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# Economic Developments and Monetary Policy Environment

Federal Reserve Bank of Chicago  
Academic Advisory Council Meeting  
November 17, 2022

**Spencer Krane**

*Senior Vice President*

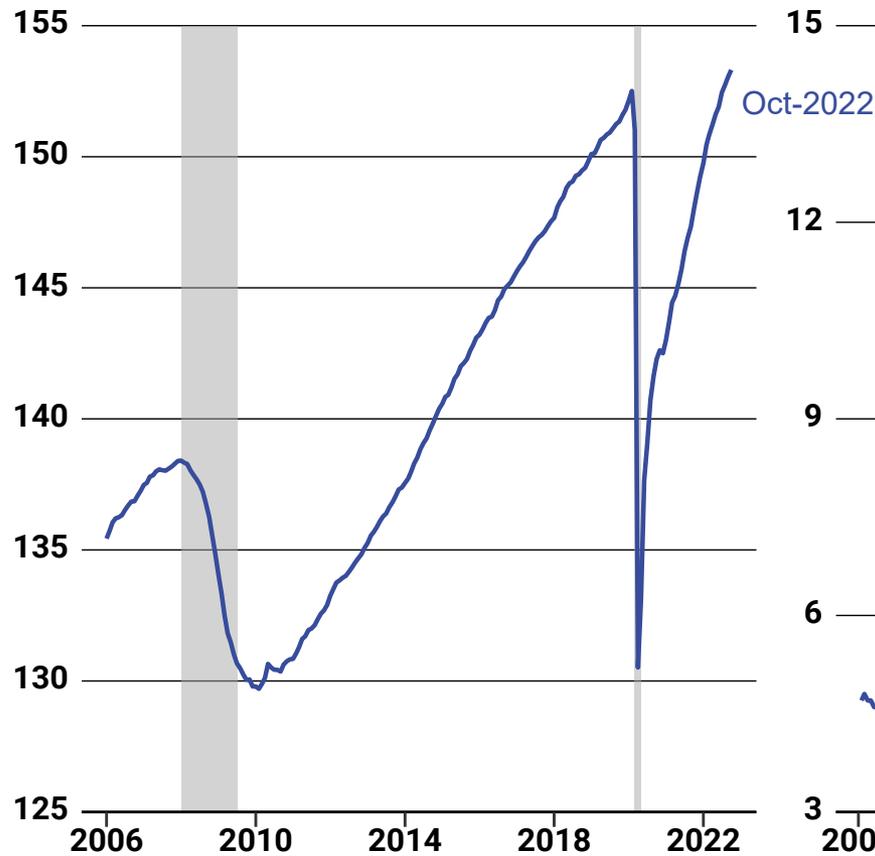
Federal Reserve Bank of Chicago

*The views expressed here do not necessarily reflect the views of the Federal Reserve Bank of Chicago or the Federal Reserve System.*

# Labor market robust

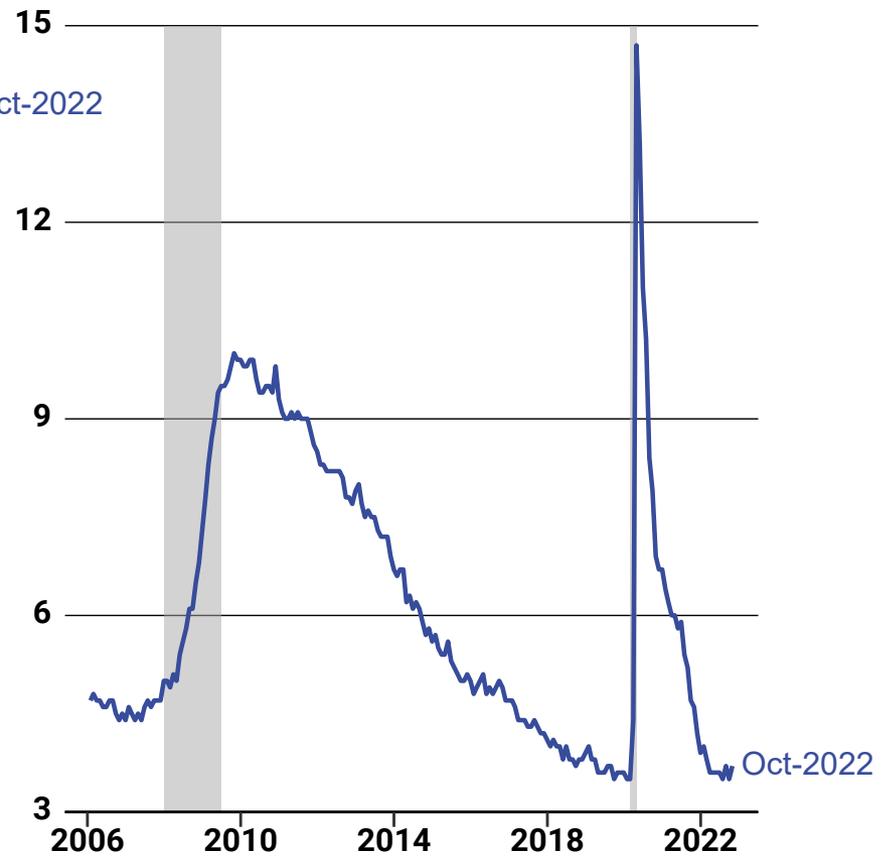
## Nonfarm payroll employment

(millions, SA)



## Unemployment rate

(percent, SA)

