US Equity Strategy in Pictures

It's a great time to be a fundamental investor…

Investment Strategy

23 June 2023

Equity and Quant Strategy
United States

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…if you have unlimited capital and infinite time

Investor frustration is palpable: recession-like demand for goods, booming services demand, some early cycle (homebuilders) and some late cycle (secular growth) leadership. Valuation dispersion is near all-time highs (good for value investors) but cap-weighted index fundamentals point to narrowing, high multiple leadership as investors are pushed into TMT. But risk-off sentiment in December (see Wall St. bearish = bullish) is lower today, and duration risk has been addressed in select mega-cap Tech co's via 2022's PE compression plus cost cuts and buybacks. Old cyclicals – starved of capital for a decade – now have supply and capital discipline plus potential for efficiency benefits. Productivity spend bodes well for valuation and returns: labor efficiency gains have been rewarded with lower risk premia than financially engineered or cost-cutting gains.

Short bonds, long beta

If equity risk premia settle lower, Tsy yields have upside risk (Exhibit 6). Moreover, former Tsy demand (Fed, China, BoJ) has vaporized; US debt to GDP, governance and political stability measures now track emerging markets (see DM = EM note), labor and commodities are supply constrained, arguing for pockets of higher nominal growth and spurring efficiency spend. Here, productivity has generally driven higher growth expectations (read: higher long rates). QE drove PE expansion mostly in long duration Cons. Disc. and Comm. Svcs. (we are Underweight both) but not in higher beta cyclicals.

SLOOS on watch, but this credit cycle is different

We are in a credit cycle based on Senior Loan Officer Surveys or SLOOS, Credit Impulse or CI, financing costs, etc. But lending channels and uses of credit have been different from prior cycles: more credit came from regionals and shadow lending vs. big, regulated banks; cyclicals paid down debt rather than expanding capacity; buybacks and tech capex were the biggest uses of capital. The correlation between SLOOS and S&P EPS has dropped (-65% correlation pre-GFC to -35% post); same for CI and EPS (55% to 5%). Sectors once sensitive to credit like Cons. Disc., Financials, Tech and Comm. Svcs. now show minimal sensitivity. Private equity played value investor in 2022's bear market with 100 US public companies privatized (70% above run-rate). Our High Yield team's credit conditions indicator sits just above the 50th percentile or "normal conditions". Risk exists in genuinely impaired assets (CRE, some levered loans, etc.) but size is known and manageable.

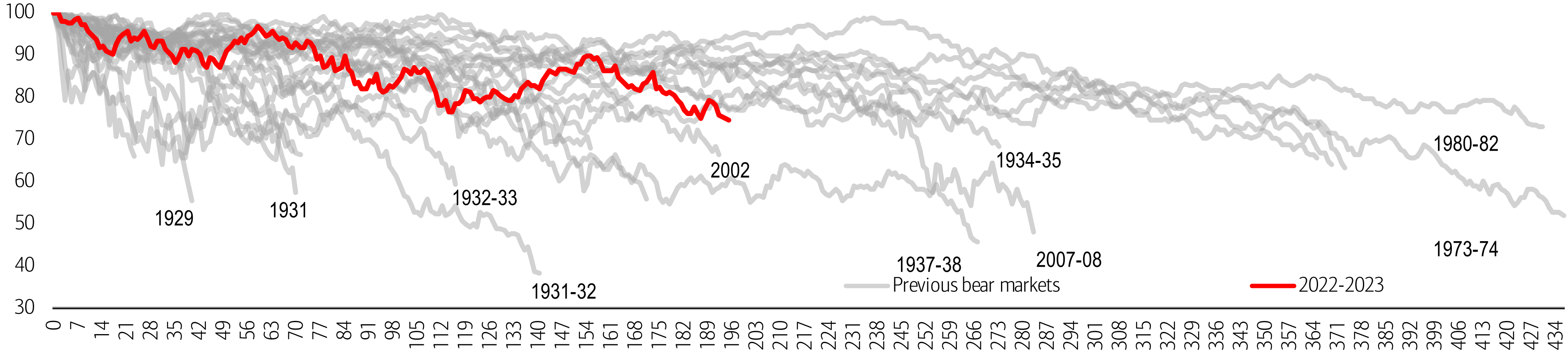
GFC: global financial crisis
QE: quantitative easing
UW = underweight

Market Outlook

Bear market post-mortem

Exhibit 1: S&P 500 continued uptrend over N12M post-20% gain off bear market low 11 of 12 times since 1950s

Peak-to-trough declines in historical bear markets (declines of 20%+ without a 20% rally) since 1929



Source: Bloomberg, BofA US Equity & Quant Strategy

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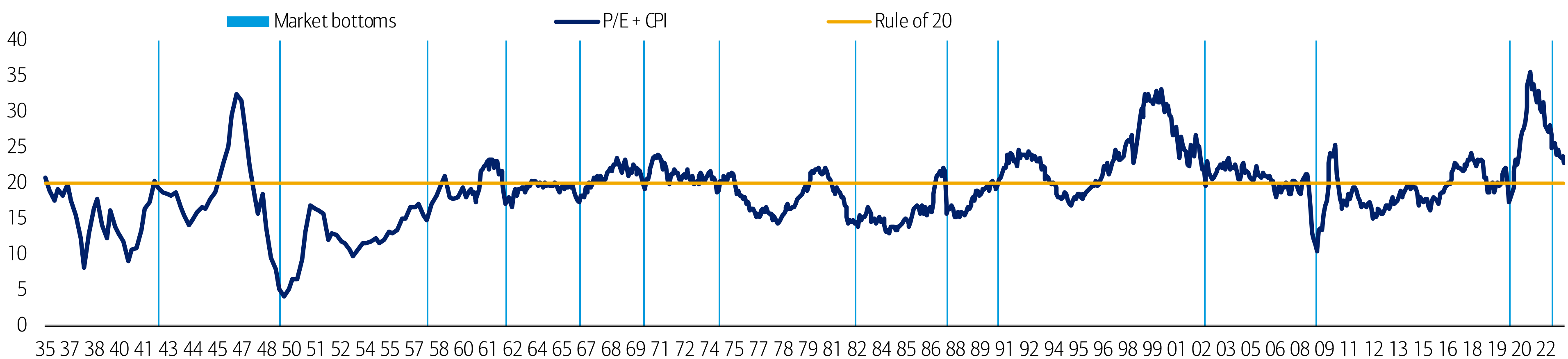
Exhibit 2: Rule of 20? Rule of 25 now (P/E + CPI <25)

S&P 500 trailing P/E + CPI YoY and prior mkt bottoms (1935-5/23)



Source: BofA US Equity & Quant Strategy, FactSet

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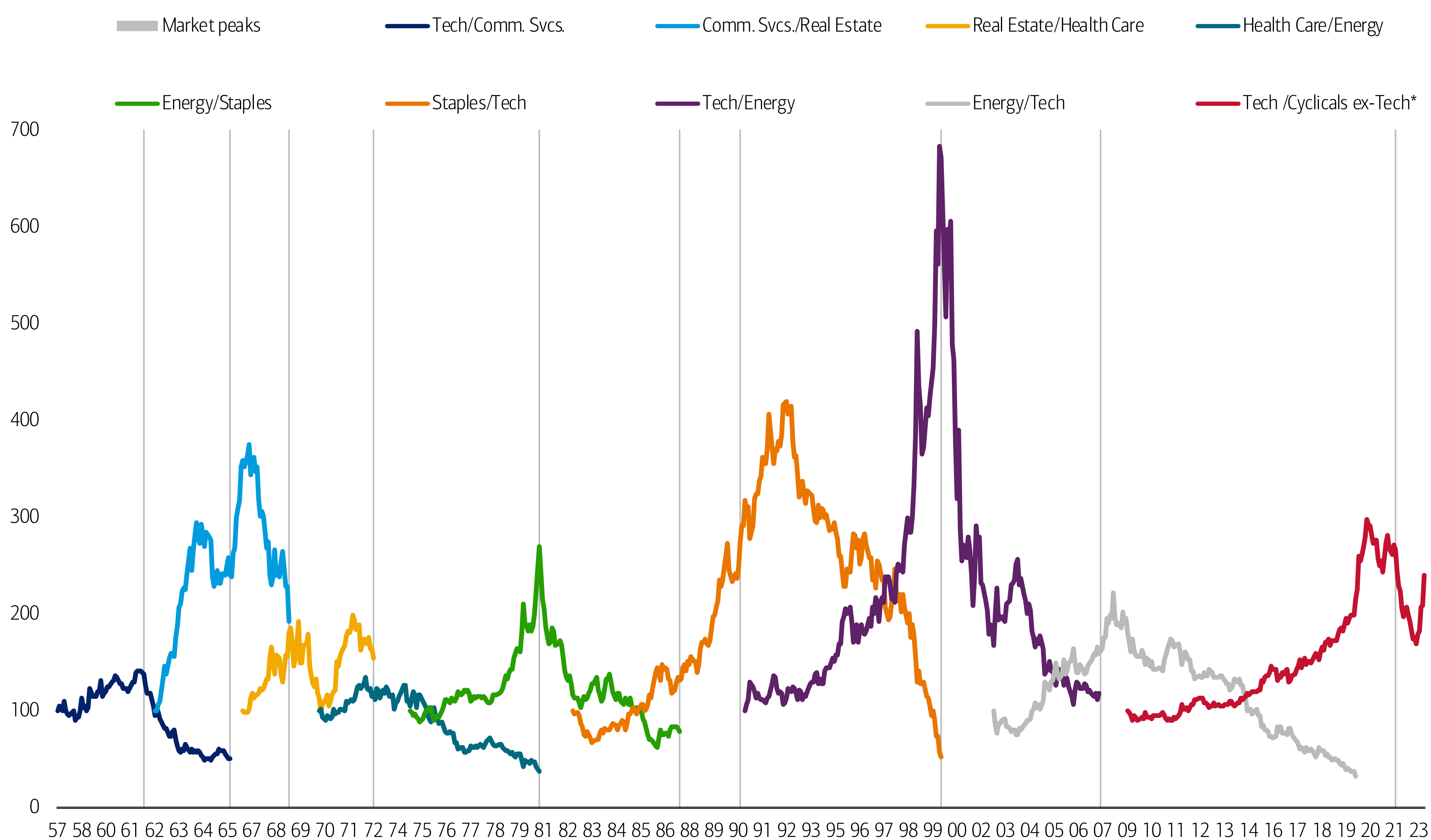
Leadership change?

Exhibit 3: Bear markets see changing leadership

Relative performance of prior bull market leader vs. the next bull market leader (beginning of bull market = 100)



Source: BofA US Equity & Quant Strategy, FactSet *Cyclicals ex-Tech include Energy, Materials, Financials, Industrials.

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S&P 500 year-end target 4300, equal-weighed benchmark should do better

Exhibit 4: 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 to 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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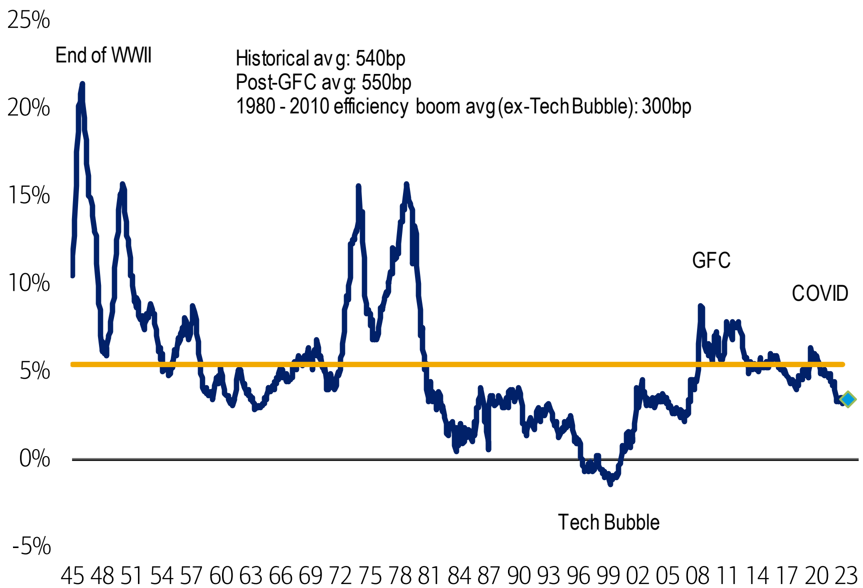
Exhibit 5: We expect ERP to normalize at levels lower than the post-Global Financial Crisis era's average of 550bp

Normalized equity risk premium (ERP) with BofA normalized ERP forecast (350bp), 1945-5/23



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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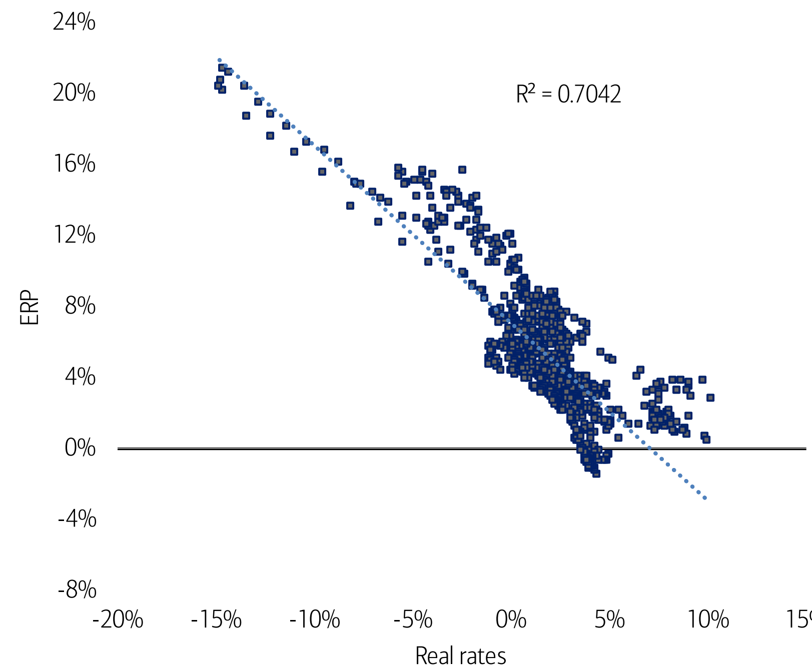
Exhibit 6: Higher real rates = lower ERP

