

November 21, 2022 05:01 AM GMT

US Equity Strategy | North America

Weekly Warm-up: Feedback on Our Tactical Views and 2023 Outlook

Feedback to our year ahead outlook has been mixed, with many agreeing on the main points but trying to understand the path, where conviction remains low. We still expect higher highs for this tactical rally before the deteriorating fundamentals take us to lower bear market lows next year.

Technical over Fundamentals for now... our tactically bullish call was always more about the technicals than the fundamentals. Today, we provide an update to those factors, some of which no longer justify higher prices although they provide support at current levels. The deciding factor is market breadth, which has improved greatly over the past month and argues for us to remain bullish into year end before the fundamentals take us to lower lows next year.

Feedback on our call for the S&P 500 to reach a price trough of 3,000-3,300 in Q1 '23... we've gotten a fair amount of pushback on that our forecast on this front is too aggressive both from a magnitude and timing standpoint. While directionally bearish, many investors struggle to see even a retest of 3,500. In our view, what was priced at the October lows was peak Fed hawkishness, not material earnings downside. If we were forecasting a modest 5% forward EPS decline and a reacceleration off of those levels, we'd concede that the earnings risk is probably priced, but we're modeling a much more significant 15-20% forward earnings downdraft, which should demand a more recessionary type 13.5-15x multiple on materially lower EPS.

We are hearing more of a desire to explore the "soft landing" scenario... We find the most common interpretation of a "soft landing" is the US economy avoids an economic recession – i.e. the labor market remains resilient, inflation slows, and the Fed does not hike beyond Q1 '23. We view that scenario as an economic muddle through, and one that is still negative for margins/earnings and therefore equity markets. Why? First off, a tight labor market keeps labor costs sticky and elevated and pressures margins. Second, inflation may be slowing but the downtrend is likely more significant for goods inflation, which the S&P 500 is relatively exposed to from a nominal revenue perspective. Third, in that scenario, the Fed may not be hiking, but they're likely not cutting either because the labor market is resilient and they're still handicapped by inflation that's slowly decelerating but not plunging. So, the equity market may get the benefit of the late cycle "pause trade" typically worth ~+15%. However, it won't get the "cuts before a recession" trade worth another ~+10%.

MORGAN STANLEY & CO. LLC

Michael J Wilson
EQUITY STRATEGIST
M.Wilson@morganstanley.com +1 212 761-2532

Andrew B Pauker
EQUITY STRATEGIST
Andrew.Pauker@morganstanley.com +1 212 761-1330

Michelle M. Weaver, CFA
EQUITY STRATEGIST
Michelle.M.Weaver@morganstanley.com +1 212 296-5254

Diane Ding, Ph.D.
QUANTITATIVE STRATEGIST
Qian.Ding@morganstanley.com +1 212 761-6758

Nicholas Lentini, CFA
RESEARCH ASSOCIATE
Nick.Lentini@morganstanley.com +1 212 761-5863

Morgan Stanley does and seeks to do business with companies covered in Morgan Stanley Research. As a result, investors should be aware that the firm may have a conflict of interest that could affect the objectivity of Morgan Stanley Research. Investors should consider Morgan Stanley Research as only a single factor in making their investment decision.

For analyst certification and other important disclosures, refer to the Disclosure Section, located at the end of this report.

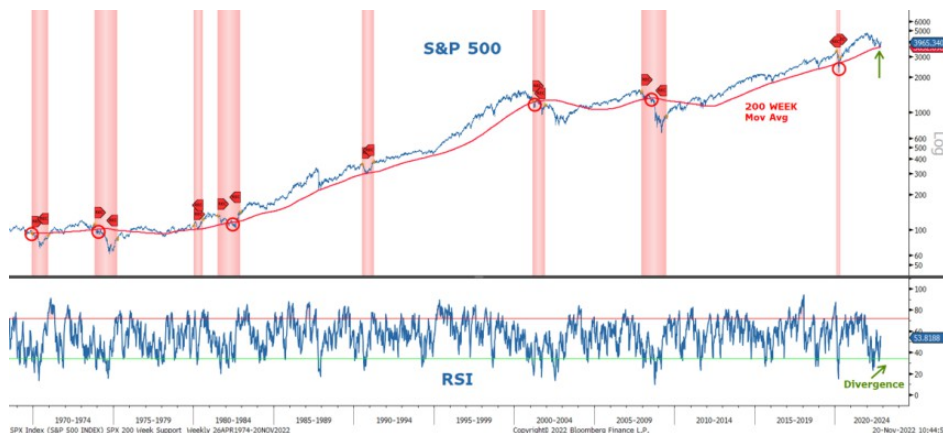
What to Focus on This Week

Feedback on Our Tactical Views and '23 Outlook

Last week, we published our [2023 US Equities Outlook](#). In it, we detail the path to our 2023 year end S&P 500 price target of 3,900. While the price may seem unexciting relative to where we're currently trading, we think the path will be quite volatile—a triple breaking put. In short, we see three inflections over the next year—(1) tactical upside into year end '22 (4150+ target), (2) a material leg lower in price in Q1 of '23, and (3) a rebound off of that Q1 trough as the market begins to discount a growth rebound well ahead of the lagging hard data turning more constructive. In our view, we're at the point in the cycle where assuming a more linear price path makes little sense as this will likely be a trading environment for some time.

The main pushback and focus from investors has centered around the first of two inflections – the tactical upside call. This makes sense given growing anxiety around how we trade into year-end. As a reminder to readers, our tactically bullish view from a month ago was all about the technicals, not the fundamentals, which remain decidedly bearish. Many active managers – i.e. our core clients – are *not* technicians so these types of calls are hard to process. As 30-year veterans of following and trading markets, we've had plenty of time to learn this lesson the hard way, which is why we spend more time on it than perhaps our clients or other fundamental strategists do. In short, technicals are always a part of our analysis even if they don't override our fundamental view that often.

Let's review a few key points to the call as we discuss how the rest of the year may play out. First, the primary technical driver to our bullish call was simply respecting the 200-week moving average which, as noted, does not give way for the S&P 500 until a recession is a *fait accompli*. The hard evidence required by the market to actually price a recession lies in the jobs data. More specifically, until it is clear we are going to have a full-blown labor cycle where the unemployment rate rises by at least 1-1.5%, the S&P 500 will give the benefit of doubt to the soft landing outcome. In other words, until we get a negative payroll release, the S&P 500 is likely to defend the 200-week moving average. To be fair, that level (3600) is now almost 10% below Friday's close so remaining bullish has become more difficult, to say the least ([Exhibit 1](#)).

Exhibit 1: 200-Week Moving Average for S&P 500 Will Not Break Until Labor Market Does

Source: Bloomberg, Morgan Stanley Research

Second, in addition to the 200-week moving average as key support, falling interest rate volatility provided the support for the higher valuations that are driving this rally in the absence of positive EPS revisions ([Exhibit 2](#)). However, much like with the 200-week moving average, this factor can provide support for the higher P/Es achieved over the past month; but it is no longer arguing for further upside. In other words, both the 200-week moving average and interest rate volatility factors have run their course, for now, in our view.

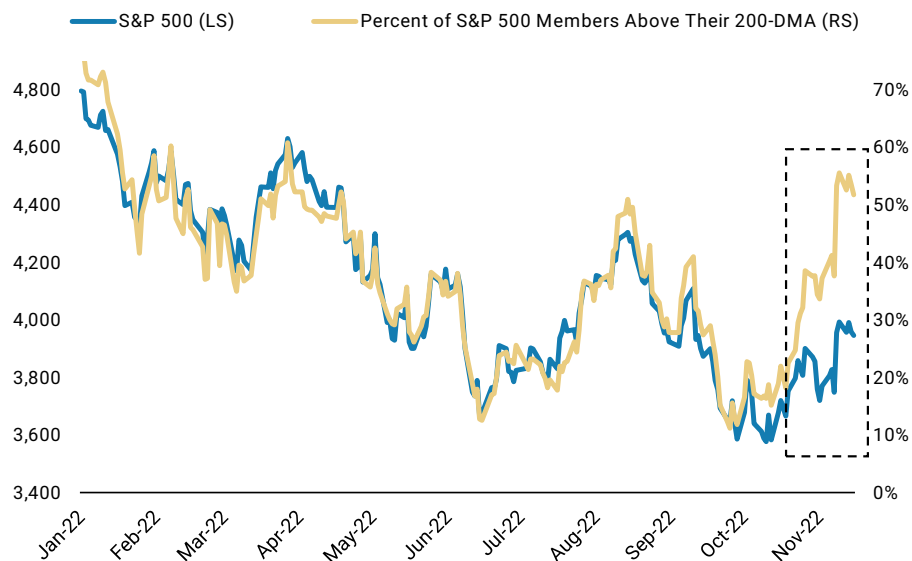
Exhibit 2: Falling Interest Rate Volatility Has Helped P/Es Expand

Source: Bloomberg, Morgan Stanley Research

However, a third factor has emerged as perhaps the best technical argument for higher prices before the fundamentals take over and determine the end to this bear market. Market breadth has improved materially during this rally. As noted last week, both small caps and the equal-weighted S&P 500 have outperformed the market-weighted index significantly during this rally. In fact, the equal-weighted S&P 500 has been outperforming since last year while the small caps have been outperforming since May. We upgraded small caps in our mid-year outlook under our view that the final stages of this bear market would be led by the bigger market cap companies that were still over owned. That scenario has played out, with 3Q earnings season punctuating that development. However, such relative moves by the small caps and the average stocks did not prevent the broader market from making a new low this fall. But the improvement in breadth is a new development and that indicator does argue for even

higher prices in the broader market cap weighted S&P 500 before this rally is complete ([Exhibit 3](#)).

Exhibit 3: Improving Breadth Supports Further Upside to Our Tactical Upside Call



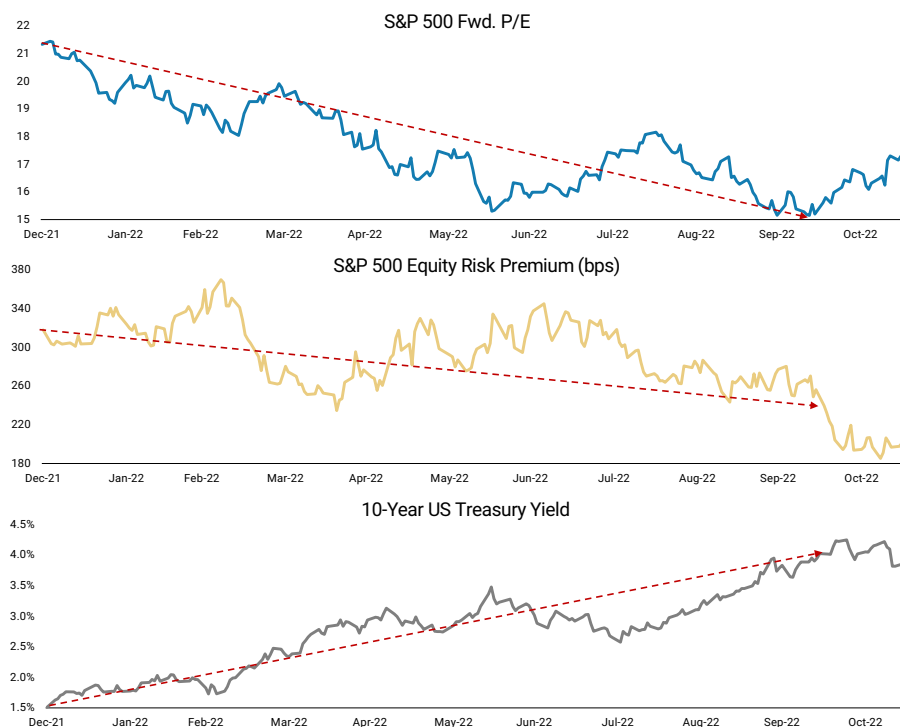
Source: Bloomberg, Morgan Stanley Research.

Bottom line, tactically bullish calls are difficult to make, especially when they go against one's fundamental view that remains decidedly bearish (see next section). When we weigh the technical evidence, we remain positive for this rally to continue into year end even though the easy money has likely been made. From here, we expect more choppiness and misdirection with respect to what's leading. For example, from the October lows, it's been a small cap, industrials/cyclicals led rally with the longer duration growth stocks lagging. IF this rally is to have further legs to 4150 and maybe a bit higher, we think it will have to be led by the Nasdaq, which remains well below its 200-day moving average, unlike the Dow Industrials. It's also where the fundamentals are deteriorating the most so that means back end interest rates will have to fall further to support valuations via short covering. Meanwhile, the direction of interest rates will be determined by macro data like Non-Farm Payrolls and the next round of inflation data (CPI and PPI) which won't arrive for a few weeks. That will determine how fast the Fed moves to pause its rate hikes, something that could end as soon as next month in our view. In short, investors should be prepared for volatility to remain high both intra-day and day to day with swings in leadership. After all, it's still a bear market and that means it's not going to get any easier before the fundamentals take over to complete this bear market.

