



Economic Policy in a Low-Productivity, Low-Interest-Rate Environment

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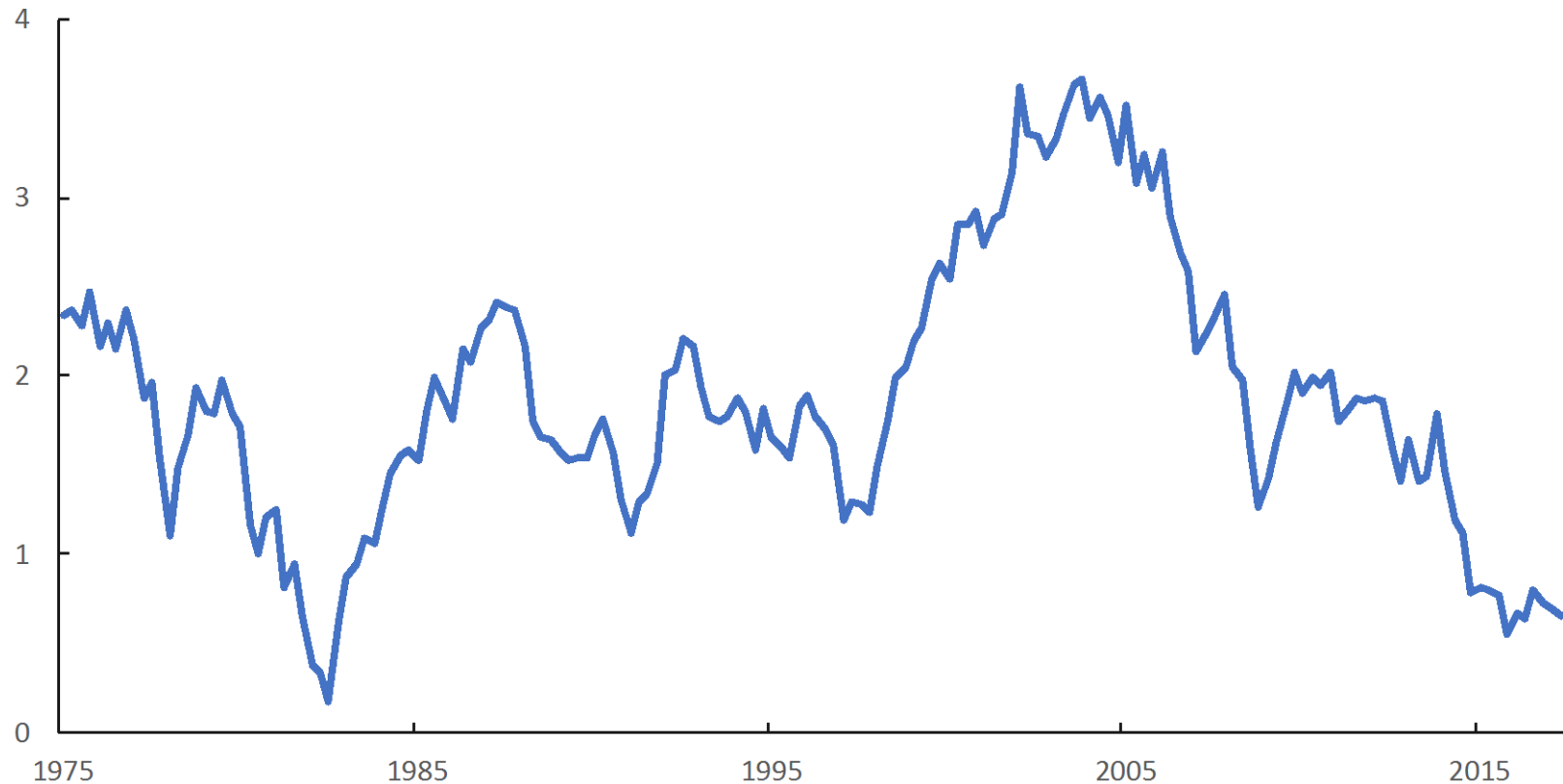
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Productivity growth and interest rates are low and will probably stay low for an extended period

