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# Weekly Warm-up: The Fed's Cred Is Back. Is That Good for Stocks?

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With equity markets continuing to rally last week in the face of a tighter Fed, still high inflation and generally weaker earnings/economic data, we further explore our thesis from last week as to why. Bottom line, the Fed has quickly regained its credibility and that's good for bonds, not stocks.

**The Fed's cred is back.** It's been hard to find a more maligned group than the Fed over the past year. In an effort to regain its credibility, the Fed swiftly pivoted to its most hawkish policy action since the 1980s. It hasn't gone unnoticed by markets. Since peaking in June, 10-year Treasuries have had one of their largest rallies in history, with the 10s-2s curve inverting by as much as 33bps. Perhaps most importantly, inflation expectations have come down significantly. Objectively speaking, it appears as though the bond market has quickly turned from a vigilante to a believer the Fed will get inflation under control.

**Fed cred is unequivocally good for bonds but maybe not for stocks.** The Fed tightens policy when things overheat. This time is no different other than they started later than normal and had to be more aggressive. While the bond market is starting to assume they get inflation under control, it may come with a heavier cost than normal, potentially a recession while they are still tightening, which may leave a very small window for stocks to work before earnings surprise on the downside. As discussed last week, we think that window is now but it can shut quickly. Risk reward is poor after the recent rally so trade accordingly as time may be running out.

**Sequencing the cycle.** Consistent with our view for a hotter but shorter cycle, the timing & order of data peaks have been widely in-line with previous cycles & suggest recession risk has risen substantially. Housing, PMIs, & consumer confidence all peaked in '20/'21 & each have seen sharper than avg declines. Bond mkt signals are also appearing. When we look at the timing of today's peaks vs history, they are remarkably similar. We watch closely for the next warnings, namely the depth of EPS cuts, 10Y-3M inversion, & a PMI firmly below 50.

**2Q earnings update**. As 2Q earnings season ramped up last week, we saw company commentary that points to softening. A number of companies discussed weakening demand, signs of consumers trading down to lower end products/services, and a problematic level of inventory build. Earnings revisions breadth has come down hard but we haven't seen forward earnings drop yet as the magnitude of earnings cuts has been modest. We expect cuts to ramp up as concerns around growth spread.

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# What to Focus on This Week

## The Fed's Cred Is Back

It was hard to find a more maligned group than the Fed over the past year. Even the Fed itself admitted they misjudged the call on inflation by claiming it would be transient. In an effort to regain their credibility, they swiftly pivoted to their most hawkish policy action since the 1980s. In fact, while we were the most hawkish equity strategists on the street at the beginning of the year, we never expected to see this many rate hikes in 2022. Kudos to Jay Powell and the Fed for taking such quick action after admitting their mistake. Suffice it to say, it hasn't gone unnoticed by markets. Not only did the S&P 500 experience a 30% decline in its P/E ratio from peak to trough, but the bond market had the worst 4 months to start a year in history.

However, since peaking in June, 10-year Treasuries have had one of their largest rallies in history, with the 10s-2s curve inverting by as much as 33bps, another historically low level. Perhaps more importantly, 10-year inflation breakevens have come down significantly, notwithstanding this past week's rally (Exhibit 1). Finally, the Fed's favorite measure of inflation expectations, Fed5Year inflation forwards, has plummeted and now sits very close to the Fed's long-term target of 2% (Exhibit 2). Objectively speaking, it appears as though the bond market has quickly turned from a vigilante to a believer the Fed will get inflation under control.

**Exhibit 1:** 10Y breakevens have come in


Source: Bloomberg, Morgan Stanley Research

**Exhibit 2:** CPI is a lagging indicator


Source: Bloomberg, Morgan Stanley Research

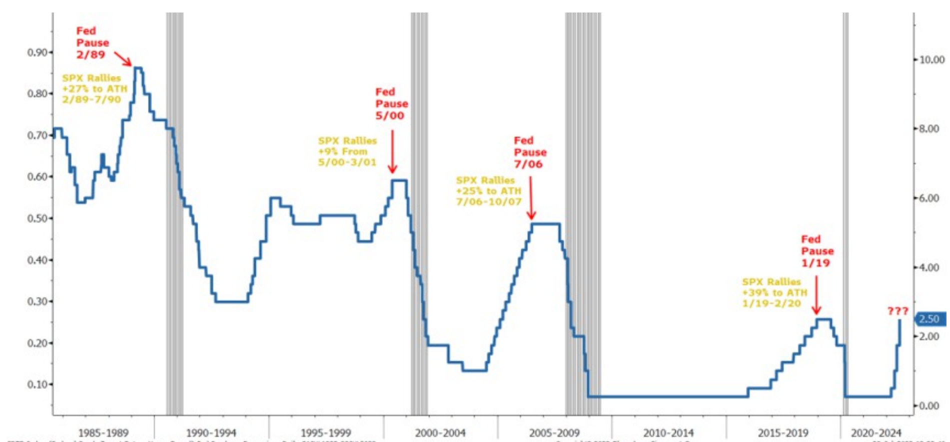
That's unequivocally bullish for bonds and one of the main reasons we turned bullish on bonds relative to stocks back in April. Since then, bonds have done better even though it's been a flat ride in absolute terms. It also explains why defensives have dominated the leadership board and why we are sticking with it.

**Exhibit 3:** Bonds are beating stocks, which suggests growth is bigger problem than inflation


Source: Bloomberg, Morgan Stanley Research

As discussed last week, we think the equity market may be taking its cue from the bond market and is also starting to think the Fed has done enough to regain its credibility and will ultimately win its war with inflation. That's bullish for sure relative to a few months ago when it looked like inflation was going to get away from them. It also suggests they may be able to pivot / pause on rate hikes later this year. As we noted last week, the end of a rate hiking campaign is bullish for stocks, *assuming that pause happens before the recession arrives*. Over the past 30 years, that's always been the case – i.e. the Fed has been able to pause before the recession arrived, which allowed the cycle and the bull market to extend a bit longer. The shortest time between the last hike and the end of the economic cycle was 10 months when the Fed stopped in May 2000 and recession started in March 2001. In that particular episode, stocks rallied just 9% and did not make a new high, although they got very close.

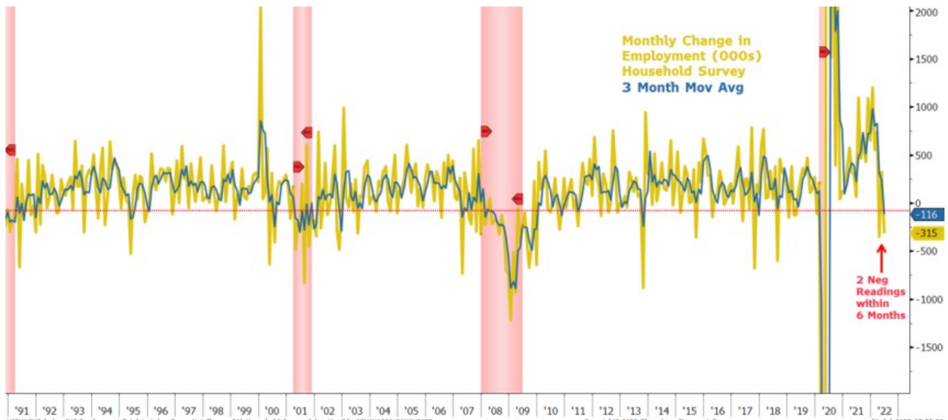
**Exhibit 4:** Equity market always rallies when the Fed pauses rate hikes, if recession hasn't arrived yet




Source: Bloomberg, Morgan Stanley Research

In this instance, we think the time between the last hike and the recession will be much shorter and perhaps *after* the recession starts. In technical terms, a recession has already begun with last week's 2Q GDP release. However, we don't think a true recession can be declared unless we experience a full-blown labor cycle – i.e. the unemployment rate rises by at least a few percentage points. Of course, labor data often gets revised and the NBER then determines when the recession actually began after the fact. It's not unusual to find out years later that a recession began sooner than market participants thought at the time. 2008 is one of those cases and markets have also traded similarly this time in many regards. As evidence that may be the case this time too, we note that the household survey and Non Farm Payrolls data sets have diverged materially since April… about the same time bonds started to outperform stocks. This suggests we may already be in a recession while market participants are trying to either look through it or thinking a soft landing or extension of the cycle can still be achieved by the Fed.

**Exhibit 5:** Household survey of employment peaked in March with 2 months of negative readings




Source: Bloomberg, Morgan Stanley Research

In our conversations with clients over the past few weeks, we have been surprised at how many now think a recession was fully priced in June. While talk of recession was rampant during that sell-off and valuations reached our target P/E of 15.4x, we do not think it properly discounted the earnings damage that will entail if we are actually in a recession right now. As we have noted, in that outcome, the earnings revisions which have begun this quarter are likely far from finished in both time or level. Our estimate for S&P 500 NTM EPS in the recession scenario is $195, which is likely to be reached in 1Q23 – i.e. at least 3 quarters of downward revisions. Furthermore, our analysis of prior cycles (see Weekly Warm-up July 11th) suggests the bottom is never reached during a recession before 3 conditions are met – unemployment rate is up at least 1.3% from the low (currently it's at the low), ISM Manufacturing PMI is below 44 (currently 53) and the median decline in NTM EPS is 10.8% from peak (currently down 1%). Of course, we could still avoid a recession defined as a full blown labor cycle, or it might come later next year, which means the Fed pause could happen prior to the arrival of recession allowing for that bullish window. We remain open minded to any outcome but our analysis suggests betting on the latter two outcomes is a risky one, especially after the recent rally.

Finally, our analysis of prior recessions also tells us the S&P 500 is typically late to discount the full cuts in earnings that a recession brings. We think this has to do with the diversity of this very high quality index and the fact that company management teams are loathe to deliver bad news to investors until they have to, particularly on out-year forecasts, which is what really drives the index price. As an example of just how slow these consensus numbers are to reflect reality, it may be instructive to look more closely at the period just before the GFC began in earnest – i.e. August 2008. For those who were actively engaged in markets at that time, they will remember the macro environment was terrible – the housing market had already imploded with rampant foreclosures, Bear Stearns had gone bankrupt 5 months earlier and most of the banking system was a mess, along with consumer balance sheets. Perhaps the only thing that was in better shape then, versus now, was the government's finances. At the time, the Fed's balance sheet was just $900B ($9T today) and debt/GDP was only 68% (125% today) leaving ample fire power to fight whatever was about to happen to the economy from the housing bust. Meanwhile, many key macro data points that are closely aligned with the price of the S&P 500 were slightly worse than we are seeing today but not materially. As an example, PMIs are slightly better today (Exhibit 6), but consumer and business confidence is just as bad as it was then using Conference Board but much worse using UMich (Exhibit 7).

**Exhibit 6:** PMI today is similar to Aug 2008


Source: Bloomberg, Morgan Stanley Research

**Exhibit 7:** While confidence is worse


Source: Bloomberg, Morgan Stanley Research

Perhaps the biggest "tell" that supports our take that forward estimates for the S&P 500 are slower to come down than they should be is the fact that bottom-up NTM EPS in early August 2008 were down just 4% at that time from the peak. It's almost hard to fathom how estimates weren't already lower in August 2008 given what was going on and the fact that unemployment had already moved off the lows by almost 1.2% whereas today we are still at the lows. This was hard evidence that a recession had already begun. One issue with this data set is that it gets revised, often years later when the NBER officially declares when the recession began. We don't have these revisions so we can't ascertain what the U-3 unemployment reading was at that point in time. It may very well have still been near the lows. Obviously, we now know the recession started in May 2008, yet earnings forecasts were down only 4% from the highs while the S&P 500 was down 17% and well off its lows the month before when it was down 24%.

The point of this walk down memory lane is not to suggest we are about to enter another financial crisis but to illustrate just how slow the forward estimates are to come down even in a situation as dire as 2008 when everyone knew it was terrible. In other words, this time is unlikely to be much different IF we are either in a recession already or one is about to arrive. More importantly for investors, assuming the market has already discounted a potential 15-20% decline in NTM EPS forecasts and is looking through the trough is a big mistake in our view. The other takeaway is that the equity market can dream and will dream of a better future as rates come down from a potentially more dovish Fed until it is proven wrong by the estimates collapsing as they always do in an actual recession. We continue to think the timing for that accelerated decline is likely during September/October when third quarter results further disappoint and companies can no longer push out inevitable cuts. The final consideration for investors is the fact that recession is usually accompanied by an "event" that makes it impossible for companies/analysts to keep their rose colored glasses on with any credibility. For the last four recessions, those events that led to the capitulation in NTM EPS were COVID lock-downs (March '20), Lehman bankruptcy/systemic fallout (Sept '08), 9-11 (Sept '01), and Irag's invasion of Kuwait (July '90). Perhaps there is no "ah-ha" moment this time. Nevertheless, we think the 4th quarter is the most likely time of year when companies will decide to "kitchen sink" the estimates in order to preserve hope for a better 2023.

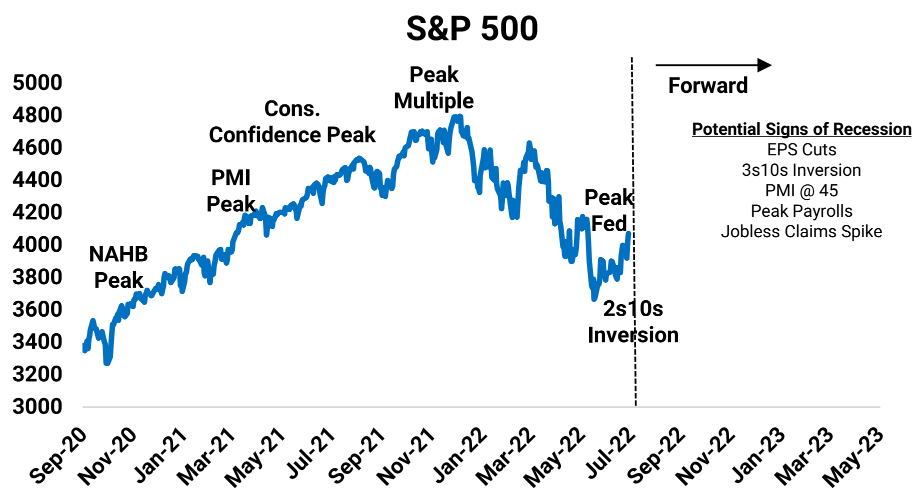
# Sequencing the Cycle

**Leading indicators have peaked, in concert with previous cycles.** Many leading indicators peaked in 2021 when M2 growth was 25% YoY and the economy was pumping on post-pandemic stimulus. Now, a full year later, we are seeing tougher year-over-year comps and a post-Covid hangover and mismatch between supply and demand that is unfavorable for margins and growth. We decided to look at the timing of peaks in leading economic variables from previous recessions and compare them to today's environment. Consistent with our view for a hotter but shorter cycle, the timing and order of data peaks have been widely in-line with previous cycles and suggest recession risk has risen substantially. First, housing, PMIs, and consumer confidence all peaked in 2020/2021 and each have seen steady declines. Fast forward to today, the market is more confident that peak Fed is behind us, the 10Y-2Y is inverted, and the more definitive 10Y-3M is on the brink of inversion with a looming 50bps hike in September. **When we look at the timing of today's peaks versus history, they are remarkably similar**. While there is still some uncertainty as to whether this will culminate in a soft landing or a recession, the odds are leaning toward the latter. We are closely watching for the next signals, namely the depth of EPS cuts, 3s10s inversion, and a PMI firmly below 50.

