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US Equity Strategy | North America

Weekly Warm-up: Fed Hits Stocks but the Larger Risk Remains Earnings, Not Rates

Chair Powell and the Fed make it crystal clear that their job fighting inflation remains unfinished. Ironically, while bonds took the message in stride, stocks seemed to be shocked by the messaging. The path for stocks from here will be determined by earnings, where we still see material downside.

Unfinished business for the Fed... While the Fed's messaging from its annual meeting at Jackson Hole was completely unsurprising to the bond market, stocks seemed to be shocked by the hawkishness of the tone. We chalk this divergence up to the fact that the equity market became a victim of its own momentum over the past few months as CTAs and other price insensitive buyers drove valuations to unrealistic levels. While P/Es have come back down, they remain well above fair value based on our equity risk premium framework.

Earnings are the bigger risk for stocks from here... Almost all of the weakness for stocks during 1H22 was due to the Fed and tighter financial conditions. The 2H outcome will ultimately be determined by earnings expectations for next year, in our view. As a result, equity investors should be laser focused on this risk, not the Fed, particularly as we enter the seasonally weakest time of the year for earnings revisions, and inflation further eats into margins and demand.

...And leading earnings indicators point to weakness ahead... We remain focused on the spread between forward sales growth and rate of change on PPI and the spread between nominal GDP growth and wage growth. Both indicators suggest margin pressure and earnings growth risk ahead. This view is confirmed by our leading earnings model, which projects a steep fall in EPS growth over the next several months. A key input to this model is the ISM manufacturing PMI, and leading regional Fed manufacturing surveys point to continued downside in the ISM PMI. The rate of change on earnings revisions breadth also leads forward EPS growth and points to growth downside as well.

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What to Focus on This Week

Unfinished Business for the Fed

The highly anticipated annual fed meeting in Jackson Hole has come and gone with a very clear message –the Fed's fight against inflation is far from over. Chair Powell's messaging on Friday was crystal clear, and the equity markets did not take it well. As we discussed in our last weekly warm-up 2 weeks ago, the equity markets may have gotten too excited and even pre-traded a Fed pivot that isn't coming. In short, the robust rally since June is likely over for now.

Technically speaking, this move looks pretty textbook. In June, we reached extreme oversold conditions with breadth collapsing to some of the lowest readings on record (Exhibit 1). However, the rally stalled out exactly at the 200-day moving average for the S&P and many key stocks (Exhibit 2). On that basis alone, the sharp reversal looks quite ominous to even the most basic technical analysts, like us.

Exhibit 1: June's Extremely Negative Breadth...



Exhibit 2: ...Led to a Classic Bear Market Rally



From a fundamental standpoint, having a bullish view on US stocks is also challenging. First, there is valuation. As we have discussed many times in our research, the P/E ratio is a function of two inputs – 10 year US Treasury yields and the Equity Risk Premium (ERP). Simplistically, the UST yield is the cost of capital component while the ERP is primarily a function of growth. Generally speaking, the ERP is negatively correlated to growth. In other words, when growth is accelerating or expected to accelerate, the ERP tends to be lower than normal and vice versa. The problem with the conclusion that June was THE low for the Index in this bear market is that the ERP never went above average. Instead, the fall in the P/E from December to June was entirely a function of the Fed's tightening of financial conditions and the higher cost of capital.



Exhibit 3: All of the Valuation Compression This Year Has Come via Higher Rates, Not ERP



Even worse, the ERP plummeted over the past few months and reached near records lows vs. the post GFC period prior to Friday's sell off. In fact, the only time the ERP has been lower in the past 14 years was at the end of the bear market rally in March earlier this year, and we know how that ended. Our model, which is based primarily on the y/y change in PMIs, suggests the S&P 500 ERP should be closer to 400bps today instead of the 280bps we closed at Friday. Suffice to say, that would imply a much lower multiple than the 17.1x we currently trade at. Specifically, assuming a 3% 10-year UST yield implies a fair value P/E of ~14x.

Meanwhile, the Real Issue Remains Earnings, in our view, not the Fed...

While most investors remain preoccupied with the Fed and their next move, we have been more focused on earnings and the risk to forward estimates. In June, many investors began to share our concern, which is why stocks sold off so sharply, in our view. Companies began managing the quarter lower and by the time 2Q earnings season rolled around, positioning was quite bearish and valuations were more reasonable at 15.4x. This led to the "bad news is good news" rally or as many people claimed "better than feared" results. Call us old school, but better than feared is not a good reason to invest in something if the price is high and the results are soft. In other words, it's a fine reason for stocks to see some relief from an oversold condition but we wouldn't commit any real capital to such a strategy. Most importantly, results showed clear deterioration in incremental operating margins, a trend we believe is just starting. In short, we believe NTM earnings forecasts remain significantly too high. In the next section we lay out our case for further earnings revisions to the downside with much larger cuts than what we have experienced to date. As noted already, earnings revision breadth reached very low levels during 2Q results. While revision breadth is a good leading indicator, it tells us nothing about the magnitude of the cuts. As usual, the cuts to NTM EPS forecasts have been de minimis to start this down cycle. Companies and analysts lowered the bar for 2Q into the quarter, but chose to maintain the out year forecasts. As a result, the NTM EPS forecast for the S&P 500 has fallen by just 1.5% since the top in June. If we back out energy, the NTM EPS estimates have fallen by closer to 5% but this is still just the beginning of the eventual decline we foresee.

The bottom line...last week's highly anticipated Fed meeting turned out to be a non event for bonds (flat on Thursday and Friday) while it appeared to be a shock to stock investors. Ironically, given the lack of any material move in yields, all of the decline in



P/Es was due to a rising Equity Risk Premium that still remains well below fair market levels, in our view. Importantly, we do think Friday's action could be the beginning of what is likely to be an elongated adjustment period to growth expectations. In our experience, such adjustments to earnings always take longer than they should. Throw on top of that the fact that operating leverage is now more extreme than it was prior to COVID, and the negative revision cycle could turn out to be worse than usual. For a more detailed discussion on how inflation affects operating leverage, please see our colleague Marty Leibowitz's recent note here. Next week, we will attempt to quantify more specifically how challenging the earnings outcome might be based on the already reported macro data.



