

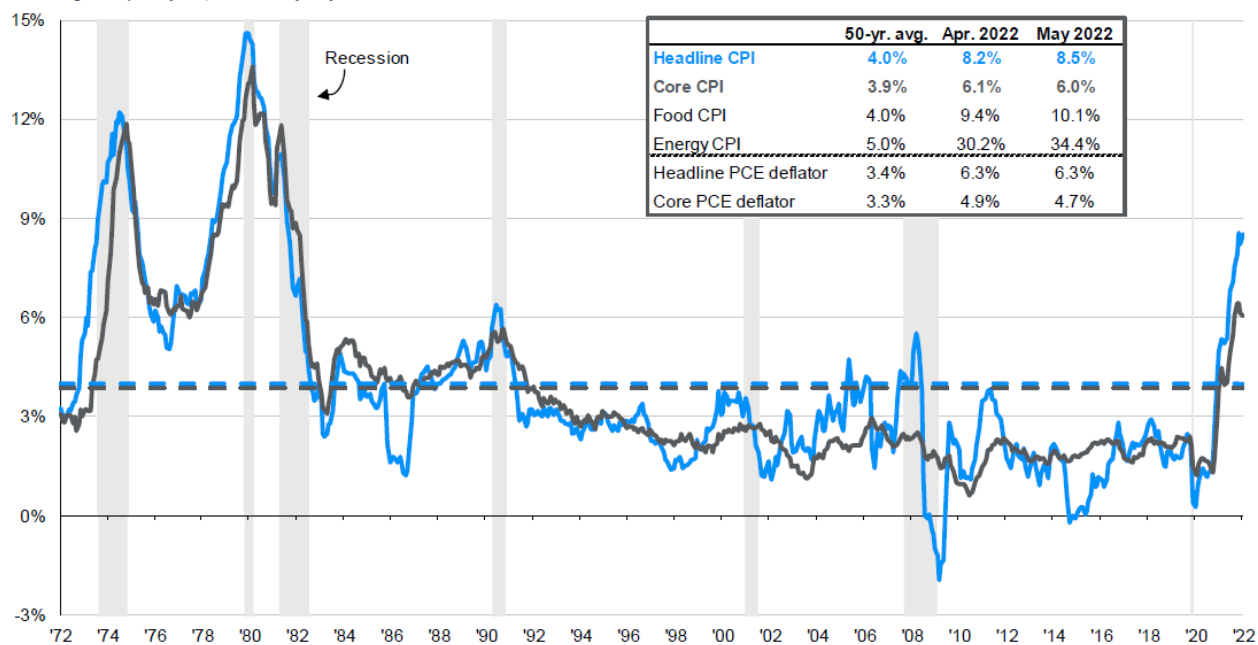




## Inflation

### CPI and core CPI

% change vs. prior year, seasonally adjusted



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

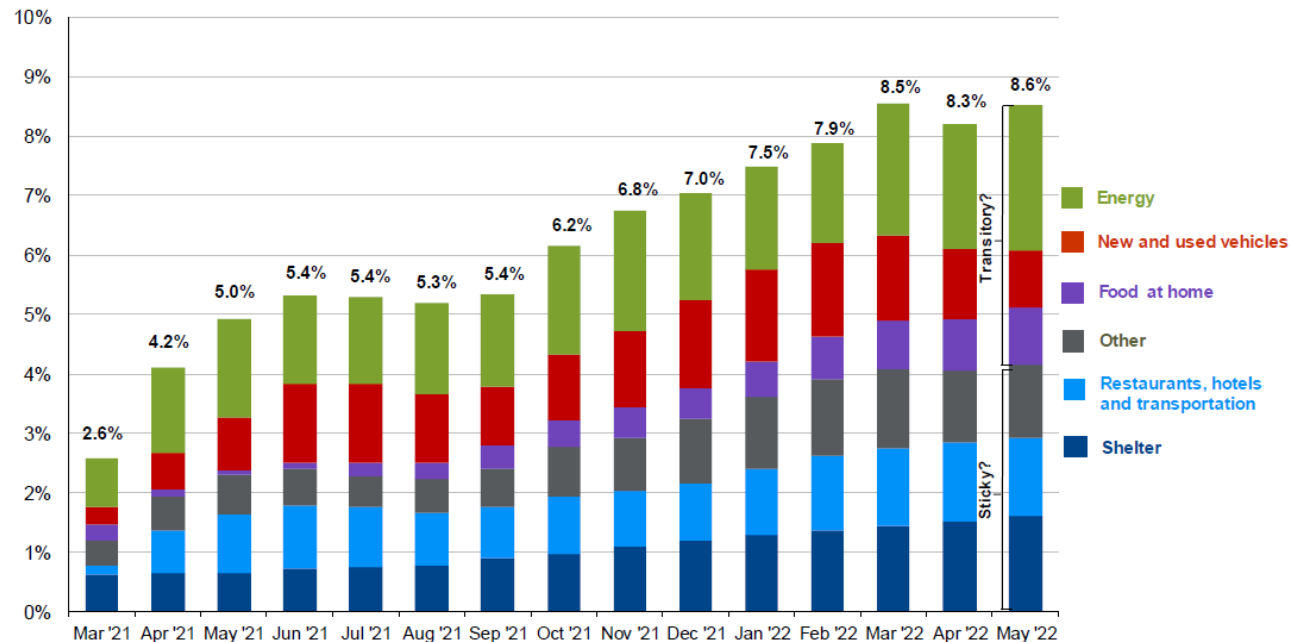
CPI used is CPI-U and values shown are % change vs. one year ago. Core CPI is defined as CPI excluding food and energy prices. The Personal Consumption Expenditure (PCE) deflator employs an evolving chain-weighted basket of consumer expenditures instead of the fixed-weight basket used in CPI calculations.

Guide to the Markets – U.S. Data are as of June 30, 2022.

