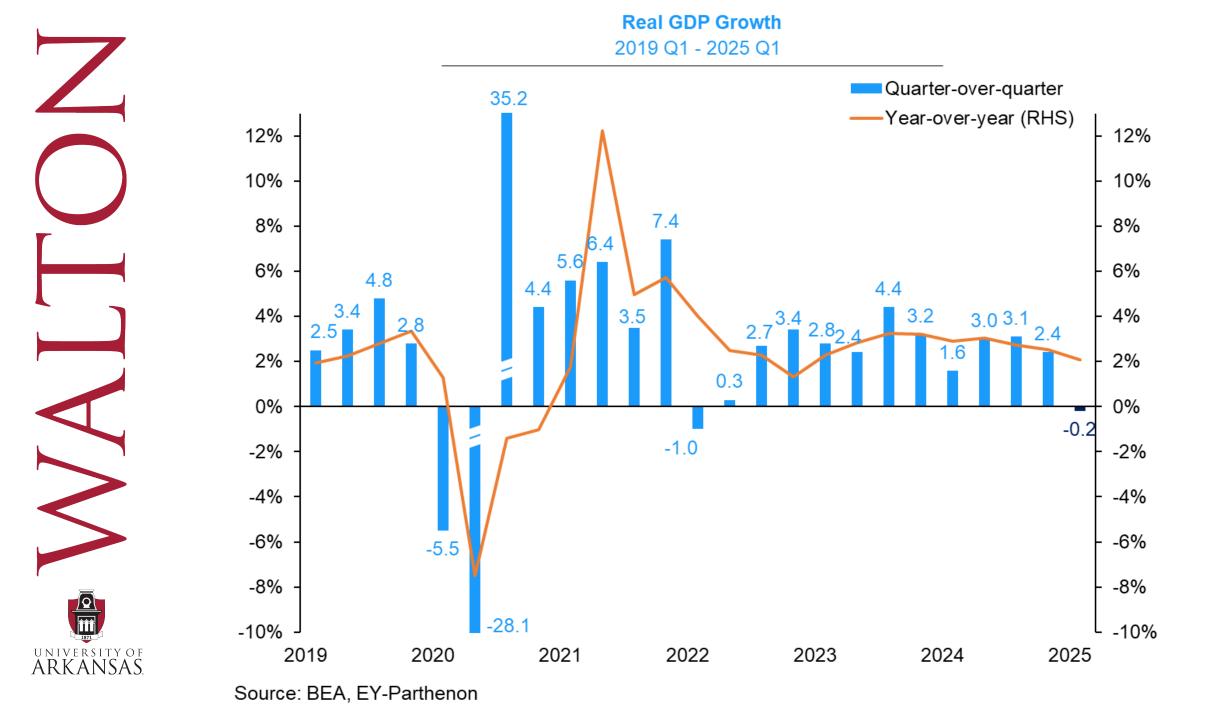
Quarterly Business Analysis

Mervin Jebaraj, Director Center for Business and Economic Research June 18, 2025

Twitter: @MervinJebaraj

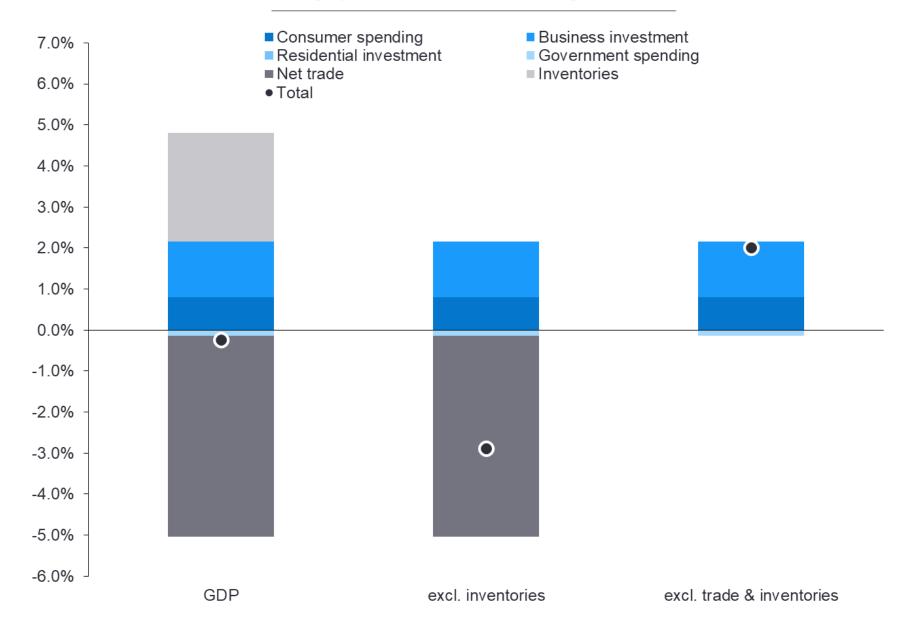
Slides: cber.uark.edu



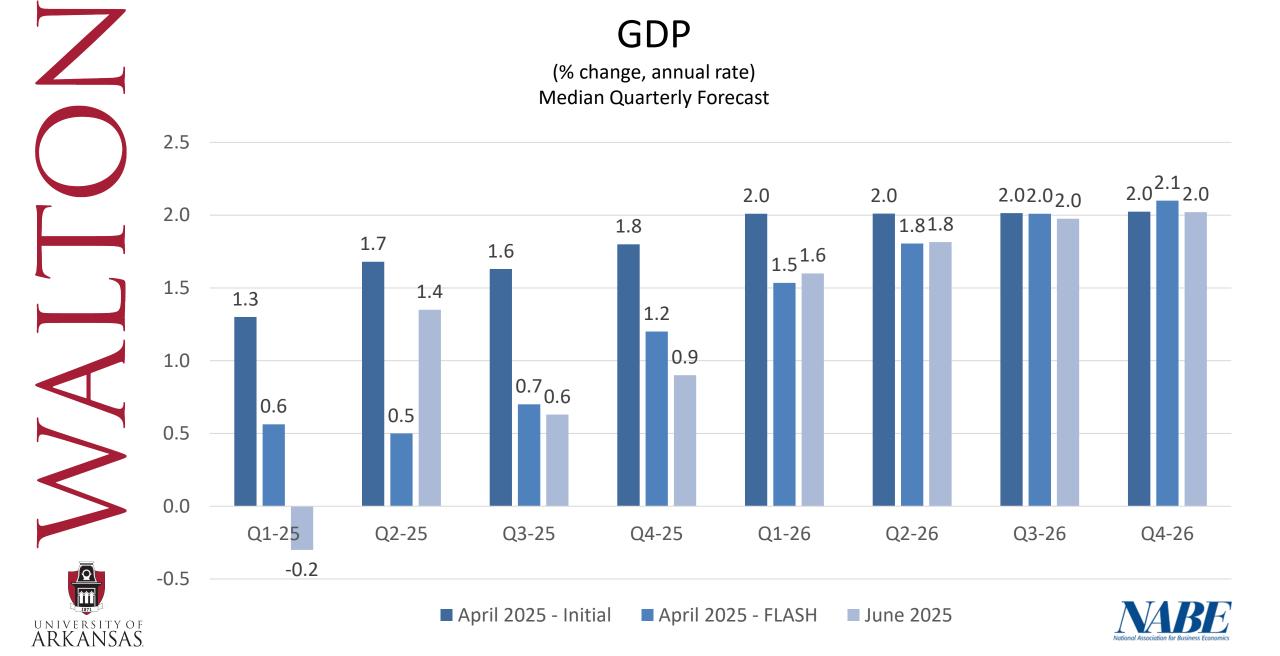
UNIVERSITY OF ARKANSAS.

Real GDP

Percentage points contribution to GDP growth in Q1 2025



Source: BEA; EY-Parthenon





The Economist

Xi's latest purge

Don't mess with the Fed

Africa's unstoppable diaspora

When AIs break the rules

APRIL 26TH-MAY 2ND 2025



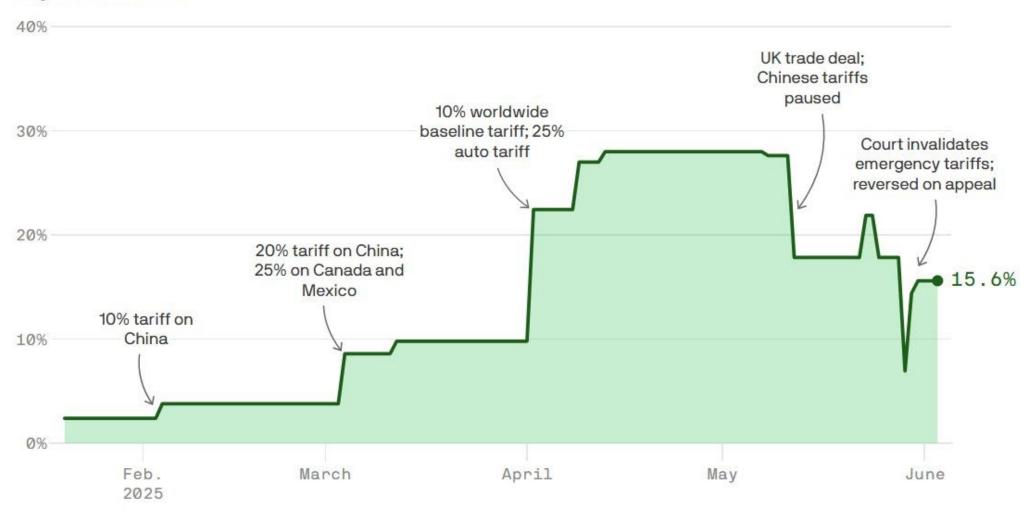
lust. y Curr

ust

growth?

Average effective tariff rate

Daily, Jan. 20 to June 3, 2025



Data: Budget Lab at Yale; Chart: Axios Visuals

Figure 2. U.S. Average Effective Tariff Rate Since 1790

Customs duty revenue as a percent of goods imports



^{*} Includes 50% steel & aluminum tariff.

Chart: The Budget Lab • Source: Historical Statistics of the United States Ea424-434, Monthly Treasury Statement, Bureau of Economic Analysis, The Budget Lab analysis. • Created with Datawrapper



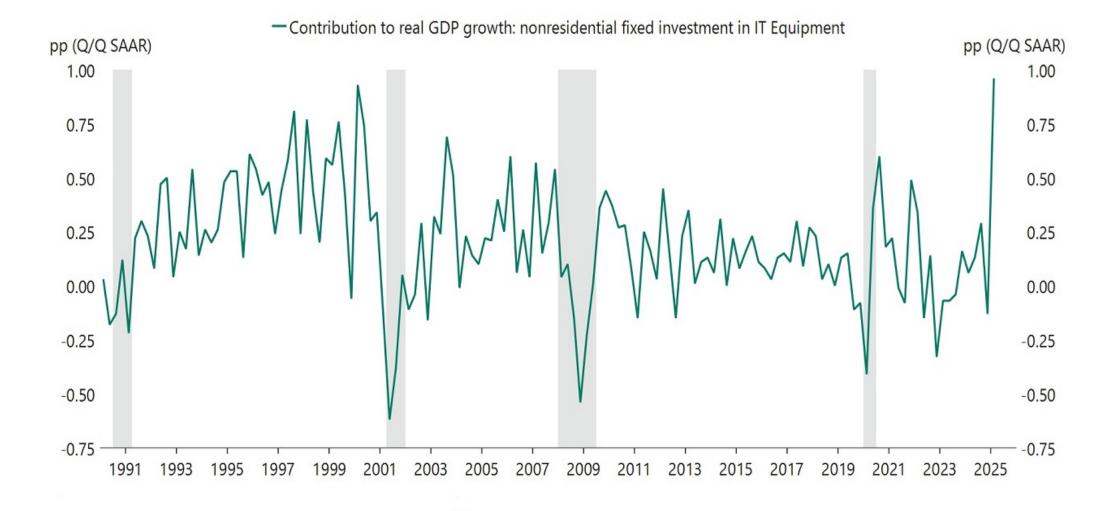


Real US GDP (Current Estimate)

(Percent change, annualized)

| | 2024Q1 | 2024Q2 | 2024Q3 | 2024Q4 | 2025Q1 | YoY |
|---------------------------|--------|--------|--------|--------|--------|------|
| GDP | 1.6 | 3.0 | 3.1 | 2.4 | -0.3 | 2.1 |
| Consumer spending | 1.9 | 2.8 | 3.7 | 4.0 | 1.8 | 3.1 |
| Durables | -1.7 | 5.4 | 7.6 | 12.4 | -3.4 | 5.3 |
| Nondurables | -0.8 | 1.7 | 4.6 | 3.1 | 2.7 | 3.0 |
| Services | 3.4 | 2.7 | 2.8 | 3.0 | 2.4 | 2.7 |
| Fixed Investment | 6.5 | 2.3 | 2.1 | -1.1 | 7.8 | 2.7 |
| Nonresidential investment | 4.5 | 3.9 | 4.0 | -3.0 | 9.8 | 3.6 |
| Structures | 6.2 | 0.2 | -5.0 | 2.9 | 0.4 | -0.4 |
| Equipment | 0.3 | 9.9 | 10.8 | -8.7 | 22.5 | 8.0 |
| Intellectual property | 7.5 | 0.7 | 3.1 | -0.5 | 4.1 | 1.8 |
| Residential investment | 13.7 | -2.8 | -4.3 | 5.5 | 1.3 | -0.1 |
| Exports | 1.9 | 1.0 | 9.6 | -0.2 | 1.8 | 40.7 |
| Imports | 6.1 | 7.6 | 10.7 | -1.9 | 41.3 | 3.0 |
| Government spending | 1.8 | 3.0 | 5.1 | 3.1 | -1.5 | 13.4 |
| Federal | -0.4 | 4.3 | 8.9 | 4.0 | -5.1 | 2.4 |
| Federal Defense | -2.5 | 6.5 | 13.9 | 4.8 | -8.0 | 2.9 |
| Federal Nondefense | 2.6 | 1.6 | 2.6 | 2.9 | -1.0 | 4.0 |
| State & Local | 3.1 | 2.3 | 2.9 | 2.5 | 8.0 | 1.5 |