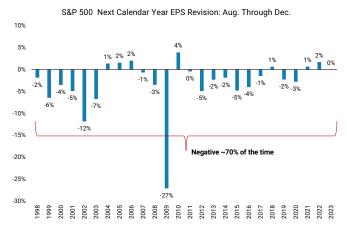
Earnings Headwinds Mount

As we showed last week, we are heading into a challenging seasonal period from an earnings revisions *breadth* standpoint. Our work confirms that is also the case with respect to the out year (in this case, 2023) dollar EPS estimate. While bottom-up consensus EPS estimates for the following year are typically revised lower as the year progresses, Exhibit 4 shows that the period running from mid-September through December is a particularly challenging time for estimates. Exhibit 5 reinforces this point, showing that next calendar year estimates are revised lower the vast majority of the time from the end of August through December.

Exhibit 4: We're Heading into a Challenging Period for Next Yr. EPS Revisions...

Source: FactSet, Morgan Stanley Research.

Exhibit 5: ...History Suggests Revisions from End of Aug. to Dec Are Negative Vast Majority of the Time

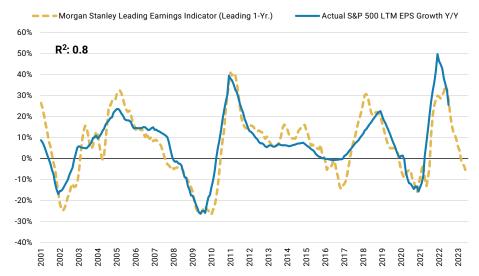


Source: FactSet, Morgan Stanley Research.

As we've discussed in recent weeks (see Operating Leverage Cuts Both Ways as Inflation Peak Signals Margin Risk), we expect the downward revision path to be especially acute this September-December given the number of earnings risks in front of us, particularly on the margin side. We remain focused on the spread between forward sales growth and rate of change on PPI and the spread between nominal GDP growth and wage growth. Both indicators suggest margin pressure and earnings growth risk ahead. This view is confirmed by our leading earnings model (Exhibit 6), which projects a steep falling in EPS growth over the next several months. A key input to this model is the ISM manufacturing PMI, and leading regional Fed manufacturing surveys point to continued, significant downside in the ISM PMI (Exhibit 7). Should this play out, our leading earnings model would fall even further into negative growth territory.

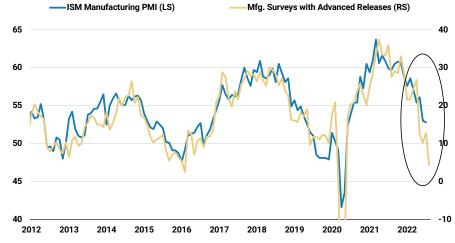


Exhibit 6: Our Leading Earnings Model Suggests Significant Downside to EPS Growth Ahead



Source: FactSet, Bloomberg, Morgan Stanley Research

Exhibit 7: Leading Signals Point to PMI Downside (A Key Input to Our EPS Model)



Source: Bloomberg, Morgan Stanley Research. Yellow series is an average.

As we've frequently shown, earnings revisions breadth for the S&P 500 is now deeply in negative territory, a sign that more analysts are cutting as opposed to raising numbers. The second derivative of that revisions breadth series tends to lead forward EPS growth (Exhibit 8) – a relationship that also suggests downside is coming from an earnings growth standpoint.



Exhibit 8: Downward Trend in Earnings Revisions Breadth Also Projects EPS Growth Downside



Source: FactSet, Morgan Stanley Research

Despite the leading signals that suggest EPS deceleration over the coming months, bottom-up consensus forward dollar earnings has only declined by ~1% for the S&P 500 and it remains 18% above the post-GFC trend (Exhibit 9). Forward earnings for the Nasdaq 100 Index remains similarly elevated at 16% above trend. What we find even more interesting and ultimately bearish is that the median S&P 500 stock has seen less than a 1% forward EPS decline, even less significant than the cap weighted index's decline. We find this very surprising given that this median stock gauge is more inclusive of the smaller, often more cyclical pockets of the S&P 500. These are cohorts that we would expect to have seen more significant earnings downside given the margin/inventory/macro headwinds present. At the end of the day, this dynamic increases our conviction in the notion that there is excess in the forward numbers across the index. At a minimum, we think there's 5% downside to the forward numbers, but would note that downside could be as significant as 15-20% (our bear case, the odds of which have risen in the last several months). Our models and seasonals line up to suggest the next leg lower in forward EPS should commence towards the end of September.



Exhibit 9: S&P 500 Forward \$ Earnings Remains Highly Extended...

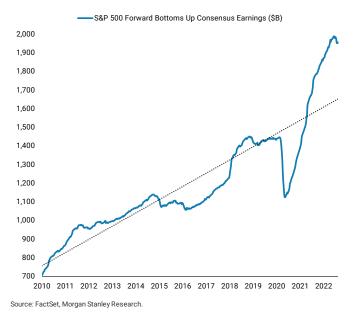


Exhibit 10: ... As Does NDX Earnings...

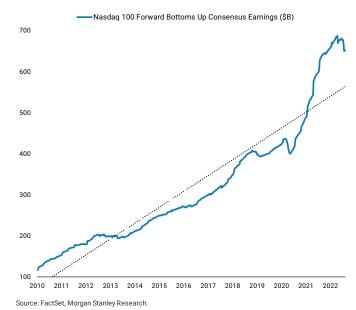
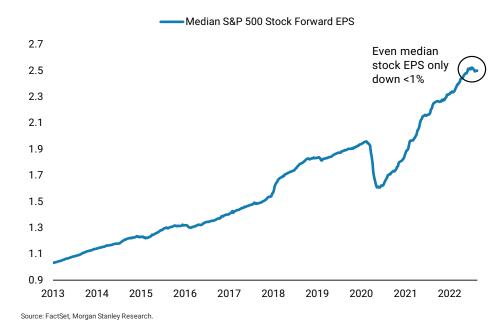


Exhibit 11: ...And Median Stock Earnings...Downward Revisions Cycle Has Barely Begun



Factor Update

We select a few key factors to monitor in Exhibit 12 and Exhibit 13 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 underperformed Junk (-1.2% relative return) and the overall market (-0.5% relative return versus the overall Top 1,000 universe).
- Value has underperformed Growth (-0.1%) while stay muted versus overall market



(+0.0% relative return).

- Cyclicals are up +6.9% in absolute terms, outperforming Defensives (+3.2%); but
 that performance spread narrows when we exclude Energy from Cyclicals, which
 has seen recent outperformance; Cyclicals-Ex Energy have outperformed
 Defensives by +2.5%.
- High Momentum stocks have outperformed low momentum stocks (+1.4% relative return), and the overall market (+0.8% relative return).
- Small Caps have underperformed Large Caps.

