

# ACG Market Review – First Quarter 2024

- Economy – Recession forecasts have decreased meaningfully as the economy perseveres, despite some lingering inflation**
  - Year over year inflation readings continue to fall, but at a slower pace than the market has expected to remain above the Fed’s 2.0% target
    - Service sector inflation has been elevated as food and energy prices have decreased within the overall CPI bucket
  - The Fed has been reluctant to signal any imminent rate cuts, with market expectations showing fewer and fewer cuts this year, and some forecasters now calling for zero cuts in 2024
- Equity – Positive momentum for equities continued with the S&P 500 gaining +10.56% for the quarter**
  - Market leadership broadened from the Magnificent Seven, which could be a good sign for this bull market
    - NVIDIA and Meta carried over strong performance from 2023 in Q1, while Amazon and Microsoft outperformed the broader market. Alphabet, Apple, and Tesla all underperformed the S&P 500 in Q1, with Apple and Tesla among the worst performers in the index for the quarter
  - US Small Cap, International Developed, and Emerging Markets all had positive absolute quarters, but still trailed US Large Cap
    - Japanese markets finally set new all-time highs for the first time since 1989
- Fixed Income – Bonds are in a better place due to higher starting yields despite tepid performance during Q1**
  - Treasury yields rose slightly with the 10-year Treasury moving from just under 4.0% to around 4.2% during the quarter
  - Yields across fixed income sectors are higher than two years ago, which should be beneficial for returns from both coupon payments and price appreciation as the Fed begins to cut rates
- Risks/Other Considerations**
  - Geopolitics continues to be a topic of conversation with conflicts ongoing in Ukraine, the Middle East, and renewed worries of a China/Taiwan engagement
  - The recent performance of the US stock market has raised concerns about a potential bubble, but pockets of froth may not mean doom for the broader market

Statistic	Last 10 Year Avg.	12 Month Prior	Prior Quarter	Current
Fed Funds Rate	1.41%	4.65%	5.33%	5.33%
Prime Rate	4.55%	7.82%	8.50%	8.50%
10-Year Treasury Yield	2.35%	3.66%	4.02%	4.21%
30-Year Fixed Mortgage Rate	4.28%	6.32%	6.61%	6.79%
S&P 500 P/E Ratio (Forward Earnings)	19.4x	18.1x	19.8x	21.1x
Projected Earnings Growth (S&P 500)	+8.9% (YoY est.)	+8.4% (2024/2023) est.	+9.5% (2024/2023) est.	+12.7% (2025/2024) est.
U.S. GDP (Real, Quarterly)	2.3% Avg.	+2.1% (Q4 2023)	+2.5% (Q4 2023) est.	+2.5% (Q4 2023) est.

# Market Index Review – March 2024

Major Market Indices	MTD	QTD	YTD	1 Year	3 Years	5 Years	10 Years
S&P 500	3.22	10.56	10.56	29.88	11.49	15.05	12.96
Russell 2000	3.58	5.18	5.18	19.71	-0.10	8.10	7.58
Russell 3000	3.23	10.02	10.02	29.29	9.78	14.34	12.33
MSCI ACWI	3.14	8.20	8.20	23.22	6.96	10.92	8.66
MSCI ACWI ex USA	3.13	4.69	4.69	13.26	1.93	5.97	4.25
Bloomberg US Aggregate TR	0.92	-0.78	-0.78	1.70	-2.46	0.36	1.54

Russell Indices	MTD	QTD	YTD	1 Year	3 Years	5 Years	10 Years
Russell 1000	3.21	10.30	10.30	29.87	10.45	14.76	12.68
Russell 1000 Growth	1.76	11.41	11.41	39.00	12.50	18.52	15.98
Russell 1000 Value	5.00	8.99	8.99	20.27	8.11	10.31	9.01
Russell MidCap	4.34	8.60	8.60	22.35	6.07	11.10	9.95
Russell MidCap Growth	2.39	9.50	9.50	26.28	4.61	11.82	11.35
Russell MidCap Value	5.18	8.23	8.23	20.39	6.80	9.94	8.57
Russell 2000 Growth	2.80	7.58	7.58	20.35	-2.68	7.38	7.89
Russell 2000 Value	4.38	2.90	2.90	18.75	2.22	8.17	6.87

Sector Indices	MTD	QTD	YTD	1 Year	3 Years	5 Years	10 Years
S&P 500 Materials	6.50	8.95	8.95	17.57	7.87	13.30	9.23
S&P 500 Consumer Discretionary	0.10	4.98	4.98	28.73	4.34	11.54	12.56
S&P 500 Consumer Staples	3.49	7.52	7.52	7.19	8.00	9.96	9.27
S&P 500 Energy	10.60	13.69	13.69	17.67	30.00	12.86	4.74
S&P 500 Financials	4.78	12.46	12.46	33.55	9.52	12.76	11.06
S&P 500 Health Care	2.38	8.85	8.85	16.09	10.01	12.05	11.93
S&P 500 Industrials	4.41	10.97	10.97	26.70	10.44	12.97	11.14
S&P 500 Information Technology	1.97	12.69	12.69	46.01	18.99	25.39	21.97
S&P 500 Real Estate	1.77	-0.55	-0.55	9.60	3.44	5.32	--
S&P 500 Communication Services	4.34	15.82	15.82	49.76	6.86	13.67	9.35
S&P 500 Utilities	6.62	4.57	4.57	0.42	4.14	5.87	8.35

International Indices	MTD	QTD	YTD	1 Year	3 Years	5 Years	10 Years
MSCI EAFE	3.29	5.78	5.78	15.32	4.78	7.33	4.80
MSCI Europe	3.74	5.23	5.23	14.11	6.19	7.96	4.44
MSCI Pacific	2.48	6.72	6.72	17.48	2.31	6.19	5.58
MSCI EAFE Small Cap	3.72	2.40	2.40	10.45	-1.36	4.94	4.70
MSCI Emerging Markets	2.48	2.37	2.37	8.15	-5.05	2.22	2.95
MSCI Frontier Markets	4.15	5.25	5.25	13.97	0.92	3.02	1.79

Bond Indices	MTD	QTD	YTD	1 Year	3 Years	5 Years	10 Years
FTSE T-Bill 3 Months	0.46	1.37	1.37	5.52	2.70	2.07	1.39
Bloomberg US Municipal TR	0.00	-0.39	-0.39	3.13	-0.41	1.59	2.66
Bloomberg US Govt/Credit TR	0.88	-0.72	-0.72	1.73	-2.35	0.62	1.70
Bloomberg US Govt/Credit Int TR	0.64	-0.15	-0.15	2.69	-1.06	1.09	1.61
Bloomberg US Credit 1-3 Yr TR	0.50	0.72	0.72	4.66	0.76	1.83	1.77
Bloomberg US Credit Long TR	1.91	-1.65	-1.65	3.30	-4.26	0.82	3.08
Bloomberg US Corporate High Yield TR	1.18	1.47	1.47	11.15	2.19	4.21	4.44
FTSE WGBI	0.43	-2.42	-2.42	-0.84	-6.12	-2.21	-0.82

Other Indices	MTD	QTD	YTD	1 Year	3 Years	5 Years	10 Years
Morningstar US Long-Short Equity	2.80	6.94	6.94	15.58	4.92	6.24	4.18
Morningstar US Equity Market Neutral	1.91	5.58	5.58	11.20	6.91	3.80	2.59
Morningstar US Multistrategy	2.18	4.65	4.65	10.32	3.93	3.87	2.76
Wilshire Liquid Alternative TR USD	1.47	3.16	3.16	8.25	1.94	2.86	1.79
FTSE EPRA/NAREIT Developed NR USD	3.45	-1.30	-1.30	7.41	-1.13	-0.21	3.05
Alerian MLP TR USD	4.53	13.89	13.89	38.46	29.44	11.46	3.05
Bloomberg Commodity Index TR USD	3.31	2.19	2.19	-0.56	9.11	6.38	-1.56
S&P Global Infrastructure TR USD	4.62	1.34	1.34	4.12	5.47	4.86	5.15
WTI Crude BL	6.27	16.08	16.08	9.91	12.02	6.70	-1.98
US Dollar Index	0.37	3.17	3.17	1.99	3.89	1.45	2.70
Consumer Price Index *	0.62	1.17	1.17	3.15	5.67	4.19	2.83