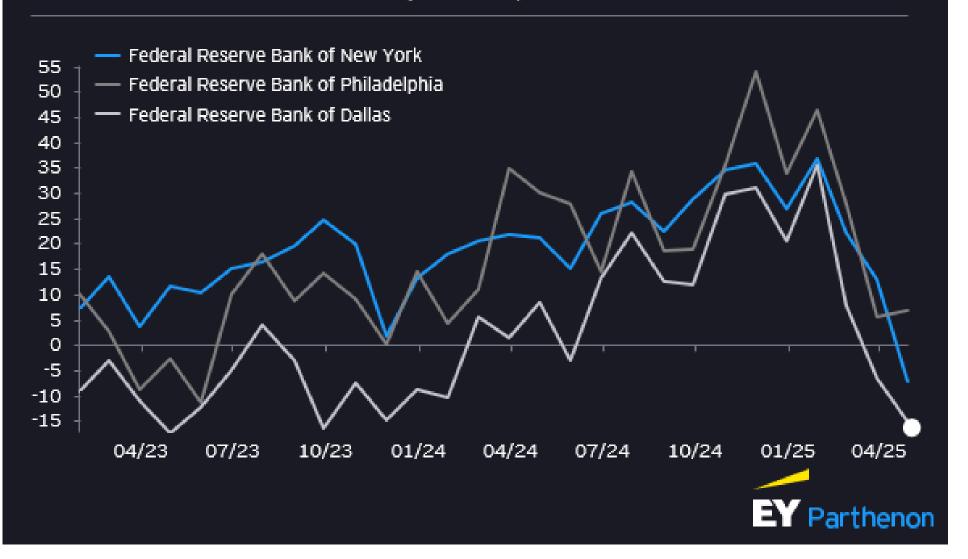
Source: EY-Parthenon, BEA



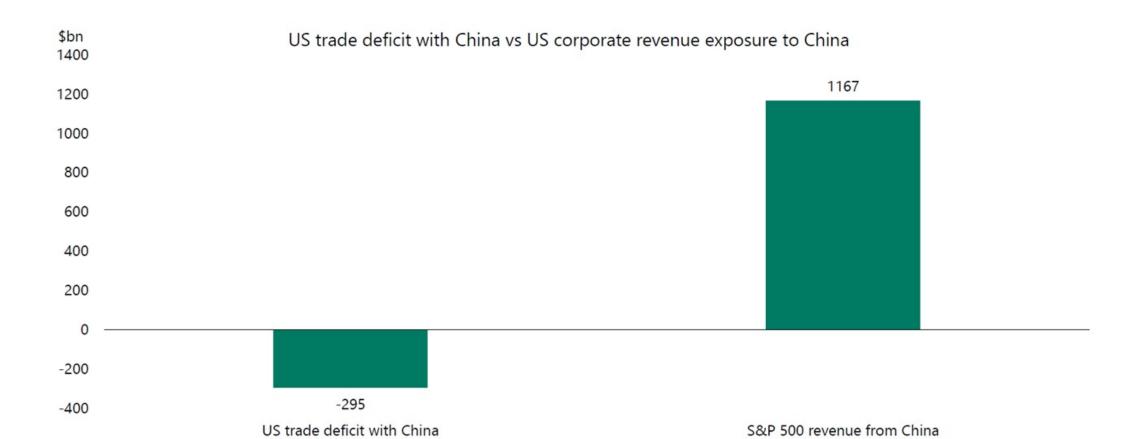




General business condition expectations¹ January 2023-April 2025

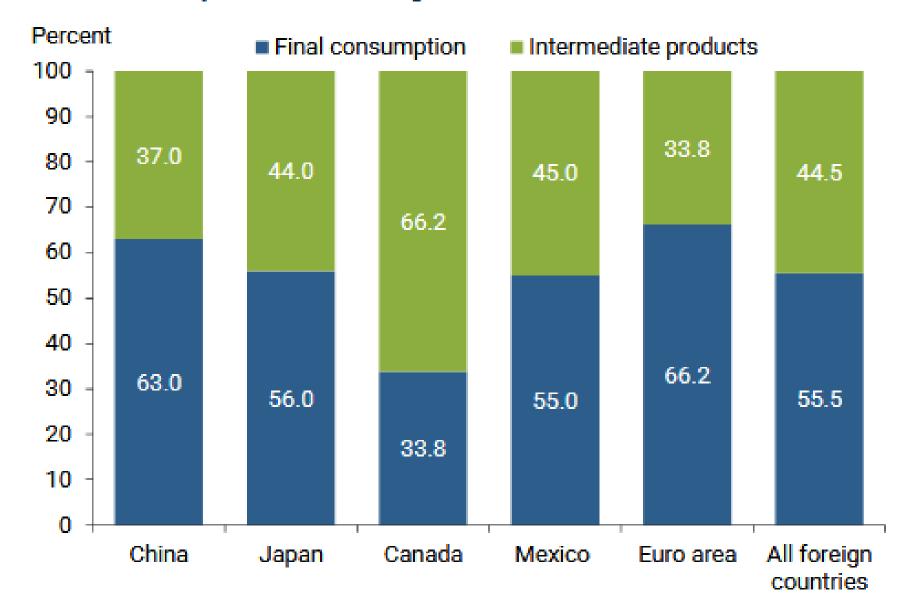


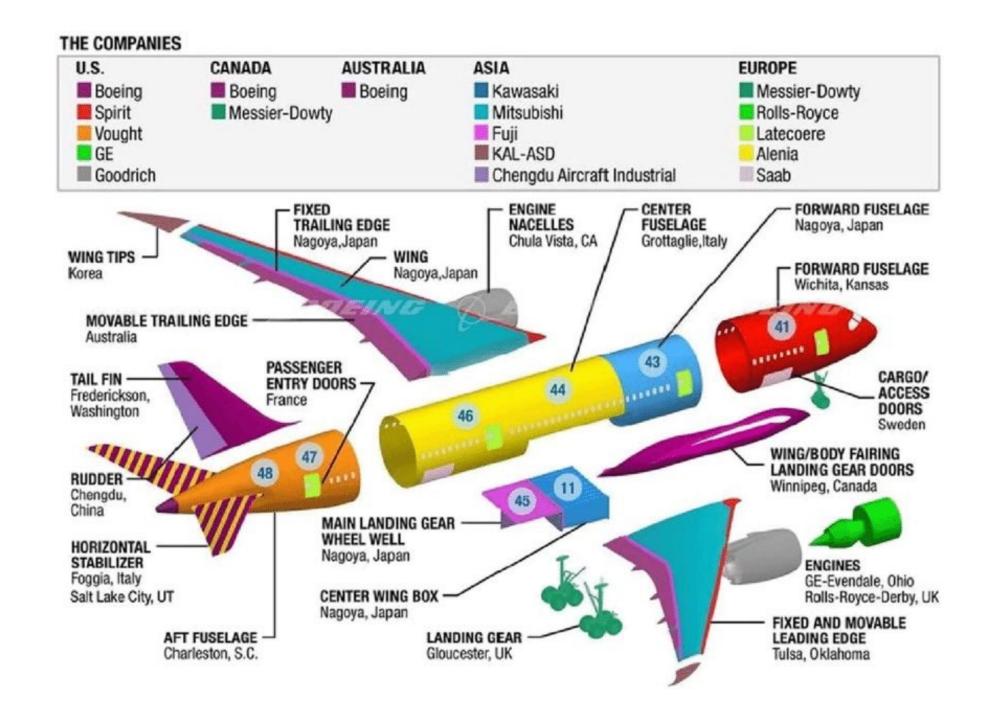
S&P 500 revenue from China is roughly four times the US trade deficit with China

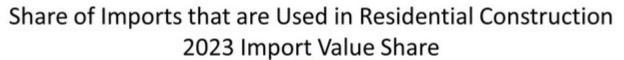


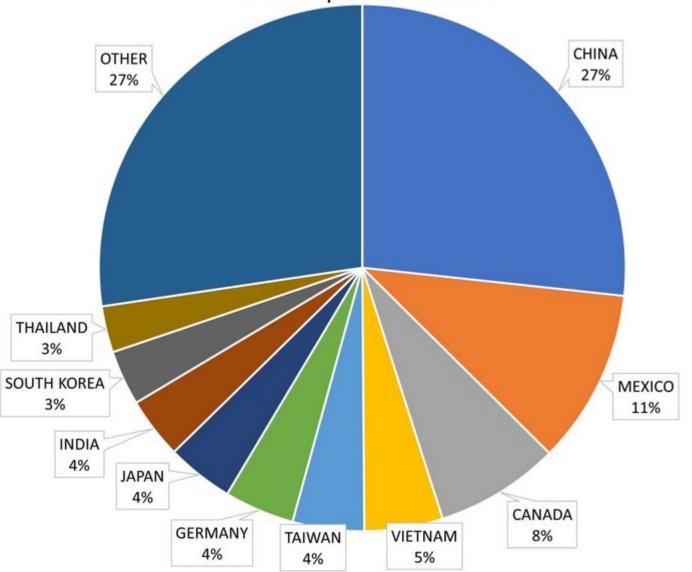


Where do imports "from..." go?









NORTH AMERICAN AUTO SUPPLY CHAIN

A transmission module, through seven steps, starts life in Ontario as scrap metal and goes back and forth across the border seven times. This is a summary of that journey.



SUPPLY CHAIN STEPS









Scrap metal from Guelph sent to smelter









Ohio plant sends to Linamar a part called a hub made from the smelted steel









Aluminum housings from plant in Mexico's Coahuila state









Other parts for assembly process supplied from Illinois









Parts sent to transmission assembly plant









Completed transmissions sent for vehicle assembly





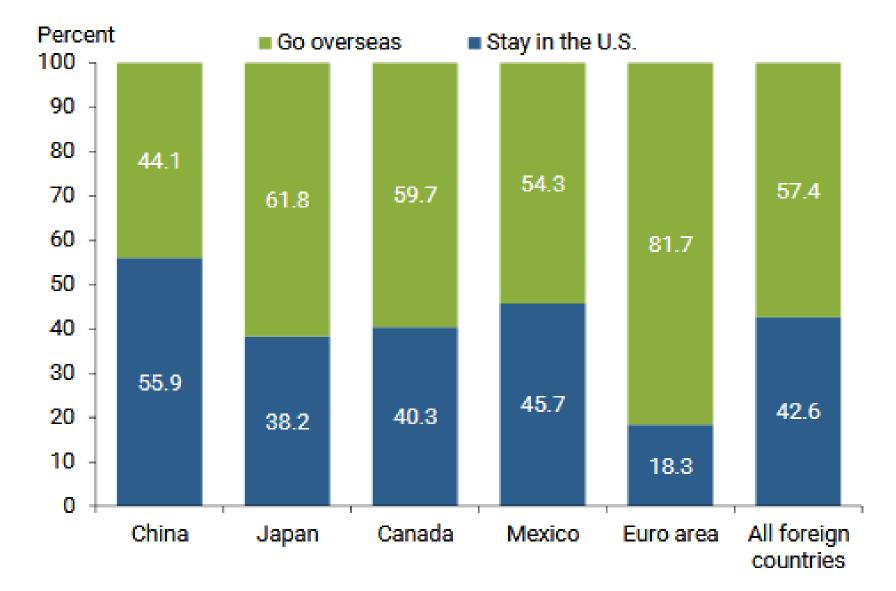




Vehicles delivered to dealership network



Where do expenditures on "made in..." go?



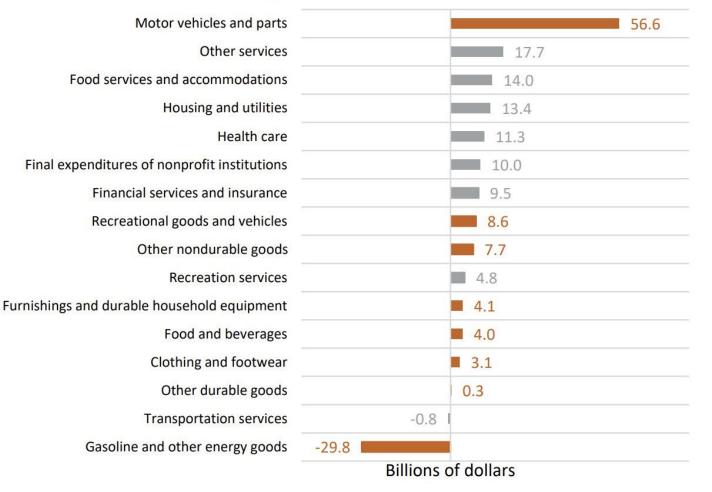




Changes in Monthly Consumer Spending, March 2025

Consumer spending increased \$134.5 billion



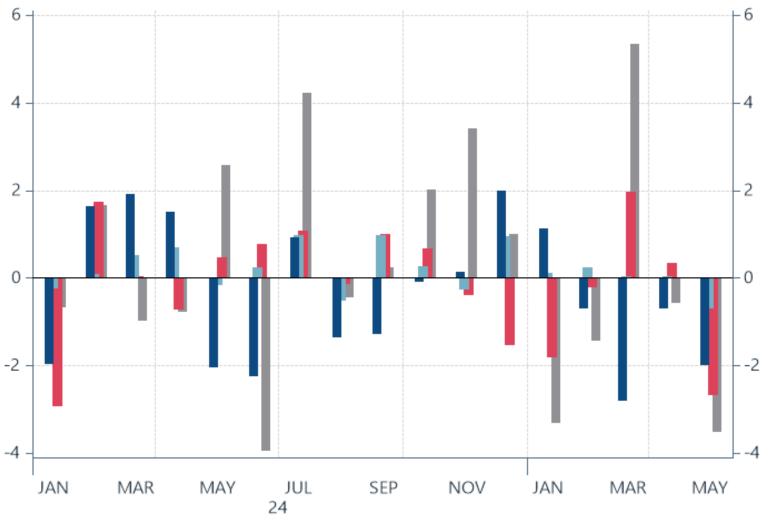


diff%(Retail Sales: Gasoline Stations (SA, \$))

diff%(Retail Sales: Food & Beverage Stores (SA, \$))

diff%(Retail Sales: Building Materials, Garden Equipment & Supply Dealers (SA, \$)

diff%(Retail Sales: Motor Vehicle & Parts Dealers (SA, \$))

