Inflation and Monetary Policy

Federal Reserve Bank of Chicago
Economic Club of Michiana
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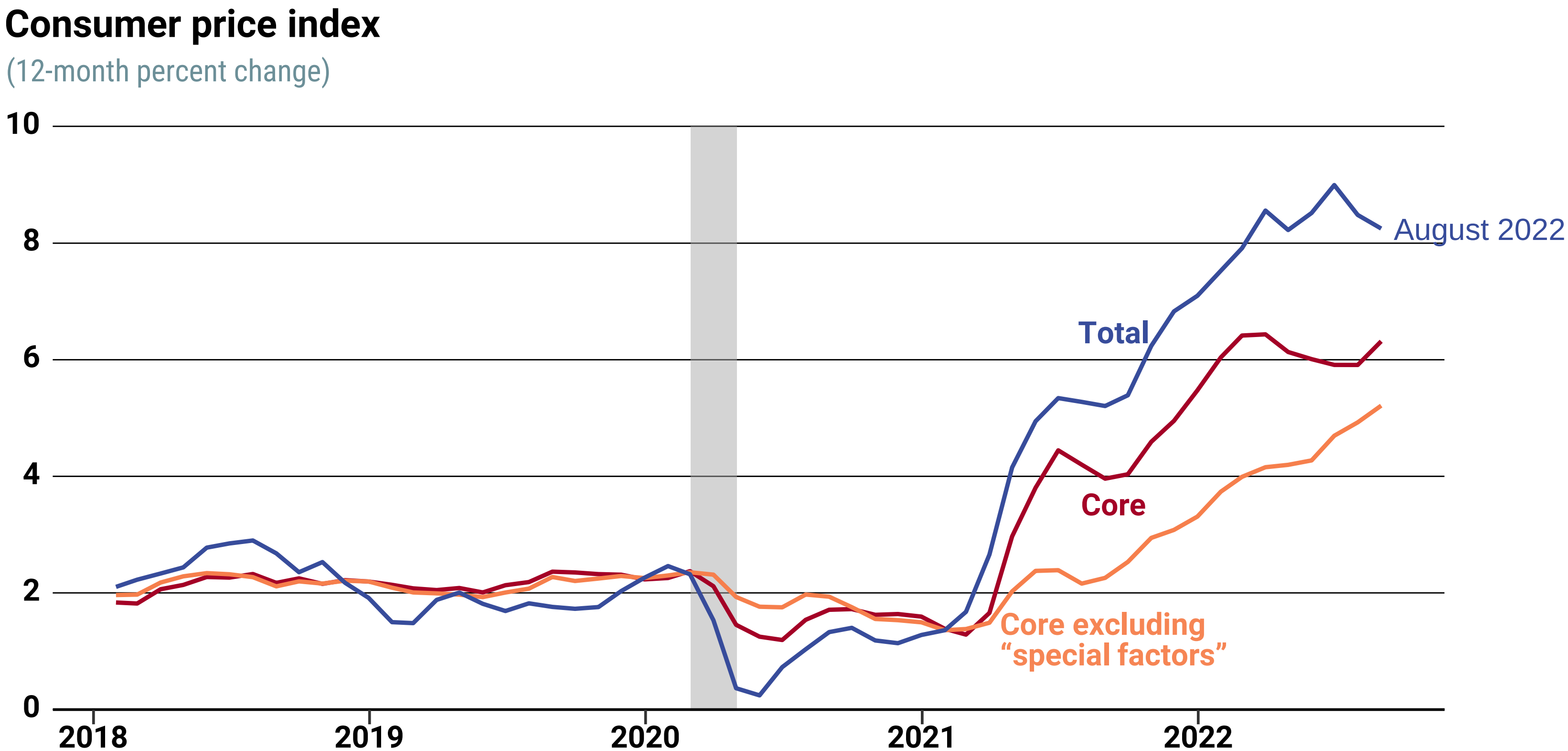
Inflation is too high



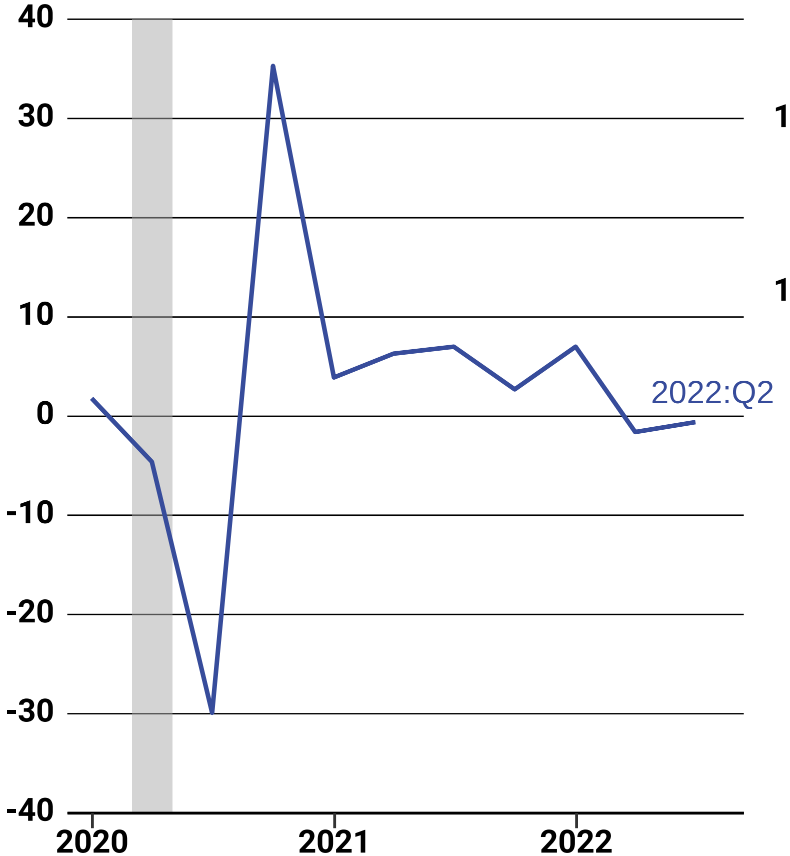
Note: Core ex. 'special factors' removes from core prices some selected categories where pandemic related shifts in demand and/or specific supply chain disruptions have had a major influence on prices, namely: used motor vehicles, new motor vehicles, household furnishings and supplies, airfares, and hotel and motel accommodations. Together these categories have had a weight of about 11 percent in core CPI since the pandemic started. CPI calculations for August 2022 use July 2022 relative importance weights as published in the August CPI release.
Source: BLS via Haver Analytics, staff calculations

Questions

- **How did we get here?**
- **What lies ahead?**
  - For monetary policy
  - For economic activity
- **What are the risks and challenges?**

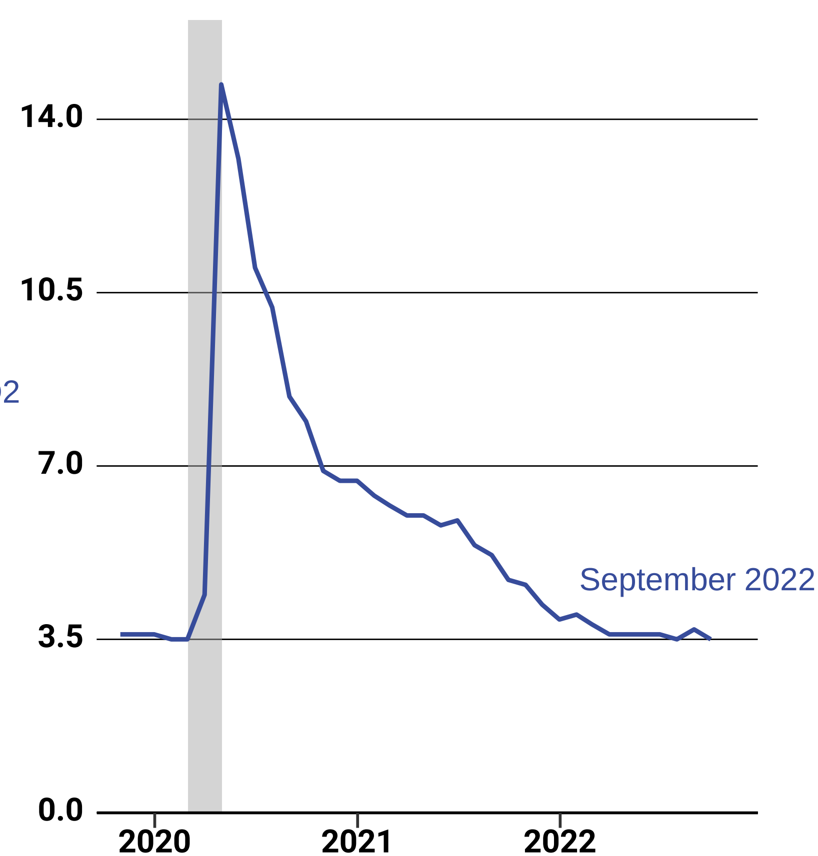
Covid: deep recession and quick recovery

Real GDP growth
(percent change, annual rate)



