

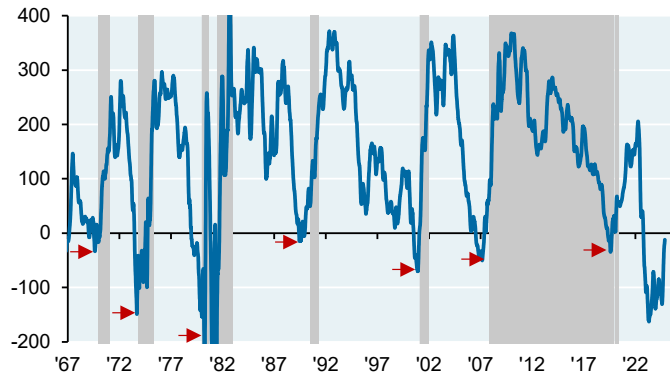
Online US inflation monitor

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Recession signals

Yield curve inversion

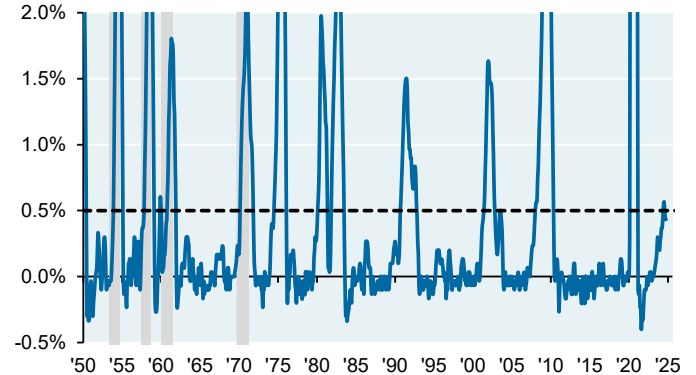
Basis points, 10Y - 3M yield spread, 30 day smoothing



Source: Bloomberg, JPMAM, December 19, 2024

Sahm rule: unemployment rate relative to recent low

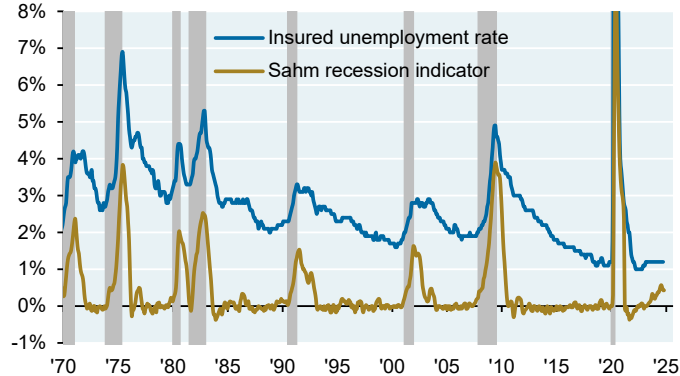
3 month moving average minus lowest value over prior 12 months



Source: BLS, JPMAM, November 30, 2024

Insured unemployment rate and Sahm recession indicator

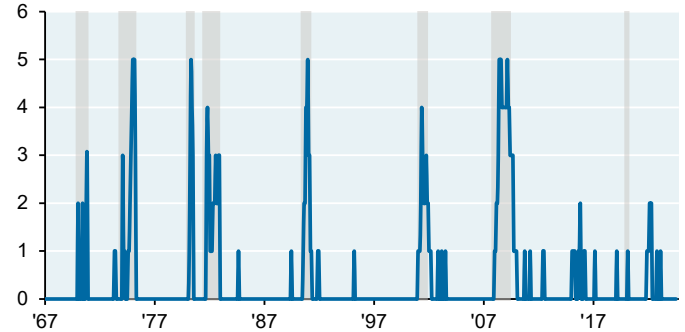
Percentage



Source: Department of Labor, JPMAM, November 30, 2024

NBER recession indicators

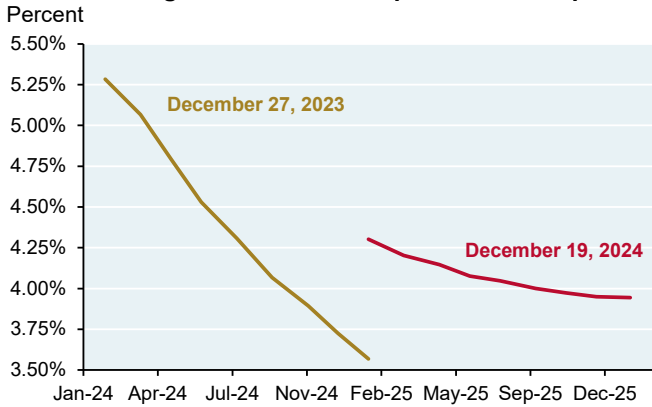
Count of indicators with three consecutive negative MoM readings



Source: BEA, FRB, BLS, NBER, Bloomberg, JPMAM, October 31, 2024. Real manufacturing & trade sales, industrial production, real personal income less transfers, real PCE, nonfarm payrolls, household survey employment

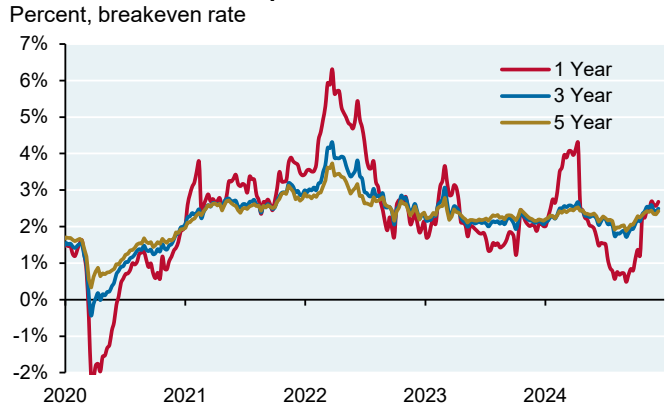
Fed Funds: What's priced in vs inflation expectations

