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May 17, 2024

# Portfolio Strategy May 2024

## *Where We Stand: Does It All Add Up?*

*Optimism About Rates, Operating Leverage, AI*

- The S&P 500 has produced a total return of almost +12% so far this year, even as Treasury bonds have racked up losses. Five mega-cap AI plays – Nvidia, Alphabet, Amazon, Meta and Microsoft – have accounted for the majority of the return, and value stocks, including energy, bank and insurance issues, also led. The market is presuming that we're in the middle of a business cycle of indeterminate length, enabled by a gradual disinflationary dynamic. If that premise is correct, we should have a bias toward holding our winners, as the primary trends are understood. The stable parts of the market offer relatively-cheap insurance should the base case go awry.
- In this research we examine the latest inflation, earnings and free cash flow data to see if it all adds up, and consider whether the underpinnings of a momentum market are intact. This year the stocks with top-quintile nine-month price trends have outperformed by +10 percentage points in the large-cap market, by +4.5 points in the small-cap one, and by +7.5 points in the other developed markets.
- The core CPI rose by +3.6% on a year-over-year basis in April. The devil though is in the details, and the core measure, ex-shelter, a component that carries a 45% weight in its construction, was up by +2.1%. The cost of auto insurance, that soared by +23% in the month, alone accounted for more than +100 basis points of that increase. The shelter index tends to lag changes in asking rents by around nine months, and this year rents have been rising at a low-single-digit rate. Apartment vacancy rates are up, and there are almost a million new units under construction. That suggests there will be a (1.5) point or greater deceleration in shelter inflation by the end of this year. At the same time, the combined ratios of the largest auto insurers, that soared in 2022 as the cost of repairing a car soared, are now back to normal, suggesting less aggressive pricing ahead. All in all, the data supports the market's presumption of disinflation.
- The earnings of the S&P 500 were up by about +7% in the first quarter, on top-line growth of around +4%. The earnings growth rate ex-energy was nearly +10%, a result similar to that of the prior quarter. Each new dollar of revenues of the core (ex-energy) generated 29¢ of pre-tax profits, more than double the base rate, and one of the best showings in decades. The incremental margins for the FAANGs + Microsoft and the semis topped 80%, while those for the rest of the market were a still respectable 20%. Most companies saw their margins rise in the period, benefiting from the end of the long-running inventory de-stocking cycle. The bottom-up earnings estimates, that envision around +9% growth for this year, look reasonable. The story is one of exceptional operating leverage in the tech and interactive media sector, that in the quarter sourced almost a third of the market's earnings and nearly half its free cash flow production.

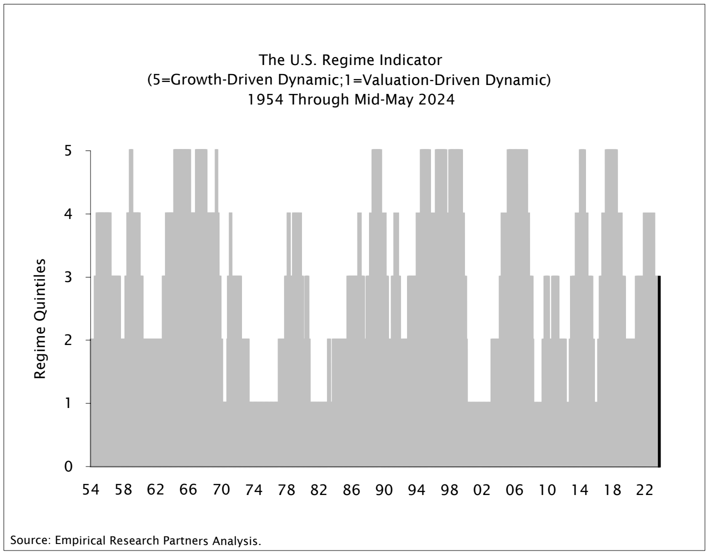
*Conclusion: So Far, So Good*

- We think that the weight of evidence supports the market's base case: a soft landing in the economy enabled by gradual disinflation, accompanied by strong earnings leverage, that's being boosted by tech spending. Given that, we should have a bias towards holding our winners, drawn from the universe of free cash flow-generating growth stocks along with some value ideas, including yield-curve-sensitive financials. The price of playing defense is now reasonable, in both parts of health care and in the consumer staples sector, and we're being paid to put a toe in those waters. Exhibit 45 on page 12 is a representative portfolio, optimized to outperform the S&P 500.

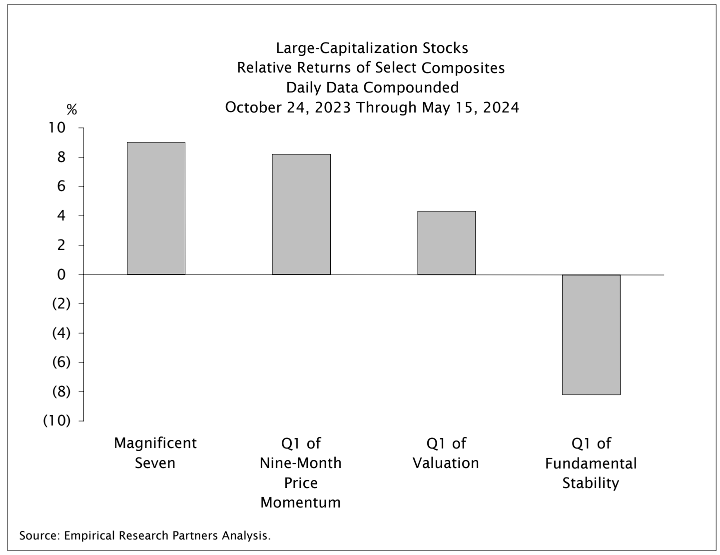
Nicole Price (212) 803-7935 Sungsoo Yang (212) 803-7925 Yi Liu (212) 803-7942 Yu Bai (212) 803-7919 Sean Duncan (212) 803-7965 Janai Haynes (212) 803-8005

# Conclusions in Brief

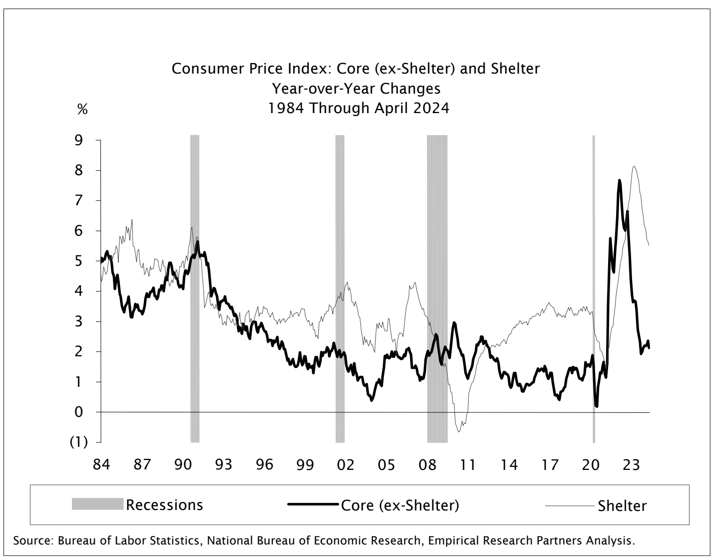
- The regime has been neutral…



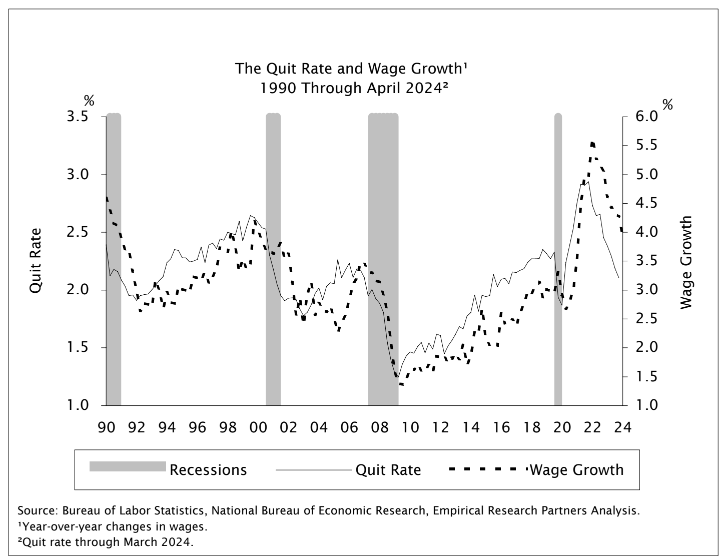

- ...Making it wise to hold on to one's winners:



