

Prospects for Inflation in a High Pressure Economy: Is the Phillips Curve Dead or is It Just Hibernating?



**2019 US Monetary Policy Forum
Discussion**

February 22, 2018

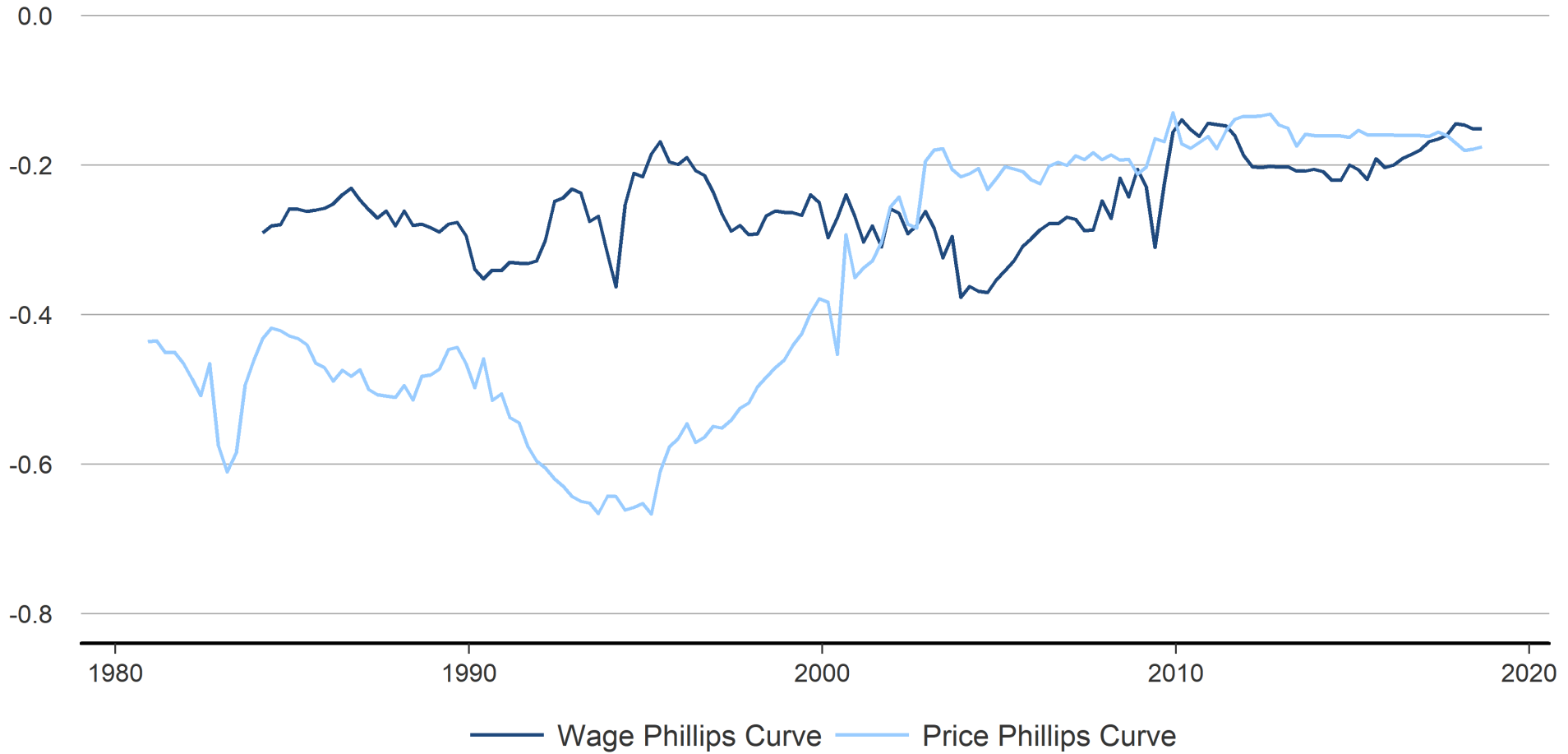
Mary Daly
President and CEO

Paper Overview

- **Nice review of the empirical Phillips Curve literature**
- **Concludes that the Phillips Curve is still breathing**
- **Warns against complacency—no free lunch**
- **But in an uncertain world how do we distinguish complacency from appropriate policy?**
- **Important to identify the wedges between theory and data and be vigilant on both sides of the target**

Wage and Price PCs Have Flattened

Slopes of Wage and Price Inflation Phillips Curves



Why?

- **Fundamental laws of supply and demand have failed—tighter labor markets don't drive wages, prices?**

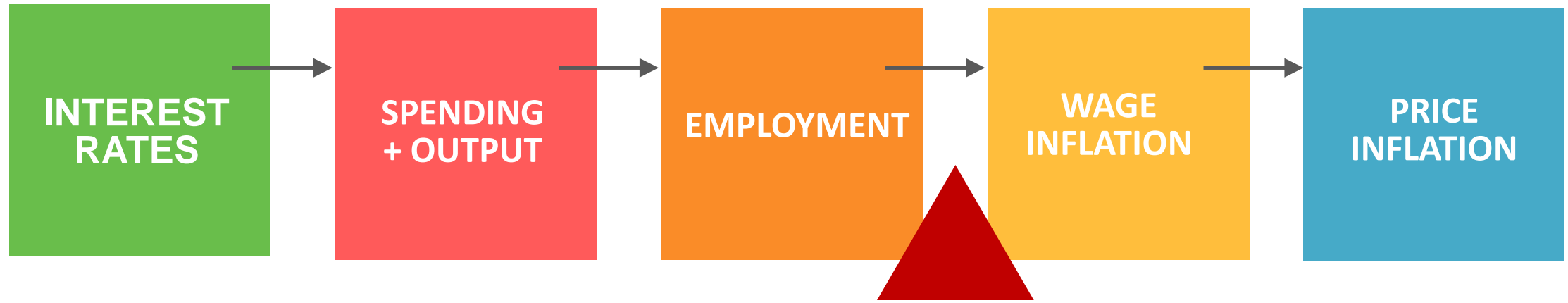
or

- **There are various wedges clouding our view of the underlying (structural) relationship?**