Fed funds target rate: current vs prior market expectations



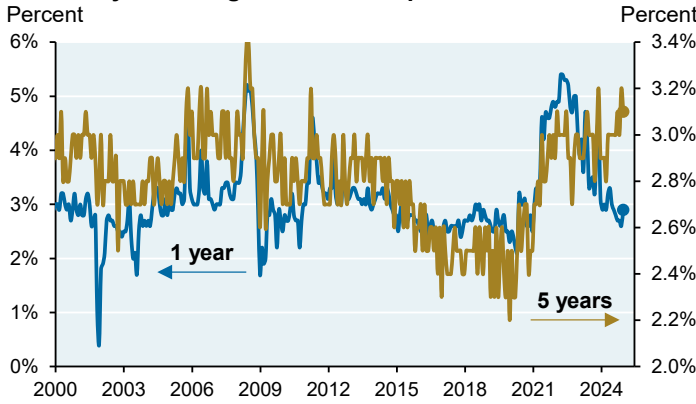
Source: Bloomberg, JPMAM, December 19, 2024

Traded US inflation expectations



Source: Bloomberg, JPMAM, December 13, 2024

University of Michigan inflation expectations



Source: Bloomberg, JPMAM, December 2024

NY Fed Consumer Survey of inflation expectations



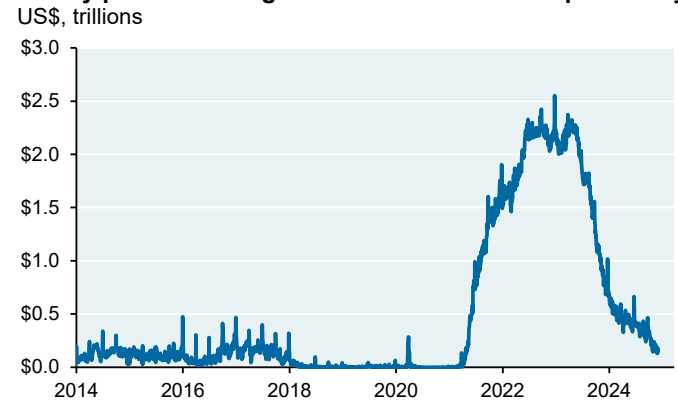
Source: Bloomberg, JPMAM, November 30, 2024

