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US Equity Strategy | North America

Weekly Warm-up: Fed('s) Up: Stocks Vs. Bonds and TMT Wrap

With Russia/Ukraine still driving the day-to-day price action, investors must now deal with a Fed beginning to tighten. Meanwhile, bonds are starting to look more attractive versus stocks as growth concerns mount. Finally, we provide our takeaways from last week's TMT Conference.

Fed('s) up... The markets are likely to turn their focus back toward the Fed this week as it begins its first tightening of this cycle following a period of the most accommodative monetary support ever provided. In our view, there is no better measure of Fed policy than the front end of the curve adjusted for QE and inflation. Based on this simple measure, the Fed has a lot of wood to chop if they are serious about removing the punch bowl. Bottom line, Don't Fight the Fed.

Are bonds now a good hedge?... With the forward Treasury curve now expecting eight 25bp hikes over the next year and a decent reduction of the Fed's balance sheet, will back end rates move much higher in the near term given the rising risk of a growth deceleration amid the Russia/Ukraine conflict? We're skeptical and think long dated bonds could offer a decent hedge for equity portfolios which are now more at risk due to a growth slowdown.

Inventory may hold the key to earnings and economy... Inventory builds commenced in 4Q accounting for almost ⅔ of GDP growth. While this is good for the economy, it's not great for costs/margins and earnings. This plays right into our call for a mismatch in supply/demand and is why we have been so bearish on the consumer *goods* segment of the Discretionary sector. Inventory cycles have been an afterthought for decades, but the pandemic exposed the fragility of the current system. **In short, inventory cycles may be back as globalization goes in reverse and economic volatility rises.**

Morgan Stanley's TMT Conference... Last week, Morgan Stanley hosted its annual Technology, Media, & Telecom Conference in San Francisco bringing together investors and corporate executives from across the sector. **Several key topics were discussed throughout the conference including exposure to Russia/Ukraine, the demand implications of a hybrid workforce, and continued supply chain trouble. We include our key takeaways in today's note.**

Quant charts of the week...this week, we highlight the recent outperformance of several factors including low EV/FCF, stable net cash, and high earnings stability. We also highlight that the market is not paying for high sales growth, but it is paying for stability of sales growth.

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What to Focus on This Week

Fed('s) Up

With all eyes still on the Russia/Ukraine war and hope for a cease fire, **the markets are likely to turn their focus back toward the Fed this week as it embarks upon the first tightening of this cycle and the first rate hike since 2018.** This follows a period of perhaps the most accommodative monetary support ever provided by the Federal Reserve, an extraordinary statement unto itself given the Fed's actions over the past few decades. Exhibit 1 and Exhibit 2 attempt to provide some context for our discussion of how things may play out from here, and how markets could react to the beginning of the end of financial repression.

The Fed only controls the front end of the yield curve directly. However, through QE, they affect rates across the curve. **What that means is there is no better measure of Fed policy than the front end of the curve adjusted for QE and inflation.** The Shadow Fed Funds Rate does the former, while backing out CPI addresses the later. Exhibit 1 shows the net result and presents the *real* Fed Funds Rate over time. A few observations…First, it's clear that Fed accommodation has been in a steady downturn since the early 1980s. In fact, the real Fed funds rate has been in a remarkably well-defined channel for almost 40 years! Second, after reaching the low end of the channel in record speed during COVID, the real Fed funds rates has turned higher as if on a predetermined schedule. That low was November of last year when Chair Powell was renominated, and he made it clear that the Fed was going to pivot on policy. Third, this is also the time when long duration equities topped and began what has been one of the largest and most persistent drawdowns in growth stocks in history. Finally, this chart provides context on where policy stands. **In short, the Fed has a lot of wood to chop to get the real Fed Funds Rate back to a more normal level. Furthermore, if it really wants to make monetary policy restrictive to fight inflation, long duration asset prices remain vulnerable, in our view.**

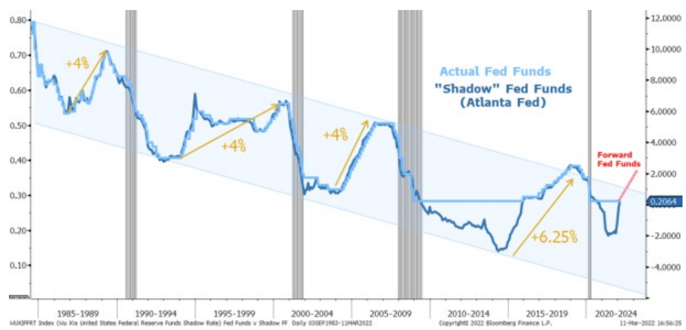
While we believe Chair Powell is very focused on inflation and fighting it, it's unclear to us if he will be able to take rates as high as the market now expects. Exhibit 2 shows the nominal Fed Funds Rate versus the Shadow Fed Funds Rate unadjusted for inflation. Just like with Real Fed Funds, these nominal measures have also been in a downtrend for 40 years. However, unlike its CPI adjusted counterpart, **the nominal Shadow Fed Funds Rate did not make a lower low during this recession, the first time that's happened since the downtrend began. From a technical standpoint, that's a very important change of long term trend, from our standpoint, and consistent with our view that we are at the beginning of the end of financial repression.** This is something we discussed in detail in our hotter but shorter cycle note last year and a dynamic we will continue to focus on. Currently, the bond market is pricing in eight 25bp hikes over the next 12 months. If the Fed were to execute on such a path, it's clear that Fed Funds Rate will break out of the 40-year downtrend. Should the Fed also engage in balance sheet reduction, or quantitative tightening, the Shadow Fed Funds Rate will rise even further outside this channel. **If the Fed is successful in executing this expected path, it**

will have achieved the soft landing it seeks—i.e., inflation will come down as the economy remains in an expansion. It would also make us more comfortable with the view that financial repression is firmly in the rear view mirror. However, we think this is a big "if" at this point. First, growth was already at risk as we entered 2022 due to payback in demand, lapsing government transfers, generationally high inflation, and rising inventories at the wrong time. Now, with the war in Ukraine leading to even higher commodity prices, the growth outlook looks even worse. While we are likely to avoid an economic recession in the US, we can't say the same for earnings. Sustainability of record high margins was already a questionable assumption that now looks at serious risk with this new demand shock arriving just as inventories appear to be picking up (more on this below).

Exhibit 1: Real Fed Funds Rate Has Bottomed

Source: Bloomberg, Morgan Stanley Research

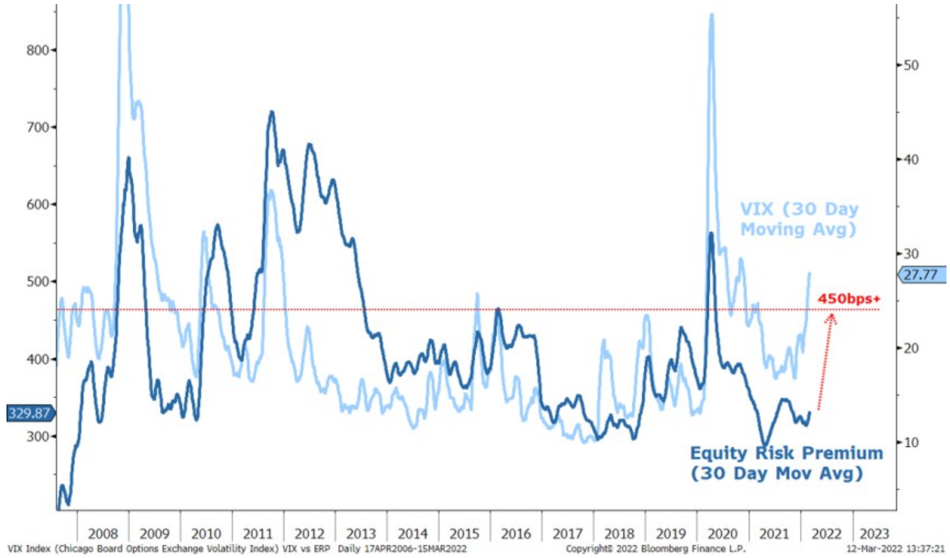
Exhibit 2: But How High Can It Really Go?



Source: Bloomberg, Morgan Stanley Research

The bottom line, we have high conviction that Chair Powell and the Fed are very focused on getting off the zero bound this week and moving forward with more rate hikes as fast as possible to fight inflation. With the war posing a new threat to demand, we think the Fed will keep a watchful eye on the data but err on the side of hawkishness given the state of inflation is now arguably out of control. This likely means a collision with equity markets this spring with valuations overshooting to the downside. Using our equity risk premium (ERP) framework, we have been suggesting 18x NTM EPS is "fair value" based on a 10-year Treasury yield of 2.1% and an ERP of 350bps. However, with this new exogenous shock, and much higher volatility, the ERP appears too low at the moment and could easily overshoot to the upside by ~100bps. Using such an adjustment yields a P/E closer to 15x which suggests an S&P 500 of 3500 assuming earnings don't take a hit. Given the closing price of 4200 on Friday, **the risk/reward remains poor over the next several months.**

Exhibit 3: The ERP Looks Too Low in the Current Environment of High Uncertainty and Volatility



Source: Bloomberg, Morgan Stanley Research

It's also important to note that back end rates remain historically low, too, especially in the context of the highest nominal GDP growth and inflation in 40 years (Exhibit 4). Of course, this is also the result of the Fed's zero bound front end rates and ultra aggressive financial repression policy. With that now changing, a key question for equity investors is **how high can back end rates go?** After all, stocks are longer duration assets and their valuations are more tied to long term rates, rather than Fed Funds. Based on the chart in Exhibit 4, it's clear that long term rates tend to follow nominal GDP. It's notable that during the era of rising rates (1960s-1970s), nominal GDP was consistently above 10-year Treasury yields. Conversely, during the 1980s-2000s as rates were in a downtrend, nominal GDP was consistently below 10-year yields. This produced the greatest bull market in history for both bonds and stocks. However, this ran its course when rates hit the zero bound after the Financial Crisis. Hence, the need for QE and other policy tools to get rates even lower on a real basis—i.e., historically negative. But, this is not a good place to end up, especially when debt balances are so high. Inflation is really the only answer and why central banks have been so desperate to get it. Enter COVID and the political support to finally force money into the economy via Modern Monetary Theory (MMT). The problem is that we got more inflation than policy makers bargained for; hence, the aggressive pivot from the Fed and other central banks. Even the ECB sounded hawkish last week despite the Russia/Ukraine conflict breaking out.