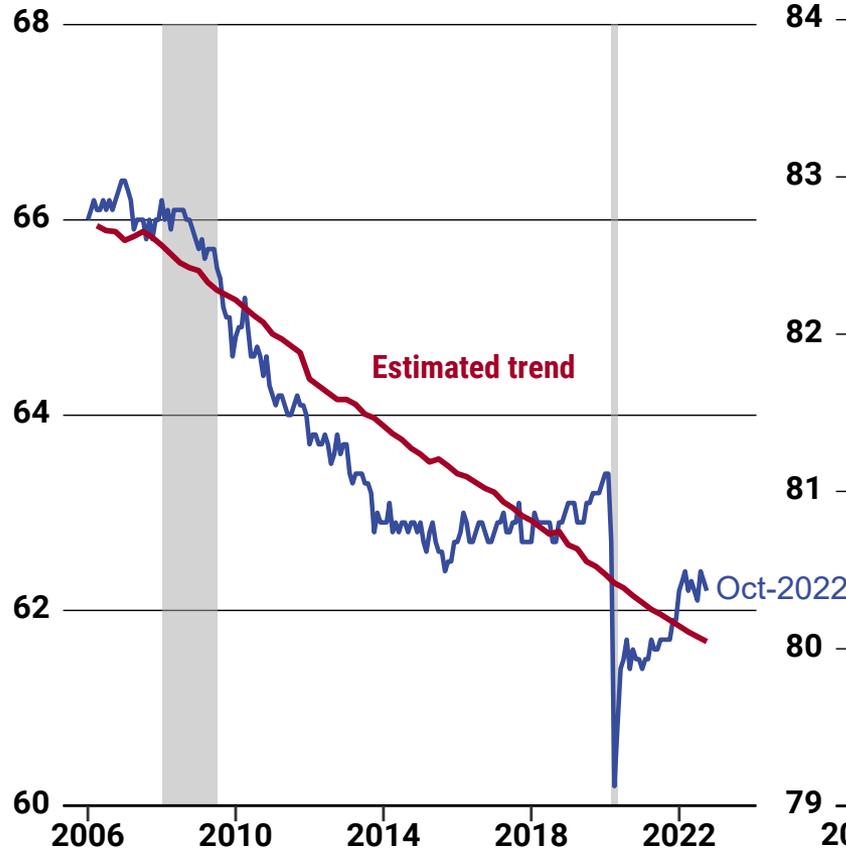


Source: Bureau of Labor Statistics via Haver Analytics

# Labor force participation

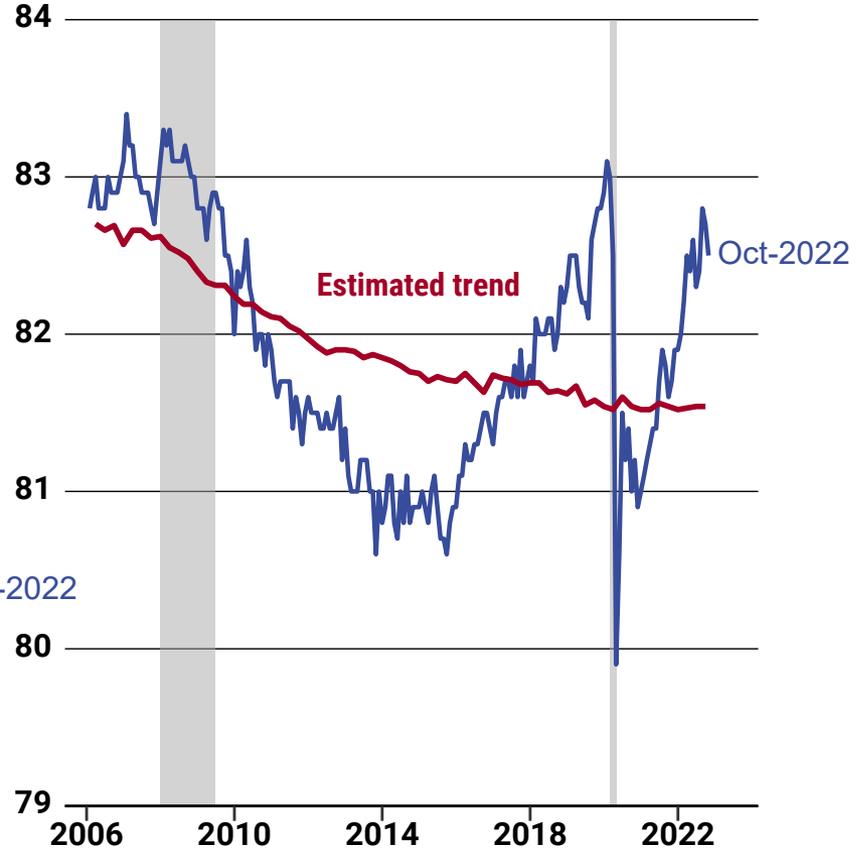
## Total (16 years and older)

(percent, SA)



## Prime age (25-54 years old)

(percent, SA)



Source: Bureau of Labor Statistics via Haver Analytics, internal series from the Chicago Fed using methodology in Aaronson, Hu, Saifoddini, and Sullivan

# Job openings and quits still extremely high

## Job opening rate

(vacancies as a percent of labor force, SA)



## Quits rate

(percent of employment, SA)

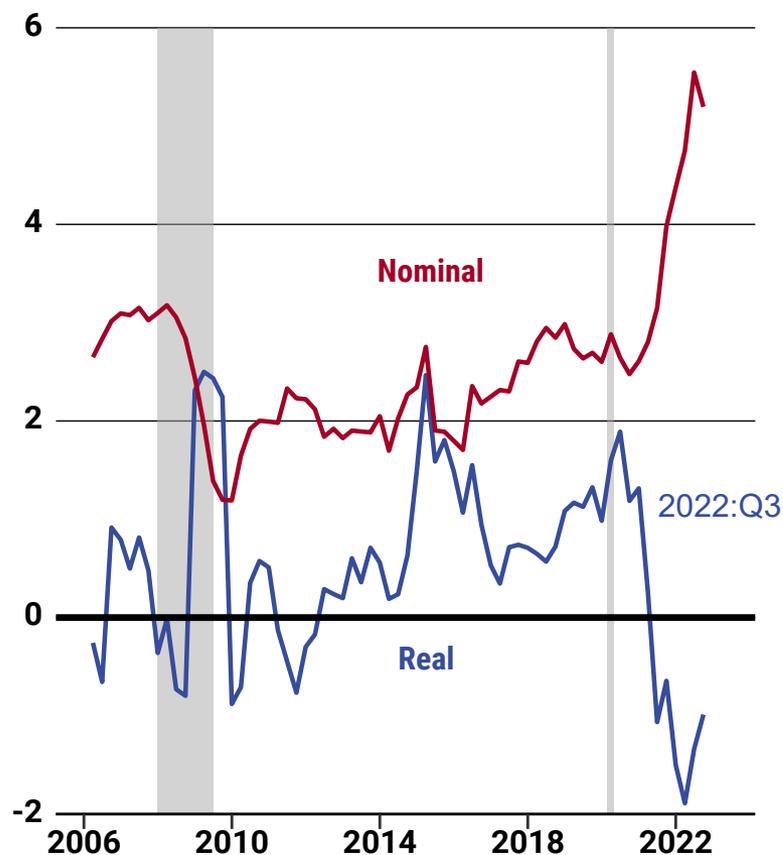


Source: Bureau of Labor Statistics via Haver Analytics

# Compensation, labor costs, and prices

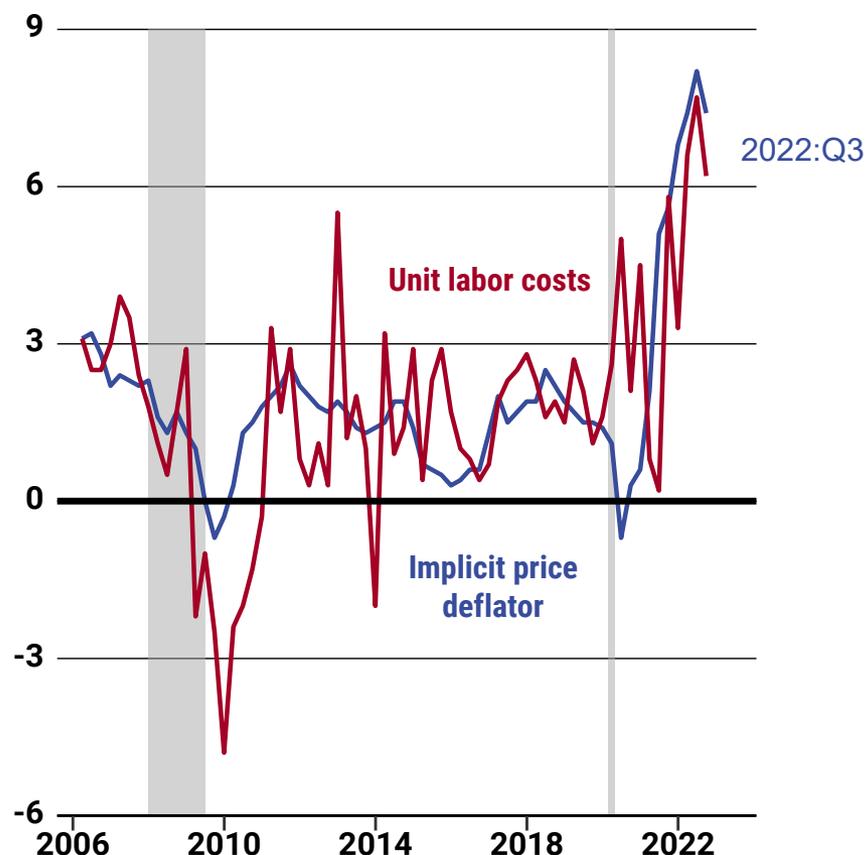
## ECI compensation

(private workers, percent change year-to-year, SA)



## Unit labor costs and inflation

(business sector, four-quarter percent change, SA)



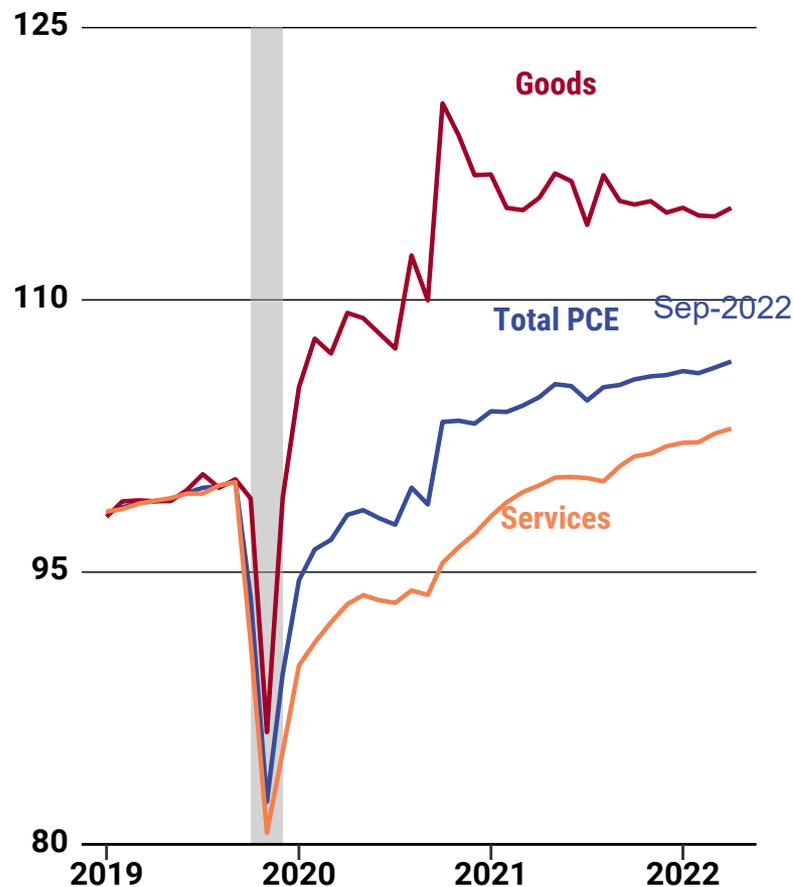
Source: Bureau of Labor Statistics via Haver Analytics

Note: Real ECI compensation is nominal ECI deflated by total PCE Price Index.

