Morgan Stanley | RESEARCH

UPDATE

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US Equity Strategy | North America

Weekly Warm-up: This Is Not QE; Focus on the Fundamentals

With the back-stopping of bank deposits by the Fed/FDIC, many equity investors are asking if this is another form of QE and therefore "risk on." We argue it's not, and instead represents the beginning of the end of the bear market as falling credit availability squeezes growth out of the economy.

- **This Is Not QE...**Once again, bond and stock markets seem to be diverging with their messaging on growth, with bonds seemingly pricing a hard landing and stocks still choosing a soft landing outcome. Part of this divergence is based on the view we hear from many that the Fed/FDIC back-stop of deposits equates to a form of QE and is therefore "risk on" for stocks. We disagree with that conclusion and think the focus should be on the more likely deterioration in growth due to the incrementally restrictive lending/credit environment that is now upon us. We also advise against the view that mega cap tech is immune to these growth concerns; we recommend positioning in defensive, low-beta sectors and stocks.

- **Why It's Not Prudent to Ignore the "Soft" Data...**The main driver of our below consensus earnings forecast is our model that is based on soft data points like surveys and business cycle indicators. The pushback we have received to our forecast has consistently been that the "hard data is holding up" and "companies are not seeing the slowdown you are forecasting." However, now we have the elusive catalyst that should lead to a convergence of the hard data with the soft data...a reflection of growth risks that have been in place for months.

- **Breadth Is Deteriorating...**We think it's worth noting that performance breadth measures are breaking down broadly. On this front, we flag the material relative underperformance of the S&P 500 Equal Weighted Index vs. the Cap Weighted Index. Further, the cumulative advance/decline series for the Nasdaq Composite Index has fallen significantly over the past several weeks, diverging from price. Ultimately, these are signs of unhealthy market internals, in our view.

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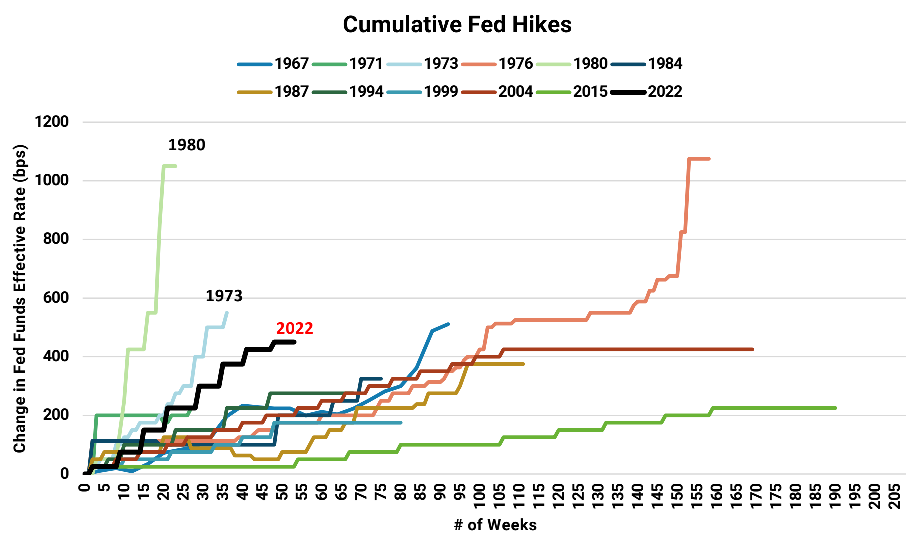
What to Focus on This Week

This Is Not QE

Over the past two weeks, the markets have been fixated on stress in the banking system and the impact of a historically rapid Fed tightening cycle. In fact, interest rates are up nearly 500bp year over year—the fastest rise in the Fed Funds Rate in 40 years (Exhibit 1).

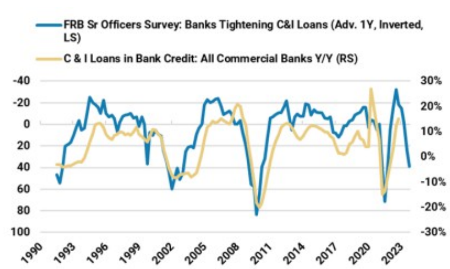
Exhibit 1: Fastest Rise in Fed Funds in 40 Years Has Led to Bank Stress and Slower Growth



Source: Bloomberg, FRED, Morgan Stanley Research

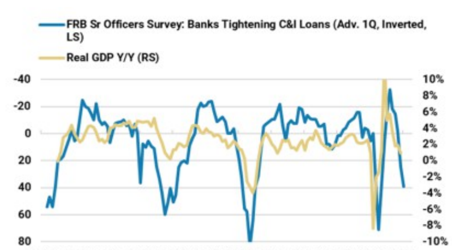
The uninsured deposit backstop put in place by the Fed/FDIC will help to alleviate further major bank runs, but it won't stop the already tight lending standards across the banking industry (Exhibit 1 and Exhibit 2) from getting even tighter. It also won't prevent the cost of deposits from rising, thereby pressuring net interest margins. In short, the risk of a credit crunch has increased materially, in our view.

Exhibit 2: Already Tight Lending Standards...



Source: Bloomberg, Morgan Stanley Research

Exhibit 3: ...Do Not Bode Well for Growth



Source: Bloomberg, Morgan Stanley Research

Bond markets have exhibited extreme volatility around these developments as market participants realize the ramifications of tighter credit. The yield curve has bull steepened by 60bp in a matter of days, something seen only a few times in history and usually the bond market's way of saying recession risk is now more elevated. An inversion of the curve typically signals a recession within 12 months, but the real risk starts when it re-steepens from the trough (Exhibit 4), especially in cycles that exhibit high inflation where the Fed's hands are tied—i.e., '70s / '80s. Meanwhile, the ECB decided to raise rates by 50bp last week despite recent events in Europe's banking industry and very sluggish economy. The German Bund curve seemed to disagree with that decision and bull steepened by 50bp.

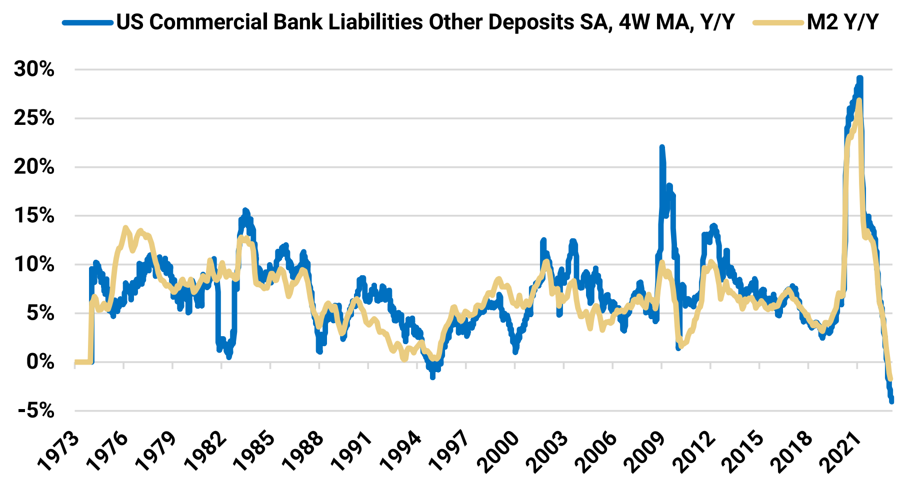
Exhibit 4: Growth Risks Become Increasingly Apparent When the Yield Curve Re-Steepens from the Trough—Like Now

Source: Bloomberg, Morgan Stanley Research

If growth is likely to slow from the effective tightening rolling through the US banking system, as we expect, and the bond market seems to be supporting that conclusion, why on earth did US stocks rally at all last week? We think it had to do with the view we have heard from some clients that the Fed/FDIC bailout of depositors is a form of quantitative easing (QE), and provides the catalyst for stocks to go higher. While the massive increase in Fed balance sheet reserves last week does 'reliquefy' the banking system, it does little in terms of creating new money that can flow into the economy or the markets, at least beyond a brief period of, say, a few days or weeks. Secondarily, the fact that the Fed is lending, not buying, also matters. If a bank borrows from the Fed, it is expanding its own balance sheet, making leverage ratios more binding. When the Fed buys the security, the seller of that security has balance sheet space made available for renewed expansion. That is not the case in this situation.

According to the Fed's weekly release of its balance sheet on Wednesday, the Fed was lending depository institutions $308B, up $303B week over week. Of this, $153B was primary credit through the discount window, which is often viewed as temporary borrowing and unlikely to translate into new credit creation for the economy. $143B was a loan to the bridge banks the FDIC created for Silicon Valley Bank and Signature. Only $12B was lending through its new Bank Term Funding Program (BTFP), which is viewed as more permanent but also unlikely to end up converting into new loans in the near term. In short, none of these reserves will likely transmit to the economy as bank deposits normally do. Instead, we believe the overall velocity of money in the banking system is likely to fall sharply and more than offset any increase in reserves, especially given the temporary/emergency nature of these funds. Moody's recent downgrade of the entire sector will likely contribute further to this deceleration. Herein lies the ultimate question for equity investors, in our view—will the Fed/FDIC backstop of deposits lead to a reversal in the plummeting M2 growth or will the concurrent fall in velocity of money from the credit crunch more than offset the increase in the Fed's balance sheet?

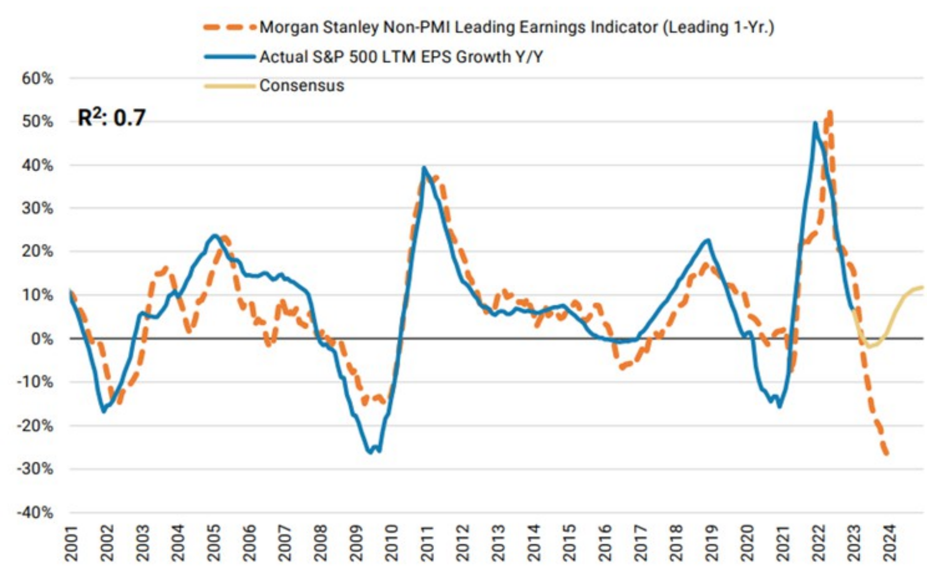
Exhibit 5: Money Supply (M2) Growth Is Already in Negative Territory...Will the Fed/FDIC Backstop Reverse This or Will It Fall Further as the Velocity of Money More than Offsets the Increase in the Fed's Balance Sheet



Source: Bloomberg, Morgan Stanley Research

Over the past several weeks, the correlation between stocks and bonds has reversed and is now negative. In other words, stocks go down when rates fall and vice versa. This is in sharp contrast to most of the past year when stocks were more worried about inflation, the Fed's reaction to it, and rates going higher. Instead, the path of stocks is now about growth, and our conviction that earnings forecasts are 15-20% too high has only increased (Exhibit 6).

