HARVARD Kennedy School
JOHN F. KENNEDY SCHOOL OF GOVERNMENT

The Old Normal Meets the New Normal

Jason Furman

Harvard Kennedy School and Peterson Institute for International Economics

Society of Policy Modeling & American Economic Association

Atlanta, GA

January 4, 2019

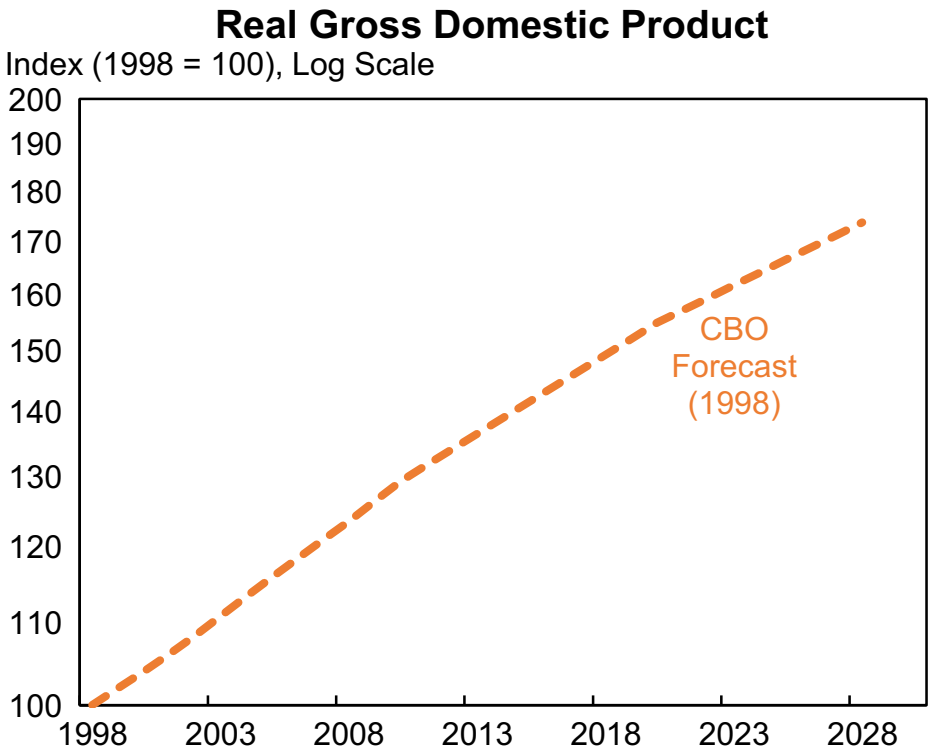
Outline

1. How New Is the Normal?
2. Estimating Potential Growth
3. Does Policy Make a Big Difference?

Outline

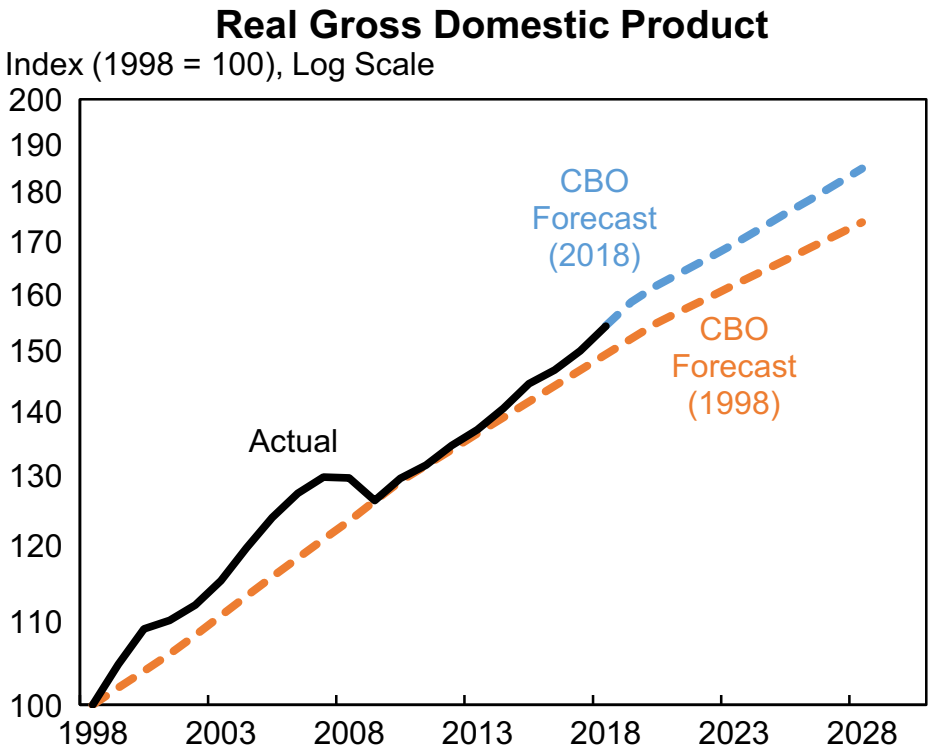
1. How New Is the Normal?
2. Estimating Potential Growth
3. Does Policy Make a Big Difference?

What would someone twenty years ago have thought GDP would look like today?



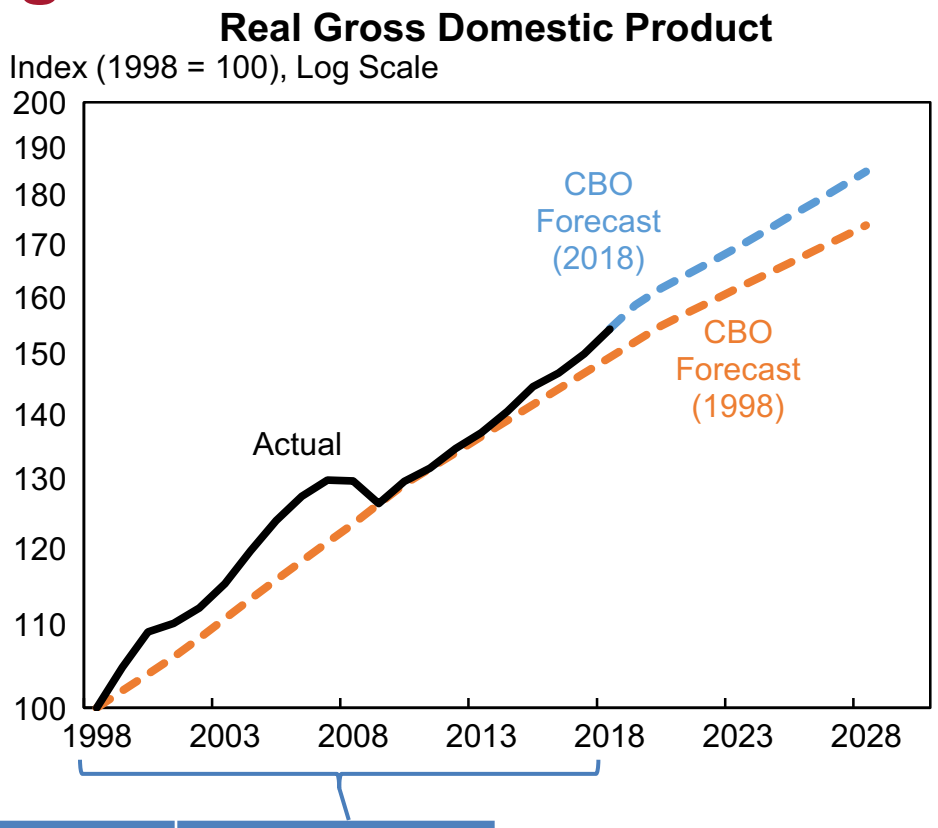
Source: Congressional Budget Office; author's calculations .

What would someone twenty years ago have thought GDP would look like today?



Source: Congressional Budget Office; Bureau of Economic Analysis; Macroeconomic Advisers; author's calculations .

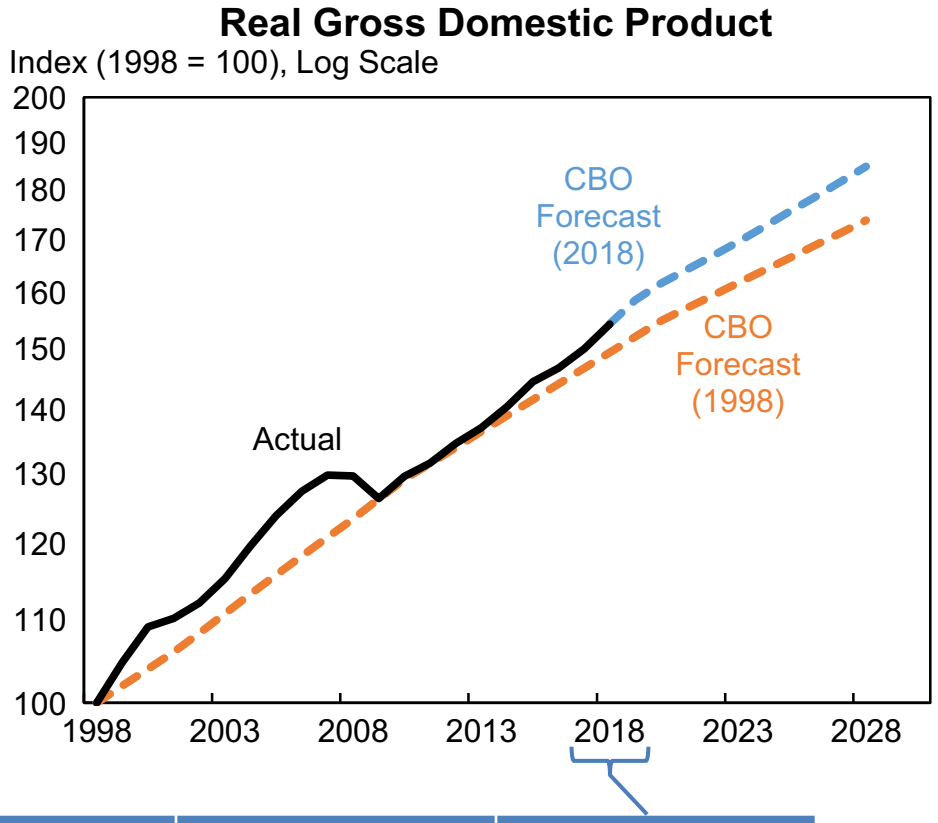
What would someone twenty years ago have thought GDP would look like today?