Federal Reserve balance sheet



Source: Bloomberg, JPMAM, September 30, 2024

Money placed overnight at the Fed Reverse Repo Facility

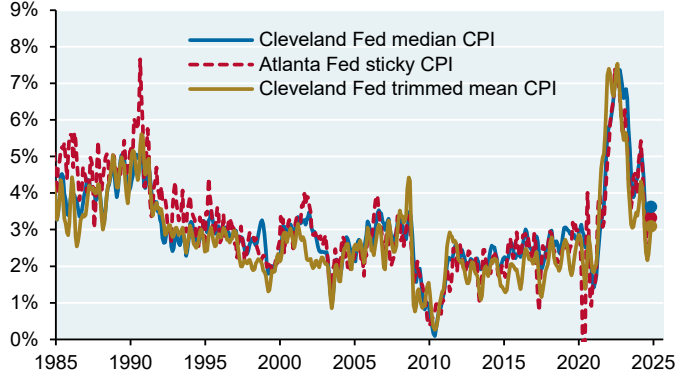


Source: Bloomberg, JPMAM, December 10, 2024

Consumer price inflation measures

US consumer price inflation measures

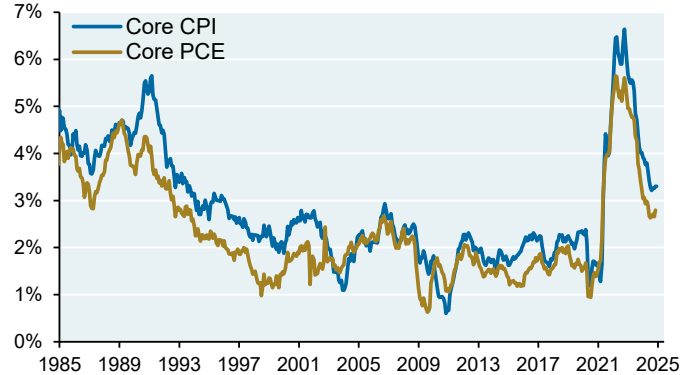
Percent, 3 month annualized change



Source: Bloomberg, JPMAM, November 30, 2024

Core CPI and PCE inflation

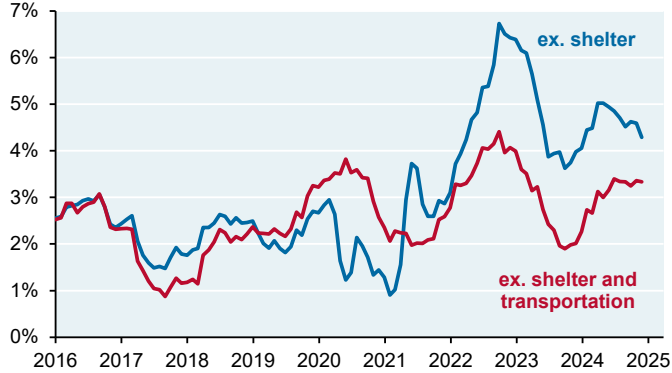
y/y % change



Source: BLS, BEA, November 30, 2024

CPI core services

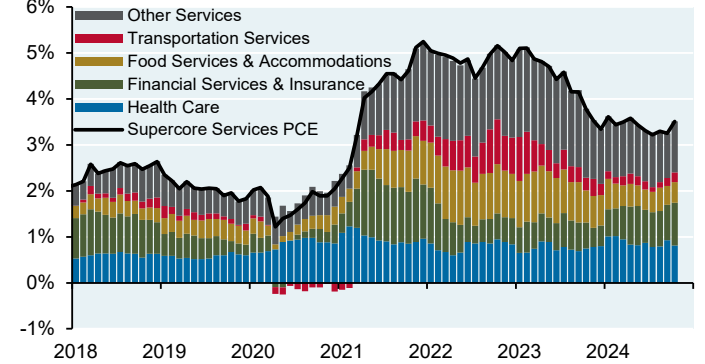
Percent, y/y



Source: BLS, Bloomberg, JPMAM, November 30, 2024

Contributions to 12-month supercore services PCE inflation

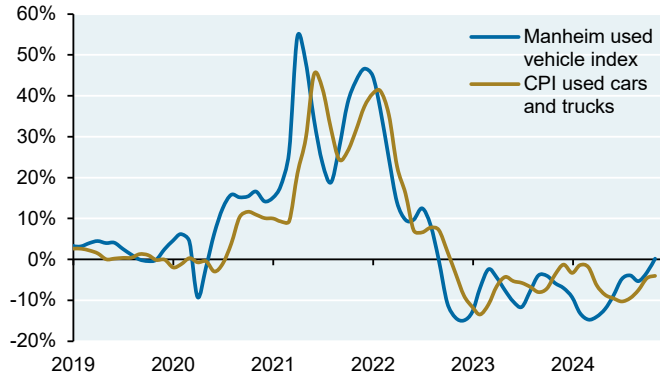
Percent, y/y



Source: Federal Reserve Bank of San Francisco, JPMAM, October 2024

Used vehicle prices

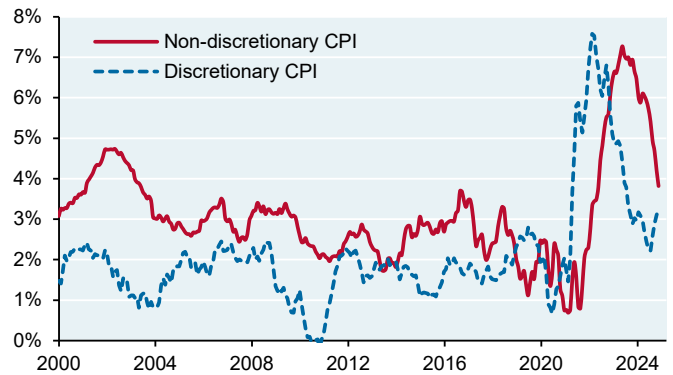
Percent, y/y



Source: Bloomberg, JPMAM, November 30, 2024

Core non-discretionary CPI

Percent, y/y

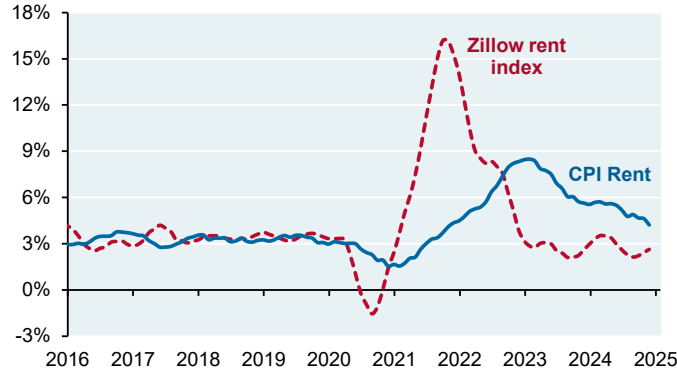


Source: BLS, JPMAM, November 30, 2024

Real estate inflation measures¹

Timely residential rent measures vs CPI rent

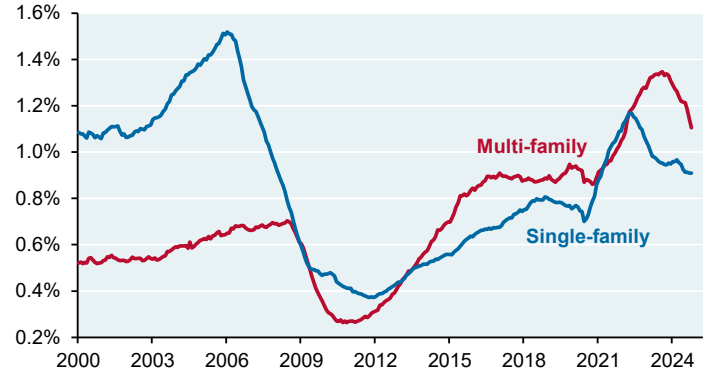