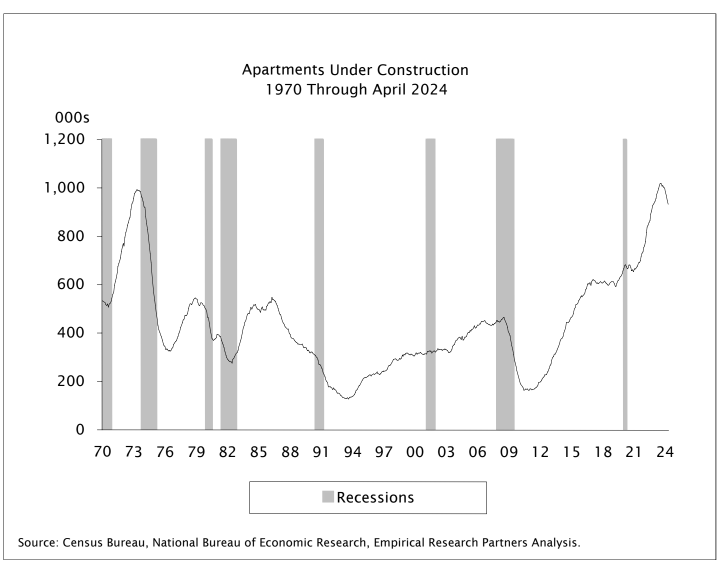

- Disinflation is the base case…



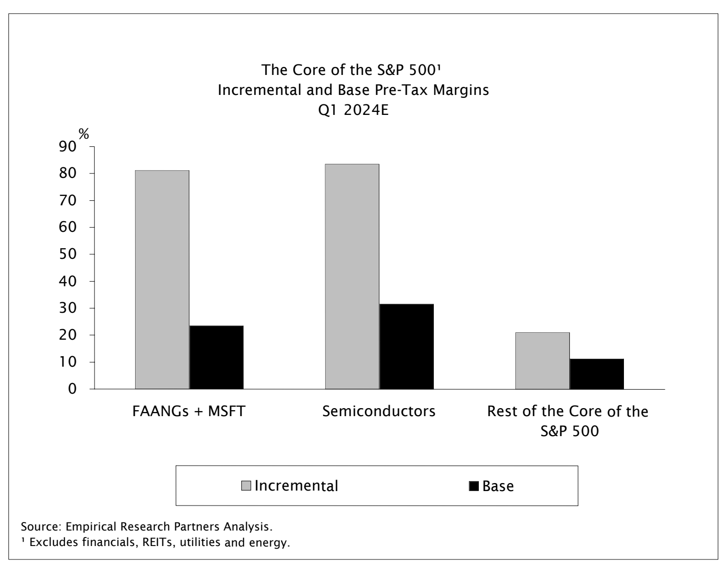

- …With the quit rate…




- …And the boom in apartment supply, critical factors:




- The tech sector has driven operating leverage:

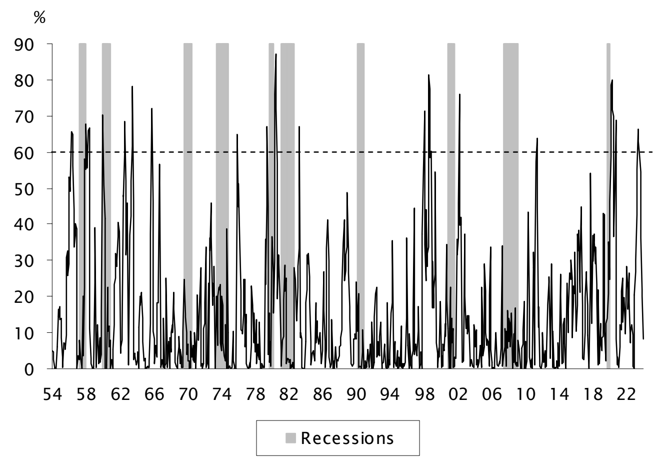


# Where We Stand: Does It All Add Up?

## *Optimism on Rates, Earnings, AI*

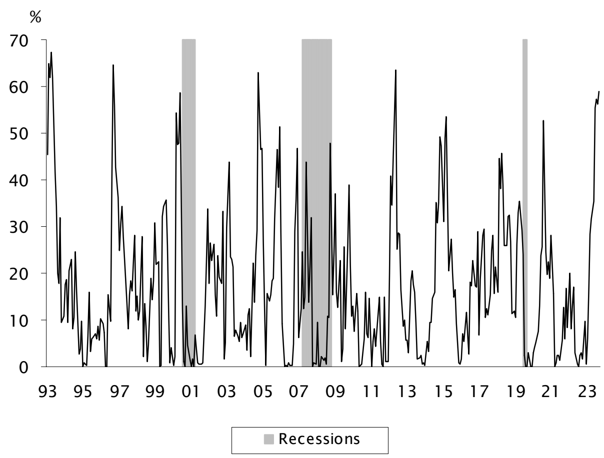
The S&P 500 has produced a total return of more almost +12% so far this year, even as ten-year Treasury bonds posted a loss of about (2.5)%. It appears that equity investors still believe in the disinflationary scenario they began to price in last Fall, while at the same time they've found the last two quarters of earnings reports encouraging (see Exhibits 1 and 2). It's the enthusiasm about the prospects for AI though that's made this period exceptional, and the top-five contributors to the S&P 500's performance – Nvidia, Alphabet, Amazon, Meta and Microsoft – have accounted for the majority of this year's return (see Exhibit 3). Given all of the above, it's been wise to stick with one's winners (see Exhibit 4).

**Exhibit 1: Large-Capitalization Stocks**
**Share of the Return Dispersion Explained by Changes in the Ten-Year Treasury Bond Yields Measured Over Nine-Month Windows**
**1954 Through Mid-May 2024**



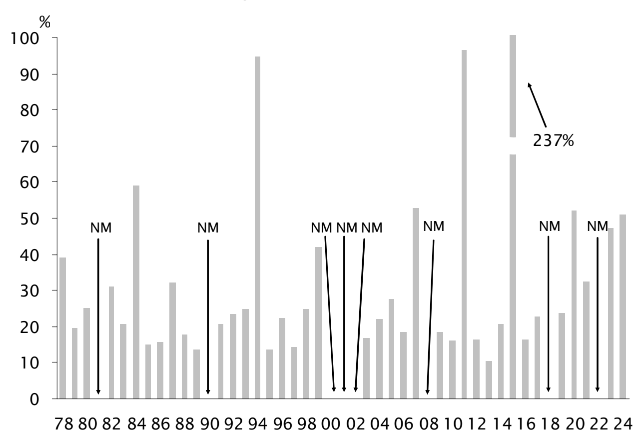

Source: Bloomberg, L.P., National Bureau of Economic Research, Empirical Research Partners Analysis.

**Exhibit 2: Large-Capitalization Stocks**
**Share of the Return Dispersion Explained by the Dispersion in Earnings Surprise Measured Over Nine-Month Windows**
**1993 Through Mid-May 2024**




Source: National Bureau of Economic Research, Empirical Research Partners Analysis.

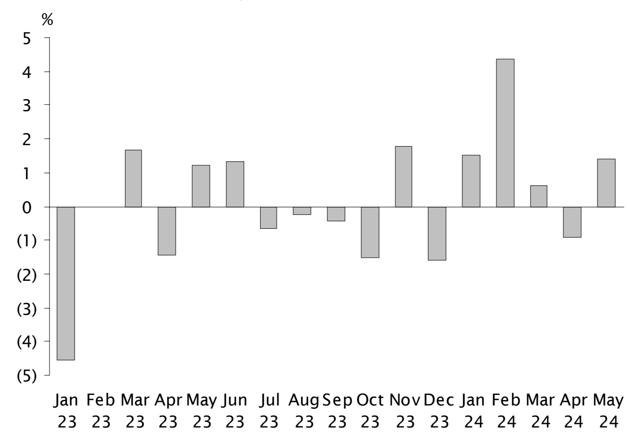
**Exhibit 3: The S&P 500**
**Share of Total Returns Attributable to the Top-Five Contributors Each Year[1]**
**1978 Through Mid-May 2024**




Source: Empirical Research Partners Analysis.

[1]Excludes years when the index return was negative. The top contributors in 2024-to-date have been Nvidia, Amazon, Alphabet, Meta and Microsoft.

**Exhibit 4: Large-Capitalization Stocks**
**Monthly Relative Returns of the Top Quintile of Nine-Month Stock Price Trends[1]**
**2023 Through Mid-May 2024**




Source: Empirical Research Partners Analysis.

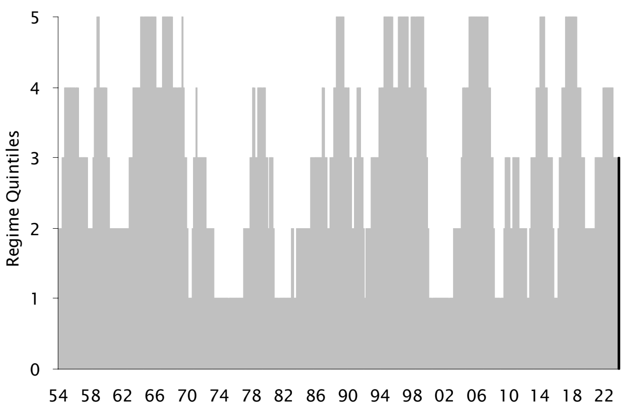
[1]Equally-weighted data.

Our Regime Indicator, that's designed to predict the stylistic bias of the market in the year ahead, shifted to a neutral stance last October, after having been growth-tilted for the previous 15 months (see Exhibit 5).[1] That prognosti-

[1]*Portfolio Strategy* October 2023. "Regime Change: Back to Neutral."

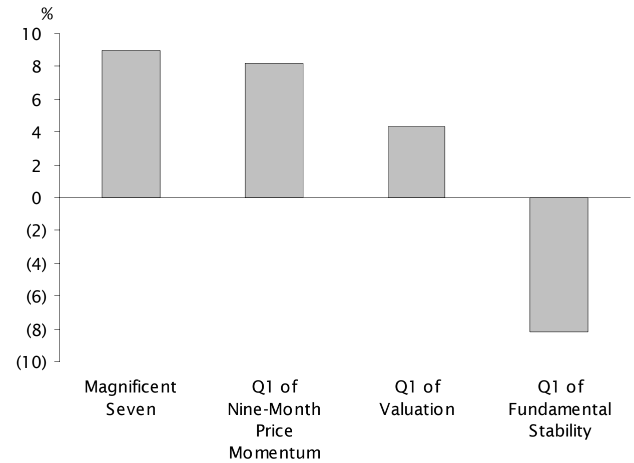
cation has thus far proven to be correct, and since then value stocks have outperformed, along with the mega-cap beneficiaries of the AI boom, while stability was shunned (see Exhibit 6).

