



# Guide to the Markets<sup>®</sup>



U.S. | 2Q 2024

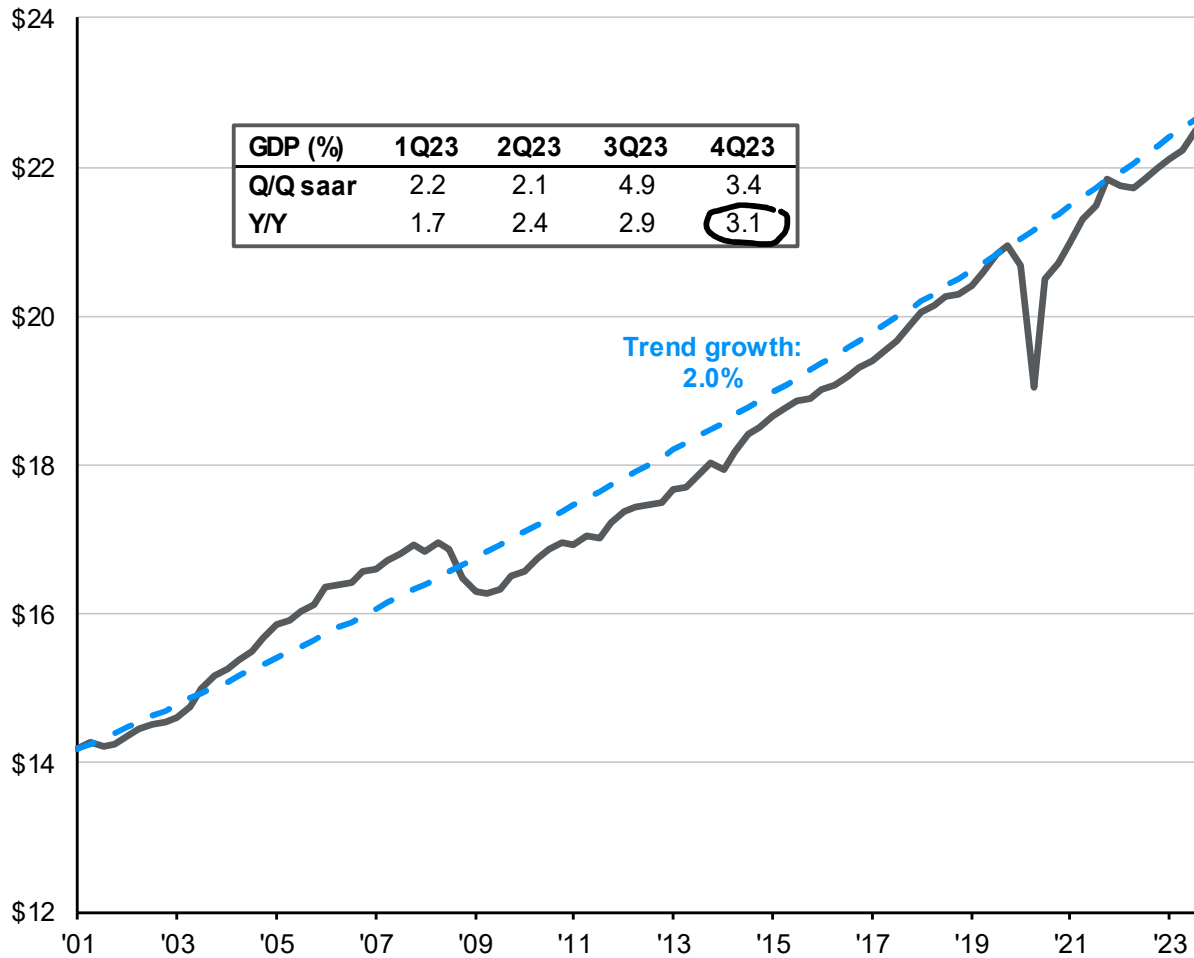
As of March 31, 2024



# Economic growth and the composition of GDP

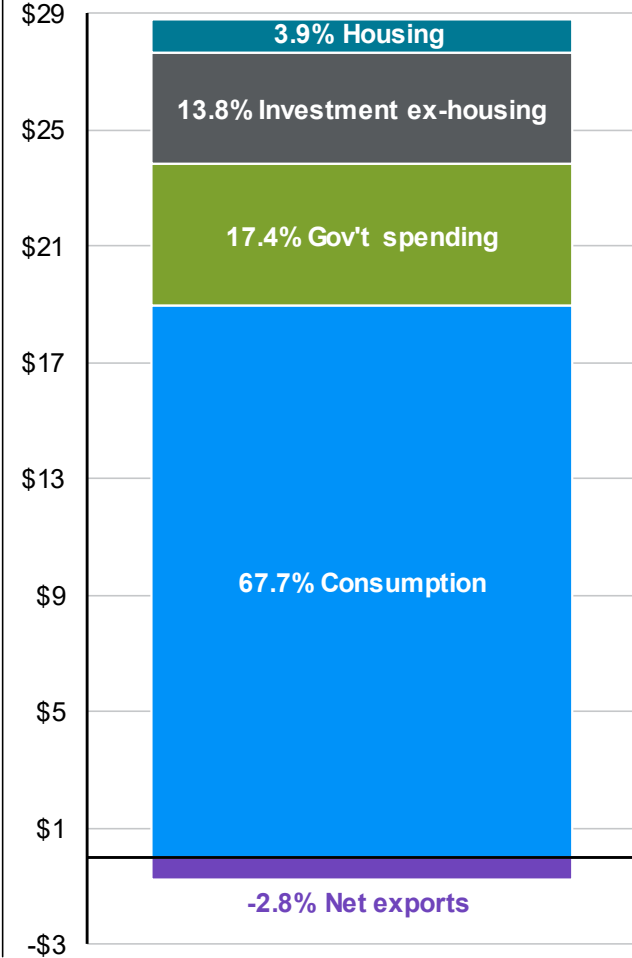
## Real GDP

Trillions of chained (2017) dollars, seasonally adjusted at annual rates



## Components of GDP

4Q23 nominal GDP, USD trillions



Source: BEA, FactSet, J.P. Morgan Asset Management. Values may not sum to 100% due to rounding. Trend growth is measured as the average annual growth rate from business cycle peak 1Q01 to business cycle peak 4Q19. Guide to the Markets – U.S. Data are as of March 31, 2024.

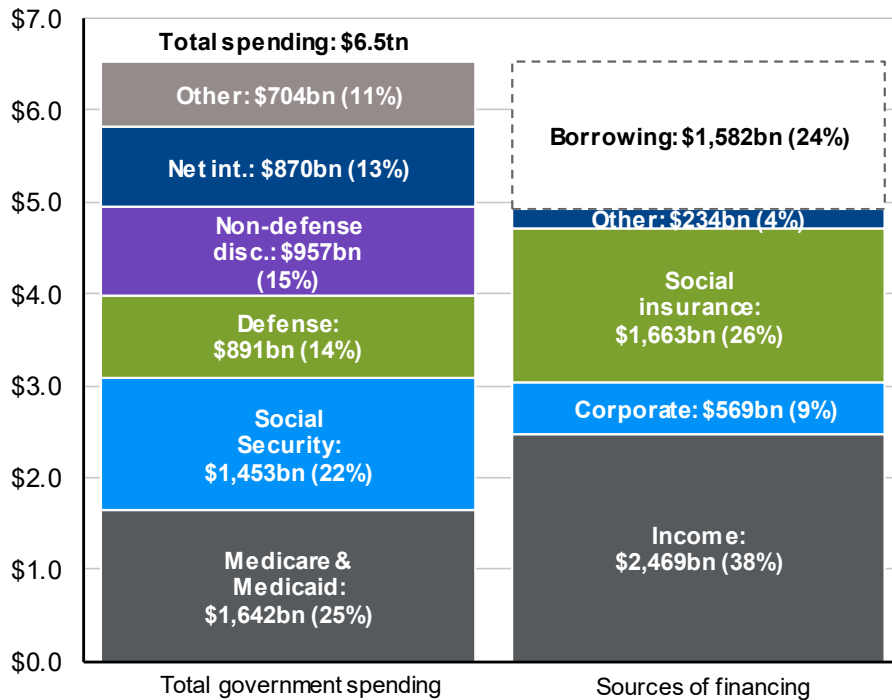


# Federal finances

Economy

## The 2024 federal budget

USD trillions

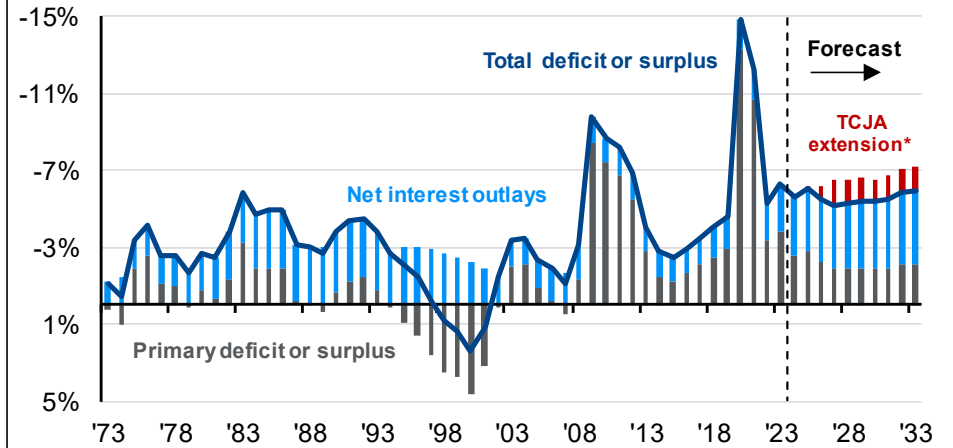


### CBO's Baseline economic assumptions

	2024	'25-'26	'27-'28	'29-'34
Real GDP growth	1.8%	2.1%	2.1%	1.9%
10-year Treasury	4.6%	4.3%	3.8%	4.1%
Headline inflation (CPI)	2.6%	2.4%	2.2%	2.2%
Unemployment	4.2%	4.4%	4.4%	4.5%

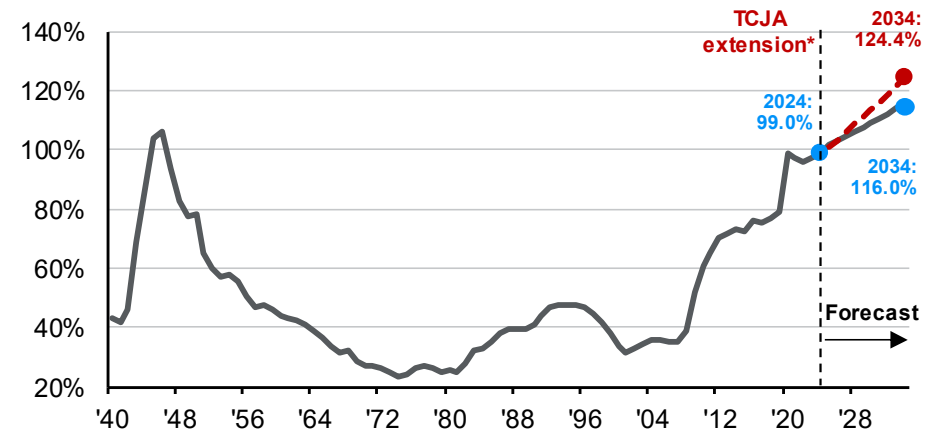
## Federal deficit and net interest outlays