	Growth Rate, 1998–2018
Actual	**2.2%**
Forecast	**2.0%**

Source: Congressional Budget Office; Bureau of Economic Advisers; Macroeconomic Advisers; author's calculations .

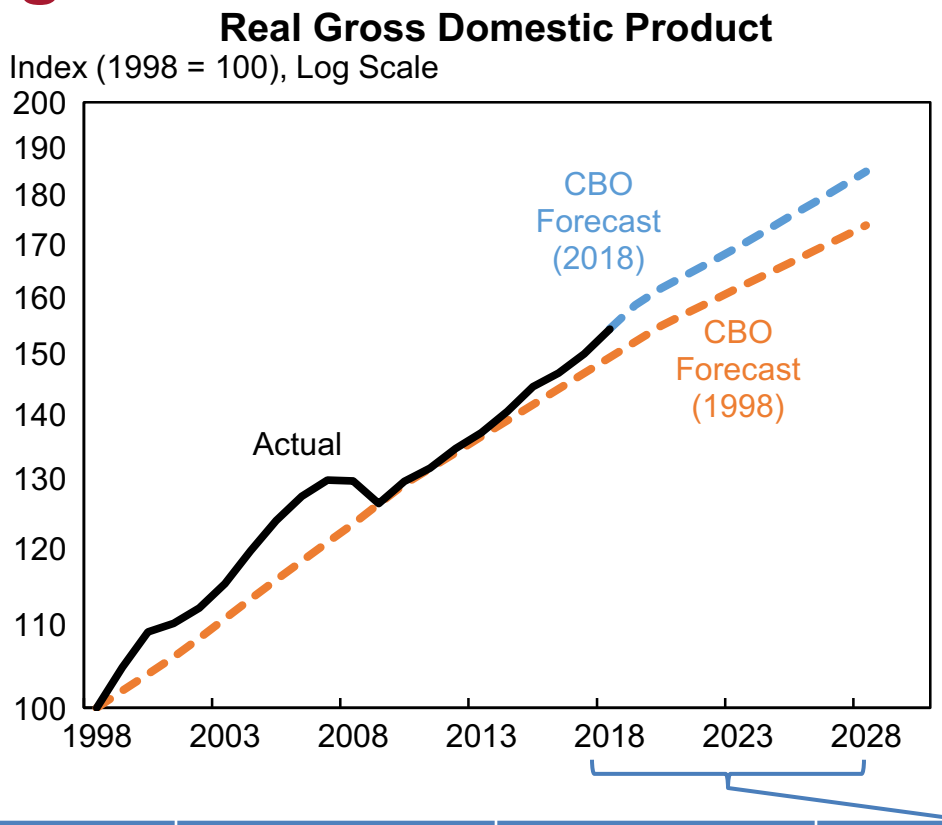
What would someone twenty years ago have thought GDP would look like today?



	Growth Rate, 1998–2018	**Growth Rate, 2018**
Actual	2.2%	**2.9%**
Forecast	2.0%	**1.8%**

Source: Congressional Budget Office; Bureau of Economic Advisers; Macroeconomic Advisers; author's calculations .

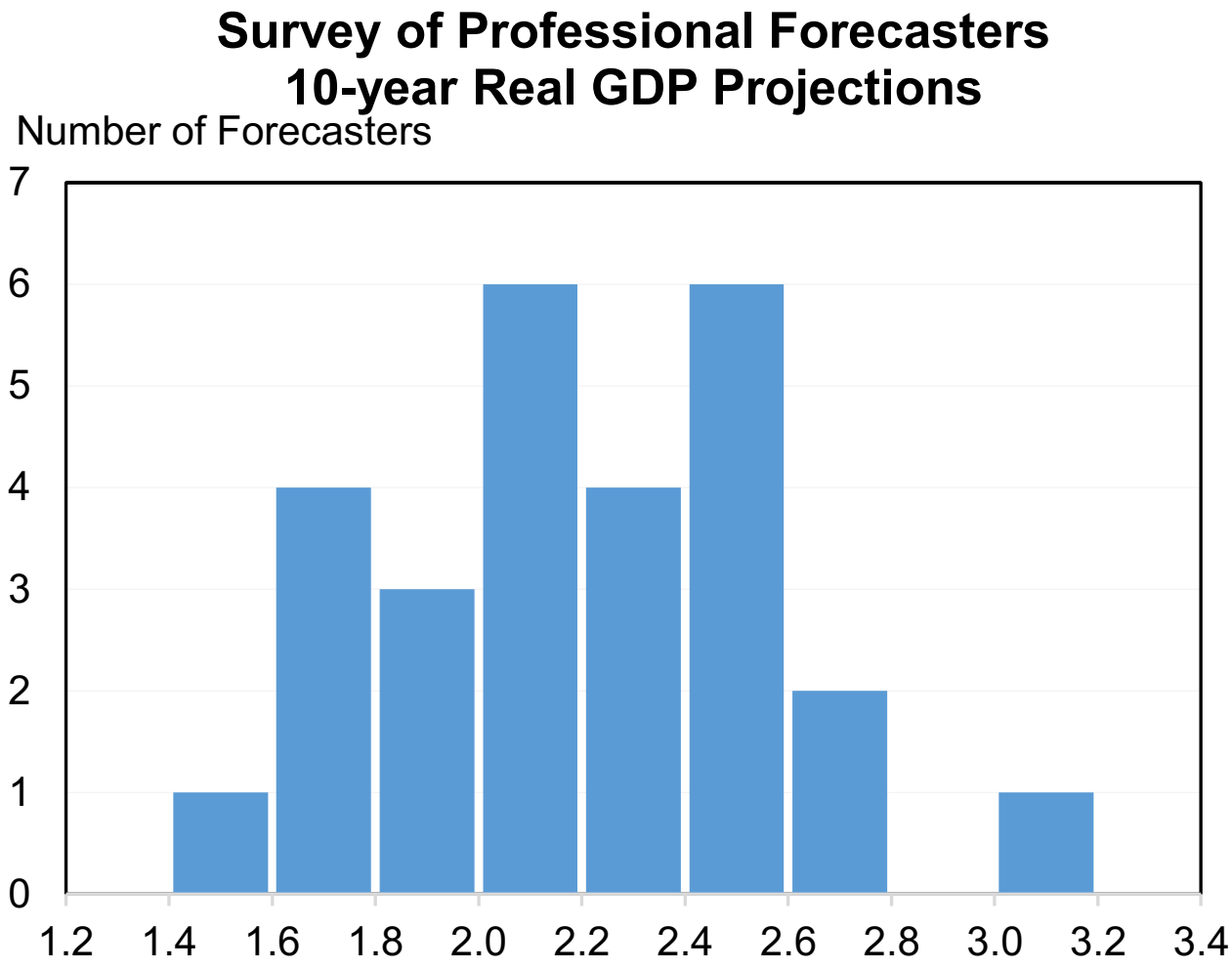
What would someone twenty years ago have thought GDP would look like today?



	Growth Rate, 1998–2018	Growth Rate, 2018	**Growth Rate, 2018–2028**
Actual	2.2%	2.9%	**1.8%**
Forecast	2.0%	1.8%	**1.5%**

