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UPDATE

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US Equity Strategy | North America

Weekly Warm-up: Is the Market Trying to Price a Fed Pause?

With equity markets seemingly shrugging off bad news on the economy and earnings, we explore the idea that it may be trying to get ahead of the eventual pause by the Fed that is always a bullish signal. The problem this time is that the pause is likely to come too late.

Is the market trying to price a Fed pause? Bonds have rallied sharply lately presumably due to the ongoing growth slowdown. Meanwhile, the stock market has traded well in the face of weaker economic and earnings data. Is this simply the bond market catching up to the equity market's view on growth, or is the equity market starting to contemplate a Fed pause in its usual attempt to kick save the cycle? We think it's more of the former but believe the equity market may try to dream a bit longer.

This cycle is not like recent ones…. In the last four cycles, the Fed paused it's tightening campaign before recession arrived and the period between the last hike and the recession was good for stocks, often VERY good. However, this cycle is different than anything we have experienced since the early 1980s, due to the high rate of inflation--the last time the Fed had to tighten right into a recession.

Defensive growth will do better than offensive growth as rates fall... Unsurprisingly, growth stocks have staged the biggest rebound as rates have fallen. Investors still have a love affair with growth stocks, particularly tech given their outstanding performance over the past decade. However, many of these stocks are more economically sensitive than many still appreciate and if recession is coming, these stocks will not do well. We would advise sticking with more defensive growth for now.

2Q Earnings Update…. Revision breadth continues to plunge as we enter the heart of earnings season this week. This was especially bad for Consumer Durables, Financials, Industrials, Materials, Semis, Tech Hardware and Telecom Services. We believe this is just the first of what is likely to be several disappointing quarters before estimates finally trough. Therefore, recent positive price action to some earnings cuts is unlikely to be the low for most stocks as it's usually unwise to buy the first cuts when we are entering a major revision cycle.

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

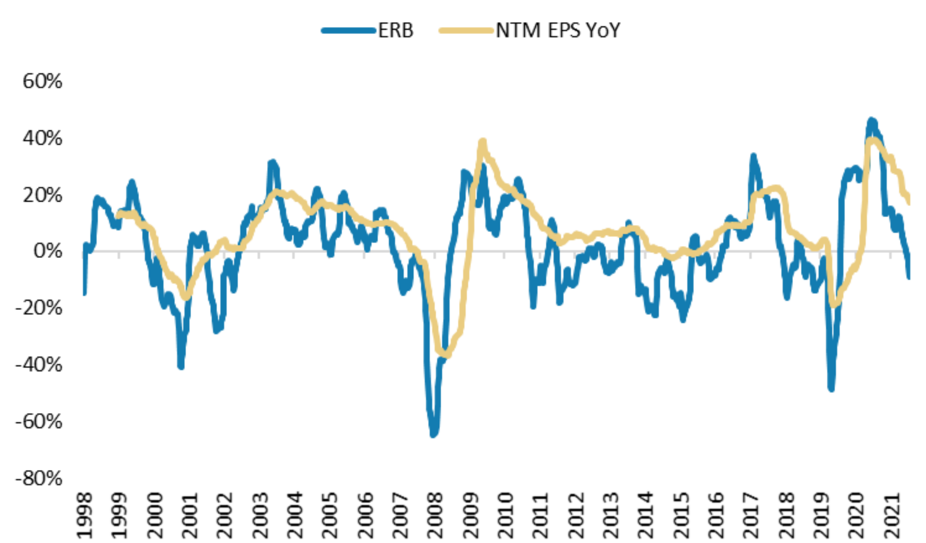
What to Focus on This Week

Is the Market Trying to Price a Fed Pause?

Since the June lows, the US equity market has been range trading between those lows and 3950. However, this past week the S&P 500 peeked its head above the 50 day moving average, touching 4000 for a few hours. While we aren't convinced this is anything but a bear market rally it does beg the question is something going on here we are missing that could make this a more sustainable low and even the end to the bear market?

First, from a fundamental standpoint, we are more convicted in our view that bottoms up NTM S&P 500 earnings estimates are too high and have meaningful (i.e. 10%+) downside from the recent peak of $240. So far, that forecast has only dropped by 0.5% making it difficult for us to agree with the view the market has already priced it. Of course, we could also be wrong about the earnings risk and perhaps the current $238 is an accurate reflection of reality. However, given the extraordinary deterioration in earnings revision breadth (Exhibit 1), we think the evidence is building for our view to play out over the next several months.

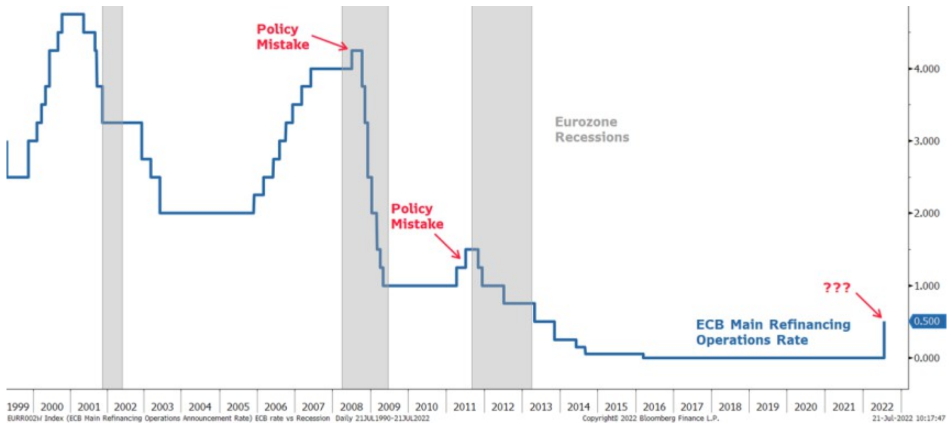
Exhibit 1: Earnings Revision Breadth Falling Sharply and leads NTM EPS estimates.



Source: Factset, Bloomberg, Morgan Stanley Research

Meanwhile, there hasn't been any relief on rates with the ECB finally joining the hiking party last week with it's own 50bps move, the largest in 22 years. We can't help but be reminded of the infamous 25bps hike by the ECB in July 2008, when Europe was already in a recession and just 2 months before the Lehman bankruptcy and onset of the Great Financial Crisis (Exhibit 2). This move seems eerily similar in many ways. Obviously, the rationale for raising rates now is to join the fight against inflation while also defending the Euro against the US Dollar. However, the battle on inflation should have begun a year ago, not now when demand destruction is already well developed and likely to take care of inflation on its own. If that wasn't enough, the ECB's rate hikes in 2011 also look unnecessary in hindsight with recession likely already baked before those two 25bps increases. Could this time be different? It seems unlikely with Eurozone GDP growth fast approaching zero and likely to move into negative territory soon.

Exhibit 2: Past as Prologue--ECB finally raising rates just as Europe is likely entering a recession



Source: Bloomberg, Morgan Stanley Research

With many/most of our leading indicators on growth rolling over hard (Exhibits 3-6), we continue to think this is the more important variable to watch for stocks at this point rather than inflation or the Fed's reaction to it. Having said that, we do agree with the narrative that inflation has likely peaked from a rate of change standpoint with commodities as the best real time evidence of that claim. We think the equity market is smart enough to understand this too and more importantly that growth is quickly becoming a problem. Therefore, part of the recent rally may be the Equity market looking forward to the Fed's eventual attempt to save the cycle from recession and with time running short on that front, that opportunity is now or never.

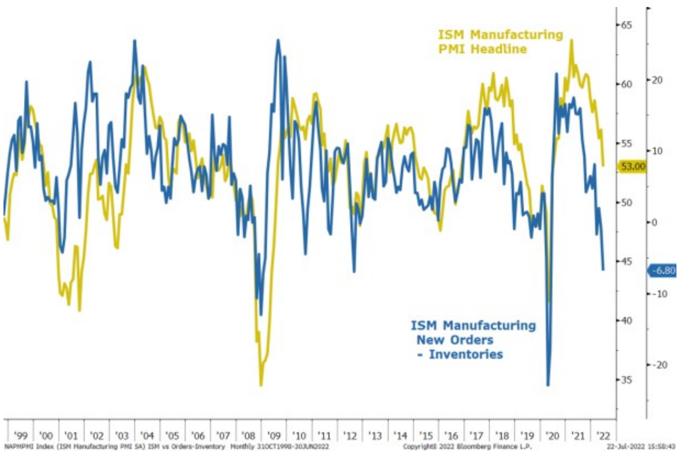
Exhibit 3: Home Sales Drive Economy

Source: Bloomberg, Morgan Stanley Research

Exhibit 4: UMich Leads Conf Board/Labor

Source: Bloomberg, Morgan Stanley Research

Exhibit 5: ISM PMIs are Headed Lower



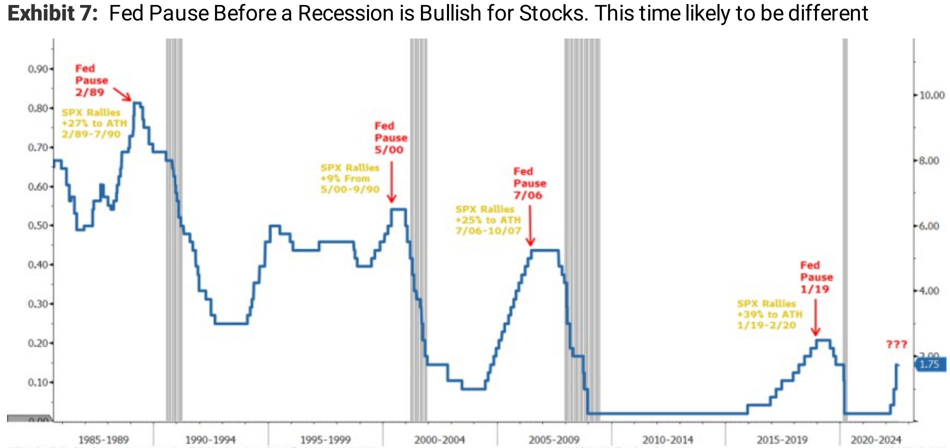
Source: Bloomberg, Morgan Stanley Research

Exhibit 6: Which Bodes Poorly for Stocks

Source: Bloomberg, Morgan Stanley Research

In looking at past cycles, there is always a period between the Fed's last hike and the eventual recession--i.e. the Fed is typically long done raising rates before the recession arrives. This is in sharp contrast to the European Central Bank which was still tightening when the last two recessions began. More importantly, this period between the last Fed hike and the eventual recession has been a good time to be long the S&P 500 and many stocks/sectors (Exhibit 7). In short, the Equity market always rallies when the Fed pauses it's tightening campaign prior to the oncoming recession. In some cases, it's significant and the S&P 500 usually makes a new all time high. The point here is that IF the market is starting to think the Fed is about to pause rate hikes after next week's move, this would provide the best fundamental rationale for why equity markets have rallied so sharply over the past few weeks and why it might signal a more durable low.

