S&P 500 Target Update

New year-end target: 4300, range 3900 to 4600

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Glass half-full view: the bull case for stocks

The era of easy money is behind us, but that might be a good thing. over the past few decades we have enjoyed financially engineered growth: cheap financing, buybacks and cost cutting. Today, Corporate America has shifted focus to structural benefits – efficiency/automation/AI and have bought themselves time to adapt via long-dated fixed rate debt. Old economy cyclicals, capital-starved since 2008, have become disciplined and self-sufficient, evidenced by lower betas and more stable earnings.

Ignore 21x PE: snapshot multiples on trough E are high

We raise our S&P 500 2023 year-end target from 4000 to 4300 based on five indicators yielding a range from 3900 (Fair Value) to 4600 (Sentiment). We believe investors should ignore the snapshot multiple this target implies – a 21x multiple on 2023 EPS of $200E (tracking $210 after 1Q's beat). 21x is elevated, but trough multiples have been higher (23x at COVID, 28x at GFC) and snapshot multiples are not particularly predictive. We use a multiple on normalized earnings in our framework, and even here find that this metric is strongly predictive but only over a long time horizon (more below).

Navigating biases: recency/anchoring vs. index evolution

We avoid doubling down on falling rates/inflation but acknowledge changes from the 1950s to today's asset-light, long duration, higher quality index. We use five uncorrelated approaches in our forecast: (1) fair value, (2) sentiment/positioning, (3) Fed liquidity, (4) valuation on normalized earnings and (5) momentum. We recalibrate the cost of equity using data back to the 50s, yielding a higher normalized real rate (2% l-t avg). We incorporate index shifts by lowering our normalized equity risk premium (ERP), consistent with a higher quality benchmark focused on productivity.

Kicking the tires on our framework

Given seismic shifts in play today - peak globalization, rates and inflation volatility- we stress-tested our framework during prior regimes and were heartened by the results. Valuation on normalized EPS has been strongly predictive (r-sq 80%) of 10yr returns for almost all of post-WW2 markets (exception: Tech Bubble). This signal now yields 5% price returns per annum, better than flat returns forecast at the beginning of last year.

For the bear case, talk to the person next to you

Geopolitics, Fed error, debt ceiling, financial crisis II, recession, "rich-cession", credit, stagflation, CRE, urban demise, civil unrest, rate cliffs, jobs etc. Stock v. bond allocations have plummeted to 2009 lows (SSI). Bad news is in the ether and is priced into cyclicals.

Go for the gusto: eq-wtd S&P 500's 2x upside case

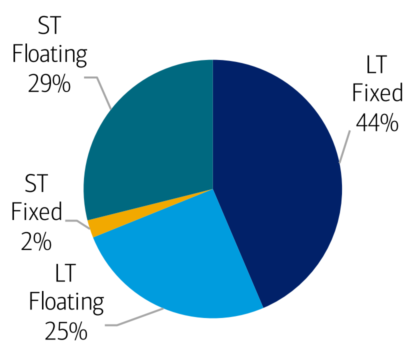
Our S&P 500 of 4300 isn't far from today's levels. We see continued risks in mega-cap growth stocks de-rating, right-sizing and managing duration risk, which keeps our forecast constrained. We prefer the equal-wtd S&P 500 to the cap-weighted S&P 500 where, using the same tools, returns are 2x those of the cap-weighted S&P 500.

Refer to important disclosures on page 12 to 13.

Glass half-full view on US equities

The era of easy earnings is likely behind us, but this might be a good thing. Corporate America has begun to adapt via efficiency spend, which bodes well for lower risk premia. Moreover, corporates bought themselves some to navigate higher rates and costs via long tenured low fixed-rate debt (Exhibit 2); the private sector got a pile of money from the public sector (Exhibit 3). Current valuations are not low, but rarely are low during profits recessions. On cyclically adjusted earnings, valuations argue for price returns of 5% per year for the S&P 500 over the next decade – better than the negative returns yield by valuation signals at the beginning of last year (see Year Ahead 2022). As equities grow less extended, bonds look riskier, and we see more risks in bonds, public debt and the so-called risk-free rate.

Exhibit 1: GFC: credit risk >50%
S&P 500 debt composition (as of 4Q 2007)



Source: FactSet, BofA US Equity & US Quant Strategy
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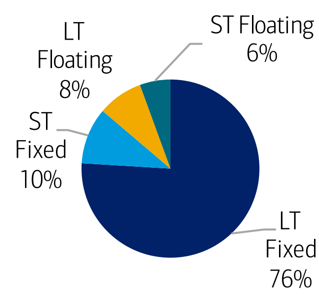
Exhibit 2: Today: credit risk <25%
S&P 500 debt composition (as of March 2023)



Source: FactSet, BofA US Equity & US Quant Strategy
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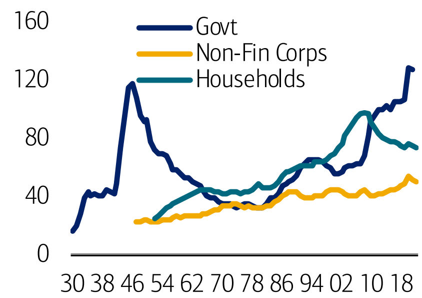
Exhibit 3: US Government holds the debt burden
US public debt to GDP, US non-financial corporate debt/GDP, and US household debt/GDP, fiscal years 1930-present



Source: Haver Analytics/Federal Reserve, BofA US Equity & US Quant Strategy
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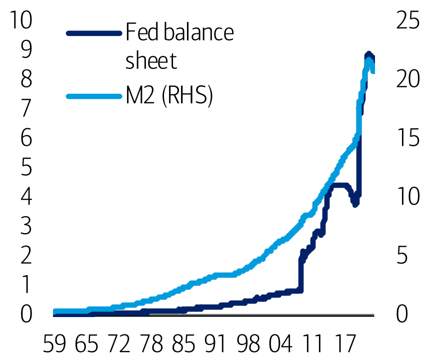
Exhibit 4: Era of easy money behind us...
Fed balance sheet and M2 money supply ($T; 1959-4/30/2023)