# Household spending

## Real personal consumption expenditures

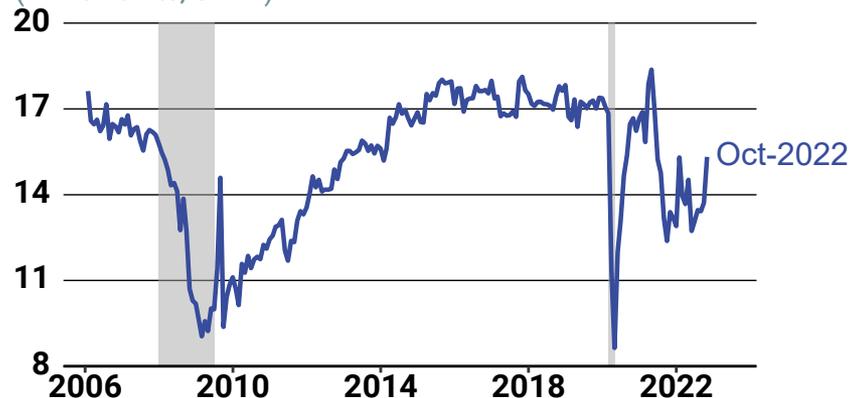
(index, Feb-2020 = 100)



Source: U.S. Bureau of Economic Analysis via Haver Analytics

## Light vehicle sales

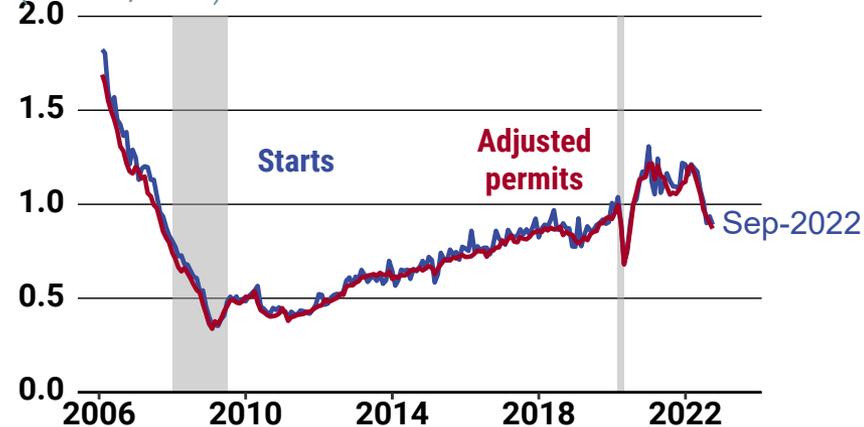
(million units, SAAR)



Source: Autodata via Haver Analytics

## Single family housing starts and permits

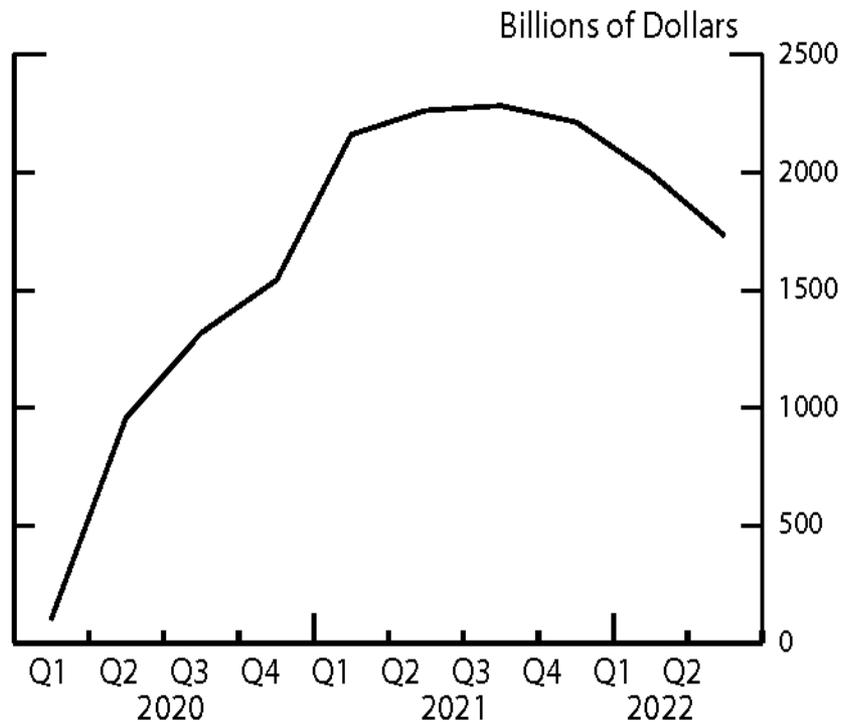
(millions, SAAR)



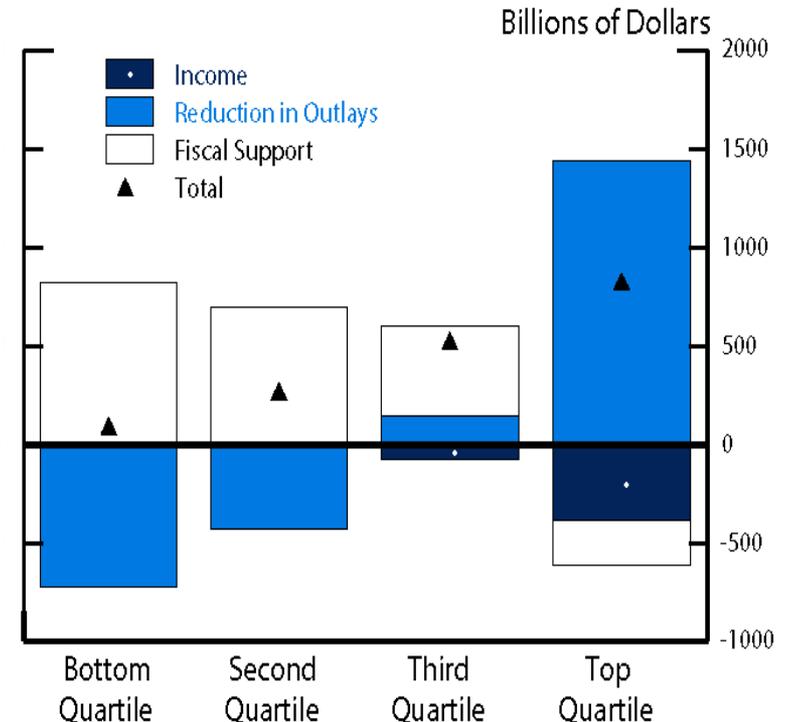
Source: Census Bureau via Haver Analytics

# Household balance sheets

Stock of Excess Savings



Contributions to Excess Savings by Income Quartile as of 2022:Q2



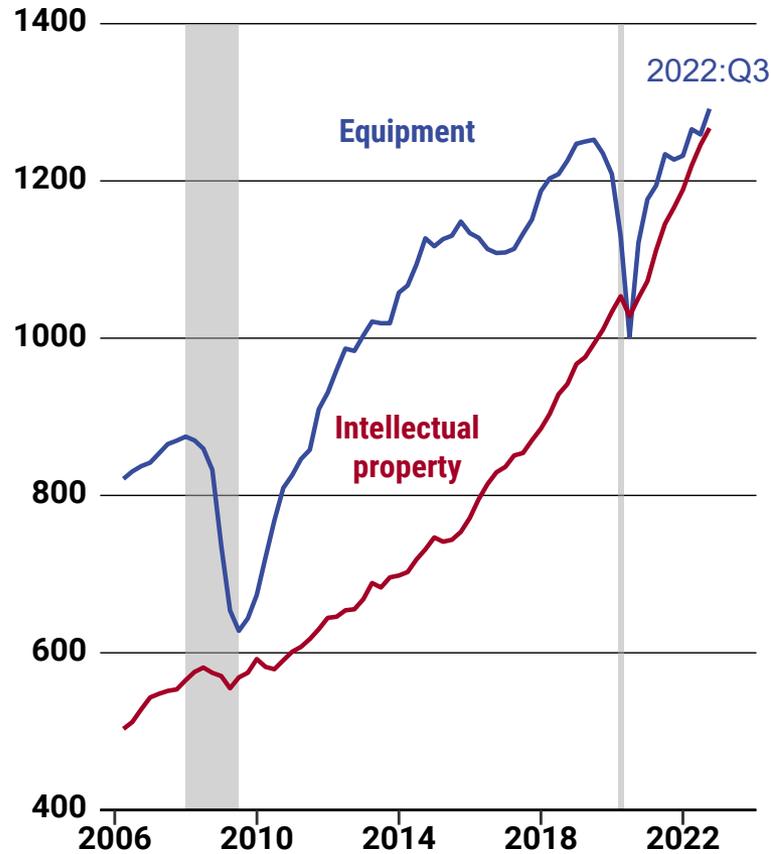
Source: Federal Reserve Board of Governors