Theory, Data, and Wedges

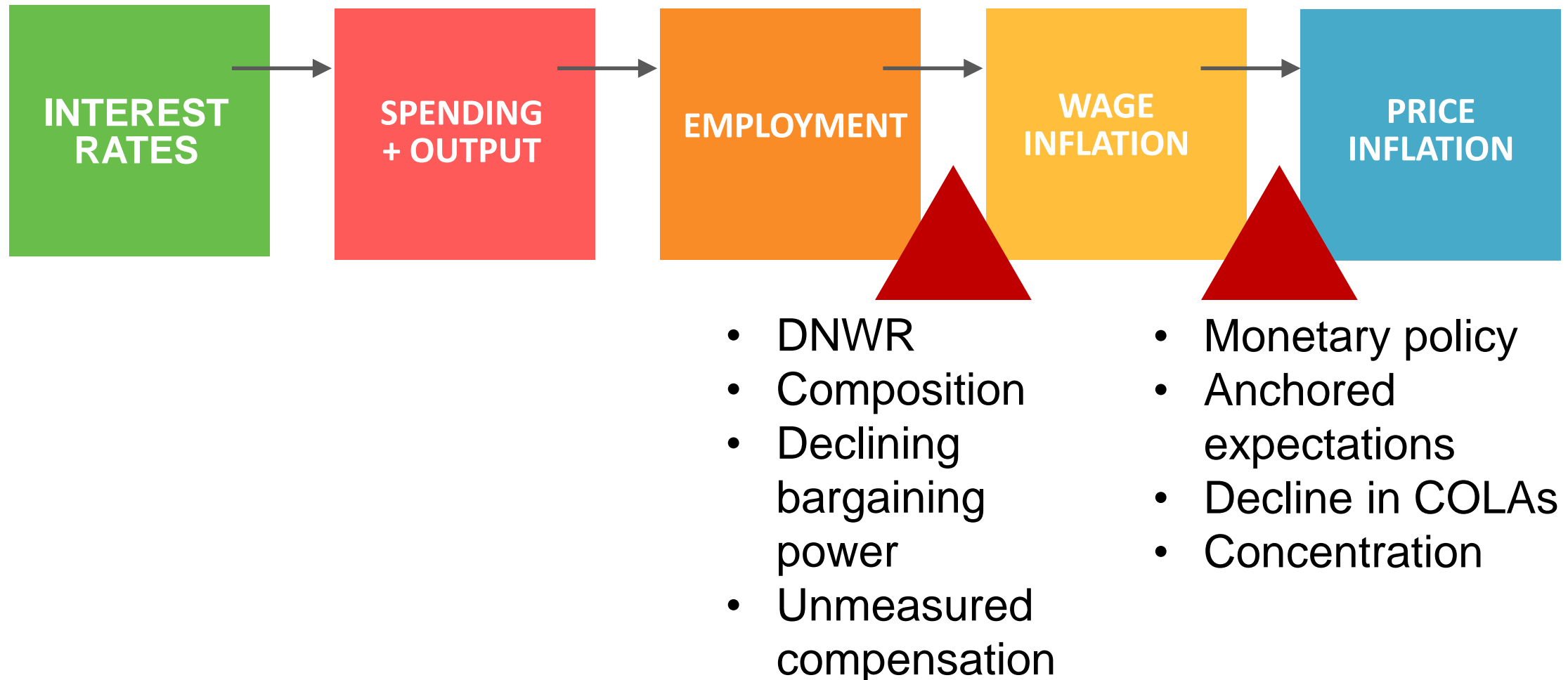


Reduced Form PCs May Not Tell the Story



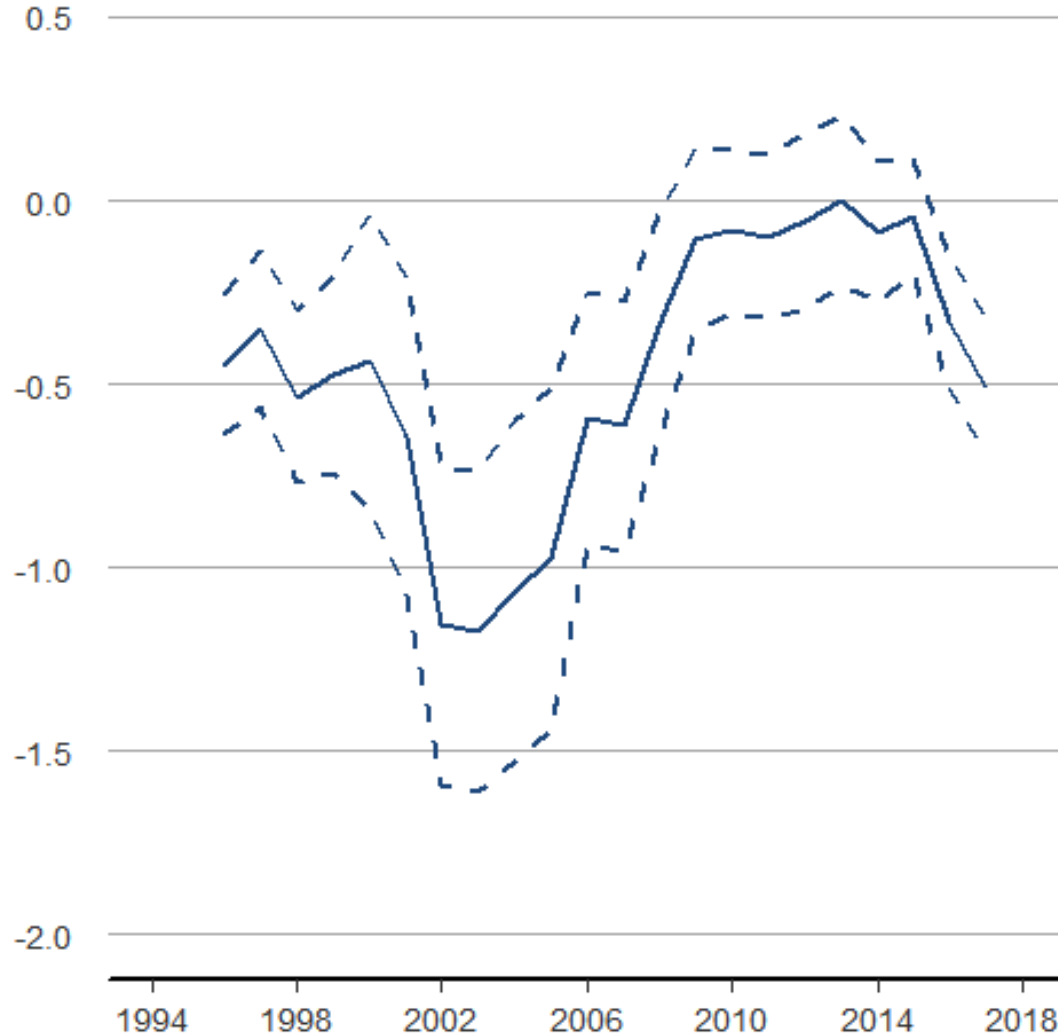
- DNWR
- Composition
- Declining bargaining power
- Unmeasured compensation

Reduced Form PCs May Not Tell the Story