Exhibit 12: Top 1,000 Factor Returns

Factor		1 Week			1 Month	-11	YTD Ret	12M Ret	
ractor	Ret	1W Chg	1M Chg	Ret	1M Chg	3M Chg	TID net	12m Het	
Quality / Junk	-0.4%	4	4	-1.2%	4	+	8.3%	13.6%	
Quality	-1.8%	4	•	4.9%	1	1	-6.1%	-0.6%	
Junk	-1.4%	4	4	6.1%	4	1	-14.4%	-14.2%	
Value / Growth	0.6%	4	^	-0.1%	•	4	18.7%	23.6%	
Value	-1.6%	4	4	5.4%	1	4	-2.9%	1.1%	
Growth	-2.2%	4	4	5.5%	1	1	-21.6%	-22.5%	
Cyclical / Defensive	0.6%	^	^	3.2%	1	↑	-2.7%	-3.6%	
Cyclical	-1.3%	4	4	6.9%	1	†	-10.8%	-8.3%	
Defensive	-1.9%	4	4	3.7%	4	1	-8.1%	-4.7%	
Cyclical xEnergy / Defensive	-0.1%	•	^	2.5%	1	1	-7.9%	-9.9%	
Cyclical xEnergy	-2.0%	4	4	6.2%	1	1	-15.9%	-14.6%	
12M Momentum	2.1%	4	•	1.4%	1	Ψ	1.2%	5.1%	
High Momentum	-0.6%	4	•	6.3%	1	1	-13.3%	-11.3%	
Low Momentum	-2.7%		4	4.9%	1	1	-14.4%	-16.4%	
Size (Small / Large)	-0.4%	1	^	-0.6%	4	Ψ	-1.3%	-5.5%	
Small Cap	-2.1%	4	4	4.6%	4	1	-12.1%	-12.0%	
Large Cap	-1.7%	-	4	5.2%	4	A	-10.7%	-6.5%	

Source: ClariFi, Morgan Stanley Research

Exhibit 13: Excess Return Versus Broader Top 1,000 Universe

Ret	1 Week			1 Month						
Ret	1W Cha									
		1M Chg	Ret	1M Chg	3M Chg	YTD Ret	12M Ret			
Quality / Junk										
-0.1%	•	Ψ.	-0.5%	1	Ψ.	5.2%	8.7%			
0.2%	1	1	0.7%	1	1	-3.1%	-4.9%			
0.1%	•	1	0.0%	1	4	8.4%	10.3%			
-0.5%	•	•	0.1%	•	1	-10.3%	-13.3%			
0.4%	1	1	1.5%	1	•	0.5%	1.0%			
-0.2%	•	₩	-1.7%	Ψ.	₩	3.2%	4.6%			
-0.3%	1	1	0.8%	1	1	-4.6%	-5.3%			
1.1%	1	1	0.8%	1	1	-2.0%	-2.1%			
-1.0%	1	1	-0.5%	1	1	-3.1%	-7.2%			
-0.4%	Ψ.	Φ	-0.8%	4	Ψ.	-0.8%	-2.7%			
0.0%	•	₽	-0.2%	1	•	0.6%	2.8%			
	0.2% 0.1% -0.5% 0.4% -0.2% -0.3% 1.1% -1.0%	0.2%	0.2%	0.2%	0.2%	0.2%	0.2%			

Source: ClariFi, Morgan Stanley Research

Exhibit 14 shows performance of these pairs in time series graph form.



Exhibit 14: Cumulative Factor Performance Since 2021



Source: ClariFi, Morgan Stanley Research

We include an extensive list of factors and their returns in Exhibit 15. 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 16.



Exhibit 15: Full List of Factor Spread Returns (Long - Short)