Labor Productivity Growth in the United States

5-year moving average

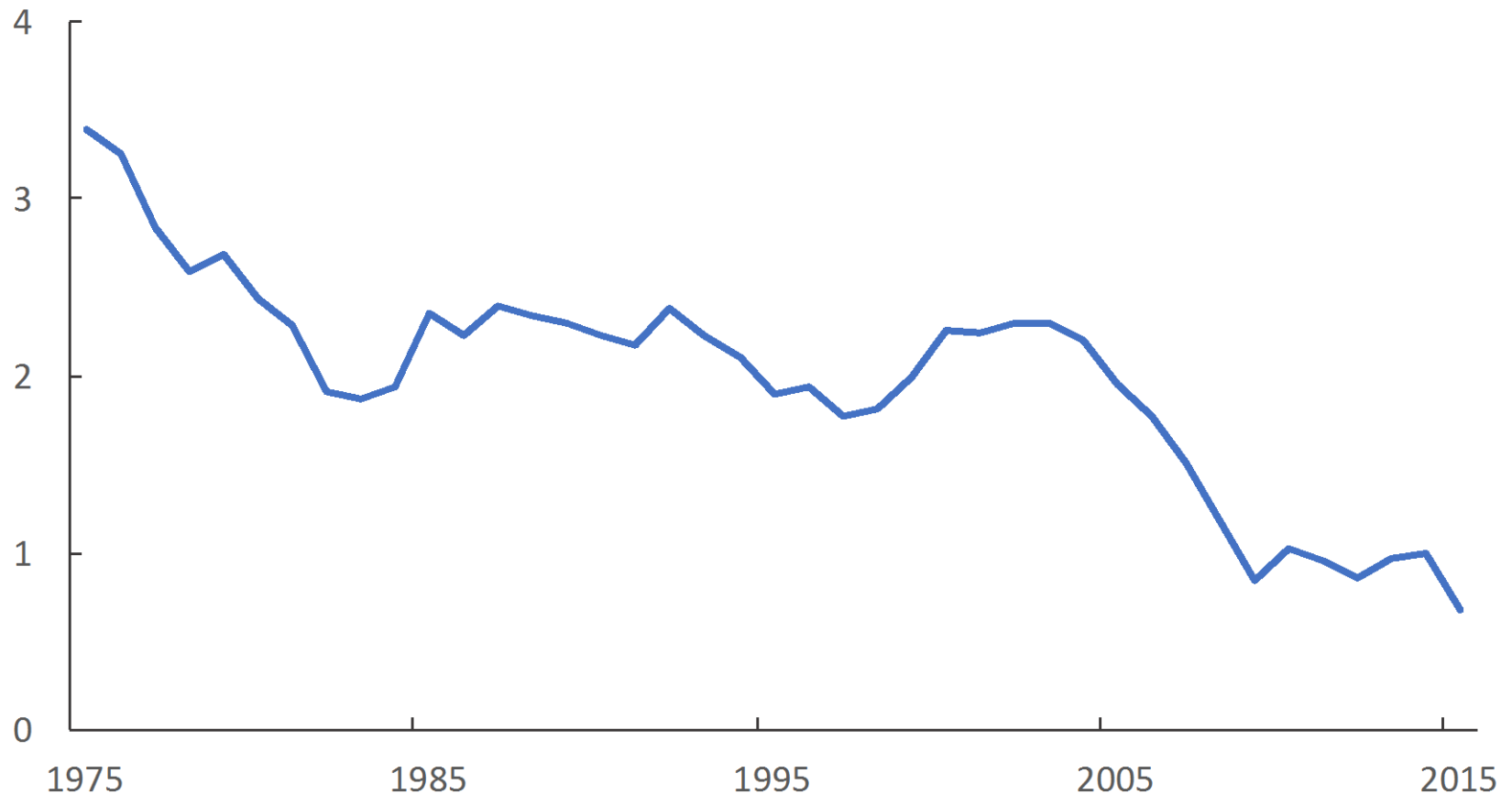


Source. U.S. Department of Labor

Note: Nonfarm business sector.

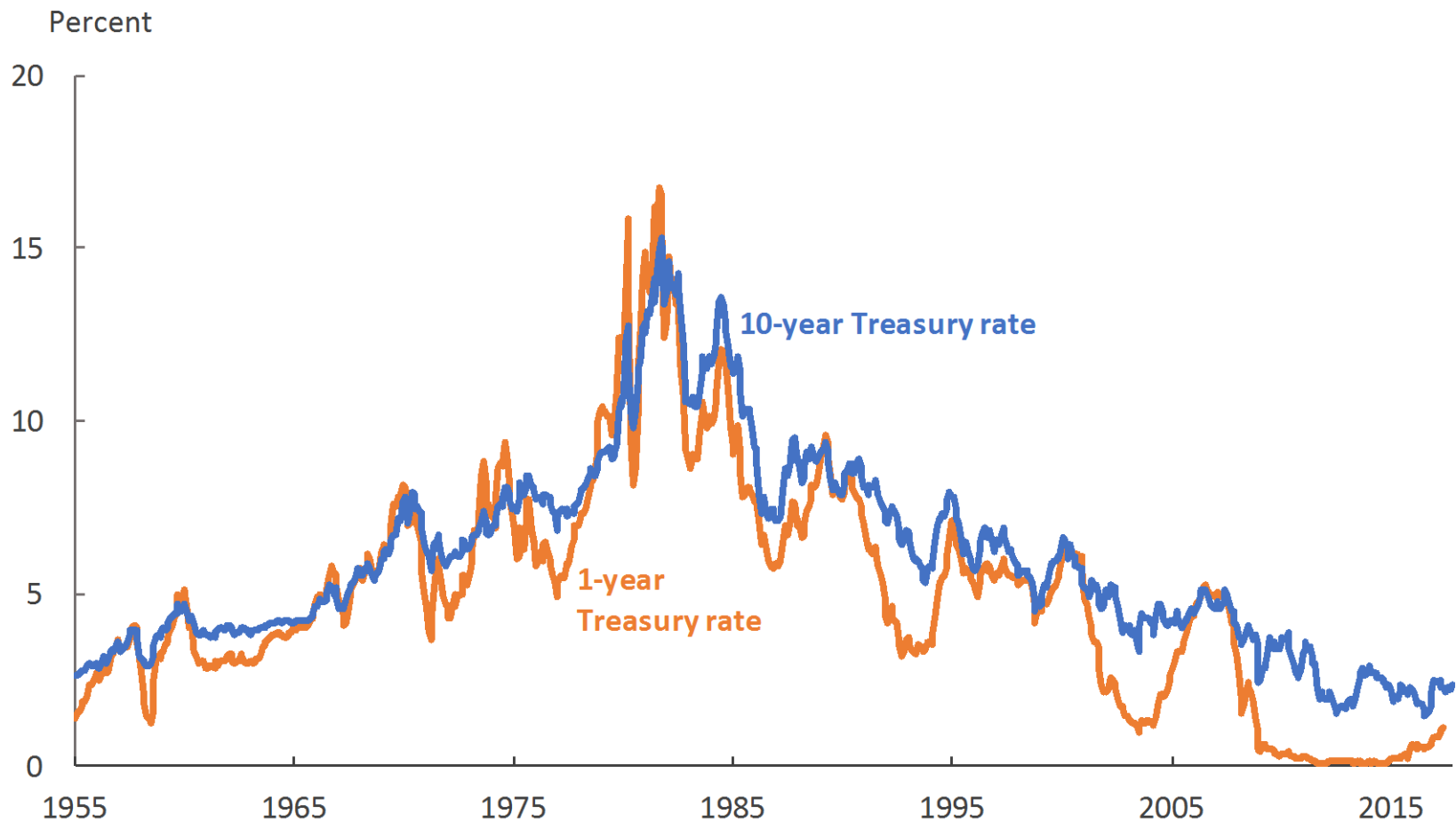
Labor Productivity Growth in G-7 Countries

5-year moving average



Source. OECD

U.S. Interest Rates



Source. Federal Reserve Board.