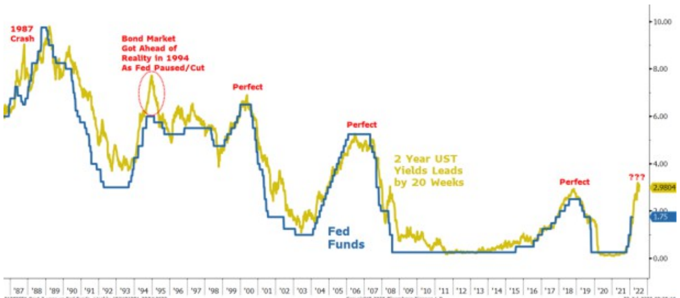
Exhibit 7: Fed Pause Before a Recession is Bullish for Stocks. This time likely to be different



Source: Bloomberg, Morgan Stanley Research

So why would equity markets be thinking the Fed is about to pause or slow rate hikes or even QT? Part of the reason is the fact that they are having their desired effect on demand (see above) and so it seems quite plausible inflation could look considerably lower in 6 months time. Second, the bond market is sending similar signals with rate *cuts* now getting priced as early as the Fed's early February 2023 meeting and the terminal rate and 2 year yields starting to fall. This is very much in line with our own thinking and why we have been bullish on long duration Treasuries over the past several months which is supportive of our defensive sector preference. Of course, lower back end rates (both nominal and real) can also be interpreted as good for longer duration growth stocks, particularly relative to value/cyclicals. This helps explain not only the rally in the S&P 500 but also the relative outperformance of the Nasdaq and other growth indices relative to value stocks.

Exhibit 8: 2 Year Yields No Longer Rising



Source: Bloomberg, Morgan Stanley Research

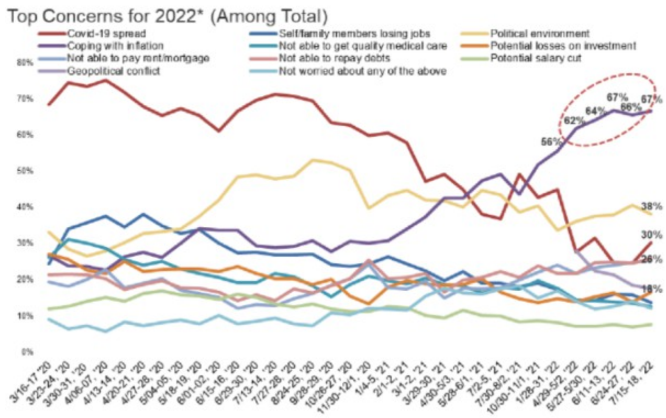
Exhibit 9: As Terminal Fed Funds Rate Falls

Source: Bloomberg, Morgan Stanley Research

The problem with this thinking beyond a near term rally is that it's unlikely the Fed is going to pause early enough to kick save the cycle. While we appreciate that the market (and investors) may be trying to leap ahead here to get in front of what could be a bullish signal for equity valuations, we remain skeptical that the Fed can reverse the negative trends for demand that are now well established, some of which have nothing to do with monetary policy--i.e. payback in demand and out of sync cost structures with too little pricing power to offset at this point. Furthermore, the demand destructive nature of high inflation that is presenting itself today (see our latest Alpha Wise Consumer Survey published last Friday) will not easily disappear even if inflation declines sharply because prices are already out of reach in areas of the economy that are critical for the cycle to extend--i.e. housing, autos, food, gasoline and other necessities. Remember, lower inflation does not mean negative price changes for many of these items and to the extent deflation does return via discounting to drive demand, rest assured that will not be good for profit margins and/or earnings revisions.

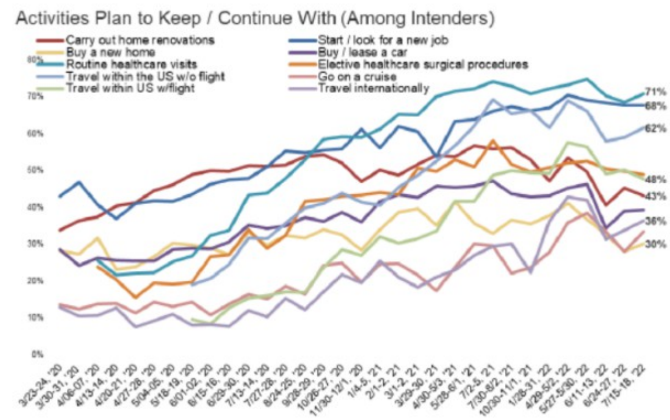
Specifically, the survey shows consumer intentions to spend over the next 6 months continues to deteriorate rapidly, even for things like travel and leisure, the area of spend that was supposed to offset the obvious payback on goods spending that is now well established. Moreover, in speaking with our industry analysts, we have encountered increasing concern about deteriorating volume demand in many categories of discretionary spend and discounting returning. Finally consumer delinquencies are picking up too in several categories of spend with AT&T mentioning this specifically for cell phone bills which tends to be one of the last things people stop paying. Car payments are the other one that is last to stop and here too we are hearing about rising delinquencies from recent buyers who borrowed more than they should have been allowed based on inflated incomes from the stimulus checks.

Exhibit 10: Inflation Still the #1 Problem



Source: MS Alpha Wise Consumer Survey

Exhibit 11: Travel Intentions are falling



Source: MS Alpha Wise Consumer Survey

In addition to 2 year UST yields and the terminal rate falling, the 10-2s curve remains inverted by approximately 20bps. While the bond market has been pre-occupied with the generationally high inflation readings and the Fed's reaction to it, we think it is now starting to contemplate the impact of both on growth. In that regard, the bond market is catching up to the equity market. Ironically, the equity market is taking the lower yields signal as a positive for stocks, particularly growth stocks as it starts to give credibility again to the soft landing scenario after having moved away from that view so aggressively in June. Our take is that this view could persist into August if the Fed throws the markets a bone next week and insinuates it has done enough for now. While that's not our call or view for next week's meeting, anything can happen in what has been an extremely unpredictable Fed that virtually no one has gotten right this year as they deviated so much from their "guidance" due to inflation surprising so much on the upside. Even our more hawkish view than consensus at the beginning of the year which was the primary feature of our Fire and Ice narrative was far surpassed as the Fed was forced to play catch up in a way that was totally mis-priced by markets just 6 months ago. We can't say that today with the curve inverted and the terminal rate still 175 basis points above the current Fed Funds rate. As a final comment for equity investors to consider....if the Fed was so off on its guidance this year due to the surprising economic and inflation outcome, perhaps this is a precursor to how bad company guidance for the year will turn out to be. The bottom line is that the Fed is looking more like the ECB this cycle in that they are likely to still be tightening when recession arrives this time making the window to trade the pause much shorter than usual with less upside as well.

Defensive Growth Should Beat Offensive Growth as Rates/Growth fall

As we just laid out the case for why stocks have likely rallied in the face of weaker earnings results, it makes sense why growth stocks came back to life. However, as we have been saying all year we think this time is going to be different because many of these companies, particularly in the technology sector, are going to miss earnings estimates more than most investors think. This is not just about interest rates rising and multiples. Earnings are next and that risk is just starting with 2Q results and guidance. Check out the next section for details on how revisions are faring for each industry group. It's not pretty, especially for the more economically sensitive areas of the economy, which includes technology.

Part of our negative case on growth is being driven by the margin pressure created from costs now rising faster than end price combined with a payback in demand for many things over consumed during the pandemic. The other major concern is the economic slowdown occurring as a natural evolution of the business cycle which has been tracking worse than expected all year. Perhaps there is no better real time data point for broad economic growth than the PMIs. On this score, last week's Philly Fed and S&P Global PMIs signaled the downtrend is accelerating. Currently, the more national ISM l PMIs are still well above 50 but based on the internals of the surveys (Orders - Inventories) and the regional surveys, we think it's just a matter of time before they fall below 50 and it could be next month. Just to remind readers, in a recession the average mfg PMI doesn't bottom out until we reach 43 on average and the S&P 500 never bottoms more than a month ahead of the trough while usually bottoming after. In other words, we got some wood to chop. As illustrated in Exhibit 6 above, the PMIs we are expecting are not yet priced at the S&P 500 level. We decided to take a look at what each industry group is currently pricing for the PMI and here too it shows many economically sensitive groups appear inflated the most. Defensives are less sensitive to this dynamic which is why we continue to prefer them.

What PMI levels are various industry groups currently pricing?... For industry groups with a strong positive correlation between rate of change on price and PMIs, we looked at what PMI levels various industry groups are priced for today. We ran this analysis at the industry group level (GICS level 2) for both the manufacturing and composite PMI (Exhibit 12 and Exhibit 13), as well as at the industry level (GICS level 3) for both PMI gauges (Exhibit 14 and Exhibit 15). Generally, we find that groups are optimistically priced for the current PMI backdrop (which is consistent with our PMI/ERP framework that suggests the market's ERP is too low for the current PMI environment). We think this valuation risk is now magnified given the recent weakness in the S&P Global PMI/other recent manufacturing survey data which suggest that the ISMs (which we used for the analysis below and use in our ERP framework) are likely headed lower.

At the industry group level vs. the composite ISM PMI, we find that Insurance, Autos, Tech Hardware, Real Estate and Diversified Financials are most optimistically priced. Meanwhile, we find that Media & Entertainment, Retailing, and Consumer Durables & Apparel are less optimistically priced. That said, even the least optimistically priced cohort (Media & Entertainment) is priced for a composite PMI of 53.9, just below the current level of 55. Assuming the composite PMI decelerates to at least 50 in a soft landing and the low 40s in a recession, all of these groups listed have further price downside ahead based on this historical regression analysis. As mentioned, Exhibit 12 is the same analysis, but compares price to manufacturing PMI, and Exhibit 14 and Exhibit 15 contain detail at the industry level (GICs level 3). The bottom line, if PMIs fall like we expect, most of the market is mis-priced, it's not just a few sectors or stocks.

Exhibit 12: Mfg. PMI Levels vs Industry Groups (GICs Level 2) Pricing.

Manufacturing PMI

Industry Group	Correlation	Implied PMI (Current Level: 53)
Media & Entertainment	0.67	49.0
Retailing	0.55	50.4
Software & Services	0.57	50.7
Consumer Durables & Apparel	0.55	52.3
Transportation	0.77	53.8
Capital Goods	0.66	54.5
Semiconductors & Semiconductor Equipment	0.66	54.6
Consumer Services	0.47	55.1
Materials	0.70	55.4
Health Care Equipment & Services	0.52	56.2
Banks	0.58	57.0
Diversified Financials	0.61	57.0
Technology Hardware & Equipment	0.55	58.2
Automobiles & Components	0.69	59.0
Insurance	0.51	61.3

Source: Bloomberg, ClariFi, Morgan Stanley Research

Exhibit 13: Composite PMI Levels vs Industry Groups (GICs Level 2) Pricing.

Composite PMI

Industry Group	Correlation	Implied PMI (Current Level: 55)
Media & Entertainment	0.58	53.9
Retailing	0.49	54.6
Consumer Durables & Apparel	0.58	54.6
Software & Services	0.49	55.1
Consumer Services	0.56	56.2
Transportation	0.74	56.3
Capital Goods	0.64	56.7
Materials	0.65	57.6
Semiconductors & Semiconductor Equipment	0.52	57.8
Health Care Equipment & Services	0.50	57.9
Banks	0.63	58.1
Diversified Financials	0.57	58.6
Real Estate	0.50	58.8
Technology Hardware & Equipment	0.50	59.5
Automobiles & Components	0.56	60.2
Insurance	0.55	61.4

Source: Bloomberg, ClariFi, Morgan Stanley Research

Exhibit 14: Mfg. PMI Levels vs Industries (GICs Level 3) Pricing.

