2024 US Equity Outlook: "All You Had To Do Was Stay"

We forecast the S&P 500 index will end 2024 at 4700, representing a 12-month price gain of 5% and a total return of 6% including dividends. Our baseline assumption during the next year is the US economy continues to expand at a modest pace and avoids a recession, earnings rise by 5%, and the valuation of the equity market equals 18x, close to the current P/E level. Our forecast falls slightly below the typical 8% return during presidential election years. At this time next year, portfolio managers will look back and realize the best investment strategy for 2024 was to follow Taylor Swift's advice in the song from her *1989* album: "All You Had To Do Was Stay" – invested.

Our macro forecasts imply a benign outcome for equities, but the current starting point will limit the potential appreciation for the benchmark US equity

index in 2024. First, our economists forecast above-consensus GDP growth of 2.1% in 2024, but this view is already reflected in equity prices. Second, margins have stabilized, but substantial expansion from current elevated levels appears unlikely. Third, equity multiples appear fairly valued based on the current macro environment but are unlikely to expand in 2024. The equal-weight S&P 500 P/E multiple has de-rated to the 74th percentile since 1976, but the aggregate P/E still trades in the 87th percentile. The Fed has likely finished its hiking cycle but will remain on hold until 4Q 2024 (vs. market pricing of a cut in 2Q). We also discuss upside and downside return scenarios, depending on the interest rate and growth outlook.

The massive outperformance of the "Magnificent 7" mega-cap tech stocks has been a defining feature of the equity market in 2023. The stocks should collectively outperform the remainder of the index in 2024. The 7 stocks have faster expected sales growth, higher margins, a greater re-investment ratio, and stronger balance sheets than the other 493 stocks and trade at a relative valuation in line with recent averages after accounting for expected growth. However, the risk/reward profile of this trade is not especially attractive given elevated expectations.

Although we forecast a below-average annual return at the S&P 500 index level, more attractive investment opportunities exist beneath the surface. We highlight three strategies: (1) Own quality stocks alongside persistent "late cycle" anxiety (GSTHQUAL). (2) Own growth stocks with high ROIC given stable growth and interest rates. (3) Own beaten-down cyclicals given recession risk is lower than feared. David J. Kostin +1(212)902-6781 | david.kostin@gs.com

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Investors should consider this report as only a single factor in making their investment decision. For Reg AC certification and other important disclosures, see the Disclosure Appendix, or go to www.gs.com/research/hedge.html.

PM Summary: "Long Story Short" — S&P 500 will end 2024 at 4700 (+5%)

The launch of singer-songwriter Taylor Swift's "Eras" tour represented one of the most notable cultural events of 2023. Global ticket sales are estimated to exceed \$1 billion. The tour's economic multiplier effect is significant. As evidence, the Federal Reserve Bank of Philadelphia specifically noted in a recent <u>Beige Book</u> commentary that "May was the strongest month for hotel revenue in Philadelphia since the onset of the pandemic, in large part due to an influx of guests for the Taylor Swift concerts in the city."

The Eras tour will conclude in late November 2024, roughly corresponding to the 12-month horizon of the market forecast in this report. As homage to the global icon, our *2024 US Equity Outlook* is subtitled "All You Had To Do Was Stay" – invested. The title of the song from Taylor Swift's *1989* album reflects our baseline forecast that despite intermittent volatility, fund managers will ultimately be rewarded for staying invested through the end of next year.

Continued economic and EPS growth will lift the S&P 500 index to 4700 (+5%) at the end of next year. However, the benchmark will still remain slightly below its January 2022 all-time high of 4797. Our interim 3-month (4500) and 6-month (4500) S&P 500 index targets reflect a flat market during 1H 2024 (Exhibit 1). We believe the returns to the index will be concentrated in 2H 2024. Resilient economic growth in the beginning of the year will force the market to push back its current pricing that Fed cuts will begin in 2Q, and US election uncertainty will suppress risk appetite. Later in the year, the first Fed cut and resolution of election uncertainty will lift US equity prices.

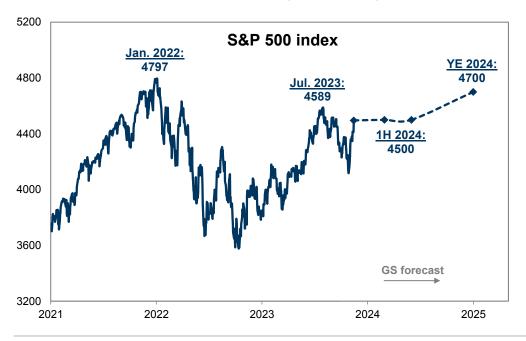
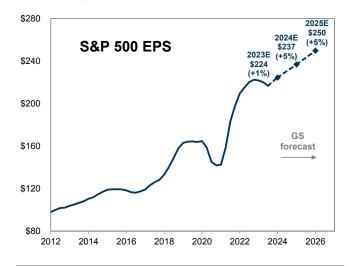
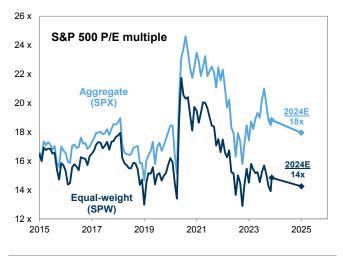


Exhibit 1: Goldman Sachs US Portfolio Strategy S&P 500 price targets: The path to 4700 at year-end 2024

Exhibit 2: The path of S&P 500 EPS

Exhibit 3: S&P 500 aggregate and equal-weight P/E





Source: FactSet, Goldman Sachs Global Investment Research

Source: FactSet, Goldman Sachs Global Investment Research

We remain constructive on US equities, but the current starting point will limit the potential appreciation for the index in 2024.

First, our economists forecast above-consensus full-year GDP growth of 2.1% in 2024. However, this view is already reflected in current equity prices. Despite many economists forecasting a recession, the performance of cyclical stocks vs. defensive stocks is consistent with a 2% real GDP growth regime.

Second, margins have stabilized, but substantial expansion from the current elevated level is unlikely due to diminishing tailwinds for S&P 500 profitability.

S&P 500 ex-Energy net profit margins troughed in 4Q 2022 and have sequentially improved for three consecutive quarters. However, resilient input cost growth, rising interest expense, and higher effective tax rates will allow only minimal margin expansion in 2024. Instead, profit growth will equal sales growth. History shows that revenue growth typically tracks nominal GDP growth. Sales-weighted global nominal GDP growth is consistent with our 5% EPS growth forecast in both 2024 and 2025 to \$237 and \$250 per share, respectively.

Generative artificial intelligence (AI) represents one potential driver of corporate earnings upside, but in most cases it will have limited impact on profitability next year. Certain companies have been obvious near-term beneficiaries of the AI-driven demand for computing power to run AI large language models. Other firms are potential long-term beneficiaries that may experience an EPS boost from the impact of AI adoption on labor productivity in coming years (see <u>The (AI) trade after the trade:</u> <u>Identifying potential long-term EPS beneficiaries of AI adoption</u>, August 21, 2023).

Compared with consensus forecasts, our 2024 EPS estimate is above the median earnings estimate of other strategists but below the bottom-up analyst consensus. While we forecast stable margins, bottom-up consensus assumes significant margin expansion that supports 11% EPS growth in both 2024 (\$245) and 2025 (\$273). The top-down consensus 2024 EPS estimate equals \$230. Third, our top-down valuation model suggests that at a forward P/E multiple of 19x, the aggregate S&P 500 index trades in line with fair value on both a historical absolute basis and relative to interest rates, but is unlikely to expand meaningfully in 2024. Note that equity valuations appear less stretched in absolute and relative terms after adjusting for record high market concentration. The equal-weight S&P 500 has de-rated to the 74th percentile P/E multiple since 1976, but the aggregate S&P 500 P/E still trades in the 87th percentile. The valuation premium of the aggregate vs. equal-weight S&P 500 equals 27%, well above the historical average but below the Tech Bubble peak of 111% in 1999.

Our baseline macro forecasts point to a roughly unchanged equal-weight S&P 500 P/E of 14x at year-end 2024 and a P/E of 18x for the aggregate S&P 500 index. We expect the Fed has finished its hiking cycle and Treasury yields have peaked. However, solid economic growth means the Fed will remain on hold until 4Q 2024, compared with market pricing of cuts beginning in 2Q. In our baseline, we assume real 10-year UST yields will equal 2.3% at year-end 2024. Based on our top-down valuation model, this macro combination supports the current P/E multiple, but implies little scope for valuation expansion. We forecast the yield gap will rise slightly from 315 bp today to 325 bp at year-end 2024. We believe the fundamentals of the largest stocks will support the current valuation premium of the aggregate vs. equal-weight S&P 500 index through 2024.

We expect positive returns to equities, but a 5% return risk-free in cash remains a competitive alternative. In the current interest rate environment, the 3-month Treasury bill yields 5.5%, similar to the earnings yield on the S&P 500 index. Households, mutual funds, pension funds, and foreign investors collectively have a current allocation to stocks (48%) ranking in the 97th percentile vs. history while bond (20%) and cash (14%) allocations rank at the 43rd and 23rd percentiles, respectively. We forecast most of these ownership categories will be net sellers of stocks in 2024. During 2023, money market mutual funds have received about \$1.2 trillion of net inflows compared with \$17 billion inflows for US stocks. We forecast that at \$550 billion net corporate buybacks will represent the largest source of demand for shares.

We expect the equity market will oscillate in its pricing of alternative scenarios around our baseline forecast. If economic growth is resilient but the Fed cuts the funds rate sooner than our economists expect, the corresponding valuation expansion would push the S&P 500 to 5000 (+11%). However, if inflation concerns reignite, leading to higher interest rates and weaker growth, valuations would contract and the S&P 500 would fall to 4150 (-8%). In a mild recession, we expect the S&P 500 would drop by 18% to 3700 at year-end 2024.

