S&P 500 Target Update

New year-end target of 5400 (up from 5000)

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Equity and Quant Strategy
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Market direction: higher. Our conviction: lower.

We raise our S&P 500 year-end target to 5400 (implying 5% upside from current levels) from 5000 primarily on tweaks to our fair value assumptions (more below/inside). But our bullish conviction has cooled since publishing our 2024 Outlook amid improving sentiment across Wall Street. The Sell Side Indicator, our key sentiment gauge, has seen increasing equity allocations and is now firmly neutral (see SSI) and we lower its weight in our framework. But a neutral call is rarely correct (Exhibit 3), and the net message of our market timing framework is still, in one word, UP.

Realistic bull / bear case fair value: 4100 to 6500

We adjusted inputs to our fair value (FV) model, another of our five target indicators. The equity risk premium (ERP) is likely to be lower than recent history, plus normalized earnings is likely to be higher (more below). The S&P 500's mix shift since the 80s is a reason for bullishness: the index has half the debt, lower EPS volatility, and has shifted from 70% asset-intensive to 50% asset-light companies today. Our base case inputs (heightened real rates, lower ERP like in the 80s and 90s) yields a target of 5050 with a bear / bull range of 4100 to 6500 (see inside for details).

EPS: 4Q beat; 2024 upside; more predictable from here

Margins have held up despite big swings in rates and inflation, 4Q EPS surprised by 4%, and 2024 EPS estimates have flat-lined, flaunting typical early-year cuts; plus an additional boost from better GDP (see Econ) is likely. Leading indicators (PMI, Korea exports, rail vol.) argue for upside to our 2024 EPS forecast of $235. Consensus' $243 now seems reasonable. BofA analysts are 2% above bottom-up consensus and the gap has widened. We increase our 2025 normalized earnings assumption from $230 to $240 to accommodate these changes. As we exit an era of arbitrary, low-quality growth from free capital and global arbitrage, corporates have nimbly shifted focus to productivity.

Sentiment: euphoric on AI, GLP-1, but not much else

Bull markets end with euphoria. The Sell Side has grown more bullish on equities as highlighted above, but pension fund allocations to public equity are still at 20yr lows, and positioning in up-market themes like high beta stocks and cyclical sectors is at bearish extremes (see ownership report). Areas of euphoria are thematic and secular: AI, GLP-1, etc. We expect the market to broaden beyond these themes, but caution that passive inflows could drive continued momentum in US growth/mega-cap stocks.

Market pullback is likely, but so is a year-end rally

On average since 1929, 5% pullbacks have occurred 3x/yr and 10% corrections have occurred once per year. We are due after four months with no meaningful drop, and our Chief US Technician sees bearish divergences (see Technicals). Also, the VIX has increased by 25% from Q2 to November of prior presidential election years. But post-election day, returns have generally been positive from the removal of uncertainty.

Exhibit 1: Our year-end target is 5400 vs. consensus 4897

BofA vs. consensus S&P 500 year-end target (as of 2/20/2024)

	2024 year-end target
BofA	**5400**
Avg.	4897
Median	5000
High	5400
Low	4200
Sample size	21

Source: Bloomberg, BofA US Equity & Quant Strategy

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Timestamp: 03 March 2024 06:00AM EST

New S&P 500 target = 5400 (from 5000)

5% upside through year end, forecast implies a 13% year

We raise our S&P 500 2024 year-end target to 5400 (from 5000). We adjust the weights of our target models to reflect a greater weight on our fundamental models (Fair Value Model to 30% from 15% previously, Earnings Surprise Indicator to 20% from 15% previously) and a lower weight in our Sell Side Indicator (to 30% from 40%) amid a shift from bullish to neutral sentiment, where sentiment is a bigger driver of returns at extreme levels. Our remaining target model weights shift to 10% from 15%. More details on each target indicator are included below.

Exhibit 2: 2024 S&P 500 year-end forecast = 5400
S&P 500 2024 Target Models

Model	Category	Time Horizon	2024 Target	Expected Return (Annualized)	Current Weight in Forecast
BofA Fair Value Model	Fundamental/Valuation	Medium Term	5,053	-2.0%	30%
Sell Side Indicator	Sentiment	Medium Term	5,706	13.4%	30%
Earnings Surprise Indicator	Fundamental/Sentiment	Short-term	5,523	9.1%	20%
Long-term Valuation Model	Valuation	Long-term	5,247	2.6%	10%
12-Month Price Momentum	Technical	Medium Term	5,543	9.6%	10%
		Official S&P 500 Target	5,400	+6.2%	

Source: BofA US Equity & US Quant Strategy; Short-term = 1-3 months, medium-term = 1 year, and long-term = 5+ years. We calculate our price target based on S&P 500 price as of 3/01/2024, and round to closest 50.

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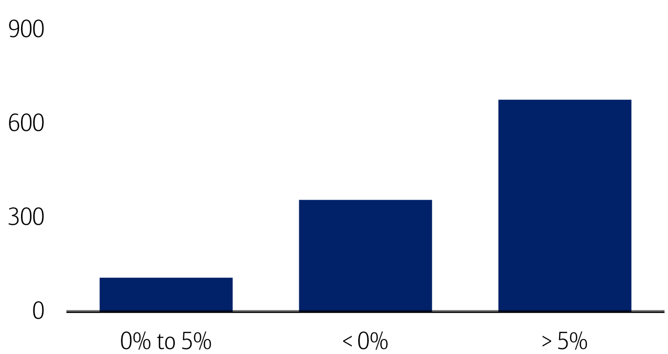
Bull case: inflows, better earnings, lower risk premium

Our sentiment model is still the most bullish of our indicators but has dropped to neutral territory. A neutral call on the market is rarely correct: the S&P 500 has been 6x more likely to gain > 5% than low single digits over a 12m period, and 3x more likely to fall (Exhibit 3). Sentiment by other barometers remains bearish which is bullish, as is the potential for a wall of retiree's cash to move into equity yield if the Fed cuts rates.

A key driver of our higher target is a higher fair value output of 5050 (up from 4400) that acknowledges the mix shift of the S&P 500 to higher margin, lower earnings risk industries, evidenced by continued margin stability despite a surge in the volatility of interest rates and inflation. We see potential for improved margin stability from here as companies shift from global cost arbitrage and free capital-driven growth to efficiency/productivity. See RVCS for a deeper dive into re-thinking our Fair Value inputs.