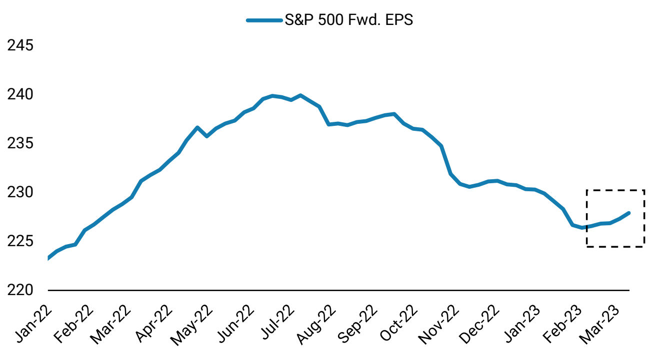
Exhibit 6: Is the Recent Banking Stress the Catalyst for Consensus Earnings to Finally Get More Realistic?



Source: Bloomberg, Haver, FactSet, Morgan Stanley Research.

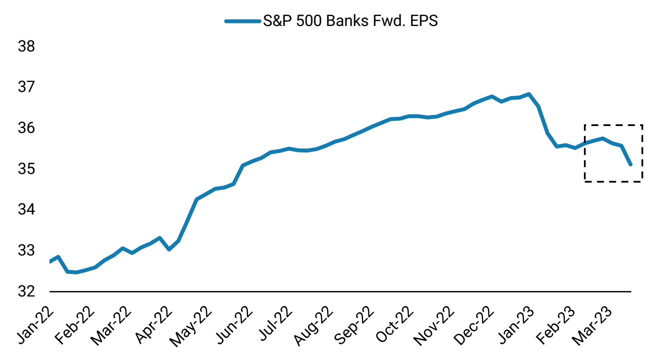
Despite the recent banking events and the increased risk to lending/credit availability and macro growth, forward EPS estimates have actually risen over the past couple of weeks (Exhibit 7); for banks, EPS estimates are just modestly lower (Exhibit 8). Our view is that as earnings season approaches, we'll see estimates revised lower, and that the stickiness of the numbers over the past 2 weeks is a by-product of the fact that we're between reporting seasons and corporate commentary broadly has been quieter. Ultimately into earnings season, we believe we'll see downward earnings revisions both for the Financials sector (the second largest expected contributor to '23 EPS; Exhibit 9) as NIM/NII likely compresses and for the overall market—macro catalysts often prompt corporates to lower guidance in a notable way; we believe we'll see lower guides on the back of macro risk as we head into/progress through Q1 reporting season.

Exhibit 7: S&P 500 Forward Earnings Estimates Have Remained Sticky (Typical Between Quarters)...We Expect This to Reverse in the Coming Weeks



Source: FactSet, Morgan Stanley Research.

Exhibit 8: Bank Earnings Revisions Face NIM/NII Headwinds Ahead As Our Bank Analysts Note



Source: FactSet, Morgan Stanley Research.

Exhibit 9: Contribution to 2023 EPS by Sector

	S&P 500	Cons. Disc.	Cons. Staples	Energy	Fins.	Health Care	Indust.	Tech	Materials	Comm Services	Utilities	REITS
2023 Consensus Y/Y EPS Growth	1.3%	10.6%	5.5%	-19.8%	10.9%	-9.0%	8.4%	0.6%	-12.9%	16.1%	9.3%	22.3%
% of Total 2023 EPS	NA	7.5%	6.0%	8.7%	16.1%	15.0%	8.0%	21.3%	2.9%	8.9%	2.9%	2.8%

Source: Refinitiv, S&P, Morgan Stanley Research.

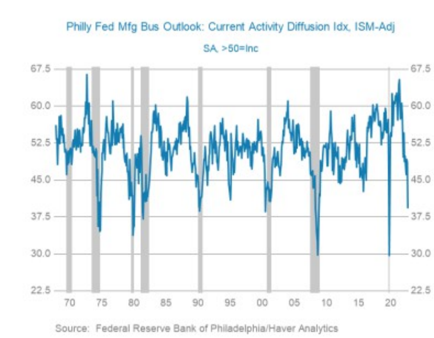
From an equity market perspective, the events of the past week mean that credit availability is decreasing for a wide swath of the economy, which may be the catalyst that finally convinces market participants that earnings estimates are too high...which is another way of saying the equity risk premium (ERP) is way too low. We have been waiting patiently for this acknowledgment because with it comes the real buying opportunity. Just to remind readers, the S&P 500 ERP is currently 230bp. Given the risk to the earnings outlook, risk/reward in US equities remains unattractive until the ERP is *at least* 350-400bp, in our view. Assuming 10-year UST yields can fall a bit further as markets begin to worry about growth more than inflation, that translates into a P/E multiple of 14-15x, 15-20% below the current multiple.

Exhibit 10: The Equity Risk Premium Appears to be Finally Adjusting for the Earnings Risk We See

Source: Bloomberg, Morgan Stanley Research

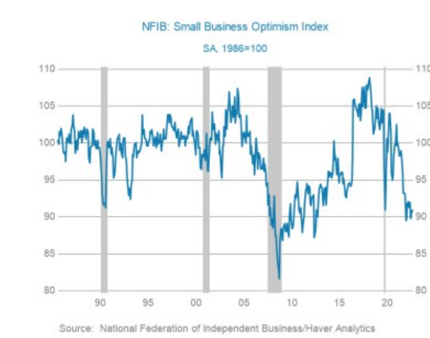
The bottom line is that we think this is exactly how bear markets end—an unforeseen catalyst that is obvious in hindsight forces market participants to acknowledge what has been right in front of them the entire time. In this case, it's the fact that earnings growth expectations are much too high given the headwinds companies are facing, and the fact that the Fed is hiking rates during a period of contracting earnings. It also reminds us why the soft data leads the hard data, and why it's not prudent to ignore weakening soft data (Exhibit 11 and Exhibit 12) even if hard data and stock prices appear more "resilient" for some time. In short, this is how it always plays out in our experience and why the last part of the bear can be vicious and highly correlated—i.e., prices fall sharply via an equity risk premium spike that is very hard to prevent or defend in one's portfolio. Understanding this dynamic, active investors have fled to higher ground to avoid the flood. More specifically, they have come back into the mega cap tech stocks that have served them well over the past decade. We caution against the view that mega cap tech is immune to these growth concerns. We recommend positioning in defensive (Exhibit 13), low-beta sectors and stocks. We also highlight the added risk to small caps here given their higher leverage and thinner profit margins (Exhibit 14 and Exhibit 15).

Exhibit 11: The Philly Fed Business Outlook Survey Is Historically Depressed...



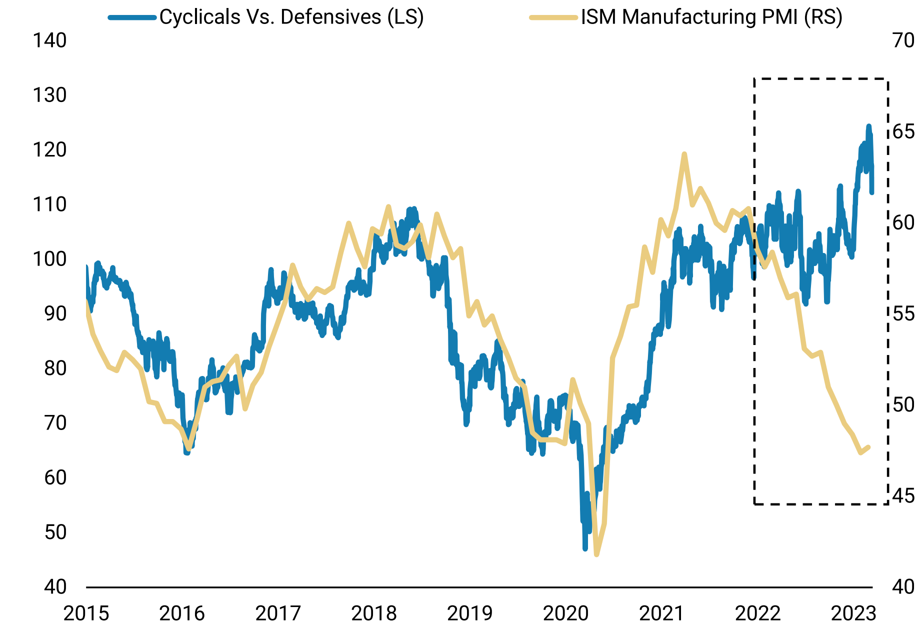
Source: Haver Analytics, Morgan Stanley Research.

Exhibit 12: ...And Small Business Optimism Was Already Depressed Before Recent Events



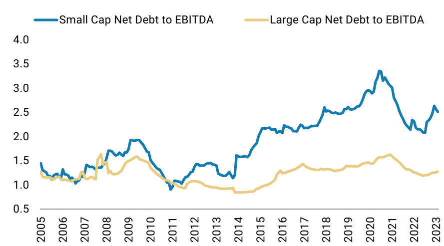
Source: Haver Analytics, Morgan Stanley Research.

Exhibit 13: ISM Survey Implies Relative Downside for Cyclicals Vs. Defensives



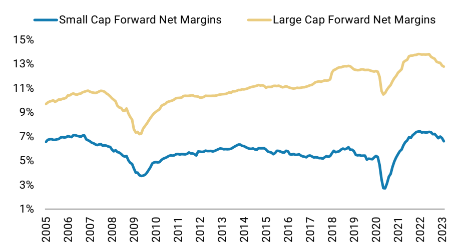
Source: Bloomberg, Morgan Stanley Research.