Historical relationship between our normalized ERP vs. real rates (1945-5/23)



Source: BofA US Equity & Quant Strategy, Global Financial Data, Bloomberg

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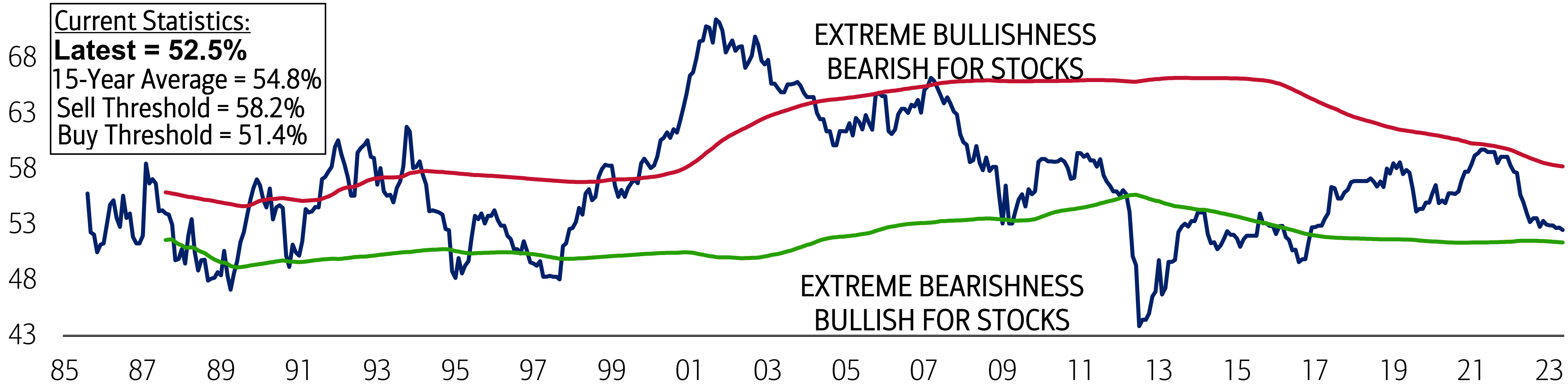
Wall Street is bearish. This is bullish.

Exhibit 7: Equity sentiment declined 7ppt from 2021 peak

Sell Side Indicator (SSI), as of 5/2023



Source: BofA US Equity & Quant Strategy. 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. 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 8: Sell side loves bonds

Average recommended allocation to bonds by Wall Street strategists (2006-5/2023)

Source: BofA US Equity & Quant Strategy

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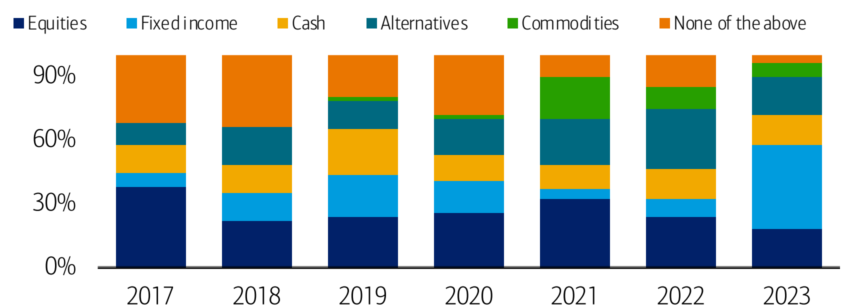
Exhibit 9: Individual investors love bonds

How are you currently changing your asset allocation? Moving more into...



Source: Wealth Management Marketing Research, BofA US Equity & US Quant Strategy. GWIM = Global Wealth & Investment Management.

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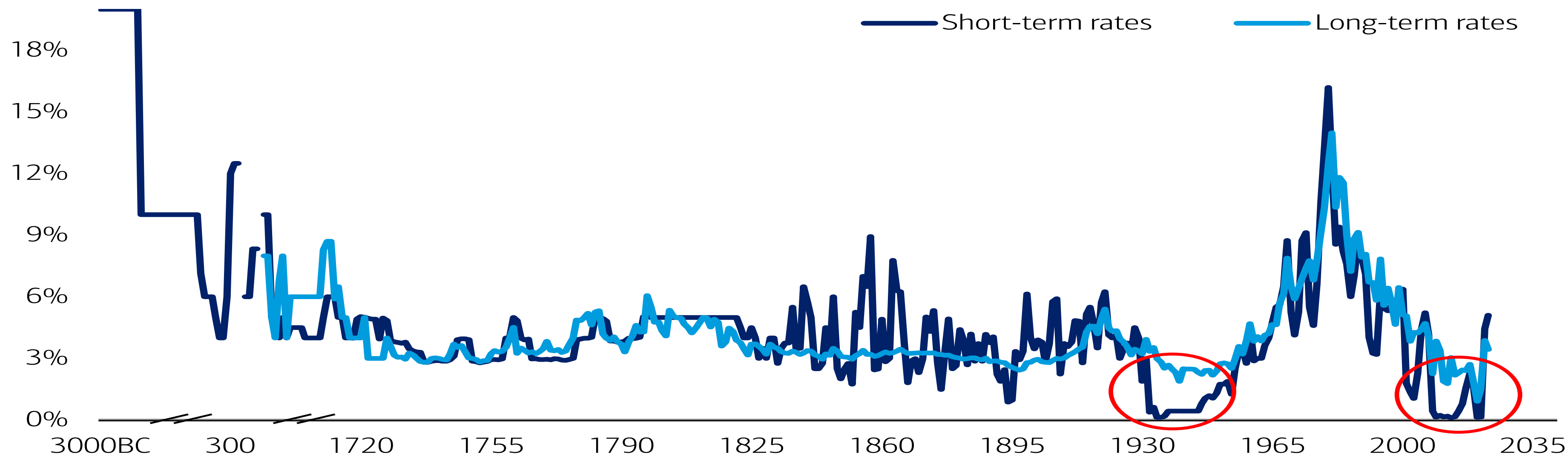
We think real rates could move higher

Exhibit 10: Rates to mean revert lower from last year? 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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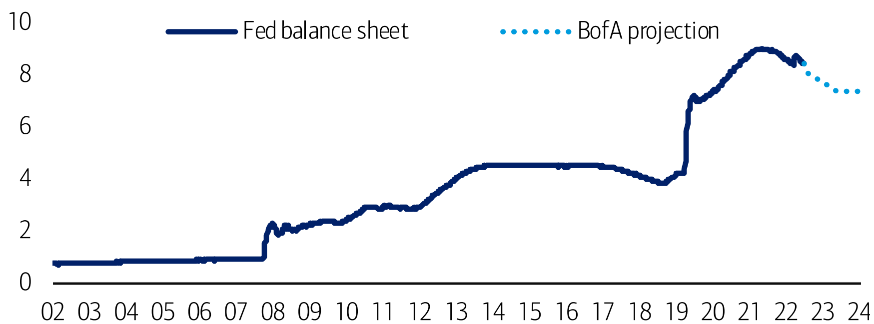
Demand vacuum: buyers of Treasuries in last bull market Fed, China, BoJ

Exhibit 11: Fed's balance sheet normalization has begun

Fed balance sheet + BofA projection ($T)



Source: Bloomberg, BofA Global Research

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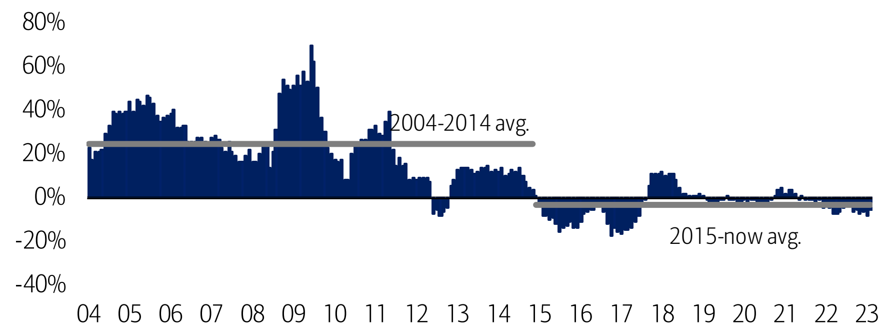
Exhibit 12: China flipped from bond buyer to seller in 2015

YoY change in China's holdings of Treasuries (2004-3/2023)



Source: Bloomberg, BofA Global Research

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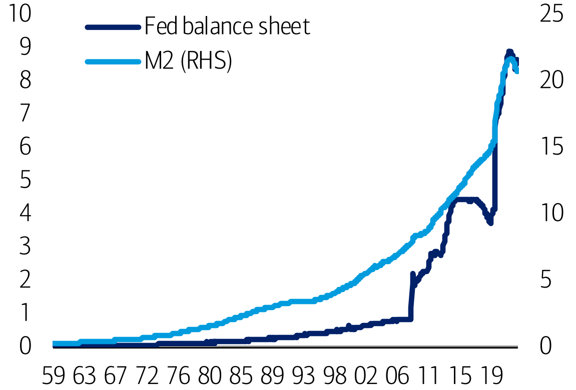
Leverage transfer from private to public sector

Exhibit 13: +$4.2T in Fed balance sheet & +5.4T in M2 since 2019

Fed balance sheet and M2 money supply ($T; 1959-5/31/2023)



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

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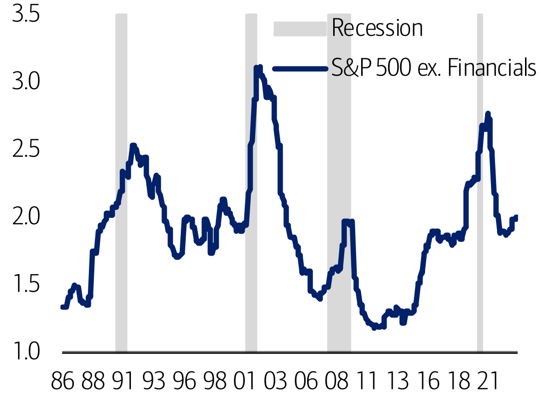
Exhibit 14: S&P 500 leverage ex. Financials below COVID levels

S&P 500 ex-Financials Net Debt/EBITDA (1986-5/2023)



Source: FactSet, BofA US Equity & Quant Strategy

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Exhibit 15: Consumer balance sheets healthier than pre-COVID

US Financial obligations ratio (Total, SA % of disposable income), 1980-1Q23

Source: Bloomberg, BofA US Equity & US Quant Strategy

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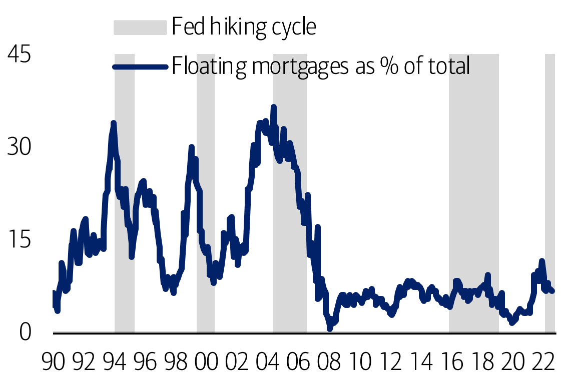
Private sector bought themselves time to adapt to higher rates

Exhibit 16: ~90% of mortgages are fixed-rate

New floating mortgages as a % of total vs. Fed hiking cycles (1990 5/2023)



Source: Bloomberg, BofA US Equity & Quant Strategy

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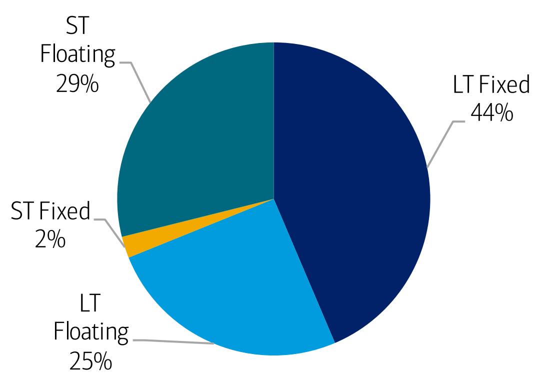
Exhibit 17: Then: 44% of S&P 500 debt was L/T fixed in 2007

S&P 500 debt composition (as of 4Q 2007)



Source: FactSet, BofA US Equity & US Quant Strategy

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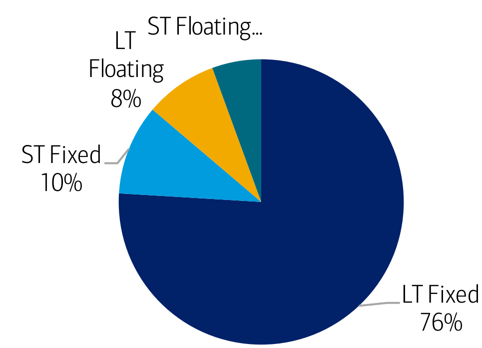
Exhibit 18: Now: 75%+ of S&P 500 debt is L/T fixed today

S&P 500 debt composition (as of March 2023)



Source: FactSet, BofA US Equity & US Quant Strategy

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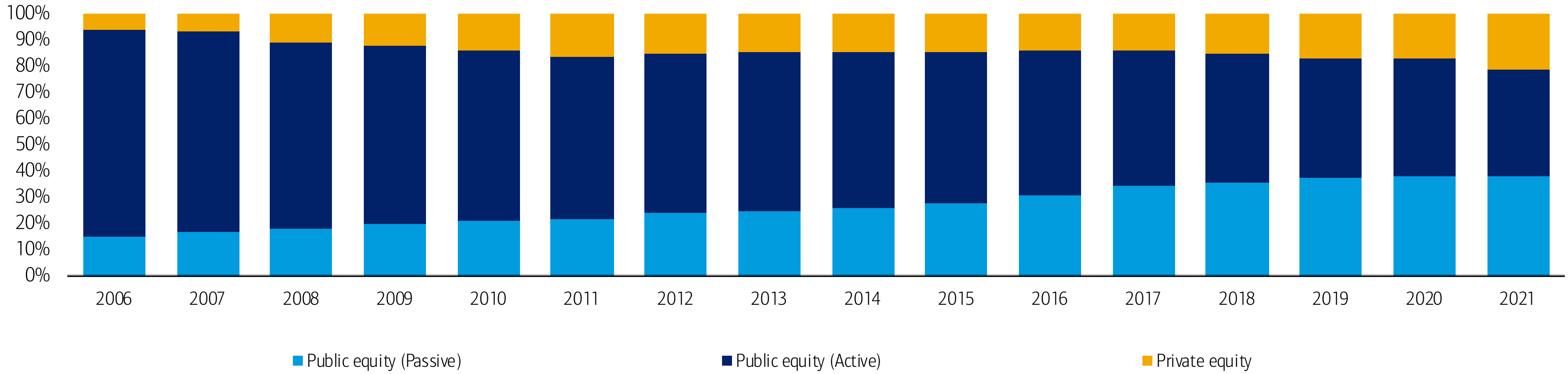
Fundamental active equity funds replaced by private & passive equity