## Inflation components

### Contributors to headline inflation

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



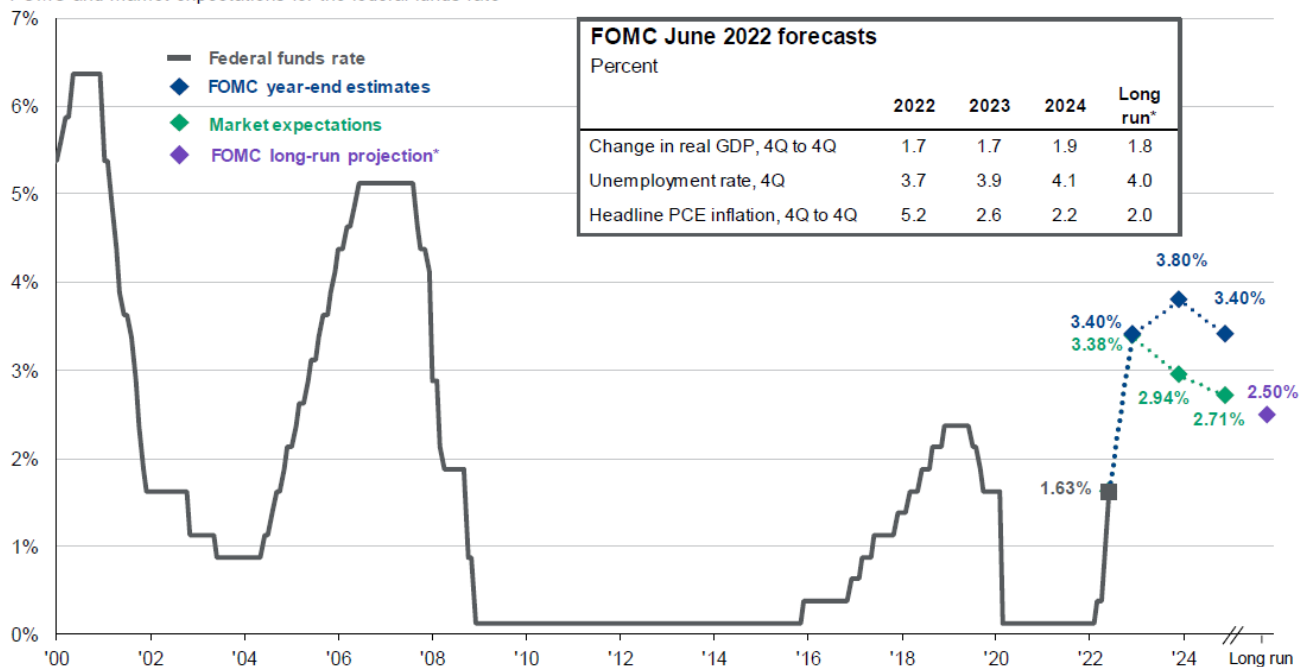
Source: BLS, J.P. Morgan Asset Management. Contributions mirror the BLS methodology on Table 7 of the CPI report. Values may not sum to headline CPI figures due to rounding and underlying calculations. "Shelter" includes owners equivalent rent and rent of primary residence. "Other" primarily reflects household furnishings, apparel, education and communication services, medical care services and other personal services.