Exhibit 4: S&P 500 2023 EPS: GS vs. consensus

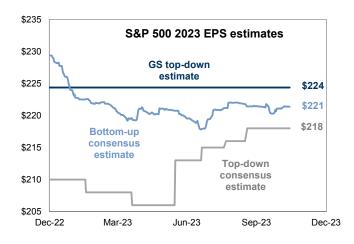
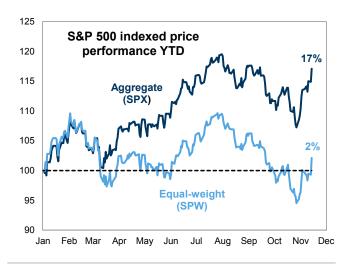


Exhibit 5: S&P 500 price performance: Aggregate vs. equal-weight



Source: Bloomberg, FactSet, Goldman Sachs Global Investment Research

Source: Goldman Sachs Global Investment Research

We were right, but wrong.

Published exactly one year ago, our <u>2023 US Equity Outlook</u> was subtitled "Paradise Lost" in reference to the fact the cost of money was no longer free and the equity story for 2023 would be about the lack of earnings growth. The first paragraph in the report predicted that "Zero earnings growth will match zero appreciation in the S&P 500. Our valuation model implies an unchanged P/E multiple of 17x and a year-end index level of 4000."

We correctly predicted the aggregate S&P 500 index would show no profit growth. We originally forecast \$224 of EPS and 10½ months into the year the market is on track to deliver earnings in line with that number. The equal-weighted S&P 500 index has also posted flat EPS.

However, we were wrong because, while the equal-weight index has posted virtually no appreciation YTD, the aggregate index has posted a 19% total return led by stellar returns of a select few mega-cap stocks. The combination of strong realized sales growth, upward estimate revisions, association with the AI theme, and valuation expansion explain the narrow rally. The "Magnificent 7" (AAPL, MSFT, GOOGL, AMZN, NVDA, META, TSLA) now comprise 29% of S&P 500 market cap and collectively have returned 71% YTD. The remaining 493 stocks in the index have returned just 6%.

Our baseline forecast suggests that mega-cap tech stocks will continue to outperform the remainder of the S&P 500 in 2024, but the risk/reward profile of this trade is not particularly attractive given elevated expectations. The Magnificent 7 stocks collectively have faster expected 2023-2025 sales growth (11% vs. 3%), higher 2023 margins (22% vs. 10%) and a greater re-investment ratio (61% vs. 18%) than the other 493 stocks and trade at a relative valuation in line with recent averages after accounting for expected growth (0.9x relative PEG ratio). However, the risk/reward of this trade is not particularly attractive given high expectations. Elevated hedge fund ownership and a potential inflection in AI enthusiasm represent two risks to the mega-cap tech stocks.

Although we forecast a below-average annual return at the S&P 500 index level, more attractive investment opportunities exist beneath the surface. We highlight three recommendations:

1. Own quality stocks alongside persistent "late cycle" anxiety. Investors should tilt their portfolios toward stocks with "quality" attributes in an environment of persistent investor concern about an impending recession. Despite our economists' optimistic US economic growth outlook, it seems likely that widespread economic anxiety will generally remain elevated next year. This should support the outperformance of stocks with "quality" attributes such as high profitability, strong balance sheets, stable sales and earnings growth, and low historical drawdown risk. <u>Exhibit 40</u> shows the 50 constituents of our High Quality basket (GSTHQUAL). The basket has returned 6% YTD compared with 4% for the equal-weight S&P 500 index and 19% for the aggregate index.

2. Own growth stocks with high returns on capital given stable economic growth and interest rates. We identify regimes in which both market pricing of growth and interest rates do not increase or decrease drastically during 6-month periods and find that our long/short Growth and Returns factors typically perform well during these periods. Exhibit 43 lists 26 S&P 500 stocks with 2025E sales growth ranking in the top third of stocks in the index and returns on capital (ROIC, ROA, ROE) in the top quartile.

3. Own beaten-down cyclicals given recession risk is lower than feared. Our economists' full-year 2024 US real GDP growth forecast of 2.1% is 1 pp higher than consensus. While cyclicals on average are pricing economic growth consistent with our economists' forecast (Exhibit 18), there are some cyclical stocks that have lagged meaningfully and present attractive tactical opportunities if economic data surprise to the upside relative to consensus expectations. Exhibit 45 contains 25 Russell 3000 stocks in a cyclical industry group, excluding Energy, that meet the following criteria: a) market cap > \$2 billion, b) EBIT interest coverage > 5x, c) net leverage < 2x, d) consensus 2024E sales growth < nominal GDP (5%), e) forward 1-year sales growth slower than the stock's 10-year median, f) current NTM EV/EBITDA below the stock's 10-year median, and g) 2024E sales growth less than 2023E sales growth.

Exhibit 6: Overview of our investment recommendations

Strategy	Description	Rationale
High quality (GSTHQUAL)	S&P 500 stocks with balance sheet strength, stable sales and earnings growth, high return on equity, and low historical drawdown risk	Quality typically outperforms during periods of economic anxiety and "late cycle" concerns.
Growth stocks with high returns on capital	S&P 500 stocks with high expected 2025 sales growth and high returns (ROIC, ROA, ROE)	Strategy typically outperforms when interest rates and growth are stable.
Beaten-down cyclicals	Russell 3000 cyclicals, excluding Energy, with pessimistic sales growth expectations and cheap valuations vs. 10-year history	Goldman Sachs economists assign just a 15% probability the US enters a recession during the next 12 months vs. 55% Bloomberg consensus.

Source: Goldman Sachs Global Investment Research

Despite our optimistic baseline market outlook, portfolio managers will need to stay invested through volatility around several economic, financial, corporate, political, and geopolitical "known knowns" on the 2024 calendar:

- Economically, fear of a recession will plague investors despite the Goldman Sachs economics view that the likelihood of a recession beginning during the next year is only 15% (vs. Bloomberg consensus of 55%).
- Financially, the commercial real estate plight will likely imperil several regional banks holding mortgages where the collateral value is below the loan amount. As of 3Q, US banks held \$2.8 trillion of commercial real estate loans and 64% of the total (\$1.8 trillion) was held by banks with less than \$100 billion of assets. More than \$500 billion of commercial real estate loans will mature in 2024.
- From a corporate perspective, "unknowns" include at least one consequential antitrust ruling expected in 1Q (<u>US vs. Google</u>) as well as many other government lawsuits in the US and the EU alleging monopolistic practices by leading "Big Tech" firms such as AMZN, META, and AAPL that collectively account for 29% of the S&P 500 index.
- Politically, the quadrennial sweepstakes also known as the US presidential election will take place in just 51 weeks. Prediction markets are signaling that a Biden-Trump rematch is the most likely general election contest. Recent <u>polls</u> suggest the general election is basically a toss-up.
- **Geopolitically**, the Israel-Hamas War, the Russia-Ukraine War, and the US-China Trade War remain enormous sources of potential financial market risk.

In the Federal Reserve's semiannual <u>Financial Stability Report</u>, survey participants identify risks to their market outlooks. The most recent report highlighted persistent inflation and monetary policy, commercial and residential real estate, and banking sector stress as the top three risks.

Earnings: "Out of the Woods" - 5% growth in both 2024 and 2025

Following 1% profit growth in 2023 (\$224), we forecast S&P 500 EPS will grow by 5% in 2024 (\$237) and by 5% in 2025 (\$250). Excluding Financials, Real Estate, and Utilities, we expect revenues to increase by 5% next year, in line with nominal GDP growth, and margins to expand by 19 bp to 11.4%. Similarly, our forecast for 2025 reflects modest 5% sales growth and a further 15 bp of margin expansion to 11.6%. We model sales, margins, and EPS as a function of economic growth, inflation, interest rates, oil, and the USD. See <u>US Weekly Kickstart: We reiterate our 2023 (\$224) and 2024</u> (\$237) S&P 500 EPS estimates and introduce 2025 (\$250) for the macro assumptions and the sensitivity of our estimates to the various inputs to our model.

Our top-down 2024 EPS estimate of \$237 is above the top-down strategist consensus forecast of \$230 (+6% growth) but below bottom-up analyst consensus of \$245 (+11% growth). Based on our macro earnings model, US economic growth accounts for roughly 50% of the variability in annual EPS growth. Our economists forecast real US economic growth will average 2.1% in 2024 (vs. consensus of 1.0%). They assign a 15% probability of a recession beginning during the next 12 months, well below the consensus of 55%. Above-trend economic growth is the primary reason our EPS forecast exceeds the top-down consensus.

However, our EPS estimates are below the bottom-up analyst consensus

forecasts. The literal bottom line is that consensus forecasts 2025 S&P 500 net margins will be 100 bp greater than our baseline (12.6% vs. 11.6%). The longstanding EPS revision pattern is that during the 24-month forecast horizon analysts cut their initial EPS estimate by 8%. If history is a guide, the bottom-up consensus 2025 EPS estimate of \$273 will be lowered by 8% to \$251 – consistent with our current 2025 estimate of \$250.