Pushback on Our '23 Views – i.e. lower lows

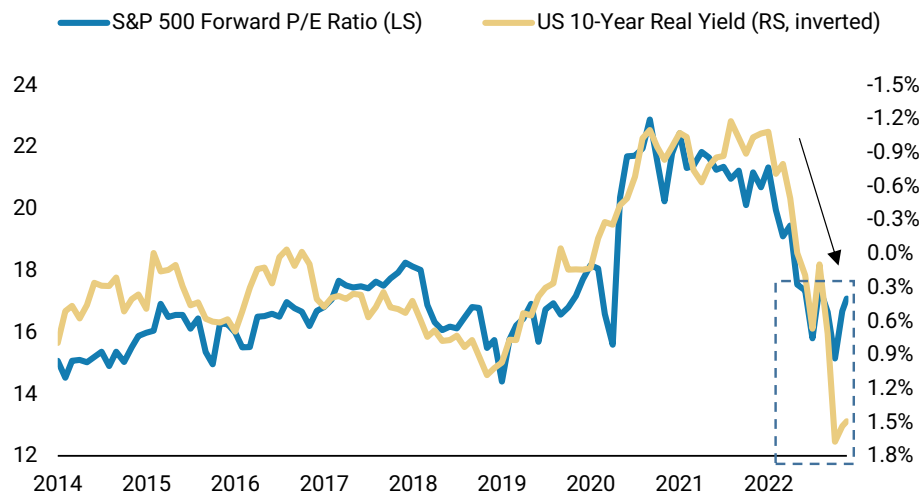
On the second inflection—the material price downside we expect (to 3,000-3,300) in Q1 '23—we've gotten a fair amount of pushback that our forecast on this front is too aggressive both from a magnitude and timing standpoint. While directionally bearish, many investors struggle to see even a retest of 3,500 given what was priced into equities at the October lows. In our view, what was priced was peak hawkishness, not material earnings downside. Higher rates drove virtually all of the multiple compression we saw YTD into the trough as the equity risk premium compressed further ([Exhibit 4](#)). Additionally, the correlation between equity indices and real rates has remained materially negative for the majority of the year, and the relationship between market multiple and real rates shows that rates have been the dominant driver of equity multiples YTD ([Exhibit 5](#)). We are cognizant of the reality that the equity market has front-run the bond market in terms of pricing a Fed pause as shown by the divergence in equity market multiple and real rates (also [Exhibit 5](#)). Thus, if December macro data does surprise on the hawkish side in a way that pushes the terminal rate even higher and calls the step down into question, the equity market is exposed to a quick de-rating. That's a risk to our tactical upside call, but macro risk events on that front are still a couple of weeks away.

Exhibit 4: Higher Rates and a Hawkish Fed Drove Multiple Compression into the Oct. Lows, Not Earnings Risk



Source: Bloomberg, Morgan Stanley Research.

Exhibit 5: On a Similar Note, Real Rates Have Directionally Driven Equity Multiples, Though the Recent Divergence in Levels Implies Risk to Our Tactical Upside Call in Equities if Rates Don't Come In



Source: FactSet, Bloomberg, Morgan Stanley Research.

What's yet to be priced is the earnings risk and that is what ultimately will serve as the catalyst for the market to make new price lows in Q1, in our view. As a reminder, we're not forecasting a 2015/2016 type modest earnings contraction, we're forecasting a material 15-20% contraction in forward EPS. From our standpoint, that's not the type of earnings reset that the market will look through. While not our economists' forecast (and there are new factors at play this cycle), historically speaking, the type of earnings downdraft we are forecasting has coincided with an unemployment cycle ([Exhibit 6](#)). As we've written about previously, if our economists' more durable labor market forecasts are correct, that's still a negative set-up for margins as labor costs remain more elevated despite slowing end demand and pricing for an index that's over-levered to goods (where payback in demand remains a material risk and discounting is likely to persist well into '23). Plus, at the end of the day it's typically margins that do the heavy lifting to the downside in an earnings recession, not top line growth because of the power of negative operating leverage ([Exhibit 7](#) and [Exhibit 8](#)).

Exhibit 6: Earnings Weakness of the Magnitude We Are Projecting Is Historically a Risk to the Labor Market

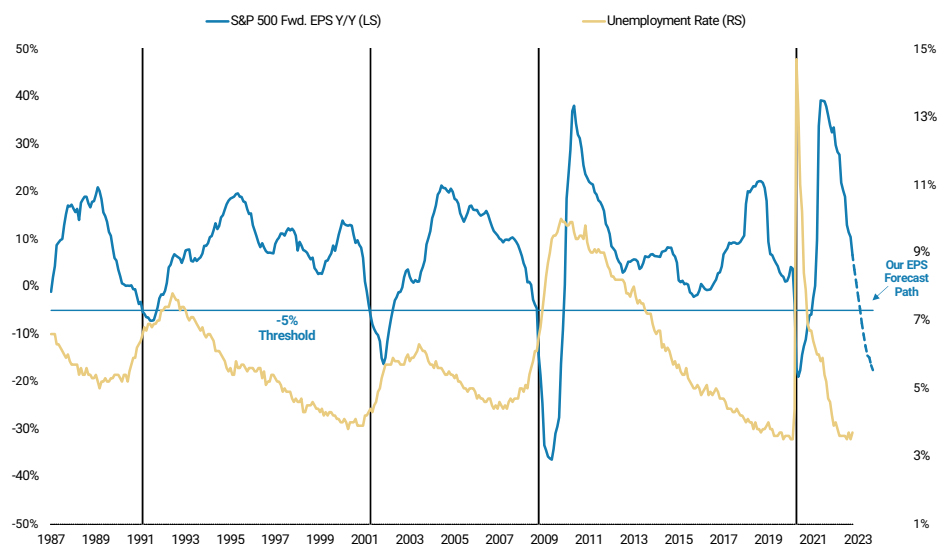


Exhibit 7: Net Margins Do the Heavy Lifting in an Earnings Recession...

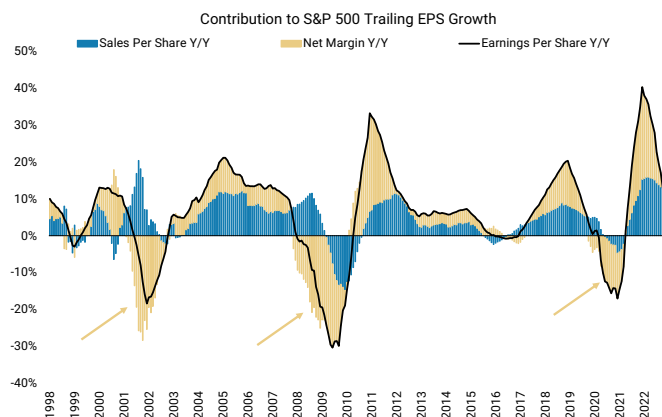
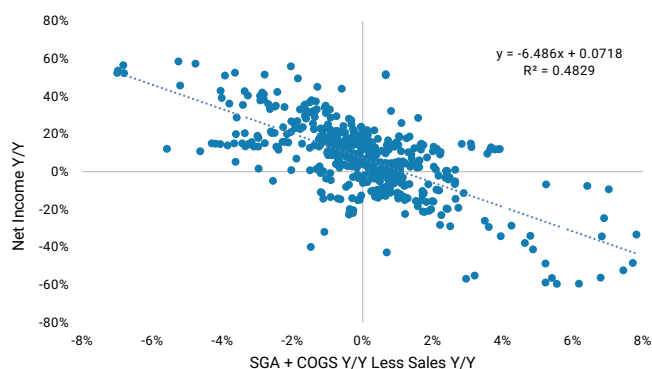
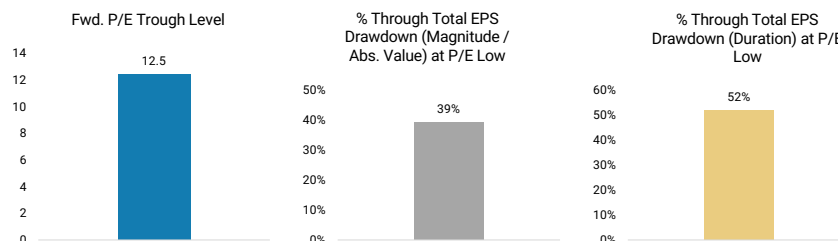


Exhibit 8: ...Due to the Significant Impact of Negative Operating Leverage



In terms of the magnitude and timing of an S&P price trough to discount the earnings downside, we point to [Exhibit 9](#) which simplistically shows that, on average, the market multiple troughs 40-50% of the way through the earnings compression (both from a duration and magnitude standpoint). That puts the discounting window in Q1 '23 using the historical precedent. Further, the average trough P/E level is 12.5X so our 13.5-15X (~\$220 EPS en route from ~\$240 to ~\$195) range is actually less severe than average.

Exhibit 9: Average Forward P/E Statistics During Earnings Recessions

Source: FactSet, Bloomberg, Morgan Stanley Research.

We do continue to hear the pushback that a recession is already priced and the market should already start to look through the growth decline in '23 and to the rebound in '24. That could be true if we're wrong on earnings, and forward estimates bottom right here and inflect higher. However, that outcome would run counter to the slew of leading earnings indicators we published in our [outlook](#), which all point to this being a significant earnings downdraft as discussed above. Further, we point out that PMIs, the unemployment rate and forward earnings are far from levels typically seen when the S&P makes a low in a recession—in other words, a recession is not priced at the index level.

Exhibit 10: PMI, Unemployment Rate and Earnings Levels at Market Lows in Prior Recessions

S&P 500 Price: Recession Trough Date (Monthly)	ISM Mfg. PMI Level on S&P Price Trough Date	Unemployment Rate Increase through S&P Price Trough Date	Fwd. EPS Decrease through S&P Price Trough Date
6/30/1949	31.6	2.8%	NA
8/31/1953	43.5	0.2%	NA
12/31/1957	36.8	1.5%	NA
10/31/1960	46.0	1.3%	NA
6/30/1970	51.1	1.5%	NA
9/30/1974	46.2	1.3%	NA
3/31/1980	43.6	0.7%	NA
7/31/1982	38.4	2.6%	NA
10/31/1990	43.2	0.9%	-1.3%
9/30/2001	46.2	1.2%	-10.5%
2/28/2009	36.6	3.9%	-36.4%
3/31/2020	49.1	0.9%	-11.0%
Median	43.6	1.3%	-10.8%

Still at 50 Up 0.2% -3.9%

Source: FactSet, Bloomberg, Morgan Stanley Research.

As mentioned, the vast majority of investors we spoke with this week are directionally bearish, but we are hearing more of a desire to explore the "soft landing" scenario. We find the most common interpretation of a "soft landing" is the US economy avoids an economic recession (i.e., the labor market remains resilient), inflation slows, and as a result the Fed does not hike beyond Q1 '23. We view that scenario as an economic muddle through, and one that is still negative from an equity market standpoint. Why?

First off, a tight labor market keeps labor costs sticky and elevated and pressures margins. Second inflation may be slowing but the downtrend is likely to be more acute for goods inflation, which the S&P 500 is relatively exposed to from a nominal revenue perspective. Third, in that scenario, the Fed may not be hiking, but they're likely not cutting either because the labor market is resilient and they're still handicapped by inflation that's slowly decelerating but not plunging. So the equity market may get the benefit of the late cycle "pause trade" which is typically worth ~15% (as shown in [Exhibit 11](#)), but it won't get the "late cycle cuts before a recession" trade worth another ~10%. Further, we'd argue that the equity market may have already priced the majority of the "pause trade" in this most recent rally.

Exhibit 11: Pauses in Fed Hiking Cycles Are Positive for Stocks, While Cuts Are Negative If They Coincide with Recessions

Pause Start Date	Pause End Date/Start of Cuts	Cuts End Date Mid Cycle (Gray Shading) OR Market Peak Immediately Preceding Recession/During Cuts (Blue Shading)	Recession Low	SPX Return Over Cuts (Either Through End of Cuts Mid Cycle OR Market Peak Immediately Preceding Recession/During Cuts)		
				SPX Return Over Pause	Recession/During Cuts	Subsequent Return Through Recession Low (If Applicable)...Fed Still Cutting
Feb-89	Jun-89	Jul-90	Oct-90	13%	13%	>20%
Feb-95	Jul-95	Jan-96	NA	16%	16%	NA
Mar-97	Sep-98	Nov-98	NA	33%	9%	NA
May-00	Jan-01	Jan-01	Sep-01	-12%	7%	-30%
Jun-06	Sep-07	Oct-07	Mar-09	16%	6%	-57%
Dec-18	Jul-19	Feb-20	Mar-20	20%	12%	-34%
Avg.				14%	11%	-35%
Median				16%	11%	-32%

Source: Bloomberg, Morgan Stanley Research

Finally, we are fielding a fair amount of questions on which industries have seen the greatest/least significant 2023 EPS compression already. [Exhibit 12](#) helps to address this topic. Estimates haven't fallen 3.6% for the median company in the S&P 500 though this varies heavily by industry group ([Exhibit 12](#)). The median stock in Consumer Durables & Apparel, Media & Entertainment, and Autos has seen the biggest downward revisions. Energy is the only industry group where the median stock has seen 2023 estimates revised higher. Estimates for the index overall (on a weighted basis) have fallen 6.6% indicating the move lower in estimates has been led by larger cap stocks.