Exhibit 4: Long-Term Treasury Yields Lag Nominal GDP

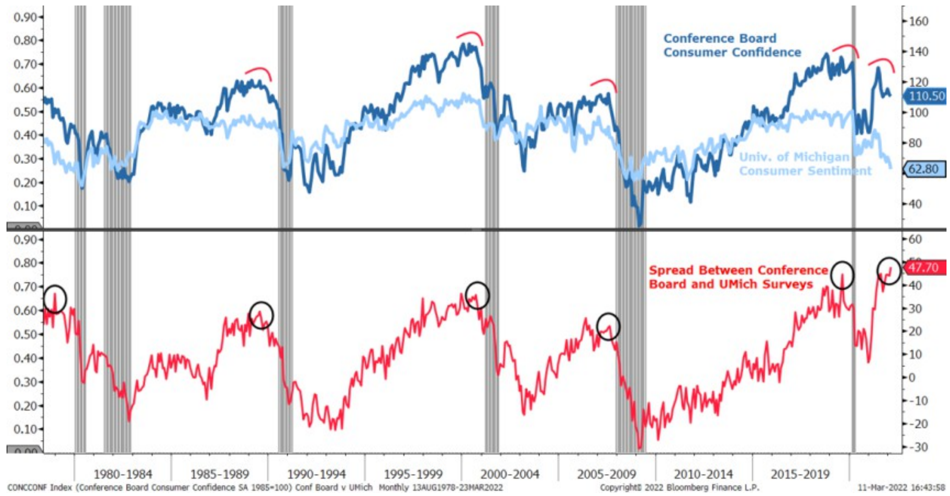
Source: Bloomberg, Morgan Stanley Research

Exhibit 5: But Can We Break Out Now?

Source: Bloomberg, Morgan Stanley Research

The bottom line is the Fed is going to start removing the punch bowl this week. The question for equity investors is how far can they get on rate hikes given the already slowing growth and additional shock from the war? Exhibit 5 is an interesting chart to watch as things develop. **If the Fed is successful in orchestrating a soft landing while raising rates 8 times over the next year, then 10-year yields should break out of this long standing 40-year channel. That would mean much higher 10-year yields, say 3%+ which would simply weigh on equity valuations** with the ERP currently at fair value for a good outcome. **Conversely, if the economy slows much more than the Fed and most of Wall Street currently expects, the Fed will have to pause, or even abort, its plan prematurely. That would mean lower 10-year yields as recession risk comes into the picture...**a rate decline for that reason would not be positive for equities. While still possible, the consensus view for goldilocks when we entered the year is looking very unlikely, in our view. For us, it was always our bull case which now is pretty much off the table. While the Russian invasion of Ukraine was an unforeseen shock by everyone, including us, the combination of tighter financial conditions with slower growth were not. Finally, **recessions occur with the arrival of an exogenous shock when the consumer is already in a weakened state. While not the consensus view prior to the invasion, we had been highlighting this condition coming into the year. Unfortunately, we now have the event that can tip us over.** Even if we get a cease fire or end to the war, we believe it's going to be very difficult to put everything back together in a way that re-establishes confidence quickly. Therefore, while we are hoping for a cease fire like everyone for humanitarian reasons, we would be sellers of the rally in equity markets that would likely ensue.

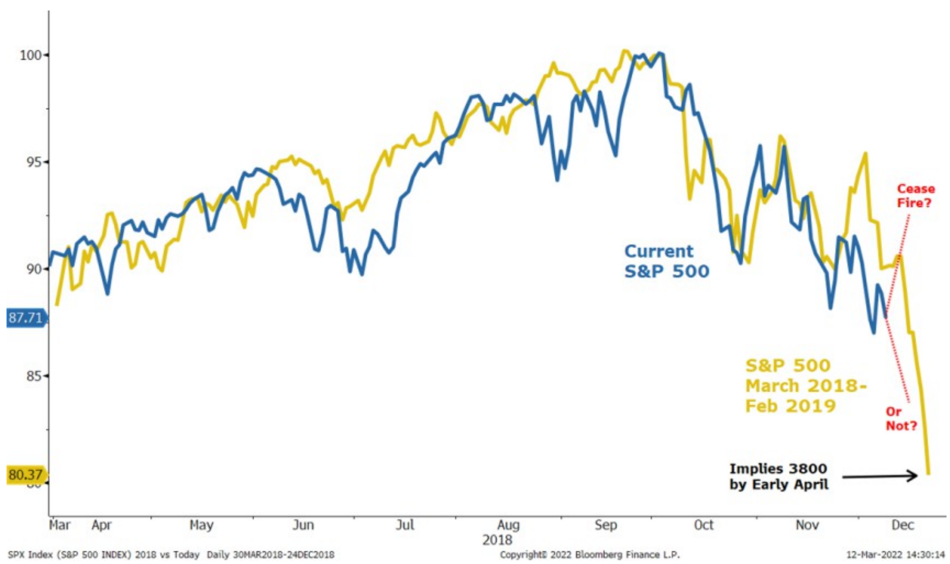
Exhibit 6: The Consumer Was Already in a Weakened State Prior to the Shock of the War



Source: Bloomberg, Morgan Stanley Research

Finally, our price analog vs. 2018 suggests there is still time for a countertrend rally before the final repricing of the risks around tightening financial conditions and slowing growth discussed above. However, it's a short leash at this point.

Exhibit 7: 3800 Looking More Likely in the Next Few Months but Path Remains Uncertain



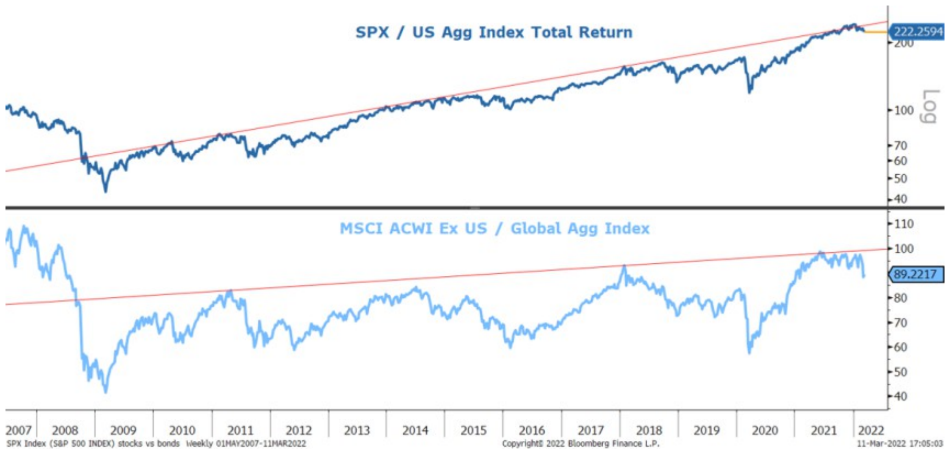
Source: Bloomberg, Morgan Stanley Research

Are Bonds a Good Hedge Again for Equity Portfolios?

Looking again at Exhibit 5, we can't help but think **long-dated Treasuries are now approaching a level of yields that offer some value for asset allocators, even if they look like an unattractive investment longer term. This is especially true if one is more concerned about growth now, like us. At a minimum, we think it provides a cheap hedge** given high levels of volatility and the cost of Puts. Let's assume we are wrong about growth slowing and the war resolves quickly. Even under such a view, it's unlikely the Fed hikes faster than what is already priced into the bond market—i.e., eight 25bp hikes over the next 12 months and a decent amount of QT. Therefore, back end rates (we like the 20-year spot the best at 2.45%), are unlikely to rise much more by the time we know the answer to this growth question. Conversely, if we're right about growth slowing more than expected, longer term rates likely have room to fall and provide a cushion to equity portfolios.

Exhibit 8 shows both the S&P 500 versus the US Aggregate Index and the MSCI All Country World Ex-US equity index versus the Global Aggregate Index. Both are in strong up-trends from the Financial Crisis lows, but both have recently broken down from key resistance and appear to have more downside, especially the S&P 500 version which is more closely tied to long duration US Treasury yields.

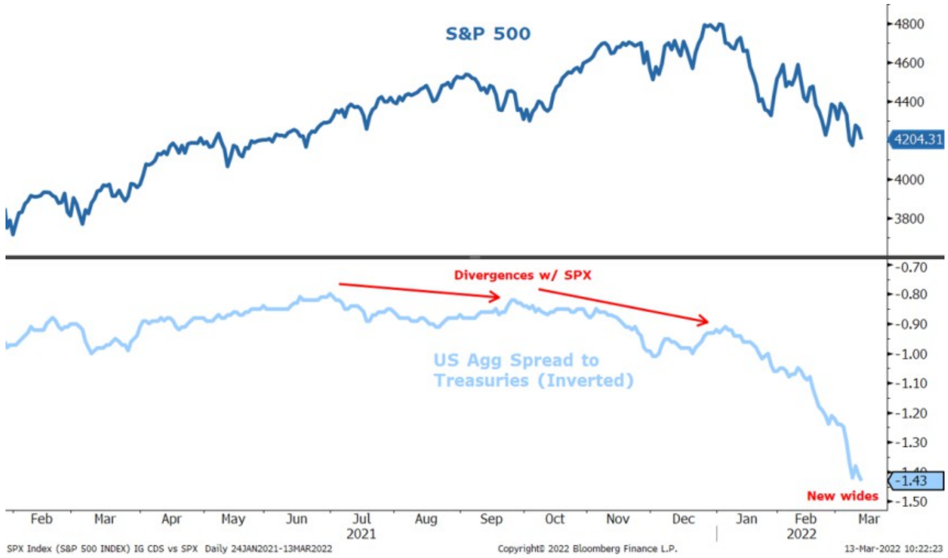
Exhibit 8: Stock / Bond Performance Has Broken from Key Resistance...A Trend that May Continue



Source: Bloomberg, Morgan Stanley Research

Finally, the breakdown in this ratio has come while yields have spiked and credit spreads have widened significantly....meaning the US Aggregate has also had one of its worst quarters in history, just like stocks. In fact, back in early January we highlighted credit markets' lack of confirmation of the new highs in the S&P 500 as just another warning for stocks. Since then, credit spreads have continued to widen further as the S&P 500 has finally broken down. Bottom line, **high quality bonds (US Agg) look like the better bet relative to high quality stocks (S&P 500) at this point if one is worried about growth. If one is not worried about growth and fears yields breaking out, stick with stocks.**

Exhibit 9: US Agg Looks Like the Better Relative Bet If One Is Worried About Growth



Source: Bloomberg, Morgan Stanley Research

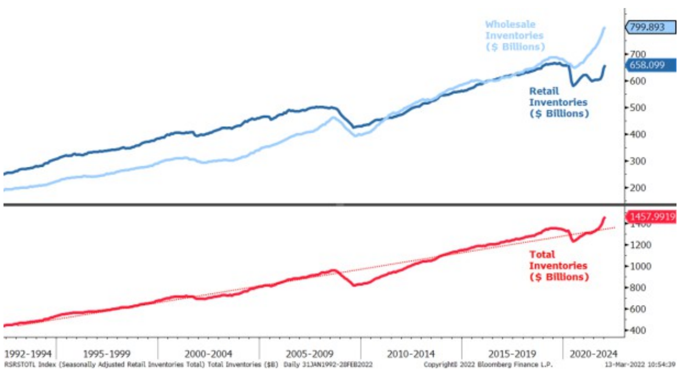
Inventories Pose a Risk to Earnings and the Economy

For the past 6 months, we've been discussing the risk of an inventory glut in the first half of 2022. With everyone, including the White House, overly focused on supply chains as the main culprit for inflation we've presented the situation as more of a demand problem—i.e., excess demand. Of course, **when companies are short on supply they over order to try and secure more of it. That "double ordering" risk overstates demand, creating a risk when supply finally catches up. Over the past few months, we have been hearing more commentary from companies that supply is getting better as wholesale inventories have really picked up (Exhibit 10).** It really started back in December as retailers were suggesting they were no longer having so many outages of key products. Part of this was due to consumers shopping earlier than normal for the holidays due to their fear of these supply shortages that retailers first warned about in September/October. We noted at the time that this could pose a risk in 1H2022.