Source: Haver Analytics, Bloomberg, BofA US Equity & Quant Strategy
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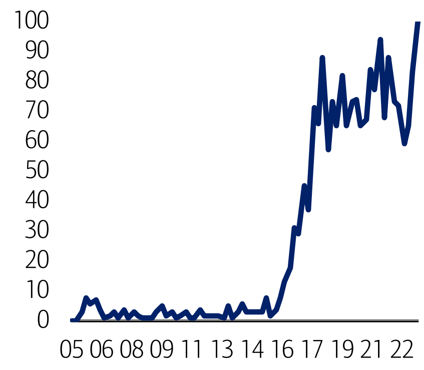
Exhibit 5: Corps pivot to efficiency
Mentions of AI during earnings calls (100=max; 2005-5/19/23)



Source: AlphaSense, BofA US Equity & Quant Strategy
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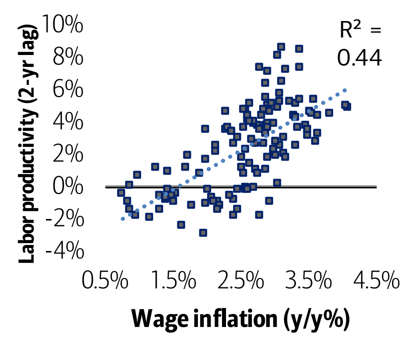
Exhibit 6: Inflation drives productivity capex
US Manufacturing wage inflation and labor productivity (y/y % changes)



Source: Bureau of Labor Statistics, BofA Global Research
Note: Quarterly data of US manufacturing labor productivity versus average hourly earnings of production & nonsupervisory employees
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New S&P 500 target 4300 (from 4000)

Range of 3900-4600

We raise our S&P 500 2023 year-end target to 4300 (from 4000) based on our updated target models, with a range of 3900 (bear case, based on our most bearish target input, our Fair Value Model) to 4600 (bull case, based on our most bullish model, our Sell Side Indicator).

Correcting for anchoring bias, index shifts

In our forecast framework we incorporate five signals: (1) fair value, (2) sentiment/positioning, (3) central bank impact, (4) long-term valuation and (5) price momentum. For (1) we shift our cost of equity assumptions to incorporate a higher real interest rate of 2% (l-t average back to the 1950s) and a lower equity risk premium consistent with higher quality constituents, inflationary pressures partially offset by productivity gains and pricing power. For (1) and (4) we update normalized earnings to use a longer look-back period for log-linear trendline earnings (1936-now vs. 1977-now). We thus avoid doubling down on a falling rate environment and incorporate that the benchmark is longer duration but also higher quality.

Exhibit 7: 2023 S&P 500 year-end forecast = 4300
S&P 500 2023 Target Models

Model	Category	Time horizon	2023 Target	Expected Return (Annualized)	Current Weight in Forecast
BofA Fair Value Model	Fundamental/Valuation	Medium Term	3,911	-11.0%	25%
Sell Side Indicator	Sentiment	Medium Term	4,599	16.1%	30%
Fed Liquidity Model	Macro	Short.Medium Term	4,064	-5.2%	10%
Long-term Valuation Model	Valuation	Long-term	4,336	5.4%	25%
12-Month Price Momentum	Technical	Medium Term	4,434	9.3%	10%
		S&P 500 year-end target	**4,300**	**+4.0%**	

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 5/19/23, and round to closest 50.

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S&P 500 Target Models

#1: BofA Fair Value Model

Exhibit 8: S&P 500 2023 Fair Value = 3,911
BofA Fair Value Model (2023)

BofA Fair Value Model (2023)	
Normalized 2023 EPS	$202
Normalized 2024 EPS	$215
Nominal Long-Term Risk-Free Rate	4.00%
Assumed Long-Term Inflation	2.00%
Normalized Real Risk-Free Rate	2.00%
Equity Risk Premium	350bp
Fair Real Cost of Equity Capital (Ke)	5.50%
Fair Forward PE (1 ÷ Fair Ke)	18.2x
2023 Year-End Target (Fair PE × Normalized 2024 EPS)	**3,911**

Source: BofA US Equity & Quant Strategy

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S&P 500's fair value = 3911 for 2023

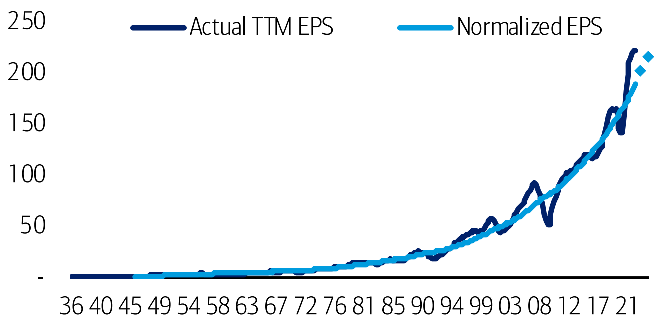
We make the following assumptions for our Fair Value Model based on the current market environment:

- **Removing anchoring biases:** we back-fill normalized EPS to 1936 (from 1977) and swap in pro forma (see #4: Long Term Valuation Model for more details). Normalized 2024E EPS is $215 based on a long-run log-linear regression incorporating cyclical and secular trends.
- **Higher real rates:** we use 2% normalized real risk-free rates (previously 1.5%), the long-term average since the 1950s. This compares to the current real rate of 1.4% - rates upside risk is elevated in our view (see Rel Val note).
- **Lower ERP:** the S&P 500 ERP has been negatively correlated with real rates. A lower ERP of 350bp is justified in our view given (a) higher real rates, (b) increased earnings quality and (c) efficiency focus. Excluding the Tech Bubble, the ERP averaged 300bp between 1980 and GFC. Our previous ERP assumption was 450bp.