Exhibit 14: Small Caps Are More Levered Than Large Caps...



Source: FactSet, Morgan Stanley Research.

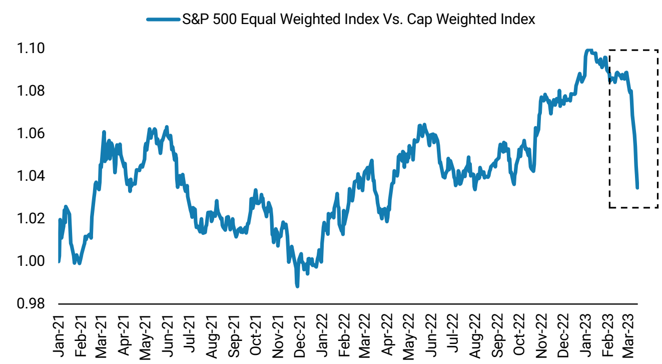
Exhibit 15: ...And Have Thinner Profit Margins



Source: FactSet, Morgan Stanley Research.

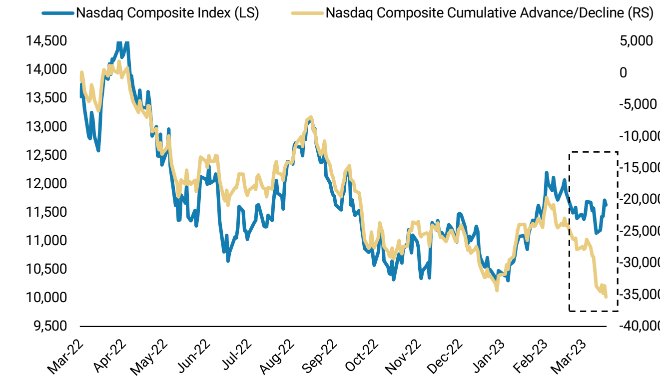
Finally, we think it's worth noting that performance breadth measures are breaking down broadly. On this front, we flag the material relative underperformance of the S&P 500 Equal Weighted Index vs. the Cap Weighted Index (Exhibit 16). Further, the cumulative advance/decline series for the Nasdaq Composite Index has fallen significantly over the past several weeks, diverging from price. Ultimately, these are signs of unhealthy market internals, in our view (Exhibit 17).

Exhibit 16: Breadth Is Deteriorating As Evidenced by the Ratio Between the Equal Weighted and Cap Weighted S&P...



Source: Bloomberg, Morgan Stanley Research.

Exhibit 17: ...And Cumulative Advance/Decline



Source: Bloomberg, Morgan Stanley Research.

Companies with Low Accruals

As highlighted by our Global Valuation, Accounting & Tax strategy team in Exhausted Earnings, accruals are at their highest level in the past 25 years. GAAP/financi al net income is based on accrual accounting, where revenue and expenses are recorded in the period that they're earned or incurred, while cash accounting records revenue and expenses when cash is actually received or goes out the door. Accruals represent the timing difference between GAAP/financial net income and net income on a cash basis. In essence, you're looking at the difference between GAAP/financial earnings and cash earnings with a widening spread generally signaling a mismatch in timing and a potential quality issue. This may also signal a higher ongoing reinvestment rate as companies need to spend more units of cash per unit of net income. Below are the top (Exhibit 18) and bottom (Exhibit 19) deciles with highest and lowest accruals in the S&P 500.

Exhibit 18: Highest Accruals in S&P 500 (Top Decile)

Ticker	Company	Sector	Industry Group	Market Cap	Price, as of 3/16/2023
NKE	NIKE, Inc. Class B	Consumer Discretionary	Consumer Durables & Apparel	184,529	120.65
RL	Ralph Lauren Corporation Class A	Consumer Discretionary	Consumer Durables & Apparel	7,380	112.18
DG	Dollar General Corporation	Consumer Discretionary	Retailing	48,183	212.09
GIS	General Mills, Inc.	Consumer Staples	Food, Beverage & Tobacco	47,263	80.47
LW	Lamb Weston Holdings, Inc.	Consumer Staples	Food, Beverage & Tobacco	14,189	98.29
RMD	ResMed Inc.	Health Care	Health Care Equipment & Servic	30,638	211.28
EW	Edwards Lifesciences Corporation	Health Care	Health Care Equipment & Servic	47,570	81.91
IDXX	IDEXX Laboratories, Inc.	Health Care	Health Care Equipment & Servic	39,082	474.11
BDX	Becton, Dickinson and Company	Health Care	Health Care Equipment & Servic	66,118	238
BIIB	Biogen Inc.	Health Care	Pharmaceuticals, Biotechnology	37,906	265.25
CRL	Charles River Laboratories International, Inc.	Health Care	Pharmaceuticals, Biotechnology	10,453	193.56
DHR	Danaher Corporation	Health Care	Pharmaceuticals, Biotechnology	178,392	249.34
SNA	Snap-on Incorporated	Industrials	Capital Goods	12,788	237.25
MMM	3M Company	Industrials	Capital Goods	56,580	104.21
ITW	Illinois Tool Works Inc.	Industrials	Capital Goods	71,429	230.34
IEX	IDEX Corporation	Industrials	Capital Goods	16,913	219.12
CMI	Cummins Inc.	Industrials	Capital Goods	33,618	231.84
MAS	Masco Corporation	Industrials	Capital Goods	11,411	50.44
DOV	Dover Corporation	Industrials	Capital Goods	20,351	140.76
PNR	Pentair plc	Industrials	Capital Goods	8,778	52.09
VRSK	Verisk Analytics Inc	Industrials	Commercial & Professional Serv	27,984	180.87
MPWR	Monolithic Power Systems, Inc.	Information Technology	Semiconductors & Semiconductor	23,355	497.97
AMAT	Applied Materials, Inc.	Information Technology	Semiconductors & Semiconductor	101,702	122.83
LRCX	Lam Research Corporation	Information Technology	Semiconductors & Semiconductor	66,656	515.19
TXN	Texas Instruments Incorporated	Information Technology	Semiconductors & Semiconductor	159,248	177.13
MCHP	Microchip Technology Incorporated	Information Technology	Semiconductors & Semiconductor	45,599	82.25
ROP	Roper Technologies, Inc.	Information Technology	Software & Services	45,480	428.42
FLT	FLEETCOR Technologies, Inc.	Information Technology	Software & Services	14,263	191.96
ANET	Arista Networks, Inc.	Information Technology	Technology Hardware & Equipmen	46,924	162.68
JNPR	Juniper Networks, Inc.	Information Technology	Technology Hardware & Equipmen	10,124	31.58
TDY	Teledyne Technologies Incorporated	Information Technology	Technology Hardware & Equipmen	19,490	413.12
TRMB	Trimble Inc.	Information Technology	Technology Hardware & Equipmen	11,965	49.45
CF	CF Industries Holdings, Inc.	Materials	Materials	14,606	73.06
DD	DuPont de Nemours, Inc.	Materials	Materials	34,924	69.22

Source: Factset, Morgan Stanley Research

Exhibit 19: Lowest Accruals in S&P 500 (Bottom Decile)

Ticker	Company	Sector	Industry Group	Market Cap	Price, as of 3/16/2023
CMCSA	Comcast Corporation Class A	Communication Services	Media & Entertainment	148,743	36.24
META	Meta Platforms Inc. Class A	Communication Services	Media & Entertainment	503,048	204.93
TTWO	Take-Two Interactive Software, Inc.	Communication Services	Media & Entertainment	19,197	115.55
TMUS	T-Mobile US, Inc.	Communication Services	Telecommunication Services	174,384	141.51
T	AT&T Inc.	Communication Services	Telecommunication Services	131,475	18.39
F	Ford Motor Company	Consumer Discretionary	Automobiles & Components	47,555	11.82
MHK	Mohawk Industries, Inc.	Consumer Discretionary	Consumer Durables & Apparel	6,174	96.49
WHR	Whirlpool Corporation	Consumer Discretionary	Consumer Durables & Apparel	7,193	129.46
RCL	Royal Caribbean Group	Consumer Discretionary	Consumer Services	16,488	64.87
NCLH	Norwegian Cruise Line Holdings Ltd.	Consumer Discretionary	Consumer Services	5,633	13.11
EBAY	eBay Inc.	Consumer Discretionary	Retailing	22,098	41.45
ETSY	Etsy, Inc.	Consumer Discretionary	Retailing	12,813	104.43
AMZN	Amazon.com, Inc.	Consumer Discretionary	Retailing	972,260	100.04
WBA	Walgreens Boots Alliance, Inc.	Consumer Staples	Food & Staples Retailing	28,713	33.41
TAP	Molson Coors Beverage Company Class B	Consumer Staples	Food Beverage & Tobacco	11,230	51.48
STZ	Constellation Brands, Inc. Class A	Consumer Staples	Food Beverage & Tobacco	39,680	215.65
CLX	Clorox Company	Consumer Staples	Household & Personal Products	18,997	154.86
CHD	Church & Dwight Co., Inc.	Consumer Staples	Household & Personal Products	20,687	85.96
CVS	CVS Health Corporation	Health Care	Health Care Equipment & Servic	97,027	75.83
XRAY	DENTSPLY SIRONA, Inc.	Health Care	Health Care Equipment & Services	8,212	37.44
DGX	Quest Diagnostics Incorporated	Health Care	Health Care Equipment & Services	14,906	134
BAX	Baxter International Inc.	Health Care	Health Care Equipment & Services	19,869	38.37
STE	STERIS Plc	Health Care	Health Care Equipment & Services	17,726	178.72
BIO	Bio-Rad Laboratories, Inc. Class A	Health Care	Pharmaceuticals Biotechnology & Life Sciences	14,657	488.28
ILMN	Illumina, Inc.	Health Care	Pharmaceuticals Biotechnology & Life Sciences	35,689	224.95
AOS	A. O. Smith Corporation	Industrials	Capital Goods	10,309	67.37
PH	Parker-Hannifin Corporation	Industrials	Capital Goods	42,869	314
EXPD	Expeditors International of Washington, Inc.	Industrials	Transportation	16,388	107.35
TYL	Tyler Technologies, Inc.	Information Technology	Software & Services	13,594	331.42
GPN	Global Payments Inc.	Information Technology	Software & Services	26,631	100.92
IBM	International Business Machines Corporation	Information Technology	Software & Services	112,699	124.7
INTU	Intuit Inc.	Information Technology	Software & Services	114,547	418.15
FIS	Fidelity National Information Services, Inc.	Information Technology	Software & Services	31,562	52.15
NEM	Newmont Corporation	Materials	Materials	35,618	45.78
VMC	Vulcan Materials Company	Materials	Materials	22,275	166.21
IFF	International Flavors & Fragrances Inc.	Materials	Materials	21,479	83.71

Source: Factset, Morgan Stanley Research

Factor Update

We select a few key factors to monitor in Exhibit 20 and Exhibit 21 to help study market drivers from a factor standpoint. These Exhibits focus on factors within the US Top 1,000 by market cap universe. Some key takeaways on performance in the last month:

- Quality has outperformed Junk (+3.0% relative return) and the overall market (+2.2% relative return versus the overall Top 1,000 universe).
- Growth has outperformed Value (+5.9% relative return) and the overall market (+2.4% relative return versus the overall Top 1,000 universe).
- Defensives have outperformed cyclicals (+4.7% relative return) and the overall market (+2.4% relative return versus the overall Top 1,000 universe).
- High Momentum stocks have outperformed low momentum stocks (+5.3% relative return) and the overall market (+1.6% relative return).
- Small Caps underperformed Large Caps (-3.6% relative return) in the trailing month.