Inventory builds commenced in 4Q, accounting for almost ⅔ of GDP growth (Exhibit 11). 1Q22 GDP growth will also be flattered by further inventory builds. While this is good for the economy, it's not great for costs/margins and earnings for those companies who are now over-stocked. Obviously, this plays right into our call for a mismatch in supply / demand that may lead to discounting on many items and is **why we have been so bearish on the consumer *goods* segment of the Discretionary sector.** It also plays into our more negative view on semiconductors (see more below in our TMT wrap) and other items that have been in short supply during this pandemic...a dynamic that is likely to span a wider swath of companies and industries that most expected when the year began.

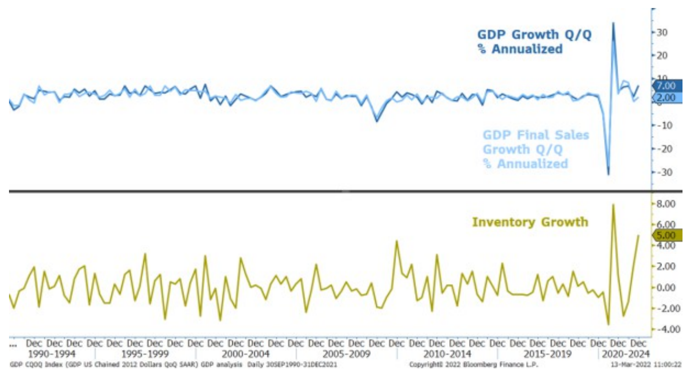
We bring this up again because inventory cycles are something we haven't had to think about much for the past 20 years as the US outsourced much of its manufacturing and maximized the just in time inventory systems. But, the pandemic exposed the fragility of that system and the transition toward holding more inventory is inflationary. Initially that meant pricing power and higher margins for companies that were able to sell low cost inventory and get enough supply to meet the initial surge in demand. But those prices have risen so much now that we're arguably reaching a level of demand destruction for many goods people already bought over the past few years. Meanwhile, rising inventory at higher prices is an unplanned cost for many businesses. **We think it's likely to lead to both top line misses as well as margin issues for many companies and is why earnings were always a risk in 1H22. With the unforeseen shock from the war, this risk is only exacerbated and could lead to an inventory glut.** The question is will that glut be big enough to drag GDP back into negative territory for a few quarters? Right now, our economists aren't forecasting that, but the risk has increased.

Exhibit 10: Wholesale Leading Retail Inventory



Source: Bloomberg, Morgan Stanley Research

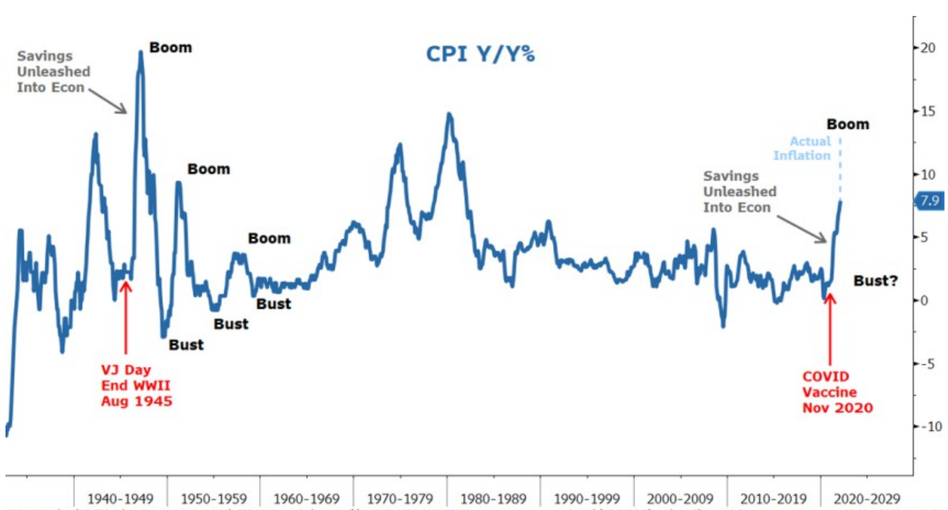
Exhibit 11: Inventory Volatility on the Rise



Source: Bloomberg, Morgan Stanley Research

This risk is right in line with our 1940s analogy vs. today's set-up which we detailed in our Hotter but Shorter Cycle note back in March 2021, as well as our 2022 Outlook in mid-November. The boom/bust nature of that time period is looking more likely given the set up coming into this year. **In short, inventory cycles may be back as globalization goes in reverse and economic volatility rises.**

Exhibit 12: Inventory Cycles May Be Back As Globalization Goes in Reverse and *Economic* Vol Rises



Source: Bloomberg, Morgan Stanley Research

TMT Wrap-Up

Last week, Morgan Stanley hosted its annual Technology, Media, & Telecom Conference in San Francisco bringing together investors and corporate executives from across the sector. **Several key topics were discussed throughout the conference including exposure to Russia/Ukraine, the demand implications of a hybrid workforce, and continued supply chain trouble.**

The impact of Russia's invasion of Ukraine on revenue and operations was a consistent theme throughout fireside chats. The overall impacts to revenue were largely cited as de minis with a number of companies including Disney, Microsoft, Zoom, Match, and more quoting <1-2% revenue exposure in the region. Uber generates less than of 1% revenue in Eastern Europe but 20% of overall bookings are from Europe and the UK. The company hasn't seen a pullback in the European consumer yet but will need to continue monitoring the region. Spotify has stopped monetization in Russia. They expect to lose about 1.5 million users out of the paid subscription business. **In our team's view, a broader decline in European consumer sentiment is likely to have a larger impact on the performance of multinational US companies than direct exposure to Russia and Ukraine.**

The Tech sector was a huge beneficiary of the rapid shift to remote work that occurred during lockdowns, and companies are now citing the rise of a hybrid workforce as another driver of demand. **Our team is skeptical that hybrid work can drive much incremental demand for goods but new innovations in software and systems could.** Several tech hardware companies including Xerox, Sonos, and HP have cited the shift to hybrid work as a possible catalyst for demand. Given the already seen high consumption of PCs, printers, and other tech hardware products, we are skeptical that hybrid work will prove incremental in these channels. Zoom was a major beneficiary of remote working and is now looking to create tools that facilitate a hybrid work environment. Companies are continuing to spend on cyber security to shore up systems as many companies choose to have a permanently hybrid workforce.

Continued supply chains issues were a persistent theme in fireside discussions with executives in semiconductors and tech hardware. Supply chain bottlenecks remain the main issue for semiconductor companies. Companies like Microchip are taking steps to increase visibility into their pipeline in response. They offer a program that allows customers to have priority in the supply chain as long as they commit to 12 months of non-cancellable backlog, and given the heightened uncertainty, customers have been placing orders with lead times as long as 18-24 months. **We suspect that there is double ordering going on throughout the channel and companies that are able to implement programs similar to the one at Microchip are likely to fare better once cancellations emerge.**

The improvement in tech hardware supply chains has been non-linear. Corporates highlighted the fact that the supply environment remains fluid, and while most companies expect constraints to ease in 2H22, the Russia/Ukraine conflict is creating further disruption and the impacts are still unknown. DELL, REZI, and XRX all commented that while availability of some components are expected to improve after 1H22, semiconductor shortages are likely to persist through 2022.

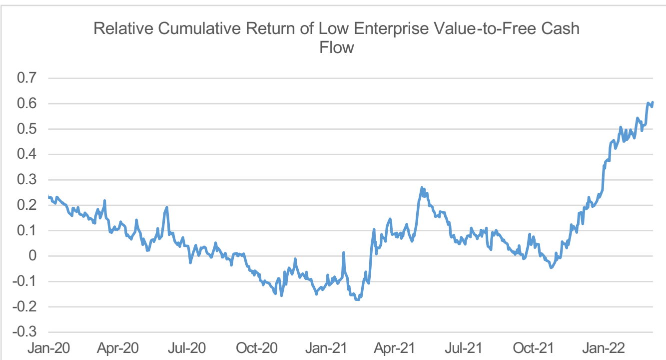
Our analysts also pitched their best ideas at a panel. Stock picks include Accenture (ACN, OW; $475 PT), Amazon.com (AMZN, OW, $4,200), Apple (AAPL, OW, $210 PT), F5

Inc. (FFIV, OW, $280 PT), Lam Research Corp (LRCX, OW, $730 PT), Match (MTCH, OW, $175 PT), Salesforce.com (CRM, OW, $360 PT), and T-Mobile US, Inc. (TMUS, OW, $150 PT).