% of GDP, 1973-2034, CBO Baseline Forecast



## Federal net debt (accumulated deficits)

% of GDP, 1940-2034, CBO Baseline Forecast, end of fiscal year



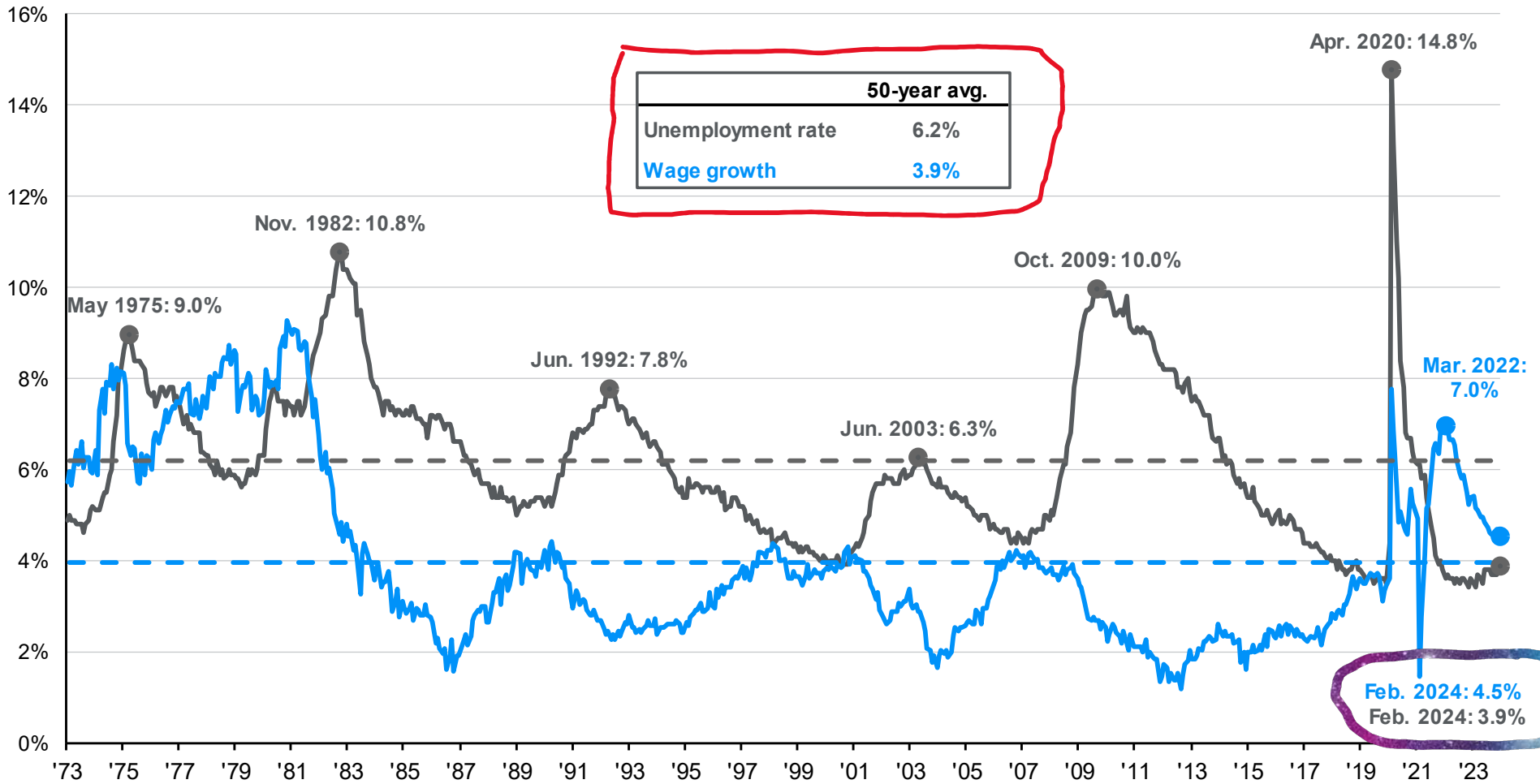
Source: CBO, J.P. Morgan Asset Management; (Top and bottom right) BEA, Treasury Department. Estimates are from the Congressional Budget Office (CBO) February 2024 An Update to the Budget Outlook: 2024 to 2034. "Other" spending includes, but is not limited to, health insurance subsidies, income security and federal civilian and military retirement. Years shown are fiscal years. \*Adjusted by JPMAM to include estimates from the CBO May 2023 report "Budgetary Outcomes Under Alternative Assumptions About Spending and Revenues" on the extension of TCJA provisions. Forecasts are not a reliable indicator of future performance. Forecasts, projections and other forward-looking statements are based upon current beliefs and expectations. They are for illustrative purposes only and serve as an indication of what may occur. Given the inherent uncertainties and risks associated with forecasts, projections or other forward-looking statements, actual events, results or performance may differ materially from those reflected or contemplated. Guide to the Markets – U.S. Data are as of March 31, 2024.



# Unemployment and wages

## Civilian unemployment rate and year-over-year wage growth

Private production and non-supervisory workers, seasonally adjusted, percent



Source: BLS, FactSet, J.P. Morgan Asset Management. Private production and non-supervisory jobs represent just over 80% of total private nonfarm jobs. Guide to the Markets – U.S. Data are as of March 31, 2024.



# Labor demand

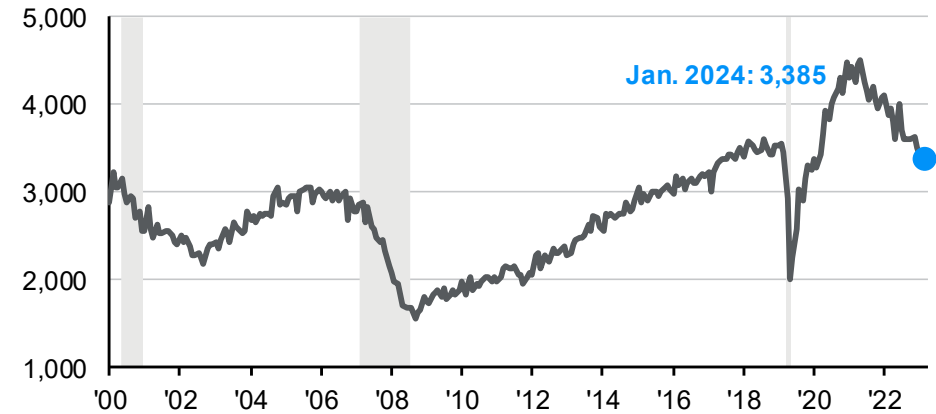
## JOLTS job openings\*

Total job openings, thousands, seasonally adjusted



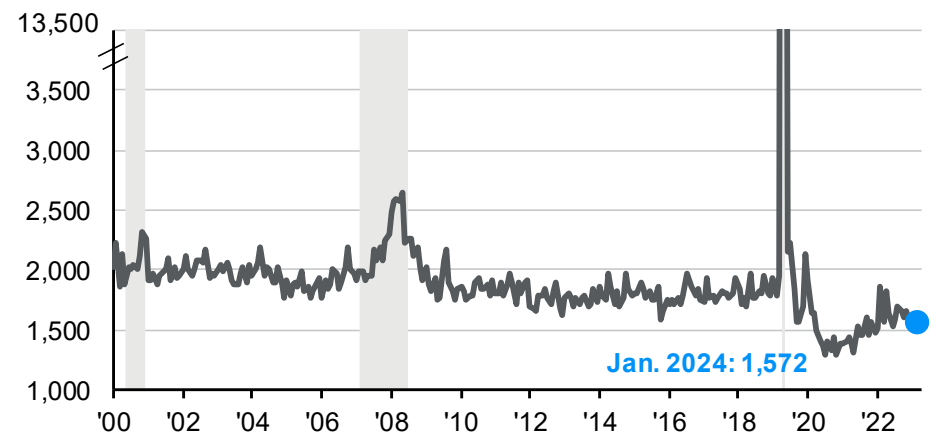
## JOLTS quits

Total nonfarm quits, thousands, seasonally adjusted



## JOLTS layoffs

Total nonfarm layoffs, thousands, seasonally adjusted



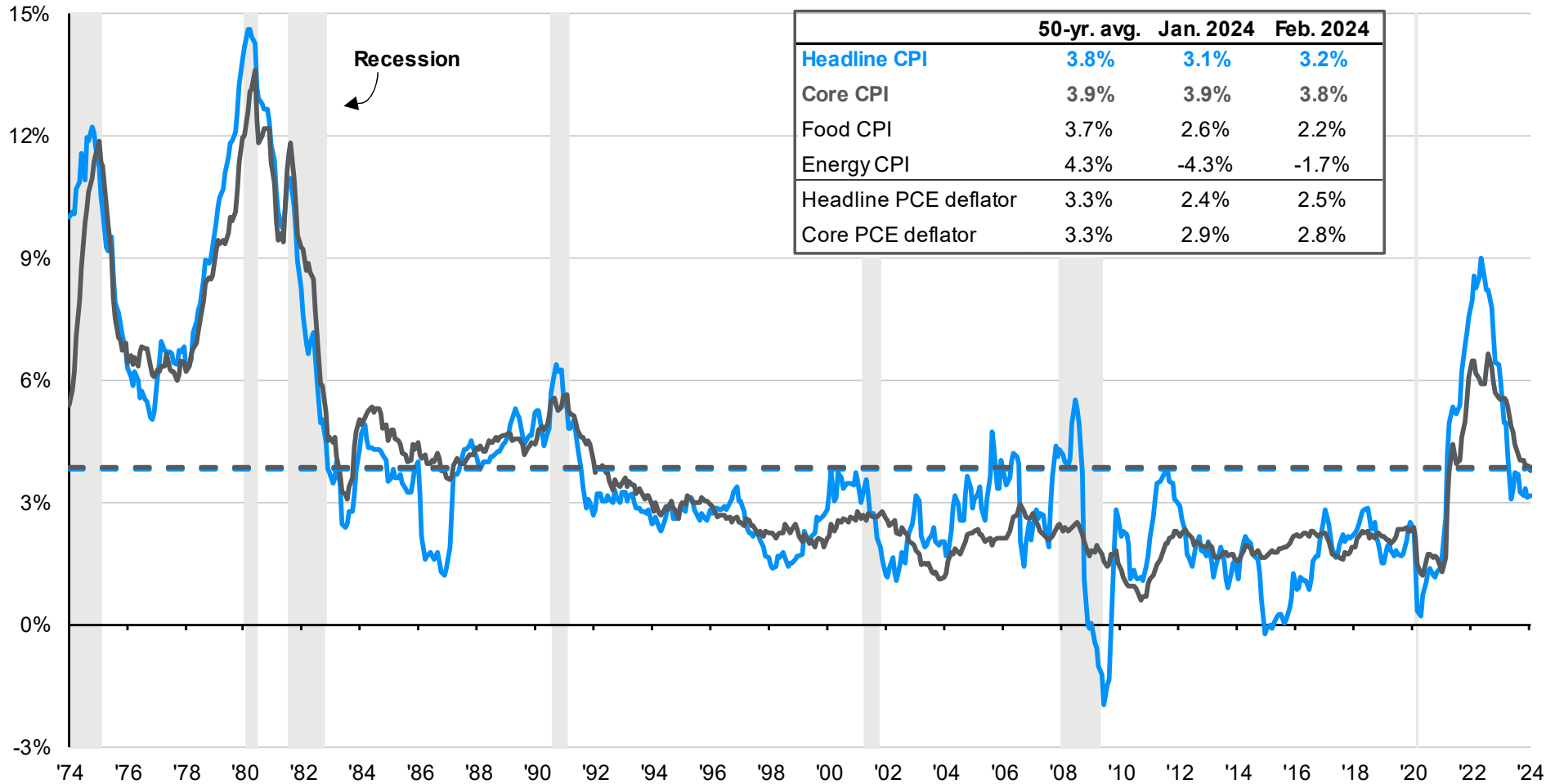
Source: U.S. Department of Labor, J.P. Morgan Asset Management. \*JOLTS job openings from February 1974 to November 2000 are J.P. Morgan Asset Management estimates. Guide to the Markets – U.S. Data are as of March 31, 2024.



# Inflation

## CPI and core CPI

% change vs. prior year, seasonally adjusted



Source: BLS, FactSet, J.P. Morgan Asset Management.

CPI used is CPI-U and values shown are % change vs. one year ago. Core CPI is defined as CPI excluding food and energy prices. The Personal Consumption Expenditure (PCE) deflator employs an evolving chain-weighted basket of consumer expenditures instead of the fixed-weight basket used in CPI calculations.

Guide to the Markets – U.S. Data are as of March 31, 2024.