Manufacturing PMI

Industry	Correlation	Implied PMI (Current Level: 53)
Entertainment	0.62	48.5
IT Services	0.47	50.4
Internet & Direct Marketing Retail	0.52	52.7
Health Care Equipment & Supplies	0.45	53.1
Interactive Media & Services	0.57	53.4
Electrical Equipment	0.65	53.8
Software	0.55	53.9
Road & Rail	0.67	54.1
Media	0.48	54.2
Semiconductors & Semiconductor Equipment	0.66	54.6
Machinery	0.75	54.7
Hotels, Restaurants & Leisure	0.49	55.2
Life Sciences Tools & Services	0.55	55.2
Chemicals	0.60	55.6
Electronic Equipment, Instruments & Components	0.73	55.9
Household Durables	0.50	56.3
Banks	0.59	56.9
Capital Markets	0.56	57.2
Metals & Mining	0.70	59.2
Computers & Peripherals	0.47	59.2
Diversified Financial Services	0.54	59.3
Insurance	0.51	61.3
Health Care Providers & Services	0.46	61.9

Source: Bloomberg, ClariFi, Morgan Stanley Research

Exhibit 15: Composite PMI Levels vs Industries (GICs Level 3) Pricing

Composite PMI

Industry	Correlation	Implied PMI (Current Level: 55)
Entertainment	0.55	53.4
IT Services	0.46	53.9
Hotels, Restaurants & Leisure	0.58	56.2
Textiles, Apparel & Luxury Goods	0.49	56.3
Media	0.47	56.5
Electrical Equipment	0.60	56.5
Road & Rail	0.64	56.6
Machinery	0.69	57.2
Household Durables	0.54	57.6
Chemicals	0.57	57.7
Semiconductors & Semiconductor Equipment	0.52	57.8
Life Sciences Tools & Services	0.47	57.8
Specialty Retail	0.48	57.9
Banks	0.64	58.1
Electronic Equipment, Instruments & Components	0.62	58.2
Capital Markets	0.50	58.9
Real Estate Investment Trusts (REITs)	0.49	59.0
Diversified Financial Services	0.49	60.2
Metals & Mining	0.59	60.2
Insurance	0.55	61.4
Health Care Providers & Services	0.48	61.9
Energy Equipment & Services	0.46	63.3

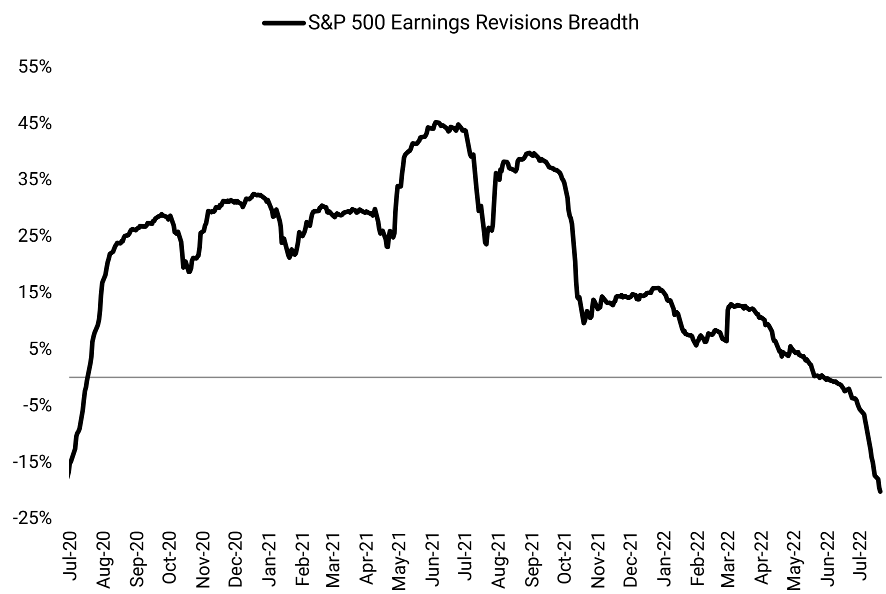
Source: Bloomberg, ClariFi, Morgan Stanley Research

2Q Earnings Update

Earnings revisions breadth is a key measure to track and it is currently negative telling us that more analysts are cutting their estimates than revising them higher. Anecdotally, the Research Department has put out a report called Conviction Into Earnings since 2015 highlighting analysts' highest conviction calls into earnings season. For the first time in the report's history more of the high conviction ideas were negative rather than positive. S&P 500 earnings revisions breadth has dropped sharply throughout the month falling 14% and now sits at -20%.

We looked at the way revisions breadth has evolved at the sector and industry group level over the past month. **Revisions breadth has dropped sharply over the past month for nearly every sector and industry group ranging from -45% to -28%.** The biggest declines Transportation, Materials, Insurance, and Consumer Durables. Semiconductors have also fared poorly. There were a modest few bright spots in Media, Health Care, & Household/Personal Products. We will continue tracking this metric closely and a sharp drop in earnings revisions breadth typically leads a significant drop in year over year forward earnings.

Exhibit 16: Earnings Revisions Breadth has Plummeted



Source: FactSet, Morgan Stanley Research

Exhibit 17: Change in Absolute Earnings Revisions Breadth by Sector & Industry Group

Earnings Revisions Breadth Change

Sector, Industry Group	1-Jul	21-Jul	Change
Communication Services	-38.3%	-35.4%	2.9%
Media & Ent	-44.2%	-37.3%	6.9%
Telecom	15.7%	-10.5%	-26.1%
Consumer Discretionary	-21.6%	-31.3%	-9.6%
Autos	-14.8%	-23.7%	-9.0%
Consumer Durables	-29.6%	-57.1%	-27.5%
Consumer Services	-25.3%	-29.4%	-4.1%
Retailing	-14.7%	-19.2%	-4.4%
Energy	52.3%	31.7%	-20.6%
Financials	-5.9%	-18.7%	-12.8%
Banks	11.4%	4.3%	-7.1%
Diversified Financials	-34.4%	-38.2%	-3.8%
Insurance	11.8%	-21.7%	-33.5%
Health Care	-24.8%	-21.8%	3.0%
HC Equipment & Services	-28.4%	-24.6%	3.7%
Pharma, Biotech, & Life Sciences	-20.6%	-18.3%	2.2%
Industrials	4.3%	-28.4%	-32.7%
Capital Goods	-3.6%	-35.2%	-31.7%
Commercial & Professional Services	0.7%	-11.1%	-11.9%
Transportation	27.1%	-18.0%	-45.1%
Materials	9.4%	-26.9%	-36.4%
Real Estate	3.6%	-4.8%	-8.4%
Staples	-7.2%	-16.2%	-9.0%
Food & Staples Retailing	-5.9%	-8.8%	-3.0%
Food Beverage & Tobacco	7.3%	-10.2%	-17.5%
Household & Personal Products	-49.6%	-40.5%	9.1%
Tech	-13.4%	-24.8%	-11.4%
Semis	0.6%	-25.8%	-26.5%
Software & Services	-5.4%	-13.3%	-7.9%
Tech Hardware	-14.9%	-31.6%	-16.7%
Utilities	3.4%	-0.7%	-4.1%
S&P 500	-5.6%	-19.8%	-14.2%

Source: FactSet, Morgan Stanley Research

We show how consensus 2Q '22, calendar '22 and calendar '23 dollar EPS estimates have evolved YTD and since June in Exhibit 18. Year to date, earnings have been revised modestly higher for the second quarter with numbers being driven by Energy's 135% revision upwards. The biggest drag on earnings has come from Consumer Discretionary and Media & Entertainment. The vast majority of industry groups have seen earnings estimates revised lower and many in the double digits.

Exhibit 18: Revisions to 2Q22, 2022, and 2023 Earnings Estimates

	YTD			Since 6/30		
Sector, Industry Group	**2Q22**	**2022**	**2023**	**2Q22**	**2022**	**2023**
Communication Services	-12.5%	-8.7%	-8.5%	-0.5%	-1.1%	-2.2%
Media & Entertainment	-13.9%	-9.6%	-9.3%	-0.7%	-1.3%	-2.6%
Telecom	-4.7%	-2.3%	-2.1%	0.1%	-0.7%	-0.7%
Consumer Discretionary	-25.0%	-17.0%	-9.1%	-2.2%	-1.2%	-1.7%
Autos	-16.4%	7.3%	6.8%	-6.2%	1.0%	-0.8%
Consumer Durables	3.3%	1.1%	-9.3%	1.4%	-0.8%	-1.3%
Consumer Services	-46.6%	-31.9%	-8.7%	-0.3%	-0.5%	-2.0%
Retailing	-29.3%	-25.9%	-13.9%	-2.5%	-2.5%	-2.1%
Energy	134.5%	96.8%	76.8%	14.7%	8.1%	4.2%
Financials	-8.5%	-3.1%	-0.7%	-2.7%	-1.8%	-1.4%
Banks	-5.5%	-0.4%	2.4%	-2.7%	-0.8%	-0.7%
Diversified Financials	-9.5%	-5.8%	-4.8%	-0.5%	-2.0%	-2.5%
Insurance	-13.1%	-3.3%	1.5%	-7.6%	-3.6%	-0.8%
Health Care	-2.2%	-1.1%	-2.5%	1.1%	-0.3%	-0.5%
HC Equipment & Services	-2.1%	-0.8%	-3.1%	3.6%	0.2%	-0.6%
Pharma, Biotech, & Life Sciences	-2.3%	-1.2%	-2.1%	-0.2%	-0.5%	-0.5%
Industrials	-4.6%	-2.1%	-1.3%	-4.0%	-1.2%	-1.8%
Capital Goods	-13.5%	-5.0%	-1.6%	-6.0%	-1.6%	-1.4%
Commercial & Professional Services	1.3%	3.0%	0.7%	0.2%	-0.4%	-0.6%
Transportation	14.6%	3.2%	-1.3%	-1.0%	-0.5%	-2.9%
Materials	12.2%	11.8%	7.6%	-1.7%	-2.7%	-2.8%
Real Estate	3.9%	4.3%	2.6%	-0.7%	-0.3%	0.1%
Staples	-3.8%	-2.3%	-3.3%	2.3%	-0.4%	-0.9%
Food & Staples Retailing	-2.6%	-0.4%	-0.7%	-0.1%	0.0%	-0.2%
Food Beverage & Tobacco	-1.7%	-1.7%	-3.3%	3.8%	-0.4%	-0.7%
Household & Personal Products	-12.8%	-6.2%	-6.5%	0.1%	-1.0%	-2.1%
Tech	-2.1%	1.6%	0.2%	0.0%	-1.2%	-2.1%
Semis	5.0%	4.2%	0.9%	0.5%	-3.0%	-5.8%
Software & Services	-4.5%	-1.3%	-1.9%	-0.1%	-0.6%	-0.6%
Tech Hardware	-5.1%	3.4%	2.5%	-0.2%	-0.4%	-0.7%
Utilities	-4.1%	2.4%	0.8%	-1.7%	2.1%	0.0%
S&P 500	1.3%	2.5%	1.1%	0.8%	-0.2%	-1.1%

Source: FactSet, Morgan Stanley Research

Exhibit 19 shows a summary of earnings season thus far. The vast majority of companies that have reported have come in at or above expectations with only 16% missing estimates. Year over year earnings growth is up a modest 4% with Energy and Transportation posting the best results. Consumer Discretionary, Financials, and Utilities are expected to see the worst results but it remains early in the reporting season.