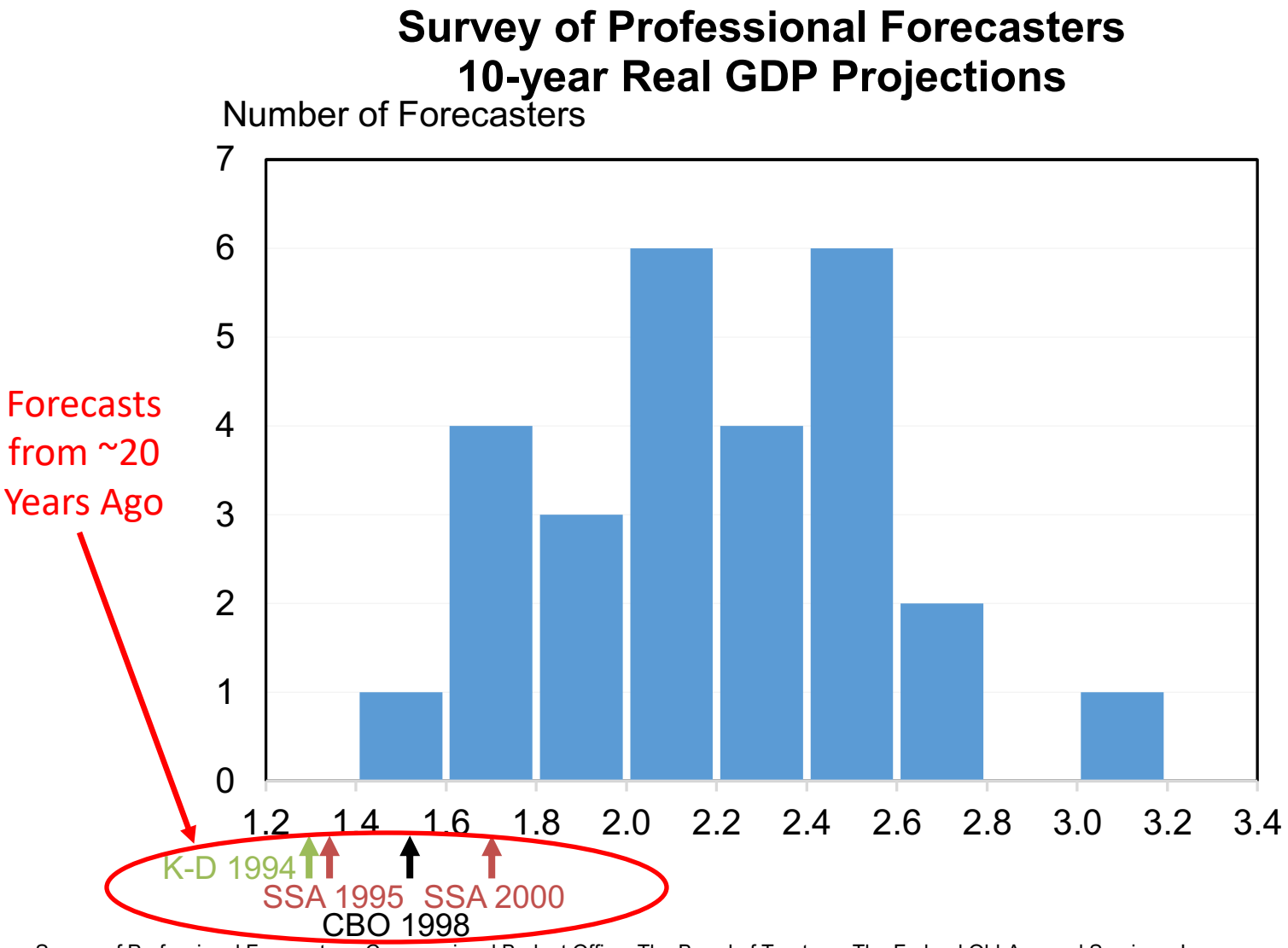
Source: Congressional Budget Office; Bureau of Economic Advisers; Macroeconomic Advisers; author's calculations .

If anything we are more optimistic today



Source: Survey of Professional Forecasters; Blue Chip Economic Indicators; Congressional Budget Office; The Board of Trustees, The Federal Old-Age and Survivors Insurance, and Disability Insurance Trust Funds; Bipartisan Commission on Entitlement and Tax Reform; author's calculations.

If anything we are more optimistic today



Source: Survey of Professional Forecasters; Congressional Budget Office; The Board of Trustees, The Federal Old-Age and Survivors Insurance, and Disability Insurance Trust Funds; Bipartisan Commission on Entitlement and Tax Reform; author's calculations.

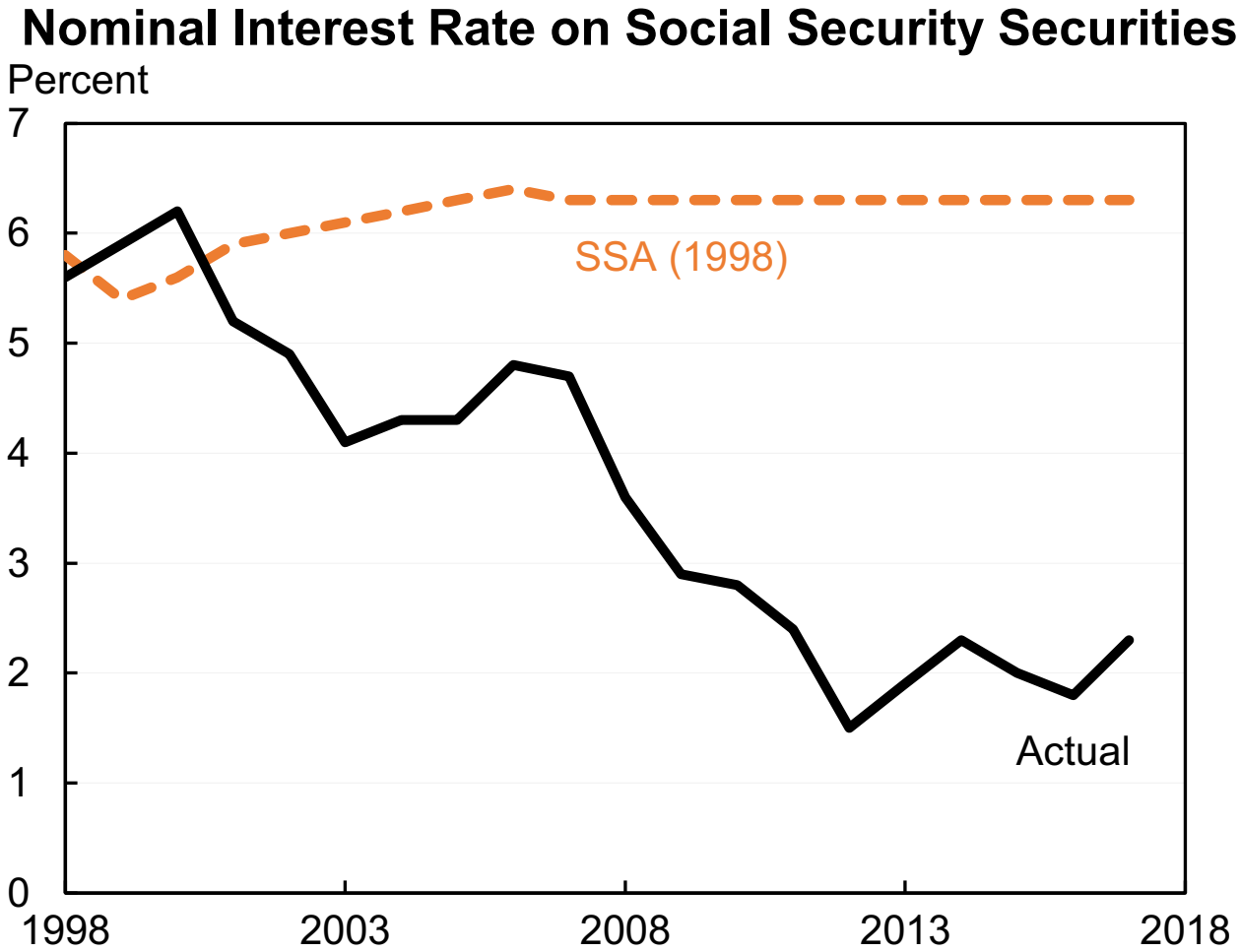
This is because of the predictable slowing of demographic growth

Selected Components of Potential Real GDP Growth, 1953-2028

Component	Growth Rate, Percentage Points at Annual Rate	
	History	CBO Forecast
	1953 to 2007	2018 to 2028
Population	1.4	0.8
Potential labor force participation rate	0.2	-0.3
Potential real output per hour (productivity, nonfarm business)	2.1	1.8
Other	-0.5	-0.4
Potential real GDP	**3.3**	**1.9**

Source: Congressional Budget Office; Bureau of Labor Statistics; author's calculations.

The big surprise is interest rates are *much* lower than expected



Source: The Board of Trustees, The Federal Old-Age and Survivors Insurance, and Disability Insurance Trust Funds.

This is especially surprising since the debt is so much higher than it was

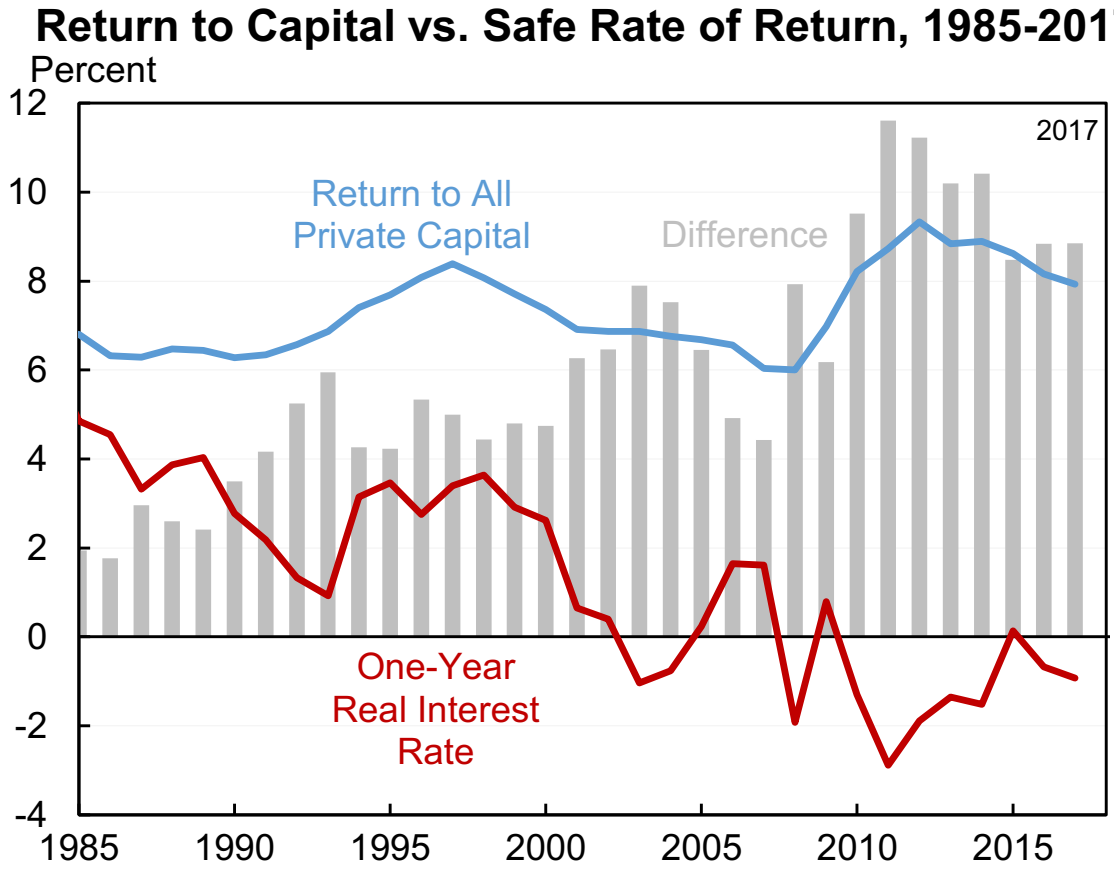
Debt is Much Higher But Interest Rates Are Much Lower