**Equity markets and labor readings are poor leading indicators of recession.** In our analysis in Exhibit 2, we found that the S&P 500 is an inconsistent indicator of a recession start. The average drawdown from peak to recession start is 11% historically but ranges anywhere from -2% to -32%, marking a wide range of outcomes. The second point that stood out to us was the lagging nature of labor, which is likely due to the fact that recessions are backdated. Labor market capitulation historically has started at or after the initial start of recession, making labor the crucial indicator for recession. Putting specific numbers on this, nonfarm payrolls collapse on average 0-2 months following the start of a recession and jobless claims peak 8 months after recession start.

So where does this leave us today? We believe we are in contraction and looking for signs of a bottom. The next signals likely come from 10Y-3M curve inversion, EPS cuts and PMIs. The Fed soft landing would see no inversion, 3-5% EPS cuts, and a PMI bottom in the high 40s. A recession would see a deeper 10Y-2Y inversion, 10Y-3M inversion, 15-20% EPS cuts, and PMIs sub 45. Our leading indicators (earnings revision breadth, incremental operating margin, projected Fed hikes, PMI new orders, Fed regional surveys) point to further deterioration in these three metrics and we continue to monitor them closely.

**Exhibit 8:** This cycle has progressed 'hotter but shorter' leaving us with Fire AND Ice




Source: Bloomberg, Morgan Stanley Research

**Exhibit 9:** Today's timing around peak leading indicators is similar to past recessions

| Months Lead/Lag from Recession Start | 1970 Lead/Lag (Months) | 1980 Lead/Lag (Months) | 1990 Lead/Lag (Months) | 2001 Lead/Lag (Months) | 2008 Lead/Lag (Months) | 2020 Lead/Lag (Months) | Average Lead/Lag (Months) | Today Lead/Lag (Months) |
|---|---|---|---|---|---|---|---|---|
| Equity Market Peak to Recession Start: | -32% | -5% | -2% | -19% | -6% | -2% | -11% | -15% |
| NAHB Home Builder Confidence | - | - | -48 | -26 | -29 | -2 | -26 | -20 |
| Manufacturing PMI (local peak) | -12 | -17 | -3 | -15 | -8 | 0 | -9 | -16 |
| Umich Consumer Confidence | - | -22 | -3 | -13 | -9 | 1 | -9 | -15 |
| Conf. Board Consumer Confidence | -13 | -20 | -4 | -9 | -3 | 1 | -8 | -13 |
| 2s10s (Trough) | - | -2 | -12 | -11 | -12 | -5 | -8 | - |
| 3s10s (Trough) | - | - | - | -3 | -9 | -5 | -6 | - |
| Recession Start Date: | 12/1/1969 | 1/1/1980 | 7/31/1990 | 3/1/2001 | 12/1/2007 | 2/1/2020 | Recession | - |
| Nonfarm Payrolls Total | 4 | 3 | 0 | 0 | 1 | 3 | 2 | - |
| 4W Jobless Claims | 5 | 5 | 9 | 8 | 16 | 3 | 8 | - |

Source: Bloomberg, Morgan Stanley Research

While we compared peak readings in the analysis above (Exhibit 9), we also looked at level and rate of change for another vantage point (Exhibit 10). Below we sequence four main categories of macro variables from the previous 6 recessions versus today. However, traditional y/y comparisons are difficult in what could be the shortest cycle in the past four decades. Below we attempt to account for this by taking the 3-month change to get a sense for the short-term trend. Our conclusions for each group are below and we find that most indicators are falling to recession levels, with Labor and PMIs as the last holdouts.

**Sentiment:** The worst of the four groups with all indicators below average recession levels (T+0).

**Treasuries:** Treasury curves (2s10s, 3s10s) are flashing warning signs as short-term yields rise and back-end yields decline. Real yields are broadly rising, a typical indicator of economic strength, but have fallen 70bps since the June intra-month high.

**Macro:** Labor levels are healthy today but the rate of change signals deterioration. M2 and PMIs are at positive levels but show rapid deterioration.

**Housing:** Housing is an early cycle beneficiary and has pulled back sharply on Fed rate hikes. Both indicators signal faster deterioration than typical recessions, partially due to their previously elevated levels.

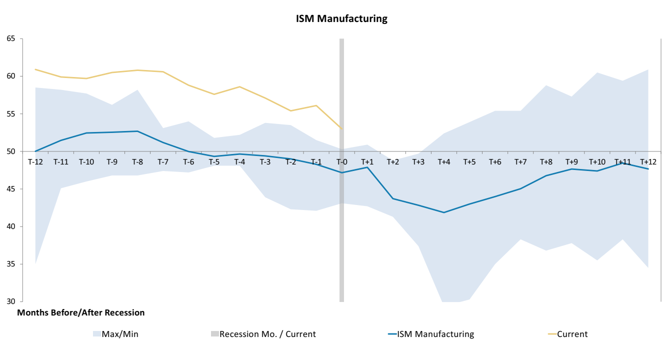
**Exhibit 10:** Macro deterioration looks similar to previous recession, with labor and PMIs as the final holdouts

| | Avg. Series Values Before/After Start of Prior 6* Recessions | | | | | | | | | Trailing 12 Months | | | | | Today vs Recession | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | T-12 | T-6 | T-3 | T-1 | T-0 | T+1 | T+3 | T+6 | T+12 | T-12 | T-6 | T-3 | T-1 | Current | Today's Trend | Today vs. Recession |
| **Sentiment** | | | | | | | | | | | | | | | | |
| Umich Consumer Confidence | 91 | 87 | 87 | 83 | 85 | 80 | 70 | 68 | 77 | 81 | 67 | 65 | 50 | 51 | Falling | Worse |
| Conf. Board Consumer Confidence | 120 | 114 | 111 | 104 | 106 | 97 | 79 | 71 | 79 | 125 | 111 | 109 | 98 | 96 | Falling | Worse |
| NFIB Small Business Optimism | 99 | 98 | 98 | 98 | 97 | 95 | 91 | 94 | 96 | 103 | 99 | 93 | 93 | 90 | Falling | Worse |
| **Treasuries** | | | | | | | | | | | | | | | | |
| 2s10s | -24 | -4 | -17 | 17 | 35 | 36 | 88 | 114 | 106 | 103 | 60 | 21 | 5 | -24 | Falling | In-Line |
| 3s10s | -6 | -9 | 3 | 44 | 72 | 123 | 145 | 167 | 240 | 118 | 158 | 209 | 130 | 25 | Falling | In-Line |
| 2Yr Yield, 3M Change | -0.4 | 0.0 | 0.7 | 0.0 | -0.4 | -0.1 | -0.7 | -0.4 | -0.1 | 0.0 | 0.7 | 1.5 | 0.6 | 0.2 | Rising | - |
| 10Yr Yield, 3M Change | -0.4 | 0.1 | 0.3 | -0.1 | -0.3 | 0.1 | -0.1 | -0.2 | -0.1 | -0.4 | 0.2 | 1.2 | 0.7 | -0.3 | Falling | - |
| 10Yr Real Yields, 3M Change | -0.1 | 0.2 | -0.3 | -0.6 | -0.5 | -0.5 | -0.2 | -0.2 | -0.1 | -0.4 | 0.3 | 0.7 | 1.2 | 0.1 | Rising | Better |
| **Macro** | | | | | | | | | | | | | | | | |
| Nonfarm Payrolls, 3M Change | 317 | 500 | 315 | 355 | 338 | -72 | -3,424 | 718 | -204 | 1,267 | 1,912 | 1,616 | 1,150 | 1,124 | Falling | Better |
| 4W Jobless Claims, 3M Change | 10 | -4 | 11 | 20 | 13 | 368 | 348 | -161 | 7 | -147.0 | -71.8 | -40.0 | 53.8 | 60.8 | Rising | Worse |
| M2 YoY | 5.8 | 6.8 | 7.5 | 7.2 | 7 | 7.7 | 9.6 | 10.2 | 11.0 | 12.9 | 12.4 | 9.5 | 6.2 | 5.9 | Falling | Worse |
| Manufacturing PMI | 50.0 | 50.0 | 49.4 | 48.3 | 47.2 | 47.9 | 42.8 | 44.0 | 47.7 | 60.9 | 58.8 | 57.1 | 56.1 | 53.0 | Falling | Better |
| **Housing** | | | | | | | | | | | | | | | | |
| Housing Starts, 3M Change | -97 | 23 | -130 | -53 | -55 | -134 | -190 | 58 | -42 | -47 | 209 | -52 | -186 | -157 | Falling | Worse |
| Mortgage Apps, 3M % Change | 8% | 12% | -11% | 27% | 39% | 41% | -4% | 16% | 41% | 5% | -1% | -43% | -24% | -22% | Falling | Worse |

Source: Bloomberg, FactSet, Haver, Morgan Stanley Research

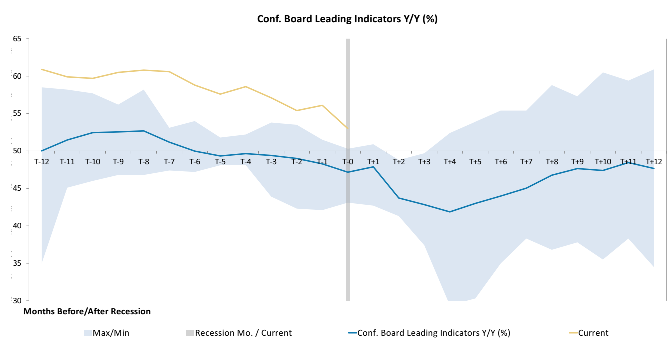
For more comparisons on today's indicators versus recession, the below charts map out today's current path versus the historical range of previous recessions. As mentioned above, many of these indicators are well above recession levels but show a deteriorating trend, which begs the question if level or rate of change will ultimately win out.