		GS	top-dow	n	Cons		I-UP
	2022	2023E	2024E	2025E	2023E	2024E	2025E
S&P 500 ex. Fin, RE, Utils							
Sales growth	13 %	3 %	5 %	5 %	2 %	5 %	6 %
Profit Margin	11.6%	11.2%	11.4%	11.6%	11.0%	11.9%	12.6%
Year/Year growth	(21)bp	(39)bp	19 bp	15 bp	(60)bp	86 bp	68 bp
S&P 500 adjusted EPS	\$222	\$224	\$237	\$250	\$221	\$245	\$273
Year/Year growth	6 %	1 %	5 %	5 %	(0)%	11 %	11 %
					Cons	s. TOP-DO	WN
					2023E	2024E	2025E
					\$218	\$230	NA
					(2)%	6 %	NA

Exhibit 7: Goldman Sachs top-down vs. consensus top-down and bottom-up forecasts

Source: FactSet, Bloomberg, Goldman Sachs Global Investment Research

Substantial margin expansion from the current elevated level is unlikely due to diminishing tailwinds for S&P 500 profitability. We forecast margins for the aggregate S&P 500 index will increase by a modest 35 bp during the next two years

while consensus forecasts expansion of 150 bp (<u>Exhibit 7</u>). Although operating leverage should support margins, headwinds include resilient wage growth, "higher for longer" interest rates, and higher tax expense. Our <u>analysis</u> of the long-term drivers of profitability found that declining costs of goods sold has contributed almost 70% of the 700 bp expansion in S&P 500 net profit margin since 1990 (<u>Exhibit 9</u>). Geopolitical tensions and efforts to onshore or nearshore operations are additional challenges to significant profit margin expansion. On the other hand, the adoption of AI is a potential source of <u>upside risk</u> to margins if companies become more productive or reduce labor costs.

Exhibit 8: We forecast modest expansion in S&P 500 net margins

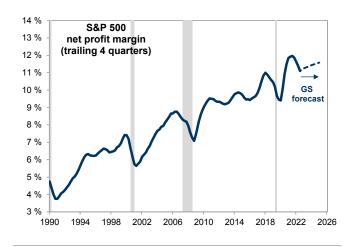
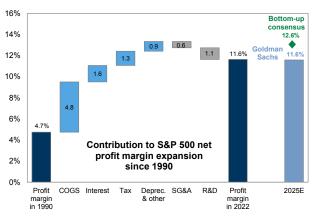


Exhibit 9: Drivers of S&P 500 profit margin expansion



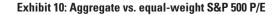
Source: Goldman Sachs Global Investment Research

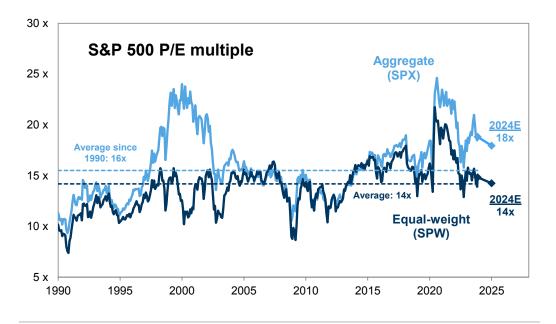
Valuation: "Champagne Problems" — S&P 500 trades at a P/E of 18x

Restrictive monetary policy for most of next year will keep the fed funds rate higher-for-longer than consensus expects and will constrain equity valuation expansion. Our economists believe that July 2023 marked the final Fed hike of this tightening cycle and that the funds rate is unlikely to rise above the current 5.25%-5.50% level. However, our economists expect that, amid resilient economic growth, the Fed will remain on hold until 4Q 2024 when core PCE falls below 2.5%. That forecast stands in contrast with the 100 bp of Fed cuts in 2024 currently reflected in forward market pricing.

Historically, equity valuations have expanded following the end of Fed hiking cycles, but multiple expansion is usually accompanied by a decline in bond yields. In October, 10-year nominal and real 10-year US Treasury yields likely peaked for this cycle at just below 5% and just above 2.5%, respectively. However, our economists forecast the 10-year Treasury yield at the end of 2024 will equal 4.6%, modestly above the current level. Our baseline forecast assumes the real 10-year US Treasury yield ends next year at 2.3%, modestly above the current level. Our expectation of a broadly stable interest rate regime is consistent with our baseline forecast of stable equity valuations.

We forecast at year-end 2024 the aggregate S&P 500 forward P/E multiple will equal 18x, roughly unchanged from the current level. Our top-down valuation model suggests that the S&P 500 trades in line with fair value on both a historical absolute basis and relative to interest rates. Based on this model, we forecast that the yield gap between equities and real yields will rise slightly to 325 bp and rank at the 88th percentile vs. history. The yield gap, a proxy for the equity risk premium, is at the narrowest level since 2002. Our model suggests the yield gap in 2024 will be broadly consistent with the level that prevailed prior to the Global Financial Crisis.



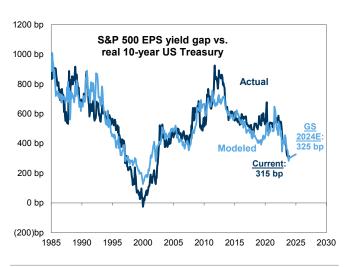


Source: FactSet, Goldman Sachs Global Investment Research



Exhibit 11: The path of real yields

Exhibit 12: We expect the yield gap will remain narrow



Source: Goldman Sachs Global Investment Research

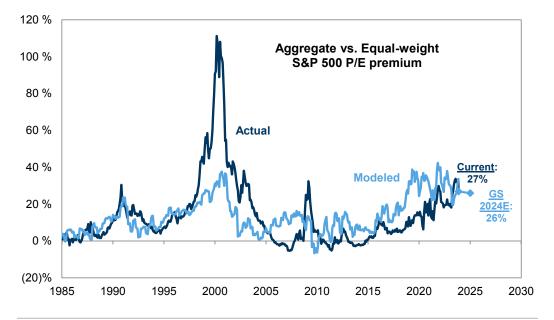
To account for the outsized impact of the largest tech stocks on the aggregate P/E multiple, we decompose our valuation forecast into two components: First, we model the equal-weight S&P 500 forward P/E. Second, we model the premium of the aggregate P/E to the equal-weight P/E. We combine these two forecasts to arrive at a forecast for the aggregate P/E multiple.

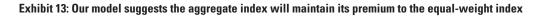
Our baseline macro forecasts point to a roughly unchanged equal-weight S&P 500 P/E of 14x at year-end 2024 that would rank in the 65th percentile since 1976. In contrast, the aggregate S&P 500 P/E of 18x will rank in the 83rd percentile versus history. Current equity valuations appear less stretched in absolute and relative terms after adjusting for record high market concentration. We model the equal-weight P/E as

Source: FactSet, Goldman Sachs Global Investment Research

a function of real yields, the distance of forward inflation from 2%, the tightness of the labor market, demographics, and the change in earnings growth.

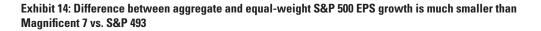
We believe the fundamentals of the largest stocks will support the current valuation premium of the aggregate vs. equal-weight index through 2024. The valuation premium of the aggregate vs. equal-weight S&P 500 equals 27%, well above the historical average. We model this premium as a function of the difference in aggregate vs. median long-term EPS growth and return on equity, as well as CEO confidence. Long-term expected EPS growth for the aggregate index equals 14%, vs. 9% for the equal-weight S&P 500, and LTM aggregate ROE equals 21%, vs. 18% for the equal-weight S&P 500. Based on consensus and GS analyst estimates, the largest stocks will likely maintain their premium growth, profitability, and therefore valuation premium.

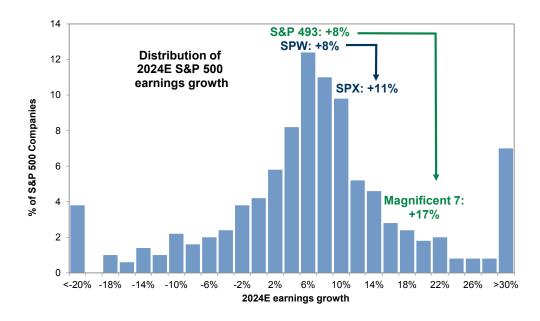




Source: FactSet, Goldman Sachs Global Investment Research

From a return perspective, we forecast the aggregate S&P 500 index (SPX) will outperform the equal-weight index (SPW) by a much narrower gap than in 2023 when the aggregate has outperformed by 1,500 bp YTD (+19% vs. +4%). Exhibit 14 shows the distribution of 2024 earnings growth for all 500 constituents of the index. Consensus expects the aggregate S&P 500 EPS will grow by 11% compared with 8% for the equal-weight index. Given our valuation model forecasts stable multiples for both indices, the superior return of the aggregate index will stem from its greater earnings growth. Investors should note that while the difference in 2024 EPS growth between the aggregate and equal-weight S&P 500 indices is 300 bp, the gap in EPS growth between the "Magnificent 7" and the remaining 493 stocks is three times as large, a substantial 9 pp (17% vs. 8%) because the left side of the distribution contains some large-cap stocks that are forecast to have negative EPS growth.



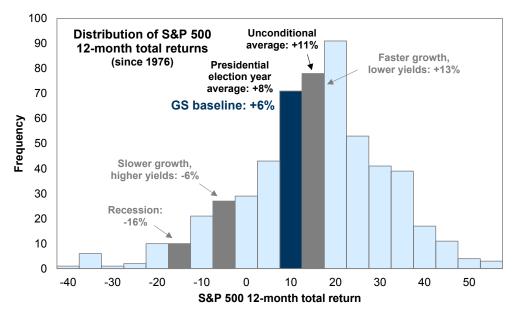


Alternative return scenarios: "Blank Space" — Upside and downside

Our baseline expectation that the aggregate S&P 500 index will post a 6% total return in 2024 is slightly below the typical return during presidential election years. Putting aside uncertainty about the path of economic growth and interest rates, S&P 500 returns during years that included a US presidential election have closely resembled the unconditional trend. In 12 presidential election years since 1976, the aggregate S&P 500 index registered an 8% average total return, similar to the unconditional average return of 11%. Equal-weighted S&P 500 returns during election years outpaced the aggregate index by 300 bp annually with an average 11% return.