	2000	2018
Debt/GDP (10-year ahead forecast)	6%	105%
Real Interest Rates	4.3%	1.0%

Note: Debt/GDP forecast is the CBO 10-year ahead forecast. Real interest rates are based on 10-year Treasury Inflation Protected Securities (TIPS).

Source: Congressional Budget Office; author's calculations.

Note that returns to capital have held up even as safe rates of return have fallen

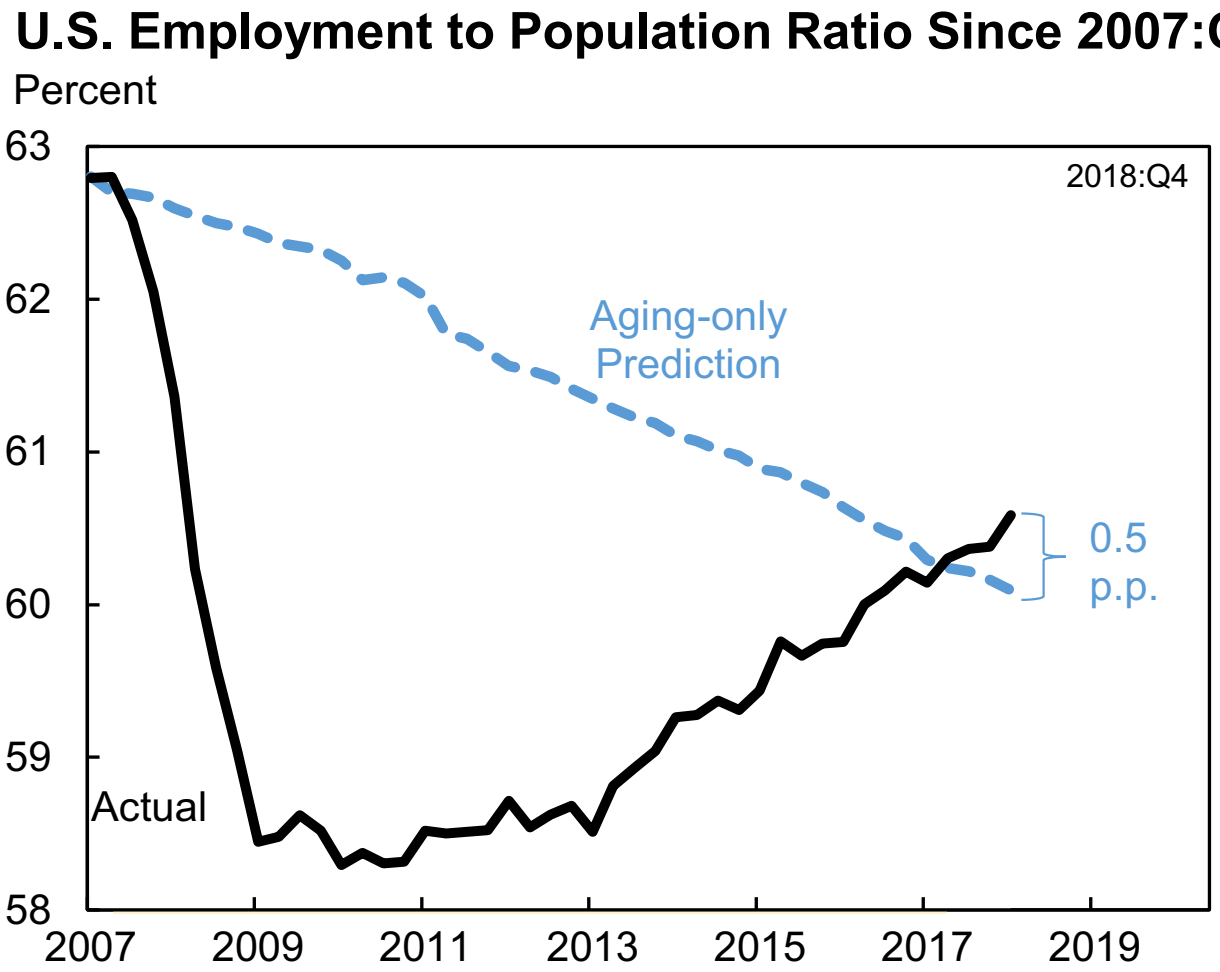


Note: The rate of return to all private capital was calculated by dividing private capital income in current dollars by the private capital stock in current dollars. Private capital income is defined as the sum of 1) corporate profits ex. federal government tax receipts on corporate income, 2) net interest and miscellaneous payments, 3) rental income of all persons, 4) business current transfer payments, 5) current surpluses of government enterprises, 6) property and severance taxes, and 7) the capital share of proprietors' income, where the capital share was assumed to match the capital share of aggregate income. The private capital stock is defined as the sum of 1) the net stock of produced private assets for all private enterprises, 2) the value of total private land inferred from the Financial Accounts of the United States, and 3) the value of U.S. capital deployed abroad less foreign capital deployed in the United States. The return to nonfinancial corporate capital is that reported by the Bureau of Economic Analysis.
Source: Bureau of Economic Analysis; Federal Reserve Board of Governors; author's calculations.

Outline

1. How New Is the Normal?
2. Estimating Potential Growth
3. Does Policy Make a Big Difference?

Not much room for further cyclical growth: age-adjusted employment rate above pre-recession



Note: Assumes that December values reflect the 2018:Q4 averages to date.
Source: Bureau of Labor Statistics, Current Population Survey; author's calculations.

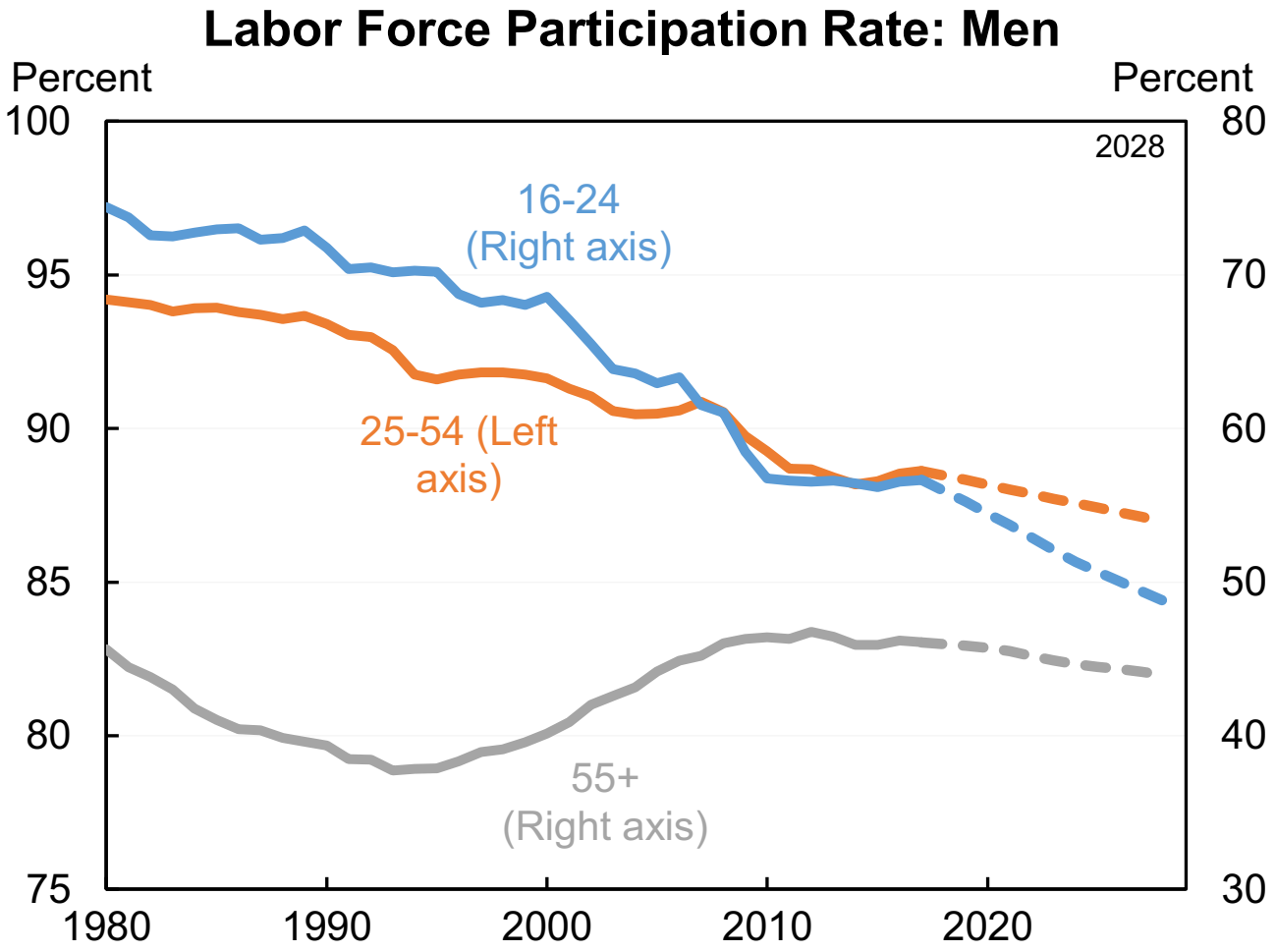
Supply Side Forecast for Potential Growth