**Exhibit 11:** ISM are in expansion territory but decelerating quickly...



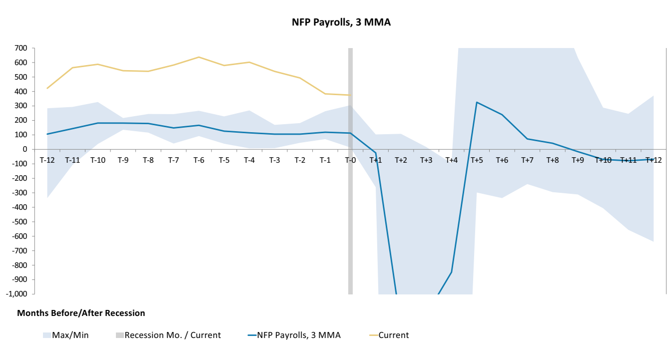

Source: Bloomberg, FactSet, Haver, Morgan Stanley Research

**Exhibit 12:** ...As are Conference Board leading indicators



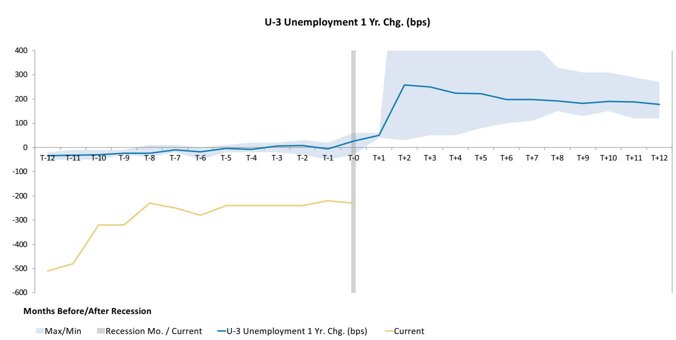

Source: Bloomberg, FactSet, Haver, Morgan Stanley Research

**Exhibit 13:** Nonfarm Payrolls are strongly positive...



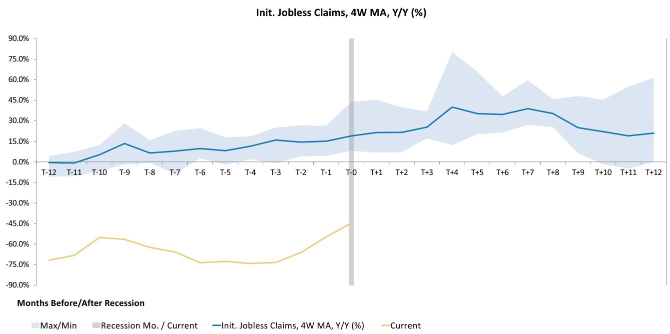

Source: Bloomberg, FactSet, Haver, Morgan Stanley Research

**Exhibit 14:** ...While Unemployment is low



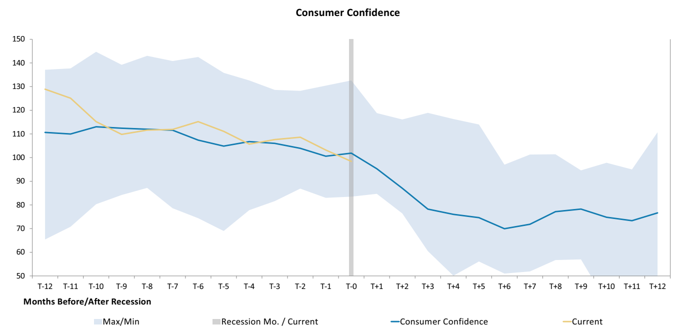

Source: Bloomberg, FactSet, Haver, Morgan Stanley Research

**Exhibit 15:** Jobless Claims are low but rising



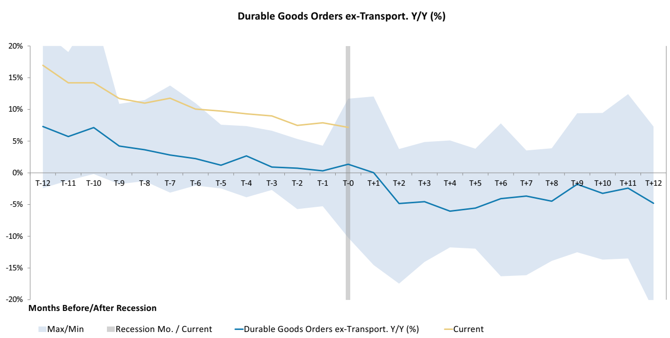

Source: Bloomberg, FactSet, Haver, Morgan Stanley Research

**Exhibit 16:** Consumer Confidence is in-line with previous recession



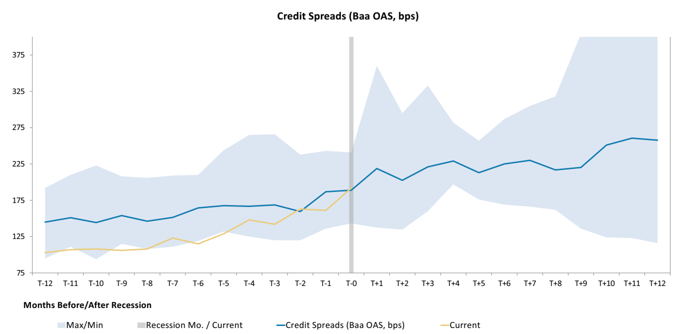

Source: Bloomberg, FactSet, Haver, Morgan Stanley Research

**Exhibit 17:** Durable Goods Orders are strong Y/Y but falling




Source: Bloomberg, FactSet, Haver, Morgan Stanley Research

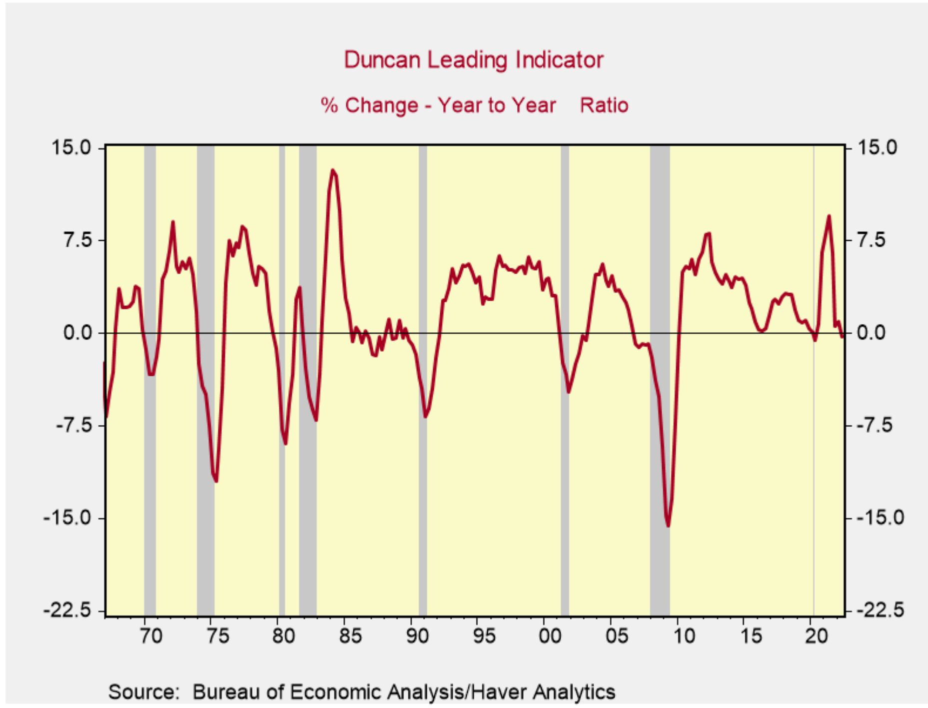
**Exhibit 18:** Credit Risk is rising




Source: Bloomberg, FactSet, Haver, Morgan Stanley Research

Finally, with the release of 2Q GDP last week, which put us into a "technical" recession already, we looked at one of our favorite recession metrics – the Duncan Leading Indicator. When y/y change in this metric goes negative it has been a very strong sign recession is here or it's coming within the next 12 months. With 2Q GDP release, the DLI y/y change went negative for the first time this cycle (Exhibit 19).

**Exhibit 19:** Negative y/y change in the DLI has a good track record of signaling recessions




Source: Bloomberg, Morgan Stanley Research

# 2Q Earnings Update

As second quarter earnings season ramped up last week, we saw a number of examples of the themes we have expected to play out as the economy slows.

- ***Consumers trading down***: Consumers have begun trading down from more premium products to lower priced alternatives as multi decade high inflation weighs on household budgets. Fiserv (FISV, covered by James Faucette), a transaction and payment processing company, noted a weakening of high end restaurant spend that was offset by better quick service spend as consumers choose cheaper paths to dining out. McDonald's (MCD, covered by John Glass) noted a similar pattern within their own business as consumers chose fewer meal options in favor value menu items, a trend that began during the spring and continued last quarter.

- ***Weakening demand***: Best Buy's (BBY, covered by Simeon Gutman) CEO called out high inflation and weak consumer sentiment as the reason demand weakness in consumer electronics - this makes sense to us as consumers slow discretionary purchases in order to keep up with price increases in Staples categories. Stanley Black & Decker (SWK, covered by Joshua Pokrzywinski) lowered its full year earnings outlook on the back of decreased demand due to lower interest in DIY home supplies. High mortgage rates have been weighing on consumers and home goods was one category where we saw major overconsumption during lockdown. Other companies levered to home improvement/furnishing may struggle as housing demand softens.

- ***Too much inventory***: Many companies ordered inventory to keep up with the levels of demand they saw as the economy recovered from Covid. This has led to excess inventory across a number of companies as consumers rethink their spending patterns to cope with high prices. Walmart (WMT, covered by Simeon Gutman) continues to suffer from inventory build and has not been able to work off the excess inventory they first alerted the market to last quarter.

We will continue to look for discussions of demand softness and inventory build as we expect these problems to broaden out as we move from a market that was characterized by too much demand in a supply constrained world to one marked by weak demand in a supply rich world. We expect companies to begin discounting merchandise and taking a hit to margins in order to move supplies off of shelves. This has began in the retail world but will likely spread to other parks of the market.

**Second quarter earnings are tracking at +6% YOY for the S&P 500 with about half of sectors seeing positive earnings growth (Exhibit 20)**. The Energy sector is currently a key driver of earnings growth contributing 10% to index level growth. The biggest drag on growth is the Financials sector where earnings have seen a -25% YOY decline with. The sector is bringing index level growth down nearly 5%.

Topline growth is tracking at +12% YOY for the S&P 500 with Energy once again being the key contributor to index level growth. Most sectors are seeing revenue growth in the mid single digits to mid teens. **All sectors but Energy and Industrials are experiencing**

**negative operating leverage**.

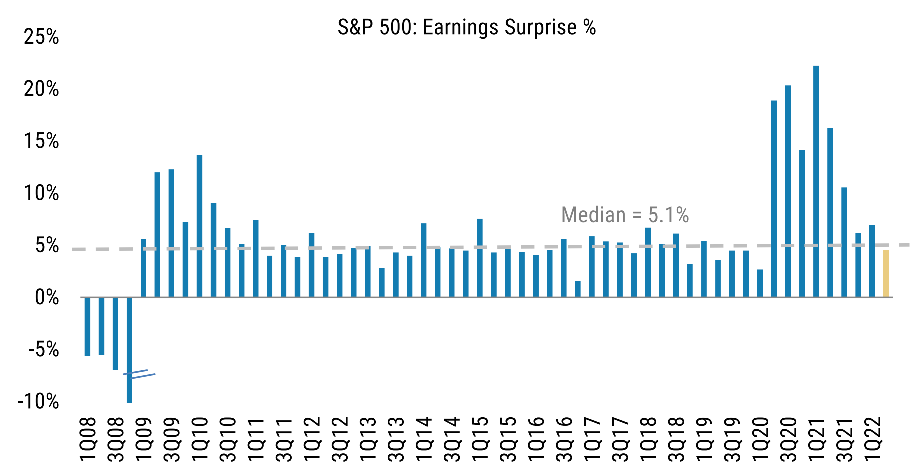
**Exhibit 20:** 2Q22 Earnings Scorecard

| Sector | EPS YOY | Contribution | Sales YOY | Contribution |
|---|---|---|---|---|
| Comm Services | -11.7% | -1.2% | 5.7% | 0.6% |
| Consumer Discretionary | -18.2% | -1.4% | 11.5% | 1.5% |
| Consumer Staples | -0.9% | -0.1% | 7.4% | 0.9% |
| Energy | 288.9% | 10.0% | 65.6% | 4.6% |
| Financials | -24.7% | -4.7% | 2.4% | 0.3% |
| Health Care | 5.7% | 0.9% | 8.1% | 1.5% |
| Industrials | 25.7% | 1.7% | 12.5% | 1.2% |
| Info Tech | 1.3% | 0.3% | 7.5% | 0.8% |
| Materials | 13.2% | 0.5% | 16.1% | 0.5% |
| Real Estate | 7.2% | 0.2% | 14.6% | 0.1% |
| Utilities | -7.6% | -0.2% | 7.4% | 0.2% |
| S&P 500 | 5.9% | 5.9% | 12.3% | 12.3% |

Source: FactSet, Morgan Stanley Research

Companies are beating estimates this quarter by approximately 5% - in line with the typical beat rate (Exhibit 21). This comes after a couple years of highly elevated beats driven by uncertainty following the pandemic. During this period beats ranged from 11% - 22%.

**Exhibit 21:** S&P 500 Earnings Surprises

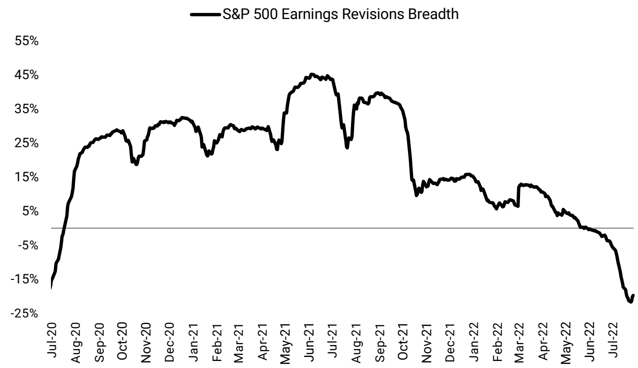



Source: Refinitiv, Morgan Stanley Research

Earnings revisions breadth has dropped precipitously over the last month falling nearly 15% to -20%. Earnings revisions breadth tends to lead forward earnings growth lower and the earnings correction has only just begun (Exhibit 22 and Exhibit 23). The substantial drop in revisions breadth gives our team high conviction that the current risk to earnings hasn't fully made its way into the estimates yet.

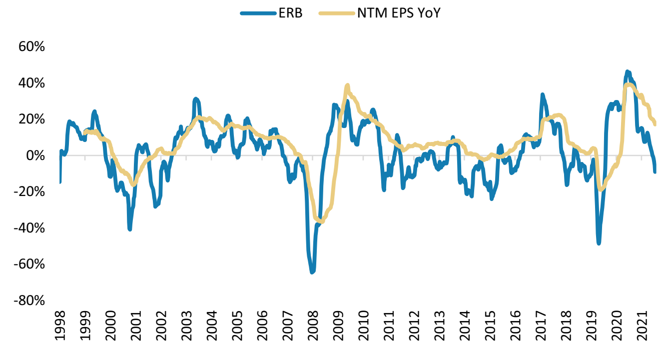
Earnings revisions breadth, on an absolute basis, looks extremely weak across all sectors and industry groups (Exhibit 24). **The metric is only positive for two groups, Energy and Banks, meaning these are the only industry groups in the market where more sell side analysts are increasing earnings estimates as opposed to lowering them.** This month, the biggest declines have occurred in Transportation, Materials, Insurance, and Consumer Durables.

**Exhibit 22:** S&P 500 Earnings Revisions Breadth



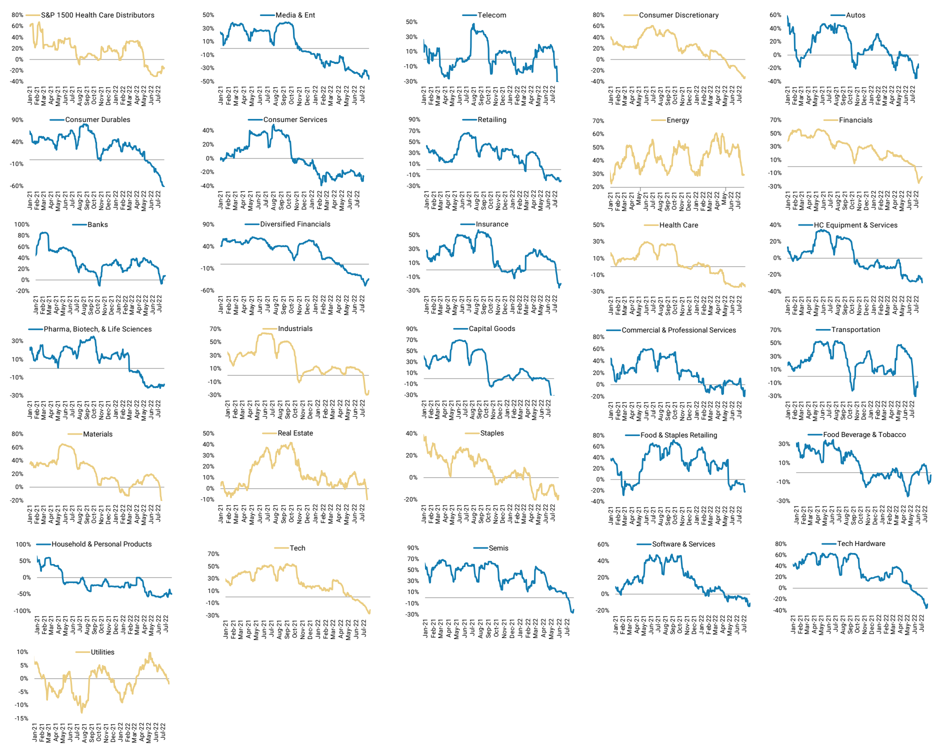

Source: FactSet, Morgan Stanley Research

**Exhibit 23:** S&P 500 ERB vs Forward Earnings




Source: FactSet, Morgan Stanley Research

**Exhibit 24:** Sector & Industry Group Earnings Revisions Breadth




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 25. Year to date, earnings have been revised modestly higher for the second quarter with numbers being driven by Energy's massive revision upwards. The biggest drag on earnings has come from the Consumer Discretionary groups, Consumer Services and Retailing in particular, and Media & Entertainment. The vast majority of industry groups have seen earnings estimates revised lower and many in the double digits.