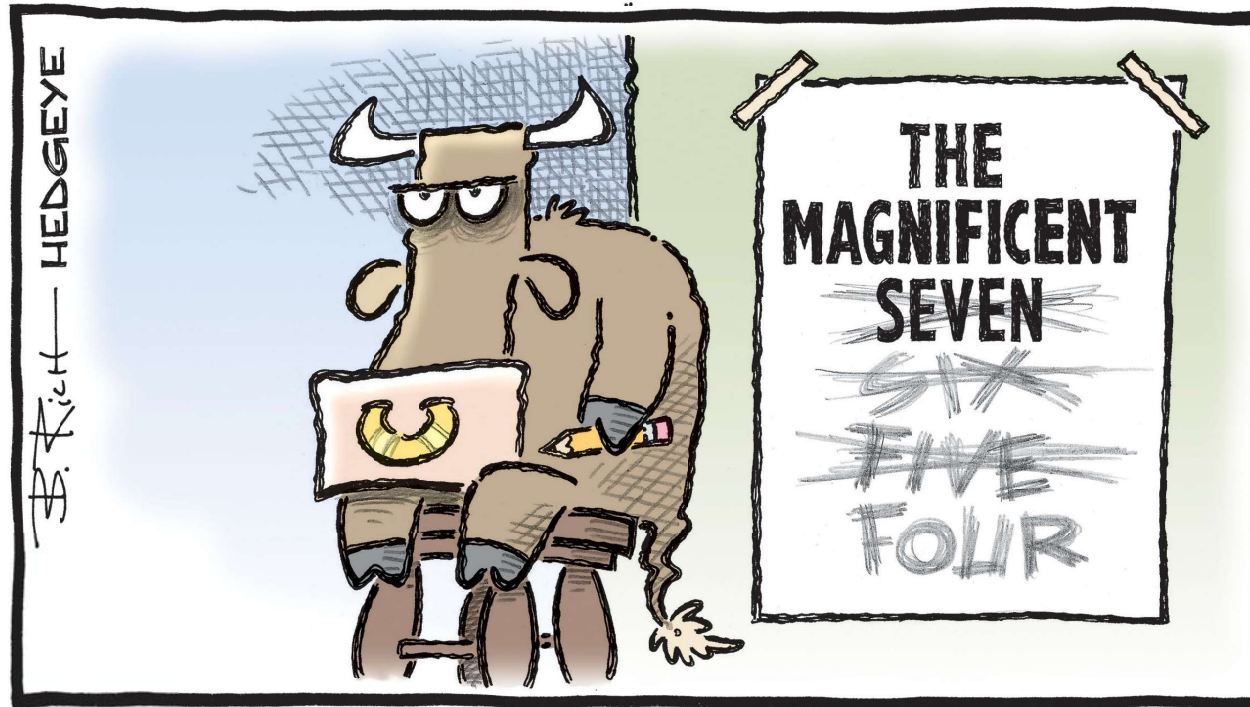
\* Consumer Price Index returns will be reported as of the previous month end due to the delayed release of data.

Source: Morningstar, ACG

Returns include dividends; 3-year, 5-year and 10-year returns are annualized. Indices are unmanaged.

You cannot invest directly into an index. Past performance is not indicative of future results

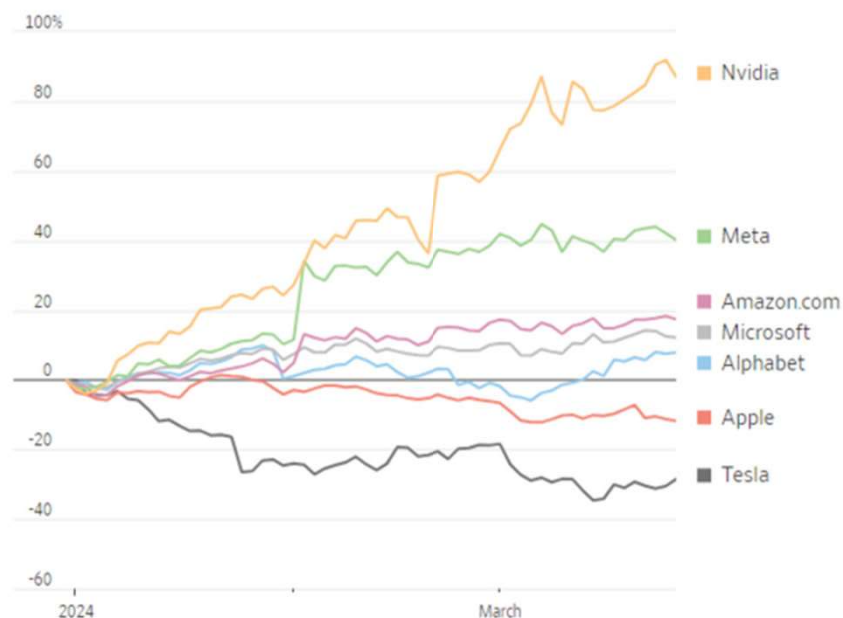
# Q1 2024: The Equity Market Rally Broadens



# Magnificent Seven (or Four) Update

- The Magnificent Seven stocks were all down in 2022 and then were all up sharply in 2023. In 2024, the performance of the seven stocks has diverged to start the year. Despite this divergence, the overall U.S. equity market has been able to withstand this change in leadership and move on to new all-time highs

**Magnificent Seven Stock Performance**  
(Year-to-Date 2024)



- Year-to-date through the first quarter of 2024, NVIDIA and Meta were the big winners and two of the best performing stocks in the S&P 500. Amazon and Microsoft have been solid performers, while Alphabet (Google), Apple and Tesla have been laggards. In 2023, the Magnificent Seven accounted for 60% of the S&P 500 return. Thus far in 2024, that percentage has shrunk to 41%

**Performance and Ranking Table**

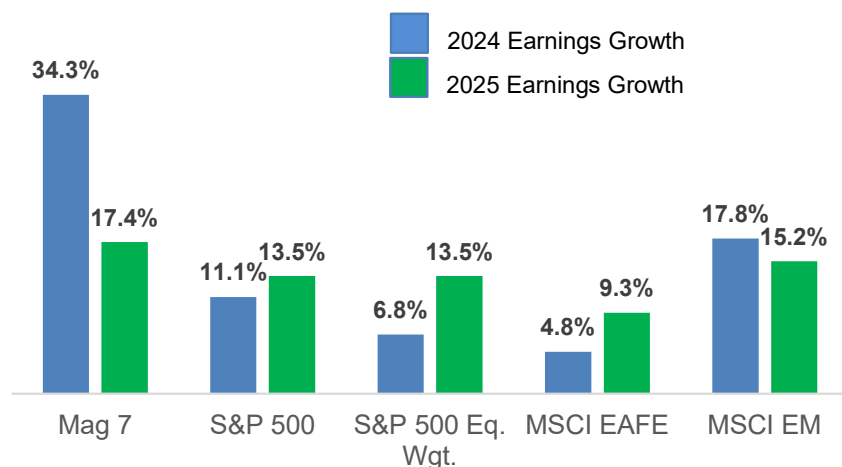
	2023 Performance	2023 S&P 500 Rank	2024 Performance	2024 S&P 500 Rank
<b>NVIDIA</b>	239%	1	82%	2
<b>Meta</b>	194%	2	37%	7
<b>Amazon</b>	81%	20	19%	88
<b>Microsoft</b>	57%	49	12%	170
<b>Alphabet</b>	58%	47	8%	236
<b>Apple</b>	48%	63	-11%	476
<b>Tesla</b>	102%	10	-29%	503
<b>S&amp;P 493*</b>	11%	N/A	6%	N/A

Source: Russell Investment Group, ACG

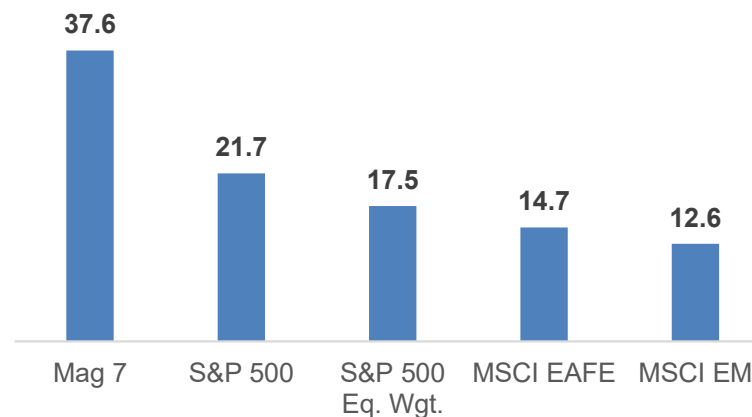
\* 493 are stocks in the S&P 500 Index other than Magnificent Seven

# Earnings and Valuations Differ by Size and Geography

**Annual Estimated Earnings Growth**  
(Year-over-Year Growth Projections)



**Valuation Comparison**  
(12M Forward Price-to-Earnings Ratio)



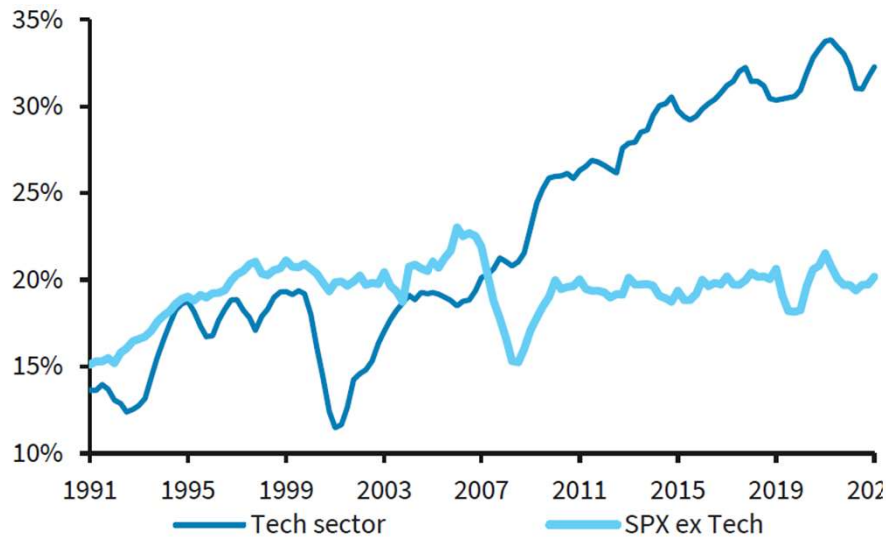
**Valuation Percentile**  
(1996-2004)