Exhibit 20: Top 1,000 Factor Returns

Top 1000 Factor Return as of Mar 16, 2023

Factor	1 Week			1 Month			YTD Ret	12M Ret
	Ret	1W Chg	1M Chg	Ret	1M Chg	3M Chg		
Quality / Junk	1.6%	↑	↑	3.0%	↑	↓	-4.0%	4.3%
Quality	-0.9%	↑	↓	-5.6%	↓	↓	-1.4%	-3.1%
Junk	-2.5%	↑	↓	-8.6%	↓	↓	2.5%	-7.4%
Value / Growth	-3.5%	↓	↓	-5.9%	↓	↓	-6.8%	-1.0%
Value	-4.1%	↑	↓	-11.3%	↓	↓	-2.3%	-8.3%
Growth	-0.6%	↑	↓	-5.4%	↓	↓	4.5%	-7.3%
Cyclical / Defensive	-3.2%	↓	↓	-4.7%	↓	↓	2.1%	-3.1%
Cyclical	-3.8%	↓	↓	-10.2%	↓	↓	1.9%	-6.7%
Defensive	-0.7%	↑	↓	-5.4%	↓	↓	-0.2%	-3.6%
Cyclical xEnergy / Defensive	-2.7%	↓	↓	-4.2%	↓	↓	3.9%	-4.7%
Cyclical xEnergy	-3.3%	↑	↓	-9.6%	↓	↓	3.6%	-8.3%
12M Momentum	0.9%	↓	↓	5.3%	↑	↑	-5.7%	0.6%
High Momentum	-2.7%	↓	↓	-6.2%	↓	↓	-1.6%	-7.9%
Low Momentum	-3.5%	↑	↓	-11.6%	↓	↓	4.0%	-8.5%
Size (Small / Large)	-3.0%	↓	↓	-3.6%	↓	↓	-0.3%	-3.6%
Small Cap	-3.2%	↑	↓	-8.7%	↓	↓	1.4%	-6.4%
Large Cap	-0.2%	↑	↓	-5.2%	↓	↓	1.7%	-2.9%

Source: Compustat, Morgan Stanley Research

Exhibit 21: Excess Return Versus Broader Top 1,000 Universe

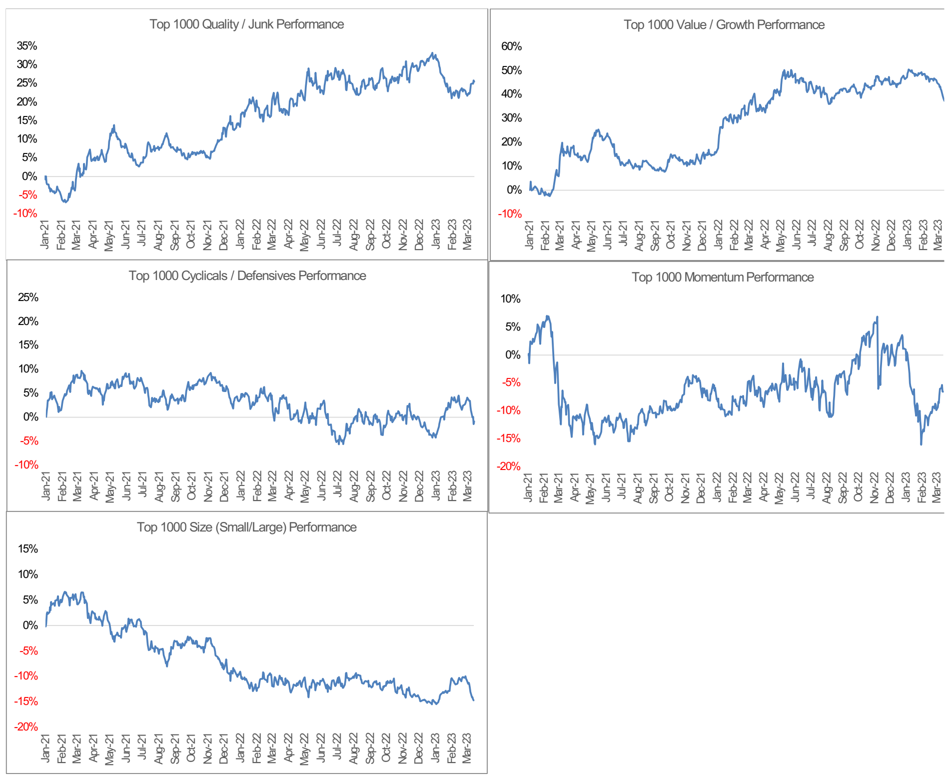
Top 1000 Excess Factor Return versus Broader Top 1000 Return as of Mar 16, 2023

Factor	1 Week			1 Month			YTD Ret	12M Ret
	Ret	1W Chg	1M Chg	Ret	1M Chg	3M Chg		
Quality / Junk								
Quality	1.3%	↑	↑	2.2%	↑	↓	-2.5%	2.4%
Junk	-0.3%	↓	↓	-0.8%	↓	↑	1.5%	-1.9%
Value / Growth								
Value	-1.8%	↓	↓	-3.5%	↓	↓	-3.4%	-2.7%
Growth	1.7%	↑	↑	2.4%	↑	↑	3.5%	-1.7%
Cyclical / Defensive								
Cyclical	-1.6%	↓	↓	-2.4%	↓	↓	0.8%	-1.1%
Defensive	1.6%	↑	↑	2.4%	↑	↑	-1.3%	2.0%
Cyclical xEnergy / Defensive								
Cyclical xEnergy	-1.1%	↓	↓	-1.8%	↓	↓	2.5%	-2.7%
Momentum								
High Momentum	-0.4%	↓	↓	1.6%	↑	↓	-2.7%	-2.3%
Low Momentum	-1.3%	↑	↓	-3.8%	↓	↓	2.9%	-2.9%
Size (Small / Large)								
Small Cap	-0.9%	↓	↓	-0.9%	↓	↑	0.3%	-0.9%
Large Cap	2.1%	↑	↑	2.6%	↑	↑	0.6%	2.7%

Source: Compustat, Morgan Stanley Research

Exhibit 22 shows performance of these pairs in time series graph form.

Exhibit 22: Cumulative Factor Performance Since 2021



Source: Compustat, Morgan Stanley Research

We include an extensive list of factors and their returns in Exhibit 23. We break down the factor spread return by their long and short portfolio and display the top and bottom performing portfolio legs last month in Exhibit 47.

Exhibit 23: Full List of Factor Spread Returns (Long - Short)

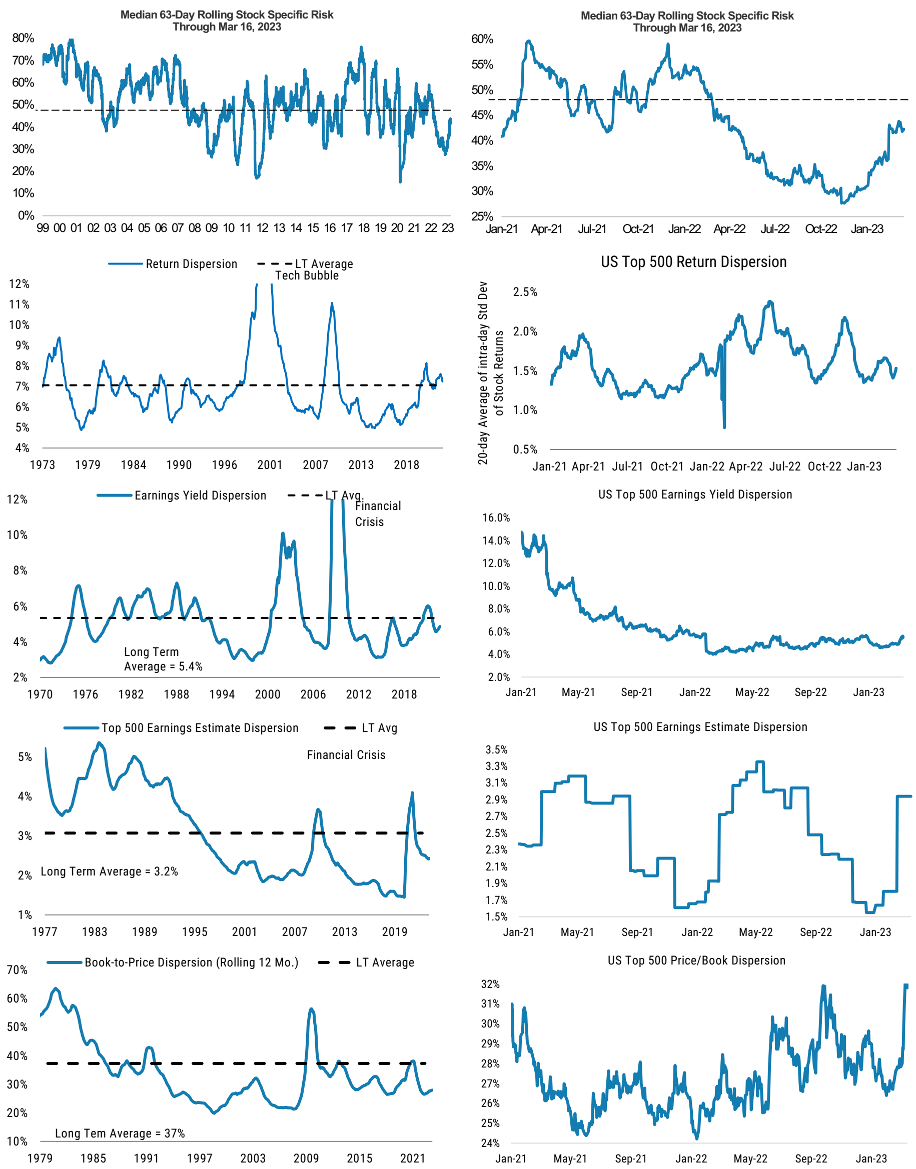
Equal Weighted Factor Return (Spread) in Top 1000 as of Mar 16, 2023