Despite the sharp decline observed in earnings revisions breadth we have only seen a flattening in forward earnings estimates at the market level. **We need to see bigger cuts**

**to annual sell side numbers in order to get a decline in a forward estimates and a bigger S&P price correction; earnings revision breadth is agnostic to *magnitude* of earnings cuts and we expect bigger cuts are on the horizon.**

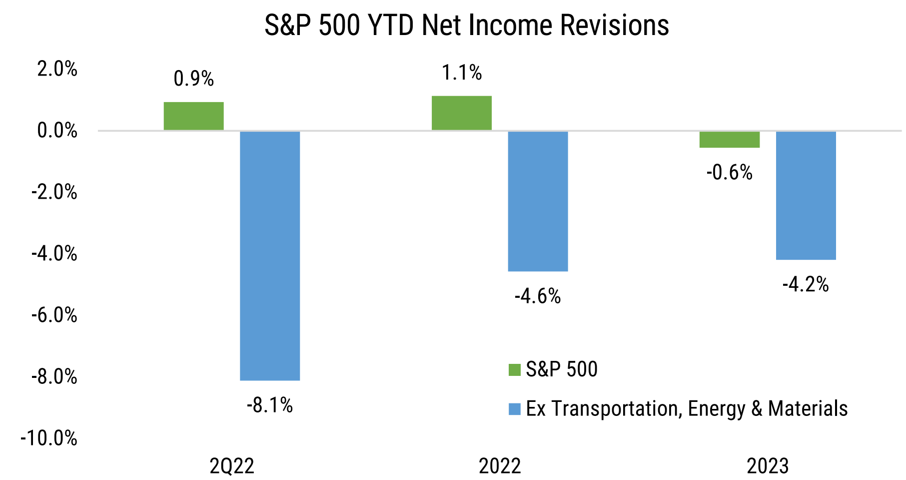
**Exhibit 25:** S&P 500 EPS Revisions

| | YTD | | | Since 6/30 | | |
|---|---|---|---|---|---|---|
| Sector, Industry Group | 2Q22 | 2022 | 2023 | 2Q22 | 2022 | 2023 |
| **Communication Services** | -15.2% | -12.8% | -12.6% | -3.5% | -5.5% | -6.6% |
| Media & Entertainment | -16.8% | -14.2% | -14.0% | -4.1% | -6.3% | -7.6% |
| Telecom | -6.5% | -4.5% | -4.4% | -1.7% | -2.9% | -2.9% |
| **Consumer Discretionary** | -23.3% | -17.6% | -10.1% | -0.2% | -2.1% | -2.8% |
| Autos | -4.9% | 7.8% | 7.4% | 6.7% | 1.4% | -0.2% |
| Consumer Durables | 4.0% | 0.0% | -12.8% | 2.1% | -1.9% | -5.1% |
| Consumer Services | -48.3% | -34.1% | -9.0% | -3.5% | -3.7% | -2.4% |
| Retailing | -29.6% | -26.3% | -14.9% | -3.0% | -3.4% | -3.2% |
| **Energy** | 137.0% | 97.1% | 76.6% | 15.9% | 8.1% | 4.1% |
| **Financials** | -8.4% | -3.3% | -0.8% | -2.6% | -1.9% | -1.6% |
| Banks | -5.8% | -0.7% | 2.3% | -3.0% | -1.1% | -0.8% |
| Diversified Financials | -9.8% | -6.1% | -5.1% | -0.8% | -2.2% | -2.9% |
| Insurance | -11.4% | -3.1% | 1.6% | -5.8% | -3.4% | -0.7% |
| **Health Care** | 1.1% | -1.0% | -2.6% | 4.5% | -0.2% | -0.7% |
| HC Equipment & Services | -0.9% | -0.7% | -3.4% | 5.0% | 0.3% | -0.9% |
| Pharma, Biotech, & Life Sciences | 2.1% | -1.2% | -2.2% | 4.3% | -0.4% | -0.5% |
| **Industrials** | -1.9% | -2.3% | -1.8% | -1.3% | -1.4% | -2.3% |
| Capital Goods | -10.6% | -5.4% | -2.1% | -2.9% | -2.0% | -1.9% |
| Commercial & Professional Services | 2.2% | 3.1% | 0.7% | 1.2% | -0.4% | -0.7% |
| Transportation | 17.2% | 3.4% | -2.0% | 1.2% | -0.3% | -3.6% |
| **Materials** | 12.1% | 11.8% | 6.7% | -1.8% | -2.6% | -3.6% |
| **Real Estate** | -0.1% | 4.3% | 2.4% | -4.5% | -0.4% | -0.1% |
| **Staples** | -3.2% | -2.8% | -3.7% | 3.0% | -0.9% | -1.3% |
| Food & Staples Retailing | -7.2% | -4.4% | -3.6% | -4.8% | -4.0% | -3.2% |
| Food Beverage & Tobacco | 1.1% | -1.0% | -2.9% | 6.8% | 0.3% | -0.3% |
| Household & Personal Products | -13.1% | -6.5% | -6.7% | -0.3% | -1.3% | -2.3% |
| **Tech** | -0.9% | 1.2% | -0.7% | 1.2% | -1.6% | -3.0% |
| Semis | 7.9% | 4.6% | 0.4% | 3.3% | -2.5% | -6.2% |
| Software & Services | -3.9% | -2.4% | -3.7% | 0.5% | -1.7% | -2.4% |
| Tech Hardware | -4.5% | 3.1% | 2.3% | 0.3% | -0.7% | -0.9% |
| **Utilities** | -0.6% | 2.4% | 0.9% | 1.9% | 2.1% | 0.1% |
| **S&P 500** | 2.3% | 1.9% | 0.2% | 1.9% | -0.8% | -2.0% |

Source: FactSet, Morgan Stanley Research

If we look at net income rather than earnings per share we are now seeing modestly negative revisions for 2023 estimates year to date (Exhibit 31). However, when we strip out Transportation, Energy, and Materials, all highly cyclical sectors that have experienced idiosyncratic tailwinds this year, numbers have fallen much further and are down 4%. These cyclical groups driving earnings represent only approximately 8.6% of the S&P 500. The earnings cuts have just begun and we expect them to heat up over the coming weeks.

**Exhibit 26:** Net Income Revisions YTD




Source: FactSet, Morgan Stanley Research

## Factor Update

We select a few key factors to monitor in Exhibit 27 and Exhibit 28 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 (-1.1% relative return) and the overall market (-0.8% relative return versus the overall Top 1,000 universe).
- Value has underperformed Growth (-3.4%) and the overall market (-1.6% relative return).
- Cyclicals are up +7.0% in absolute terms, outperforming Defensives (+0.6%); but that performance spread widens when we exclude Energy from Cyclicals, which has seen recent pull back in crude prices; Cyclicals-Ex Energy have outperformed Defensives by +1.2%.
- High Momentum stocks have underperformed low momentum stocks (-1.9% relative return), and the overall market (-1.6% relative return).
- Small Caps have outperformed Large Caps.

**Exhibit 27:** Top 1,000 Factor Returns

Top 1000 Factor Return as of Jul 28, 2022

| Factor | 1 Week | | | 1 Month | | | YTD Ret | 12M Ret |
|---|---|---|---|---|---|---|---|---|
| | Ret | 1W Chg | 1M Chg | Ret | 1M Chg | 3M Chg | | |
| Quality / Junk | 1.7% | ↑ | ↑ | -1.1% | ↓ | ↓ | 9.2% | 15.8% |
| Quality | 2.8% | ↓ | ↑ | 5.9% | ↑ | ↑ | -8.9% | -0.8% |
| Junk | 1.2% | ↓ | ↓ | 6.9% | ↑ | ↑ | -18.1% | -16.7% |
| Value / Growth | 0.9% | ↑ | ↑ | -3.4% | ↓ | ↓ | 17.7% | 23.1% |
| Value | 2.0% | ↓ | ↓ | 5.1% | ↑ | ↑ | -6.6% | -0.5% |
| Growth | 1.1% | ↓ | ↓ | 8.5% | ↑ | ↑ | -24.3% | -23.6% |
| Cyclical / Defensive | -0.7% | ↓ | ↑ | 0.6% | ↑ | ↑ | -5.3% | -5.7% |
| Cyclical | 1.6% | ↓ | ↓ | 7.0% | ↑ | ↑ | -15.3% | -10.8% |
| Defensive | 2.3% | ↓ | ↓ | 6.4% | ↑ | ↑ | -10.0% | -5.0% |
| *Cyclical xEnergy / Defensive* | -1.1% | ↓ | ↑ | 1.2% | ↑ | ↑ | -9.6% | -11.0% |
| *Cyclical xEnergy* | 1.2% | ↓ | ↓ | 7.6% | ↑ | ↑ | -19.6% | -16.0% |
| 12M Momentum | 3.2% | ↑ | ↑ | -1.9% | ↓ | ↓ | -0.1% | 6.8% |
| High Momentum | 2.6% | ↓ | ↑ | 5.0% | ↑ | ↑ | -17.2% | -12.2% |
| Low Momentum | -0.6% | ↓ | ↓ | 7.0% | ↑ | ↑ | -17.1% | -19.1% |
| Size (Small / Large) | -1.2% | ↓ | ↓ | 0.6% | ↓ | ↑ | -0.8% | -6.0% |
| Small Cap | 0.8% | ↓ | ↓ | 6.6% | ↑ | ↑ | -14.7% | -14.2% |
| Large Cap | 2.0% | ↓ | ↑ | 5.9% | ↑ | ↑ | -13.9% | -8.2% |

Source: ClariFi, Morgan Stanley Research

**Exhibit 28:** Excess Return Versus Broader Top 1,000 Universe

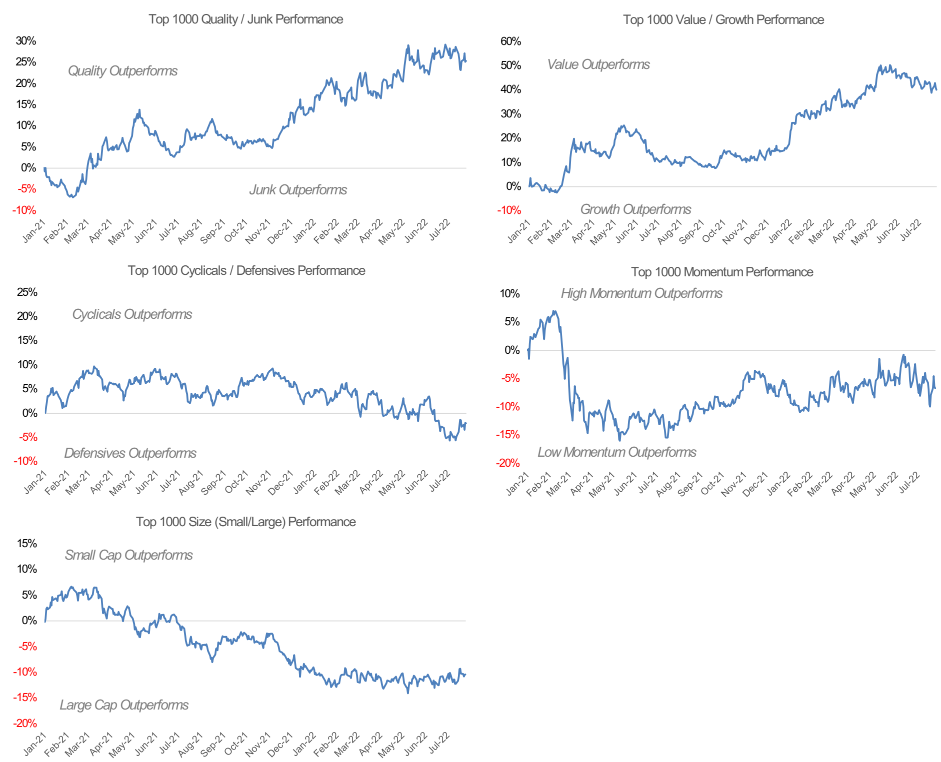
Top 1000 Excess Factor Return versus Broader Top 1000 Return as of Jul 28, 2022

| Factor | 1 Week | | | 1 Month | | | YTD Ret | 12M Ret |
|---|---|---|---|---|---|---|---|---|
| | Ret | 1W Chg | 1M Chg | Ret | 1M Chg | 3M Chg | | |
| Quality / Junk | | | | | | | | |
| Quality | 1.1% | ↑ | ↑ | -0.8% | ↓ | ↓ | 5.7% | 10.0% |
| Junk | -0.6% | ↓ | ↓ | 0.3% | ↑ | ↑ | -3.5% | -5.9% |
| Value / Growth | | | | | | | | |
| Value | 0.3% | ↑ | ↑ | -1.6% | ↓ | ↓ | 8.0% | 10.3% |
| Growth | -0.6% | ↓ | ↓ | 1.8% | ↑ | ↑ | -9.7% | -12.8% |
| Cyclical / Defensive | | | | | | | | |
| Cyclical | -0.1% | ↓ | ↑ | 0.4% | ↑ | ↑ | -0.7% | 0.0% |
| Defensive | 0.5% | ↑ | ↓ | -0.2% | ↓ | ↓ | 4.6% | 5.8% |
| *Cyclical xEnergy / Defensive* | | | | | | | | |
| *Cyclical xEnergy* | -0.5% | ↓ | ↑ | 1.0% | ↑ | ↑ | -5.0% | -5.3% |
| Momentum | | | | | | | | |
| High Momentum | 0.9% | ↑ | ↑ | -1.6% | ↓ | ↓ | -2.7% | -1.4% |
| Low Momentum | -2.3% | ↓ | ↓ | 0.3% | ↑ | ↑ | -2.5% | -8.3% |
| Size (Small / Large) | | | | | | | | |
| Small Cap | -1.0% | ↓ | ↓ | -0.1% | ↓ | ↓ | -0.1% | -3.4% |
| Large Cap | 0.2% | ↑ | ↑ | -0.8% | ↓ | ↓ | 0.6% | 2.6% |

Source: ClariFi, Morgan Stanley Research

Exhibit 29 shows performance of these pairs in time series graph form.

**Exhibit 29:** Cumulative Factor Performance Since 2021




Source: ClariFi, Morgan Stanley Research

We include an extensive list of factors and their returns in Exhibit 30. 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 31.

