

# Wage Dynamics: Theory, Data, and Policy



## **NBER Wage Dynamics in the 21<sup>st</sup> Century** Panel Remarks

May 21, 2021

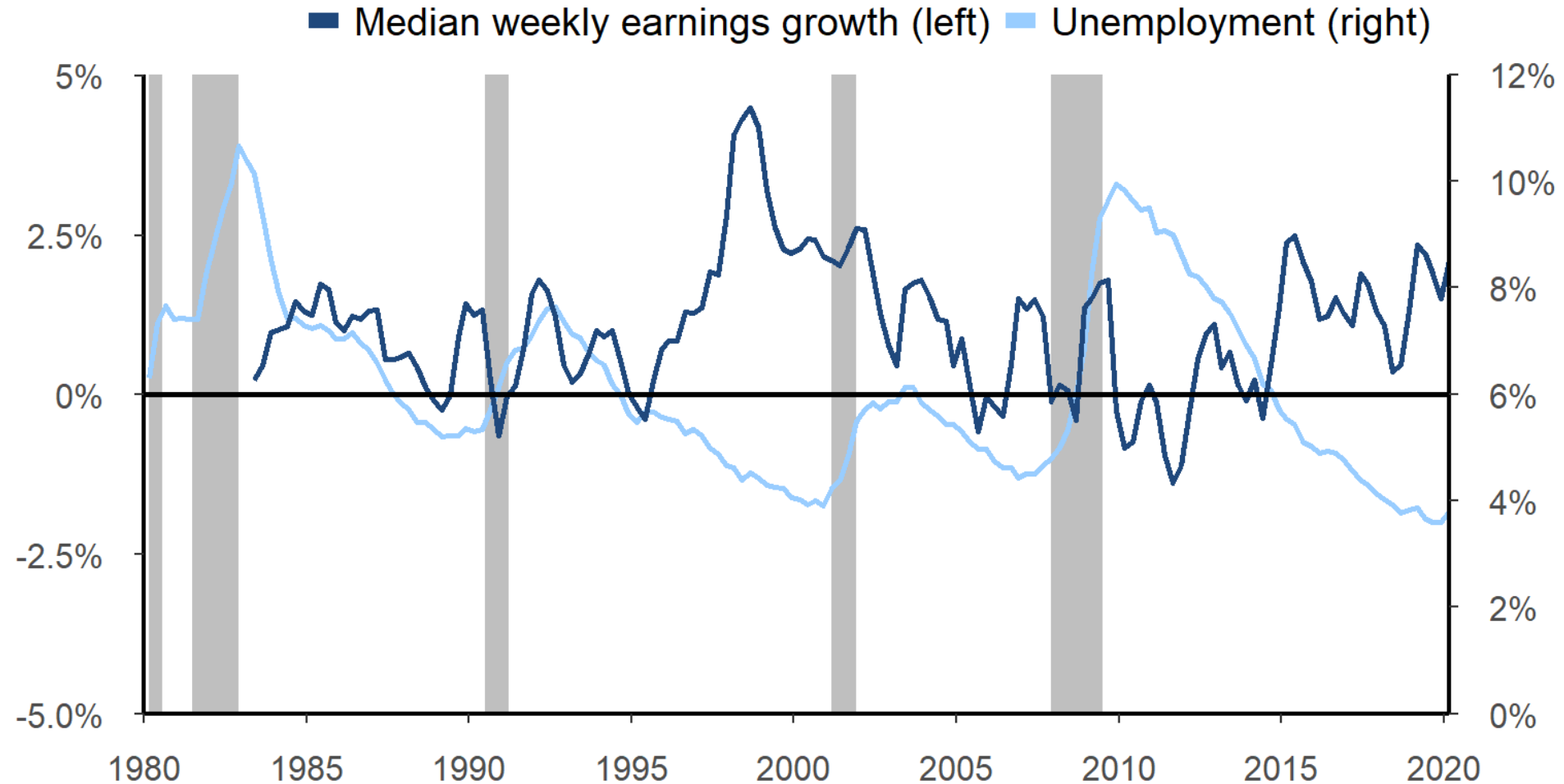
Mary C. Daly  
President and CEO  
Federal Reserve Bank of San Francisco