Percent, annualized 6-month change



Source: Bloomberg, Zillow, JPMAM, November 2024

Housing supply under construction

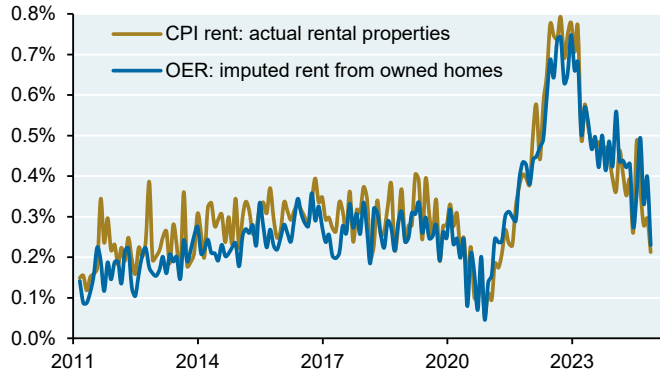
Percent of owner occupied housing stock



Source: Bloomberg, US Census, JPMAM, October 2024

CPI shelter inflation measures

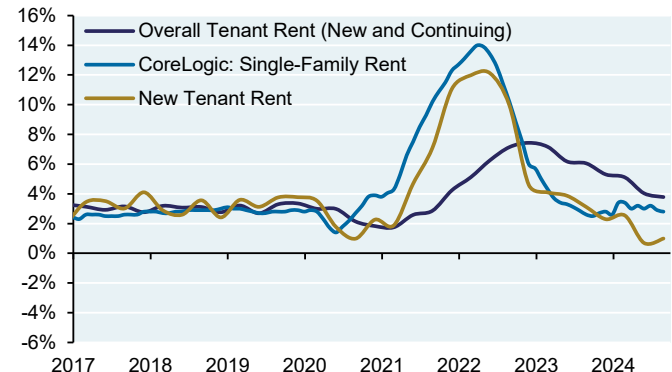
Percent, m/m



Source: Bloomberg, JPMAM, November 30, 2024

US housing rent growth

Percent change, y/y

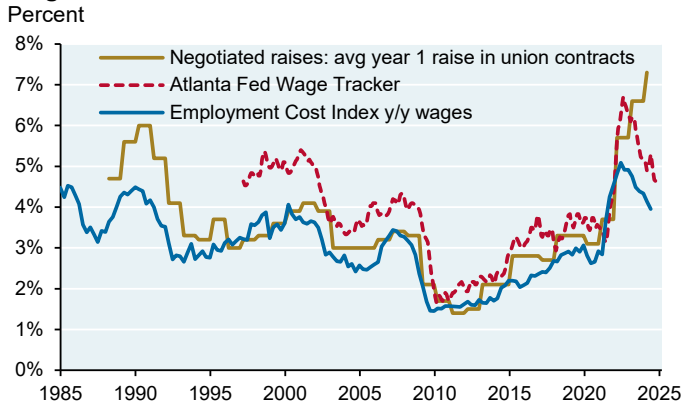


Source: BLS, Cleveland Fed, CoreLogic, JPMAM, Q3 2024

¹ **Single-Family Rent Index** (CoreLogic): measures rent changes of the same single-family rental homes over time
New Tenant Index (BLS): measures the rent a new tenant pays relative to the prior tenant when the lease rolls, includes both single family and multifamily
Overall Tenant Index (BLS): measures the rent paid at lease rollover whether the lessee is new or existing, includes both single family and multifamily
Zillow Rent Index (Zillow): measures rent changes of multi-family and single-family homes

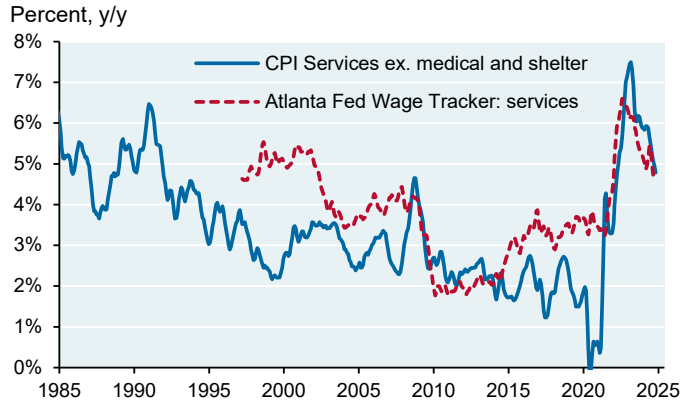
Labor market inflation measures

Wage inflation measures



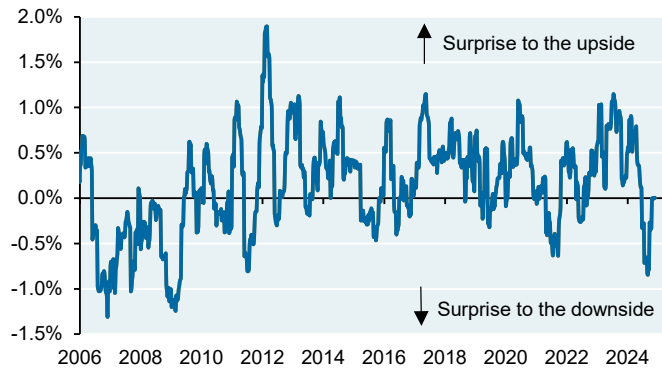
Source: BLS, Bloomberg Law, JPMAM, November 30, 2024

