FIVE FAQs

Bye bye, bear

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Equity and Quant Strategy
United States

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New bull market has legs

The bear market is officially over. We don't put a lot of stock (pun intended) in arbitrary definitions, but note that after crossing the +20% mark from the bottom, the S&P 500 continued to rise over the next 12 months 92% of the time (vs. avg. 75% overall), returning 19% on average (vs. 9% avg. overall) based on data back to the 1950s. Sentiment, positioning, fundamentals and supply/demand support that being underinvested in stocks and cyclicals is still the key risk today –the more likely direction of surprise is still positive. We here provide our views on most asked questions from advisors / clients.

Q: What will it take to get investors bullish again?

The official end of the bear market might help, but the wall of worry could continue until investors feel pain in long bonds or FOMO in equities. Investors have bought into a singular equity theme (AI, more below) but a broader bull case for stocks can be made: we are off of ZIRP and real yields are positive again, volatility around rates and inflation has subsided, estimate dispersion (earnings uncertainty) has declined and companies have preserved margins by cutting costs and focusing on efficiency. After a fast hiking cycle, the Fed has latitude to ease. The equity risk premium could *fall* from here.

Q: Active or passive?

After decades of passive equity funds taking share from active, the active approach in public equity now makes sense. Less eyeballs means inefficient markets (more alpha), higher dispersion and a reversal in passive inflows argue for stock picking over indexing. The index primacy this year from record narrowness is unsustainable, in our view.

Q: Which equity index, equal-weighted or cap weighted?

The equal-weighted S&P 500 could yield double the returns of the S&P 500 index based on various signals (see target note). These include breadth reversion, relative value (the eq-wt index trades at 15x), lower duration risk vs. the cap weighted index and more upside vs. the cap weighted index based on our analysts' price targets.

Q: If stocks are reviled, why is the S&P trading at 20x?

Wall Street is rife with conviction-less bears, and individual investor outflows are at capitulation levels somewhat at odds with high snapshot multiples. 20x is not the reason to be bearish - when earnings fall as they are today, P/E ratios expand. It's just math.

Q: How do I invest in AI?

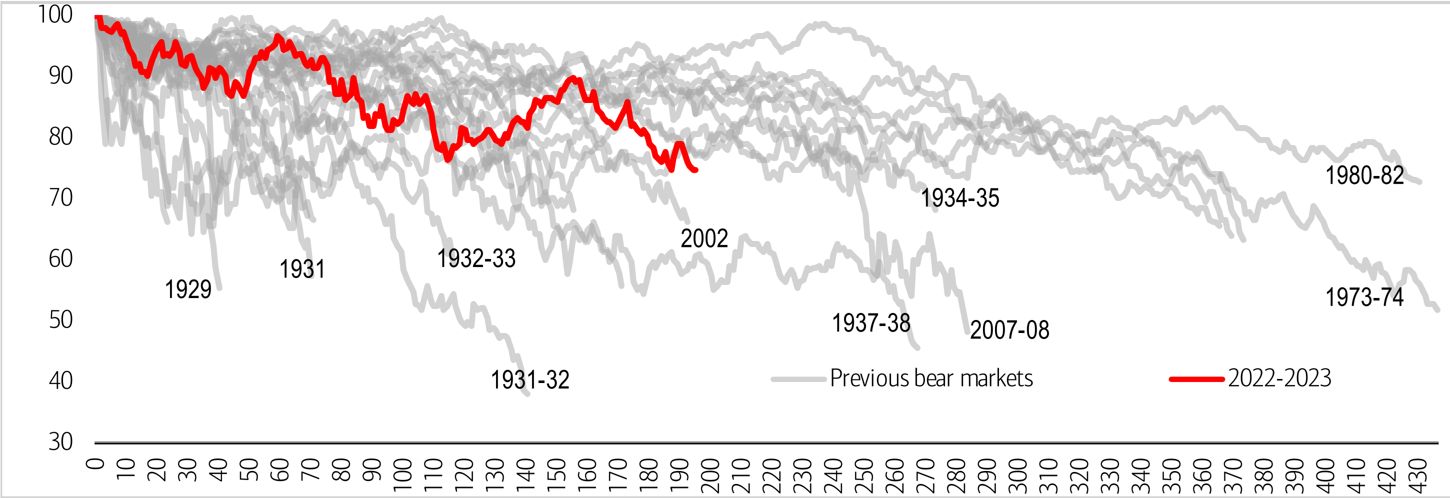
Recent developments in generative AI herald a sea change. The obvious benefitiaries, capex takers, are semis and select software companies that can provide AI services. But not all Tech wins, many need to spend just to remain competitive. The larger benefit may be had by old economy, inefficient companies that can increase earnings power more permanently from efficiency and productivity gains.