Returns during election years are typically stronger post-Election Day and driven more by earnings growth than change in valuation. In the median election year since 1976, the S&P 500 has typically appreciated by 5% between the start of the year and Election Day and risen 4% post-Election Day through year-end. Aggregate valuations were roughly flat during election years. Our interim 3-month (4500) and 6-month (4500) S&P 500 index targets reflect a flat market during 1H 2024.





GS baseline and scenarios reflect total return including dividends.

Source: Goldman Sachs Global Investment Research

Exhibit 16: Average S&P 500 returns and changes in P/E by year of presidential cycle

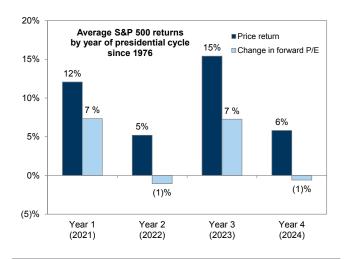
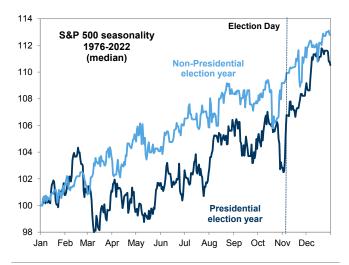


Exhibit 17: Election year seasonality



Source: Goldman Sachs Global Investment Research

Source: Goldman Sachs Global Investment Research

Our relatively benign macro forecast is currently reflected in the equity market. Accordingly, we believe investors should be particularly focused on the distribution of risks around our baseline forecast. While our economists' forecast that the US will avoid a recession in 2024 is an outlier relative to consensus, that view is already priced in the US equity market. The performance of cyclical stocks vs. defensive stocks (GSPUCYDE) is consistent with a 2% real GDP growth regime (Exhibit 18). We discuss below three alternative paths for the equity market in 2024 (Exhibit 19).

Exhibit 18: US equities are pricing real GDP growth of roughly 2%



Source: Goldman Sachs Global Investment Research

Faster growth, lower yields: In a scenario where inflation and bond yields fall more quickly than we expect but growth remains strong, we expect the S&P 500 would end 2024 at 5000 (+11%). The relief from peak and falling bond yields would more

closely mirror the historical playbook at the end of Fed hiking cycles, with valuations expanding modestly to 19x. Equity returns would also benefit from more rapid economic and earnings growth. At 5000, the index would trade 4% above the January 2022 all-time high of nearly 4800.

Slower growth, higher yields: In a scenario where the economy manages to avoid a recession but bond yields rise by more than we expect, we forecast the S&P 500 would end 2024 at 4150 (-8%). The resulting slowdown in economic and earnings growth would be exacerbated by valuation contraction in the higher interest rate environment. This backdrop could prove particularly challenging for the mega-cap tech stocks, which tend to be longer duration equities and well-owned among hedge funds, although the strength of their balance sheets would likely provide some insulation.

Recession: In a recession, we expect the S&P 500 would end 2024 at 3700 (-18%). Although not our baseline, we consider a relatively mild recession scenario. If a recession materializes and real GDP contracts, it would likely lead to a 15% decline in EPS in 2024, before rebounding by 9% in 2025. However, consensus estimates would be cut more gradually, with 2025 EPS estimates declining to roughly halfway between today's bottom-up consensus estimate of \$273 and our recession scenario EPS of \$209. We also assume the Fed would respond to the recession by easing the policy rate, leading real yields lower and cushioning the potential valuation decline. We forecast the S&P 500 P/E would contract to 15x. For historical context, during prior economic downturns S&P 500 EPS experienced a peak-to-trough decline of 11% and the index level typically fell by 24%, although prices and valuations typically bottom faster than earnings.

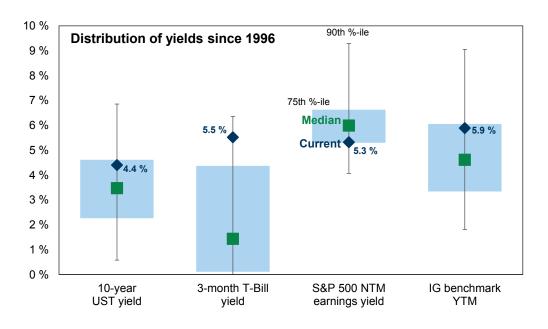
	Baseline	Faster growth lower yields	Slower growth higher yields	Recession
2024 EPS growth	5 %	9 %	1 %	(15)%
Equal-weight P/E	14 x	15 x	13 x	13 x
%ile rank vs. history	65%	77%	58%	53%
Aggregate P/E	18 x	19 x	16 x	15 x
%ile rank vs. history	83%	86%	71%	64%
Real 10-yr UST yield	2.3 %	1.8 %	3.0 %	1.3 %
S&P 500 level	4700	5000	4150	3700
% total return vs. current	6 %	13 %	(6)%	(16)%
%ile rank since 1976	29%	47%	13%	5%
GS subjective probability	50%	25%	10%	15%

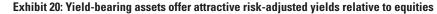
Exhibit 19: S&P 500 index scenarios at year-end 2024

GS baseline and scenarios reflect total return including dividends.

Money Flow: "Everything Has Changed" — From TINA to TARA

The dramatic rise in Treasury yields during the past two years has sparked a seismic shift in the asset allocation trade off. The 10-year US Treasury note currently yields 4.4%, roughly 300 bp above its level two years ago. Although the Treasury yield has retreated from its recent 5% peak, our rates strategists expect at year-end 2024 the 10-year will trade at the still-elevated level of 4.6%. Yield-bearing assets such as three-month Treasury bills and investment-grade corporate bonds have also become considerably more attractive than two-years ago. In contrast, equity valuations on an absolute and relative basis have actually become less attractive (<u>Exhibit 20</u>). Consequently, equities offer the narrowest risk premium relative to 10-year Treasury notes in more than 20 years.





Source: Haver, FactSet, Goldman Sachs Global Investment Research

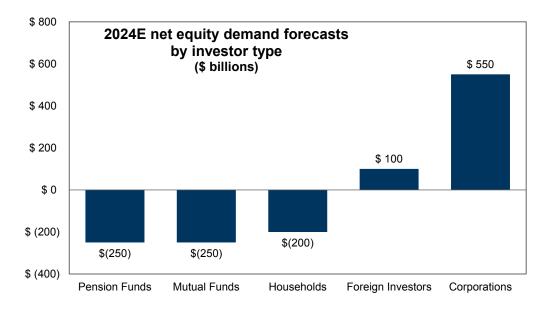
US households directly own 39% of US equities. We <u>forecast</u> in 2024 they will be net sellers of stocks for a second consecutive year. The new interest rate regime has led to a clear shift in the asset allocation calculus for households: After purchasing \$2.3 trillion in equities from 2020-2022, households have been net sellers of US stocks in 2023. In lieu of equities, households have chosen to purchase yield-bearing assets, such as Treasuries and money market funds. Given household balance sheets remain heavily tilted toward equities, we expect households will net sell \$200 billion in US stocks in 2024 and will continue to rotate toward yield-bearing assets.

Similarly, in 2024 pension funds will also continue rotating away from equities and toward bonds. The surge in interest rates means US corporate pension funds discount their future liabilities at a much higher rate than recent history allowed. According to Milliman, the largest defined benefit pension plans in the US are currently 104% funded, up from 90% at the start of 2021 when 10-year US Treasury bonds yielded just 0.9%.

Their improved funded status means pensions are incentivized to rotate away from equities and toward less risky assets, such as Treasuries. We forecast pension funds will be net sellers of \$250 billion of equities in 2024 as the environment of higher-for-longer rates will drive a sustained rotation away from stocks.

Corporations and foreign investors will be net buyers of US stocks in 2024. Similar to the last 23 years, we expect corporations will be the largest source of equity demand in 2024. We forecast buybacks will rise by 4% and cash M&A will rebound by 15% in 2024. The combination of buyback and M&A strength will lead corporations to be net purchasers of \$550 billion in US stocks in 2024. Our FX strategists expect the dollar will weaken modestly in 2024, which should drive continued net buying of US stocks by foreign investors (+\$100 billion).





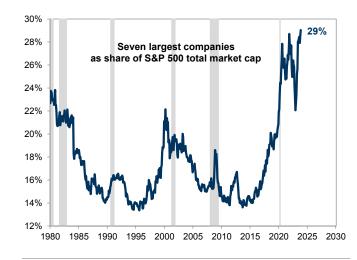
Source: Federal Reserve and Goldman Sachs Global Investment Research

Concentration: "Seven" — The "Magnificent 7" vs. the remaining 493

The massive outperformance of mega-cap technology stocks has been a defining feature of the equity market in 2023. The so-called "Magnificent 7" (AAPL, MSFT, GOOGL, AMZN, NVDA, META, TSLA) now comprise 29% of S&P 500 market cap and collectively have returned 71% YTD in 2023. The remaining 493 stocks in the index have returned just 6%. As a result, the top 7 stocks have accounted for 76% of the S&P 500 index's 19% YTD return.

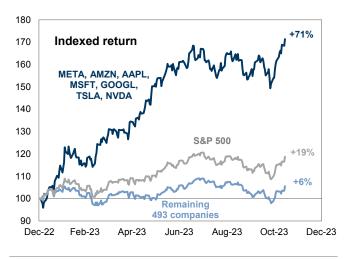
However, the dominance of mega-cap tech in 2023 largely reflected a reversal of meaningful underperformance in 2022. The Magnificent 7 stocks collectively returned -39% in 2022 compared with a -11% return for the remaining 493 constituents in the S&P 500.