<https://www.federalreserve.gov/econres/notes/feds-notes/excess-savings-during-the-covid-19-pandemic-20221021.html>

# Nonresidential investment

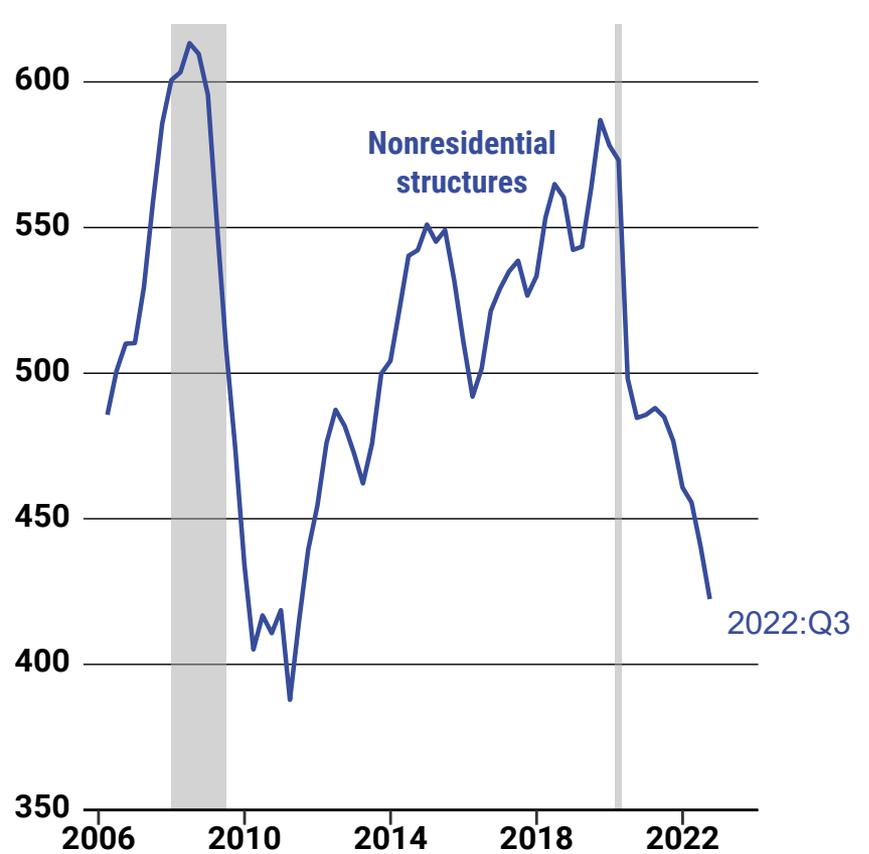
## Equipment and intellectual property

(bil. \$ 2012, SAAR)



## Structures

(bil. \$ 2012, SAAR)



Source: Bureau of Economic Analysis via Haver Analytics

# Global growth outlook revised down

<b>IMF GDP Forecasts<sup>1</sup></b>	<b>2022</b>	<b>2023</b>
<b>Advanced Economies</b>	<b>2.4</b>	<b>1.1</b>
<i>April</i>	3.3	2.4
<b>Emerging Economies</b>	<b>3.7</b>	<b>3.7</b>
<i>April</i>	3.8	4.4
<b>United Kingdom</b>	<b>3.6</b>	<b>0.3</b>
<i>April</i>	3.7	1.2
<b>Euro Area</b>	<b>3.1</b>	<b>0.5</b>
<i>April</i>	2.8	2.3
<b>China</b>	<b>3.2</b>	<b>4.4</b>
<i>April</i>	4.4	5.1

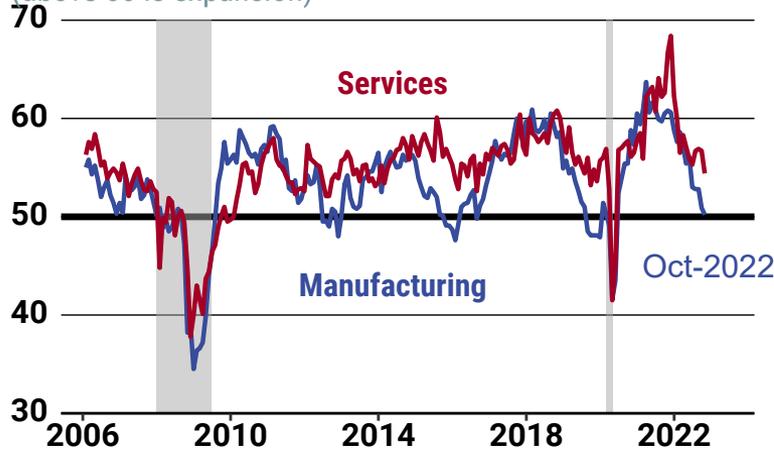
<sup>1</sup> Percent change in average annual level of real GDP

Source: International Monetary Fund World Economic Outlook, October (current) and April 2022

# Business activity and supply constraints

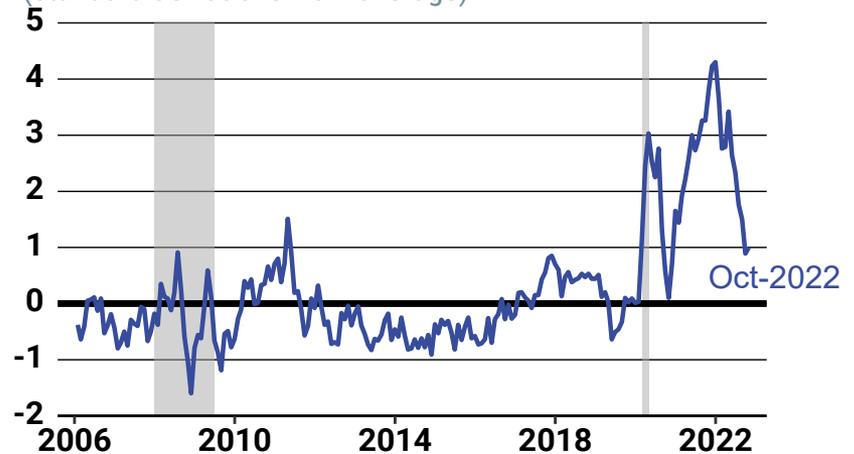
**Overall PMI<sup>1</sup>**

(above 50 is expansion)



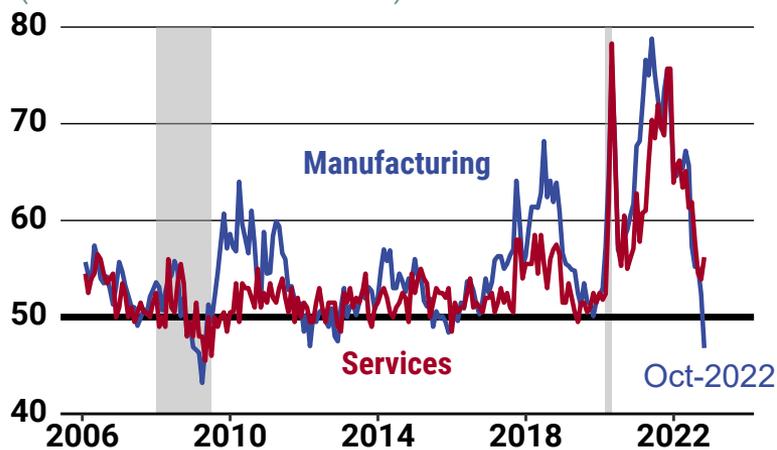
**Global Supply Chain Pressure Index<sup>2</sup>**

(standard deviations from average)