Exhibit 19: Pension allocations squeezing out active public equity

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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Exhibit 20: Near record duration risk in S&P 500

S&P 500 duration based on our DDM framework (as of 5/2023)

Source: BofA US Equity & Quant Strategy

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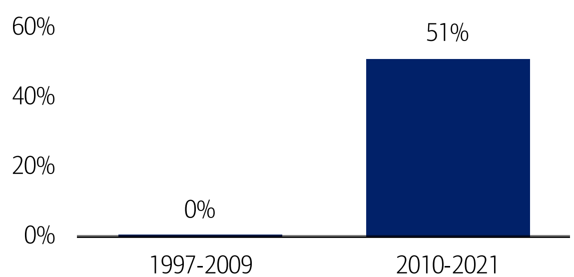
Exhibit 21: Over half of PE explained by QE, mostly in Tech, TMT, Consumer Disc (long duration)

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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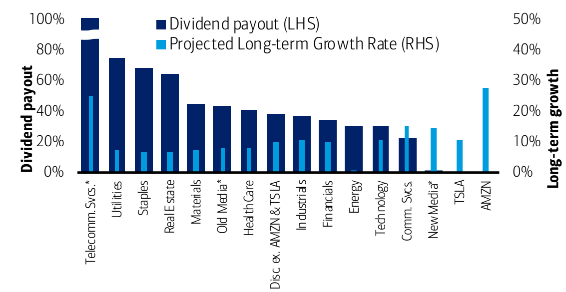
Exhibit 22: Short duration (high payout/low growth) to long duration (high growth/low payout)

S&P 500 dividend payout ratios and projected long-term growth rates as of 5/22/23



Source: FactSet, BofA US Equity & Quant Strategy. *denotes industry groups/industries in Communication Services; "New Media" includes Entertainment and Interactive Media & Services industries; "Old Media" includes Media industry.

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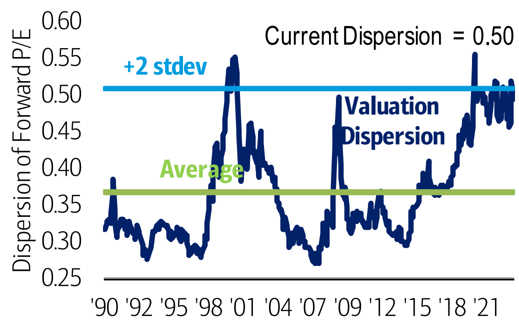
Alpha opportunities are high

Exhibit 23: Lots of valuation dispersion = high alpha opportunity, bodes well for a value cycle
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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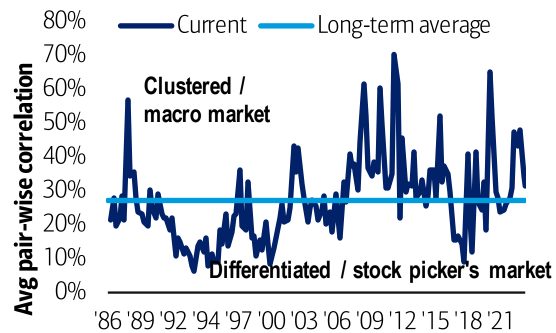
Exhibit 24: Pair-wise correlation in the S&P 500 is declining
Avg. pair-wise stock correl. based on 90-day periods, daily (as of 5/23)



Source: FactSet, BofA US Equity & US Quant Strategy

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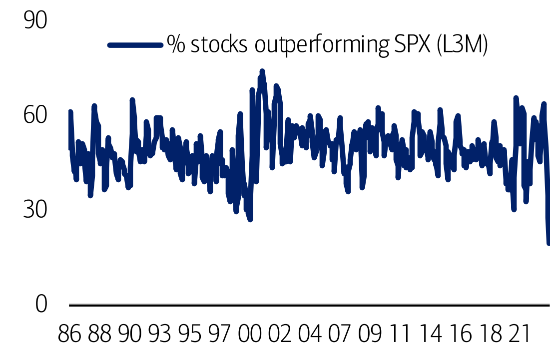
Exhibit 25: Bad breadth usually mean reverts
% of stocks outperforming the S&P 500 over the last three months (1986-5/31/2023)



Source: BofA US Equity & Quant Strategy, FactSet

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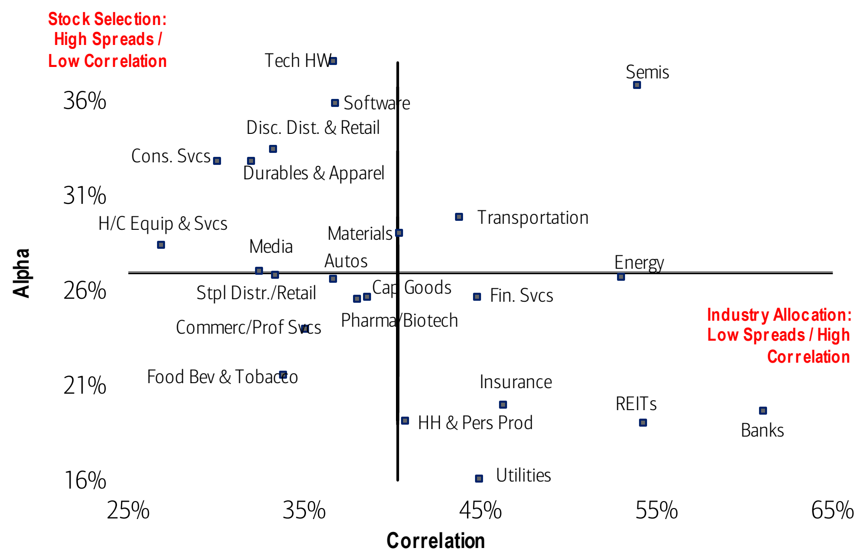
Exhibit 26: Where to pick stocks? Tech, Consumer & Health Care: more idiosyncratic, less macro
Historical Intra-stock correlation vs. performance spread (3Q86 to 1Q23)



Source: FactSet, BofA US Equity & US Quant Strategy

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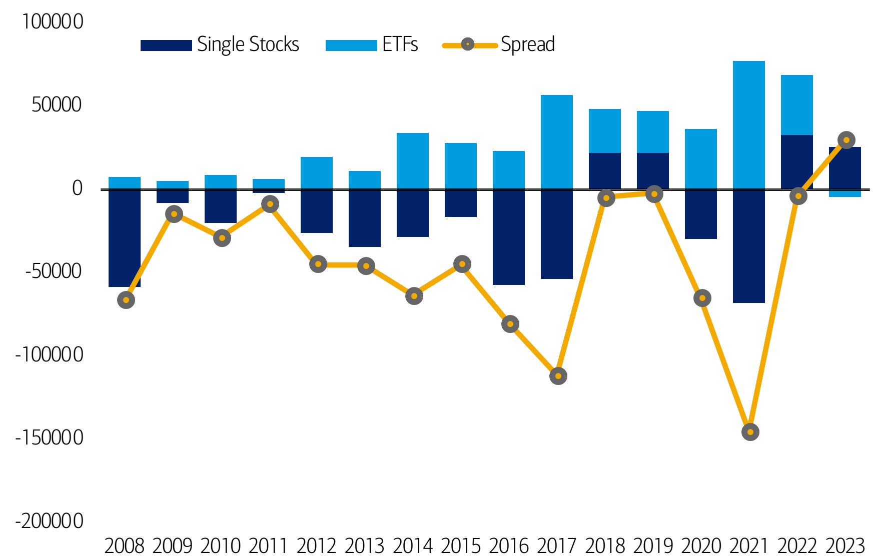
Exhibit 27: First sign of stock picking since 2008
Cumulative flows into single stocks vs ETFs by year (and 2023 YTD) by BofA Securities clients, $mn



Source: BofA Securities

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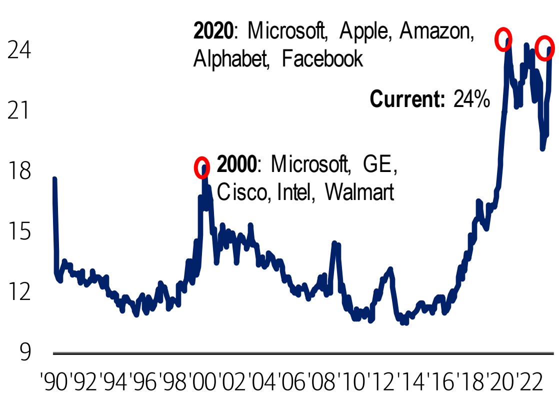
Equal-weighted S&P 500 > cap-weighted S&P 500

Exhibit 28: Anti-monopoly rhetoric likely
Top 5 companies' weight in the S&P 500 (1990-5/23)



Source: Bloomberg, BofA US Equity & Quant Strategy

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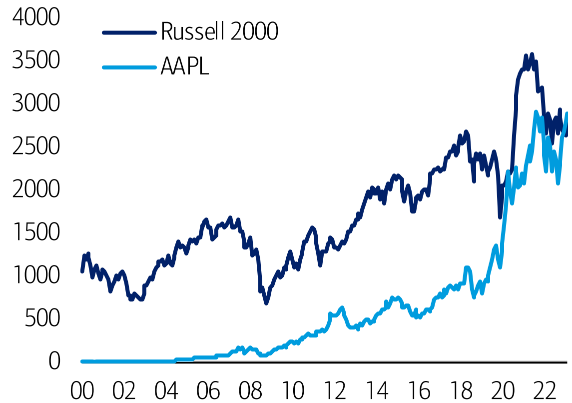
Exhibit 29: AAPL is now bigger than the Russell 2000
Market cap of Russell 2000 vs. AAPL ($B; 2000-6/21/23)



Source: Bloomberg, BofA US Equity & Quant Strategy

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Exhibit 30: 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 31: Ex-Nifty 50, S&P 500 trades at 15x trailing P/E
S&P 500 trailing P/E ex-Top 50 vs. top 50 stocks (1986-5/23)

Source: BofA US Equity & Quant Strategy, FactSet

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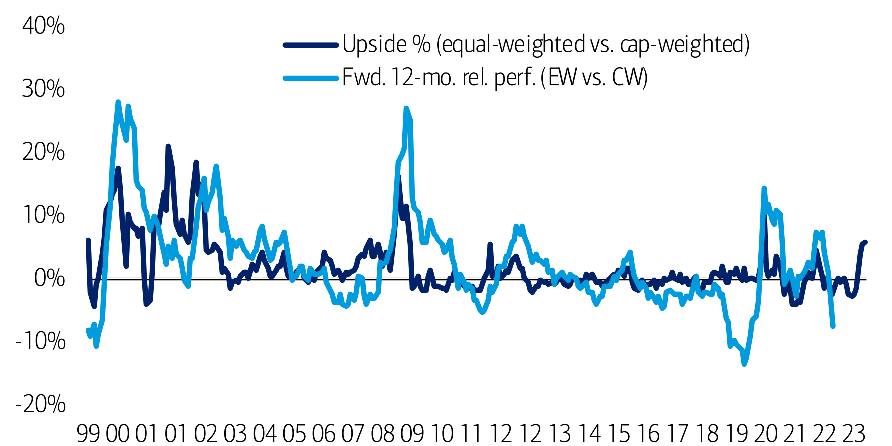
Exhibit 32: Higher price returns forecast for equal-weighted S&P bodes well for leadership
Aggregate upside to equal-weighted (EW) vs. cap-weighted (CW) S&P 500 and fwd. 12-mo. performance of EW vs. CW index (55% correlation, 1999-5/23)



Source: FactSet, BofA US Equity & Quant Strategy

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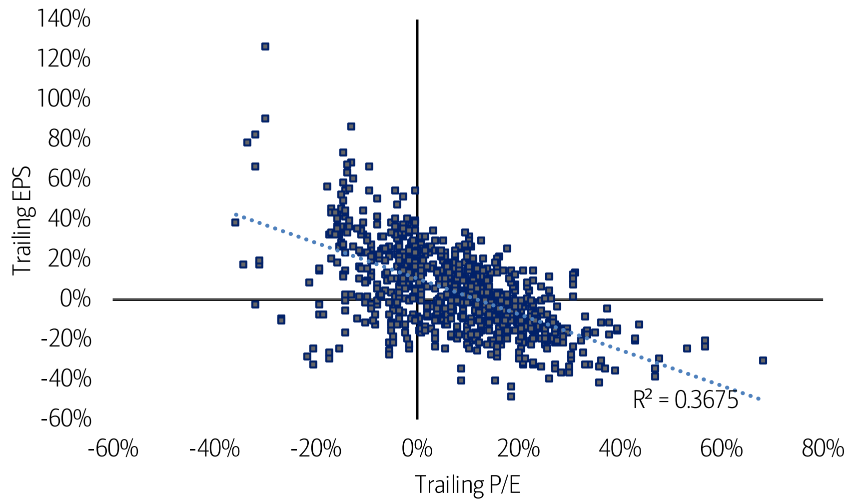
"If everyone's bearish, why is the S&P trading at 20x?"