Exhibit 19: Earnings Summary

S&P 500 2Q22 Preliminary Earnings Analysis							
	Surprise Ratios			$ Actual vs. Est.	$ Actual vs. Est.	**2Q22 Y/Y	Growth
Sector	Above	At/Above	Below	2Q22	1Q22	%	Contribution
Communication Services	**100%**	**100%**	**0%**	**7.6%**	**2.0%**	**-29.8%**	**-2.2%**
Media & Entertainment	*100%*	*100%*	*0%*	*8.3%*	*1.5%*	*-39.5%*	*-1.7%*
Telecommunication Services	*100%*	*100%*	*0%*	*7.3%*	*3.8%*	*-16.6%*	*-0.5%*
Consumer Discretionary	**33%**	**83%**	**17%**	**6.5%**	**6.0%**	**-8.0%**	**-0.7%**
Automobiles & Components	*100%*	*100%*	*0%*	*25.1%*	*24.5%*	*30.2%*	*0.3%*
Consumer Durables & Apparel	*75%*	*100%*	*0%*	*9.6%*	*8.3%*	*15.2%*	*0.2%*
Consumer Services	*0%*	*50%*	*50%*	*-59.0%*	*-192.7%*	*NA*	*0.5%*
Retailing	*0%*	*100%*	*0%*	*1.9%*	*1.3%*	*-31.2%*	*-1.7%*
Consumer Staples	**57%**	**86%**	**14%**	**9.1%**	**6.8%**	**0.4%**	**0.0%**
Food & Staples Retailing	*0%*	*100%*	*0%*	*4.0%*	*0.9%*	*2.6%*	*0.0%*
Food Beverage & Tobacco	*67%*	*83%*	*17%*	*9.7%*	*9.6%*	*0.2%*	*0.0%*
Household & Personal Products	*0%*	*0%*	*0%*	*0.0%*	*4.8%*	*-1.6%*	*0.0%*
Energy	**33%**	**67%**	**33%**	**-6.1%**	**5.2%**	**254.8%**	**9.4%**
Financials	**36%**	**82%**	**18%**	**3.6%**	**11.1%**	**-25.5%**	**-5.3%**
Banks	*19%*	*75%*	*25%*	*3.0%*	*13.6%*	*-28.0%*	*-2.7%*
Diversified Financials	*46%*	*85%*	*15%*	*3.3%*	*9.6%*	*-18.7%*	*-1.4%*
Insurance	*75%*	*100%*	*0%*	*13.8%*	*8.6%*	*-32.9%*	*-1.2%*
Health Care	**44%**	**100%**	**0%**	**8.2%**	**9.2%**	**2.9%**	**0.5%**
Health Care Equipment & Services	*40%*	*100%*	*0%*	*10.0%*	*5.5%*	*-1.7%*	*-0.1%*
Pharmaceuticals Biotechnology & Life Sciences	*50%*	*100%*	*0%*	*6.4%*	*11.3%*	*5.5%*	*0.6%*
Industrials	**27%**	**80%**	**20%**	**-2.3%**	**2.7%**	**23.2%**	**1.6%**
Capital Goods	*25%*	*75%*	*25%*	*-9.0%*	*0.6%*	*-2.8%*	*-0.1%*
Commercial & Professional Services	*33%*	*100%*	*0%*	*3.7%*	*7.4%*	*9.2%*	*0.1%*
Transportation	*25%*	*75%*	*25%*	*-1.7%*	*10.7%*	*159.7%*	*1.7%*
Information Technology	**29%**	**86%**	**14%**	**3.7%**	**5.4%**	**1.3%**	**0.3%**
Semiconductors & Semiconductor Equipment	*100%*	*100%*	*0%*	*6.5%*	*7.2%*	*12.1%*	*0.7%*
Software & Services	*20%*	*100%*	*0%*	*3.7%*	*4.2%*	*2.8%*	*0.3%*
Technology Hardware & Equipment	*0%*	*0%*	*100%*	*-16.3%*	*5.6%*	*-9.2%*	*-0.7%*
Materials	*50%*	*75%*	*25%*	*7.6%*	*8.6%*	*14.7%*	*0.6%*
Real Estate	*0%*	*100%*	*0%*	*0.0%*	*4.1%*	*9.9%*	*0.3%*
Utilities	*0%*	*0%*	*0%*	*0.0%*	*15.6%*	*-13.9%*	*-0.4%*
S&P 500	**39%**	**84%**	**16%**	**4.7%**	**6.9%**	**4.2%**	**4.2%**

Source: FactSet, Refinitiv, Morgan Stanley Research

Factor Update

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

- Quality has underperformed Junk (-3.1% relative return) and the overall market (-2.2% relative return versus the overall Top 1,000 universe).
- Value has underperformed Growth (-4.4%) and the overall market (-1.7% relative return).
- Cyclicals are up +7.4% in absolute terms, underperforming Defensives (-0.2%); but that performance spread turns positive when we exclude Energy from Cyclicals, which has seen recent pull back in crude prices; Cyclicals-Ex Energy have outperformed Defensives by +1.1%.
- High Momentum stocks have underperformed low momentum stocks (-8.2% relative return), and the overall market (-3.5% relative return).
- Small Caps have outperformed Large Caps.

Exhibit 20: Top 1,000 Factor Returns

Top 1000 Factor Return as of Jul 21, 2022

Factor	1 Week			1 Month			YTD Ret	12M Ret
	Ret	1W Chg	1M Chg	Ret	1M Chg	3M Chg		
Quality / Junk	-4.2%	↓	↓	-3.1%	↓	↓	7.6%	14.2%
Quality	4.5%	↑	↑	5.6%	↑	↑	-11.4%	-3.1%
Junk	8.7%	↑	↑	8.7%	↑	↑	-19.0%	-17.3%
Value / Growth	-2.5%	↓	↓	-4.4%	↓	↓	16.7%	22.0%
Value	6.3%	↑	↑	6.1%	↑	↑	-8.5%	-2.2%
Growth	8.7%	↑	↑	10.4%	↑	↑	-25.1%	-24.1%
Cyclical / Defensive	4.5%	↑	↑	-0.2%	↑	↑	-4.6%	-5.3%
Cyclical	9.5%	↑	↑	7.4%	↑	↑	-16.7%	-11.9%
Defensive	5.0%	↑	↑	7.6%	↑	↑	-12.0%	-6.6%
Cyclical xEnergy / Defensive	4.6%	↑	↑	1.1%	↑	↑	-8.5%	-10.2%
Cyclical xEnergy	9.5%	↑	↑	8.7%	↑	↑	-20.5%	-16.8%
12M Momentum	-6.1%	↓	↓	-8.2%	↓	↓	-2.8%	3.4%
High Momentum	4.5%	↑	↑	4.3%	↑	↑	-19.4%	-14.8%
Low Momentum	10.6%	↑	↑	12.4%	↑	↑	-16.6%	-18.3%
Size (Small / Large)	3.4%	↑	↑	3.8%	↑	↑	0.2%	-5.8%
Small Cap	9.2%	↑	↑	9.3%	↑	↑	-15.3%	-14.9%
Large Cap	5.9%	↑	↑	5.5%	↑	↑	-15.6%	-9.1%

Source: ClariFi, Morgan Stanley Research

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

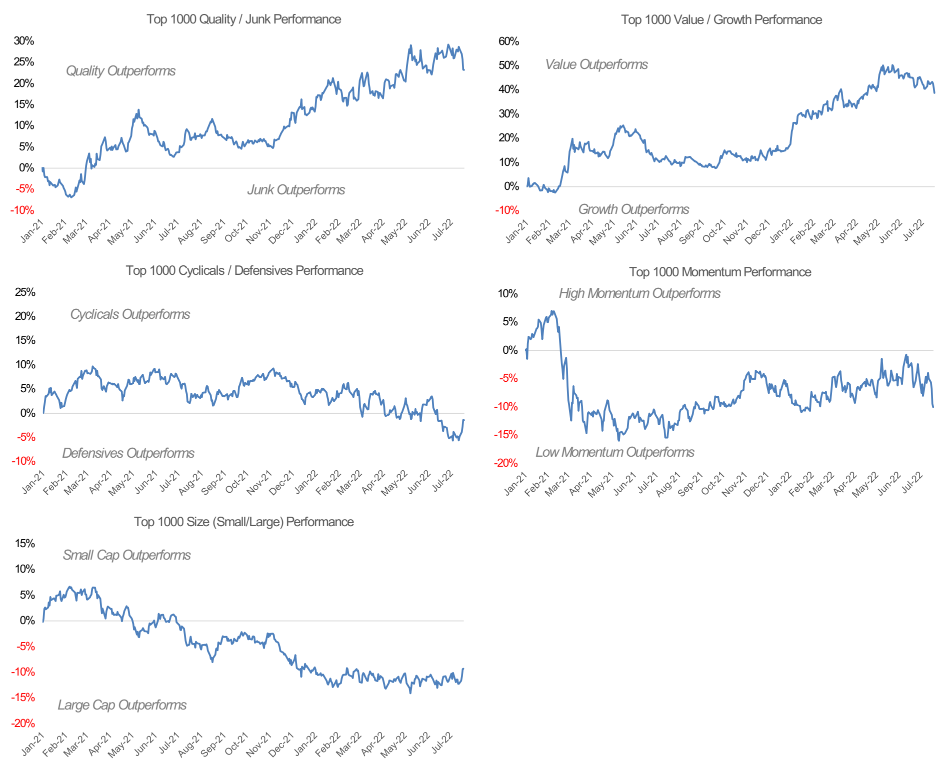
Top 1000 Excess Factor Return versus Broader Top 1000 Return as of Jul 21, 2022

Factor	1 Week			1 Month			YTD Ret	12M Ret
	Ret	1W Chg	1M Chg	Ret	1M Chg	3M Chg		
Quality / Junk								
Quality	-2.8%	↓	↓	-2.2%	↓	↓	4.6%	8.9%
Junk	1.5%	↑	↑	0.9%	↑	↑	-3.0%	-5.4%
Value / Growth								
Value	-1.0%	↓	↓	-1.7%	↓	↓	7.5%	9.8%
Growth	1.5%	↑	↑	2.6%	↑	↑	-9.1%	-12.1%
Cyclical / Defensive								
Cyclical	2.2%	↑	↑	-0.4%	↑	↑	-0.6%	0.0%
Defensive	-2.3%	↓	↓	-0.2%	↓	↓	4.0%	5.4%
Cyclical xEnergy / Defensive								
Cyclical xEnergy	2.3%	↑	↑	0.9%	↑	↑	-4.5%	-4.8%
Momentum								
High Momentum	-2.7%	↓	↓	-3.5%	↓	↓	-3.4%	-2.8%
Low Momentum	3.4%	↑	↑	4.6%	↑	↑	-0.6%	-6.3%
Size (Small / Large)								
Small Cap	2.0%	↑	↑	1.5%	↑	↑	0.7%	-2.9%
Large Cap	-1.4%	↓	↓	-2.3%	↓	↓	0.5%	2.9%

Source: ClariFi, Morgan Stanley Research

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

Exhibit 22: Cumulative Factor Performance Since 2021



Source: ClariFi, Morgan Stanley Research

We include an extensive list of factors and their returns in Exhibit 23. We break down the factor spread return by their long and short portfolio and display the top and bottom performing portfolio legs last month in Exhibit 24.