Factor Name	1 Week			1 Month			3M Ret	YTD Ret	12M Ret
	Ret	1W Chg	1M Chg	Ret	1M Chg	3M Chg			
9-Month Price Momentum (High vs Low)	1.6%	↓	↑	5.9%	↑	↑	-2.8%	-4.7%	-1.4%
12-Month Price Momentum (High vs Low)	0.9%	↓	↓	5.3%	↑	↑	-2.2%	-5.7%	0.6%
Net Debt-to-Market Cap (Low vs High)	4.2%	↑	↑	5.2%	↑	↑	4.5%	5.9%	6.4%
Net Cash Ratio (High vs Low)	4.2%	↑	↑	5.0%	↑	↑	5.0%	5.0%	5.0%
Smoothed Estimate Revisions (%) (High vs Low)	1.1%	↑	↓	4.6%	↑	↑	2.0%	2.5%	3.3%
Dividend Payout Ratio (High vs Low)	4.3%	↑	↑	4.0%	↑	↓	-1.3%	-2.6%	6.7%
6-Month Price Momentum (High vs Low)	1.0%	↓	↓	3.9%	↑	↑	-1.6%	-1.7%	-0.9%
Debt-to-Assets (Low vs High)	2.3%	↑	↑	3.7%	↑	↑	4.9%	5.6%	4.2%
12m Volatility (Low vs High)	2.0%	↑	↑	3.6%	↑	↓	-2.6%	-7.1%	7.7%
Reinvestment Rate (High vs Low)	3.4%	↑	↑	3.5%	↑	↓	-1.1%	-1.5%	5.3%
1-Month Estimate Revisions (%) (High vs Low)	0.7%	↑	↑	3.5%	↑	↑	3.3%	3.6%	0.0%
Debt-to-Capital (Low vs High)	2.1%	↑	↑	3.1%	↑	↑	5.4%	5.7%	3.9%
Cash-to-Debt (High vs Low)	1.7%	↑	↑	3.0%	↑	↑	5.7%	7.6%	3.7%
Quality vs Junk	1.6%	↑	↑	3.0%	↑	↓	-2.6%	-4.0%	4.3%
Debt-to-EBITDA (Low vs High)	1.9%	↑	↑	2.9%	↓	↑	6.2%	7.5%	-0.8%
Sales Growth Stability (High vs Low)	2.8%	↑	↑	2.8%	↑	↑	-0.7%	-3.9%	3.1%
EPS Variability (Low vs High)	1.6%	↑	↑	2.6%	↑	↑	-0.9%	-2.9%	3.1%
Operating Income Variability (Low vs High)	1.7%	↑	↑	2.6%	↑	↑	-1.8%	-2.4%	-1.6%
Gross Margin (High vs Low)	2.4%	↑	↑	2.5%	↑	↑	0.8%	1.0%	1.1%
Cash Flow / Debt (High vs Low)	1.8%	↑	↑	2.5%	↑	↑	-0.4%	-1.6%	7.3%
Gross Profit / Assets (High vs Low)	1.8%	↑	↑	2.4%	↓	↑	3.3%	3.1%	3.5%
ROE Variability (Low vs High)	1.3%	↑	↑	2.3%	↑	↑	1.0%	-0.3%	1.5%
Estimate Dispersion (Low vs High)	0.4%	↓	↑	2.3%	↑	↓	-1.5%	-3.8%	6.5%
Earnings Stability (High vs Low)	1.7%	↑	↑	2.3%	↑	↑	-1.8%	-5.1%	1.0%
Net Margin (High vs Low)	1.4%	↑	↑	2.2%	↑	↑	-1.1%	-2.2%	7.7%
12m-1m Residual Momentum (High vs Low)	-1.6%	↓	↓	2.1%	↑	↑	0.1%	0.0%	1.1%
Up-to-Down Revisions (High vs Low)	-0.6%	↓	↓	2.0%	↑	↑	-0.7%	-1.1%	-5.9%
Debt-to-Equity (Low vs High)	2.4%	↑	↑	1.9%	↑	↑	2.8%	2.6%	5.3%
Profitability (High vs Low)	1.7%	↑	↑	1.8%	↑	↑	0.6%	0.7%	3.2%
Interest Coverage (High vs Low)	1.6%	↑	↑	1.8%	↑	↑	0.3%	-1.2%	7.7%
Forecast long term growth (High vs Low)	-0.1%	↓	↓	1.8%	↓	↑	2.6%	3.9%	0.1%
Return on Invested Capital (High vs Low)	1.0%	↓	↑	1.7%	↑	↑	0.2%	-2.2%	9.9%
Sales Revisions (High vs Low)	0.1%	↓	↓	1.7%	↑	↑	0.6%	0.2%	-5.3%
Earnings Revisions (High vs Low)	-0.1%	↓	↓	1.7%	↑	↑	-0.8%	-1.0%	-3.6%
ROE (High vs Low)	0.6%	↑	↑	1.7%	↑	↓	-1.0%	-1.8%	6.2%
Free Cash Flow-to-Debt (High vs Low)	1.0%	↑	↑	1.7%	↑	↑	-0.8%	-2.0%	3.9%
CapEx-to-Sales (Low vs High)	-0.3%	↓	↓	1.6%	↑	↑	0.8%	-0.8%	4.1%
Sales Estimate Revisions (High vs Low)	0.2%	↓	↓	1.4%	↑	↑	0.5%	0.6%	-2.8%
5-Year Dividend per share growth (High vs Low)	1.9%	↑	↑	1.4%	↑	↑	0.2%	-0.1%	1.9%
3-Month Price Momentum (High vs Low)	0.9%	↑	↑	1.4%	↑	↓	-1.3%	-3.6%	-7.5%
Sales per Employee (High vs Low)	1.0%	↑	↑	1.3%	↓	↑	1.2%	2.1%	2.6%
Up vs Down Sales Revisions (High vs Low)	-0.3%	↓	↓	1.2%	↑	↑	-2.0%	-2.0%	-8.2%
CapEx-to-Assets (Low vs High)	-0.4%	↓	↓	1.2%	↑	↓	-0.9%	-3.1%	5.1%
ROA (High vs Low)	1.0%	↑	↑	1.2%	↑	↓	-0.4%	-2.5%	8.9%
Earnings Estimate Revisions (High vs Low)	0.5%	↑	↑	1.1%	↑	↓	-1.0%	-2.0%	-0.2%
Cash Ratio (High vs Low)	1.2%	↑	↑	1.0%	↓	↑	3.3%	5.9%	1.0%
Composite Sentiment (High vs Low)	-1.7%	↓	↓	0.9%	↑	↑	2.0%	1.7%	-1.7%
Operating Margin (High vs Low)	1.1%	↑	↑	0.8%	↑	↓	-1.7%	-3.2%	5.8%
Cash-to-Assets (High vs Low)	1.0%	↑	↑	0.7%	↓	↑	2.7%	5.0%	-0.3%
Composite Growth (High vs Low)	-0.1%	↑	↓	0.6%	↓	↑	0.2%	1.2%	-1.0%
Sales Variability (Low vs High)	1.3%	↑	↑	0.6%	↑	↓	-2.8%	-6.5%	3.9%
Financial Leverage (Low vs High)	1.4%	↑	↑	0.6%	↓	↑	0.2%	-0.1%	0.9%
Composite Quality (High vs Low)	1.1%	↑	↑	0.5%	↑	↓	-2.2%	-3.8%	1.5%
Y/Y %Change in number of employees (Low vs High)	-0.5%	↓	↓	0.3%	↑	↓	-1.4%	-4.7%	7.6%
Price-to-Cash Flow (Cheap vs Expensive)	-0.4%	↓	↓	0.2%	↓	↓	-1.5%	-0.9%	-3.0%
Asset Turnover (High vs Low)	-0.1%	↓	↓	0.2%	↓	↓	1.6%	0.9%	6.3%
Long-Term Operating Leverage (High vs Low)	-0.1%	↓	↑	0.1%	↓	↑	1.7%	1.9%	4.3%
CapEx-to-Depreciation (Low vs High)	-0.8%	↑	↓	0.1%	↑	↓	-2.1%	-4.4%	-1.5%
5-Year Sales Growth (High vs Low)	-0.4%	↓	↓	0.1%	↓	↑	2.3%	6.1%	-10.3%
1-Year Dividend per share growth (High vs Low)	-0.6%	↓	↓	0.0%	↓	↑	2.7%	3.8%	6.2%
5-Year EPS Growth (High vs Low)	-0.4%	↓	↓	0.0%	↓	↑	1.8%	3.0%	-1.3%
1-Year Sales Growth (High vs Low)	-1.1%	↓	↓	0.0%	↓	↑	2.1%	6.6%	-11.5%
Analyst Coverage (High vs Low)	1.1%	↑	↑	0.0%	↓	↓	0.1%	0.9%	-3.7%
Operating Leverage (High vs Low)	-0.2%	↓	↓	-0.3%	↓	↓	0.3%	0.7%	3.7%
Tangible Book/Price (Cheap vs Expensive)	-0.4%	↑	↓	-0.7%	↓	↑	2.6%	2.9%	2.8%
Enterprise Value-to-Free Cash Flow (Low vs High)	-0.6%	↓	↓	-0.8%	↓	↓	-1.5%	-3.8%	3.0%
Incremental Margin (High vs Low)	-0.5%	↓	↑	-0.8%	↓	↑	-0.9%	-0.1%	3.5%
Inventory Turnover (High vs Low)	-0.3%	↓	↓	-1.0%	↓	↓	-4.1%	-3.0%	-1.7%
Inventory-to-Sales (Low vs High)	0.3%	↑	↓	-1.1%	↓	↓	-3.8%	-3.4%	-4.6%
Reduction in Shares Outstanding (Low vs High)	-1.1%	↓	↓	-1.2%	↑	↓	-2.5%	-4.4%	10.3%
1-Month Reversal (Low vs High)	-1.5%	↓	↓	-1.2%	↓	↑	2.0%	2.2%	-3.5%
1-Year EPS Growth (High vs Low)	-1.7%	↓	↓	-1.3%	↓	↓	-0.9%	-0.1%	-3.2%
Operational Efficiency (High vs Low)	-1.1%	↓	↓	-1.4%	↑	↓	-3.6%	-5.5%	1.1%
Composite Value (Cheap vs Expensive)	-1.4%	↓	↓	-1.6%	↓	↓	-1.8%	-3.2%	4.4%
Composite Free Cash Flow (High vs Low)	-0.8%	↓	↓	-1.6%	↓	↓	-2.6%	-5.0%	0.2%
Short-Term Accruals (Low vs High)	0.1%	↑	↑	-1.8%	↓	↓	-1.8%	-0.6%	-5.9%
Y/Y Change in Inventory/Sales (Low vs High)	-1.1%	↓	↓	-1.8%	↓	↓	-2.4%	-2.4%	-1.3%
Receivables Turnover (High vs Low)	0.3%	↓	↓	-2.0%	↓	↓	-2.3%	-2.3%	-0.6%
Composite Accruals (Low vs High)	0.4%	↑	↑	-2.2%	↓	↓	-4.6%	-5.3%	-2.8%
Enterprise Value-to-Operating Income (Low vs High)	-2.3%	↓	↓	-2.2%	↓	↓	0.0%	-3.2%	8.9%
Trailing Dividend Yield (High vs Low)	-0.3%	↑	↓	-2.2%	↓	↓	-2.2%	-3.9%	2.7%
Total Yield (High vs Low)	-1.0%	↓	↓	-2.3%	↓	↓	-0.8%	-1.6%	2.3%
Cash Flow Coverage (High vs Low)	-0.8%	↓	↓	-2.3%	↓	↓	-1.7%	-1.2%	-6.2%
Free Cash Flow Yield (High vs Low)	-1.3%	↓	↓	-2.5%	↓	↓	-4.2%	-6.5%	-0.7%
Net Cash Variability (Low vs High)	-1.5%	↓	↓	-2.9%	↓	↑	-1.4%	-2.4%	-7.0%
Accruals (Low vs High)	-0.3%	↑	↓	-3.0%	↓	↓	-7.3%	-9.0%	-1.0%
Enterprise Value-to-EBITDA (Low vs High)	-3.3%	↓	↓	-3.3%	↓	↓	-0.2%	-3.1%	8.4%
Price-to-Earnings (Cheap vs Expensive)	-2.4%	↓	↓	-3.5%	↓	↓	-3.5%	-5.6%	2.0%
Size (Small vs Large)	-3.0%	↓	↓	-3.6%	↓	↓	-0.3%	-0.3%	-3.6%
Price-to-Operating Income (Cheap vs Expensive)	-3.1%	↓	↓	-4.2%	↓	↓	-3.3%	-5.5%	3.2%
Cash-to-Market Cap (High vs Low)	-2.1%	↓	↓	-4.3%	↓	↓	-0.6%	0.8%	-5.2%
Price-to-Sales (Cheap vs Expensive)	-3.4%	↓	↓	-4.3%	↓	↓	-1.2%	-3.4%	-0.4%
Price-to-EBITDA (Cheap vs Expensive)	-3.6%	↓	↓	-4.5%	↓	↓	-2.7%	-5.1%	2.4%
Price-to-Book (Cheap vs Expensive)	-2.6%	↓	↓	-4.5%	↓	↓	-0.6%	-1.7%	-0.4%
Industry Cyclical vs Defensive	-3.7%	↓	↓	-4.5%	↓	↓	1.8%	4.8%	-0.2%
Cyclical vs Defensive	-3.2%	↓	↓	-4.7%	↓	↓	-0.3%	2.1%	-3.1%
Value vs Growth	-3.5%	↓	↓	-5.9%	↓	↓	-4.4%	-6.8%	-1.0%
Price-to-Forward Earnings (Cheap vs Expensive)	-5.0%	↓	↓	-6.0%	↓	↓	-5.0%	-7.8%	0.9%