Weekly Quant Charts and Factor Update

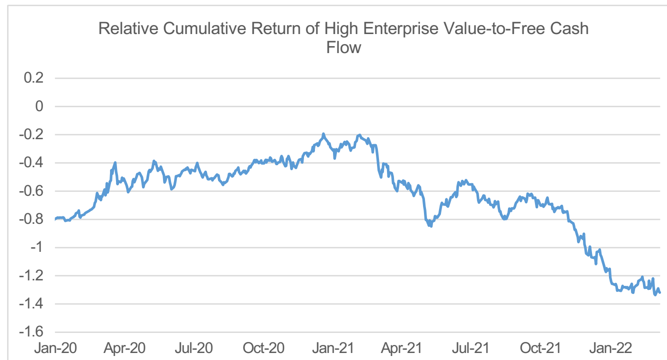
Companies with low enterprise value to free cash flow have outperformed the market since Nov 2021 (Exhibit 13), while high enterprise value/ free cash flow names underperformed (Exhibit 14).

Exhibit 13: Low EV/Free Cash Flow Stocks Have Outperformed



Source: ClariFi, Morgan Stanley Research

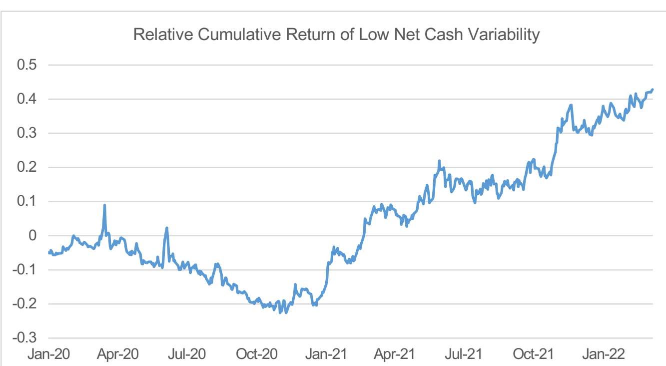
Exhibit 14: High EV/Free Cash Flow Stocks Have Underperformed



Source: ClariFi, Morgan Stanley Research

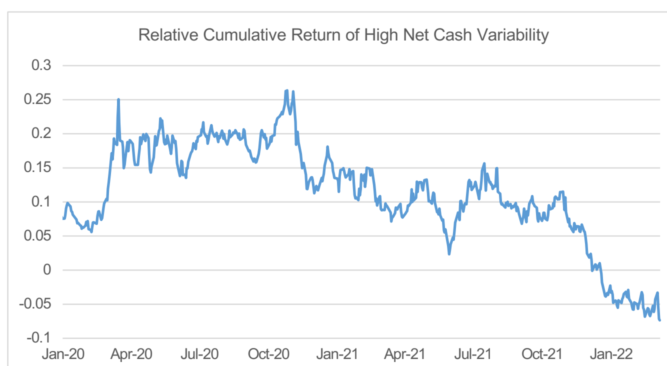
Net cash variability is a measure that evaluates the stability of a company's cash. It is calculated as the standard deviation of the net cash ratio. Companies with stable cash (low net cash variability) have outperformed (Exhibit 15).

Exhibit 15: Stable Net Cash on Balance Sheet Is Favored



Source: ClariFi, Morgan Stanley Research

Exhibit 16: Opposite Dynamic Present for Cos. with High Net Cash Variability



Source: ClariFi, Morgan Stanley Research

Earnings Stability is another factor we favor. Companies with high earnings stability outperformed the market albeit with some performance pull back in February (Exhibit 17). Earnings stability is a composite factor evaluating a company's estimate dispersion, ROE variability, and sales growth stability.

Exhibit 17: High Earnings Stability Has Outperformed

Source: ClariFi, Morgan Stanley Research

Exhibit 18: Low Earnings Stability Has Underperformed

Source: ClariFi, Morgan Stanley Research

One other interesting thing we discovered is that high sales growth underperformed low sales growth since the end of last year, but high *stability* of sales growth has outperformed (Exhibit 20).

Exhibit 19: High Sales Growth Underperformed Low Sales Growth

Source: ClariFi, Morgan Stanley Research

Exhibit 20: While High Sales Growth Stability Is Favored

Source: ClariFi, Morgan Stanley Research

Factor Update

We select a few key factors to monitor in Exhibit 21 and Exhibit 22 to help study market drivers from a factor standpoint. These exhibits focus on factors within the US Top 1000 by market cap universe. Some key takeaways on performance in the last month:

- Quality has outperformed Junk (+1.5% relative return) and the overall market (+0.8% relative return versus the overall Top 1000 universe).
- Value has outperformed Growth (+5.1%); Growth's absolute return is one the worst of any cohort (-7.2%) out of those listed below.
- Cyclicals are down -5.8% in absolute terms, underperforming Defensives (-2.8%); but that performance spread widens when we exclude Energy from Cyclicals, which has seen relatively strong performance amid the recent squeeze in crude prices; Cyclicals-Ex Energy have underperformed Defensives by -4.4%.
- High Momentum stocks have outperformed low momentum stocks (+2.5% relative

return) and the overall market (+0.9% relative return).

- Small Caps have outperformed Large Caps by +1.0%.

Exhibit 21: Top 1000 Factor Returns

Top 1000 Factor Return as of Mar 10, 2022

Factor	1 Week	1 Month	YTD	12 Months
Top 1000 (Equal Weighted)	-2.6%	-4.6%	-10.7%	-0.8%
Quality / Junk	0.6%	1.5%	4.4%	18.7%
Quality	-2.1%	-3.8%	-7.8%	9.7%
Junk	-2.7%	-5.3%	-12.1%	-9.0%
Value / Growth	1.8%	5.1%	16.1%	20.0%
Value	-1.7%	-2.1%	-2.5%	8.1%
Growth	-3.5%	-7.2%	-18.5%	-12.0%
Cyclical / Defensive	-1.2%	-2.8%	-1.3%	-7.1%
Cyclical	-3.1%	-5.8%	-9.9%	-1.8%
Defensive	-1.9%	-3.0%	-8.6%	5.3%
Cyclical xEnergy / Defensive	-2.0%	-4.4%	-4.7%	-11.2%
Cyclical xEnergy	-3.9%	-7.4%	-13.3%	-5.9%
12M Momentum	0.8%	2.5%	0.1%	1.0%
High Momentum	-2.3%	-3.7%	-11.4%	-5.5%
Low Momentum	-3.1%	-6.2%	-11.5%	-6.4%
Size (Small / Large)	0.3%	1.0%	-0.7%	-16.2%
Small Cap	-2.3%	-4.0%	-10.8%	-9.3%
Large Cap	-2.5%	-5.0%	-10.2%	6.9%

Source: ClariFi, Morgan Stanley Research

Exhibit 22: Excess Return Versus Broader Top 1000 Universe

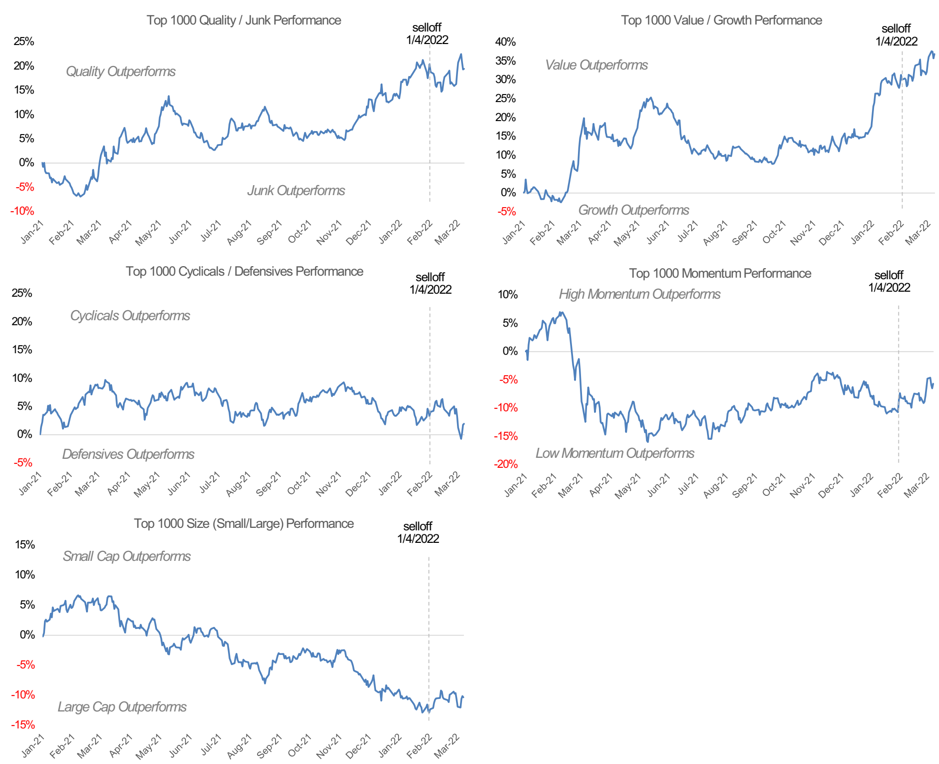
Top 1000 Excess Factor Return versus Broader Top 1000 Return as of Mar 10, 2022

Factor	1 Week	1 Month	YTD	12 Months
Quality / Junk				
Quality	0.5%	0.8%	2.9%	10.5%
Junk	-0.1%	-0.7%	-1.5%	-8.2%
Value / Growth				
Value	1.0%	2.5%	8.2%	8.9%
Growth	-0.8%	-2.6%	-7.9%	-11.1%
Cyclical / Defensive				
Cyclical	-0.5%	-1.2%	0.8%	-1.0%
Defensive	0.7%	1.6%	2.0%	6.1%
Cyclical xEnergy / Defensive				
Cyclical xEnergy	-1.3%	-2.8%	-2.6%	-5.1%
Momentum				
High Momentum	0.4%	0.9%	-0.7%	-4.6%
Low Momentum	-0.4%	-1.6%	-0.9%	-5.6%
Size (Small / Large)				
Small Cap	0.4%	0.6%	-0.2%	-8.5%
Large Cap	0.1%	-0.4%	0.5%	7.8%

Source: ClariFi, Morgan Stanley Research

Exhibit 23 shows performance of these pairs in time series graph form.

Exhibit 23: Cumulative Factor Performance Since 2021



Source: ClariFi, Morgan Stanley Research

We include an extensive list of factors and their returns in Exhibit 24. 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 25.