Equal Weighted Factor Return (Spread) in Top 1000 Factor Name	1 We	ek hg 1M Chg	1 Mo	nth hg 3M Chg	3M Ret	YTD Ret	12M R
Smoothed Estimate Revisions (%) (High vs Low)	1.2% 🛧	Φ.	5.0%	Φ.	5,3%	0.1%	3.4
12m-1m Residual Momentum (High vs Low)	2.4% A 0.8% A	†	4.9% ↑ 4.8% ↑	†	7.1%	1.6%	4.8 -22.7
-Year Sales Growth (High vs Low) Cash-to-Assets (High vs Low)	0.8% ↑	T	4.8% T	T	4.7%	-18.1%	-22.7
ndustry Cyclical vs Defensive	-0.3% 🖖	‡	3.3%	Φ.	2.8%	-1.5%	3.5
-Year Sales Growth (High vs Low)	-0.1% 🛧	Φ.	3.2%	Φ.	4.5%	-18.7%	-24.9
Cyclical vs Defensive	0.6%	•	3.2%	1	0.7%	-2.7%	-3.6
Cash-to-Debt (High vs Low)	0.5% 🛧	←←←←→	3.0% ♠	*********	2.5%	-10.3% -6.5%	-17.5 -5.3
-Month Estimate Revisions (%) (High vs Low) Debt-to-EBITDA (Low vs High)	0.1% ↑ 0.1% ↑	T	2.8% ↑	T	2.6%	-10.5%	-15.
Cash Ratio (High vs Low)	0.2%	•	2.5%	•	5.0%	-12.9%	-20.0
Forecast long term growth (High vs Low)	0.8%	Ψ.	2.5%	÷.	5.6%	-3.2%	-0.6
let Debt-to-Market Cap (Low vs High)	0.2% ↑ 1.2% ↓	← ←++++	2.4%	1	6.9%	-12.1%	-16.0
Composite Sentiment (High vs Low)	1.2% 0.1% ^	1	2.4% 🖟		7.0%	-2.3% -10.6%	0.4
Vet Cash Ratio (High vs Low) i-Year EPS Growth (High vs Low)	0.1% ↑ -0.1% ↓	T	1.6%	T	5.8% 3.3%	-6.1%	-13.6 -4.3
Composite Growth (High vs Low)	0.7%	Ų.	1.4%	*	0.3%	0.1%	4.0
2-Month Price Momentum (High vs Low)	2.1% 🝁	Ψ.	1.4%	ψ.	-0.6%	1.2%	5.1
Cash-to-Market Cap (High vs Low)	0.3%	←←←←←→	1.3%	*******	-2.5%	-2.7%	-5.2
angible Book/Price (Cheap vs Expensive)	-0.4%	Ţ	1.3% \land	*	-0.6%	1.1%	0.
Analyst Coverage (High vs Low) Cash Flow Coverage (High vs Low)	0.4%	T	0.9%	T	1.6%	-0.4%	-3.4
Debt-to-Assets (Low vs High)	0.6%	•		<u> </u>	1.5%	-4.8%	-3.2
-Year Dividend per share growth (High vs Low)	-0.3% 🍁	ų.	0.6% 🍁	ů.	1.2%	0.7%	2.6
f/Y Change in Inventory/Sales (Low vs High)	1.0% 个	†	0.5%	Ψ.	-2.7%	0.9%	1.5
Debt-to-Capital (Low vs High)	0.4%	•	0.5%	Ψ.	1.2%	-5.3%	-6.0
vet Cash Variability (Low vs High) Earnings Estimate Revisions (High vs Low)	0.2% ↑	†	0.5% ^ 0.3% ↓	<u>T</u>	-1.1% -0.4%	-1.2% -1.3%	4.1 5.5
Jp-to-Down Revisions (High vs Low)	0.8%	T	0.3%	T	-1.4%	-2.5%	2.1
Operating Income Variability (Low vs High)	-0.5%	†	0.2%	+++	0.4%	-4.5%	-8.7
Gross Margin (High vs Low)	-0.9% 🖖	Ψ.	0.0%	÷.	-0.3%	-7.7%	-10.1
Sales Estimate Revisions (High vs Low)	0.0%	Φ.	0.0% 🍁	•	0.1%	-4.6%	-1.2
arnings Revisions (High vs Low)	0.5% 🖖	1	0.0% 🖖	← ← ← →	-0.7%	-1.9%	3.5
Debt-to-Equity (Low vs High)	0.0% 🛧	*	-0.1% ↓ -0.1% ↑	Ψ.	-0.7%	-3.2% -8.4%	-2.1 -6.1
Jp vs Down Sales Revisions (High vs Low) i-Year Dividend per share growth (High vs Low)	0.0% ↑ -0.6% ↓	Î	-0.1% ^ -0.1% ^	T	2.0%	-0.5%	4.1
/alue vs Growth	0.6%	•	-0.1%	1	-6.8%	18.7%	23.0
Sales Revisions (High vs Low)	0.0%	••••	-0.1% 🍁	φ.	-0.8%	-6.5%	-3.5
Receivables Turnover (High vs Low)	-0.7% 🖖	ψ.	-0.2% 🖖	†	-0.6%	0.0%	0.1
Long-Term Operating Leverage (High vs Low)	0.2% 🝁	Ψ.	-0.2% 🝁	Ψ.	-1.2%	2.1%	4.4
-Month Reversal (Low vs High)	-0.3% ¥	(†)	-0.2% ♥ -0.3% ♠	‡	8.0% -5.4%	-3.8% 1.6%	-6.7 6.4
l-Year EPS Growth (High vs Low) Profitability (High vs Low)	-0.7%	I	-0.3% 🛧 -0.4% 🖖	*	1.7%	-3.2%	-2.1
rona Yield (High vs Low)	-0.1%	*	-0.4%	1	4.0%	5.5%	6.1
Price-to-Cash Flow (Cheap vs Expensive)	0.0%	ų.	-0.4% 🖖	φ.	0.8%	-4.9%	-10.4
9-Month Price Momentum (High vs Low)	1.6% 🍁	← ← ← ◆ ◆	-0.5% 🛧 -0.5% 🖖	ų.	-6.2%	-3.0%	0.1
ncremental Margin (High vs Low)	-0.1%	Ψ.		¥	-1.8%	5.0%	7.1
i-Month Price Momentum (High vs Low) Size (Small vs Large)	-0.4%	*	-0.5% ^ -0.6% \dag{\psi}	*	-7.5% 1.1%	0.9%	-5.5
Size (Small vs Large) Sales per Employee (High vs Low)	-0.4% ↑	Ţ	-0.6% 🗸	*	-2.8%	-1.3% 3.6%	-5.2
Accruals (Low vs High)	0.0%	†	-0.7%	Ţ	-5.1%	7.7%	11.5
Frailing Dividend Yield (High vs Low)	-0.2% 🝁	*	-1.0%	Ť.	-5.5%	11.3%	8.8
Gross Profit / Assets (High vs Low)	-1.1% 🍁	++++	-1.0% ↑ -1.2% ↓	Ψ.	-1.5%	-9.1%	-10.1
Quality vs Junk	-0.4% 🝁	Ψ		Ψ.	-1.5%	8.3%	13.6
Operating Leverage (High vs.Low)	-0.8%	*	-1.4% ¥	Ψ.	-1.2% 0.0%	5.6%	10.1
Sales Growth Stability (High vs Low) EPS Variability (Low vs High)	-1.2%	1	-1.6%	T	1.1%	2.4%	3.1
Composite Accruals (Low vs High)	0.3%	*	-1.7%	Ţ	-5.8%	4.4%	5.7
inancial Leverage (Low vs High)	-0.3% 🖖	← ← ← ◆ →	-1.7%	ů.	-3.0%	1.1%	4.1
ROE (High vs Low)	-0.2% 🍁	Ψ.	-1.8% 🝁	Ψ.	-1.9%	4.7%	13.0
Short-Term Accruals (Low vs High)	-0.6% 🖖	Ψ.	-1.8% 🖖	Ψ.	-3.6%	-1.4%	-42
Asset Turnover (High vs Low)	-0.1%	Ψ.	-1.9%	Ψ.	-2.9%	5.0%	11.5
CapEx-to-Assets (Low vs High) Cash Flow / Debt (High vs Low)	0.0%	T	-2.0% ¥	.	-1.4% -1.8%	2.6% 5.2%	-1.0 13.8
ROE Variability (Low vs High)	-1.3%	Ţ	-2.1%	Ţ	2.0%	-1.1%	1.0
Operational Efficiency (High vs Low)	0.4%	ŭ.	-2.2% 🝁	Ť.	-5.1%	12.2%	16.6
Earnings Stability (High vs Low)	-0.8% 🖖	←++++	-2.3% 🖖	<->	-0.2%	6.8%	10.1
nventory Turnover (High vs Low)	-0.6% 🥎		-2.3% 🝁	Ψ	-1.8%	5.8%	9.1
Price-to-Book (Cheap vs Expensive)	0.6%	€ € € € € 	-2.3% V	<u> </u>	-6.8% -1.2%	10.9%	13.6
CapEx-to-Sales (Low vs High) Return on Invested Capital (High vs Low)	-0.2% V	#	-2.4% \ -2.5% \	Ψ.	-1.2%	4.6%	21.1
Composite Quality (High vs Low)	-0.6%	T.	-2.6%	Ţ	-3.1%	3.0%	6.4
ROA (High vs Low)	-0.2%	Ū.	-2.7% 🖖	Ť.	-2.6%	8.5%	18.7
"Y %Change in number of employees (Low vs High)	0.2%	ů.	-2.8% 🗼	Ť.	-5.6%	17.2%	23.
nventory-to-Sales (Low vs High)	-0.2% 🔨	Î	-2.9% 🖖	Ψ	-2.0%	0.2%	1.4
nterest Coverage (High vs Low)	-0.2% 🍁	Ψ.	-2.9% 🔟	÷	-2.2%	4.8%	13.6
Price-to-Sales (Cheap vs Expensive)	0.3%	***********	-3.0% ¥ -3.0% ¥	¥	-11.9% -8.8%	14.9% 13.0%	24.7
Price-to-Earnings (Che ap vs Expensive) Reinvestment Rate (High vs Low)	-0.5% V	1	-3.0% ↓ -3.0% ↓	<u>_</u>	-8.8%	13.0%	20.1
errvesment Hate (High vs.Low) Enterprise Value-to-Operating Income (Low vs.High)	-0.1%	Ţ	-3.1% 🝁	Ť.	-8.8%	18.9%	30.7
Composite Value (Che ap vs Expensive)	0.2% 🖖	Ψ.	-3.3% 🖖	Ψ.	-8.4%	12.9%	21.2
Reduction in Shares Outstanding (Low vs High)	0.0% 🍁	Ψ.	-3.3% 🝁	Ψ.	-6.2%	13.8%	23.2
ree Cash Flow-to-Debt (High vs Low)	-0.3% 🖖	Ψ.	-3.3% 🖖	¥	4.1%	3.7%	12.5
Dividend Payout Ratio (High vs Low)	-0.6%	Ψ.	-3.4%	Ψ.	-2.7%	3.3%	5.
Price-to-EBITDA (Cheap vs Expensive)	0.5%	T.	-3.4% ¥ -3.4% ¥	¥	-10.3% -9.6%	19.3% 19.7%	28.1
rice-to-Forward Earnings (Cheap vs Expensive) Interprise Value-to-EBITDA (Low vs High)	0.7% 🖖	1	-3.4% ↓ -3.6% ↓	<u>_</u>	-9.6% -9.9%	20.40	29.1
rice-to-Operating Income (Cheap vs Expensive)	0.0%	Ţ	-3.6%	Ĭ	-9.9%	20.4% 17.7%	27.
-Month Price Momentum (High vs Low)	0.3%	Ţ.	-3.6% 🖖	Ţ	-7.9%	-5.0%	-1.5
stimate Dispersion (Low vs High)	-0.7% 🍁	Ĭ.	-3.9% 🔟	Ĭ.	-2.8%	7.9%	16.
CapEx-to-Depreciation (Low vs High)	0.0%	Ψ.	-4.1% 🖖	ψ.	-6.9%	7.4%	9.1
Sales Variability (Low vs High)		Ψ.	-4.3% 🔟	Ψ.	-6.3%	12.4%	16.1
Operating Margin (High vs Low)	-0.3%	Ψ.	-4.7%	Ψ.	4.4%	6.8%	15.5
Vet Margin (High vs Low)	-0.4%	4	-4.8% \ -5.2% \	Ψ.	-4.4% -10.2%	7.1%	16.2
ree Cash Flow Yield (High vs Low) Enterprise Value-to-Free Cash Flow (Low vs High)	-0.1% Ψ -0.3% Ψ	*******	-5.2% ¥	T.	-10.2% -10.8%	14.7% 15.2%	24.1
		Ť		T.	-10.8%	13.8%	24.4
Composite Free Cash Flow (High vs Low)	-0.3%		-5.6%				