Selected Components of Potential Real GDP Growth, 1953-2028

Component	Growth Rate, Percentage Points at Annual Rate		
	History	CBO Forecast	My Forecast
	1953 to 2007	2018 to 2028	2018 to 2028
Population	1.4	0.8	0.8
Potential labor force participation rate	0.2	-0.3	
Potential real output per hour (productivity, nonfarm business)	2.1	1.8	
Other	-0.5	-0.4	
Potential real GDP	**3.3**	**1.9**	

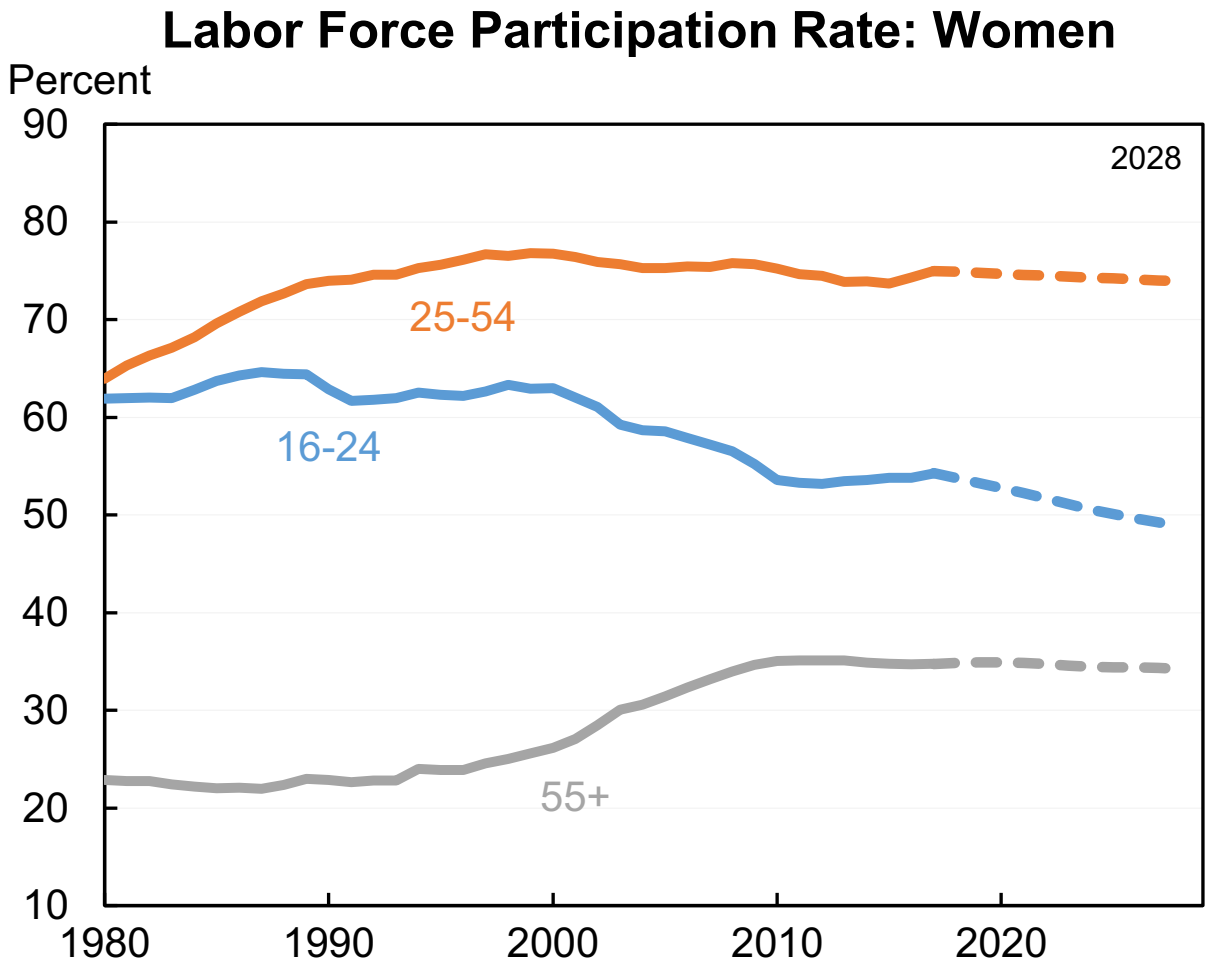
Note: May not sum due to rounding.
Source: Census Bureau; Bureau of Economic Analysis; Bureau of Labor Statistics; Kendrick (1961); author's calculations.

Forecasting participation: assume the continuation of group-specific age-adjusted trends from 2000-17: Men



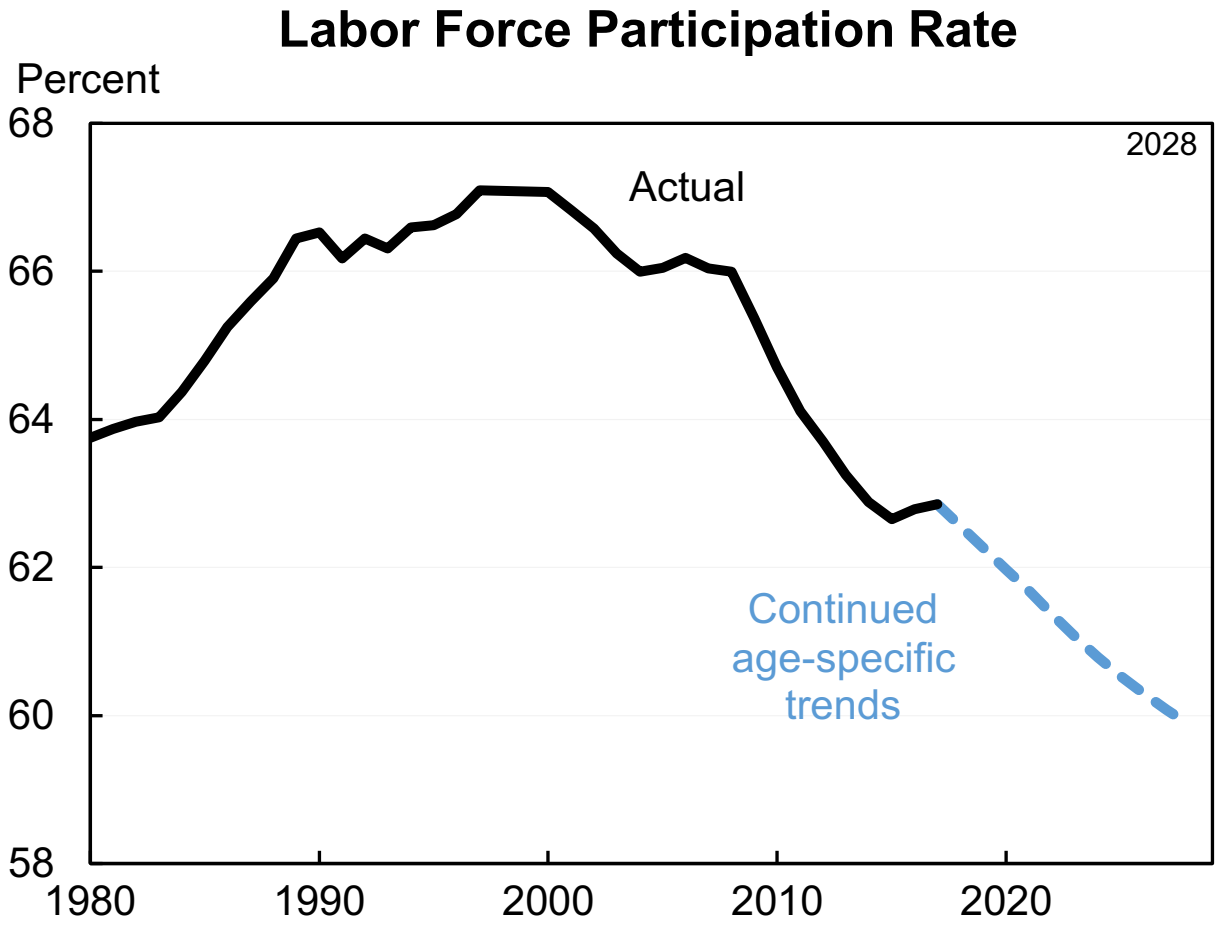
Source: Census Bureau; Bureau of Labor Statistics; author's calculations.