Exhibit 33: P/E rises as earnings fall

S&P 500 trailing EPS YoY vs. P/E YoY (1950-5/23)



Source: BofA US Equity & Quant Strategy, FactSet

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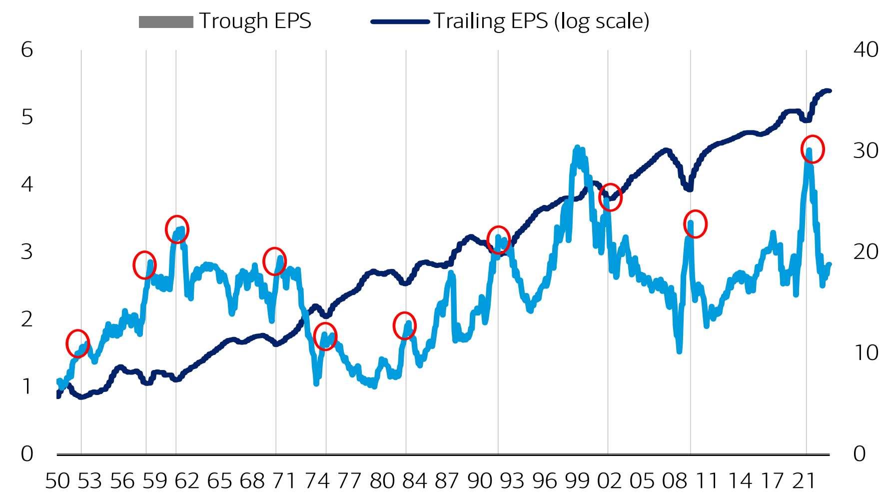
Exhibit 34: Trough earnings multiples average 20x

S&P 500 trailing EPS vs. P/E (1950-5/23)



Source: FactSet, BofA US Equity & Quant Strategy

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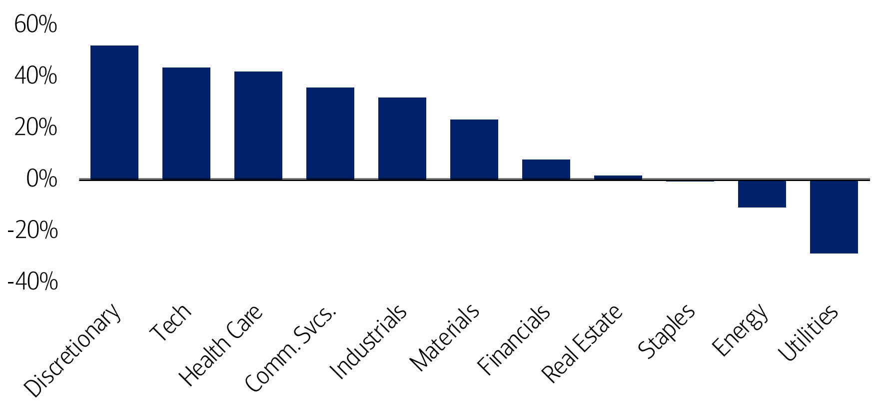
Exhibit 35: QE drove multiple expansion

Correlations between y/y change in Fed balance sheet and y/y change in trailing PE (2010-present)



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

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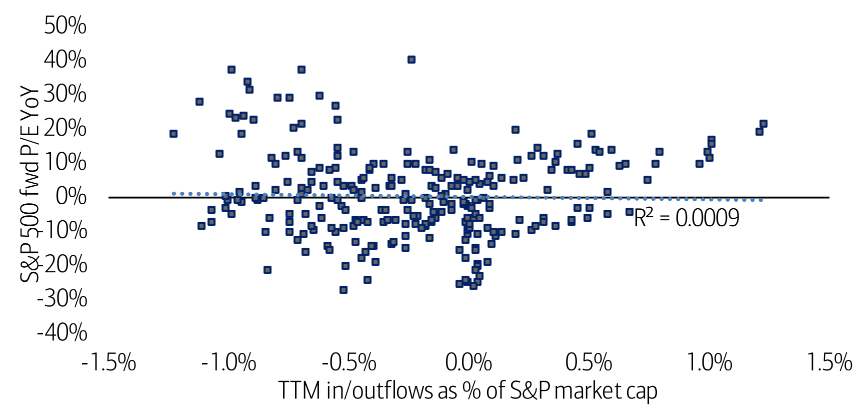
Exhibit 36: Equity flows have shown no relationship to valuations

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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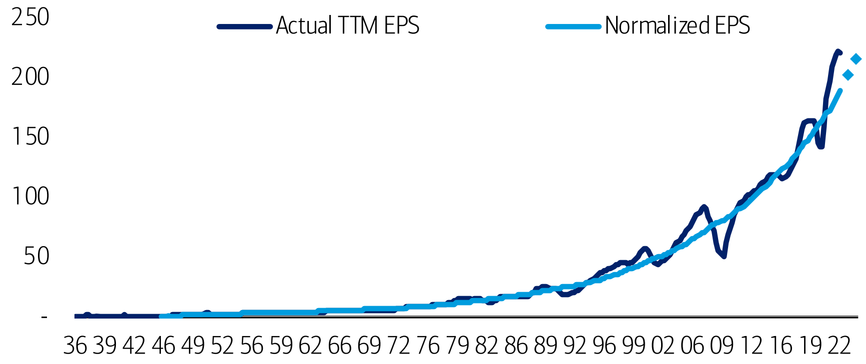
20 years of financially engineered growth (buybacks, cost cuts, globalization)

Exhibit 37: Cyclical peak: 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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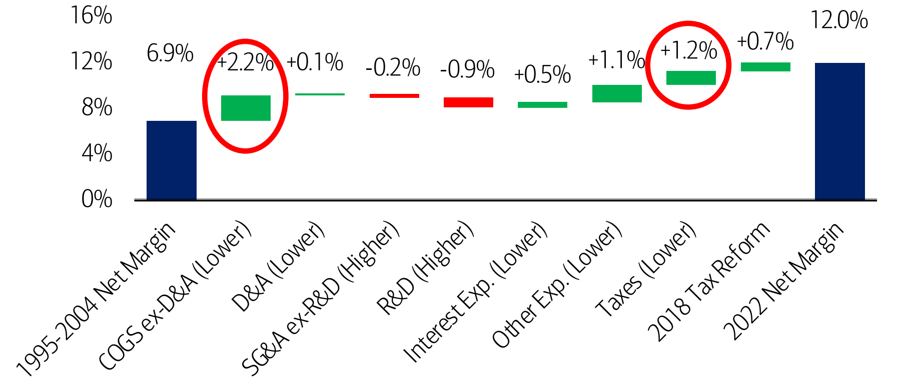
Exhibit 38: Globalization explains almost all of margin expansion since 1995

2022 net margin (ex-Financials) expansion waterfall vs. 1995-2004 levels (factors related to globalizatior circled in red)



Source: BofA US Equity & Quant Strategy, FactSet

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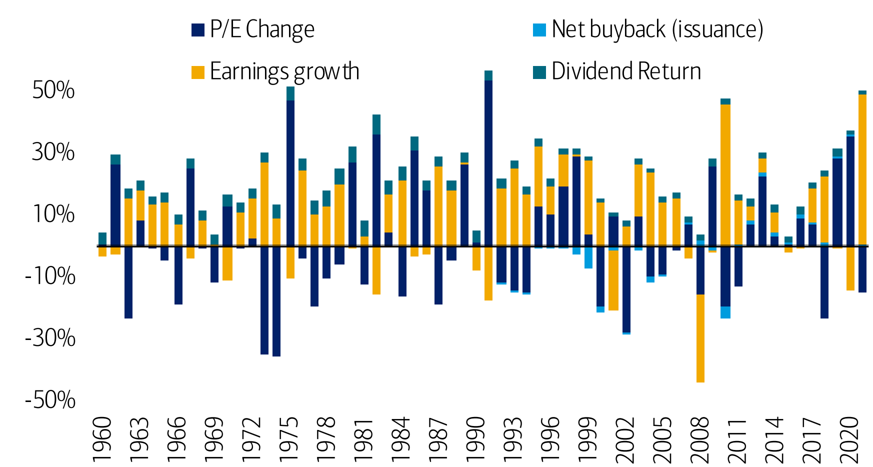
Exhibit 39: Buybacks have added 1ppt/yr of EPS over the past decade

S&P 500 total return decomposition, 1960-2022



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

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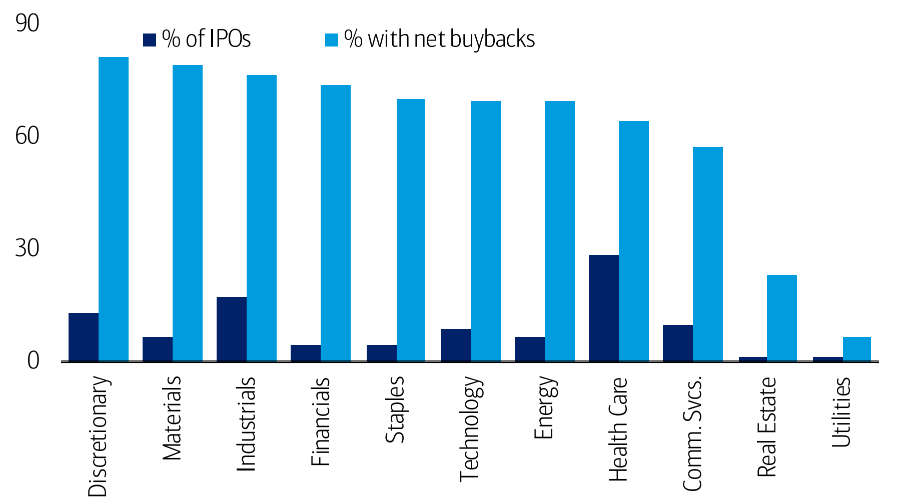
Exhibit 40: IPOs vs. buybacks: Supply & demand dynamics by sector

% of IPOs over the last 12 months by sector vs. % of sector doing net buybacks (as of 4/30/23)



Source: FactSet, BofA US Equity & Quant Strategy

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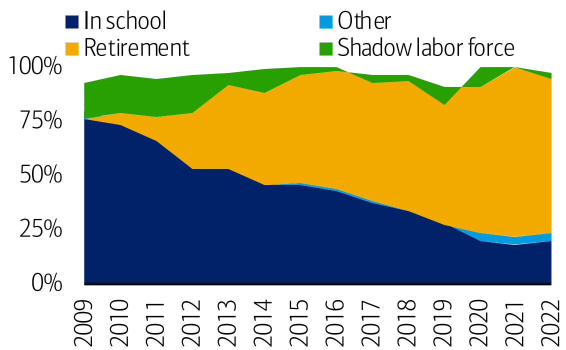
Next bull case for margins, multiples & performance: productivity/efficiency

Exhibit 41: Great resignation = lower participation
% contribution to the total change in LFP since '98



Source: FRB Atlanta, BofA US Equity & Quant Strategy. Note: Disability/Illness and Family Responsibilities are not included.

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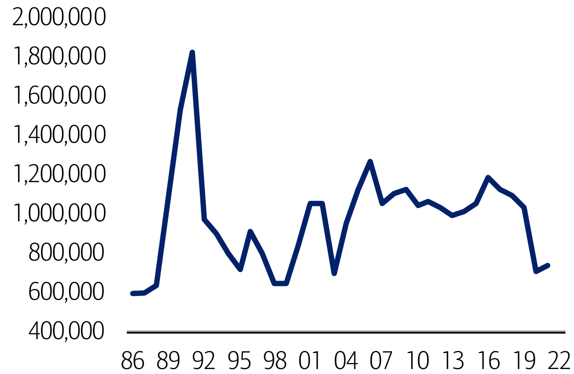
Exhibit 42: Immigration at cycle lows
Persons Obtaining US Legal Permanent Resident Status



Source: Haver Analytics

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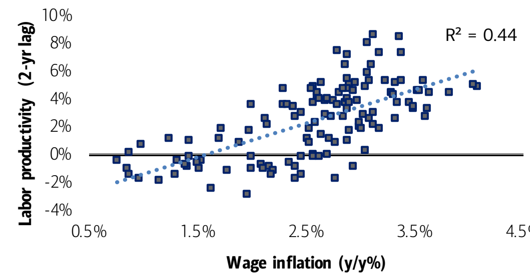
Exhibit 43: Wage inflation has historically driven labor productivity growth on a lagged basis
US Manufacturing wage inflation and labor productivity (y/y % changes)



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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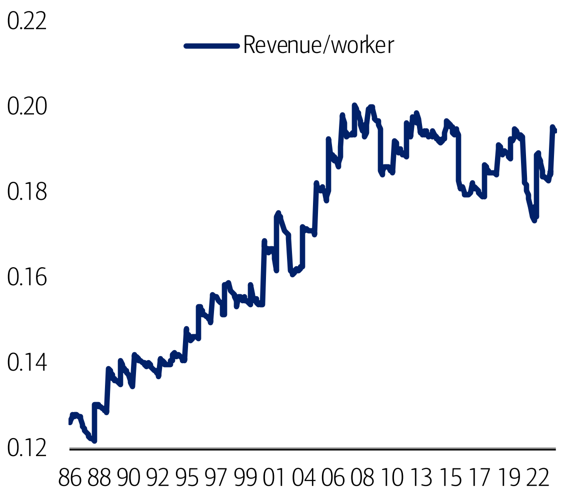
Exhibit 44: Labor efficiency improvements stalled amid ZIRP
S&P 500 $M revenue per year per worker (1986-5/2023)



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

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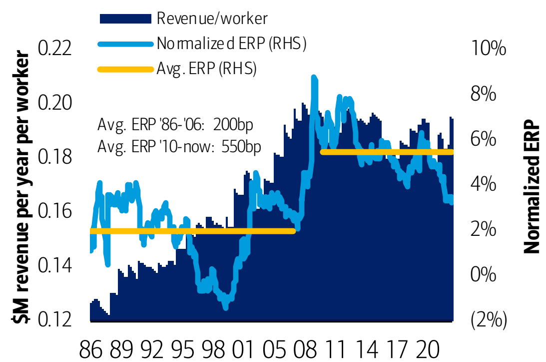
Exhibit 45: Higher ERP amid stalled productivity
S&P 500 $M revenue per year per worker (CPI adjusted) vs. Normalized ERP (1986-5/2023)



Source: BofA US Equity & Quant Strategy, Bloomberg, Haver Analytics, FactSet. Norm. ERP = norm. earnings yield –real risk-free rate, where norm. 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, fwd1-yr CPI was used as a proxy, which showed the strongest correlation to the 10-yr breakeven