# The Way It's Supposed to Work



# The Data: Unemployment and Wage Growth

## Real wage growth and unemployment

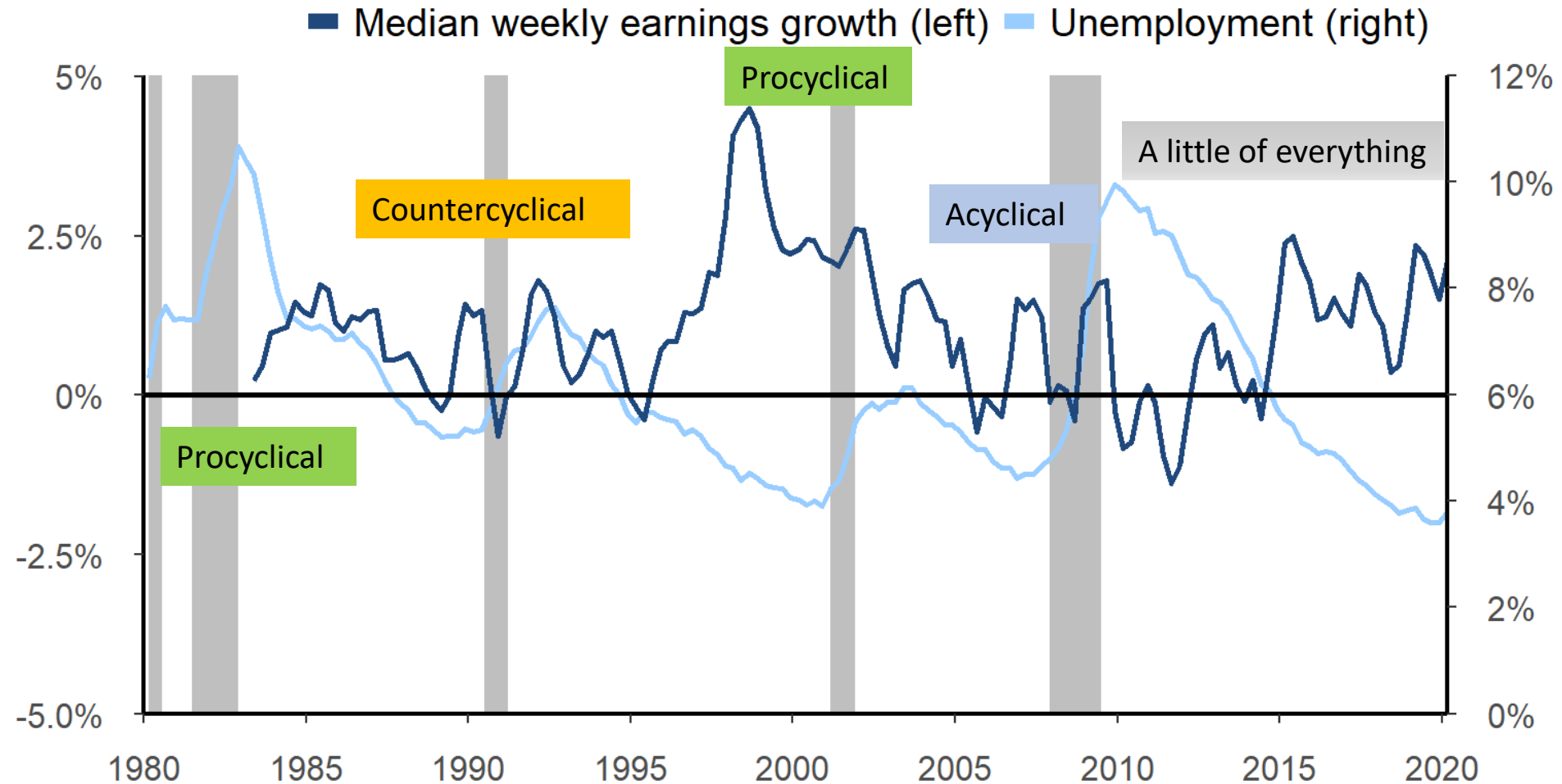


Notes: MWE series is shown as 4-quarter growth rates. Only data until March 2020 is shown.