Mag 7	S&P 500	S&P 500 Eq. Wgt.	MSCI EAFE	MSCI EM
88 <sup>th</sup>	84 <sup>th</sup>	79 <sup>th</sup>	48 <sup>th</sup>	56 <sup>th</sup>

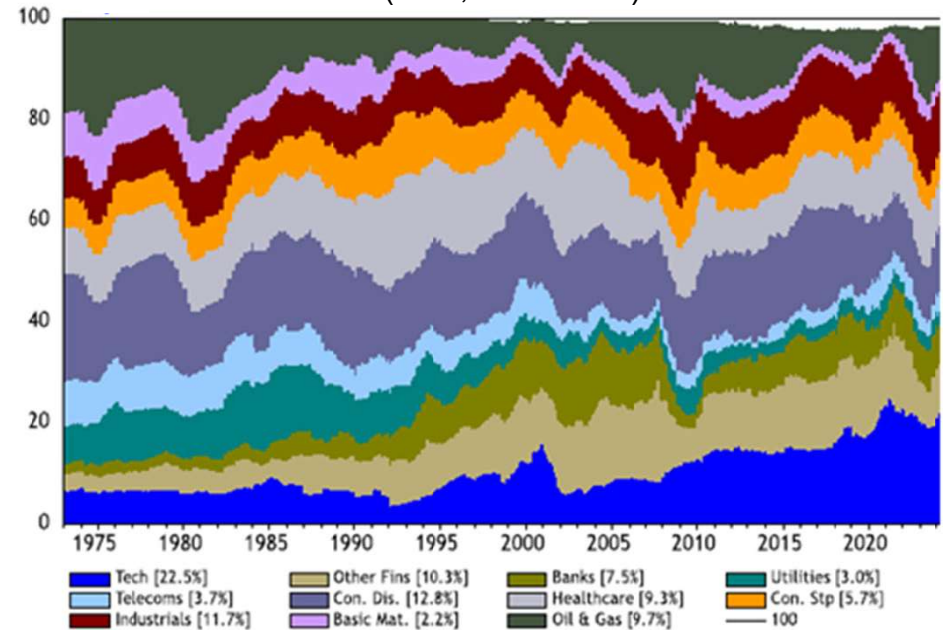
- A key driver of the Magnificent Seven outperformance is strong underlying earnings growth. While future earnings growth expectations still look strong relative to the overall market, the gap is expected to close going forward
- After the year and a half long rally in the equity markets, equity valuations are again at historically high levels. The forward price-to-earnings ratio of the S&P 500 is near 22x forward earnings. For the Magnificent Seven, this ratio is closer to 38x. Foreign markets still offer a relative discount and trade near their historical averages

# The Dominance of the Technology Sector

**Margin Comparison**  
(Last 12 Month EBITDA Margin, 1991-2023)



**Earnings Per Share by Sector**  
(USA, 1972-2024)



- Wall Street analysts typically view profit margins using EBITDA (earnings before interest, tax, depreciation and amortization). Looking at Technology sector margins over the last 25 years shows that the sector's margins have doubled while the remaining S&P 500 components have remained relatively flat. This trend underlies the unique position technology plays in the modern economy. Recently, the market has rewarded the higher margin Technology sector with outsized gains

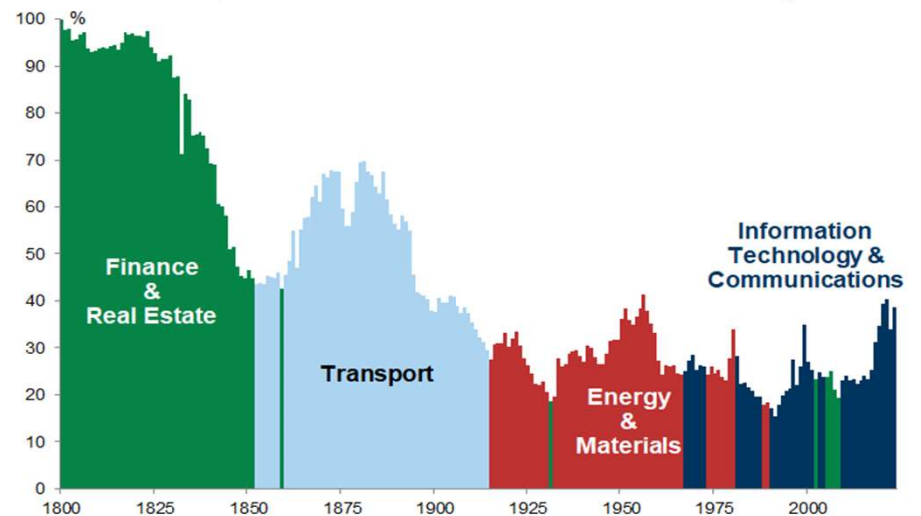
- The degree to which the market currently relies on one sector for growth is rare. Fully 23% of S&P 500 earnings comes from Technology. In the past 50 years, only Energy (1980), Healthcare (1992) and Consumer Discretionary stocks (1978) briefly managed to sustain 20%+ shares of total earnings. Once a sector reaches this scale, the issue becomes how can it generate incremental earnings growth. Even if AI continues to grow like the internet did 20 years ago, can this pace of earnings growth be sustained?



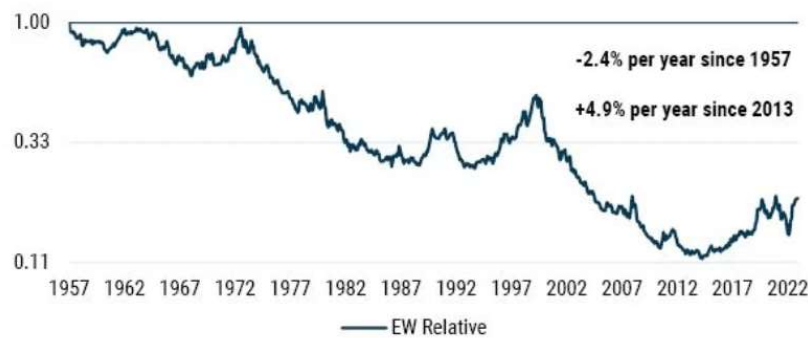
# A Historical Look at Equity Market Concentration

- In addition to being the sector that accounts for the biggest portion of overall earnings growth, the Technology sector (combined with Communications) is the largest segment in today's market. If you look back historically, however, its weight is no different than that of the Energy sector during the 1950s and much lower than Transports (Railroads) and Finance were in prior periods
- Over the long-term, the biggest stocks in the market have performed well in absolute terms, but they also underperformed the broad market after reaching Top 10 status. Over the last decade, this trend reversed with the largest stocks outperforming

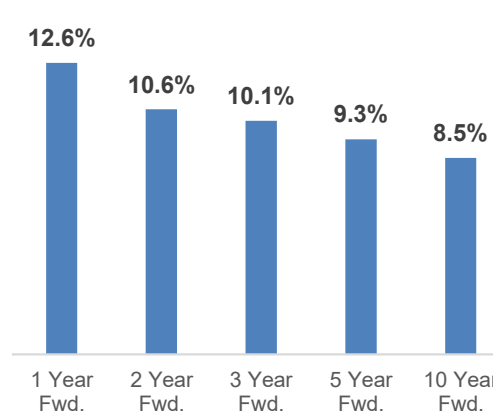
**Weight of Largest U.S. Sector (1800-2024)**



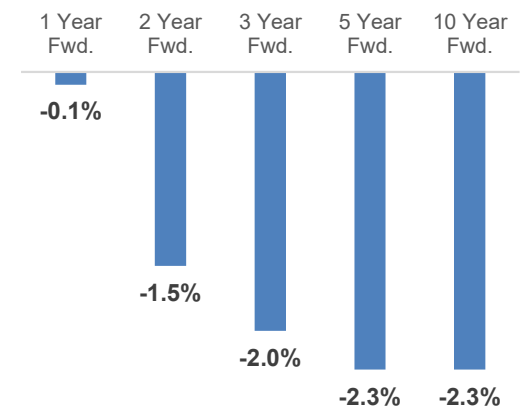
**S&P 500 – Top 10 Largest vs. 490 Equally Weighted (Relative Return, 1957-2023)**