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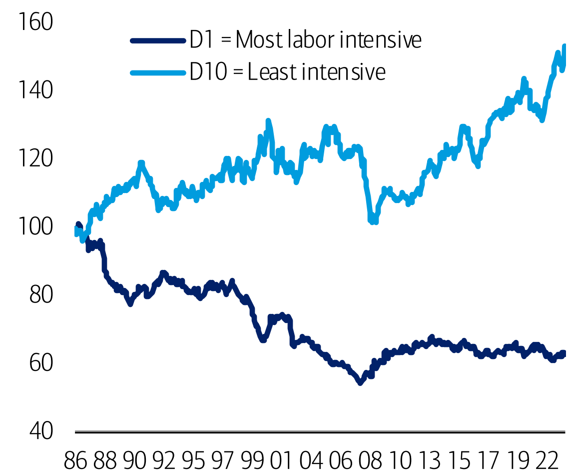
Exhibit 46: Labor efficiency generates alpha
Cumulative relative performance vs. equal weighted S&P 500 index (based on top and bottom sector neutral deciles by # of employees to sales ratio)



Source: BofA US Equity & Quant Strategy, FactSet

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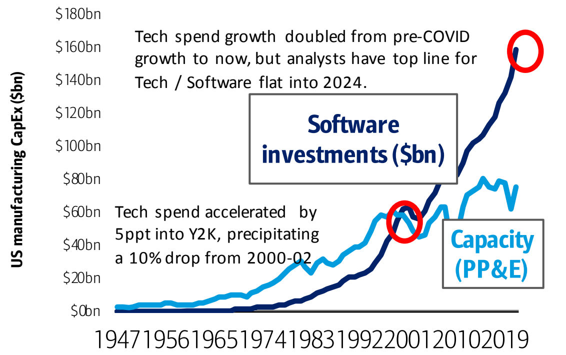
From software to structures: capex boom

Exhibit 47: Y2K pull forward preceded spending cuts
US Manufacturing Capex spending: software vs. "core" industrial equipment (1990-2021)



Source: Software investments include both third-party purchased and custom software. Equipment investments include industrial and transportation equipment and exclude information processing equipment (e.g. computers, communication equipment, etc.) **Source:** BofA Global Research, BEA

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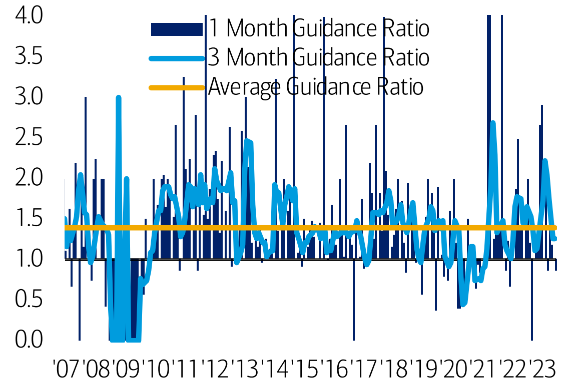
Exhibit 48: More above than below capex guides
S&P 500 capex guidance ratio (number above vs. below consensus) – as of 6/21/23



Source: BofA US Equity and Quantitative Strategy, Bloomberg

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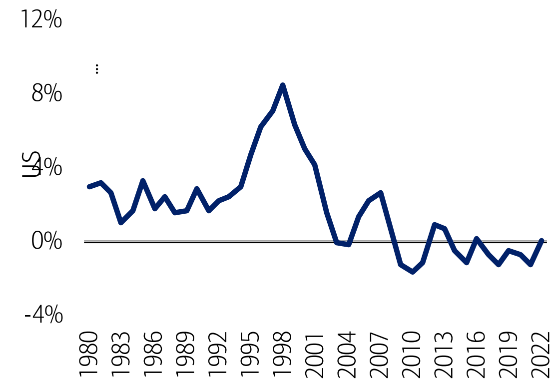
Exhibit 49: Limited manufacturing capacity additions since 2008 recession
US manufacturing capacity (1957-2022)



Source: Federal Reserve, BofA Global Research

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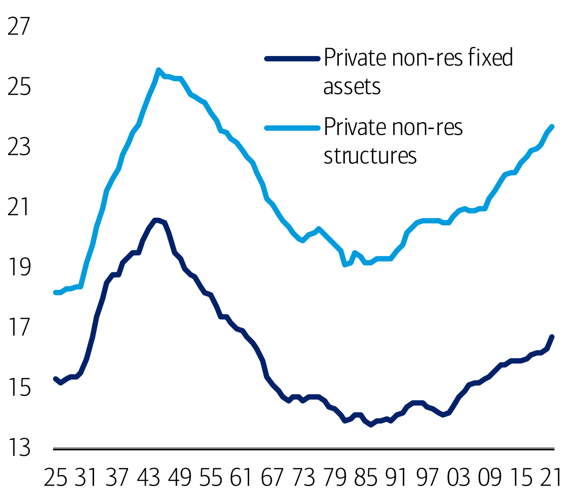
Exhibit 50: Stuff is old
Avg. age of private nonresidential fixed assets (years) (1925-2021)



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

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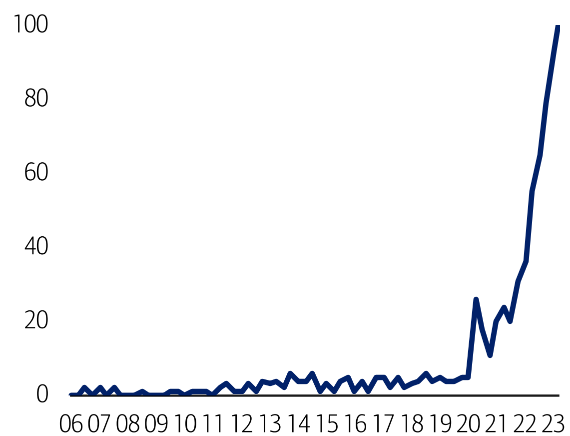
Exhibit 51: Mentions of re-shoring skyrocketed over the past year
Companies mentions of re-/near-/on-shoring (100=max; 2006-5/22/23)



Source: AlphaSense, BofA Global Research

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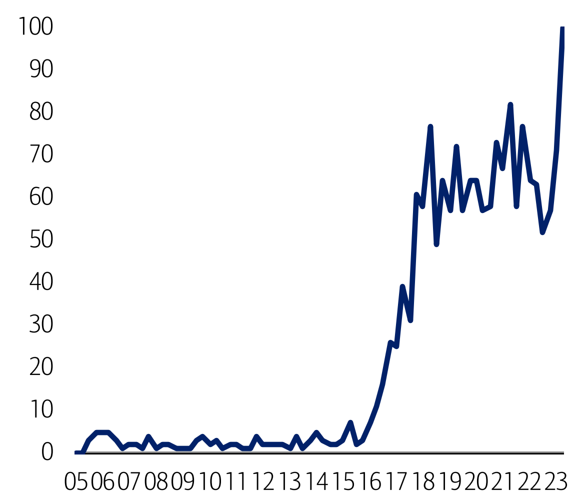
Exhibit 52: AI capex - mentions +60% YoY
Mentions of AI during earnings calls (100=max; 2005-5/23)



Source: AlphaSense, BofA Global Research

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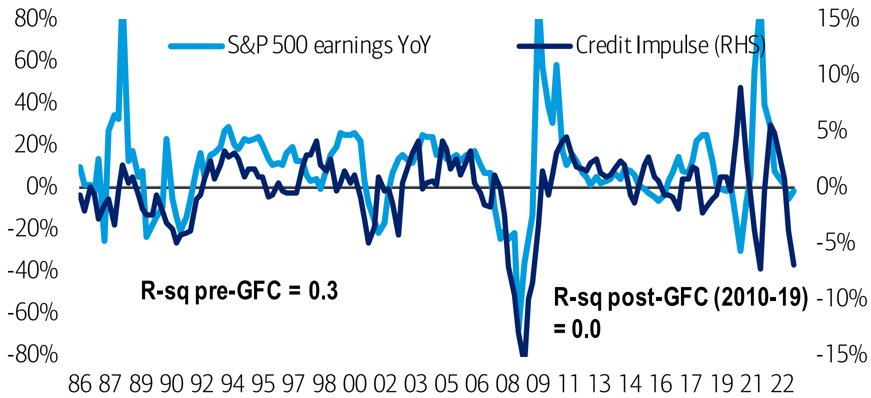
Tighter credit: it's different this time

Exhibit 53: Earnings had no correlation to credit impulse post-GFC
S&P 500 quarterly earnings YoY vs. US credit impulse (1986-1Q23)



Source: Haver Analytics, FactSet, BofA US Equity & Quant Strategy
Credit impulse: non-financial private sector borrowing as % of GDP (2-qtr average)

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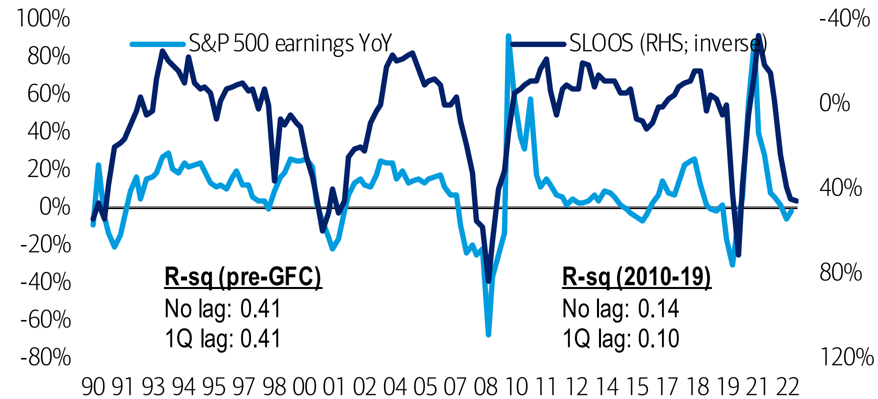
Exhibit 54: Earnings sensitivity to SLOOS weakened post-GFC
S&P 500 quarterly earnings YoY vs. % banks tightening C&I loans to large firms (1990-1Q23)



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

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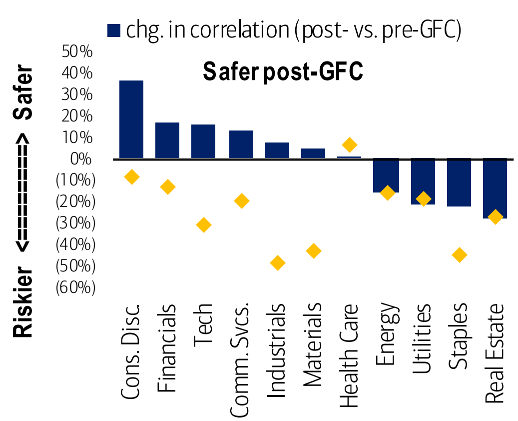
Exhibit 55: 6 of 11 sectors show lower sensitivity to SLOOS
Sector earnings correlations to SLOOS % banks tightening C&I loans to large firms



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

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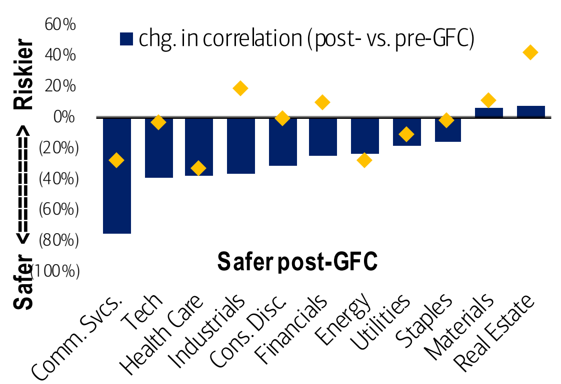
Exhibit 56: 9 of 11 sectors show lower sensitivity to CI
Correlations between S&P 500 sectors' quarterly earnings YoY vs. US credit impulse



Source: Haver Analytics, FactSet, BofA US Equity & Quant Strategy
Credit impulse: non-financial private sector borrowing as % of GDP (2-qtr average)

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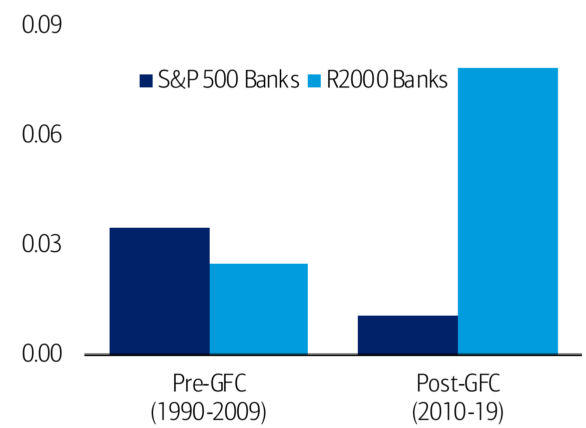
Exhibit 57: S&P 500 less sensitive vs. Russell 2000 banks
R-sq of earnings vs. sr. loan officer opinion survey



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

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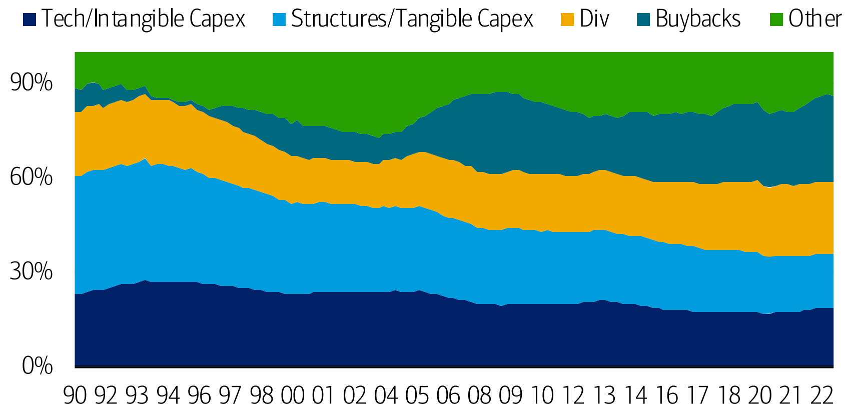
Uses of capital have been different

Exhibit 58: Companies spent less on traditional capex more on buybacks/tech capex
Use of rolling 5-yr operating cash flow + debt issued (4Q85-1Q23)



Source: FactSet, BofA US Equity & Quant Strategy *Other uses of cash can include cash build, acquisitions, etc.