Source: Bureau of Economic Analysis via Haver Analytics

Unemployment rate
(percent, SA)

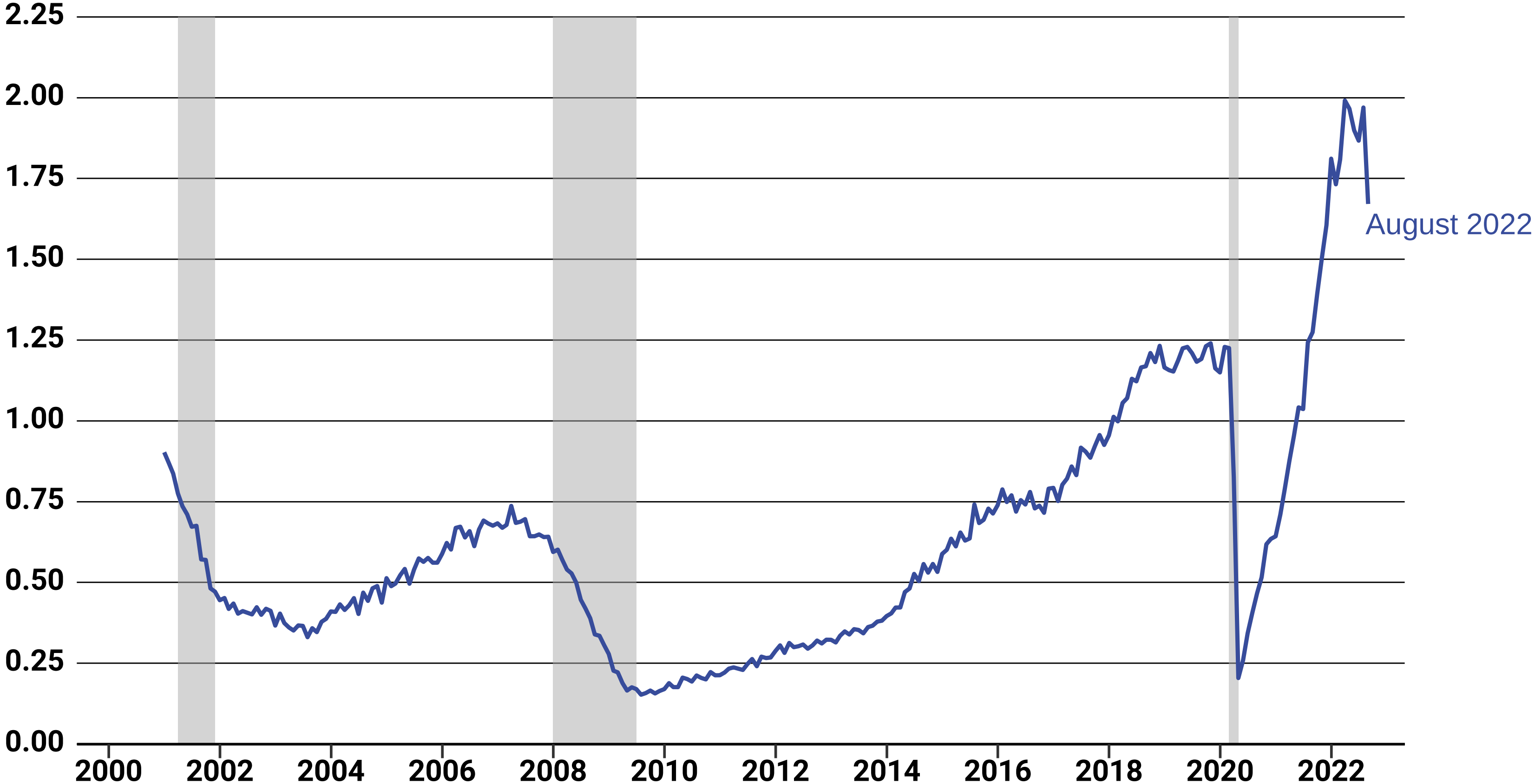


Source: Bureau of Labor Statistics via Haver Analytics

The labor market is unusually tight

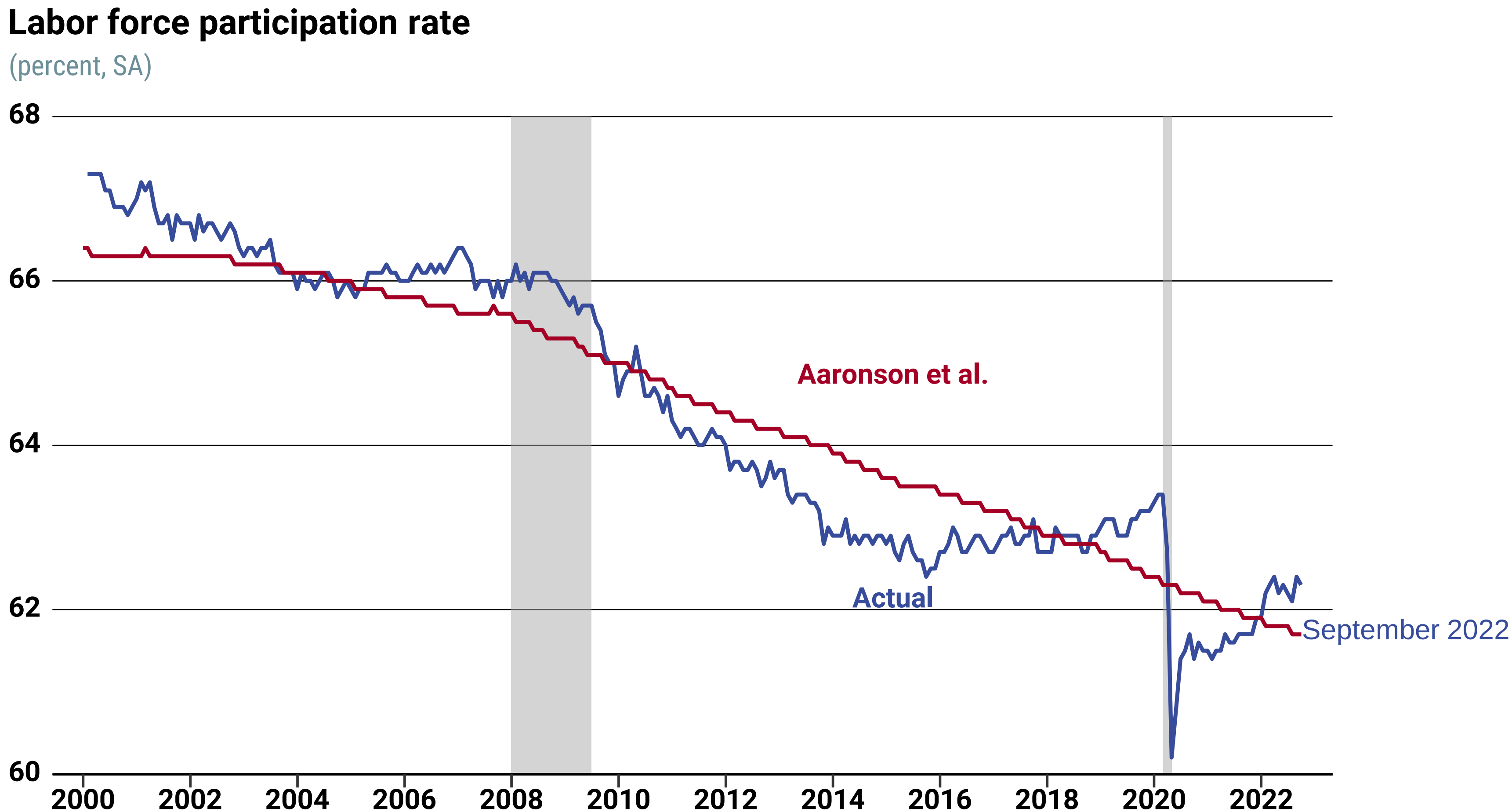
Labor market tightness

(tightness = job openings per unemployed worker)