Exhibit 22: Share of largest seven companies' market cap in S&P 500 is at an all-time high



Source: Compustat, Goldman Sachs Global Investment Research

Exhibit 23: The Magnificent 7 have led the index higher in 2023

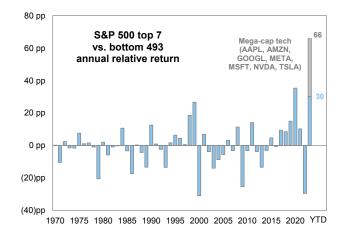


Source: FactSet, Goldman Sachs Global Investment Research

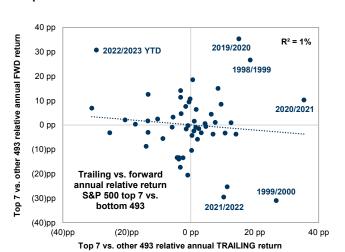
The 30 pp of outperformance of the seven largest stocks at the start of this year vs. the rest of the index YTD ranks as the second largest annual difference since

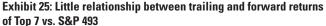
1970. Notably, during the year, META, NVDA, and TSLA displaced BRK.B, JNJ, and UNH among the 7 largest stocks in the index. This year's return has only been surpassed by the 35 pp of outperformance during the COVID-affected 2020 calendar year. While the magnitude of outperformance has been striking, there has been no reliable historical relationship between the trailing and forward 12-month outperformance of the largest seven S&P 500 constituents vs. the remainder of the index. For example, the dramatic 27 pp outperformance of the largest seven stocks in 1999 was followed by 31 pp of underperformance in 2000, while the outperformance in 2020 was followed by another year of outperformance in 2021.

Exhibit 24: Sharp outperformance of Top 7 vs. S&P 493



Only 5 of the 7 largest stocks today were also among the 7 largest stocks at the start of 2023.





Source: Goldman Sachs Global Investment Research

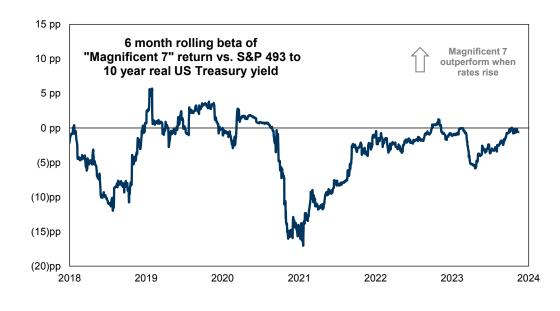
Our baseline forecast suggests that in 2024 the mega-cap tech stocks will continue to outperform the remainder of the S&P 500, but the risk/reward profile of this trade is not especially attractive given elevated expectations. All investment forecasts include the disclaimer that "past performance is no guarantee of future results." Nevertheless, the Magnificent 7 stocks have faster expected 2023-2025 CAGR sales growth (11% vs. 3%), higher 2023 margins (22% vs. 10%), and a greater re-investment ratio (61% vs. 18%) than the other 493 stocks and trade at a relative valuation in line with recent averages after accounting for expected growth (0.9x relative PEG ratio). From a macro perspective, our economists' forecast for stable interest rates implies fundamentals rather than valuation changes will be the key driver of stock returns in 2024.

The key determinant of whether the mega-caps will continue to outperform next year will be how realized sales and earnings growth compare with current expectations. In 2000, the eventual underperformance of the mega-cap market leaders occurred when those companies failed to meet elevated growth expectations and multiples collapsed. If the Magnificent 7 repeat this dynamic and disappoint expectations in 2024, those stocks' valuations will likely "catch down" towards the remainder of the index and underperform. Fading enthusiasm in Al is one potential way those growth expectations could deteriorate, as is an unfavorable outcome in one of the ongoing antitrust trials. Conversely, if the growth environment proves better than expected for the remainder of the index, the Magnificent 7 will underperform as the other 493 stocks "catch up." From a macro perspective, a substantial decline in interest rates that occurs alongside a resilient economic growth environment would also help spur a "catch up." Concentrated hedge fund positioning in the Magnificent 7 is another key risk to those stocks. However, P/E multiple expansion for the Magnificent 7 stocks is possible if their sales growth expectations accelerate due to faster-than-anticipated adoption of AI (for example, see Nvidia Corp. Framing the Key Debates and Refreshing our Bull-Bear Analysis ahead of 3Q23 EPS, Toshiya Hari, November 14, 2023).

Source: Goldman Sachs Global Investment Research

We do not expect interest rates to be a major driver of Magnificent 7 performance in 2023. The sensitivity of Magnificent 7 performance to real rates is currently close to zero, but the historical relationship has varied widely over time. Sometimes the market has treated the Magnificent 7 as a long duration asset, with the group underperforming as rates rise. In 2022 the Magnificent 7 underperformed the rest of the market alongside rising interest rates, but many investors overstated the impact of rates given earnings were falling concurrently. At other times, such as when investors were worried about the impact of rising interest rates, the market rewarded the Magnificent 7 for their strong balance sheets. The performance of these stocks during recent months demonstrates this dynamic (see Exhibit 26).

Exhibit 26: Sensitivity of Magnificent 7 vs. S&P 493 performance to real rates

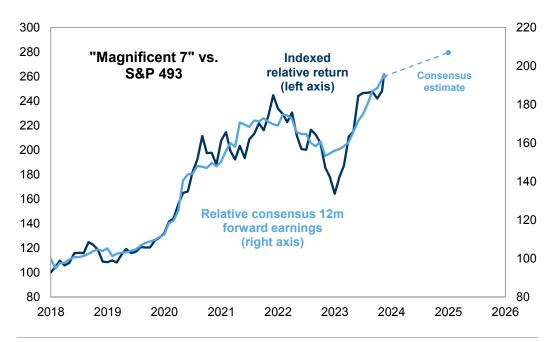


regression of daily returns, controlling for equity market pricing of economic growth

Source: Goldman Sachs Global Investment Research

From a fundamental perspective, in recent years the trajectory of earnings has explained the performance of the Magnificent 7 relative to the rest of the market.

Mega-cap tech margins fell by 520 bp in 2022, compared with 60 bp of margin expansion for the remaining stocks, contributing to a 17% decline in EPS vs. 10% growth for the other 493 stocks. The outperformance of the Magnificent 7 this year has coincided with a rebound in margins and earnings that has outpaced the weakness across the rest of the market.





Source: Goldman Sachs Global Investment Research

Consensus expects the Magnificent 7 will continue to deliver faster growth than the rest of the index. Analyst estimates show the mega-cap tech companies growing sales at a CAGR of 11% through 2025 compared with just 3% for the rest of the S&P 500. The net margins of the Magnificent 7 are twice the margins of the rest of the index, and consensus expects this gap will persist through 2025.



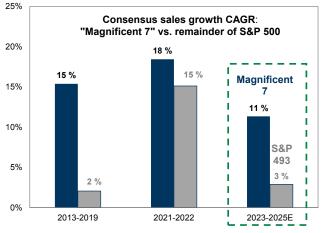
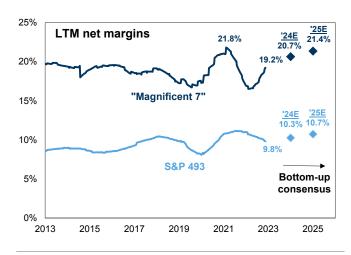


Exhibit 29: Margins of Magnificent 7 vs. rest of S&P 500



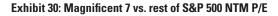
Source: FactSet, Goldman Sachs Global Investment Research

Source: FactSet, Goldman Sachs Global Investment Research

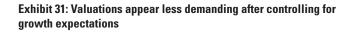
From a valuation perspective, the Magnificent 7 trade at a large P/E premium vs. the rest of the market, but relative valuations stand in line with recent averages after accounting for expected growth. The Magnificent 7 trades at a P/E of 29x, 1.7x the 17x P/E multiple of the median S&P 500 stock. This ratio ranks in the 91st percentile since 2012. However, on an earnings-weighted basis, the Magnificent 7 long-term expected EPS growth is 8 pp faster than the median S&P 500 stock (+17% vs. +9%).

On a PEG ratio basis, the relative valuations are in line with the 10-year average.

2012



Source: FactSet, Goldman Sachs Global Investment Research



"Magnificent 7" vs. median S&P 500 stock

Relative

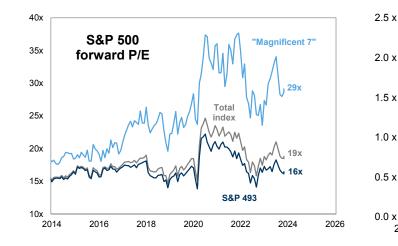
P/F

1 7

0.87

Median = 0.84x

2022



Source: FactSet, Goldman Sachs Global Investment Research

2016

2018

2020

Relative PEG ratio

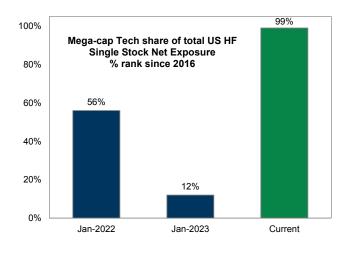
(P / NTM EPS / LTG EPS growth)

Elevated hedge fund ownership and a potential inflection in AI enthusiasm represent two risks to the mega-cap tech stocks. According to GS Prime Services data, at the start of 2023 US single stock hedge fund net exposures to the mega-cap tech stocks ranked in just the 12th percentile vs. history since 2016. Today, positions rank in the 99th percentile since 2016. The recent surge in enthusiasm regarding artificial intelligence (AI) may also have inflected. The emergence of ChatGPT, and AI more broadly, benefited the largest stocks who were either directly or indirectly involved in the development of the technology. However, the frequency of AI mentions in earnings transcripts declined during the 3Q earnings season after surging earlier in 2023. Likewise, Google search volumes for AI rose sharply in early 2023 but appear to have stabilized in recent weeks.