Source: Compustat, Morgan Stanley Research

In Exhibit 24, we monitor a number of dispersion metrics on a long-term and short-term basis. For most forms of dispersion, 2021 marked a local peak with these measures now back at or below long-term averages. Stock-specific risk has risen in 2023 meaning less price movement can be explained by macro variables but the reading overall remains low, below historical median. Return dispersion remains elevated relative to the post-GFC cycle and has fallen slightly in recent weeks. Lastly, earnings estimate dispersion has moved higher since 4Q earnings but may be impacted by the rolling of estimate periods.

Exhibit 24: US Top 500 Dispersion Metrics: Long-term and Short-Term



Source: Compustat, Morgan Stanley Research

We also monitor these dispersion metrics on a percentile basis relative to history (Exhibit 25). Dispersion levels have come down closer to median levels after being elevated for most of 2022. Looking under the surface, there is greater variance at the industry group level with a number of industries in their top quartile historically. Specifically, high dispersion is present in BioPharma, Consumer Durables & Apparel, Software, Banks and

Diversified Financials while there are lower relative dispersion levels in Commercial & Professional Services and Utilities, suggesting macro factors are a driving force.

Exhibit 25: Historical Dispersion Metrics by Industry Group

	Return Dispersion	Earning Yield Dispersion	Book/Price Dispersion	Earnings Estimate Dispersion
S&P 500	69%	77%	70%	88%
Energy	60%	85%	51%	71%
Materials	35%	94%	38%	76%
Capital Goods	34%	68%	50%	56%
Commercial & Professional Services	34%	25%	27%	76%
Transportation	43%	82%	37%	85%
Automobiles & Components	48%	84%	97%	69%
Consumer Durables & Apparel	31%	88%	89%	96%
Consumer Services	58%	34%	35%	84%
Retailing	72%	77%	20%	85%
Food & Staples Retailing	49%	93%	96%	17%
Food, Beverage & Tobacco	19%	66%	61%	70%
Household & Personal Products	39%	59%	11%	94%
Health Care Equipment & Services	30%	72%	67%	53%
Pharma, Biotech & Life Sciences	72%	92%	96%	94%
Banks	89%	78%	58%	80%
Diversified Financials	70%	87%	58%	86%
Insurance	76%	82%	36%	73%
Software & Services	56%	72%	86%	86%
Technology Hardware & Equipment	46%	16%	82%	75%
Semiconductors & Semi Equipment	89%	43%	81%	64%
Telecommunication Services	40%	78%	80%	74%
Media & Entertainment	81%	54%	76%	87%
Utilities	27%	26%	47%	1%
Real Estate	86%	45%	88%	61%

Source: Compustat, Morgan Stanley Research

Fresh Money Buy List

Exhibit 26: Fresh Money Buy List - Stats & Performance

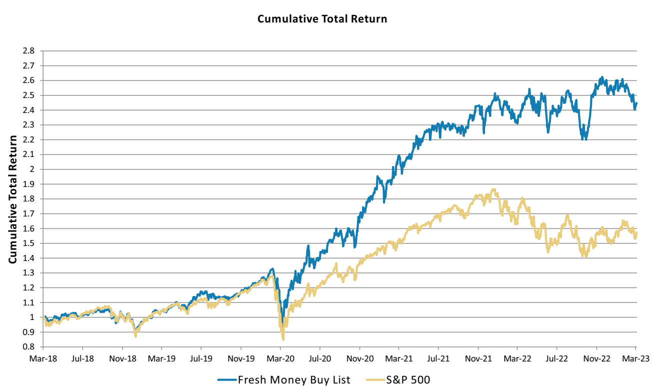
Company Name	Ticker	MS Rating	Sector	Market Cap ($Bn)	Price	MS PT	% to MS PT	MS Analyst	Date Added	Total Return Since Inclusion	
										Absolute	Rel. to S&P
CenterPoint Energy Inc	CNP	Overweight	Utilities	$18.3	$29.05	30.00	3.3%	Arcaro, David	3/21/2022	2.4%	13.2%
Coca-Cola Co.	KO	Overweight	Consumer Staples	$259.7	$60.02	70.00	16.6%	Mohsenian, Dara	3/28/2022	0.4%	12.8%
Exxon Mobil Corporation	XOM	Overweight	Energy	$406.4	$99.84	114.00	14.2%	McDermott, Devin	2/22/2021	108.5%	105.0%
Humana Inc	HUM	Overweight	Health Care	$61.9	$495.55	620.00	25.1%	Ha, Michael	7/19/2018	61.2%	10.4%
McDonald's Corporation	MCD	Overweight	Consumer Discretionary	$195.5	$267.20	305.00	14.1%	Harbour, Brian	10/18/2021	14.1%	24.4%
Mondelez International Inc	MDLZ	Overweight	Consumer Staples	$90.5	$66.40	75.00	13.0%	Kaufman, Pamela	7/19/2021	7.0%	14.1%
SBA Communications	SBAC	Overweight	Real Estate	$27.7	$255.98	329.00	28.5%	Flannery, Simon	6/7/2021	(16.8%)	(12.0%)
Simon Property Group Inc	SPG	Overweight	Real Estate	$34.1	$104.31	132.00	26.5%	Kamdem, Ronald	2/16/2021	7.6%	4.8%
Verizon Communications	VZ	Overweight	Communication Services	$154.5	$36.79	44.00	19.6%	Flannery, Simon	12/19/2022	0.7%	(1.4%)
Current List Performance											
Average (Eq. Weight)				$138.7			17.9%			20.55%	19.01%
Median				$90.5			16.6%			7.0%	12.8%
% Positive Returns (Abs. / Rel.)										89%	78%
% Negative Returns (Abs. / Rel.)										11%	22%
Avg. Hold Period (Months)											21.4
All Time List Performance											
Average (Eq. Weight)										30.6%	16.2%
Median										14.6%	12.4%
% Positive Returns (Abs. / Rel.)										79%	61%
% Negative Returns (Abs. / Rel.)										21%	39%
Avg. Hold Period (Months)											15.6

Performance returns shown above and below represent local currency total returns, including dividends and excluding brokerage commission. Returns are calculated using the closing price on the last trading day before the date shown in the "Date Added" column through close on the last trading day prior to publication of this report for stocks currently on the list and through close on the day of removal for stocks formerly on the list. These figures are not audited. Past performance is no guarantee of future results.

++ Rating and other information has been removed from consideration in this report because, under applicable law and/or Morgan Stanley policy, Morgan Stanley may be precluded from issuing such information with respect to this company at this time.

