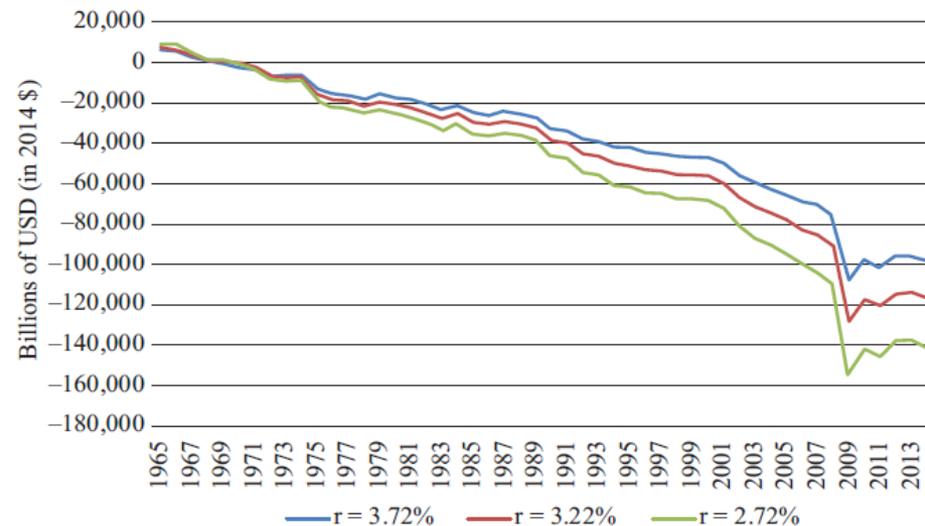
FISCAL IMBALANCE WITH VARYING GDP GROWTH RATES



BASELINE: \$79 Trillion (\$2014)

Figure 17

FISCAL IMBALANCE WITH VARYING INTEREST RATES



BASELINE: \$100 Trillion (\$2014)

SOURCE: Miron, 2016

NOTE: For each year, the fiscal imbalance is the present value of expenditures minus the present value of revenues over the following 75 years.

Fearless Forecast for the next 3 Years.

- Projected averages, 2016 to 2019:
 - Real GDP growth: Around 2%
 - Unemployment rate: About 4.75%
 - Headline inflation: 2%
- Punchline: More of the same—unless something unexpected happens!

To Recap: The Five Things You Need To Know About the U.S. Economy.

1. We're at full employment.
2. Real GDP growth is around 2%.
3. Labor productivity growth stinks—and that's a problem.
4. Low inflation seems likely for the forecastable future (2-3 years).
5. The U.S. has a long-term debt problem.

QUESTIONS?

Fernald & Jones' Modern Growth Model

From 1950 to 2007 the 2% growth rate breaks down as follows...

Output per
Capita

Educational
Attainment

$$y^* \approx \left(\frac{K}{Y} \right)^\beta \square h \square (\text{R\&D Intensity})^\gamma \square L^\gamma$$

Capital/Output
Ratio

Researchers as
Share of
Workforce

Population

2 = 0.0

0.4

1.2

0.4

(100%) (0%)

(20%)

(58%)

(21%)