Median = 1.4>

2014

Exhibit 32: Hedge fund positioning in mega-cap tech is now back at record highs



Source: GS Prime Services, Goldman Sachs Global Investment Research

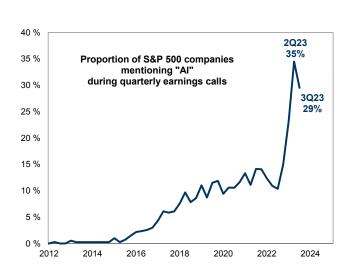


Exhibit 33: Mentions of AI in earnings calls declined in 3Q

Exhibit 34: Magnificent 7 fundamentals vs. other 493

	Si	ize	Total	return	Fu	Indamenta	ls (bottom-up	o consensus	5)		Valuation		Balance sheet
Company	Market cap (trillions)	Weight in S&P 500	2022	2023	2023-2025 revenue CAGR	2023 net margin	2023-2025 net margin growth	YTD revision to 2024 EPS	3-year Growth Inv. Ratio	Current forward 12m P/E	P/E at start of 2023	Forward 12m EV/sales	Net debt / EBITDA
AAPL	\$2.9	7 %	(26)%	45 %	3 %	26 %	41 bp	(0)%	23 %	28 x	21 x	8 x	0.5 x
MSFT	2.8	7	(28)	55	13	35	92	1	42	31	23	11	(0.4)
GOOGL	1.7	4	(39)	51	10	27	66	6	53	21	17	5	(1.0)
AMZN	1.5	4	(50)	74	12	9	215	19	159	42	47	3	1.2
NVDA	1.2	3	(50)	240	52	48	252	201	NA	32	34	16	(0.4)
META	0.9	2	(64)	179	13	34	71	61	81	20	15	6	(0.4)
TSLA	0.8	2	(65)	93	22	11	172	(44)	52	62	22	7	(1.2)
Magnificent 7	\$11.7	29 %	(39)%	71 %	11 %	22 %	147 bp	13 %	61 %	29 x	22 x	6 x	(0.1)x
Other 493	28.3	71	(10)	6	3	10	99	(4)	18	16	16	3	2.2
S&P 500	40.0	100	(18)	19	4	11	129	(1)	28	19	17	3	1.8

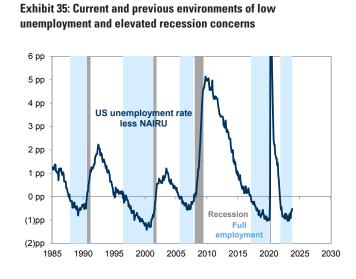
"Safe and Sound" — Own quality stocks given "late cycle" anxiety

Investors should tilt their portfolios toward stocks with "quality" attributes in an environment of persistent investor concern about an impending recession.

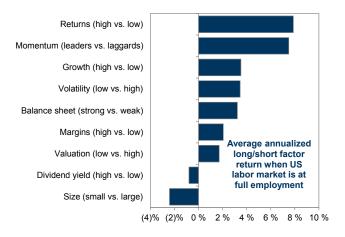
Recession fears are a common characteristic of periods when the labor market and monetary policy are tight, which investors often describe as "late cycle" environments. Despite our economists' optimistic US economic growth outlook, it seems likely that widespread economic anxiety will generally remain elevated next year. This should support the outperformance of stocks with attributes such as high profitability, strong balance sheets, and stable revenues relative to their lower quality peers.

We recommend investors allocate to quality as a medium-term core portfolio tilt rather than a tactical trade. Investor sentiment is likely to be volatile throughout 2024, with periods of increased recession fears followed by reversals as those fears are alleviated. The performance of quality stocks will likely oscillate alongside those swings in risk sentiment. Quality should perform particularly well if our economic forecasts prove wrong and the US dips into a recession. In contrast, an improving economic growth environment or increased investor risk sentiment would work in favor of lower-quality stocks.

Quality factors have outperformed YTD. Stocks with quality attributes also outperformed during the few years pre-COVID and during other "late cycle" environments of limited economic slack (illustrated as the shaded blue periods in <u>Exhibit</u> <u>35</u>). Although quality characteristics command an elevated valuation premium relative to history, the current premium is lower than the valuations reached in 2020-2021. In addition, valuations have historically been poor predictors of near-term factor returns.







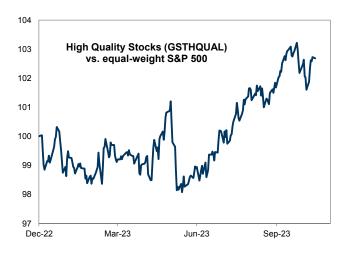
Source: BLS, CBO, Goldman Sachs Global Investment Research

Exhibit 37: Quality outperformed towards the end of the previous economic cycle



Source: Goldman Sachs Global Investment Research

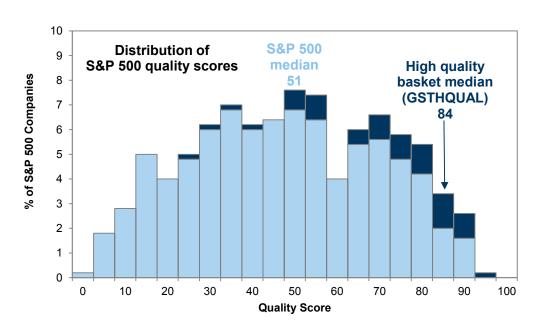




Source: Goldman Sachs Global Investment Research

Exhibit 40 shows the 50 constituents of our High Quality basket (GSTHQUAL). We assign a quality score to each stock in the S&P 500 based on balance sheet strength, the stability of sales and earnings growth, return on equity, and low historical drawdown risk. The High Quality basket has posted a YTD return of 6% compared with 19% for the aggregate S&P 500 index and 4% for the equal-weight index. We rebalance the basket in this report.





The Quality Score is a weighted average of each stock's percentile rank vs. peers for: EBIT downside deviation (40%); sales Sortino ratio (40%); 5th percentile drawdown (10%); and average ROE (10%).

Exhibit 40: Constituents of our Quality basket (GSTHQUAL)

bold indicates new constituents

Company	Ticker	Market Cap (\$ bil)	Altman Z-Score	P/E	2024E EPS Growth	Div Yield	ROE LTM	Quality Score	Company	Ticker	Market Cap (\$ bil)	Altman Z-Score	P/E (NTM)	2024E EPS Growth	Div Yield	ROE LTM	Qual Score						
company ommunication Services	Ticker	() () () () () () () () () () () () () () () () (Z-Score		Growth	Tiela		Score	Health Care	Ticker	(\$ DII)	Z-Score		Growth	riela		500						
Alphabet Inc.	GOOGL	\$ 1,560	10.7	20x	17 %	0.0%	26 %	94	Zoetis Inc.	ZTS	\$ 78	7.5	28x	12 %	0.9%	49 %	92						
	CHTR	\$ 1,500						84		IDXX	\$78 36		40			49 % 86	89						
Charter Communications			0.7	11	18	0.0	48		IDEXX Laboratories			15.7		10	0.0								
T-Mobile US Inc.	TMUS	173	1.3	15	38	1.8	15	77	UnitedHealth Group	UNH	503	3.6	20	12	1.4	27	88						
Comcast Corp.	CMCSA	171	1.6	10	9	2.8	19	74	ResMed Inc.	RMD	21	7.0	19	14	1.3	23	88						
Meta Platforms Inc.	META	732	8.7	19	22	0.0	29	74	STERIS plc Mettler-Toledo Intl	STE MTD	20 22	3.6 9.0	22 26	10 1	1.0 0.0	9 NM	87 82						
Basket Median Sector Median								77 49	Elevance Health Basket Median	ELV	109	3.4	13	12	1.3	20	81 88						
onsumer Discretionary									Sector Median								50						
PReilly Automotive	ORLY	\$ 60	3.9	24x	11 %	0.0%	NM	99															
ractor Supply	TSCO	21	5.2	19	4	2.1	55	92	Industrials														
lome Depot Inc.	HD	290	6.9	18	5	2.9	NM	92	Fastenal Co.	FAST	\$ 34	20.6	28x	6 %	2.3%	34 %	93						
Pool Corp.	POOL	13	6.3	23	8	1.3	41	81	Paychex Inc.	PAYX	41	5.0	24	8	3.1	47	92						
_KQ Corp.	LKQ	12	3.2	11	10	2.7	17	79	Cintas Corp.	CTAS	55	10.4	36	11	1.0	37	91						
									Rollins Inc.	ROL	19	12.4	39	12	1.5	33	90						
Basket Median								92															
Sector Median								50	Basket Median Sector Median								91 52						
nsumer Staples																	01						
Church & Dwight	CHD	\$ 22	5.0	27x	8 %	1.2%	23 %	94	Information Technology														
Ionster Beverage	MNST	58	28.0	31	16	0.0	20	84	Accenture Plc	ACN	\$ 199	7.4	25x	6 %	1.6%	31 %	94						
epsiCo Inc.	PEP	231	3.9	21	8	3.0	60	83	Cadence Design Systems	CDNS	72	21.5	46	15	0.0	35	94						
epsico inc.	1 21	251	5.5	21	0	5.0	00	05	Synopsys Inc.	SNPS	80	14.0	40	13	0.0	20	90						
asket Median								84	Monolithic Power Systems	MPWR	24	39.0	40	10	0.8	25	86						
ector Median								52	Tyler Technologies	TYL	18	6.6	48	14	0.0	6	8						
									Amphenol Corp.	APH	52	5.9	27	9	1.0	26	8						
ergy									EPAM Systems Inc.	EPAM	14	12.1	22	3	0.0	17	82						
larathon Petroleum	MPC	\$ 59	3.5	9x	(26)%	2.2%	43 %	63	ANSYS Inc.	ANSS	25	10.6	31	12	0.0	10	81						
		\$ 35 72						59					- ·	7		72							
OG Resources Inc.	EOG	72	4.9	9	14	3.0	30	59	CDW Corp.	CDW	28	3.6	20		1.2		80						
															Broadcom Inc.	AVGO	391	6.2	20	10	1.9	64	77
Basket Median								61	Fair Isaac Corp.	FICO	25	11.9	42	21	0.0	NM	76						
ector Median								49	Akamai Technologies	AKAM	17	3.5	17	11	0.0	14	75						
									Cognizant Tech Solutions	CTSH	33	6.6	14	5	1.8	18	75						
ancials									Arista Networks	ANET	65	20.4	30	10	0.0	34	7						
	105	A 00		40	4.0/	4 50/	44.0/	~~															
tercontinental Exchange	ICE	\$ 62	NM	19x	4 %		11 %	88	Microsoft Corp.	MSFT	2724	10.1	31	7	0.8	39	73						
ISCI Inc.	MSCI	40	NM	35	11	1.1	NM	85															
harles Schwab	SCHW	96	NM	14	21	1.9	24	75	Basket Median								81						
aymond James Financial	RJF	21	NM	11	15	1.7	18	74	Sector Median								5						
lobe Life Inc.	GL	11	NM	10	8	0.8	21	73															
ruist Financial	TFC	39	NM	8	(9)	7.1	11	73	Materials														
					.,				Sherwin-Williams	SHW	\$ 65	3.7	23x	9 %	1.0%	72 %	90						
asket Median ector Median								74 53	Basket Median								9(
									Sector Median								52						
									Real Estate														
									American Tower	AMT	\$ 86	NM	39x	22 %	3.4%	32 %	81						
									Basket Median								81						
									Sector Median								50						
									Utilities														
									American Water Works	AWK	\$ 24	NM	24x	7 %	2.3%	10 %	86						
									Basket Median Sector Median								86 49						
									High Quality Stock <gsthqual></gsthqual>	Median		6.6	23x	10 %	1.2%								
									S&P 500 Median			3.4	16	9	1.8	17	51						

