Q1 Financial Market Update: Data, Insights, and Analysis

Prepared and Presented by: William Kline, Ph.D., CFA

February 21st, 2025

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Speaker Bio

- William Kline, Ph.D., CFA is an Associate Professor of Management at Pennsylvania State University - Harrisburg. He received his Ph.D. in Strategic Management from the Fox School of Business at Temple University. He has received four awards for teaching excellence including the Beta Gamma Sigma Professor of the Year Award (PSU – Harrisburg), the Dean's Award for Faculty Excellence and Stanley Fuchs Award (Fordham University), and the Award for Excellence in Teaching by a Doctoral Candidate (Temple University).

- Dr. Kline's primary research interests include strategic decision-making and executive compensation. He has been published in 14 peer-reviewed journals including the Academy of Management Perspectives, the Journal of International Management, and the Journal of Strategy & Management.

- Prior to entering academia, Mr. Kline was a manager at PricewaterhouseCoopers where he completed valuations for mergers and acquisitions, business planning, as well as tax and financial reporting. Mr. Kline also spent time consulting at CBIZ Valuation Group, Inc. and Curtis Financial Group, a regional investment bank.

Agenda

1. Introductions
2. Equity Markets
3. Monetary and Fiscal Policy
4. Debt Markets
5. Business Cycle Review
6. Key Economic Indicators

Learning Outcomes

Describe current stock market indicators and discuss if current valuations are reasonable.
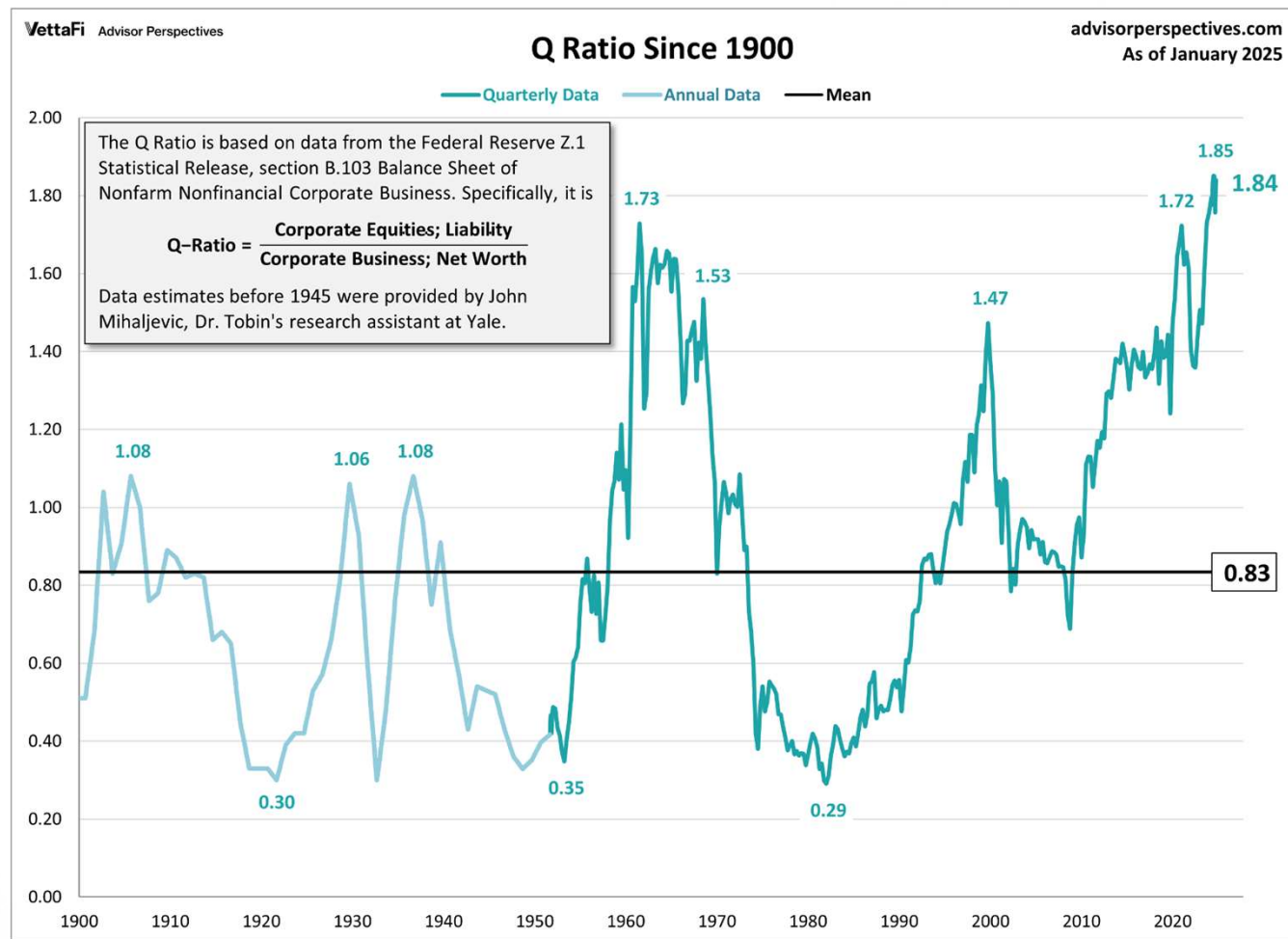
Market Index Considerations

- Magnificent 7: Microsoft, Apple, Nvidia, Alphabet, Amazon, Meta and Tesla.

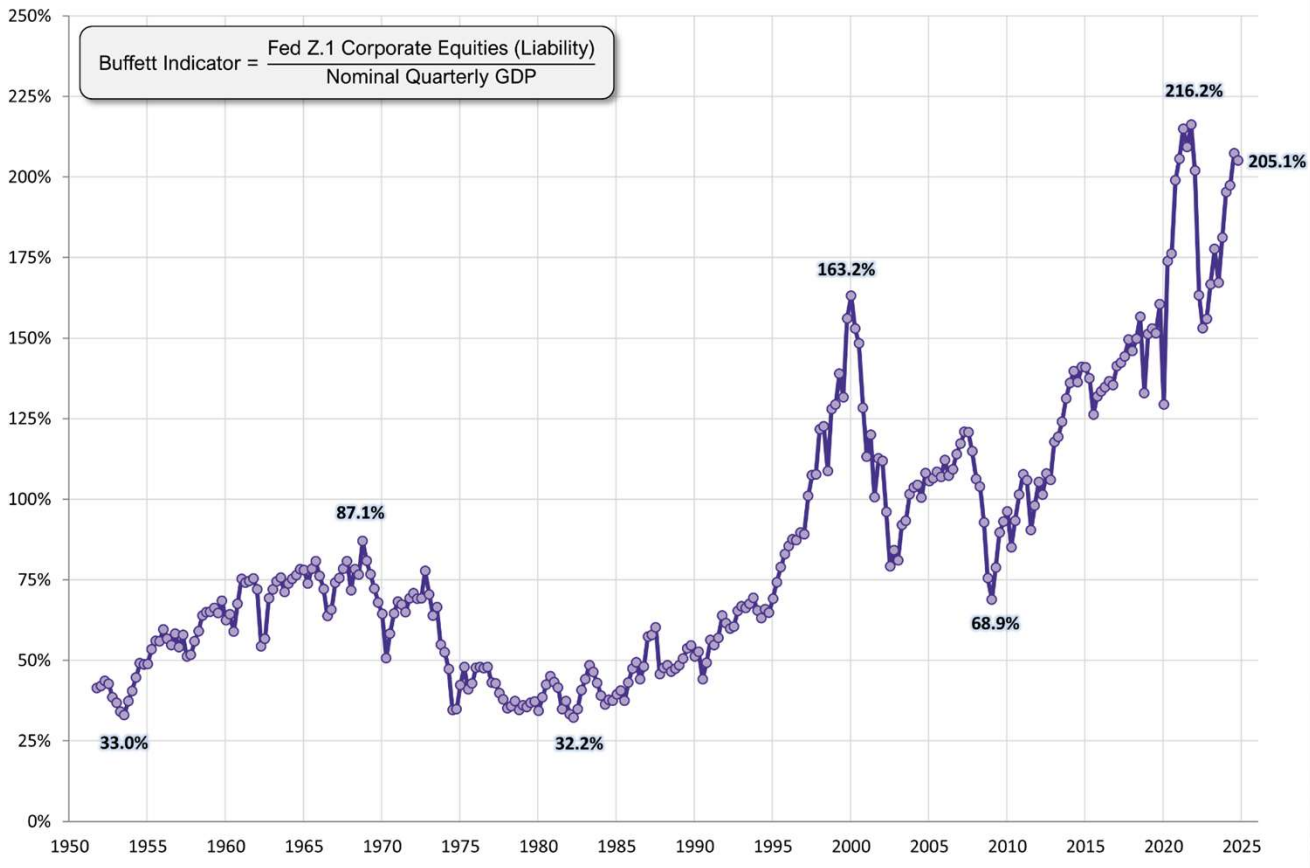- Index construction: Equal vs. Market Weights

https://www.visualcapitalist.com/charted-sp-500-vs-sp-500-equal-weight-index/?utm_source=chatgpt.com


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The data since 1945 is a simple calculation using data from the Federal Reserve Z.1 Statistical Release, section B.103, *Balance Sheet and Reconciliation Tables for Nonfinancial Corporate Business*. Specifically, it is the ratio of Market Value divided by Replacement Cost.

VettaFi Advisor Perspectives

Q Ratio Since 1900

advisorperspectives.com
As of January 2025

— Quarterly Data — Annual Data — Mean

The Q Ratio is based on data from the Federal Reserve Z.1 Statistical Release, section B.103 Balance Sheet of Nonfarm Nonfinancial Corporate Business. Specifically, it is

$$Q\text{–Ratio} = \frac{\text{Corporate Equities; Liability}}{\text{Corporate Business; Net Worth}}$$

Data estimates before 1945 were provided by John Mihaljevic, Dr. Tobin's research assistant at Yale.

The Buffett Indicator: Corporate Equities to GDP

The Buffett Indicator — Detrended with Standard Deviations

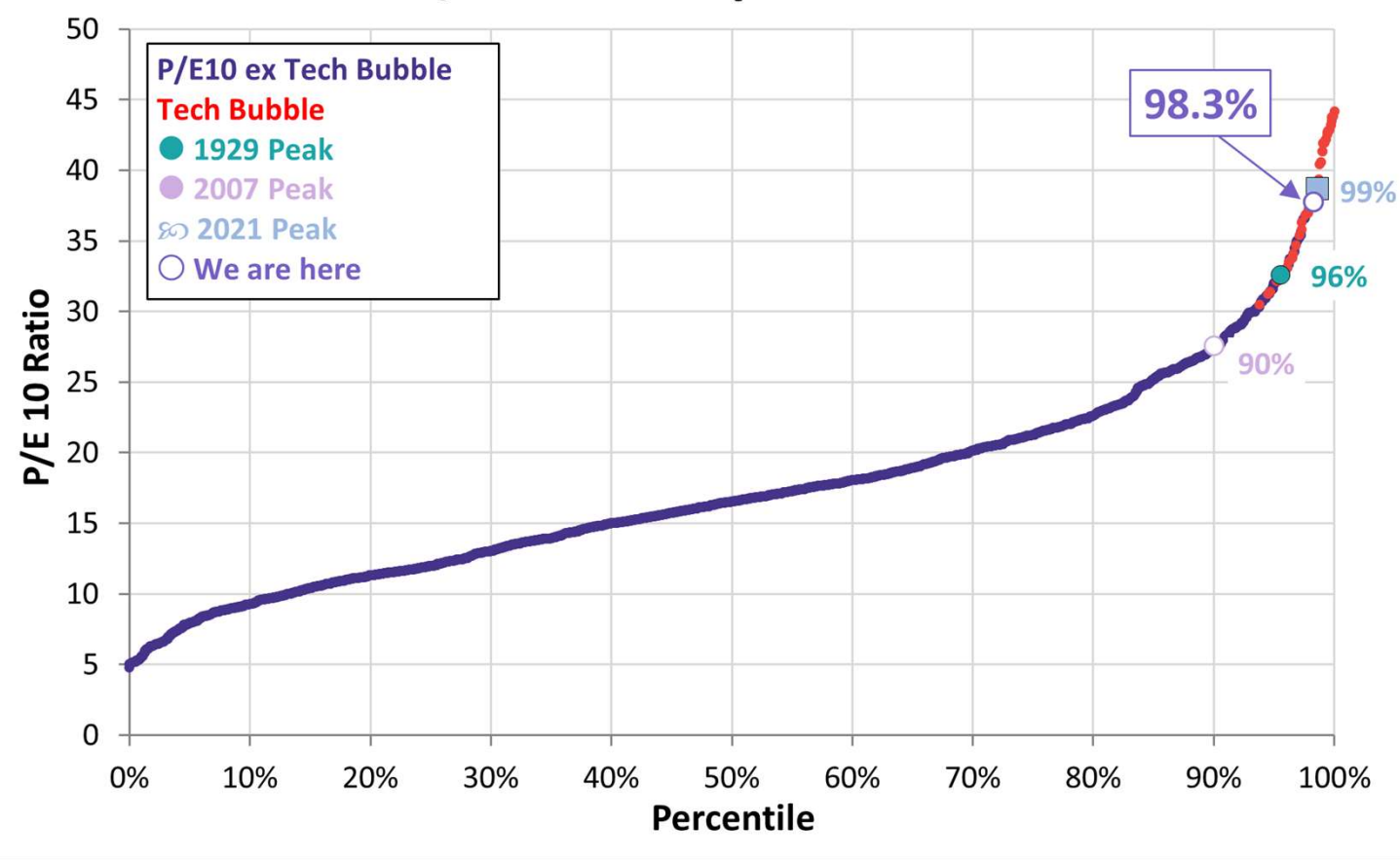$$\text{Buffett Indicator} = \frac{\text{Fed Z.1 Corporate Equities (Liability)}}{\text{Nominal Quarterly GDP}}$$
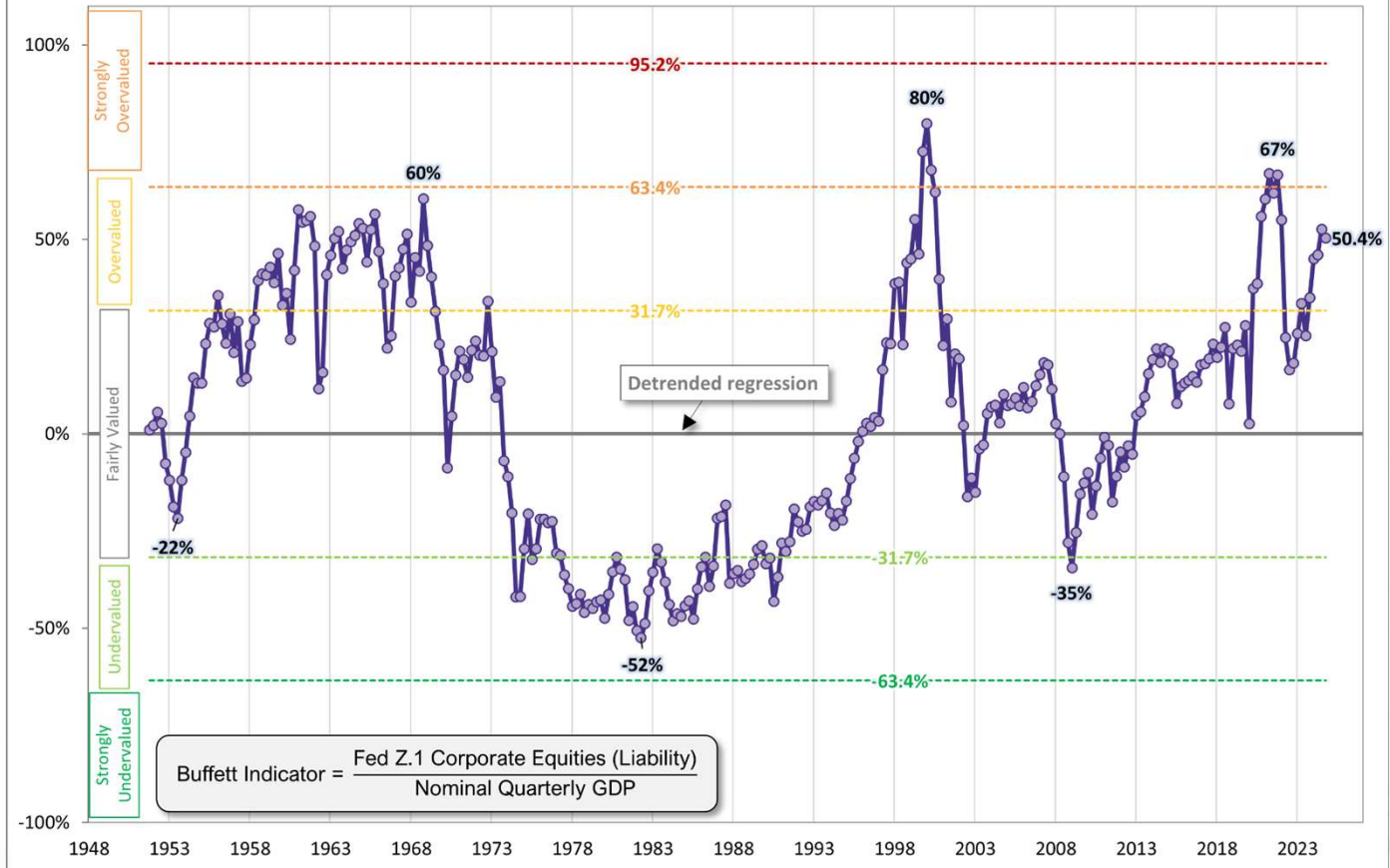
Buffett Valuation Indicator: January 2025 - dshort - Advisor Perspectives