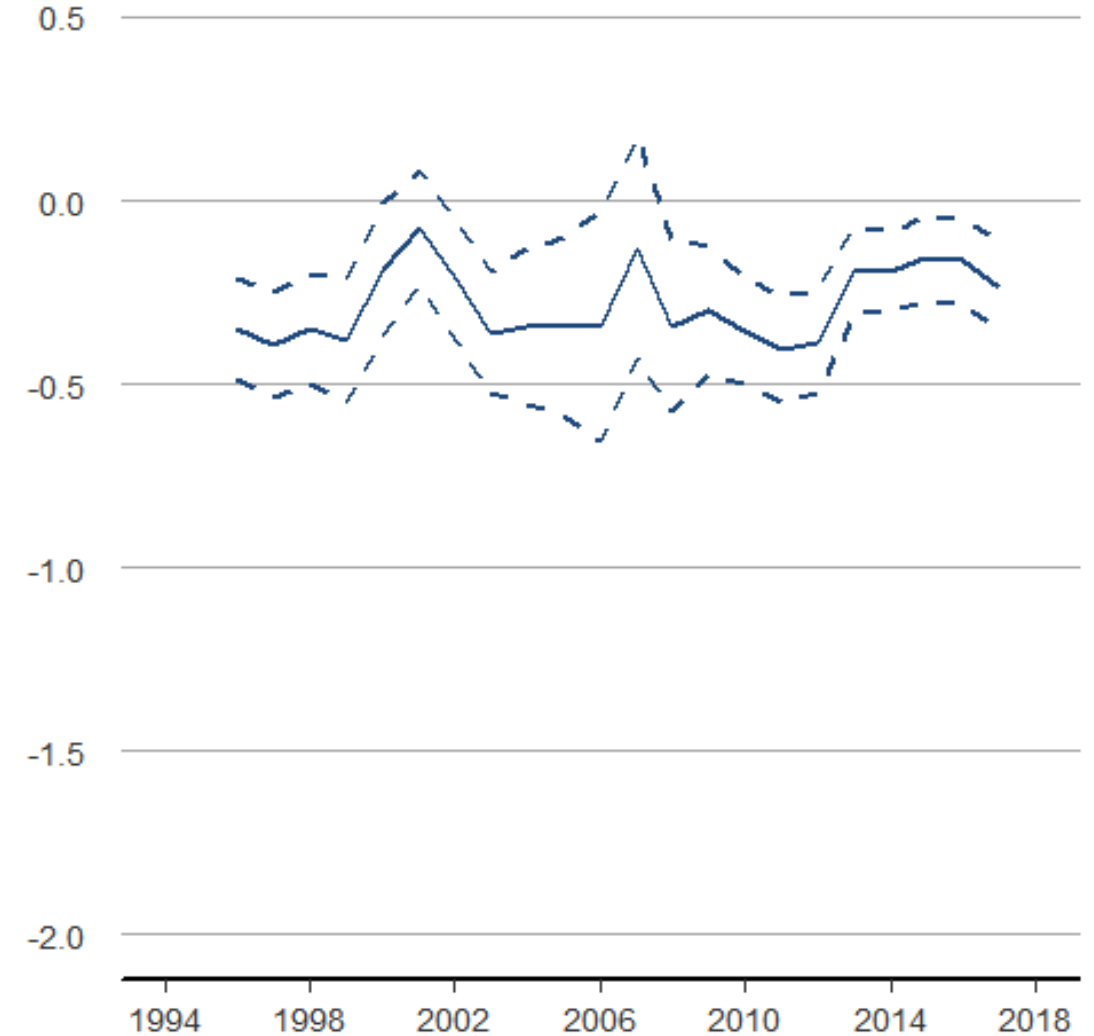


The Regional Phillips Curves: Still Breathing

Cross-MSA Slope of Wage Phillips Curve



Cross-MSA Slope of Price Phillips Curve



Note: Slack measured with unemployment gap.
Source: Leduc and Wilson (FRBSF Economic Letter, 2017) and authors' calculations.