Forecasting participation: assume the continuation of group-specific age-adjusted trends from 2000-17: Women



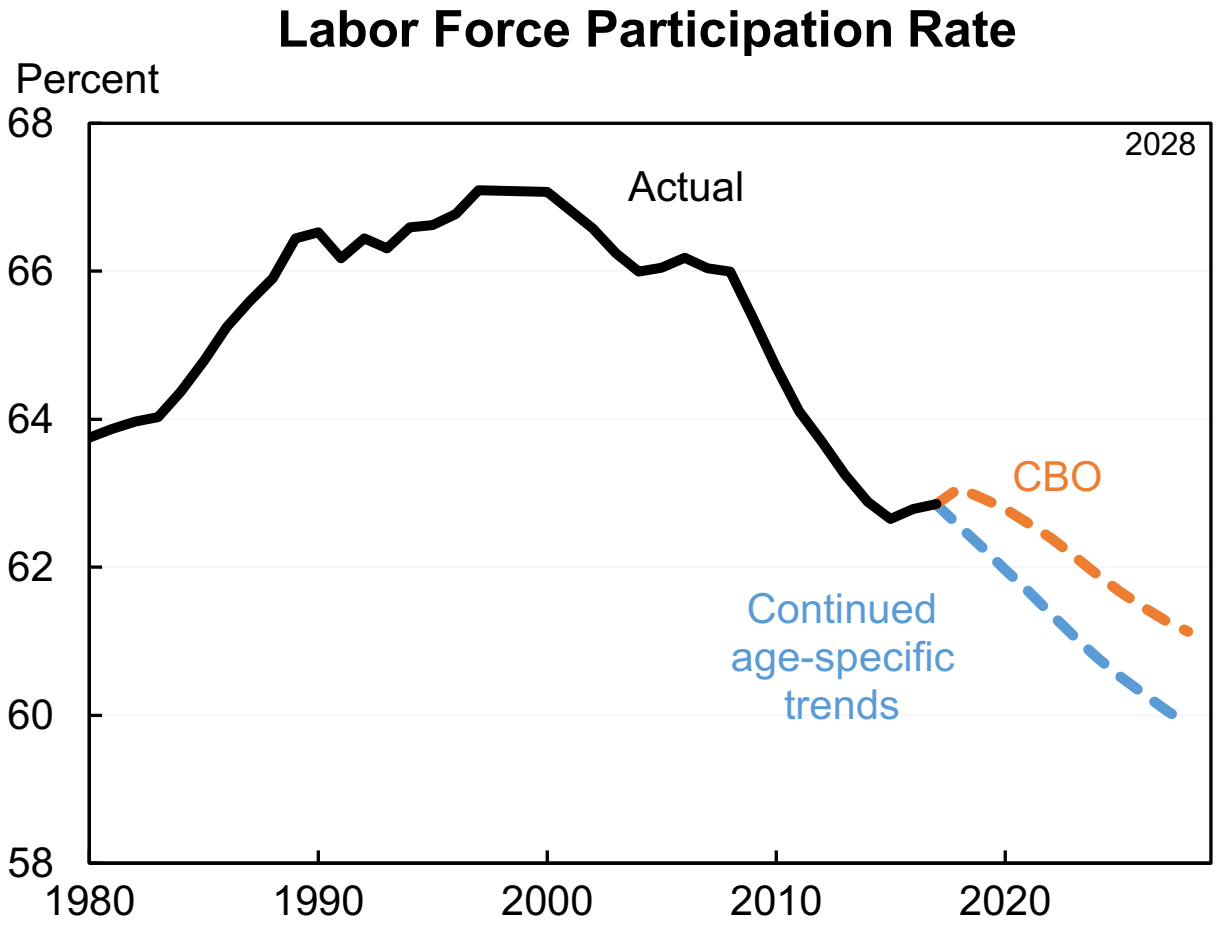
Source: Census Bureau; Bureau of Labor Statistics; author's calculations.

What the overall participation rate looks like



Source: Census Bureau; Bureau of Labor Statistics; author's calculations.

What the overall participation rate looks like



Source: Census Bureau; Bureau of Labor Statistics; Congressional Budget Office; author's calculations.

How far back should you go in assessing productivity trends?

Source: Bureau of Economic Analysis; Bureau of Labor Statistics; Kendrick (1961); author's calculations.

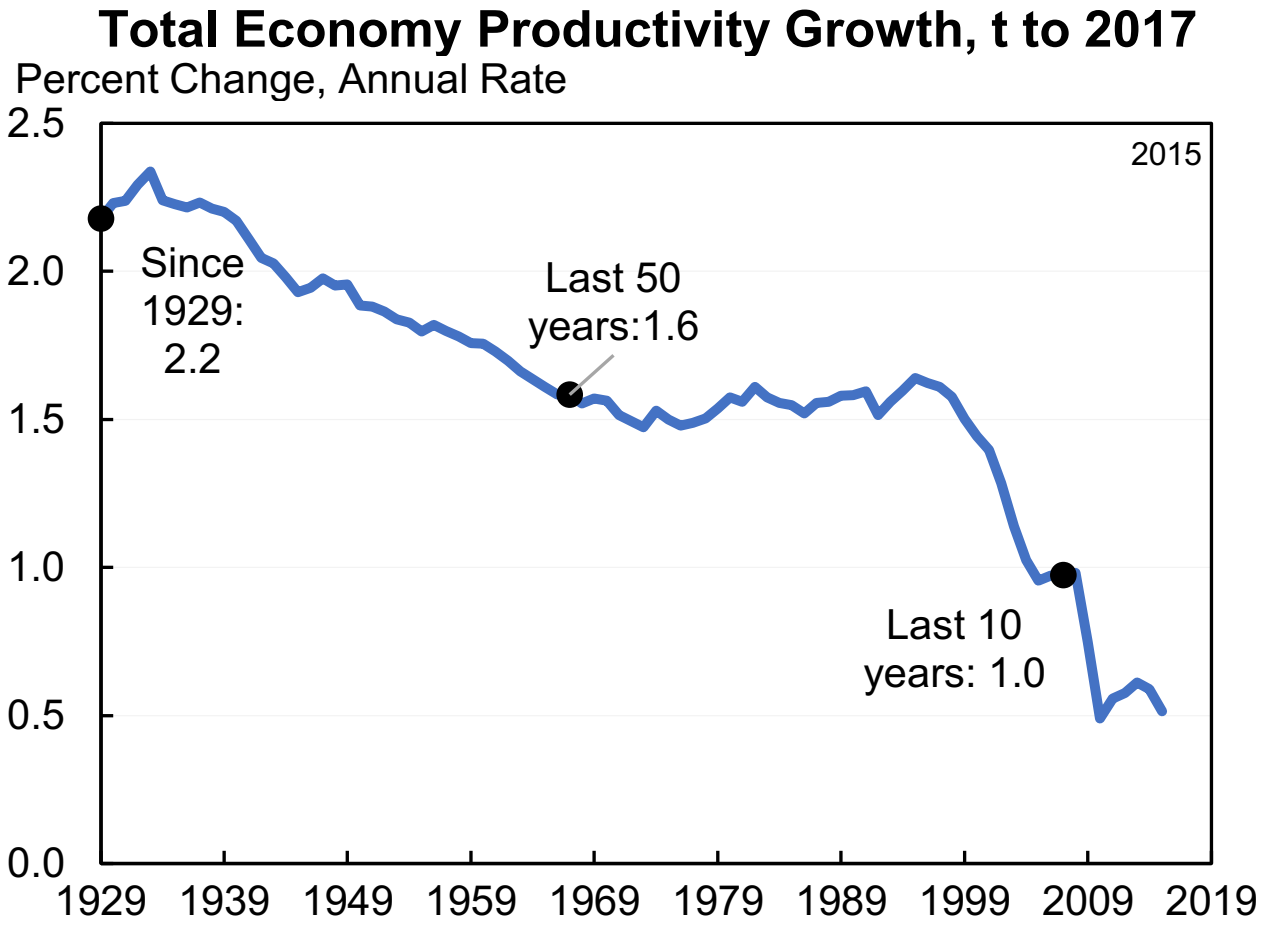
How far back should you go in assessing productivity trends?

Source: Bureau of Economic Analysis; Bureau of Labor Statistics; Kendrick (1961); author's calculations.

How far back should you go in assessing productivity trends?