Nominal S&P Composite with the Trailing 12-Month P/E Ratio
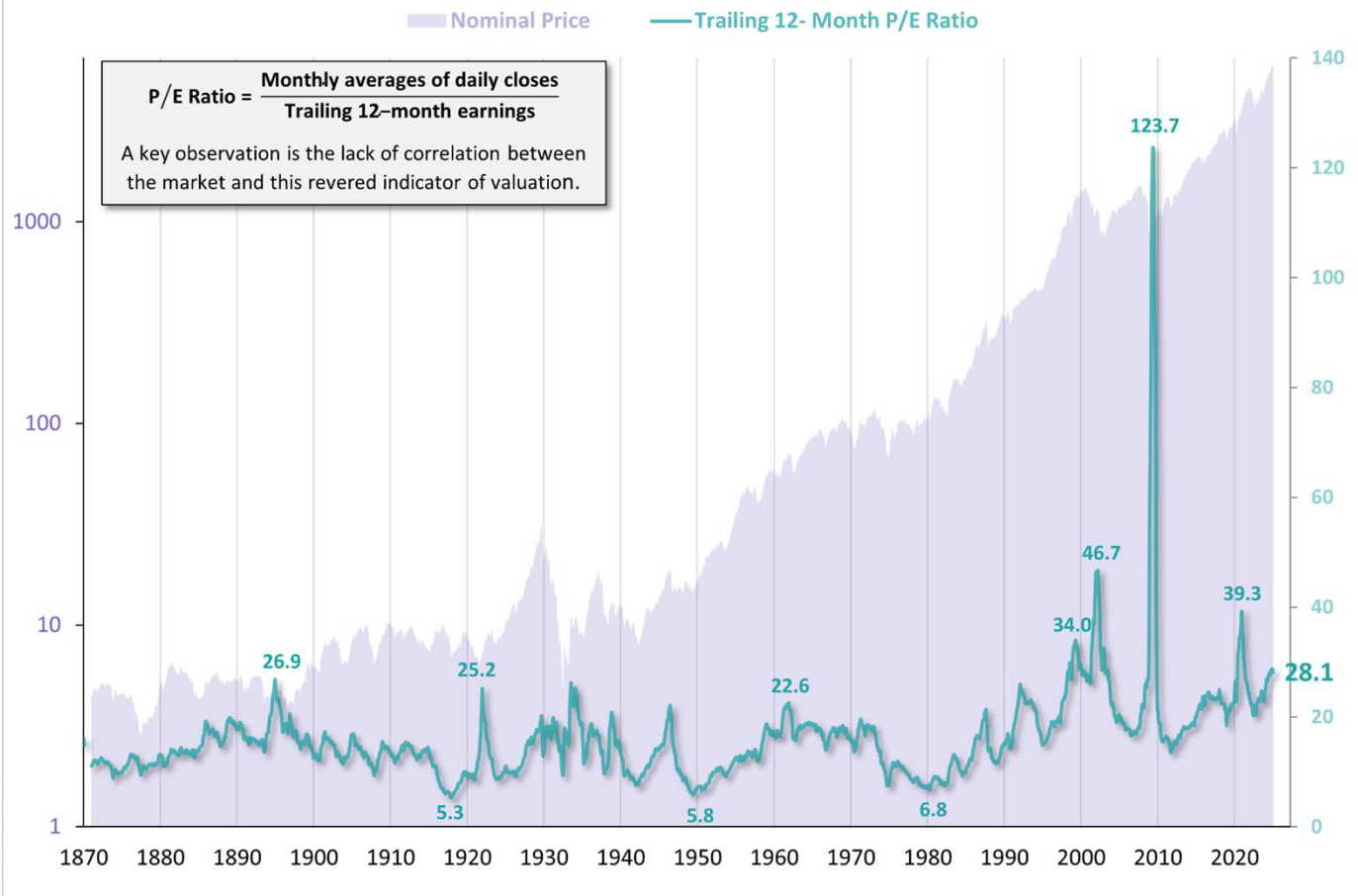
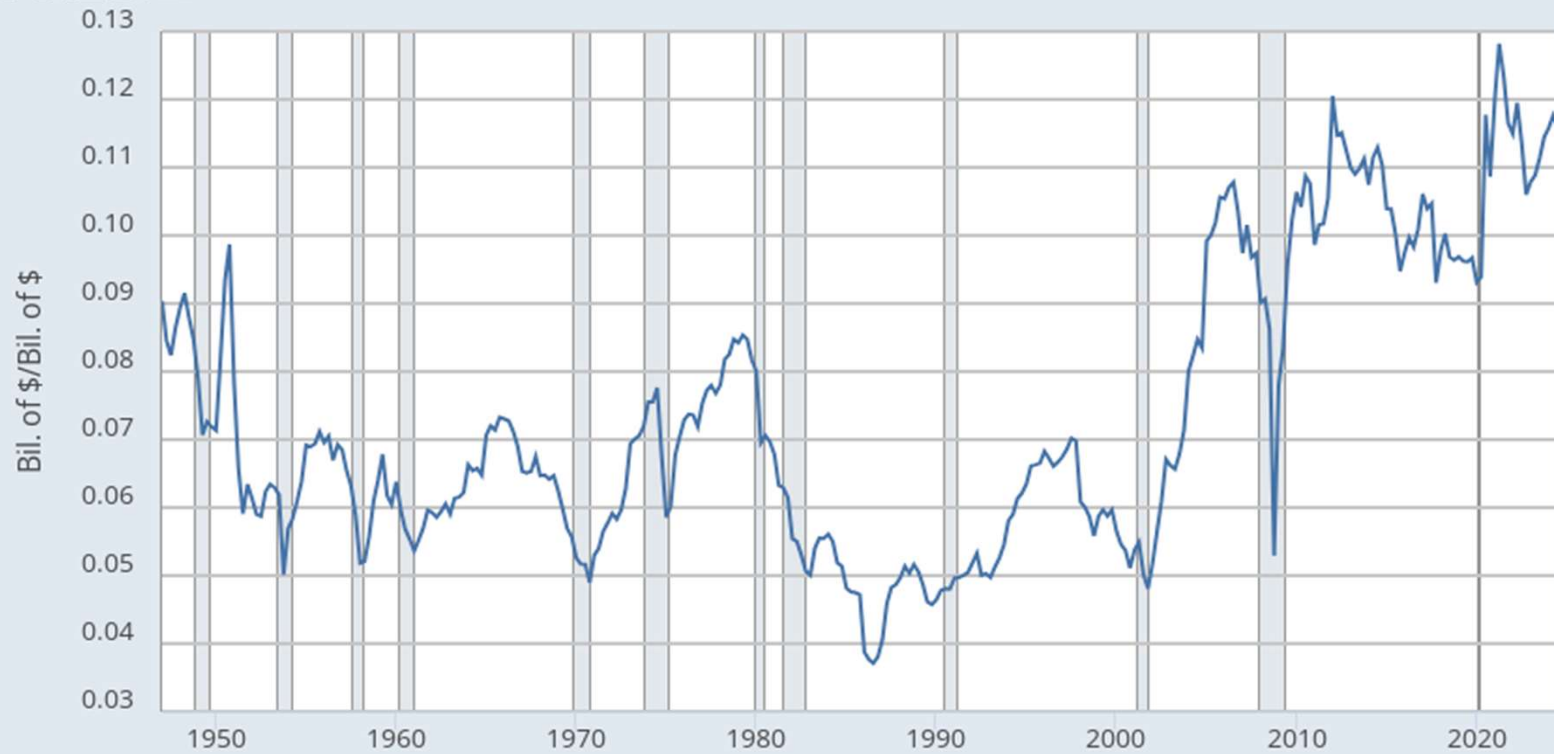P/E10 and Market Valuation: January 2025 - dshort - Advisor Perspectives

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P/E10 and Market Valuation: January 2025 - dshort - Advisor Perspectives

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Source: U.S. Bureau of Economic Analysis via FRED®
Shaded areas indicate U.S. recessions.

myf.red/g/1DQW5

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CAPE PE & Subsequent Stock Market Returns

- Monthly data from 1871 to the April of 2016: Compliments of Tom McDevitt, CFA, CFP, EA

- 1,730 observation points

- We asked ourselves several questions:

  - Out of the 1,730 data points, how many registered a CAPE PE > 25 ?

  - When we observed a CAPE PE > 25, what was the subsequent 3 year holding return?

CAPE PE & Subsequent Stock Market Returns

- There have been 139 instances (months) in which CAPE PE > 25

- Approximately 8% of observations

- Subsequent 3 year total return (excluding dividends) was 2.48% or about 80 basis points per year for 3 years.

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Volatility Measures

- CBOE Russell 2000 Volatility Index - It measures the market's expectation of 30-day volatility implicit in the prices of near-term Russell 2000 options.

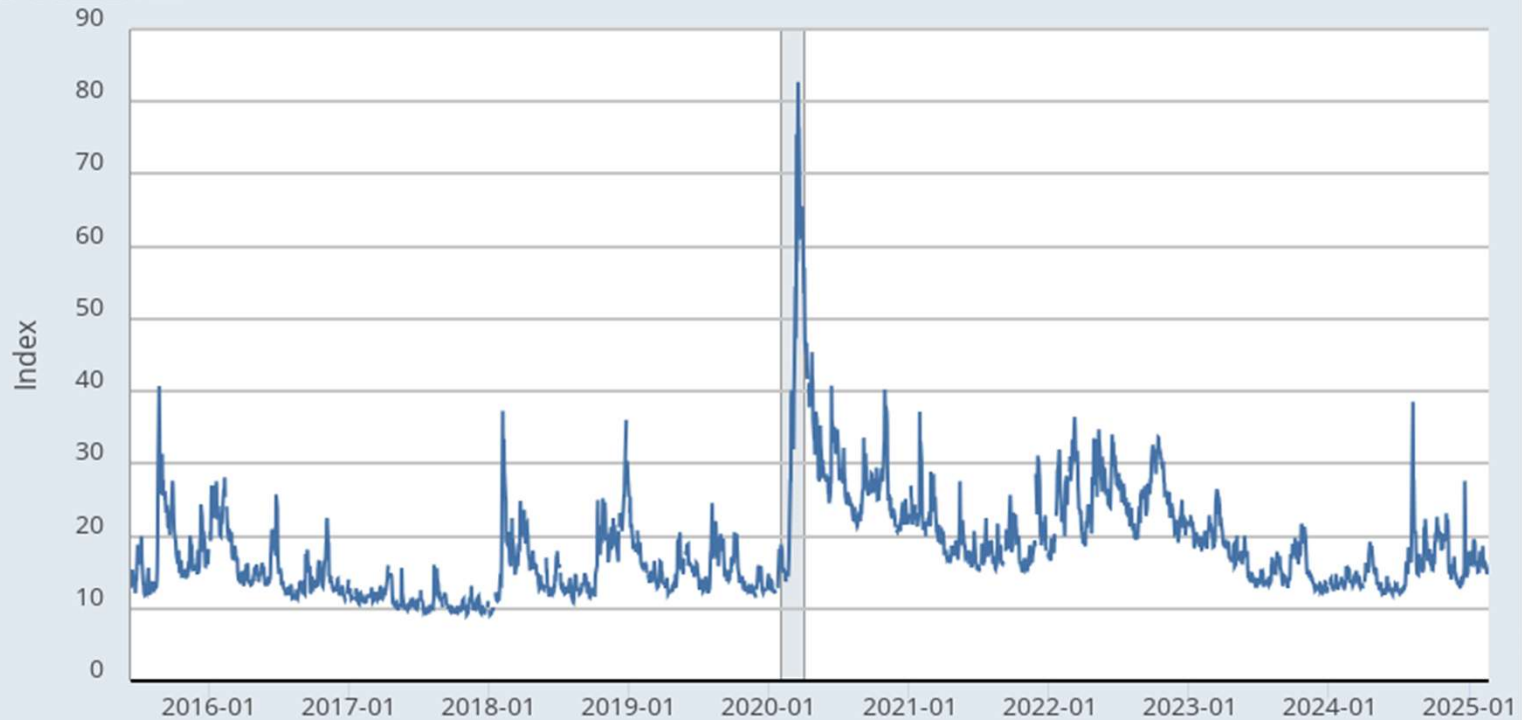- CBOE Volatility Index (VIX) - It measures market expectation of near term volatility conveyed by stock index option prices.

Source: Chicago Board Options Exchange via FRED®
Shaded areas indicate U.S. recessions.

myf.red/g/1DPfr

Source: Chicago Board Options Exchange via FRED®
Shaded areas indicate U.S. recessions.

myf.red/g/1DPmZ

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FRED 〰 — St. Louis Fed Financial Stress Index

Source: Federal Reserve Bank of St. Louis via FRED®
Shaded areas indicate U.S. recessions.

myf.red/g/1DPn3

The STLFSI4 measures the degree of financial stress in the markets and is constructed from 18 weekly data series: seven interest rate series, six yield spreads and five other indicators. Each of these variables captures some aspect of financial stress. Accordingly, as the level of financial stress in the economy changes, the data series are likely to move together.

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Sources: Federal Reserve Bank of St. Louis; S&P Dow Jones Indices LLC via FRED®
Shaded areas indicate U.S. recessions.

myf.red/g/1DPn7

The STLFSI4 measures the degree of financial stress in the markets and is constructed from 18 weekly data series: seven interest rate series, six yield spreads and five other indicators. Each of these variables captures some aspect of financial stress. Accordingly, as the level of financial stress in the economy changes, the data series are likely to move together.

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https://money.cnn.com/data/fear-and-greed/

https://www.aaii.com/sentimentsurvey/sent_results?

When Mom & Pop Are Getting Back In....

Market Cycle

Euphoria

Excitement

Denial

Optimism

Low Risk High Opportunity

Low Opportunity High Risk

Fear

Optimism

Hope

Panic

Depression
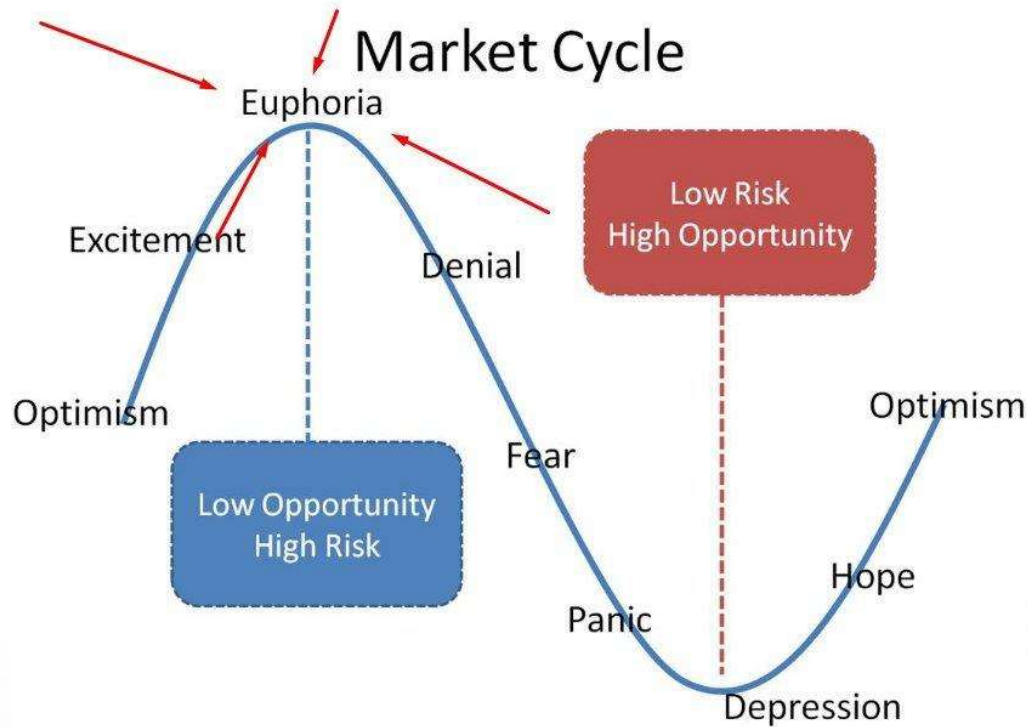
Measures	Severely Undervalued	Moderately Undervalued	Fairly Valued	Moderately Overvalued	Severely Overvalued
Q Ratio					
Buffet Ratio					
CAPE					
Volatility					
Stress					
Fear & Greed					

Learning Outcomes

Discuss monetary and fiscal policy.

Monetary and Fiscal Policy

1   Which of the following statements *best* describes monetary policy? Monetary policy:

   A   involves the setting of medium-term targets for broad money aggregates.

   B   involves the manipulation by a central bank of the government's budget deficit.

   C   seeks to influence the macro economy by influencing the quantity of money and credit in the economy.

2   Which of the following statements *best* describes fiscal policy? Fiscal policy:

   A   is used by governments to redistribute wealth and incomes.

   B   is the attempt by governments to balance their budgets from one year to the next.

   C   involves the use of government spending and taxation to influence economy activity.

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The Federal Reserve

- The Federal Reserve System is the central bank of the United States. It was founded by Congress in 1913 to provide the nation with a safer, more flexible, and more stable monetary and financial system. Over the years, its role in banking and the economy has expanded.

- Each of the 12 Reserve Banks serves its region of the country, and all but three have other offices within their Districts to help provide services to depository institutions and the public. The Banks are named after the locations of their headquarters - Boston, New York, Philadelphia, Cleveland, Richmond, Atlanta, Chicago, St. Louis, Minneapolis, Kansas City, Dallas and San Francisco.

- The Federal Open Market Committee, or FOMC, is the Fed's monetary policymaking body. It is responsible for formulation of a policy designed to promote stable prices and economic growth. Simply put, the FOMC manages the nation's money supply.