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

Equal Weighted Factor Return (Spread) in Top 1000 as of Jul 21, 2022

Factor Name	1 Week			1 Month			3M Ret	YTD Ret	12M Ret
	Ret	1W Chg	1M Chg	Ret	1M Chg	3M Chg			
1-Month Reversal (Low vs High)	5.4%	↑	↑	5.2%	↑	↑	4.6%	-3.3%	-7.9%
5-Year Sales Growth (High vs Low)	3.4%	↑	↑	4.1%	↑	↑	-3.8%	-18.3%	-24.7%
Size (Small vs Large)	3.4%	↑	↑	3.8%	↑	↑	1.9%	0.2%	-5.8%
1-Year Sales Growth (High vs Low)	4.4%	↑	↑	3.3%	↑	↑	-5.1%	-19.9%	-24.0%
Forecast long term growth (High vs Low)	2.2%	↑	↑	2.4%	↑	↑	-2.7%	-5.2%	-1.0%
5-Year EPS Growth (High vs Low)	1.8%	↑	↑	2.3%	↑	↑	0.3%	-6.1%	-3.5%
ROE Variability (Low vs High)	-1.2%	↓	↓	1.5%	↓	↑	4.8%	0.6%	3.2%
Debt-to-EBITDA (Low vs High)	0.9%	↑	↓	1.5%	↑	↑	-2.3%	-9.6%	-13.1%
Receivables Turnover (High vs Low)	-0.4%	↓	↓	1.4%	↑	↑	-1.0%	0.6%	0.8%
1-Month Estimate Revisions (%) (High vs Low)	2.0%	↑	↑	1.3%	↑	↑	-4.5%	-7.1%	-5.1%
1-Year Dividend per share growth (High vs Low)	1.3%	↑	↑	1.2%	↑	↑	2.4%	0.2%	3.1%
Composite Sentiment (High vs Low)	1.7%	↑	↑	1.0%	↓	↑	-0.1%	-4.8%	-0.7%
Industry Cyclical vs Defensive	5.6%	↑	↑	0.8%	↑	↑	-1.2%	-3.8%	1.2%
Net Debt-to-Market Cap (Low vs High)	-0.1%	↑	↓	0.7%	↓	↑	1.4%	-12.4%	-16.9%
Cash Ratio (High vs Low)	2.2%	↑	↓	0.7%	↓	↑	-1.8%	-12.5%	-21.8%
Profitability (High vs Low)	-0.3%	↓	↓	0.6%	↓	↑	1.7%	-2.4%	-1.6%
Inventory-to-Sales (Low vs High)	-0.4%	↓	↓	0.6%	↓	↓	-1.6%	2.2%	2.2%
Smoothed Estimate Revisions (%) (High vs Low)	0.5%	↑	↑	0.6%	↑	↑	-2.2%	-3.8%	3.0%
CapEx-to-Sales (Low vs High)	-0.3%	↓	↑	0.5%	↓	↓	3.8%	6.0%	6.1%
Earnings Estimate Revisions (High vs Low)	0.8%	↑	↑	0.4%	↑	↑	-1.2%	-1.2%	7.5%
5-Year Dividend per share growth (High vs Low)	-1.5%	↓	↓	0.3%	↓	↑	4.1%	-0.4%	3.9%
Net Cash Variability (Low vs High)	2.4%	↑	↑	0.1%	↑	↑	-4.0%	-1.0%	5.0%
Net Cash Ratio (High vs Low)	0.0%	↑	↓	0.1%	↓	↑	1.1%	-10.8%	-14.6%
Price-to-Cash Flow (Cheap vs Expensive)	0.3%	↓	↓	0.1%	↓	↑	-1.0%	-4.6%	-11.3%
Debt-to-Equity (Low vs High)	0.1%	↓	↓	0.1%	↓	↑	3.4%	-3.0%	-1.2%
Inventory Turnover (High vs Low)	-0.4%	↓	↓	0.0%	↑	↓	-0.3%	6.6%	9.9%
Sales Estimate Revisions (High vs Low)	-1.2%	↓	↓	0.0%	↓	↑	-1.6%	-4.4%	1.2%
Gross Profit / Assets (High vs Low)	0.1%	↑	↑	0.0%	↓	↑	1.2%	-7.0%	-7.8%
Cash-to-Assets (High vs Low)	1.9%	↑	↓	-0.2%	↓	↑	-3.9%	-13.5%	-23.9%
Cyclical vs Defensive	4.5%	↑	↑	-0.2%	↑	↑	-2.8%	-4.6%	-5.3%
Analyst Coverage (High vs Low)	0.6%	↑	↓	-0.3%	↓	↑	-1.8%	-1.5%	1.3%
EPS Variability (Low vs High)	-2.4%	↓	↓	-0.3%	↓	↓	4.0%	3.0%	4.1%
CapEx-to-Assets (Low vs High)	-0.1%	↑	↓	-0.4%	↓	↓	3.4%	3.8%	-2.2%
Gross Margin (High vs Low)	0.7%	↑	↓	-0.5%	↓	↑	-1.2%	-6.0%	-8.9%
Cash-to-Market Cap (High vs Low)	2.7%	↑	↑	-0.6%	↑	↑	-3.7%	-1.7%	-6.4%
Operating Income Variability (Low vs High)	-2.4%	↓	↓	-0.6%	↓	↓	0.0%	-3.4%	-9.1%
Tangible Book/Price (Cheap vs Expensive)	1.1%	↑	↑	-0.6%	↑	↑	0.1%	0.5%	-0.3%
Sales Revisions (High vs Low)	-1.2%	↓	↓	-0.7%	↓	↑	-2.9%	-6.3%	-1.1%
Reinvestment Rate (High vs Low)	-2.6%	↓	↓	-0.8%	↓	↓	4.8%	4.1%	4.9%
Cash Flow Coverage (High vs Low)	0.8%	↑	↑	-0.9%	↓	↓	-0.7%	-1.5%	-4.8%
Sales Growth Stability (High vs Low)	-2.3%	↓	↓	-0.9%	↓	↓	3.3%	3.6%	5.8%
Earnings Stability (High vs Low)	-3.0%	↓	↓	-1.0%	↓	↓	3.5%	7.3%	11.8%
Composite Growth (High vs Low)	0.5%	↑	↑	-1.0%	↓	↑	-1.6%	-1.5%	3.4%
Sales per Employee (High vs Low)	-0.4%	↓	↓	-1.0%	↓	↓	2.3%	3.8%	7.8%
Up vs Down Sales Revisions (High vs Low)	-1.3%	↓	↓	-1.1%	↓	↑	-3.3%	-8.3%	-3.6%
Debt-to-Capital (Low vs High)	0.0%	↑	↓	-1.1%	↓	↑	1.9%	-4.9%	-5.9%
ROE (High vs Low)	-1.6%	↓	↑	-1.1%	↓	↓	3.9%	4.8%	14.4%
Cash-to-Debt (High vs Low)	2.2%	↑	↓	-1.2%	↓	↑	-2.0%	-10.3%	-18.5%
Earnings Revisions (High vs Low)	-0.7%	↓	↑	-1.2%	↓	↓	-2.8%	-2.0%	6.4%
Y/Y Change in Inventory/Sales (Low vs High)	0.2%	↑	↑	-1.3%	↑	↓	-1.7%	0.4%	0.5%
Up-to-Down Revisions (High vs Low)	-1.5%	↓	↓	-1.4%	↓	↓	-4.0%	-2.9%	5.7%
Asset Turnover (High vs Low)	-1.3%	↓	↑	-1.6%	↓	↓	3.2%	6.2%	15.4%
CapEx-to-Depreciation (Low vs High)	0.6%	↑	↑	-1.6%	↓	↓	1.0%	9.8%	10.7%
Financial Leverage (Low vs High)	-0.1%	↓	↑	-1.7%	↓	↓	1.3%	1.3%	5.3%
Price-to-Book (Cheap vs Expensive)	0.5%	↓	↑	-1.8%	↑	↓	2.9%	12.1%	14.6%
12m-1m Residual Momentum (High vs Low)	-0.5%	↓	↑	-2.0%	↓	↓	-2.9%	-4.2%	0.7%
Long-Term Operating Leverage (High vs Low)	-0.9%	↓	↓	-2.0%	↓	↓	-1.1%	1.2%	2.2%
Composite Quality (High vs Low)	-0.8%	↓	↓	-2.1%	↓	↓	2.7%	4.6%	8.6%
Short-Term Accruals (Low vs High)	-1.0%	↓	↓	-2.1%	↓	↓	-1.7%	0.1%	-2.8%
Total Yield (High vs Low)	-0.6%	↓	↓	-2.2%	↓	↓	0.6%	5.8%	5.9%
Debt-to-Assets (Low vs High)	-0.5%	↑	↓	-2.2%	↓	↑	1.3%	-4.9%	-2.5%
Dividend Payout Ratio (High vs Low)	-3.2%	↓	↓	-2.2%	↓	↓	4.6%	5.3%	6.6%
Free Cash Flow-to-Debt (High vs Low)	-1.6%	↓	↓	-2.4%	↓	↓	3.9%	4.7%	16.2%
ROA (High vs Low)	-2.4%	↓	↑	-2.5%	↓	↓	7.2%	8.1%	19.4%
Operating Margin (High vs Low)	-2.1%	↓	↓	-2.6%	↓	↓	5.2%	7.7%	17.2%
Net Margin (High vs Low)	-2.7%	↓	↓	-2.8%	↓	↓	7.1%	8.3%	19.4%
Return on Invested Capital (High vs Low)	-2.2%	↓	↑	-2.9%	↓	↓	6.5%	10.3%	22.1%
Operating Leverage (High vs Low)	-0.6%	↓	↓	-2.9%	↓	↓	-0.1%	4.5%	8.7%
Incremental Margin (High vs Low)	-1.0%	↓	↓	-3.0%	↓	↓	0.9%	4.2%	7.1%
Interest Coverage (High vs Low)	-2.6%	↓	↓	-3.1%	↓	↓	6.8%	4.8%	17.8%
Estimate Dispersion (Low vs High)	-3.9%	↓	↓	-3.1%	↓	↓	5.3%	8.7%	17.2%
Quality vs Junk	-4.2%	↓	↓	-3.1%	↓	↓	3.1%	7.6%	14.2%
Trailing Dividend Yield (High vs Low)	-1.4%	↓	↓	-3.2%	↓	↓	3.6%	11.5%	7.1%
Operational Efficiency (High vs Low)	-0.7%	↓	↓	-3.2%	↓	↓	1.4%	12.0%	16.5%
Reduction in Shares Outstanding (Low vs High)	-2.9%	↓	↓	-3.4%	↓	↓	4.2%	14.3%	26.4%
Cash Flow / Debt (High vs Low)	-2.4%	↓	↓	-3.4%	↓	↓	3.7%	5.0%	16.4%
Sales Variability (Low vs High)	-3.2%	↓	↓	-3.8%	↓	↓	4.9%	13.5%	19.8%
Price-to-Sales (Cheap vs Expensive)	-0.6%	↓	↑	-3.8%	↑	↓	0.5%	15.7%	27.0%
1-Year EPS Growth (High vs Low)	-0.4%	↓	↑	-3.9%	↓	↓	-1.7%	0.9%	7.1%
Composite Value (Cheap vs Expensive)	-1.6%	↓	↑	-4.1%	↓	↓	4.1%	13.6%	23.8%
Value vs Growth	-2.5%	↓	↓	-4.4%	↓	↓	0.2%	16.6%	21.9%
Price-to-Forward Earnings (Cheap vs Expensive)	-0.5%	↓	↑	-4.5%	↓	↓	4.9%	19.2%	31.8%
Composite Free Cash Flow (High vs Low)	-1.7%	↓	↑	-4.5%	↓	↓	2.7%	15.6%	27.5%
Free Cash Flow Yield (High vs Low)	-2.0%	↓	↑	-4.6%	↓	↓	2.1%	16.0%	27.0%
Composite Accruals (Low vs High)	-1.3%	↓	↓	-4.7%	↓	↓	-2.3%	5.3%	6.2%
Enterprise Value-to-Free Cash Flow (Low vs High)	-2.3%	↓	↑	-4.7%	↓	↓	3.3%	16.6%	29.4%
Price-to-Earnings (Cheap vs Expensive)	-1.6%	↓	↑	-4.8%	↓	↓	3.6%	12.7%	22.1%
Accruals (Low vs High)	-1.8%	↓	↓	-4.8%	↓	↓	-2.2%	7.0%	10.7%
Y/Y %Change in number of employees (Low vs High)	-2.8%	↓	↓	-5.0%	↓	↓	1.8%	16.8%	23.5%
Enterprise Value-to-Operating Income (Low vs High)	-2.1%	↓	↑	-5.4%	↓	↓	5.1%	17.9%	32.4%
Price-to-Operating Income (Cheap vs Expensive)	-1.8%	↓	↑	-5.5%	↓	↓	4.5%	17.2%	29.1%
Price-to-EBITDA (Cheap vs Expensive)	-1.4%	↓	↑	-5.6%	↓	↓	4.3%	18.8%	29.9%
12m Volatility (Low vs High)	-6.3%	↓	↓	-5.6%	↓	↓	4.9%	10.9%	22.3%
Enterprise Value-to-EBITDA (Low vs High)	-1.9%	↓	↑	-6.2%	↓	↓	5.0%	19.7%	33.4%
12-Month Price Momentum (High vs Low)	-6.1%	↓	↓	-8.2%	↓	↓	-3.5%	-2.8%	3.4%
3-Month Price Momentum (High vs Low)	-7.2%	↓	↓	-8.3%	↓	↓	-6.9%	-4.1%	1.8%
9-Month Price Momentum (High vs Low)	-7.2%	↓	↓	-9.2%	↓	↓	-5.3%	-4.8%	1.3%
6-Month Price Momentum (High vs Low)	-7.6%	↓	↓	-9.9%	↓	↓	-4.5%	-1.2%	5.8%