Source: Bureau of Labor Statistics and Bureau of Economic Analysts

# The Data: Unemployment and Wage Growth

## Real wage growth and unemployment

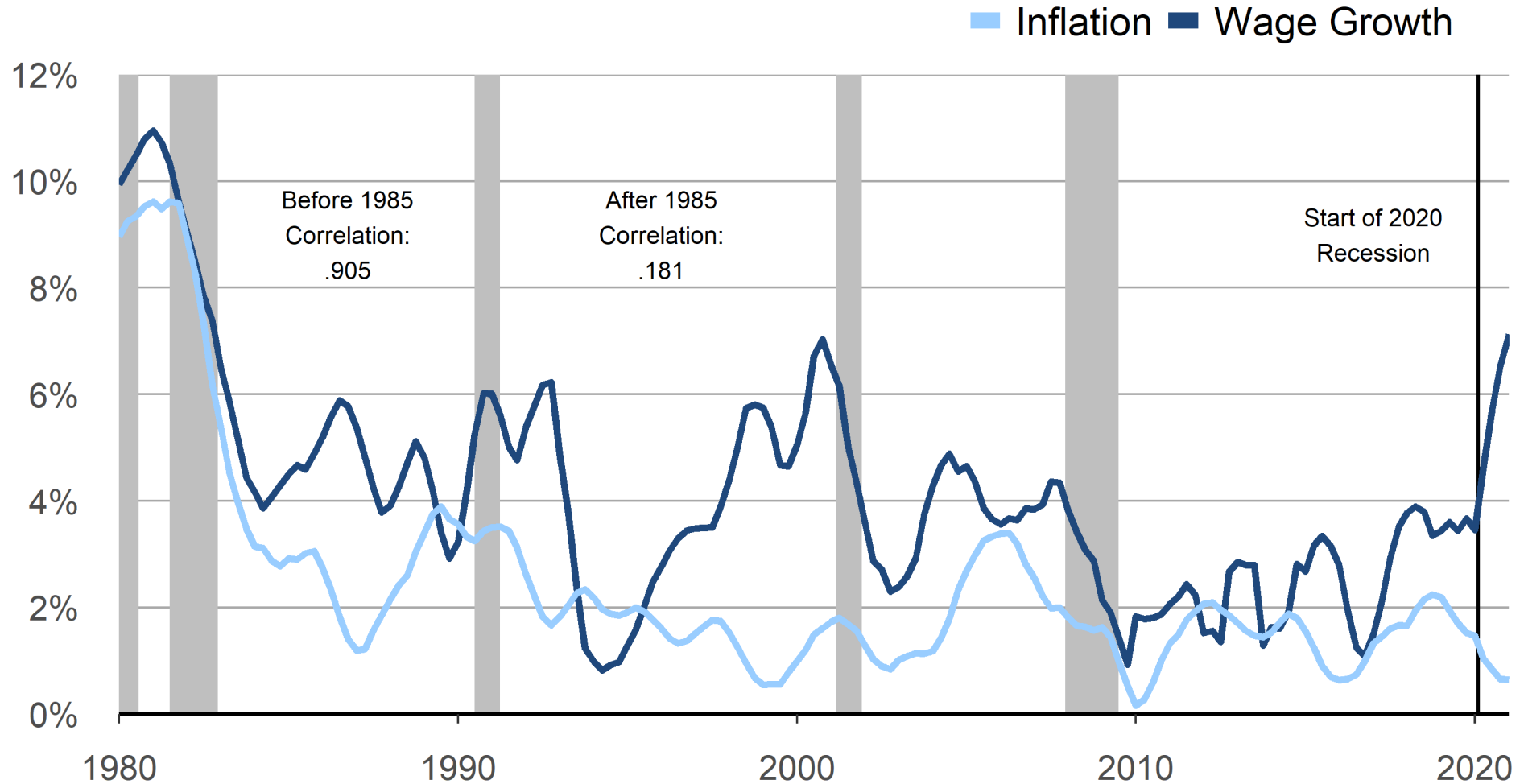


Notes: MWE series is shown as 4-quarter growth rates. Only data until March 2020 is shown.