Source: Bureau of Labor Statistics via Haver Analytics

Some workers have not returned to the labor market

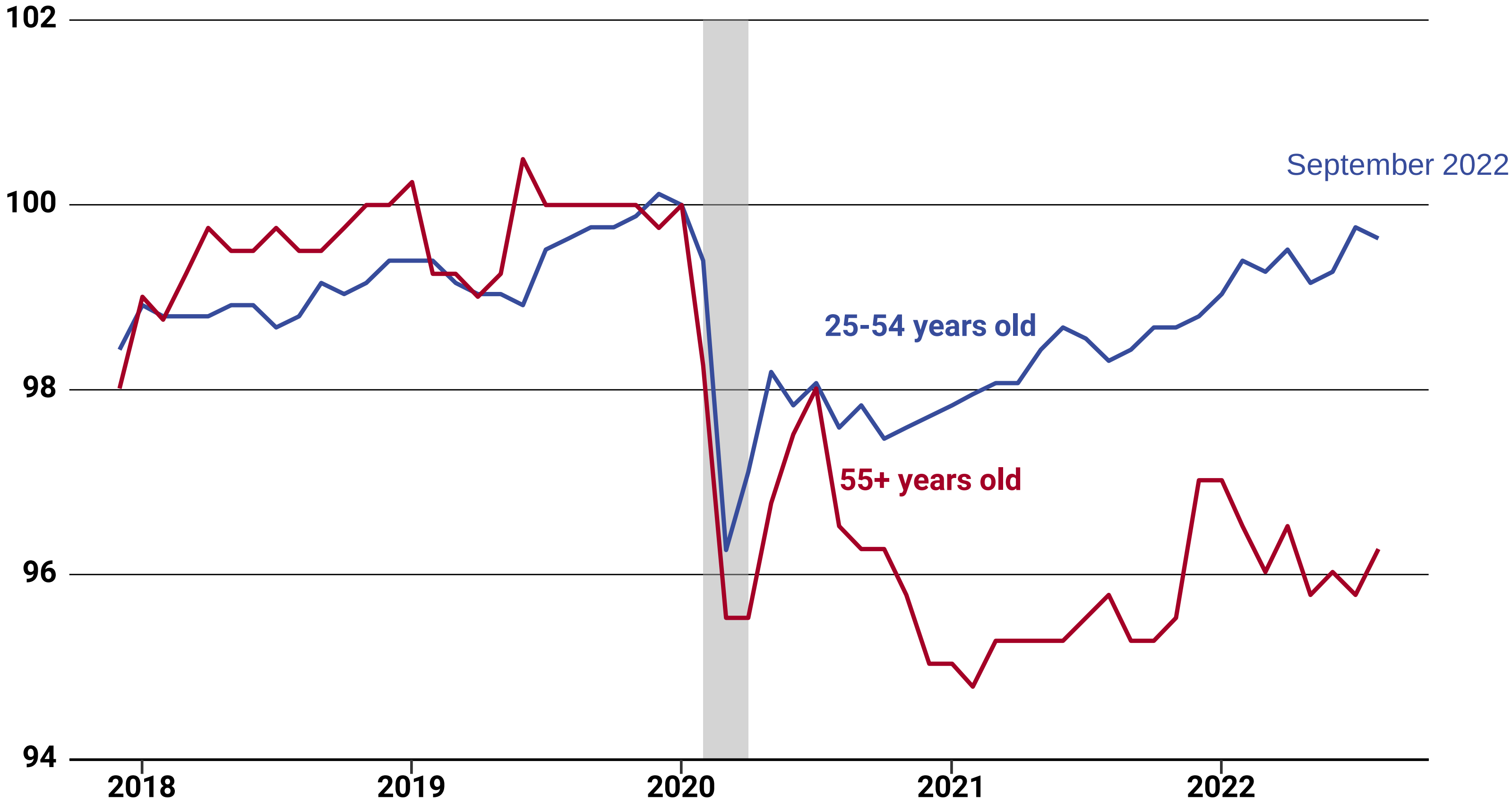


Sources: Bureau of Labor Statistics via Haver Analytics; Chicago Federal Reserve Bank staff calculations using methodology in Aaronson, Hu, Seifoddini, and Sullivan (2014)

Older workers remain on the sidelines

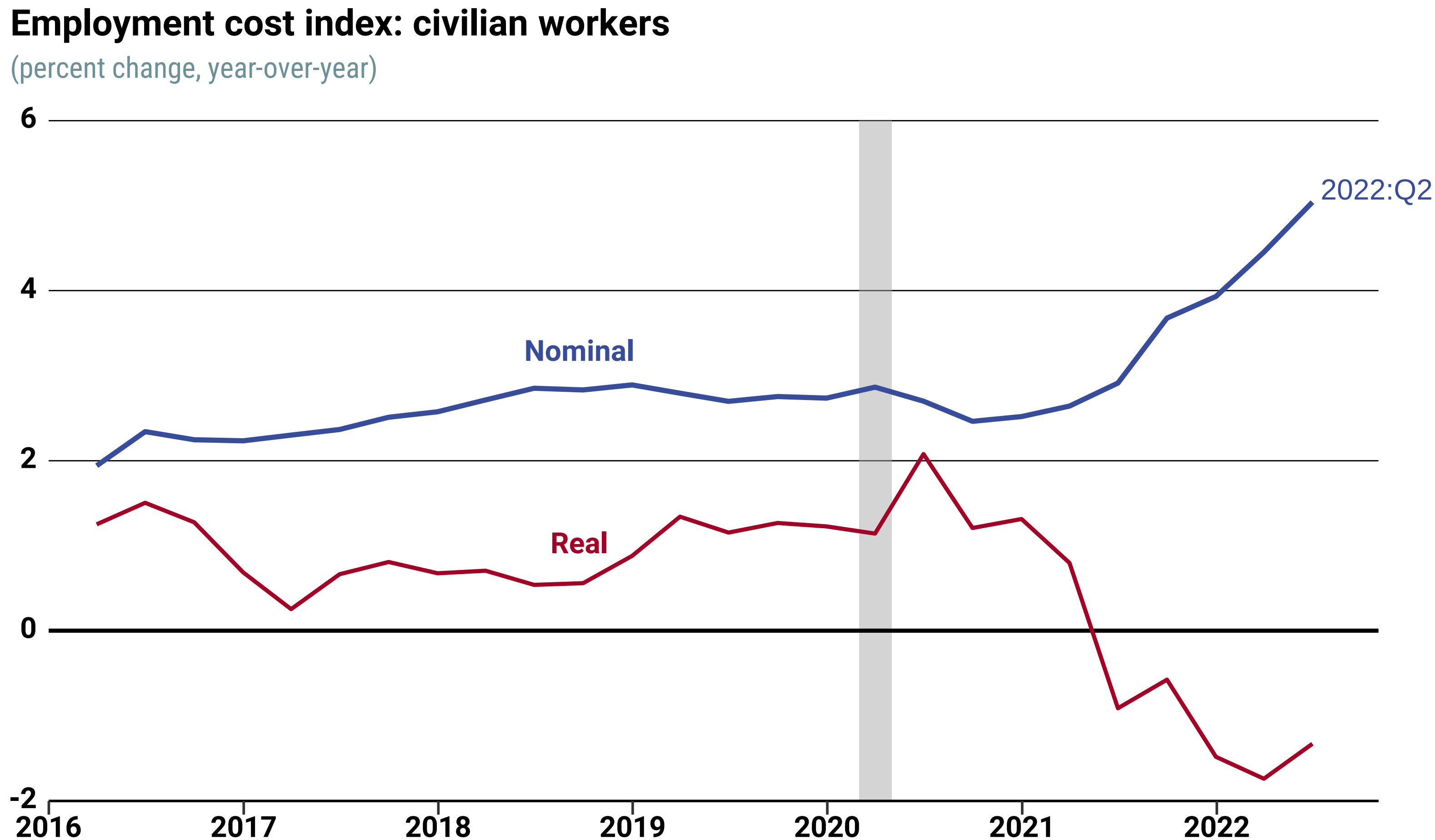
Labor force participation by age

(indexed, Feb. 2020 = 100)



Source: Bureau of Labor Statistics via Haver Analytics

Wages are up but have not kept up with inflation



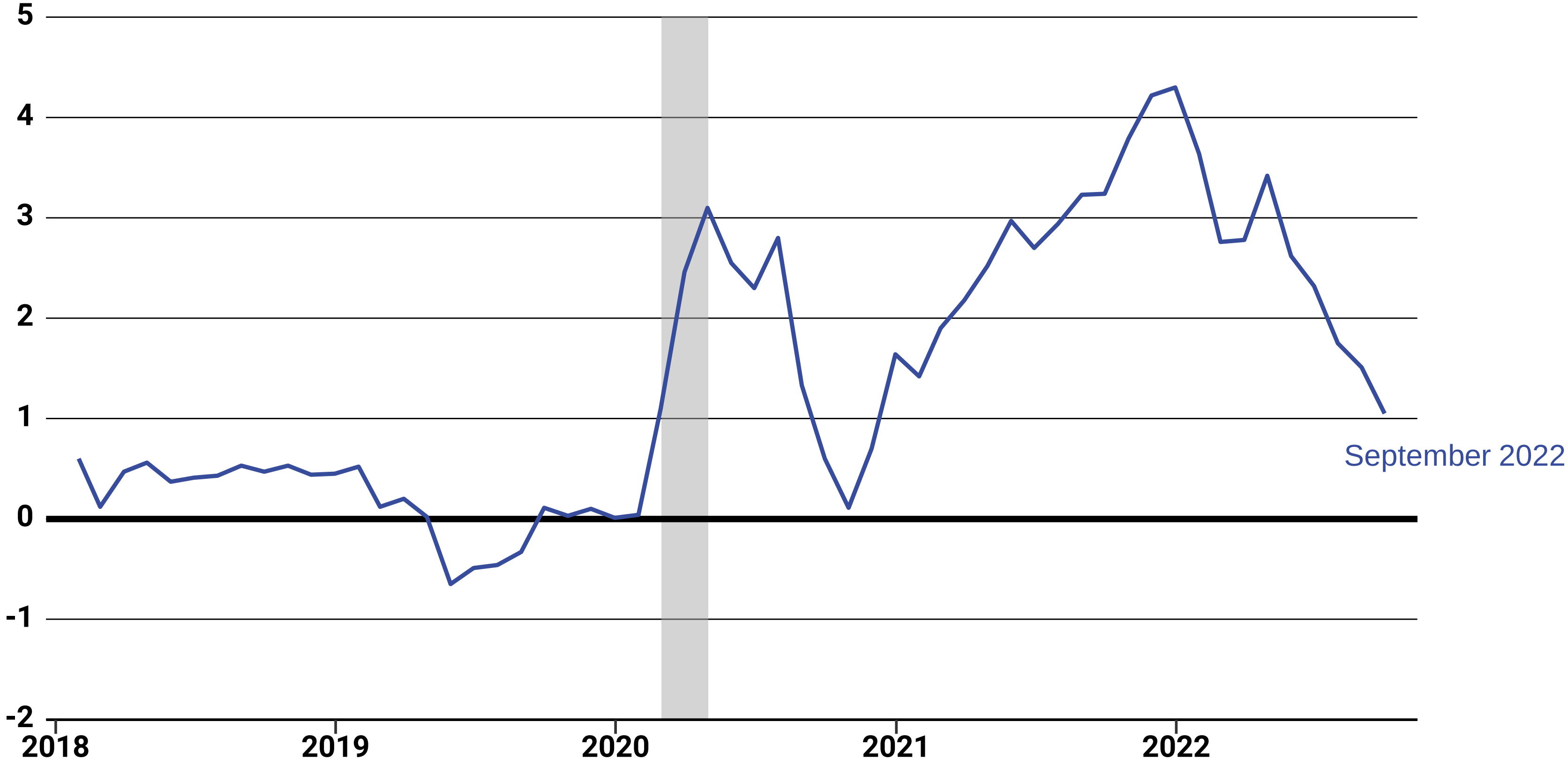
Note: Real ECI is nominal ECI deflated by the price index for total personal consumption expenditures.