Source: ClariFi, Morgan Stanley Research

Exhibit 24: Best and Worst Performing Factor Leg Returns

Best 20 Performing Equal Weighted Group Return in Top 1000 as of Jul 21, 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)	7.2%	↑	↑	7.8%	↑	↑	-10.6%	-16.0%	-12.0%
Low 9-Month Price Momentum	11.2%	↑	↑	13.0%	↑	↑	-8.8%	-15.7%	-17.3%
Low 6-Month Price Momentum	11.3%	↑	↑	12.9%	↑	↑	-8.9%	-17.7%	-18.4%
Low 12-Month Price Momentum	10.6%	↑	↑	12.4%	↑	↑	-10.5%	-16.6%	-18.3%
High Enterprise Value-to-EBITDA	9.2%	↑	↑	12.4%	↑	↑	-14.6%	-27.5%	-33.6%
High Enterprise Value-to-Operating Income	9.3%	↑	↑	12.0%	↑	↑	-14.5%	-26.8%	-33.0%
High Price-to-EBITDA	8.8%	↑	↑	12.0%	↑	↑	-15.0%	-27.6%	-32.9%
High Price-to-Operating Income	9.1%	↑	↑	11.8%	↑	↑	-14.8%	-26.7%	-32.3%
Low 3-Month Price Momentum	11.0%	↑	↑	11.7%	↑	↑	-7.6%	-16.1%	-16.0%
High Price-to-Earnings	8.8%	↑	↑	11.5%	↑	↑	-12.9%	-22.6%	-25.3%
Low 1-Month Reversal	10.5%	↑	↑	11.5%	↑	↑	-8.2%	-19.1%	-19.2%
High 12m Volatility	10.8%	↑	↑	11.4%	↑	↑	-13.2%	-21.4%	-24.5%
Low Cash Flow / Debt	9.4%	↑	↑	11.4%	↑	↑	-13.1%	-22.6%	-28.4%
High Price-to-Forward Earnings	8.2%	↑	↑	11.3%	↑	↑	-14.4%	-27.5%	-31.7%
Low Interest Coverage	9.2%	↑	↑	11.3%	↑	↑	-14.9%	-20.6%	-24.7%
High Accruals	9.0%	↑	↑	11.2%	↑	↑	-10.0%	-22.3%	-22.8%
Low Net Margin	9.5%	↑	↑	11.2%	↑	↑	-15.1%	-23.9%	-28.0%
High Debt-to-Assets	8.2%	↑	↑	11.0%	↑	↑	-10.9%	-16.6%	-15.8%
High 5-Year Sales Growth	9.8%	↑	↑	10.9%	↑	↑	-14.5%	-29.0%	-30.8%
Low ROA	9.3%	↑	↑	10.9%	↑	↑	-14.9%	-23.8%	-27.8%
High Y/Y Change in number of employees	9.1%	↑	↑	10.8%	↑	↑	-12.5%	-26.3%	-26.4%

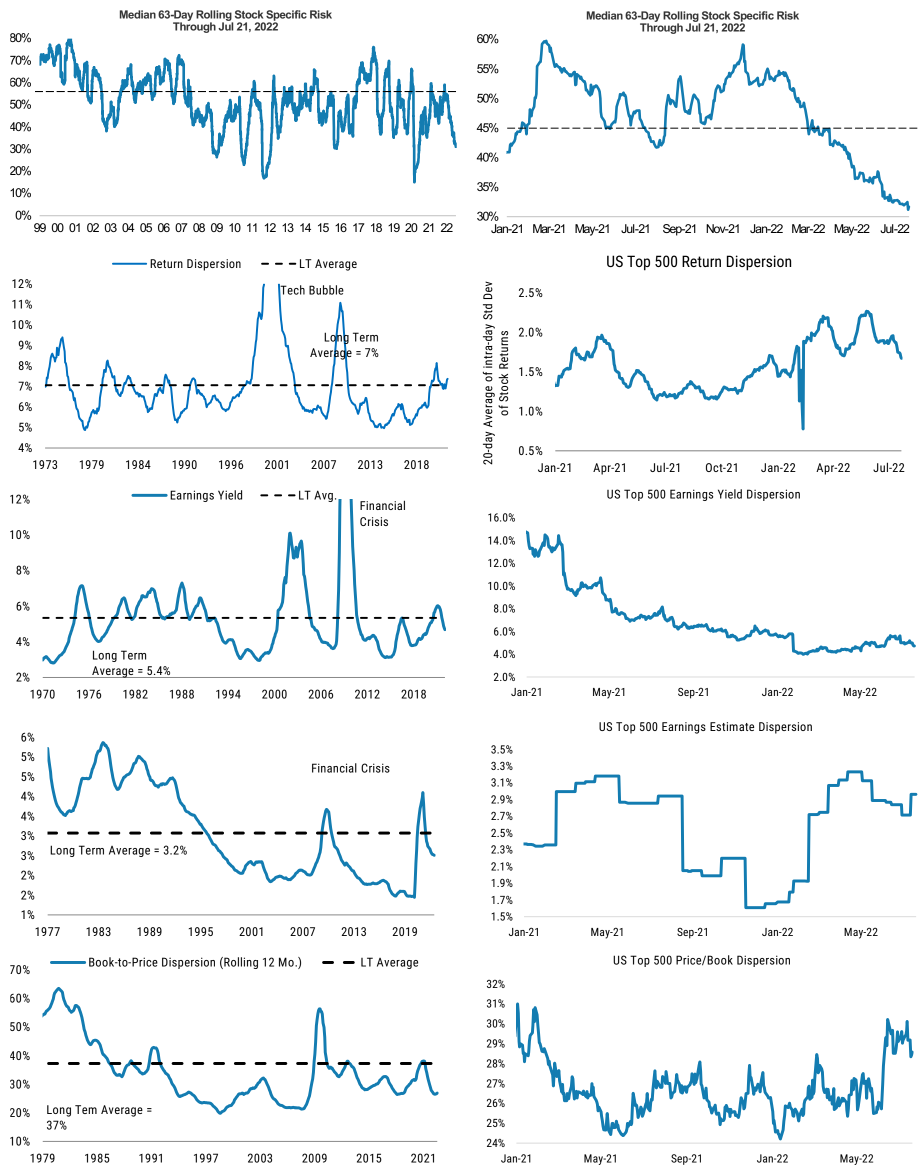
Worst 20 Performing Equal Weighted Group Return in Top 1000 as of Jul 21, 2022

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)	7.2%	↑	↑	7.8%	↑	↑	-10.6%	-16.0%	-12.0%
High 1-Year EPS Growth	7.8%	↑	↑	6.2%	↑	↑	-11.6%	-15.4%	-8.5%
Value	6.3%	↑	↑	6.1%	↑	↑	-11.0%	-8.5%	-2.2%
Low Composite Accruals	7.3%	↑	↑	6.0%	↑	↑	-11.8%	-14.9%	-13.4%
Low Forecast long term growth	6.8%	↑	↑	6.0%	↑	↑	-8.7%	-12.1%	-10.9%
Low Price-to-Sales	7.1%	↑	↑	6.0%	↑	↑	-11.0%	-9.1%	-1.3%
Low Enterprise Value-to-Free Cash Flow	6.5%	↑	↑	5.9%	↑	↑	-10.3%	-8.8%	-1.3%
High Composite Free Cash Flow	6.9%	↑	↑	5.9%	↑	↑	-10.6%	-9.1%	-1.6%
Low 12m Volatility	4.6%	↑	↑	5.8%	↑	↑	-8.3%	-10.5%	-2.2%
High Free Cash Flow Yield	6.8%	↑	↑	5.8%	↑	↑	-10.8%	-8.7%	-1.9%
High Dividend Payout Ratio	4.8%	↑	↑	5.8%	↑	↑	-8.2%	-8.8%	-2.0%
Low Y/Y Change in number of employees	6.3%	↑	↑	5.8%	↑	↑	-10.7%	-9.5%	-2.9%
Quality	4.5%	↑	↑	5.6%	↑	↑	-9.1%	-11.4%	-3.1%
Large Cap	5.9%	↑	↑	5.5%	↑	↑	-11.2%	-15.6%	-9.1%
High Total Yield	6.5%	↑	↑	5.3%	↑	↑	-10.9%	-8.4%	-0.9%
Low 1-Year Dividend per share growth	5.7%	↑	↑	5.3%	↑	↑	-12.8%	-11.6%	-4.9%
High Trailing Dividend Yield	5.1%	↑	↑	4.4%	↑	↑	-8.6%	-5.2%	0.0%
High 12-Month Price Momentum	4.5%	↑	↑	4.3%	↑	↑	-14.0%	-19.4%	-14.8%
High 9-Month Price Momentum	4.0%	↑	↑	3.8%	↑	↑	-14.1%	-20.6%	-16.0%
High 3-Month Price Momentum	3.8%	↑	↑	3.4%	↑	↑	-14.5%	-20.2%	-14.2%
High 6-Month Price Momentum	3.7%	↑	↑	3.0%	↑	↑	-13.4%	-18.9%	-12.6%

Source: ClariFi, Morgan Stanley Research

In Exhibit 25, 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 moved lower and is currently in the 7th percentile since 2000 as geopolitical uncertainty and macro risk continue to weigh on equities broadly. Return dispersion has fallen in recent weeks but remains elevated relative to the post-GFC cycle. Price/book dispersion has spiked as investors question the right valuation on the S&P 500. Earnings estimate dispersion moved higher last week as 2Q earnings season kicks off and new guidance is baked into forecasts.

Exhibit 25: 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 26). 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 is near the long-term average. With that in mind, both metrics highlight the wide valuation dispersion at the industry group level.

Lastly, S&P 500 earnings estimate dispersion is currently in the 89th percentile historically with Utilities and Tech Hardware as the exceptions with near all-time lows in dispersion.