Refer to important disclosures on page 8 to 10.

It's official, the bear market is behind us

Exhibit 1: Bear market post-mortem

Peak-to-trough declines in historical bear markets (declines of 20%+ without a 20% rally) since 1929 (most recent bear market ended 10/12/2022)



Source: Bloomberg, BofA US Equity & Quant Strategy

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What will it take to get investors bullish on stocks?

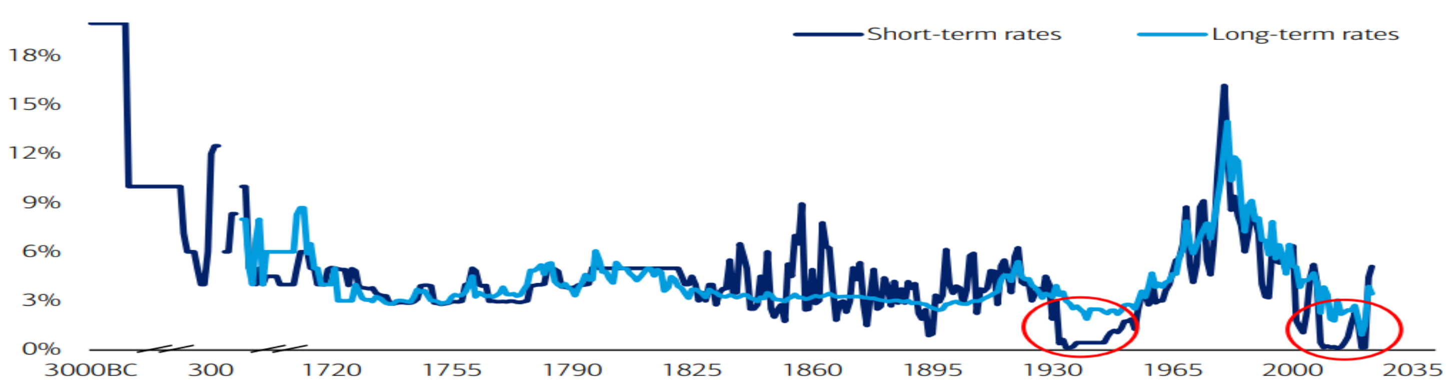
We believe we are back in bull territory, which might be part of what it takes to get investors enthusiastic about equities again. If investors feel pain in bonds, via lower returns or negative opportunity costs - likely if real rates rise from here - they should be incented to return to equities, especially equities that benefit from rising real rates (cyclicals).

Why would real rates rise? Three reasons: (1) a shift from net buying to net selling of 10yr Tsy bonds by the Fed, China, BoJ and other foreign buyers, (2) the fact that rate cycles are lengthy and 10yr yields are just coming off of record lows, plus (3) higher expected growth from productivity gains at long last.

If duration is the biggest risk for stocks in a rising real rate environment, corporates have optionality– they can shorten their duration by returning cash via dividend growth and buybacks. With low payout ratios, less volatile earnings and better balance sheets, we see ample room for dividend raises in the next bull market, and believe we are returning to a total return world.