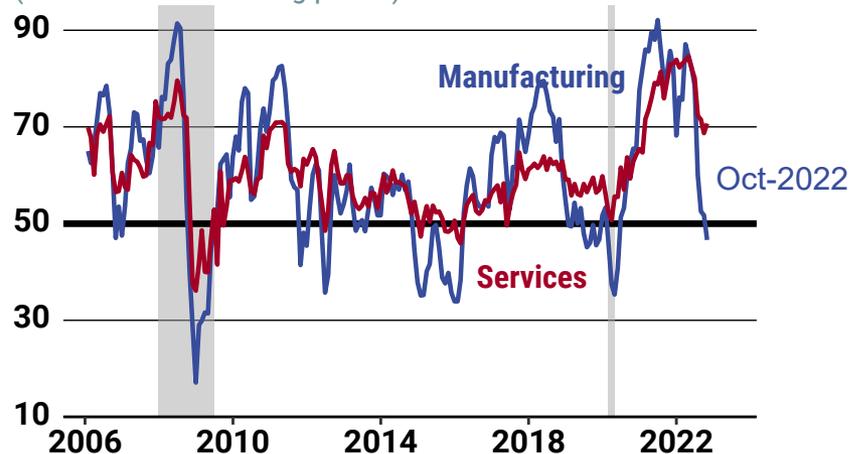
**Supplier deliveries index<sup>1</sup>**

(above 50 is slower deliveries)



**Prices paid index<sup>1</sup>**

(above 50 is increasing prices)

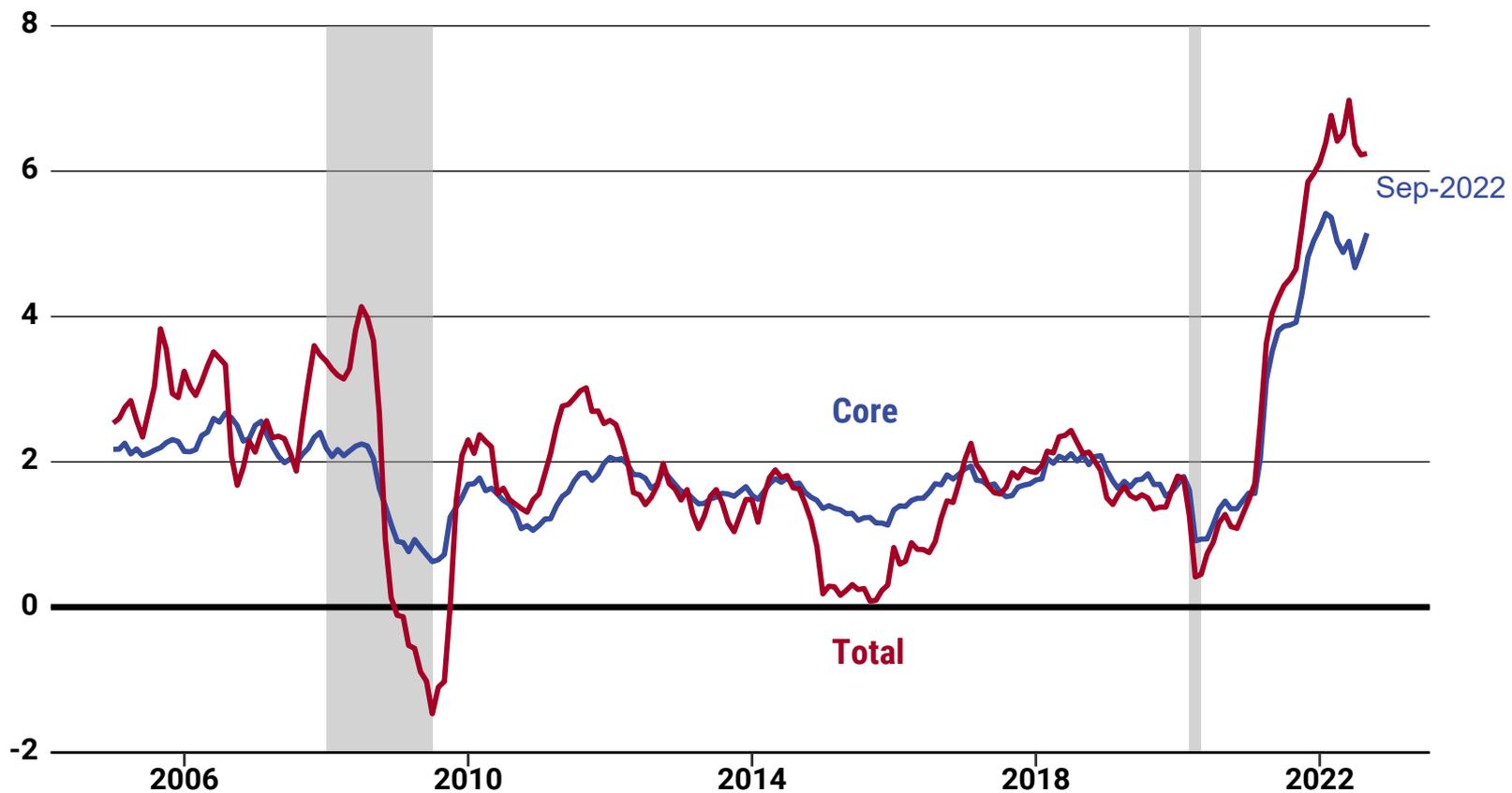


1. Institute for Supply Management via Haver Analytics; 2. Federal Reserve Bank of New York using data from Bureau of Labor Statistics, Harper Petersen Holding GmbH, Baltic Exchange, IHS Markit, Institute for Supply Management, Refinitiv, Haver Analytics

# Inflation very high

## PCE Price Index

(12-month percent change)

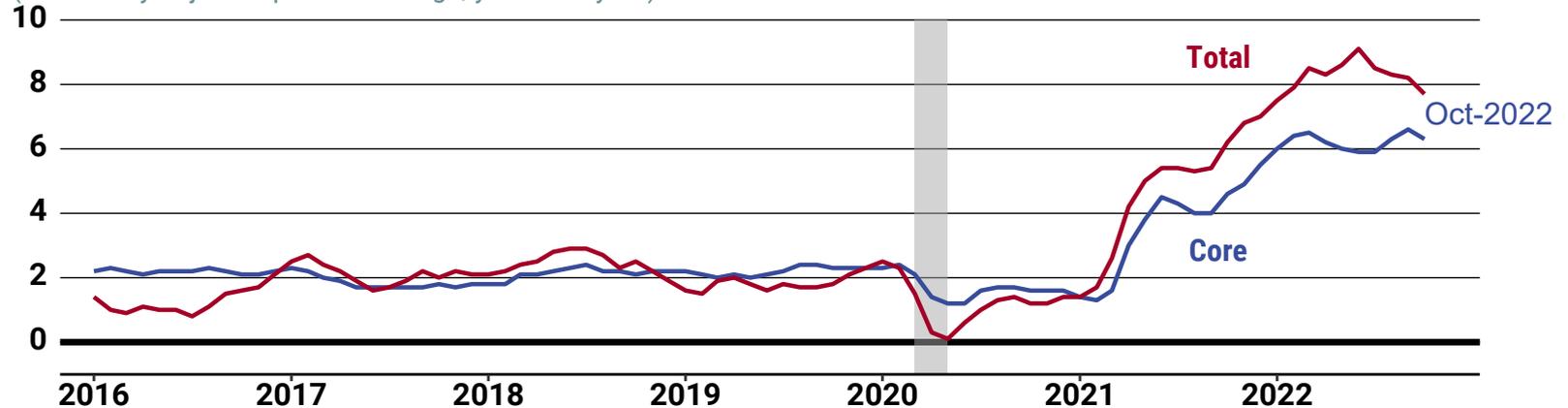


Source: Bureau of Economic Analysis via Haver Analytics

# CPI inflation: goods lower; services higher

## Consumer Price Index

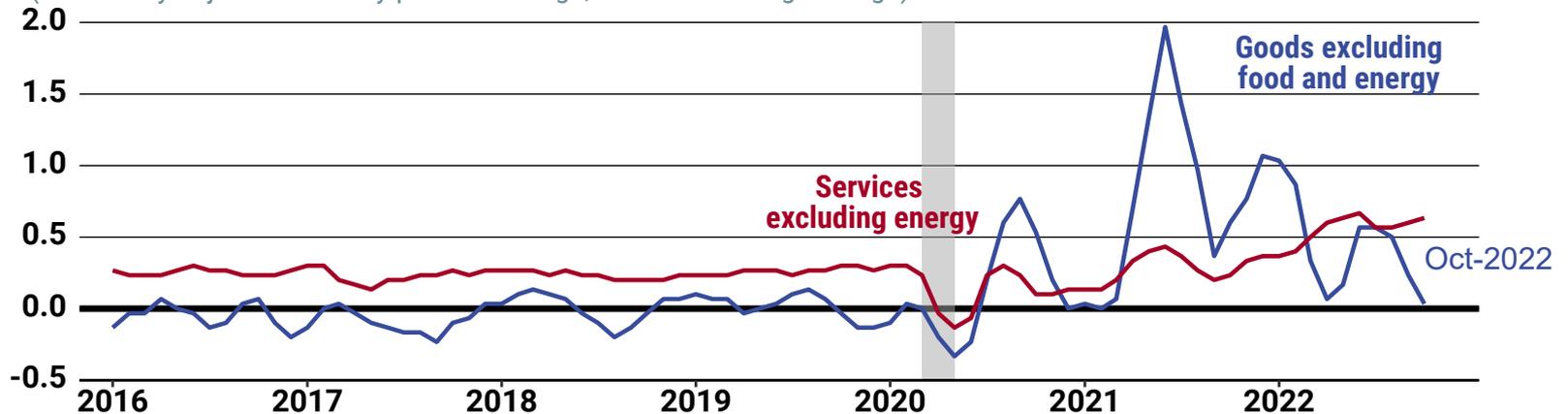
(seasonally adjusted percent change, year-over-year)