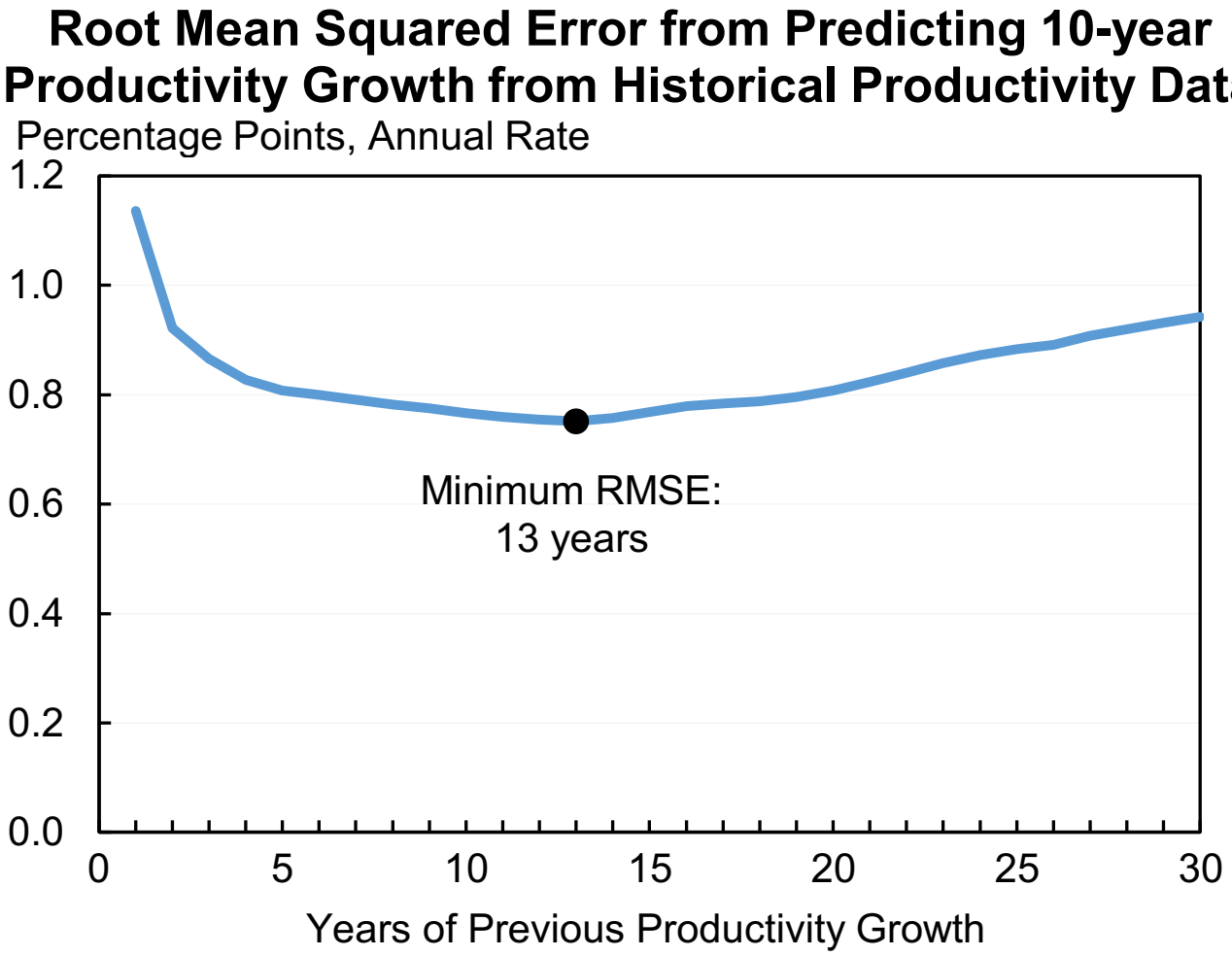
Source: Bureau of Economic Analysis; Bureau of Labor Statistics; Kendrick (1961); author's calculations.

How far back should you go in assessing productivity trends?



Source: Bureau of Economic Analysis; Bureau of Labor Statistics; Kendrick (1961); author's calculations.

The optimal averaging period appears to be 13 years



Source: Bureau of Economic Analysis; Bureau of Labor Statistics; Kendrick (1961); author's calculations.

The optimal averaging period implies total economy productivity growth = 1.0%

Source: Bureau of Economic Analysis; Bureau of Labor Statistics; Kendrick (1961); author's calculations.

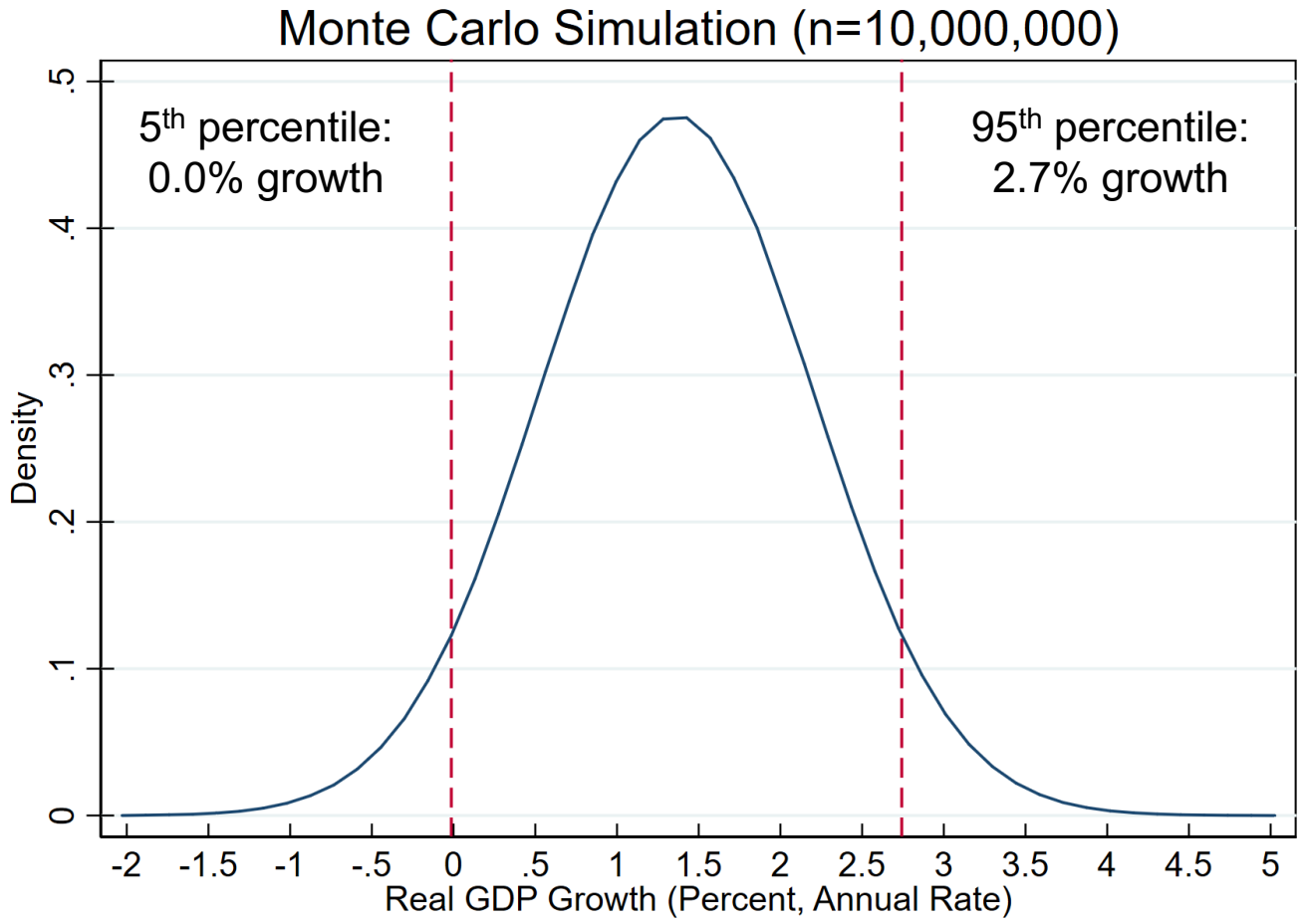
Supply Side Forecast for Potential Growth

Selected Components of Potential Real GDP Growth, 1953-2028

Component	Growth Rate, Percentage Points at Annual Rate		
	History	CBO Forecast	My Forecast
	1953 to 2007	2018 to 2028	2018 to 2028
Population	1.4	0.8	0.8
Potential labor force participation rate	0.2	-0.3	-0.5
Potential real output per hour (productivity, nonfarm business)	2.1	1.8	1.4
Other	-0.5	-0.4	-0.4
Potential real GDP	**3.3**	**1.9**	**1.3**

Note: May not sum due to rounding.
Source: Census Bureau; Bureau of Economic Analysis; Bureau of Labor Statistics; Kendrick (1961); author's calculations.