Source: BLS via Haver Analytics

Supply chain issues have been a challenge

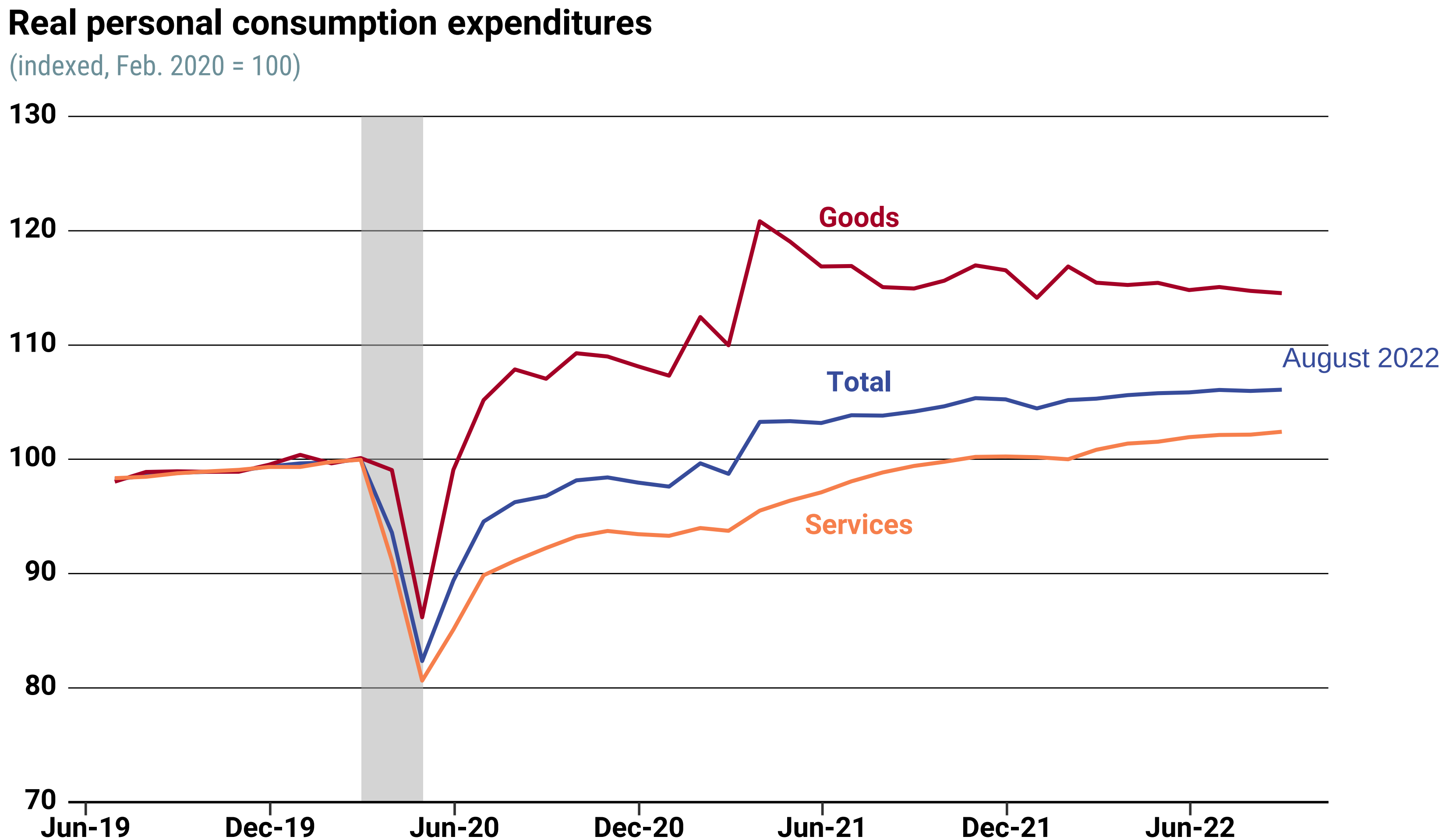
Federal Reserve Bank of New York Global Supply Chain Pressure Index

(standard deviations from average)



Source: Federal Reserve Bank of New York using data from Bureau of Labor Statistics; Harper Petersen Holding GmbH; Baltic Exchange; IHS Markit; Institute for Supply Management; Haver Analytics; Refinitiv

High demand for goods contributes to imbalances

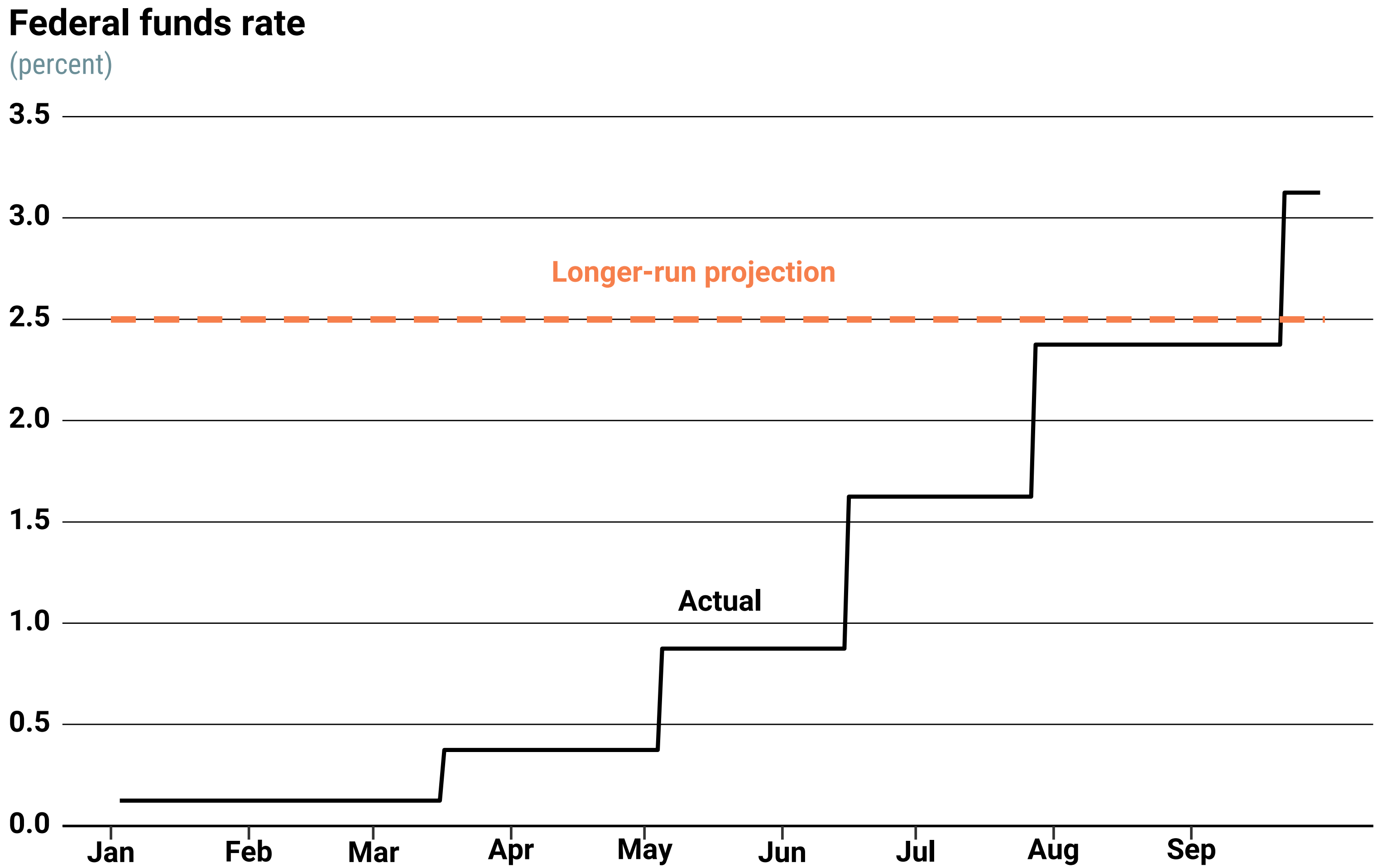


Source: Bureau of Economic Analysis via Haver Analytics

How do we bring inflation down?