Service inflation measures



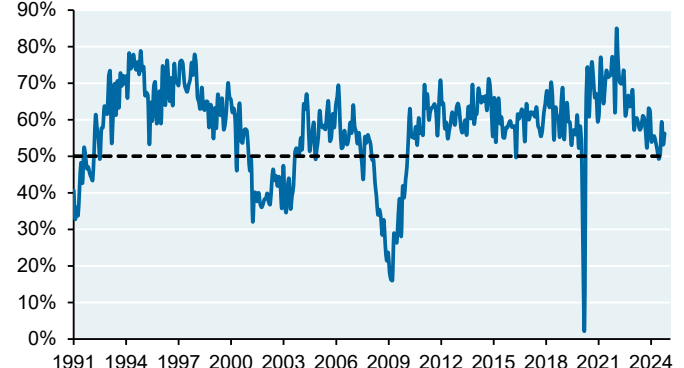
Source: BLS, Bloomberg, JPMAM, November 30, 2024

Difference between actual labor market data releases and analyst expectations, Percent



Source: Bloomberg, JPMAM, December 06, 2024

Share of industries with employment growth over last month plus half of those with no change, Percent



Source: Bloomberg, JPMAM, November 30, 2024

Wages in job postings => Wages



Source: Steno Research, Bloomberg, Indeed, JPMAM, November 30, 2024

US temporary help requirement



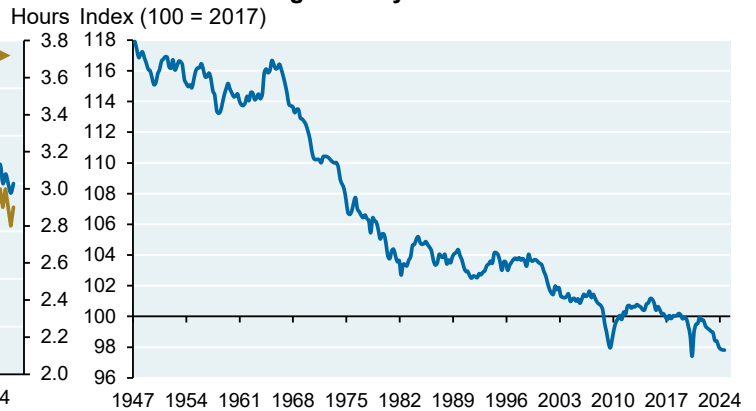
Source: Bloomberg, JPMAM, November 30, 2024

US average weekly hours of manufacturing employees



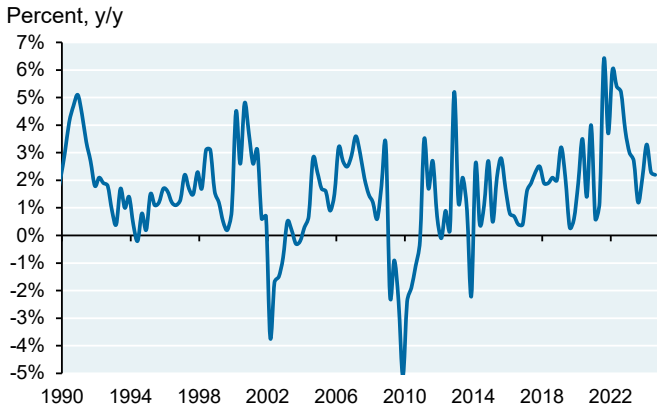
Source: Bloomberg, JPMAM, November 30, 2024

US nonfarm average weekly hours worked



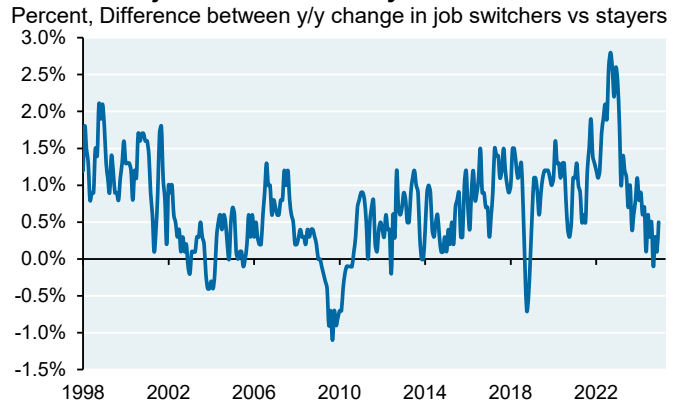
Source: BLS, JPMAM, September 30, 2024

Unit labor costs for US nonfarm business sector



Source: Bloomberg, JPMAM, Q3 2024

Premium of job switchers vs stayers



Source: Bloomberg, JPMAM, November 30, 2024

JOLTS voluntary quit rate



Source: Bloomberg, JPMAM, October 31, 2024

Labor market pressure gauge

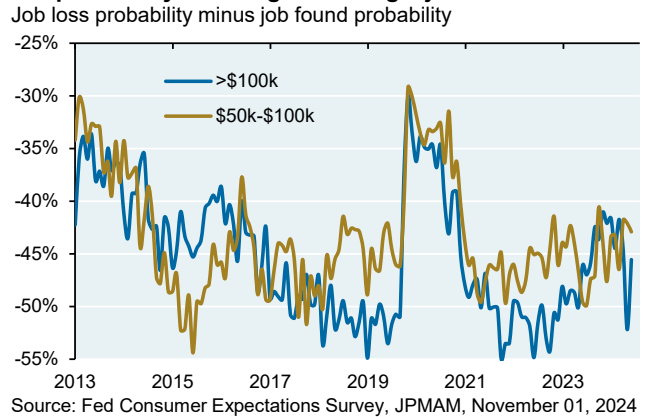


Source: BLS, JPMAM, October 2024

NAPM employment indicator



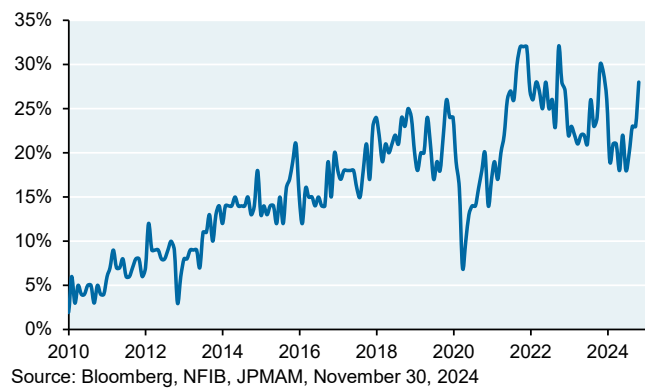
Net probability of losing vs finding a job