Source: Bureau of Labor Statistics and Bureau of Economic Analysts

# The Data: Wage and Price Inflation

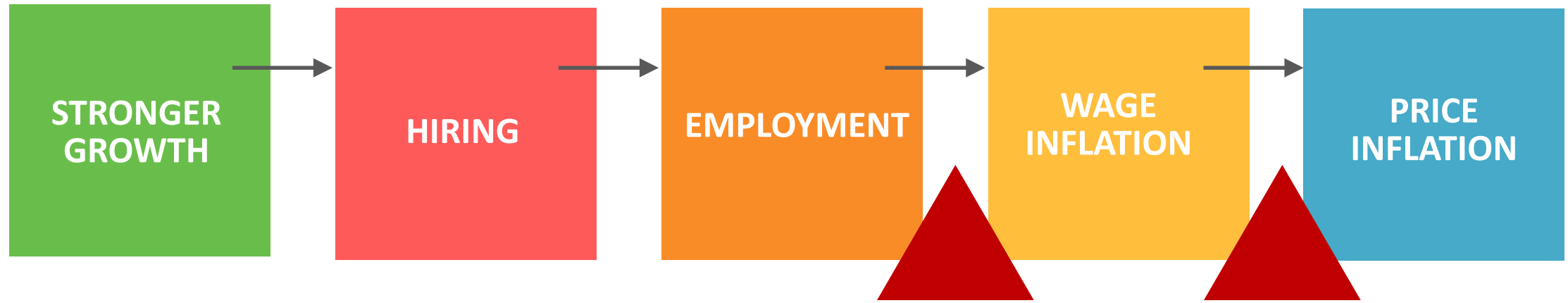
## Inflation and Wage Growth since 1970



Note: Series shown are 3-quarter moving averages.

Source: FRBSF calculations using data from Bureau of Labor Statistics and Bureau of Economic Analysis

# A Number of Structural “Wedges” Cloud the Picture



- Wage Rigidities
- Declines in worker bargaining power
- Unmeasured compensation
- Employment composition

- Monetary policy
- Anchored expectations
- Decline in COLAs
- Industry strategic complementaries

# But Within Cycle Dynamics Also Matter

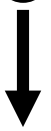


# And Here There is Notable Asymmetry

Unemployment

rate

Low 



High 

- Employment drops, layoffs spike, initial claims rise, quits fall, wage growth slows, involuntary part-time employment increases.

- Layoffs slow and initial claims recover.
- Job finding rate remains subdued. Long term unemployment rises.

- Wage growth slows. In downturn and early stage of recovery, adjustments are through quantities.
- Hiring recovers. Labor force participation grows.

- Wage growth plateaus below trend.

- 
- Labor market tightens. As labor market tightens, adjustment increasingly through prices (wages).