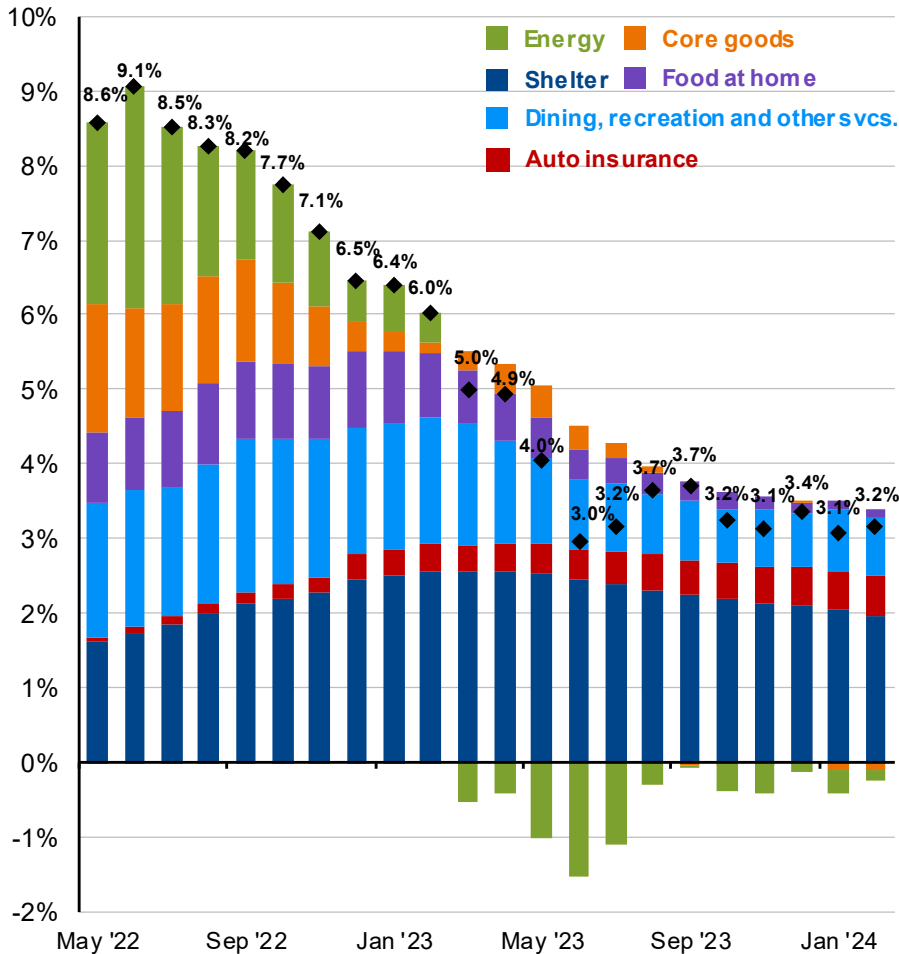


# Inflation components

Economy

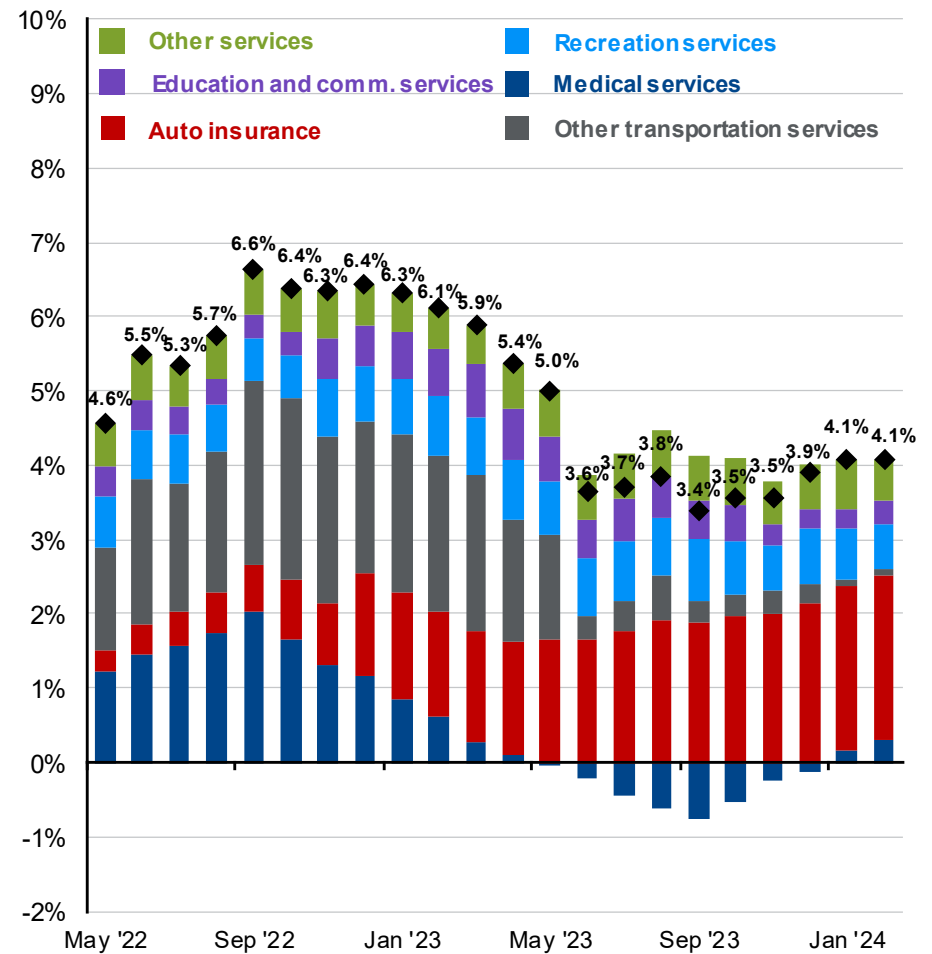
## Contributors to headline CPI inflation

Contribution to y/y % change in CPI, non-seasonally adjusted



## Contributors to core services ex-shelter CPI inflation\*

Contribution to y/y % change in custom CPI index, non-seasonally adj.



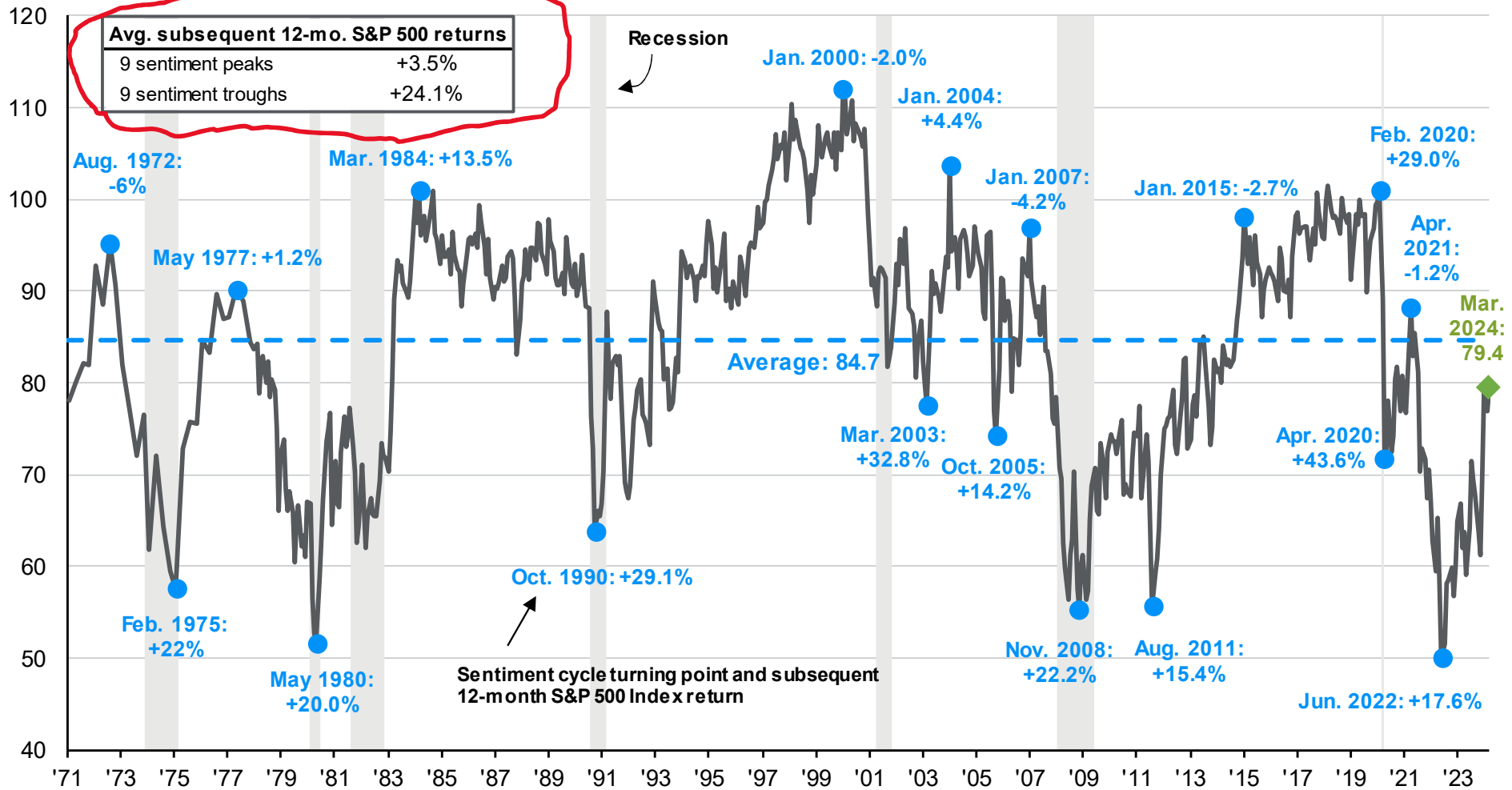
Source: BLS, FactSet, J.P. Morgan Asset Management. Contributions mirror the BLS methodology on Table 7 of the CPI report. Values may not sum to headline CPI figures due to rounding and underlying calculations. \*Core services ex-shelter CPI is a custom index using CPI components created by J.P. Morgan Asset Management. (Left) "Shelter" includes owners' equivalent rent, rent of primary residence and home insurance. Guide to the Markets – U.S. Data are as of March 31, 2024.



# Consumer confidence and the stock market

Economy

### Consumer Sentiment Index and subsequent 12-month S&P 500 returns



Source: FactSet, Standard & Poor's, University of Michigan, J.P. Morgan Asset Management.  
 Peak is defined as the highest index value before a series of lower lows, while a trough is defined as the lowest index value before a series of higher highs.  
 Subsequent 12-month S&P 500 returns are price returns only starting from the end of the month and excluding dividends. Past performance is not a reliable indicator of current and future results.  
 Guide to the Markets – U.S. Data are as of March 31, 2024.