Exiting the best era for earnings ever….

Easy earnings growth from cheap financing, buybacks, globalization and cost-cutting may be behind us, but efficiency gains could improve quality of earnings and offset margin risk from re-shoring.

Exhibit 9: Normalized earnings: suggests flat earnings growth over the next two years
Trailing 12-mo. actual EPS* vs. normalized EPS (1936-4Q22; dots = 2023 and 2024 normalized EPS)



Source: BofA US Equity & Quant Strategy, Haver Analytics, FactSet. 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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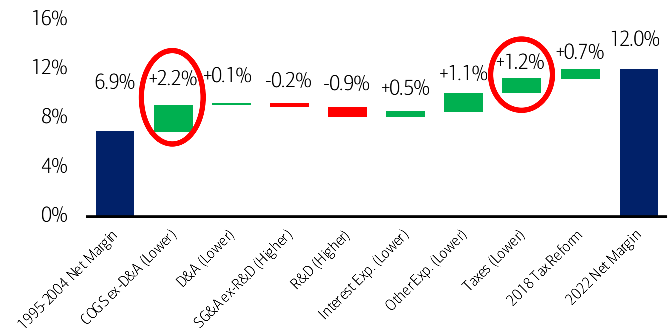
Exhibit 10: Globalization explains majority of margin expansion since 1995
2022 net margin (ex-Financials) expansion waterfall vs. 1995-2004 levels (factors related to globalization circled in red)



Source: BofA US Equity & Quant Strategy, FactSet

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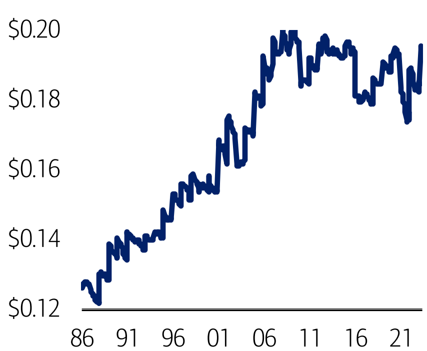
Exhibit 11: Labor efficiency improvements stalled post-GFC / ZIRP. What next?
S&P 500 $M revenue per year per worker (1986-4/2023)



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

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Exhibit 12: High quality composition
S&P 500: % of B+ or better quality-rated stocks, 1990-present

Source: FactSet, BofA US Equity & US Quant Strategy

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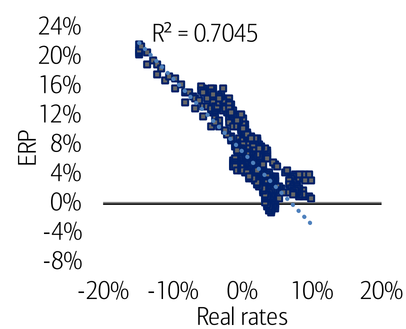
Exhibit 13: Higher real rates = lower ERP
Historical relationship between our normalized ERP vs. real rates (1945-4/23)



Source: BofA US Equity & Quant Strategy, Global Financial Data, Bloomberg. Note: See Methodology for details on calculations

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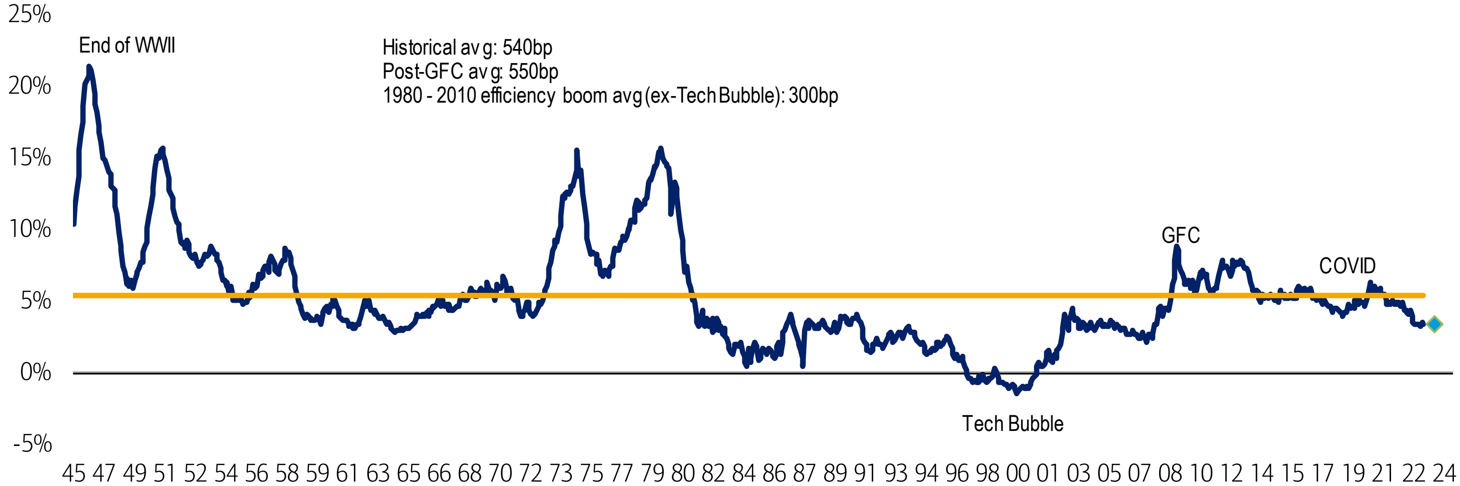
Exhibit 14: We expect ERP to normalize at levels lower than the post-Global Financial Crisis era's average of 550bp
Normalized equity risk premium (ERP) with BofA normalized ERP forecast (350bp), 1945-4/23