US small business job openings and plans to raise wages



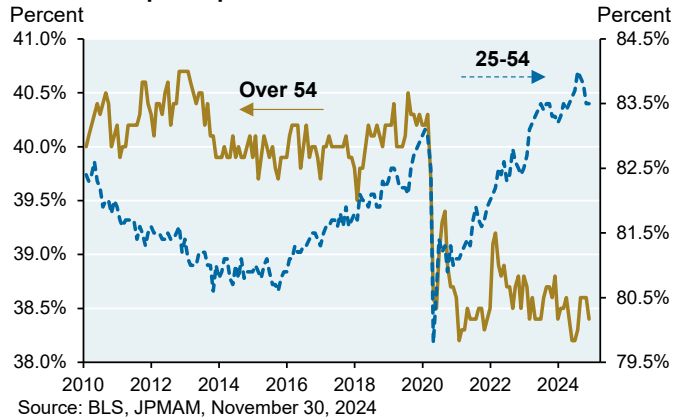
US small businesses planning to raise worker compensation, % of small business survey respondents



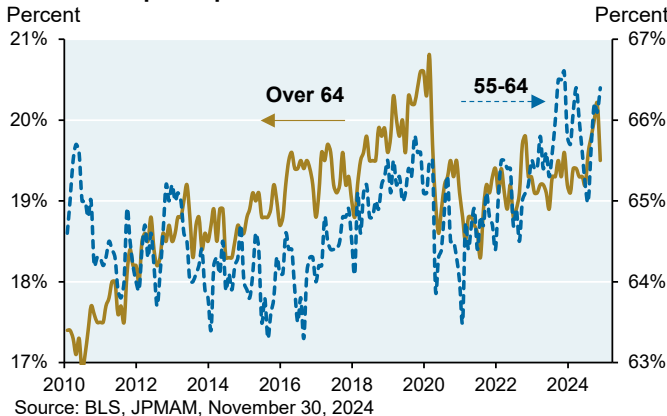
US labor force participation rate: Women 25-54 yrs old