# Asset class returns

Investing Principles

2009-2023		2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	YTD
Ann.	Vol.																
Large Cap	Small Cap	EM Equity	REITs	REITs	REITs	Small Cap	REITs	REITs	Small Cap	EM Equity	Cash	Large Cap	Small Cap	REITs	Comdty.	Large Cap	Large Cap
14.0%	21.9%	79.0%	27.9%	8.3%	19.7%	38.8%	28.0%	2.8%	21.3%	37.8%	1.8%	31.5%	20.0%	41.3%	16.1%	26.3%	10.6%
Small Cap	REITs	High Yield	Small Cap	Fixed Income	High Yield	Large Cap	Large Cap	Large Cap	High Yield	DM Equity	Fixed Income	REITs	EM Equity	Large Cap	Cash	DM Equity	DM Equity
11.3%	21.2%	59.4%	26.9%	7.8%	19.6%	32.4%	13.7%	1.4%	14.3%	25.6%	0.0%	28.7%	18.7%	28.7%	1.5%	18.9%	5.8%
REITs	EM Equity	DM Equity	EM Equity	High Yield	EM Equity	DM Equity	Fixed Income	Fixed Income	Large Cap	Large Cap	REITs	Small Cap	Large Cap	Comdty.	High Yield	Small Cap	Small Cap
10.9%	20.3%	32.5%	19.2%	3.1%	18.6%	23.3%	6.0%	0.5%	12.0%	21.8%	-4.0%	25.5%	18.4%	27.1%	-12.7%	16.9%	5.2%
High Yield	DM Equity	REITs	Comdty.	Large Cap	DM Equity	Asset Alloc.	Asset Alloc.	Cash	Comdty.	Small Cap	High Yield	DM Equity	Asset Alloc.	Small Cap	Fixed Income	Asset Alloc.	Asset Alloc.
8.6%	18.4%	28.0%	16.8%	2.1%	17.9%	14.9%	5.2%	0.0%	11.8%	14.6%	-4.1%	22.7%	10.6%	14.8%	-13.0%	14.1%	4.2%
Asset Alloc.	Comdty.	Small Cap	Large Cap	Cash	Small Cap	High Yield	Small Cap	DM Equity	EM Equity	Asset Alloc.	Large Cap	Asset Alloc.	DM Equity	Asset Alloc.	Asset Alloc.	High Yield	Comdty.
8.1%	16.6%	27.2%	15.1%	0.1%	16.3%	7.3%	4.9%	-0.4%	11.6%	14.6%	-4.4%	19.5%	8.3%	13.5%	-13.9%	14.0%	2.2%
DM Equity	Large Cap	Large Cap	High Yield	Asset Alloc.	Large Cap	REITs	Cash	Asset Alloc.	REITs	High Yield	Asset Alloc.	EM Equity	Fixed Income	DM Equity	DM Equity	REITs	EM Equity
7.4%	16.1%	26.5%	14.8%	-0.7%	16.0%	2.9%	0.0%	-2.0%	8.6%	10.4%	-5.8%	18.9%	7.5%	11.8%	-14.0%	11.4%	2.2%
EM Equity	High Yield	Asset Alloc.	Asset Alloc.	Small Cap	Asset Alloc.	Cash	High Yield	High Yield	Asset Alloc.	REITs	Small Cap	High Yield	High Yield	High Yield	Large Cap	EM Equity	High Yield
6.9%	11.5%	25.0%	13.3%	-4.2%	12.2%	0.0%	0.0%	-2.7%	8.3%	8.7%	-11.0%	12.6%	7.0%	1.0%	-18.1%	10.3%	2.1%
Fixed Income	Asset Alloc.	Comdty.	DM Equity	DM Equity	Fixed Income	Fixed Income	EM Equity	Small Cap	Fixed Income	Fixed Income	Comdty.	Fixed Income	Cash	Cash	EM Equity	Fixed Income	Cash
2.7%	11.5%	18.9%	8.2%	-11.7%	4.2%	-2.0%	-1.8%	-4.4%	2.6%	3.5%	-11.2%	8.7%	0.5%	0.0%	-19.7%	5.5%	1.3%
Cash	Fixed Income	Fixed Income	Fixed Income	Comdty.	Cash	EM Equity	DM Equity	EM Equity	DM Equity	Comdty.	DM Equity	Comdty.	Comdty.	Fixed Income	Small Cap	Cash	Fixed Income
0.8%	4.5%	5.9%	6.5%	-13.3%	0.1%	-2.3%	-4.5%	-14.6%	1.5%	1.7%	-13.4%	7.7%	-3.1%	-1.5%	-20.4%	5.1%	-0.8%
Comdty.	Cash	Cash	Cash	EM Equity	Comdty.	Comdty.	Comdty.	Comdty.	Cash	Cash	EM Equity	Cash	REITs	EM Equity	REITs	Comdty.	REITs
-0.2%	0.7%	0.1%	0.1%	-18.2%	-1.1%	-9.5%	-17.0%	-24.7%	0.3%	0.8%	-14.2%	2.2%	-5.1%	-2.2%	-24.9%	-7.9%	-1.3%

Source: Bloomberg, FactSet, MSCI, NAREIT, Russell, Standard & Poor's, J.P. Morgan Asset Management.  
 Large cap: S&P 500, Small cap: Russell 2000, EM Equity: MSCI EME, DM Equity: MSCI EAFE, Comdty: Bloomberg Commodity Index, High Yield: Bloomberg Global HY Index, Fixed Income: Bloomberg US Aggregate, REITs: NAREIT Equity REIT Index, Cash: Bloomberg 1-3m Treasury. The "Asset Allocation" portfolio assumes the following weights: 25% in the S&P 500, 10% in the Russell 2000, 15% in the MSCI EAFE, 5% in the MSCI EME, 25% in the Bloomberg US Aggregate, 5% in the Bloomberg 1-3m Treasury, 5% in the Bloomberg Global High Yield Index, 5% in the Bloomberg Commodity Index and 5% in the NAREIT Equity REIT Index. Balanced portfolio assumes annual rebalancing. Annualized (Ann.) return and volatility (Vol.) represents period from 12/31/2009 to 12/31/2023. Please see disclosure page at end for index definitions. All data represents total return for stated period. The "Asset Allocation" portfolio is for illustrative purposes only. Past performance is not indicative of future returns.  
 Guide to the Markets – U.S. Data are as of March 31, 2024.



# S&P 500 Index at inflection points

Equities

## S&P 500 Price Index



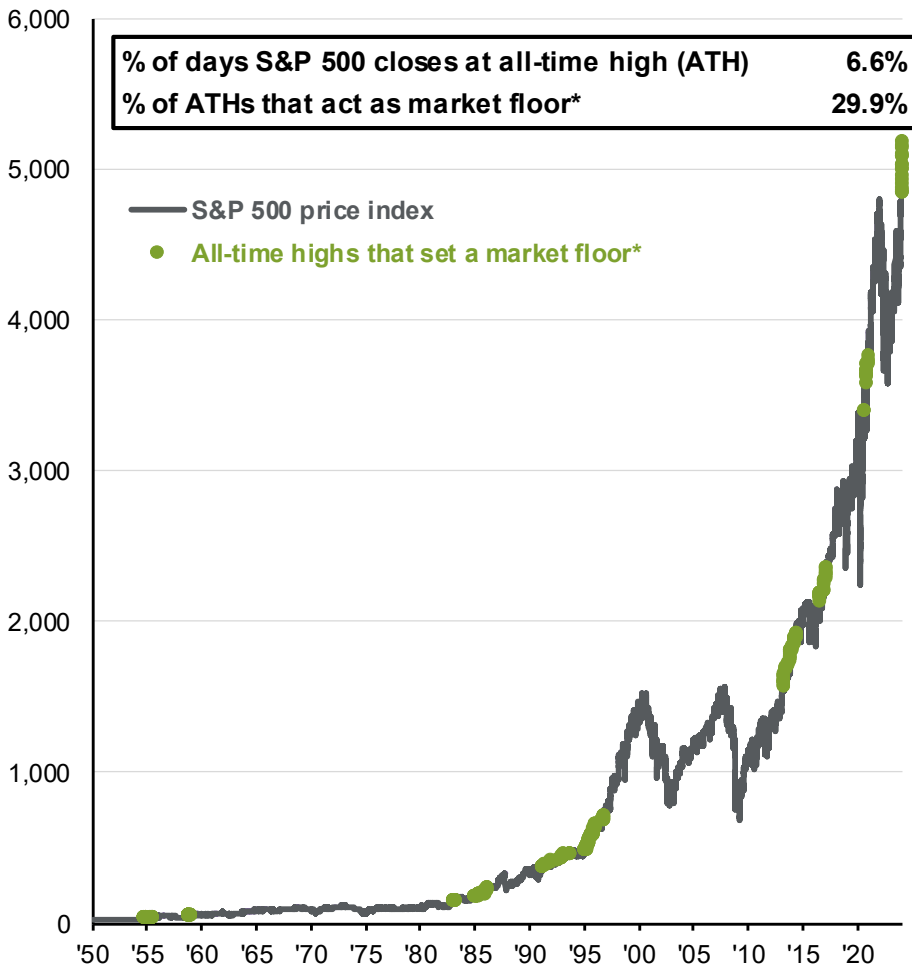
Source: Compustat, FactSet, Federal Reserve, Refinitiv Datastream, Standard & Poor's, J.P. Morgan Asset Management. Dividend yield is calculated as consensus estimates of dividends for the next 12 months, divided by most recent price, as provided by Compustat. Forward price-to-earnings ratio is a bottom-up calculation based on IBES estimates and FactSet estimates since January 2022. Returns are cumulative and based on S&P 500 Index price movement only, and do not include the reinvestment of dividends. Past performance is not indicative of future returns. *Guide to the Markets – U.S.* Data are as of March 31, 2024.



# Investing at all-time highs

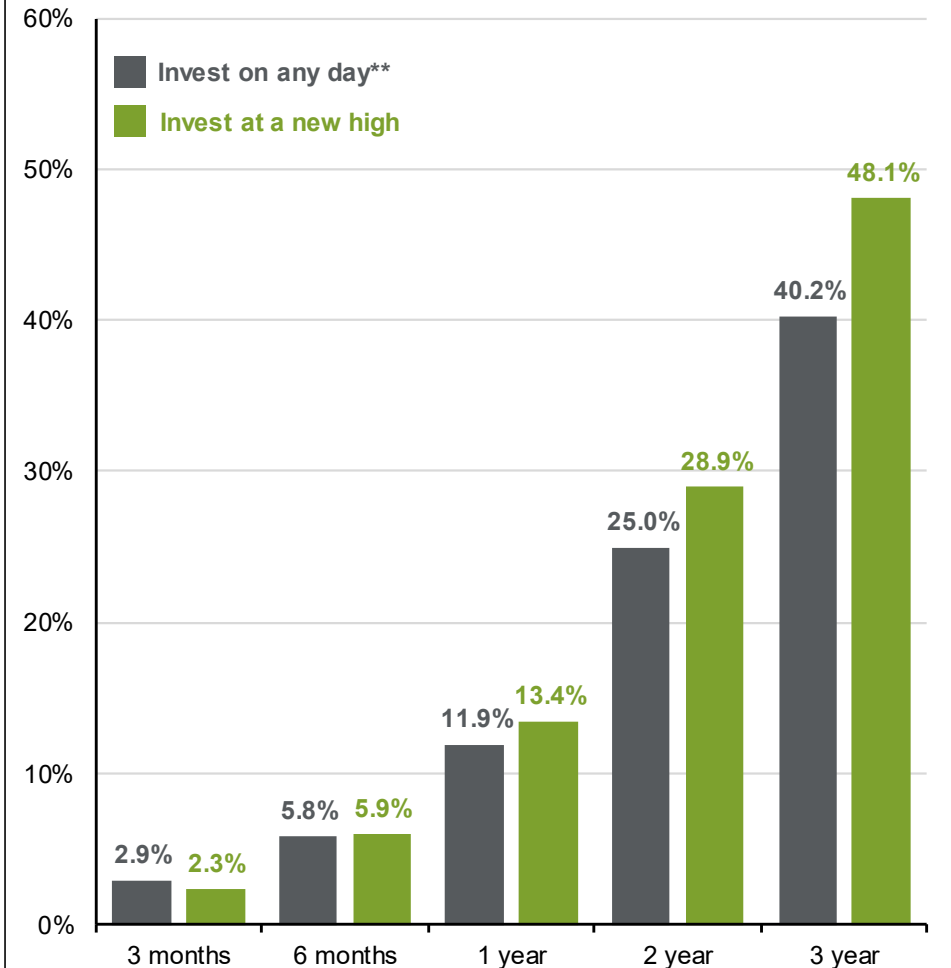
## All-time highs and market floors

S&P 500 price index, daily, 1950 - today



## Average cumulative S&P 500 total returns

Jan. 1, 1988 - Dec. 31, 2023



Investing Principles

Source: FactSet, Standard & Poor's, J.P. Morgan Asset Management.

(Left) \*Market floor is defined as an all-time high from which the market never fell more than 5%. (Right) \*\*"Invest on any day" represents average of forward returns for the entire time period whereas "Invest at a new high" represents average of rolling forward returns calculated from each new S&P 500 high for the subsequent 3-months, 6-months, 1-year, 2-year and 3-year intervals, with data starting 1/1/1988 through 12/31/2023.

Guide to the Markets – U.S. Data are as of March 31, 2024.