Exhibit 2: Rates to mean revert lower from last year? Long-term rates are just off a 5000yr low

Interest rates since 3000 BC



Source: Global Investment Strategy, Bank of England, Global Financial Data, Homer and Sylla"A History of Interest Rates" (2005)

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Exhibit 3: Long bonds are consensus
Average recommended allocation to bonds by Wall Street strategists (2006-5/2023)

Source: BofA US Equity & Quant Strategy
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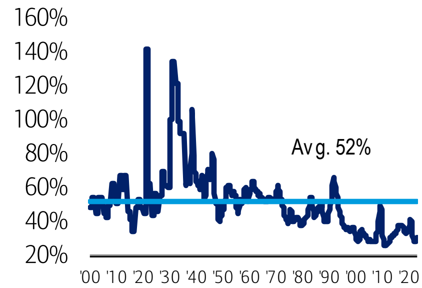
Exhibit 4: Companies have room to raise dividends
S&P 500 dividend payout ratio 1900-1Q2023



Source: Haver Analytics/S&P, FactSet, BofA US Equity & US Quant Strategy
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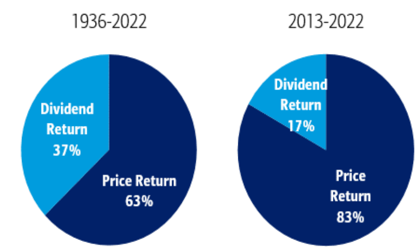
Exhibit 5: Dividends have contributed 37% to total returns (but just 17% in last 10yrs)
S&P 500 price return and dividend contributions to total return



Source: Bloomberg, BofA US Equity & Quant Strategy
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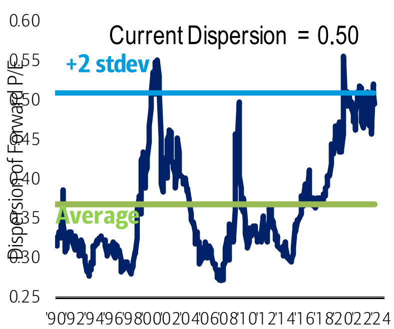
Should I index or invest in actively managed funds?

We like both, but choice of index is paramount (more below). We like active investment today amid signs that this may be the best fundamental stock pickers' markets for a host of reasons : (1) resources and eyeballs allocated to active fundamental investing have shifted to passive or private equity, arguing for a less efficient market (read: higher alpha); (2) mean-reversion potential on valuations is close to an all-time high - value investors can harvest alpha from cheap stocks re-rating and expensive stocks de-rating; (3) 46% of large cap active funds are ahead YTD, a 5-year high; and (4) assets under management in ETFs has now reached critical mass, and our client data shows that the tide may be turning: for most of this year, investors have sold ETFs and bought single stocks. Finally, (5) market breadth tends to mean revert, and we just clocked the narrowest breadth in the history of our data (Exhibit 7).

Exhibit 6: High valuation dispersion
S&P 500 valuation dispersion of fwd P/E (std. dev / avg) (1990-5/23)



Source: FactSet, BofA US Equity & US Quant Strategy
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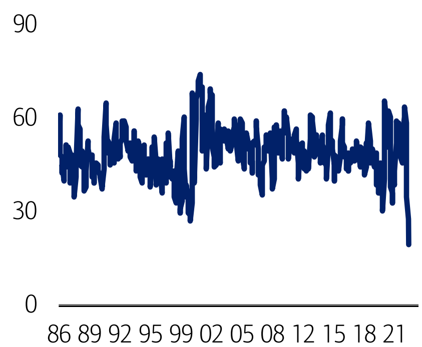
Exhibit 7: Bad breadth usually mean reverts
% of stocks outperforming the S&P 500 over the last three months (1986-5/31/2023)