The median stock is still baking in 6.5% year over year growth next year and only three industry groups, Consumer Durables & Apparel, Real Estate, and Telecom are baking in negative year over year growth. Our team recently lowered our 2023 earnings estimates as discussed, and our base case forecast is for earnings to contract -11% next year.

Exhibit 12: Median 2023 Earnings Revisions

Median Stock Revisions to 2023 EPS Since 6/30 & YOY Growth		
Industry Group	Median Delta	Median YOY
Automobiles & Components	-12.19%	12.23%
Banks	-2.71%	14.05%
Capital Goods	-4.44%	7.12%
Commercial & Professional Services	-2.87%	7.20%
Consumer Durables & Apparel	-26.26%	-5.75%
Consumer Services	-5.51%	16.99%
Diversified Financials	-5.03%	8.15%
Energy	5.21%	1.34%
Food & Staples Retailing	-3.73%	9.22%
Food Beverage & Tobacco	-1.62%	5.60%
Health Care Equipment & Services	-3.57%	6.50%
Household & Personal Products	-7.91%	3.62%
Insurance	-0.73%	14.96%
Materials	-9.15%	3.87%
Media & Entertainment	-12.79%	11.15%
Pharmaceuticals Biotechnology & Life Sciences	-4.64%	3.15%
Real Estate	-2.82%	-2.62%
Retailing	-3.53%	8.81%
Semiconductors & Semiconductor Equipment	-9.12%	0.94%
Software & Services	-3.00%	12.49%
Technology Hardware & Equipment	-2.74%	6.02%
Telecommunication Services	-4.94%	-2.17%
Transportation	-8.07%	3.23%
Utilities	-0.21%	6.00%
Median S&P 500	-3.6%	6.5%
Cap Weighted S&P 500	-6.6%	5.4%

Source: FactSet, Morgan Stanley Research

Factor Update

We select a few key factors to monitor in [Exhibit 13](#) and [Exhibit 14](#) 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:

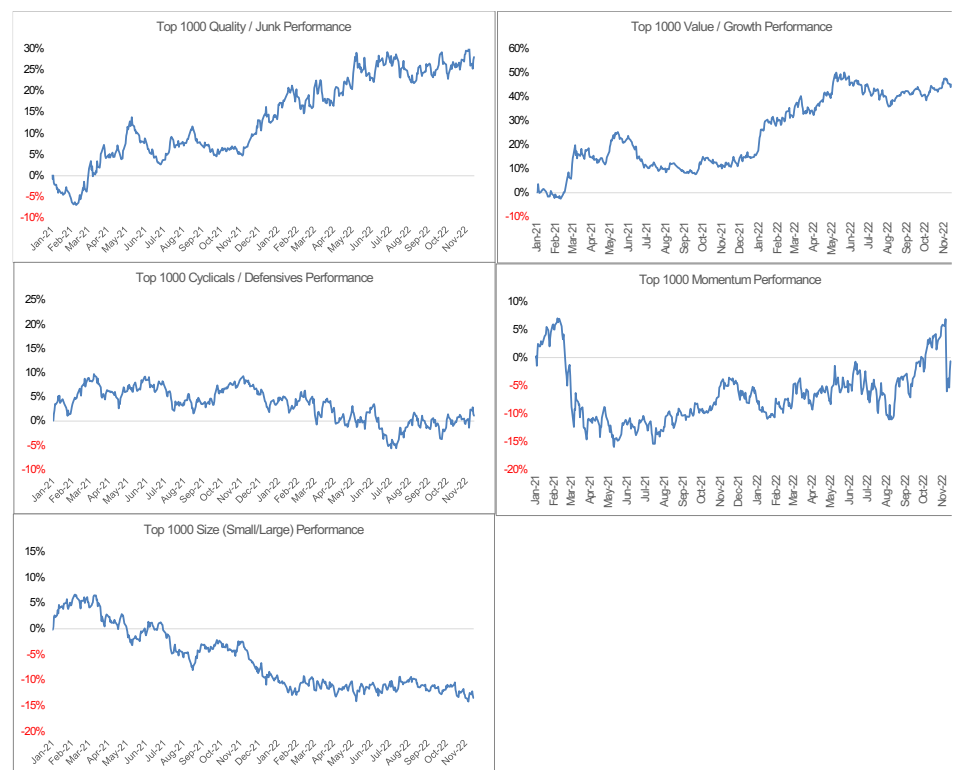
- Quality has outperformed Junk (+1.1% relative return) and the overall market (+1.1% relative return versus the overall Top 1,000 universe).
- Value has outperformed Growth (+0.9% relative return) and the overall market (+0.2% relative return versus the overall Top 1,000 universe).
- Cyclical have outperformed defensive (+1.3% relative return) and the overall market (+0.8% relative return versus the overall Top 1,000 universe).
- Low Momentum stocks have outperformed high momentum stocks (+4.8% relative return), and the overall market (+3.0% relative return).
- Large Caps outperformed Small Caps (+1.9% relative return) in the trailing month

Exhibit 14: Excess Return Versus Broader Top 1,000 Universe

Top 1000 Excess Factor Return versus Broader Top 1000 Return as of Nov 17, 2022								
Factor	1 Week			1 Month			YTD Ret	12M Ret
	Ret	1W Chg	1M Chg	Ret	1M Chg	3M Chg		
Quality / Junk								
Quality	-0.1%	👆	👇	1.1%	👆	👇	6.9%	10.6%
Junk	0.3%	👆	👆	-0.1%	👆	👆	-4.2%	-5.8%
Value / Growth								
Value	-0.6%	👇	👆	0.2%	👆	👇	8.3%	9.7%
Growth	0.0%	👇	👆	-0.7%	👆	👆	-11.8%	-13.5%
Cyclical / Defensive								
Cyclical	0.3%	👇	👆	0.8%	👆	👆	0.8%	-0.4%
Defensive	-0.3%	👆	👇	-0.5%	👇	👇	3.6%	5.8%
Cyclical xEnergy / Defensive								
Cyclical xEnergy	0.2%	👇	👆	0.9%	👆	👆	-5.3%	-6.2%
Momentum								
High Momentum	-0.5%	👆	👇	-3.1%	👇	👇	-0.5%	-2.6%
Low Momentum	0.2%	👇	👆	1.7%	👆	👆	-5.9%	-7.3%
Size (Small / Large)								
Small Cap	0.0%	👆	👇	-0.6%	👇	👆	-1.3%	-3.2%
Large Cap	0.4%	👆	👇	1.3%	👆	👆	2.4%	4.7%

Source: ClariFi, Morgan Stanley Research

Exhibit 15: Cumulative Factor Performance Since 2021



We include an extensive list of factors and their returns in [Exhibit 16](#). 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 17](#).

Exhibit 16: Full List of Factor Spread Returns (Long - Short)