**Avg. Forward Absolute Return (Top 10 U.S. Companies)**

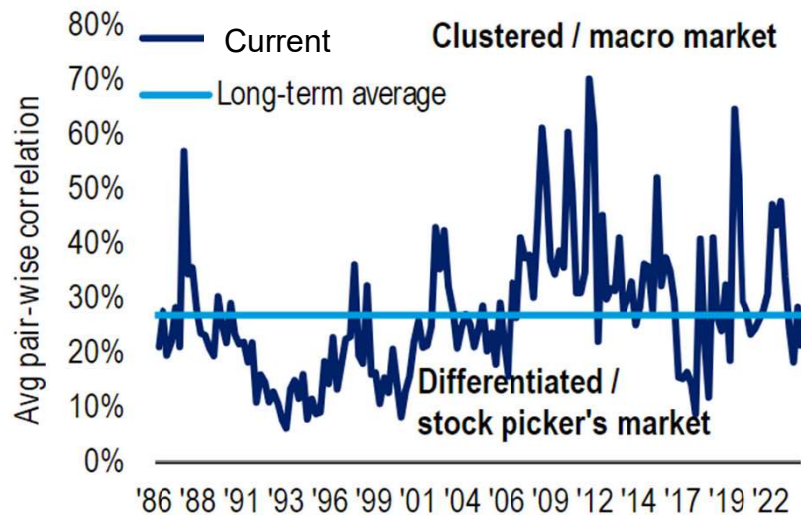


**Avg. Forward Relative Return (Top 10 U.S. Companies)**

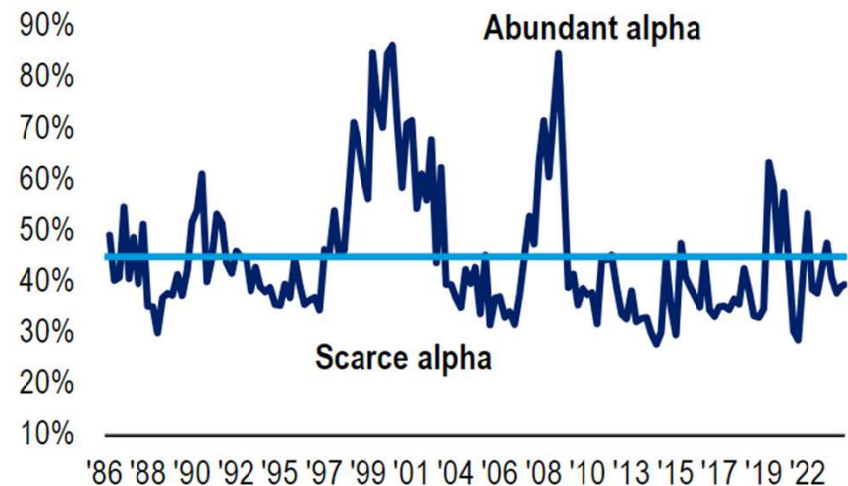


# Active Management Backdrop Remains Mixed

**Average Pairwise Stock Correlations**  
(90-day average, S&P 500)



**Return Dispersion**  
(Top/Bottom Quartile Return, S&P 500)



- Pairwise correlations, which measure the correlation of individual stocks to one another, are slightly below average. This differentiation among individual stocks, when they trade more on fundamentals, can provide a tailwind for stock pickers as opposed to periods when stocks trade on macro news and correlations are high
- Dispersion in stock returns, which measures the difference in returns for different groupings of stocks, can also give some insight into the backdrop for active management. Recent dispersion data is near historical averages, suggesting an average environment for stock pickers



# International Markets: Japan Finally Moves Past Prior Peak

- After peaking in late 1989, it took the Japanese stock market a full 35 years to surpass the prior peak and set new all-time highs
- Many developed international investment strategies have increased their allocations in Japan due to better market performance, a better environment for value stocks, as well as continued reforms, such as stock buybacks, that have helped bolster corporate earnings

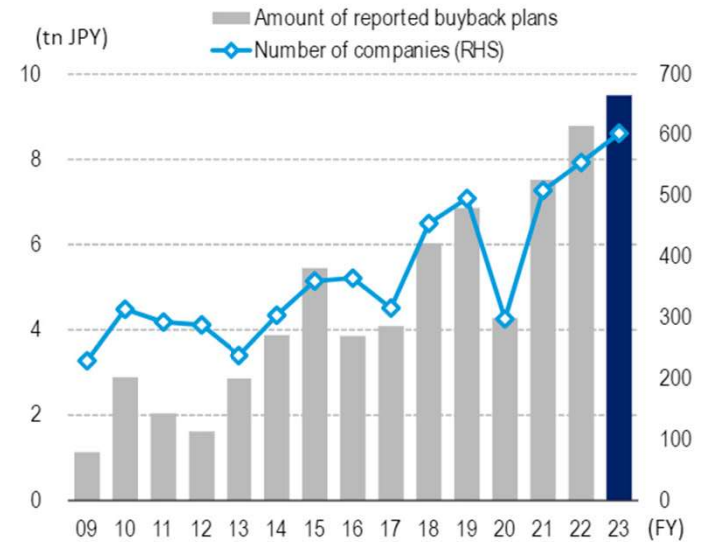
Japan Nikkei 225 Index Level



Value Style Comparison  
(MSCI Japan vs. MSCI USA)



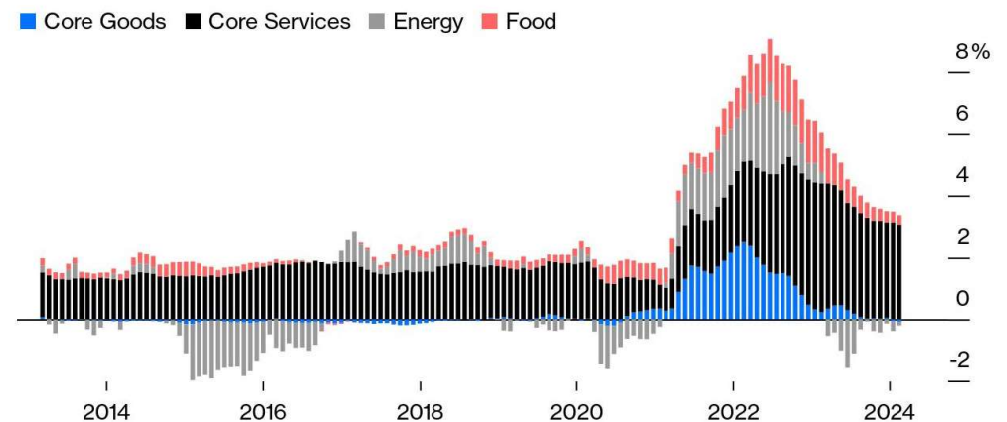
Japanese Stock Buybacks  
(Number of Companies and Value)



# Inflation is Coming Down....But Slowly

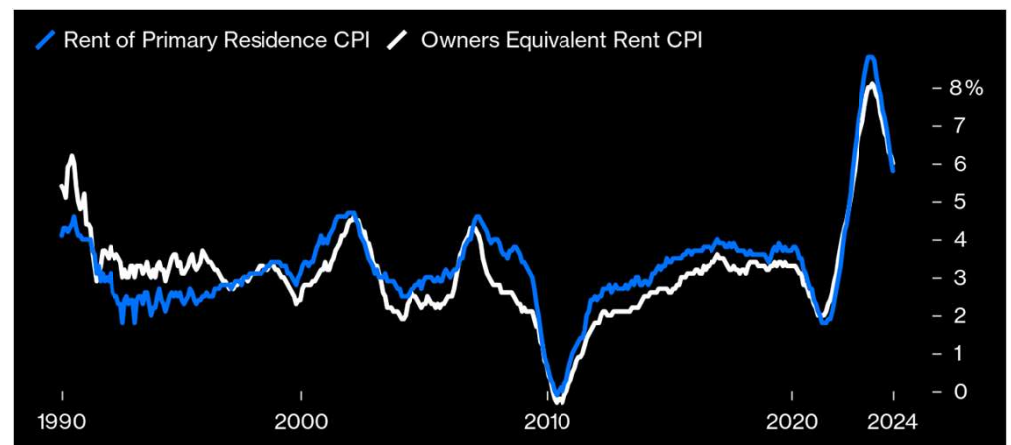
- Inflation continues to come down from its peak of the last couple years, but recent declines have been smaller than the market expected, and the overall rate remains stubbornly above the Federal Reserve's 2% target. While food and energy have declined, the services sector remains elevated and contributes to the vast majority of the current increase

**Inflation**  
(CPI by Component, Annual Rate)



- Within the services component, however, a large piece of the increase comes from the cost of housing. The Bureau of Labor Statistic's method of calculation of the housing component causes a lag in the data. This is important because there is strong evidence that housing inflation will continue to fall, bringing the services component down as well

**Rental Inflation**  
(Annual Rate)



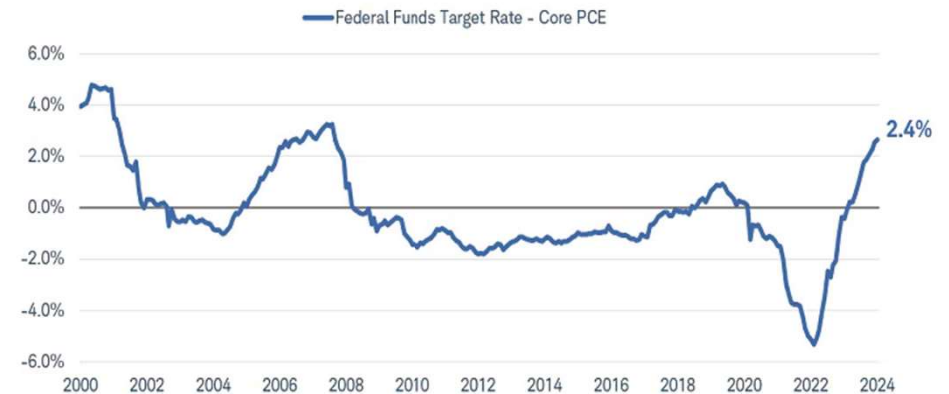
# Federal Open Market Committee Rate Decision Gets Tougher