**Exhibit 30:** Full List of Factor Spread Returns (Long - Short)

**Equal Weighted Factor Return (Spread) in Top 1000 as of Jul 28, 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) | -0.2% | ↓ | ↓ | 4.2% | ↑ | ↑ | 4.5% | -3.6% | -7.7% |
| Industry Cyclical vs Defensive | 0.4% | ↓ | ↑ | 3.6% | ↑ | ↑ | -0.4% | -3.5% | 2.5% |
| Composite Sentiment (High vs Low) | 0.7% | ↓ | ↑ | 2.8% | ↑ | ↑ | 0.4% | -4.3% | 0.2% |
| 12m-1m Residual Momentum (High vs Low) | 2.7% | ↑ | ↑ | 2.6% | ↑ | ↑ | -0.3% | -2.1% | 3.3% |
| Forecast long term growth (High vs Low) | 0.6% | ↓ | ↑ | 2.5% | ↑ | ↑ | -0.5% | -4.7% | -1.1% |
| Return on Invested Capital (High vs Low) | 3.0% | ↑ | ↑ | 2.5% | ↑ | ↓ | 8.2% | 12.8% | 24.2% |
| ROA (High vs Low) | 2.6% | ↑ | ↑ | 2.4% | ↑ | ↓ | 8.7% | 10.2% | 21.3% |
| Interest Coverage (High vs Low) | 2.6% | ↑ | ↑ | 2.1% | ↑ | ↑ | 8.4% | 7.0% | 18.6% |
| Operating Margin (High vs Low) | 2.6% | ↑ | ↑ | 2.0% | ↑ | ↓ | 6.9% | 9.9% | 18.8% |
| 5-Year EPS Growth (High vs Low) | -0.7% | ↓ | ↓ | 1.9% | ↑ | ↑ | 0.9% | -6.7% | -4.6% |
| 1-Year Sales Growth (High vs Low) | -0.6% | ↓ | ↓ | 1.8% | ↑ | ↑ | -4.0% | -20.7% | -24.7% |
| ROE (High vs Low) | 1.3% | ↑ | ↑ | 1.7% | ↑ | ↓ | 3.9% | 6.0% | 15.3% |
| Net Margin (High vs Low) | 2.4% | ↑ | ↑ | 1.6% | ↑ | ↓ | 8.0% | 10.3% | 20.7% |
| 1-Year Dividend per share growth (High vs Low) | 0.5% | ↓ | ↑ | 1.6% | ↑ | ↑ | 3.1% | 0.5% | 2.9% |
| ROE Variability (Low vs High) | 0.3% | ↑ | ↓ | 1.2% | ↓ | ↑ | 5.0% | 0.8% | 3.2% |
| Enterprise Value-to-Operating Income (Low vs High) | 3.0% | ↑ | ↑ | 1.1% | ↑ | ↓ | 5.9% | 20.5% | 34.4% |
| Debt-to-Equity (Low vs High) | 0.3% | ↑ | ↑ | 1.1% | ↓ | ↑ | 4.4% | -2.8% | -1.5% |
| Financial Leverage (Low vs High) | 1.3% | ↑ | ↑ | 1.1% | ↑ | ↑ | 2.7% | 2.4% | 5.7% |
| Cash Flow / Debt (High vs Low) | 1.9% | ↑ | ↑ | 1.0% | ↑ | ↓ | 5.1% | 6.5% | 17.3% |
| Net Debt-to-Market Cap (Low vs High) | -0.6% | ↓ | ↑ | 1.0% | ↓ | ↑ | 2.2% | -13.1% | -17.3% |
| Profitability (High vs Low) | -0.3% | ↑ | ↑ | 0.9% | ↓ | ↑ | 1.8% | -2.7% | -2.8% |
| Smoothed Estimate Revisions (%) (High vs Low) | -0.3% | ↓ | ↑ | 0.8% | ↑ | ↑ | -2.5% | -4.1% | 2.0% |
| Price-to-Cash Flow (Cheap vs Expensive) | -0.1% | ↓ | ↑ | 0.7% | ↑ | ↑ | -0.1% | -4.8% | -11.1% |
| Size (Small vs Large) | -1.2% | ↓ | ↓ | 0.6% | ↓ | ↑ | 1.4% | -0.8% | -6.0% |
| Cyclical vs Defensive | -0.7% | ↓ | ↑ | 0.6% | ↑ | ↑ | -1.7% | -5.3% | -5.7% |
| Free Cash Flow-to-Debt (High vs Low) | 1.0% | ↑ | ↑ | 0.6% | ↑ | ↓ | 3.9% | 5.5% | 16.3% |
| Operating Leverage (High vs Low) | 1.8% | ↑ | ↑ | 0.5% | ↑ | ↑ | 2.0% | 6.0% | 9.8% |
| Receivables Turnover (High vs Low) | -1.2% | ↓ | ↓ | 0.5% | ↑ | ↑ | -2.1% | -0.4% | 0.4% |
| 5-Year Sales Growth (High vs Low) | -1.9% | ↓ | ↓ | 0.5% | ↑ | ↑ | -4.0% | -20.0% | -26.4% |
| Sales Estimate Revisions (High vs Low) | -0.3% | ↑ | ↑ | 0.5% | ↑ | ↑ | -2.4% | -4.6% | 0.8% |
| Net Cash Ratio (High vs Low) | -0.7% | ↓ | ↑ | 0.4% | ↓ | ↑ | 1.3% | -11.6% | -15.1% |
| Inventory Turnover (High vs Low) | 0.2% | ↑ | ↑ | 0.3% | ↑ | ↓ | -0.8% | 6.9% | 10.6% |
| CapEx-to-Sales (Low vs High) | -0.6% | ↓ | ↓ | 0.3% | ↑ | ↓ | 2.0% | 5.6% | 5.2% |
| Net Cash Variability (Low vs High) | -0.7% | ↓ | ↑ | 0.3% | ↑ | ↑ | -2.7% | -1.6% | 4.9% |
| Sales per Employee (High vs Low) | -0.2% | ↑ | ↑ | 0.3% | ↑ | ↓ | 1.5% | 3.7% | 7.8% |
| Earnings Estimate Revisions (High vs Low) | -0.8% | ↓ | ↓ | 0.2% | ↑ | ↓ | -3.0% | -2.0% | 6.9% |
| EPS Variability (Low vs High) | 0.6% | ↑ | ↑ | 0.2% | ↓ | ↓ | 3.7% | 3.5% | 4.6% |
| 5-Year Dividend per share growth (High vs Low) | 0.4% | ↑ | ↑ | 0.2% | ↓ | ↑ | 4.7% | -0.2% | 3.9% |
| Earnings Stability (High vs Low) | 0.9% | ↑ | ↑ | 0.1% | ↓ | ↓ | 3.5% | 8.2% | 12.5% |
| Asset Turnover (High vs Low) | -0.1% | ↑ | ↑ | 0.0% | ↑ | ↓ | 2.9% | 6.2% | 14.6% |
| Composite Growth (High vs Low) | 0.8% | ↑ | ↑ | -0.1% | ↑ | ↓ | -0.7% | -0.9% | 3.5% |
| 1-Month Estimate Revisions (%) (High vs Low) | -1.7% | ↓ | ↓ | -0.1% | ↑ | ↓ | -6.5% | -8.6% | -7.0% |
| Cash Ratio (High vs Low) | -1.1% | ↓ | ↓ | -0.2% | ↓ | ↑ | -1.2% | -13.7% | -22.1% |
| Sales Revisions (High vs Low) | -0.1% | ↑ | ↑ | -0.2% | ↑ | ↑ | -3.1% | -6.5% | -1.4% |
| Inventory-to-Sales (Low vs High) | -0.2% | ↑ | ↓ | -0.2% | ↓ | ↓ | -2.0% | 2.1% | 2.4% |
| Long-Term Operating Leverage (High vs Low) | 0.8% | ↑ | ↑ | -0.3% | ↑ | ↓ | -0.1% | 1.8% | 3.0% |
| Price-to-Earnings (Cheap vs Expensive) | 1.8% | ↑ | ↑ | -0.3% | ↑ | ↓ | 4.0% | 14.3% | 23.6% |
| Price-to-Operating Income (Cheap vs Expensive) | 2.4% | ↑ | ↑ | -0.3% | ↑ | ↓ | 5.1% | 19.3% | 30.8% |
| Estimate Dispersion (Low vs High) | 1.7% | ↑ | ↑ | -0.3% | ↓ | ↓ | 4.9% | 10.3% | 18.5% |
| Price-to-Forward Earnings (Cheap vs Expensive) | 1.7% | ↑ | ↑ | -0.4% | ↑ | ↓ | 5.3% | 20.7% | 33.1% |
| Gross Profit / Assets (High vs Low) | -0.9% | ↓ | ↓ | -0.4% | ↓ | ↑ | 0.4% | -7.8% | -9.5% |
| Enterprise Value-to-EBITDA (Low vs High) | 2.8% | ↑ | ↑ | -0.4% | ↑ | ↓ | 6.4% | 22.1% | 35.3% |
| Up vs Down Sales Revisions (High vs Low) | 0.0% | ↑ | ↑ | -0.4% | ↓ | ↑ | -3.2% | -8.5% | -3.8% |
| Cash Flow Coverage (High vs Low) | -0.2% | ↓ | ↑ | -0.5% | ↓ | ↑ | -0.1% | -1.6% | -5.1% |
| Reinvestment Rate (High vs Low) | -0.2% | ↑ | ↑ | -0.6% | ↓ | ↓ | 3.5% | 4.0% | 4.6% |
| Tangible Book/Price (Cheap vs Expensive) | -0.6% | ↓ | ↑ | -0.6% | ↑ | ↑ | 0.1% | 0.0% | 0.1% |
| Debt-to-EBITDA (Low vs High) | -2.4% | ↓ | ↓ | -0.6% | ↓ | ↑ | -3.8% | -11.5% | -15.3% |
| Debt-to-Assets (Low vs High) | 0.0% | ↑ | ↑ | -0.7% | ↓ | ↑ | 1.9% | -5.0% | -2.9% |
| Earnings Revisions (High vs Low) | -0.4% | ↑ | ↑ | -0.8% | ↓ | ↓ | -4.3% | -2.5% | 5.7% |
| Incremental Margin (High vs Low) | 0.9% | ↑ | ↑ | -0.8% | ↑ | ↓ | 1.9% | 5.0% | 7.9% |
| Price-to-EBITDA (Cheap vs Expensive) | 2.3% | ↑ | ↑ | -0.8% | ↑ | ↓ | 5.2% | 20.8% | 31.8% |
| Analyst Coverage (High vs Low) | -1.0% | ↓ | ↓ | -0.9% | ↓ | ↑ | -2.9% | -2.4% | 0.0% |
| Quality vs Junk | 1.7% | ↑ | ↑ | -1.1% | ↓ | ↓ | 2.4% | 9.2% | 15.8% |
| Enterprise Value-to-Free Cash Flow (Low vs High) | 1.1% | ↑ | ↑ | -1.1% | ↑ | ↓ | 2.0% | 17.7% | 30.2% |
| Composite Value (Cheap vs Expensive) | 0.8% | ↑ | ↑ | -1.1% | ↑ | ↓ | 3.4% | 14.4% | 24.6% |
| Debt-to-Capital (Low vs High) | -0.7% | ↓ | ↓ | -1.2% | ↓ | ↑ | 1.5% | -5.5% | -6.5% |
| 1-Year EPS Growth (High vs Low) | 1.4% | ↑ | ↑ | -1.2% | ↑ | ↓ | -1.1% | 2.0% | 8.1% |
| Up-to-Down Revisions (High vs Low) | -0.4% | ↑ | ↑ | -1.2% | ↑ | ↓ | -5.6% | -3.3% | 4.9% |
| Sales Growth Stability (High vs Low) | -0.1% | ↑ | ↓ | -1.3% | ↓ | ↓ | 2.6% | 3.6% | 4.8% |
| Reduction in Shares Outstanding (Low vs High) | 0.4% | ↑ | ↑ | -1.3% | ↑ | ↓ | 2.6% | 14.9% | 26.2% |
| Price-to-Book (Cheap vs Expensive) | -0.4% | ↓ | ↑ | -1.3% | ↑ | ↓ | 1.9% | 12.0% | 15.0% |
| Composite Free Cash Flow (High vs Low) | 0.8% | ↑ | ↑ | -1.3% | ↑ | ↓ | 1.4% | 16.4% | 28.2% |
| Sales Variability (Low vs High) | 1.3% | ↑ | ↑ | -1.3% | ↓ | ↓ | 4.2% | 14.8% | 20.6% |
| Composite Quality (High vs Low) | -0.3% | ↑ | ↑ | -1.4% | ↓ | ↓ | 1.2% | 4.3% | 7.9% |
| Free Cash Flow Yield (High vs Low) | 1.0% | ↑ | ↑ | -1.4% | ↑ | ↓ | 1.1% | 17.0% | 27.9% |
| Short-Term Accruals (Low vs High) | -0.2% | ↑ | ↑ | -1.4% | ↓ | ↓ | -1.8% | -0.1% | -2.6% |
| Y/Y Change in Inventory/Sales (Low vs High) | -0.5% | ↓ | ↓ | -1.5% | ↑ | ↓ | -2.7% | -0.1% | 0.4% |
| CapEx-to-Assets (Low vs High) | -0.9% | ↓ | ↓ | -1.6% | ↓ | ↓ | 1.0% | 3.1% | -3.1% |
| Cash-to-Assets (High vs Low) | -2.1% | ↓ | ↓ | -1.7% | ↓ | ↑ | -4.4% | -15.6% | -25.3% |
| Dividend Payout Ratio (High vs Low) | 0.0% | ↑ | ↑ | -1.8% | ↓ | ↓ | 2.9% | 5.6% | 6.6% |
| Gross Margin (High vs Low) | -1.8% | ↓ | ↓ | -1.8% | ↓ | ↓ | -3.1% | -7.6% | -11.6% |
| CapEx-to-Depreciation (Low vs High) | -0.6% | ↓ | ↓ | -1.9% | ↓ | ↓ | -1.2% | 9.4% | 10.1% |
| 12-Month Price Momentum (High vs Low) | 3.2% | ↑ | ↑ | -1.9% | ↓ | ↓ | -0.9% | -0.1% | 6.8% |
| Cash-to-Debt (High vs Low) | -2.0% | ↓ | ↓ | -2.1% | ↓ | ↑ | -2.7% | -12.2% | -20.0% |
| Total Yield (High vs Low) | -1.3% | ↓ | ↓ | -2.3% | ↓ | ↓ | -2.1% | 4.7% | 5.1% |
| Operational Efficiency (High vs Low) | 0.1% | ↑ | ↑ | -2.4% | ↓ | ↓ | -0.7% | 12.3% | 16.9% |
| Price-to-Sales (Cheap vs Expensive) | 0.2% | ↑ | ↑ | -2.4% | ↑ | ↓ | -1.5% | 16.2% | 27.5% |
| Cash-to-Market Cap (High vs Low) | -2.3% | ↓ | ↓ | -2.5% | ↓ | ↑ | -5.8% | -3.8% | -7.5% |
| Y/Y %Change in number of employees (Low vs High) | 0.7% | ↑ | ↑ | -2.7% | ↓ | ↓ | 0.6% | 17.6% | 24.1% |
| 12m Volatility (Low vs High) | 1.5% | ↑ | ↑ | -2.7% | ↓ | ↓ | 3.1% | 12.4% | 23.3% |
| Trailing Dividend Yield (High vs Low) | -0.6% | ↑ | ↑ | -3.2% | ↓ | ↓ | 1.0% | 11.1% | 6.9% |
| Value vs Growth | 0.9% | ↑ | ↑ | -3.4% | ↓ | ↓ | -1.1% | 17.7% | 23.1% |
| Accruals (Low vs High) | -0.1% | ↑ | ↑ | -3.9% | ↓ | ↓ | -4.2% | 7.0% | 11.3% |
| 3-Month Price Momentum (High vs Low) | 2.0% | ↑ | ↑ | -3.9% | ↓ | ↓ | -6.9% | -2.5% | 2.6% |
| 9-Month Price Momentum (High vs Low) | 2.2% | ↑ | ↑ | -4.1% | ↓ | ↓ | -4.5% | -3.1% | 3.2% |
| Operating Income Variability (Low vs High) | -1.6% | ↑ | ↓ | -4.3% | ↓ | ↓ | -2.8% | -4.7% | -9.9% |
| Composite Accruals (Low vs High) | -0.7% | ↑ | ↑ | -4.6% | ↓ | ↓ | -4.4% | 4.8% | 6.5% |
| 6-Month Price Momentum (High vs Low) | 1.9% | ↑ | ↑ | -5.1% | ↓ | ↓ | -4.8% | 0.4% | 6.7% |