Labor force participation rate



Labor force participation rate

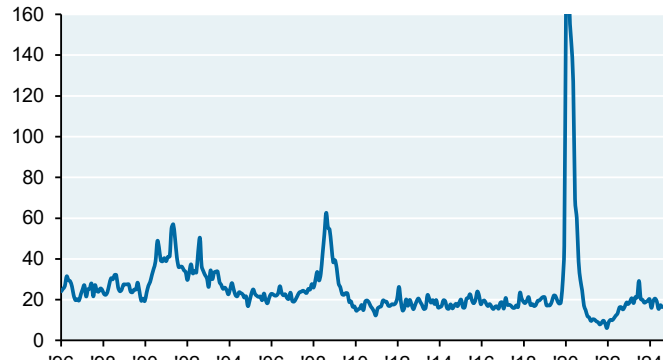


Excess labor demand



WARN notices

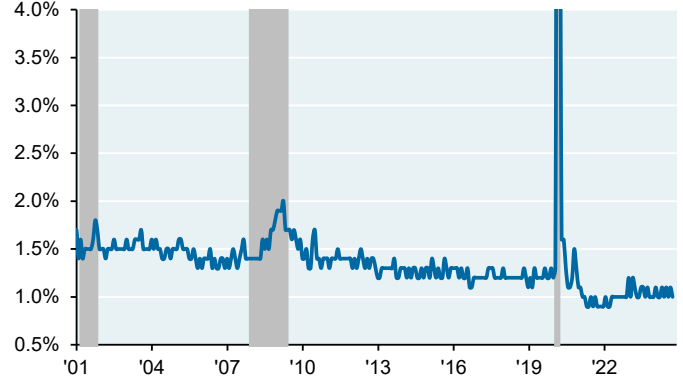
Number of implied layoffs, thousands



Source: FRB of Cleveland, JPMAM, October 31, 2024

JOLTS: layoffs and discharges

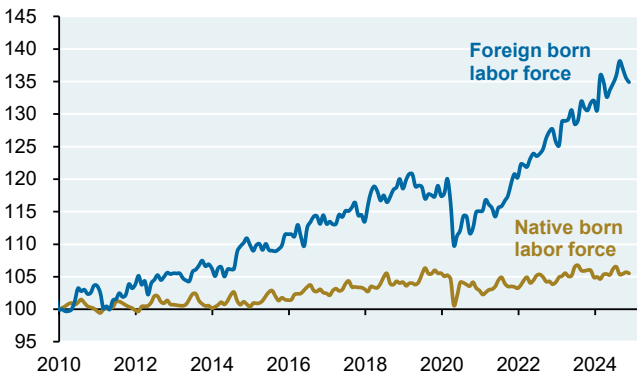
Rate, seasonally adjusted



Source: Bureau of Labor Statistics, JPMAM, October 31, 2024

US labor force growth

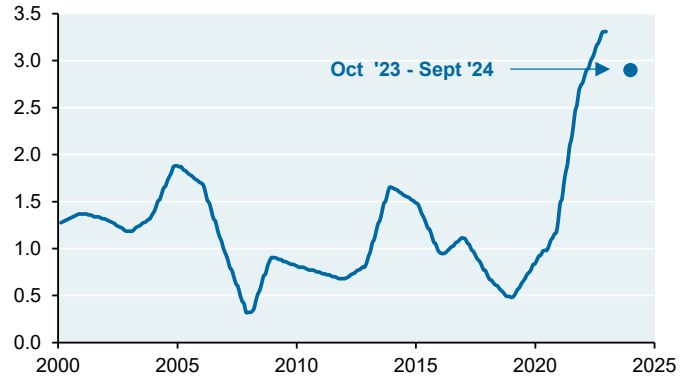
Index (100 = December 2009)



Source: Bloomberg, JPMAM, November 30, 2024

Net immigration by year

Millions of people

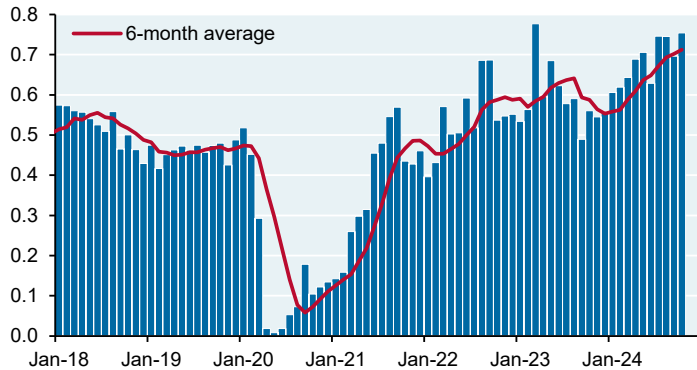


Source: CBO, CBP, 2024

Note: An analysis of immigration inflows and core CPI inflation shows no impact in the year of the immigration inflow, but does show a lagged decline in CPI in the following year.