Exhibit 3: A neutral call is rarely right
# of months since 1928 in which 12m fwd S&P 500 returns were 0-5%, <5%, or >5%



Source: BofA US Equity & Quant Strategy, FactSet

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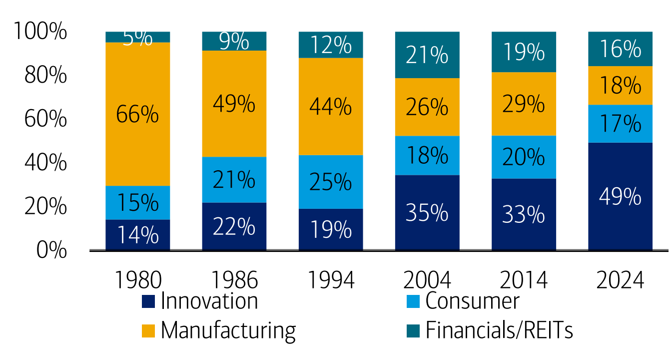
Exhibit 4: 50% of S&P 500 is asset-light sectors today vs. <15% in 1980; Manufacturing is <20% of index today vs. 66% in 1980
% of S&P 500 market cap by sector, 1980-present (Asset light / Innovation = Tech, Comm. Services ex-Telecom & Health Care, Consumer =Staples/Discretionary, Manufacturing/Asset Intensive/Capex = Industrials, Materials, Energy, Utilities, Telecom)



Source: Haver Analytics/S&P Analyst Handbook, FactSet, BofA US Equity & Quant Strategy

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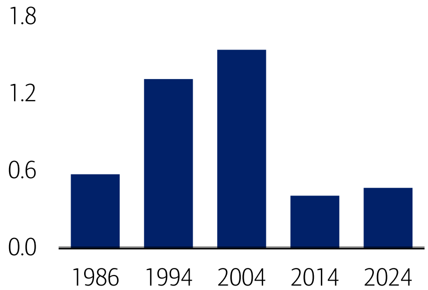
Exhibit 5: Leverage lower than 1990s-early 2000s
S&P 500 non-Fins net debt/Equity, 1986-present



Source: FactSet, BofA US Equity & Quant Strategy
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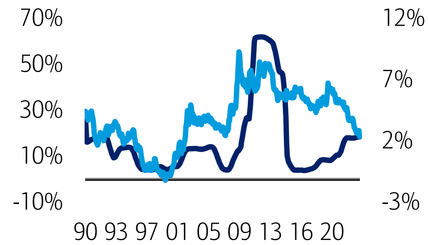
Exhibit 6: ERP lower on lower EPS volatility
S&P 500 4yr rolling earnings volatility vs. Normalized ERP (RHS) (1990-2/2024)



Source: Bloomberg, FactSet, Haver Analytics, BofA US Equity & US Quant Strategy
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Exhibit 7: Prior cycles of lower EPS risk saw lower ERP
Average Norm. ERP and real rates given different levels of earnings volatility (since 1990)

4yr earnings vol (since '90)... Greater than...	Less than...	Avg. ERP	Avg. Real Rates
0%	5%	2.5%	2.4%
5%	10%	3.3%	1.8%
10%	15%	3.8%	2.3%
15%	20%	3.4%	2.7%
20%	65%	6.8%	0.5%

Source: Bloomberg, FactSet, Haver Analytics, BofA US Equity & US Quant Strategy. Border indicates current eps volatility range.
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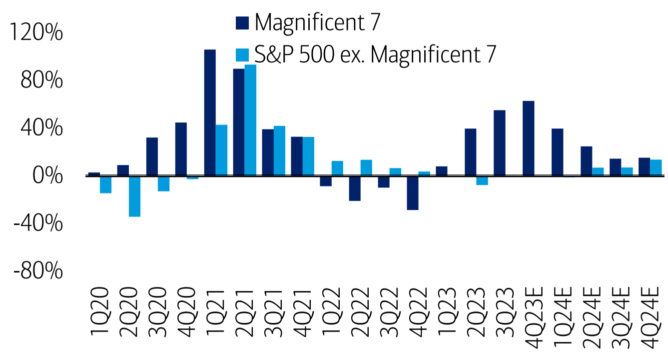
Broadening expected: The S&P 500 has remained stubbornly narrow: just four stocks drove 45% of February's gains. But we expect leadership to broaden as the gap between earnings growth of the Magnificent 7 and the rest of the S&P 500 begin to narrow. Also see Breadth FAQs.

Exhibit 8: Magnificent 7 earnings growth outpaced "Other 493" in 2023, but the gap is narrowing...
YoY qrtly earnings growth of Magnificent 7 vs. Other 493 (1Q20-4Q24E)



Source: BofA US Equity & Quant Strategy, FactSet. Current constituents, consensus estimates.
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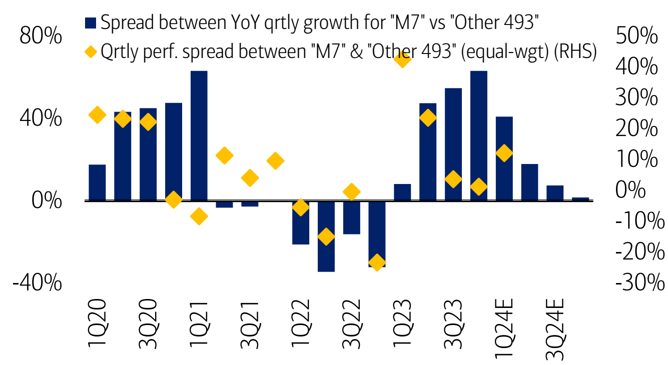
Exhibit 9: ...suggesting Mag 7 outperformance may be waning
YoY qrtly earnings growth spread between Magnificent 7 & Other 493 vs. equal-weighted performance spread (1Q20-4Q24E)



Source: BofA US Equity & Quant Strategy, FactSet. Current constituents. 1Q24 perf to March 1.
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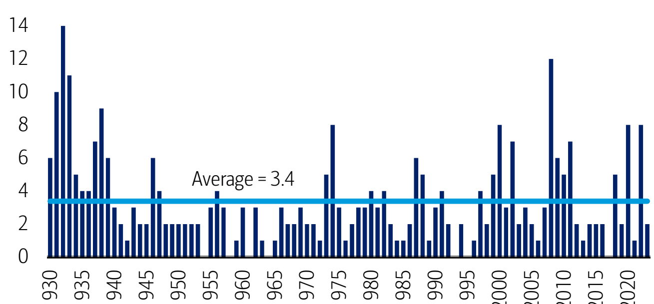
Near-term pullback, year-end rally

5% pullbacks have occurred 3x/yr and we have not had one in four months. But that and typical pre-election volatility is usually followed by a rally.