- Another factor affecting the Fed's decision is the level of Real Interest Rate. This is defined as the Fed Funds Target Rate minus inflation. The Fed uses Core Personal Consumption Expenditures as their preferred measure of inflation. Looking at this metric shows that with inflation having come down so much, the real level of interest rates is at almost two-decade long highs. A worry is that this higher level of real rates becomes restrictive to economic growth

- The Fed has been cautious in their statements regarding exactly when they expect to cut rates. Not long ago, the market expected the first cuts near the end of Q1. Recent higher-than-expected inflation numbers have pushed out the most likely first cut until the second half of 2024. Looking at short-term rates is a good indicator of where the market expects rates to go. The current yield on the 2-Year Treasury is 4.69%, suggesting 75 to 100 basis points of cuts in the near-term

## Real Fed Funds Rate (Fed Funds Rate Minus Inflation)

The real federal funds rate is at the highest level since 2007

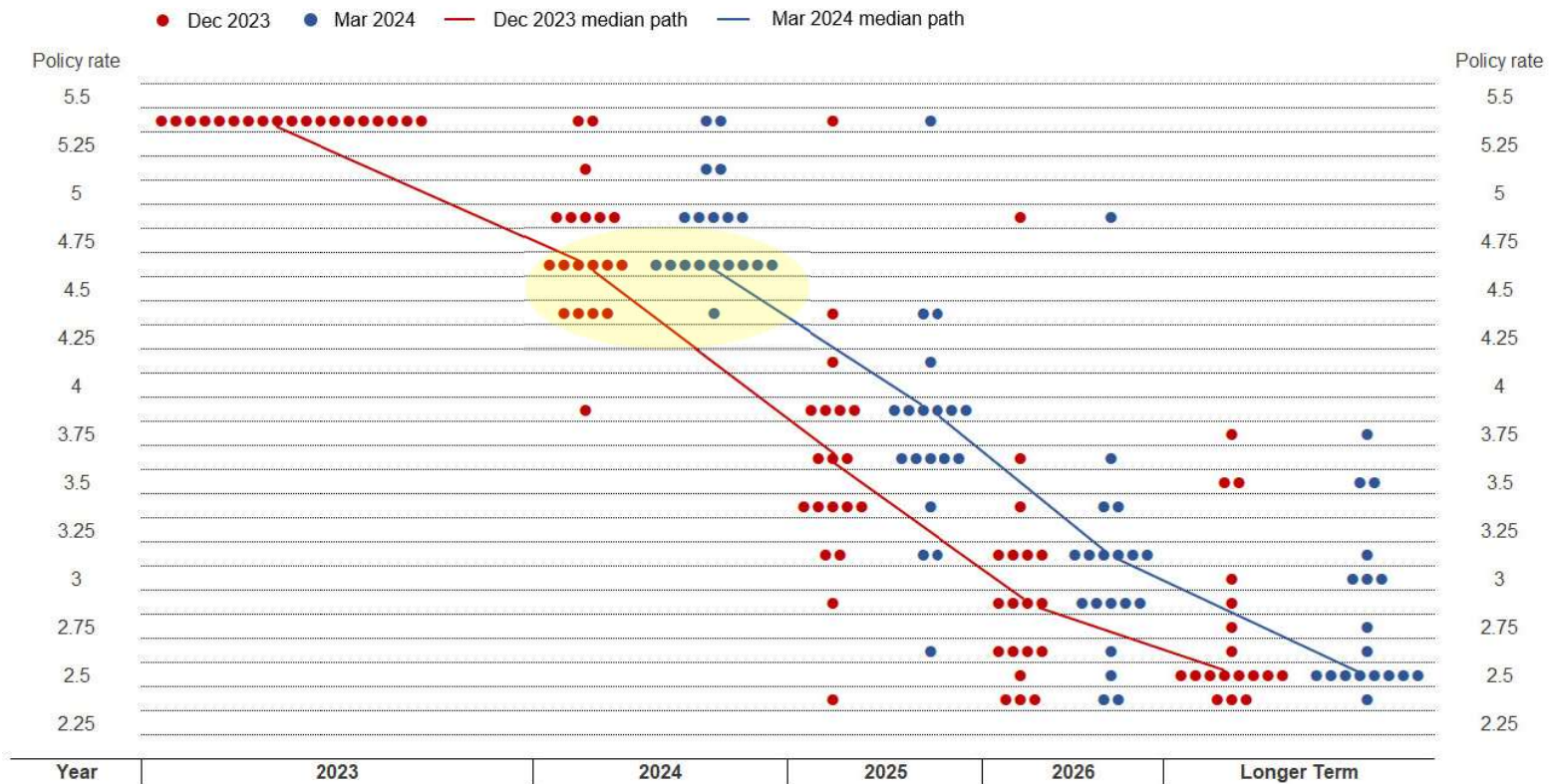


## Yield Comparison (Fed Fund vs. 2-Year Treasury)



# What Does The Latest Dot Plot Tell Us?

Federal Open Market Committee (FOMC) Implied Path Rate  
(March 2024 FOMC Meeting)

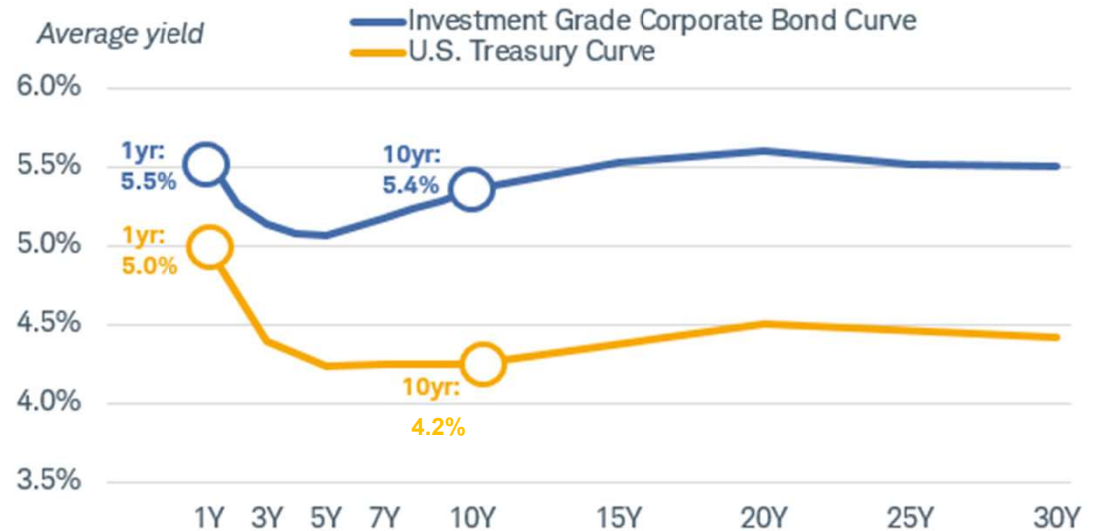


- The Federal Open Market Committee (FOMC) meeting in March gave the latest insight into the Fed's thinking around the future path of interest rates
- In addition to an expectation for slightly higher average rates in 2025 and 2026, the near-term rate expectation for 2024 changed (as highlighted in yellow above). The consensus view following the FOMC meeting was for three 25 basis point rate cuts in 2024 with another three cuts likely in 2025

# On the Bright Side, Bonds Provide More Yield Today

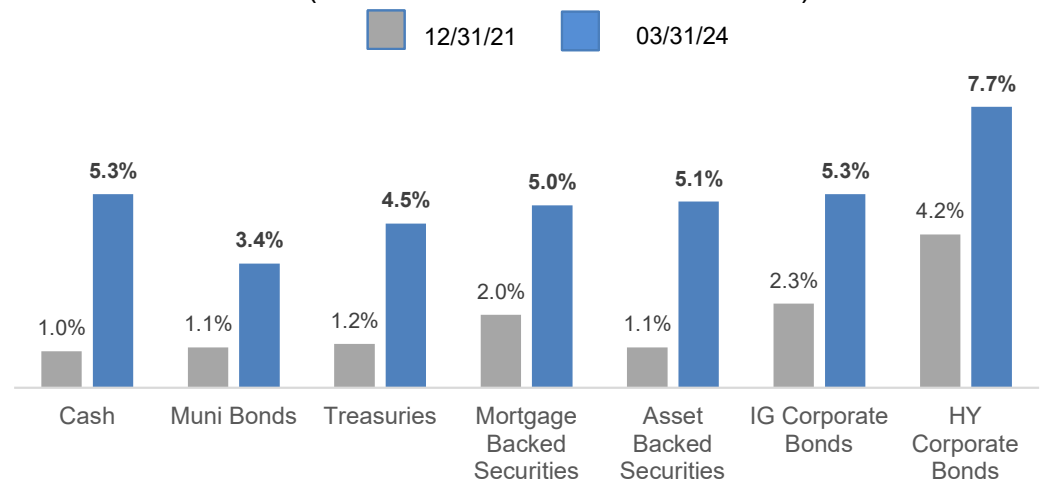
- Currently, the Treasury yield curve remains inverted with 1-year Treasuries near 5.0% and the 10-year Treasury near 4.2%. The investment grade yield curve is less inverted and also offers the extra benefit of a credit spread that, despite being near recent lows, is currently over 120 basis points of additional yield at the intermediate maturities