Source: ClariFi, Morgan Stanley Research

Exhibit 16: Best and Worst Performing Factor Leg Returns

Group		1 Week			1 Month		2M Dat	YTD Ret	12M Ret
Group	Ret 1	IW Chg	1M Chg	Ret	1M Chg	3M Chg	3m net		
Top 1000 (Equal Weighted)	-1.7%	Į.	4	5.4%	介		6.1%	-11.3%	-9.3%
High Enterprise Value-to-Free Cash Flow	-0.9%	V	个	10.0%	个	1	13.1%	-19.4%	-25.3%
Low Composite Free Cash Flow	-1.0%	Į.	4	10.0%	1	1	12.4%	-18.4%	-23.3%
Low Free Cash Flow Yield	-1.1%	Į.	个	9.8%	个	1	12.1%	-18.7%	-23.4%
High 12m Volatility	-1.2%	ı	4	9.7%	介	4	12.7%	-15.0%	-19.3%
High Smoothed Estimate Revisions (%)	-1.0%	i	4	9.4%	1	4	11.1%	-13.3%	-12.79
Low Free Cash Flow-to-Debt	-1.1%	L		8.9%	4	4	11.0%	-17.9%	-24.0%
High 1-Year Sales Growth	-0.7%	L	4	8.8%	1	4	9.2%	-20.9%	-23.19
High 5-Year Sales Growth	-1.5%	i	4	8.4%	介	1	9.3%	-24.3%	-27.3%
High Price-to-Forward Earnings	-1.7%	ı	4	8.2%		4	12.2%	-22.9%	-27.19
High Estimate Dispersion	-1.4%	L	4	8.2%	小	4	8.8%	-16.2%	-19.3%
Low 3-Month Price Momentum	-1.6%	ı	4	8.1%	1	1	10.4%	-10.7%	-12.19
Low Inventory Turnover	-0.9%	i	1	8.1%	介	4	9.4%	-9.0%	-7.5%
High Price-to-Sales	-1.4%	i	į.	8.1%		4	13.5%	-19.1%	-23.6%
Low Operating Margin	-1.3%	į.	4	8.1%	4	4	9.4%	-17.9%	-22.6%
High Enterprise Value-to-EBITDA	-1.3%	i	4	8.1%	4	1	12.3%	-23.5%	-29.3%
Low Interest Coverage	-1.6%	i	4	8.0%		4	9.9%	-15.7%	-19.49
High Cash-to-Assets	-1.4%	L	4	8.0%	1	4	10.1%	-18.7%	-22.7%
High Price-to-Operating Income	-1.6%	į.	4	8.0%		1	11.2%	-22.5%	-27.6%
High Enterprise Value-to-Operating Income	-1.2%			7.9%		4	11.2%		-28.8%
High Sales Variability	-1.7%			7.9%	A	*	9.3%	-20.5%	-21.9%