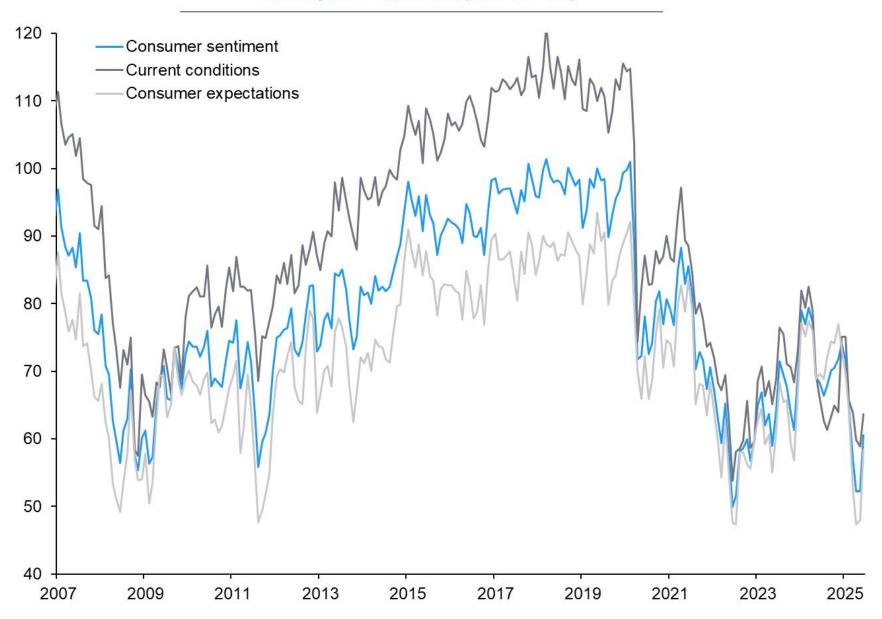


Source: @ernietedeschi analysis/Census Bureau/Haver Analytics

University of Michigan consumer sentiment index

January 2007 - June 2025 (1966 Q1=100)



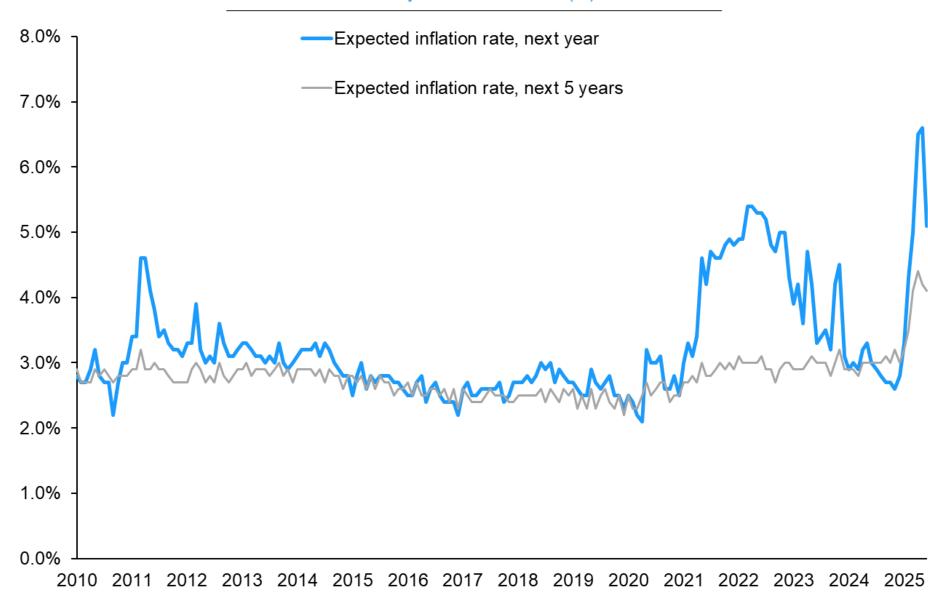


Source: University of Michigan; EY-Parthenon



University of Michigan inflation expectations

January 2010 - June 2025 (%)

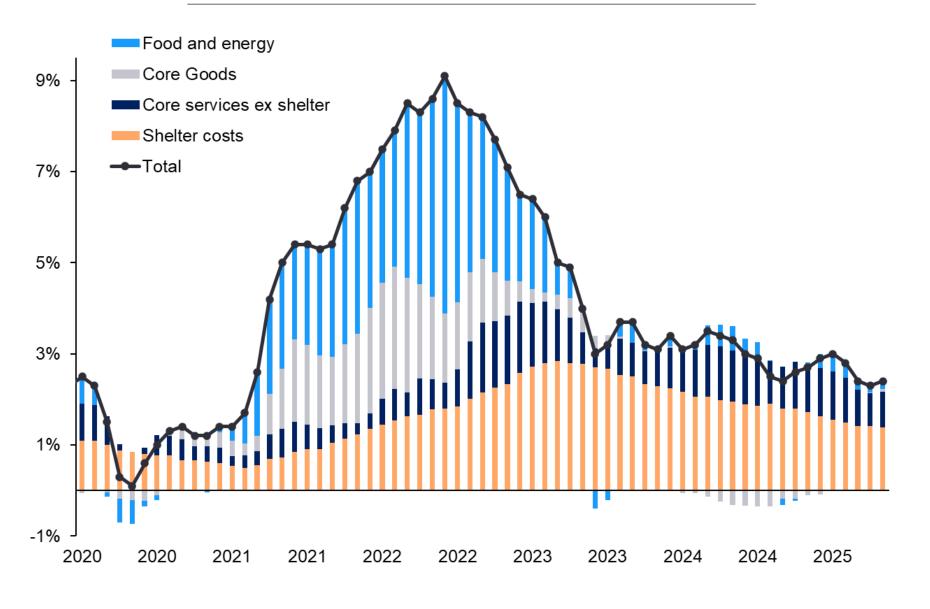


Source: University of Michigan; EY-Parthenon

Year-over-year percent change in consumer price index (CPI)

January 2020 - May 2025





Source: BLS; EY-Parthenon

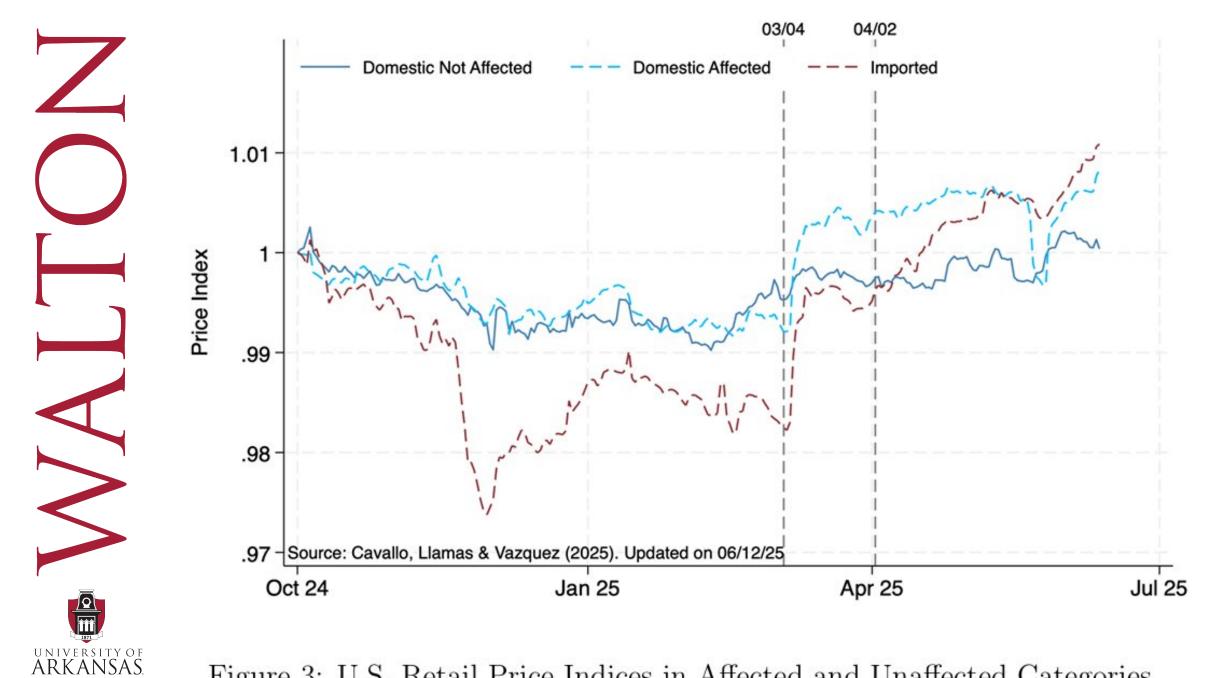
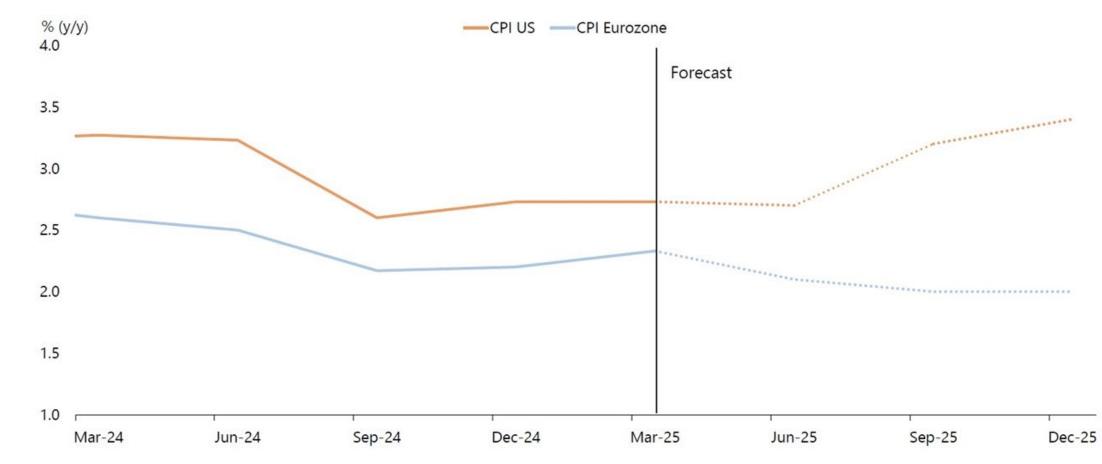


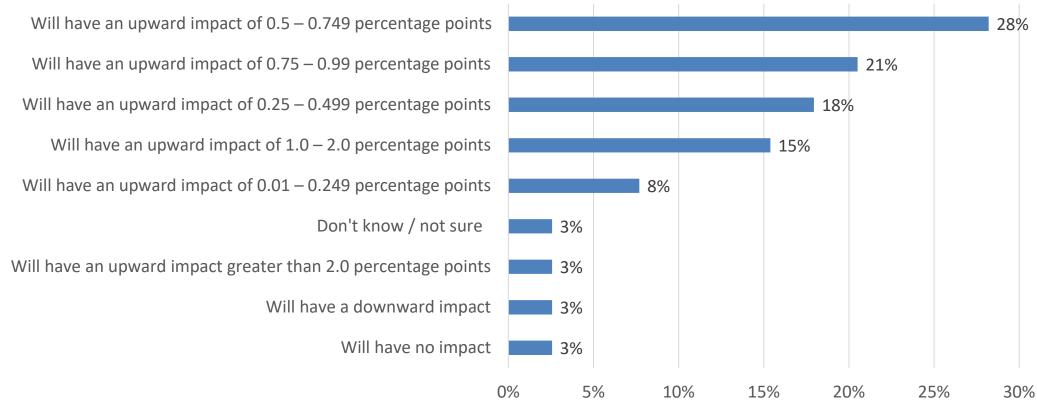
Figure 3: U.S. Retail Price Indices in Affected and Unaffected Categories

Consensus expects inflation to rise in the US and fall in Europe





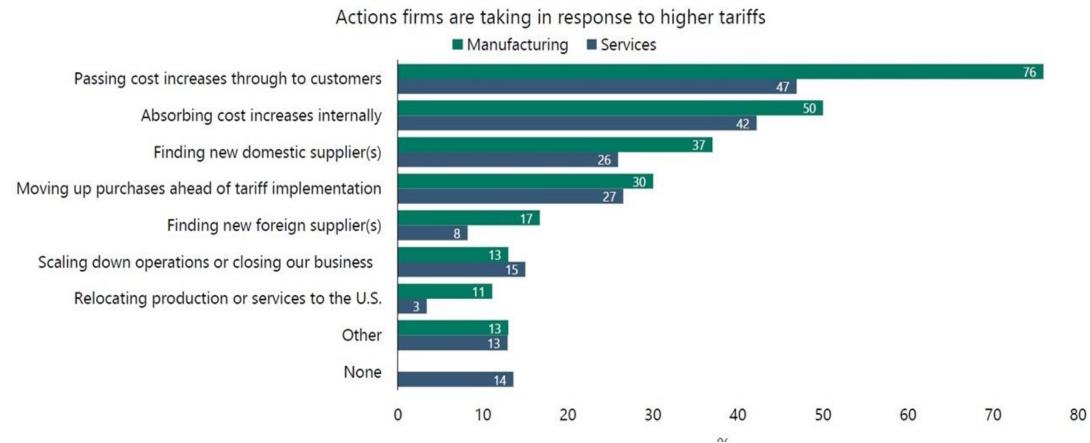
What do you expect the impact of tariffs will be on the annual pace of personal consumption expenditure (PCE) price index inflation in 2025?