**Yield Curve**  
(Investment Grade vs. Treasuries)



- Fixed income returns over the last three years have been poor due to the negative effects of duration as the Fed increased short-term rates to combat inflation. Going forward from here, however, starting yields are significantly higher and the Fed is now expected to cut rates in the future, instead of raising rates, which should add a boost to bond returns from duration

**Yield Comparison**  
(Various Fixed Income Instruments)

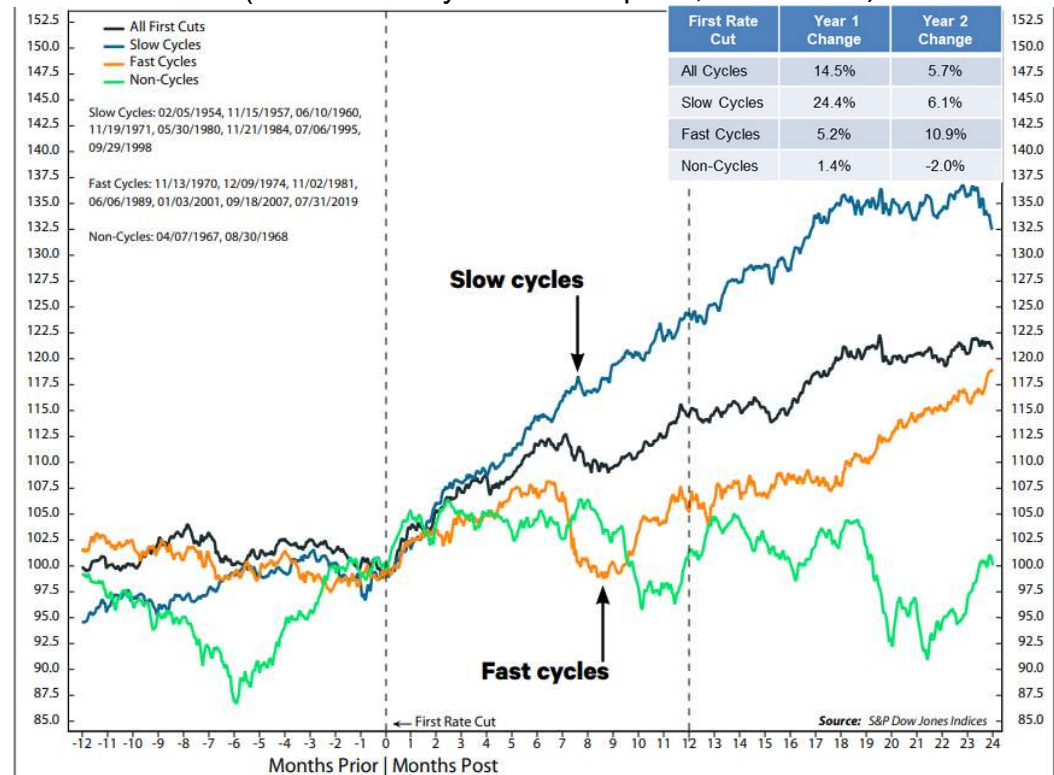




# When it Comes to Rate Cuts, Speed Matters

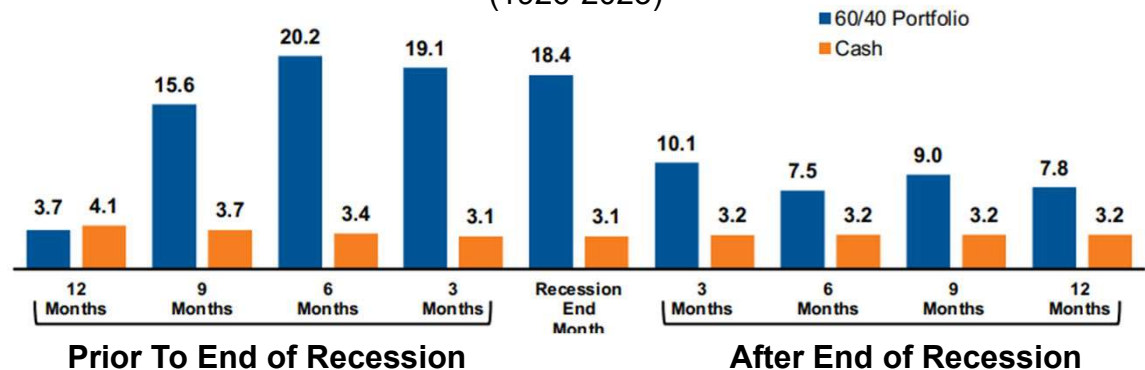
- Market reaction to the hotter-than-expected inflation reports for January and February were immediate equity market sell-offs. After reconsideration, the market quickly rebounded. The market is now pricing in fewer rate cuts with a later start than was previously expected. Historically, a slow cycle of cuts can actually be a good thing. As shown in the chart, stocks have tended to perform better when the Fed was moving slowly (which was defined as four or fewer cuts in a year) vs. quickly (five or more cuts in a year)

**S&P 500 Index Returns Around First Fed Rate Cuts**  
(Broken Out by Rate Cut Speed, 1950-2024)



- Equity markets tend to have strong returns prior to the end of recessionary periods. Investors who wait until recessions happen and then pass have historically achieved lower returns

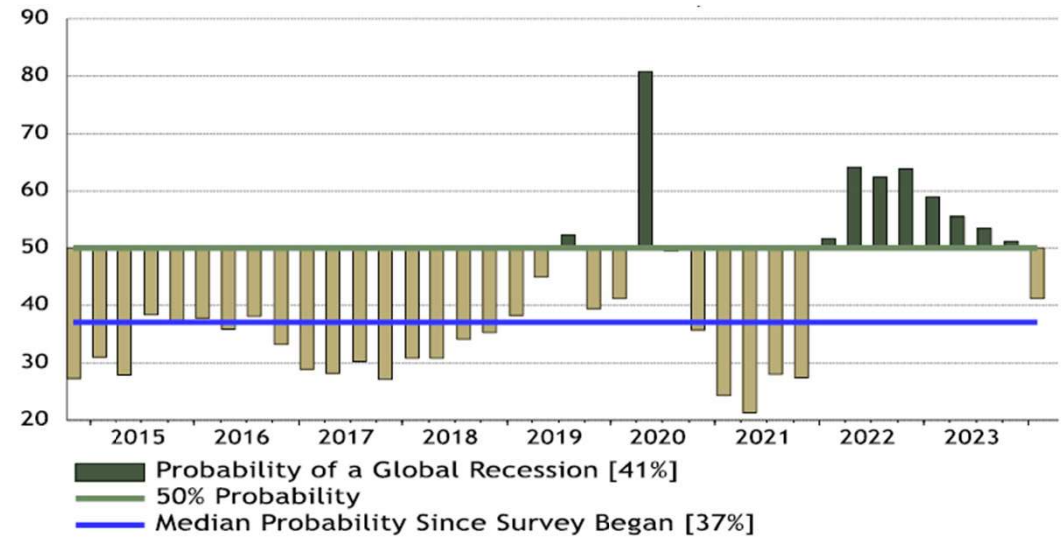
**Average 12-Month Forward Return**  
(1926-2023)



# The Likelihood of a Recession Depends on Who You Ask

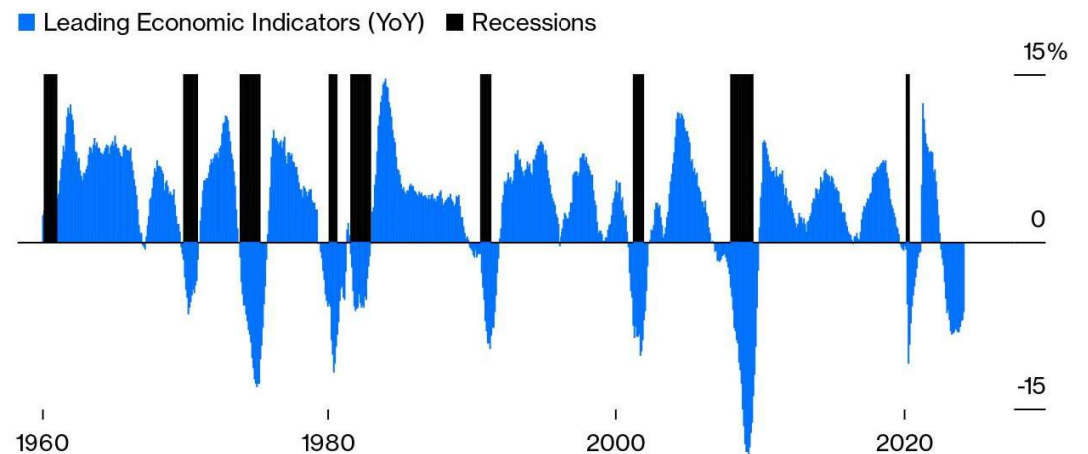
- For the first time in over two years, asset allocators and portfolio managers who were asked to place their odds of a global recession in the next 12 months put that chance at less than a 50% probability. Further, the odds they place on such an event are now similar to the long-term average of just over 35%