- https://www.federalreserveeducation.org/

Interest Rates

- The Federal Reserve's Discount Window is a source of temporary funding available to depository institutions regardless of whether they have a Federal Reserve account or are a member.

- The federal funds rate is the interest rate at which depository institutions trade federal funds (balances held at Federal Reserve Banks) with each other overnight.

- https://fred.stlouisfed.org/series/FEDFUNDS

FRED — Federal Funds Effective Rate

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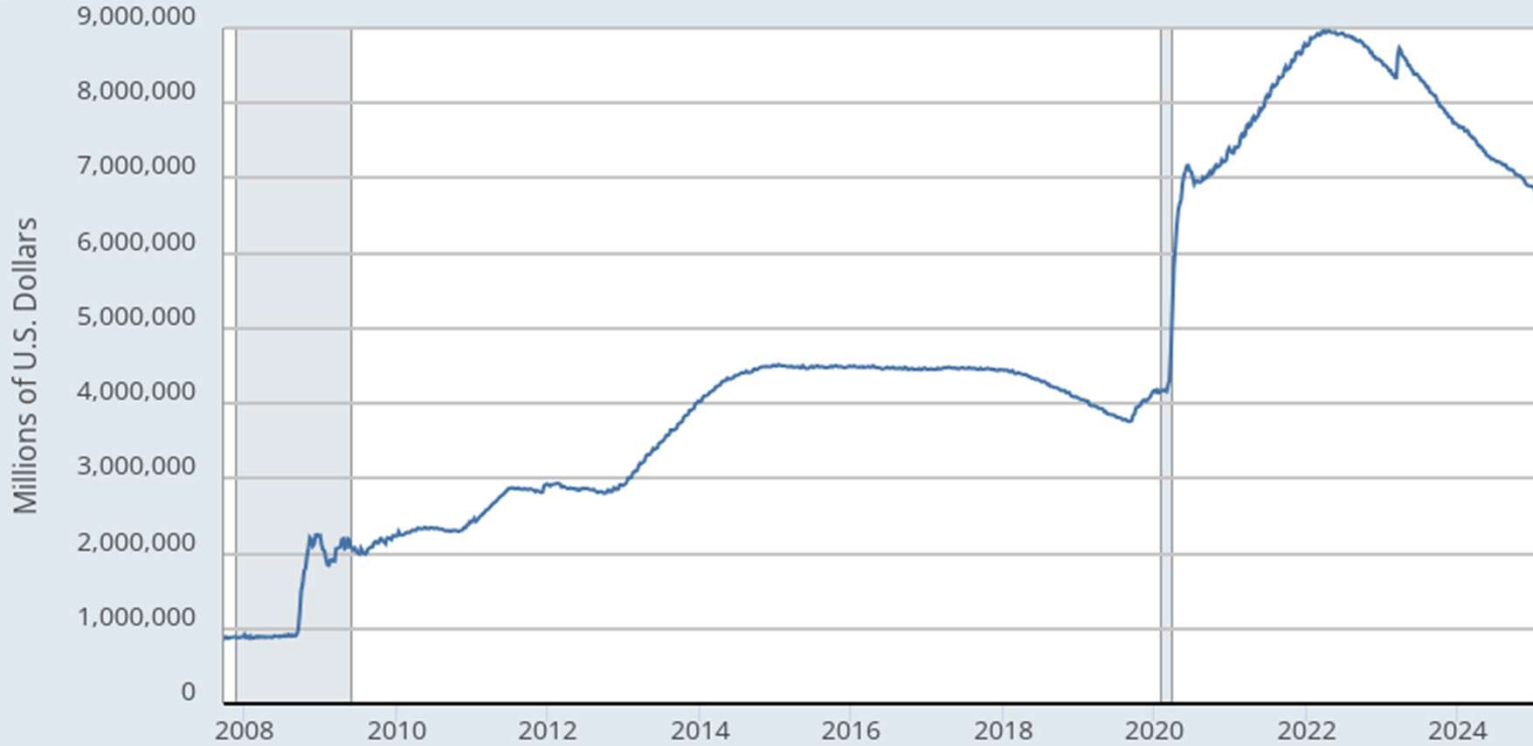Shaded areas indicate U.S. recessions.

myf.red/g/1DPnB

January
4.33%

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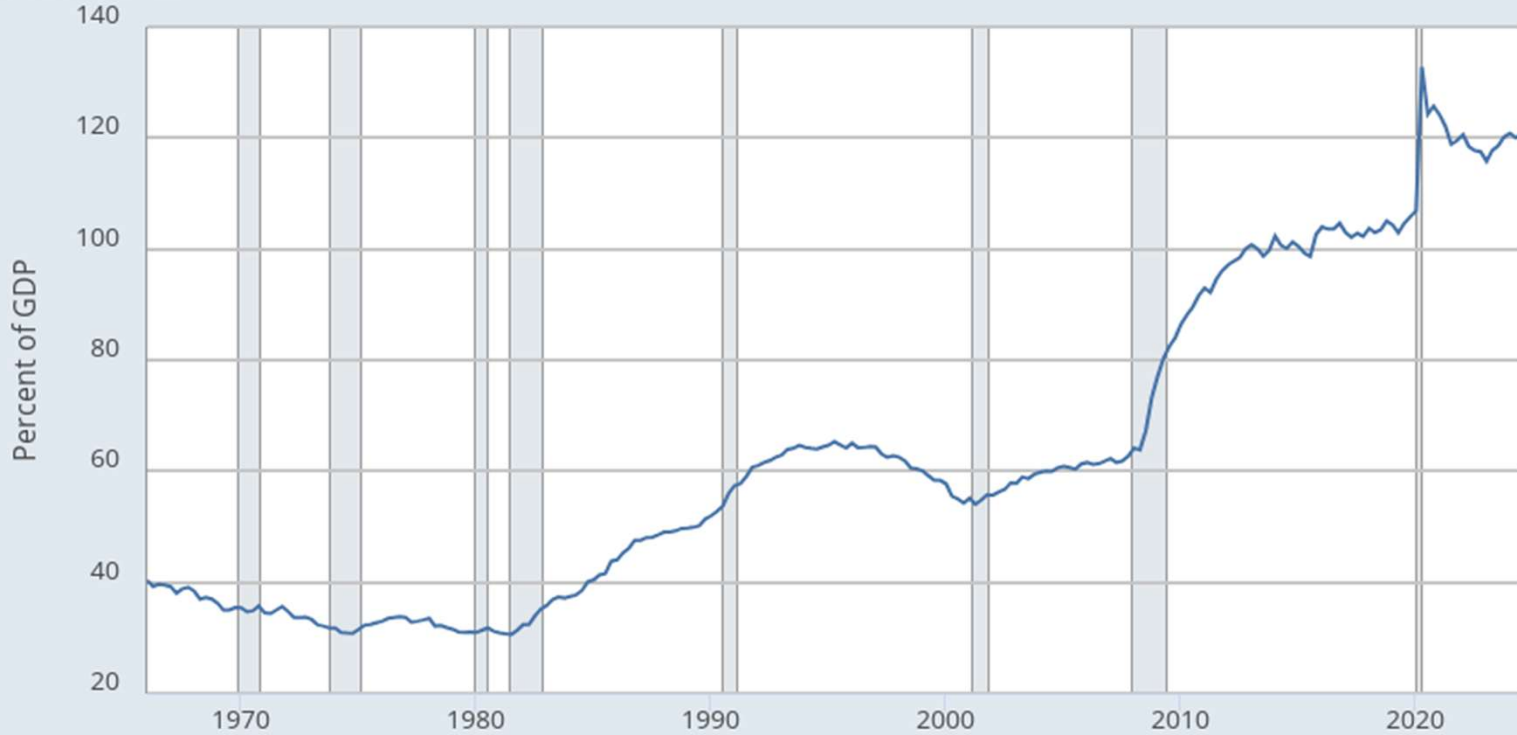FRED ― Assets: Total Assets: Total Assets (Less Eliminations from Consolidation): Wednesday Level

$6.8 Trillion

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

myf.red/g/1DPnM

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FRED — Federal Debt: Total Public Debt as Percent of Gross Domestic Product

120% as of July 2024

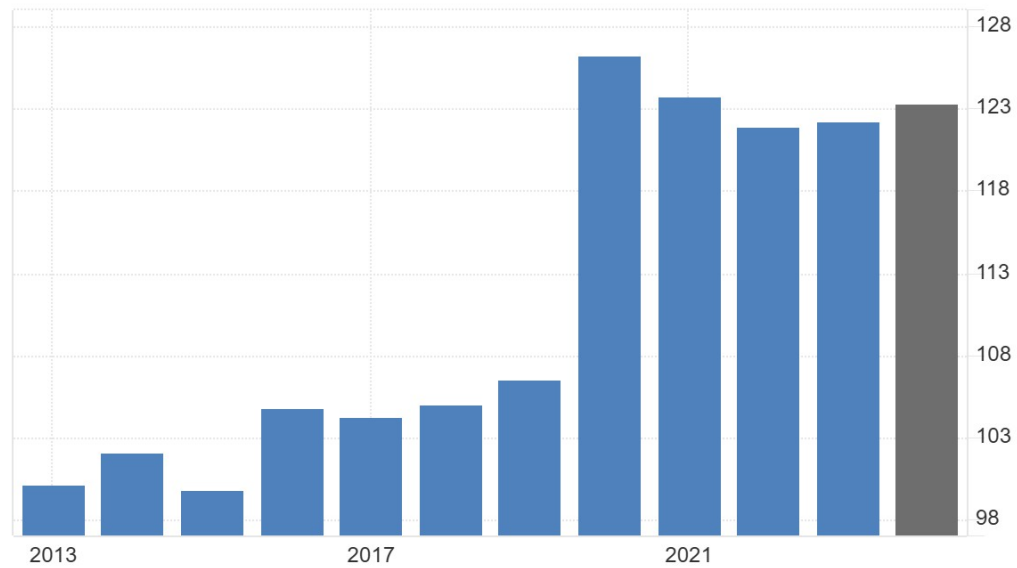Sources: Federal Reserve Bank of St. Louis; U.S. Office of Management and Budget via FRED®
Shaded areas indicate U.S. recessions.

myf.red/g/1DPnU

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Federal Debt to GDP %
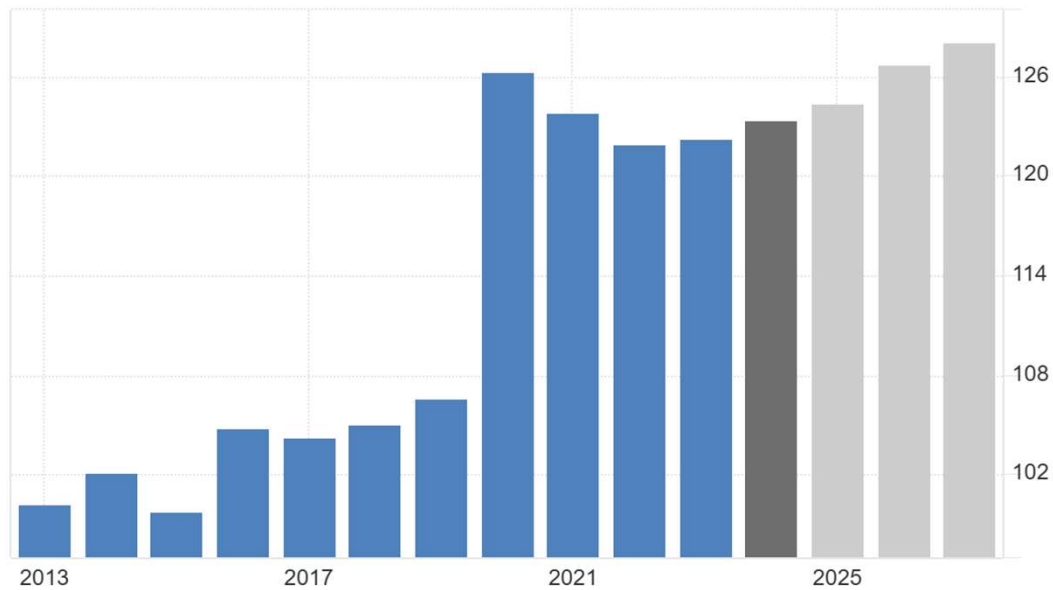
US Government Debt to GDP - percent of GDP

Source: tradingeconomics.com | Office of Management and Budget, The White House

Federal Debt to GDP % Forecast

US Government Debt to GDP - percent of GDP

Source: tradingeconomics.com | Office of Management and Budget, The White House

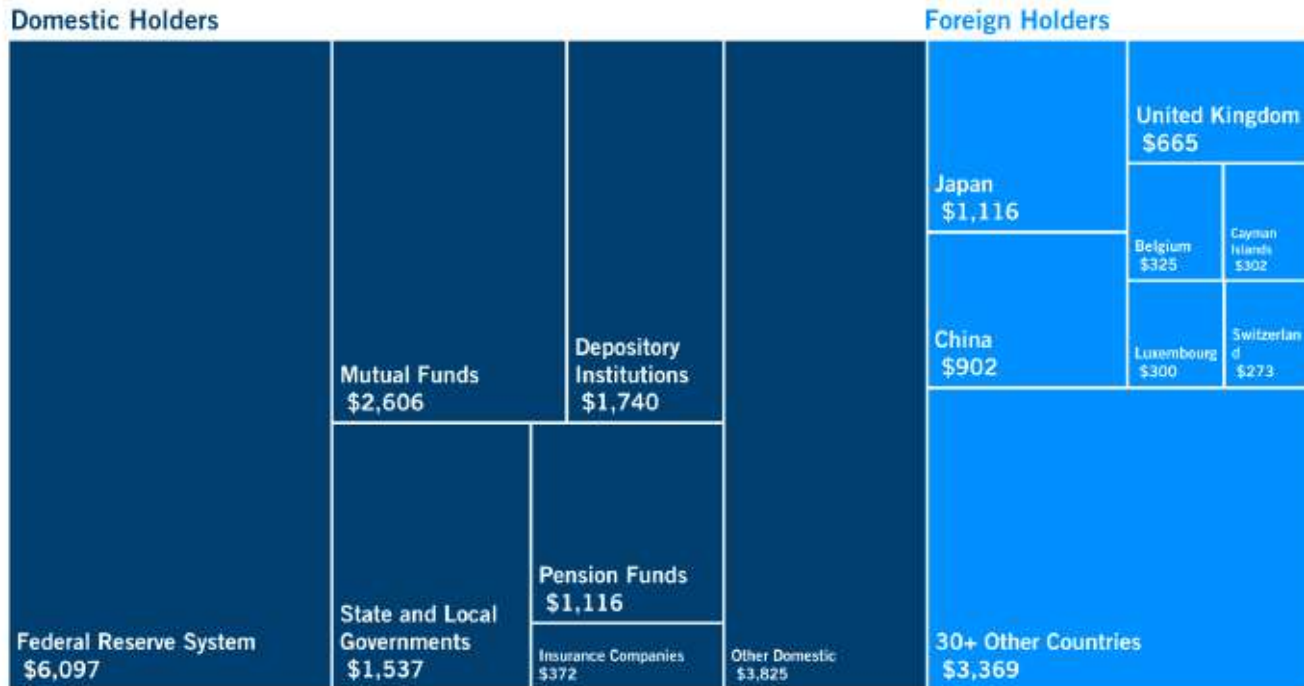https://tradingeconomics.com/united-states/government-debt-to-gdp

- Who holds the federal debt?

- 27.1% is held by the U.S. government, its agencies, and its trusts—such as the social security trust.

- 42.1% is held by private individuals and entities in the U.S., which includes 14.2% held by the Federal Reserve. (This 69.2% held domestically is technically debt between Americans.)

- 30.9% is held outside the U.S.