Uncertainty around this forecast



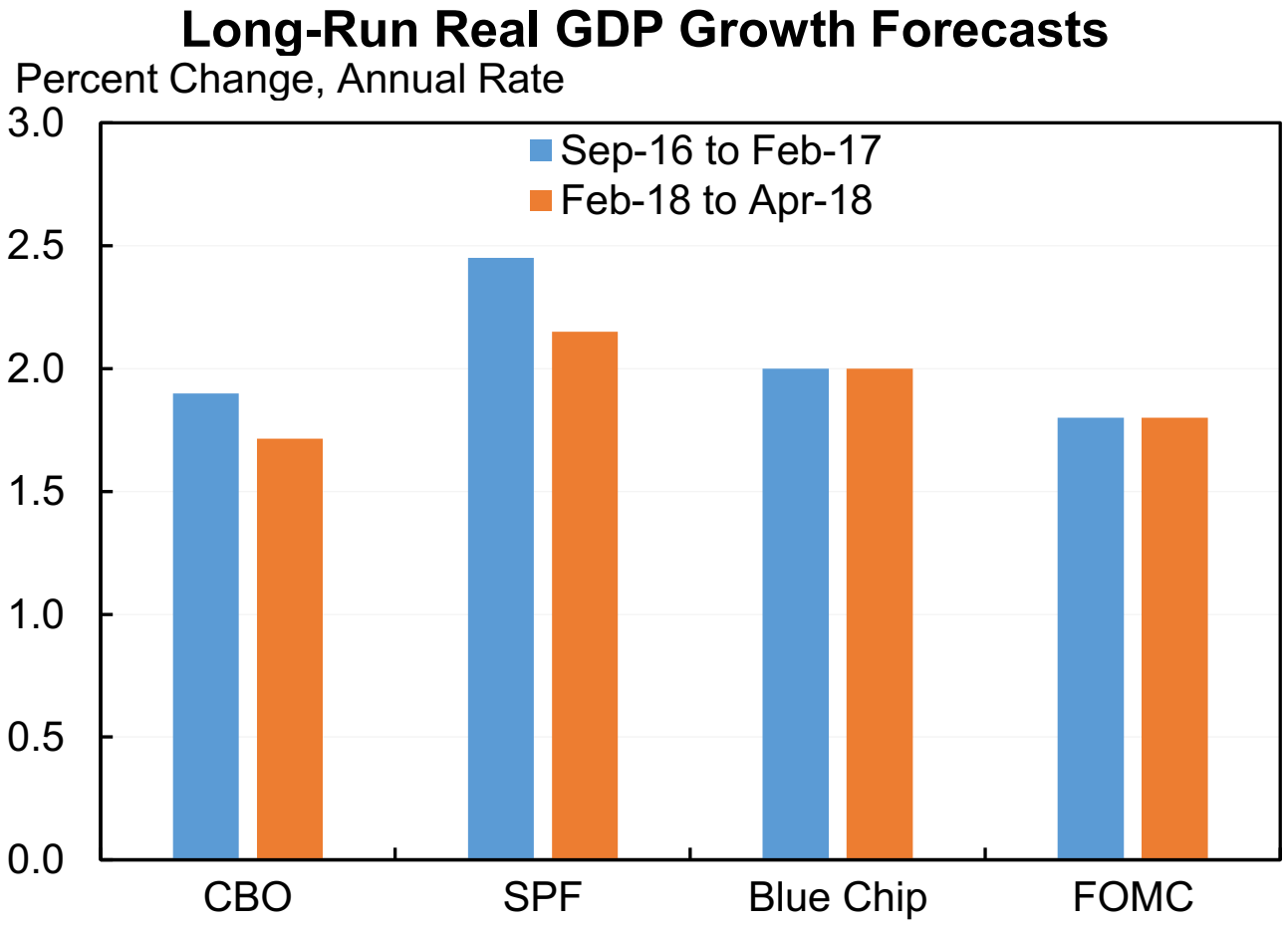
Probability of 3% growth or higher: 2.5%

Source: Census Bureau; Bureau of Economic Analysis; Bureau of Labor Statistics; Kendrick (1961); author's calculations.

Outline

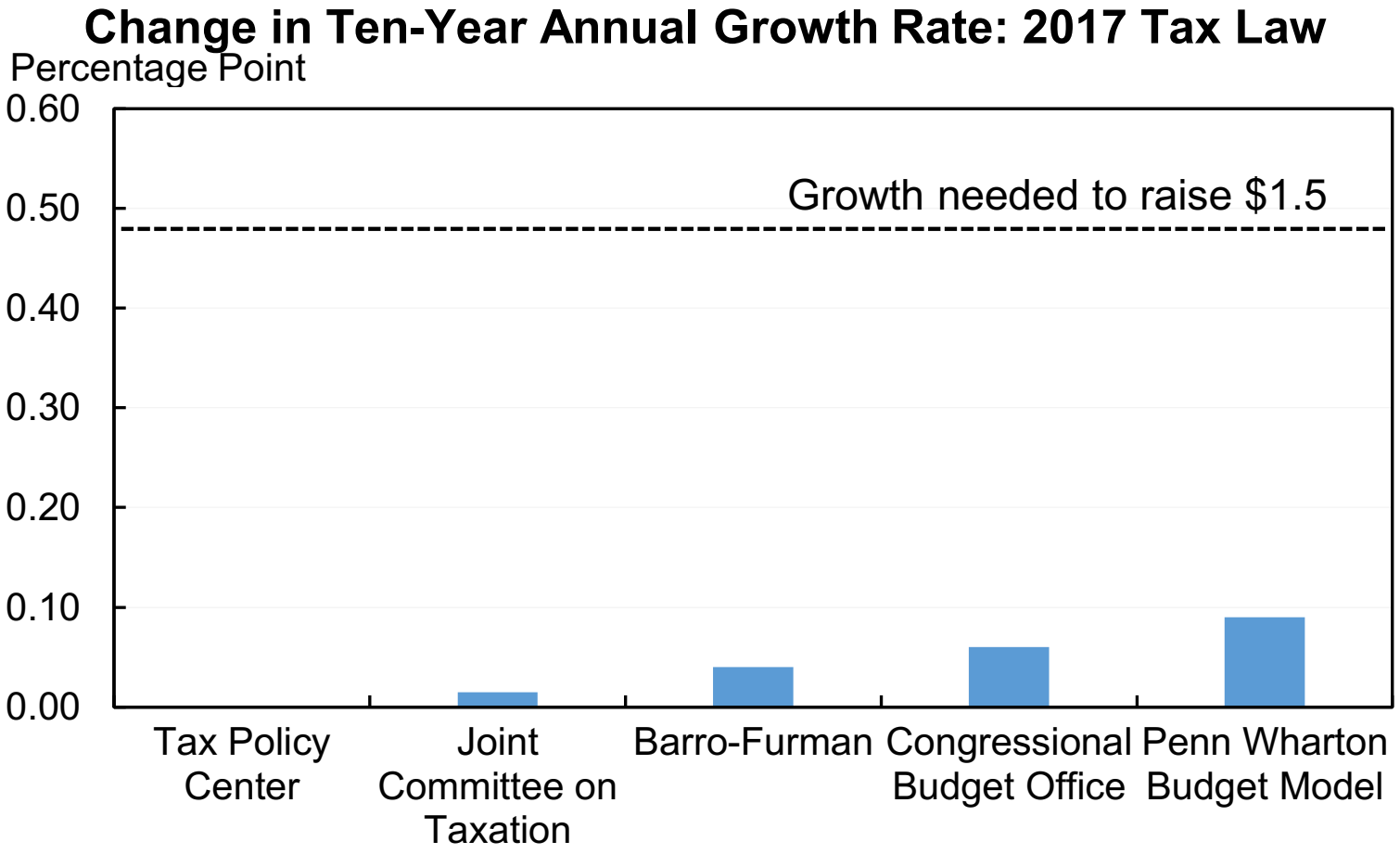
1. How New Is the Normal?
2. Estimating Potential Growth
3. Does Policy Make a Big Difference?

Long-term growth forecasts have not been unchanged or revised down slightly



Note: Based on sources listed and author's calculations. CBO forecasts are for 2022-2027; SPF forecasts are for the following 10 years; Blue Chip forecasts are for the last 5-year period reported; FOMC forecasts are for the longer run.

Broad agreement tax bill will add less than 0.1pp to annual GDP growth



Note: Estimates for the Joint Committee on Taxation and Penn Wharton Budget Model represent midpoint from range of estimates.
Source: Based on sources listed; Office of Management and Budget; author's calculations.

Other potential policies

Estimates of Growth Effects of Best/Worst Case Trump Administration Policies

Policy	Average Annual Change in Real GDP Growth Rate (p.p.)
Best Version of Policies That Could Have a Positive Impact	
Regulatory reform (Holtz-Eakin 2015; Barro 2017)	0.1 ??
$1.5 trillion of net new public investment (Gaspar et al. 2016; CEA 2016)	0.1
Worst Version of Policies That Could Have a Negative Impact	
Major tariffs leading to a trade war (Noland et al. 2016)	-0.15
Immigration restrictions (CBO 2013a)	-0.2
$3 trillion increase in primary Federal deficit (CBO 2013b)	-0.1

Note: Growth rates are author's calculations based on source(s) listed in table, in some cases adjusted to match the scenario shown.

Summary of analysis

- Forecasters always expected growth less than 2% for this period. In fact, it may be even a challenge to attain the earlier forecasts of 1.8% or 1.9% growth.
- The economy is near/at/above full employment.
- Projecting potential:
  - Labor force participation with age-specific trends declines 0.27 percentage point per year (is 0.24 pp with only aging).
  - Historical forecasts most accurate when using shorter periods to extrapolate productivity growth, like the last 13 years.
- Substantial uncertainty, Monte Carlo suggests growth between 0 and 3 percent is plausible.
- Policies may add or subtract a few tenths from these estimates.

What does this mean for policy?

- **Need accurate forecasts for budgeting (not to mention private sector decisions).** Those should be based on extrapolating from the past updated for known aspects of the future—not wishful thinking based on changes in policy regimes.

- **Most policy choices unaffected by the forecast—if you have a good policy to increase the growth of (log) incomes then should do it.** Regardless of whether potential growth was 1.0% or 3.0% we would still want to undertake whatever policies we could to increase it—with all the usual caveats about tradeoffs.

- **Lower interest rates should cause us to update our views on fiscal policy.** The optimal debt size is larger, crowd out is less costly, and debt has a smaller impact on interest rates. All of this should make us more dovish on fiscal policy.

- **The fact that the return to capital has stayed constant or even increased while safe rates have declined should motivate more vigorous competition policy.** This is one sign that rents have grown in the economy in a manner that has constrained business investment.

HARVARD Kennedy School
JOHN F. KENNEDY SCHOOL OF GOVERNMENT

The Old Normal Meets the New Normal

Jason Furman

Harvard Kennedy School and Peterson Institute for International Economics

Society of Policy Modeling & American Economic Association

Atlanta, GA

January 4, 2019