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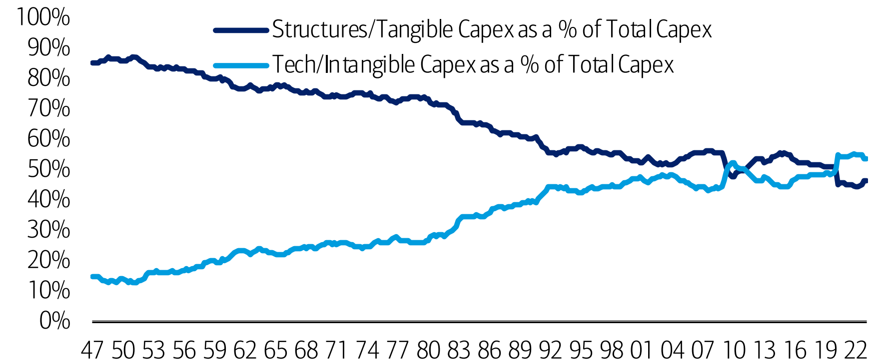
Exhibit 59: Traditional capex dropped from 85% of total capex in 1950 to <50% of total capex today
Structures/tangible capex and tech/intangible capex as a % of total capex (1947-present)



Source: "Structures/Tangible Capex" includes structures capex and equipment capex, excluding information processing equipment. "Tech/Intangible Capex" includes information processing equipment and intellectual property capex. Total capex reflects nonresidential fixed investment.

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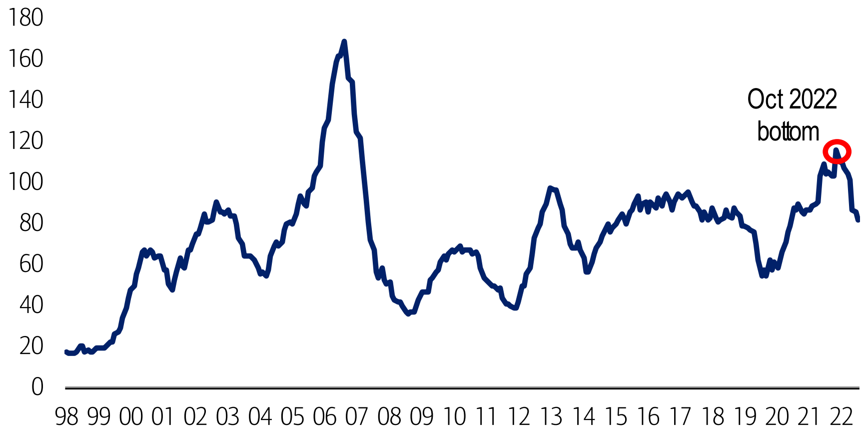
Private equity can offset liquidity withdrawal

Exhibit 60: Significant privatization during 2022 downturn…
Number of privatization of US public companies (TTM; 1998-5/23)



Source: Bloomberg, BofA US Equity & Quant Strategy

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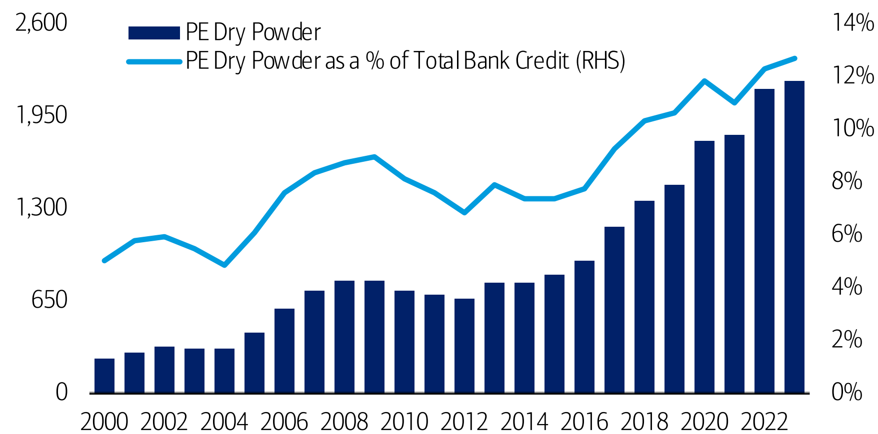
Exhibit 61: …from PE dry powder deployed in less expensive public markets
Private equities' total dry powder ($B) and as % of total bank credit (2023 as of 5/23/2023)



Source: Board of Governors of the Federal Reserve System, Preqin, BofA Global Research

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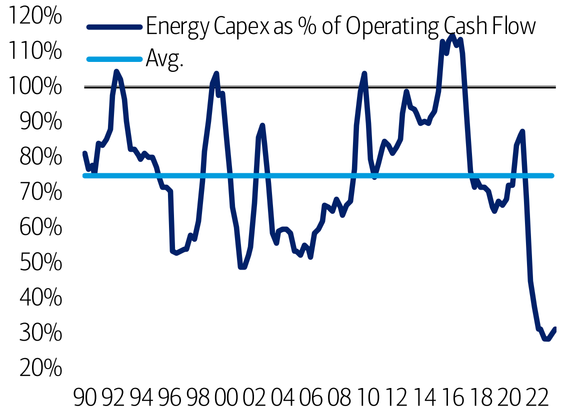
Old cyclicals getting safer, defensives & TMT riskier

Exhibit 62: No supply response in Energy
S&P 500 Energy capex as % of operating cash flow (1990-1Q23)



Source: BofA US Equity & Quant Strategy, FactSet

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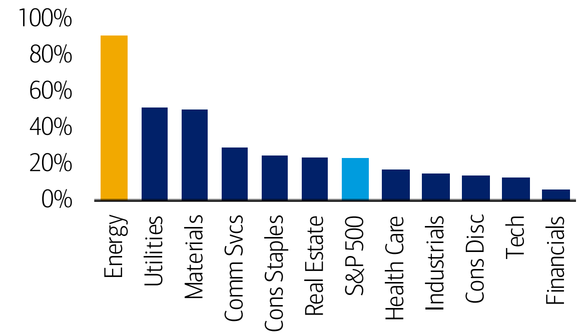
Exhibit 63: Energy leads in aligning CEO comp. to ESG
% of S&P 500 companies with ESG metrics as part of CEO short-term compensation plan within the last 3 years, as of 4/2023



Source: ICE, BofA US Equity and Quant Strategy

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Exhibit 64: Green capex pull forward from 5yr tax incentive
Estimated impact to corporates from the IRA

Total capex needed for net zero	**741**
Benefits:	
IRA tax credits	43
PTC for renewables	30
Carbon capture benefits to Energy	8
Borrowing benefit to Energy – preferential rate	4
Total benefits	**84**
% of total capex needed for net zero	*11%*
Tax hit (15% min. & buyback)*	123
Total net impact	**-39**

Source: BofA US Equity & Quant Strategy

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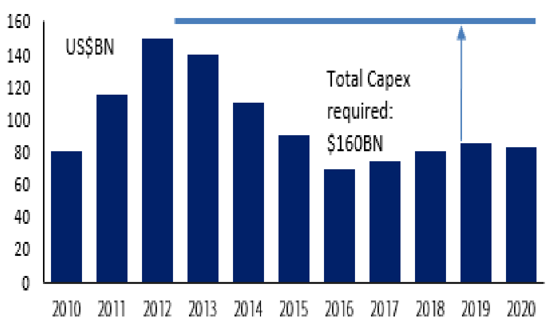
Exhibit 65: Mining capacity needs to double to get to net zero
Global Metals and Mining capex



Source: S&P, BofA Global Research

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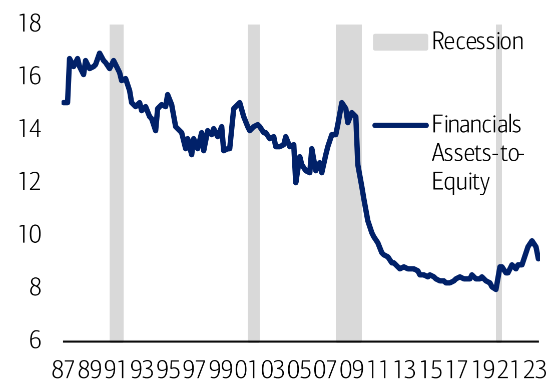
Exhibit 66: Financials leverage is still near record lows
Financials Assets-to-Equity (1987-1Q23)



Source: FactSet, BofA US Equity & Quant Strategy

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Exhibit 67: Defensives & Health Care lead in default risk
High yield sector default estimates

Sector	Face	DC Face	DR	DPx
Cable	99281	14747	15%	73
Media	73634	8674	12%	67
Healthcare	119504	11198	9%	65
Technology	64934	4801	7%	50
Telecoms	68145	4262	6%	57
Retail	74819	4421	6%	72
Autos	87538	3839	4%	75
Food Producers	24779	551	2%	75
Travel	88421	1419	2%	89
Financials	115296	1781	2%	47
Capital Goods	63910	840	1%	75
Energy	170492	426	0%	79
Transportation	38497	0	0%	0
Utilities	33334	0	0%	0
Packaging/Paper	39516	0	0%	0
Real Estate	61331	0	0%	0
Chemicals	44077	0	0%	0
Gaming	44335	0	0%	0
Metals	30219	0	0%	0
Services	48632	0	0%	0

Source: BofA Global Research

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Mispriced risk: Fins vs. Utilities, low vs. high income

Exhibit 68: US Regulated sectors: Financials hated, Utilities loved
LO relative exposure to Financials (cyclical) vs. Utilities (defensive) within S&P 500

Source: FactSet Ownership, BofA US Equity & Quant Strategy

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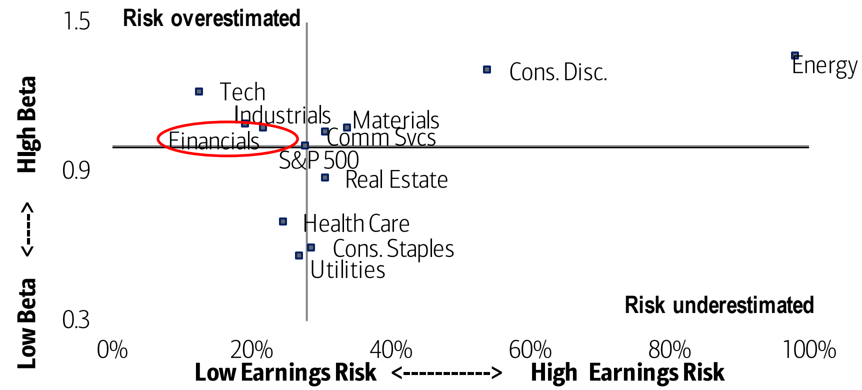
Exhibit 69: Misunderstood: high earnings quality but high price beta
S&P Quality rankings (cap-wtd. % of Low Quality B or Worse stocks) vs. 5-yr price beta (as of 5/23)



Source: S&P, FactSet, BofA US Equity & Quant Strategy. Note: Financials excludes BRK/B.

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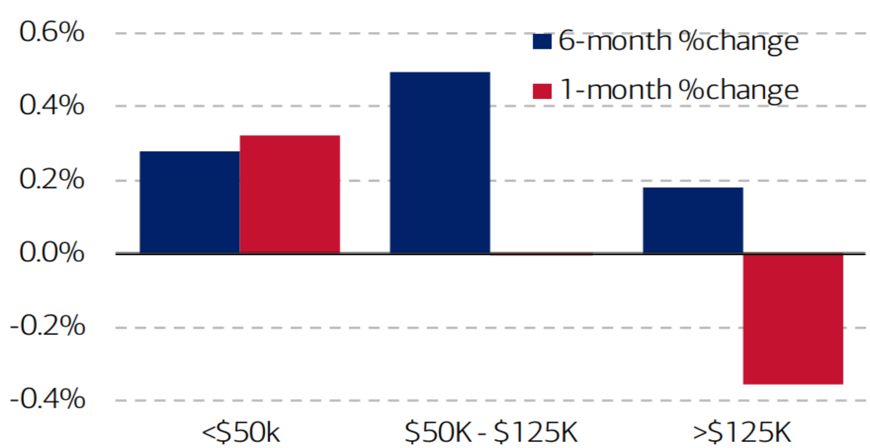
Exhibit 70: The higher-income households spending for discretionary items has slipped below lower- and middle-income groups since the start of this year
Discretionary spending per household on Bank of America credit and debit cards (SA, % change from 6 months and one month ago)



Source: Bank of America Institute. Bank of America internal data.