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## The Fed and interest rates

### Federal funds rate expectations

FOMC and market expectations for the federal funds rate



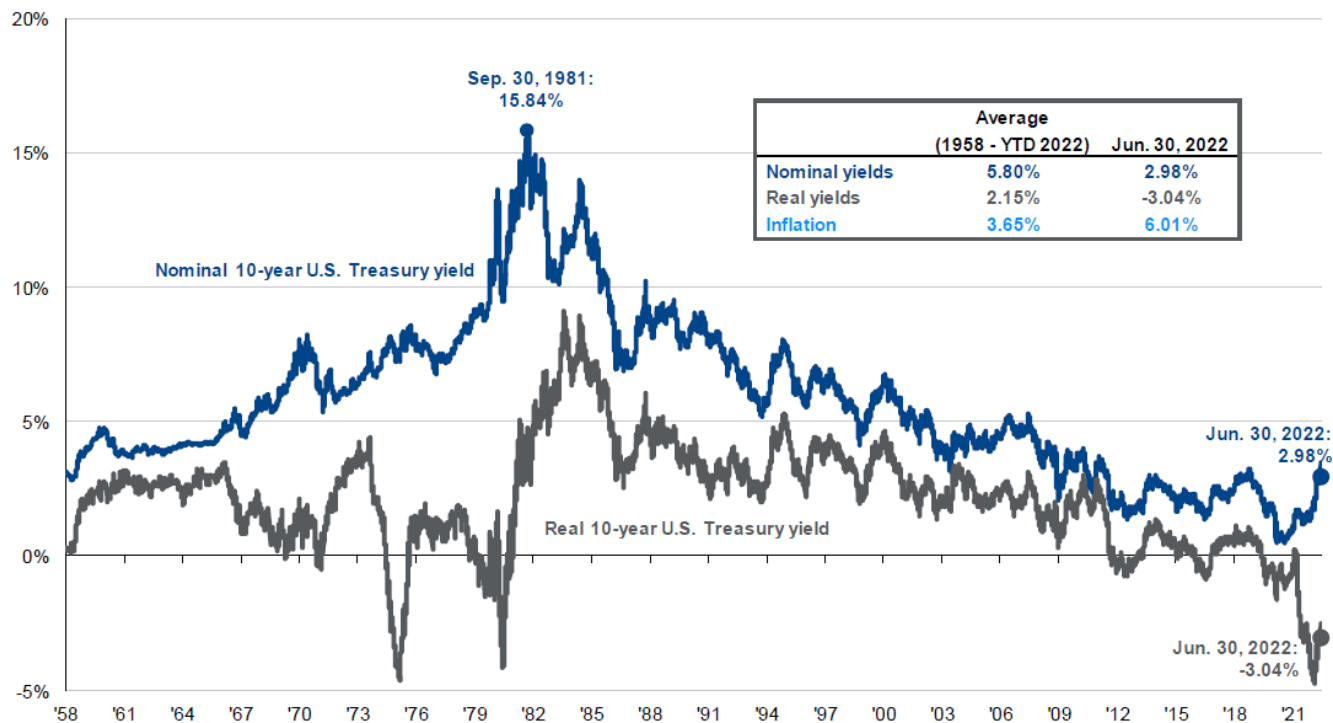
Source: Bloomberg, FactSet, Federal Reserve, J.P. Morgan Asset Management.