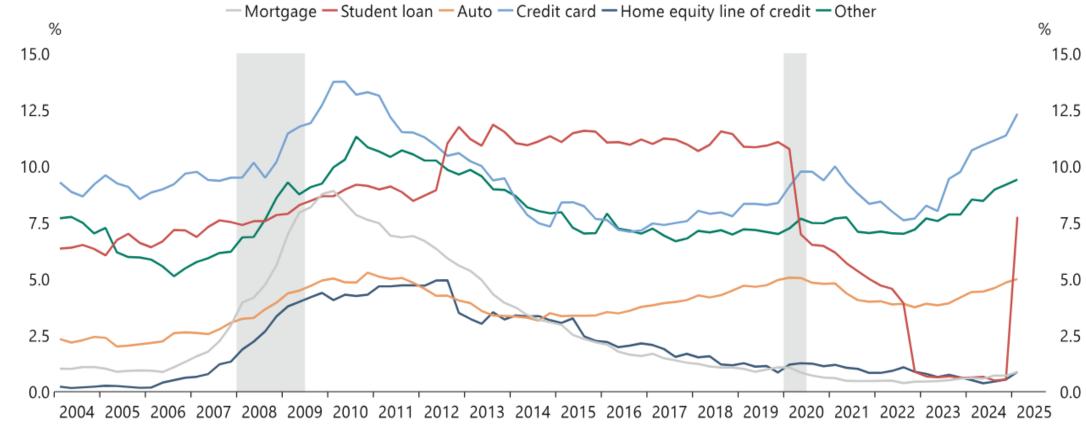




Firms plan to pass tariff-related costs to consumers



Percent of balance 90+ days delinquent

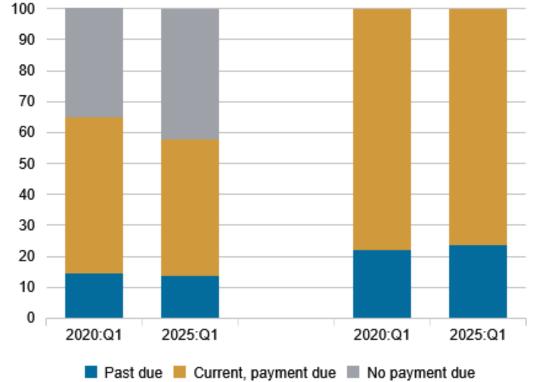






Fewer Student Loan Borrowers Are in Repayment, but a Higher Share Is Delinquent

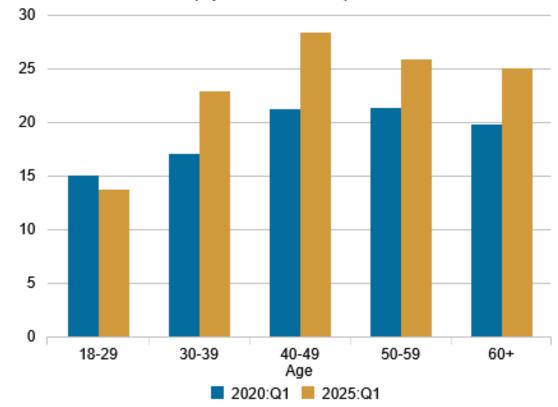




Sources: New York Fed Consumer Credit Panel/Equifax; author's calculations.

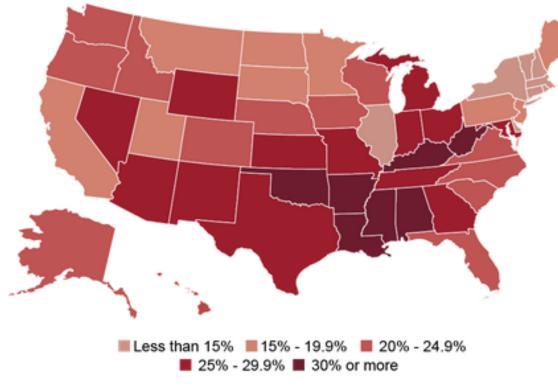
More Than a Quarter of Student Loan Borrowers over 40 with a Payment Due Are Delinquent

Percent of borrowers with payment due that are past due



The Highest Rates of Student Loan Delinquency Are Concentrated in the South

Share of borrowers with payment due that are past due



Sources: New York Fed Consumer Credit Panel/Equifax; author's calculations.

Note: The map shows the share of borrowers within each state that have at least one student loan that is ninety or more days past due or in default as a share of the borrowers in each state with at least one student loan in repayment.



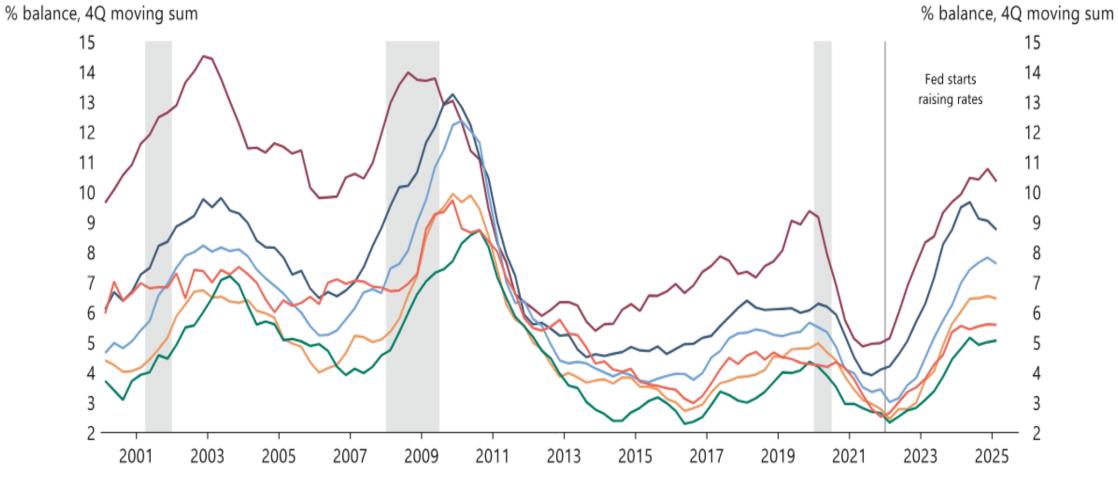
Almost Half of Newly Past Due Face Damage to Previous Credit Access

| Credit score group | Count (millions) | Share of newly delinquent population | Average credit score change |
|-----------------------|---------------------|--------------------------------------|-----------------------------|
| Less than 620 | 3.2 | 56.6% | -74 |
| 620 - 719 | 2 | 35.9% | -140 |
| Greater than 720 | 0.4 | 7.5% | -177 |

Sources: New York Fed Consumer Credit Panel/Equifax; author's calculations.

Credit card transitions to serious delinquency (90+), by age

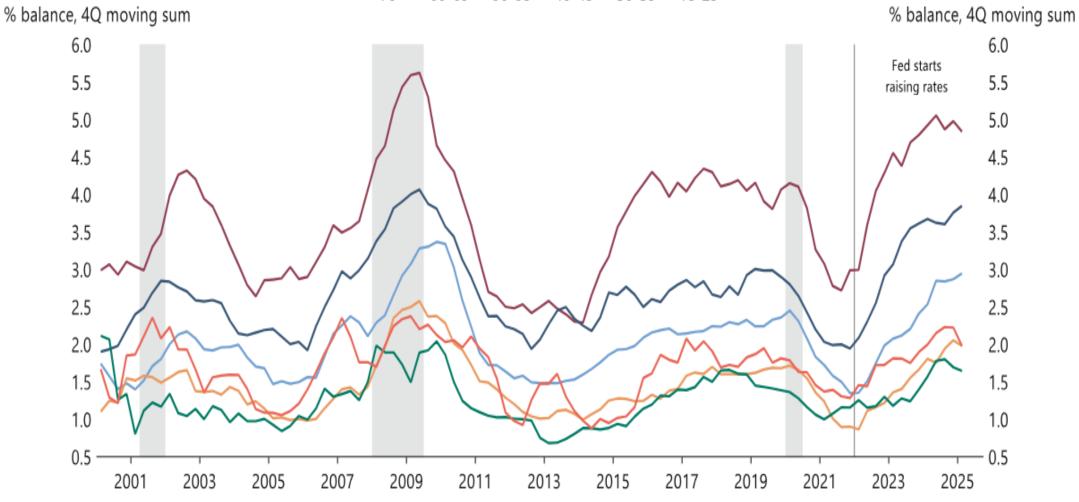
$$-70+$$
 $-60-69$ $-50-59$ $-40-49$ $-30-39$ $-18-29$





Auto loan transitions to serious delinquency (90+), by age

$$-70+$$
 $-60-69$ $-50-59$ $-40-49$ $-30-39$ $-18-29$

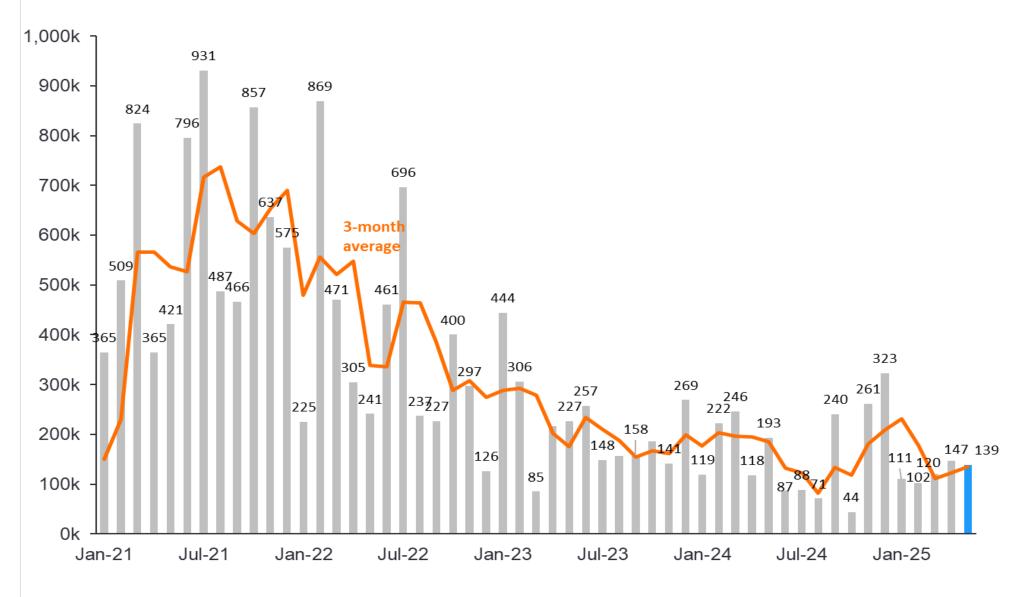




Source: Federal Reserve Bank of New York, Macrobond, Apollo Chief Economist

Month-over-month change in total nonfarm employment

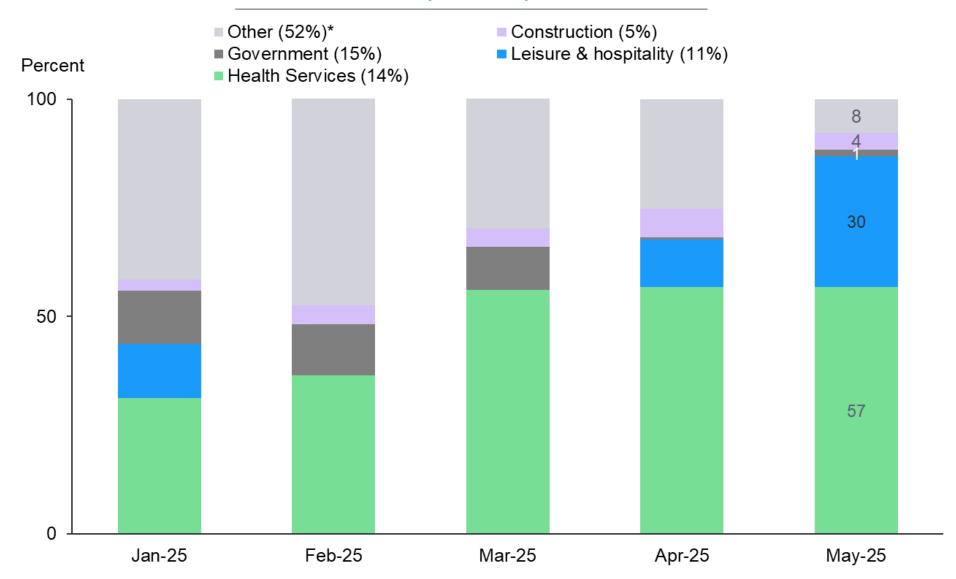
January 2021 - May 2025



Source: BLS; EY-Parthenon

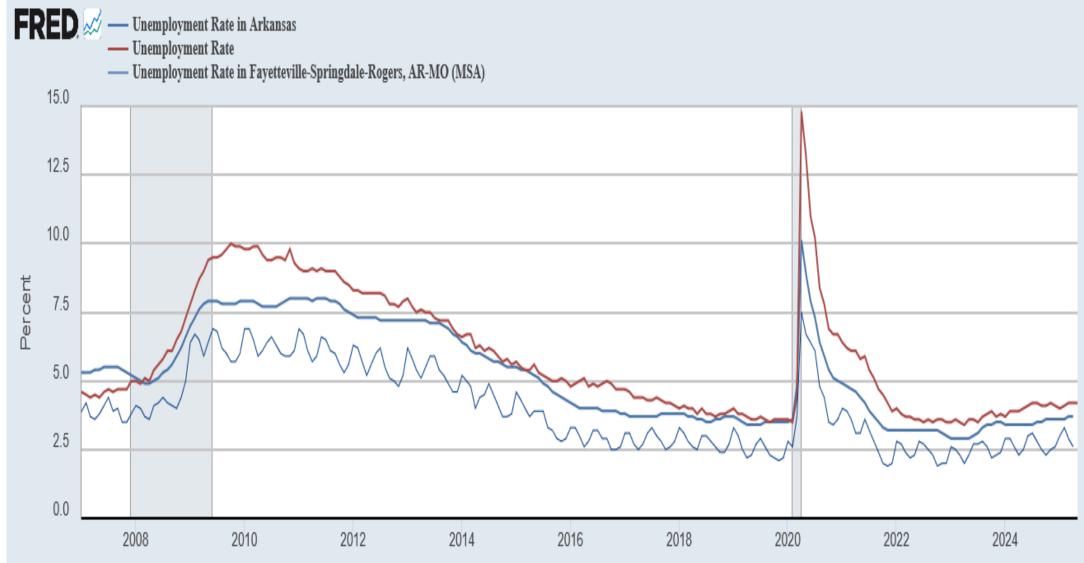
Share of total payroll gains by sector on a 3-month rolling average

January 2025 - May 2025



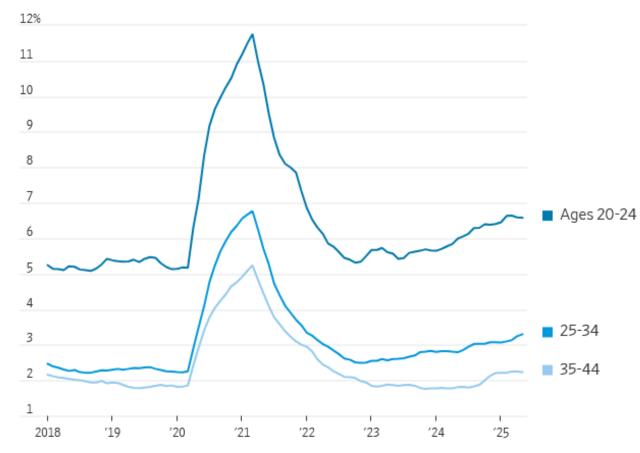
* (Share of total employment) Source: BLS; EY-Parthenon





Source: U.S. Bureau of Labor Statistics via FRED® Shaded areas indicate U.S. recessions.