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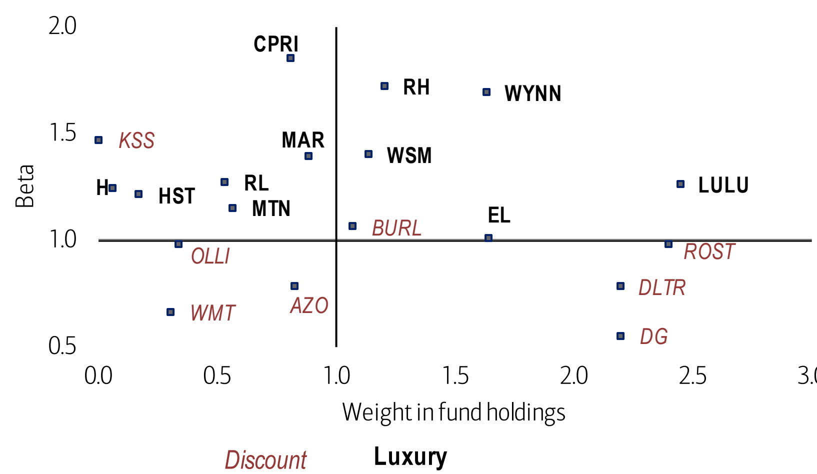
Exhibit 71: High income retailers have higher beta and more positioning risk than low income retailers
Discount basket and Luxury basket – Beta and positioning



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

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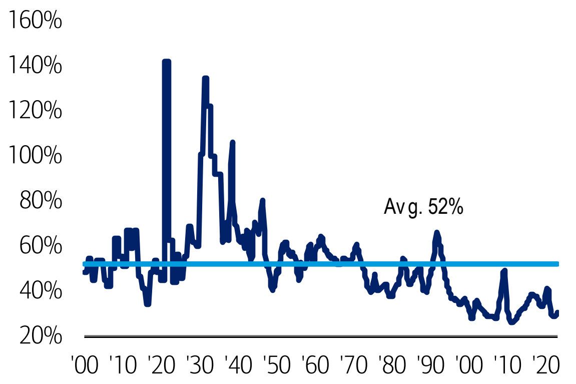
Welcome to a total return world

Exhibit 72: 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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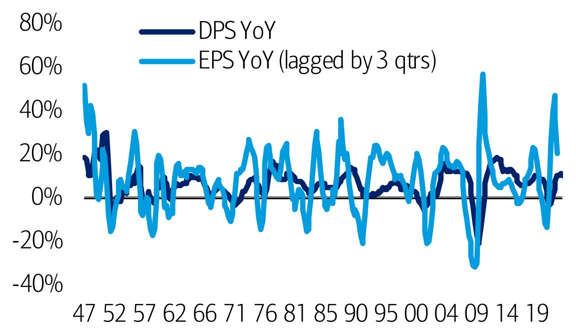
Exhibit 73: DPS growth lagged EPS by >40ppt; expect some catch up
S&P 500 TTM div. per share vs. EPS YoY with a 3-qtr lag (1945-present)



Source: BofA US Equity & Quant Strategy, FactSet, Haver Analytics
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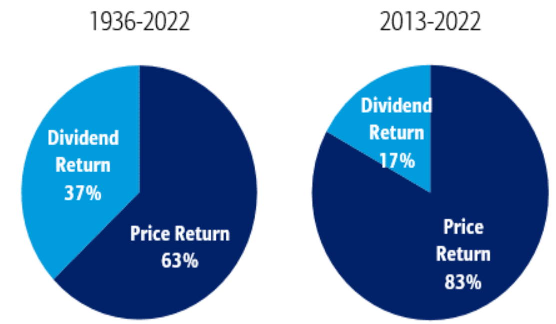
Exhibit 74: Dividends have contributed 37% of total returns (but just 17% in the last decade)
S&P 500 price return and dividend contributions to total return



Source: Bloomberg, BofA US Equity & Quant Strategy
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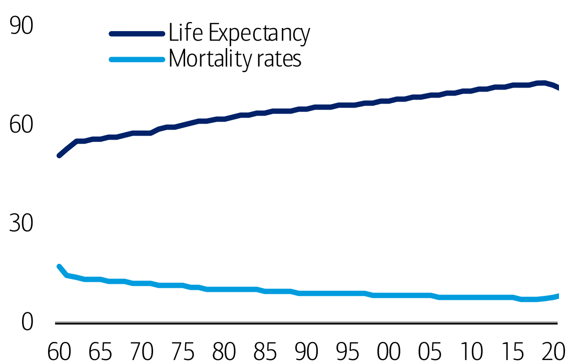
Demand still skews to income over capital appreciation

Exhibit 75: Demographics suggest demand for income will accelerate from here
Life expectancy vs mortality rates, 1960-2021



Source: World Bank
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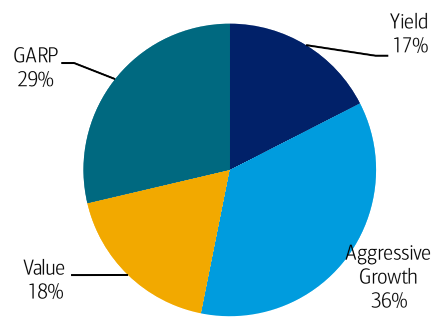
Exhibit 76: Income funds have grown from less than 20% of active AUM in 2010...
Active equity AUM landscape by fund category – Aug 2010



Source: BofA US Equity & US Quant Strategy, FactSet Ownership
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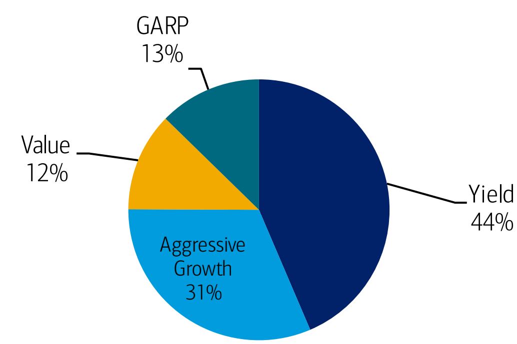
Exhibit 77: ...To over 40% of active funds today
Active equity AUM landscape by fund category – present



Source: BofA US Equity & US Quant Strategy, FactSet Ownership
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EPS Outlook

$215 in 2023 (-4% YoY); $235 in 2024 (+9% YoY)

Exhibit 78: 2023 and 2024 EPS outlook – see earnings model

BofA S&P 500 EPS outlook

All based on current constituents unless specified		Bottom-up Consensus				BofA Analyst estimates				BofA Strategy			
	2022	2023	y/y	2024	y/y	2023	y/y	2024	y/y	2023	y/y	2024	y/y
S&P 500 Pro-forma EPS (Historical Index)	**$218.1**												
S&P 500 Pro-forma EPS (Current Constituents)	**$223.2**	**$220.1**	**-1%**	**$245.8**	**12%**	**$220.9**	**-1%**	**$242.6**	**10%**	**$215.0**	**-4%**	**$235.0**	**9%**
Sector ($ billions)													
Consumer Discretionary	110.5	134.9	22%	157.5	17%	154.5	40%	180.8	17%	126.9	15%	143.4	13%
Consumer Staples	116.7	119.6	2%	129.4	8%	119.1	2%	128.0	7%	117.9	1%	126.2	7%
Energy	202.9	147.1	-28%	145.2	-1%	132.1	-35%	123.5	-7%	134.2	-34%	153.4	14%
Financials	304.4	314.7	3%	332.1	6%	304.8	0%	324.2	6%	305.9	1%	320.3	5%
Health Care	309.2	277.9	-10%	300.0	8%	266.6	-14%	299.2	12%	266.6	-14%	294.0	10%
Industrials	141.4	156.0	10%	175.6	13%	156.7	11%	178.2	14%	152.1	8%	169.5	11%
Information Technology	354.0	343.6	-3%	392.6	14%	343.4	-3%	390.1	14%	338.2	-4%	375.3	11%
Materials	64.1	52.1	-19%	53.8	3%	54.6	-15%	54.9	1%	52.5	-18%	53.0	1%
Real Estate	50.4	51.4	2%	54.4	6%	52.0	3%	55.6	7%	50.7	1%	52.4	3%
Communication Services	148.9	167.3	12%	193.8	16%	178.9	20%	202.3	13%	170.6	15%	190.5	12%
Utilities	51.0	54.0	6%	58.2	8%	54.4	7%	58.7	8%	53.7	5%	56.8	6%
S&P 500	**1,853.4**	**1,818.7**	**-2%**	**1,992.7**	**10%**	**1,817.2**	**-2%**	**1,995.4**	**10%**	**1,769.3**	**-5%**	**1,934.8**	**9%**
S&P 500 ex. Financials	1,549.0	1,504.0	-3%	1,660.6	10%	1,512.4	-2%	1,671.2	11%	1,463.4	-6%	1,614.5	10%
S&P 500 ex. Energy and Financials	1,346.1	1,356.9	1%	1,515.4	12%	1,380.2	3%	1,547.7	12%	1,329.2	-1%	1,461.1	10%
S&P 500 ex. Energy	1,650.5	1,671.7	1%	1,847.5	11%	1,685.0	2%	1,871.9	11%	1,635.1	-1%	1,781.4	9%
Energy Sector ($bn)	**202.9**	**147.1**	**-28%**	**145.2**	**-1%**	**132.1**	**-35%**	**123.5**	**-7%**	**134.2**	**-34%**	**153.4**	**14%**
Avg. Oil Price (wtd. blend of Brent & WTI)	*$97/bbl*									*~$78/bbl*	*-20%*	*~$88/bbl*	*13%*
S&P 500 Dividends (Historical Constituents, $/share)	**$66.94**									**$70.00**	**5%**	**$80.00**	**14%**
Key Macro Economic Forecasts													
Global GDP growth (real)	3.6%									2.9%		2.6%	
US GDP growth (real)	2.1%									1.0%		-0.1%	
FX Rate: US$/Euro (average)	1.05									1.08		1.13	

Source: BofA US Equity & Quant Strategy, FactSet

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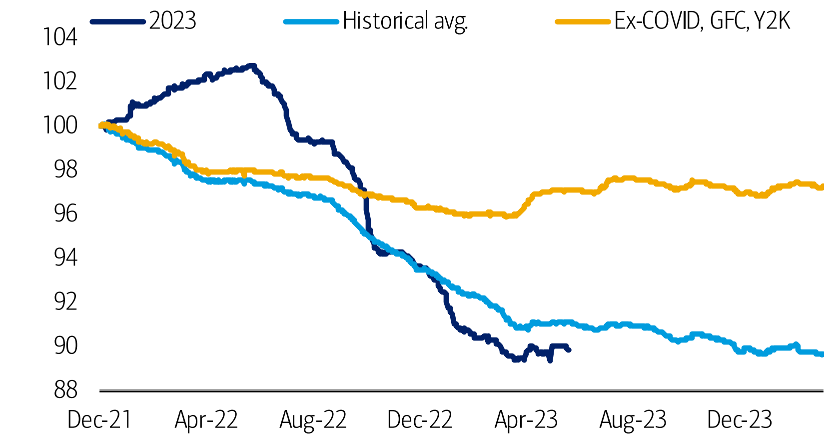
It's dangerous to underestimate Corporate America

Exhibit 79: 2023 consensus EPS stopped falling after -13% since the June 2022 peak

S&P 500 historical FY2 EPS revisions vs. 2023 consensus EPS (2023 as of 6/15/23)



Source: FactSet, BofA US Equity & Quant Strategy

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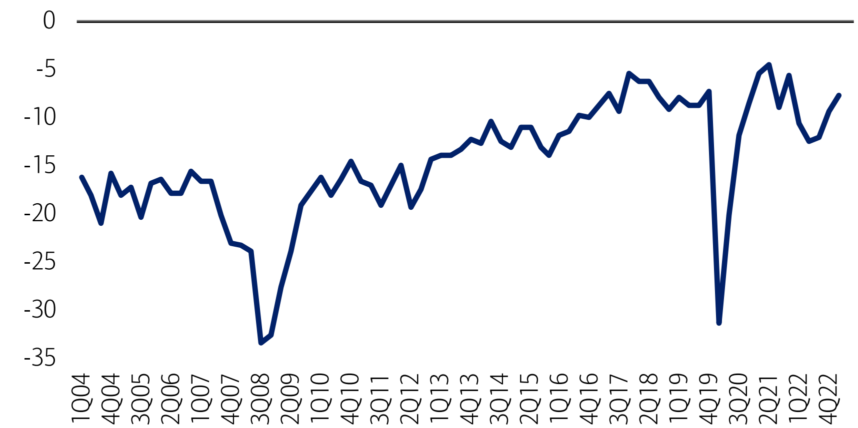
Exhibit 80: Corporate sentiment improved off its lows

Average negative sentiment score for S&P 500 companies (1Q04-5/19/23)



Source: BofA Global Research, FactSet

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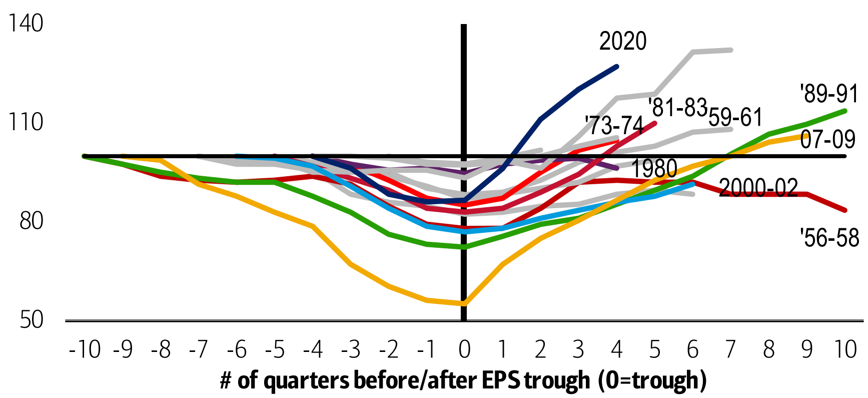
Glass half full view

Exhibit 81: Earnings have generally recovered faster than they have fallen

S&P 500 TTM EPS before/after earnings troughs (same # of quarters leading to the trough and following the trough; 100=pre-recession peak; 1950-present)



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

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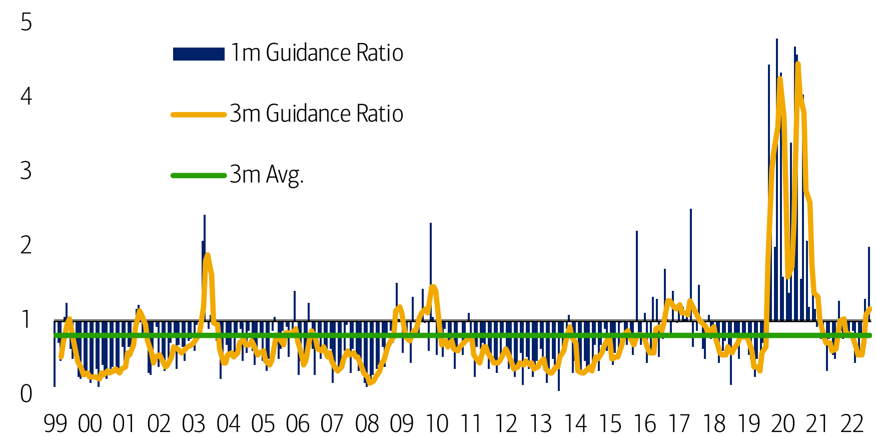
Exhibit 82: More above-consensus guides than below

S&P 500 management guidance ratio (number above vs. below consensus) – 1999-6/16/2023



Source: BofA US Equity and Quantitative Strategy

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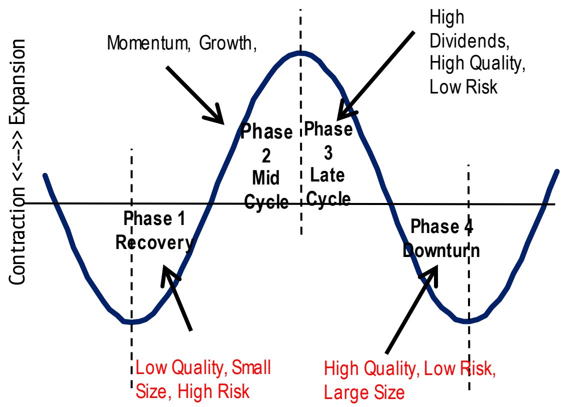
US Regime Indicator: whipsaw alert

Exhibit 83: US Regimes: most dangerous phase is between a downturn and an upturn – opposite factors outperform

Early Cycle, Mid Cycle, Late Cycle and Recession/Downturn regimes



Source: BofA US Equity & Quant Strategy

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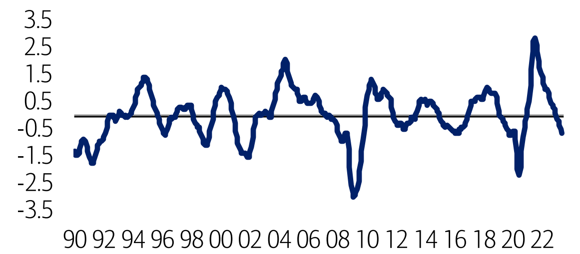
Exhibit 84: US Regime Indicator dipped deeper into Downturn in May

US Regime Indicator (January 1990-May 2023)



Source: BofA US Equity & Quant Strategy, Refinitiv, ICE Data Indices, LLC, Institute for Supply Management, BLS, Federal Reserve. Note: Phase 1 – Early Cycle; Phase 2 – Mid Cycle; Phase 3 – Late Cycle; Phase 4 – Recession; Disclaimer: The indicator identified as the US Regime 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 be relied upon by third parties for any other purpose, without the written consent of BofA Global Research. This indicator was not created to act as a benchmark.