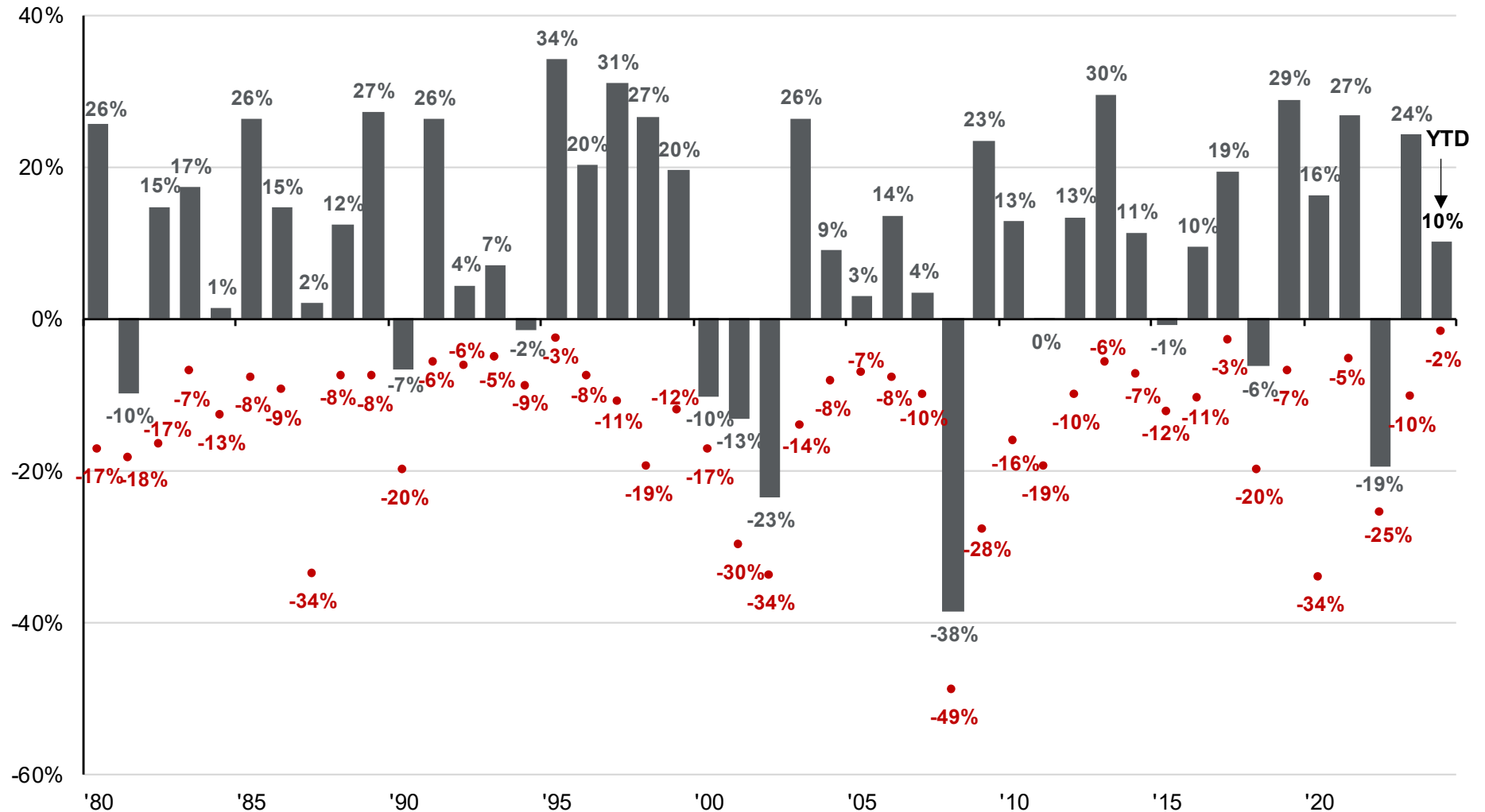


# Annual returns and intra-year declines

Equities

## S&P intra-year declines vs. calendar year returns

Despite average intra-year drops of 14.2%, annual returns were positive in 33 of 44 years



Source: FactSet, Standard & Poor's, J.P. Morgan Asset Management.

Returns are based on price index only and do not include dividends. Intra-year drops refers to the largest market drops from a peak to a trough during the year. For illustrative purposes only. Returns shown are calendar year returns from 1980 to 2023, over which time period the average annual return was 10.3%.

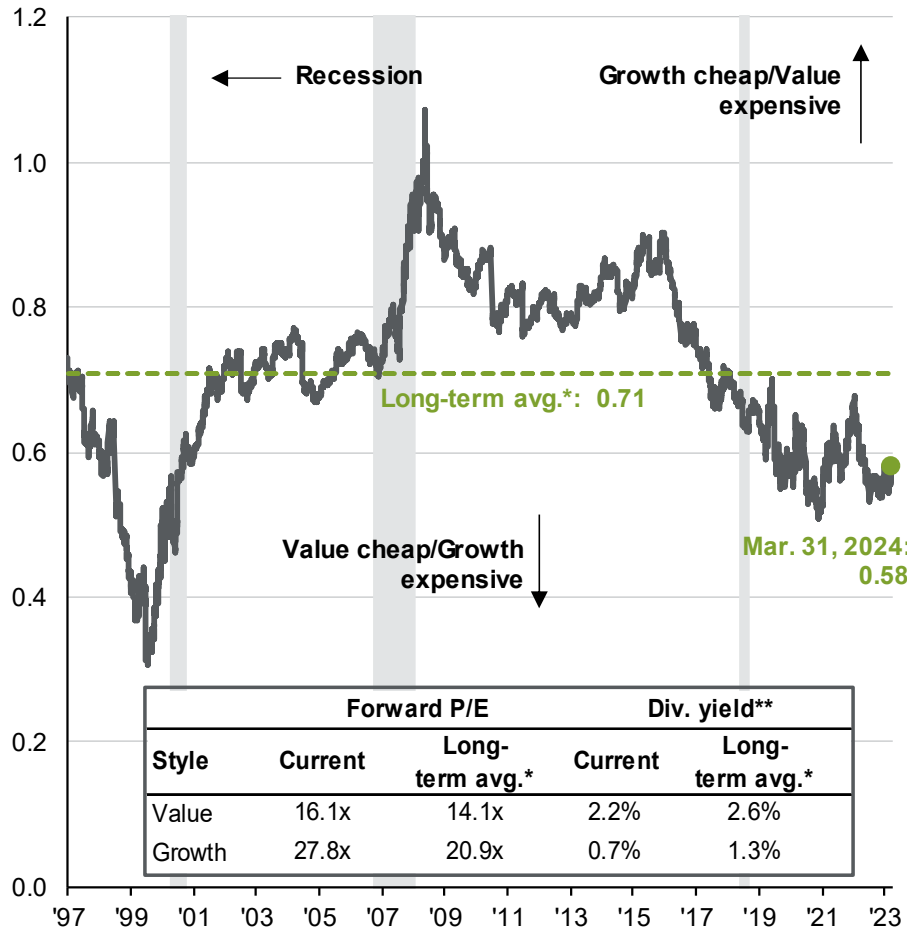
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# Value vs. Growth: Valuations and interest rates

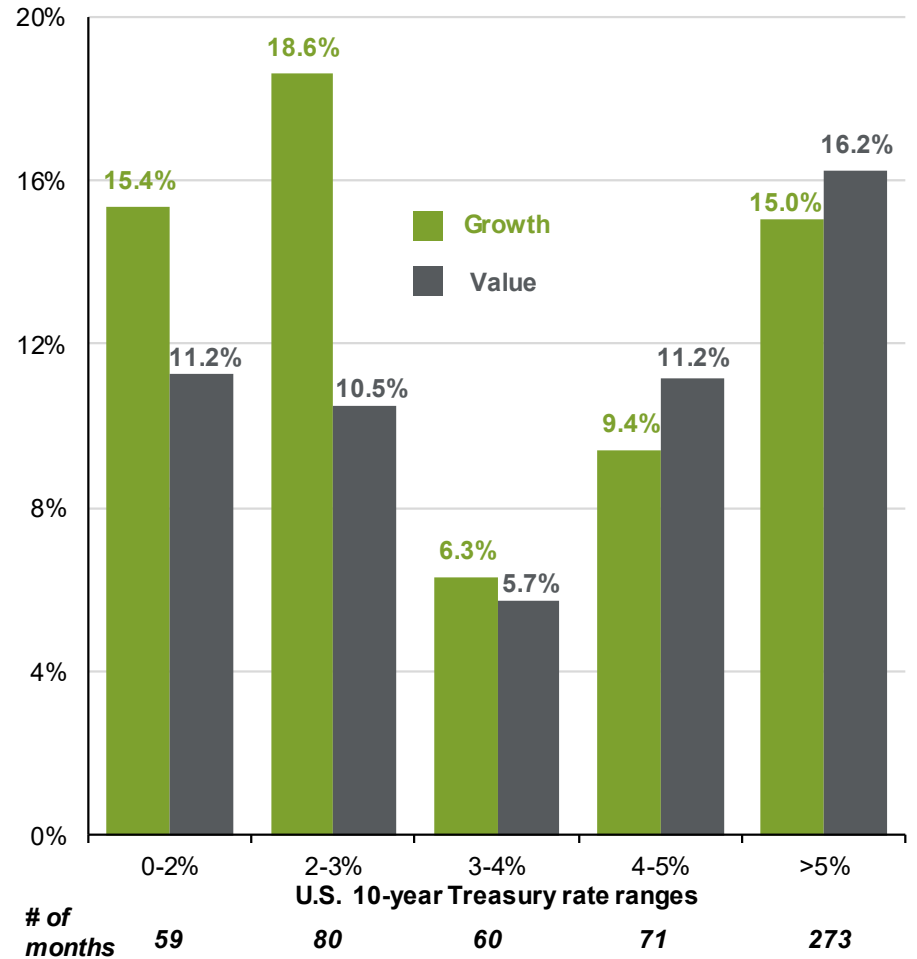
## Value vs. Growth relative valuations

Rel. fwd. P/E ratio of Value vs. Growth, 1997 - present



## Value vs. Growth in different interest rate environments

Annualized total return by 10-year Treasury rate ranges, 1979 - present



Source: FactSet, FTSE Russell, NBER, J.P. Morgan Asset Management.

Growth is represented by the Russell 1000 Growth Index and Value is represented by the Russell 1000 Value Index. (Left) \*Long-term averages are calculated monthly since December 1997. \*\*Dividend yield is calculated as the next 12-month consensus dividend divided by most recent price. (Right) Returns are calculated by annualizing the average monthly performance during each interest rate range.

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# S&P 500: Index concentration, valuations and earnings

## P/E ratio of the top 10 and remaining stocks in the S&P 500

Next 12 months, 1996 - present



## Weight of the top 10 stocks in the S&P 500

% of market capitalization of the S&P 500



## Earnings contribution of the top 10 in the S&P 500

Based on last 12 months' earnings



Source: FactSet, Standard & Poor's, J.P. Morgan Asset Management.

The top 10 S&P 500 companies are based on the 10 largest index constituents at the beginning of each month. As of 3/31/2024, the top 10 companies in the index were MSFT (7.2%), AAPL (5.6%), NVDA (5.1%), AMZN (3.7%), META (2.4%), GOOGL (2.0%), BRK.B (1.7%), GOOG (1.7%), LLY (1.4%), AVGO (1.3%) and JPM (1.3%). The remaining stocks represent the rest of the 492 companies in the S&P 500.

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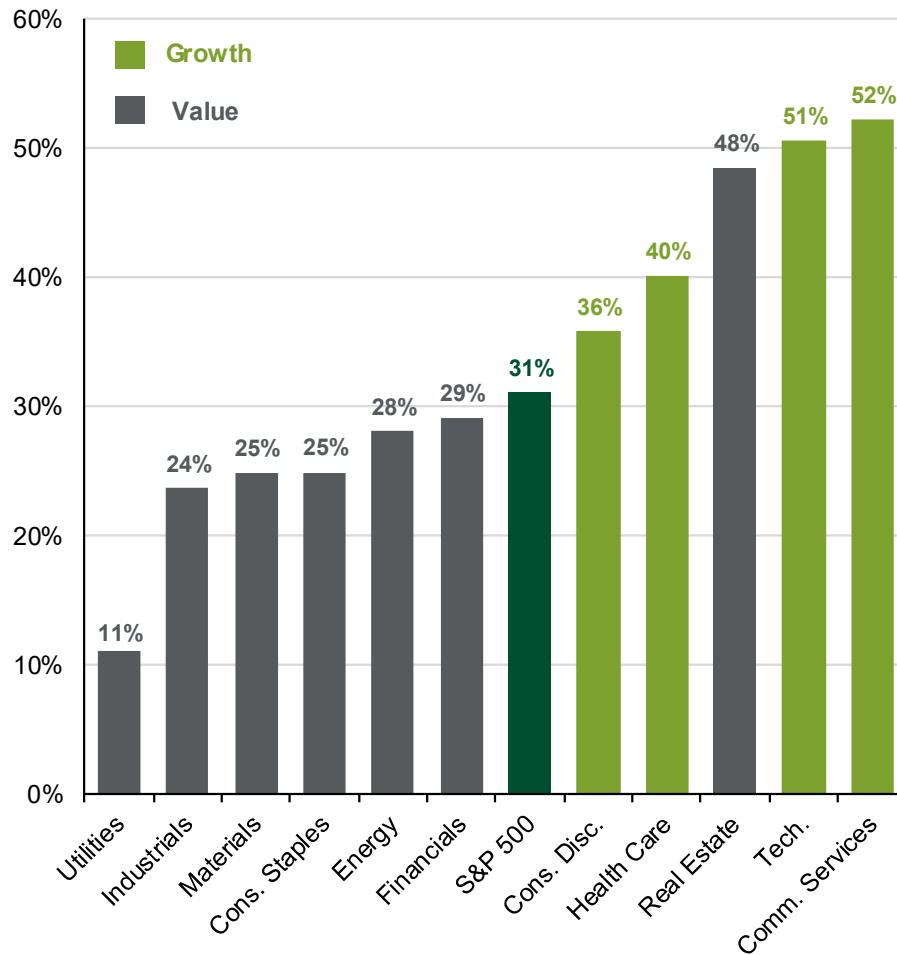