But Few Signs Wage Inflation is Running Away

Wage Growth

Percent

5.0

4.0

3.0

2.0

1.0

0.0

Region

Industry

Occupation

Pacific
Overall
West South

Finance,
Manufacturing
Education and
Health

High Skill,
Mid Skill
Low Skill

Source: Atlanta Federal Reserve Wage Growth Tracker.

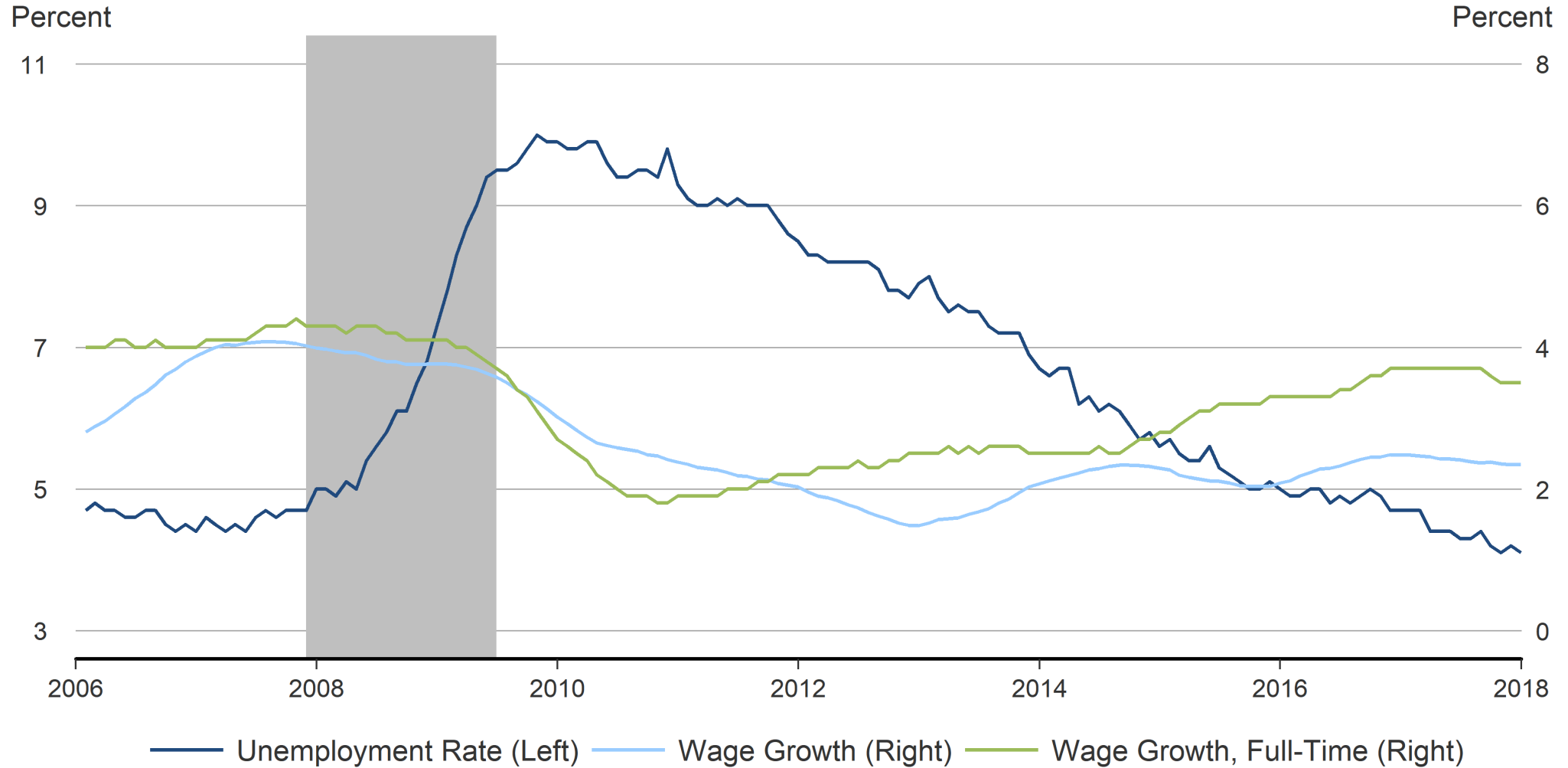
Price PC: Housing Services Dominates

Cross-MSA Slope of the Price Phillips Curve

	<u>Unemployment Gap</u>	<u>Unemployment Rate</u>
Total	-0.323***	-0.329***
Rent	-0.672***	-0.592***
Services (excl. Rent)	0.0172	-0.111*
Non-Durables	-0.102	-0.1240
Durables	0.0131	0.0769

So if the PC is Alive, What's Ahead?

Wage Growth Slowly Ratcheting Up ...