Equal Weighted Factor Return (Spread) in Top 1000 as of Nov 17, 2022

Factor Name	1 Week			1 Month			3M Ret	YTD Ret	12M Ret
	Ret	1W Chg	1M Chg	Ret	1M Chg	3M Chg			
Enterprise Value-to-EBITDA (Low vs High)	1.2%	↓	↑	6.9%	↑	↑	8.7%	27.5%	35.5%
Enterprise Value-to-Operating Income (Low vs High)	1.0%	↓	↑	6.5%	↑	↑	8.4%	26.0%	34.8%
Composite Value (Cheap vs Expensive)	1.1%	↓	↑	5.2%	↑	↑	5.9%	18.2%	25.3%
Price-to-EBITDA (Cheap vs Expensive)	0.4%	↓	↑	4.8%	↑	↑	5.8%	23.5%	30.5%
Asset Turnover (High vs Low)	0.7%	↓	↑	4.7%	↑	↑	5.8%	10.3%	15.1%
Price-to-Operating Income (Cheap vs Expensive)	0.7%	↓	↑	4.6%	↑	↑	6.6%	23.1%	30.6%
ROA (High vs Low)	0.5%	↓	↑	4.5%	↑	↑	6.0%	14.1%	21.9%
Return on Invested Capital (High vs Low)	0.3%	↓	↑	4.5%	↑	↑	6.5%	17.3%	25.7%
Price-to-Earnings (Cheap vs Expensive)	0.9%	↓	↑	4.4%	↑	↑	5.2%	17.8%	24.4%
Reduction in Shares Outstanding (Low vs High)	0.3%	↓	↑	4.4%	↑	↑	7.9%	20.9%	28.7%
Operating Margin (High vs Low)	0.0%	↓	↑	4.4%	↑	↑	5.8%	12.4%	20.0%
Industry Cyclical vs Defensive	1.1%	↓	↑	4.0%	↑	↑	2.8%	0.3%	0.3%
Operating Leverage (High vs Low)	-0.4%	↓	↑	4.0%	↑	↑	5.4%	10.0%	14.4%
Price-to-Sales (Cheap vs Expensive)	0.5%	↓	↑	4.0%	↑	↑	4.1%	17.8%	25.3%
Net Margin (High vs Low)	0.2%	↓	↑	3.9%	↑	↑	5.8%	12.8%	20.2%
Enterprise Value-to-Free Cash Flow (Low vs High)	0.1%	↓	↑	3.9%	↑	↑	7.4%	21.9%	31.1%
Price-to-Forward Earnings (Cheap vs Expensive)	0.5%	↓	↑	3.9%	↑	↑	4.7%	22.6%	29.8%
Composite Free Cash Flow (High vs Low)	0.4%	↓	↑	3.6%	↑	↑	6.1%	19.4%	27.4%
Gross Profit / Assets (High vs Low)	0.7%	↓	↑	3.5%	↑	↑	3.9%	-4.6%	-5.3%
Incremental Margin (High vs Low)	0.6%	↓	↑	3.3%	↑	↑	4.3%	8.2%	9.9%
Free Cash Flow Yield (High vs Low)	0.4%	↓	↑	3.3%	↑	↑	5.0%	20.1%	27.6%
Receivables Turnover (High vs Low)	0.2%	↓	↑	3.2%	↑	↑	2.0%	2.3%	2.3%
ROE (High vs Low)	-0.3%	↓	↑	3.0%	↑	↑	3.9%	8.9%	14.9%
Long-Term Operating Leverage (High vs Low)	0.3%	↓	↑	3.0%	↑	↑	5.8%	6.8%	9.2%
Accruals (Low vs High)	0.3%	↓	↑	2.9%	↑	↑	5.2%	11.9%	15.2%
Free Cash Flow-to-Debt (High vs Low)	0.6%	↓	↑	2.7%	↑	↑	5.3%	8.7%	14.7%
Composite Accruals (Low vs High)	0.6%	↓	↑	2.7%	↑	↑	4.1%	7.7%	9.1%
Net Cash Variability (Low vs High)	-0.5%	↓	↑	2.6%	↑	↑	2.5%	0.6%	2.3%
Cash Flow / Debt (High vs Low)	0.8%	↓	↑	2.6%	↑	↑	6.9%	11.2%	16.2%
Cash-to-Market Cap (High vs Low)	1.4%	↓	↑	2.4%	↑	↑	2.2%	-1.6%	-2.0%
Analyst Coverage (High vs Low)	0.0%	↓	↑	2.3%	↑	↑	-2.1%	-3.4%	-2.4%
Sales per Employee (High vs Low)	-0.5%	↓	↑	2.2%	↑	↑	1.5%	4.2%	5.9%
Y/Y %Change in number of employees (Low vs High)	0.5%	↓	↑	2.1%	↑	↑	6.1%	22.2%	26.5%
Debt-to-Equity (Low vs High)	0.6%	↓	↑	2.1%	↑	↑	2.4%	-1.3%	-2.6%
Price-to-Book (Cheap vs Expensive)	0.6%	↓	↑	2.1%	↑	↑	1.3%	11.2%	14.3%
Interest Coverage (High vs Low)	0.5%	↓	↑	2.0%	↑	↑	4.6%	9.6%	16.8%
Total Yield (High vs Low)	0.7%	↓	↑	1.8%	↑	↑	2.1%	7.8%	9.5%
Tangible Book/Price (Cheap vs Expensive)	1.1%	↓	↑	1.8%	↑	↑	2.9%	3.0%	2.2%
Profitability (High vs Low)	0.0%	↓	↑	1.7%	↑	↑	1.5%	-1.1%	-0.8%
Reinvestment Rate (High vs Low)	0.8%	↓	↑	1.6%	↑	↑	1.1%	4.1%	7.4%
Trailing Dividend Yield (High vs Low)	0.7%	↓	↑	1.4%	↑	↑	0.8%	12.4%	13.2%
Cyclical vs Defensive	0.7%	↓	↑	1.3%	↑	↑	1.8%	-2.9%	-6.2%
1-Year EPS Growth (High vs Low)	0.4%	↓	↑	1.2%	↑	↑	1.0%	2.0%	6.0%
Quality vs Junk	-0.4%	↓	↑	1.2%	↑	↑	2.0%	11.1%	16.4%
Cash Ratio (High vs Low)	1.3%	↓	↑	1.1%	↑	↑	-0.3%	-13.9%	-20.1%
Value vs Growth	-0.6%	↓	↑	0.9%	↑	↑	2.9%	20.1%	23.1%
5-Year EPS Growth (High vs Low)	-0.3%	↓	↑	0.7%	↑	↑	-2.2%	-7.9%	-8.2%
1-Month Reversal (Low vs High)	0.4%	↓	↑	0.6%	↑	↑	-5.3%	-7.2%	-8.2%
Sales Variability (Low vs High)	-0.1%	↓	↑	0.6%	↑	↑	3.7%	16.2%	21.4%
Composite Growth (High vs Low)	-0.4%	↓	↑	0.5%	↑	↑	-0.2%	5.2%	2.3%
1-Year Dividend per share growth (High vs Low)	0.2%	↓	↑	0.4%	↑	↑	2.6%	3.4%	6.1%
Composite Quality (High vs Low)	0.6%	↓	↑	0.3%	↑	↑	0.4%	4.3%	7.1%
Estimate Dispersion (Low vs High)	-0.5%	↓	↑	0.2%	↑	↑	2.5%	11.6%	16.9%
Cash-to-Debt (High vs Low)	1.2%	↓	↑	0.2%	↑	↑	1.7%	-6.6%	-14.6%
Cash-to-Assets (High vs Low)	1.2%	↓	↑	0.1%	↑	↑	0.1%	-1.4%	-20.0%
Debt-to-Assets (Low vs High)	0.5%	↓	↑	0.0%	↑	↑	2.1%	-3.4%	-4.0%
Gross Margin (High vs Low)	0.2%	↓	↑	-0.2%	↑	↑	1.1%	-6.0%	-8.1%
Short-Term Accruals (Low vs High)	0.5%	↓	↑	-0.5%	↑	↑	-1.0%	-1.6%	-2.0%
Y/Y Change in Inventory/Sales (Low vs High)	0.2%	↓	↑	-0.6%	↑	↑	3.5%	3.0%	4.1%
Dividend Payout Ratio (High vs Low)	0.6%	↓	↑	-0.6%	↑	↑	1.9%	6.7%	10.3%
Operational Efficiency (High vs Low)	0.0%	↓	↑	-0.7%	↑	↑	3.1%	14.6%	17.8%
5-Year Dividend per share growth (High vs Low)	-0.6%	↓	↑	-0.9%	↑	↑	0.1%	0.4%	3.7%
Financial Leverage (Low vs High)	0.2%	↓	↑	-1.0%	↑	↑	-0.2%	1.8%	4.5%
12m Volatility (Low vs High)	-0.5%	↓	↑	-1.1%	↑	↑	5.9%	15.8%	24.8%
Net Debt-to-Market Cap (Low vs High)	1.0%	↓	↑	-1.2%	↑	↑	0.3%	-11.8%	-15.3%
Inventory Turnover (High vs Low)	0.0%	↓	↑	-1.2%	↑	↑	2.0%	8.1%	10.2%
ROE Variability (Low vs High)	-0.3%	↓	↑	-1.4%	↑	↑	-2.1%	-1.4%	1.7%
Net Cash Ratio (High vs Low)	1.0%	↓	↑	-1.4%	↑	↑	1.1%	-6.6%	-12.9%
Debt-to-EBITDA (Low vs High)	0.7%	↓	↑	-1.5%	↑	↑	-3.1%	-13.0%	-18.0%
Debt-to-Capital (Low vs High)	0.5%	↓	↑	-1.6%	↑	↑	0.1%	-5.7%	-8.3%
CapEx-to-Assets (Low vs High)	0.0%	↓	↑	-1.7%	↑	↑	1.4%	3.8%	4.3%
CapEx-to-Depreciation (Low vs High)	-0.1%	↓	↑	-1.7%	↑	↑	-0.3%	-7.4%	10.3%
Size (Small vs Large)	-0.4%	↓	↑	-1.9%	↑	↑	-2.4%	-3.8%	-7.8%
Up-to-Down Revisions (High vs Low)	-0.6%	↓	↑	-2.0%	↑	↑	-0.8%	-3.1%	-0.4%
CapEx-to-Sales (Low vs High)	-0.2%	↓	↑	-2.0%	↑	↑	0.7%	5.5%	8.1%
Sales Growth Stability (High vs Low)	-0.7%	↓	↑	-2.5%	↑	↑	-0.8%	3.4%	5.8%
EPS Variability (Low vs High)	-0.3%	↓	↑	-2.5%	↑	↑	-1.0%	3.3%	6.2%
Inventory-to-Sales (Low vs High)	-0.2%	↓	↑	-2.5%	↑	↑	1.5%	1.8%	1.9%
Earnings Stability (High vs Low)	-0.4%	↓	↑	-2.5%	↑	↑	-1.4%	6.9%	9.4%
12m-1m Residual Momentum (High vs Low)	-0.4%	↓	↑	-2.7%	↑	↑	3.5%	3.0%	3.0%
Earnings Revisions (High vs Low)	-0.5%	↓	↑	-2.7%	↑	↑	0.8%	-1.3%	1.6%
5-Year Sales Growth (High vs Low)	-0.6%	↓	↑	-2.7%	↑	↑	-6.2%	-23.9%	-28.0%
Forecast long term growth (High vs Low)	-0.6%	↓	↑	-2.7%	↑	↑	-2.2%	-5.9%	-6.4%
Price-to-Cash Flow (Cheap vs Expensive)	-0.7%	↓	↑	-2.8%	↑	↑	-1.0%	-5.2%	-7.9%
Composite Sentiment (High vs Low)	-0.7%	↓	↑	-3.3%	↑	↑	-0.6%	-2.8%	-2.5%
Earnings Estimate Revisions (High vs Low)	0.1%	↓	↑	-3.4%	↑	↑	2.5%	1.4%	4.5%
1-Year Sales Growth (High vs Low)	0.0%	↓	↑	-3.9%	↑	↑	-6.4%	-24.3%	-28.1%
1-Month Estimate Revisions (%) (High vs Low)	-0.5%	↓	↑	-4.3%	↑	↑	1.2%	-5.7%	-6.2%
Operating Income Variability (Low vs High)	-0.7%	↓	↑	-4.4%	↑	↑	-4.4%	-7.5%	-9.0%
6-Month Price Momentum (High vs Low)	-0.7%	↓	↑	-4.4%	↑	↑	4.5%	4.6%	4.0%
Up vs Down Sales Revisions (High vs Low)	-1.5%	↓	↑	-4.8%	↑	↑	-0.5%	-8.4%	-9.6%
12-Month Price Momentum (High vs Low)	-0.7%	↓	↑	-4.8%	↑	↑	4.8%	5.4%	4.7%
3-Month Price Momentum (High vs Low)	-0.8%	↓	↑	-5.3%	↑	↑	2.0%	-2.4%	-2.4%
Sales Revisions (High vs Low)	-1.2%	↓	↑	-5.4%	↑	↑	-0.5%	-6.6%	-7.5%
9-Month Price Momentum (High vs Low)	-1.0%	↓	↑	-5.9%	↑	↑	4.6%	2.0%	3.1%
Sales Estimate Revisions (High vs Low)	-1.2%	↓	↑	-6.0%	↑	↑	0.1%	-4.3%	-4.1%
Smoothed Estimate Revisions (%) (High vs Low)	-0.4%	↓	↑	-6.7%	↑	↑	0.5%	-0.5%	-0.5%
Cash Flow Coverage (High vs Low)	-0.7%	↓	↑	-6.0%	↑	↑	-6.3%	-5.9%	-7.4%

Source: Clarifi, Morgan Stanley Research

Exhibit 17: Best and Worst Performing Factor Leg Returns

Best 20 Performing Equal Weighted Group Return in Top 1000 as of Nov 17, 2022

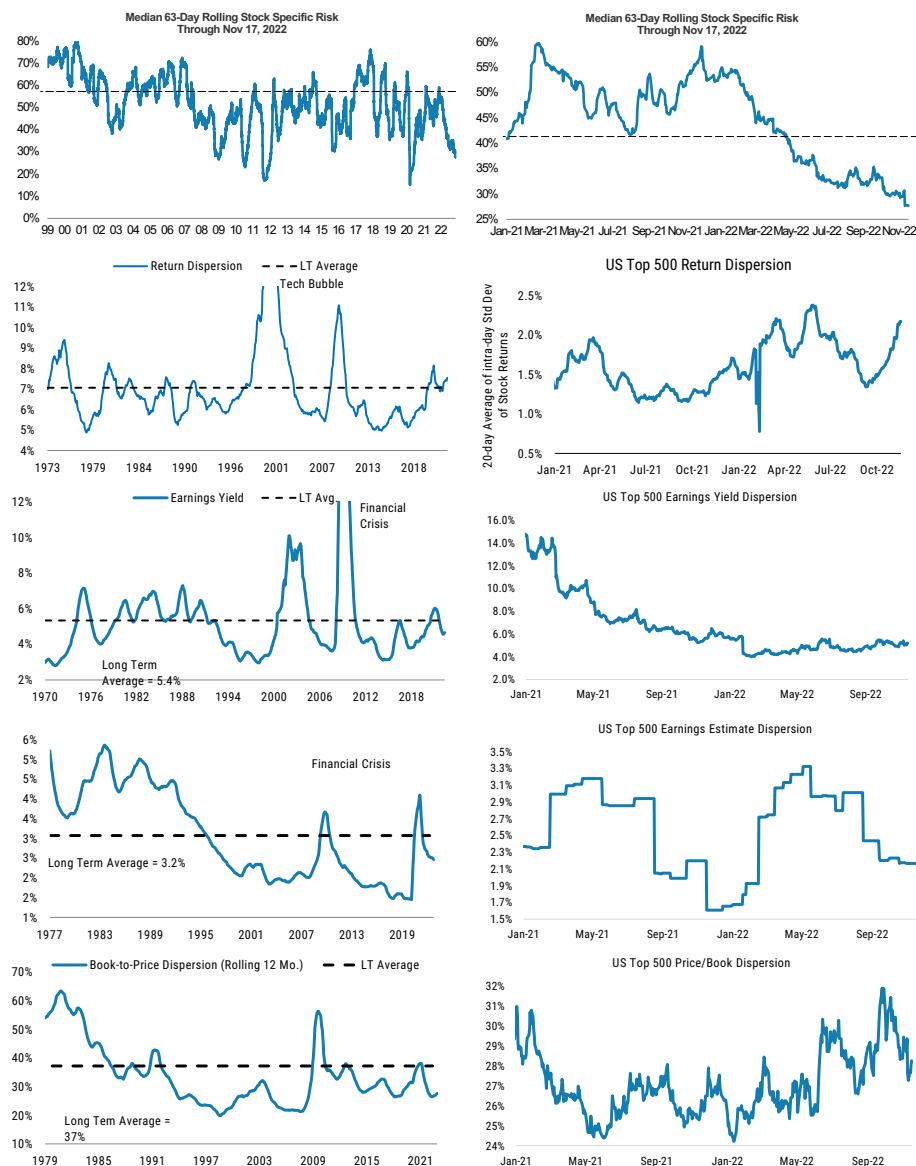
Group	1 Week			1 Month			3M Ret	YTD Ret	12M Ret
	Ret	1W Chg	1M Chg	Ret	1M Chg	3M Chg			
Top 1000 (Equal Weighted)	-0.9%	↓	↑	8.2%	↑	↑	-4.8%	-15.5%	-16.9%
Low Enterprise Value-to-Operating Income	0.2%	↓	↑	12.3%	↑	↑	-1.2%	-5.4%	-3.2%
Low Sales Estimate Revisions	0.0%	↓	↑	11.8%	↑	↑	-6.0%	-16.3%	-16.4%
Low Sales Revisions	0.2%	↓	↑	11.7%	↑	↑	-4.8%	-14.7%	-15.1%
Low Enterprise Value-to-EBITDA	0.0%	↓	↑	11.7%	↑	↑	-1.8%	-5.0%	-3.7%
Low Cash Flow Coverage	-0.3%	↓	↑	11.4%	↑	↑	-2.2%	-14.3%	-15.6%
High Net Margin	-0.1%	↓	↑	11.4%	↑	↑	-2.0%	-14.2%	-13.1%
Industry Cyclical	0.2%	↓	↑	11.3%	↑	↑	-2.0%	-12.3%	-14.0%
High Operating Margin	-0.3%	↓	↑	11.2%	↑	↑	-2.1%	-12.9%	-11.6%
Low Price-to-Earnings	-0.3%	↓	↑	11.2%	↑	↑	-2.9%	-8.2%	-6.7%
High Operating Income Variability	0.0%	↓	↑	11.2%	↑	↑	-2.8%	-15.1%	-17.5%
High Asset Turnover	0.0%	↓	↑	11.2%	↑	↑	-2.3%	-11.4%	-11.2%
High ROA	-0.1%	↓	↑	11.2%	↑	↑	-2.7%	-13.7%	-12.1%
Low Price-to-Operating Income	-0.2%	↓	↑	11.0%	↑	↑	-2.4%	-12.2%	-10.8%
High Return on Invested Capital	0.0%	↓	↑	11.0%	↑	↑	-2.6%	-20.1%	-23.2%
High Gross Profit / Assets	-0.1%	↓	↑	10.9%	↑	↑	-10.8%	-14.1%	-14.1%
Low Up vs Down Sales Revisions	0.2%	↓	↑	10.8%	↑	↑	-3.3%	-11.7%	-13.0%
Low Forecast long term growth	-0.5%	↓	↑	10.8%	↑	↑	-4.6%	-16.2%	-17.2%
High Y/Y Change in Inventory/Sales	-0.3%	↓	↑	10.7%	↑	↑	-4.3%	-8.4%	-7.3%
Low Price-to-EBITDA	-0.5%	↓	↑	10.7%	↑	↑	-2.3%	-7.4%	-5.6%
High Composite Value (Cheap)	-0.2%	↓	↑	10.7%	↑	↑			