Market expectations are based off of the respective Federal Funds Futures contracts for December expiry. \*Long-run projections are the rates of growth, unemployment and inflation to which a policymaker expects the economy to converge over the next five to six years in absence of further shocks and under appropriate monetary policy. 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.

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## Interest rates and inflation

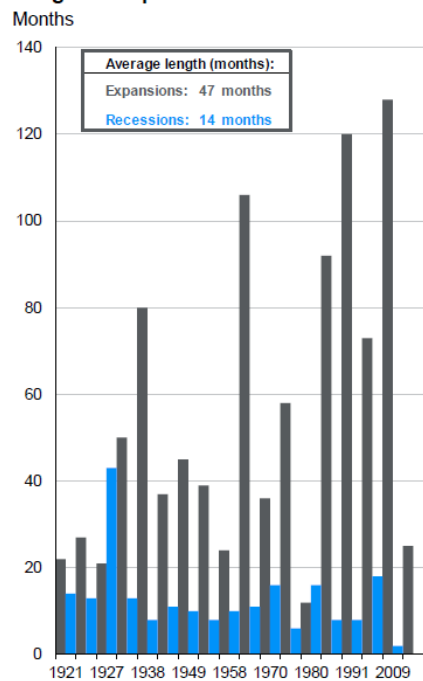
Nominal and real U.S. 10-year Treasury yields



Source: BLS, FactSet, Federal Reserve, J.P. Morgan Asset Management.  
 Real 10-year Treasury yields are calculated as the daily Treasury yield less year-over-year core CPI inflation for that month. For the current month, we use the prior month's core CPI figures until the latest data is available.  
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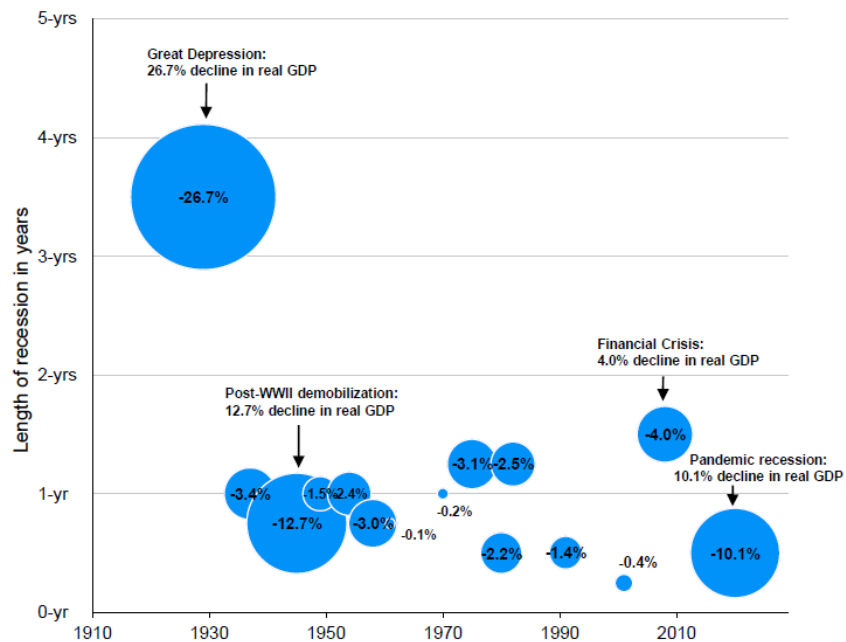
## U.S. expansions and recessions

### Length of expansions and recessions



### The Great Depression and post-war recessions

Length and severity of recession



Source: BEA, NBER, J.P. Morgan Asset Management.