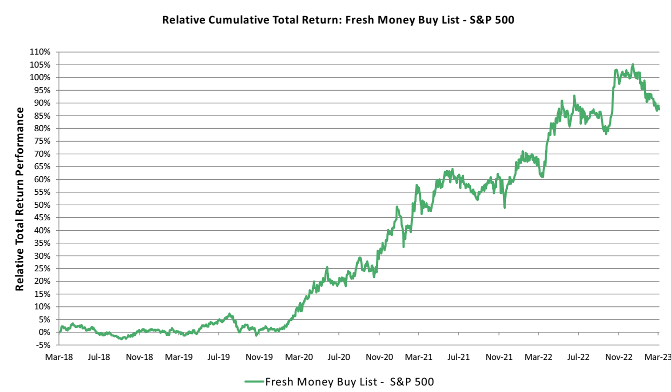
Source: Bloomberg, Morgan Stanley Research estimates

Exhibit 27: Fresh Money Buy List & S&P 500 Cumulative Total Return



Source: Bloomberg, Morgan Stanley Research.

Exhibit 28: Fresh Money Buy List / S&P 500 Cumulative Relative Return



Source: Bloomberg, Morgan Stanley Research.

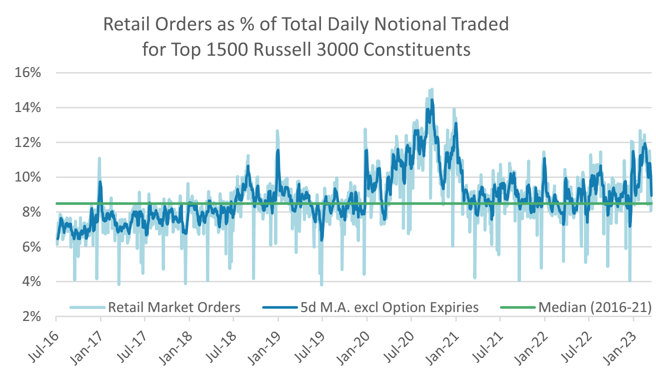
What's Retail Doing?

Our Quantitative Equity Strategy team recently introduced a novel way to track the activity of retail traders using publicly available data. We provide a few updates and key observations on the retail trader using this approach.

A few key observations:

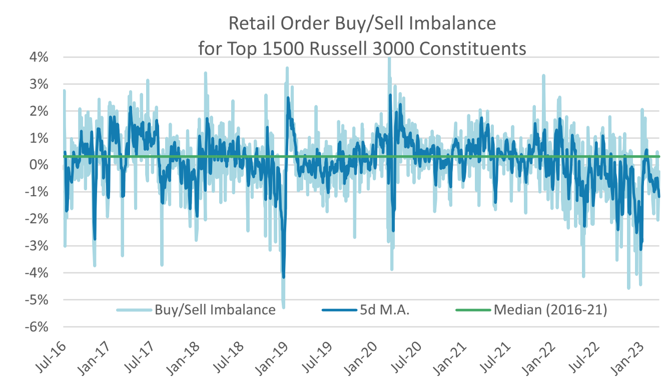
- Retail participation is currently at 8.9% of the total market volume, and at 63rd%-ile relative to the last 5 years.
- Order imbalance was negative at -1.2% (6th percentile relative to the last 5 years).
- Imbalance was negative at the sector level this week. The most negative relative to history was Industrials (4th %-ile), Information Technology, and Health Care (4th %-ile).

Exhibit 29: Retail orders as a % of notional traded slightly above median



Source: Morgan Stanley Research, Morgan Stanley Quantitative and Derivative Strategies, Compustat

Exhibit 30: ... and order imbalance has been largely negative



Source: Morgan Stanley Research, Morgan Stanley Quantitative and Derivative Strategies, Compustat

Exhibit 31: Retail Participation and Buy/sell Imbalance

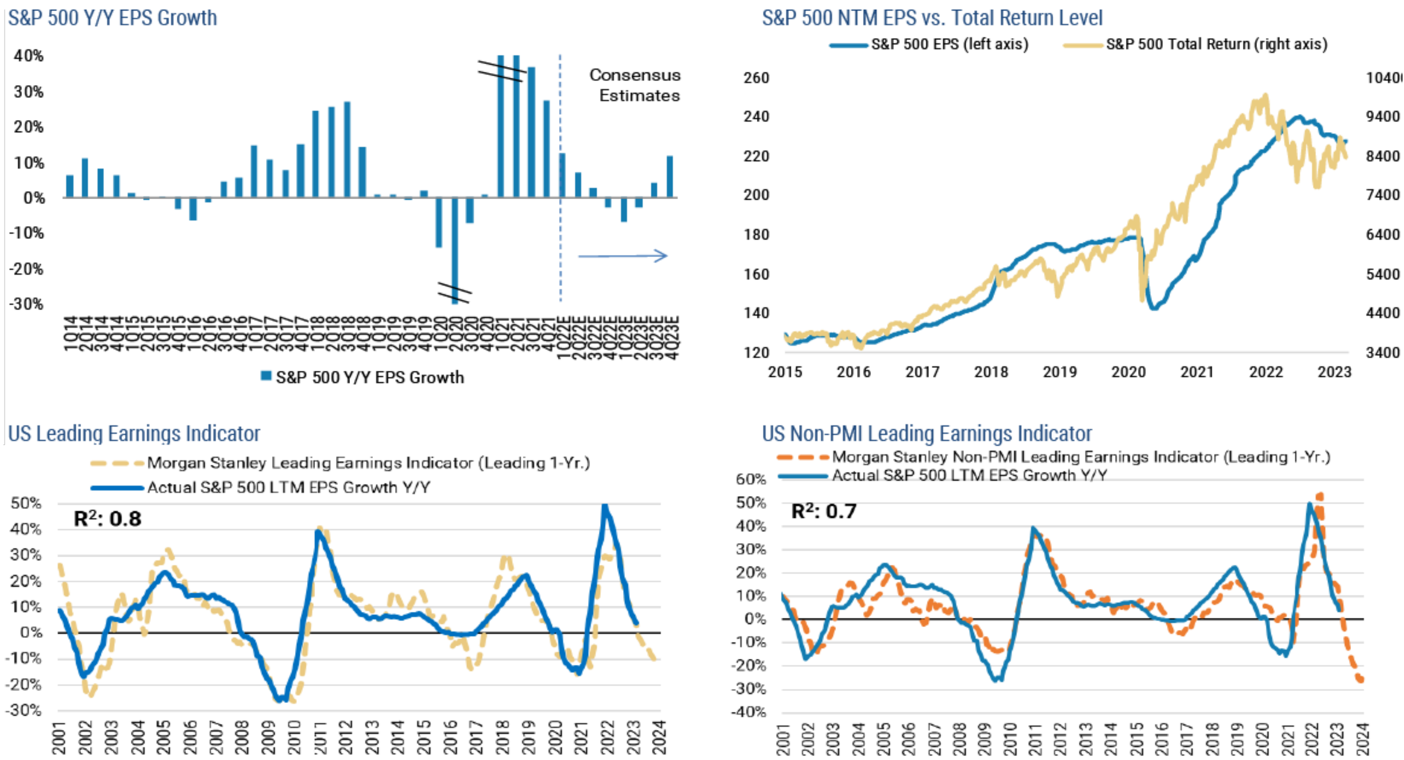
	Retail Participation			Buy/Sell Imbalance		
Sector	**2016-22 Median**	**Current**	**p-tile**	**2016-22 Median**	**Current**	**p-tile**
Energy	6.8%	6.0%	0.24	-0.32%	-2.3%	0.11
Materials	5.6%	4.3%	0.05	0.4%	-1.7%	0.07
Industrials	6.5%	4.7%	0.00	-0.1%	-2.5%	0.04
Consumer Discretionary	11.5%	17.2%	0.95	0.6%	-0.8%	0.07
Consumer Staples	5.9%	3.8%	0.00	-0.5%	-3.4%	0.06
Health Care	5.7%	3.5%	0.00	-0.6%	-3.2%	0.04
Financials	5.6%	7.7%	0.99	-0.1%	0.3%	0.62
Information Technology	11.0%	10.1%	0.27	0.4%	-1.8%	0.04
Communication Services	9.4%	9.6%	0.50	0.2%	-1.4%	0.11
Utilities	3.8%	2.8%	0.03	-1.2%	-2.2%	0.31
Real Estate	3.5%	3.1%	0.19	0.5%	-1.6%	0.14
Model Universe (Top 1500)	**8.6%**	**8.9%**	**0.63**	**0.2%**	**-1.2%**	**0.06**

Source: Morgan Stanley Research, Morgan Stanley Quantitative and Derivative Strategies, Compustat

For more on the methodology, please see Quantitative Equity Research: The Rise of the Retail Trader (30 Jun 2021).

Weekly Charts to Watch

Exhibit 32: US Earnings Snapshot



Source: Refinitiv, FactSet, Morgan Stanley Research. Top: As of March 10, 2023. Bottom left as of February 1, 2022. Bottom right as of February 1, 2023. MS Leading Earnings Indicator inputs: ISM Mfg. PMI, Conference Board Consumer Confidence, housing starts, credit spreads. Weightings float over time based on rolling correlation of a given factor versus EPS growth. MS Non-PMI Leading Earnings Indicator inputs: Philadelphia Fed economic activity, Creighton U. business confidence, Chicago Fed supplier deliveries, Atlanta Fed wage tracker (inverse signal), NFIB small bus. most important problem inflation (inverse signal), and Brave-Butters-Kelley cycle component of monthly GDP. Weightings are fixed over time.;

Exhibit 33: S&P 500 Price Target

Morgan Stanley S&P 500 2023 Price Target

Landscape	Earnings	Multiple	Price Target	Upside / Downside
Bull Case	$251	16.7x	4,200	6.1%
Base Case	$241	16.1x	3,900	-1.5%
Bear Case	$230	15.3x	3,500	-11.6%
Current S&P 500 Price as of:		3/16/2023	3,960	