Source: ClariFi, Morgan Stanley Research

**Exhibit 31:** Best and Worst Performing Factor Leg Returns

**Best 20 Performing Equal Weighted Group Return in Top 1000 as of Jul 28, 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) | 1.8% | ↓ | ↓ | 6.7% | ↑ | ↑ | -2.6% | -14.6% | -10.8% |
| High Operating Income Variability | 2.1% | ↓ | ↓ | 9.5% | ↑ | ↑ | -3.4% | -15.6% | -11.1% |
| High CapEx-to-Assets | 2.5% | ↓ | ↓ | 9.1% | ↑ | ↑ | -1.6% | -15.9% | -10.8% |
| High Composite Accruals | 1.7% | ↓ | ↓ | 9.0% | ↑ | ↑ | -0.4% | -18.8% | -18.9% |
| Low Cash-to-Market Cap | 3.1% | ↓ | ↓ | 8.8% | ↑ | ↑ | 0.7% | -11.7% | -6.0% |
| High Accruals | 1.4% | ↓ | ↓ | 8.8% | ↑ | ↑ | -1.1% | -21.3% | -22.6% |
| Low 1-Month Reversal | 1.1% | ↓ | ↓ | 8.8% | ↑ | ↑ | -0.4% | -18.2% | -18.4% |
| High Interest Coverage | 2.5% | ↓ | ↑ | 8.8% | ↑ | ↑ | 0.4% | -13.7% | -5.9% |
| High CapEx-to-Depreciation | 2.2% | ↓ | ↓ | 8.6% | ↑ | ↑ | -1.3% | -19.8% | -19.4% |
| Low 6-Month Price Momentum | 0.2% | ↓ | ↓ | 8.5% | ↑ | ↑ | -1.2% | -17.6% | -17.9% |
| Growth | 1.1% | ↓ | ↓ | 8.5% | ↑ | ↑ | -2.5% | -24.3% | -23.6% |
| High ROA | 2.2% | ↓ | ↑ | 8.4% | ↑ | ↑ | 0.5% | -13.8% | -7.1% |
| Low Sales Growth Stability | 2.1% | ↓ | ↓ | 8.4% | ↑ | ↑ | -4.5% | -15.3% | -11.8% |
| High Debt-to-Assets | 1.5% | ↓ | ↓ | 8.4% | ↑ | ↑ | -2.9% | -15.3% | -14.9% |
| Industry Cyclical | 2.2% | ↓ | ↑ | 8.3% | ↑ | ↑ | -1.8% | -14.1% | -8.6% |
| High Y/Y Change in Inventory/Sales | 2.3% | ↓ | ↑ | 8.3% | ↑ | ↑ | -0.5% | -15.1% | -10.3% |
| Low Operational Efficiency | 1.9% | ↓ | ↓ | 8.2% | ↑ | ↑ | -2.1% | -21.7% | -21.4% |
| High Net Margin | 2.3% | ↓ | ↓ | 8.2% | ↑ | ↑ | 0.1% | -13.6% | -7.4% |
| High Short-Term Accruals | 1.8% | ↓ | ↓ | 8.2% | ↑ | ↑ | -1.1% | -14.9% | -10.7% |
| High ROE | 1.9% | ↓ | ↓ | 8.2% | ↑ | ↑ | -0.5% | -11.7% | -4.3% |
| High 12m Volatility | 0.7% | ↓ | ↓ | 8.1% | ↑ | ↑ | -4.4% | -20.9% | -23.9% |

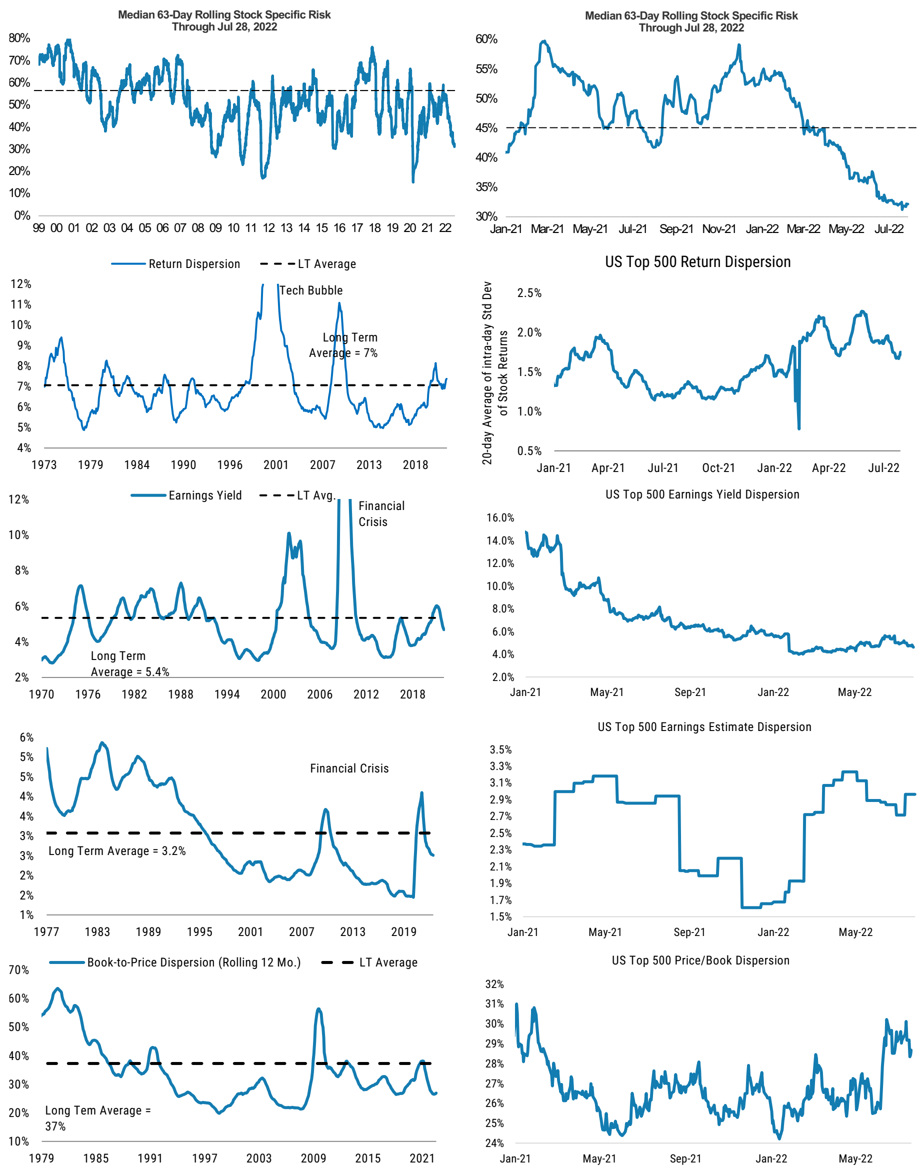
**Worst 20 Performing Equal Weighted Group Return in Top 1000 as of Jul 28, 2022**

| 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) | 1.8% | ↓ | ↓ | 6.7% | ↑ | ↑ | -2.6% | -14.6% | -10.8% |
| Low 12m Volatility | 2.2% | ↓ | ↓ | 5.5% | ↑ | ↑ | -1.3% | -8.5% | -0.6% |
| High Net Debt-to-Market Cap | 1.4% | ↓ | ↓ | 5.4% | ↑ | ↑ | -4.6% | -9.1% | -6.4% |
| High Free Cash Flow Yield | 1.6% | ↓ | ↓ | 5.4% | ↑ | ↑ | -3.6% | -7.3% | -0.6% |
| High Total Yield | 1.6% | ↓ | ↓ | 5.2% | ↑ | ↑ | -4.0% | -7.0% | 0.4% |
| Low Operating Income Variability | 0.5% | ↓ | ↓ | 5.2% | ↑ | ↑ | -6.2% | -20.2% | -21.0% |
| Low 12m-1m Residual Momentum | 0.3% | ↓ | ↓ | 5.2% | ↑ | ↑ | -3.3% | -16.2% | -16.8% |
| Low Composite Sentiment | 1.3% | ↓ | ↓ | 5.2% | ↑ | ↑ | -2.7% | -12.9% | -12.5% |
| Value | 2.0% | ↓ | ↓ | 5.1% | ↑ | ↑ | -3.6% | -6.6% | -0.5% |
| Low Y/Y Change in number of employees | 1.8% | ↓ | ↓ | 5.1% | ↑ | ↑ | -3.5% | -7.9% | -1.5% |
| High 12-Month Price Momentum | 2.6% | ↓ | ↑ | 5.0% | ↑ | ↑ | -4.8% | -17.2% | -12.2% |
| Low 1-Year Dividend per share growth | 2.0% | ↓ | ↓ | 5.0% | ↑ | ↑ | -4.7% | -9.8% | -3.1% |
| Low Accruals | 1.3% | ↓ | ↓ | 4.9% | ↑ | ↑ | -5.4% | -14.2% | -11.3% |
| Industry Defensive | 1.8% | ↓ | ↓ | 4.7% | ↑ | ↑ | -1.3% | -10.6% | -11.1% |
| Low Forecast long term growth | 1.1% | ↓ | ↓ | 4.6% | ↑ | ↑ | -1.7% | -11.2% | -9.9% |
| High 1-Month Reversal | 1.4% | ↓ | ↓ | 4.6% | ↑ | ↑ | -4.9% | -14.7% | -10.7% |
| Low Composite Accruals | 1.0% | ↓ | ↓ | 4.4% | ↑ | ↑ | -4.8% | -14.0% | -12.4% |
| High Trailing Dividend Yield | 2.2% | ↓ | ↑ | 4.4% | ↑ | ↑ | -1.7% | -3.1% | 2.0% |
| High 3-Month Price Momentum | 2.4% | ↓ | ↑ | 4.2% | ↑ | ↑ | -6.5% | -18.2% | -13.0% |
| High 9-Month Price Momentum | 2.2% | ↓ | ↑ | 3.9% | ↑ | ↑ | -5.8% | -18.8% | -14.2% |
| High 6-Month Price Momentum | 2.1% | ↓ | ↑ | 3.4% | ↑ | ↑ | -6.0% | -17.2% | -11.2% |

Source: ClariFi, Morgan Stanley Research

In Exhibit 32, 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 remains higher as 2Q earnings season continues and new guidance is baked into forecasts.

**Exhibit 32:** 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 33). 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 33:** Historical Dispersion Metrics by Industry Group

| | Return Dispersion | Earning Yield Dispersion | Book/Price Dispersion | Earnings Estimate Dispersion |
|---|---|---|---|---|
| **S&P 500** | 86% | 59% | 44% | 89% |
| Energy | 78% | 53% | 30% | 73% |
| Materials | 54% | 92% | 54% | 78% |
| Capital Goods | 93% | 75% | 62% | 81% |
| Commercial & Professional Services | 87% | 27% | 16% | 88% |
| Transportation | 99% | 64% | 11% | 91% |
| Automobiles & Components | 91% | 86% | 89% | 74% |
| Consumer Durables & Apparel | 78% | 87% | 93% | 90% |
| Consumer Services | 70% | 64% | 15% | 88% |
| Retailing | 64% | 75% | 11% | 54% |
| Food & Staples Retailing | 58% | 88% | 97% | 82% |
| Food, Beverage & Tobacco | 81% | 69% | 53% | 96% |
| Household & Personal Products | 55% | 8% | 3% | 90% |
| Health Care Equipment & Services | 92% | 50% | 53% | 67% |
| Pharma, Biotech & Life Sciences | 86% | 74% | 92% | 59% |
| Banks | 85% | 55% | 44% | 78% |
| Diversified Financials | 89% | 80% | 52% | 81% |
| Insurance | 96% | 56% | 68% | 88% |
| Software & Services | 84% | 67% | 72% | 80% |
| Technology Hardware & Equipment | 49% | 74% | 81% | 6% |
| Semiconductors & Semi Equipment | 88% | 66% | 70% | 41% |
| Telecommunication Services | 5% | 57% | 20% | 38% |
| Media & Entertainment | 95% | 57% | 70% | 89% |
| Utilities | 91% | 29% | 41% | 1% |
| Real Estate | 92% | 39% | 59% | 64% |