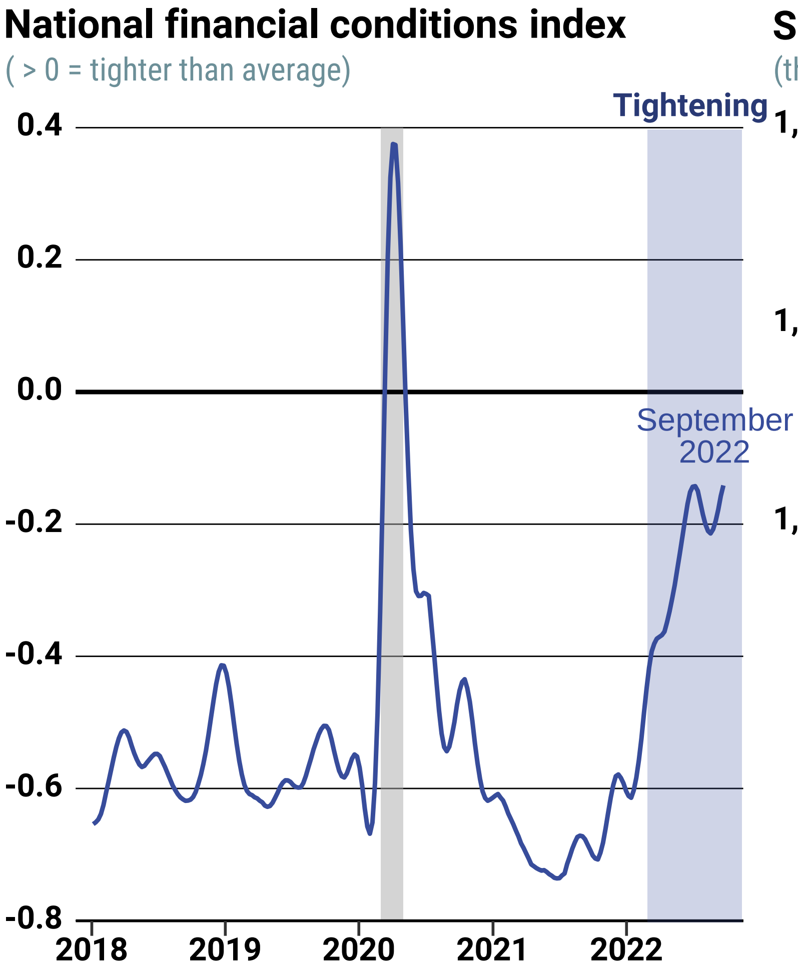
- Get demand and supply in better balance
- Need restrictive monetary policy to slow demand
  - Returning inflation to the 2% target will require a slowdown in growth and some increase in unemployment
- Supply chain repair will help
- **Policy goal:**
  - Bring inflation back to 2% without causing unnecessary pain

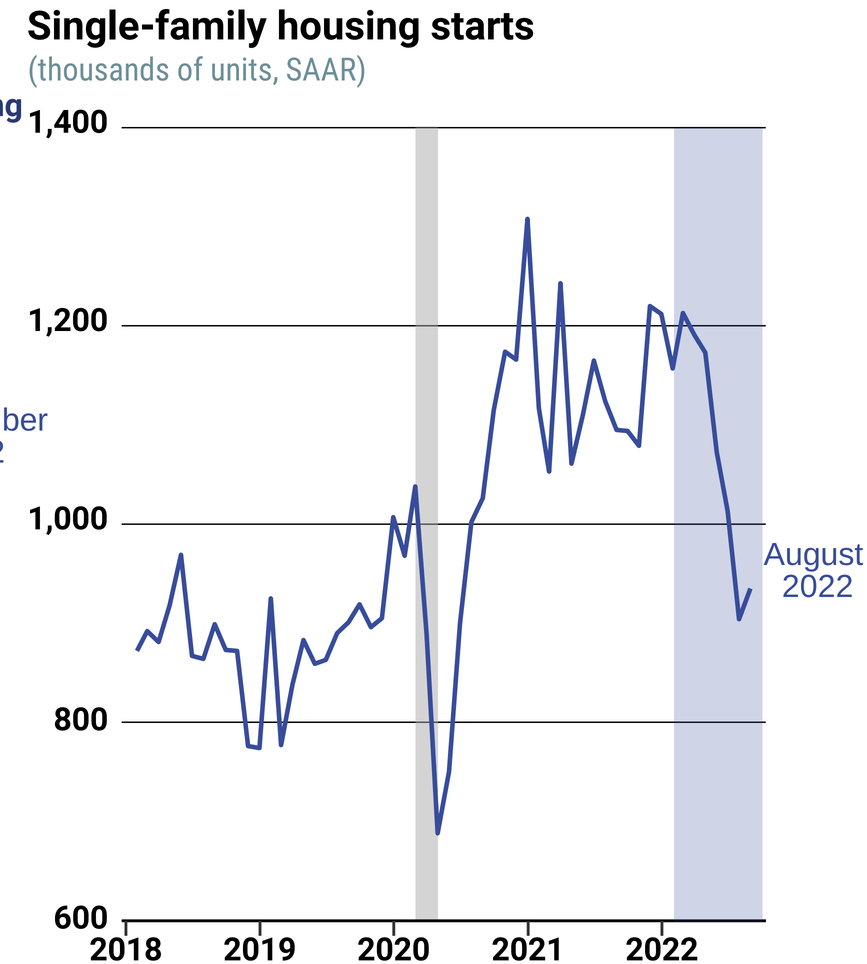
Monetary policy has tightened rapidly



Sources: Federal Reserve Board Division of Monetary Affairs; FOMC Summary of Economic Projections via Haver Analytics

Impact of tighter monetary policy



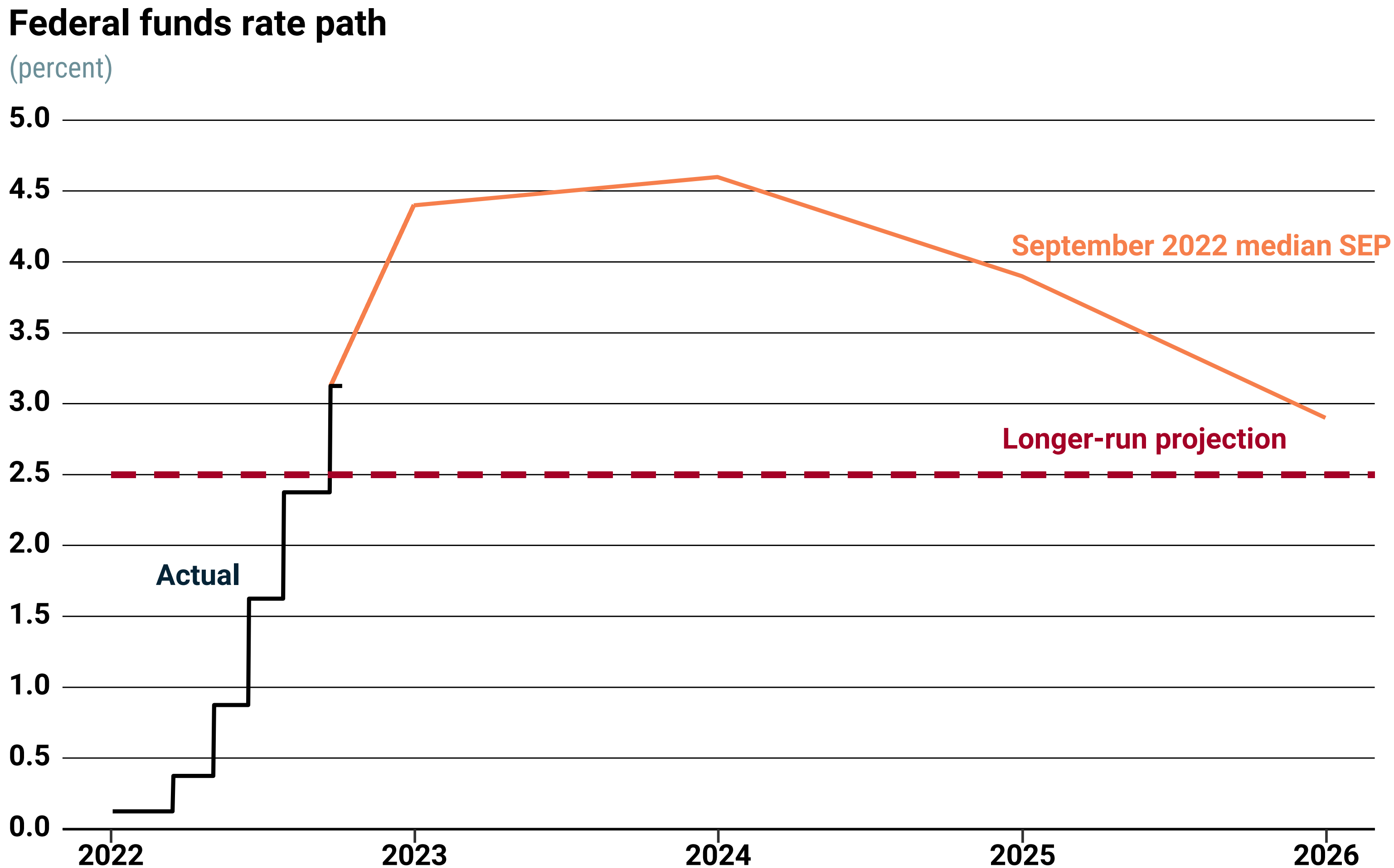


Sources: Federal Reserve Bank of Chicago and U.S. Census Bureau via Haver Analytics

What lies ahead?