**Exhibit 5: The U.S. Regime Indicator**
**(5=Growth-Driven Dynamic;**
**1=Valuation-Driven Dynamic)**
**1954 Through Mid-May 2024**




Source: Empirical Research Partners Analysis.

**Exhibit 6: Large-Capitalization Stocks**
**Relative Returns of Select Composites**
**Daily Data Compounded**
**October 24, 2023 Through May 15, 2024**



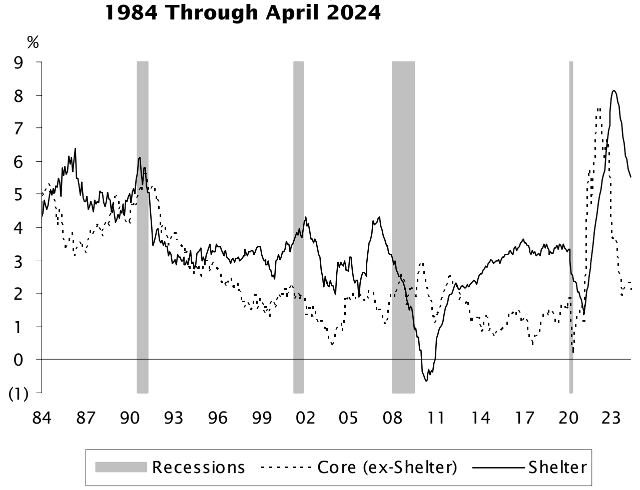

Source: Empirical Research Partners Analysis.

In this research, we examine the evidence on inflation and earnings, to see if it supports the bullish mindset of the market.

### *Inflation: Moderating*

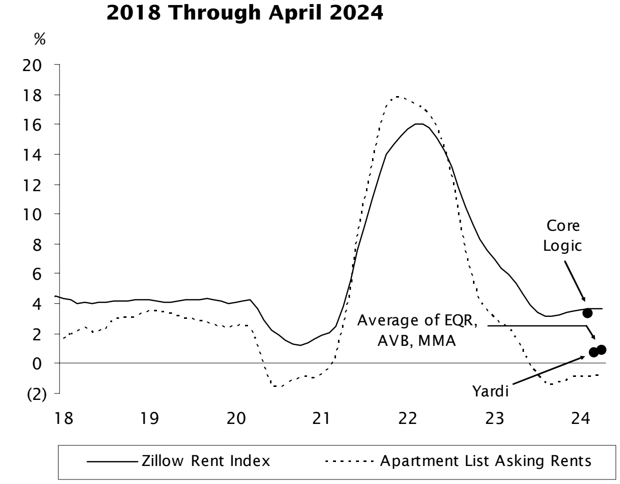
We believe that the market's constructive view of the underlying inflation dynamic is at least directionally correct. We can see what's been going on in Exhibit 7, that depicts the year-over-year changes, through April, of the core CPI excluding shelter, the dotted line, and its shelter component, the black line. That component now comprises a whopping 45% of the core measure. The latest readings were just over +2% for the former and +5.5% for the latter.

**Exhibit 7: Consumer Price Index: Core (ex-Shelter) and Shelter**
**Year-over-Year Changes**
**1984 Through April 2024**




Source: Bureau of Labor Statistics, National Bureau of Economic Research, Empirical Research Partners Analysis.

**Exhibit 8: Asking Rents**
**Year-over-Year Changes**
**2018 Through April 2024**




Source: Zillow, Apartment List, Core Logic, Yardi, Corporate Reports.

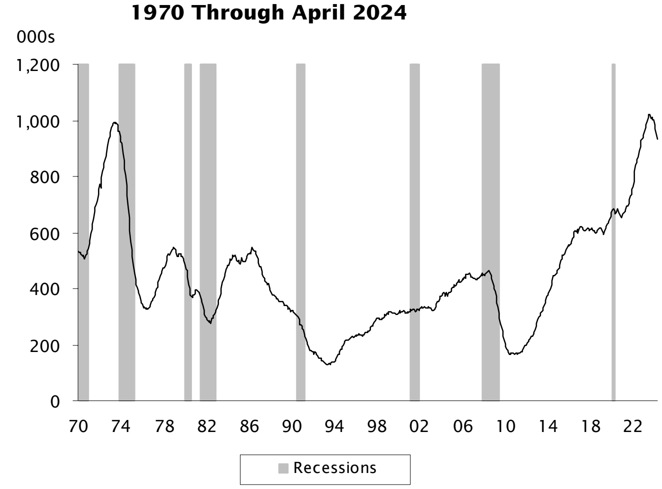
The shelter series is designed to measure the consumption of housing, and it's constructed based on the results of a survey that asks about rents. Its movements have historically tracked those of asking rents with about a nine-month lag. Rents for both apartments and single-family homes have been rising at a low-single-digit rate this year (see Exhibit 8). Apartment vacancy rates are now back to normal, after dipping in 2021 (see Exhibit 9). There are nearly a million units under construction, many of which are set to come to market this year (see Exhibit 10).

**Exhibit 9: Apartment Vacancy Rates**
**2017 Through April 2024[1]**


Source: U.S. Census Bureau, Apartment List.

[1]Census vacancy data through Q1 2024.

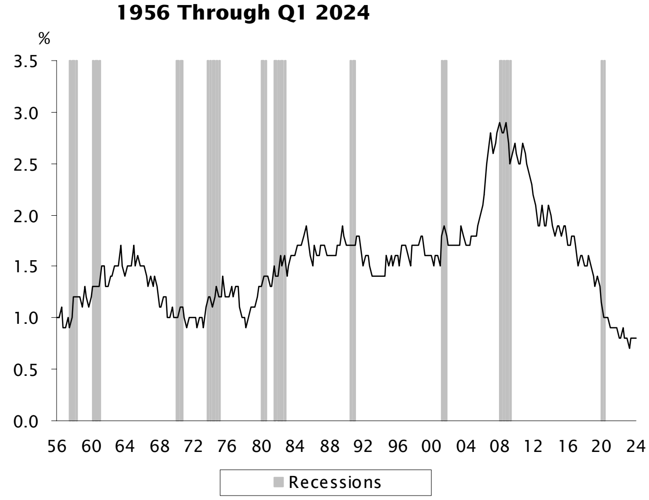
**Exhibit 10: Apartments Under Construction**
**1970 Through April 2024**




Source: Census Bureau, National Bureau of Economic Research, Empirical Research Partners Analysis.

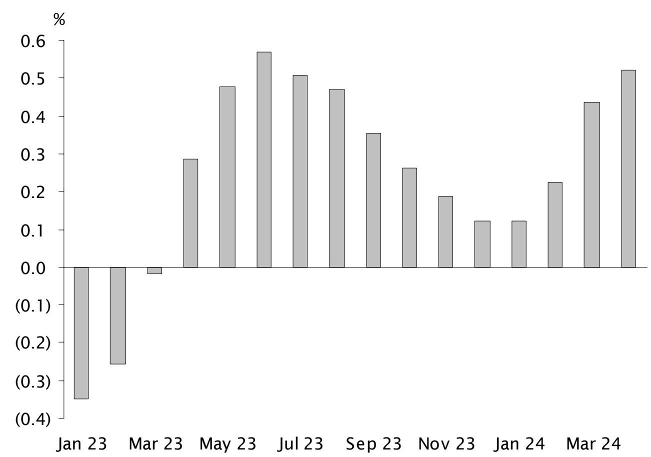
Growth in the supply of new single-family homes hasn't boomed like that of apartments, and the homeowner vacancy rate is near an all-time low (see Exhibit 11). Home prices are up by about +2% already this year, despite the abysmal state of affordability (see Exhibit 12). Historically higher home prices have impacted the inflation statistics with a long lag (see Exhibit 13). That seems likely this time given the surge in the supply of apartments and a pick up in the number of homes being listed for sale.

**Exhibit 11: U.S. Housing**
**Owner-Occupied Vacancy Rates**
**1956 Through Q1 2024**




Source: National Bureau of Economic Research, U.S. Census Bureau, Empirical Research Partners Analysis.

**Exhibit 12: Monthly Changes in Home Prices[1]**
**January 2023 Through April 2024**




Source: Zillow.

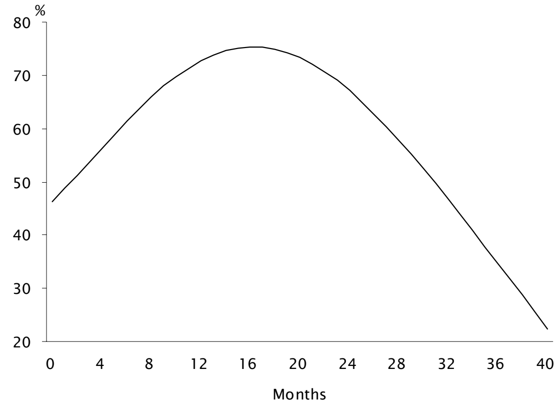
[1]Seasonally-adjusted price index computed based on trailing three-month same home sales.

The trend in asking rents, the rising vacancy rate in the apartment market, and the supply that's set to come on line, all suggest that there will be modest inflation in rents ahead, and that will eventually show up in the aggregate data. A reasonable forecast is that by late this year the shelter index will be rising at a +3.5 to +4% rate, compared to its +5.5% increase in April (see Exhibit 14). All other things being equal, a deceleration of that size would bring the core inflation rate down by around (65) to (90) basis points.