# Value vs. Growth: Cash, R&D and capex

Equities

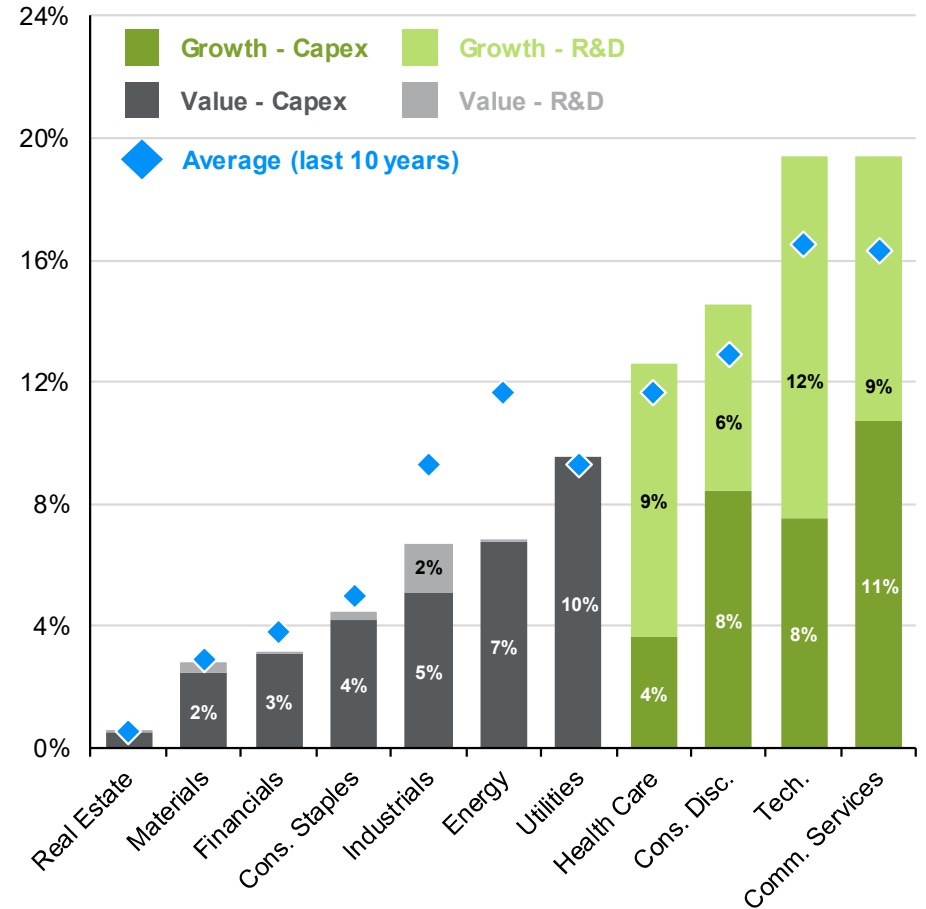
## Corporate cash as a % of current assets by sector

Quarterly



## Research & development and capex by sector

Share of total S&P 500 R&D and capex by sector, current vs. average



Source: Compustat, FactSet, J.P. Morgan Asset Management. (Left) Corporate cash and current assets data are based on the latest available quarterly data. Current assets are assets that can be converted into cash within a 12-month time frame. Current assets includes items such as cash and cash equivalents, marketable securities, accounts receivable, inventory and other short-term investments. (Right) Research and development (R&D) and capital expenditure (capex) data are year-to-date through 3Q23.

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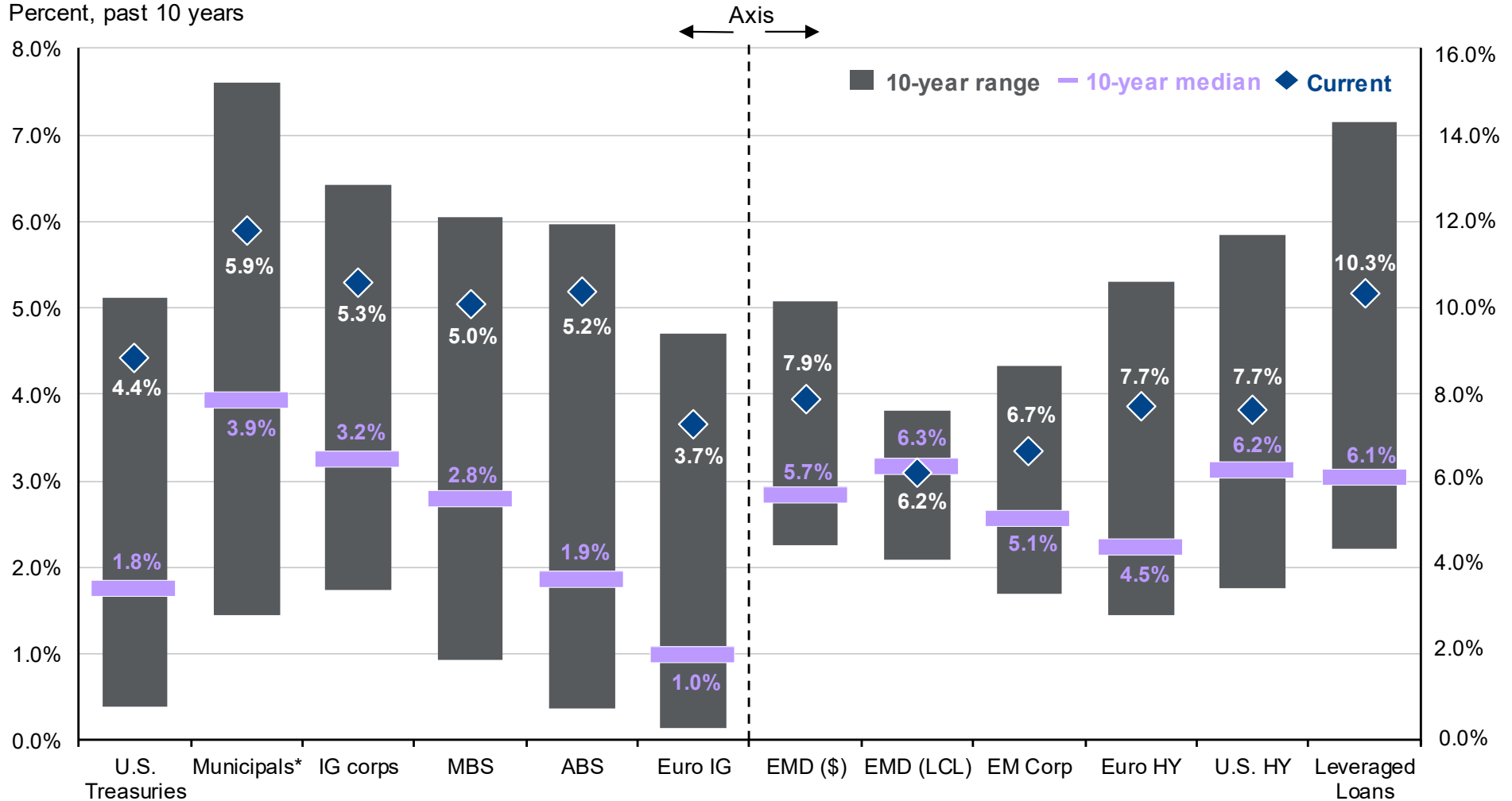


# Fixed income valuations

Fixed Income

## Yield-to-worst across fixed income sectors

Percent, past 10 years



Source: Bloomberg, FactSet, J.P. Morgan Credit Research, J.P. Morgan Asset Management.

Indices used are Bloomberg except for emerging market debt and leveraged loans: EMD (USD): J.P. Morgan EMIGLOBAL Diversified Index; EMD (LCL): J.P. Morgan GBI-EM Global Diversified Index; EM Corp.: J.P. Morgan CEMBI Broad Diversified; Leveraged Loans: JPM Leveraged Loan Index; Euro IG: Bloomberg Euro Aggregate Corporate Index; Euro HY: Bloomberg Pan-European High Yield Index. Yield-to-worst is the lowest possible yield that can be received on a bond apart from the company defaulting and considers factors like call provisions, prepayments and other features that may affect the bonds cash flows. \*All sectors shown are yield-to-worst except for Municipals, which is based on the tax-equivalent yield-to-worst assuming a top-income tax bracket rate of 37% plus a Medicare tax rate of 3.8%. Guide to the Markets – U.S. Data are as of March 31, 2024.