- **Tighter monetary policy**
- **Slowing growth**
- **Some increase in unemployment**
- **Inflation moderating toward 2% target**

Monetary policy is expected to tighten further

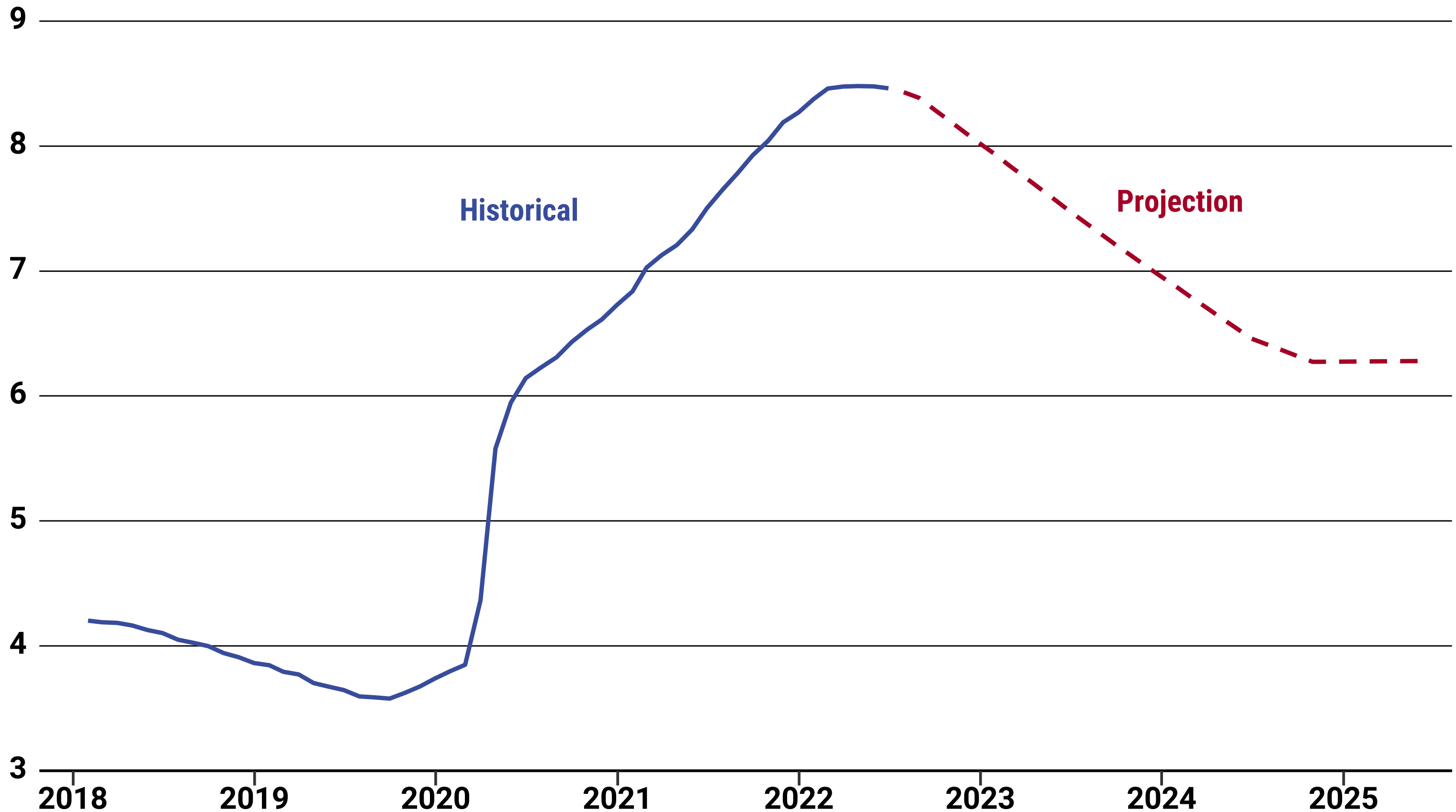


Sources: Federal Reserve Board Division of Monetary Affairs; FOMC Summary of Economic Projections via Haver Analytics

Quantitative tightening is also underway

Projected baseline balance sheet holdings

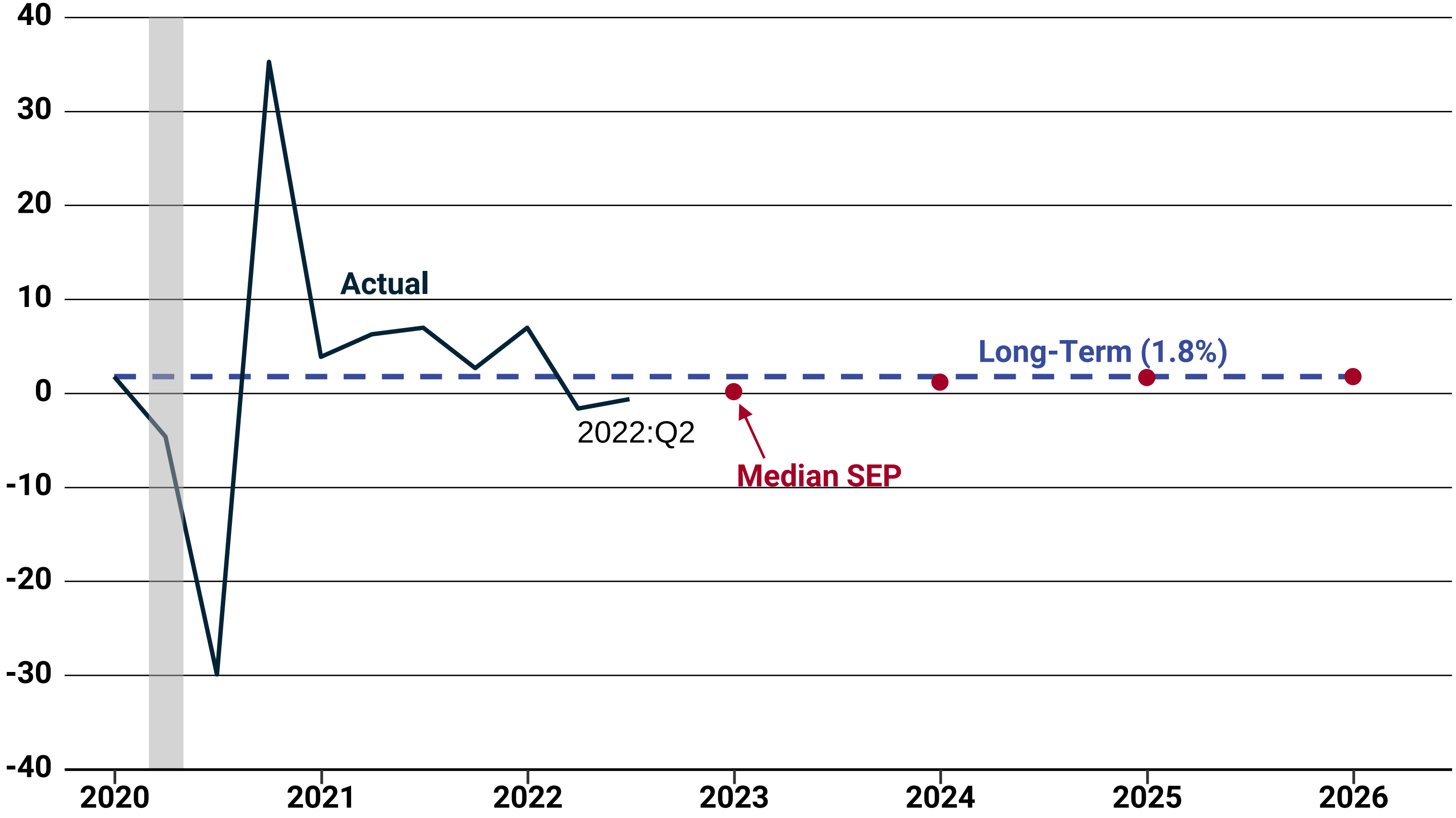
($ trillions)