Source: BofA US Equity & Quant Strategy, FactSet
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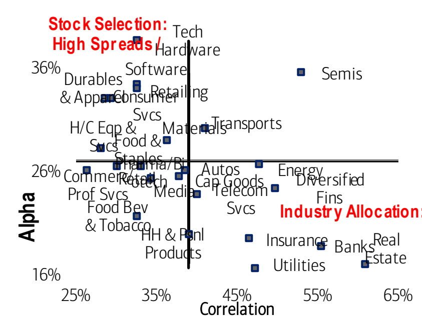
Exhibit 8: Pick stocks in idiosyncratic sectors (Tech, Consumer & Health Care)
Historical Intra-stock correlation vs. performance spread (3Q86 to 4Q22)



Source: FactSet, BofA US Equity & US Quant Strategy
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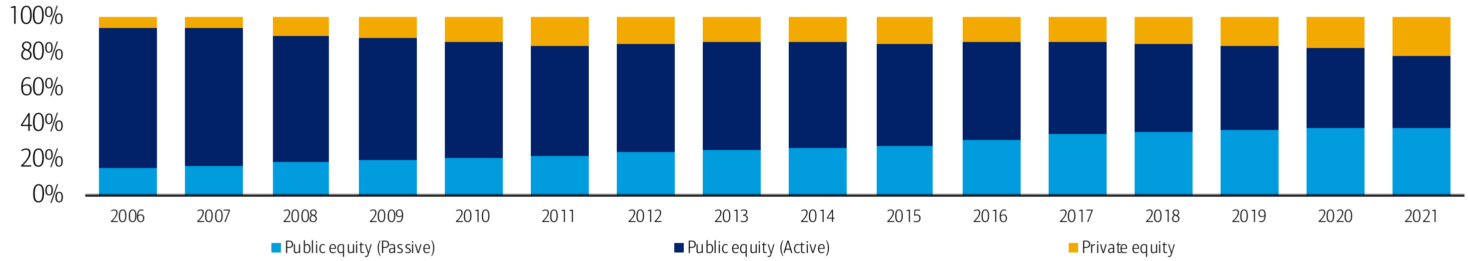
Exhibit 9: Public equity allocations squeezed by private and passive
Pension Plan Asset Allocation: Public equity (Active)*, Public equity (Passive)* and Private Equity as a % of total equity



Source: Pensions & Investments, Strategic Insights, SimFund, BofA US Equity & US Quant Strategy. Based on US pension funds within the top 1000 that have available asset allocations. Total equity includes public equity (global, international, and domestic) and private equity.
*We make assumptions on mix shift based on SimFund US AUM tracked in passive vs active.

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Which index, equal- or cap-weighted S&P 500?

We are neutral on the cap-weighted S&P 500 given its top heaviness in mega-cap growth companies. Our year -target of 4300 implies little upside or downside from here (see target note). But we are bullish on the equal-weighted (EW) S&P 500 and expect it to significantly outperform the S&P 500 given 1) record concentration risk, 2) record low breadth, (3) discounted valuations, 3) duration risk most acute in secular growth stocks where we see AI and efficiency gains benefiting a broader array of companies and see most megacaps as capex spenders rather than capex takers (more below) and 4) more upside for equal weighed benchmark vs. cap weighted benchmark based on our fundamental analysts' price targets.

> Excluding the 50 biggest stocks, the S&P 500 trades at just 15x, a full standard deviation below its historical average multiple (18x).