Exhibit 10: 5% pullbacks in the S&P 500 have occurred 3x per year
Frequency of 5% pullbacks since 1930



Source: Bloomberg, BofA US Equity & US Quant Strategy
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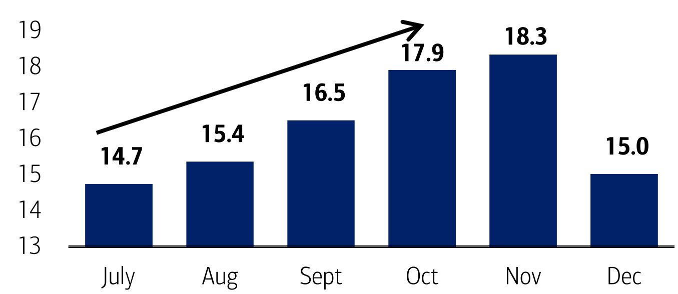
Exhibit 11: 25% increase in volatility from July-Nov of election years
Average monthly volatility (VIX 1990-present, monthly average of daily S&P 500 return volatility 1928-1989) for US election years since 1928



Source: Bloomberg, FactSet, BofA US Equity & Quantitative Strategy
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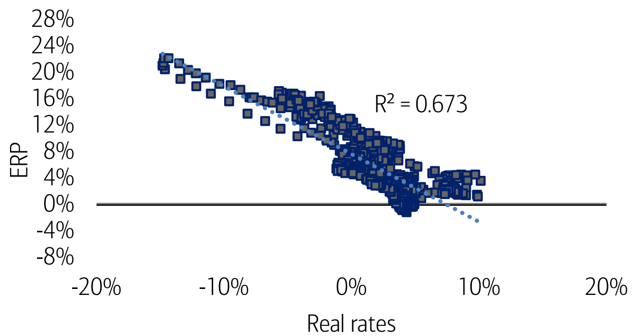
S&P 500 Target Inputs

#1: BofA Fair Value Model

Exhibit 12: S&P 500 2024 Fair Value = 5053
BofA Fair Value Model (2024)

BofA Fair Value Model (2024)	
Normalized 2025 EPS	$240
Nominal Long-Term Risk-Free Rate	4.50%
Assumed Long-Term Inflation	2.25%
- Normalized Real Risk-Free Rate	2.25%
= Equity Risk Premium	250bp
+ Fair Real Cost of Equity Capital (Ke)	4.75%
= Fair Forward PE (1 ÷ Fair Ke)	21.1x
2024 Year-End Target (Fair PE × Normalized 2025 EPS)	**5,053**

Exhibit 13: Historically, higher real rates = lower ERP
Historical relationship between our normalized ERP vs. real rates (1945-2/24)



Source: BofA US Equity & Quant Strategy, Global Financial Data, Bloomberg.
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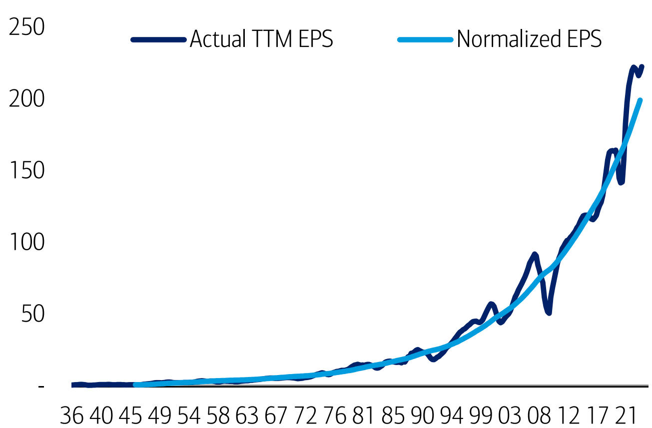
S&P 500's fair value = 5053

We make the following assumptions for our Fair Value Model based on the current market environment:

- **Real rates:** we use 2.25% normalized real risk-free rates, in line with the long-term average since 1970 and above the current real rate of roughly 2.0%. We continue to see upside risk to higher real rates, a key driver for our preference for equities over fixed income.
- **Equity risk premium (from 300bp to 250bp):** the S&P 500 ERP has been negatively correlated with real rates. The ERP averaged 570bp from post-GFC to now, but we believe a lower ERP is justified given (a) higher real rates, (b) increased earnings quality and (c) a shift in focus from lower quality sources of growth to efficiency / productivity. We lower our ERP from 300bp to 250bp, which was the average ERP in the 1980s/90s, a period marked by productivity gains and companies growing labor-light.
- **Normalized EPS (from $230 to $240):** Normalized 2025E EPS is $240 based on a long-run log-linear regression, incorporating cyclical and secular trends. We adjust our normalized earnings to reflect the output based on varying start dates. A long-run log linear regression yielded 2025 forecasts ranging from $225 to $245 (Exhibit 15). We forecast normalized EPS of $240 in 2025 based on the median.

Exhibit 14: Actual earnings are elevated vs. full time series trend
S&P 500 EPS vs. normalized EPS based on log-linear regression since 1936



Source: BofA US Equity & Quant Strategy, FactSet, Haver Analytics. Pro-forma EPS used since 1988, Operating EPS used between 1977-1988, GAAP EPS (adjusted for write-offs) used from 1936-1977.
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Exhibit 15: Normalized EPS output sensitive to start date - $240 median in 2025
Normalized EPS estimates based on log-linear regression of actual earnings starting in different decades

Regression begins in...	2024 Norm EPS	2025 Norm EPS
1936	$216	$230
1950	$212	$226
1960	$225	$241
1970	$227	$242
1980	$224	$239
1990	$228	$244
2000	$219	$233