- [Who Owns the US National Debt? (thebalancemoney.com)](thebalancemoney.com)

https://fred.stlouisfed.org/graph/?g=10lPd

PETER G. PETERSON FOUNDATION
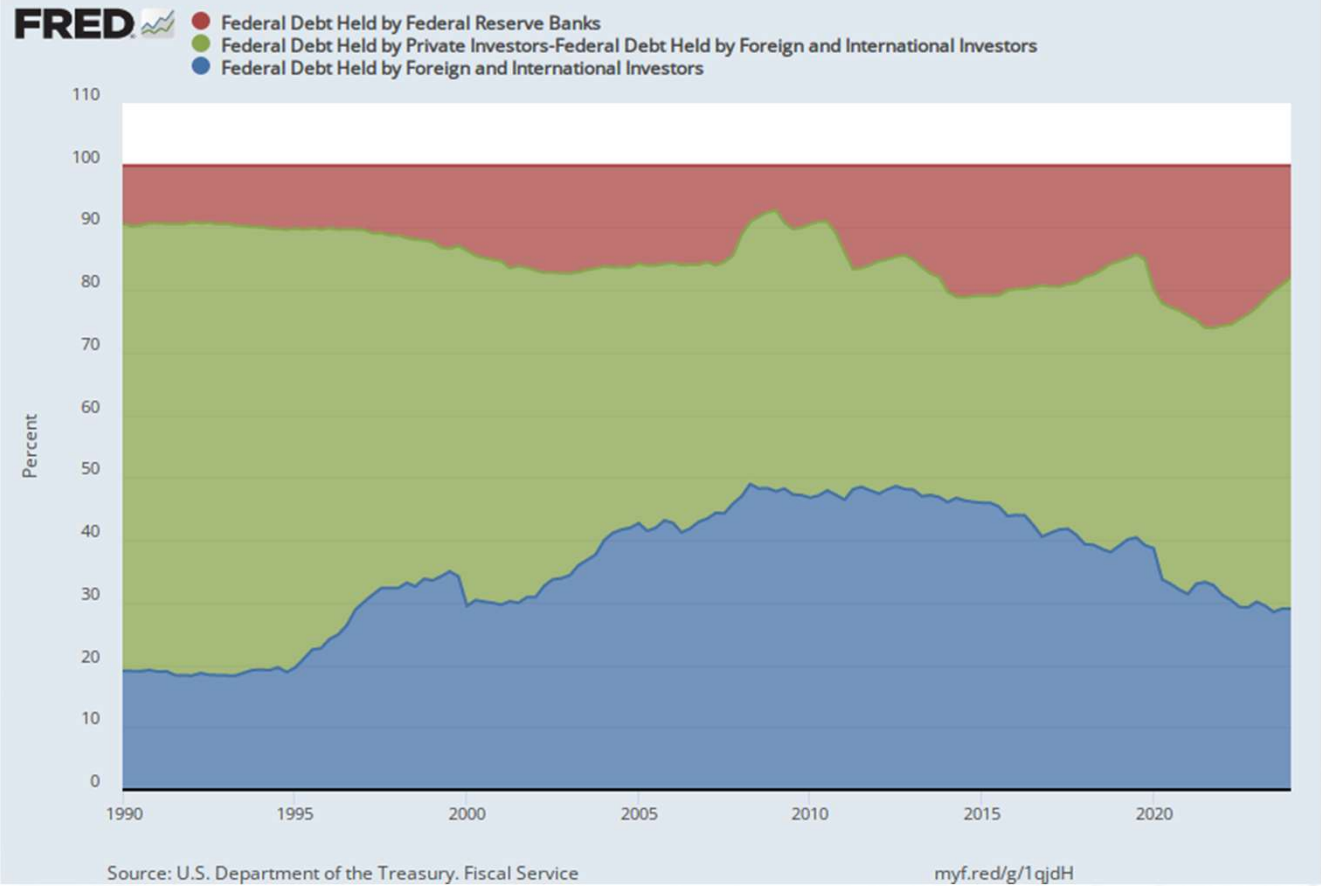
Two-thirds of public debt is held by domestic holders

Composition of Debt Held by the Public (Billions of Dollars)

Domestic Holders

- Federal Reserve System $6,097
- Mutual Funds $2,606
- State and Local Governments $1,537
- Pension Funds $1,116
- Insurance Companies $372
- Depository Institutions $1,740
- Other Domestic $3,825

Foreign Holders

- Japan $1,116
- China $902
- United Kingdom $665
- Belgium $325
- Cayman Islands $302
- Luxembourg $300
- Switzerland $273
- 30+ Other Countries $3,369

SOURCE: U.S. Department of the Treasury, *Treasury Bulletin*, March 2023.
NOTES: Other Domestic includes owners of savings bonds. Data is through September 2022.
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PGPF.ORG

https://www.pgpf.org/blog/2023/05/the-federal-government-has-borrowed-trillions-but-who-owns-all-that-debt

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Bond Markets

Learning Outcomes

Discuss/estimate/calculate the current yields on government bills, notes, bonds, and corporate bonds.

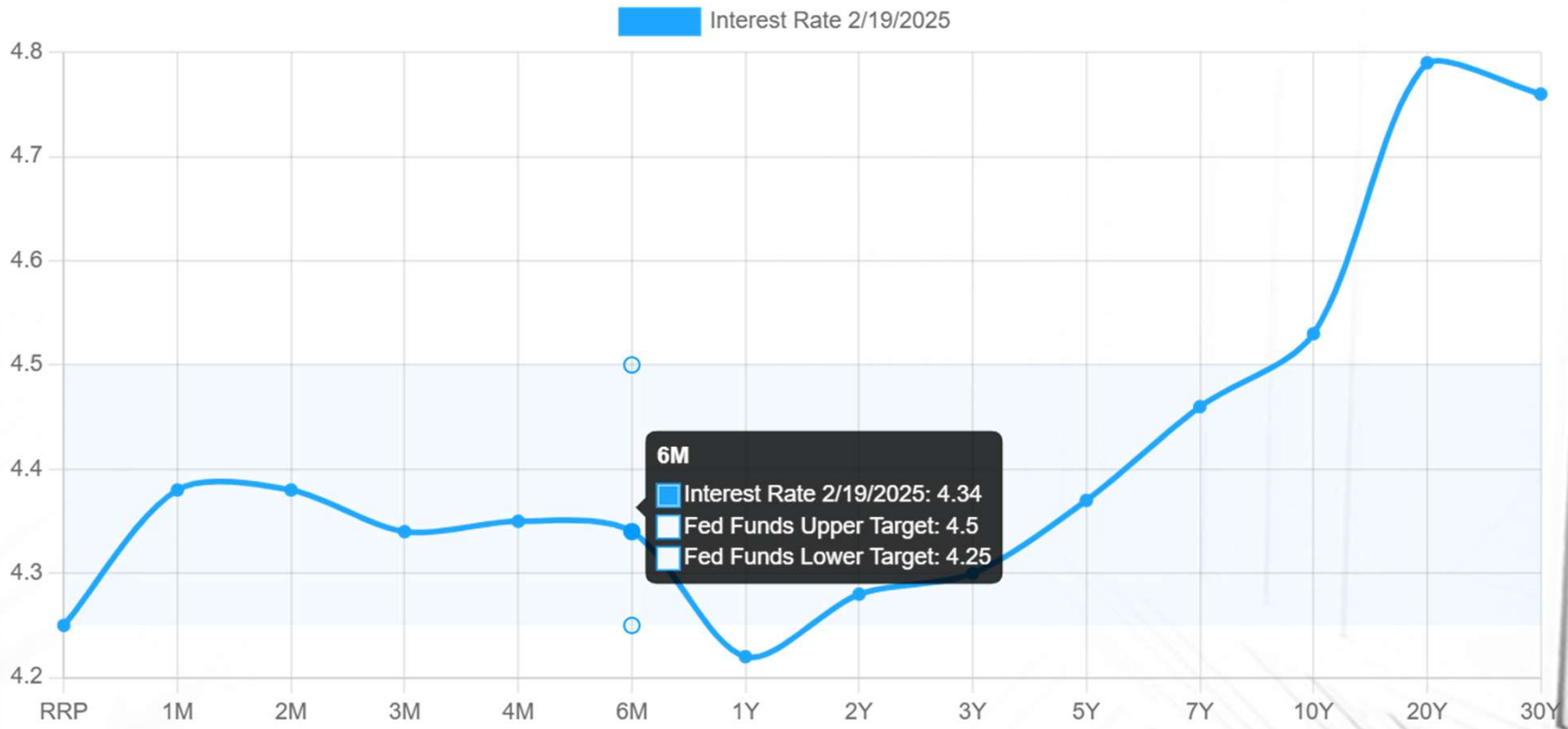| Date	1 Mo	2 Mo	3 Mo	4 Mo	6 Mo	1 Yr	2 Yr	3 Yr	5 Yr	7 Yr	10 Yr	20 Yr	30 Yr
2/3/2025	4.37	4.38	4.34	4.35	4.28	4.20	4.26	4.28	4.35	4.45	4.54	4.82	4.77
2/4/2025	4.36	4.38	4.33	4.35	4.27	4.18	4.21	4.25	4.31	4.42	4.52	4.81	4.75
2/5/2025	4.35	4.37	4.33	4.35	4.27	4.17	4.17	4.19	4.24	4.33	4.43	4.69	4.64
2/6/2025	4.37	4.38	4.34	4.36	4.28	4.19	4.21	4.23	4.28	4.36	4.45	4.70	4.65
2/7/2025	4.37	4.38	4.35	4.37	4.30	4.25	4.29	4.31	4.34	4.42	4.49	4.75	4.69
2/10/2025	4.38	4.40	4.35	4.37	4.31	4.24	4.28	4.30	4.34	4.42	4.51	4.76	4.71
2/11/2025	4.38	4.40	4.35	4.37	4.31	4.25	4.29	4.28	4.37	4.45	4.54	4.80	4.75
2/12/2025	4.38	4.39	4.35	4.36	4.33	4.30	4.36	4.37	4.48	4.56	4.62	4.90	4.83
2/13/2025	4.37	4.39	4.34	4.35	4.33	4.27	4.31	4.31	4.39	4.46	4.52	4.79	4.72
2/14/2025	4.37	4.38	4.34	4.35	4.32	4.23	4.26	4.26	4.33	4.41	4.47	4.75	4.69
2/18/2025	4.38	4.38	4.34	4.37	4.34	4.24	4.29	4.33	4.40	4.48	4.55	4.83	4.77
2/19/2025	4.38	4.38	4.34	4.35	4.34	4.22	4.28	4.30	4.37	4.46	4.53	4.79	4.76

FRED — 10-Year Treasury Constant Maturity Minus 2-Year Treasury Constant Maturity

Source: Federal Reserve Bank of St. Louis via FRED®
Shaded areas indicate U.S. recessions.

myf.red/g/1DPQ4

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Interest Rate 2/19/2025

6M
- Interest Rate 2/19/2025: 4.34
- Fed Funds Upper Target: 4.5
- Fed Funds Lower Target: 4.25

https://www.ustreasuryyieldcurve.com/

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FRED — ICE BofA BBB US Corporate Index Effective Yield

Source: Ice Data Indices, LLC via FRED®
Shaded areas indicate U.S. recessions.

myf.red/g/1DPQc

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Source: Ice Data Indices, LLC via FRED®
Shaded areas indicate U.S. recessions.

myf.red/g/1DPQe

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Fed Blog About Bonds

- https://fredblog.stlouisfed.org/2019/09/gauging-returns-and-risk-in-the-bond-market/?utm_source=series_page&utm_medium=related_content&utm_term=related_resources&utm_campaign=fredblog

- Weighted average maturity: TreasuryPresentationToTBACQ42024.pdf

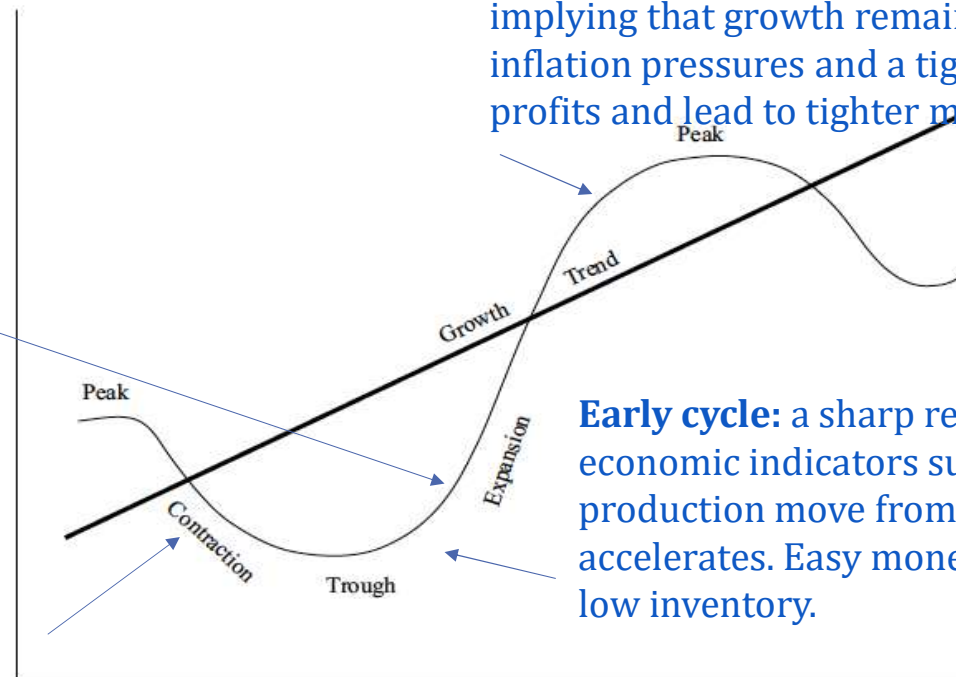**List and describe the phases of the business cycle.**

Panel A: Representation of a Business Cycle

Level of National Economic Activity

Late cycle: Economic activity often reaches its peak, implying that growth remains positive but slowing. Rising inflation pressures and a tight labor market may crimp profits and lead to tighter monetary policy.

Mid cycle: Typically the longest phase with moderate growth. Economic activity gathers momentum, credit growth is strong, and profitability is healthy as monetary policy turns increasingly neutral.

Peak

Trend

Growth

Peak

Contraction

Trough

Expansion

Early cycle: a sharp recovery from recession, as economic indicators such as GDP and industrial production move from negative to positive and growth accelerates. Easy monetary policy, rapid profit growth, low inventory.

Time

Recession: Economic activity contracts, profits decline, and credit is scarce for businesses and consumers. Monetary policy eases and inventories gradually fall despite low sales, setting the stage for recovery.

(continued)

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Discuss the patterns of typical recessions and expansions.

Typical Scenario: Recession

1. Aggregate demand declines because of an environmental shock or change in consumer preferences

2. Companies continue to produce for some period and inventories accumulate

3. With an increase in inventory, firms slow production and/or cut expenditures

4. GDP declines

Typical Scenario: Expansion

1. In response to a recession, the Federal Reserve may lower interest rates or the Federal Government may stimulate the economy with tax cuts or monetary payments

2. With lower interest rates or surplus funds, businesses and consumers spend more

3. Firms produce more and GDP increases

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Discuss strategic asset allocation and tactical asset allocation.
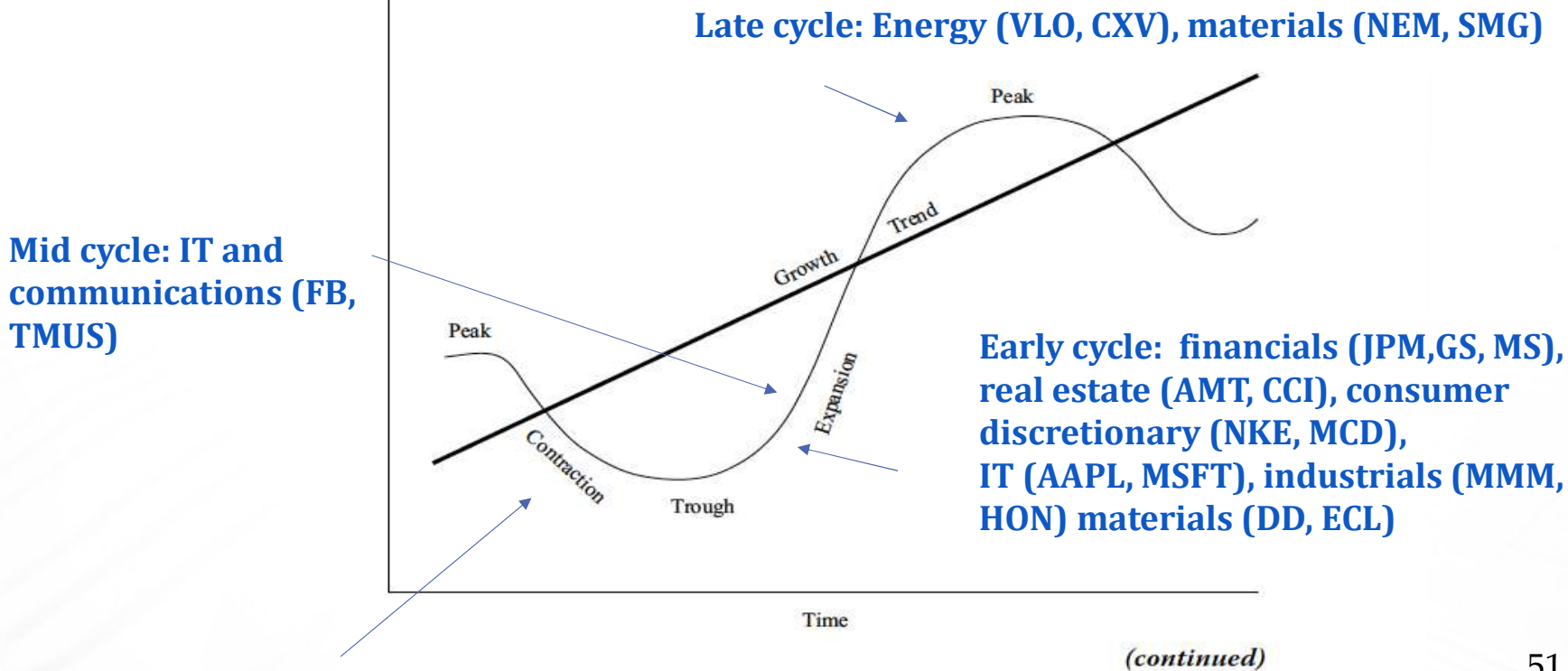
Learning Outcomes

Describe industry classification based on business cycle reactions and explain why classifying an industry is important.