Source: Bureau of Labor Statistics via Haver Analytics

## Consumer Price Index

(seasonally adjusted monthly percent change, 3-month moving average)

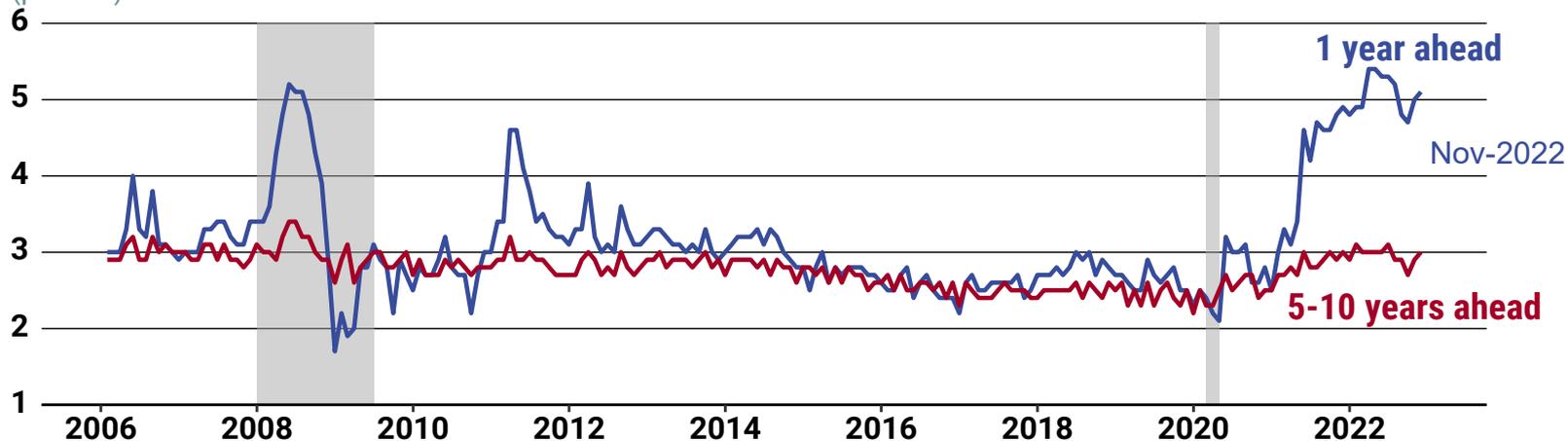


Source: Bureau of Labor Statistics via Haver Analytics

# Inflation expectations

## Michigan Survey of Inflation Expectations

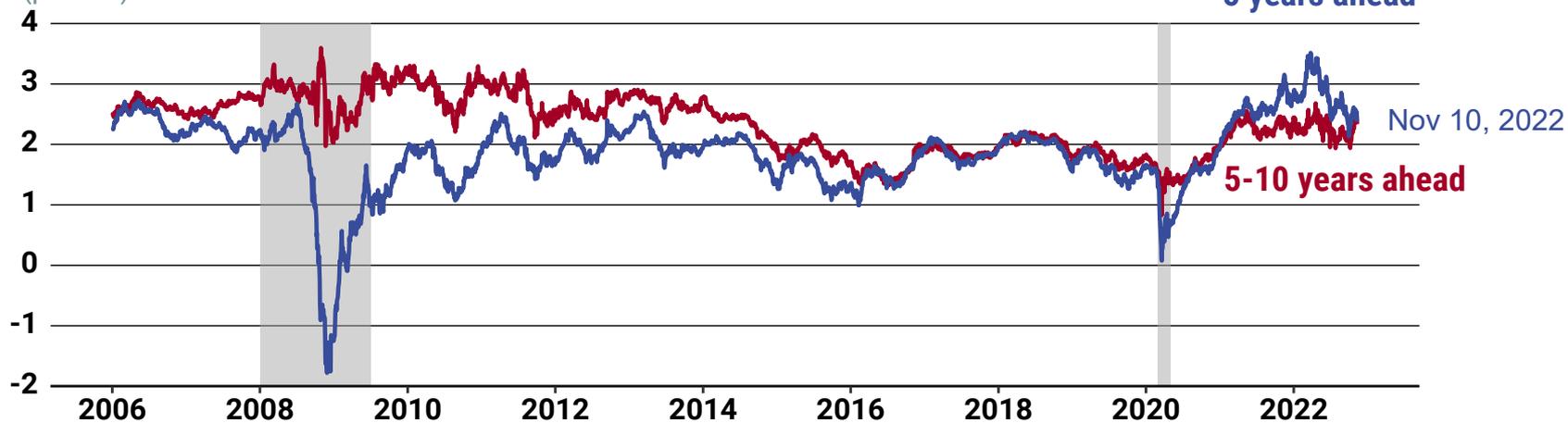
(percent)



Source: University of Michigan from Haver Analytics

## TIPS inflation compensation

(percent)

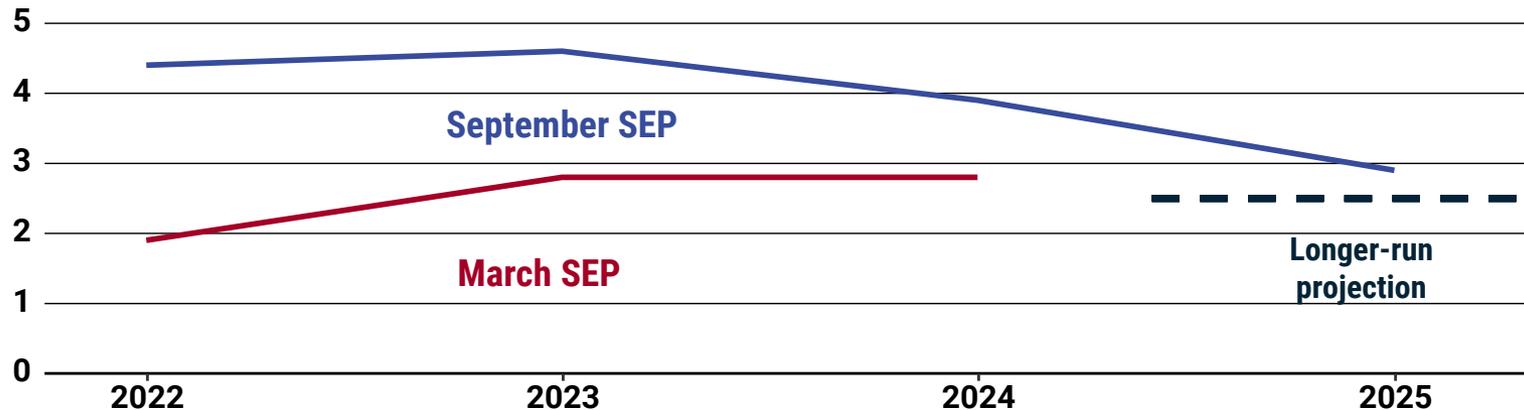


Source: Board of Governors of the Federal Reserve System

# Higher fed funds rate

## Median SEP Federal Funds Rate projection

(percent)