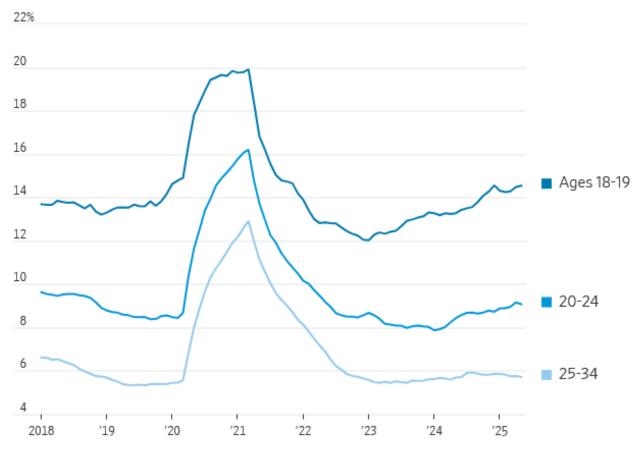
Unemployment rate by age, bachelor's degree



Note: 12-month moving average

Source: Labor Department via St. Louis Fed

Unemployment rated by age, high-school degree, no college

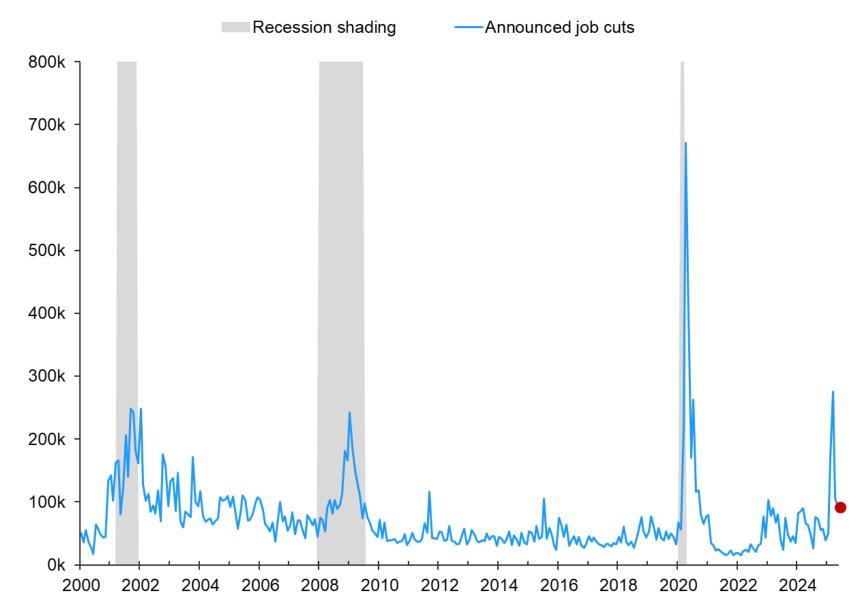


Note: 12-month moving average Source: Labor Department

US announced job cuts





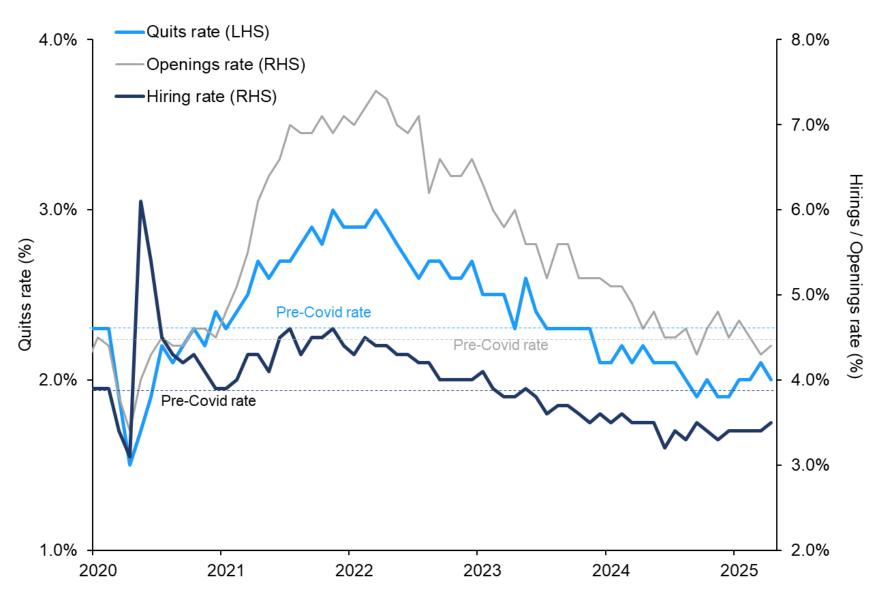


Source: Challenger, Gray & Christmas; Haver Analytics; EY-Parthenon

JOLTS¹ openings rate vs quits rate

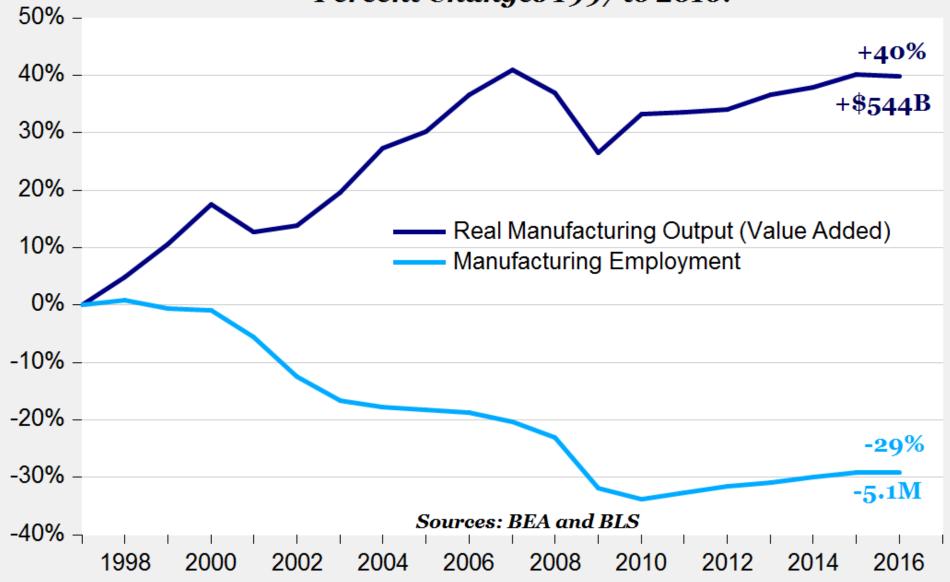
January 2020 - April 2025





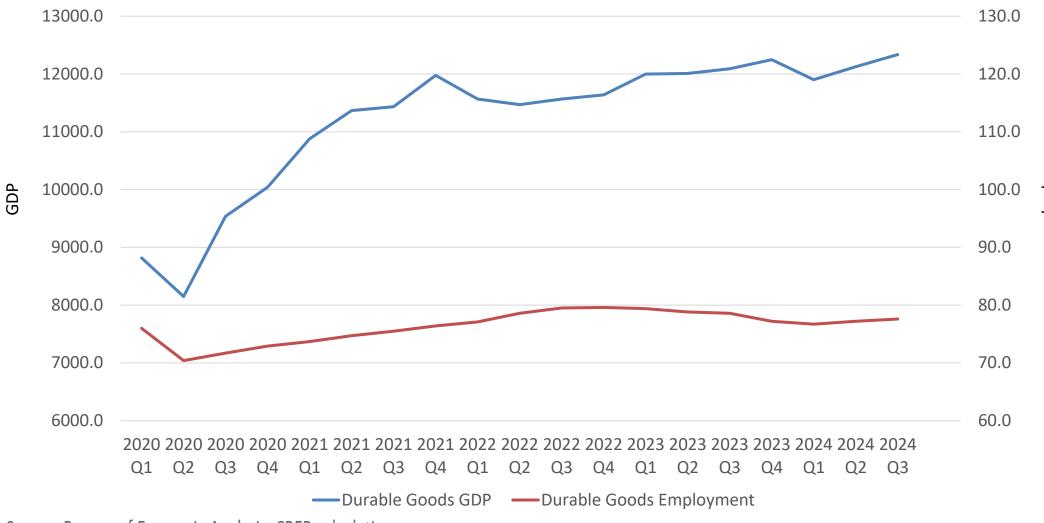
Source: BLS; EY-Parthenon

Real Manufacturing Output vs. Manufacturing Employment Percent Changes 1997 to 2016:



Carpe Diem

Arkansas Durable Goods Manufacturing Output v Jobs



Source: Bureau of Economic Analysis, CBER calculations

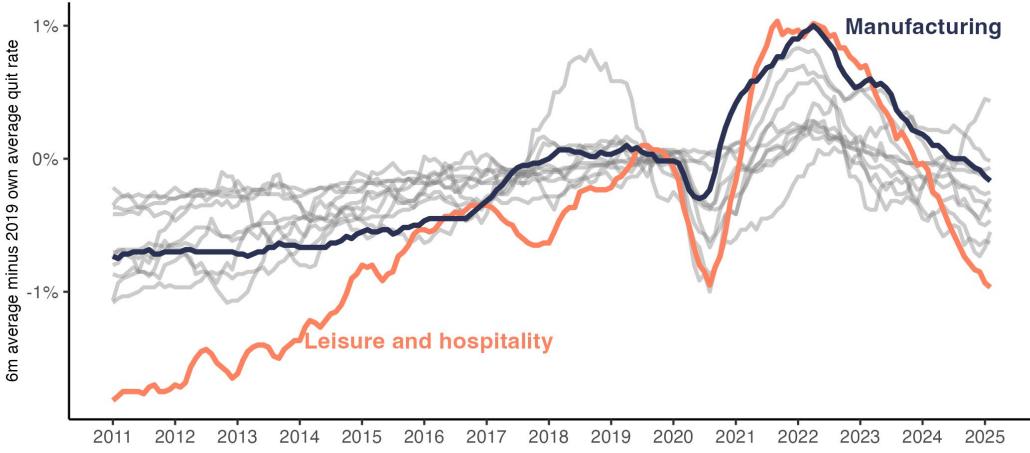
g) America would be better off if more Americans works in manufacturing than they do today

| SUM-agree | 80% |
|---------------|-----|
| SIIM-disagree | 20% |

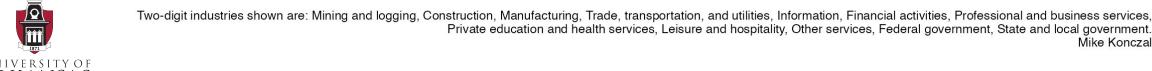
9) [IF NOT RETIRED/NOT EMPLOYED IN MANUFACTURING] I would be better off if I worked in a factory instead of my current field of work.

| SUM-agree | 25% |
|--------------|-----|
| SUM-disagree | 73% |

Figure 3: Manufacturing Rivals Hospitality For Highest Absolute Increase in Quits During Pandemic JOLTS quit rate by two-digit industries, six-month average, absolute change compared to 2019 annual.



Mike Konczal







Buc-ee's





Car Wash Attendant

Apply

- O TN Sevierville
- ▶ Posted 30+ Days Ago
- R2093

Overview

\$21.00 * Medical * Dental * Vision * 3 Weeks Paid Time Off * 401k 100% Match up to 6%



25 indeed.com/q-automotiv







Nissan Automotive Parts Sorting Technician

Yates Services

Smyrna, TN

\$18.57 - \$20.02 an hour

Dental insurance

401(k)

Health insurance

Paid time off

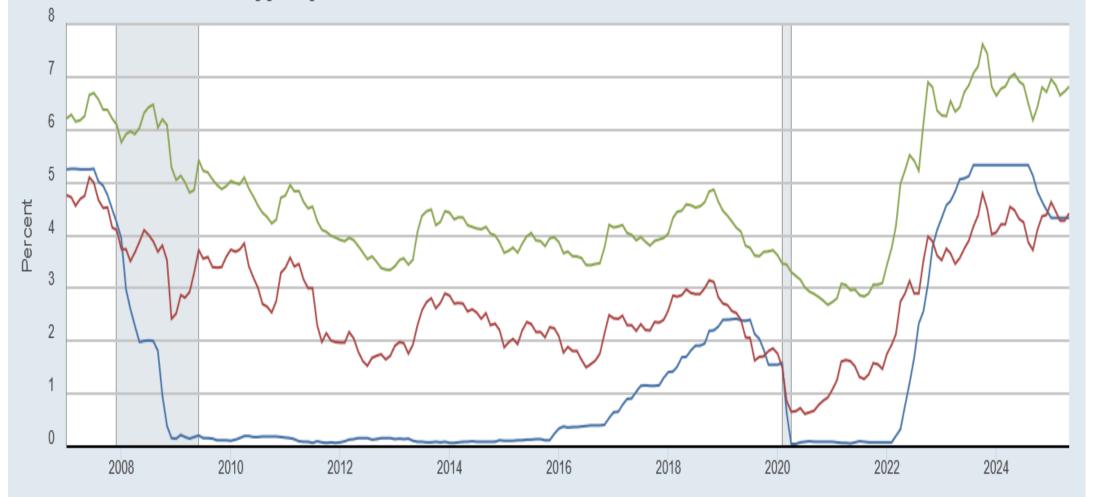
Paid holidays





— Market Yield on U.S. Treasury Securities at 10-Year Constant Maturity, Quoted on an Investment Basis

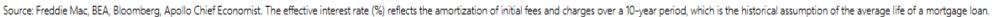
— 30-Year Fixed Rate Mortgage Average in the United States



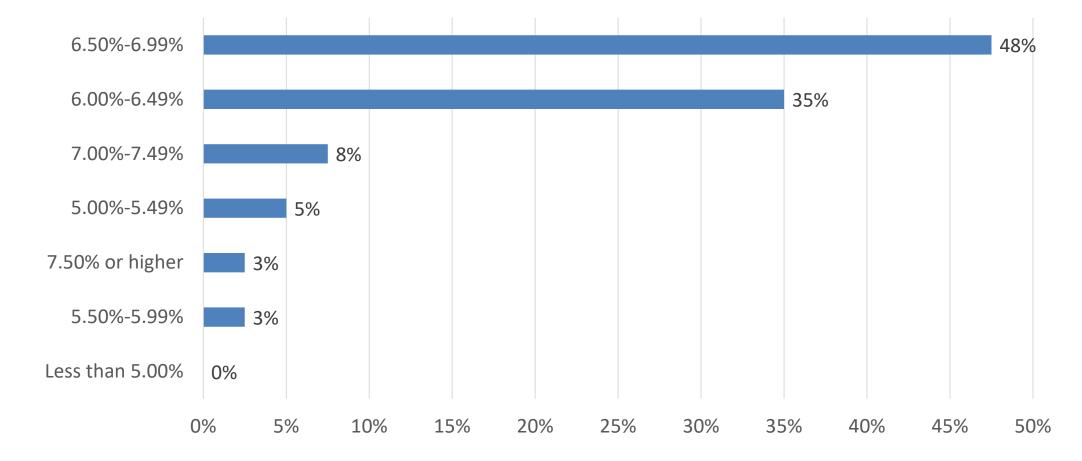
Sources: Board of Governors of the Federal Reserve System (US); Freddie Mac via FRED® Shaded areas indicate U.S. recessions.

fred.stlouisfed.org





What do you expect the 30-year mortgage rate will be at the end of 2025?