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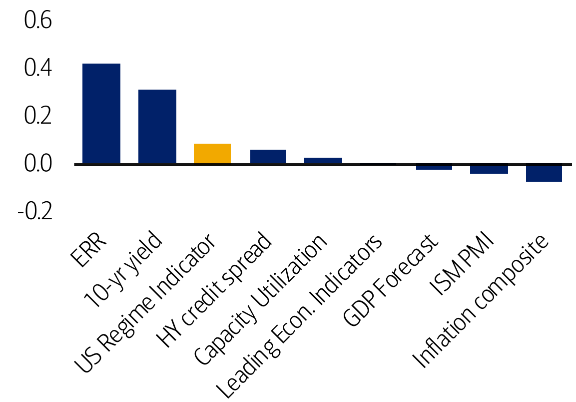
Exhibit 85: US Regime Indicator fell on 3-mo. basis, rose on 1-mo. basis (4 of 8 indicators up)

m/m change in US Regime Indicator variables (as of 5/23)



Source: BofA US Equity & Quant Strategy, Refinitiv, ICE Data Indices, LLC, Institute for Supply Management, Bureau of Labor Statistics, Federal Reserve

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Exhibit 86: Style performance in the four US Regime indicator phases

Relative performance vs. equal-weighted S&P 500

		Value	Growth	Momentum	High Quality	Low Quality	High Risk	Low Risk	Large Cap	Small Cap	Low Beta	High Div. Yield
Phase 1	Avg:	19.4%	-7.5%	-5.9%	-6.0%	8.4%	18.4%	-10.7%	-8.4%	19.0%	-12.8%	7.0%
Recovery	Median:	14.9%	-5.3%	-1.7%	-6.5%	10.7%	12.9%	-12.5%	-7.8%	11.2%	-13.4%	7.8%
	Hit Rate:	100.0%	12.5%	50.0%	25.0%	75.0%	75.0%	25.0%	12.5%	75.0%	12.5%	87.5%
Phase 2	Avg:	3.8%	10.9%	11.2%	0.8%	3.9%	11.0%	-6.6%	-2.1%	6.0%	-12.6%	-6.7%
Mid Cycle	Median:	4.3%	2.3%	4.0%	-0.7%	2.2%	10.3%	-4.9%	-6.6%	9.1%	-12.1%	-7.1%
	Hit Rate:	77.8%	66.7%	77.8%	44.4%	66.7%	77.8%	22.2%	33.3%	77.8%	0.0%	11.1%
	Hit Rate ex. Tech Bubble:	*87.5%*	*62.5%*	*75.0%*	*37.5%*	*75.0%*	*75.0%*	*25.0%*	*25.0%*	*87.5%*	*0.0%*	*12.5%*
Phase 3	Avg:	-0.8%	-6.2%	-3.4%	3.5%	-6.9%	-11.4%	8.4%	-1.2%	-7.6%	7.0%	7.5%
Late Cycle	Median:	-0.9%	-1.8%	2.3%	5.8%	-6.6%	-8.9%	9.8%	2.3%	-8.1%	3.2%	3.5%
	Hit Rate:	44.4%	33.3%	55.6%	66.7%	22.2%	11.1%	77.8%	55.6%	11.1%	55.6%	77.8%
Phase 4	Avg:	-0.8%	-0.2%	3.1%	5.2%	-4.7%	-6.1%	4.8%	5.6%	-3.0%	-0.9%	-2.4%
Downturn	Median:	-6.3%	0.4%	0.9%	3.7%	0.0%	-4.5%	4.3%	6.5%	-7.5%	0.9%	-5.9%
(Current)	Hit Rate:	28.6%	57.1%	57.1%	71.4%	28.6%	42.9%	85.7%	85.7%	14.3%	57.1%	28.6%

Note: Performance is calculated as price return relative to equal-weighted S&P 500, for all styles except High Dividend Yield, where total return for the style and the index are used. Hit rate = % of months in phase where style outperformed equal-weighted S&P 500.

Source: BofA US Equity & Quant Strategy, Refinitiv, ICE Data Indices, LLC, Institute for Supply Management, Bureau of Labor Statistics, Federal Reserve

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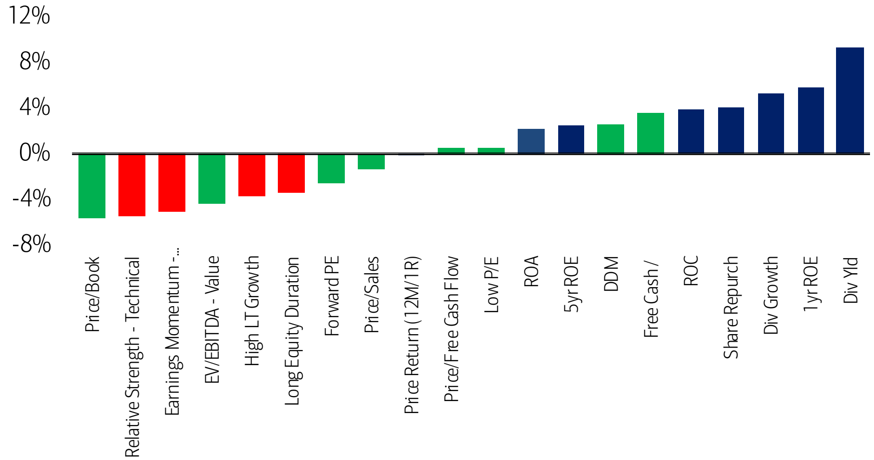
Prefer free cash flow value to long duration growth

Exhibit 87: Downturn: Growth (red) lags, Value (green) mixed; cash return & Quality wins
Top Decile S&P 500 avg. rel. perf. during Downturn regimes



Source: BofA US Equity & US Quant Strategy , FactSet (Green = value, red –growth, blue = cash & quality)

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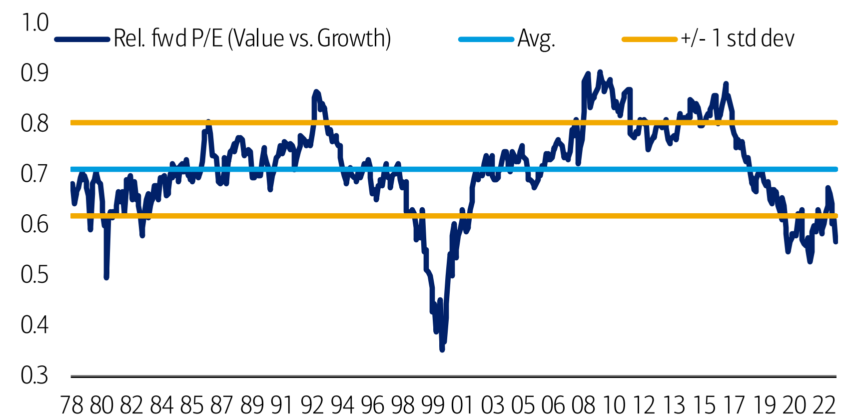
Exhibit 88: Growth still expensive
Relative forward P/E of Russell 1000 Growth vs Value style indices as of 5/23



Source: BofA US Equity and Quant Strategy, FactSet

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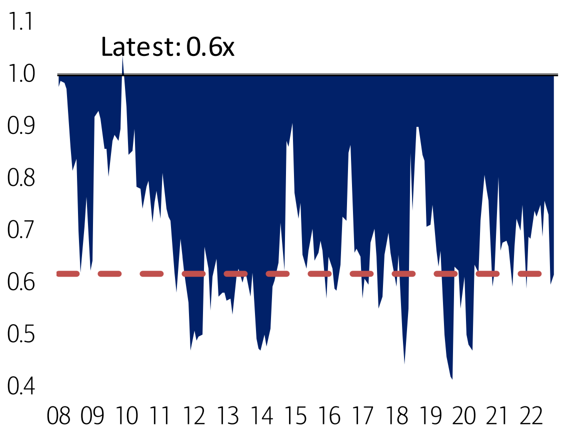
Exhibit 89: Value is underweight vs. growth by factors
Long only positioning in Value vs Growth proxied by Price to Book Value vs Long-Term Growth of S&P 500 (9/2008-5/2023)



Source: BofA US Equity & Quant Strategy, FactSet Ownership

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Exhibit 90: Value is underweight by sector: Energy vs. TMT
Energy sector vs Communication Services sector relative weight in mutual funds (9/08-4/23)

Source: BofA US Equity & Quant Strategy, FactSet Ownership

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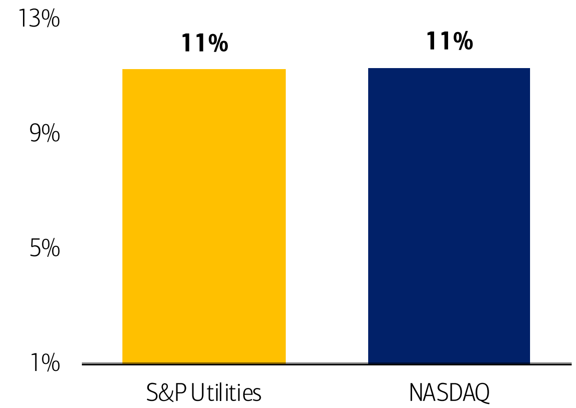
Exhibit 91: Dead heat for the tortoise (value) and the hare (growth)
Annualized returns 1980-present, S&P Utilities vs. NASDAQ



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

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Appendix

Sell Side Indicator

The Sell Side Indicator (SSI) is based on our survey of the Wall Street Strategists that submit their asset allocation recommendations to us (currently, there are nine. Note that post the Global Financial Crisis, the number of respondents has typically ranged between 6 and 11). For this indicator, we use the simple average of the recommended equity weighting for each strategist as of the last business day of each month. The thresholds for the Buy and Sell readings are rolling 15-year +/- 1 standard deviations from the rolling 15-year mean.

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.

Capex guidance: We track the number of instances of above- vs. below-consensus management guidance for planned capex over the last three months for S&P 500 companies, calculated the same way as above; data source is FactSet.

US Regime Indicator

Inputs for the US regime indicator include the following eight signals:

Earnings Revision ratio: The ratio between the number of companies in the S&P 500 for which Thomson Financial consensus earnings estimates have been raised versus those that have been lowered. Rising = improving economic cycle.

ISM PMI: ISM PMI Institute for Supply Management Manufacturing Purchasing Managers Index, represented as the Z-Score. The index monitors activity reported by 300 supply management professionals. Above 50 indicates economic expansion.

Inflation: The 12-month change in the BofA Inflation Composite (see methodology), represented a Z-Score. Rising inflation indicates improvement.

GDP Forecast: The next 12-month US GDP growth forecast from the Federal Reserve Bank of Philadelphia Survey, represented as a Z-Score.

LEI index: The 12-month change in the Conference Board US Leading Index of Ten Economic Indicators represented as a Z-Score. Rising = improving.

US Capacity Utilization: The 12-month change in US capacity utilization, represented as a Z-score. The capacity utilization rate indicates the percentage of total economic capacity currently used. Rising capacity utilization implies improving economic conditions. Rising capacity utilization suggests expansion and potential inflationary pressure.

10-yr US Treasury Bond Yield: The 12-month change in the bond yield, represented as the Z-Score. Rising yields indicate improving economic conditions.

High Yield corp. bond spread: The 12-month change in the credit spread of the ICE BofA US High Yield Index, represented as a Z-score. Falling = improving.

For the historic period from January 1970 to December 1989, the US Regime Indicator was based on the available inputs listed above, which were:

1/70 to 1/82: 5 inputs: Inflation, 10-yr US Treasury Bond Yield, ISM PMI, Leading Economic Indicators index, US Capacity Utilization;

2/82 to 3/88: 6 inputs: all of the above plus GDP Forecast;

4/88 to 4/89: 7 inputs: all of the above plus the High Yield corporate bond credit spread;

5/89 to 12/89: all 8 inputs: all of the above plus the Earnings Revision Ratio.

Performance of sizes/styles during regimes prior to January 1990 could be impacted by the more limited set of factors used to determine regimes, different definitions for Growth, Value and Size (where we use Fama-French performance data for the 1970-1989 period vs. performance of our S&P 500 top/bottom decile factors over the original history of our indicator from 1990-present), as well as the different macro backdrop in the earlier period marked by high inflation.

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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