Source: BofA US Equity & Quant Strategy, Global Financial Data, Bloomberg
Note: Nominal 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.
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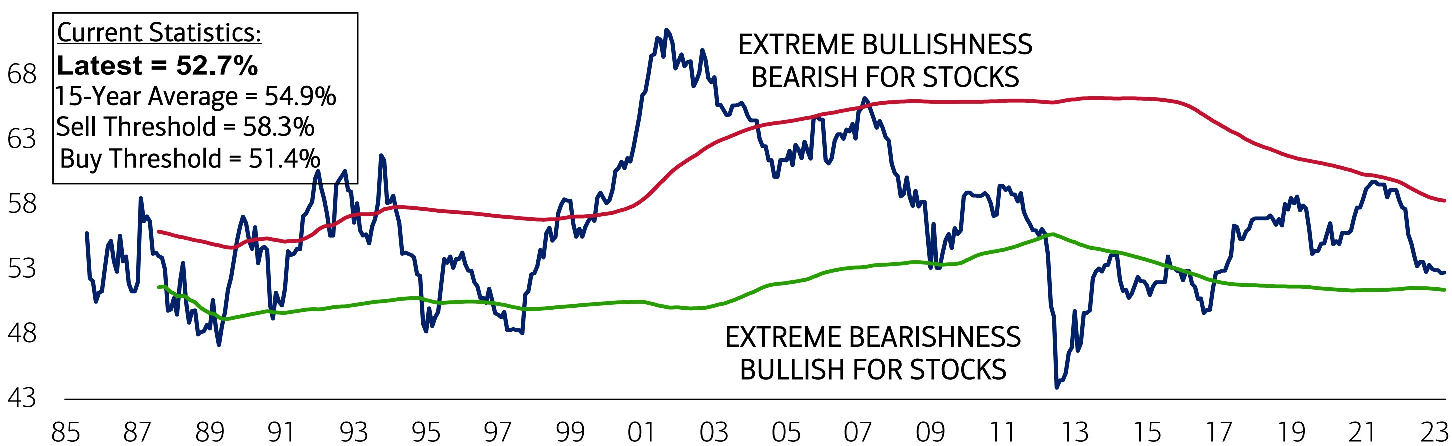
#2: Sell Side Indicator (SSI)

Inching towards "Buy": +16% price return over next 12mos (4600 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 has dropped 7ppt from its 2021 peak to 52.7%, just 1.3ppt shy of triggering a "Buy" signal (see Sell Side Indicator). This level implies price returns of +16% over the next 12 months. Historically, when the SSI was at current levels or lower, subsequent 12-month S&P 500 returns were positive 94% of the time (vs. 81% over the full history). *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 9.5% since Aug. 1985 (when SSI data begin) vs. 6.7% based on data from 1929 to 1985).*

Exhibit 15: Our Sell Side Indicator has been inching towards a Buy signal
Sell Side Indicator (SSI), as of 4/2023



Disclaimer: The indicator identified as the Sell Side Consensus Indicator above 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.
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
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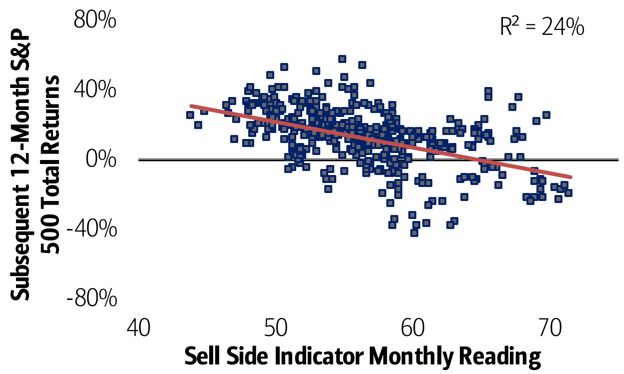
Exhibit 16: Sell Side Indicator has historically been a reliable contrarian signal

Sell Side Indicator Monthly Readings & Subsequent 12-Month S&P 500 Total Return (8/1985-4/2022)



Source: BofA US Equity & Quant Strategy, Haver Analytics

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Exhibit 17: Sell Side Indicator has a higher R-sq than most other single factor market timing models

Predictive Power of Selected Indicators Forecasting 12-Month S&P 500 Returns (8/1985-4/2022)

Indicator	R2
Sell Side Indicator	24%
Sell Side Indicator at extremes (Buy or Sell)	34%
S&P 500 Dividend Yield	12%
Proforma PE	10%
Adj. Fed Model (EPS Yld - Real 10-Yr Tsy Yld)	4%
M1 Growth	3%
Fed Model (EPS Yield - 10-Yr Treasury)	1%
10-Yr Treasury Yield	0%
3-Mo T-Bill Rate	0%
GAAP PE	0%
M2 Growth	0%
Yield Curve (10-Yr - 3-Mo)	0%
BBB to Treasury Spread	0%

Source: BofA US Equity & Quant Strategy. Haver Analytics

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#3: Central Bank Liquidity

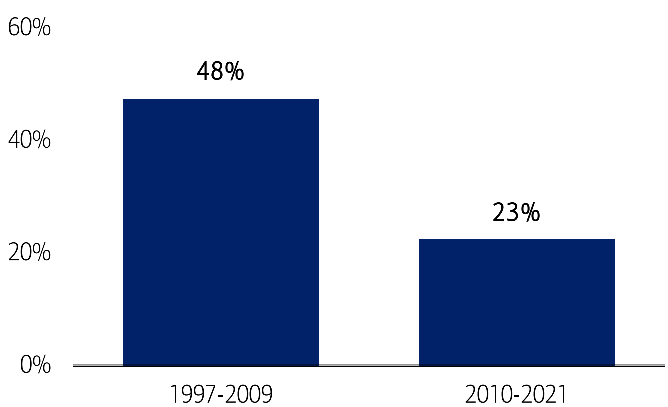
If QE mattered, QT should matter too: implies 4100 by 2023 year-end

Pre-GFC, earnings explained ~50% of S&P 500 returns. Post-GFC, earnings mattered less (23% explanatory power), and Fed balance sheet changes mattered more. Fed liquidity was irrelevant pre-GFC, but drove more than half of non-earnings returns of the S&P 500 post-GFC. NB: the recent strong performance of growth / Tech stocks may be attributable to bank bailout-driven balance sheet expansion in 1Q23.