Group	1 W			1 Month	OH Do	YTD Ret	10M Del
	Ret 1W (Chg 1M Chg	Ret	1M Chg 3M C	hg 3M Net	TID Ret	12m net
Top 1000 (Equal Weighted)	-1.7% 🖖	-	5.4%		6.1%		-9.3%
Low Cash-to-Debt	-2.1% 🖖	1	4.1%	Ψ Λ	5.4%	-7.2%	-2.9%
Low 1-Year Sales Growth	-1.5% 🖖	•	4.1%	1 1	5.0%	-2.7%	-0.4%
Low ROE Variability	-2.3% 🍑	•	4.0%	↓	7.4%	-9.1%	-4.3%
High Earnings Stability	-2.1% 🖖		4.0%	T T	6.5%	-8.4%	-4.2%
Low Inventory-to-Sales	-1.4% 🍑	4	3.9%	↓ ↑	5.4%	-11.3%	-8.3%
ow Cash-to-Assets	-1.8% 🖖	•	3.9%	•	5.4%	-5.7%	-1.0%
ow 12m Volatility	-1.6% 🖖	•	3.8%	1 1	3.8%	-6.2%	-0.1%
Defensive	-1.9% 🖖	•	3.7%	1 1	5.3%	-8.1%	-4.7%
ow CapEx-to-Depreciation	-1.5% 🖖	•	3.7%	T	4.7%	-8.2%	-7.6%
ow Sales Variability	-1.6% 🍑	•	3.6%	1 1	2.9%	-8.1%	-5.0%
ndustry Defensive	-1.1% 🍑	•	3.5%	个 个	4.7%	-8.4%	-9.8%
High Operating Margin	-1.6% 🍁	•	3.4%	↓ ↑	5.0%	-11.1%	-7.1%
ow Sales Revisions	0.0%	•	3.1%	• •	3.6%	-10.5%	-9.7%
ow Sales Estimate Revisions	0.0%	•	3.0%	◆ ↑	2.6%	-11.0%	-9.3%
High Sales Revisions	0.0%	•	3.0%	•	2.8%	-17.0%	-13.2%
ligh Sales Estimate Revisions	0.0%	•	3.0%	•	2.7%	-15.6%	-10.6%
ow Up vs Down Sales Revisions	0.0%	•	2.9%	4 • •	4.3%	-9.3%	-9.0%
ligh Up vs Down Sales Revisions	0.0%	•	2.8%	•	3.7%	-17.7%	-15.1%
ligh Net Margin	-1.8% 🍑	4	2.8%	•	5.2%	-12.7%	-7.8%
ow 12m-1m Residual Momentum	-3.0% 🖖	•	2.4%	1 1	2.3%	-15.2%	-16.3%

Source: ClariFi, Morgan Stanley Research

1979

1991

Source: ClariFi, Morgan Stanley Research

1997 2003 2009

2015 2021



In Exhibit 17, 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 rebounded slightly post 2Q earnings but remains historically low (7th percentile) as geopolitical uncertainty and macro risk continue to weigh on equities broadly. Return dispersion remains elevated relative to the post-GFC cycle but has ticked lower recently. Price/book dispersion has fallen in recent weeks as the market rallies above 4,000. Earnings estimate dispersion remains elevated as forward guidance from 2Q earnings is baked into forecasts.

Exhibit 17: US Top 500 Dispersion Metrics: Long-term and Short-Term Median 63-Day Rolling Stock Specific Risk Through Aug 18, 2022 Median 63-Day Rolling Stock Specific Risk Through Aug 18, 2022 80% 70% 60% 40% 45% 30% 40% 20% 10% 99 00 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 Return Dispersion US Top 500 Return Dispersion 12% std Dev 2.5% 11% 10% Average of intra-day of Stock Returns 2.0% 9% 8% 6% 1.0% 5% 20-day 2001 Jan-21 1973 1984 1990 1996 2007 2013 Apr-21 Jul-21 Oct-21 Jan-22 Earnings Yield US Top 500 Earnings Yield Dispersion 12% 16.0% 10% 14.0% 12.0% 10.0% 8.0% 6.0% 4% 4.0% verage = 5.4% 2.0% 1976 1982 1988 1994 2000 2006 2012 Jan-21 May-21 Sen-21 Jan-22 May-22 US Top 500 Earnings Estimate Dispersion 3.5% 3.3% 5% 5% 3.1% 4% 4% 2.7% 2.5% 2.3% 3% Long Term Average = 3.2% 2.1% 2% 1.9% 2% 1% 1.5% 1977 1989 1995 2001 2007 2013 May-21 Sep-21 May-22 US Top 500 Price/Book Dispersion 70% 32% 60% 31% 30% 50% 29% 40% 28% 30% 27% 26% 20% Long Tem Average = 25% 37% 10% 24%

We also monitor these dispersion metrics on a percentile basis relative to history (Exhibit 18). Return dispersion remains historically elevated at the S&P 500 level and led by many of the consumer-oriented industries. Earnings yield dispersion is slightly above historical levels while book/price dispersion falls to the 32nd percentile. With that in mind, both metrics highlight the wide valuation dispersion at the industry group level.

-Jan-21



Lastly, S&P~500 earnings estimate dispersion is currently in the 88th percentile historically with Utilities and Tech Hardware as the exceptions with near all-time lows in dispersion.