Immigrant (permanent) visa issuances

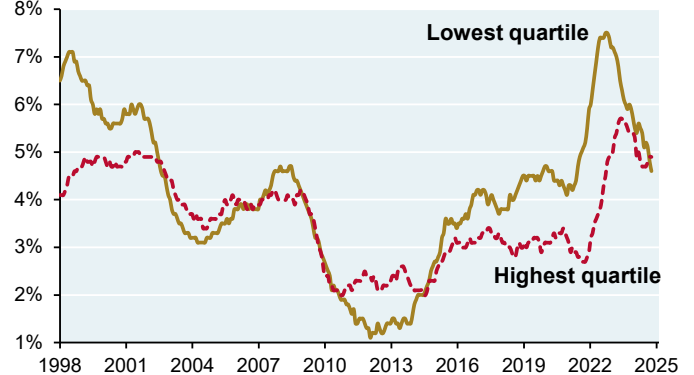
Millions, annual rate



Source: US Department of State, JPMAM, October 31, 2024

Atlanta Fed Wage Growth Tracker

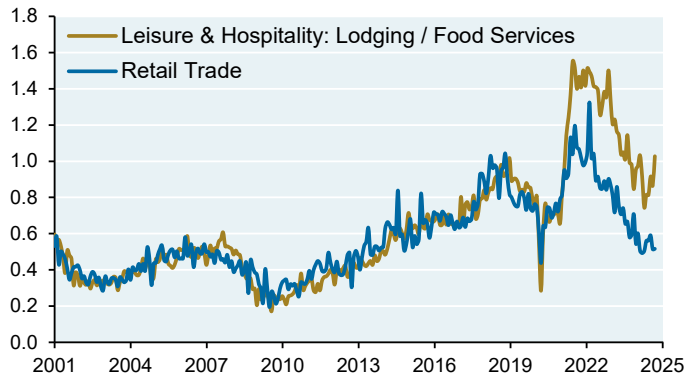
Percent



Source: Bloomberg, JPMAM, November 30, 2024

US job openings by industry

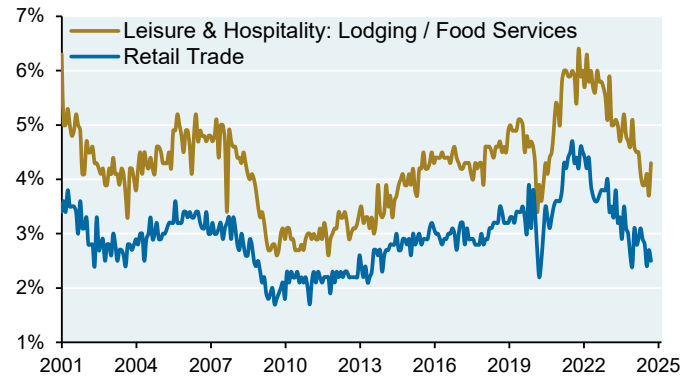
Number of openings, millions



Source: Bloomberg, JPMAM, October 31, 2024

JOLTS quit rate by industry

Percent

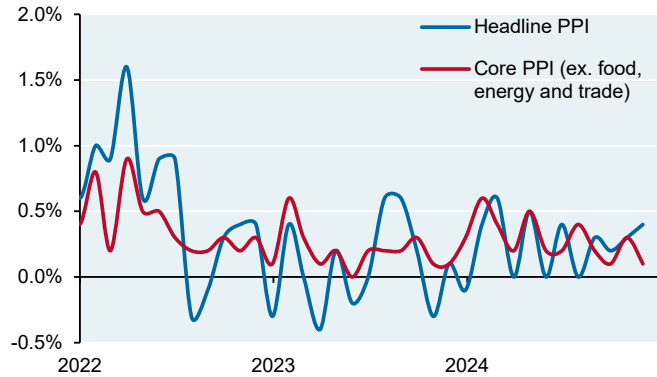


Source: Bloomberg, JPMAM, October 31, 2024

Producer, import and supply chain prices

Headline vs core PPI

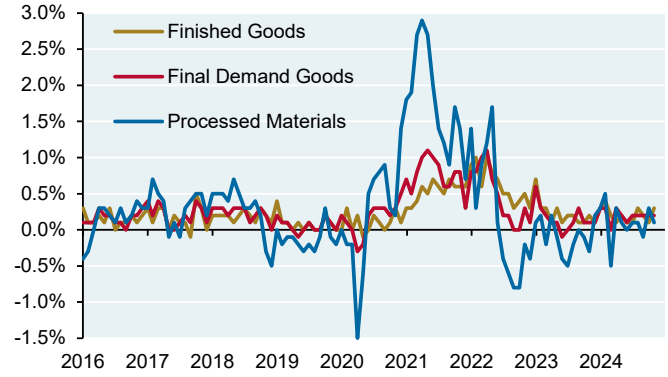
Percent, m/m



Source: BLS, JPMAM, November 30, 2024

Key core goods PPI components

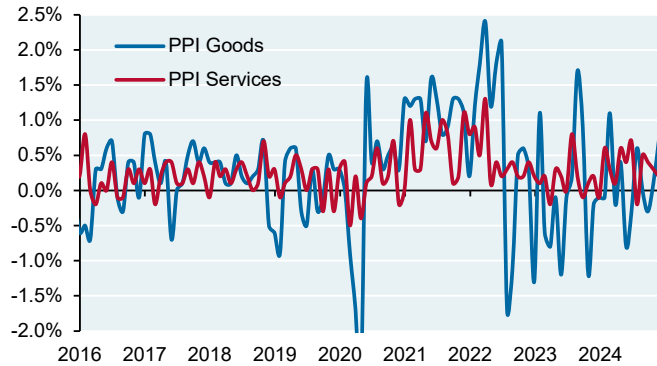
Percent, m/m



Source: Bloomberg, JPMAM, November 30, 2024

Goods vs services PPI

Percent, m/m

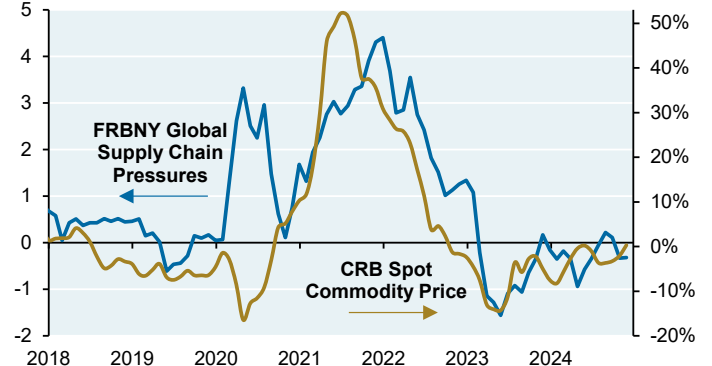


Source: BLS, JPMAM, November 30, 2024

Supply chain pressures vs commodity prices

Index, standard deviations

Percent, y/y

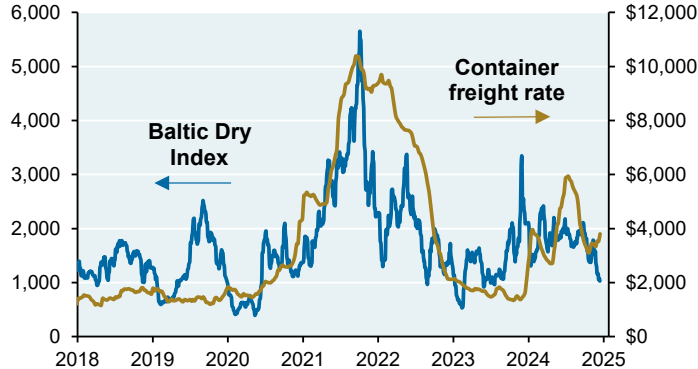


Source: Bloomberg, CRB, JPMAM, November 30, 2024

Shipping rates

Index

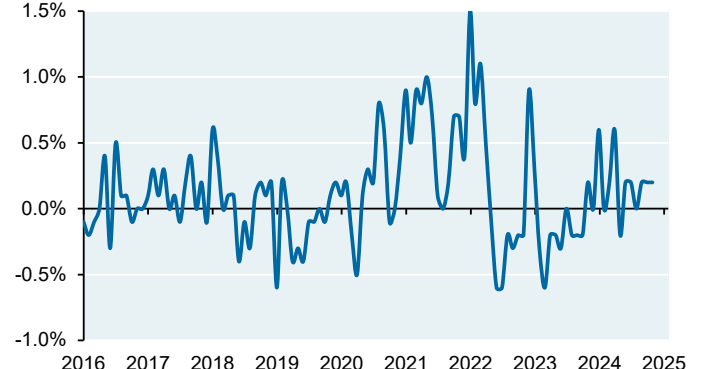
US\$ / 40ft box



Source: Bloomberg, JPMAM, December 19, 2024

US Import Price Index of Goods (ex-Petroleum)

Percent, m/m



Source: Bloomberg, JPMAM, November 2024

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