Exhibit 24: Full List of Factor Spread Returns (Long - Short)

Equal Weighted Factor Return (Spread) in Top 1000 as of Mar 10, 2022

Factor Name	1 Week	1 Month	3 Month	YTD	12 Months
Enterprise Value-to-Operating Income (Low vs High)	0.2%	6.2%	20.4%	14.9%	39.0%
Enterprise Value-to-Free Cash Flow (Low vs High)	1.4%	6.0%	20.3%	14.8%	35.6%
Enterprise Value-to-EBITDA (Low vs High)	0.6%	5.6%	22.1%	16.6%	39.0%
Price-to-Operating Income (Cheap vs Expensive)	0.1%	5.6%	19.2%	14.2%	34.5%
Price-to-EBITDA (Cheap vs Expensive)	0.5%	5.6%	21.3%	16.4%	35.3%
Composite Free Cash Flow (High vs Low)	1.1%	5.3%	19.2%	14.0%	34.1%
Y/Y Change in number of employees (Low vs High)	1.4%	5.2%	17.6%	13.7%	19.8%
Free Cash Flow Yield (High vs Low)	1.2%	5.2%	19.4%	14.4%	33.6%
Value vs Growth	1.8%	5.1%	18.5%	16.1%	20.0%
Price-to-Sales (Cheap vs Expensive)	0.7%	4.0%	20.3%	15.3%	29.8%
Net Margin (High vs Low)	0.5%	3.6%	7.3%	3.1%	23.9%
Composite Value (Cheap vs Expensive)	0.6%	3.5%	14.9%	10.4%	27.3%
Operational Efficiency (High vs Low)	0.3%	3.5%	12.3%	9.8%	14.1%
Price-to-Forward Earnings (Cheap vs Expensive)	0.0%	3.4%	19.7%	14.9%	37.8%
Asset Turnover (High vs Low)	0.0%	3.4%	7.4%	4.5%	21.2%
Return on Invested Capital (High vs Low)	0.1%	3.3%	10.3%	5.5%	26.2%
Sales per Employee (High vs Low)	1.0%	3.3%	2.7%	2.1%	7.6%
Earnings Stability (High vs Low)	1.2%	3.3%	6.5%	4.5%	18.3%
Price-to-Earnings (Cheap vs Expensive)	-0.2%	3.2%	15.0%	10.4%	27.7%
Operating Margin (High vs Low)	0.3%	3.2%	7.3%	3.3%	22.7%
Free Cash Flow-to-Debt (High vs Low)	1.0%	3.1%	5.5%	2.0%	24.2%
Cash Flow / Debt (High vs Low)	1.1%	3.0%	4.6%	1.9%	24.9%
Sales Variability (Low vs High)	1.1%	3.0%	12.6%	9.1%	21.6%
6-Month Price Momentum (High vs Low)	1.6%	2.9%	2.7%	1.9%	2.2%
1-Year Dividend per share growth (High vs Low)	0.7%	2.8%	0.7%	-0.1%	4.5%
Financial Leverage (High vs Low)	0.8%	2.8%	0.9%	-0.5%	10.4%
ROA (High vs Low)	-0.3%	2.7%	7.4%	3.2%	23.1%
9-Month Price Momentum (High vs Low)	1.2%	2.6%	-0.4%	-2.2%	-3.1%
12-Month Price Momentum (High vs Low)	0.8%	2.5%	1.0%	0.1%	1.0%
12m Volatility (Low vs High)	0.8%	2.5%	10.8%	5.6%	29.0%
Reduction in Shares Outstanding (Low vs High)	0.9%	2.4%	13.4%	8.3%	28.0%
3-Month Price Momentum (High vs Low)	1.2%	2.4%	2.7%	1.4%	0.1%
Interest Coverage (High vs Low)	0.2%	2.3%	3.6%	0.6%	25.1%
Operating Leverage (High vs Low)	0.8%	2.2%	7.6%	4.4%	10.3%
Estimate Dispersion (Low vs High)	0.4%	1.7%	6.8%	3.7%	23.0%
Tangible Book/Price (Cheap vs Expensive)	0.8%	1.7%	0.7%	1.6%	-4.0%
ROE (High vs Low)	-0.6%	1.6%	4.3%	1.1%	18.9%
Receivables Turnover (High vs Low)	-0.1%	1.6%	0.8%	1.1%	6.0%
Quality vs Junk	0.6%	1.5%	7.3%	4.4%	18.7%
Net Cash Variability (Low vs High)	0.8%	1.4%	4.6%	3.3%	11.5%
CapEx-to-Depreciation (Low vs High)	0.2%	1.4%	11.0%	8.1%	6.3%
EPS Variability (Low vs High)	-0.1%	1.4%	1.0%	-0.1%	6.5%
Composite Sentiment (High vs Low)	-0.4%	1.4%	-4.2%	-4.0%	0.9%
Cash Flow Coverage (High vs Low)	0.0%	1.3%	-1.9%	-1.1%	-3.5%
12m-1m Residual Momentum (High vs Low)	-0.4%	1.2%	-1.3%	-2.1%	3.1%
1-Year EPS Growth (High vs Low)	0.0%	1.2%	4.0%	2.1%	13.8%
Composite Quality (High vs Low)	-0.1%	1.2%	3.7%	1.6%	15.7%
Long-Term Operating Leverage (High vs Low)	0.9%	1.1%	3.7%	2.2%	-0.6%
Size (Small vs Large)	0.3%	1.0%	-3.5%	-0.7%	-16.2%
1-Month Reversal (Low vs High)	0.0%	1.0%	-8.6%	-6.0%	-4.2%
5-Year Dividend per share growth (High vs Low)	0.1%	1.0%	-0.7%	-1.7%	4.4%
Trailing Dividend Yield (High vs Low)	-0.1%	1.0%	9.0%	7.4%	0.6%
Price-to-Book (Cheap vs Expensive)	0.8%	0.9%	11.7%	9.9%	7.5%
5-Year EPS Growth (High vs Low)	-0.6%	0.7%	-5.0%	-4.7%	1.7%
CapEx-to-Sales (Low vs High)	0.0%	0.7%	4.6%	2.2%	1.8%
Debt-to-Assets (Low vs High)	0.6%	0.5%	-4.7%	-4.2%	-3.6%
Inventory Turnover (High vs Low)	0.2%	0.5%	5.9%	3.8%	8.1%
ROE Variability (Low vs High)	0.1%	0.4%	-1.1%	-2.0%	5.0%
Total Yield (High vs Low)	-0.1%	0.4%	6.1%	4.5%	4.7%
Sales Growth Stability (High vs Low)	0.3%	0.4%	2.3%	0.6%	13.2%
Debt-to-Capital (Low vs High)	0.6%	0.3%	-6.9%	-4.9%	-10.8%
Dividend Payout Ratio (High vs Low)	-0.3%	0.3%	3.3%	1.4%	2.5%
Inventory-to-Sales (Low vs High)	0.2%	0.3%	1.2%	0.4%	1.9%
Composite Accruals (Low vs High)	0.9%	0.3%	8.5%	6.0%	8.4%
Earnings Estimate Revisions (High vs Low)	-0.3%	0.2%	1.9%	-0.5%	7.9%
Gross Profit / Assets (High vs Low)	-1.8%	0.2%	-5.9%	-5.7%	1.5%
Earnings Revisions (High vs Low)	0.1%	0.1%	3.2%	0.7%	10.7%
Debt-to-Equity (Low vs High)	0.6%	0.1%	-5.5%	-4.4%	-3.5%
Up-to-Down Revisions (High vs Low)	0.0%	0.0%	3.6%	1.5%	10.9%
Composite Growth (High vs Low)	-0.5%	-0.1%	1.3%	-0.2%	6.6%
Y/Y Change in Inventory/Sales (Low vs High)	-0.3%	-0.1%	1.8%	1.3%	5.0%
Debt-to-EBITDA (Low vs High)	0.4%	-0.2%	-9.9%	-6.1%	-5.9%
Incremental Margin (High vs Low)	0.7%	-0.2%	3.7%	3.0%	5.8%
Profitability (High vs Low)	-1.4%	-0.3%	-2.5%	-3.5%	6.7%
Accruals (Low vs High)	1.0%	-0.3%	10.0%	7.1%	14.6%
Short-Term Accruals (Low vs High)	-0.1%	-0.3%	3.1%	2.4%	-1.7%
Price-to-Cash Flow (Cheap vs Expensive)	0.0%	-0.4%	-5.4%	-3.4%	-12.0%
Smoothed Estimate Revisions (%) (High vs Low)	-0.5%	-0.4%	-0.4%	-1.9%	3.9%
Reinvestment Rate (High vs Low)	-0.6%	-0.6%	2.2%	0.3%	6.6%
Up vs Down Sales Revisions (High vs Low)	-0.6%	-0.6%	-3.8%	-3.7%	3.3%
Sales Revisions (High vs Low)	-0.5%	-0.7%	-2.7%	-2.6%	5.1%
Gross Margin (High vs Low)	-1.1%	-1.2%	-5.3%	-4.5%	-4.4%
1-Month Estimate Revisions (%) (High vs Low)	-0.5%	-1.3%	-1.6%	-3.5%	-6.0%
Sales Estimate Revisions (High vs Low)	-0.7%	-1.3%	-1.6%	-2.8%	4.0%
Industry Cyclical vs Defensive	0.2%	-1.5%	-2.1%	-0.6%	1.0%
CapEx-to-Assets (Low vs High)	-0.1%	-1.6%	1.4%	0.3%	-10.5%
Net Cash Ratio (High vs Low)	0.3%	-1.6%	-12.7%	-9.9%	-16.1%
Net Debt-to-Market Cap (Low vs High)	0.3%	-1.8%	-15.4%	-12.2%	-19.0%
Analyst Coverage (High vs Low)	0.0%	-1.8%	1.3%	1.1%	10.8%
Cash-to-Market Cap (High vs Low)	0.2%	-2.3%	2.4%	2.8%	-7.1%
Cyclical vs Defensive	-1.2%	-2.8%	-3.8%	-1.3%	-7.1%
Cash Ratio (High vs Low)	0.3%	-2.9%	-13.3%	-9.3%	-27.3%
Cash-to-Debt (High vs Low)	0.1%	-2.9%	-10.5%	-7.4%	-20.8%
Forecast long term growth (High vs Low)	-1.0%	-3.1%	-4.5%	-4.0%	-2.3%
5-Year Sales Growth (High vs Low)	-1.1%	-3.2%	-16.2%	-12.5%	-18.0%
Operating Income Variability (Low vs High)	-0.1%	-3.3%	-6.6%	-5.0%	-6.6%
Cash-to-Assets (High vs Low)	0.1%	-3.9%	-13.4%	-9.2%	-26.8%
1-Year Sales Growth (High vs Low)	-2.0%	-4.1%	-17.8%	-13.6%	-14.1%