Source: BofA US Equity & Quant Strategy, FactSet, Haver Analytics.
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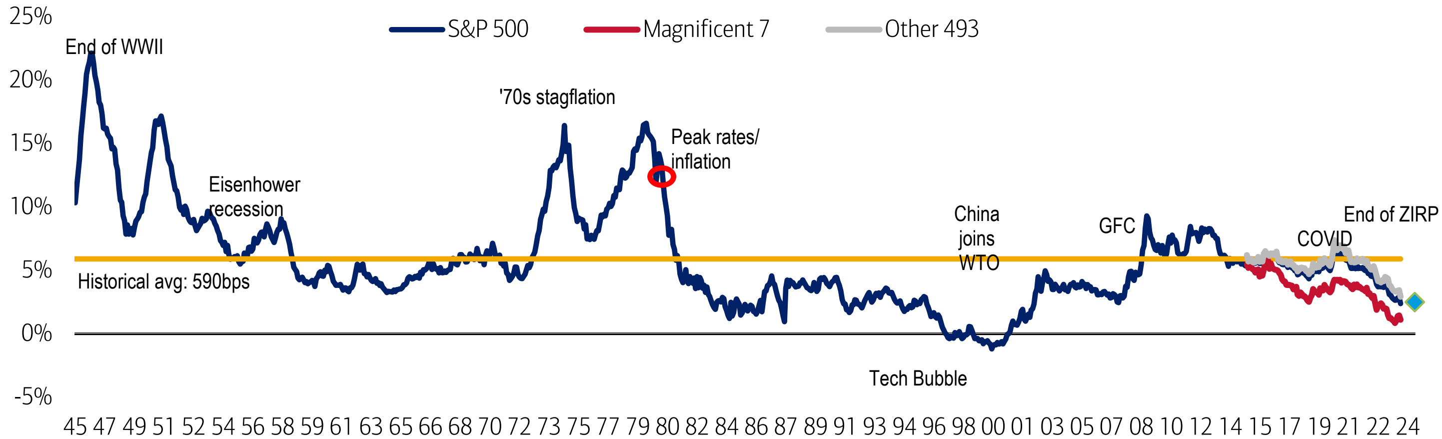
Exhibit 16: Today's ERP is lower than its long-term average, but with justification
S&P 500 normalized equity risk premium 1950-present (and forecast for year-end 2024), with ERP for Magnificent 7 vs. rest of index from 2015-present



Source: Bloomberg, FactSet, Haver Analytics, BofA US Equity & US Quant Strategy. Normalized ERP is calculated as the spread between the normalized earnings yield and real risk-free rate, where normalized EPS is based on a log linear regression of a blend of S&P 500 pro-forma EPS and operating EPS. The real rate is the difference between 1) 10-yr Tsy yield and 2) 10-yr breakeven, where prior to 1998, fwd 1-yr CPI was used as a proxy, which showed the strongest correlation to the 10-yr breakeven. ERP for the "Magnificent 7" and "Other 493" was calculated using the forward PE premium/discount of the two groups vs. the overall index

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What's the right ERP to use today?

Today's corporate backdrop is more similar to the post-Volcker efficiency era, in our view: post peak rates and inflation, a higher real rates regime, with a focus on productivity/efficiency/Tech tools.

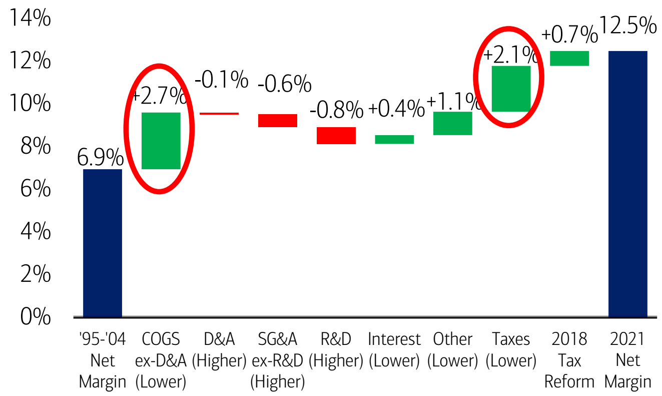
Highest: Post-GFC to 2021: high EPS volatility, uncertainty about Quantitative Easing/Zero-Interest-Rate-Policy exit strategy, brewing geopolitical tensions and the beginnings of deglobalization. A good chunk of EPS growth was manufactured from buybacks funded by cheap capital. **Average ERP: 6ppt.**

Higher: 2002 to 2007: China joined the World Trade Organization in 2001 and ushered in a decade of global arbitrage: import costs, labor and taxes shrank as a percentage of sales, contributing to S&P 500 margin expansion (Exhibit 17). But risks about pace and sustainability were apparent – i.e., how much corporate tax arbitrage is too much, will the US remain friendly with other regions vying for superpower, etc. **Average ERP: 3.4ppt.**

Lower: **Post-Volcker efficiency era 1982 to 1998**: Two years after a peak in inflation (similar to today, given mid-2022 peak). Characterized by steady gains in labor efficiency (Exhibit 18) via personal computing, robotics / automation. **Average ERP: 2.5ppt.**

Lowest: 1999 to 2001: A speculative bubble. **Average ERP: -0.1ppt.**

Exhibit 17: Globalization contributed to margin expansion in the 2000s
S&P 500 ex-Fins change in net margin contribution from 1990s to 2021



Source: FactSet, BofA US Equity & Quant Strategy

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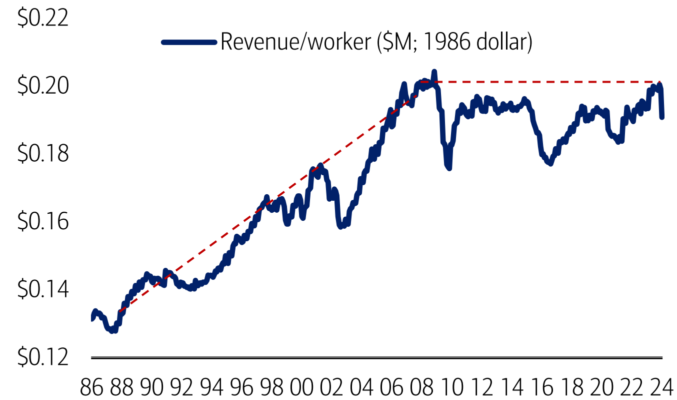
Exhibit 18: 1980s-to early 2000s: labor efficiency gains
S&P 500 companies' revenue per worker ($M 1986 dollar)



Source: BofA US Equity & Quant Strategy, Bloomberg, FactSet

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Fair Value base case: 5050: Our base case is predicated on elevated real rates (2.25%) but an ERP similar to that of the 80s/90s of 250bp, with $240 normalized earnings.

Realistic worst case: 4100: lower real rates (1.0%) on economic weakness with a higher ERP (450bp) and normalized earnings of $225.

Realistic best case: 6500: slightly lower real rates (1.5%) and an ERP of the 80s/90s (2.5%), yielding a real cost of capital below 4ppt. Normalized earnings of $260 based on trough earnings in mid-2023 grown at trend 8% growth.