Probability of Global Recession in Next 12 Months  
(Survey Results\*)



- In addition to the bond market, where we still have an inverted yield curve, Conference Board's Index of Leading Economic Indicators (LEI) shows a potential recession as more likely. Historically, when the LEI goes into negative year-over-year territory, there is typically a recession in the near-term

Index of Leading Economic Indicators



Source: Bloomberg, Datastream, ASR Ltd., Conference Board, ACG  
\* Survey of 225 investment managers with over \$8 Trillion in assets under management

# Risks: Geopolitics

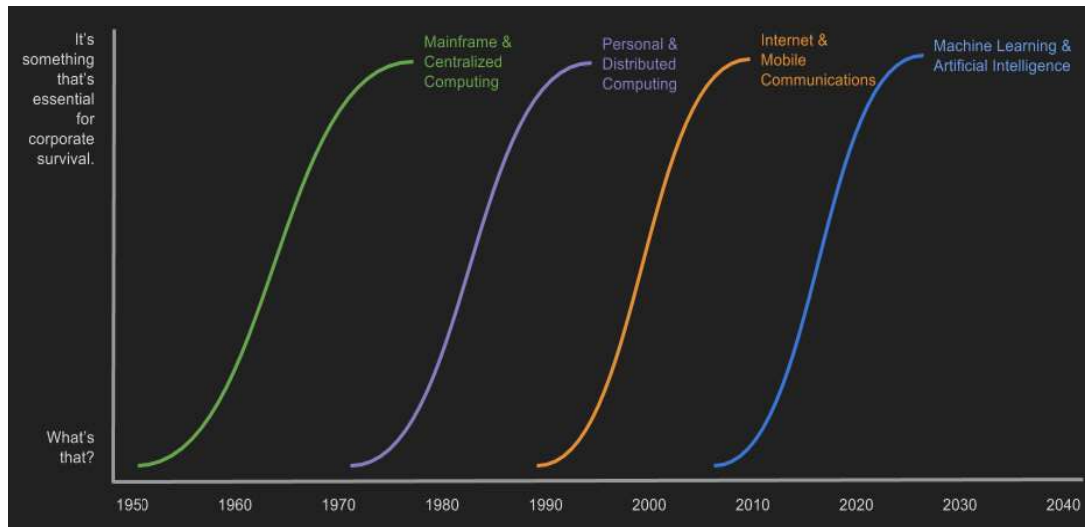
Scenario	Modeling Assumptions (Year One)	GDP Impact (Year One)
Chinese invasion draws US into local conflict	<b>100%</b> Cut in Taiwan trade	<b>-40%</b> Taiwan
	<b>Near 100%</b> Cut in US-China trade	<b>-16.7%</b> Mainland China
	<b>50%</b> Tariffs between US allies and China	<b>-6.7%</b> US
	<b>40 point</b> Spike in VIX	<b>-10.2%</b> World
	<b>80%</b> Cut in trade to and from Japan, Korea, ASEAN	
China blockades Taiwan	<b>100%</b> Cut in Taiwan trade	<b>-12.2%</b> Taiwan
	<b>50%</b> Tariffs between US and China	<b>-8.9%</b> Mainland China
	<b>25%</b> Tariffs between US allies and China	<b>-3.3%</b> US
	<b>16 point</b> Spike in VIX	<b>-5%</b> World

Source: Bloomberg Economics Bloomberg

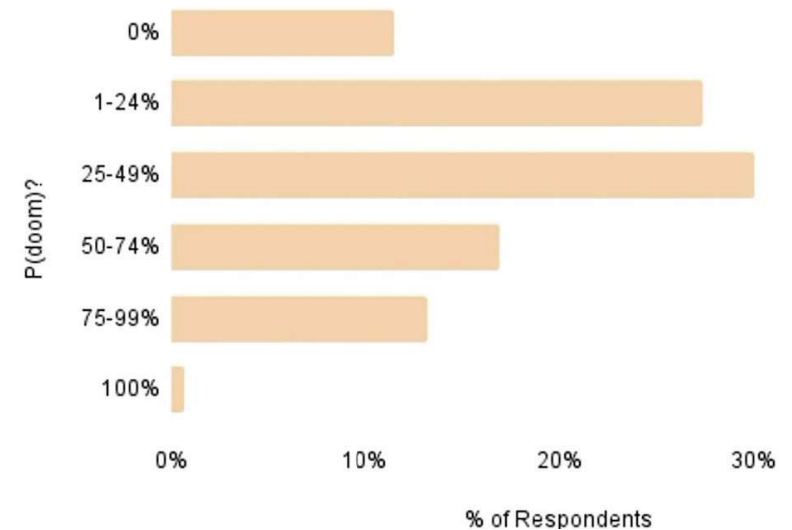
- One of the biggest geopolitical risks continues to be the potential for China to invade Taiwan
- With the large amount of global trade involving the two countries, the effects of such an event would be large and widespread. Bloomberg Economics modelled the potential economic fallout under two scenarios

# Risks: Artificial Intelligence

Adoption Curves for New Technologies

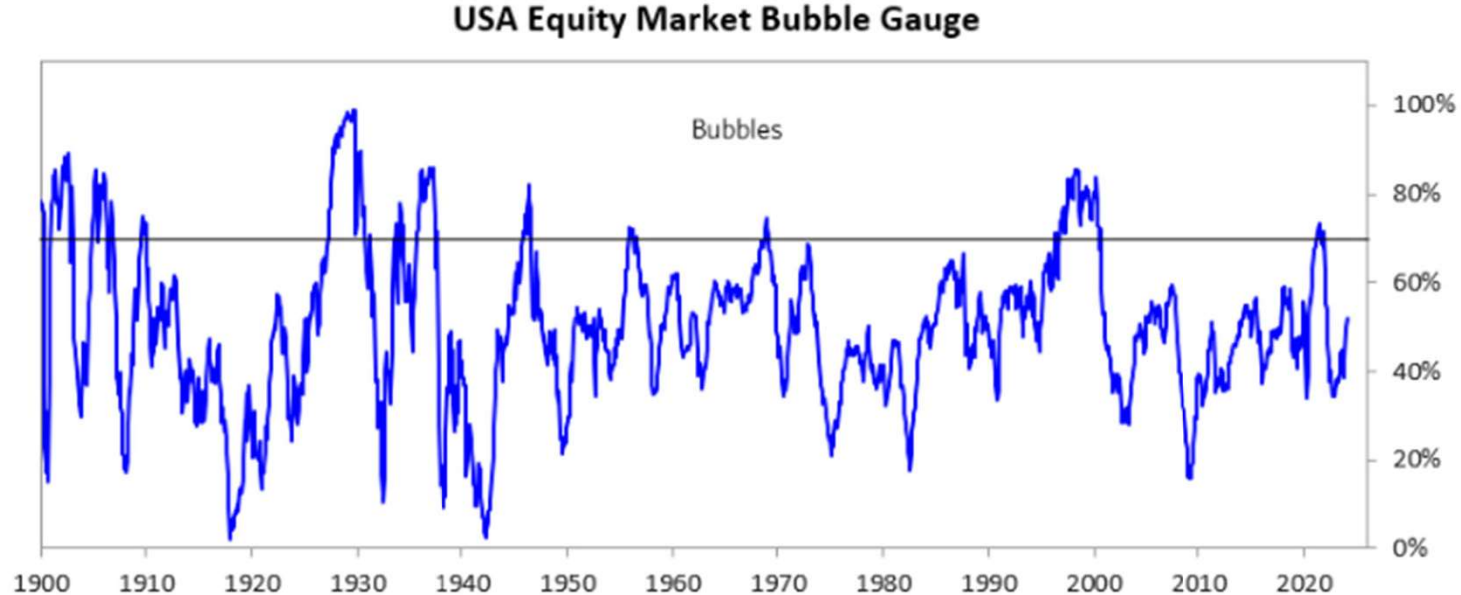


“What are the Odds that AI Destroys the World?”  
(Survey Results\*)



- The adoption rate of AI has exceeded that of past new technologies
- Artificial Intelligence (AI) and Machine Learning have moved from the “What’s That?” to the “It’s something that is essential for corporate survival” in record pace
- In a recent survey, 841 AI engineers were asked what were the odds that AI destroys the world. Alarmingly, the average respondent gave that outcome a 40% probability – with many responding with much higher odds!