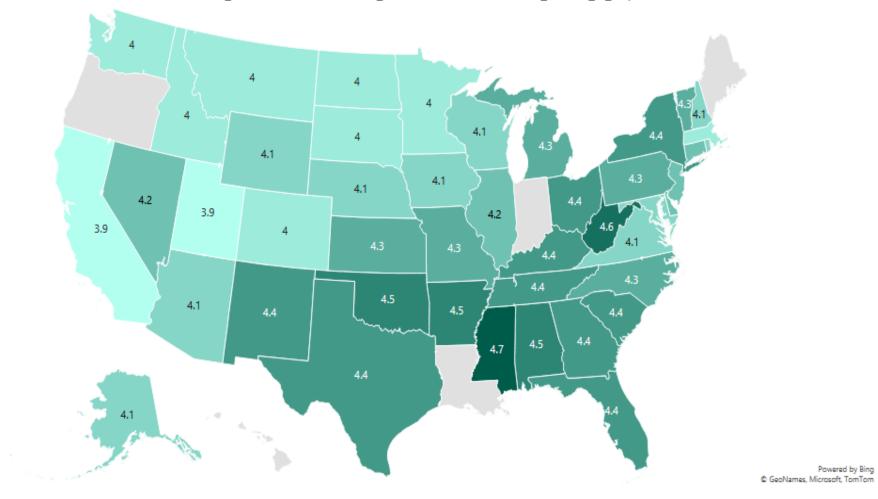


Average interest rate at origination for outstanding mortgages, 2024 Q3

Average interest rate

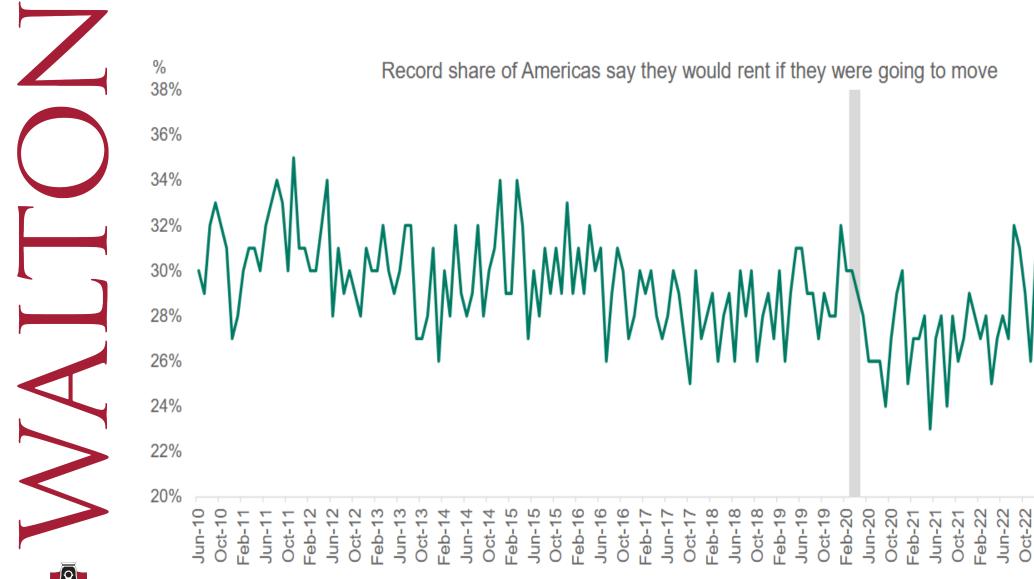
4.7

3.9





Source: FHFA, Apollo Chief Economist





Source: Fannie Mae, Apollo Chief Economist.