Worst 20 Performing Equal Weighted Group Return in Top 1000 as of Nov 17, 2022

Group	1 Week			1 Month			3M Ret	YTD Ret	12M Ret
	Ret	1W Chg	1M Chg	Ret	1M Chg	3M Chg			
Top 1000 (Equal Weighted)	-0.9%	↓	↑	8.2%	↑	↑	-4.8%	-15.5%	-16.9%
High Price-to-Forward Earnings	-1.3%	↓	↑	6.4%	↑	↑	-8.3%	-29.9%	-36.0%
High Enterprise Value-to-Free Cash Flow	-0.2%	↓	↑	6.3%	↑	↑	-9.1%	-27.8%	-34.6%
High Sales Estimate Revisions	-1.2%	↓	↑	6.2%	↑	↑	-5.9%	-20.6%	-20.5%
Low Incremental Margin	-0.6%	↓	↑	6.2%	↑	↑	-8.4%	-25.8%	-29.7%
Low Analyst Coverage	-0.9%	↓	↑	6.1%	↑	↑	-4.5%	-13.1%	-14.8%
High Up vs Down Sales Revisions	-1.2%	↓	↑	6.0%	↑	↑	-5.5%	-22.2%	-23.7%
High Price-to-EBITDA	-0.9%	↓	↑	5.9%	↑	↑	-10.1%	-31.9%	-37.7%
High 1-Month Estimate Revisions (%)	-1.0%	↓	↑	5.9%	↑	↑	-4.9%	-21.0%	-24.5%
High Enterprise Value-to-Operating Income	-0.8%	↓	↑	5.8%	↑	↑	-9.8%	-31.4%	-38.0%
Low Composite Value (Expensive)	-1.3%	↓	↑	5.5%	↑	↑	-8.2%	-25.6%	-30.8%
High 1-Year Sales Growth	-0.8%	↓	↑	5.4%	↑	↑	-10.1%	-30.2%	-34.6%
High Reduction in Shares Outstanding	-1.0%	↓	↑	5.4%	↑	↑	-10.0%	-29.1%	-34.8%
High Cash Flow Coverage	-1.0%	↓	↑	5.4%	↑	↑	-8.5%	-20.2%	-23.0%
Low Receivables Turnover	-1.0%	↓	↑	5.3%	↑	↑	-6.7%	-18.3%	-20.3%
High 3-Month Price Momentum	-1.2%	↓	↑	5.2%	↑	↑	-4.7%	-19.7%	-22.4%
High 12-Month Price Momentum	-1.4%	↓	↑	5.1%	↑	↑	-2.8%	-16.0%	-19.5%
High 6-Month Price Momentum	-1.5%	↓	↑	4.8%	↑	↑	-3.3%	-16.4%	-19.6%
High Enterprise Value-to-EBITDA	-1.2%	↓	↑	4.8%	↑	↑	-10.5%	-32.6%	-39.2%
High Smoothed Estimate Revisions (%)	-1.2%	↓	↑	4.8%	↑	↑	-5.9%	-19.4%	-22.9%
High 9-Month Price Momentum	-1.7%	↓	↑	4.3%	↑	↑	-3.5%	-18.3%	-20.7%

In [Exhibit 18](#), 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 continues to fall (4th percentile historically) as geopolitical uncertainty and macro risk continue to weigh on equities broadly. Return dispersion remains elevated relative to the post-GFC cycle and has ticked higher during 3Q earnings season. To the opposite effect, earnings estimate dispersion has fallen in recent weeks. Lastly, price/book dispersion remains elevated as the move in real yields pressures valuation.

Exhibit 18: US Top 500 Dispersion Metrics: Long-term and Short-Term



Source: Clarifi, Morgan Stanley Research

We also monitor these dispersion metrics on a percentile basis relative to history ([Exhibit 19](#)). Return dispersion and earnings yields dispersion are above historical levels and have been in this range for most of the third quarter. Looking under the surface, there is greater variance at the industry group level with a number of industries in their top two deciles historically. Specifically, high dispersion is present in Food & Staples Retailing,

Software & Services, and Media & Entertainment while there are lower relative dispersion levels in Utilities, Commercial & Professional Services, and Telecom Services, suggesting macro factors are a driving force.

Exhibit 19: Historical Dispersion Metrics by Industry Group

	Return Dispersion	Earning Yield Dispersion	Book/Price Dispersion	Earnings Estimate Dispersion
S&P 500	73%	73%	43%	58%
Energy	45%	78%	34%	36%
Materials	34%	93%	31%	59%
Capital Goods	56%	90%	44%	26%
Commercial & Professional Services	83%	16%	17%	32%
Transportation	58%	83%	36%	24%
Automobiles & Components	76%	89%	84%	50%
Consumer Durables & Apparel	34%	94%	97%	75%
Consumer Services	89%	43%	63%	69%
Retailing	91%	85%	11%	51%
Food & Staples Retailing	23%	90%	96%	86%
Food, Beverage & Tobacco	19%	67%	53%	83%
Household & Personal Products	84%	32%	21%	92%
Health Care Equipment & Services	78%	61%	53%	23%
Pharma, Biotech & Life Sciences	89%	93%	57%	70%
Banks	80%	44%	37%	66%
Diversified Financials	72%	89%	48%	58%
Insurance	68%	75%	15%	85%
Software & Services	81%	71%	94%	67%
Technology Hardware & Equipment	59%	75%	69%	0%
Semiconductors & Semi Equipment	64%	63%	83%	52%
Telecommunication Services	44%	57%	57%	14%
Media & Entertainment	82%	73%	83%	79%
Utilities	33%	5%	50%	5%
Real Estate	52%	58%	82%	62%

Source: Clarifi, Morgan Stanley Research

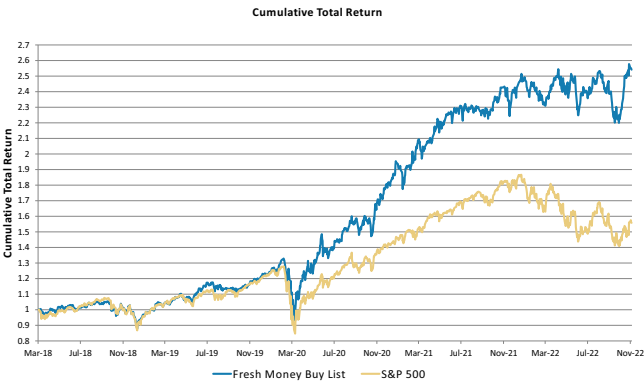
Fresh Money Buy List

Exhibit 20: 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
AT&T, Inc.	T	Overweight	Communication Services	\$135.1	\$18.95	20.00	5.5%	Flannery, Simon	12/20/2021	12.7%	26.0%
CenterPoint Energy Inc	CNP	Overweight	Utilities	\$18.4	\$29.19	29.00	(0.7%)	Arcaro, David	3/21/2022	2.2%	12.8%
Coca-Cola Co.	KO	Overweight	Consumer Staples	\$262.5	\$60.71	68.00	12.0%	Mohsenian, Dara	3/28/2022	0.1%	12.3%
Exxon Mobil Corporation	XOM	Overweight	Energy	\$465.6	\$113.06	114.00	0.8%	McDermott, Devin	2/22/2021	134.3%	130.6%
Humana Inc	HUM	Overweight	Health Care	\$65.9	\$520.26	620.00	19.2%	Ha, Michael	7/19/2018	69.0%	17.9%
McDonald's Corporation	MCD	Overweight	Consumer Discretionary	\$200.2	\$273.36	285.00	4.3%	Glass, John	10/18/2021	15.4%	25.6%
Mondelez International Inc	MDLZ	Overweight	Consumer Staples	\$88.0	\$64.45	69.00	7.1%	Kaufman, Pamela	7/19/2021	3.3%	10.2%
SBA Communications	SBAC	Overweight	Real Estate	\$31.1	\$287.86	309.00	7.3%	Flannery, Simon	6/7/2021	(6.8%)	(2.2%)
Simon Property Group Inc	SPG	Overweight	Real Estate	\$37.9	\$115.79	131.00	13.1%	Kandern, Ronald	2/16/2021	15.8%	12.8%
Current List Performance											
Average (Eq. Weight)				\$145.0			7.6%			27.33%	27.34%
Median				\$88.0			7.1%			12.7%	12.8%
% Positive Returns (Abs. / Rel.)										89%	89%
% Negative Returns (Abs. / Rel.)										11%	11%
Avg. Hold Period (Months)											18.8
All Time List Performance											
Average (Eq. Weight)										32.9%	18.1%
Median										15.8%	12.8%
% Positive Returns (Abs. / Rel.)										78%	62%
% Negative Returns (Abs. / Rel.)										22%	38%
Avg. Hold Period (Months)											15.0
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											

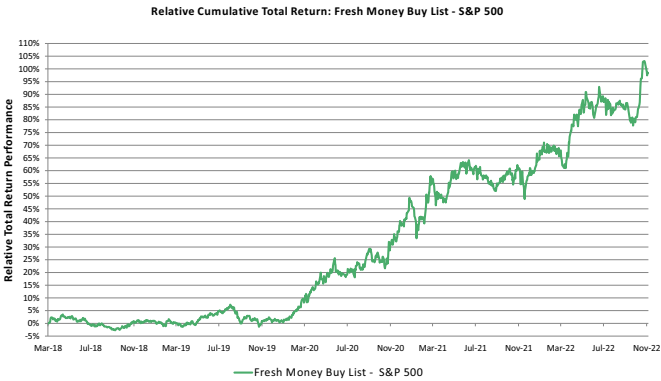
Source: Bloomberg, Morgan Stanley Research estimates

Exhibit 21: Fresh Money Buy List & S&P 500 Cumulative Total Return



Source: Bloomberg, Morgan Stanley Research.

Exhibit 22: Fresh Money Buy List / S&P 500 Cumulative Relative Return



Source: Bloomberg, Morgan Stanley Research.

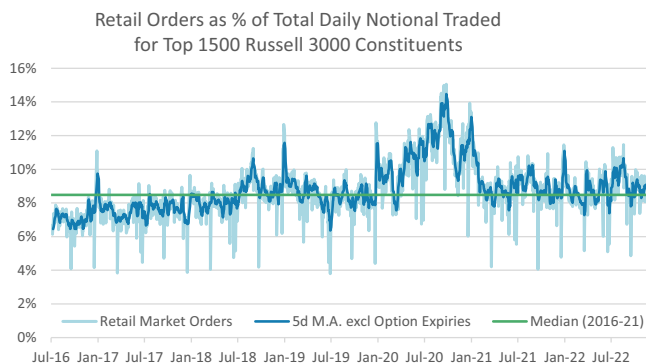
What's Retail Doing?

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:

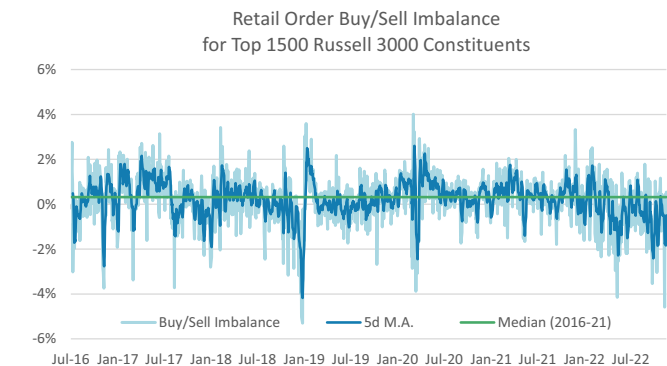
- Retail participation is currently at 9.1% of the total market volume, and at 70th %-ile relative to the last 5 years.
- Order imbalance was positive at 0.3% (15th percentile relative to the last 5 years).
- Imbalance skewed negatively on the sector level with Utilities and Comm. Services as the only two in positive territory. The most negative relative to history is Materials (8th %-ile).