### *The Labor Market: Some Loosening*

The labor market of the 2020s has been defined by a record number of openings, accompanied by lots of quitting (see Exhibit 15). The quit rate tends to be correlated with wage growth, and both have been trending lower (see Exhibit 16). Moreover, the wage gains enjoyed by job switchers are converging with those for stayers, a sign of normalization (see Exhibit 17).

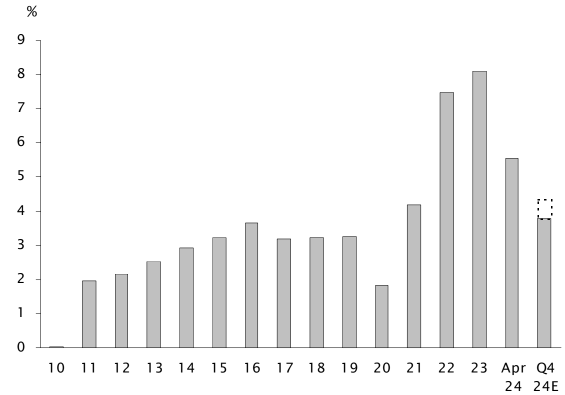
**Exhibit 13: Correlation of the Change in Home Prices[1] With Future Rents 1996 Through June 2021**




Source: Dolmas, J. and Xiaoqing Zhou, 2021. "Surging House Prices Expected to Propel Rent Increases, Push Up Inflation," Federal Reserve Bank of Dallas.

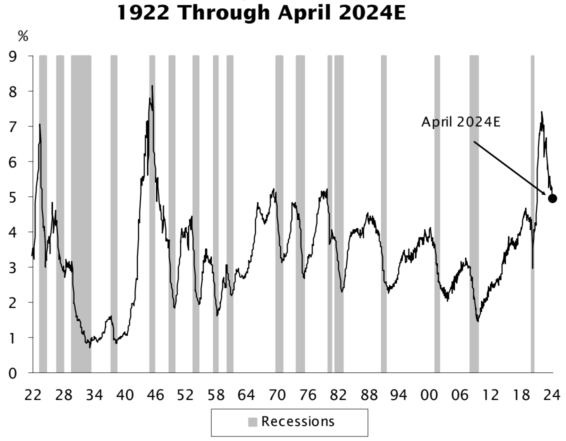
[1]Year-over-year growth rates.

**Exhibit 14: The Shelter Component of the CPI Year-over-Year Changes 2010 Through Q4 2024E**



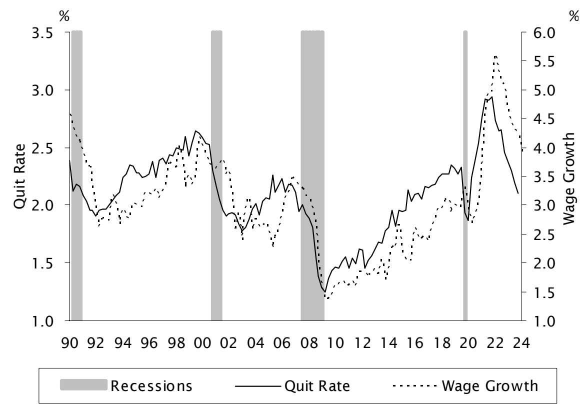

Source: Federal Reserve Bank of Boston, Bureau of Labor Statistics, Empirical Research Partners Analysis.

**Exhibit 15: U.S. Vacancy Rate Job Openings as a Share of the Labor Force 1922 Through April 2024E**




Source: Regis Barnichon, 2010. "Building a Composite Help-Wanted Index," Federal Reserve Board Economic Letter, Petrosky-Nadeau, N. and Lu Chang, 2020. "Unemployment Crises," Working Paper, Bureau of Labor Statistics, Indeed.com, National Bureau of Economic Research, Empirical Research Partners Analysis and Estimate.

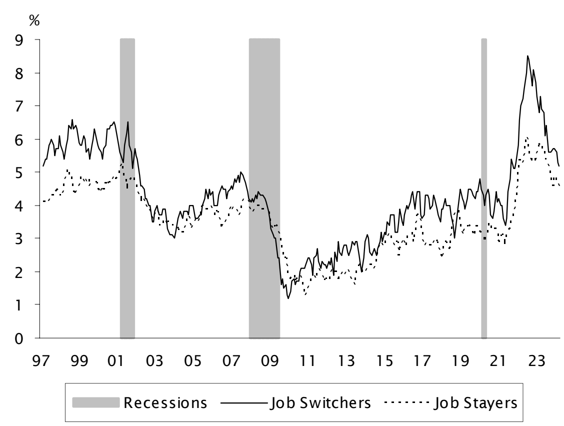
**Exhibit 16: The Quit Rate and Wage Growth[1] 1990 Through April 2024[2]**




Source: Bureau of Labor Statistics, National Bureau of Economic Research, Empirical Research Partners Analysis.

[1]Year-over-year changes in wages.
[2]Quit rate through March 2024.

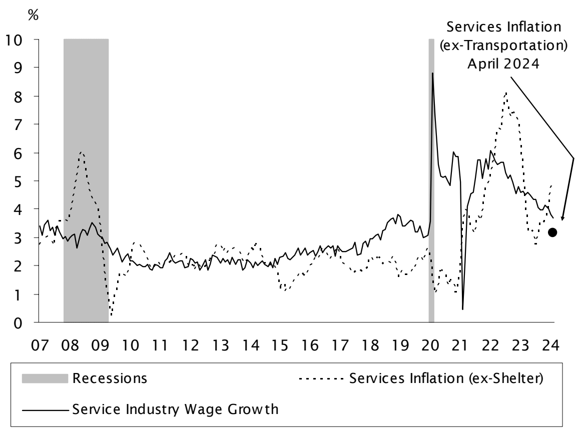
**Exhibit 17: Job Stayers and Switchers Wage Growth Rates[1] 1997 Through March 2024**




Source: Federal Reserve Bank of Atlanta, National Bureau of Economic Research, Empirical Research Partners Analysis.

[1]Expressed as three-month moving averages.

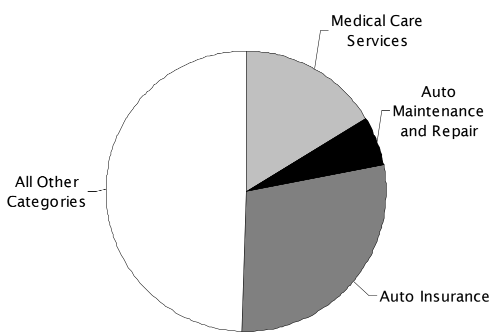
**Exhibit 18: Services Inflation (ex-Shelter) and Service-Industry Wage Growth Year-over-Year Changes 2007 Through April 2024**




Source: Bureau of Labor Statistics, National Bureau of Economic Research, Empirical Research Partners Analysis.

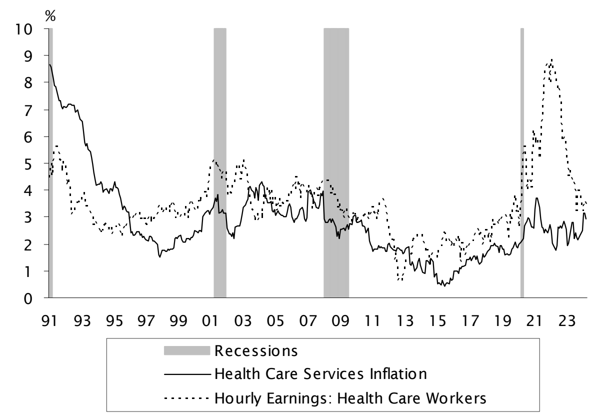
Wage growth for service-industry positions has been moderating too, but services inflation (ex-shelter) has gone in the opposite direction (see Exhibit 18 overleaf). We decompose what's driven that dynamic in services in the first four months of this year in Exhibit 19. As usual, inflation in medical care services figures into the equation, and that sector saw extraordinary wage growth in the post-Pandemic period, that's finally coming down to earth (see Exhibit 20). After spiking in the last two years analysts are expecting premium increases at the largest HMOs to moderate (see Exhibit 21).

**Exhibit 19: Decomposition of Services (ex-Shelter) Inflation 2024 Through April**



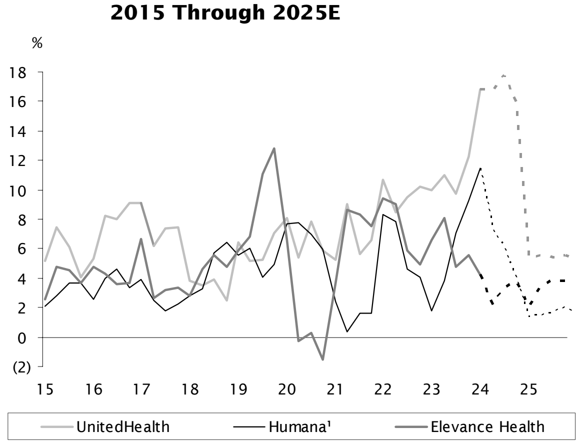

Source: Bureau of Labor Statistics, Empirical Research Partners Analysis.

**Exhibit 20: Health Care Services Inflation and Growth of the Hourly Earnings of Health Care Workers 1991 Through March 2024**




Source: Bureau of Economic Analysis, Bureau of Labor Statistics, National Bureau of Economic Research, Empirical Research Partners Analysis.