Exhibit 18: Historical Dispersion Metrics by Industry Group

				Earnings
	Return	Earning Yield	Book/Price	Estimate
	Dispersion	Dispersion	Dispersion	Dispersion
S&P 500	59%	62%	32%	88%
Energy	9%	72%	30%	73%
Materials	26%	92%	49%	78%
Capital Goods	57%	71%	58%	81%
Commercial & Professional Services	63%	27%	17%	88%
Transportation	53%	66%	20%	90%
Automobiles & Components	90%	83%	81%	74%
Consumer Durables & Apparel	8%	88%	95%	90%
Consumer Services	62%	84%	17%	88%
Retailing	49%	80%	12%	54%
Food & Staples Retailing	32%	87%	97%	82%
Food, Beverage & Tobacco	6%	68%	50%	96%
Household & Personal Products	79%	19%	9%	89%
Health Care Equipment & Services	63%	46%	41%	66%
Pharma, Biotech & Life Sciences	60%	80%	89%	59%
Banks	57%	54%	43%	78%
Diversified Financials	27%	84%	50%	81%
Insurance	15%	70%	30%	88%
Software & Services	76%	69%	72%	80%
Technology Hardware & Equipment	16%	70%	78%	6%
Semiconductors & Semi Equipment	58%	63%	75%	41%
Telecommunication Services	5%	58%	21%	37%
Media & Entertainment	72%	50%	83%	89%
Utilities	39%	25%	26%	1%
Real Estate	22%	38%	62%	64%

Source: ClariFi, Morgan Stanley Research



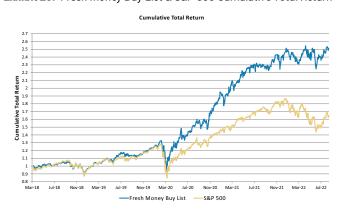
Fresh Money Buy List

Exhibit 19: Fresh Money Buy List - Stats & Performance

O	Thetere	MS Rating	Boting Sector		Beter	MO DT	% to MS	MO Assolved	Date	Total Return S	Since Inclusion
Company Name	Ticker	ivio Rating	Sector	(\$Bn)	Price	MS PT	PT	MS Analyst	Added	Absolute	Rel. to S&P
AT&T, Inc.	Т	Overweight	Communication Services	\$128.9	\$18.09	22.00	21.6%	Flannery, Simon	12/20/2021	5.6%	13.8%
CenterPoint Energy Inc	CNP	Overweight	Utilities	\$20.4	\$32.37	34.00	5.0%	Byrd, Stephen	3/21/2022	12.7%	17.9%
Coca-Cola Co.	КО	Overweight	Consumer Staples	\$279.7	\$64.67	74.00	14.4%	Mohsenian, Dara	3/28/2022	5.9%	12.8%
Exxon Mobil Corporation	XOM	Overweight	Energy	\$413.0	\$99.09	106.00	7.0%	McDermott, Devin	2/22/2021	103.7%	93.8%
Humana Inc	HUM	Equal-Weight	Health Care	\$62.7	\$495.27	494.00	(0.3%)	Ha, Michael	7/19/2018	60.6%	0.5%
McDonald's Corporation	MCD	Overweight	Consumer Discretionary	\$193.2	\$262.56	285.00	8.5%	Glass, John	10/18/2021	10.2%	15.1%
Mondelez International Inc	MDLZ	Overweight	Consumer Staples	\$88.3	\$64.46	70.00	8.6%	Kaufman, Pamela	7/19/2021	2.6%	4.0%
SBA Communications	SBAC	Overweight	Real Estate	\$36.6	\$338.95	361.00	6.5%	Flannery, Simon	6/7/2021	9.5%	8.4%
Simon Property Group Inc	SPG	Overweight	Real Estate	\$35.4	\$108.24	133.00	22.9%	Hill, Richard	2/16/2021	6.5%	(2.7%)
Current List Performance Average (Eq. Weight) Median % Positive Returns (Abs. / Rel.) % Negative Returns (Abs. / Rel.) Avg. Hold Period (Months)				\$139.8 \$88.3			10.5% 8.5%			24.1% 9.5% 100% 0%	18.2% 12.8% 89% 11% 16.0
All Time List Performance Average (Eq. Weight) Median % Positive Returns (Abs. / Rel.) % Negative Returns (Abs. / Rel.) Avg. Hold Period (Months)										32.2% 15.1% 81% 19%	15.8% 12.1% 62% 38% 14.4

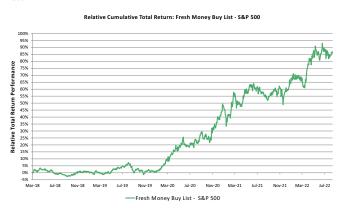
Performance returns shown above and below represent local currency total returns, including dividends and excluding brokerage commission. Returns are calculated using the closing price on the last trading day before the date shown in the "Date Added" column through close on the last trading day prior 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.

Exhibit 20: Fresh Money Buy List & S&P 500 Cumulative Total Return



Source: Bloomberg, Morgan Stanley Research.

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



 $Source: Bloomberg, Morgan\,Stanley\,Research.$

⁺⁺ 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.



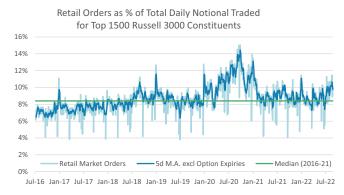
What's Retail Doing?

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:

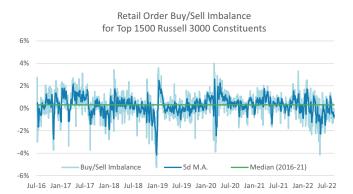
- Retail participation is currently at 9.8% of the total market volume, and at 83rd %ile relative to the last 5 years.
- Order imbalance remains negative last week. It currently sits at -0.6% or 12th percentile relative to the last 5 years.
- Imbalance is mixed on sector level. It is most positive relative to history in Materials (79th %-ile) and Real Estate (71st %-ile). Real Estate is most positive in buy/sell imbalance, while Discretionary is most negative.