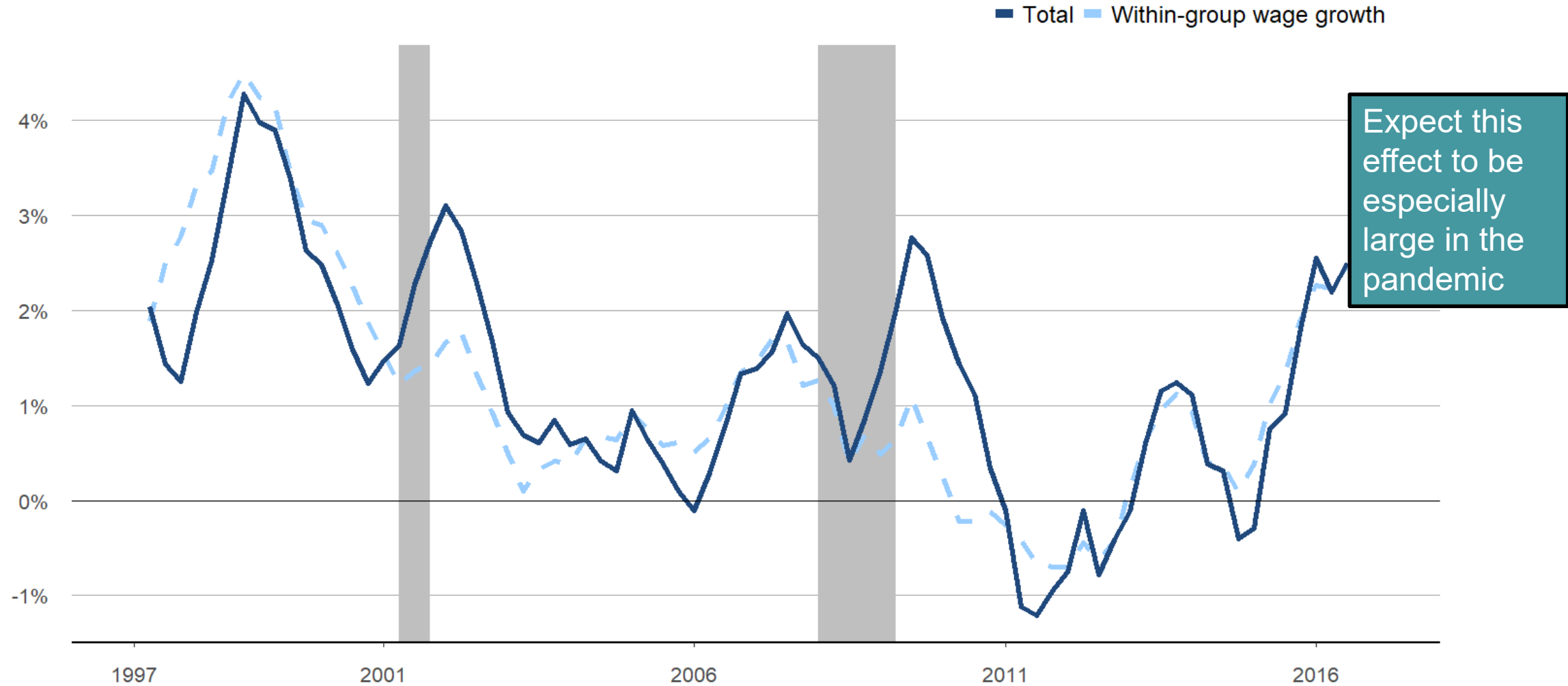
- Voluntary quits rise. If unemployment decline.
- Labor force participation returns to trend.
- Wage growth plateaus above trend.