Source: ClariFi, Morgan Stanley Research

# Fresh Money Buy List

**Exhibit 34:** Fresh Money Buy List - Stats & Performance

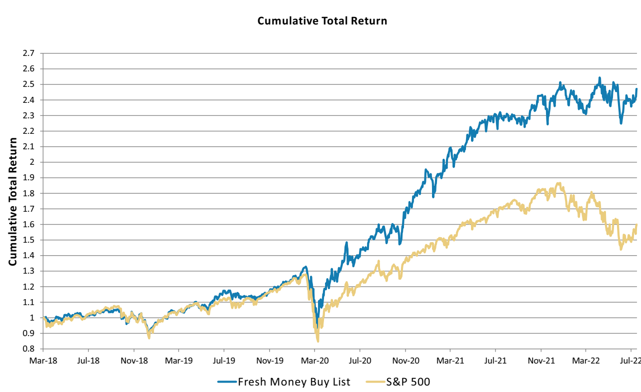
| Company Name | Ticker | MS Rating | Sector | Market Cap ($Bn) | Price | MS PT | % to MS PT | MS Analyst | Date Added | Total Return Since Inclusion | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | Absolute | Rel. to S&P |
| AT&T, Inc. | T | Overweight | Communication Services | $133.1 | $18.68 | 22.00 | 17.8% | Flannery, Simon | 12/20/2021 | 9.1% | 19.5% |
| CenterPoint Energy Inc | CNP | Overweight | Utilities | $20.0 | $31.75 | 31.00 | (2.4%) | Byrd, Stephen | 3/21/2022 | 9.9% | 17.5% |
| Coca-Cola Co. | KO | Overweight | Consumer Staples | $276.2 | $63.88 | 74.00 | 15.9% | Mohsenian, Dara | 3/28/2022 | 4.6% | 13.9% |
| Exxon Mobil Corporation | XOM | Overweight | Energy | $405.2 | $96.20 | 106.00 | 10.2% | McDermott, Devin | 2/22/2021 | 95.9% | 88.7% |
| Humana Inc | HUM | Equal-Weight | Health Care | $60.3 | $476.48 | 453.00 | (4.9%) | Ha, Michael | 7/19/2018 | 54.5% | (1.6%) |
| McDonald's Corporation | MCD | Overweight | Consumer Discretionary | $194.3 | $262.68 | 285.00 | 8.5% | Glass, John | 10/18/2021 | 10.3% | 17.5% |
| Mondelez International Inc | MDLZ | Overweight | Consumer Staples | $88.1 | $64.26 | 70.00 | 8.9% | Kaufman, Pamela | 7/19/2021 | 2.3% | 6.1% |
| SBA Communications | SBAC | Overweight | Real Estate | $36.1 | $334.60 | 361.00 | 7.9% | Flannery, Simon | 6/7/2021 | 7.8% | 9.3% |
| Simon Property Group Inc | SPG | Overweight | Real Estate | $35.6 | $108.36 | 133.00 | 22.7% | Hill, Richard | 2/16/2021 | 6.6% | 0.2% |
| **Current List Performance** | | | | | | | | | | | |
| *Average (Eq. Weight)* | | | | $138.8 | | | 9.4% | | | 22.3% | 19.0% |
| *Median* | | | | $88.1 | | | 8.9% | | | 9.1% | 13.9% |
| *% Positive Returns (Abs. / Rel.)* | | | | | | | | | | 100% | 89% |
| *% Negative Returns (Abs. / Rel.)* | | | | | | | | | | 0% | 11% |
| *Avg. Hold Period (Months)* | | | | | | | | | | | 15.1 |
| **All Time List Performance** | | | | | | | | | | | |
| *Average (Eq. Weight)* | | | | | | | | | | 31.7% | 16.0% |
| *Median* | | | | | | | | | | 15.1% | 12.1% |
| *% Positive Returns (Abs. / Rel.)* | | | | | | | | | | 81% | 62% |
| *% Negative Returns (Abs. / Rel.)* | | | | | | | | | | 19% | 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.

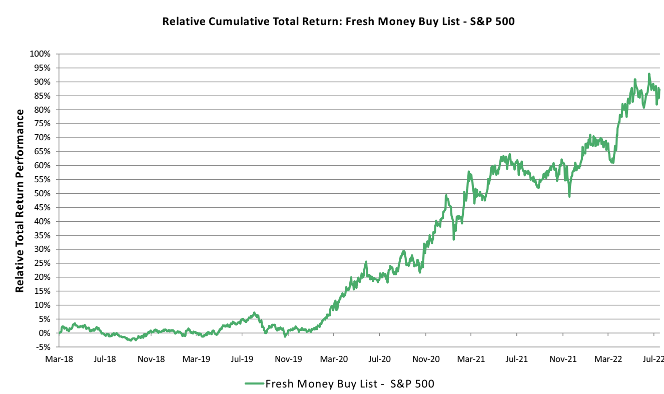
Source: Bloomberg, Morgan Stanley Research estimates.

**Exhibit 35:** Fresh Money Buy List & S&P 500 Cumulative Total Return




Source: Bloomberg, Morgan Stanley Research.

**Exhibit 36:** Fresh Money Buy List / S&P 500 Cumulative Relative Return




Source: Bloomberg, Morgan Stanley Research.

**Coca Cola (KO), Dara Mohsenian**

- We are OW KO, with Q2 upside driving increased confidence in our prior call for short/long-term topline upside post COVID with strong pricing power, limited demand elasticity, execution improvements, a post COVID away from home recovery, and higher marketing.

- Q2 Upside Confirms Building Topline Momentum, and Solid 2022 Visibility: Coke's stock was +1.6% (vs the S&P -1.2%) post significant Q2 topline (and to a lesser extent EPS) upside and reiterated FY22 EPS guidance despite a large 500-600 bps of incremental FX EPS pressure. A sizeable topline beat drove Q2 upside, with very strong 20% underlying organic sales growth (using 8% unit cases and 12% price/mix), well above the 7% consensus, confirming our belief that with strong price/mix, limited demand elasticity, a post COVID away from home recovery, and strong underlying LT secular growth drivers, Coke is well positioned to beat consensus top-line forecasts. Importantly, despite China COVID issues and a Russia impact, Coke's 3-yr organic revenue CAGR (using unit cases + price/mix) accelerated to 7.4% in Q2, improving sequentially vs 4.8% in Q1.

**Exxon Mobil (XOM), Devin McDermott**

- 2Q22 Earnings Results: 2Q results – EPS: $4.14 (cons: $3.99 / MS: $4.02). CFPS: $5.36 (cons: $5.13 / MS: $5.52). Total production: 3,732 Mboe/d (cons: 3,693 / MS: 3,661), liquids: 2,298 Mbbl/d (cons: 2,339 / MS: 2,349), nat gas: 8,606 MMcf/d (cons: 8,333 / MS: 7,871). Cash capex: $3.8 B (cons: $4.5 B / MS: $4.7 B). Segment earnings contribution – Upstream: $11.1 B (cons: $10.1 B / MS: $10.6 B), Energy Products: $5.3 B (MS: $5.2 B), Chemical Products $1.1 B (MS: $1.3 B), Specialty Products: $417 MM (MS: $483 MM).

**Humana (HUM), Ricky Goldwasser**

- The one thing that mattered: Negative optics on headline MLR miss versus consensus is a set back to the stock, but overall utilization continues to trend favorably providing Humana the bandwidth to increase investments. HUM stock is down 4% after missing consensus MLR expectations. While consolidated MLR in the quarter (85.8% vs MS 86.2% and consensus 85.4%) was at the midpoint of their internal projections (85.4-86.4%), management provided commentary in June which we believe suggested medical costs should have been even more favorable relative to their expectations. Group MA MLR came in higher driven by pent up demand for orthopedics surgeries at higher levels than management's expectations. Importantly, claims reserves appear healthy (DCP up 1 day yty with claims payables yty rising faster than premium revenue yty) while lower favorable PYD yty was as expected due to 2021's higher than normal benefit. Other elements of the 2Q print were more positive 1) reinvesting +75c outperformance into marketing & distribution for 2023 Medicare Advantage annual enrollment period, 2) +50c of COVID cushion carrying into 2H, 3) overall utilization continuing to trend favorably (less ER visits and more outpatient) which should provide the company with more bandwidth to reinvest into MA AEP. While management delivered an upbeat tone around returning to 2023 MA growth we continue to remain cautious on the company's execution risk into AEP.

**McDonald's (MCD), John Glass**

- Strong global comps of near 10% underscore the value of MCD shares in an uncertain macro as a trade down beneficiary. EPS commensurately beat, with puts and takes, though increasing F/X headwinds keep our revisions for 22/23 in check. Maintain OW as results underscore why this is a stock to own now.

- Our take: Robust global SSS of 9.7% not only beat MSe of 6.8%, but did so across all three major segments, and two of the three - the US and IOM (Europe/Australia/Canada) - experienced accelerating three year comp sales vs 1Q. We credit strong value, effective marketing and emerging digital strengths, among other factors. While much was expected of MCD as a classic defensive play and a consensus long by most accounts, seeing is nonetheless believing. Below the top line, adj EPS (backing out a sizable charge for exiting Russia) of $2.55 beat MSe of $2.46 (+14% y/y ex. F/X), with puts and takes, including higher G&A than expected, greater F/X pressure even vs our raised expectations for this, and a lower tax rate. Looking forward, despite being able to raise our 2H global comps (now 5.3% vs prior 3.5%), pressures still exist, including inflation which will linger, especially in the IOM markets, and unrelenting F/X pressure which will now dilute full year earnings by up to ~5% vs 3% prior. Here our numbers are little changed for '23 with some offsetting factors described below. We maintain our OW rating.

**Mondelez (MDLZ), Pamela Kaufman**

- MDLZ delivered $0.03 of EPS upside in Q2 and strong 13.1% organic sales growth, driven by a combination of volume and pricing growth. Increased FY22 organic sales guidance of +8%+ appears conservative and underscores the positive impact from the company's execution changes.

- Q2 EPS beat on strong organic sales growth; Raised FY22 topline guidance but EPS maintained on higher input costs, Ukraine impact, and FX headwinds: MDLZ's Q2 EPS of $0.67 beat consensus of $0.64 as Q2 topline/gross profit/operating profit were +7.6%/6.6%/2.4% above consensus. MDLZ's organic sales growth underscores its strong category and market share momentum, supported by the positive strategic changes the company has made over the last several years. In addition, MLDZ is benefiting from strong consumer confidence in emerging markets and limited demand elasticity in developed markets (to date). While many packaged food companies are beginning to exhibit evidence of modest demand elasticity reflected in declining volumes, MDLZ delivered strong Q2 organic sales growth of +13.1% (vs. consensus +5.1%) driven by solid growth in both vol/mix and price (+5.1%/+8.0%). MDLZ's delivered a sequential acceleration in vol/mix and price across all regions.

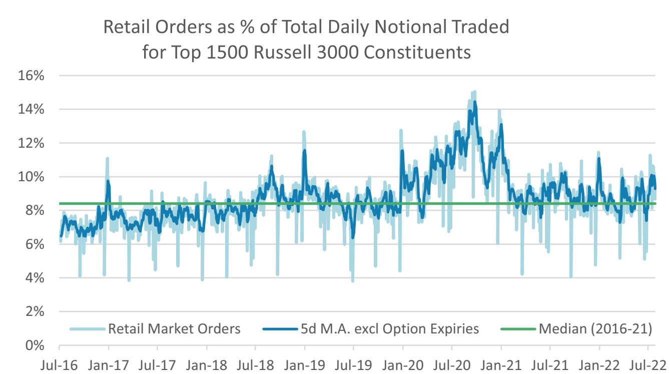
# What's Retail Doing?

*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:

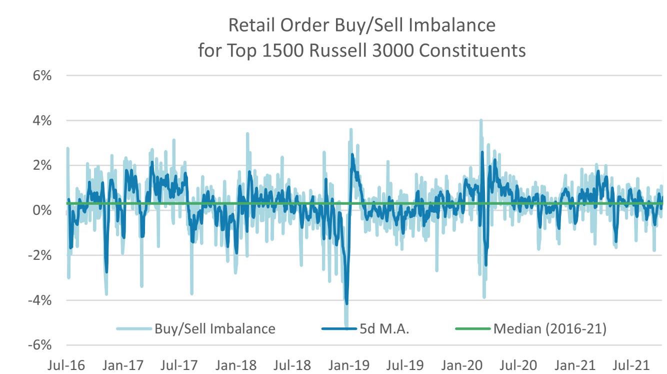
- Retail participation is currently at 9.3% of the total market volume,and at 75th %-ile relative to the last 5 years.
- Order imbalance remains positive last week. It currently sits at 1.1% or 89th percentile relative to the last 5 years.
- Imbalance is positive in most sectors, except Staples and Utilities. It is most positive relative to history in Tech (91st %-ile), Energy (86th %-ile), and Communication Services (80th %-ile). Technology is most positive in buy/sell imbalance.