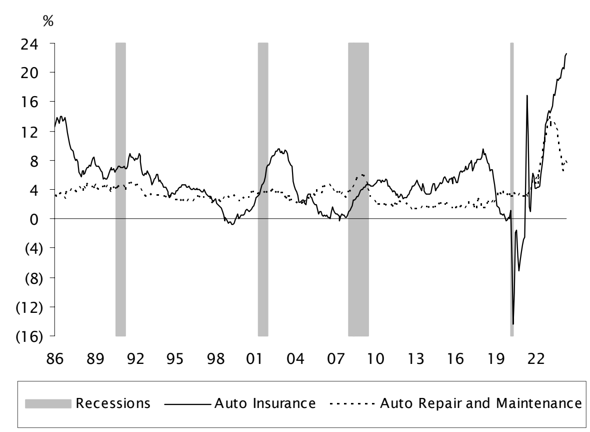
**Exhibit 21: UnitedHealth, Humana and Elevance Health Year-over-Year Changes in Premium Per Member Per Month 2015 Through 2025E**




Source: Visible Alpha, Empirical Research Partners Analysis.

¹Excludes Medicare stand-alone PDP and Medicare supplement programs.

**Exhibit 22: Auto Insurance, Repair and Maintenance Year-over-Year Price Changes 1986 Through April 2024**



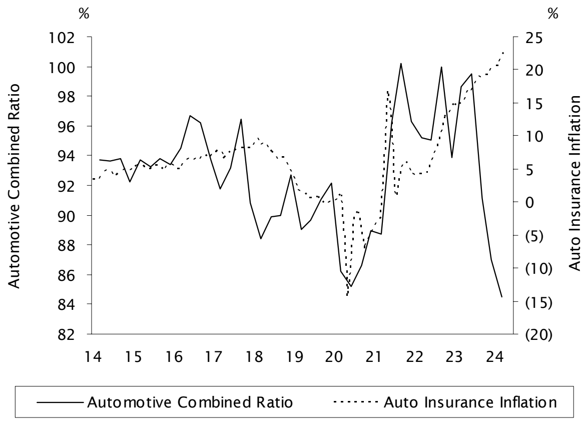

Source: Bureau of Labor Statistics, National Bureau of Economic Research, Empirical Research Partners Analysis.

The accident rate and the cost of repairing a car took off in the last couple of years, and so did the price of auto insurance (see Exhibit 22). Faced with a painful spike in their combined ratios, the largest auto insurers aggressively raised price (see Exhibits 23 and 24). As those increases have flowed through their combined ratios have come down, and the price momentum of the stocks of Progressive and Allstate is at the best level in decades (see Exhibit 25). The auto insurance shock continued in May, with a +23% year-over-year increase, but it looks to be well along.

### *Conclusion: Lower Inflation, Lower Real Yields?*

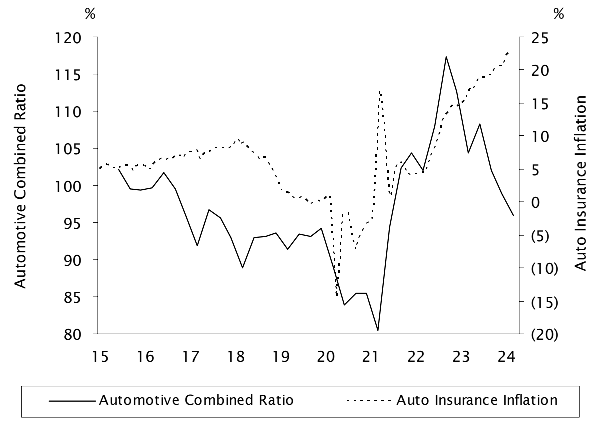
The outlook for both inflation and real interest rates has been unusually uncertain, as apparent in the bond market volatility index (see Exhibit 26). It's computed by aggregating the implied volatility of one-month options on two– to 30-year constant-maturity interest rate swaps. At the same time, the breakeven inflation rates built into the ten-year TIPS have held steady in the 2.3% to 2.5% range (see Exhibit 27). The big swings have been in real yields, in part reflecting uncertainty about the course of monetary policy and the budget deficit (see Exhibit 28).

**Exhibit 23: Progressive Corp.
Automotive Combined Ratio and
Auto Insurance Inflation
2014 Through April 2024**



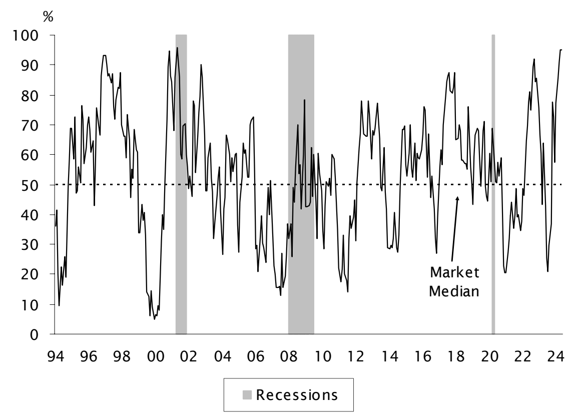

Source: Visible Alpha, Bureau of Labor Statistics, Empirical Research Partners Analysis.

**Exhibit 24: Allstate Corp.
Automotive Combined Ratio and
Auto Insurance Inflation
2015 Through April 2024**




Source: Visible Alpha, Bureau of Labor Statistics, Empirical Research Partners Analysis.

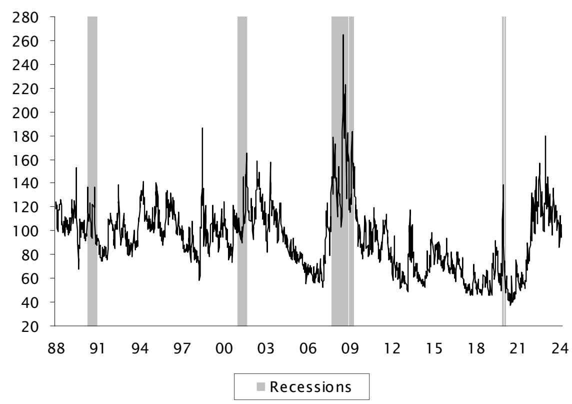
**Exhibit 25: Progressive Corp. and Allstate Corp.
Relative Nine-Month Stock Price Trends[1]
(100 = Highest, 1 = Lowest)
1994 Through Early-May 2024**




Source: National Bureau of Economic Research, Empirical Research Partners Analysis.

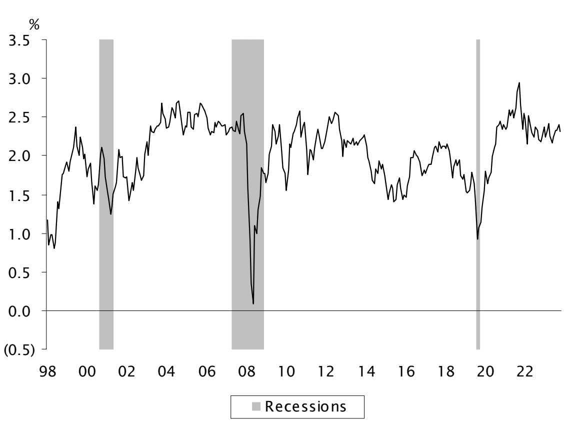
[1]Equally-weighted data.

**Exhibit 26: Bond Market Volatility Index
1988 Through Mid-May 2024**



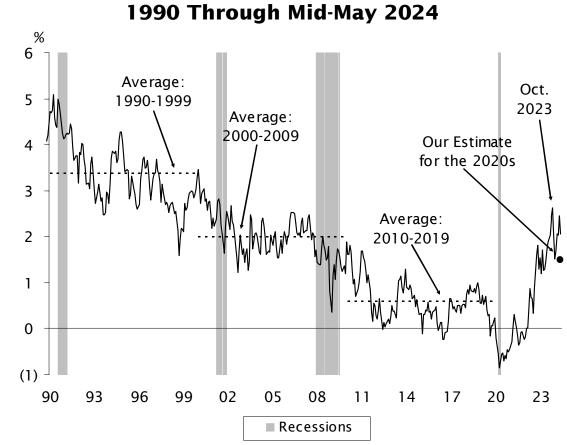

Source: National Bureau of Economic Research, Bank of America Merrill Lynch.

**Exhibit 27: TIPS Ten-Year Breakeven Inflation Rates
1998 Through Mid-May 2024**




Source: National Bureau of Economic Research, Bloomberg, L.P.

**Exhibit 28: Real Long Rates
Ten-Year U.S. Treasury Bond Yields
Less Ten-Year Inflation Expectations[1]
1990 Through Mid-May 2024**

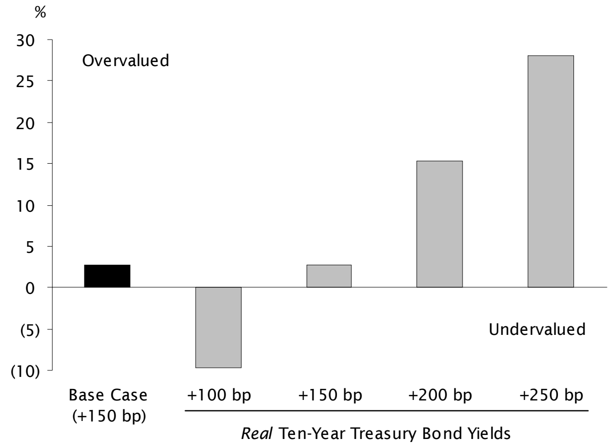



Source: Federal Reserve Bank of Cleveland, Federal Reserve Board, National Bureau of Economic Research, Empirical Research Partners Analysis.

[1]Less the trailing three-month average of ten-year inflation expectations as estimated by the Cleveland Fed model.