A $750bn reduction in the Fed balance sheet by the end of 2023 (our house view) would result in the S&P 500 falling to 4100 by the end of 2023, all else equal.

Exhibit 18: Earnings explained nearly 50% of market returns pre-GFC, but only 23% of post-GFC returns

R-sq of S&P 500 fwd EPS YoY vs. S&P 500 price returns on a monthly basis (5/97-12/21)



Source: FactSet, BofA US Equity & Quant Strategy

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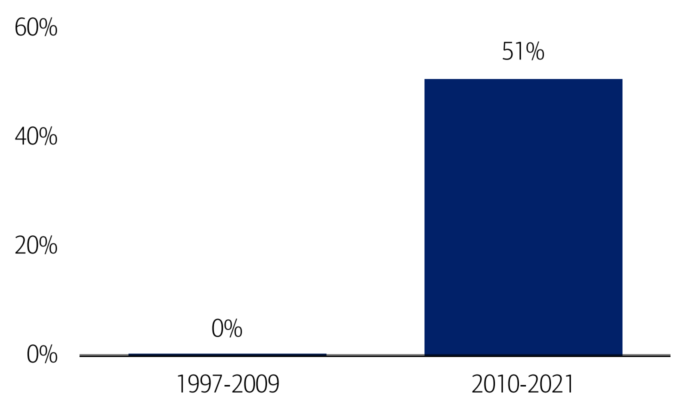
Exhibit 19: Over half of non-earnings driven market cap changes was explained by the Fed balance sheet expansion since GFC

R-sq of Fed balance sheet YoY vs. YoY change in S&P 500 market cap that is not driven by earnings (5/97-12/21)



Source: FactSet, BofA US Equity & Quant Strategy

*Non-earnings driven market cap change = [total market cap change] – [historical avg. fwd P/E] x [chg. in fwd EPS]

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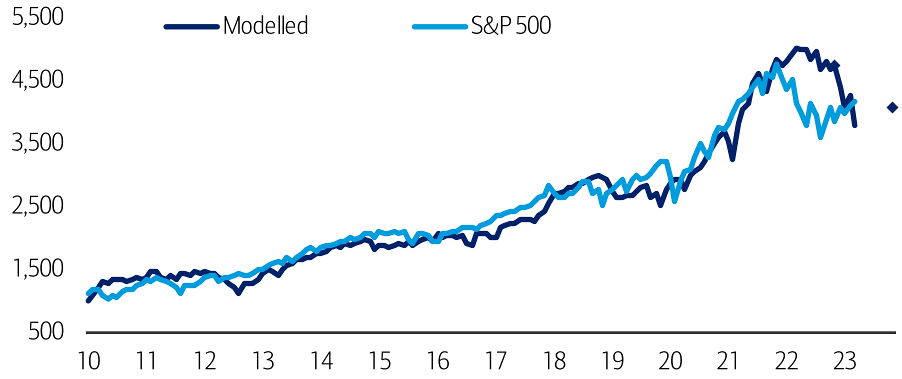
Exhibit 20: $750bn reduction in the Fed balance sheet and trend earnings growth for 2024E EPS could result in the S&P 500 at 4100 in 2023

Modelled S&P 500 based on chg in fwd EPS and YoY chg in Fed balance sheet since 2010 vs. actual S&P 500



Source: BofA US Equity & Quant Strategy, FactSet

Note: 2023 dot assumes $233 in EPS in 2024 (6% y/y trend earnings growth from consensus 2023 EPS) and BofA Fed balance sheet forecast

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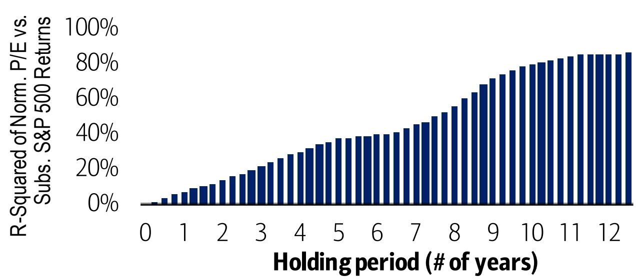
#4: Long Term Valuation Model

10-year return forecast = +5% annualized price returns (4300 by year-end)

Valuation may not be a catalyst, but has had strong predictive power over long-term returns. Today's multiple of 21x normalized earnings implies +5.4%/yr annualized returns over the next decade based on the historical relationship.