The Quality Score is a weighted average of each stock's percentile rank vs. peers for: EBIT downside deviation (40%); sales Sortino ratio (40%); 5th percentile drawdown (10%); and average ROE (10%).

"Bejeweled" — Own growth stocks given stable growth and rates

Own high growth stocks with high returns on capital in an environment where interest rates and economic growth remain stable. Consistent with our rates strategists' and economists' forecasts, interest rates will likely remain high and the Fed will likely not cut the policy rate until late 2024, placing a cap on valuations. With no benefit from valuation expansion, earnings growth will drive returns. We identify environments since 1995 in which both market pricing of growth and interest rates do not increase or decrease drastically over 6 month periods and find that our long/short Growth and Returns factors typically perform well during these periods.

We screen for stocks in the S&P 500 with high expected sales growth and high returns on capital to capitalize on this environment. Exhibit 43 shows S&P 500 stocks with 2025E sales growth ranking in the top third of stocks in the index and returns on capital (ROIC, ROA, ROE) in the top quartile.

Although starting valuations are not highly predictive of returns over the near term, elevated multiples for growth stocks represent a risk for this trade. The NTM P/E for the median stock in the screen is high relative to the median stock in the index. But the median stock in the screen currently trades at an 8% lower P/E multiple compared with its valuation at the end of July when the market reached its most recent high.

Exhibit 41: Economic growth and interest rates will remain stable in 2024

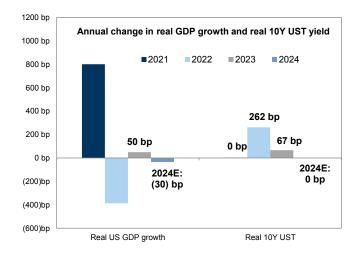


Exhibit 42: Our Growth and Returns factors fare best when rates and growth remain stable

Factor performance in stable interest rate

and stable growth environments									
Long/Short factor	6m median factor return								
Growth (high vs. low)	1.7 pp								
Returns (high vs. low)	1.4								
Volatility (low vs. high)	1.0								
Bal. sheet (strong vs. weak)	0.6								
Valuation (low vs. high)	0.3								
Dividend yield (high vs. low)	(0.5)								
Margins (high vs. low)	(0.8)								
Size (small vs. large)	(1.1)								

Source: Goldman Sachs Global Investment Research

Exhibit 43: S&P 500 stocks with high expected sales growth and high returns on capital

Stocks with 2025E sales growth in top third of stocks in the S&P 500 and returns (ROIC, ROA, ROE) in the top quartile

			Mkt cap	YTD		NTM P/E		2025E	LTM
Name	Ticker	Sector	(\$ bn)	return	Jul-23	Today	% change	sales growth	ROE
Enphase Energy Inc.	ENPH	Information Technology	\$11	(70)%	25 x	17 x	(31)%	33 %	61 %
ServiceNow Inc.	NOW	Information Technology	130	64	52	51	(0)	21	26
Eli Lilly & Co.	LLY	Health Care	582	69	43	53	25	20	77
NVIDIA Corp.	NVDA	Information Technology	1,201	233	48	31	(35)	19	43
Albemarle Corp.	ALB	Materials	13	(47)	10	7	(30)	18	39
EQT Corp.	EQT	Energy	14	20	12	11	(16)	17	24
Lam Research Corp.	LRCX	Information Technology	90	62	26	22	(13)	15	50
Microsoft Corp.	MSFT	Information Technology	2,724	54	30	31	3	14	39
Chipotle Mexican Grill	CMG	Consumer Discretionary	59	55	40	41	3	14	45
Arista Networks	ANET	Information Technology	65	73	25	30	19	13	34
Lululemon Athletica	LULU	Consumer Discretionary	53	30	29	31	4	13	45
Texas Instruments	TXN	Information Technology	132	(9)	24	22	(7)	13	46
Airbnb Inc.	ABNB	Consumer Discretionary	51	39	39	25	(36)	13	87
Adobe Inc.	ADBE	Information Technology	269	75	32	33	3	12	35
Cadence Design Systems	CDNS	Information Technology	72	64	42	46	8	12	35
Meta Platforms Inc.	META	Communication Services	732	174	21	19	(8)	12	29
Autodesk Inc.	ADSK	Information Technology	45	12	27	25	(6)	12	88
Alphabet Inc.	GOOGL	Communication Services	1,560	50	21	20	(5)	10	26
IDEXX Laboratories	IDXX	Health Care	36	6	53	40	(24)	10	86
Edwards Lifesciences	EW	Health Care	39	(13)	30	23	(22)	10	25
Old Dominion Freight Line	ODFL	Industrials	43	38	35	30	(14)	9	32
ON Semiconductor	ON	Information Technology	29	7	20	14	(29)	9	33
Keysight Technologies	KEYS	Information Technology	22	(28)	19	16	(15)	9	25
Applied Materials	AMAT	Information Technology	126	55	21	19	(9)	9	47
Robert Half Inc.	RHI	Industrials	8	6	19	20	5	9	30
Vertex Pharmaceuticals	VRTX	Health Care	98	31	23	23	2	9	27
Screen median			\$62	39 %	26 x	24 x	(8)%	12 %	37 %
S&P 500 median			30	0	18	16	(8)	6	17

"Anti-Hero" — Own lagging cyclicals given low recession risk

Look for tactical opportunities to own beaten-down cyclicals pricing greater recession risk than the Goldman Sachs baseline. Our economists' US real GDP growth forecast of 2.1% in 2024 is 1 pp higher than the consensus. While cyclicals on average are pricing economic growth consistent with our economists' forecast (Exhibit 18), there are pockets of cyclicals that have lagged meaningfully and present attractive tactical opportunities if economic data surprise to the upside.

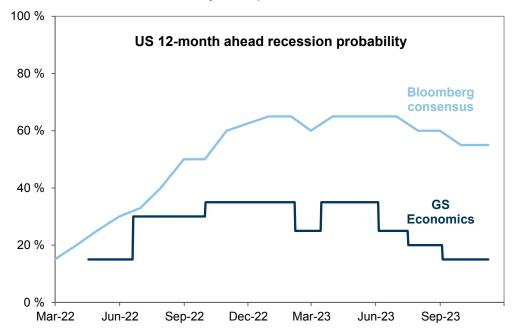


Exhibit 44: GS Economics forecasts a low probability of recession

Source: Bloomberg, Goldman Sachs Global Investment Research

See Exhibit 45 for a screen of beaten-down Russell 3000 cyclicals with "quality" attributes. The list consists of Russell 3000 stocks in a cyclical industry group, excluding Energy, meeting the following criteria: a) market cap > \$2 billion, b) EBIT interest coverage > 5x, c) net leverage < 2x, d) consensus 2024E sales growth < nominal GDP (5%), e) forward 1-year sales growth slower than the stock's 10-year median, f) current NTM EV/EBITDA below the stock's 10-year median, and g) 2024E sales growth less than 2023E sales growth. The typical stock trades at 8x NTM EV/EBITDA and is expected to grow 2024 sales by 1% vs. 6% in 2023.