Global Long-term Interest Rates



Source. International Monetary Fund. 2014. "IMF Survey: Interest Rates to Increase But Modestly as Global Economy Normalizes."

Productivity growth and interest rates likely to rise a bit but remain relatively low

Productivity growth damped by low investment during and after the recession; investment is picking up

But a lower trend in multifactor productivity growth set in before the recession (Fernald, Hall, Stock, and Watson, 2017)

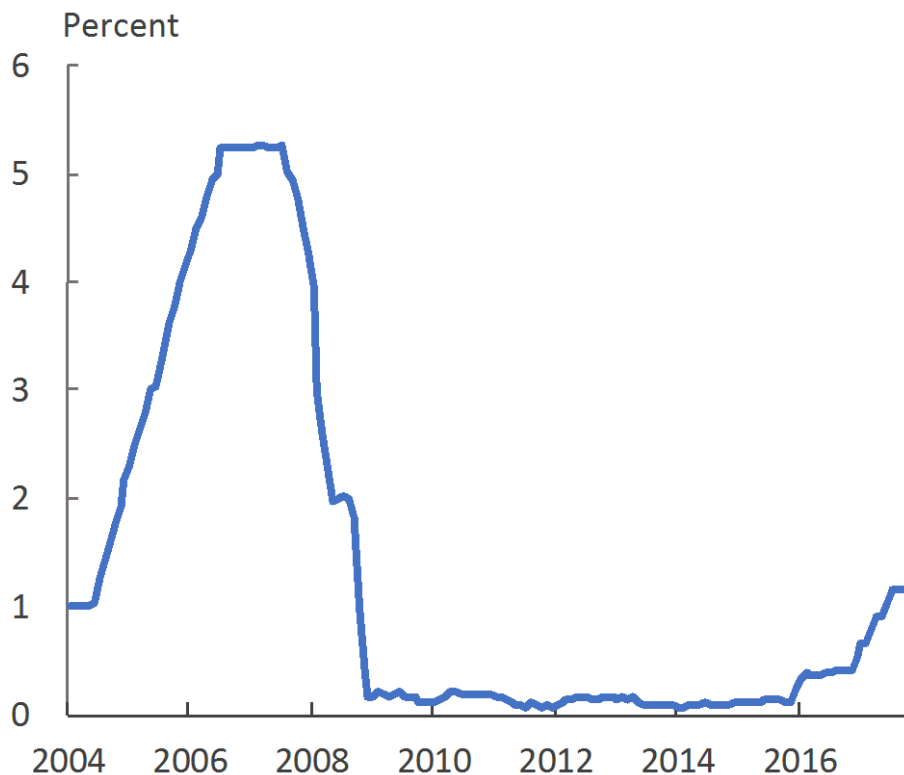
Interest rates held down by expansionary monetary policy in recent years; policy is normalizing

But the longer-term downtrend in interest rates reflects slower-moving forces—low growth, demographics, rising inequality

What are the implications for monetary policy?

The zero lower bound has been a constraint over the past decade for many central banks

The Effective Fed Funds Rate



Source. Federal Reserve Board.

The Federal Reserve, the European Central Bank, the Bank of Japan, the Bank of England, and other central banks ran out of room to cut their policy rates

The long-term decline in real interest rates presents real challenges

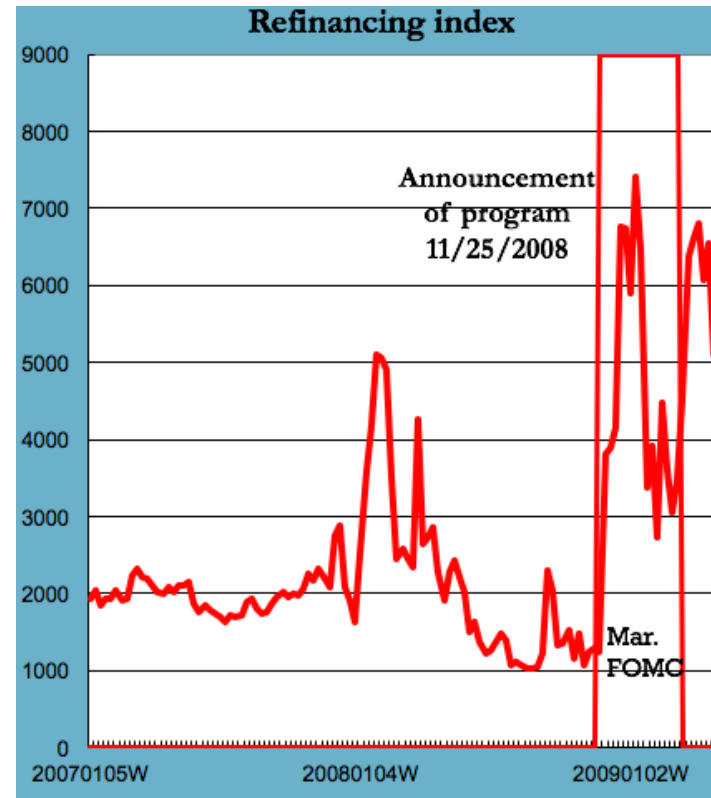
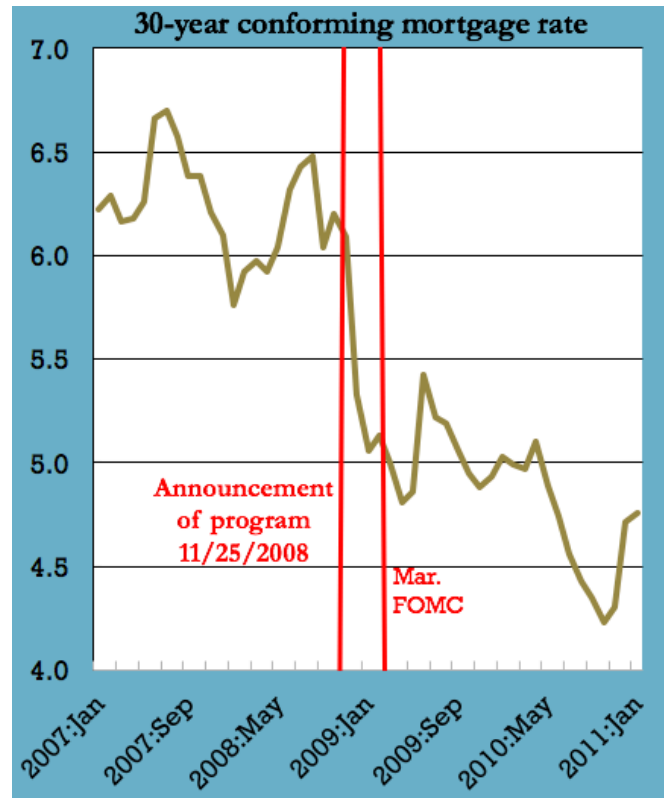
For example, the Federal Reserve currently thinks the long-run value of the federal funds rate is **2.8 percent**