Source: ClariFi, Morgan Stanley Research

Exhibit 25: Best and Worst Performing Factor Leg Returns

Best 20 Performing Equal Weighted Group Return in Top 1000 as of Mar 10, 2022

Group	1 Week	1 Month	3 Month	YTD	12 Months
Top 1000 (Equal Weighted)	-2.6%	-4.6%	-10.0%	-10.7%	-0.8%
High Sales per Employee	-1.5%	-1.4%	-8.7%	-9.7%	1.8%
Low 1-Year Sales Growth	-1.2%	-1.5%	-2.3%	-4.8%	1.2%
Low Enterprise Value-to-Operating Income	-2.6%	-1.6%	-1.5%	-4.2%	13.0%
Low Price-to-EBITDA	-2.1%	-1.7%	-0.5%	-2.8%	10.7%
High Free Cash Flow Yield	-1.9%	-1.8%	-0.2%	-3.1%	12.2%
High Composite Free Cash Flow	-1.9%	-1.8%	-0.4%	-3.4%	12.8%
Low Price-to-Operating Income	-2.3%	-1.8%	-1.7%	-4.3%	10.0%
Low Enterprise Value-to-Free Cash Flow	-2.0%	-1.8%	-0.3%	-3.1%	12.4%
High Inventory Turnover	-1.4%	-1.9%	-4.0%	-6.1%	6.8%
Low Enterprise Value-to-EBITDA	-2.2%	-2.0%	-0.5%	-3.0%	12.9%
High 1-Year Dividend per share growth	-1.7%	-2.0%	-3.8%	-6.1%	13.7%
Low Cash-to-Assets	-2.2%	-2.0%	-5.6%	-7.5%	8.5%
Low Price-to-Sales	-2.1%	-2.0%	-1.0%	-3.7%	10.0%
Value	-1.7%	-2.1%	-0.8%	-2.5%	8.1%
High Trailing Dividend Yield	-1.8%	-2.2%	0.2%	-2.2%	10.0%
Low Y/Y Change in number of employees	-2.5%	-2.3%	-2.9%	-4.7%	5.5%
Low Inventory Turnover	-1.6%	-2.4%	-9.9%	-10.0%	-1.3%
High Tangible Book/Price	-1.8%	-2.4%	-6.1%	-6.9%	0.2%
High Operating Income Variability	-2.3%	-2.5%	-9.4%	-9.6%	-2.2%
High Sales Growth Stability	-1.9%	-2.6%	-7.6%	-9.3%	7.0%

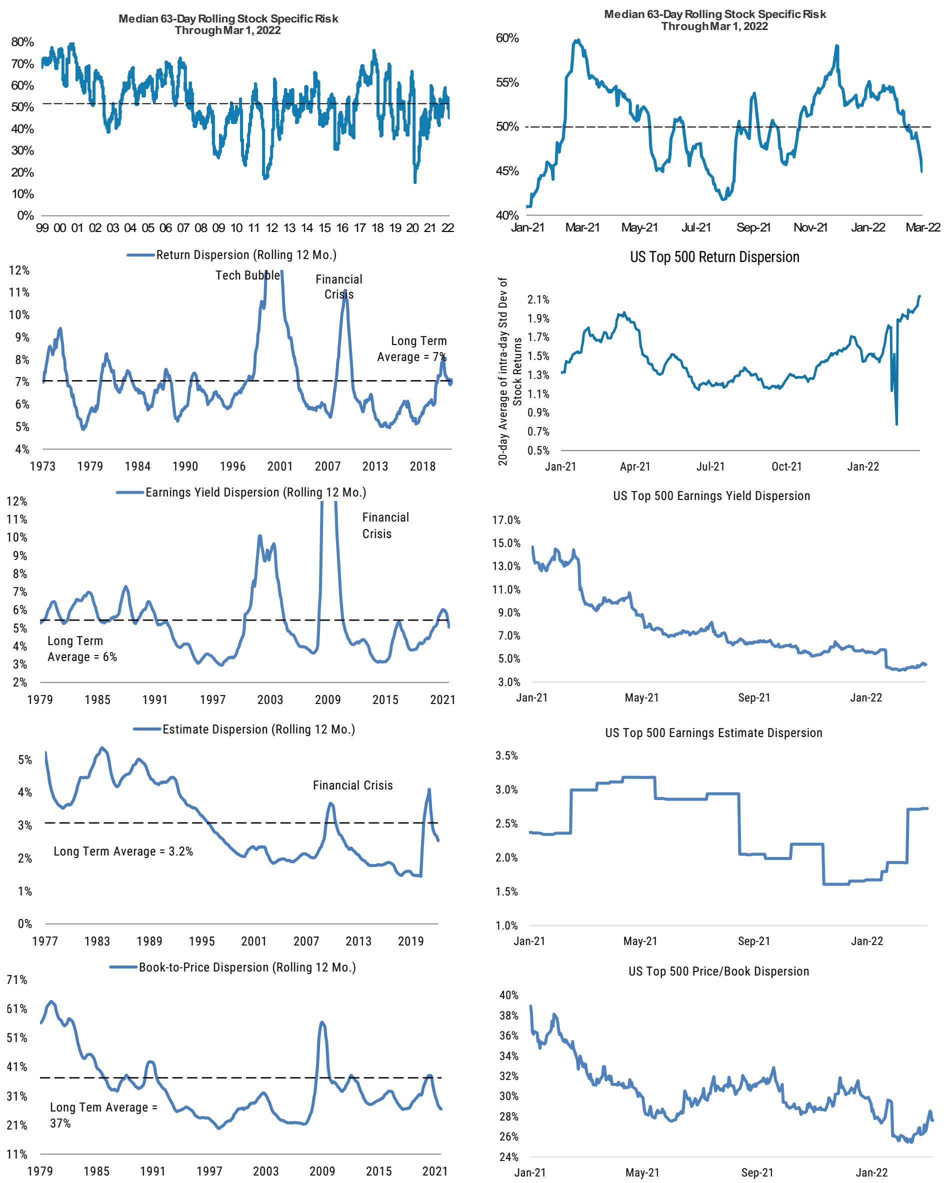
Worst 20 Performing Equal Weighted Group Return in Top 1000 as of Mar 10, 2022

Group	1 Week	1 Month	3 Month	YTD	12 Months
Top 1000 (Equal Weighted)	-2.6%	-4.6%	-10.0%	-10.7%	-0.8%
Low Operational Efficiency	-2.9%	-6.5%	-18.1%	-16.5%	-11.8%
Low Operating Margin	-2.5%	-6.6%	-17.2%	-15.0%	-18.9%
Low Net Margin	-2.7%	-6.6%	-17.5%	-15.0%	-18.4%
Low Composite Value (Expensive)	-3.0%	-6.6%	-17.9%	-15.7%	-17.2%
High Price-to-Forward Earnings	-2.7%	-6.7%	-21.8%	-19.0%	-24.3%
High Reduction in Shares Outstanding	-3.4%	-6.7%	-18.1%	-15.7%	-17.0%
Low 3-Month Price Momentum	-3.4%	-6.8%	-14.3%	-13.3%	-5.2%
Low 9-Month Price Momentum	-3.3%	-6.8%	-12.7%	-11.4%	-4.6%
Low Cash Flow / Debt	-3.2%	-6.9%	-17.4%	-15.2%	-23.4%
Low 6-Month Price Momentum	-3.5%	-6.9%	-14.2%	-13.4%	-6.8%
Low Free Cash Flow Yield	-3.0%	-7.0%	-19.7%	-17.5%	-21.4%
Low Composite Free Cash Flow	-3.0%	-7.1%	-19.5%	-17.3%	-21.4%
Growth	-3.5%	-7.2%	-19.3%	-18.5%	-12.0%
High Price-to-EBITDA	-2.5%	-7.3%	-21.8%	-19.2%	-24.5%
Low Free Cash Flow-to-Debt	-3.1%	-7.4%	-18.6%	-15.8%	-21.7%
High Price-to-Operating Income	-2.4%	-7.4%	-20.9%	-18.5%	-24.5%
High Y/Y Change in number of employees	-3.9%	-7.6%	-20.5%	-18.4%	-14.3%
High Enterprise Value-to-EBITDA	-2.9%	-7.6%	-22.5%	-19.6%	-26.0%
High Enterprise Value-to-Operating Income	-2.8%	-7.8%	-21.9%	-19.1%	-25.9%
High Enterprise Value-to-Free Cash Flow	-3.4%	-7.8%	-20.7%	-17.9%	-23.2%

Source: ClariFi, Morgan Stanley Research

In Exhibit 26, we continue to 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 falling back towards/below long-term averages. In recent weeks, stock specific risk has declined as geopolitical uncertainty and macro risk prevailed. Alongside higher uncertainty, return dispersion and earnings estimate dispersion continue to rise amid heightened volatility.

Exhibit 26: US Top 500 Dispersion Metrics: Long-term and Short-Term



Source: ClariFi, Morgan Stanley Research

Lastly, we monitor these dispersion metrics on a percentile basis relative to history (Exhibit 27). Return dispersion remains elevated for the S&P 500 overall and with a number of industries in their top quartiles since 2000. Valuations dispersion per earnings yield and book/price differs widely by industry group with elevated readings in consumer sectors (Food & Staples Retailing and Consumer Durables). Meanwhile Energy has very low earnings yield dispersion historically as latest volatility in oil drives sector-wide moves. Lastly, S&P 500 earnings estimate dispersion is historically high across most industries with Utilities and Telecom Services as the outliers at near all-time dispersion lows.