Exhibit 29: All that matters for the long-term

Price to normalized EPS r-sq vs. returns (1987-present)



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

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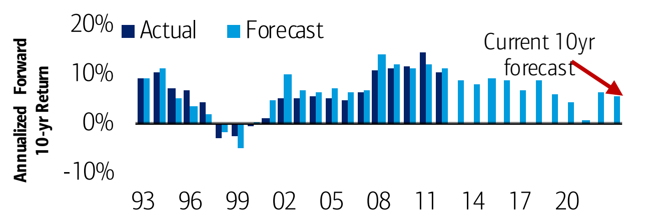
Exhibit 30: Valuation currently suggests ~5% p.a. price returns over the next decade

S&P 500 annualized forward 10-yr return: actuals vs. model forecast (1993-present)



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

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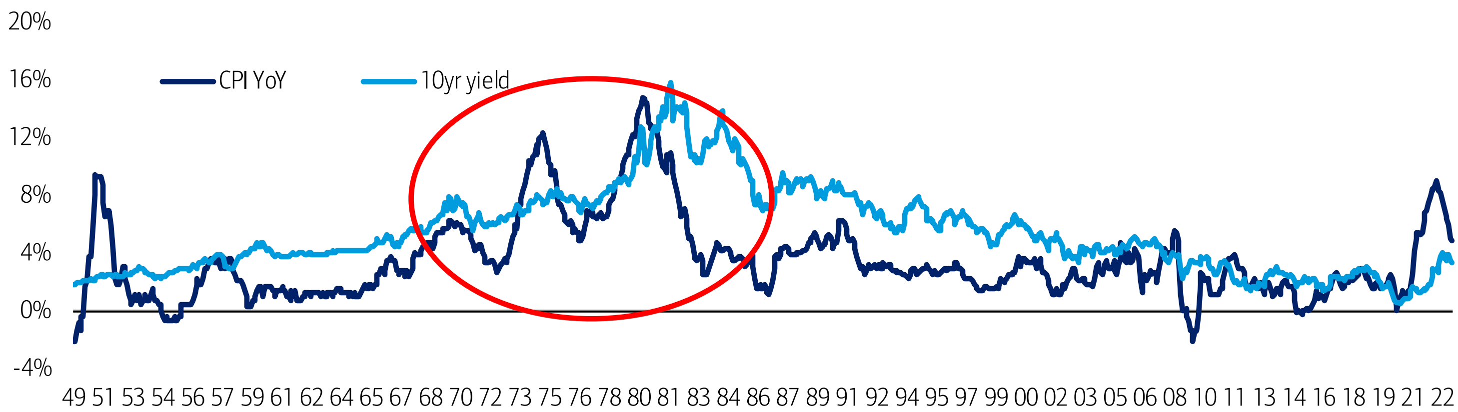
Removing the anchoring bias: extending our long-term valuation model

We extended our long-term valuation model back to 1950 to determine whether valuation predicted returns during different macro environments than the last 40 years. Our measure of normalized EPS is based on a long-run log-linear regression, intended to estimate the underlying earnings power of the S&P 500 based on cyclical (linear) and secular (log) trends. Our extended EPS data is based on a blend of GAAP EPS adjusted for write-offs (prior to 1977 we add back the average write-off amount to GAAP EPS), Operating EPS (until 1988), and Proforma EPS (until present).

Valuation was a strong predictor of 10-yr forward returns in most decades, including rising rates, and amid inflation and rates shocks in the late 60s-early 80s. However, valuation from the mid- to late-80s was a weaker predictor of returns for the mid- to late-90s (Tech Bubble years) – valuations would have understated returns for this period (Based on an extended history back to 1950, price to normalized earnings of the S&P 500 would predict +4%/yr annualized returns over the next decade.)

Exhibit 23: Regimes: 50s stability; 60s/70s shocks, 80s Volcker, 90s / 00s Tech Bubble, 2010s ZIRP; COVID shock
YoY CPI and 10yr yield (1950-present)



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

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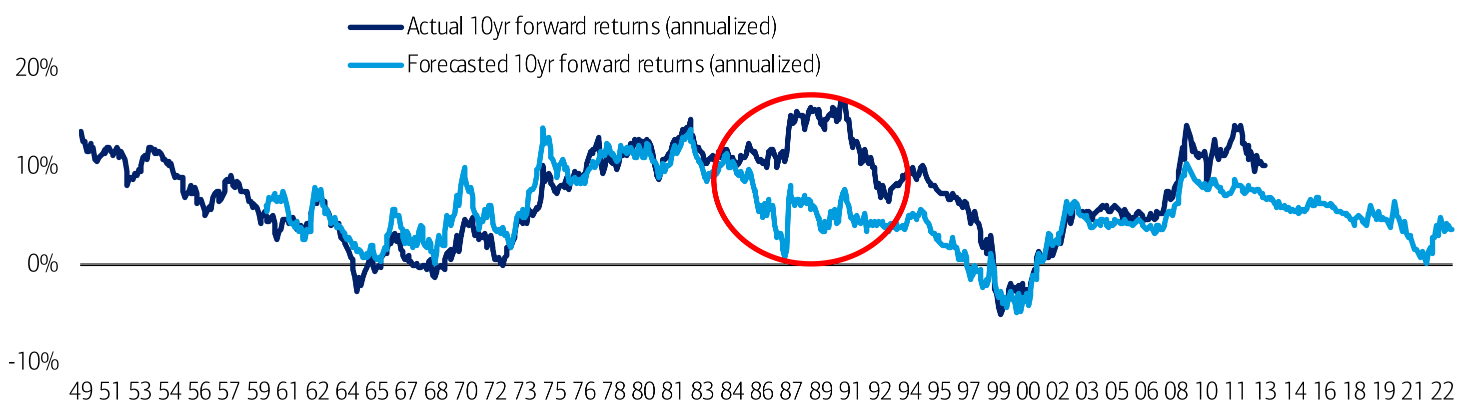
Exhibit 24: Valuation was an effective long-term returns framework except during Tech Bubble (red circle) during which it underestimated returns
Actual 10-yr fwd S&P 500 returns and forecasted 10-yr fwd S&P 500 returns based on our extended long-term Price to Normalized EPS model (1950-present)