Exhibit 10: Extreme concentration risk remains in the market
Top 5 companies' weight in the S&P 500 (1990-5/23)

Source: Bloomberg, BofA US Equity & Quant Strategy
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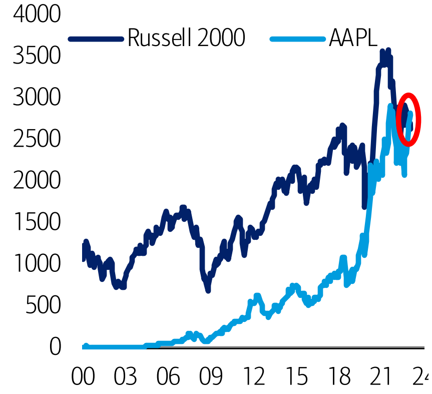
Exhibit 11: AAPL is now bigger than the Russell 2000
Market cap of Russell 2000 vs. AAPL ($B; 2000-6/5/23)



Source: Bloomberg, BofA US Equity & Quant Strategy
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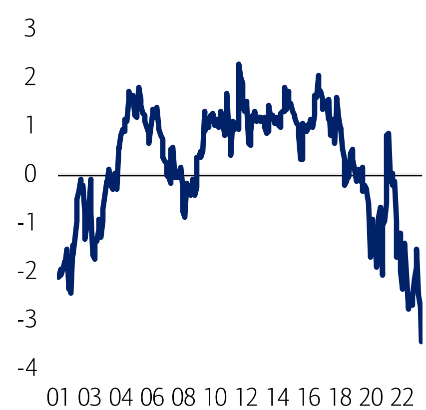
Exhibit 12: A record duration gap between equal-weighted vs. cap-weighted S&P 500
Spread between the duration of equal-weighted S&P 500 and cap-weighted S&P 500 (2001-5/23)



Source: FactSet, BofA US Equity & Quant Strategy
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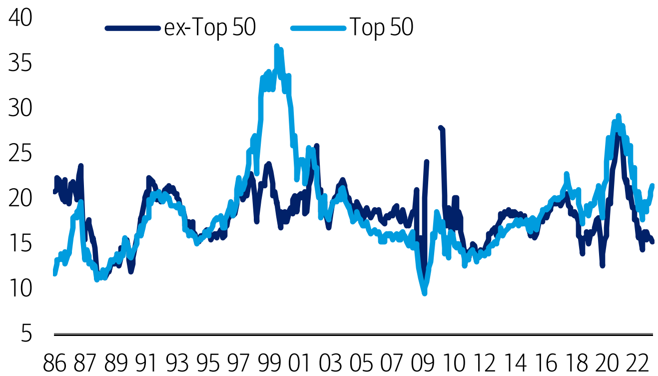
Exhibit 13: Excluding top 50 stocks, the S&P 500 trades at just 15x trailing P/E
S&P 500 trailing P/E ex-Top 50 vs. top 50 stocks (1986-5/23)



Source: FactSet, BofA US Equity & Quant Strategy
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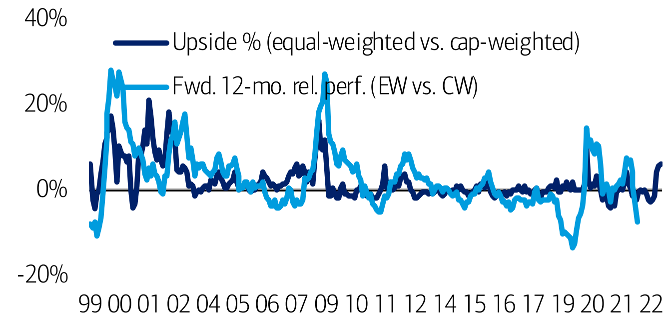
Exhibit 14: Bigger upside to consensus price target for the equal-weighted index, pointing to the equal-weighted index leading the cap-weighted S&P 500
Aggregate upside to equal-weighted (EW) vs. cap-weighted (CW) S&P 500 and fwd. 12-mo. performance of EW vs. CW index (55% correlation, 1999-5/23)



Source: FactSet, BofA US Equity & Quant Strategy
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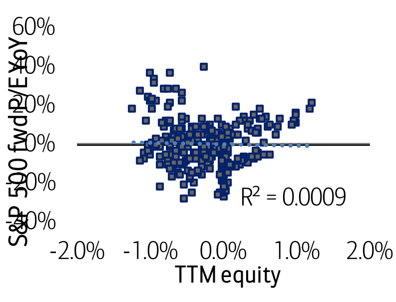
If equity sentiment is bearish, why is S&P trading at 20x?