Exhibit 26: Historical Dispersion Metrics by Industry Group

	Return Dispersion	Earning Yield Dispersion	Book/Price Dispersion	Earnings Estimate Dispersion
S&P 500	73%	61%	47%	89%
Energy	85%	60%	32%	73%
Materials	84%	92%	53%	78%
Capital Goods	47%	75%	65%	81%
Commercial & Professional Services	64%	30%	17%	88%
Transportation	85%	65%	8%	91%
Automobiles & Components	86%	89%	91%	75%
Consumer Durables & Apparel	82%	88%	95%	90%
Consumer Services	82%	65%	14%	88%
Retailing	76%	75%	11%	54%
Food & Staples Retailing	80%	90%	97%	82%
Food, Beverage & Tobacco	64%	71%	53%	96%
Household & Personal Products	55%	10%	5%	90%
Health Care Equipment & Services	56%	60%	53%	67%
Pharma, Biotech & Life Sciences	94%	74%	91%	59%
Banks	62%	63%	43%	78%
Diversified Financials	78%	80%	51%	81%
Insurance	83%	56%	68%	88%
Software & Services	55%	64%	71%	80%
Technology Hardware & Equipment	1%	74%	80%	6%
Semiconductors & Semi Equipment	24%	64%	69%	41%
Telecommunication Services	21%	56%	82%	38%
Media & Entertainment	41%	58%	64%	89%
Utilities	13%	32%	52%	1%
Real Estate	54%	43%	59%	64%

Source: ClariFi, Morgan Stanley Research

Fresh Money Buy List

Exhibit 27: Fresh Money Buy List - Stats & Performance

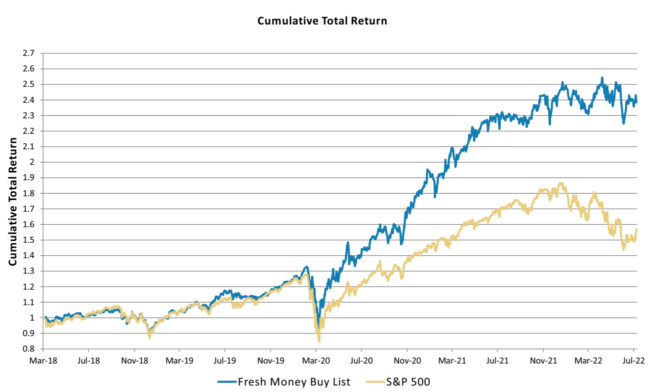
Company Name	Ticker	MS Rating	Sector	Market Cap ($Bn)	Price	MS PT	% to MS PT	MS Analyst	Date Added	Total Return Since Inclusion	
										Absolute	Rel. to S&P
AT&T, Inc.	T	Overweight	Communication Services	$130.4	$18.31	22.00	20.2%	Flannery, Simon	12/20/2021	6.9%	20.8%
CenterPoint Energy Inc	CNP	Overweight	Utilities	$18.6	$29.60	31.00	4.7%	Byrd, Stephen	3/21/2022	2.4%	13.6%
Coca-Cola Co.	KO	Overweight	Consumer Staples	$266.2	$61.40	76.00	23.8%	Mohsenian, Dara	3/28/2022	0.5%	13.3%
Exxon Mobil Corporation	XOM	Overweight	Energy	$366.2	$86.93	106.00	21.9%	McDermott, Devin	2/22/2021	77.0%	74.0%
Humana Inc	HUM	Equal-Weight	Health Care	$61.5	$485.86	453.00	(6.8%)	Goldwasser, Ricky	7/19/2018	57.6%	7.5%
McDonald's Corporation	MCD	Overweight	Consumer Discretionary	$187.0	$252.81	285.00	12.7%	Glass, John	10/18/2021	6.1%	17.0%
Mondelez International Inc	MDLZ	Overweight	Consumer Staples	$85.5	$61.80	70.00	13.3%	Kaufman, Pamela	7/19/2021	(1.6%)	5.9%
SBA Communications	SBAC	Overweight	Real Estate	$34.3	$318.08	361.00	13.5%	Flannery, Simon	6/7/2021	2.5%	7.8%
Simon Property Group Inc	SPG	Overweight	Real Estate	$34.0	$103.45	133.00	28.6%	Hill, Richard	2/16/2021	1.7%	(0.5%)
Current List Performance											
Average (Eq. Weight)				$131.5			14.7%			17.0%	17.7%
Median				$85.5			13.5%			2.5%	13.3%
% Positive Returns (Abs. / Rel.)										89%	89%
% Negative Returns (Abs. / Rel.)										11%	11%
Avg. Hold Period (Months)											14.8
All Time List Performance											
Average (Eq. Weight)										30.4%	15.7%
Median										15.1%	12.1%
% Positive Returns (Abs. / Rel.)										78%	62%
% Negative Returns (Abs. / Rel.)										22%	38%
Avg. Hold Period (Months)											14.1

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

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

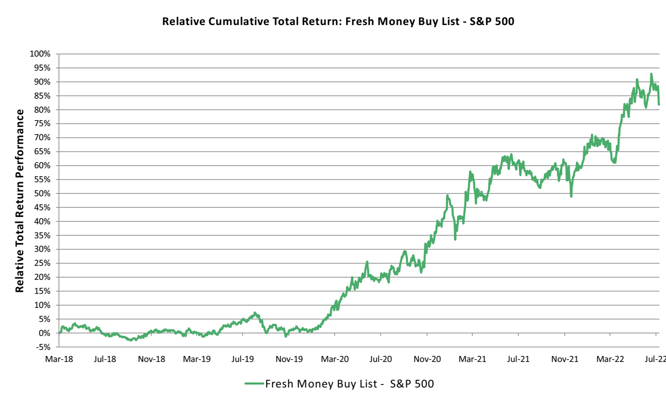
Source: Bloomberg, Morgan Stanley Research estimates.

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



Source: Bloomberg, Morgan Stanley Research.

Exhibit 29: Fresh Money Buy List / S&P 500 Cumulative Relative Return



Source: Bloomberg, Morgan Stanley Research.

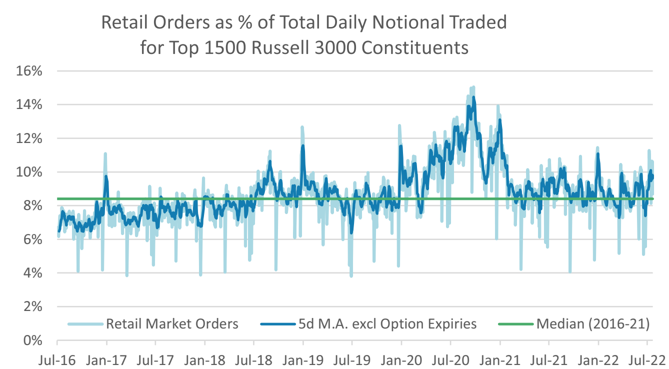
What's Retail Doing?

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:

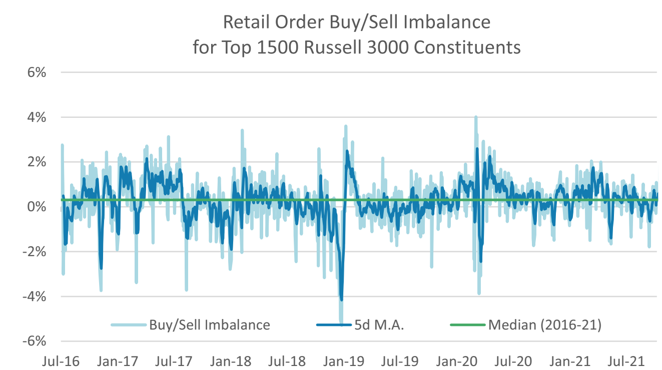
- Retail participation is currently at 9.6% of the total market volume,and at 82nd %-ile relative to the last 5 years.
- Order imbalance remains slight negative last week. It currently sits at -0.3% or 18th percentile relative to the last 5 years.
- Imbalance is mixed across sectors. It is most negative relative to history in Tech (13th %-ile), Communication Services (15th %-ile), and Discretionary (16th %-ile). Communication Services is most negative in buy/sell imbalance.

Exhibit 30: Retail orders as a % of notional traded above median



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

Exhibit 31: ... and negative in order imbalance



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

Exhibit 32: Retail's buy/sell imbalance is most negative in Communication Services

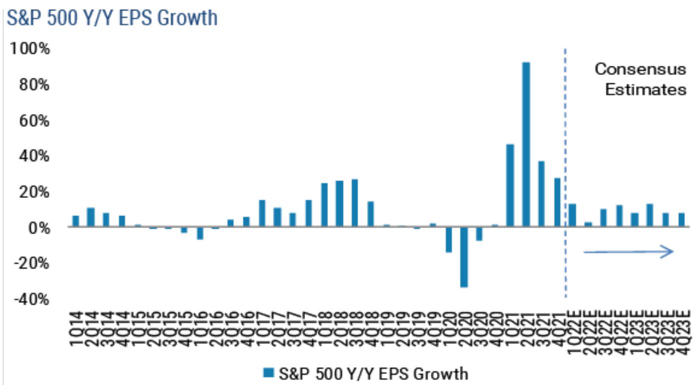
	Retail Participation			Buy/Sell Imbalance		
Sector	**2016-22 Median**	**Current**	**p-tile**	**2016-22 Median**	**Current**	**p-tile**
Energy	6.8%	8.0%	0.79	-0.31%	0.7%	0.74
Materials	5.7%	4.9%	0.19	0.5%	0.9%	0.65
Industrials	6.6%	6.2%	0.36	0.0%	0.2%	0.60
Consumer Discretionary	11.3%	12.2%	0.67	0.7%	-0.1%	0.16
Consumer Staples	6.1%	4.6%	0.08	-0.5%	0.2%	0.64
Health Care	5.9%	4.5%	0.08	-0.4%	0.6%	0.77
Financials	5.6%	6.1%	0.74	0.0%	-0.8%	0.28
Information Technology	10.9%	13.4%	0.93	0.5%	-0.4%	0.13
Communication Services	8.9%	13.0%	0.91	0.3%	-0.9%	0.15
Utilities	3.8%	3.1%	0.13	-1.3%	0.4%	0.80
Real Estate	3.5%	2.8%	0.06	0.5%	1.2%	0.62
Model Universe (Top 1500)	**8.5%**	**9.6%**	**0.82**	**0.3%**	**-0.3%**	**0.18**

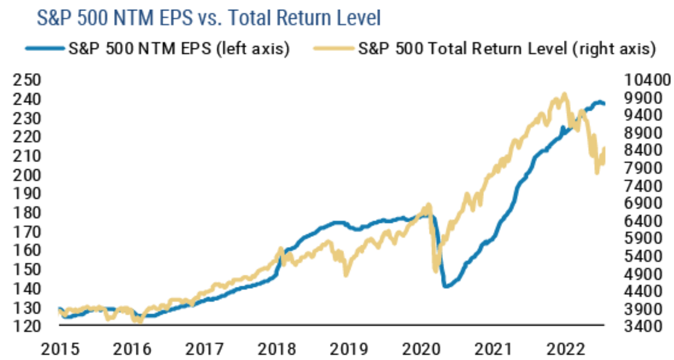
Source: Morgan Stanley Research, Morgan Stanley Quantitative and Derivative Strategies, Compustat

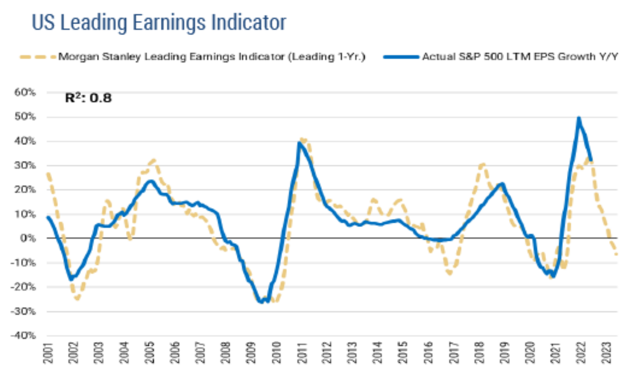
For more on the methodology, please see Quantitative Equity Research: The Rise of the Retail Trader (30 Jun 2021).