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

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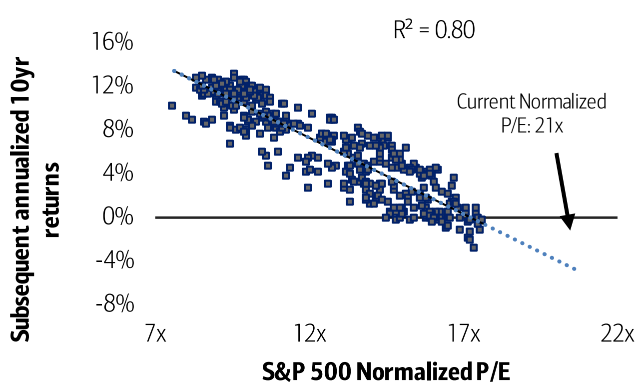
Exhibit 25: In a rising rate environment (1950-1980), valuations explained ~80% of 10yr returns
S&P 500 normalized P/E vs. subsequent annualized returns (1950-1980)



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

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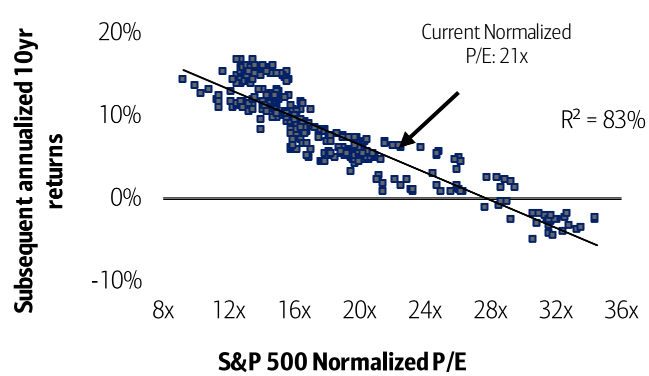
Exhibit 34: In a falling rate environment, valuations explained ~80% of 10yr returns
S&P 500 normalized P/E vs. subsequent annualized returns (1987-4/2023)



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

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#5: 12-month Price Momentum

Reversion to mean suggests 12m returns of +9% (4400 by year-end)

This framework is based on the notion that returns revert to "normal". The last 12 months' return was +0.9% as of April 30. This is 0.3 standard deviations below the historical average. This would imply a projected 12-month return of 9.3%, all else equal.

Exhibit 35: The last 12-mo. price return of +0.9% is 0.3 std. dev below average and implies a projected 12-month price return of 9.3%, 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 4/2023

	-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%	10.3%	9.3%	7.9%	9.6%	-0.2%
Standard Deviation of 12m Returns	13.9%	21.2%	18.8%	14.0%	14.5%	16.5%
Probability of Negative Returns	0.0%	30.8%	28.0%	29.3%	23.2%	60.0%
Percent of observations	0.7%	4.6%	34.5%	43.2%	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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Go for the gusto: equal-weighted S&P 500

We are relatively neutral on the cap-weighted (CW) S&P 500 given its high exposure to long-duration Growth stocks. But we are bullish on the equal-weighted (EW) S&P 500 and expect it to outperform the CW index, given 1) concentration risk, 2) valuation discount, 3) duration risk, and 4) upside based on bottom-up analyst price targets.

Concentration risk: Seven stocks drove the entire gain on the S&P 500 YTD. The top five stocks are off their peak weight, but represent 22% of the S&P 500, well above Tech Bubble peak 18%. AAPL's market cap surpassed the Russell 2000.

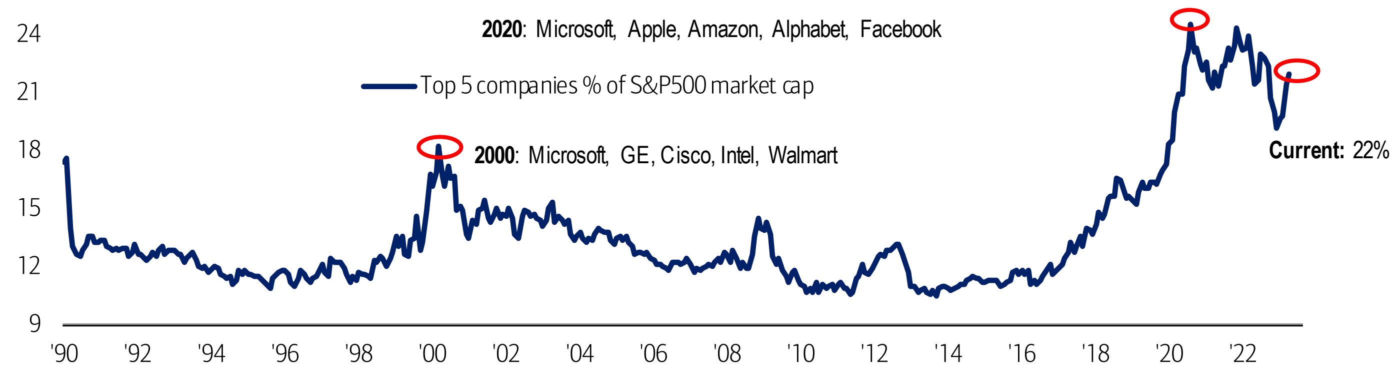
Valuation Dispersion: in the S&P 500 is just off its widest level in history, with expensive stocks rerating vs. inexpensive stocks (Exhibit 38). If dispersion were to mean revert to average from expensive stocks dropping and inexpensive stocks increasing, that would translate to a 10% decline for overall index but a 10% increase for the equal weighted index.

S&P 500 trades at 19x forward earnings. Excluding the top 50 stocks drops the valuation to 15.7x, in line with historical average PE of 15.2x since 1986. Compared to the S&P 500 Ex-Nifty 50 trades at a 13% discount, 1.3 standard deviations below average.