If Wall Street is dominated by bears, with bonds and cash favored over stocks (see Sell Side Indicator) what is keeping the multiple of the S&P 500 at such lofty levels? Indeed, stocks appear to be statistically expensive on most measures we track (see Relative Value Cheat Sheet) but high snapshot multiples are not the reason to be bearish.

- **It's just math: E down, P/E up:** We are several quarters into an earnings recession, and expect a trough in 3Q. P/E ratios tend to increase when earnings decline, all else equal (rsq = 40%).
- **QE explains PE (especially for megacaps).** Since the global financial crisis (GFC), S&P 500 valuations have been more correlated with quantitative easing (QE) than with earnings growth. Fed balance sheet explained 50% of returns in excess of EPS growth (Exhibit 8), with mega-caps most correlated with QE.
- **No relationship between flows and multiples:** One might intuitively expect multiples to expand with inflows, and compress with outflows. In actuality, the correlation between equity flows and valuations is effectively zero (Exhibit 10).

Exhibit 15: No relationship between equity inflows and valuations
S&P 500 fwd P/E YoY vs. TTM equity flows as % of S&P 500 market cap (2000-21)



Source: EPFR, FactSet, BofA US Equity & Quant Strategy
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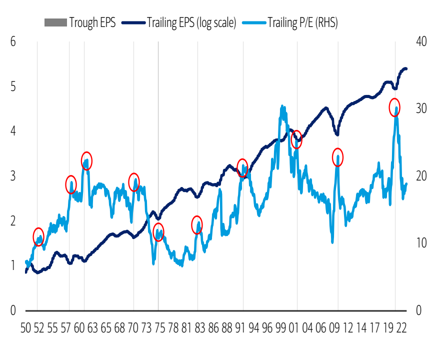
Exhibit 16: Multiples on trough earnings average 20x over the last 50 years
S&P 500 trailing EPS vs. P/E (1950-5/23)



Source: FactSet, Haver Analytics, Global Financial Data, BofA US Equity & Quant Strategy
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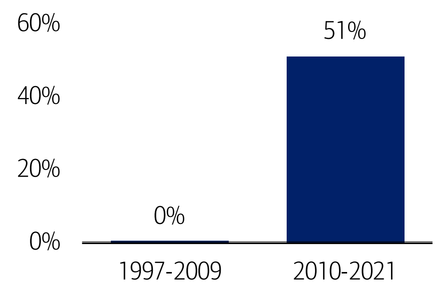
Exhibit 17: Fed balance sheet expansion explains half of multiple expansion
R-sq of Fed balance sheet YoY vs YoY change in S&P 500 market cap that is not driven by earnings (5/97-12/21)



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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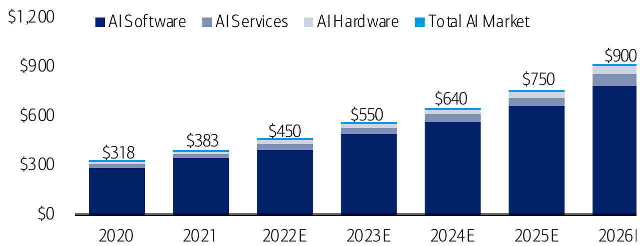
How can I make money off of AI?

Recent developments in generative AI argue for a sea change. The obvious benefit to companies that provide AI services (AI capex takers) may be overshadowed by the longer-term benefit to inefficient companies adopting AI and other efficiencies to expand margins. AI could add 0.8-1.4ppt to global productivity growth in the long run – see Primer, and market participants tend to reward permanent, efficiency-driven margin expansion (labor lightness) over financially engineered margin growth. The global direct AI opportunity (software + services + hardware) is projected to reach $900B by 2026, mostly via Software. (source: IDC). But we think the potential for earnings power from efficiency gains is likely a much larger a benefit.