Source: Board of Governors of the Federal Reserve System, July 15, 2022

Growth is expected to be low

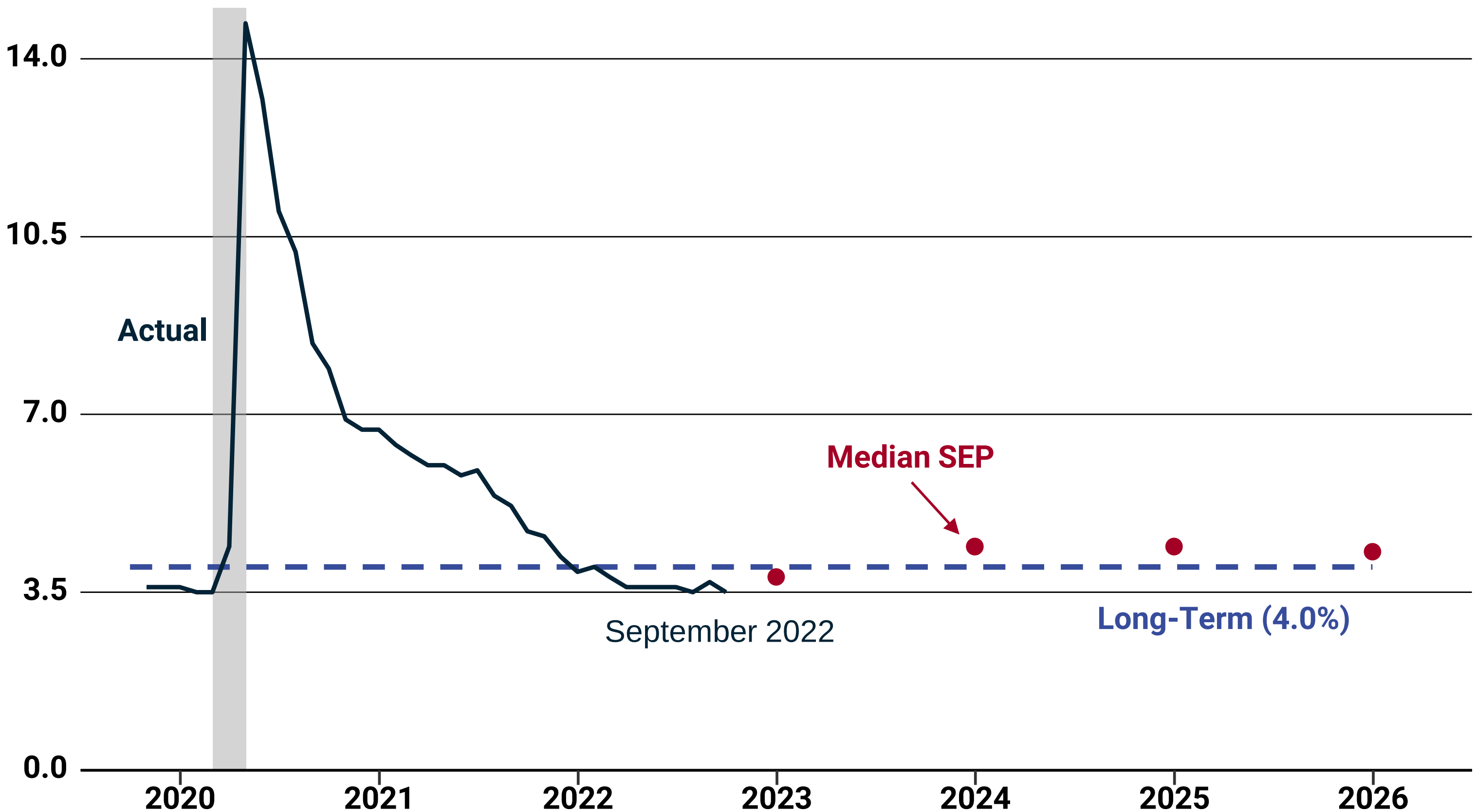
Real GDP Growth and Median SEP
(percent change, annual rate)



Source: Bureau of Economic Analysis and FOMC Summary of Economic Projections via Haver Analytics

Unemployment is expected to rise modestly

Unemployment Rate and Median SEP
(percent, SA)

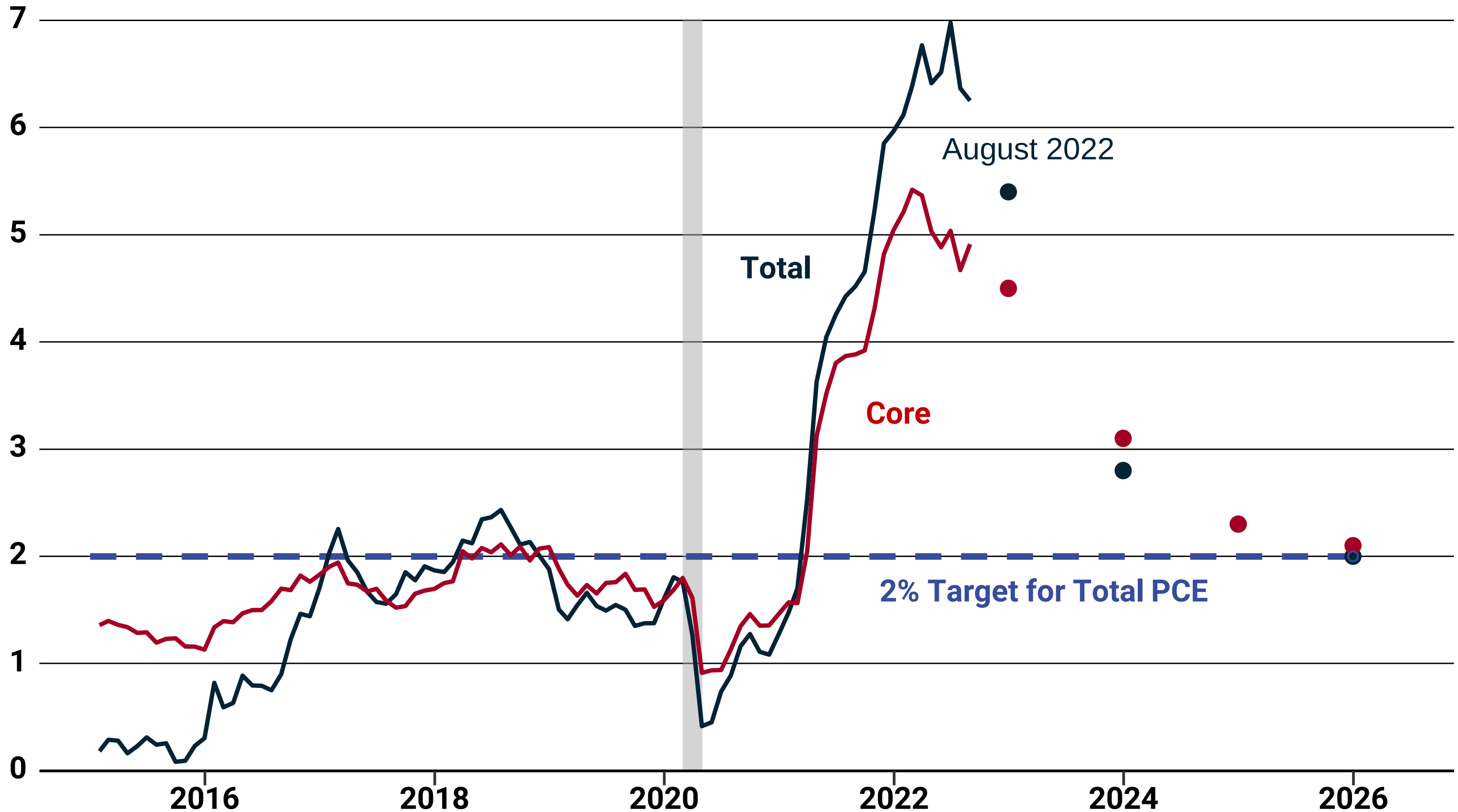


Source: Bureau of Labor Statistics and FOMC Summary of Economic Projections via Haver Analytics

Inflation is expected to moderate

Total and core PCE price indices and median SEPs

(12-month percent change; Q4/Q4 for SEPs)



Source: Burueau of Economic Analysis and FOMC Summary of Economic Projections via Haver Analytics

Outside forecasters are similar to the FOMC

Median Private-Sector Forecasts of Key Indicators

	2022	2023
GDP	-0.1	0.5
Unemployment	3.7	4.4
PCE	5.4	2.2
Core PCE	4.4	2.8

Notes: Private forecaster median projections as of October 6. GDP growth and inflation rates are Q4/Q4. Unemployment is the projected rate in Q4 of each year.