Exhibit 19: S&P 500 fair value given cost of equity and EPS
Fair value = (1/cost of equity)*2025 EPS

Real cost of equity (real rate + ERP)	2025 Normalized EPS								
	$225	**$230**	**$235**	**$240**	**$245**	**$250**	**$255**	**$260**	**$265**
4.00%	5625	5750	5875	6000	6125	6250	6375	6500	6625
4.25%	5294	5412	5529	5647	5765	5882	6000	6118	6235
4.50%	5000	5111	5222	5333	5444	5556	5667	5778	5889
4.75%	4737	4842	4947	5053	5158	5263	5368	5474	5579
5.00%	4500	4600	4700	4800	4900	5000	5100	5200	5300
5.25%	4286	4381	4476	4571	4667	4762	4857	4952	5048
5.50%	4091	4182	4273	4364	4455	4545	4636	4727	4818
5.75%	3913	4000	4087	4174	4261	4348	4435	4522	4609
6.00%	3750	3833	3917	4000	4083	4167	4250	4333	4417
6.25%	3600	3680	3760	3840	3920	4000	4080	4160	4240
6.50%	3462	3538	3615	3692	3769	3846	3923	4000	4077
6.75%	3333	3407	3481	3556	3630	3704	3778	3852	3926
7.00%	3214	3286	3357	3429	3500	3571	3643	3714	3786
7.25%	3103	3172	3241	3310	3379	3448	3517	3586	3655
7.50%	3000	3067	3133	3200	3267	3333	3400	3467	3533
7.75%	2903	2968	3032	3097	3161	3226	3290	3355	3419
8.00%	2813	2875	2938	3000	3063	3125	3188	3250	3313

Source: BofA US Equity & Quant Strategy

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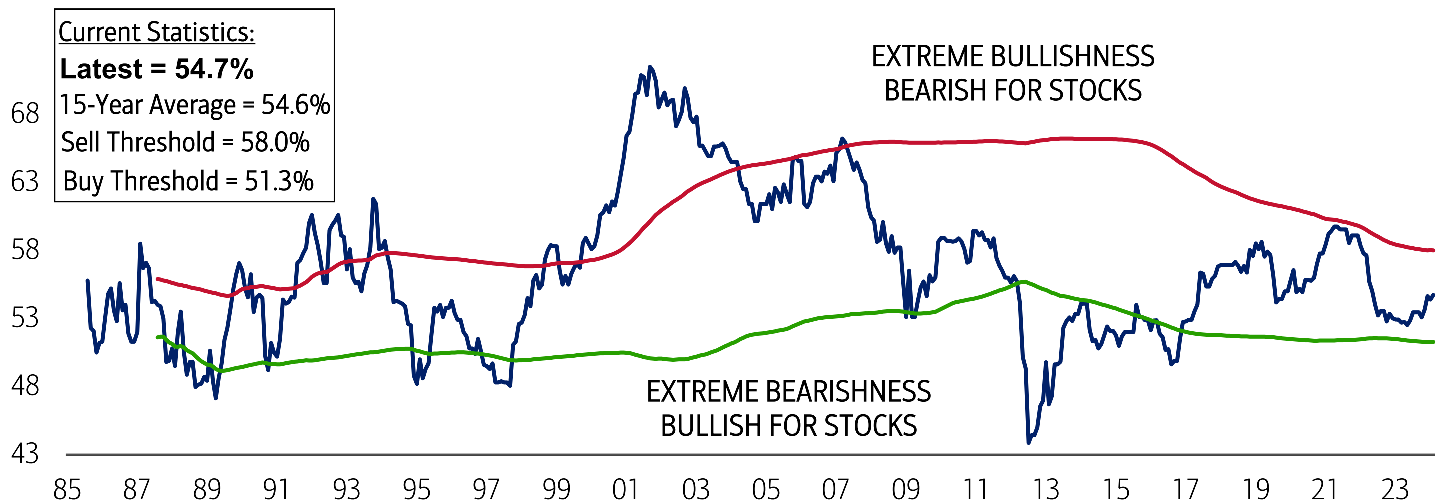
#2: Sell Side Indicator (SSI)

Firmly neutral: +13% over next 12mos (5700 by year-end)

The SSI is a contrarian sentiment indicator tracking US sell side strategists' average recommended allocation to stocks based on a monthly survey. It has been bullish when Wall Street strategists were bearish, and vice versa. The SSI ticked up 33bp to 54.7% in February, moving slightly above its 15-year average (see Sell Side Indicator). This level implies price returns of +13% over the next 12 months. Historically, when the indicator has been here or lower, 12m forward S&P 500 returns were positive 94% of the time (vs. 81% overall). *Caveat: the life of this indicator spans a period of higher equity returns than prior cycles (average S&P 500 12m fwd. price returns of 9.6% since Aug. 1985 (when SSI data begin) vs. 6.7% based on data from 1929 to 1985).*

Exhibit 20: Equity sentiment ticked up 33bp in February, moving above its 15yr average
Sell Side Indicator, 8/1985-2/2024



Source: BofA US Equity & Quant Strategy Note: Buy and Sell signals are based on rolling 15-year +/- 1 standard deviation from the rolling 15-year mean. A reading above the red line indicates a Sell signal and a reading below the green line indicates a Buy signal. The BofA Sell Side Indicator is intended to be an indicative metric only and may not be used for reference purposes or as a measure of performance for any financial instrument or contract, or otherwise relied upon by third parties for any other purpose, without the prior written consent of BofA Global Research. This indicator was not created to act as a benchmark.

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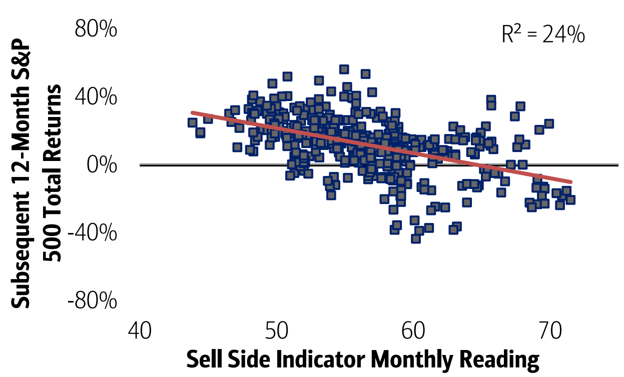
Exhibit 21: Sell Side Indicator has historically been a reliable contrarian indicator
Sell Side Indicator Monthly Readings & Subsequent 12-Month S&P 500 Total Return (8/85-2/24)



Source: BofA US Equity & Quant Strategy, Haver Analytics

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Exhibit 22: Sell Side Indicator has a higher R-squared than most other single factor market timing models
Predictive Power of Selected Indicators Forecasting 12-Month S&P 500 Returns (8/85-2/24)