Exhibit 23: Retail orders as a % of notional traded slightly above median



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

Exhibit 24: ... and order imbalance has been largely negative



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

Exhibit 25: Retail's buy/sell imbalance is most negative in Health Care

Sector	Retail Participation			Buy/Sell Imbalance		
	2016-22 Median	Current	p-tile	2016-22 Median	Current	p-tile
Energy	6.8%	7.3%	0.61	-0.31%	-0.2%	0.51
Materials	5.6%	5.2%	0.36	0.5%	-1.5%	0.08
Industrials	6.6%	4.7%	0.00	-0.1%	-1.0%	0.20
Consumer Discretionary	11.5%	14.8%	0.92	0.6%	-0.6%	0.09
Consumer Staples	6.0%	5.0%	0.17	-0.5%	-0.2%	0.57
Health Care	5.8%	4.0%	0.04	-0.5%	-1.5%	0.24
Financials	5.6%	5.1%	0.24	-0.1%	-1.3%	0.18
Information Technology	10.9%	11.9%	0.76	0.4%	-0.6%	0.12
Communication Services	9.2%	11.5%	0.74	0.3%	0.8%	0.68
Utilities	3.8%	3.2%	0.20	-1.2%	0.8%	0.86
Real Estate	3.5%	3.5%	0.49	0.5%	-1.1%	0.20
Model Universe (Top 1500)	8.5%	9.1%	0.70	0.3%	-0.5%	0.15

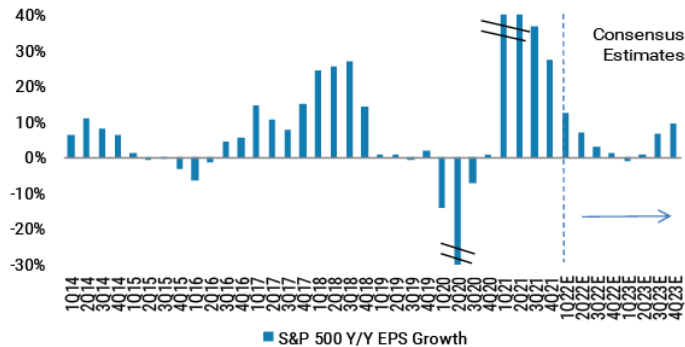
Source: Morgan Stanley Research, Morgan Stanley Quantitative and Derivative Strategies, Compustat

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

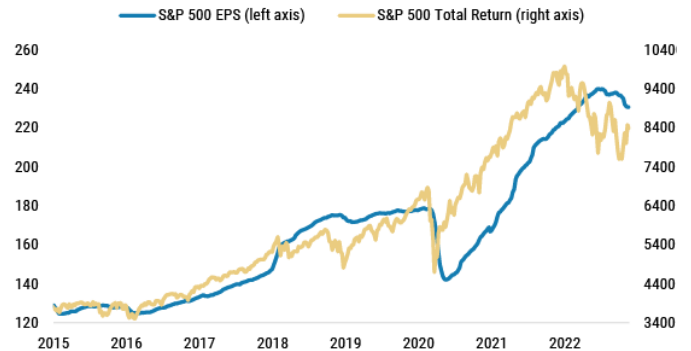
Weekly Charts to Watch

Exhibit 26: US Earnings Snapshot

S&P 500 Y/Y EPS Growth



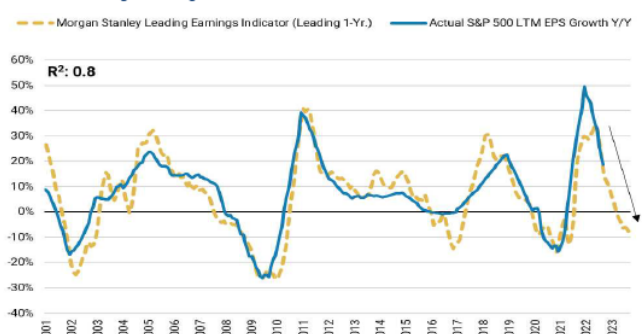
S&P 500 NTM EPS vs. Total Return Level



S&P 500 Earnings Revisions Breadth



US Leading Earnings Indicator



Source: Refinitiv, FactSet, Morgan Stanley Research. Top and bottom left: As of November 18, 2022 Bottom right As of October 1, 2022. MS Leading Earnings Indicator is a macro factor based earnings model that leads actual earnings growth by one year with a 0.7 12-month leading correlation. Note: S&P 500 fundamental data used post March 1993; Top 500 by market cap data used before 1993. LTM equity risk premium average is since 1920. ERP based on forward earnings yield and 10-year Treasury Yield.

Exhibit 27: 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	5.9%
Base Case	\$241	16.1x	3,900	-1.6%
Bear Case	\$230	15.3x	3,500	-11.7%

Current S&P 500 Price as of: 11/18/2022 3,965

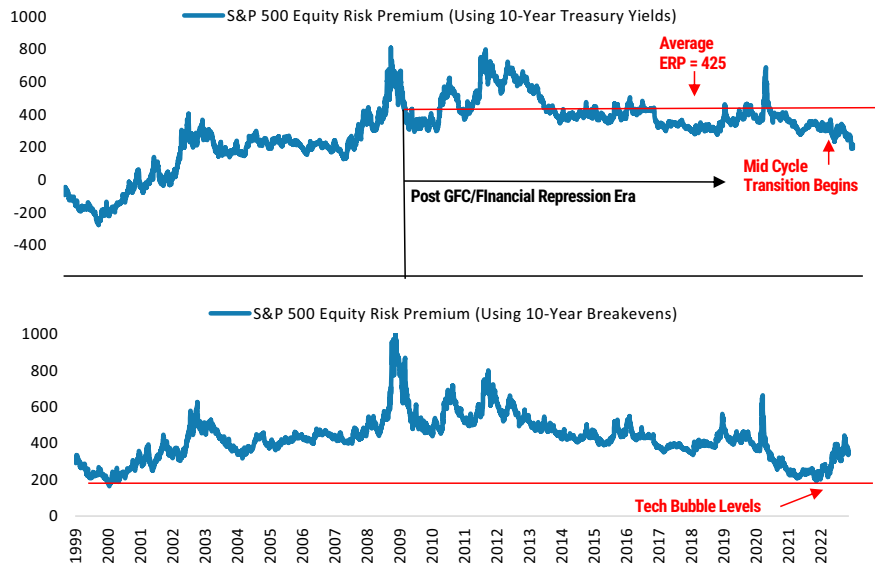
Note: We use 2023 forward earnings to project our price target which takes into account our 2024 earnings forecast (currently \$241 base case). Source: Bloomberg, Morgan Stanley Research

Exhibit 28: Sector Ratings

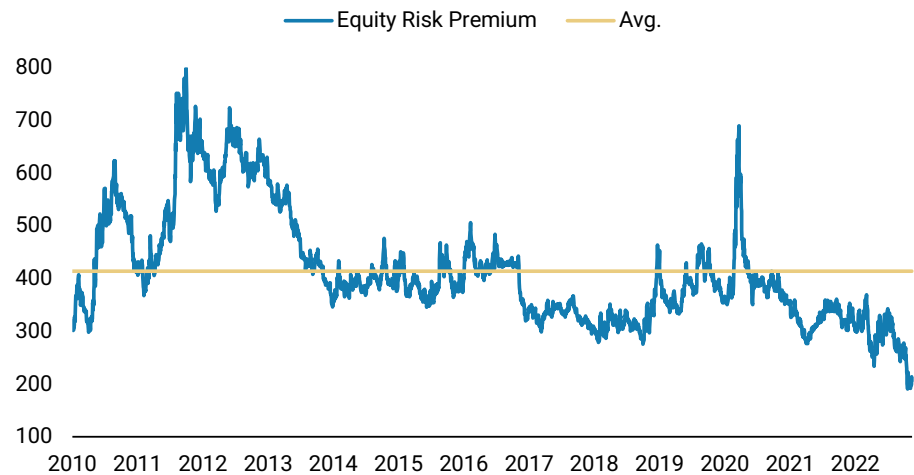
Morgan Stanley Sector Recommendations			
Overweight	Health Care	Staples	Utilities
	Comm. Services	Energy	Financials
Neutral	Industrials	Materials	Real Estate
	Tech ex Hardware		
Underweight	Discretionary	Tech Hardware	

Source: Morgan Stanley Research

Exhibit 29: S&P 500 Equity Risk Premium using Nominal Rates and Breakevens



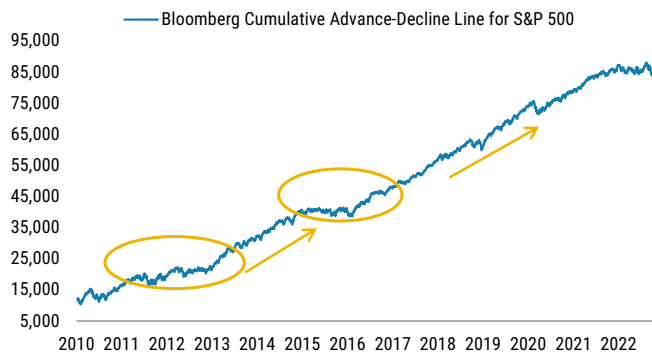
Source: Bloomberg, Morgan Stanley Research. As of November 18, 2022

Exhibit 30: Equity Risk Premium is Below Post-GFC Average


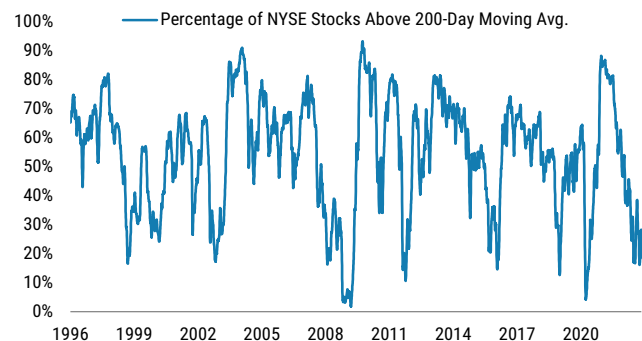
Note: Equity risk premium is calculated as the S&P 500 forward 12M earnings yield minus the nominal 10-Year Treasury.
Source: Bloomberg, Morgan Stanley Research

Exhibit 31: US Equity Market Technicals and Financial Conditions

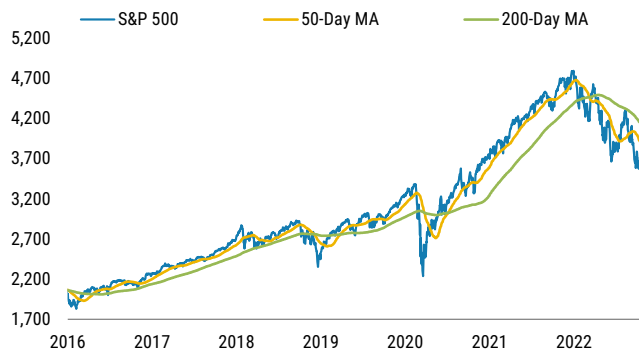
S&P 500 Cumulative Advance-Dcline



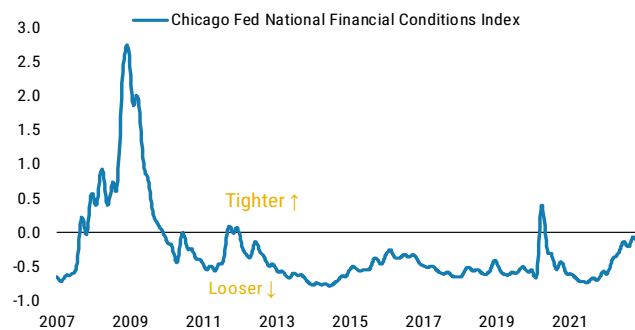
S&P 500 Percent Members Above 200-Day Moving Average