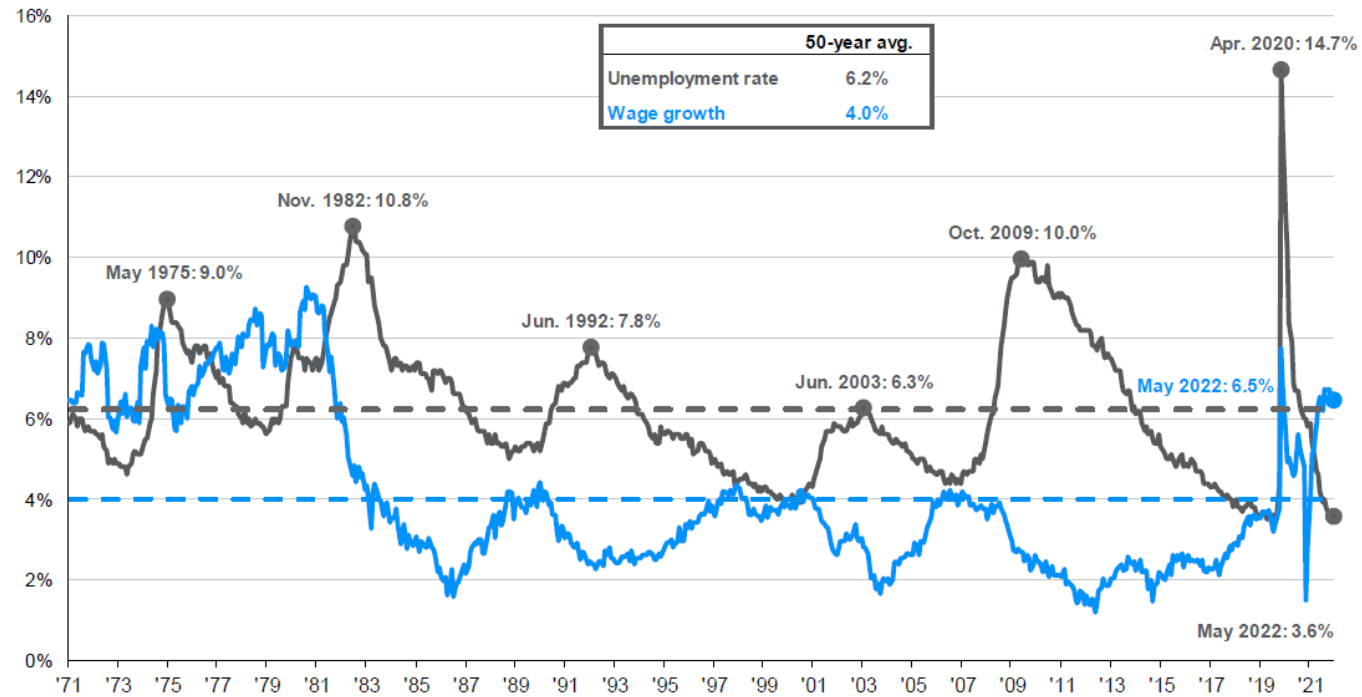
Left-hand chart assumes the current expansion lasted until at least June 2022. Bubble size reflects the severity of the recession, which is calculated as the decline in real GDP from the peak quarter to the trough quarter except in the case of the Great Depression, where it is calculated from the peak year (1929) to the trough year (1933), due to a lack of available quarterly data. Data for length of economic expansions and recessions obtained from the National Bureau of Economic Research (NBER). Past performance is not a reliable indicator of current and future results.