But, they cut the policy rate by **5+ percentage points** in the last 3 recessions

	Starting fed funds rate	Lowest fed funds rate	Cumulative cut
1990 recession	8.25 percent	3.0 percent	5.25pp
2001 recession	6.50 percent	1.0 percent	5.50pp
2007 recession	5.25 percent	~ zero	~5.25pp

What are the options?

1. **Don't be squeamish about quantitative easing**—it works, and risks of financial instability can probably be managed in other ways



What are the options?

Empirical studies supporting the view that QE provided important countercyclical support to the economy

Gagnon, Joseph, Raskin, Matthew, Remache, Julie, Sack, Brian. 2011. "The Financial Market Effects of the Federal Reserve's Large-Scale Asset Purchases," *International Journal of Central Banking*, vol. 7, no. 1, p. 3-43.

Krishnamurthy, Arvind, and Vissing-Jorgensen, Annette. 2011. "The Effects of Quantitative Easing on Long-term Interest Rates," *Brookings Papers on Economic Activity*, Fall.

D'Amico, Stefania, and King, Thomas. 2013. "Flow and Stock Effects of Large-Scale Treasury Purchases: Evidence on the Importance of Local Supply," *Journal of Financial Economics*, vol. 108, no. 2, p. 425-448.

D'Amico, Stefania, English, William, Lopez-Salido, David, and Nelson, Edward. 2012. "The Federal Reserve's Large Scale Asset Purchase Programs: Rationale and Effects," *Economic Journal*, vol. 122, no. 564, p. 415-46.

Meaning, Jack and Zhu, Feng. 2011. "The Impact of Recent Central Bank Asset Purchase Programmes," *BIS Quarterly Review*, Bank for International Settlements, December.

Swanson, Eric T. 2011. "Let's Twist Again: A High-Frequency Event-Study Analysis of Operation Twist and its Implications," *Brookings Papers on Economic Activity*, p. 151-188, Spring.

Hamilton, J. D. and Wu, J. C. 2012. "The Effectiveness of Alternative Monetary Policy Tools in a Zero Lower Bound Environment," *Journal of Money, Credit and Banking*, 44: 3-46.

Meaning, Jack, and Zhu, Feng. 2012. "The Impact of Federal Reserve Asset Purchase Programs: Another Twist," *BIS Quarterly Review*, Bank for International Settlements, March.

Engen, Eric, Laubach, Thomas, and Reifschneider, David. 2015. "The Macroeconomic Effects of the Federal Reserve's Unconventional Monetary Policies," *FEDS 2015-005*, January. [Return to table](#)

Source: Bonis, Irhig, and Wei (2017) <https://www.federalreserve.gov/econres/notes/feds-notes/effect-of-the-federal-reserves-securities-holdings-on-longer-term-interest-rates-20170420.htm>

What are the options?

2. **Forward guidance can help**—for example, the FOMC noted in December 2008 that they anticipated that weak economic conditions were "likely to warrant exceptionally low levels of the federal funds rate for some time." **But, long-term rates can only fall a little further.**
3. **Negative short-term rates can help**—Europe and Japan have tried it, with central banks charging private banks on the excess reserves they hold. **But, there are limits in how negative you can go and how far long-term rates can fall.**

What are the options?

4. **Raising the inflation target can help** by raising the equilibrium policy rate. Most central banks currently target ~2 percent. But central banks leaders have voiced concern about damaging their credibility, and causing inflation expectations to become unanchored. **So, they probably can't raise the target very far.**

What are the implications for fiscal policy?

Use aggressive countercyclical fiscal policy to maintain full employment

Prior to the financial crisis, monetary policy was seen as dominating discretionary fiscal policy as a stabilization tool

“Monetary policy is . . . generally accepted as the policy of choice when it comes to . . . stimulating a weak economy.”

Marty Feldstein, *Commentary: Is There a Role for Discretionary Fiscal Policy?* (2002)

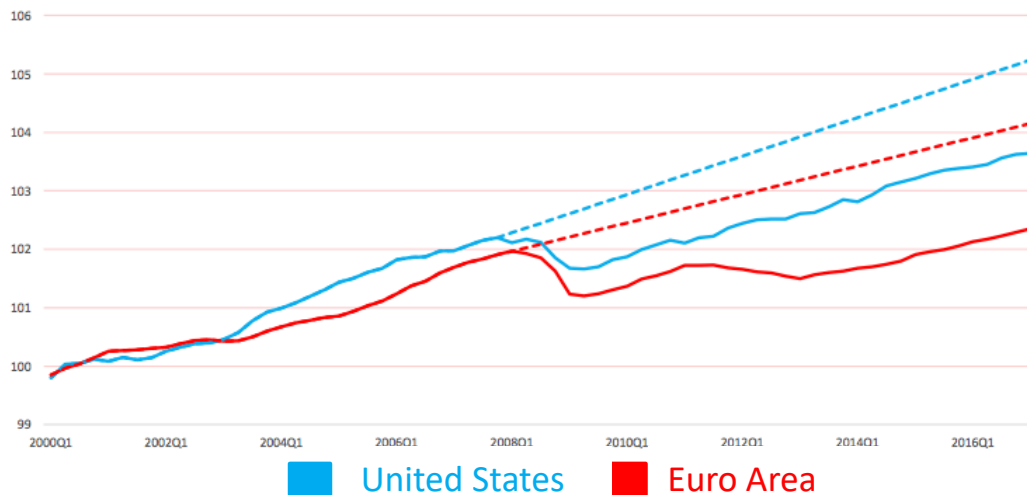
“Fiscal policy, it had previously been concluded, was too slow, too clumsy, and too political to be relied upon.”