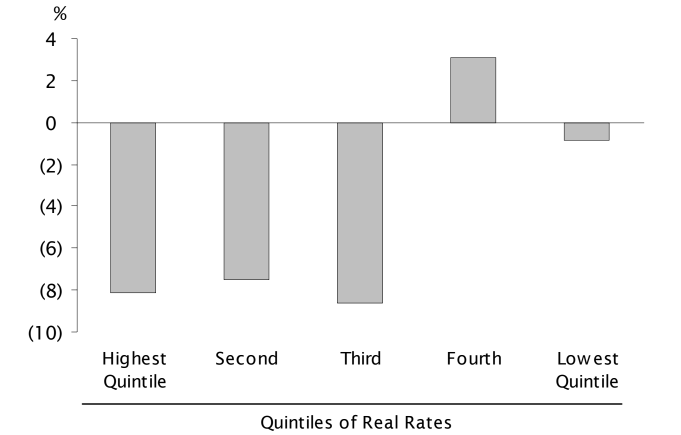
Real yields are important to the big picture, and the fair value of the equity market is quite sensitive to where they settle out. Investors seem to believe that our estimate of +150 basis points or so is sensible, but if instead the right number turns out to be the current level, +200 basis points, which was also the average in the 2000s, the S&P 500 is 15% overvalued (see Exhibit 29). Real rates are important to stock selection too, and money-losing growth stocks have struggled when they're above average (see Exhibit 30).

**Exhibit 29: Valuation of the S&P 500**
**Percent Over- or Under-valued**
**Base Case and Scenarios for**
***Real* Ten-Year Treasury Bond Yields**
**As of Mid-May 2024**




Source: Empirical Research Partners Analysis.

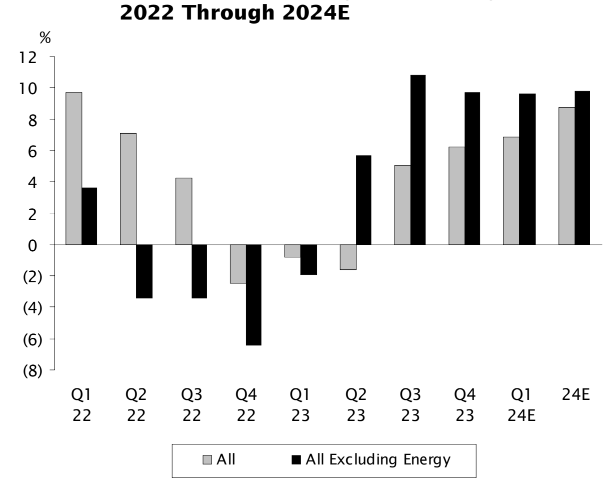
**Exhibit 30: Large-Capitalization Money-Losing Growth Stocks**
**Forward Relative Returns By Quintiles of Real Rates**
**Monthly Data Compounded to Annual Periods**
**1981 Through March 2024**




Source: Federal Reserve Board, Bureau of Labor Statistics, Federal Reserve Bank of Cleveland, Empirical Research Partners Analysis.

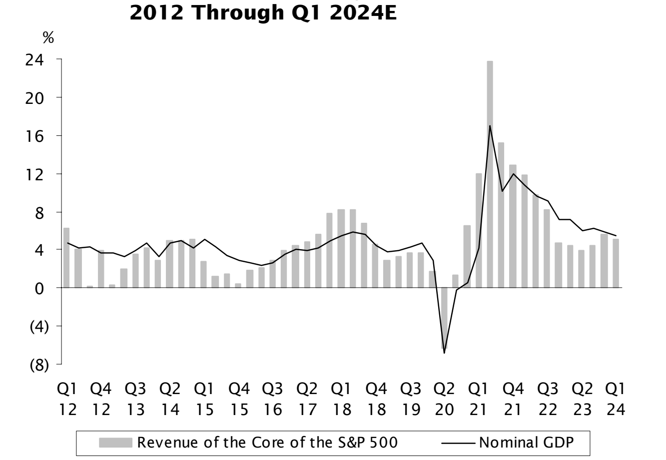
The latest data leads us to believe that the equity market's presumption that the underlying trend is one of disinflation, is likely correct. The two decisive outliers, the shelter index and the cost of auto insurance, seem poised to become less problematic ahead.

**Exhibit 31: The S&P 500**
**All and All Excluding Energy**
**Year-over-Year Changes in Earnings**
**2022 Through 2024E**




Source: Empirical Research Partners Analysis.

**Exhibit 32: Revenues of the Core of the S&P 500**
**and Nominal GDP[1]**
**Year-over-Year Changes**
**2012 Through Q1 2024E**



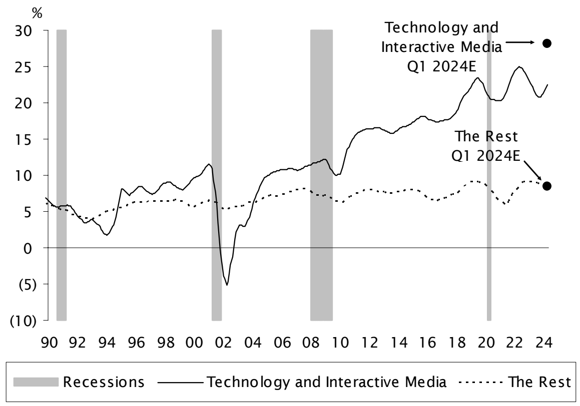

Source: Corporate Reports, Empirical Research Partners Analysis.

[1]Excludes financials, REITs, utilities and energy.

### *Earnings: Strong Operating Leverage, Courtesy of the Tech Sector*

The earnings per share of the S&P 500 went up by about +7% in the first quarter, and by +10% excluding the volatile energy sector (see Exhibit 31). Those results were similar to those posted in the prior quarter. Lately, the top line of the market has been tracking the nominal growth rate of the U.S. economy, the typical relationship (see Exhibit 32). The tech and interactive media sector was again a driving force behind the positive dynamic, with an earnings gain of +33% on +8.5% top-line growth. The sector produced a 28% net margin in the quarter, while that for the remainder of the market was about 8.5% (see Exhibit 33). On an EBIT basis the two numbers were 31% and 10%. The burden from higher financing costs wasn't material in the quarter (see Exhibit 34). The bottom-up estimates for the S&P 500 for the entirety of 2024 envision earnings growth of around +9%, and that seems like a reasonable guess.

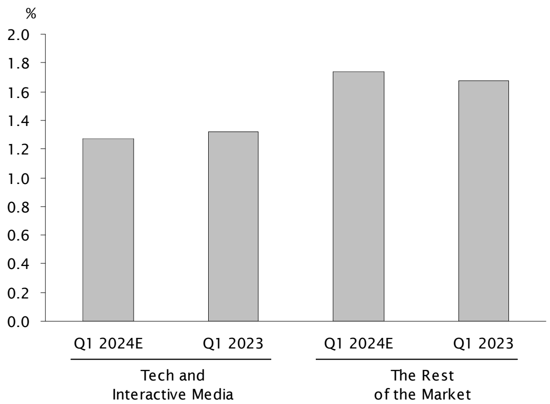
**Exhibit 33: S&P 500 Stocks[1]**
**Technology and Interactive Media and the Rest**
**Net Profit Margins**
**1990 Through Mid-May 2024**




Source: National Bureau of Economic Research, Corporate Reports, Empirical Research Partners Analysis.

[1]Based on adjusted net income measured as aggregates and data smoothed on a trailing six-month basis. Excludes financials and REITs.

**Exhibit 34: The S&P 500[1]**
**Ratios of Net Interest Expense to Revenues**
**Q1 2024E and Q1 2023**

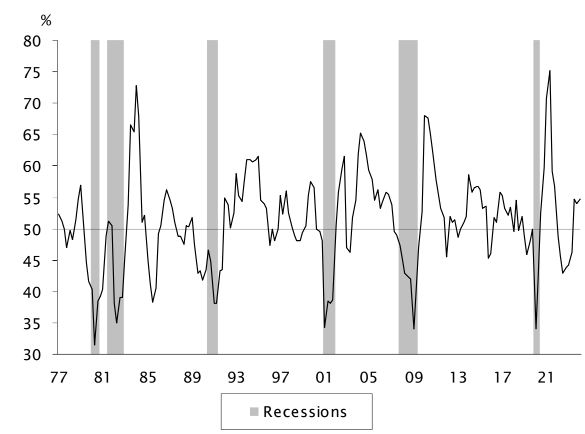



Source: Empirical Research Partners Analysis.

[1]Excludes financials and REITs.

In the latest reporting period 55% of the non-financial constituents of the S&P 500 saw their pre-tax profit margins improve, the most in some time (see Exhibit 35). More benign input cost trends and the end of a major inventory drawdown underpinned the improvement (see Exhibits 36 and 37). Operating leverage was strong and in the core of the market (i.e., excluding energy) incremental pre-tax profit margins were 29% on each dollar of new sales (see Exhibit 38). That compares to a base margin of 13% and was one of the best results in the last decade. The FAANGs + Microsoft composite produced an incremental margin that topped 80%, while that for the semis was in the same ballpark (see Exhibit 39). That for the rest of the market was a respectable 20%.

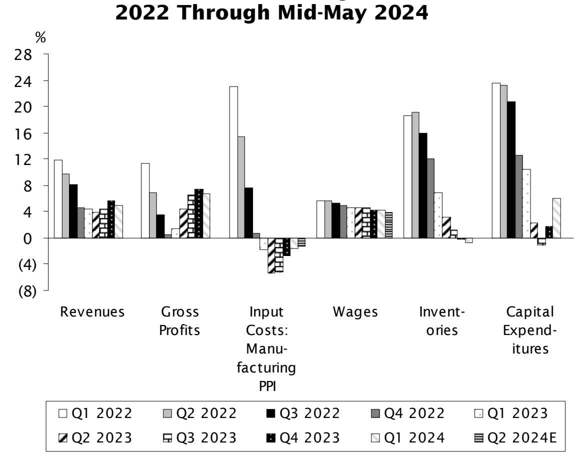
**Exhibit 35: The S&P 500**
**Share of Stocks with Rising Pre-Tax Profit Margins[1]**
**1977 Through Q1 2024E**




Source: National Bureau of Economic Research, Empirical Research Partners Analysis.