Indicator	R2
Sell Side Indicator	24%
Sell Side Indicator at extremes (Buy or Sell)	34%
S&P 500 Dividend Yield	11%
Proforma PE	10%
M1 Growth	3%
Fed Model (EPS Yield - 10-Yr Treasury)	1%
Adj. Fed Model (EPS Yld - Real 10-Yr Tsy Yld)	1%
10-Yr Treasury Yield	0%
3-Mo T-Bill Rate	0%
GAAP PE	0%
M2 Growth	0%
BBB to Treasury Spread	0%
Yield Curve (10-Yr - 3-Mo)	0%

Source: BofA US Equity & Quant Strategy. Haver Analytics

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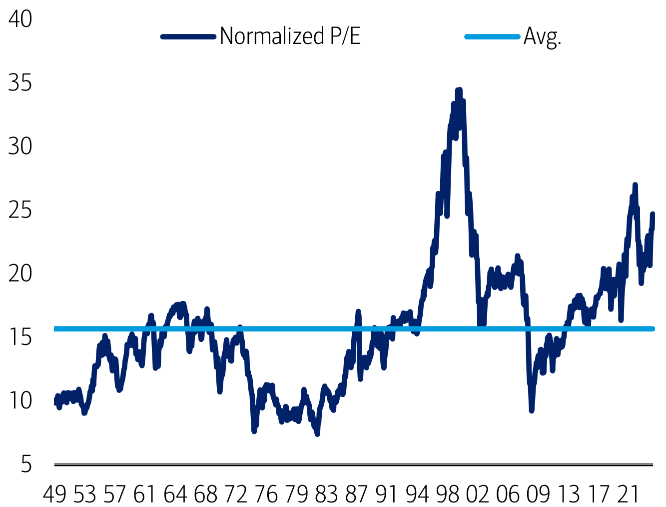
#3: Long Term Valuation Model

10-year return forecast = +3% annualized price returns (5250 by year-end)

Valuation may not be a catalyst, but has had strong predictive power over long-term returns. Today's multiple of 25x normalized earnings implies +2.6%/yr annualized returns over the next decade based on the historical relationship.

Exhibit 23: At 25x, the S&P trades 60% rich vs. the long-term avg.
S&P 500 Normalized P/E Ratio (1987-2/24)



Source: BofA US Equity & US Quant Strategy, FactSet, Haver Analytics

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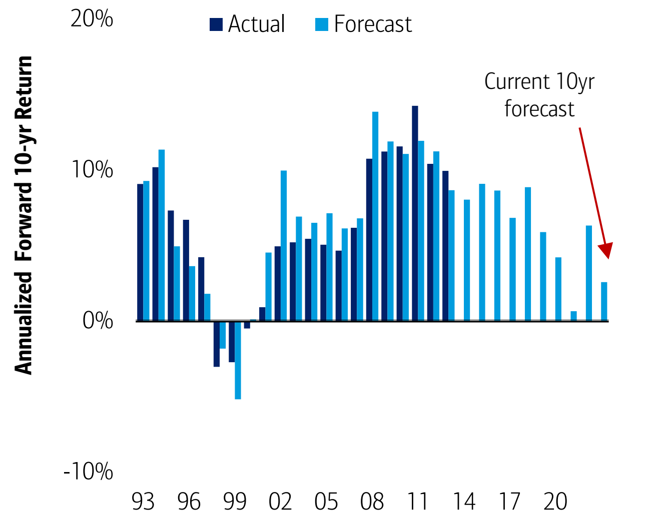
Exhibit 24: Valuation currently suggests 3% p.a. price returns over the next decade
S&P 500 annualized forward 10-yr return: actuals vs. model forecast (1993-2/2024)



Source: FactSet, Haver, BofA US Equity & Quant Strategy

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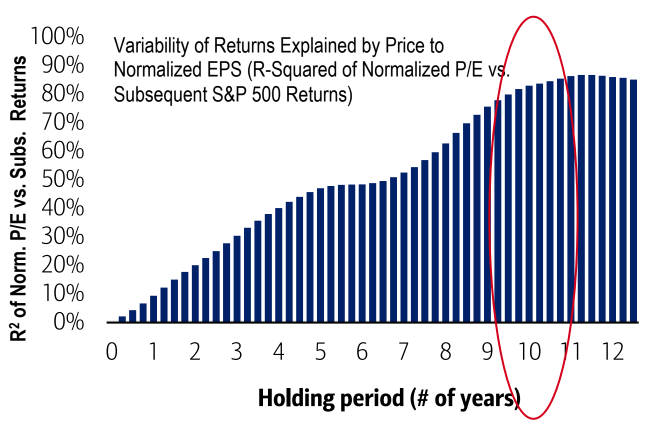
Exhibit 25: Valuation is almost all that matters for long-term stock returns
Price to normalized earnings predictive power on subsequent holding period returns (since 1987)



Source: BofA US Equity & US Quant Strategy, Haver Analytics, FactSet

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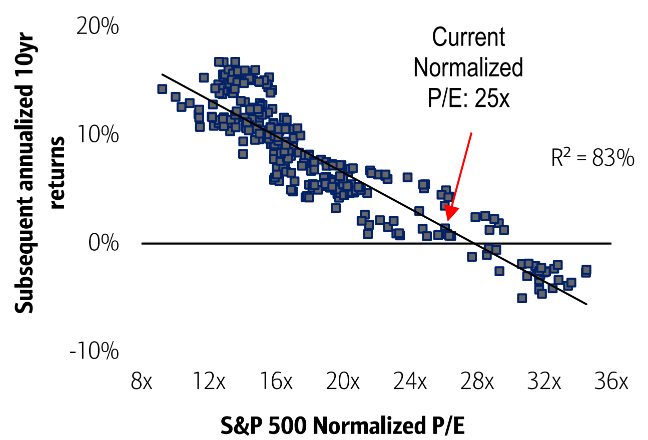
Exhibit 26: Valuations explained >80% of 10yr returns
S&P 500 normalized P/E vs. subsequent annualized returns (since 1987, as of 2/24)



Source: BofA US Equity & US Quant Strategy, Haver Analytics, FactSet

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#4: Earnings Surprise directional indicator

"Neutral" earnings surprise backdrop: S&P 500 at 5500 by year-end

Stocks discount expected growth, but react to surprises. Our earnings surprise directional indicator is based on a set of leading indicators incorporating macroeconomic data, BofA vs. consensus, and corporate guidance (Exhibit 27). Guidance is weak (likely due to early year conservatism), but BofA analysts are positive on earnings vs. consensus. The Economic Surprise Index is well off peak but more positive than negative. We thus consider the current environment "Neutral."