Alan Blinder, *Fiscal Policy Reconsidered* (2015)

But, zero-lower-bound constraints (along with the sheer size of the crisis) have led to a **rethinking of that view**

Moreover, hysteresis seems to be real

Log Real GDP and Extrapolated Trend
(Index, 2000=100)



Source. Blanchard and Summers. 2017. "Rethinking Stabilization Policy. Back to the Future."

The prime-age labor force participation rate has not fully rebounded to trend and business investment has lagged, so projected output today is much lower than before

Evidence from the recent episode suggests fiscal policy helped

U.S. time series evidence—Blinder and Zandi (2015)

Economic Impact of No Fiscal Stimulus

		2008	2009	2010	2011	2012	2013	2014
Real GDP*	No Fiscal Stimulus	14,784.0	14,187.3	14,271.3	14,536.4	14,927.2	15,306.0	15,851.2
% Change		-0.6	-4.0	0.6	1.9	2.7	2.5	3.6
Real GDP*	Actual	14,830.4	14,418.8	14,783.8	15,020.6	15,354.6	15,583.3	15,961.7
% Change		-0.3	-2.8	2.5	1.6	2.2	1.5	2.4

U.S. geographic cross-section evidence—2017 survey by Chodorow-Reich

“the cross-sectional evidence suggests a national zero lower bound **multiplier of about 1.7 or above**, at the upper end of most studies based on time series evidence.”

To get around “slow, clumsy, and political” concerns, use more automatic stabilizers

For example—when the unemployment rate crosses a certain threshold, you could automatically turn on extended unemployment benefits and reduce payroll taxes

Then automatically turn these benefits off when the unemployment rate goes back down

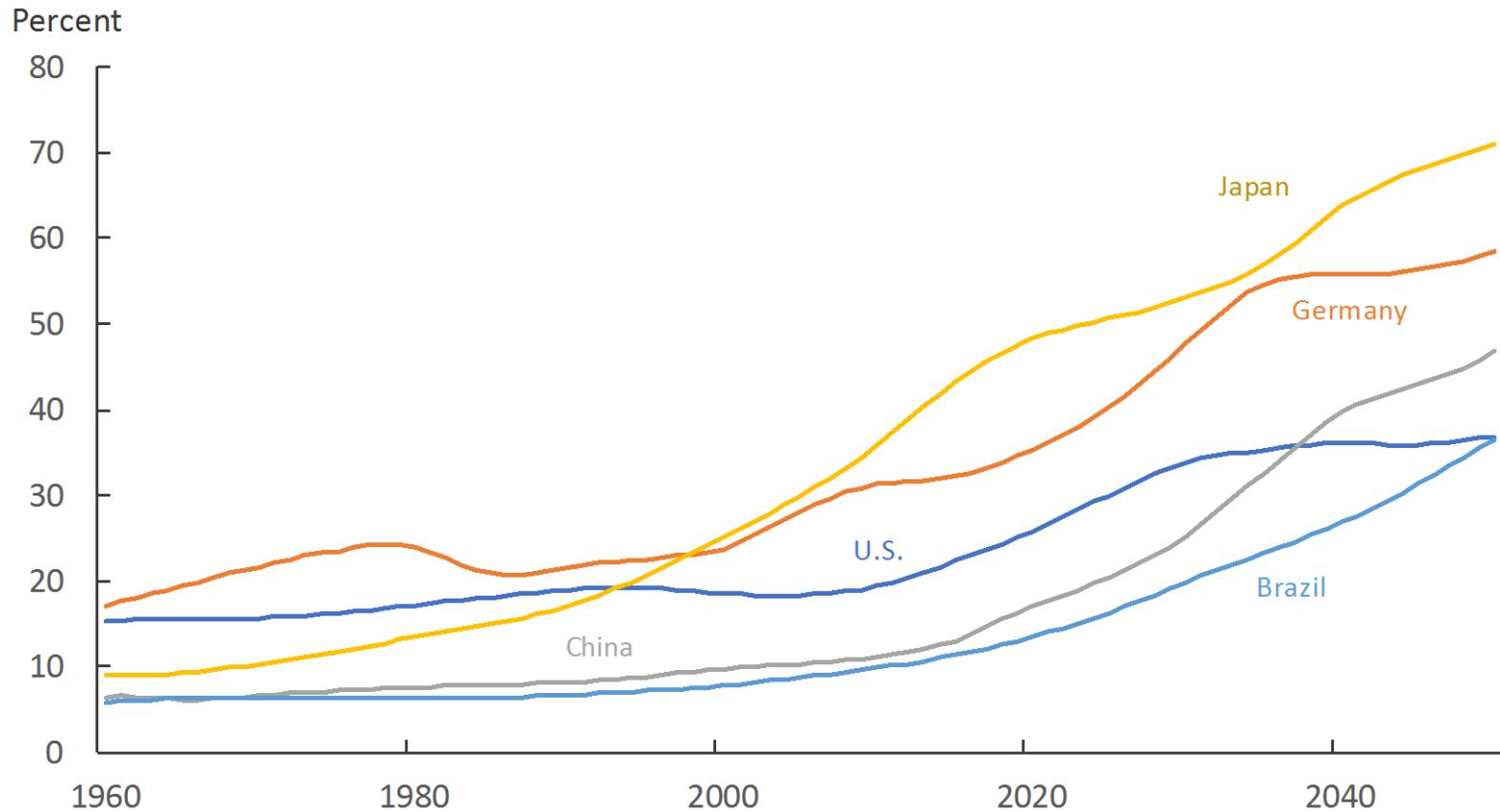
Over the longer-run, fiscal sustainability will be difficult to achieve