# Appendix: Are We in a Bubble?



- Ray Dalio, founder of Bridgewater Associates, one of the world's largest hedge funds, recently published his thoughts on whether the U.S. is in another equity market bubble
- He constructed a list of 6 factors that he incorporated into a model for past bubbles. They encompass the following criteria:
  - High prices relative to traditional measures of value (for example, discounting future cashflows)
  - Unsustainable conditions (extrapolating past growth)
  - Many new buyers (perceived "hot" market)
  - Bullish overall sentiment
  - High percentage of purchases financed by debt
  - A lot of forward or speculative purchases made to bet on future price gains
- Overall, he argues that by these metrics the U.S. is not currently in a bubble and is near the median percentile of his bubble gauge



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# INDEX DESCRIPTIONS

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## Asset class and reference benchmarks:

ASSET CLASS	BENCHMARK
U.S. Equity	Russell 3000 TR
Non-U.S. Equity	MSCI ACWI ex US NR
U.S. Fixed Income	Bloomberg Barclays U.S. Aggregate Bond TR
Global Real Estate (prior to 2008)	NASDAQ Global Real Estate NR
Global Real Estate (2008-present)	FTSE EPRA/NAREIT Global Real Estate NR
Commodities	Bloomberg Commodity TR USD
Cash & Cash Alternatives	Citi Treasury Bill 3 Mon USD

**Alerian MLP:** The Alerian MLP Index is the leading gauge of large- and mid-cap energy Master Limited Partnerships (MLPs). The float-adjusted, capitalization-weighted index, which includes 50 prominent companies and captures approximately 75% of available market capitalization, is disseminated real-time on a price-return basis (AMZ) and on a total-return basis (AMZX).

**Bloomberg 10-Year U.S. Treasuries:** Measures the performance of U.S. Treasury securities that have a remaining maturity of 10 years.

**Bloomberg U.S. Aggregate Index:** Represents securities that are SEC-registered, taxable, and dollar denominated. The index covers the U.S. investment-grade fixed rate bond market, with index components for government and corporate securities, mortgage pass-through securities, and asset-backed securities.

**Bloomberg Global Aggregate ex-U.S. Dollar Bond Index:** Tracks an international basket of bonds that currently contains 65% government, 14% corporate, 13% agency and 8% mortgage-related bonds.

**Bloomberg High Yield:** Covers the universe of fixed-rate, non-investment grade debt. Pay-in-kind (PIK) bonds, Eurobonds, and debt issues from countries designated as emerging markets (e.g., Argentina, Brazil, Venezuela, etc.) are excluded, but Canadian and global bonds (SEC-registered) of issuers in non-EMG countries are included. Original issue zeroes, step-up coupon structures and 144-As are also included.

**Bloomberg U.S. Corporate High Yield:** Composed of fixed-rate, publicly issued, non-investment grade debt.

**The Dow Jones Industrial Average** is an unmanaged index of 30 widely held securities.

**Dow Jones U.S. Total Stock Market Index**, which comprises all U.S. equity securities with readily available prices.

**FTSE 3-Month Treasury-Bill Index:** This is an unmanaged index of three-month Treasury bills.

**FTSE EPRA/NAREIT Global Real Estate Index:** Designed to represent general trends in eligible listed real estate stocks worldwide. Relevant real estate activities are defined as the ownership, trading and development of income producing real estate.

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**Gross Domestic Product (GDP)** is the annual market value of all goods and services produced domestically by the US.

**Morningstar US Equity-Market Neutral:** These funds attempt to reduce systematic risk created by factors such as exposures to sectors, market-cap ranges, investment styles, currencies, and/or countries. They try to achieve this by matching short positions within each area against long positions. These strategies are often managed as beta-neutral, dollar-neutral, or sector-neutral. A distinguishing feature of funds in this category is that they typically have low beta exposures (less than 0.3 in absolute value) to equity market indexes such as the MSCI World. In attempting to reduce systematic risk, these funds put the emphasis on issue selection, with profits dependent on their ability to sell short and buy long the correct securities.

**Morningstar US Event Driven :** These funds attempt to profit from price changes related to a variety of corporate actions, including bankruptcy, emergence from bankruptcy, divestitures, stock buybacks, dividend issuance, major shifts in corporate strategy, and other atypical events. Many of these funds undertake activist techniques to spur further corporate changes at the underlying companies.

**Morningstar US Long-Short Equity:** These funds primarily take long and short positions in U.S. equities. These funds follow a strategy in which at least 75% of the fund's gross exposure is in equities, and 75% of equities exposure is in U.S. equities. The fund may also include some derivative instruments. These funds tend to have betas of 0.3 and higher relative to broad U.S. indexes like the S&P 500 and DJ Wilshire 5000.

**Morningstar US Macro Trading:** These funds base investment decisions on an assessment of the broad macroeconomic environment. They look for investment opportunities by studying such factors as the global economy, government policies, interest rates, inflation, and market trends. As opportunists, these funds are not restricted by asset class and may invest across such disparate assets as global equities, bonds, currencies, derivatives, and commodities. These funds primarily invest through derivatives markets. They typically make discretionary trading decisions rather than using a systematic strategy. At least 60% of the funds' exposure is obtained through derivatives.

**Morningstar US Multistrategy:** These funds offer investors exposure to several different hedge fund investment tactics. In most of these cases, all of the assets are managed in-house at the hedge fund, but the assets may be divided between multiple portfolio managers, each of whom focuses on a different strategy. This is not to be confused with a fund of funds, which uses external portfolio managers and strategies, as well as second layer of management and performance fees. An investor's exposure to different tactics may change slightly over time in response to market movements.

**MSCI All Country World Index Ex-U.S Index.:** A market-capitalization-weighted index maintained by Morgan Stanley Capital International (MSCI) and designed to provide a broad measure of stock performance throughout the world, with the exception of U.S.-based companies. It includes both developed and emerging markets.

**MSCI EAFE Index (Europe, Australasia, Far East):** A free-float adjusted market capitalization index that is designed to measure developed market equity performance, excluding the United States and Canada. The EAFE consists of the country indices of 21 developed nations.

**MSCI EAFE Growth Index:** Represents approximately 50% of the free-float adjusted market capitalization of the MSCI EAFE index, and consists of those securities classified by MSCI as most representing the growth style.

**MSCI EAFE Small-Cap Index:** An unmanaged, market-weighted index of small companies in developed markets, excluding the U.S. and Canada.

**MSCI EAFE Value:** Represents approximately 50% of the free-float adjusted market capitalization of the MSCI EAFE index, and consists of those securities classified by MSCI as most representing the value style.

**MSCI Emerging Markets Index:** Designed to measure equity market performance in 25 emerging market indexes. The three largest industries are materials, energy and banks.

**The NASDAQ Composite Index** is an unmanaged index of all stocks traded on the NASDAQ over-the-counter market.

**Russell 1000 Index:** Measures the performance of the 1,000 largest companies in the Russell 3000 Index, which represents approximately 90% of the investible U.S. equity market.

**Russell 1000 Value Index:** Measures the performance of those Russell 1000 companies with lower price-to-book ratios and lower forecasted growth values.

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**Russell 1000 Growth Index:** Measures the performance of those Russell 1000 companies with higher price-to-book ratios and higher forecasted growth values.

**Russell Mid-Cap Index:** Measures the performance of the 800 smallest companies of the Russell 1000 Index, which represent approximately 30% of the total market capitalization of the Russell 1000 Index.

**Russell Mid-Cap Value Index:** Measures the performance of those Russell Mid-cap companies with lower price-to-book ratios and lower forecasted growth values.

**Russell Mid-Cap Growth Index:** Measures the performance of those Russell Mid-cap companies with higher price-to-book ratios and higher forecasted growth values.

**Russell 2000 Index:** Measures the performance of the 2,000 smallest companies in the Russell 3000 Index, which represent approximately 8% of the total market capitalization of the Russell 3000 Index.

**Russell 2000 Value Index:** Measures the performance of those Russell 2000 companies with lower price-to-book ratios and lower forecasted growth values.

**Russell 2000 Growth Index:** Measures the performance of those Russell 2000 companies with higher price-to-book ratios and higher forecasted growth values.

**Russell 3000 Index:** Measures the performance of the 3,000 largest U.S. companies based on total market capitalization, which represents approximately 98% of the investable U.S. equity market.

**Standard & Poor's 500 (S&P 500):** Measures changes in stock market conditions based on the average performance of 500 widely held common stocks. Represents approximately 68% of the investable U.S. equity market.

**Wilshire Liquid Alternative Index:** The Wilshire Liquid Alternative Index<sup>SM</sup> measures the collective performance of the five Wilshire Liquid Alternative strategies that make up the Wilshire Liquid Alternative Universe. The Wilshire Liquid Alternative Index (WLIQA) is designed to provide a broad measure of the liquid alternative market by combining the performance of the Wilshire Liquid Alternative Equity Hedge Index<sup>SM</sup> (WLIQAEH), Wilshire Liquid Alternative Global Macro Index<sup>SM</sup> (WLIQAGM), Wilshire Liquid Alternative Relative Value Index<sup>SM</sup> (WLIQARV), Wilshire Liquid Alternative Multi-Strategy Index<sup>SM</sup> (WLIQAMS), and Wilshire Liquid Alternative Event Driven Index<sup>SM</sup> (WLIQAED).