Low 



# Impact of Cyclical Composition Changes

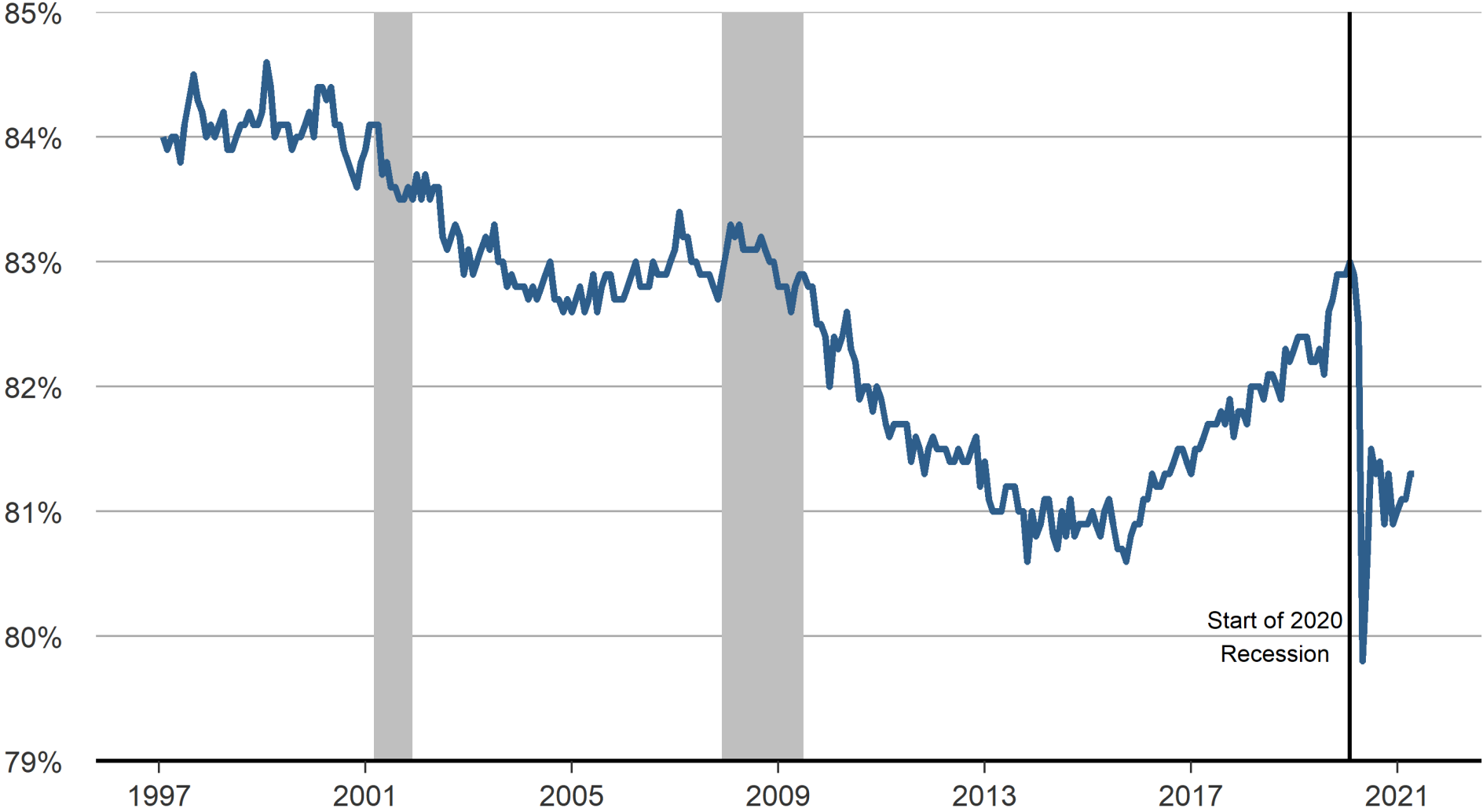
## Within-Group and Total Wage Growth (1997-2016)



Source: Daly, Mary C., and Bart Hobijn. "Composition and Aggregate Real Wage Growth." *American Economic Review* 107, no. 5 (May 2017): 349–52. <https://doi.org/10.1257/aer.p20171075>