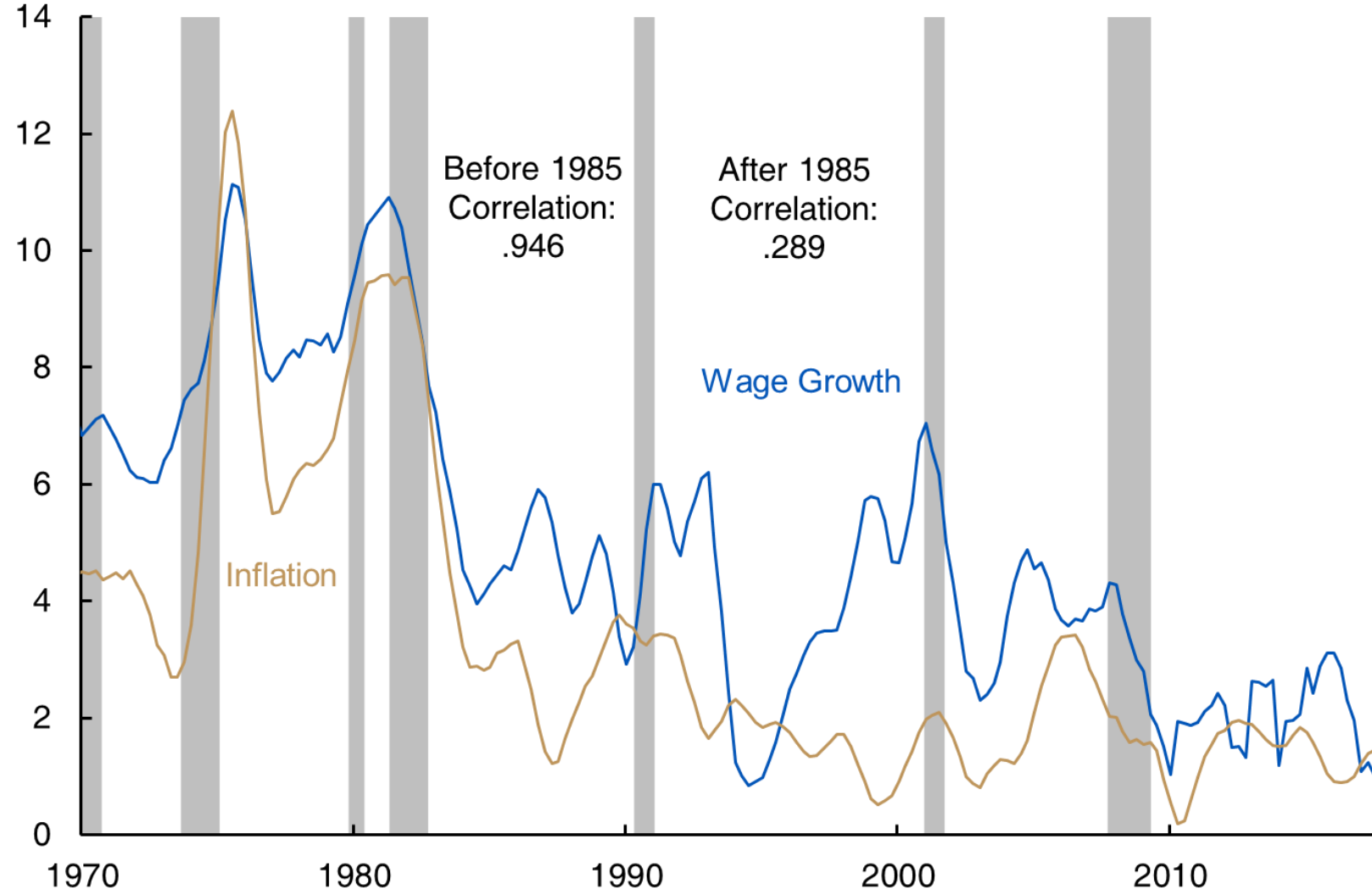
Note: Wage growth is the twelve-month moving average of the percent change in average hourly earnings over the last twelve months. Full-time wage growth is the 12-month moving average of median wage growth for usually full-time workers.

Source: Bureau of Labor Statistics, Atlanta Federal Reserve Wage Growth Tracker.