Exhibit 22: Retail orders as a % of notional traded above median



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

Exhibit 23: ... and negative in order imbalance



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



Exhibit 24: Retail's buy/sell imbalance is most positive in Real Estate

	Reta	ail Participat	tion	Buy/Sell Imbalance			
Sector	2016-22 Median	Current	p-tile	2016-22 Median	Current	p-tile	
Energy	6.8%	11.7%	1.00	- <mark>0</mark> .28%	0.4%	0.66	
Materials	5.7%	5.8%	0.56	0.5%	1.4%	0.79	
Industrials	6.6%	5.5%	0.07	0.0%	0.4%	0.66	
Consumer Discretionary	11.3%	13.2%	0.80	0.7%	2.0%	0.00	
Consumer Staples	6.0%	5.3%	0.23	- 0.5%	0.9%	0.39	
Health Care	5.9%	4.6%	0.11	0.4%	0.7%	0.43	
Financials	5.6%	5.9%	0.67	0.0%	0.9%	0.26	
Information Technology	10.9%	12.7%	0.86	0.5%	0.4%	0.13	
Communication Services	9.0%	11.8%	0.78	D .3%	0.7%	0.63	
Utilities	3.8%	3.3%	0.22	1.3%	0.6%	0.66	
Real Estate	3.5%	3.3%	0.33	0.5%	1.6%	0.71	
Model Universe (Top 1500)	8.5%	9.8%	0.83	0.3%	<u>-</u> 0.6%	0.12	

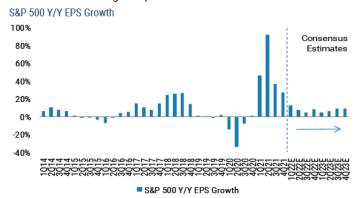
Source: Morgan Stanley Research, Morgan Stanley Quantitative and Derivative Strategies, Compustat

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



Weekly Charts to Watch

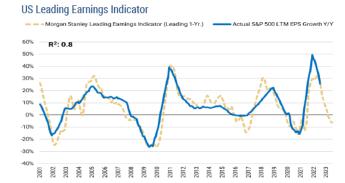
Exhibit 25: US Earnings Snapshot





S&P 500 Earnings Revisions Breadth





Source: Refinitiv, FactSet, Morgan Stanley Research. Top and bottom left: As of August 25, 2022 Bottom right As of July 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 26: S&P 500 Price Target

Morgan Stanley S&P 500 June 2023 Price Target

Landscape	Earnings	Multiple	Price Target	Upside / Downside
Bull Case	\$249	17.9x	4,450	7.0%
Base Case	\$236	16.5x	3,900	-6.2%
Bear Case	\$212	15.9x	3,350	-19.4%
Current S&P 500	Price as of:	8/25/2022	4,158	

Note: We use June 2023 forward earnings to project our price target which takes into account our June '24 earnings forecast (currently \$236 base case). Source: Bloomberg, Morgan Stanley Research

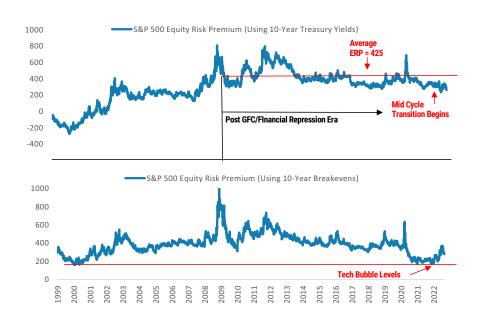


Exhibit 27: Sector Ratings

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

Source: Morgan Stanley Research

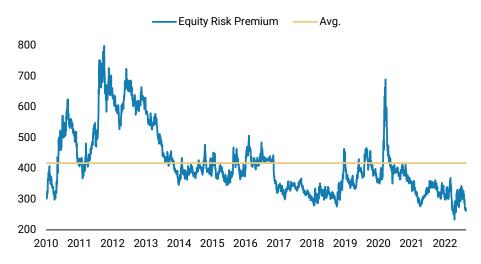
Exhibit 28: S&P 500 Equity Risk Premium using Nominal Rates and Breakevens



Source: Bloomberg, Morgan Stanley Research. As of August 24, 2022

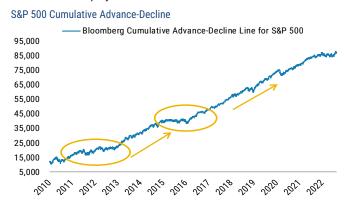


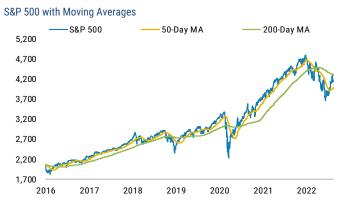
Exhibit 29: Equity Risk Premium is Below Post-GFC Average



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

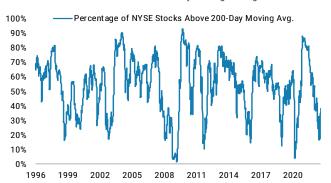
Exhibit 30: US Equity Market Technicals and Financial Conditions





Source: Bloomberg, Morgan Stanley Research. All: As of August 24, 2022

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



Morgan Stanley Financial Conditions Index

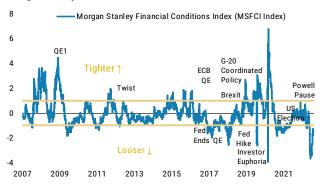
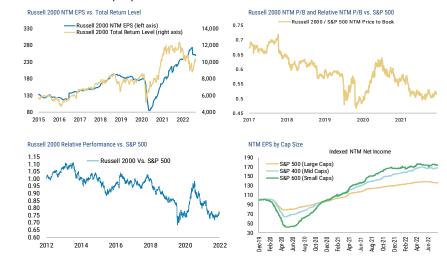


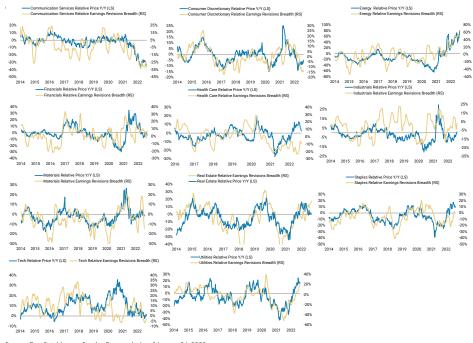


Exhibit 31: US Small Cap Equities



Source: FactSet, Morgan Stanley Research. As of August 25, 2022

Exhibit 32: Earnings Revisions Breadth vs YoY Performance



Source: FactSet, Morgan Stanley Research. As of August 24, 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

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	COVERAGE UN	NIVERSE	INVESTMEN	IT BANKING CLIE	OTHER MAI INVESTMENT (CLIENTS (SERVICES	
STOCK RATING	COUNT	% OF	COUNT	% OF	% OF	COUNT	% OF
CATEGORY		TOTAL		TOTAL IBC	RATING		TOTAL
				(CATEGORY		OTHER
							MISC
Overweight/Buy	1366	39%	318	42%	23%	593	39%
Equal-weight/Hold	1559	44%	357	47%	23%	708	46%
Not-Rated/Hold	0	0%	0	0%	0%	0	0%
Underweight/Sell	613	17%	91	12%	15%	226	15%
TOTAL	3,538		766			1527	

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