# Labor Supply More Elastic Than We Think

## Civilian Labor Force Participation Rate, ages 25-54

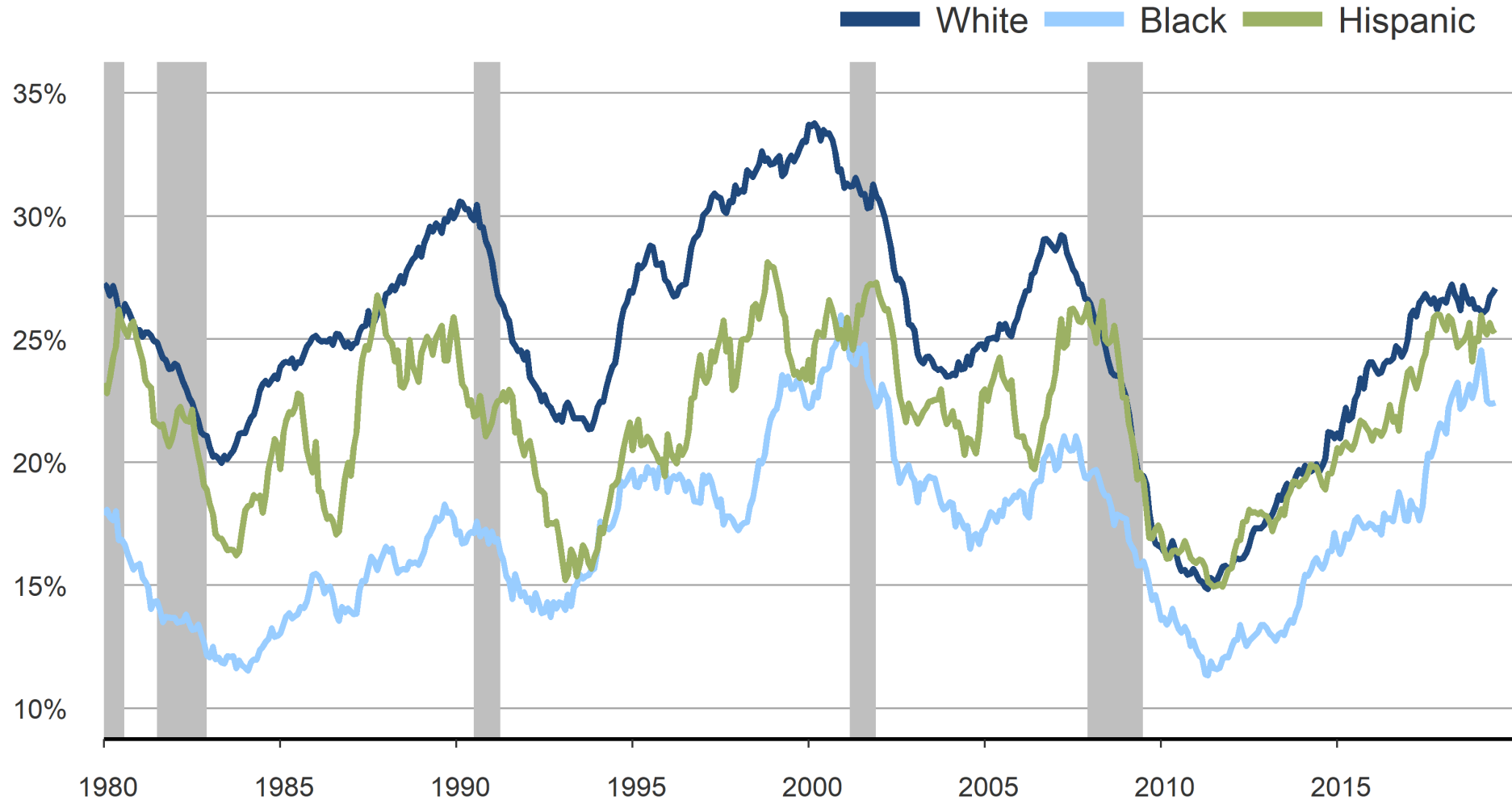


Note: Data are seasonally adjusted.