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## Unemployment and wages

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

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

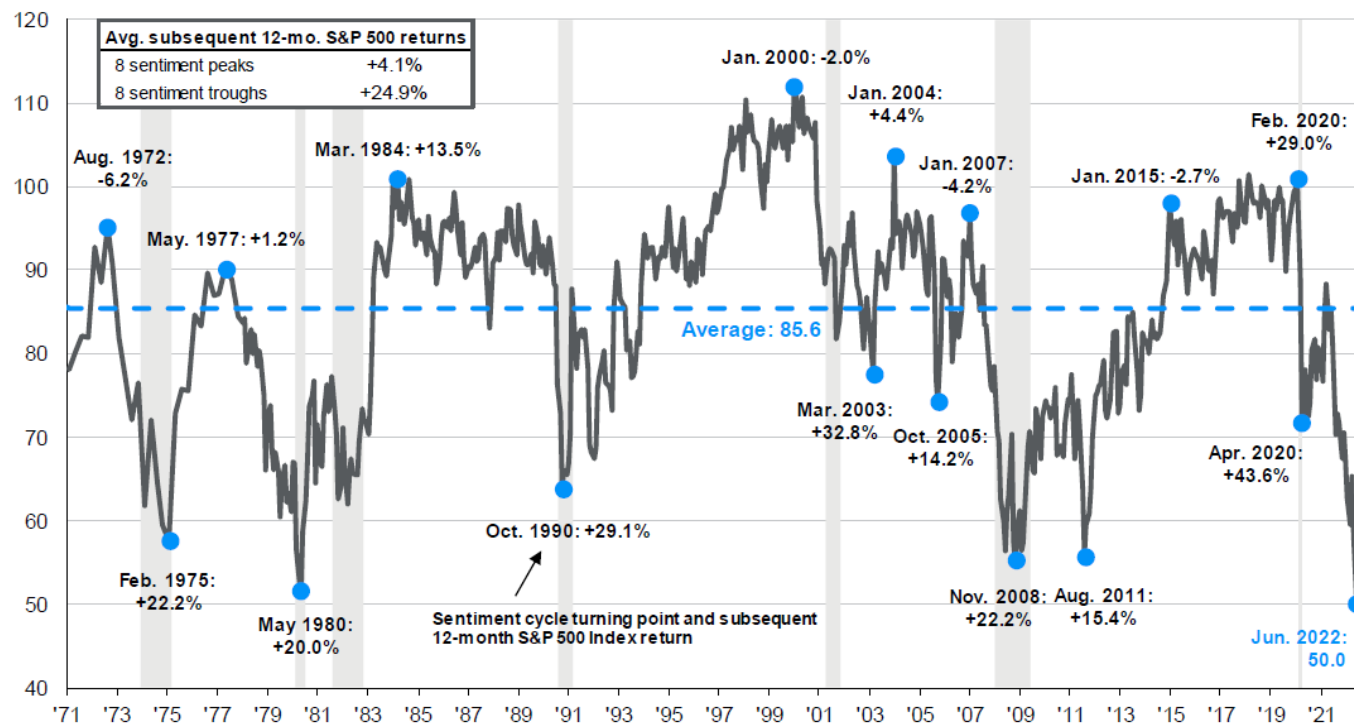


Source: BLS, FactSet, J.P. Morgan Asset Management.  
Guide to the Markets – U.S. Data are as of June 30, 2022.



## Consumer confidence and the stock market

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

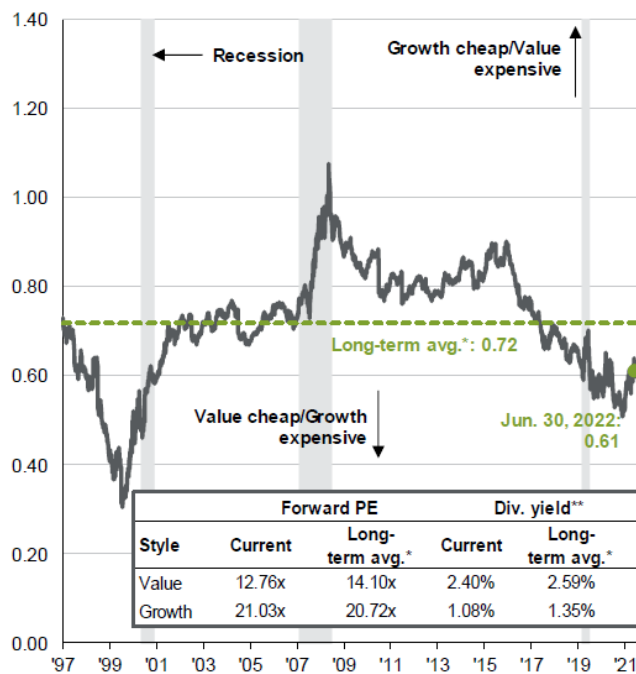


Source: FactSet, Standard & Poor's, University of Michigan, J.P. Morgan Asset Management.  
 Peak is defined as the highest index value before a series of lower lows, while a trough is defined as the lowest index value before a series of higher highs. Subsequent 12-month S&P 500 returns are price returns only, which excludes dividends. Past performance is not a reliable indicator of current and future results.  
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## Value vs. Growth