S&P 500 with Moving Averages

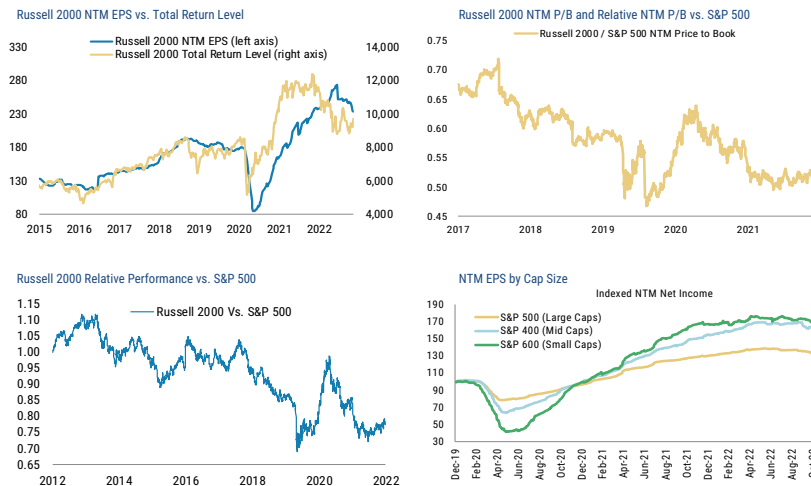


Chicago Fed National Financial Conditions Index



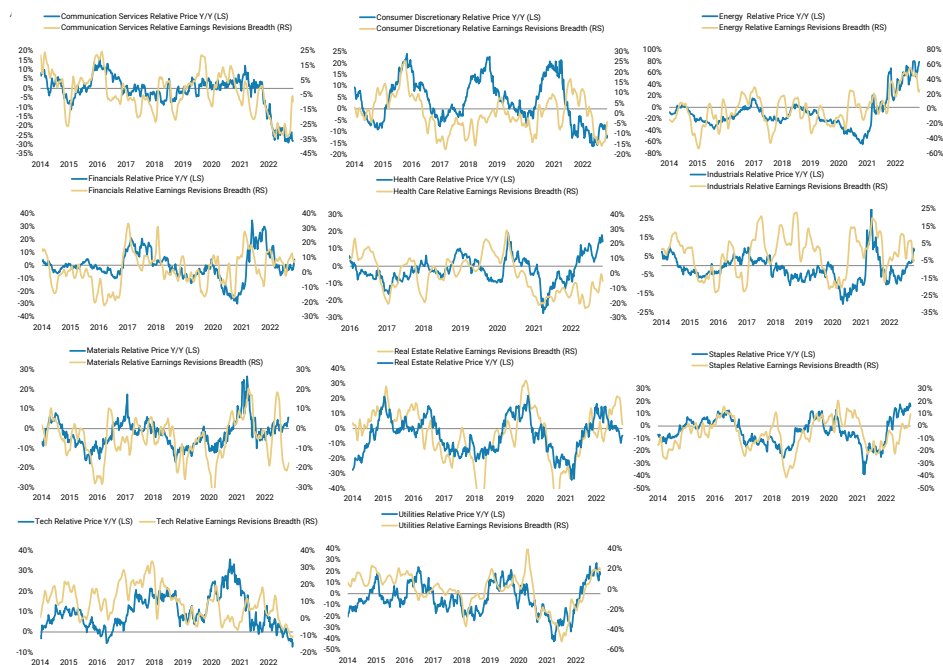
Source: Bloomberg, Morgan Stanley Research. All: As of November 18, 2022

Exhibit 32: US Small Cap Equities



Source: FactSet, Morgan Stanley Research. As of November 18, 2022

Exhibit 33: Earnings Revisions Breadth vs YoY Performance



Source: FactSet, Morgan Stanley Research. As of November 18, 2022

For valuation methodology and risks associated with any price targets referenced in this research report, please contact the Client Support Team as follows: US/Canada +1 800 303-2495; Hong Kong +852 2848-5999; Latin America +1 718 754-5444 (U.S.); London +44 (0)20-7425-8169; Singapore +65 6834-6860; Sydney +61 (0)2-9770-1505; Tokyo +81 (0)3-6836-9000. Alternatively you may contact your investment representative or Morgan Stanley Research at 1585 Broadway (Attention: Research Management), New York, NY 10036 USA.

Disclosure Section

The information and opinions in Morgan Stanley Research were prepared by Morgan Stanley & Co. LLC, and/or Morgan Stanley C.T.V.M. S.A., and/or Morgan Stanley Mexico, Casa de Bolsa, S.A. de C.V., and/or Morgan Stanley Canada Limited. As used in this disclosure section, "Morgan Stanley" includes Morgan Stanley & Co. LLC, Morgan Stanley C.T.V.M. S.A., Morgan Stanley Mexico, Casa de Bolsa, S.A. de C.V., Morgan Stanley Canada Limited and their affiliates as necessary.

For important disclosures, stock price charts and equity rating histories regarding companies that are the subject of this report, please see the Morgan Stanley Research Disclosure Website at www.morganstanley.com/researchdisclosures, or contact your investment representative or Morgan Stanley Research at 1585 Broadway, (Attention: Research Management), New York, NY, 10036 USA.

For valuation methodology and risks associated with any recommendation, rating or price target referenced in this research report, please contact the Client Support Team as follows: US/Canada +1 800 303-2495; Hong Kong +852 2848-5999; Latin America +1 718 754-5444 (U.S.); London +44 (0)20-7425-8169; Singapore +65 6834-6860; Sydney +61 (0)2-9770-1505; Tokyo +81 (0)3-6836-9000. Alternatively you may contact your investment representative or Morgan Stanley Research at 1585 Broadway, (Attention: Research Management), New York, NY 10036 USA.

Analyst Certification

The following analysts hereby certify that their views about the companies and their securities discussed in this report are accurately expressed and that they have not received and will not receive direct or indirect compensation in exchange for expressing specific recommendations or views in this report: Diane Ding, Ph.D.; Nicholas Lentini, CFA; Andrew B Pauker; Michelle M. Weaver, CFA; Michael J Wilson.

Global Research Conflict Management Policy

Morgan Stanley Research has been published in accordance with our conflict management policy, which is available at www.morganstanley.com/institutional/research/conflict/policies. A Portuguese version of the policy can be found at www.morganstanley.com.br

Important Regulatory Disclosures on Subject Companies

The analyst or strategist (or a household member) identified below owns the following securities (or related derivatives): Diane Ding, Ph.D. - Simon Property Group Inc (common or preferred stock).

As of October 31, 2022, Morgan Stanley beneficially owned 1% or more of a class of common equity securities of the following companies covered in Morgan Stanley Research: AT&T, Inc., CenterPoint Energy Inc, Coca-Cola Co., Exxon Mobil Corporation, Humana Inc, McDonald's Corporation, Mondelez International Inc, SBA Communications, Simon Property Group Inc.

Within the last 12 months, Morgan Stanley managed or co-managed a public offering (or 144A offering) of securities of CenterPoint Energy Inc, Humana Inc, McDonald's Corporation, Mondelez International Inc.

Within the last 12 months, Morgan Stanley has received compensation for investment banking services from CenterPoint Energy Inc, Coca-Cola Co., Humana Inc, McDonald's Corporation, Mondelez International Inc.

In the next 3 months, Morgan Stanley expects to receive or intends to seek compensation for investment banking services from AT&T, Inc., CenterPoint Energy Inc, Coca-Cola Co., Exxon Mobil Corporation, Humana Inc, McDonald's Corporation, Mondelez International Inc, SBA Communications, Simon Property Group Inc.

Within the last 12 months, Morgan Stanley has received compensation for products and services other than investment banking services from AT&T, Inc., CenterPoint Energy Inc, Coca-Cola Co., Exxon Mobil Corporation, Humana Inc, McDonald's Corporation, Mondelez International Inc, Simon Property Group Inc.

Within the last 12 months, Morgan Stanley has provided or is providing investment banking services to, or has an investment banking client relationship with, the following company: AT&T, Inc., CenterPoint Energy Inc, Coca-Cola Co., Exxon Mobil Corporation, Humana Inc, McDonald's Corporation, Mondelez International Inc, SBA Communications, Simon Property Group Inc.

Within the last 12 months, Morgan Stanley has either provided or is providing non-investment banking, securities-related services to and/or in the past has entered into an agreement to provide services or has a client relationship with the following company: AT&T, Inc., CenterPoint Energy Inc, Coca-Cola Co., Exxon Mobil Corporation, Humana Inc, McDonald's Corporation, Mondelez International Inc, Simon Property Group Inc.

An employee, director or consultant of Morgan Stanley is a director of AT&T, Inc.. This person is not a research analyst or a member of a research analyst's household.

Morgan Stanley & Co. LLC makes a market in the securities of AT&T, Inc., CenterPoint Energy Inc, Coca-Cola Co., Exxon Mobil Corporation, McDonald's Corporation, Mondelez International Inc, SBA Communications, Simon Property Group Inc.

The equity research analysts or strategists principally responsible for the preparation of Morgan Stanley Research have received compensation based upon various factors, including quality of research, investor client feedback, stock picking, competitive factors, firm revenues and overall investment banking revenues. Equity Research analysts' or strategists' compensation is not linked to investment banking or capital markets transactions performed by Morgan Stanley or the profitability or revenues of particular trading desks.

Morgan Stanley and its affiliates do business that relates to companies/instruments covered in Morgan Stanley Research, including market making, providing liquidity, fund management, commercial banking, extension of credit, investment services and investment banking. Morgan Stanley sells to and buys from customers the securities/instruments of companies covered in Morgan Stanley Research on a principal basis. Morgan Stanley may have a position in the debt of the Company or instruments discussed in this report. Morgan Stanley trades or may trade as principal in the debt securities (or in related derivatives) that are the subject of the debt research report.

Certain disclosures listed above are also for compliance with applicable regulations in non-US jurisdictions.

STOCK RATINGS

Morgan Stanley uses a relative rating system using terms such as Overweight, Equal-weight, Not-Rated or Underweight (see definitions below). Morgan Stanley does not assign ratings of Buy, Hold or Sell to the stocks we cover. Overweight, Equal-weight, Not-Rated and Underweight are not the equivalent of buy, hold and sell. Investors should carefully read the definitions of all ratings used in Morgan Stanley Research. In addition, since Morgan Stanley Research contains more complete information concerning the analyst's views, investors should carefully read Morgan Stanley Research, in its entirety, and not infer the contents from the rating alone. In any case, ratings (or research) should not be used or relied upon as investment advice. An investor's decision to buy or sell a stock should depend on individual circumstances (such as the investor's existing holdings) and other considerations.

Global Stock Ratings Distribution

(as of October 31, 2022)

The Stock Ratings described below apply to Morgan Stanley's Fundamental Equity Research and do not apply to Debt Research produced by the Firm. For disclosure purposes only (in accordance with FINRA requirements), we include the category headings of Buy, Hold, and Sell alongside our ratings of Overweight, Equal-weight, Not-Rated and Underweight. Morgan Stanley does not assign ratings of Buy, Hold or Sell to the stocks we cover. Overweight, Equal-weight, Not-Rated and Underweight are not the equivalent of buy, hold, and sell but represent recommended relative weightings (see definitions below). To satisfy regulatory requirements, we correspond Overweight, our most positive stock rating, with a buy recommendation; we correspond Equal-weight and

Not-Rated to hold and Underweight to sell recommendations, respectively.

STOCK RATING CATEGORY	COVERAGE UNIVERSE		INVESTMENT BANKING CLIENTS (IBC)			OTHER MATERIAL INVESTMENT SERVICES CLIENTS (MISC)	
	COUNT	% OF TOTAL	COUNT	% OF TOTAL IBC	% OF RATING CATEGORY	COUNT	% OF TOTAL OTHER MISC
Overweight/Buy	1353	38%	288	41%	21%	597	39%
Equal-weight/Hold	1599	45%	326	47%	20%	709	46%
Not-Rated/Hold	1	0%	0	0%	0%	0	0%
Underweight/Sell	624	17%	80	12%	13%	220	14%
TOTAL	3,577		694			1526	

Data include common stock and ADRs currently assigned ratings. Investment Banking Clients are companies from whom Morgan Stanley received investment banking compensation in the last 12 months. Due to rounding off of decimals, the percentages provided in the "% of total" column may not add up to exactly 100 percent.

Analyst Stock Ratings

Overweight (O). The stock's total return is expected to exceed the average total return of the analyst's industry (or industry team's) coverage universe, on a risk-adjusted basis, over the next 12-18 months.

Equal-weight (E). The stock's total return is expected to be in line with the average total return of the analyst's industry (or industry team's) coverage universe, on a risk-adjusted basis, over the next 12-18 months.

Not-Rated (NR). Currently the analyst does not have adequate conviction about the stock's total return relative to the average total return of the analyst's industry (or industry team's) coverage universe, on a risk-adjusted basis, over the next 12-18 months.

Underweight (U). The stock's total return is expected to be below the average total return of the analyst's industry (or industry team's) coverage universe, on a risk-adjusted basis, over the next 12-18 months.

Unless otherwise specified, the time frame for price targets included in Morgan Stanley Research is 12 to 18 months.

Analyst Industry Views

Attractive (A): The analyst expects the performance of his or her industry coverage universe over the next 12-18 months to be attractive vs. the relevant broad market benchmark, as indicated below.

In-Line (I): The analyst expects the performance of his or her industry coverage universe over the next 12-18 months to be in line with the relevant broad market benchmark, as indicated below.

Cautious (C): The analyst views the performance of his or her industry coverage universe over the next 12-18 months with caution vs. the relevant broad market benchmark, as indicated below.

Benchmarks for each region are as follows: North America - S&P 500; Latin America - relevant MSCI country index or MSCI Latin America Index; Europe - MSCI Europe; Japan - TOPIX; Asia - relevant MSCI country index or MSCI sub-regional index or MSCI AC Asia Pacific ex Japan Index.