**Exhibit 37:** Retail orders as a % of notional traded above median




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

**Exhibit 38:** ... and positive in order imbalance




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

**Exhibit 39:** Retail's buy/sell imbalance is most positive in Technology

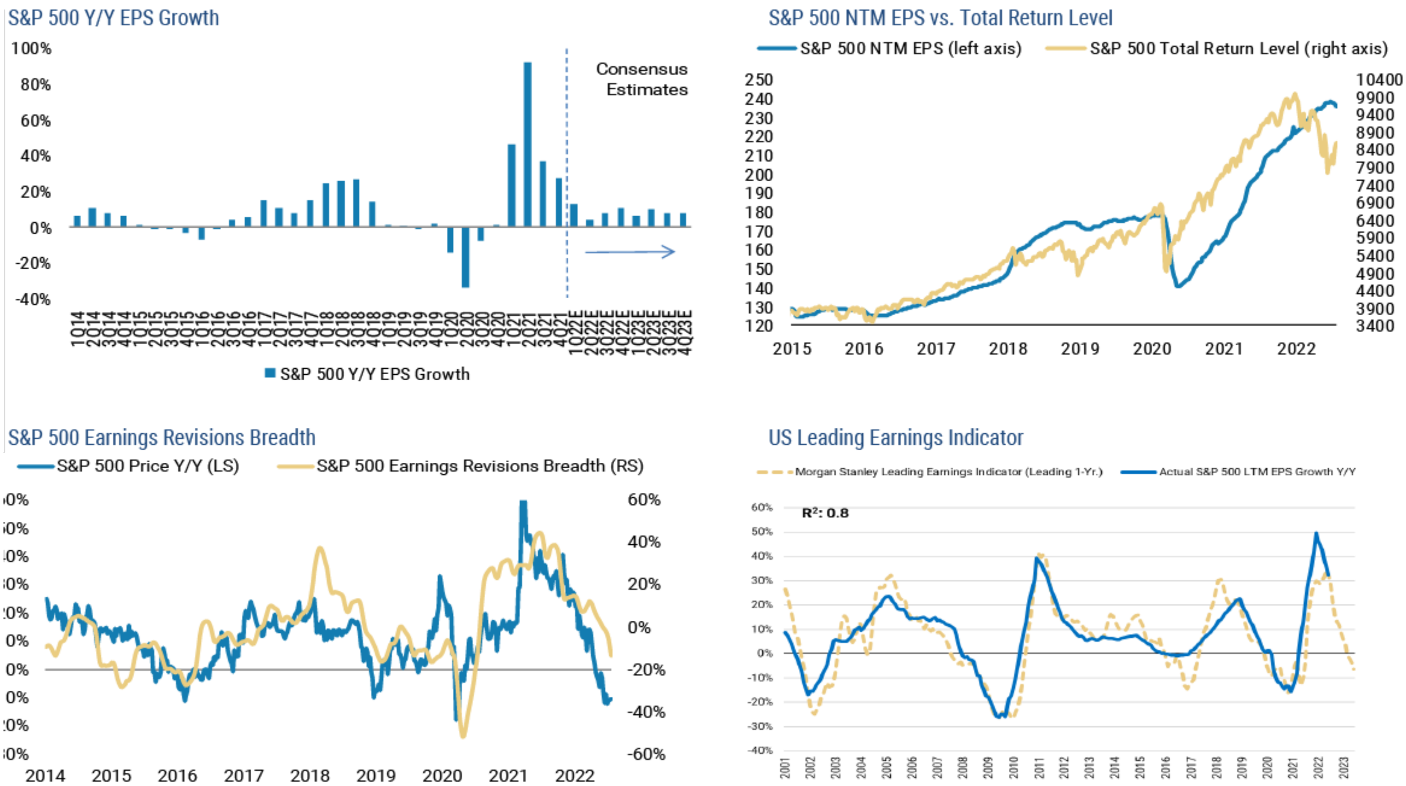
| | Retail Participation | | | Buy/Sell Imbalance | | |
|---|---|---|---|---|---|---|
| **Sector** | **2016-22 Median** | **Current** | **p-tile** | **2016-22 Median** | **Current** | **p-tile** |
| Energy | 6.8% | 8.4% | 0.84 | -0.30% | 1.3% | 0.86 |
| Materials | 5.7% | 5.7% | 0.54 | 0.5% | 0.4% | 0.46 |
| Industrials | 6.6% | 5.7% | 0.15 | 0.0% | 0.4% | 0.65 |
| Consumer Discretionary | 11.3% | 12.1% | 0.64 | 0.7% | 0.9% | 0.61 |
| Consumer Staples | 6.1% | 5.3% | 0.23 | -0.5% | -0.6% | 0.45 |
| Health Care | 5.9% | 4.0% | 0.03 | -0.4% | 0.2% | 0.68 |
| Financials | 5.6% | 5.4% | 0.41 | 0.0% | 0.3% | 0.58 |
| Information Technology | 10.9% | 12.5% | 0.86 | 0.5% | 1.7% | 0.91 |
| Communication Services | 8.9% | 11.6% | 0.77 | 0.3% | 1.3% | 0.80 |
| Utilities | 3.8% | 3.0% | 0.09 | -1.3% | -0.7% | 0.63 |
| Real Estate | 3.5% | 2.9% | 0.12 | 0.5% | 1.4% | 0.66 |
| **Model Universe (Top 1500)** | **8.5%** | **9.3%** | **0.75** | **0.3%** | **1.1%** | **0.89** |

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 40:** US Earnings Snapshot




Source: Refinitiv, FactSet, Morgan Stanley Research. Top and bottom left: As of July 29, 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 41:** 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 | 7.7% |
| Base Case | $236 | 16.5x | 3,900 | -5.6% |
| Bear Case | $212 | 15.9x | 3,350 | -18.9% |
| Current S&P 500 Price as of: | | 7/29/2022 | 4,130 | |

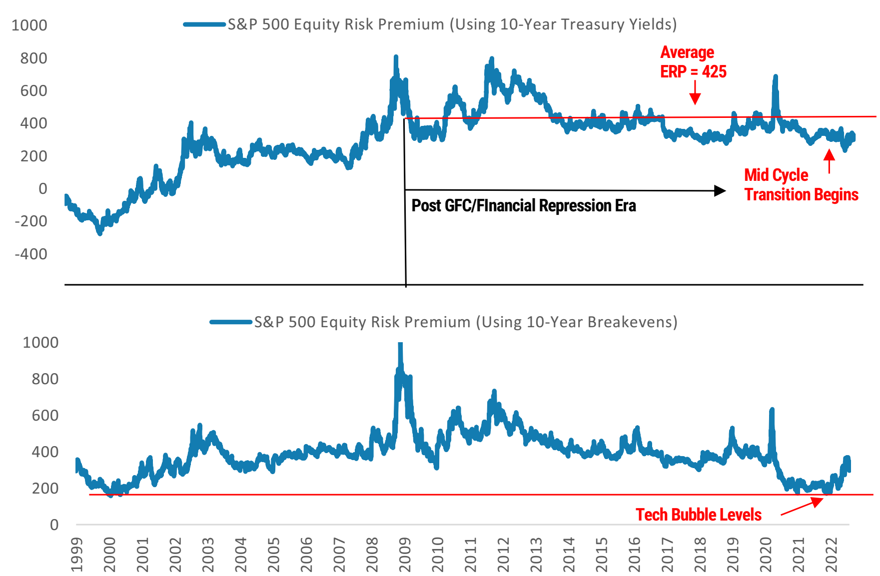
Note: We use June 2023 forward earnings to project our price target which takes into account our June '24 earnings forecast (currently $236 base case).
Source: Bloomberg, Morgan Stanley Research

**Exhibit 42:** 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 | |

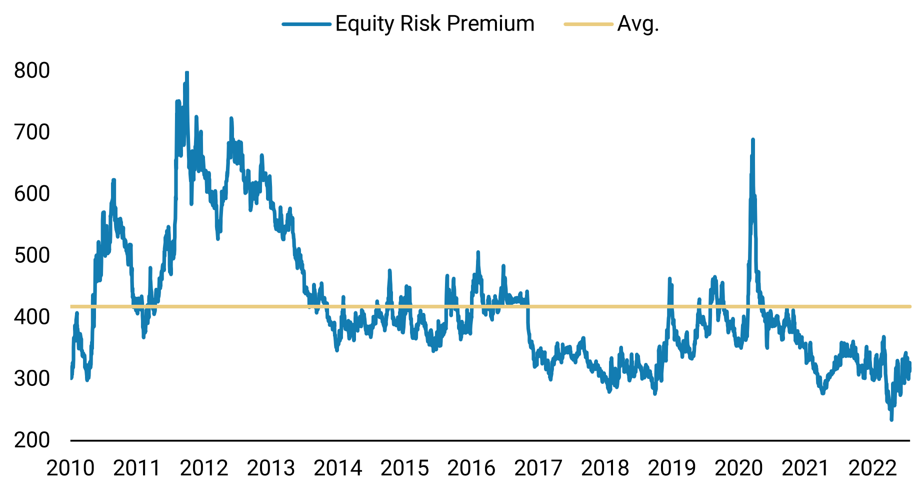
Source: Morgan Stanley Research

**Exhibit 43:** S&P 500 Equity Risk Premium using Nominal Rates and Breakevens



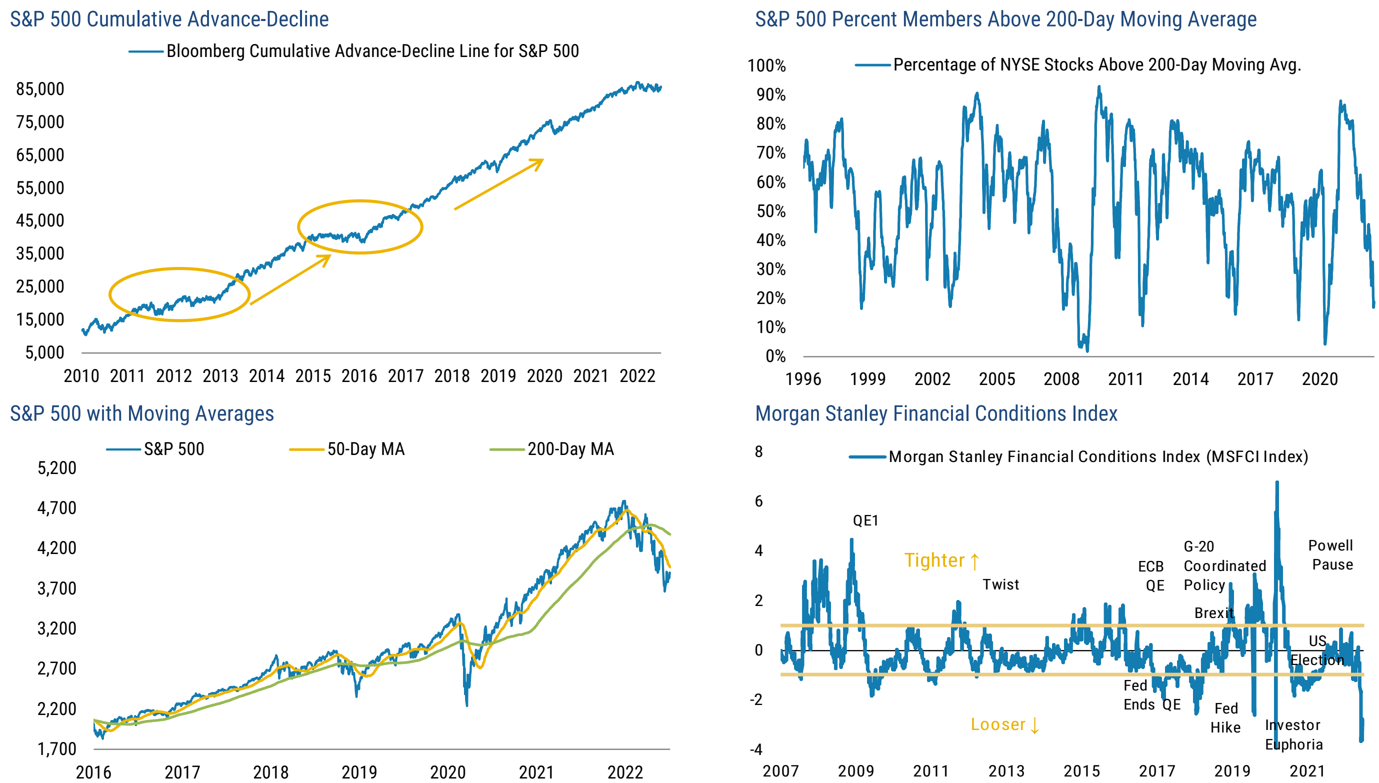

Source: Bloomberg, Morgan Stanley Research. As of July 29, 2022

**Exhibit 44:** Equity Risk Premium is Below Post-GFC Average



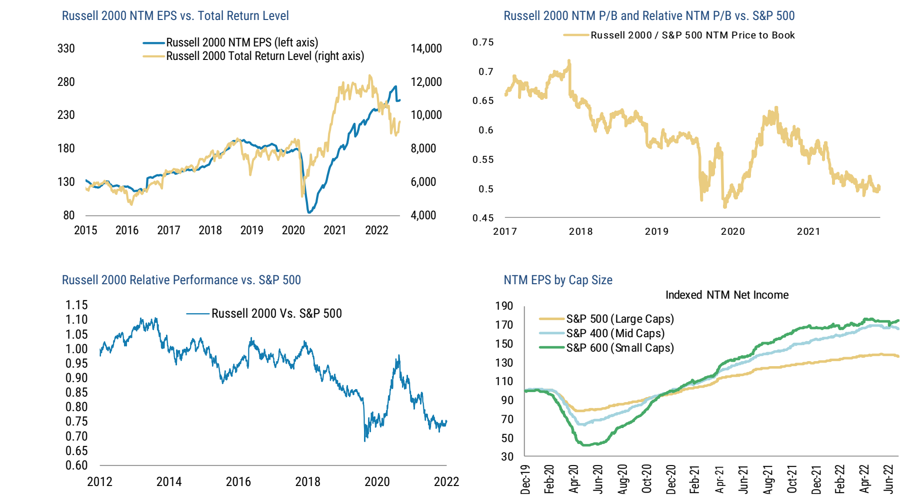

Note: Equity risk premium is calculated as the S&P 500 forward 12M earnings yield minus the nominal 10-Year Treasury.
Source: Bloomberg, Morgan Stanley Research

**Exhibit 45:** US Equity Market Technicals and Financial Conditions



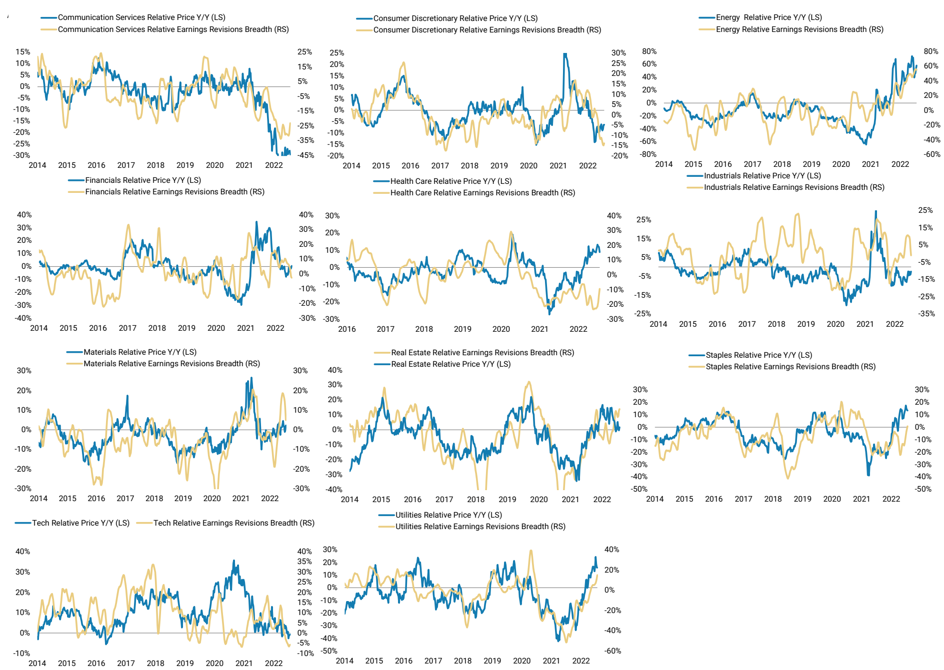

Source: Bloomberg, Morgan Stanley Research. All: As of July 29, 2022

**Exhibit 46:** US Small Cap Equities




Source: FactSet, Morgan Stanley Research. As of July 29, 2022

**Exhibit 47:** Earnings Revisions Breadth vs YoY Performance




Source: FactSet, Morgan Stanley Research. As of July 29, 2022

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|---|---|---|---|---|---|---|---|
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| **Underweight/Sell** | **574** | **16%** | **87** | **11%** | **15%** | **215** | **14%** |
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