38%

36%

34%

32%

30%

28%

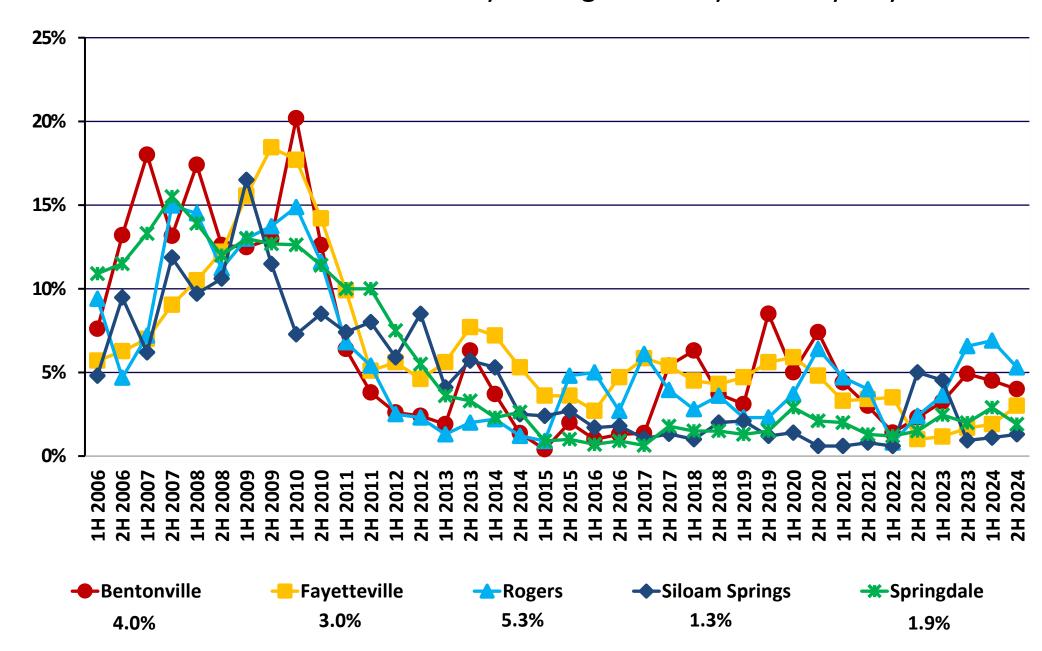
26%

24%

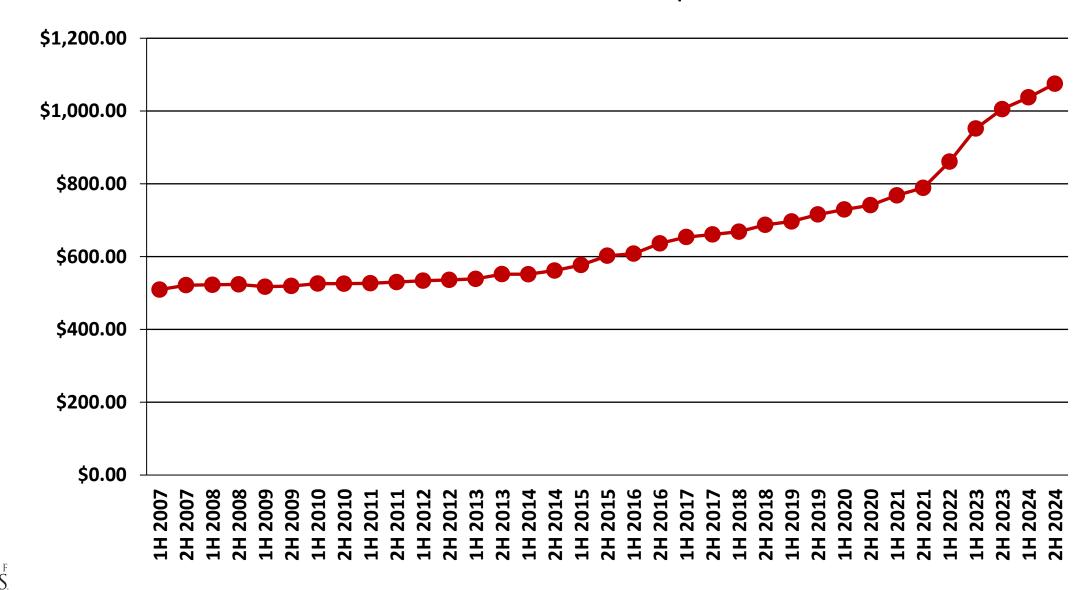
22%

20%

Selected Cities Multifamily Average Vacancy Rates by City

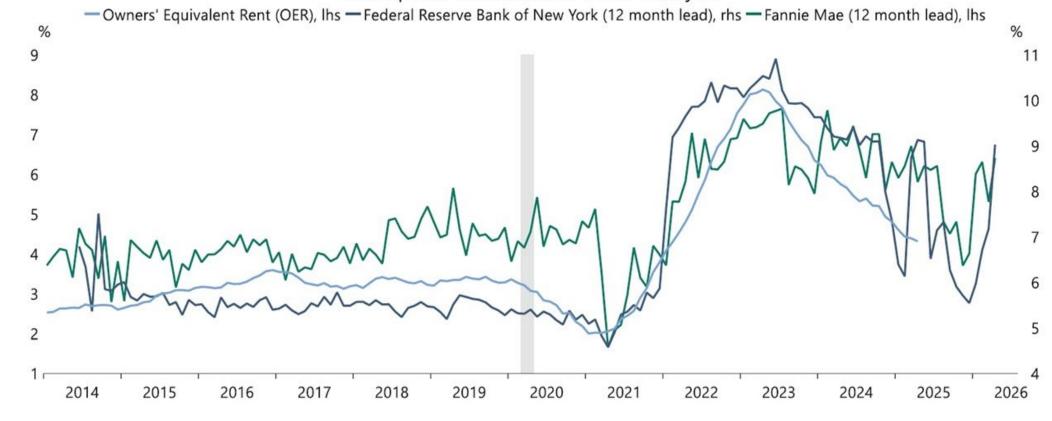


Northwest Arkansas Price per Unit



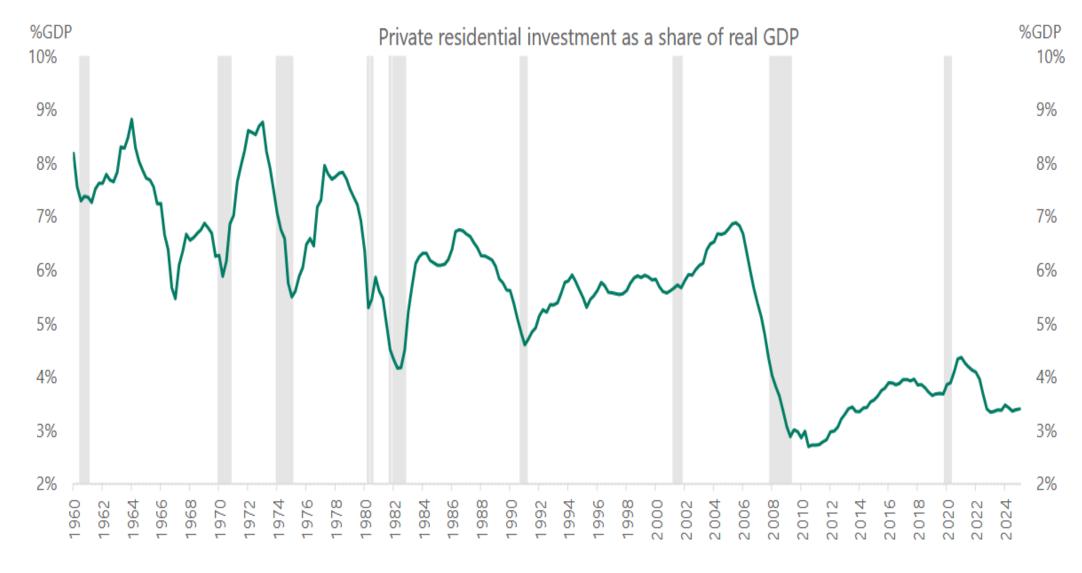
Upward pressure on housing inflation

Anticipated rent inflation in the next year





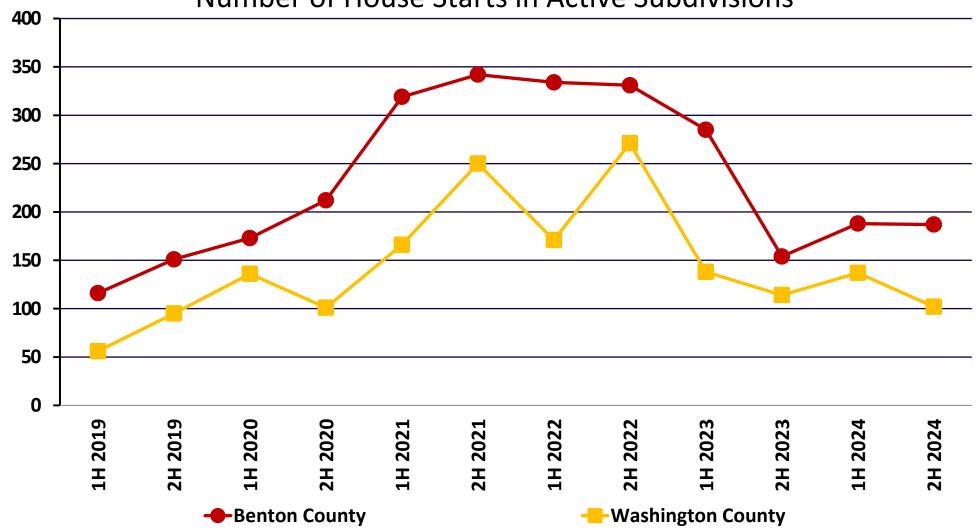




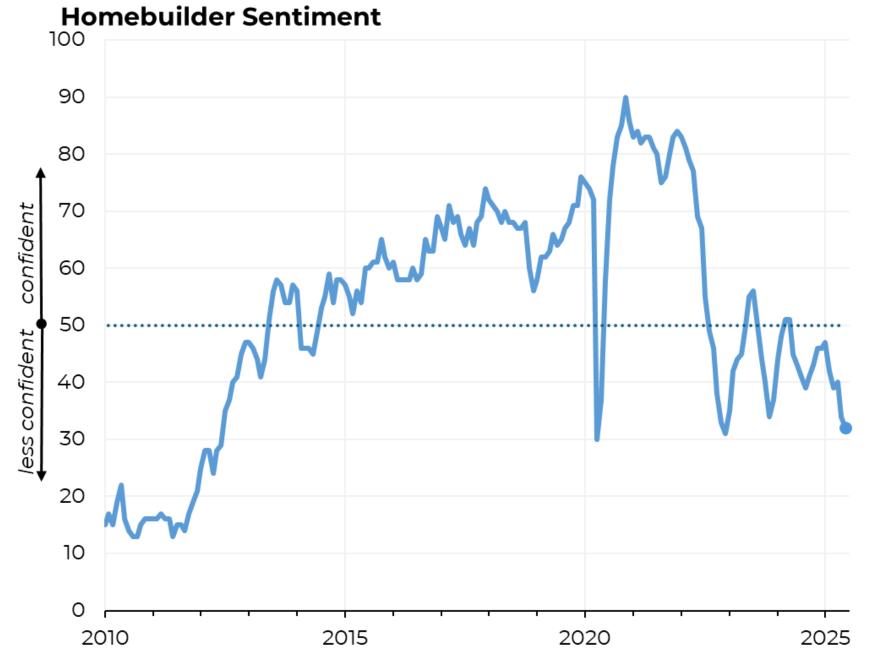


Source: BEA, Haver Analytics, Apollo Chief Economist

Benton and Washington County Number of House Starts in Active Subdivisions







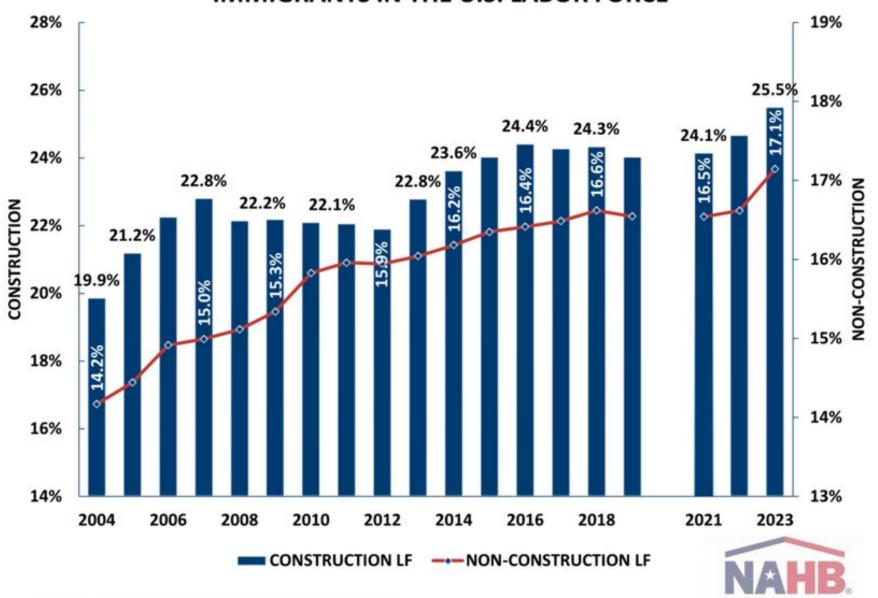


How the costs of home building could increase

| ESTIMAT INCR | ED COS |
|-----------------|--------|
| LABOR | MATER |

| ITEM | LABOR | MATERIAL |
|--------------------------------------|-------|----------|
| Concrete foundation | +25% | +18% |
| Framing | +25% | +4% |
| Exterior windows and doors | 0% | +11% |
| Roofing | +20% | +21% |
| Siding | +26% | +7% |
| Plumbing, electrical and mechanicals | 0% | +8% |
| Insulation and drywall | +35% | +20% |
| Flooring | +30% | +2% |
| Painting and wall coverings | +19% | +11% |
| Cabinets and countertops | +30% | +17% |
| Appliances | 0% | +11% |
| Other | +16% | +31% |

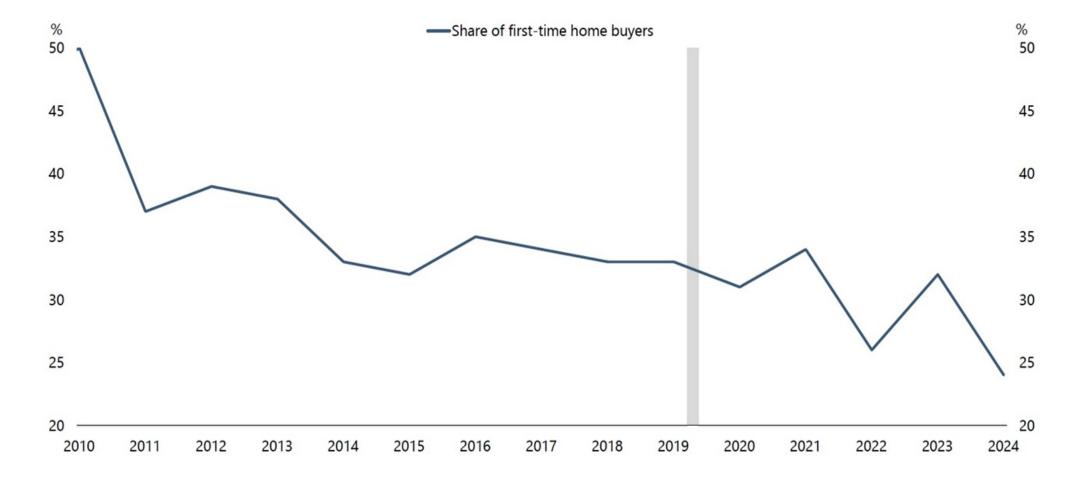
IMMIGRANTS IN THE U.S. LABOR FORCE



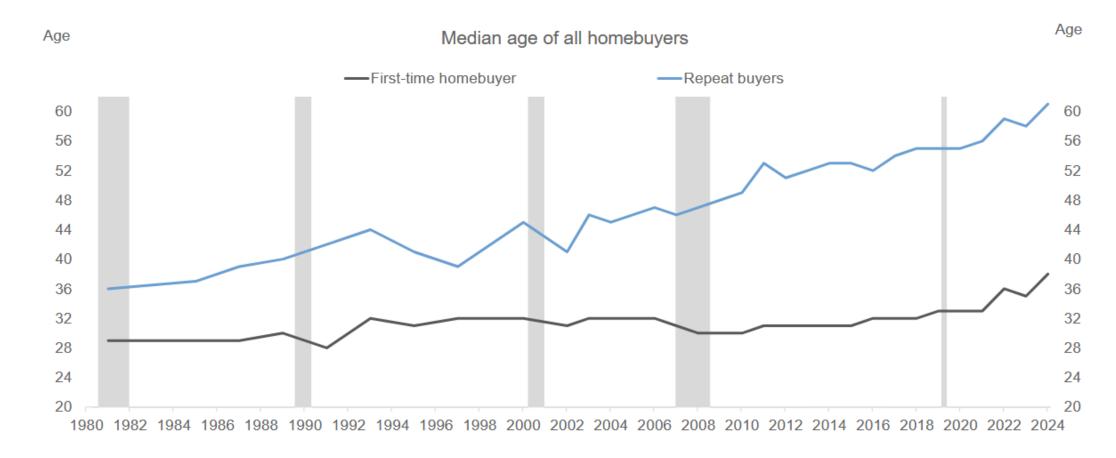
National Association of Home Builders

Source: 2004-2023 ACS PUMS, NAHB estimates

The share of first-time home buyers has declined from 50% to currently 24%



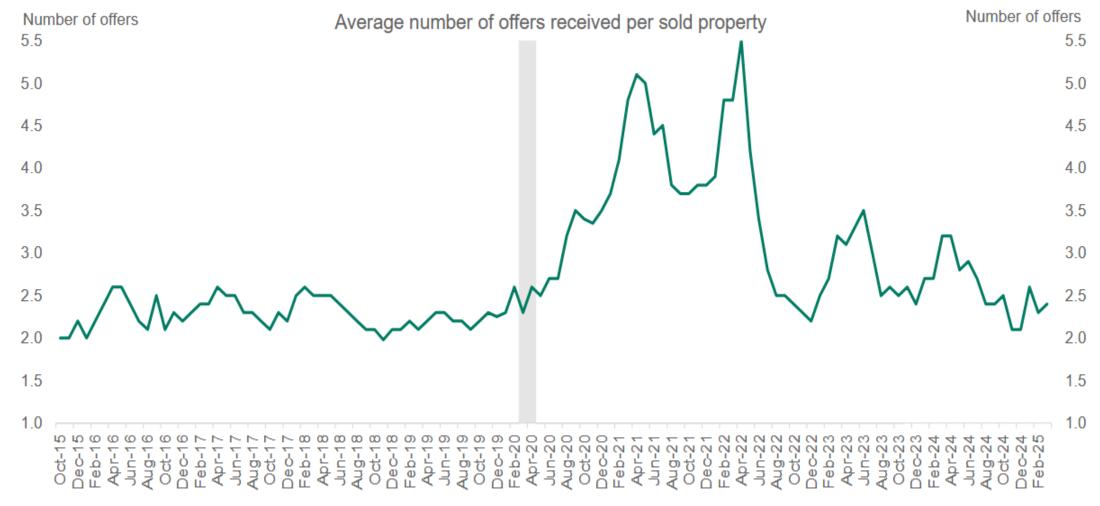
The median age of first-time homebuyers has increased from 30 in 2008 to 38 today