Industry Analysis: Classification by Business Cycle Reaction

Business Cycle Reaction

- **Growth**
- **Defensive**
- **Cyclical**
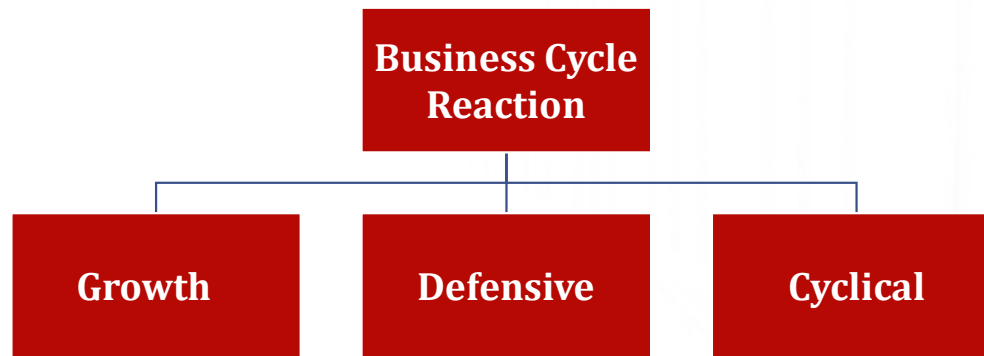
Investopedia.com/top-stocks-4581225

Panel A: Representation of a Business Cycle

Level of National Economic Activity

Late cycle: Energy (VLO, CXV), materials (NEM, SMG)

Peak

Trend

Growth

Mid cycle: IT and communications (FB, TMUS)

Peak

Early cycle: financials (JPM,GS, MS), real estate (AMT, CCI), consumer discretionary (NKE, MCD), IT (AAPL, MSFT), industrials (MMM, HON) materials (DD, ECL)

Expansion

Contraction

Trough

Time

(continued)

Recession: Consumer staples (PG, KO), utilities (DUK, XEL), health care (CVS, BIIB)

The business cycle: Equity sector investing | Fidelity

	Early cycle Rebounds	Mid cycle Peaks	Late cycle Moderates	Recession cycle Contracts
Financials	+			
Real Estate	++			––
Consumer Discretionary	++	–	––	
Information Technology	+	+	––	––
Industrials	++			––
Materials	+	––	++	
Consumer Staples			++	++
Health Care	––		++	++
Energy	––		++	
Communication Services		+		–
Utilities	––	–	+	++
	Economically sensitive sectors may tend to outperform, while more defensive sectors have tended to underperform.	Making marginal portfolio allocation changes to manage drawdown risk with sectors may enhance risk-adjusted returns during this cycle.	Defensive and inflation-resistant sectors tend to perform better, while more cyclical sectors underperform.	Since performance is generally negative in recessions, investors should focus on the most defensive, historically stable sectors.

Note: The typical business cycle shown above is a hypothetical illustration. There is not always a chronological progression in this order, and in past cycles the economy has skipped a phase or retraced an earlier one.

Source for sector performance during business cycle: Fidelity Investments (AART). Unshaded (white) portions above suggest no clear pattern of over- or underperformance vs. broader market. Double+/– signs indicate that the sector is showing a consistent signal across all three metrics: full-phase average performance, median monthly difference, and cycle hit rate. A single +/– indicates a mixed or less consistent signal. Returns data from 1962 to 2016. Annualized returns are represented by the performance of the largest 3,000 US stocks measured by market capitalization, and sectors are defined by the Global Industry Classification Standard (GICS®). Past performance is no guarantee of future results. See below for important information.

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Classify economic indicators as leading, lagging or coincident indicators.

Economic indicators

An **economic indicator** is a measure that provides information about the state of the overall economy.

- A **leading economic indicator** is a measure that has turning points that precede changes in the economy. (Equity markets, weekly hours, housing permits, durable goods, weekly initial unemployment)

- A **coincident economic indicator** has turning points that coincide with the changes in the economy. (Aggregate real personal income, nonfarm payrolls, Industrial Production Index, manufacturing and trade sales)

- A **lagging economic indicator** has turning points that are later than changes in the economy. (Average duration of unemployment, average bank prime lending rate, GDP)

List and describe key macroeconomic measures for firms to examine as part of their external analysis. Explain how macroeconomic factors influence firm operations or investments.

Key Factors to Consider

- Accuracy

- Timeliness

- Business Cycle Stage

- Predictability

- Degree of Interest

Fundamental Measures

- Gross Domestic Product

- Personal Consumption Expenditures

- Consumer Savings

- Durable Goods Orders

- Consumer Sentiment

- Institute for Supply Management

- Shiller Real Estate Index

- Commodities Snapshot

- Inflation

- Employment

Gross Domestic Product

- GDP is the total market value of the goods and services produced in a country within a certain time period.

- Transfer payments made by the government (e.g., unemployment, retirement, and welfare benefits) are not economic output and are not included in the calculation of GDP.

- Example 1: The value of Intel chips are not included in GDP until the computers are sold.

- Example 2: The value of art is not included since it was not produced during the period.

- The Bureau of Economic Analysis (BEA) releases 3 estimates (refining each time) for each quarterly period.
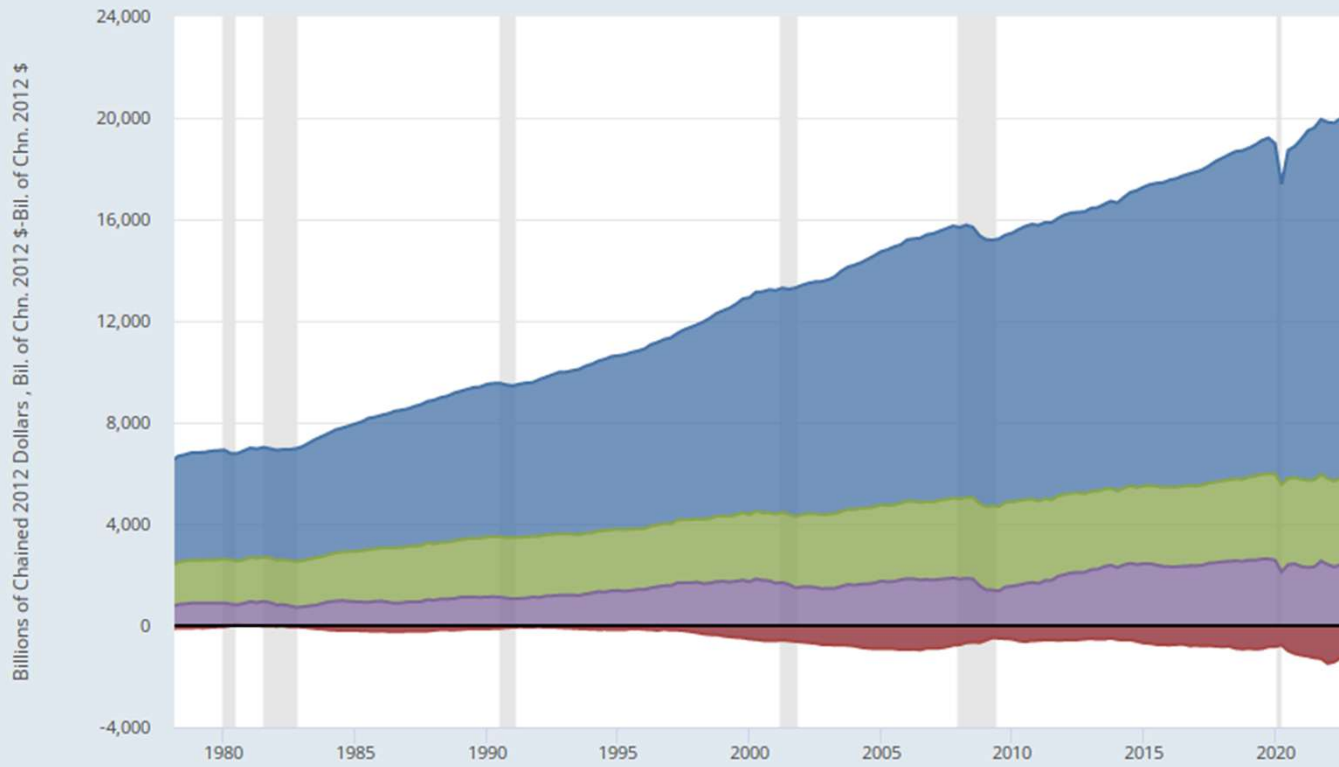
GDP Components

GDP (Y) is the sum of:

- Consumption spending (C)

- Business investment (capital equipment, inventories, etc.) (I)

- Government purchases (G)

- Net exports (X – M) or

$$Y = C + I + G + (X - M)$$

Source: U.S. Bureau of Economic Analysis

myf.red/g/17cGx

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GDP Components by %

GDP Components by % From 1950 - 2021

	Consumption Spending	Business Investment	Government Purchases	Net Exports
Low	54.3%	17.0%	8.8%	-6.8%
Mean	63.2%	25.3%	13.8%	-2.3%
Median	63.3%	25.0%	13.3%	-1.5%
High	70.8%	37.0%	19.8%	0.4%

Data Source: Federal Reserve Bank of St. Louis
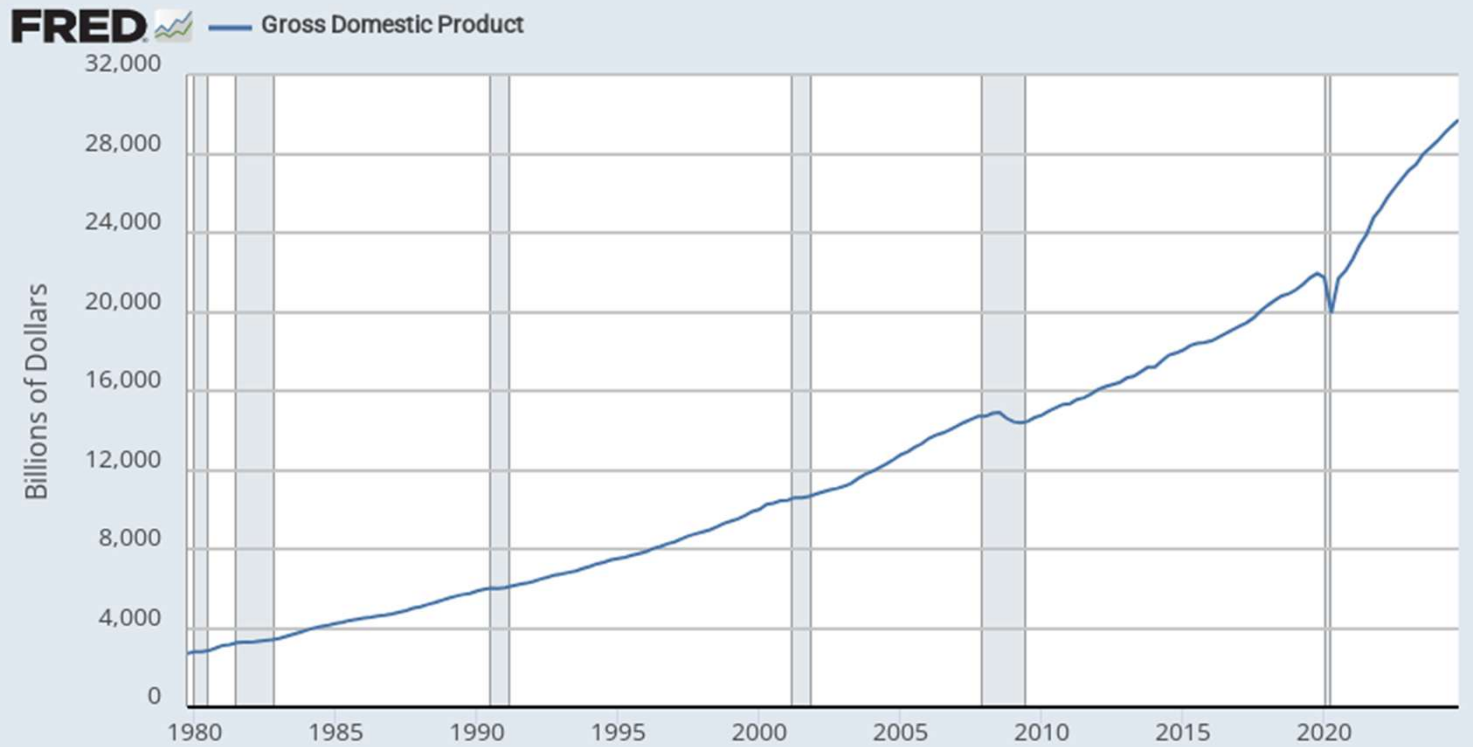
FRED — Gross Domestic Product

$29.7 Trillion

Source: U.S. Bureau of Economic Analysis via FRED®
Shaded areas indicate U.S. recessions.

myf.red/g/1DPR8

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$23.5 Trillion

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Real GDP, Percent Change from Preceding Quarter
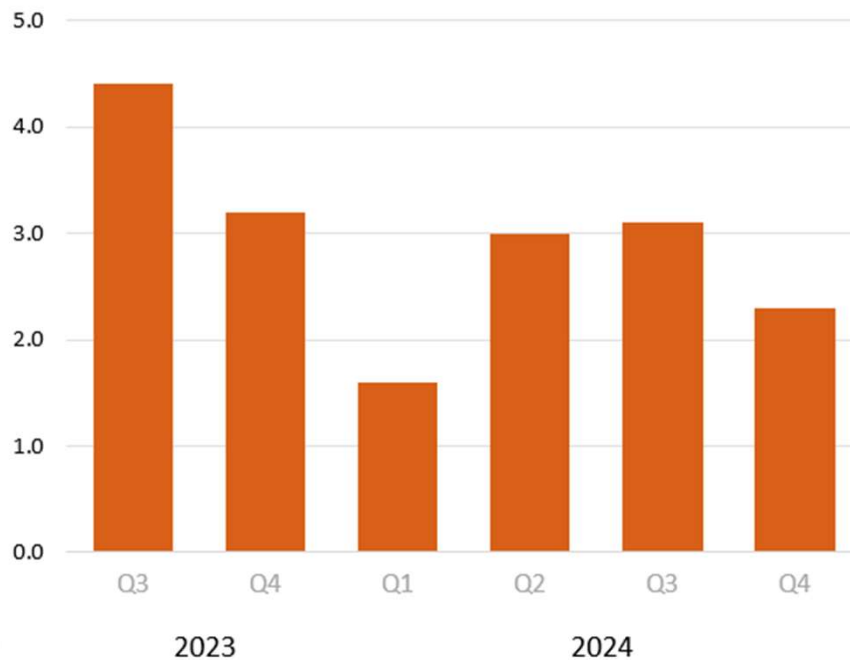
U.S. Bureau of Economic Analysis   Seasonally adjusted annual rates

Real gross domestic product (GDP) increased at an annual rate of 2.3 percent in the fourth quarter of 2024, according to the advance estimate. In the third quarter, real GDP increased 3.1 percent. The increase in real GDP in the fourth quarter primarily reflected increases in consumer spending and government spending that were partly offset by a decrease in investment. Imports, which are a subtraction in the calculation of GDP, decreased.
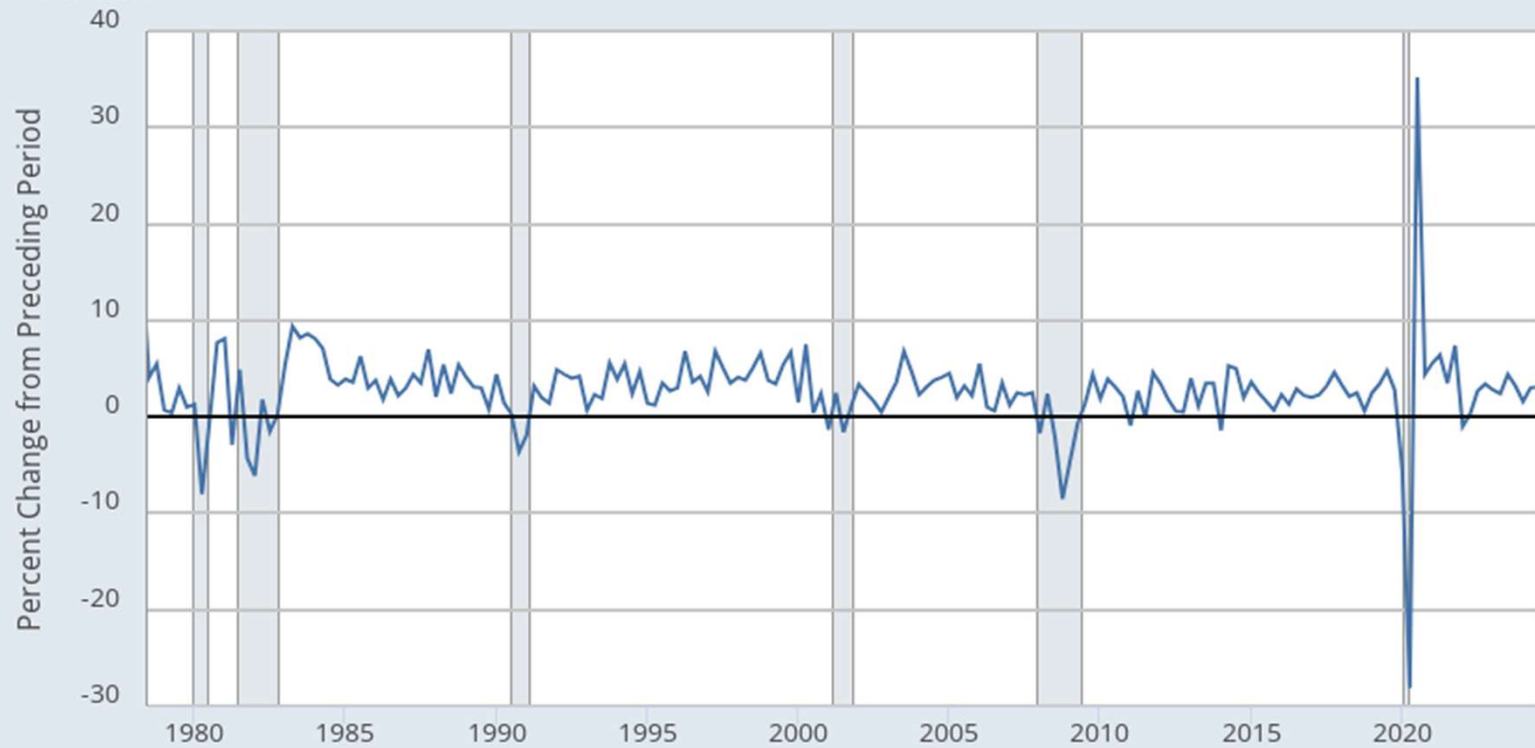
https://www.bea.gov/data/gdp/gross-domestic-product