Duration risk: The S&P 500's duration remains at a near-record level at 35 – i.e., record sensitivity to interest rates. We see compelling reasons for rates to rise from here, which would be a major headwind for the cap-weighted S&P 500 – see another case for cyclicals and beta. On the other hand, the equal-weighted index can benefit from rates rising, if it's driven by higher growth and inflation. The spread between duration of the EW and CW S&P 500 is at a record level, indicating that the headwind from higher rates is much smaller for the equal-weighted index. Moreover ~70% of the CW S&P 500 are either Growth or defensive sectors that are typically hurt by higher rates, whereas the half of S&P 500 stocks are cyclicals that benefit from higher growth.

Bottom up bullish on equal-weighted S&P 500: Consensus price targets for the 500 stocks in the S&P 500 suggest 17% implied upside for the equal-weighted index vs. 13% implied upside for the cap-weighted index. Historically, the spread has been 55% correlated to the forward 12-mo. return of the EW index relative to the CW index. The current gap of 5.4ppt in upside potential suggests the EW index outperforming the CW index by 6ppt over the next 12 months.

Exhibit 28: Extreme concentration risk remains in the market
Top 5 companies' weight in the S&P 500 (1990-4/23)



Source: Bloomberg, BofA US Equity & Quant Strategy

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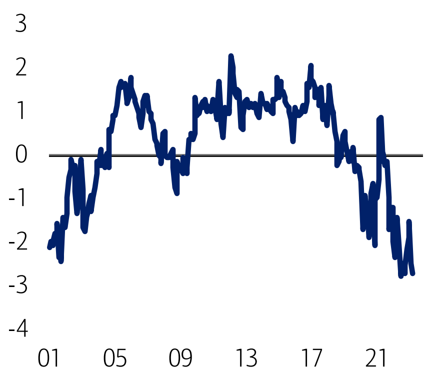
Exhibit 29: A record duration gap between equal-weighted vs. cap-weighted S&P 500
Spread between the duration of equal-weighted S&P 500 and cap-weighted S&P 500 (2001-4/23)



Source: FactSet, BofA US Equity & Quant Strategy

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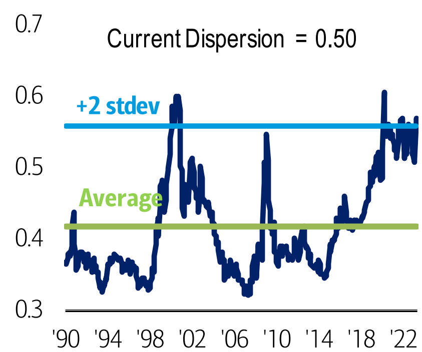
Exhibit 30: Valuation dispersion just off record highs. Mean reversion represents 10% downside risk to S&P 500
Dispersion of forward P/E in the S&P 500 (std. dev. / mean); 1990-4/23



Source: FactSet, BofA US Equity & Quant Strategy

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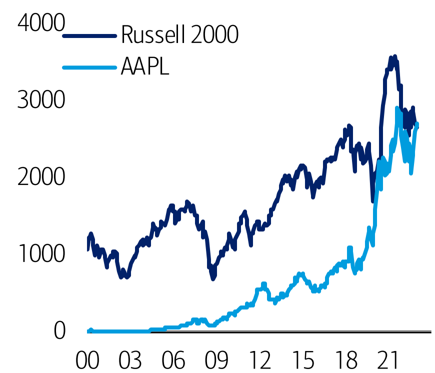
Exhibit 31: AAPL is now bigger than the Russell 2000
Market cap of Russell 2000 vs. AAPL ($B; 2000-5/16/23)



Source: Bloomberg, BofA US Equity & Quant Strategy

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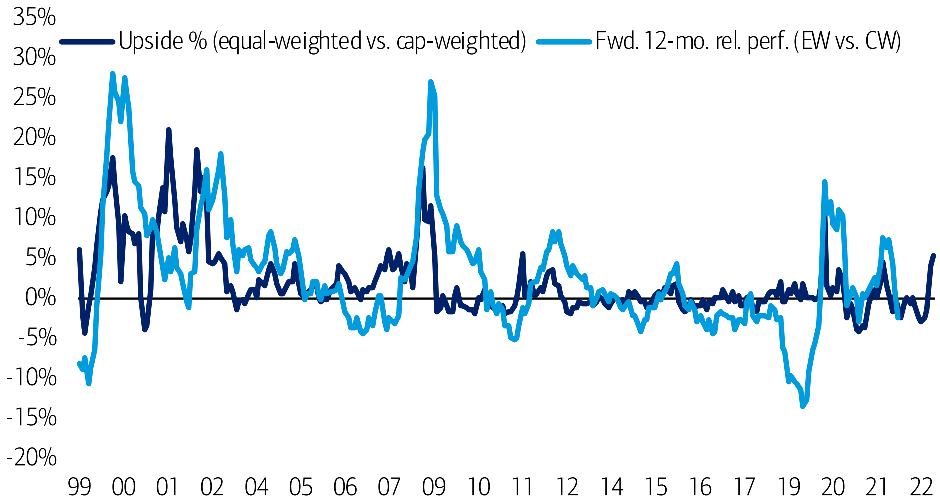
Exhibit 32: Bigger upside to consensus price target for the equal-weighted index, pointing to the equal-weighted index leading the cap-weighted S&P 500

Aggregate upside to equal-weighted (EW) vs. cap-weighted (CW) S&P 500 and fwd. 12-mo. performance of EW vs. CW index (55% correlation, 1999-4/23)



Source: FactSet, BofA US Equity & Quant Strategy

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Recession, schmecession: whipsaw risk is high

Another reason we are more positive on risk vs. safety is the fact that our US regime indicator is waffling between a downturn and an upturn. See Quant Note

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