Exhibit 45: Beaten-down Russell 3000 cyclicals

			Market cap	YTD total	Conse sales g		EBIT interest	Net Debt/	NTM EV	EBITDA 10-year
Ticker	Name	Industry	(billions)	return	2023	2024	coverage	EBITDA	Current	median
TTC	Toro Company	Machinery	\$9	(23)%	10 %	5 %	9	1.2	13x	15x
JBT	John Bean Technologies Corporation	Machinery	3	19	7	5	43	0.4	13	13
DAL	Delta Air Lines	Passenger Airlines	23	8	15	5	10	1.8	5	6
CROX	Crocs	Textiles Apparel & Luxury Goods	5	(21)	12	5	7	1.6	7	11
ALK	Alaska Air Group	Passenger Airlines	5	(16)	6	4	10	0.3	4	6
ALLE	Allegion Public Limited Company	Building Products	9	2	8	3	9	2.0	12	14
ENS	EnerSys	Electrical Equipment	4	27	6	3	8	1.4	9	10
UAA	Under Armour	Textiles Apparel & Luxury Goods	3	(25)	4	3	396	0.0	8	20
AAP	Advance Auto Parts	Specialty Retail	3	(59)	2	2	6	1.9	9	10
TKR	Timken Company	Machinery	5	6	5	1	6	2.0	8	8
CVCO	Cavco Industries	Household Durables	2	29	3	1	177	-1.6	10	13
CAT	Caterpillar Inc.	Machinery	126	6	7	1	32	2.0	11	13
TEX	Terex Corporation	Machinery	3	22	5	1	9	0.5	5	8
VMI	Valmont Industries	Construction & Engineering	4	(36)	7	1	9	1.4	9	10
ALSN	Allison Transmission Holdings	Machinery	5	33	3	0	7	1.9	6	9
AYI	Acuity Brands	Electrical Equipment	6	11	3	(0)	21	0.2	10	12
JNPR	Juniper Networks	Communications Equipment	9	(12)	7	(2)	7	0.2	8	9
CMI	Cummins Inc.	Machinery	32	(6)	11	(2)	9	1.0	8	9
PII	Polaris Inc.	Leisure Products	5	(8)	(1)	(2)	5	1.9	7	8
BC	Brunswick Corporation	Leisure Products	5	6	3	(2)	7	1.9	7	8
AGCO	AGCO Corporation	Machinery	9	(11)	9	(3)	78	0.6	5	7
SANM	Sanmina Corporation	Electronic Equipment Instruments & Components	3	(13)	9	(5)	13	-0.6	5	6
PCAR	PACCAR Inc	Machinery	47	39	2	(8)	27	0.8	11	12
RUSHA	Rush Enterprises	Trading Companies & Distributors	3	15	(0)	(10)	9	1.8	8	11
ENPH	Enphase Energy	Semiconductors & Semiconductor Equipment	12	(66)	38	(12)	54	-0.7	17	38
List med	lian		\$5	2 %	6 %	1 %	9	1.2	8x	10x

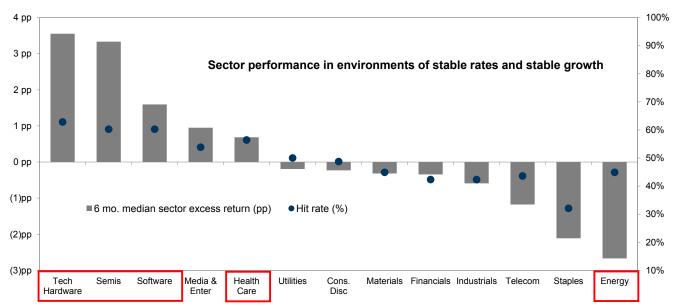
"End Game" — Sector expressions of our trade recommendations

We recommend investors own three sectors related to the three investment themes we recommend for 2024: Information Technology, Health Care, and Energy.

Own Information Technology for exposure to growth stocks with "quality"

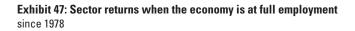
attributes. We recommend owning stocks that offer both fundamental growth and strong returns on capital based on our economists' outlook for stable economic growth and interest rates. At the sector level, Info Tech screens as the most resilient sector in these kinds of macroeconomic environments. Since 1995, Info Tech outpaced the S&P 500 by 3 pp in the median 6-month period when both interest rates and growth were stable (<u>Exhibit 46</u>). At the industry group level, Tech Hardware was the best performer, outpacing the index by nearly 4 pp. In addition, Info Tech has historically outperformed the index during environments when the US labor market was at full employment.

Exhibit 46: Sector performance during environments of stable rates and stable growth



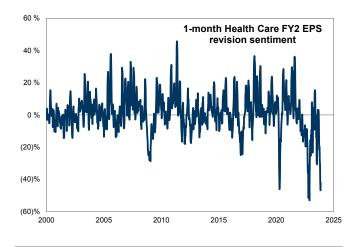
Source: Goldman Sachs Global Investment Research

Own Health Care, which is typically resilient when investors are concerned about the end of the cycle, has already weathered downgrades to fundamental forecasts, and trades at an undemanding valuation vs. history. Like the Info Tech sector, Health Care has historically outperformed the rest of the index when the unemployment rate was very low. During five episodes since 1978 when the US labor market was at full employment, Health Care outperformed the index by 2.5 pp on an annualized basis (Exhibit 47). From a fundamental perspective, revisions to Health Care EPS forecasts have been deeply negative recently, reaching levels not seen since the end of 2022 and the 2020 recession. Consensus EPS estimates for Health Care are in line with our top-down estimate, suggesting that the bulk of analyst revisions are behind us. Although valuations are not a strong indicator of near-term returns, the Health Care sector's relative P/E is undemanding vs. history, ranking in just the 20th percentile since 1990.



Energy Average annualized sector return vs. S&P Health Care 500 when US labor Information Technology market is at full employment Consumer Staples Industrials Materials Utilities Financials Comm Services Consumer Discretionary (6)pp 2 pp (4)pp (2)pp 0 pp 4 pp

Exhibit 48: Health Care revision sentiment has been extremely negative

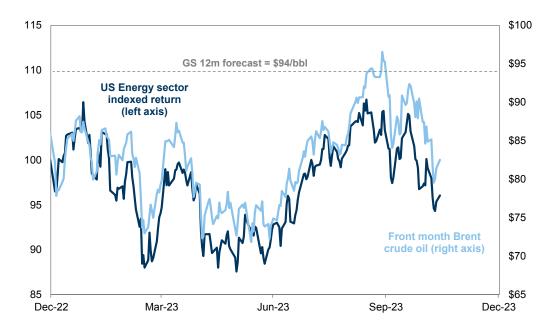


Source: Goldman Sachs Global Investment Research

Source: FactSet, Goldman Sachs Global Investment Research

Energy is a sector-level expression of our recommendation to own cyclicals that are pricing overly pessimistic growth. After lagging the S&P 500 by 13 pp during the last four weeks, the relative P/E valuation of the Energy sector vs. the market sits in just the 5th percentile vs. history since 1990. From a fundamental perspective, Energy earnings should benefit from rising oil prices next year. Energy sector returns closely track crude oil prices, and our commodities strategists expect Brent crude will rise to \$94 during the next 12 months (Exhibit 49). In terms of the macroeconomic outlook, the Energy sector screens as attractive if the US economy avoids recession as our economists forecast. During five episodes when the economy was at full employment since 1978, Energy has outperformed the S&P 500 by 3 pp on an annualized basis.

Exhibit 49: Energy sector returns closely track the price of oil



	Total		ensus ard P/E		lative to P 500	EPS yield gap vs. real 10-year US Treasury			
0	return	30-year		0	30-year	Querrant	30-year		
Sector	(YTD)	Current	%ile rank	Current	%ile rank	Current	%ile rank		
Comm Services	49 %	17x	28 %	0.9x	1 %	387bp	56 %		
Energy	(1)	11	12	0.6	5	725	22		
Real Estate	(0)	15	21	0.8	7	452	85		
Consumer Staples	(3)	19	54	1.0	11	324	73		
Financials	2	13	58	0.7	12	540	77		
Health Care	(5)	17	56	0.9	20	382	66		
Materials	4	17	65	0.9	21	365	74		
Industrials	8	17	85	0.9	40	356	89		
Utilities	(10)	15	84	0.8	55	451	93		
Info Tech	50	26	77	1.4	67	167	78		
Consumer Discretionary	33	23	88	1.2	77	210	93		
S&P 500	19 %	19	79			315	82		

Exhibit 50: S&P 500 sector valuations vs. history

Appendix: Overlap between our investment recommendations

Exhibit 51: Overlap between our recommended investment strategies ACN AKAM AMT ANSS APH AVGO AWK CDW CHTR CMCSA CHD EOG CTAS CTSH ELV EPAM FAST FICO GL HD ICE **MNST LKQ** MPC MPWR MSCI MTD **High Quality** ORLY PEP POOL PAYX (GSTHQUAL) RJF RMD ROL SCHW SHW **SNPS** STE TFC TMUS TSCO TYL UNH ZTS ANET CDNS GOOGL **IDXX** META MSFT ABNB ADBE ADSK ALB AMAT CMG EQT EW **Growth stocks KEYS** LLY LRCX LULU with high returns NOW **NVDA** ODFL ON on capital RHI TXN VRTX ENPH AAP AGCO ALK ALLE ALSN AYI BC CAT СМІ CROX cvco DAL **Beaten-down** ENS JBT **JNPR** PCAR cyclicals PII RUSHA SANM TEX TKR TTC UAA VMI

Exhibit 51 shows the overlap between our three recommended investment strategies.

GS MACRO OUTLOOK 2024

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15 November 2023

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Reg AC

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