Dependency rates are rising

Health costs have grown faster than costs in other sectors

Old-age dependency ratios

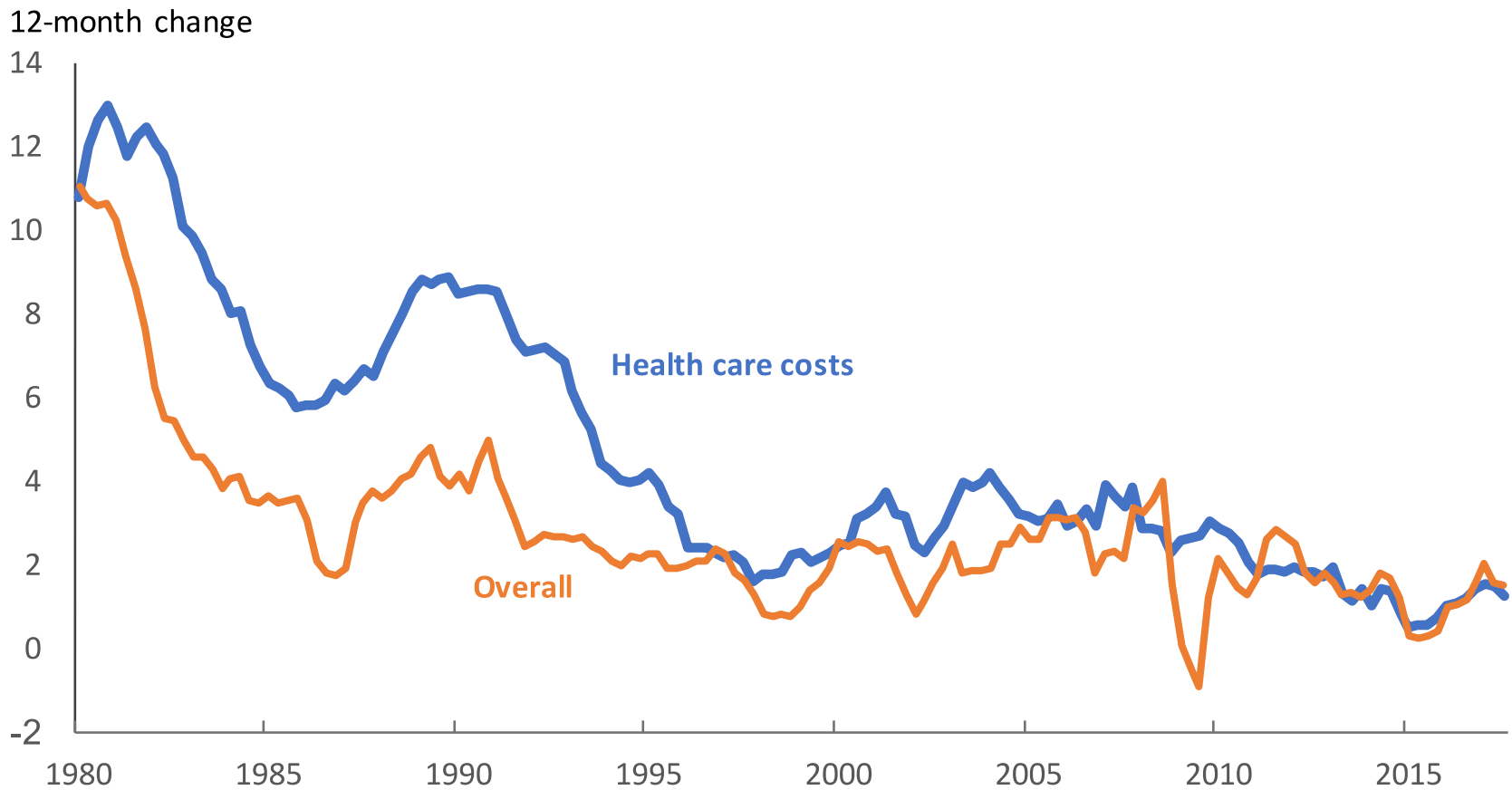
Population 65+ Relative to Working-Age Population



Source: World Bank.