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FRED 〰 — Real Gross Domestic Product
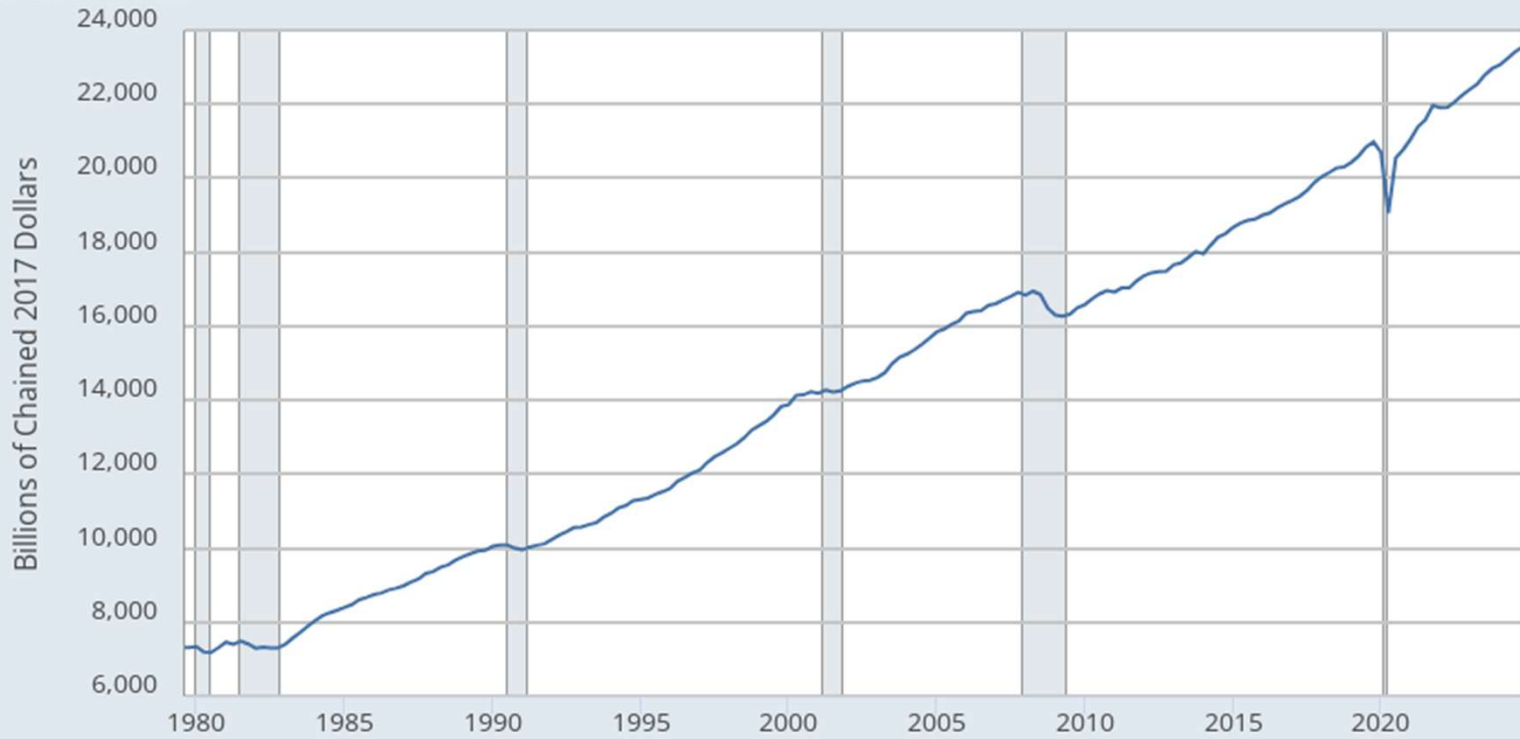
Source: U.S. Bureau of Economic Analysis via FRED®

Shaded areas indicate U.S. recessions.

myf.red/g/1DPRP

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Gross Domestic Product

- GDP historical metrics

Low [1]	-31.2%
Mean	3.3%
Median	3.1%
High [2]	33.8%

[1] 2nd Quarter of 2020, [2] 3rd Quarter of 2020.

Data Source: Federal Reserve Bank of St. Louis

After the housing starts report from the US Census Bureau, the GDPNow model estimate for real GDP growth (seasonally adjusted annual rate) in the first quarter of 2025 is **2.3 percent** on February 19, unchanged from February 14 after rounding.

Evolution of Atlanta Fed GDPNow real GDP estimate for 2025: Q1
Quarterly percent change (SAAR)

Atlanta Fed GDPNow estimate

Blue Chip consensus

Range of top 10 and bottom 10 average forecasts

Date of forecast
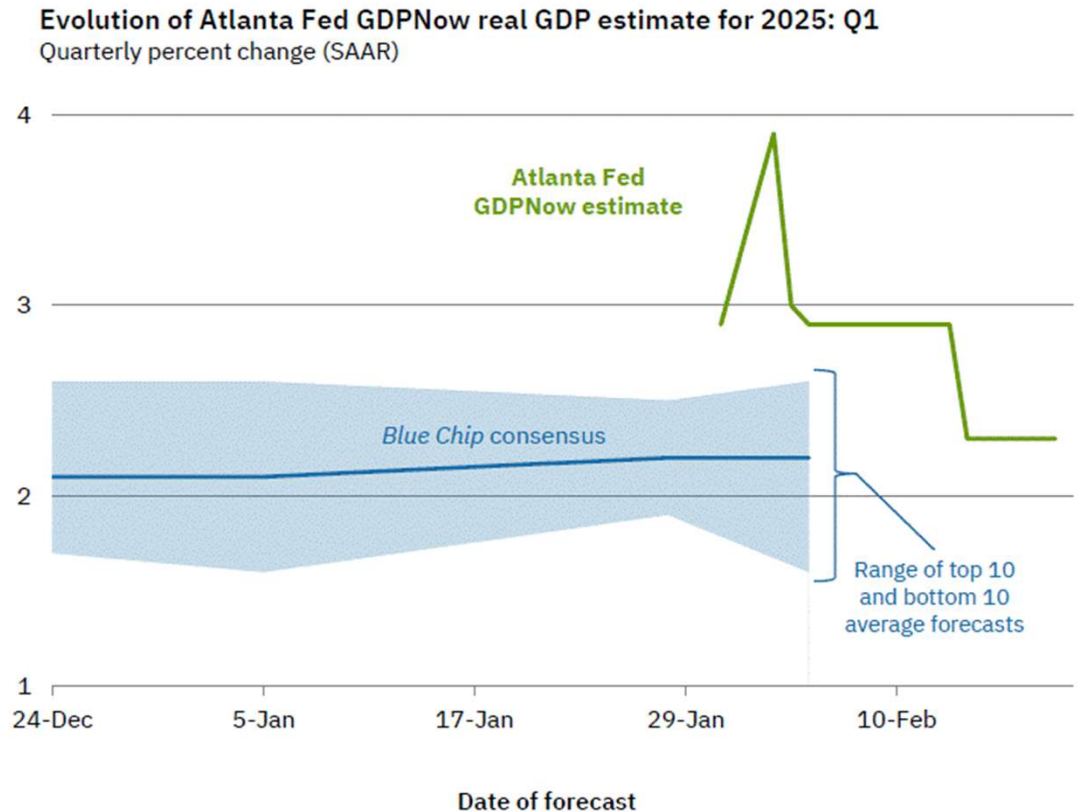
Sources: *Blue Chip Economic Indicators* and *Blue Chip Financial Forecasts*
Note: The top (bottom) 10 average forecast is an average of the highest (lowest) 10 forecasts in the *Blue Chip* survey.

GDPNow - Federal Reserve Bank of Atlanta (atlantafed.org)

https://www.economist.com/graphic-detail/2018/12/15/gdp-predictions-are-reliable-only-in-the-short-term

67

Real PCE

- Personal consumption expenditures (PCE) is the primary measure of consumer spending on goods and services in the U.S. economy.

- It accounts for about two-thirds of domestic final spending, and thus it is the primary engine that drives future economic growth.

- PCE shows how much of the income earned by households is being spent on current consumption as opposed to how much is being saved for future consumption.

- In addition, the PCE estimates are available monthly, so they can provide an early indication of the course of economic activity in the current quarter. For example the PCE estimates for January are released at the end of February, and the estimates for February are released at the end of March.

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Month	% Change
2019-10-01	2.7
2020-01-01	-6.6
2020-04-01	-30.6
2020-07-01	41.2
2020-10-01	5.8
2021-01-01	9.5
2021-04-01	14.1
2021-07-01	3.1
2021-10-01	4.4
2022-01-01	1.0
2022-04-01	2.6
2022-07-01	1.5
2022-10-01	1.2
2023-01-01	4.9
2023-04-01	1.0
2023-07-01	2.5
2023-10-01	3.5
2024-01-01	1.9
2024-04-01	2.8
2024-07-01	3.7
2024-10-01	4.2

Source: U.S. Bureau of Economic Analysis via FRED®

Shaded areas indicate U.S. recessions.

myf.red/g/1DPS2

69
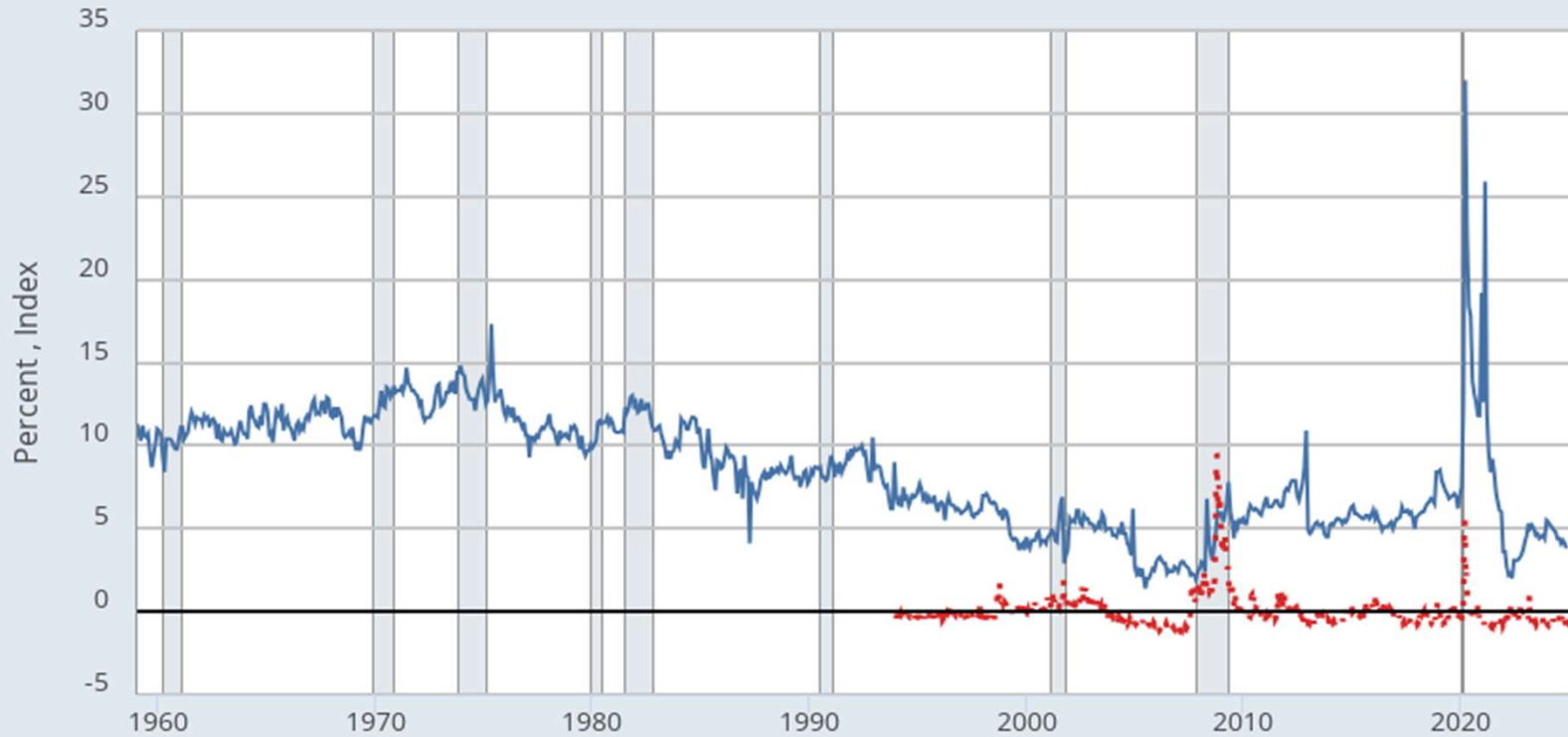
Sources: Federal Reserve Bank of St. Louis; U.S. Bureau of Economic Analysis via FRED®
Shaded areas indicate U.S. recessions.

myf.red/g/1DQIB

70

FRED — Consumer Loans: Credit Cards and Other Revolving Plans, All Commercial Banks

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

myf.red/g/1DQJt

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ALFRED ▮ ● Delinquency Rate on Consumer Loans, All Commercial Banks Vintage: 2024-11-19
● Delinquency Rate on Consumer Loans, All Commercial Banks Vintage: 2025-02-18
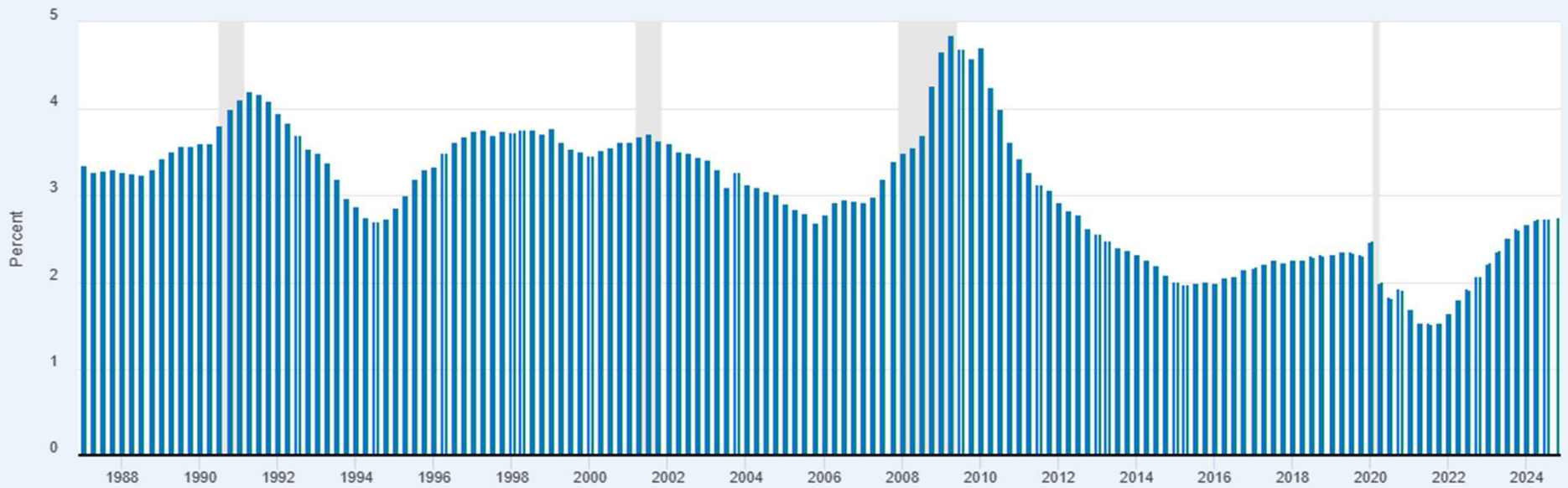
Shaded areas indicate U.S. recessions.   Source: Board of Governors of the Federal Reserve System (US)   alfred.stlouisfed.org

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Durable Goods (Component of PCE)

- Personal Consumption Expenditure is divided into three broad categories: expenditures for services, for durable goods, and for nondurable goods.

- Measures consumer spending on long-term purchases; products that are expected to last more than three years.

- Orders for factory hard goods can provide information on how busy factories may be in the future. Orders placed in current months may provide work in factories for many months to come as they work to fill the orders.

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FRED 〰 — Manufacturers' New Orders: Durable Goods

Source: U.S. Census Bureau via FRED®
Shaded areas indicate U.S. recessions.

myf.red/g/1DQK0

75

Consumer durable goods: Goods bought by individuals and households. They include furniture, automobiles, electronics, luggage, books, and sports equipment.

Business durable goods: Durable goods used by businesses are plant, property and equipment (PP&E). They include industrial equipment such as machinery and electrical apparatus. They also include boats, trucks, buses, and aircraft.

Nondurable goods: Goods that are known to last less than three years on average and include goods such as food, clothing, tobacco, personal care products, etc.
https://corporatefinanceinstitute.com/resources/knowledge/economics/durable-goods-orders-report/

https://www.census.gov/manufacturing/m3/adv/pdf/durgd.pdf

Institute For Supply Management (ISM)

- The Purchasing Manager Index (PMI) is a composite index based on the diffusion indexes for the following five indicators at equal weights:

    -New Orders (seasonally adjusted) 20%

    -Production (seasonally adjusted) 20%

    -Employment (seasonally adjusted) 20%

    -Supplier Deliveries (seasonally adjusted) 20%

    -Inventories 20%

- A PMI index over 50 represents growth or expansion within the manufacturing sector of the economy compared with the prior month.