...Not Much Effect on Price Inflation

4-Quarter Moving Average of Inflation and Wage Growth

Percent



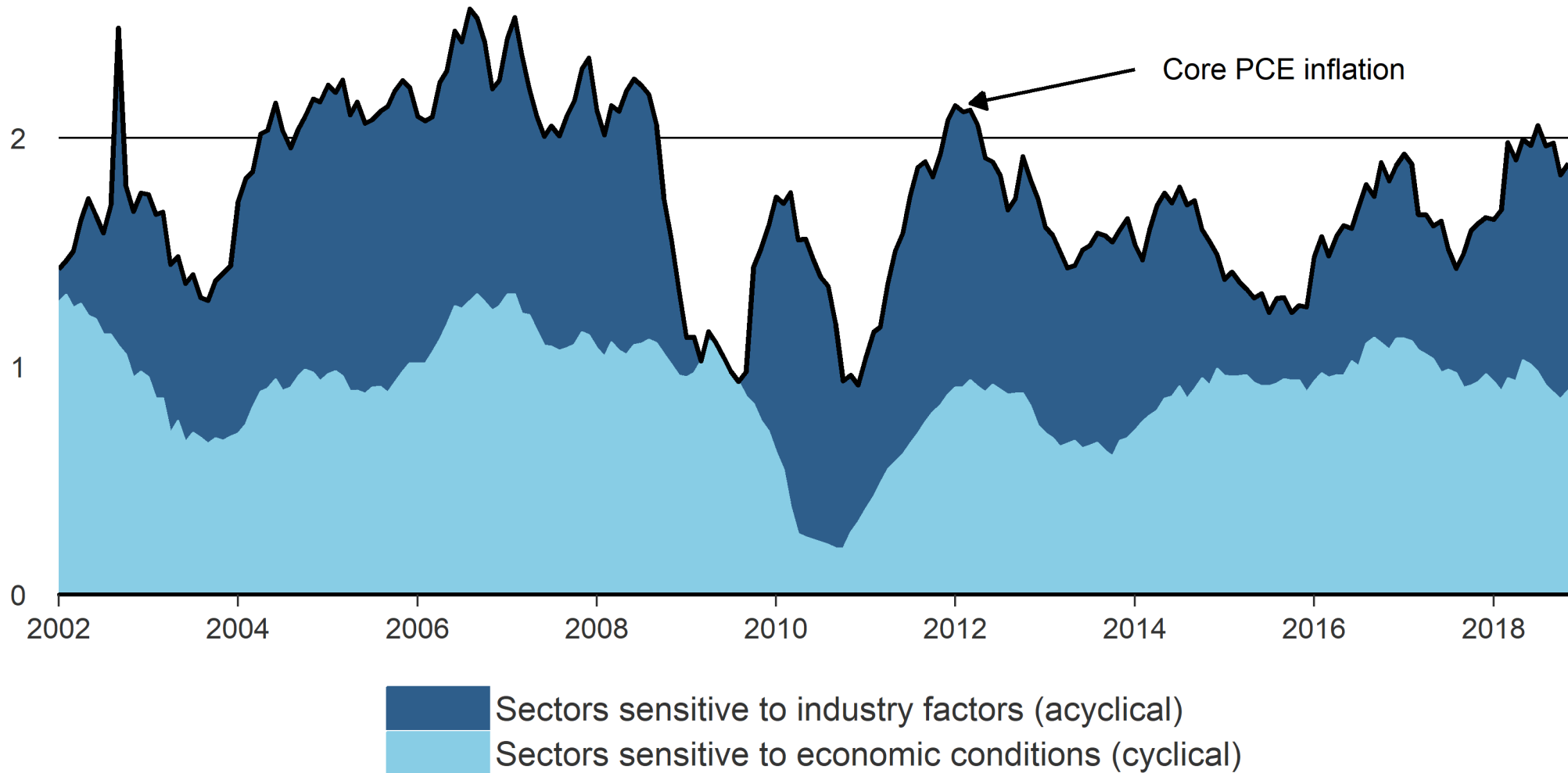
Source: Bureau of Labor Statistics and Bureau of Economic Analysis

Cyclical Sectors Not Reacting to Hot Labor Markets

Percent

3

Core PCE Inflation and Contributions by Sector



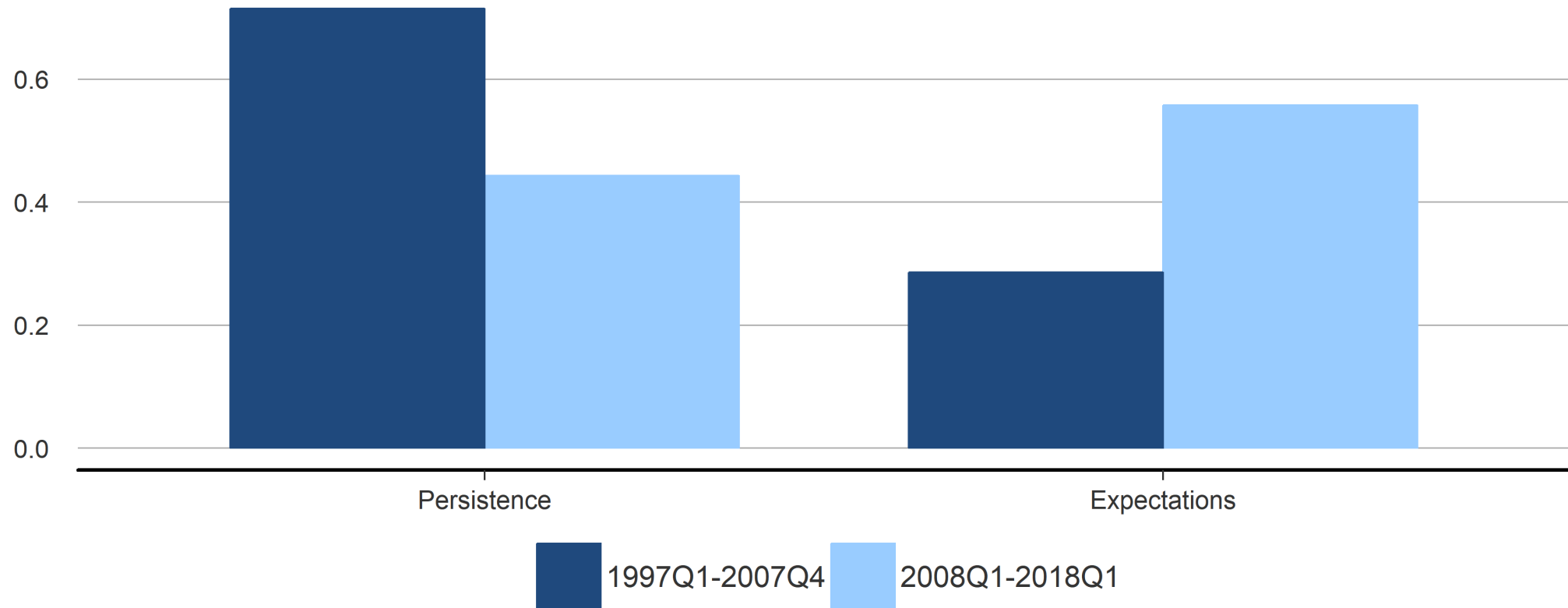
Healthcare Services Inflation: This Time is Different