Exhibit 27: We see a "Neutral" earnings surprise backdrop based on leading indicators
BofA Earnings Surprise directional indicator

Indicators	Direction	Current	Historical avg.	z-score
Economic Surprise Index	Neutral	0.1%	0.0%	0.0
Guidance ratio	Negative	0.5	0.8	-0.4
BofA analysts vs. consensus (2024 EPS)	Positive	2.0%		
BofA Strategy view	**Neutral**			

Source: BofA US Equity & Quant Strategy, Bloomberg, FactSet
Note: BofA Strategy view is not based on quantitative metrics, but based on our discretionary view on what the leading indicators are suggesting *Based on aggregate earnings amount, not average or median; BofA analyst forecasts account for ~90% of the S&P 500 stocks and ~95% of market cap. We use consensus estimates for stocks not covered by BofA analysts

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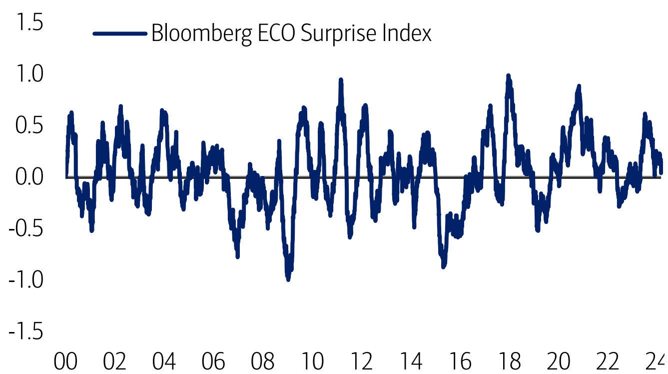
Exhibit 28: Economic data remains more positive, but well off its peak
Bloomberg ECO Surprise Index (2000-present)



Source: Bloomberg

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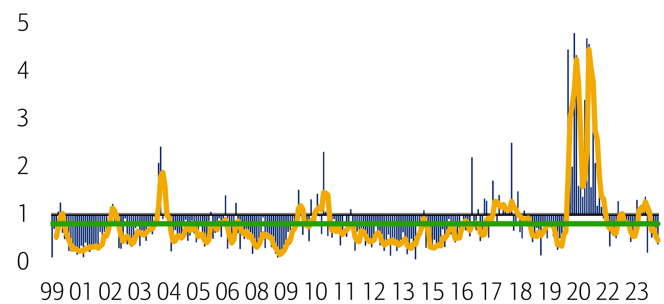
Exhibit 29: Our 3m guidance ratio is weak at just 0.5x
S&P 500 Management Guidance Ratio (# Above vs. Below Consensus) – as of 2/29/24



Source: BofA US Equity and Quantitative Strategy, Bloomberg

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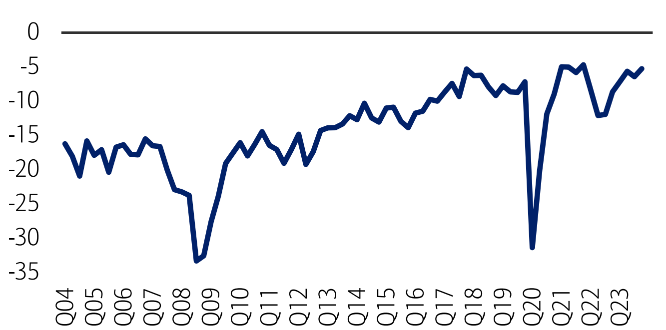
Exhibit 30: More positive earnings calls, suggesting weaker guides may be due to conservatism
Avg. negative sentiment score for S&P 500 companies (2004-4Q23 as of 2/8/24)



Source: BofA Global Research, FactSet

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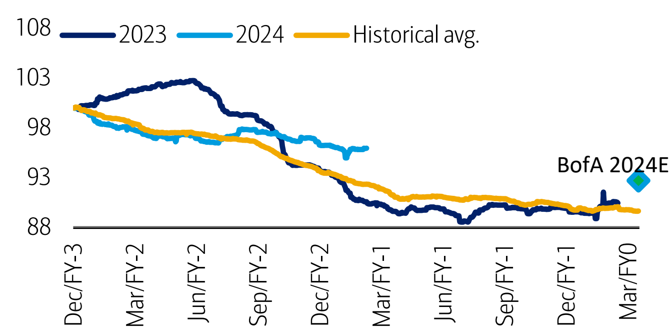
Exhibit 31: …and Consensus 2024 EPS is holding up despite seasonal weakness
S&P 500 historical FY2 EPS revisions vs. 2023 consensus EPS (2023-24 as of 3/1/24)



Source: BofA US Equity & Quant Strategy, FactSet; Note: historical average based on 2001-2022

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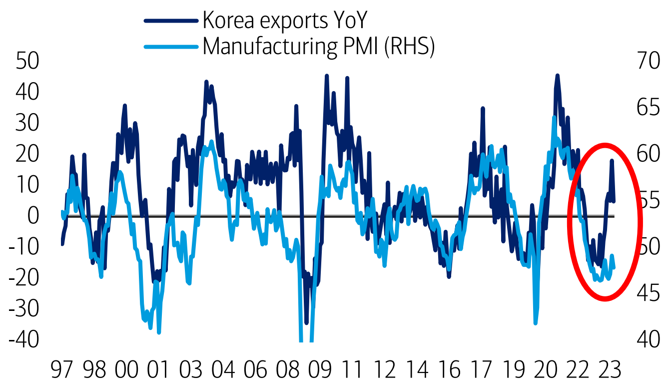
Leading indicators point to an earnings upcycle

Exhibit 32: Korea exports soared, pointing to a manufacturing recovery
Korea exports YoY vs. ISM Manufacturing PMI (1997-2/24)



Source: Bloomberg, BofA US Equity & Quant Strategy

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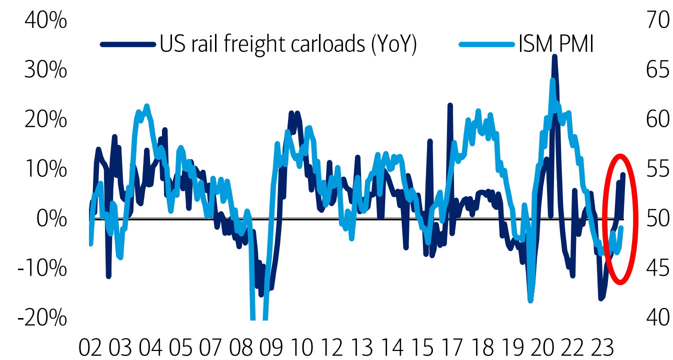
Exhibit 33: Rail freight carload growth jumped, pointing to PMI upside
US rail freight carloads YoY vs. ISM Manufacturing PMI (2002-2/24)