Health care inflation vs. overall inflation

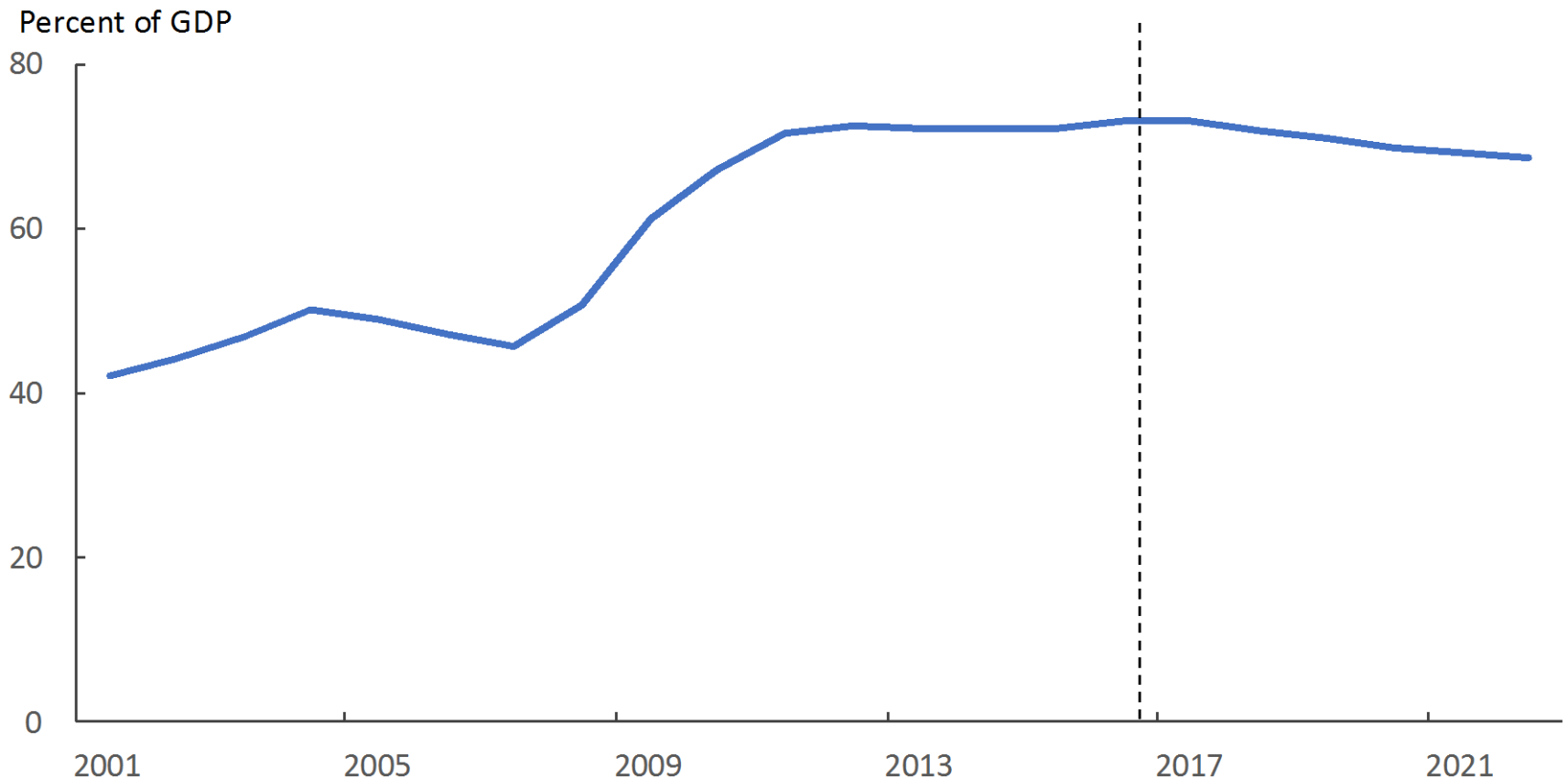
U.S. Consumer Prices



Source. U.S. Commerce Department.

Debt levels are already high in many countries

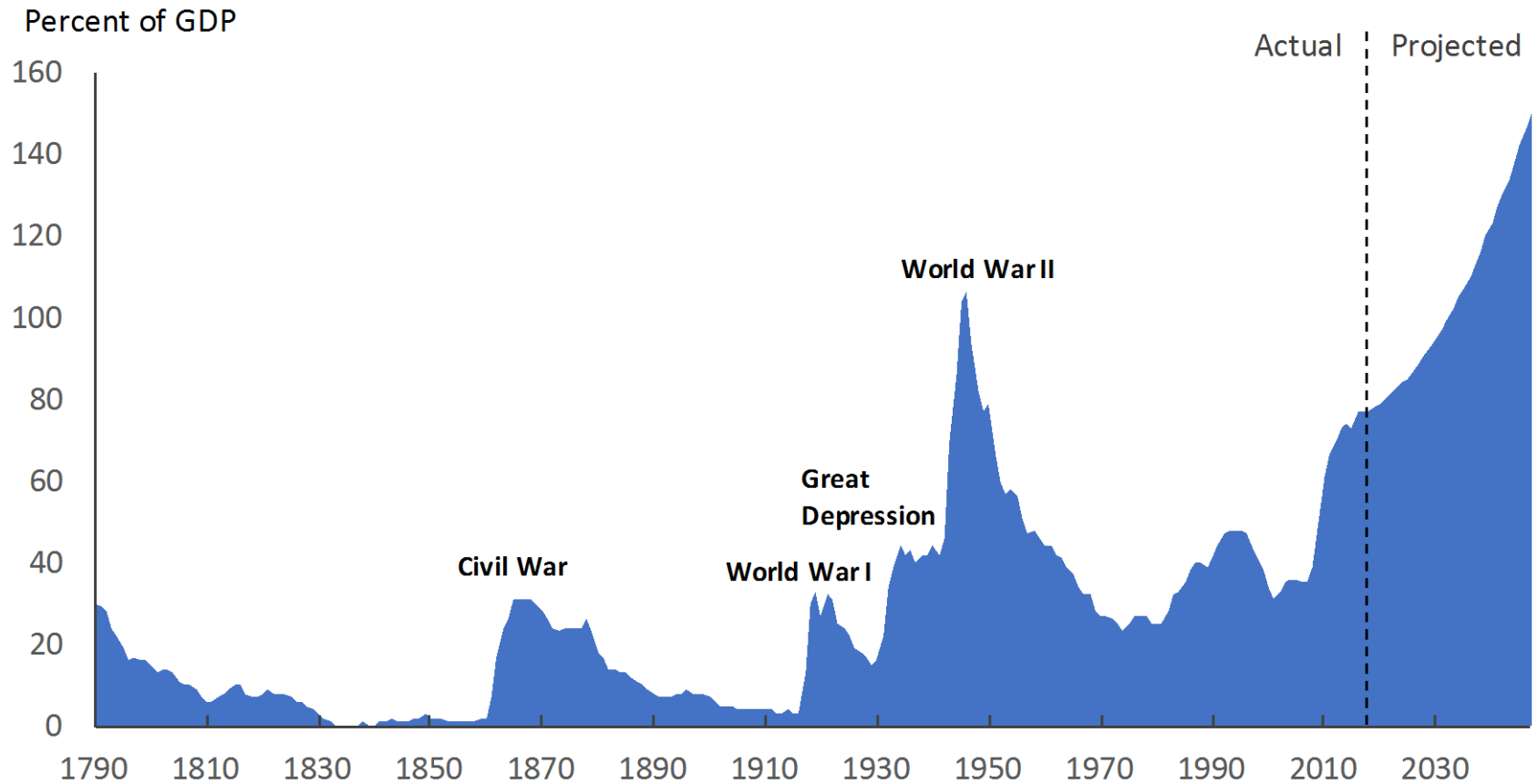
Net General Government Debt for Advanced Countries



Source: International Monetary Fund.