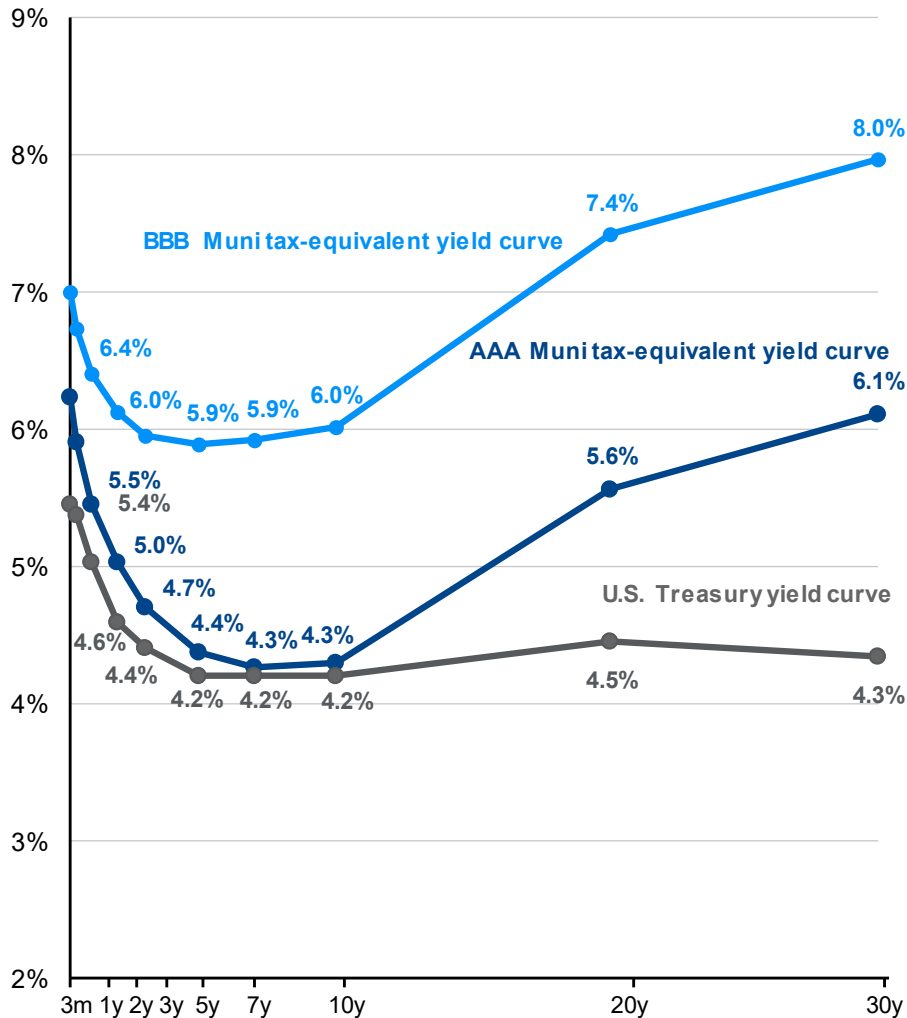




# Municipal finance

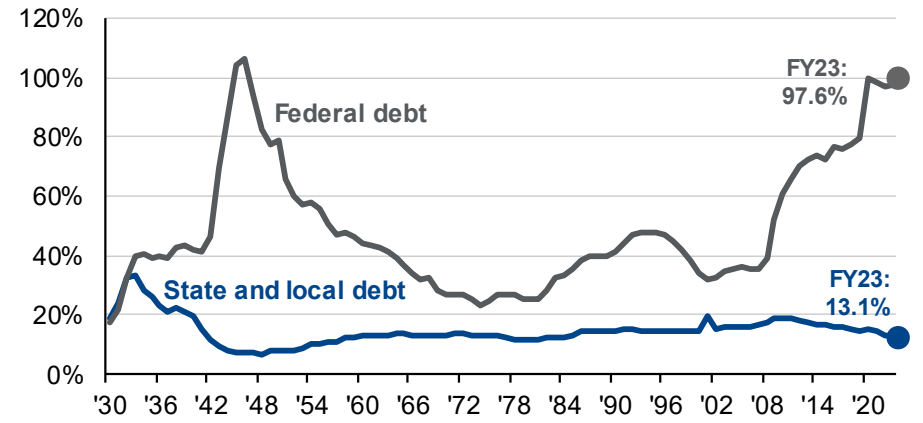
Fixed Income

## Muni tax-equivalent and Treasury yield curves



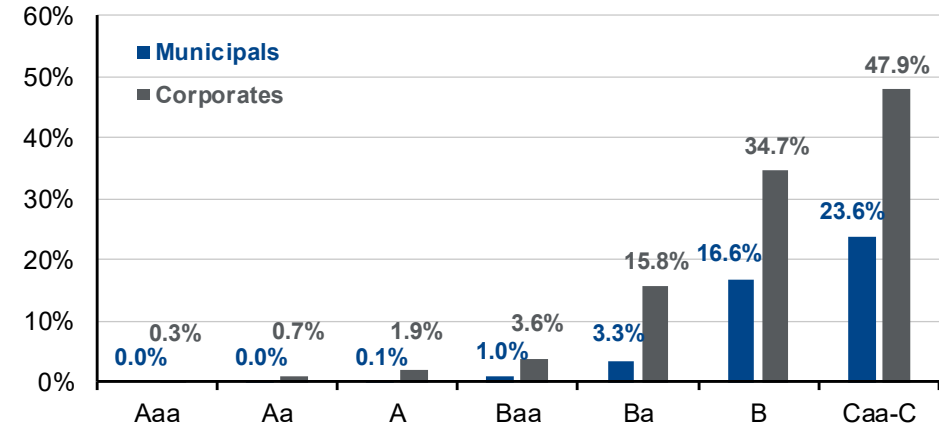
## State and local and federal net debt

% of GDP, 1930-2023, end of fiscal year



## Muni and corporate default rates

% of issuers defaulting within 10 years, 1970-2022



Source: J.P. Morgan Asset Management; (Left) Bloomberg, FactSet, Federal Reserve, S&P Global; (Top right) Census Bureau, Congressional Budget Office (CBO); (Bottom right) Moody's U.S. Public Finance: U.S. municipal bond defaults and recoveries, 1970 to 2022. Municipal tax-equivalent yields are calculated based on municipal bond curves for each credit rating according to S&P Global and assume a top-income tax bracket rate of 37% plus a Medicare tax rate of 3.8% for a total tax rate of 40.8%. State and local debt are based on the Census Bureau's Annual Survey of State and Local Government Finances. Municipal and corporate default rates are the average cumulative default rate over a 10-year horizon as calculated by Moody's using data from issuances through 2013. *Guide to the Markets* – U.S. Data are as of March 31, 2024.



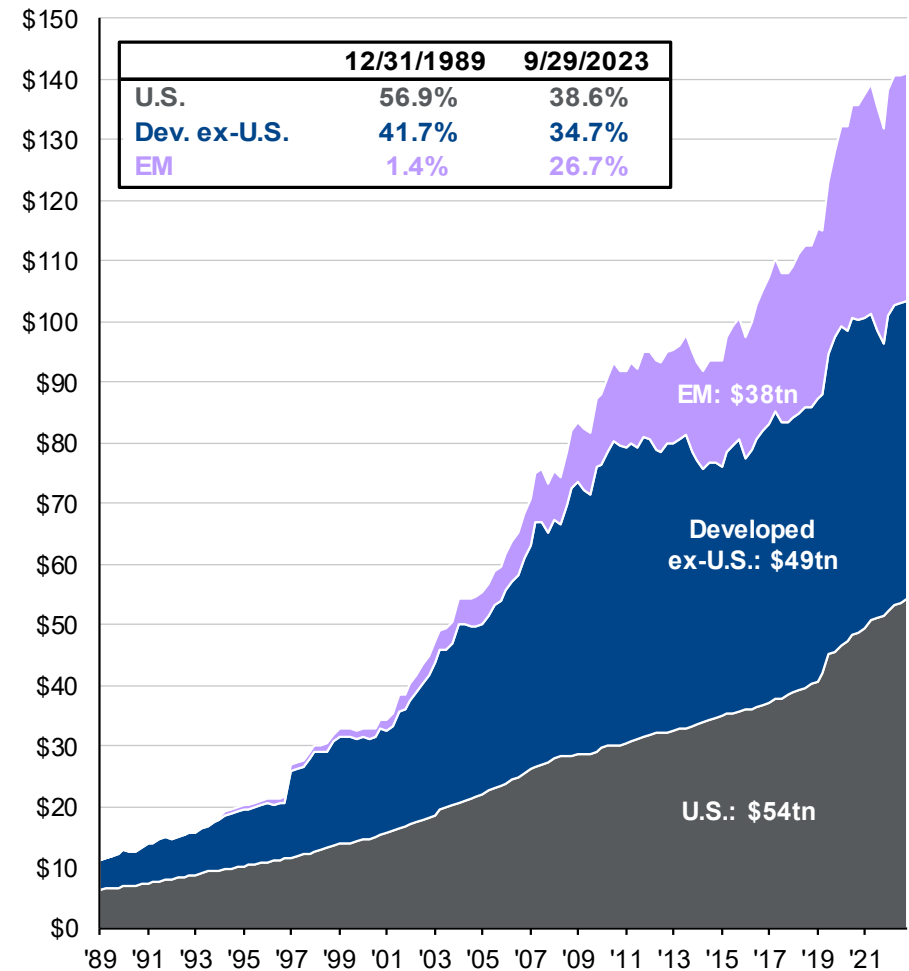
# Global fixed income

Fixed Income

Aggregates	Yield		2024 Return		Duration	Correlation to U.S. 10yr
	3/31/2024	12/31/2023	Local	USD		
<b>U.S.</b>	4.85%	4.53%	-0.78%	-0.78%	6.2 years	0.92
<b>Gbl. ex-U.S.</b>	3.03%	2.87%	-	-2.88%	7.0	0.63
<b>Japan</b>	0.87%	0.76%	-0.06%	-6.90%	9.2	0.64
<b>Germany</b>	3.01%	2.73%	-0.54%	-2.76%	6.3	0.56
<b>UK</b>	4.39%	4.10%	-1.10%	-2.00%	8.1	0.55
<b>Italy</b>	3.52%	3.40%	0.88%	-1.38%	6.2	0.43
<b>China</b>	2.40%	2.62%	2.03%	0.12%	6.0	0.56
<b>Sector</b>						
<b>Euro Corp.</b>	3.66%	3.56%	0.47%	-1.78%	4.4 years	0.45
<b>Euro HY</b>	7.72%	7.35%	1.81%	-0.46%	3.0	0.05
<b>EMD (USD)</b>	7.88%	7.84%	-	1.11%	6.0	0.01
<b>EMD (LCL)</b>	6.21%	6.19%	0.85%	-0.93%	5.0	-0.06
<b>EM Corp.</b>	6.70%	6.81%	-	1.89%	4.9	-0.02

## Global bond market

USD trillions



Source: J.P. Morgan Asset Management; (Left) Bloomberg, FactSet; (Right) BIS.

Fixed income sectors shown above are provided by Bloomberg and are represented by the global aggregate for each country except where noted. EMD sectors are represented by the J.P. Morgan EMBIG Diversified Index (USD), the J.P. Morgan GBI EM Global Diversified Index (LCL) and the J.P. Morgan CEMBI Broad Diversified Index (Corp). European Corporates are represented by the Bloomberg Euro Aggregate Corporate Index and the Bloomberg Pan-European High Yield Index. Sector yields reflect yield-to-worst. Correlations are based on 10-years of monthly returns for all sectors. Past performance is not indicative of future results. Countries included in the emerging market debt calculation are those represented in the J.P. Morgan EMB Index suite for which the BIS has data. Global bond market regional breakdown may not sum to 100% due to rounding.

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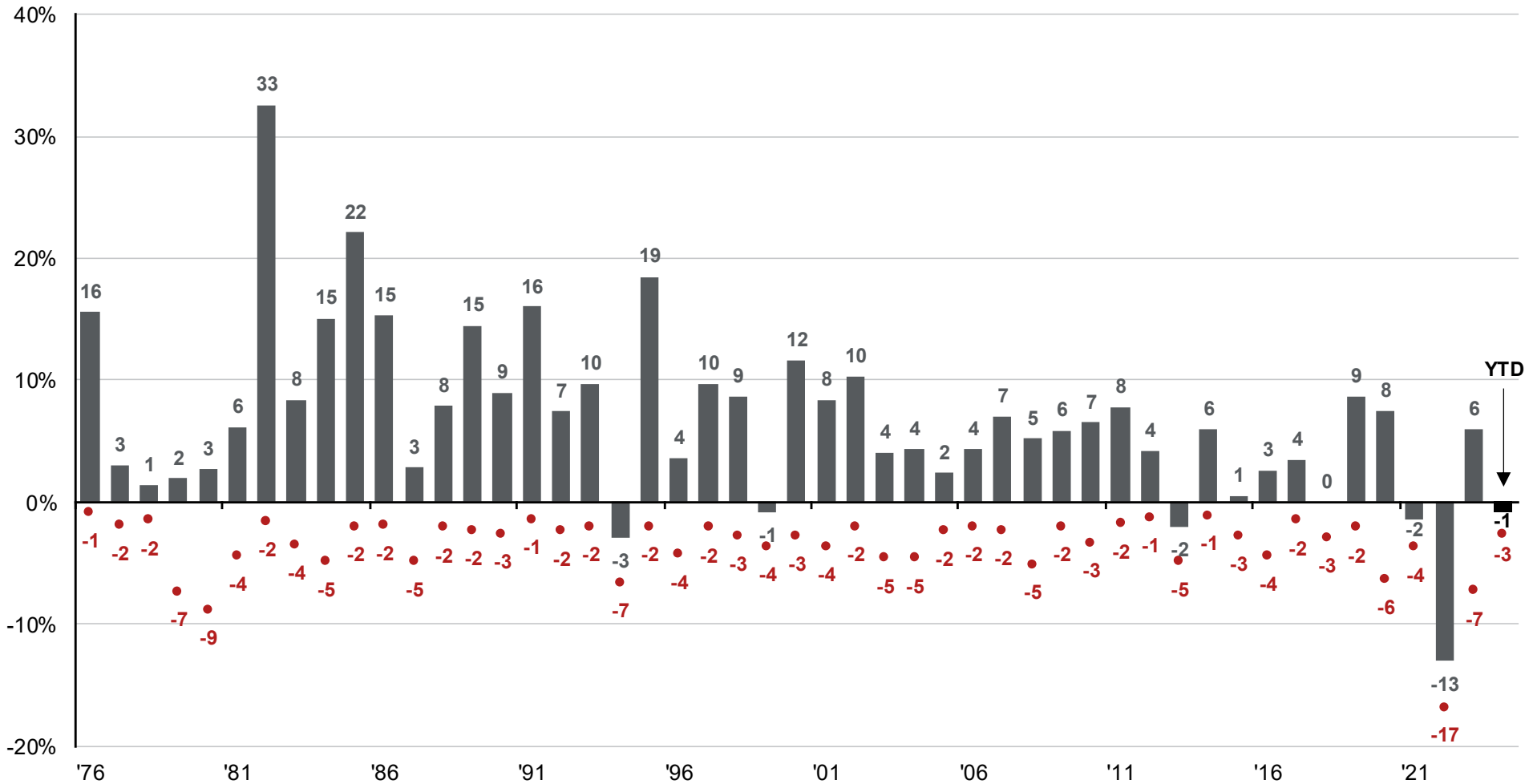


# Bloomberg U.S. Agg. annual returns and intra-year declines

Fixed Income

## Bloomberg U.S. Aggregate intra-year declines vs. calendar year returns

Despite average intra-year drops of 3.5%, annual returns were positive in 43 of 48 years



Source: Bloomberg, FactSet, J.P. Morgan Asset Management.