Important Disclosures for Morgan Stanley Smith Barney LLC & E*TRADE Securities LLC Customers

Important disclosures regarding the relationship between the companies that are the subject of Morgan Stanley Research and Morgan Stanley Smith Barney LLC or Morgan Stanley or any of their affiliates, are available on the Morgan Stanley Wealth Management disclosure website at www.morganstanley.com/online/researchdisclosures. For Morgan Stanley specific disclosures, you may refer to www.morganstanley.com/researchdisclosures.

Each Morgan Stanley research report is reviewed and approved on behalf of Morgan Stanley Smith Barney LLC and E*TRADE Securities LLC. This review and approval is conducted by the same person who reviews the research report on behalf of Morgan Stanley. This could create a conflict of interest.

Other Important Disclosures

Morgan Stanley & Co. International PLC and its affiliates have a significant financial interest in the debt securities of AT&T, Inc., CenterPoint Energy Inc, Coca-Cola Co., Exxon Mobil Corporation, Humana Inc, McDonald's Corporation, Mondelez International Inc.

Morgan Stanley Research policy is to update research reports as and when the Research Analyst and Research Management deem appropriate, based on developments with the issuer, the sector, or the market that may have a material impact on the research views or opinions stated therein. In addition, certain Research publications are intended to be updated on a regular periodic basis (weekly/monthly/quarterly/annual) and will ordinarily be updated with that frequency, unless the Research Analyst and Research Management determine that a different publication schedule is appropriate based on current conditions. Morgan Stanley is not acting as a municipal advisor and the opinions or views contained herein are not intended to be, and do not constitute, advice within the meaning of Section 975 of the Dodd-Frank Wall Street Reform and Consumer Protection Act.

Morgan Stanley produces an equity research product called a "Tactical Idea." Views contained in a "Tactical Idea" on a particular stock may be contrary to the recommendations or views expressed in research on the same stock. This may be the result of differing time horizons, methodologies, market events, or other factors. For all research available on a particular stock, please contact your sales representative or go to Matrix at <http://www.morganstanley.com/matrix>.

Morgan Stanley Research is provided to our clients through our proprietary research portal on Matrix and also distributed electronically by Morgan Stanley to clients. Certain, but not all, Morgan Stanley Research products are also made available to clients through third-party vendors or redistributed to clients through alternate electronic means as a convenience. For access to all available Morgan Stanley Research, please contact your sales representative or go to Matrix at <http://www.morganstanley.com/matrix>.

Any access and/or use of Morgan Stanley Research is subject to Morgan Stanley's Terms of Use (<http://www.morganstanley.com/terms.html>). By accessing and/or using Morgan Stanley Research, you are indicating that you have read and agree to be bound by our Terms of Use (<http://www.morganstanley.com/terms.html>). In addition you consent to Morgan Stanley processing your personal data and using cookies in accordance with our Privacy Policy and our Global Cookies Policy (http://www.morganstanley.com/privacy_pledge.html), including for the purposes of setting your preferences and to collect readership data so that we can deliver better and more personalized service and products to you. To find out more information about how Morgan Stanley processes personal data, how we use cookies and how to reject cookies see our Privacy Policy and our Global Cookies Policy (http://www.morganstanley.com/privacy_pledge.html).

If you do not agree to our Terms of Use and/or if you do not wish to provide your consent to Morgan Stanley processing your personal data or using cookies please do not access our research.

Morgan Stanley Research does not provide individually tailored investment advice. Morgan Stanley Research has been prepared without regard to the circumstances and objectives of those who receive it. Morgan Stanley recommends that investors independently evaluate particular investments and strategies, and encourages investors to seek the advice of a financial adviser. The appropriateness of an investment or strategy will depend on an investor's circumstances and objectives. The securities, instruments, or strategies discussed in Morgan Stanley Research may not be suitable for all investors, and certain investors may not be eligible to purchase or participate in some or all of them. Morgan Stanley Research is not an offer to buy or sell or the solicitation of an offer to buy or sell any security/instrument or to participate in any particular trading strategy. The value of and income from your investments may vary because of changes in interest rates, foreign exchange rates, default rates, prepayment rates, securities/instruments prices, market indexes, operational or financial conditions of companies or other factors. There may be time limitations on the exercise of options or other rights in securities/instruments transactions. Past performance is not necessarily a guide to future performance. Estimates of future performance are based on assumptions that may not be realized. If provided, and unless otherwise stated, the closing price on the cover page is that of the primary exchange for the subject company's securities/instruments.

The fixed income research analysts, strategists or economists principally responsible for the preparation of Morgan Stanley Research have received compensation based upon various factors, including quality, accuracy and value of research, firm profitability or revenues (which include fixed income trading and capital markets profitability or revenues), client feedback and competitive factors. Fixed Income Research analysts', strategists' or economists' compensation is not linked to investment banking or capital markets transactions performed by Morgan Stanley or the profitability or revenues of particular trading desks.

The "Important Regulatory Disclosures on Subject Companies" section in Morgan Stanley Research lists all companies mentioned where Morgan Stanley owns 1% or more of a class of common equity securities of the companies. For all other companies mentioned in Morgan Stanley Research, Morgan Stanley may have an investment of less than 1% in securities/instruments or derivatives of securities/instruments of companies and may trade them in ways different from those discussed in Morgan Stanley Research. Employees of Morgan Stanley not involved in the preparation of Morgan Stanley Research may have investments in securities/instruments or derivatives of securities/instruments of companies mentioned and may trade them in ways different from those discussed in Morgan Stanley Research. Derivatives may be issued by Morgan Stanley or associated persons.

With the exception of information regarding Morgan Stanley, Morgan Stanley Research is based on public information. Morgan Stanley makes every effort to use reliable, comprehensive information, but we make no representation that it is accurate or complete. We have no obligation to tell you when opinions or information in Morgan Stanley Research change apart from when we intend to discontinue equity research coverage of a subject company. Facts and views presented in Morgan Stanley Research have not been reviewed by, and may not reflect information known to, professionals in other Morgan Stanley business areas, including investment banking personnel.

Morgan Stanley Research personnel may participate in company events such as site visits and are generally prohibited from accepting payment by the company of associated expenses unless pre-approved by authorized members of Research management.

Morgan Stanley may make investment decisions that are inconsistent with the recommendations or views in this report.

To our readers based in Taiwan or trading in Taiwan securities/instruments: Information on securities/instruments that trade in Taiwan is distributed by Morgan Stanley Taiwan Limited ("MSTL"). Such information is for your reference only. The reader should independently evaluate the investment risks and is solely responsible for their investment decisions. Morgan Stanley Research may not be distributed to the public media or quoted or used by the public media without the express written consent of Morgan Stanley. Any non-customer reader within the scope of Article 7-1 of the Taiwan Stock Exchange Recommendation Regulations accessing and/or receiving Morgan Stanley Research is not permitted to provide Morgan Stanley Research to any third party (including but not limited to related parties, affiliated companies and any other third parties) or engage in any activities regarding Morgan Stanley Research which may create or give the appearance of creating a conflict of interest. Information on securities/instruments that do not trade in Taiwan is for informational purposes only and is not to be construed as a recommendation or a solicitation to trade in such securities/instruments. MSTL may not execute transactions for clients in these securities/instruments.

Morgan Stanley is not incorporated under PRC law and the research in relation to this report is conducted outside the PRC. Morgan Stanley Research does not constitute an offer to sell or the solicitation of an offer to buy any securities in the PRC. PRC investors shall have the relevant qualifications to invest in such securities and shall be responsible for obtaining all relevant approvals, licenses, verifications and/or registrations from the relevant governmental authorities themselves. Neither this report nor any part of it is intended as, or shall constitute, provision of any consultancy or advisory service of securities investment as defined under PRC law. Such information is provided for your reference only.

Morgan Stanley Research is disseminated in Brazil by Morgan Stanley C.T.V.M. S.A. located at Av. Brigadeiro Faria Lima, 3600, 6th floor, São Paulo - SP, Brazil; and is regulated by the Comissão de Valores Mobiliários; in Mexico by Morgan Stanley México, Casa de Bolsa, S.A. de C.V. which is regulated by Comisión Nacional Bancaria y de Valores. Paseo de los Tamarindos 90, Torre 1, Col. Bosques de las Lomas Floor 29, 05120 Mexico City; in Japan by Morgan Stanley MUFG Securities Co., Ltd. and, for Commodities related research reports only, Morgan Stanley Capital Group Japan Co., Ltd; in Hong Kong by Morgan Stanley Asia Limited (which accepts responsibility for its contents) and by Morgan Stanley Bank Asia Limited; in Singapore by Morgan Stanley Asia (Singapore) Pte. (Registration number 199206298Z) and/or Morgan Stanley Asia (Singapore) Securities Pte Ltd (Registration number 200008434H), regulated by the Monetary Authority of Singapore (which accepts legal responsibility for its contents and should be contacted with respect to any matters arising from, or in connection with, Morgan Stanley Research) and by Morgan Stanley Bank Asia Limited, Singapore Branch (Registration number T14FC0118J); in Australia to "wholesale clients" within the meaning of the Australian Corporations Act by Morgan Stanley Australia Limited A.B.N. 67 003 734 576, holder of Australian financial services license No. 233742, which accepts responsibility for its contents; in Australia to "wholesale clients" and "retail clients" within the meaning of the Australian Corporations Act by Morgan Stanley Wealth Management Australia Pty Ltd (A.B.N. 19 009 145 555, holder of Australian financial services license No. 240813, which accepts responsibility for its contents; in Korea by Morgan Stanley & Co International plc, Seoul Branch; in India by Morgan Stanley India Company Private Limited; in Canada by Morgan Stanley Canada Limited; in Germany and the European Economic Area where required by Morgan Stanley Europe S.E., authorised and regulated by Bundesanstalt fuer Finanzdienstleistungsaufsicht (BaFin) under the reference number 149169; in the US by Morgan Stanley & Co. LLC, which accepts responsibility for its contents. Morgan Stanley & Co. International plc, authorized by the Prudential Regulatory Authority and regulated by the Financial Conduct Authority and the Prudential Regulatory Authority, disseminates in the UK research that it has prepared, and approves solely for the purposes of section 21 of the Financial Services and Markets Act 2000, research which has been prepared by any of its affiliates. RMB Morgan Stanley Proprietary Limited is a member of the JSE Limited and A2X(Pty) Ltd. RMB Morgan Stanley Proprietary Limited is a joint venture owned equally by Morgan Stanley International Holdings Inc. and RMB Investment Advisory (Proprietary) Limited, which is wholly owned by FirstRand Limited. The information in Morgan Stanley Research is being disseminated by Morgan Stanley Saudi Arabia, regulated by the Capital Market Authority in the Kingdom of Saudi Arabia, and is directed at Sophisticated investors only.

The information in Morgan Stanley Research is being communicated by Morgan Stanley & Co. International plc (DIFC Branch), regulated by the Dubai Financial Services Authority (the DFSA), and is directed at Professional Clients only, as defined by the DFSA. The financial products or financial services to which this research relates will only be made available to a customer who we are satisfied meets the regulatory criteria to be a Professional Client. A distribution of the different MS Research ratings or recommendations, in percentage terms for Investments in each sector covered, is available upon request from your sales representative.

The information in Morgan Stanley Research is being communicated by Morgan Stanley & Co. International plc (QFC Branch), regulated by the Qatar Financial Centre Regulatory Authority (the QFCRA), and is directed at business customers and market counterparties only and is not intended for Retail Customers as defined by the QFCRA.

As required by the Capital Markets Board of Turkey, investment information, comments and recommendations stated here, are not within the scope of investment advisory activity. Investment advisory service is provided exclusively to persons based on their risk and income preferences by the authorized firms. Comments and recommendations stated here are general in nature. These opinions may not fit to your financial status, risk and return preferences. For this reason, to make an investment decision by relying solely to this information stated here may not bring about outcomes that fit your expectations.

The trademarks and service marks contained in Morgan Stanley Research are the property of their respective owners. Third-party data providers make no warranties or representations relating to the accuracy, completeness, or timeliness of the data they provide and shall not have liability for any damages relating to such data. The Global Industry Classification Standard (GICS) was developed by and is the exclusive property of MSCI and S&P.

Morgan Stanley Research, or any portion thereof may not be reprinted, sold or redistributed without the written consent of Morgan Stanley.

Indicators and trackers referenced in Morgan Stanley Research may not be used as, or treated as, a benchmark under Regulation EU 2016/1011, or any other similar framework.

The issuers and/or fixed income products recommended or discussed in certain fixed income research reports may not be continuously followed. Accordingly, investors should regard those fixed income research reports as providing stand-alone analysis and should not expect continuing analysis or additional reports relating to such issuers and/or individual fixed income products.

Morgan Stanley may hold, from time to time, material financial and commercial interests regarding the company subject to the Research report.

© 2022 Morgan Stanley