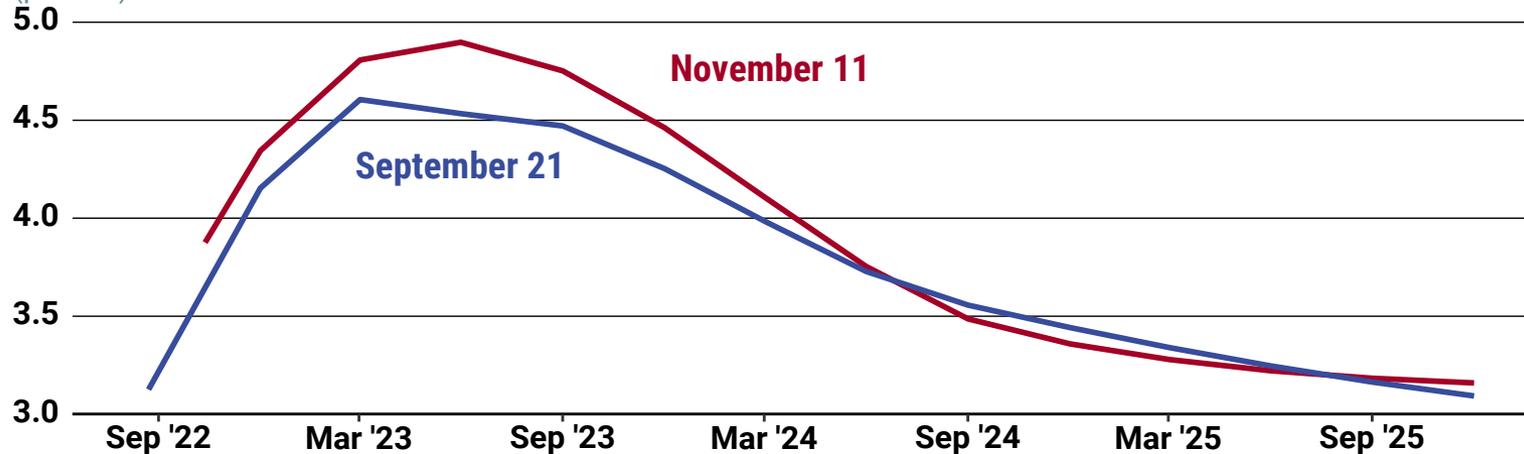


Sources: FOMC Summary of Economic Projections via Haver Analytics

Note: Median SEP projections are plotted at the beginning of their respective year

## Market pricing Federal Funds Rate path

(percent)

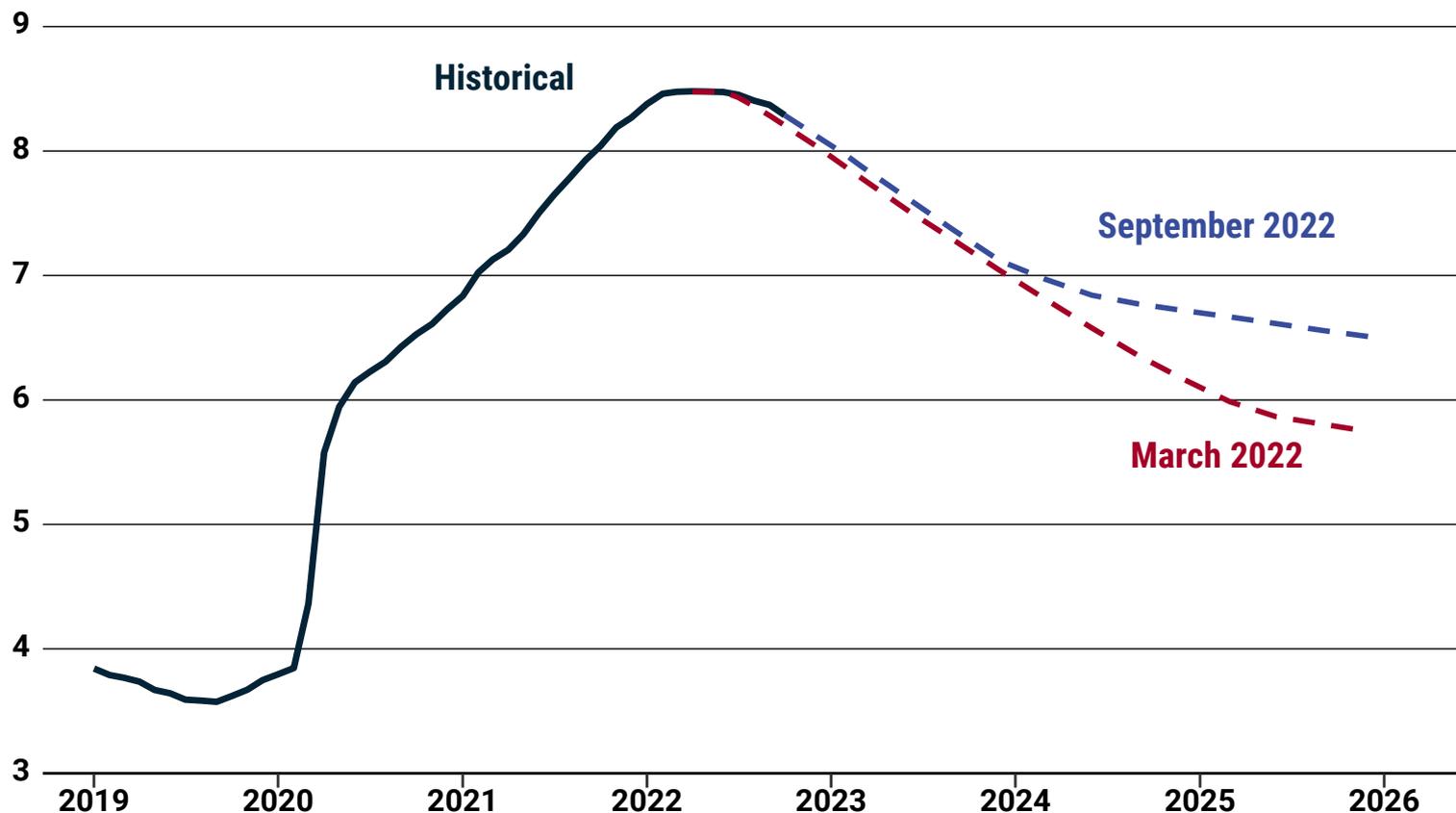


Sources: Federal Reserve Board Division of Monetary Affairs

# Smaller balance sheet

## Key Federal Reserve assets

(tril. \$)



Source: Federal Reserve Board via Haver Analytics; FRBNY Survey of Market Participants

# Financial market developments

## S&P 500 Index

(index)

4800

3800

2800

1800

2016

2017

2018

2019

2020

2021

2022

Nov 11, 2022

Source: Standard & Poor's via Haver Analytics

## Treasury yields

(percent)