[1]Excludes financials and REITs; margins measured versus the same quarter a year earlier.

**Exhibit 36: The Core of the S&P 500[1]**
**Revenues and Select Cost Items**
**Year-over-Year Changes**
**2022 Through Mid-May 2024**



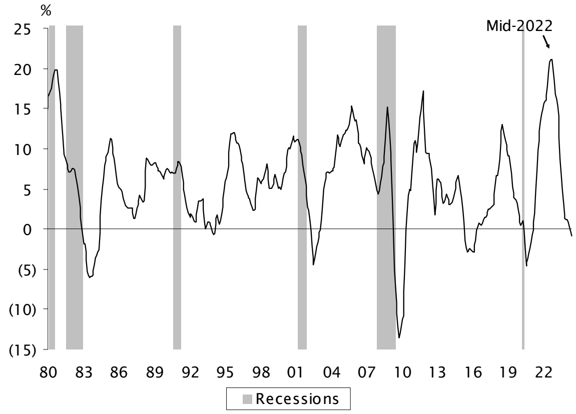

Source: Bureau of Labor Statistics, Corporate Reports, Empirical Research Partners Analysis.

[1]Excludes financials, REITs, utilities and energy.

Capital spending was up by +6% in the quarter, growing more slowly than gross cash flow, and Alphabet and Microsoft accounted for 75% of the entire increase (see Exhibits 40 and 41).[2] The free cash flow output of the core of the market grew by about $11 billion or +5.5%, lagging earnings growth (see Exhibit 42).

[2]*Stock Selection: Research and Results* May 2024. "Capital Spending Growth Accelerates: An Early Warning Sign?"

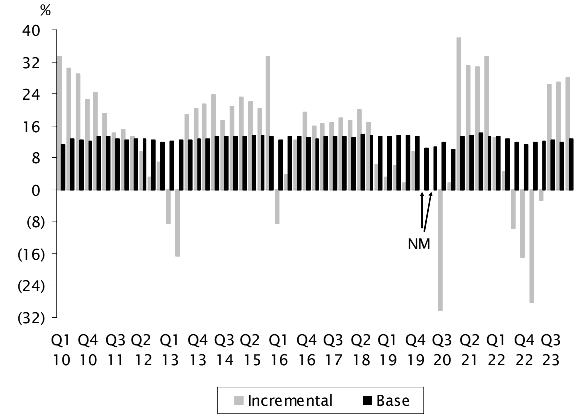
**Exhibit 37: Large-Capitalization Stocks[1]**
**Year-over-Year Changes in Inventories**
**1980 Through Mid-May 2024**




Source: National Bureau of Economic Research, Empirical Research Partners Analysis.

[1]Excludes financials, REITs and utilities; data smoothed on a trailing three-month basis.

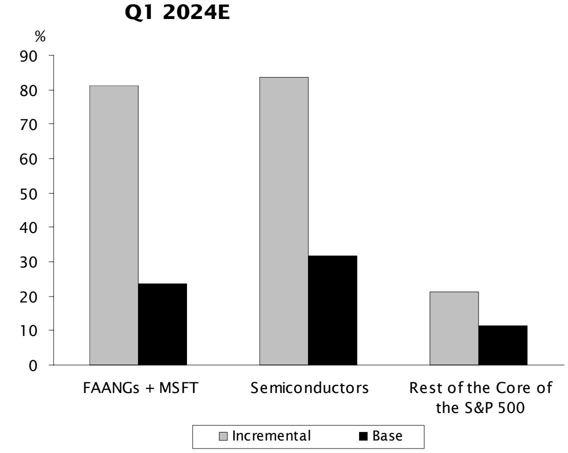
**Exhibit 38: The Core of the S&P 500[1]**
**Incremental and Base Pre-Tax Margins**
**2010 Through Q1 2024E**




Source: Corporate Reports, Empirical Research Partners Analysis.

[1]Excludes financials, REITs, utilities and energy.

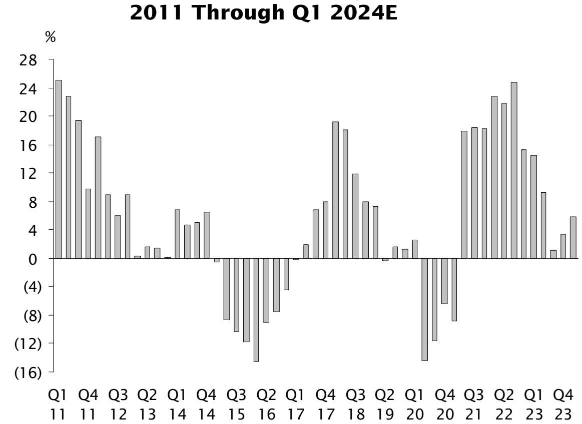
**Exhibit 39: The Core of the S&P 500[1]**
**Incremental and Base Pre-Tax Margins**
**Q1 2024E**




Source: Empirical Research Partners Analysis.

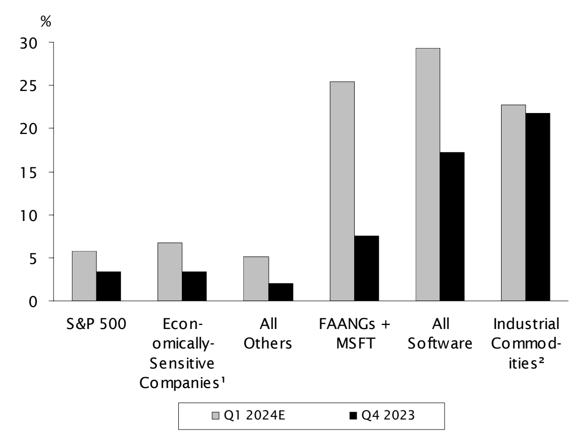
[1]Excludes financials, REITs, utilities and energy.

**Exhibit 40: The S&P 500**
**Year-over-Year Changes in Capital Spending**
**2011 Through Q1 2024E**




Source: Empirical Research Partners Analysis.

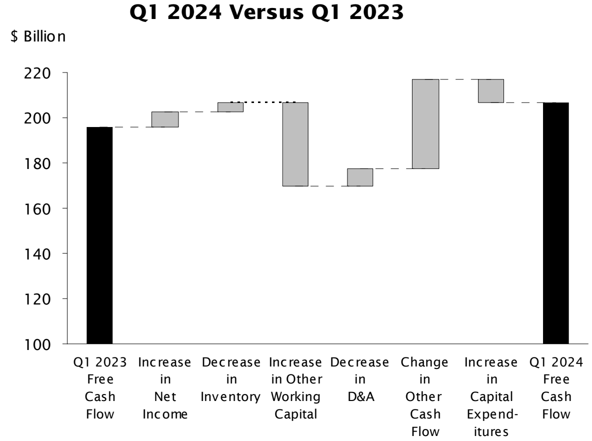
**Exhibit 41: S&P 500 Stocks**
**Capital Spending Growth**
**Q4 2023 and Q1 2024E**




Source: Empirical Research Partners Analysis.

[1]Consumer cyclicals, industrial capital equipment, transports, industrial commodities and technology sectors.
[2]Chemicals, metals and mining, containers and packaging, and construction materials.

**Exhibit 42: The Core of the S&P 500[1]**
**Decomposition of the Year-over-Year Change in Free Cash Flow**
**Q1 2024 Versus Q1 2023**



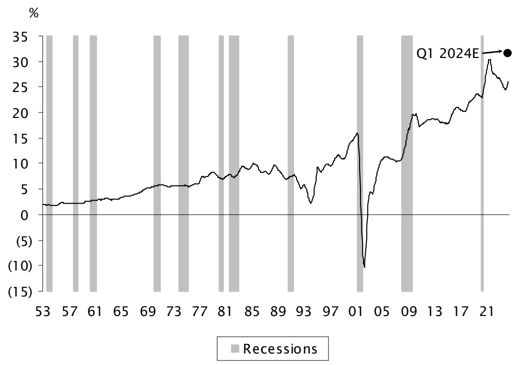

Source: Corporate Reports, Empirical Research Partners Analysis.

[1]The core excludes financials, REITs, utilities and energy. Based on 309 stocks that have reported.

### *Conclusion: Tech's Operating Leverage Carries the Day*

The latest earnings reports supported the narrative of a soft landing in the economy accompanied by trend-like earnings growth. We don't yet see evidence of overinvestment, with the real issue the payoff from the massive spending on data centers. The inexorable rise of the tech and interactive media sector has been the story of the last two decades, and it sourced almost a third of earnings and half the market's free cash flow production (see Exhibits 43 and 44). Its fundamentals have also lifted the market's multiple.[3] Someday the era of tech leadership will end, but it doesn't seem like we're near that turning point. Exhibit 45 is a GARP(y) portfolio we built last December, optimized versus the S&P 500 that still reflects our thinking.

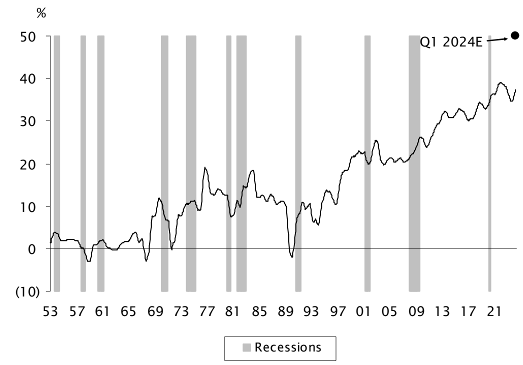
**Exhibit 43: S&P 500 Stocks[1]**
**Share of Earnings Coming from the Technology and Interactive Media Sector**
**1953 Through Mid-May 2024**




Source: National Bureau of Economic Research, Corporate Reports, Empirical Research Partners Analysis.