- A reading under 50 represents contraction, and a reading at 50 indicates an equal balance between manufacturers reporting advances and declines in their business.

https://www.ismworld.org/supply-management-news-and-reports/reports/ism-report-on-business/pmi/june/

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ISM Report Details

- Manufactuing: https://www.ismworld.org/supply-management-news-and-reports/reports/ism-report-on-business/pmi/january/

- Services: https://www.ismworld.org/supply-management-news-and-reports/reports/ism-report-on-business/services/january/

FRED — Capacity Utilization: Manufacturing (NAICS)

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

myf.red/g/1DQKN

80

Consumer Sentiment

Consumer sentiment fell for the second straight month, dropping about 5% to reach its lowest reading since July 2024. The decrease was pervasive, with Republicans, Independents, and Democrats all posting sentiment declines from January, along with consumers across age and wealth groups. Furthermore, all five index components deteriorated this month, led by a 12% slide in buying conditions for durables, in part due to a perception that it may be too late to avoid the negative impact of tariff policy. Expectations for personal finances sank about 6% from last month, again seen across all political affiliations, reaching its lowest value since October 2023. Many consumers appear worried that high inflation will return within the next year. Interviews for this release concluded on February 4.

Source: University of Michigan: http://www.sca.isr.umich.edu/

US Consumer Confidence - points

Source: tradingeconomics.com | University of Michigan

https://tradingeconomics.com/united-states/consumer-confidence

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Michigan Sentiment, Current Conditions and Expectations

Preliminary Results for February 2025

	Feb 2025	Jan 2025	Feb 2024	M-M Change	Y-Y Change
Index of Consumer Sentiment	67.8	71.1	76.9	-4.6%	-11.8%
Current Economic Conditions	68.7	74.0	79.4	-7.2%	-13.5%
Index of Consumer Expectations	67.3	69.3	75.2	-2.9%	-10.5%

Source: University of Michigan: http://www.sca.isr.umich.edu/

Real Estate:
S&P/Case-Schiller 20 City Index

The S&P/Case-Shiller Home Price Indices are the leading measures of U.S. residential real estate prices, tracking changes in the value of residential real estate both nationally as well as in 20 metropolitan regions.

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Real Estate:
S&P/Case-Schiller 20 City Index

	Regions	Cities
PHXR	Phoenix metropolitan area	Phoenix–Mesa–Scottsdale, AZ
LXXR	Greater Los Angeles	Los Angeles–Long Beach–Santa Ana, CA
SDXR	San Diego County, California	San Diego–Carlsbad–San Marcos, CA
SFXR	San Francisco	San Francisco–Oakland–Fremont, CA
DNXR	Denver-Aurora Metropolitan Area	Denver–Aurora, CO
WDXR	Washington Metropolitan Area	Washington–Arlington–Alexandria, DC–VA–MD–WV
MIXR	South Florida metropolitan area	Miami–Fort Lauderdale–Pompano Beach, FL
TPXR	Tampa Bay Area	Tampa–St. Petersburg–Clearwater, FL
ATXR	Atlanta metropolitan area	Atlanta–Sandy Springs–Marietta, GA
CHXR	Chicago metropolitan area	Chicago–Naperville–Joliet, IL–IN–WI
BOXR	Greater Boston	Boston–Cambridge–Quincy, MA
DEXR	Metro Detroit	Detroit–Warren–Livonia, MI
MNXR	Minneapolis-Saint Paul	Minneapolis–St. Paul–Bloomington, MN–WI
CRXR	Charlotte metropolitan area	Charlotte-Gastonia-Concord, NC-SC
LVXR	Las Vegas metropolitan area	Las Vegas, NV-AZ
NYXR	New York metropolitan area	New York–Northern New Jersey–Long Island, NY–NJ–PA
CEXR	Greater Cleveland	Cleveland–Elyria–Mentor, OH
POXR	Portland metropolitan area	Portland–Vancouver–Beaverton, OR–WA
DAXR	Dallas/Fort Worth Metroplex	Dallas–Fort Worth–Arlington, TX
SEXR	Seattle metropolitan area	Seattle–Tacoma–Bellevue, WA

FRED 〜 — S&P CoreLogic Case-Shiller 20-City Composite Home Price Index

Source: S&P Dow Jones Indices LLC via FRED®
Shaded areas indicate U.S. recessions.

myf.red/g/1DQLp
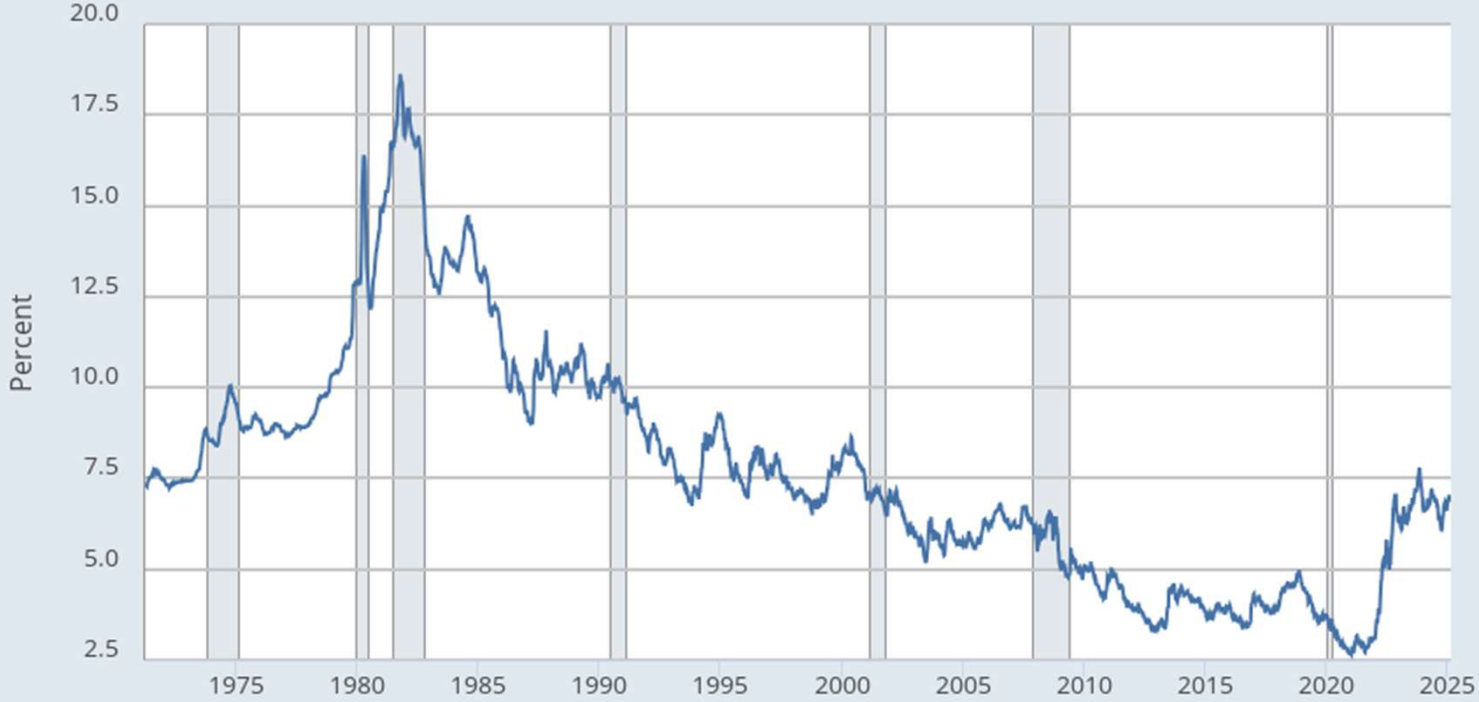
86

6.87% in Feb 2025

Median Sales Price of Houses Sold for the United States
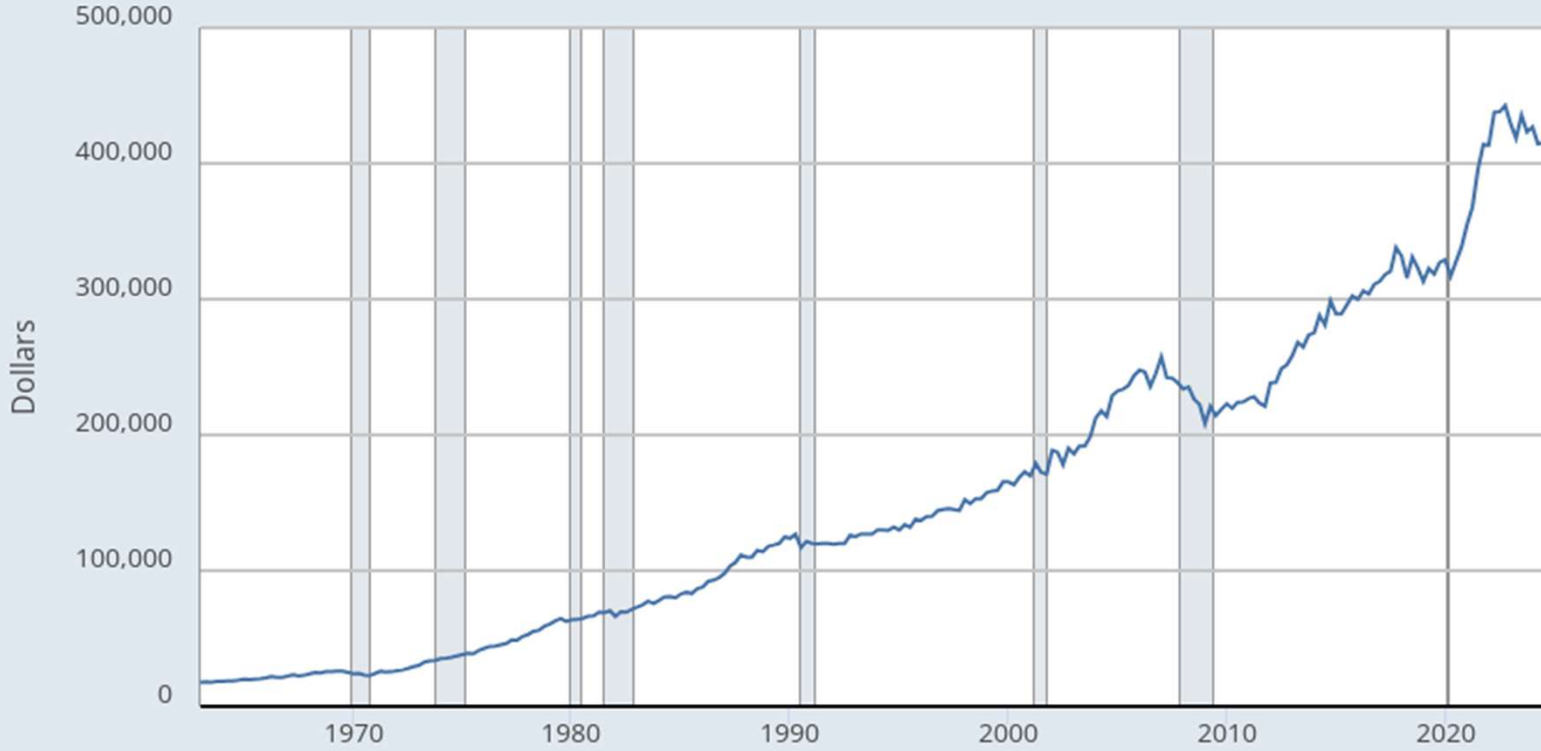
$420,000 in Dec 2024

Sources: U.S. Census Bureau; U.S. Department of Housing and Urban Development via FRED®

Shaded areas indicate U.S. recessions.

myf.red/g/1DQLy

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Inflation, Hyperinflation, Deflation, Stagflation

- Inflation is an increase in the price of goods/services over time

- Hyperinflation is a monthly 50% decline in the value of currency

- Deflation is the decrease in the price for goods/services over time

- Stagflation is when inflation is high and economic growth is slow

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Common Measures of Inflation

- The Consumer Price Index (CPI) is the best-known indicator of inflation.
  - Inflation is the increase of prices for a broad basket of goods/services over time.
  - CPI captures the price changes of a basket of goods purchased by "all urban consumers."

- Personal Consumption Expenditures (PCE) captures the level of consumer spending

- The Producer Price Index (PPI) measures price changes at different stages of processing (raw, intermediate, finished)

- Sticky Price Index

- 10-Year Inflation Expectations

Consumer Price Index for All Urban Consumers: All Items in U.S. City Average
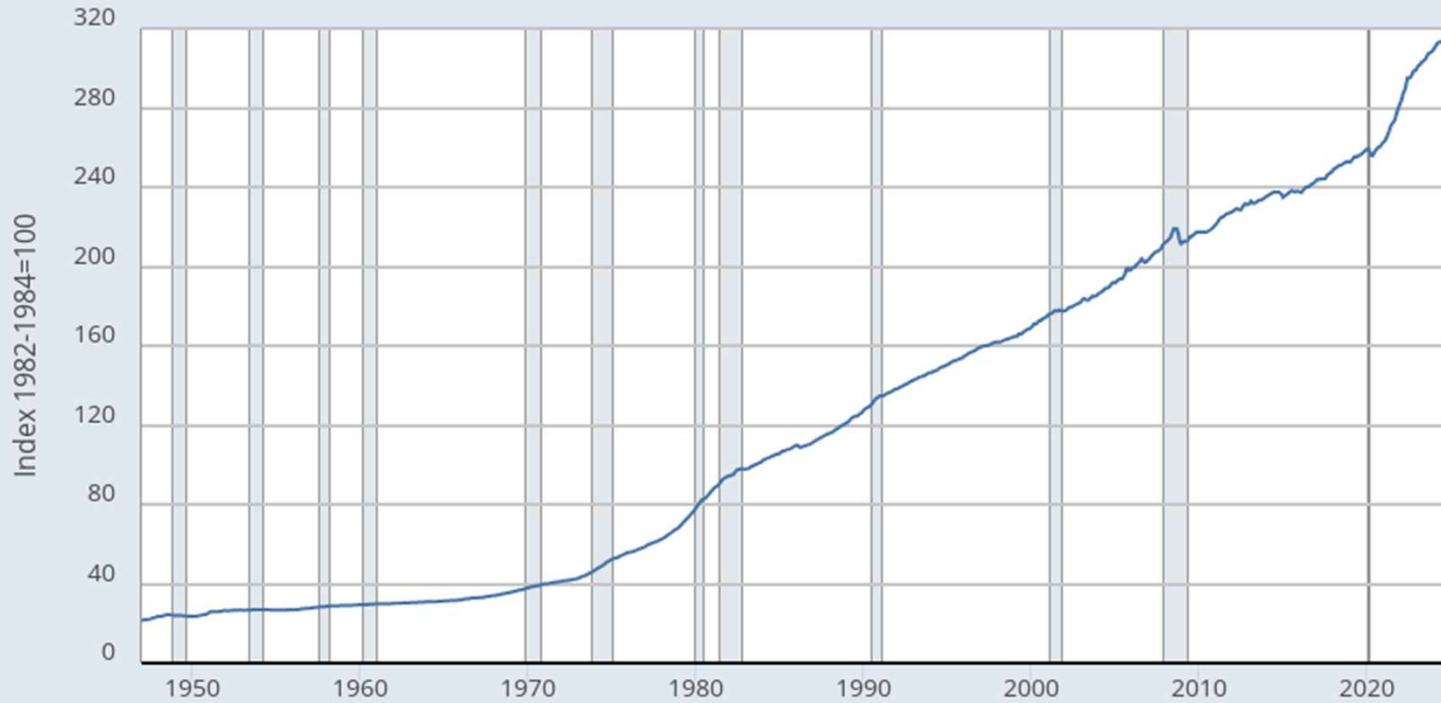
Index 1982-1984=100

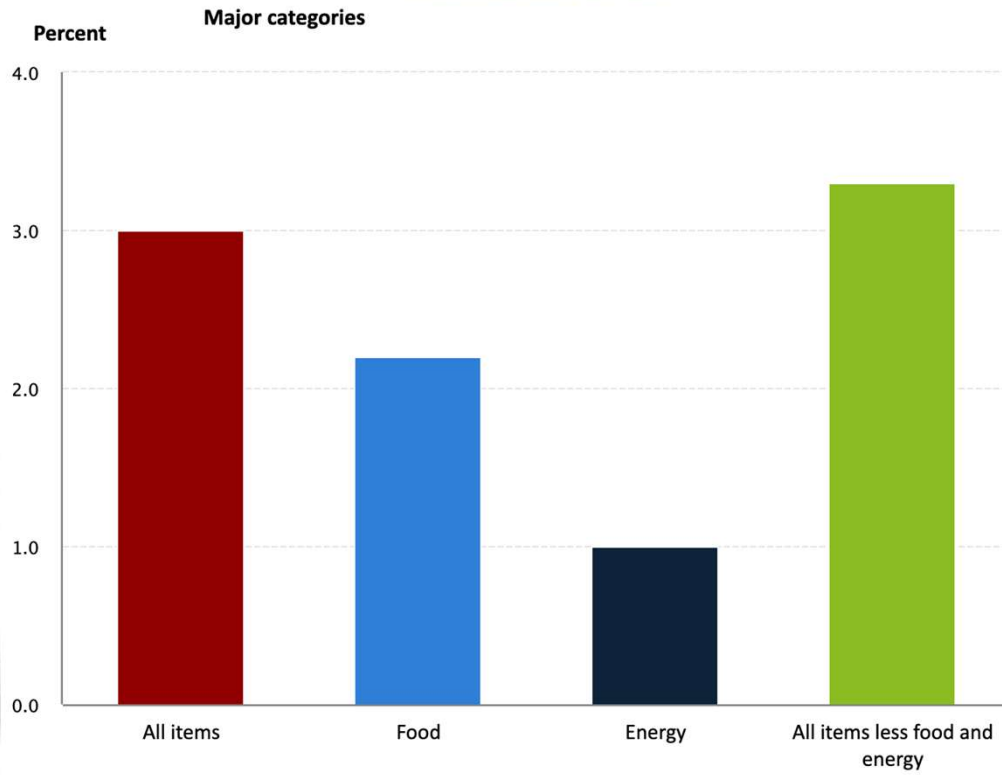Source: U.S. Bureau of Labor Statistics via FRED®
Shaded areas indicate U.S. recessions.

myf.red/g/1DQLz

Month	Index	Monthly in %	Cumulative in %
1/1/2023	300.456	0.55	14.4
2/1/2023	301.476	0.34	14.79
3/1/2023	301.643	0.06	14.85
4/1/2023	302.858	0.4	15.31
5/1/2023	303.316	0.15	15.49
6/1/2023	304.099	0.26	15.79
7/1/2023	304.615	0.17	15.98
8/1/2023	306.138	0.5	16.56
9/1/2023	307.374	0.4	17.03
10/1/2023	307.653	0.09	17.14
11/1/2023	308.087	0.14	17.3
12/1/2023	308.735	0.21	17.55
1/1/2024	309.794	0.34	17.95
2/1/2024	311.022	0.4	18.42
3/1/2024	312.107	0.35	18.83
4/1/2024	313.016	0.29	19.18
5/1/2024	313.14	0.04	19.23
6/1/2024	313.131	0	19.22
7/1/2024	313.566	0.14	19.39
8/1/2024	314.131	0.18	19.61
9/1/2024	314.851	0.23	19.88
10/1/2024	315.564	0.23	20.15
11/1/2024	316.449	0.28	20.49
12/1/2024	317.603	0.36	20.93
1/1/2025	319.086	0.47	21.49

Base period 1/1/21

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12-month percentage change, Consumer Price Index, selected categories, June 2024, not seasonally adjusted

https://www.bls.gov/charts/consumer-price-index/consumer-price-index-by-category.htm#

Drill down by category.