Returns are based on total return. Intra-year drops refers to the largest market drops from a peak to a trough during the year. For illustrative purposes only. Returns shown are calendar year returns from 1976 to 2023, over which time period the average annual return was 6.6%. Returns from 1976 to 1989 are calculated on a monthly basis; daily data are used afterward.

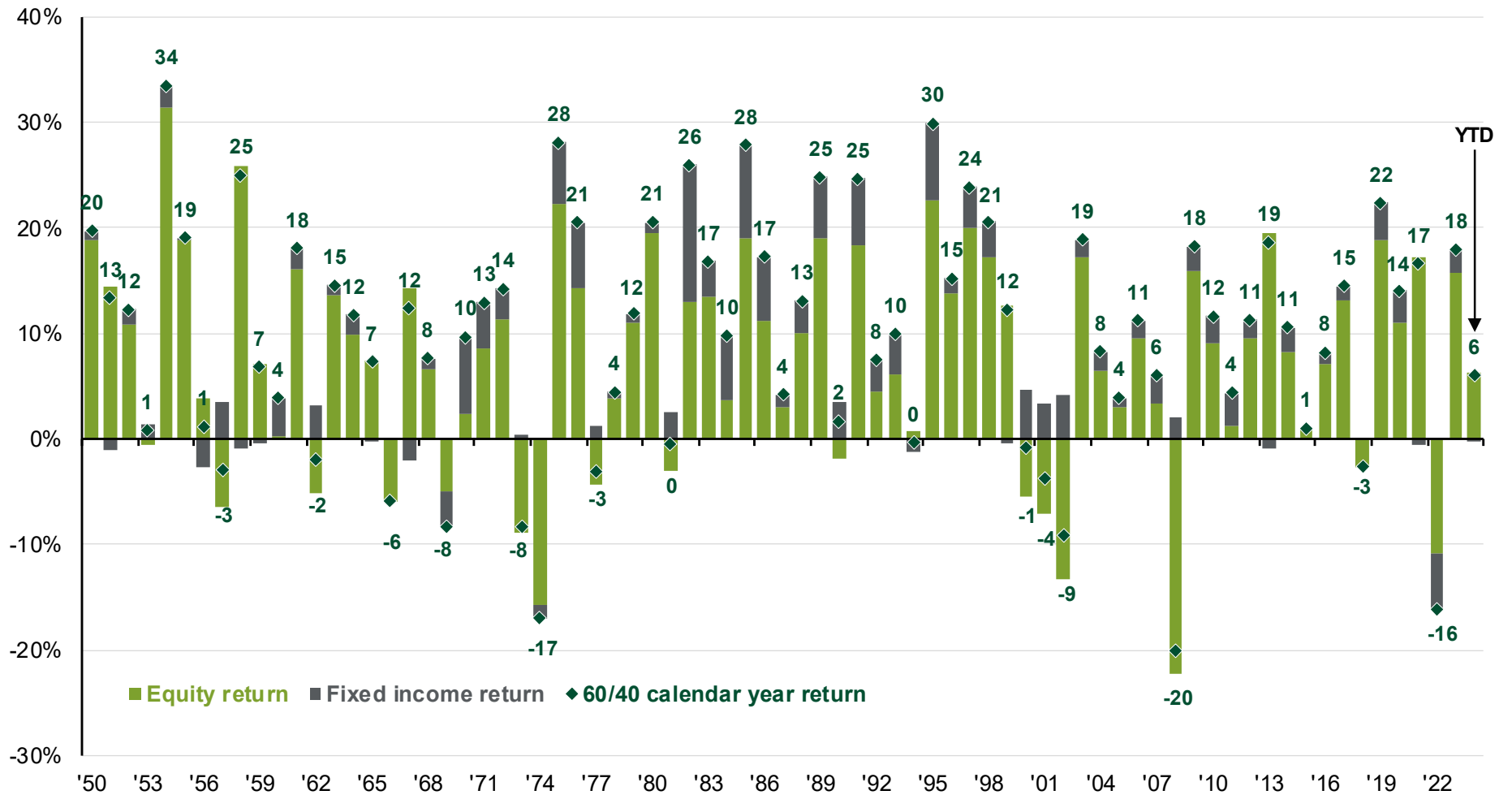
Guide to the Markets – U.S. Data are as of March 31, 2024.



# 60/40 annual returns

## 60/40 annual return decomposition

Total returns in percent, 1950-present



Investing Principles

Source: Bloomberg, FactSet, Ibbotson/Strategas, Standard & Poor's, J.P. Morgan Asset Management.  
 The 60/40 portfolio is 60% invested in the S&P 500 Total Return Index and 40% invested in the Bloomberg U.S. Aggregate Total Return Index. U.S. fixed income total returns from 1950 to 1975 are estimated using data from Strategas/Ibbotson. The portfolio is rebalanced annually.  
*Guide to the Markets – U.S.* Data are as of March 31, 2024.

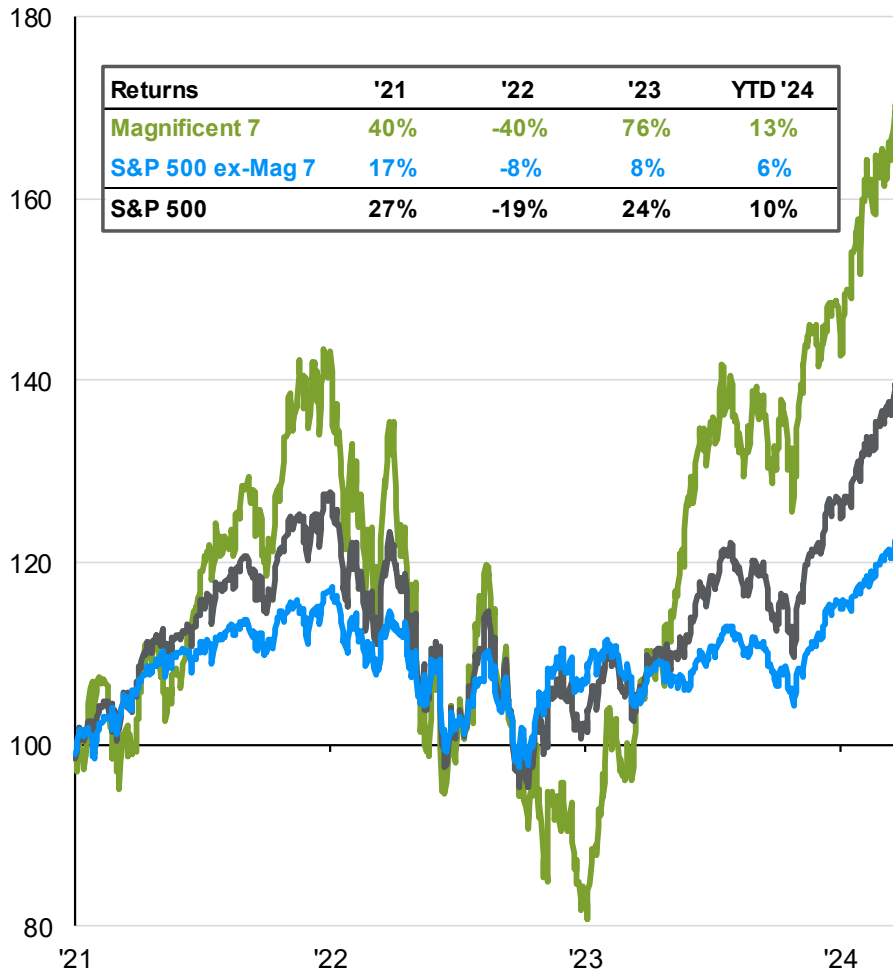


# Magnificent 7 performance and earnings dynamics

Equities

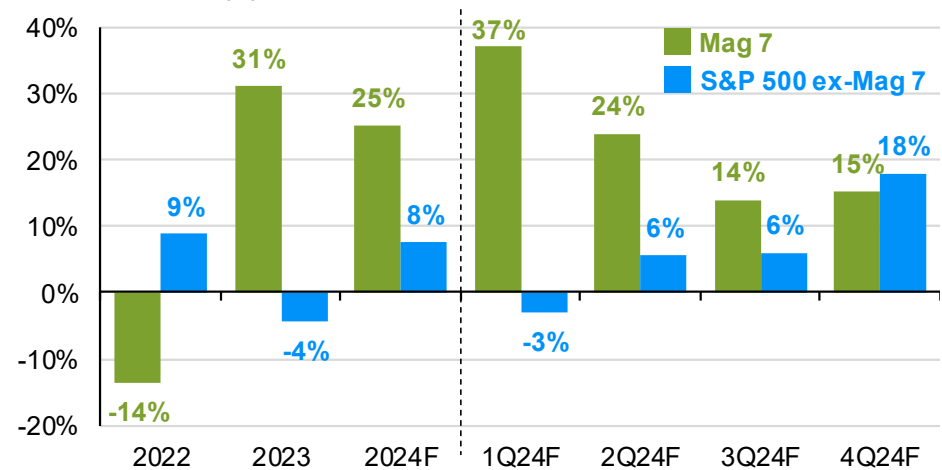
## Performance of “Magnificent 7” stocks in S&P 500\*

Indexed to 100 on 1/1/2021, price return



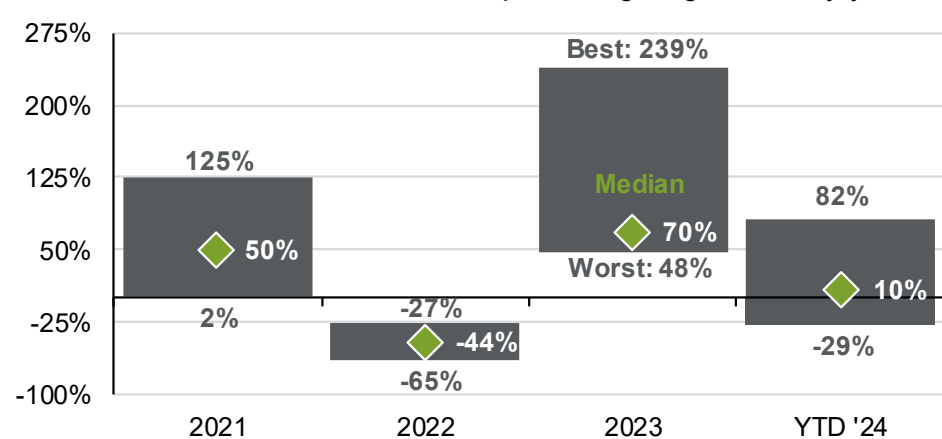
## Earnings growth

Pro-forma EPS, y/y



## Magnificent 7 performance dispersion

Price returns, best, median and worst performing Mag 7 stock by year



Source: FactSet, Standard & Poor's, J.P. Morgan Asset Management.

\*Magnificent 7 includes AAPL, AMZN, GOOG, GOOGL, META, MSFT, NVDA and TSLA. Earnings estimates for 2024 are forecasts based on consensus analyst expectations.

Guide to the Markets – U.S. Data are as of March 31, 2024.



# Strategies For AI Magnificent 7

GTM U.S.

YTD

**NVDA : 85%**

**META: 43%**

**TESLA: -31%**

**AMZN: 17%**

**GOOGL: 6%**

**MSFT: 14%**

**AAPL: -3%**



## Strategies For AI – ETF's

GTM

U.S.

YTD

**BOTZ: 12%**

**VPN: 6%**

**IGPT: 17%**

**CHAT: 15%**

<https://www.kiplinger.com/investing/etfs/601112/top-artificial-intelligence-ai-etfs>



## 3 Stocks That Could Benefit from AI

GTM

U.S.

**CRM: Salesforce: cloud based services gives detailed view of customer base, forecasts sales growth, sales data, etc.**

**NOW: Service Now: automation for service businesses, improved productivity.**

**AMD: Advanced Micro Devices: semiconductors, and processors manufacturer**