[1]Data smoothed on a trailing six-month basis.

**Exhibit 44: S&P 500 Stocks[1]**
**Share of Free Cash Flow Coming from the Technology and Interactive Media Sector**
**1953 Through Mid-May 2024**




Source: National Bureau of Economic Research, Corporate Reports, Empirical Research Partners Analysis.

[1]Data smoothed on a trailing six-month basis.

**Exhibit 45: U.S. Large-Capitalization Stocks**
**Growth Stock Selection Model**
**Optimized Large-Cap Portfolio**
**As of Mid-May 2024**

| Symbol | Company Name | Price at Inclusion (12/19/23) | Price | Recommended Weight | Benchmark Weight | Market Capitalization ($ Billion) |
|---|---|---|---|---|---|---|
| **Consumer Cyclicals:** | | | | | | |
| **Consumer Durables** | | | | | | |
| LEN | LENNAR CORP | $148.65 | $170.85 | 2.5 % | | $47.6 |
| NVR | NVR INC | 6,936.65 | 7,818.73 | 1.5 | | 24.8 |
| STLA | STELLANTIS NV | 23.34 | 23.16 | 1.0 | | 70.0 |
| | Consumer Durables Total | | | 5.0 % | 1.8 % | |
| **Retail and Other Consumer Cyclicals** | | | | | | |
| BKNG | BOOKING HOLDINGS INC | $3,515.29 | $3,792.53 | 3.0 % | | $129.2 |
| AMZN | AMAZON.COM INC | 153.79 | 185.99 | 2.5 | | 1,935.5 |
| WMT | WALMART INC | 51.84 | 59.83 | 1.5 | | 482.2 |
| MCD | MCDONALD'S CORP | 290.73 | 273.87 | 1.0 | | 197.5 |
| | Retail and Other Consumer Cyclicals Total | | | 8.0 % | 9.9 % | |
| **Media and Entertainment** | | | | | | |
| GOOGL | ALPHABET INC | $136.65 | $172.51 | 5.0 % | | $2,141.5 |
| META | META PLATFORMS INC | 350.36 | 481.54 | 2.5 | | 1,221.7 |
| | Media and Entertainment Total | | | 7.5 % | 8.3 % | |
| **Industrial Cyclicals:** | | | | | | |
| **Capital Equipment** | | | | | | |
| CAT | CATERPILLAR INC | $292.96 | $360.04 | 1.5 % | | $176.2 |
| FAST | FASTENAL CO | 64.69 | 66.98 | 1.0 | | 38.3 |
| BLDR | BUILDERS FIRSTSOURCE | 164.68 | 171.94 | 1.0 | | 21.0 |
| | Capital Equipment Total | | | 3.5 % | 5.7 % | |
| **Commercial Services and Supplies** | | | | | | |
| VRSK | VERISK ANALYTICS INC | $234.46 | $247.84 | 1.0 % | | $35.4 |
| MCO | MOODY'S CORP | 390.53 | 409.90 | 1.0 | | 74.9 |
| | Commercial Services and Supplies Total | | | 2.0 % | 1.3 % | |
| **Industrial Commodities** | | | | | | |
| STLD | STEEL DYNAMICS INC | $123.32 | $136.93 | 1.5 % | | $21.6 |
| SCCO | SOUTHERN COPPER CORP | 84.09 | 122.89 | 1.0 | | 96.0 |
| RS | RELIANCE STEEL & ALUMINUM CO | 277.13 | 296.56 | 1.0 | | 17.0 |
| | Industrial Commodities Total | | | 3.5 % | 2.3 % | |
| **Transports** | | | | | | |
| EXPD | EXPEDITORS INTERNATIONAL | $126.49 | $117.81 | 1.5 % | | $16.6 |
| CSX | CSX CORP | 34.58 | 33.84 | 1.5 | | 66.2 |
| | Transports Total | | | 3.0 % | 1.6 % | |
| **Technology:** | | | | | | |
| **Technology Software and Services** | | | | | | |
| MSFT | MICROSOFT CORP | $373.26 | $423.08 | 8.0 % | | $3,144.8 |
| ADBE | ADOBE INC | 604.64 | 485.35 | 3.0 | | 219.9 |
| MA | MASTERCARD INC | 425.47 | 458.00 | 3.0 | | 426.5 |
| VRSN | VERISIGN INC | 205.14 | 169.25 | 2.0 | | 16.9 |
| | Technology Software and Services Total | | | 16.0 % | 14.4 % | |
| **Technology Hardware** | | | | | | |
| AAPL | APPLE INC | $196.94 | $189.72 | 7.0 % | | $2,909.9 |
| | Technology Hardware Total | | | 7.0 % | 8.0 % | |
| **Semiconductors** | | | | | | |
| AVGO | BROADCOM INC | $1,139.58 | $1,436.17 | 2.5 % | | $665.6 |
| NVDA | NVIDIA CORP | 496.04 | 946.30 | 2.5 | | 2,365.8 |
| LRCX | LAM RESEARCH CORP | 781.01 | 947.75 | 1.5 | | 123.9 |
| AMAT | APPLIED MATERIALS INC | 162.33 | 217.49 | 1.5 | | 180.7 |
| | Semiconductors Total | | | 8.0 % | 10.5 % | |

| Symbol | Company Name | Price at Inclusion (12/19/23) | Price | Recommended Weight | Benchmark Weight | Market Capitalization ($ Billion) |
|---|---|---|---|---|---|---|
| **Health Care:** | | | | | | |
| **Pharmaceuticals** | | | | | | |
| MRK | MERCK & CO | $106.49 | $131.73 | 1.5 % | | $333.6 |
| LLY | LILLY (ELI) & CO | 579.81 | 787.02 | 1.5 | | 748.0 |
| JNJ | JOHNSON & JOHNSON | 156.46 | 152.67 | 1.0 | | 367.4 |
| | Pharmaceuticals Total | | | 4.0 % | 5.1 % | |
| **Biotechnology** | | | | | | |
| VRTX | VERTEX PHARMACEUTICALS INC | $403.14 | $437.49 | 3.5 % | | $113.0 |
| | Biotechnology Total | | | 3.5 % | 1.9 % | |
| **Health Care Equipment and Services** | | | | | | |
| HUM | HUMANA INC | $463.58 | $347.15 | 1.0 % | | $41.8 |
| ELV | ELEVANCE HEALTH INC | 465.78 | 539.99 | 1.0 | | 125.6 |
| ISRG | INTUITIVE SURGICAL INC | 335.72 | 399.39 | 1.0 | | 141.7 |
| | Health Care Equipment and Services Total | | | 3.0 % | 5.1 % | |
| **Consumer Staples** | | | | | | |
| MO | ALTRIA GROUP INC | $42.44 | $45.85 | 2.0 % | | $78.8 |
| PG | PROCTER & GAMBLE CO | 146.17 | 166.51 | 2.0 | | 393.0 |
| | Consumer Staples Total | | | 4.0 % | 4.3 % | |
| **Financials:** | | | | | | |
| **Banks, Consumer Finance and Other** | | | | | | |
| JPM | JPMORGAN CHASE & CO | $168.45 | $202.11 | 3.0 % | | $580.4 |
| WFC | WELLS FARGO & CO | 50.09 | 62.34 | 2.0 | | 218.3 |
| FITB | FIFTH THIRD BANCORP | 35.12 | 38.98 | 2.0 | | 26.7 |
| | Banks, Consumer Finance and Other Total | | | 7.0 % | 5.6 % | |
| **Capital Markets** | | | | | | |
| AMP | AMERIPRISE FINANCIAL INC | $381.62 | $439.39 | 2.0 % | | $43.8 |
| | Capital Markets Total | | | 2.0 % | 2.4 % | |
| **Insurance** | | | | | | |
| AFL | AFLAC INC | $82.10 | $87.48 | 1.5 % | | $49.9 |
| | Insurance Total | | | 1.5 % | 2.1 % | |
| **Real Estate** | | | | | | |
| EQIX | EQUINIX INC | $809.49 | $809.68 | 1.5 % | | $76.8 |
| | Real Estate Total | | | 1.5 % | 2.2 % | |
| **Energy:** | | | | | | |
| **Integrateds, Oil Service, Refiners and Other** | | | | | | |
| XOM | EXXON MOBIL CORP | $102.99 | $118.58 | 2.0 % | | $531.9 |
| VLO | VALERO ENERGY CORP | 133.60 | 157.71 | 1.0 | | 51.6 |
| | Integrateds, Oil Service, Refiners and Other Total | | | 3.0 % | 3.0 % | |
| **Exploration and Production** | | | | | | |
| EOG | EOG RESOURCES INC | $122.53 | $129.09 | 3.0 % | | $74.2 |
| COP | CONOCOPHILLIPS | 116.49 | 120.70 | 2.0 | | 141.2 |
| | Exploration and Production Total | | | 5.0 % | 0.9 % | |
| **Utilities** | | | | | | |
| ED | CONSOLIDATED EDISON INC | $90.31 | $96.91 | 2.0 % | | $33.5 |
| | Utilities Total | | | 2.0 % | 2.5 % | |

Source: Empirical Research Partners Analysis.

[3]*Portfolio Strategy* April 2024. "Market Valuation: A Deal Breaker?"