Personal Consumption Expenditures: Chain-type Price Index

Source: U.S. Bureau of Economic Analysis via FRED®
Shaded areas indicate U.S. recessions.

myf.red/g/1DQP4

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PPI – January 2025

The Producer Price Index for final demand increased 0.4 percent in January, seasonally adjusted, the U.S. Bureau of Labor Statistics reported today. Final demand prices rose 0.5 percent in December 2024 and 0.2 percent in November. (See table A.) On an unadjusted basis, the index for final demand moved up 3.5 percent for the 12 months ended January 2025.

Leading the broad-based January advance in the index for final demand, prices for final demand services rose 0.3 percent. The index for final demand goods moved up 0.6 percent.

The index for final demand less foods, energy, and trade services rose 0.3 percent in January after moving up 0.4 percent in December. For the 12 months ended in January, prices for final demand less foods, energy, and trade services advanced 3.4 percent.

https://www.bls.gov/news.release/ppi.nr0.htm

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Sticky Price Index – 3.6 percent in February, 2025

- The Atlanta Fed's sticky-price consumer price index (CPI)—a weighted basket of items that change price relatively slowly—rose 4.9 percent (on an annualized basis) in January, following a 2.6 percent (revised) increase in December. On a year-over-year basis, the series is up 3.6 percent.

- On a core basis (excluding food and energy), the sticky-price index rose 5.1 percent (annualized) in January, and its 12-month percent change was 3.6 percent.

- The flexible cut of the CPI—a weighted basket of items that change price relatively frequently—rose 7.5 percent (annualized) in January and is up 1.1 percent on a year-over-year basis.

https://www.atlantafed.org/research/inflationproject/stickyprice

A Measure of Inflation Expectations

Treasury yield = TIPS yield + expected inflation

Or

Treasury yield – TIPS yield = expected inflation

Why do Tips have negative yield? The answer is that the **yield on a TIPS bond is equal to the [Treasury] bond yield minus the expected inflation rate**. As a result, when standard Treasury bonds are trading at yields below the expected inflation rate—as has been the case since late 2010—TIPS yields fall into negative territory.

A Measure of Inflation Expectations

November 1st, 2023

10 Yr. Treasury Constant Maturity	:	4.77%
10 Yr. TIPS Constant Maturity	:	2.36%
Inflation expectations	:	2.41%

February 14th, 2024

10 Yr. Treasury Constant Maturity	:	4.27%
10 Yr. TIPS Constant Maturity	:	1.97%
Inflation expectations	:	2.30%

February 21st, 2025

10 Yr. Treasury Constant Maturity	:	4.55%
10 Yr. TIPS Constant Maturity	:	2.10%
Inflation expectations	:	2.45%

https://www.federalreserve.gov/releases/h15/

Treasury Inflation-Protected Securities, or TIPS, provide protection against inflation. The principal of a TIPS increases with inflation and decreases with deflation, as measured by the Consumer Price Index. When a TIPS matures, you are paid the adjusted principal or original principal, whichever is greater.

TIPS pay interest twice a year, at a fixed rate. The rate is applied to the adjusted principal; so, like the principal, interest payments rise with inflation and fall with deflation.

https://www.treasurydirect.gov

FRED

— Producer Price Index by Commodity: Pulp, Paper, and Allied Products: Wood Pulp
— Producer Price Index by Industry: Plastics Material and Resin Manufacturing
— Producer Price Index by Commodity: Metals and Metal Products: Iron and Steel
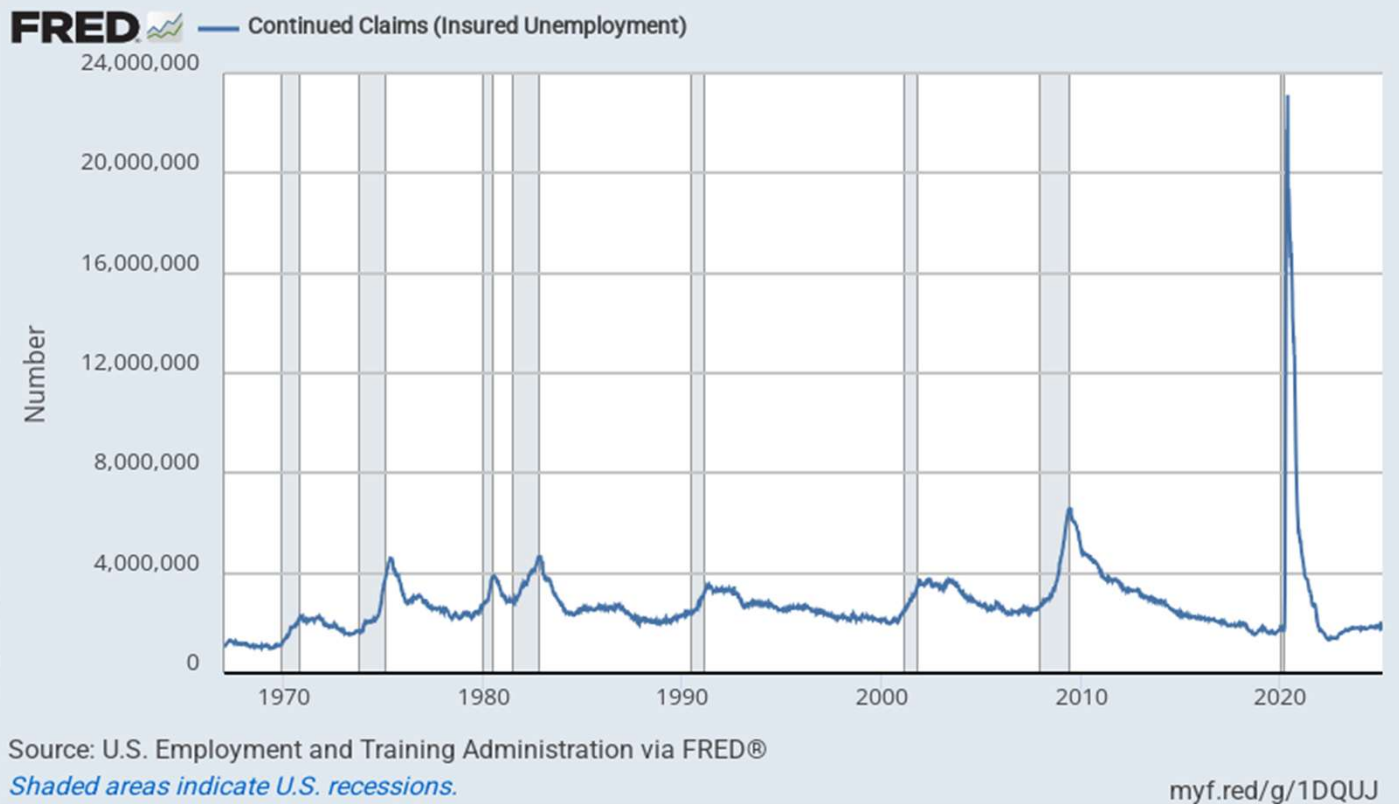— Producer Price Index by Industry: Total Manufacturing Industries
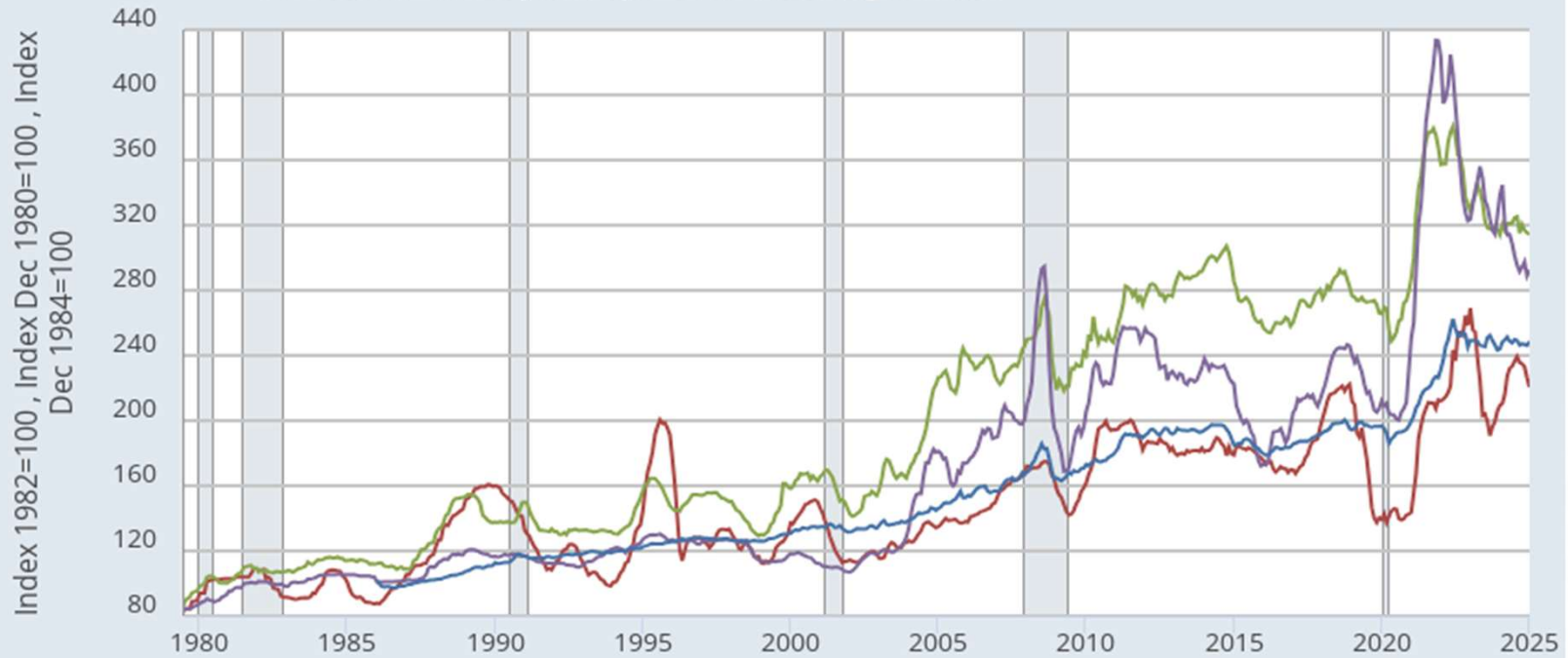
Source: U.S. Bureau of Labor Statistics via FRED®

Shaded areas indicate U.S. recessions.

myf.red/g/1DQSd

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Employment Measures

- Weekly unemployment claims (February 20th release): + 219 Thousand https://www.dol.gov/ui/data.pdf

- Monthly employment situation release (February 7th release): 4.0% https://www.bls.gov/news.release/pdf/empsit.pdf

- ADP National Employment Report, Private Sector (January Report): +183 Thousand https://adpemploymentreport.com/

- More definitions/explanations: https://fredblog.stlouisfed.org/2017/03/what-is-unemployment/?utm_source=series_page&utm_medium=related_content&utm_term=related_resources&utm_campaign=fredblog&_gl=1*8rnxcs*_ga*MjYwODEzOTE2LjE1ODgzNDg0MjI.*_ga_5K9L4B5XET*MTYxMzE0OTA5OC4yLjEuMTYxMzE0OTEzMi4w

FRED ⌁ —— Continued Claims (Insured Unemployment)

Source: U.S. Employment and Training Administration via FRED®
Shaded areas indicate U.S. recessions.

myf.red/g/1DQUJ

The number of people who have already filed an initial claim and who have experienced a week of unemployment and then filed a continued claim to claim benefits for that week of unemployment. Continued claims data are based on the week of unemployment, not the week when the initial claim was filed.

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Source: U.S. Bureau of Labor Statistics via FRED®
Shaded areas indicate U.S. recessions.
myf.red/g/1DQUT

Labor force data are restricted to people 16 years of age and older, who currently reside in 1 of the 50 states or the District of Columbia, who do not reside in institutions (e.g., penal and mental facilities, homes for the aged), and who are not on active duty in the Armed Forces.

4% This rate is also defined as the U-3 measure of labor underutilization.

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https://data.bls.gov/cgi-bin/surveymost
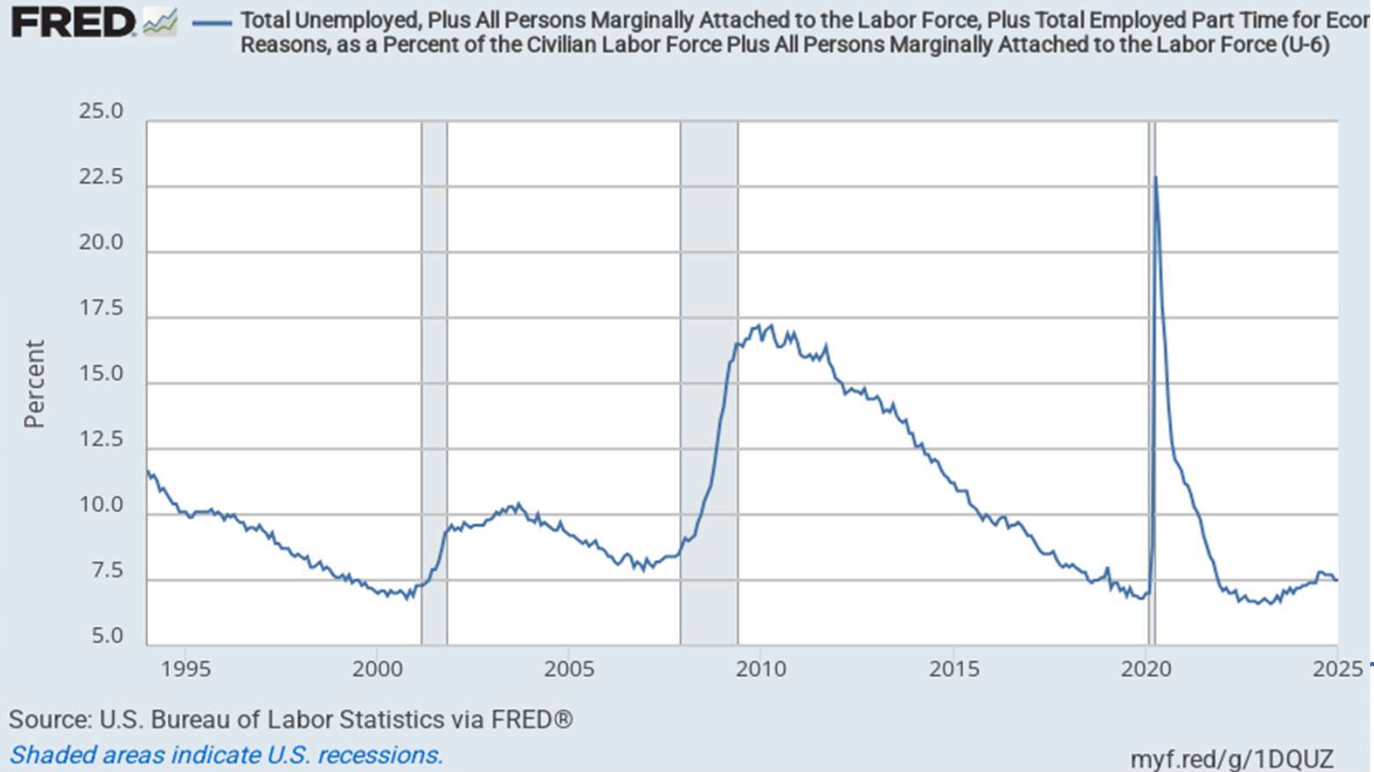
The marginally attached are those persons not in the labor force who want and are available for work, and who have looked for a job sometime in the prior 12 months, but were not counted as unemployed because they had not searched for work in the 4 weeks preceding the survey.

7.5%

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Potential Discussion Topics

- Chinese real estate developer defaults

- AI Chatbots

- Population trends

- Government debt: How far is too far?

- U.S. as the world currency?

- Thoughts on recovery?

- How to use the St. Louis Fed Dashboard

Thank You!