Exhibit 27: Historical Dispersion Metrics by Industry Group

	Percentile Since 2000			
	Return Dispersion	Earning Yield Dispersion	Book/Price Dispersion	Earnings Estimate Dispersion
S&P 500	77%	56%	39%	85%
Energy	79%	2%	26%	62%
Materials	74%	76%	26%	64%
Capital Goods	73%	78%	55%	77%
Commercial & Professional Services	89%	40%	95%	79%
Transportation	78%	49%	13%	70%
Automobiles & Components	89%	86%	85%	68%
Consumer Durables & Apparel	8%	86%	87%	85%
Consumer Services	87%	77%	45%	94%
Retailing	90%	65%	12%	65%
Food & Staples Retailing	76%	89%	95%	91%
Food, Beverage & Tobacco	79%	58%	52%	83%
Household & Personal Products	47%	45%	1%	86%
Health Care Equipment & Services	75%	41%	39%	71%
Pharma, Biotech & Life Sciences	61%	93%	90%	89%
Banks	58%	73%	47%	81%
Diversified Financials	72%	89%	52%	84%
Insurance	51%	62%	67%	90%
Software & Services	81%	47%	57%	77%
Technology Hardware & Equipment	62%	68%	70%	20%
Semiconductors & Semi Equipment	58%	43%	52%	31%
Telecommunication Services	24%	38%	45%	0%
Media & Entertainment	77%	54%	62%	89%
Utilities	66%	29%	65%	6%
Real Estate	65%	54%	39%	74%

Source: ClariFi, Morgan Stanley Research

Fresh Money Buy List

Exhibit 28: Fresh Money Buy List - Stats & Performance

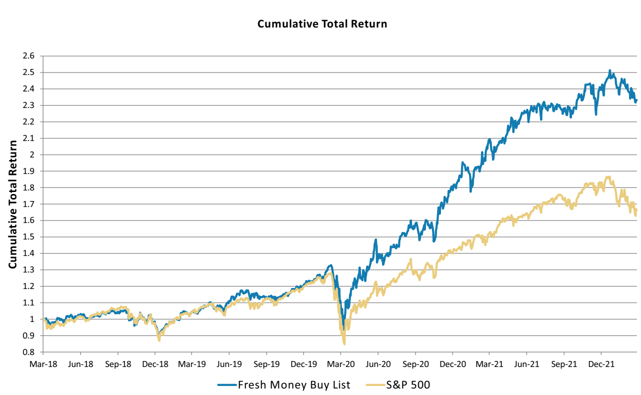
Company Name	Ticker	MS Rating	Sector	Market Cap ($Bn)	Price	MS PT	% to MS PT	MS Analyst	Date Added	Total Return Since Inclusion	
										Absolute	Rel. to S&P
AT&T, Inc.	T	Overweight	Communication Services	$165.6	$23.19	28.00	20.7%	Flannery, Simon	12/20/2021	(0.6%)	8.2%
Exxon Mobil Corporation	XOM	Overweight	Energy	$359.5	$84.92	95.00	11.9%	McDermott, Devin	2/22/2021	71.2%	61.9%
Humana Inc	HUM	Equal-Weight	Health Care	$54.0	$426.12	436.00	2.3%	Goldwasser, Ricky	7/19/2018	37.7%	(21.5%)
MasterCard, Inc.	MA	Overweight	Information Technology	$317.5	$324.79	449.00	38.2%	Faucette, James	3/2/2020	13.0%	(33.9%)
McDonald's Corporation	MCD	Overweight	Consumer Discretionary	$168.7	$226.87	294.00	29.6%	Glass, John	10/18/2021	(5.3%)	0.1%
Mondelez International Inc	MDLZ	Overweight	Consumer Staples	$82.1	$59.12	73.00	23.5%	Kaufman, Pamela	7/19/2021	(7.0%)	(5.0%)
SBA Communications	SBAC	Overweight	Real Estate	$34.6	$320.88	384.00	19.7%	Flannery, Simon	6/7/2021	3.2%	2.7%
Simon Property Group Inc	SPG	Overweight	Real Estate	$42.7	$130.05	160.00	23.0%	Hill, Richard	2/16/2021	25.9%	17.4%
Synchrony Financial	SYF	Overweight	Financials	$18.3	$35.04	56.00	59.8%	Graseck, Betsy	2/22/2021	(6.2%)	(15.4%)
Welltower Inc.	WELL	Overweight	Real Estate	$40.8	$91.21	95.50	4.7%	Hill, Richard	2/22/2021	37.4%	28.2%
Current List Performance											
Average (Eq. Weight)				$124.2			23.6%			18.9%	3.9%
Median				$54.0			23.0%			13.0%	0.1%
% Positive Returns (Abs. / Rel.)										67%	56%
% Negative Returns (Abs. / Rel.)										33%	44%
Avg. Hold Period (Months)											15.8
All Time List Performance											
Average (Eq. Weight)										31.9%	14.4%
Median										20.6%	6.6%
% Positive Returns (Abs. / Rel.)										74%	56%
% Negative Returns (Abs. / Rel.)										26%	44%
Avg. Hold Period (Months)											15.5

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.

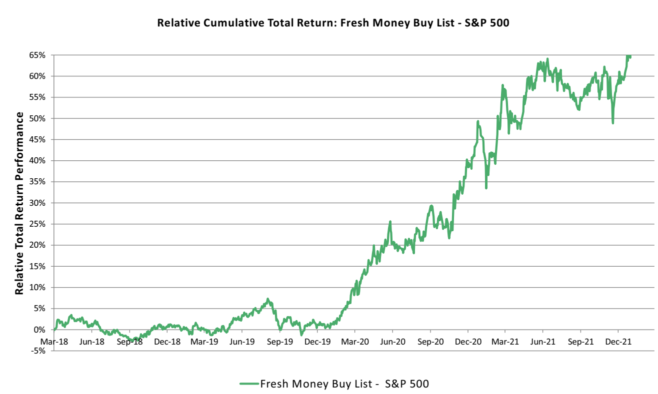
Source: Bloomberg, Morgan Stanley Research estimates.

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



Source: Bloomberg, Morgan Stanley Research.

Exhibit 30: Fresh Money Buy List / S&P 500 Cumulative Relative Return



Source: Bloomberg, Morgan Stanley Research.

AT&T (T), Simon Flannery

- Constructive Investor Day, 7x Pro Forma P/E Multiple. AT&T hosted their 2022 investor day earlier today, where they laid out strategic and financial priorities for the company as they prepare to spin off WarnerMedia to shareholders in early 2Q22 (likely mid-April). We were encouraged with the improved visibility into free cash flow generation and EBITDA growth over the next couple of years. AT&T is one of the best values in our coverage universe with a pro forma dividend yield of over 6% (at a 40% payout ratio), a double digit free cash flow yield, and a pro forma P/E multiple of just 7x on newly issued guidance, which compares to Verizon at 10x for example. We believe the stock could see incremental investor interest after the spin is complete.

Humana (HUM), Ricky Goldwasser

- Proprietary Medicare Advantage Benefits Analysis Sheds Light on Market Share Shift Away from HUM. Our proprietary analysis of MA benefit richness suggests CVS' strategic positioning is translating into brand recognition & share gains. But, also that HUM has been losing share for some time & we are skeptical if $1B of savings identified by mgmt will be enough to return to industry growth.

Welltower (WELL), Simon Flannery

- Encouraging Expense Trends; Investment Activity Update. WELL published a Business Update in conjunction with two significant investment announcements ahead of a competitor conference. Reliance on more costly agency labor is declining as staff COVID cases have declined 93%. 1QTD Occ. is flat through Mar-4 but has seen a 30bp increase over the past 2 weeks. WELL disclosed a $548mn investment in three portfolios where StoryPoint will be their operating partner, as well as two developments in Silicon Valley in partnership with a Related Companies and Atria Senior Living JV.

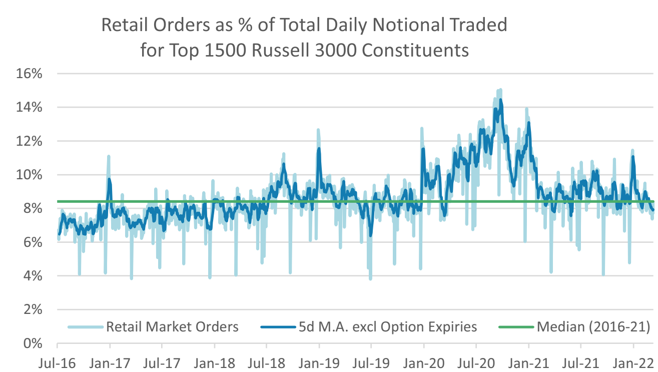
What's Retail Doing?

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:

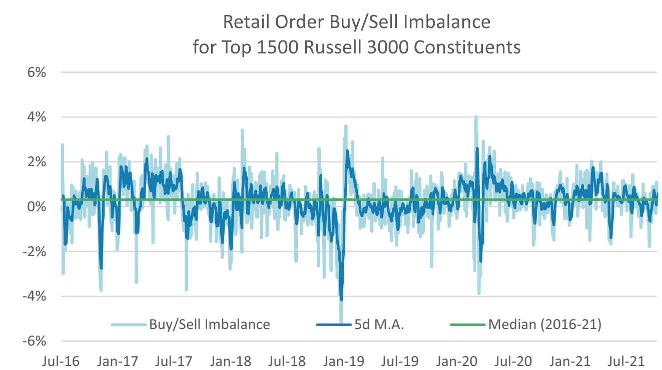
- Retail participation is currently at 7.9% of the total market volume,and at 32nd %-ile relative to the last 5 years.
- Order imbalance remains negative later of the week. It currently sits at -1.1% or 4th percentile relative to the last 5 years.
- Imbalance is negative on market level and most sectors, except for Industrials and Financials. It is most negative relative to sector history in Technology (1st %-ile), Discretionary (2nd %-ile), and Health Care (4th %-ile). Health Care is most negative in buy/sell imbalance.