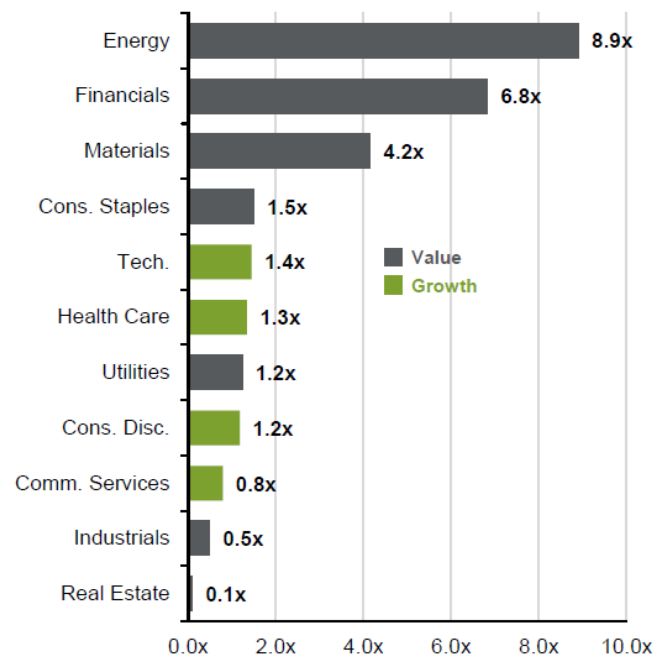
### Value vs. Growth relative valuations

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



### S&P 500 operating leverage by sector

Impact on operating income from a 1% rise in revenues



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

(Left) Growth is represented by the Russell 1000 Growth Index and Value is represented by the Russell 1000 Value Index. \*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) Operating leverage is a bottom-up calculation based on the 5-year compounded annual growth rate (CAGR) in EBIT divided by the 5-year CAGR in revenues. Each sector's operating leverage is weighted by market cap. Calculations use EBIT and revenue over the 5-year period between 2016 and 2021.

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## Returns and valuations by style

10-year annualized				YTD			
	Value	Blend	Growth		Value	Blend	Growth
Large	10.5%	13.0%	14.8%	Large	-12.9%	-20.0%	-28.1%
Mid	10.6%	11.3%	11.5%	Mid	-16.2%	-21.6%	-31.0%
Small	9.1%	9.4%	9.3%	Small	-17.3%	-23.4%	-29.5%
Since market peak (February 2020)				Since market low (March 2020)			
	Value	Blend	Growth		Value	Blend	Growth
Large	10.8%	16.1%	16.3%	Large	79.1%	75.3%	69.7%
Mid	10.9%	8.4%	-1.4%	Mid	96.1%	81.6%	53.3%
Small	13.3%	3.8%	-7.1%	Small	99.3%	75.0%	51.0%

Current P/E vs. 20-year avg. P/E			
	Value	Blend	Growth
Large	12.9 / 13.7	15.9 / 15.5	21.3 / 18.5
Mid	12.4 / 14.4	14.3 / 16.3	19.9 / 20.3
Small	13.6 / 16.9	17.1 / 21.4	22.9 / 35.4