Healthcare services inflation minus core PCE inflation



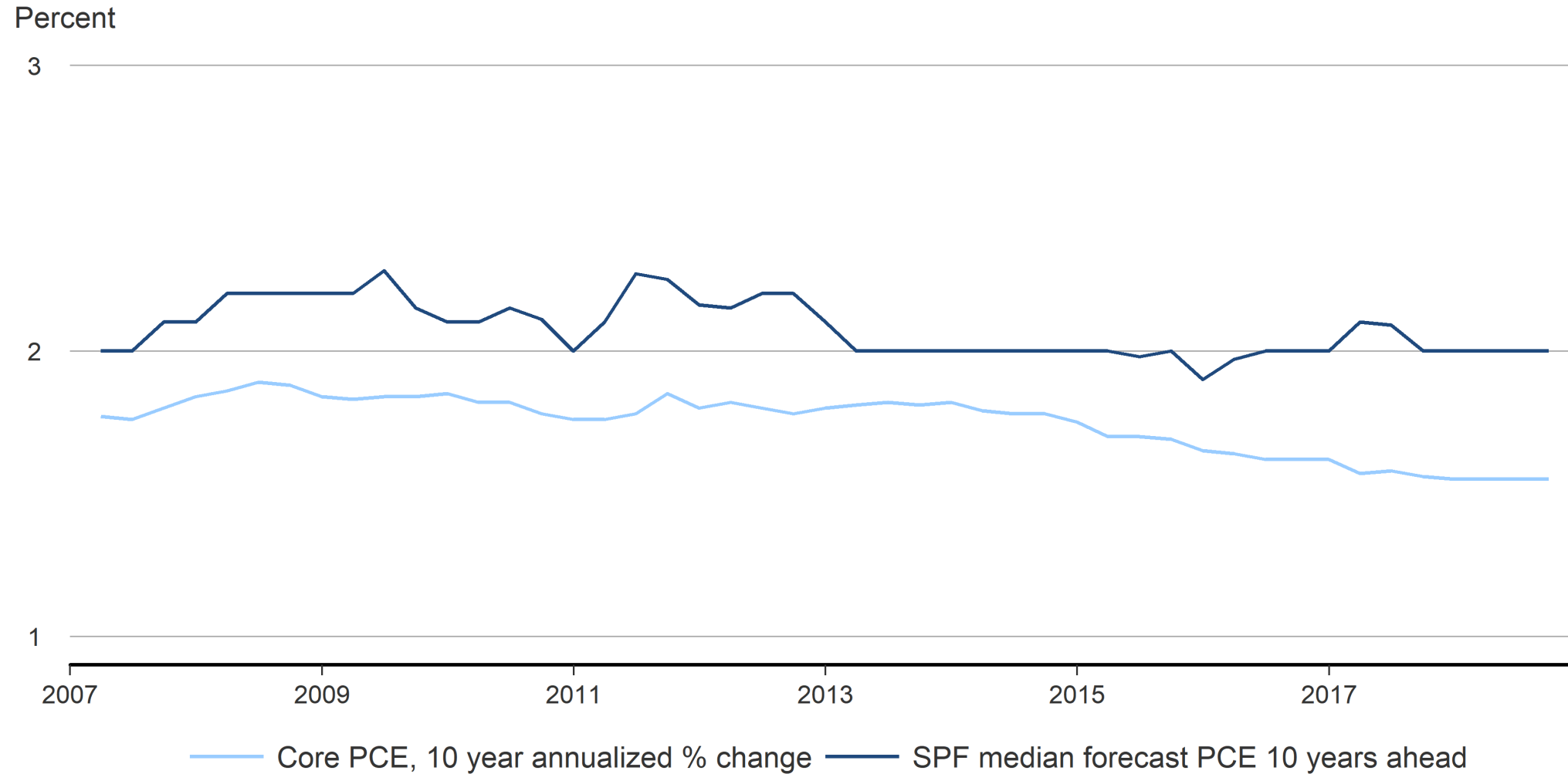
Inflation Expectations Matter More Now

Coefficient on Lagged Inflation and Inflation Expectations



Source: BLS, BEA, CBO, SPF

Inflation Has Been Low For A Long Time



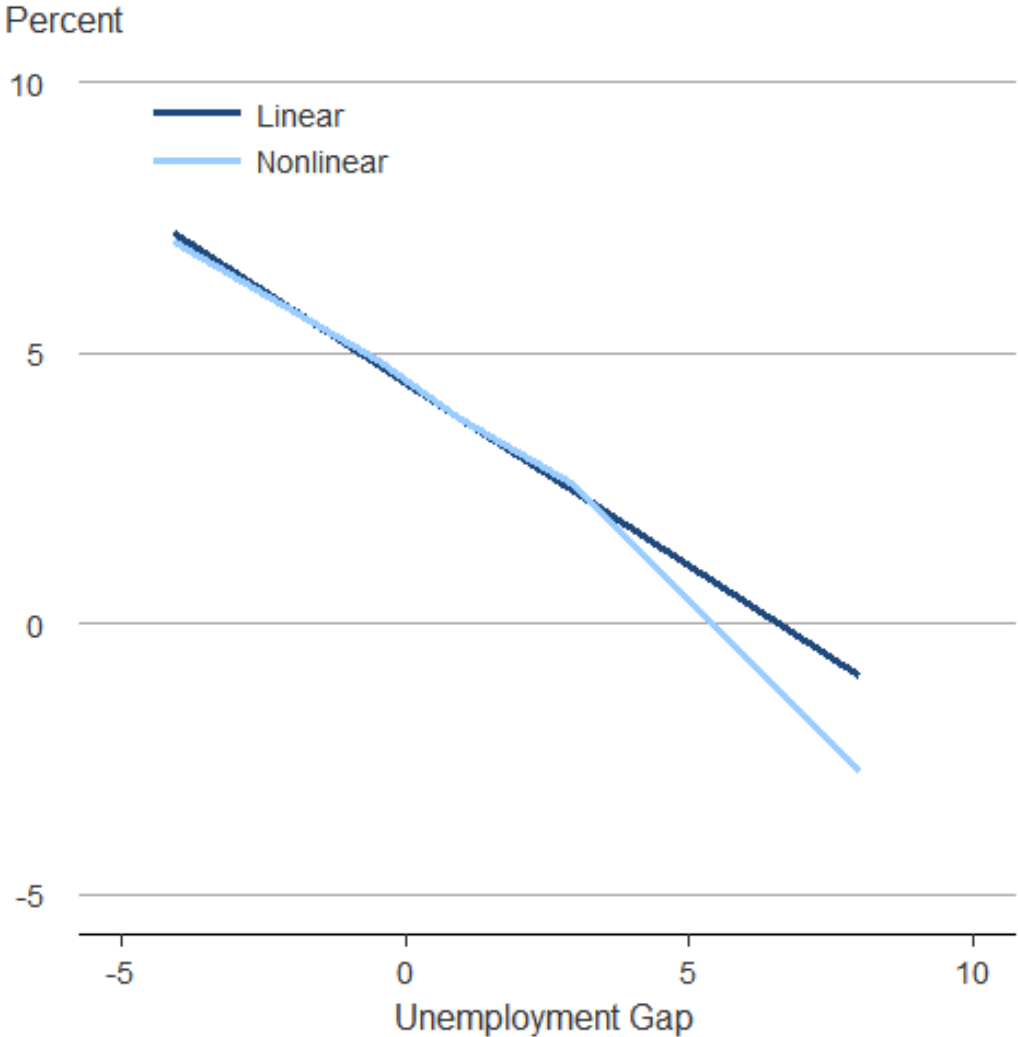
Conclusion

- **The Phillips curve remains a useful guide**
- **The effects of nonlinearities appear muted**