Sources: Various private forecasters; staff calculations

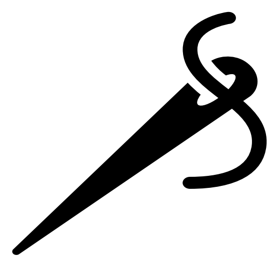
Monetary policy tradeoffs

- **Aim: Full employment and price stability**

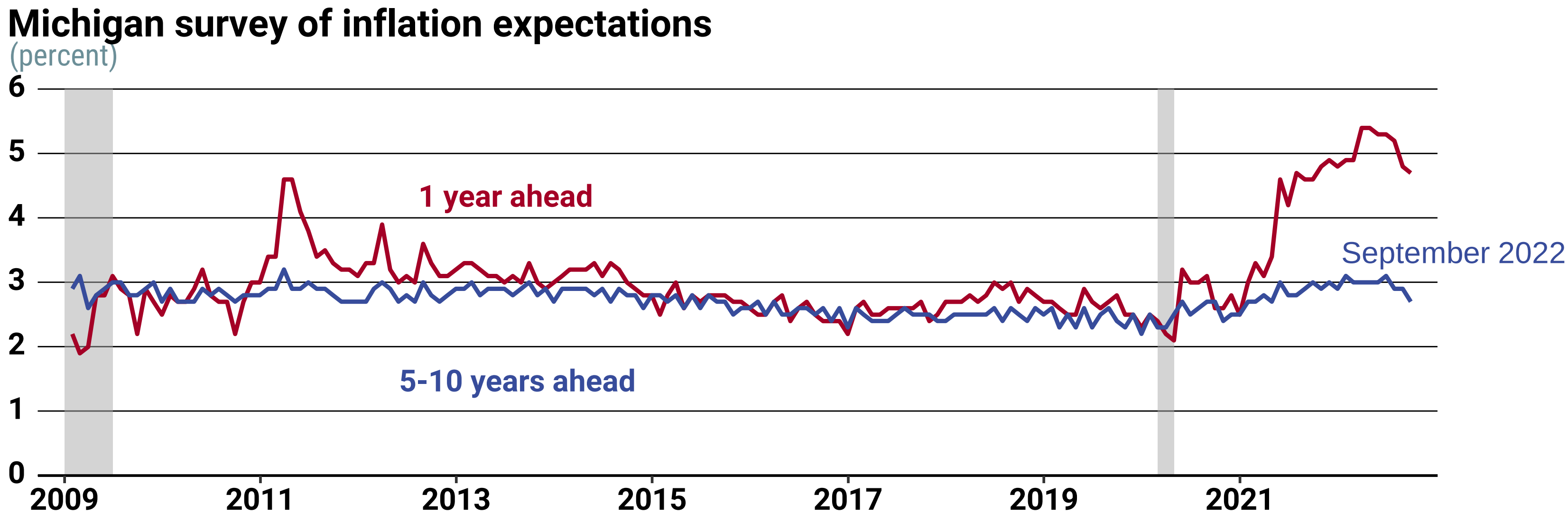
- If raise rates too slowly and/or to a level that isn't restrictive enough → inflation will stay elevated

- If raise rates too quickly and/or to a level that is too restrictive → unemployment will go up a lot and there will be a recession

- Threading a needle

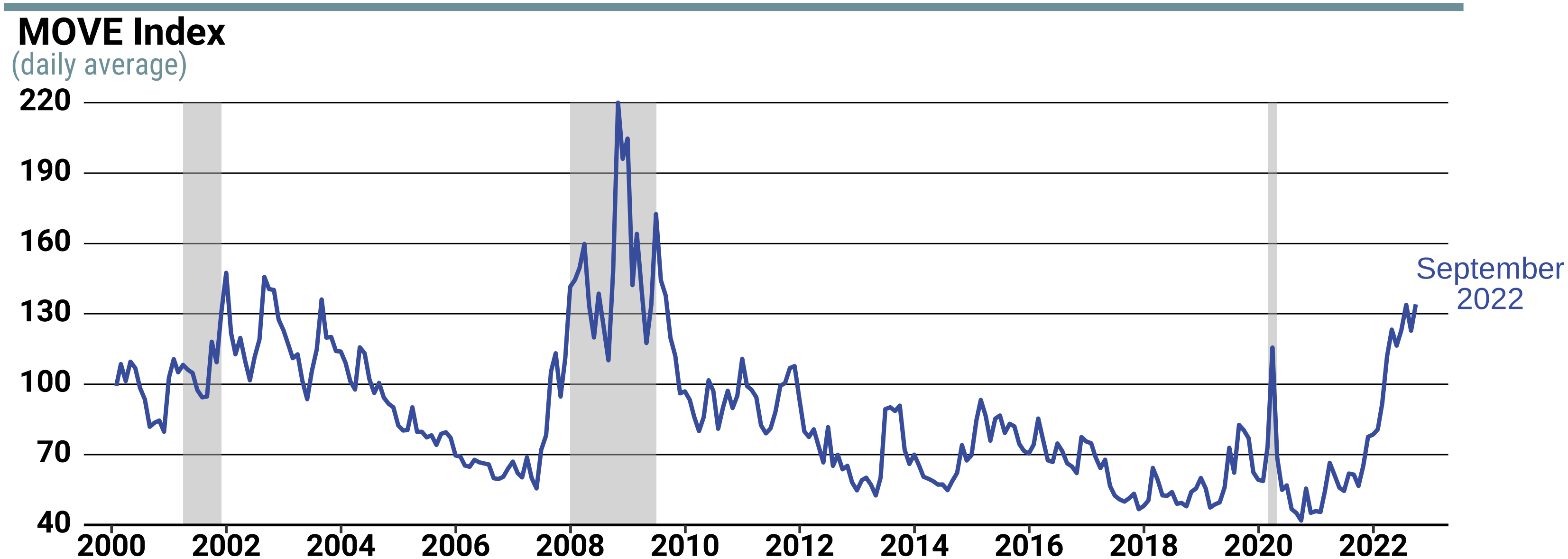


Long-run inflation expectations appear anchored

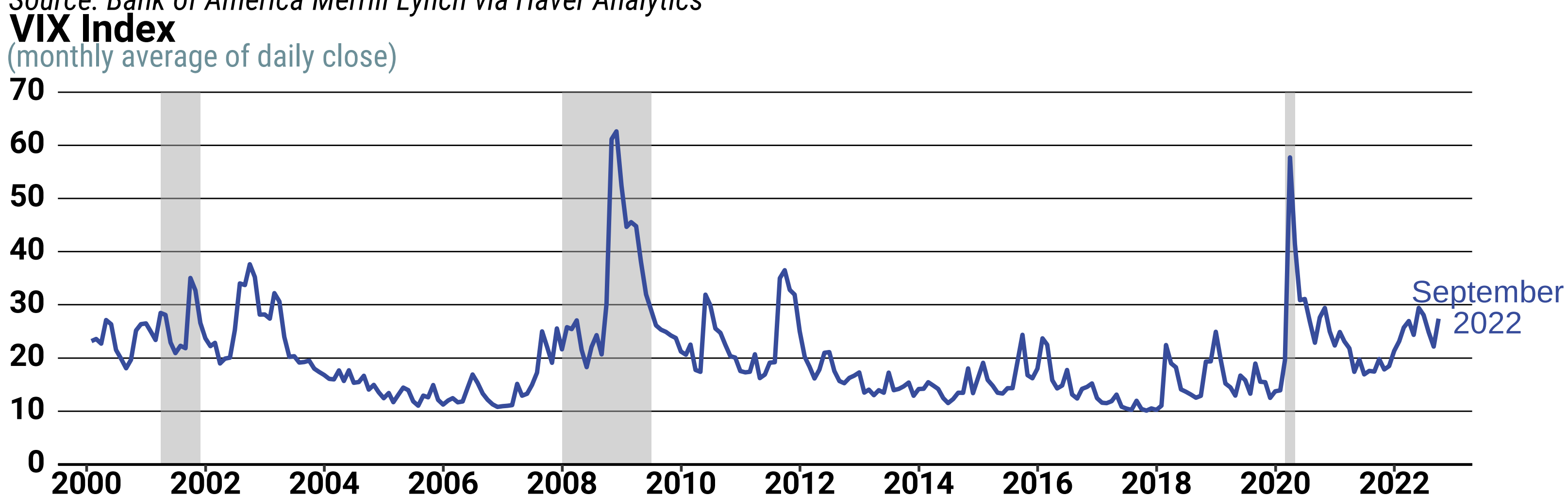


Source: University of Michigan via Haver Analytics; Federal Reserve Board

Financial market risk has increased



Source: Bank of America Merrill Lynch via Haver Analytics



Source: Wall Street Journal via Haver Analytics

Threading the needle on inflation

- **Helps**
  - Workers on the sidelines return to the labor market
  - Consumption patterns normalize and take pressure off supply chains
  - Supply backlogs get worked out
  - Job postings go down, wage growth slows

- **Hinders**
  - Global conflict or other shocks intensify supply disruptions
  - Wage growth accelerates and fuels inflationary pressures
  - Long-run inflation expectations increase

Summing up

- **Sharp, rapid decline followed by sharp, rapid recovery**
- **Inflation has increased and inflation pressures have broadened**
- **Rapid tightening of monetary policy and more to come**
- **Forecast is that we thread the needle: bring inflation down with only modest costs in terms of growth and unemployment**
- **Risks abound**

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