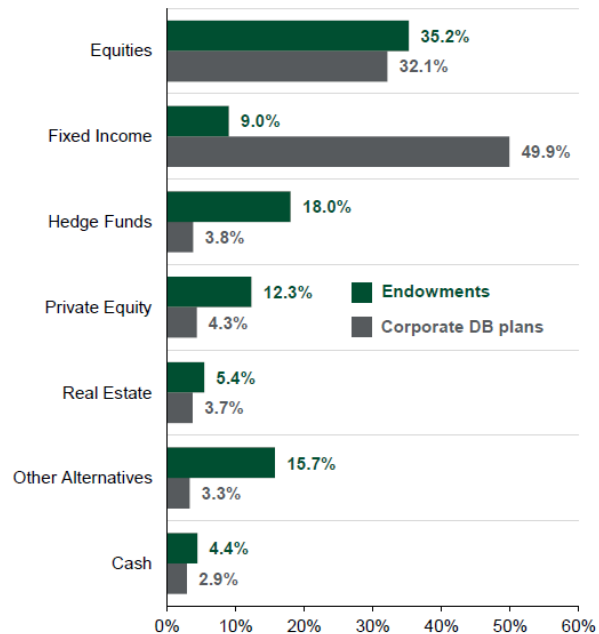
  

Current P/E as % of 20-year avg. PE			
	Value	Blend	Growth
Large	94.0%	103.1%	114.9%
Mid	86.3%	87.7%	98.2%
Small	80.2%	80.0%	64.8%

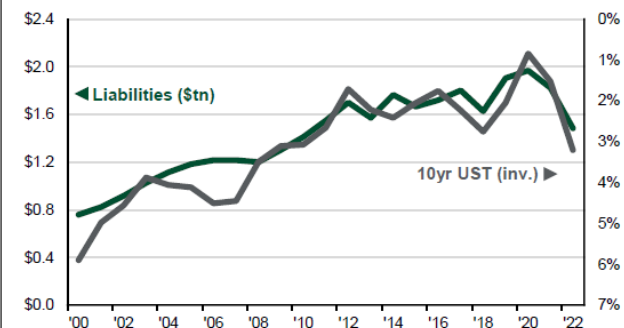
Source: FactSet, Refinitiv Datastream, Russell Investment Group, Standard & Poor's, J.P. Morgan Asset Management. All calculations are cumulative total return, including dividends reinvested for the stated period. Since Market Peak represents period from February 19, 2020 to June 30, 2022. Since Market Low represents period from March 23, 2020 to June 30, 2022. Returns are cumulative returns, not annualized. For all time periods, total return is based on Russell style indices except for the large blend category, which is based on the S&P 500 Index. Past performance is not indicative of future returns. The price-to-earnings is a bottom-up calculation based on the most recent index price, divided by consensus estimates for earnings in the next 12 months (NTM) and is provided by FactSet Market Aggregates and J.P. Morgan Asset Management.  
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## Institutional investor behavior

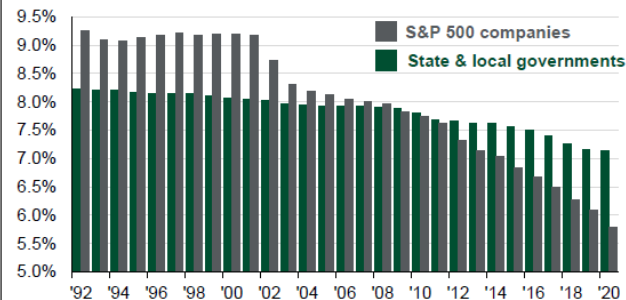
**Asset allocation: Corporate DB plans, endowments**



**Corporate pension liabilities and 10-year UST yield**



**Pension return assumptions**



Source: J.P. Morgan Asset Management; (Left) NACUBO (National Association of College and University Business Officers), Towers Watson; (Top right) Milliman Pension Funding Index; (Bottom right) Census for Governments, Compustat, FactSet, S&P 500 corporate 10-Ks. Endowment asset allocation is as of 2019. Corporate DB plan asset allocation as of 2018. Endowments represents dollar-weighted average data of 749 colleges and universities. Corporate DB plans represents aggregate asset as of 12/31/2020 for Fortune 1000 pension plans. Pension return assumptions based on all available and reported data from S&P 500 Index companies and are as of 12/31/2019. State and local pension return assumptions are weighted by plan size. Pension assets, liabilities and funded status based on Milliman 100 companies reporting pension data as of May 2022. All information is shown for illustrative purposes only.  
Guide to the Markets – U.S. Data as of June 30, 2022.