Weekly Charts to Watch

Exhibit 33: US Earnings Snapshot







Source: Refinitiv, FactSet, Morgan Stanley Research. Top and bottom left: As of July 22, 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 34: 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	12.3%
Base Case	$236	16.5x	3,900	-1.6%
Bear Case	$212	15.9x	3,350	-15.4%
Current S&P 500 Price as of:		7/22/2022	3,962	

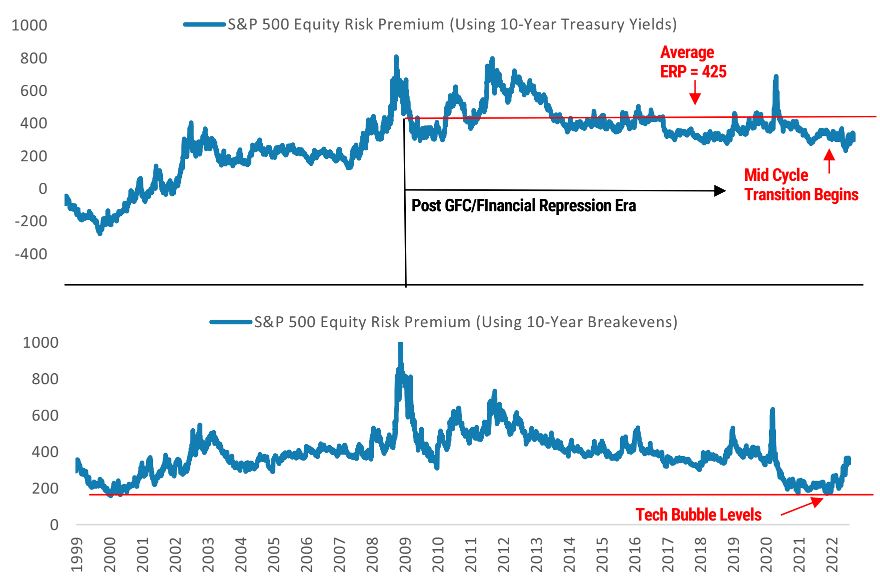
Note: We use June 2023 forward earnings to project our price target which takes into account our June '24 earnings forecast (currently $236 base case).
Source: Bloomberg, Morgan Stanley Research

Exhibit 35: Sector Ratings

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

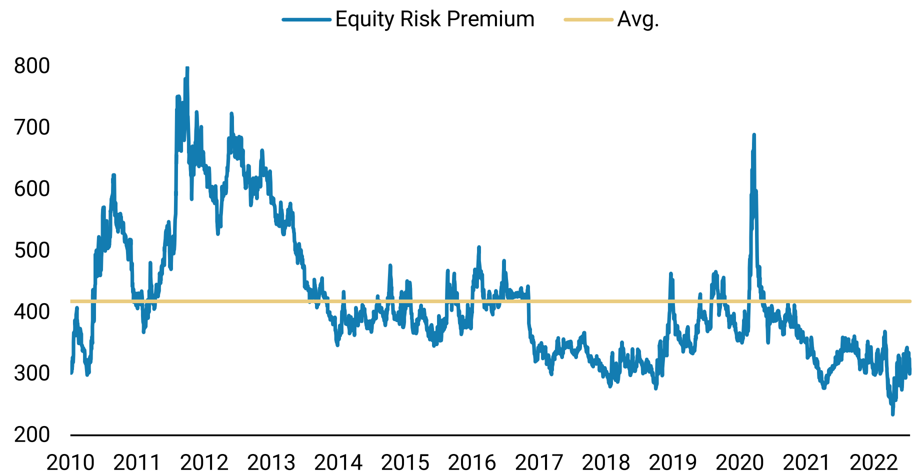
Source: Morgan Stanley Research

Exhibit 36: S&P 500 Equity Risk Premium using Nominal Rates and Breakevens



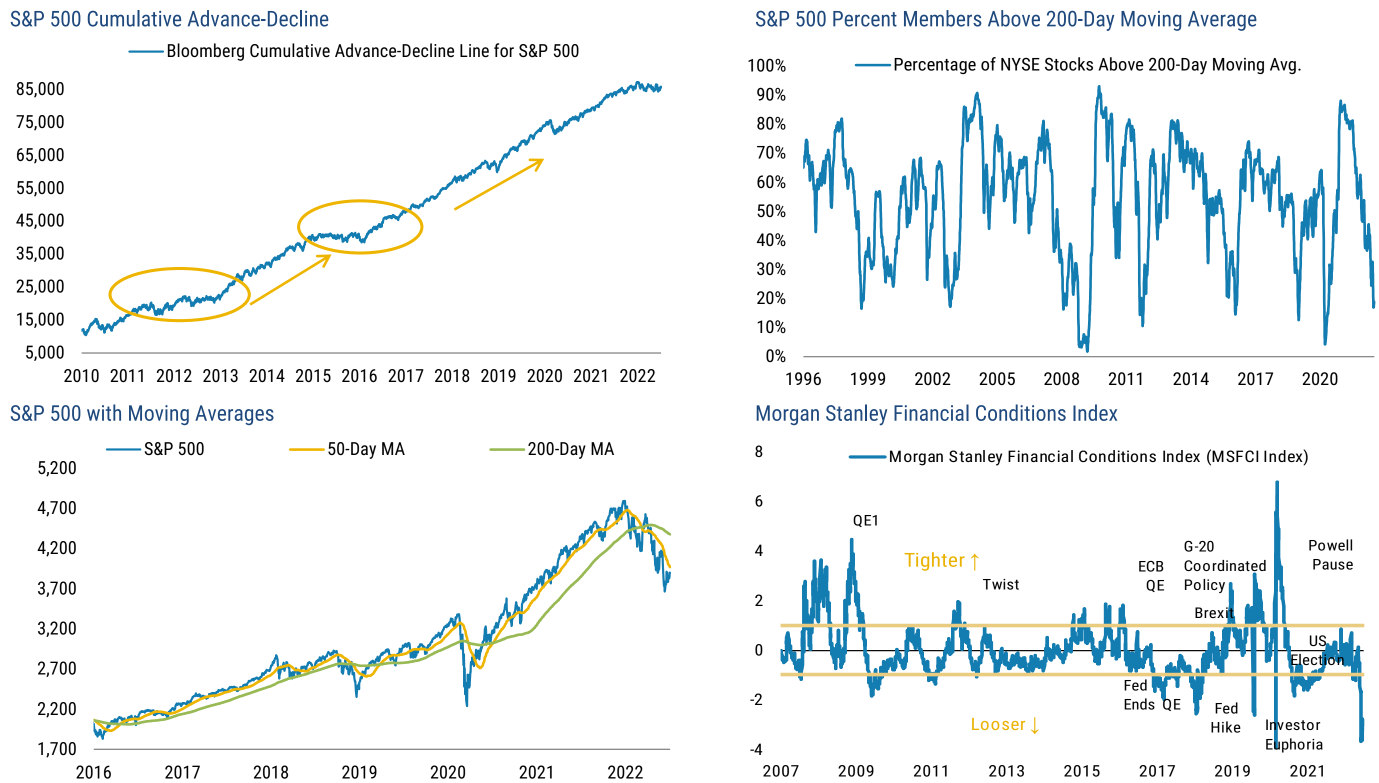
Source: Bloomberg, Morgan Stanley Research. As of July 22, 2022

Exhibit 37: Equity Risk Premium is Below Post-GFC Average



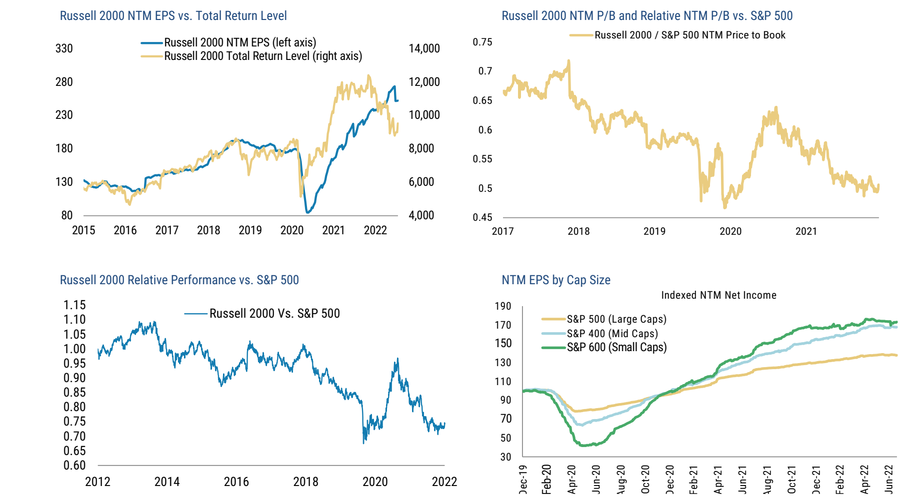
Note: Equity risk premium is calculated as the S&P 500 forward 12M earnings yield minus the nominal 10-Year Treasury.
Source: Bloomberg, Morgan Stanley Research

Exhibit 38: US Equity Market Technicals and Financial Conditions



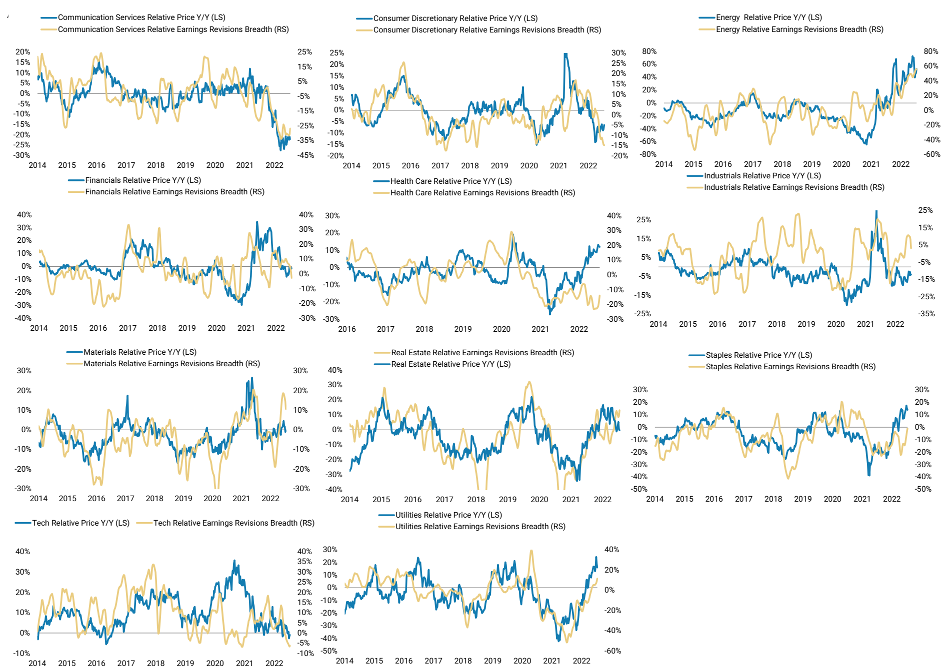
Source: Bloomberg, Morgan Stanley Research. All: As of July 22, 2022

Exhibit 39: US Small Cap Equities



Source: FactSet, Morgan Stanley Research. As of July 22, 2022

Exhibit 40: Earnings Revisions Breadth vs YoY Performance



Source: FactSet, Morgan Stanley Research. As of July 22, 2022

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(as of June 30, 2022)
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	COVERAGE UNIVERSE		INVESTMENT BANKING CLIENTS (IBC)			OTHER MATERIAL INVESTMENT SERVICES CLIENTS (MISC)	
STOCK RATING CATEGORY	COUNT	% OF TOTAL	COUNT	% OF TOTAL IBC	% OF RATING CATEGORY	COUNT	% OF TOTAL OTHER MISC
Overweight/Buy	**1383**	**39%**	**320**	**42%**	**23%**	**595**	**39%**
Equal-weight/Hold	**1561**	**44%**	**353**	**46%**	**23%**	**715**	**47%**
Not-Rated/Hold	**0**	**0%**	**0**	**0%**	**0%**	**0**	**0%**
Underweight/Sell	**574**	**16%**	**87**	**11%**	**15%**	**215**	**14%**
TOTAL	**3,518**		**760**			**1525**	

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.

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