Source: Bloomberg, BofA US Equity & Quant Strategy

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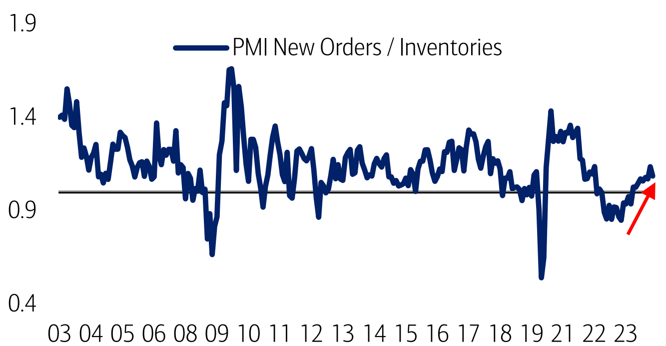
Exhibit 34: Evidence of a re-stocking cycle
ISM Manufacturing PMI new orders / inventories (2003-2/24)



Source: Bloomberg, BofA US Equity & Quant Strategy

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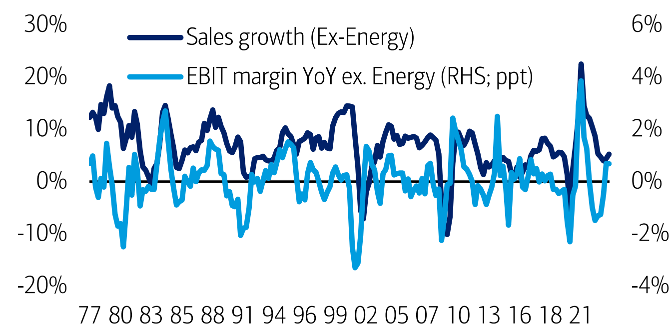
Exhibit 35: Margins inflected higher even without accelerating sales
S&P 500 ex. Energy & Financials sales growth YoY vs. EBIT margin YoY (1977-4Q23E)



Source: FactSet, BofA US Equity & Quant Strategy

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Return distribution based on surprise classifications

The distribution of 12-mo. S&P 500 price returns since 1928 suggests that returns have been less than +1% one third of the time, between 1-15% one third of the time and >15% one third of the time. The median annual return in each of these three ranges is presented in the table below. We use the median returns in each range as the three possible inputs into our S&P 500 target from our qualitative earnings surprise directional indicator, based on whether our read on potential earnings surprise is Negative, Neutral or Positive.

Exhibit 36: Range of 12-mo. S&P 500 price returns since 1928
Returns have been negative one-third of the time, >15% one-third of the time, and between 1-15% the remaining third of the time

	% of returns	Median 12m return in range	Classification
<1%	34%	(11%)	Negative
Between 1-15%	33%	9%	Neutral
>15%	34%	25%	Positive

Source: Bloomberg, BofA US Equity & US Quant Strategy

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#5: 12-month Price Momentum

Reversion to mean suggests 12m returns of +10% (5550 by year-end)

This technical framework is based on the notion that returns revert to "normal". The last 12 months' return was +28% as of February 29. This is 1 standard deviations above the historical average. This would imply a projected 12-month return of 9.6%, all else equal.

Exhibit 37: The last 12-mo. price return of +28% is 1.02 std. dev above average and implies a projected 12-month price return of 9.6%, all else equal.

Historical 12-month S&P 500 price return z-scores by range and average subsequent 12-month S&P 500 price returns, as of 2/24

	-2 or Less Std Dev Below Avg.	-1 to -2 Std Dev Below Avg.	-1 to 0 Std Dev Below Avg.	0 to +1 Std Dev Above Avg.	+1 to +2 Std Dev Above Avg.	+2 or More Std Dev Above Avg.
Average 12-Month Return	30.9%	10.8%	9.4%	7.9%	9.6%	-0.2%
Standard Deviation of 12m Returns	13.9%	20.5%	18.7%	14.0%	14.5%	16.5%
Probability of Negative Returns	0.0%	28.6%	27.5%	29.3%	23.2%	60.0%
Percent of observations	0.7%	5.0%	34.7%	42.8%	7.3%	0.4%

Note: Based on S&P 500 return data since 1928, with cumulative average and z-scores beginning in 1933 when at least 5 years of data history is available

Source: FactSet, BofA US Equity & US Quant Strategy

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Methodology

Guidance Ratios

Earnings guidance: We track the number of instances of above- vs. below-consensus management guidance for earnings over the last three months for S&P 500 companies. If a company issues changes to its outlook more than once in a one-month period, we incorporate all instances of guidance into our aggregate number. The ratio also includes all instances of above- or below-consensus earnings guidance issued by a company (for example, if they issue both quarterly and annual guidance). The one-month and three-month revision ratios are calculated as they are for estimate revision ratios. The data source is Bloomberg. For companies that provide both GAAP and Operating guidance, or for REITs that provide both EPS and FFO guidance, we remove one data point if both data points provide the same guidance direction, otherwise both data points are used.

Earnings Calls Sentiment

With the help of BofA's Predictive Analytics team, we parsed through earnings calls transcripts to calculate sentiment for the S&P500 universe of companies that have reported since 31st March 2020. We use the Loughran McDonald's financial dictionary to calculate sentiment scores as per the definition below.

Sentiment score = No. of Unique positive words – No. of unique negative and uncertainty words

The sentiment score is computed with three different filters: the full transcript, management discussion and answers of CEO/CFO from Q/A section. Calculated scores were then averaged on the Sector level. Loughran-McDonald Sentiment and Uncertainty:

1. **Loughran-McDonald Sentiment:** Examples of positive words include ***accomplish, achieve, outperform, stabilize, strength*** and negative words such as ***abandon, abnormal, downturn, evade, failing, stagnate.*** In total, the lexicon has 2,355 negative words and 354 positive words.

2. **Loughran-McDonald Uncertainty**: Examples of uncertain words include ***almost, ambiguity, hidden, fluctuate, doubts, unclear.*** In total, the lexicon has 297 words.

Note that the charts show the sentiment score multiplied by (- 1) and after applying the natural log to normalize the data on the same scale. Our Predictive Analytics team is currently researching more advance modeling approaches including Deep Learning so please stay tuned for future enhancements.

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