Source: NAR, Apollo Chief Economist

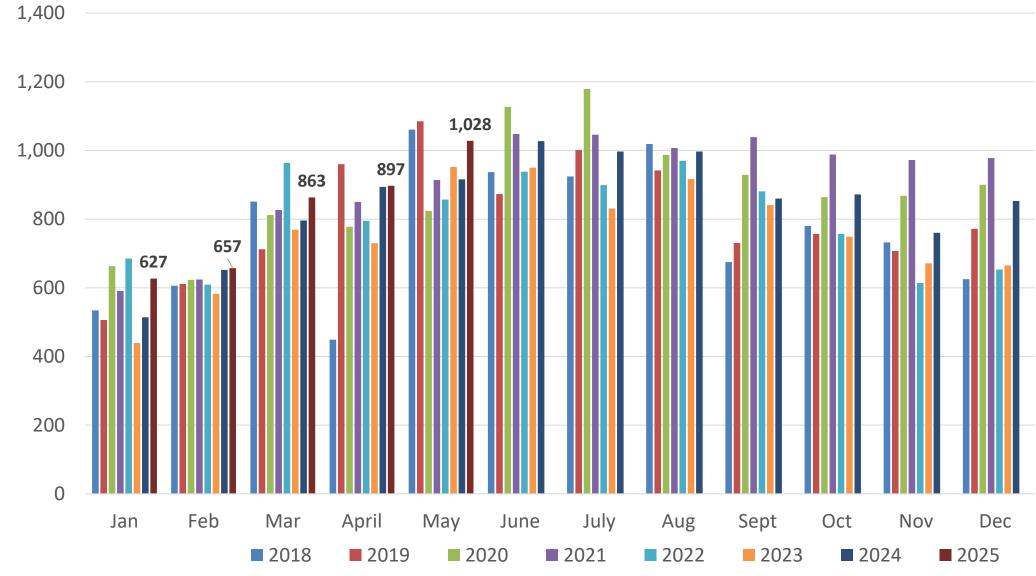






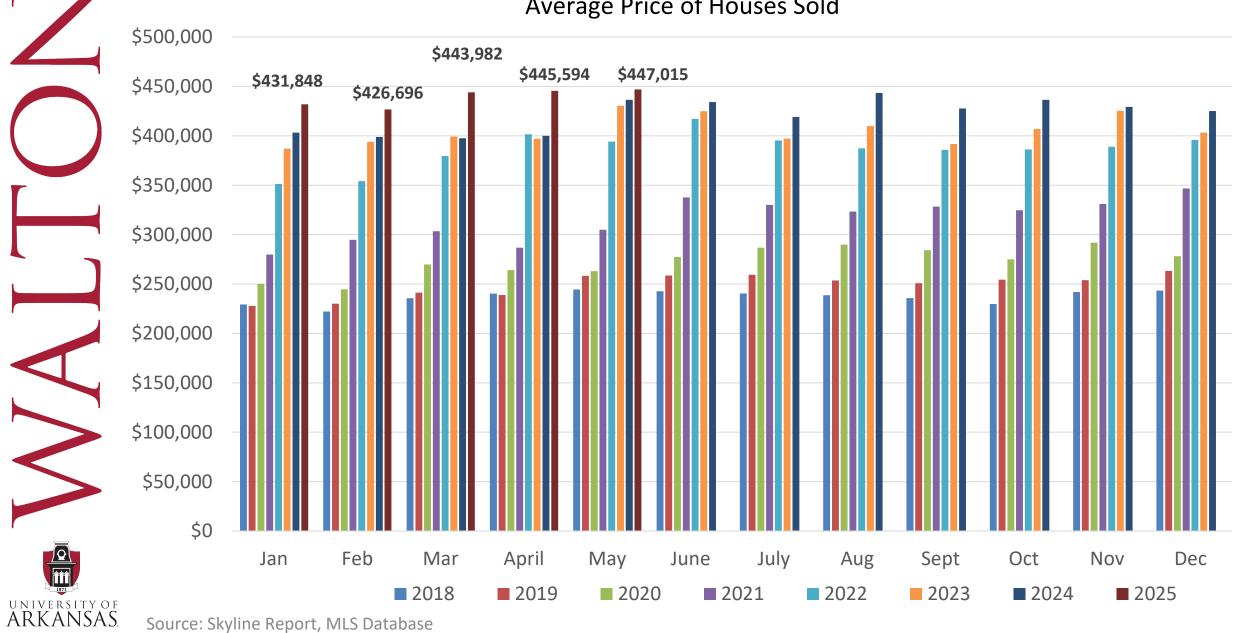
Source: NAR, Apollo Chief Economist

NWA Number of Houses Sold

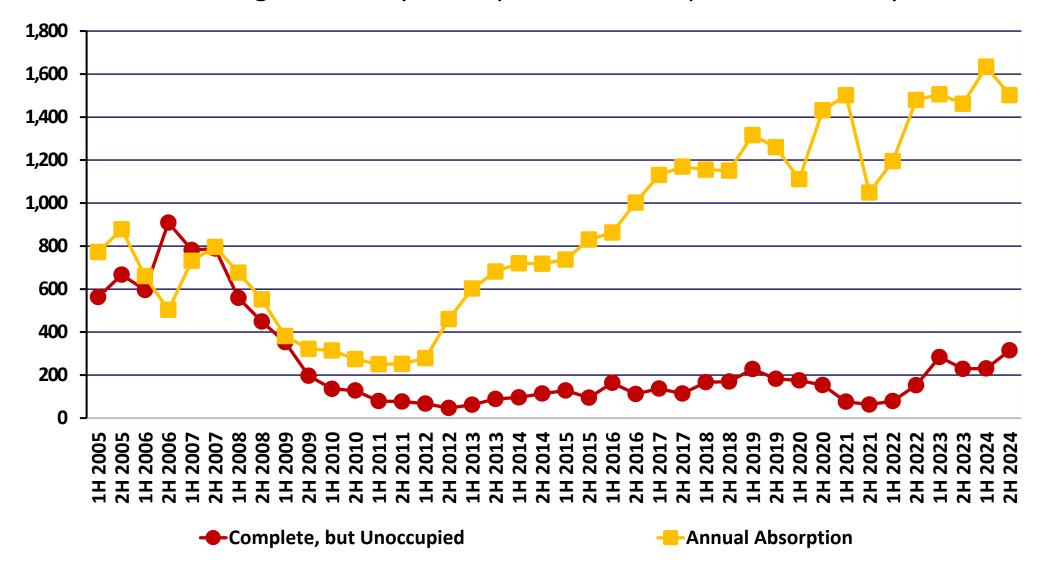


Source: Skyline Report, MLS Database



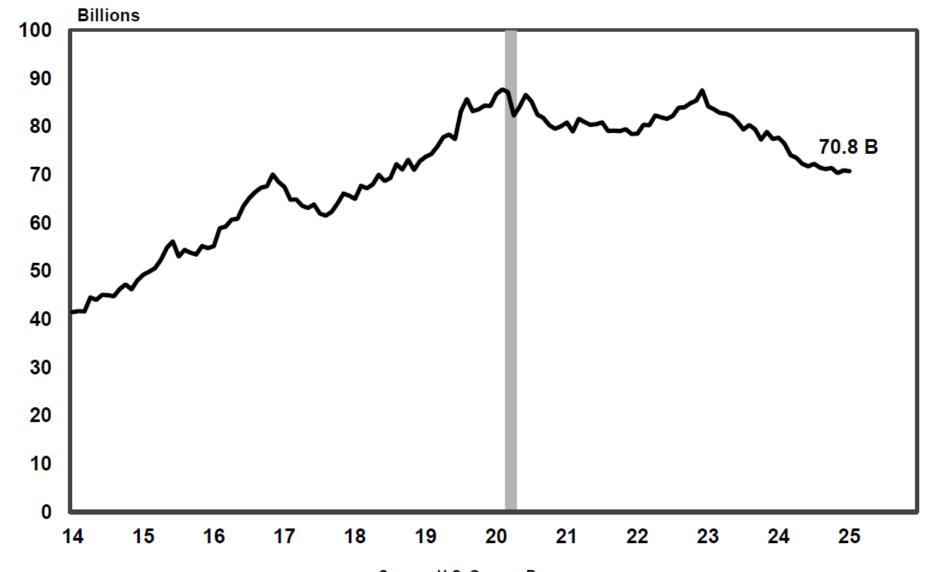


Washington County Absorption and Completed Inventory

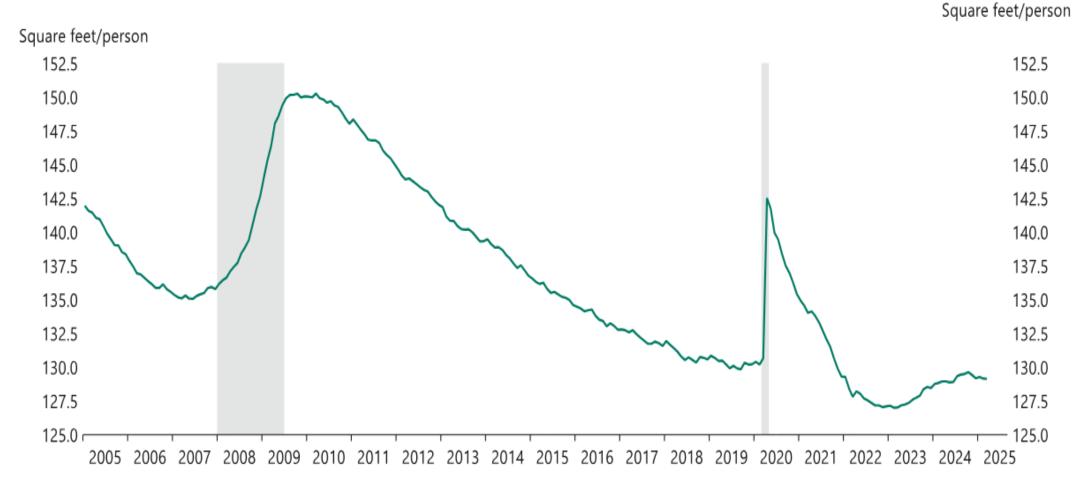


Markstein Advisors

Office ex Data Center Construction Spending (SA)



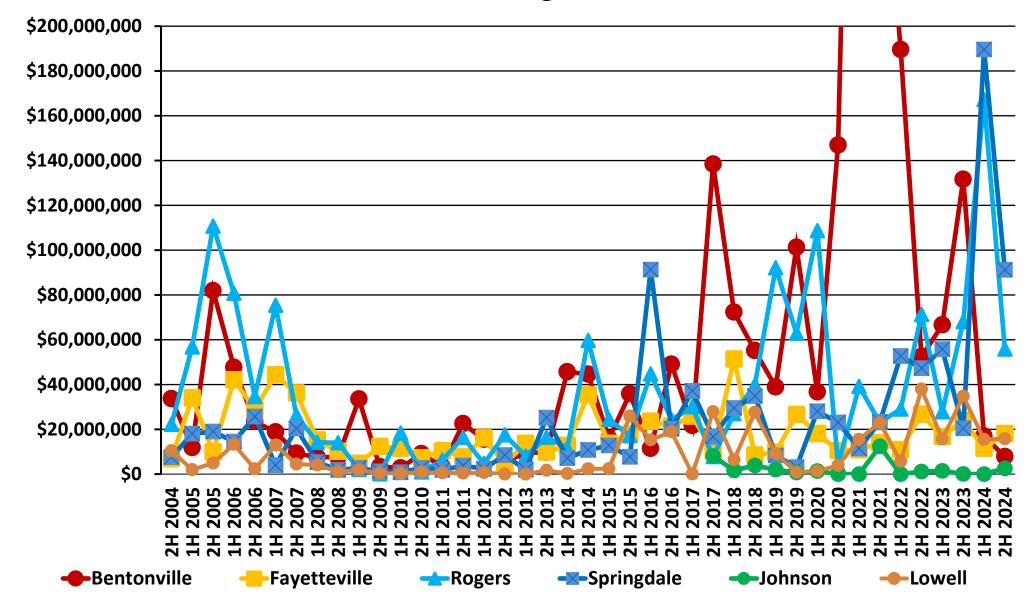
Office space per worker





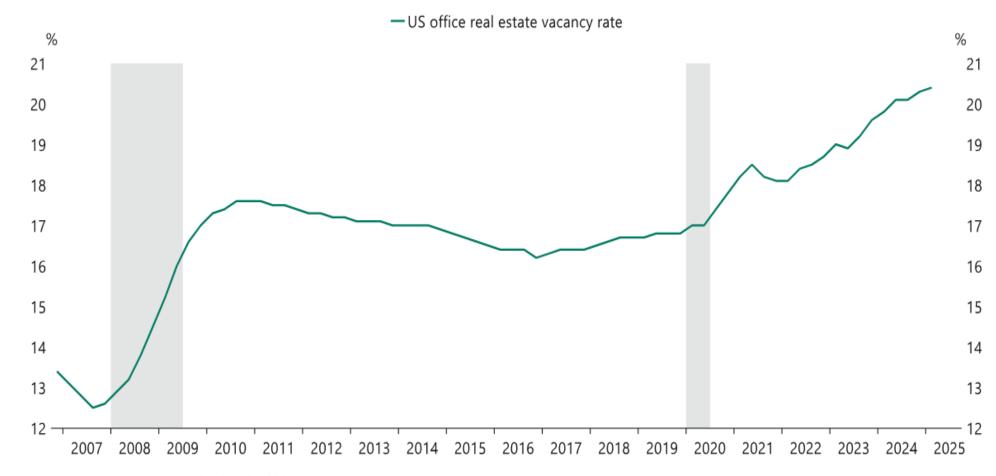
Source: REITS, BLS, Bloomberg, Apollo Chief Economist (Note: Office using employment includes professional and business services, Information and Financial activities)

Commercial Building Permit Values



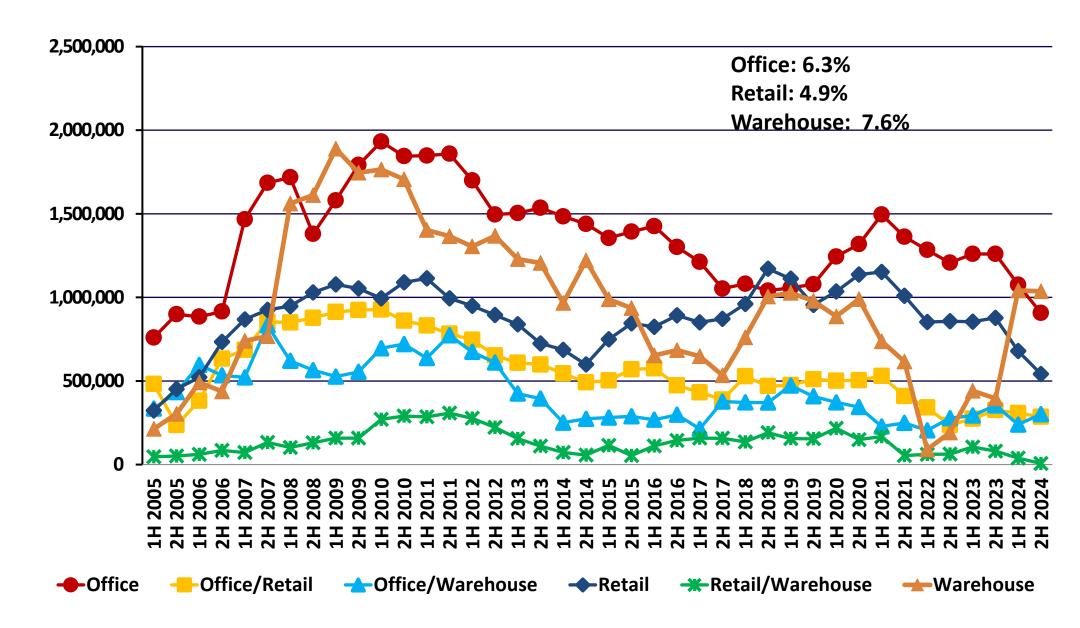


US: Office vacancy rate at 20%





Northwest Arkansas Available Square Footage



The Voluntary Trade Reset Recession

April 2

Liberation day tariffs

Container departures from China to the US slowing rapidly 20-40 days containership transit time

Early May/Mid May

Containerships to US ports come to a stop 1-10 days truck/rail transit time to cities

Mid May/Late May

Trucking demand comes to a halt Empty shelves and companies respond to lower sales

Late May/Early June

Layoffs in trucking and retail industry

Summer 2025

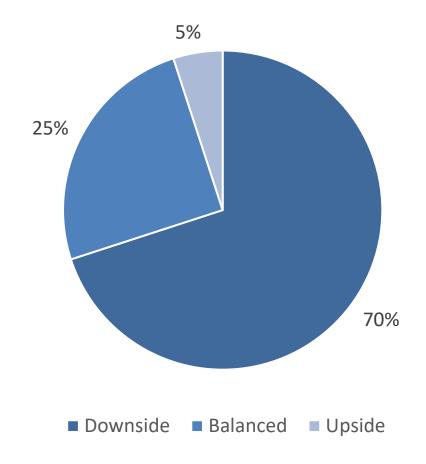
Recession



Source: Apollo Chief Economist

4

Are the risks to your forecasts weighted towards the upside or downside?



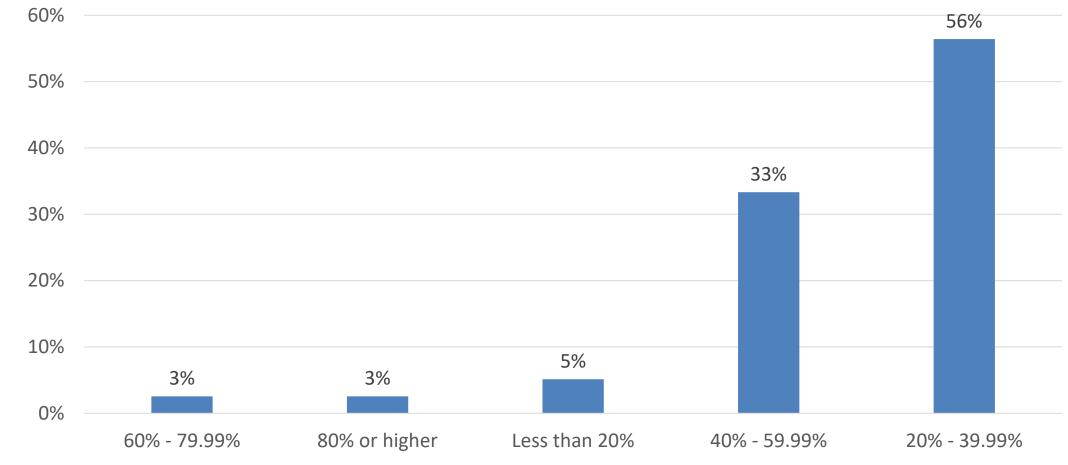


Risks

- 8. Lower tourism
- 7. Federal govt. layoffs
- 6. Student loans repayments
- 5. Lower housing demand
- 4. Weak business investment from policy uncertainty
- 3. Negative impact on business earnings from tariffs
- 2. Lower employment and hiring
- 1. Lower consumer spending from job loss/uncertainty, higher prices



What are the odds for a recession in the next 12 months?









Questions and Comments?

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