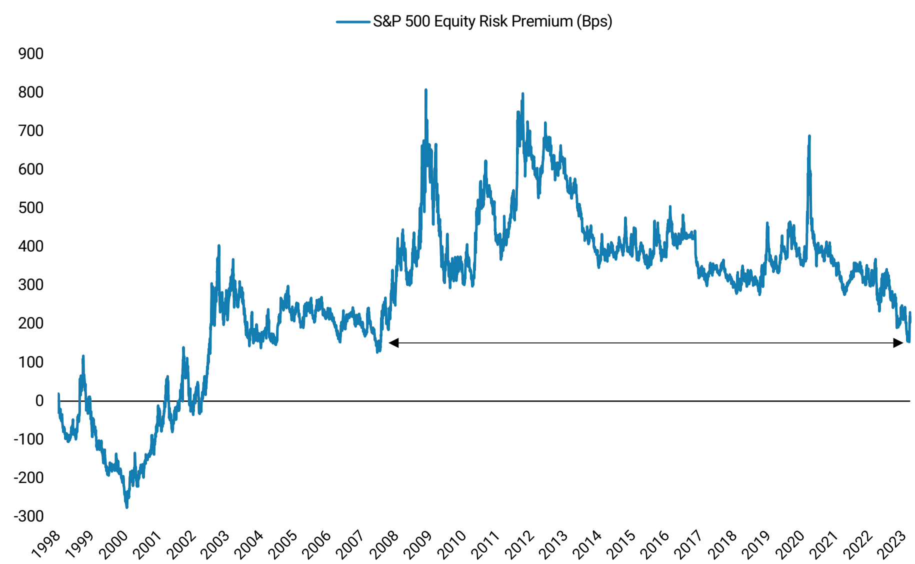
Note: We use 2023 forward earnings to project our price target which takes into account our 2024 earnings forecast (currently $241 base case).
Source: Bloomberg, Morgan Stanley Research

Exhibit 34: Sector Ratings

Morgan Stanley Sector Recommendations			
Overweight	Health Care	Staples	Utilities
Neutral	Comm. Services	Energy	Financials
	Industrials	Materials	Real Estate
	Tech ex Hardware		
Underweight	Discretionary	Tech Hardware	

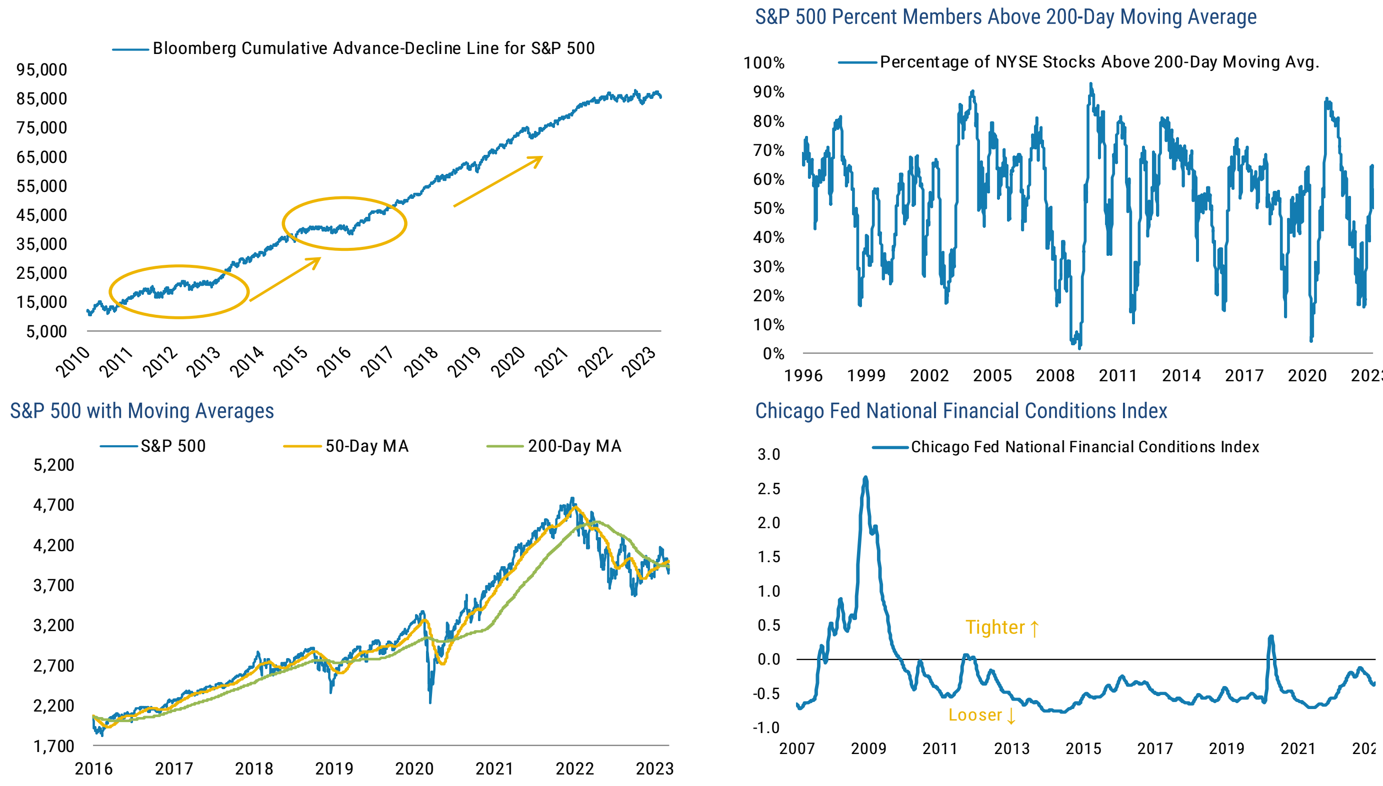
Source: Morgan Stanley Research

Exhibit 35: Equity Risk Premium Is at Pre-GFC Levels



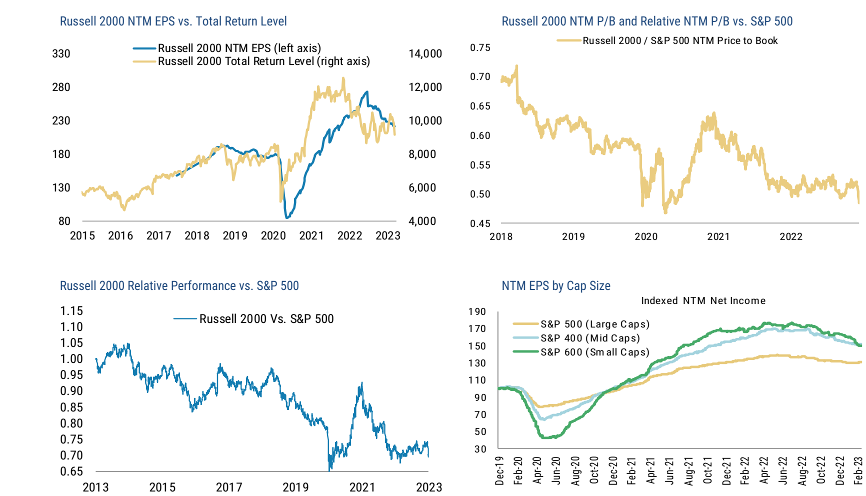
Note: Equity risk premium is calculated as the S&P 500 forward 12M earnings yield minus the nominal 10-Year Treasury.
Source: Bloomberg, Morgan Stanley Research

Exhibit 36: US Equity Market Technicals and Financial Conditions



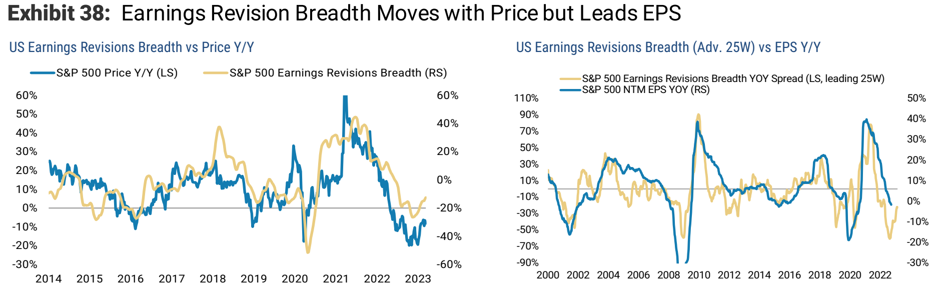
Source: Bloomberg, Morgan Stanley Research. As of March 16, 2023

Exhibit 37: US Small Cap Equities



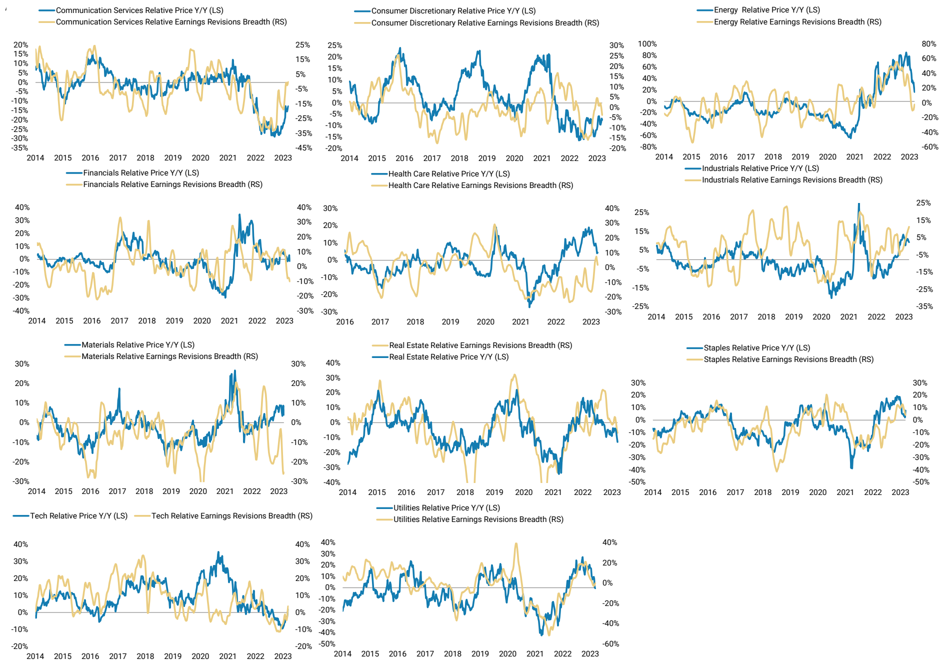
Source: FactSet, Morgan Stanley Research. As of March 16, 2023

Exhibit 38: Earnings Revision Breadth Moves with Price but Leads EPS



Source: FactSet, Morgan Stanley Research

Exhibit 39: Earnings Revisions Breadth vs YoY Performance



Source: FactSet, Morgan Stanley Research. As of March 17, 2023

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Underweight/Sell	**660**	**18%**	**80**	**12%**	**12%**	**232**	**15%**
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