Source: Bureau of Labor Statistics

# Strong Sustained Growth Gets Into the Cracks

## Job finding rate for women by race/ethnicity

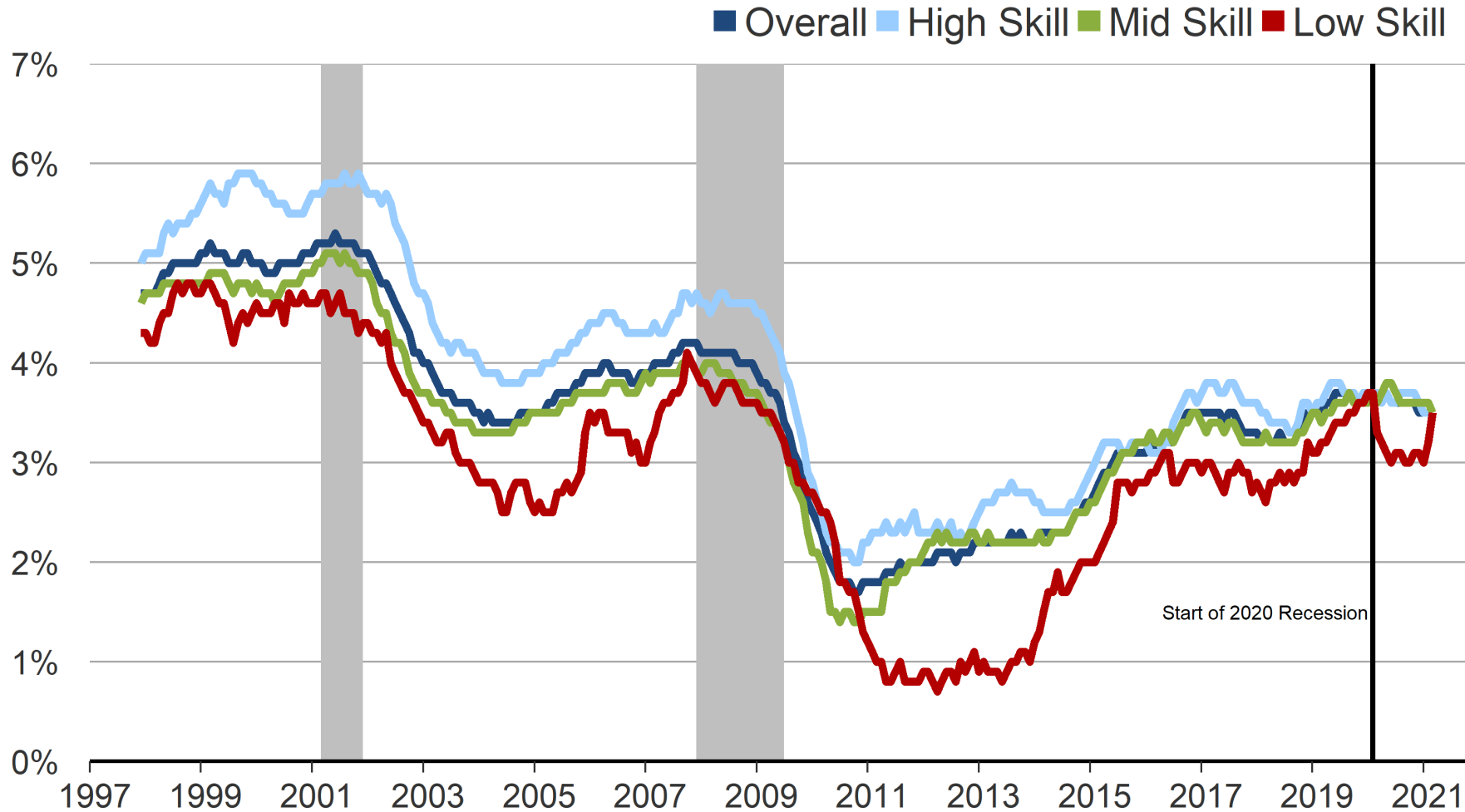


Notes: Series shown are 12-month moving averages. Data are not seasonally adjusted data.

Source: FRBSF calculations from matched monthly Current Population Survey data

# And Chips Away At Long-Standing Gaps

## Wage Growth by Skill Level



Note: Series shown are 12-month moving averages of median wage growth for each category, hourly data.

Sources: Current Population Survey, Bureau of Labor Statistics, and the Federal Reserve Bank of Atlanta.

# What's Needed?

- Deeper understanding of within cycle dynamics
  - Why they occur
  - How to quicken the pace towards recoveries (policies)
- More work on the cyclicalities of the employer-employee matching process
  - Recruiting intensity of firms
  - Search intensity of workers
- More work that explicitly incorporates the micro evidence on worker labor market entry and exit decisions and worker-firm dynamics into macro models of business cycle dynamics