Exhibit 18: AI Software spend to reach ~900bn by 2026E, mostly via software

Global AI market size (US$ bn)



Source: BofA Global Research, IDC

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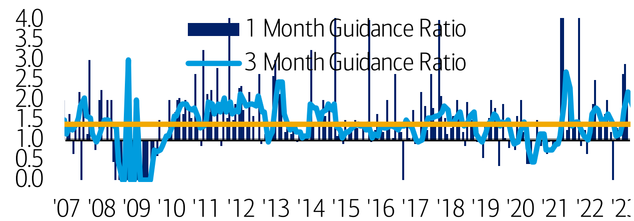
Exhibit 19: Our capex guidance ratio remains above 1x, pointing to continued strength in spend on automation & efficiency

S&P 500 Capex Guidance Ratio (# Above vs Below Consensus) - 05/23



Source: FactSet, BofA US Equity & Quant Strategy

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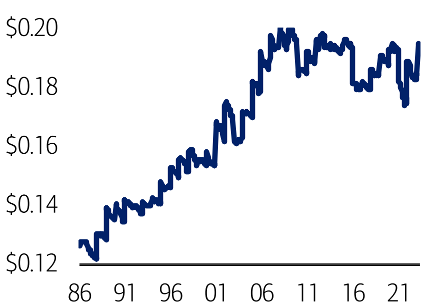
Within Tech, own capex takers, not spenders: AI is a growth theme but not all Software companies win - some will need to spend just to tread water. And companies with the highest capex to sales ratio chronically underperform (Exhibit 22). Software companies could need to spend on AI just to remain competitive. We prefer Semis, benefitting from the AI capex cycle as well as automation and other capex themes. Software is more idiosyncratic than Semis and Hardware – see Navigating the next frontier of enterprise software - AI Primer for our team's proprietary AI ranking system.

Exhibit 20: 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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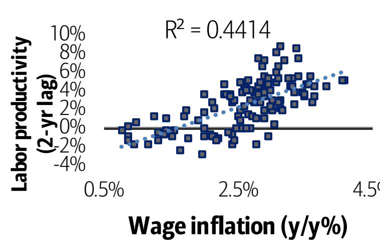
Exhibit 21: Wage inflation has historically driven labor productivity growth on a lagged basis

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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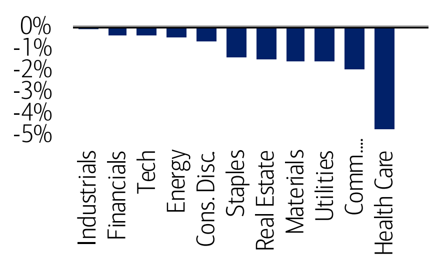
Exhibit 22: Capex spenders lag in every sector

Annualized relative performance of capex spenders in each sector (top decile in capex to sales) vs its equal-weighted sector (1986-5/23)



Source: FactSet, BofA US Equity & Quant Strategy

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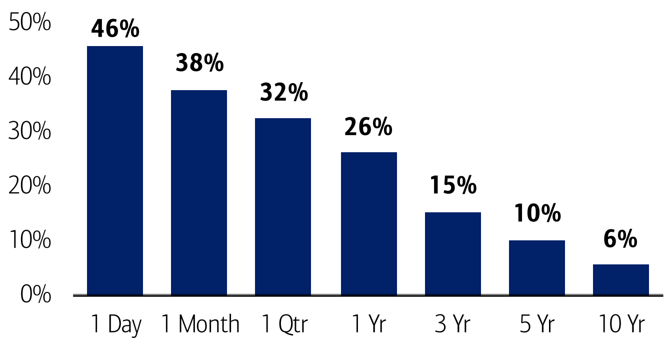
Should I shorten or lengthen my time horizons?