5

4

3

2

1

0

2016

2017

2018

2019

2020

2021

2022

10-year

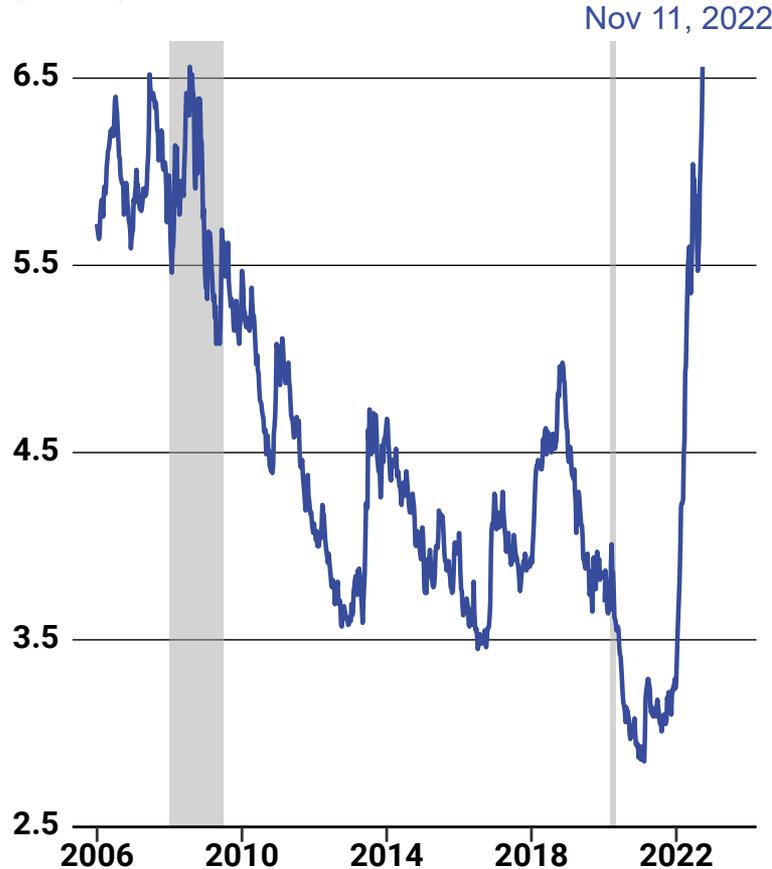
2-year

Nov 10, 2022

Source: Board of Governors of the Federal Reserve System via Haver Analytics

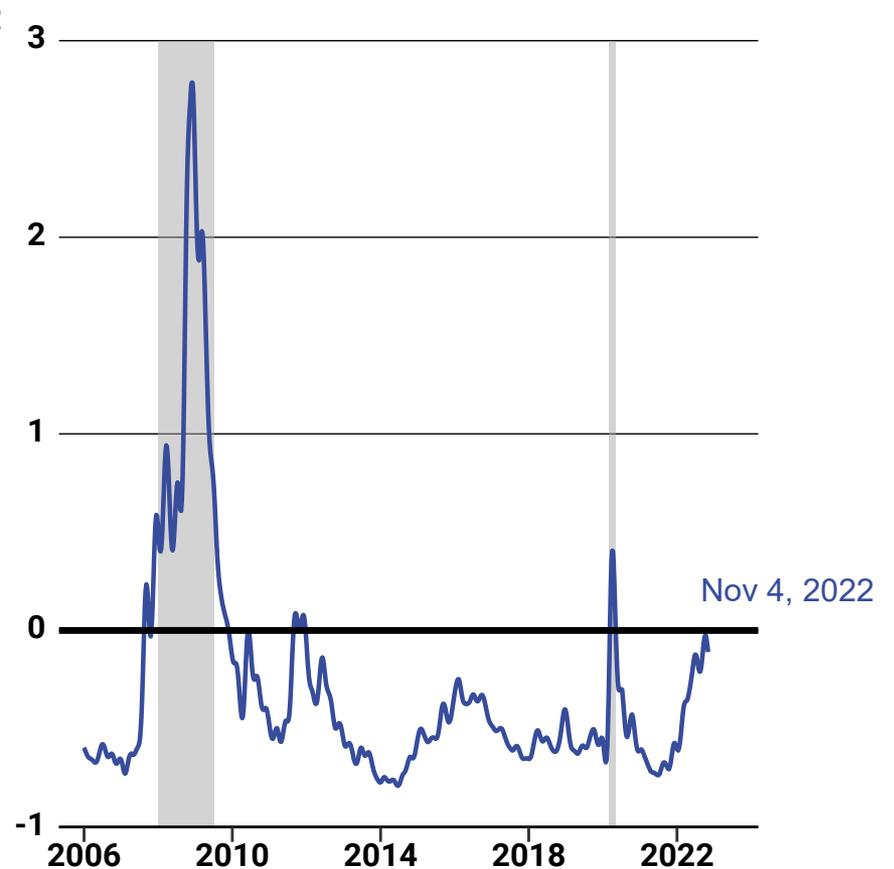
# Financial market developments, cont.

**30-year fixed mortgage rate**  
(percent)



Source: Wall Street Journal via Haver Analytics

**Chicago Fed National Financial Conditions Index**  
(>0 indicates tighter than average)

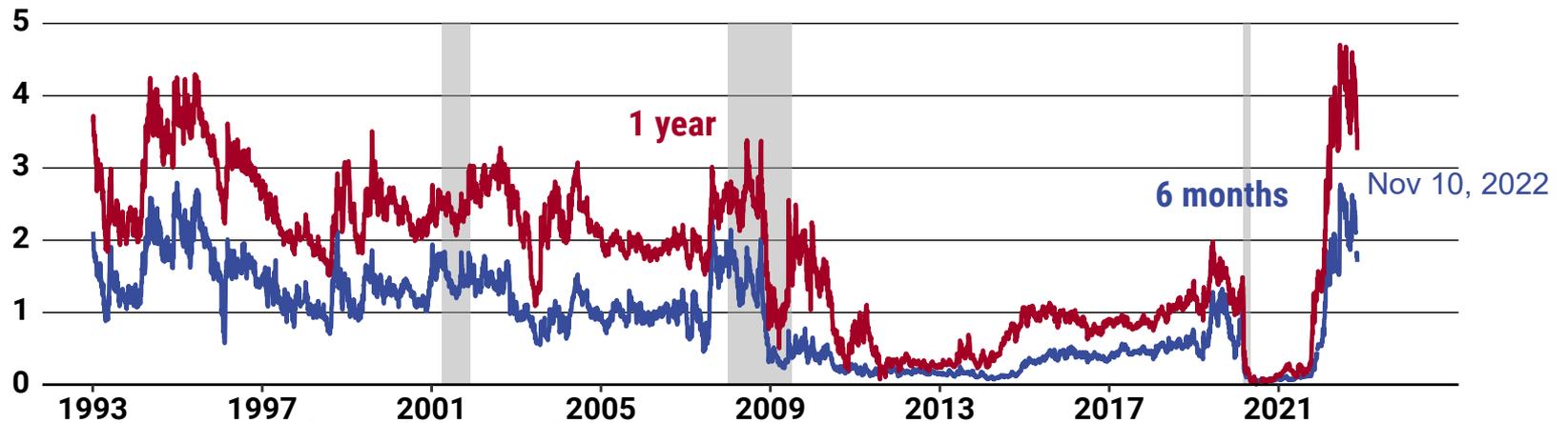


Source: Federal Reserve Bank of Chicago from Haver Analytics

# Interest rate uncertainty

## Uncertainty on near-term monetary policy

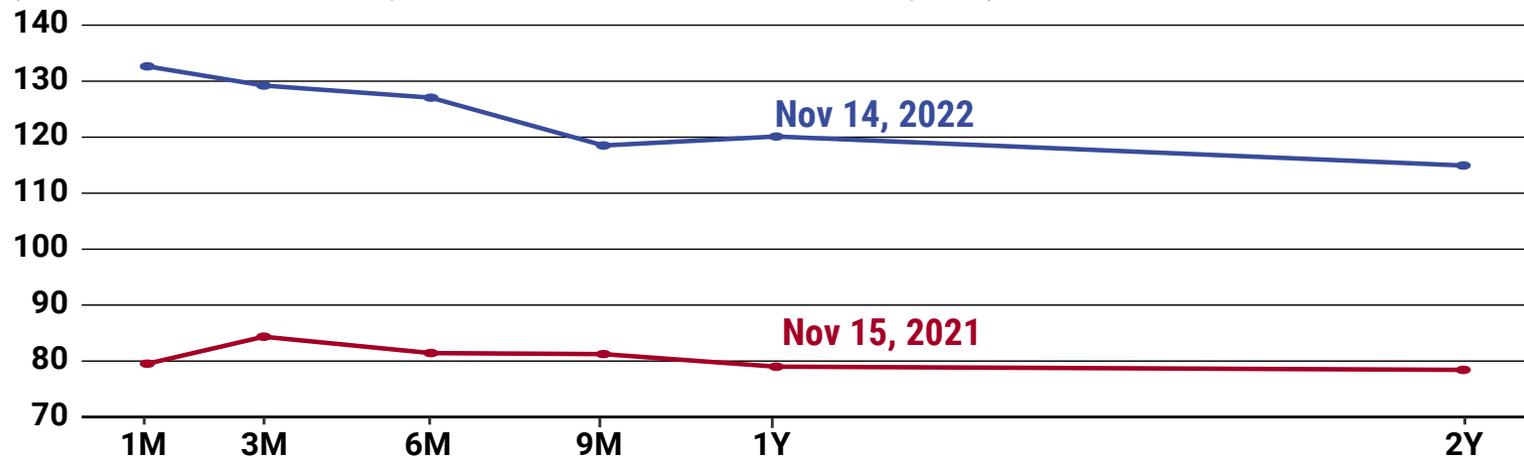
(width of the 90% confidence interval around expected Federal Funds Rate)



Source: Federal Reserve Board of Governors, BDP

## Uncertainty over future US treasury rates

(standard deviation around expected rates at indicated horizons, basis points)



Source: Bloomberg

# Blue Chip consensus forecasts

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Variable	2022	2023
<b>GDP<sup>1</sup></b>	<b>0.2</b>	<b>0.1</b>
<i>May</i>	1.5	1.9
<b>Unemployment rate<sup>2</sup></b>	<b>3.7</b>	<b>4.7</b>
<i>May</i>	3.5	3.7
<b>PCE inflation<sup>1</sup></b>	<b>5.8</b>	<b>2.9</b>
<i>May</i>	5.0	2.5
<b>Core PCE inflation<sup>1</sup></b>	<b>4.9</b>	<b>3.0</b>
<i>May</i>	4.2	2.6

<sup>1</sup>Q4/Q4 percent changes

<sup>2</sup>Q4 level

Source: Blue Chip Consensus Forecast via Haver Analytics, November (current) and May 2022



[www.chicagofed.org](http://www.chicagofed.org)

# Appendix

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