- **Need to be vigilant about upside *and* downside risks**

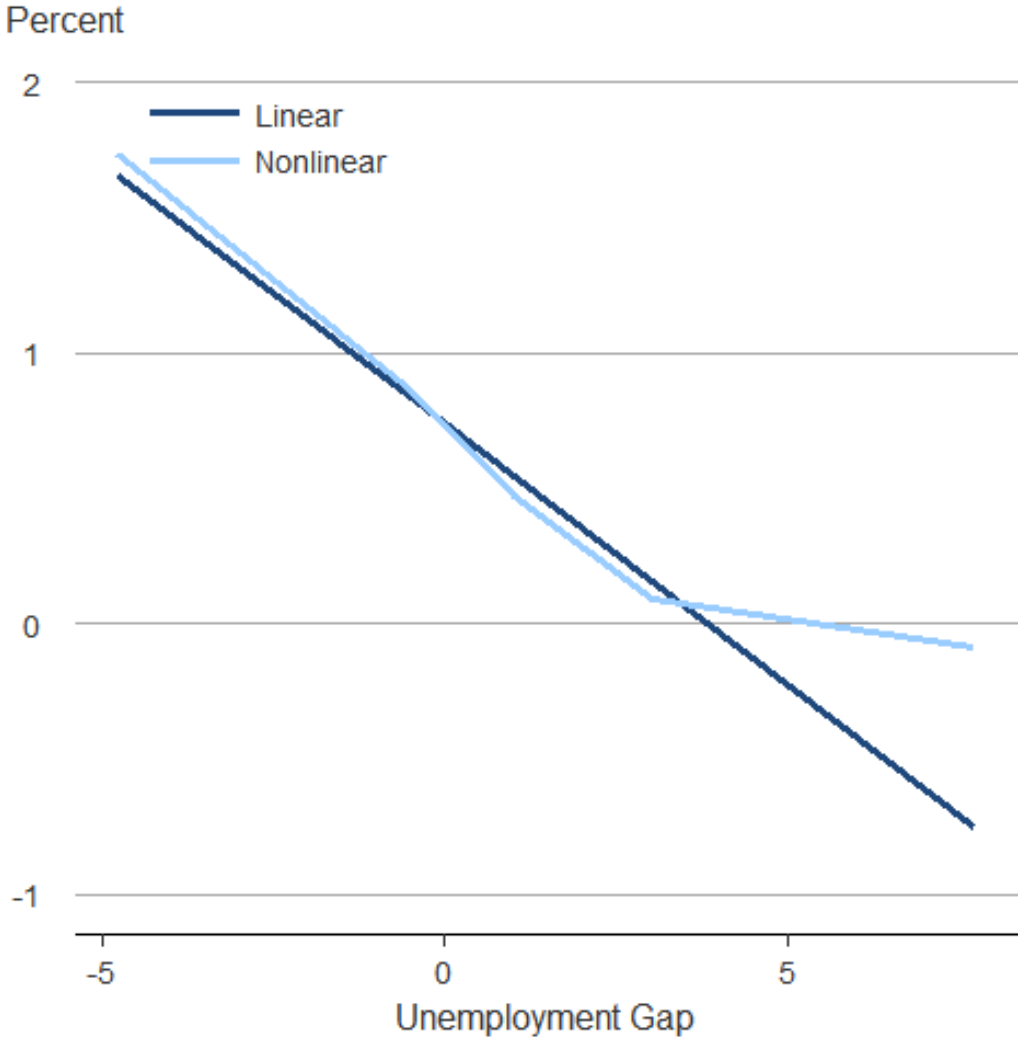
Supplementary Figures

Little Evidence of Nonlinearities in Hot Labor Markets

Cross-State Wage Phillips Curve



Cross-MSA Price Phillips Curve



Note: Slack measured with unemployment gap. Inflation measure on y-axis excludes regional and time fixed effects
Source: Leduc, Marti, and Wilson (FRBSF Economic Letter, 2019) and authors' calculations