- **For stocks, the best recipe for loss avoidance is time**: the probability of losing money over one day is a little worse than a coin-flip (46%), but the probability declines to just 6% over a 10-year window since 1929 (Exhibit 23).

- **Negative 10-yr returns are rare**: Outside of the 1930s, the 2000s is the only decade with negative total returns (Exhibit 24).
- **Market timing is difficult**: Since the 1930s, if an investor sat out the 10 best return days per decade, his/her returns would be just 40% compared to ~20,000% returns since then (Exhibit 25).
- **Time heals most wounds**: Recovering bear market losses has historically required remaining invested for about 1,100 trading days (over four years), but some market recoveries, like in 2020, have been much swifter (Exhibit 26).

Exhibit 23: As time horizons increase, equity losses drop
Probability of negative returns, based on S&P 500 total returns from 1929-5/31/2023



Source: Bloomberg, BofA US Equity & Quant Strategy

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Exhibit 24: Returns by decade have rarely been negative
S&P 500 Returns by Decade (1930s -2010s)

Decade	Total Return	Avg Annual Return
1930s	-1%	-0.1%
1940s	149%	9.5%
1950s	486%	19.3%
1960s	112%	7.8%
1970s	77%	5.9%
1980s	404%	17.5%
1990s	431%	18.2%
2000s	-9%	-0.9%
2010s	256%	13.6%

Source: BofA US Equity & Quant Strategy, Bloomberg

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Exhibit 25: Market timing can lead to missing out on the best days
S&P 500 returns by decade excluding the 10 best and 10 worst days, as of 5/31/23

Decade	Price return	Excluding best 10d per decade	Excluding worst 10d per decade	Excluding best/worst 10d per decade
1930	-42%	-79%	39%	-50%
1940	35%	-14%	136%	51%
1950	257%	167%	425%	293%
1960	54%	14%	107%	54%
1970	17%	-20%	59%	8%
1980	227%	108%	572%	328%
1990	316%	186%	526%	330%
2000	-24%	-62%	57%	-21%
2010	190%	95%	351%	203%
2020	32%	-26%	154%	41%
Since 1930	**19,844%**	**41%**	**4,282,461%**	**30,090%**

Source: Bloomberg, BofA US Equity & Quant Strategy

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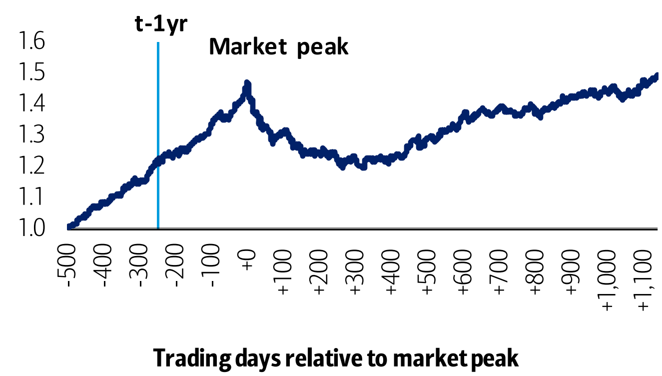
Exhibit 26: Unless you can pinpoint the peak of the market to within 12 months, you are typically better off staying invested
Average daily performance index of S&P 500 before and after market peaks, since 1937



Source: BofA US Equity & Quant Strategy, Bloomberg

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Important Disclosures

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Investment rating	Total return expectation (within 12-month period of date of initial rating)	Ratings dispersion guidelines for coverage cluster[R1]
Buy	≥ 10%	≤ 70%
Neutral	≥ 0%	≤ 30%
Underperform	N/A	≥ 20%

[R1] Ratings dispersions may vary from time to time where BofA Global Research believes it better reflects the investment prospects of stocks in a Coverage Cluster.

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