Debt levels are already high in many countries

U.S. Federal Debt Held by the Public



Source. Congressional Budget Office.

Changes needed for tax policy

1. Increase tax incentives for work

Given that low productivity growth will probably damp future wage growth, there may be further declines in labor force participation (assuming the substitution effect dominates as it seems to have done in recent decades)

This would exacerbate fiscal pressures—both through lower tax revenue and through more need for social insurance

Best to focus on groups with most elastic labor supply (e.g. second earners) and those for whom the social concerns are greatest (e.g. low-skill men)

Changes needed for tax policy

2. Improve tax incentives for investment

Large literature documents features of current tax systems that lead to misallocation of resources and hold back productivity growth by (1) distorting investment by industry and assets, (2) distorting choice of financing for investment, and (3) distorting how businesses are organized and where they are located

We should always be trying to fix these problems but it is especially important to do so now given low productivity growth

Changes needed for tax policy

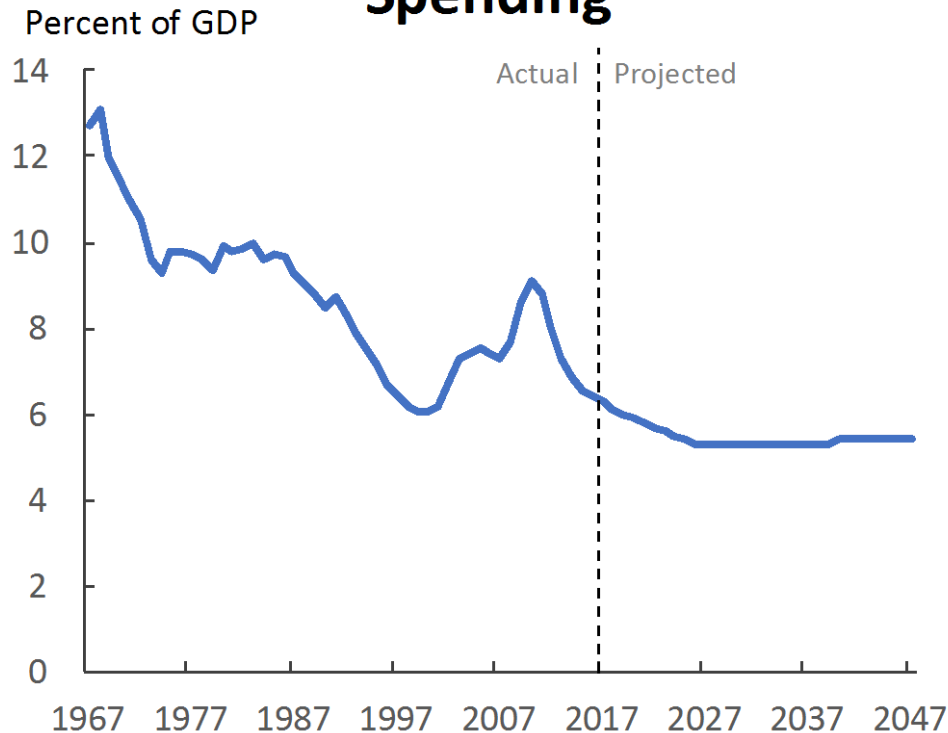
3. Raise more revenues

Even assuming low interest rates persist (as CBO assumes), countries like the United States are not in a fiscally sustainable position under current law, with low productivity growth exacerbating the problem

So tax revenues will need to be higher (even assuming some cuts to spending on programs providing retirement income and health care)

Also need to maintain public investment spending

U.S. Federal Discretionary Spending



Source. Congressional Budget Office.

U.S. discretionary spending is now falling to its lowest share of GDP in decades; this is the category that includes growth-enhancing public investments in infrastructure, education, and research

Conclusions (I)

The near-term global outlook may be good (given that nearly all countries are growing again), but low interest rates and low productivity growth pose major challenges for the longer run

Low interest rates will limit conventional monetary policy:

- More thought needed on unconventional measures

- Fiscal policy will need to play a bigger stabilization role

Conclusions (II)

In addition to damping interest rates, low productivity growth exacerbates the fiscal pressures that are coming for many countries:

Tax systems need to incentivize more work and better investment and to raise more revenues

Governments need to maintain public spending on pro-growth investments

Notes

Slide 2: Data from the U.S. Department of Labor.

Slide 3: Data from the OECD.

Slide 4: Data from the Federal Reserve Board.

Slide 5: Screenshot from International Monetary Fund (2014) “IMF Survey: Interest Rates to Increase But Modestly as Global Economy Normalizes.”

Slide 6: See Fernald John G., Robert E. Hall, James H. Stock, and Mark W. Watson (2017) “The Disappointing Recovery of Output after 2009,” *Brookings Papers on Economic Activity* (Spring).

Slide 8: Data from the Federal Reserve Board.

Slide 10: Data from Freddie Mac and the Mortgage Bankers Association.

Slide 11: Screenshot from Bonis, Irhig, and Wei (2017) <https://www.federalreserve.gov/econres/notes/feds-notes/effect-of-the-federal-reserves-securities-holdings-on-longer-term-interest-rates-20170420.htm>.

Slide 15: See Feldstein, Martin S. (2002) “Commentary: Is There a Role for Discretionary Fiscal Policy?” *Rethinking Stabilization Policy* and and Blinder, Alan (2015) “Fiscal Policy Reconsidered.” Feldstein noted that fiscal policy might become the preferred tool in a low-interest rate environment.

Slide 16: Screenshot from Blanchard and Summers (2017) “Rethinking Stabilization Policy. Back to the Future.”

Slide 17: See Blinder, Alan S. and Mark Zandi (2016) “The Financial Crisis: Lessons for the Next One,” Center on Budget and Policy Priorities and Chodorow-Reich, Gabe Chodorow Reich (2017) “Geographic Cross-Sectional Fiscal Spending Multipliers: What Have We Learned?”

Slide 20: Data are from the World Bank.

Slide 21: Data are from the U.S. Commerce Department.

Slide 22: Data are from the International Monetary Fund.

Slide 23: Data are from the Congressional Budget Office.

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