Exhibit 31: Retail orders as a % of notional traded now sits below median



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

Exhibit 32: ... and negative in order imbalance



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

Exhibit 33: Retail's buy/sell imbalance is negative in most sectors

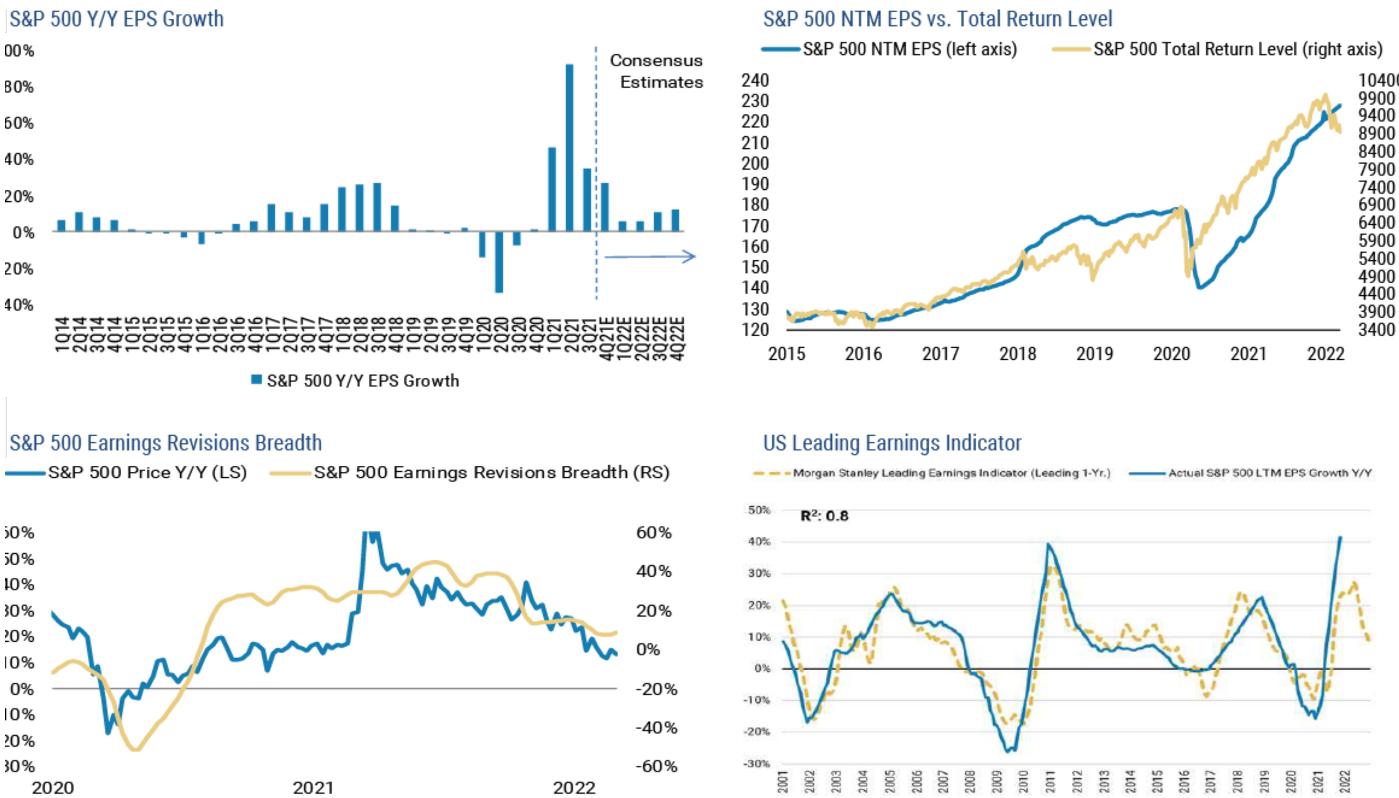
	Retail Participation			Buy/Sell Imbalance		
Sector	2016-21 Median	Current	p-tile	2016-21 Median	Current	p-tile
Energy	6.7%	10.0%	0.97	-0.33%	-1.0%	0.30
Materials	5.7%	7.7%	0.94	0.5%	-0.5%	0.19
Industrials	6.7%	6.0%	0.24	0.0%	0.9%	0.83
Consumer Discretionary	11.3%	9.0%	0.10	0.7%	-1.0%	0.02
Consumer Staples	6.2%	4.4%	0.03	-0.5%	-1.2%	0.33
Health Care	6.0%	3.9%	0.01	-0.3%	-3.2%	0.04
Financials	5.6%	5.3%	0.31	0.0%	0.9%	0.74
Information Technology	10.8%	10.9%	0.54	0.5%	-1.7%	0.01
Communication Services	8.7%	7.5%	0.40	0.3%	-1.0%	0.13
Utilities	3.9%	2.9%	0.05	-1.2%	-2.4%	0.28
Real Estate	3.5%	2.9%	0.06	0.5%	-1.2%	0.19
Model Universe (Top 1500)	**8.5%**	**7.9%**	**0.32**	**0.3%**	**-1.1%**	**0.04**

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 34: US Earnings Snapshot



Source: Refinitiv, FactSet, Morgan Stanley Research. Top and bottom left: As of Mar 11, 2022 Bottom right As of Dec 31, 2021. 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 35: S&P 500 Price Target

Morgan Stanley S&P 500 Year-End 2022 Price Target

Landscape	Earnings	Multiple	Price Target	Upside / Downside
Bull Case	$265	18.8x	5,000	17.3%
Base Case	$245	18.0x	4,400	3.2%
Bear Case	$225	17.2x	3,900	-8.5%
Current S&P 500 Price as of:		3/11/2022	4,264	

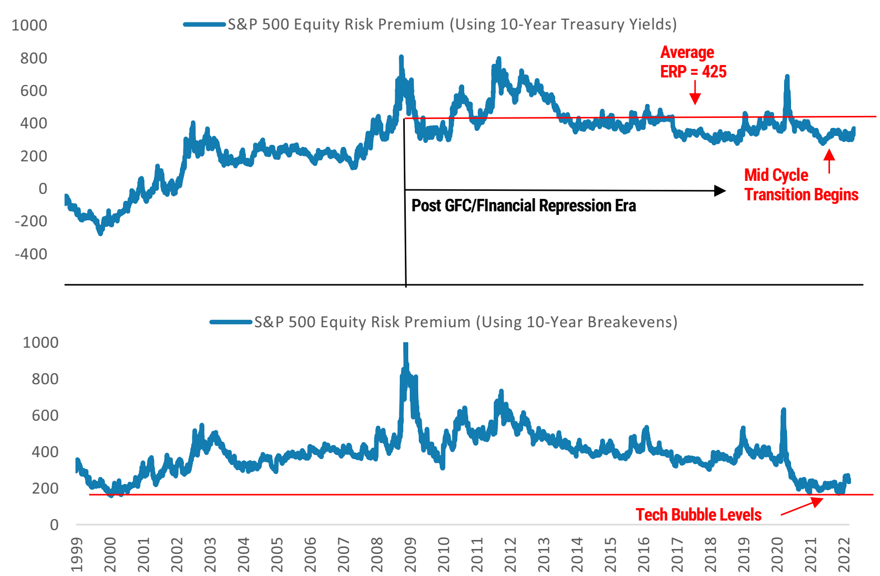
Source: Bloomberg, Morgan Stanley Research

Exhibit 36: Sector Ratings

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

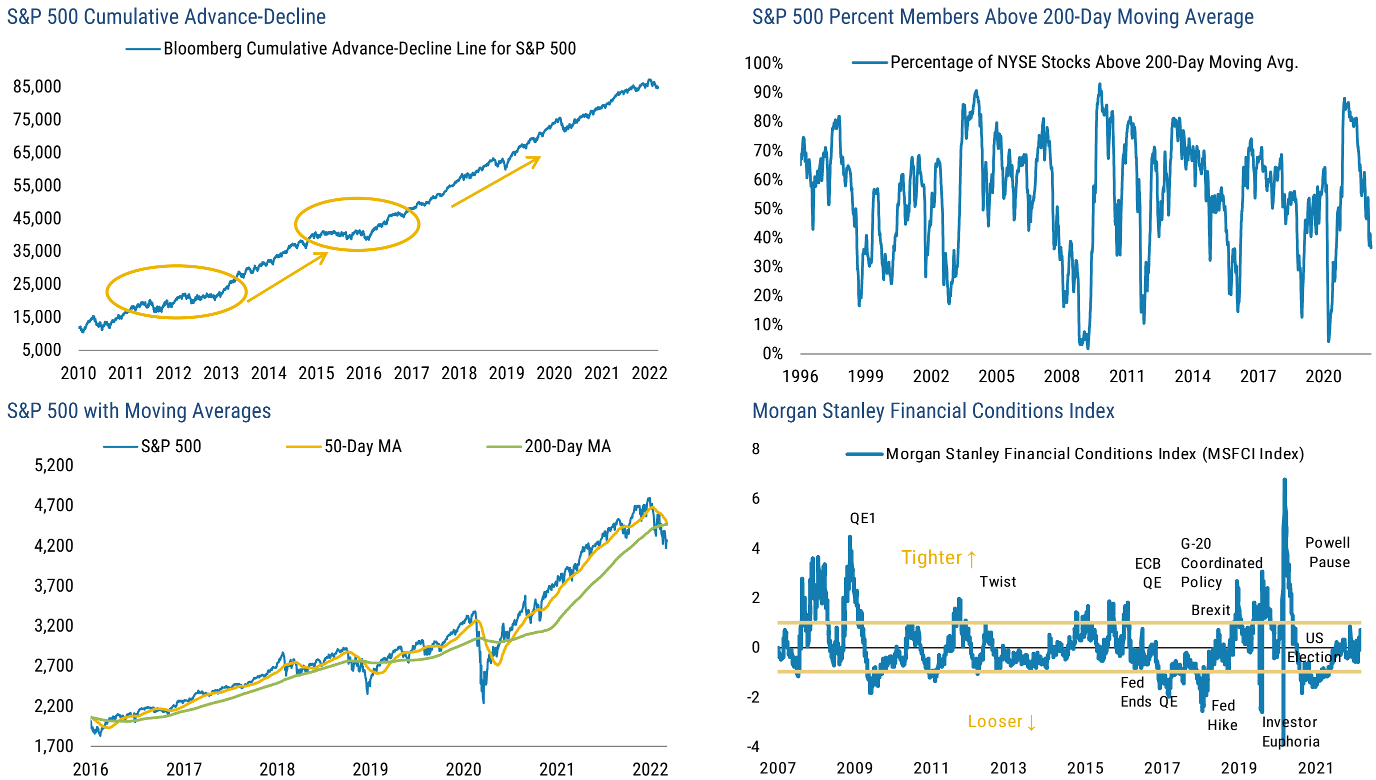
Source: Morgan Stanley Research

Exhibit 37: S&P 500 Equity Risk Premium using Nominal Rates and Breakevens



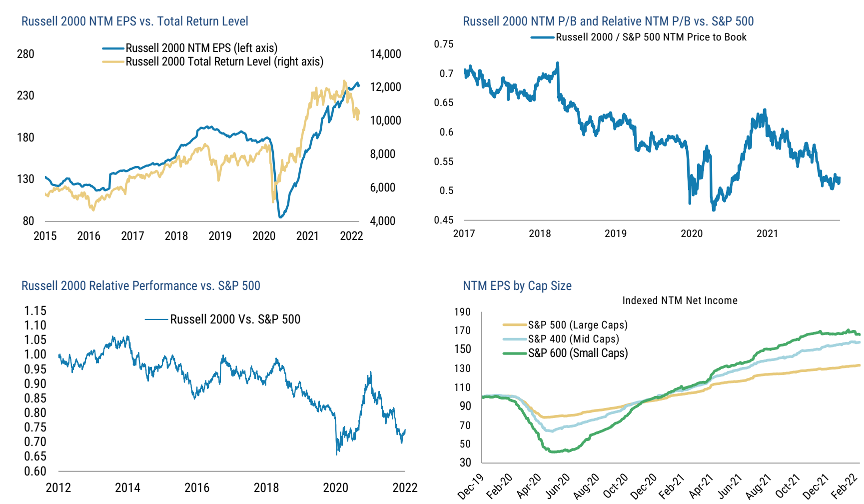
Source: Bloomberg, Morgan Stanley Research. As of Mar 10, 2022

Exhibit 38: US Equity Market Technicals and Financial Conditions



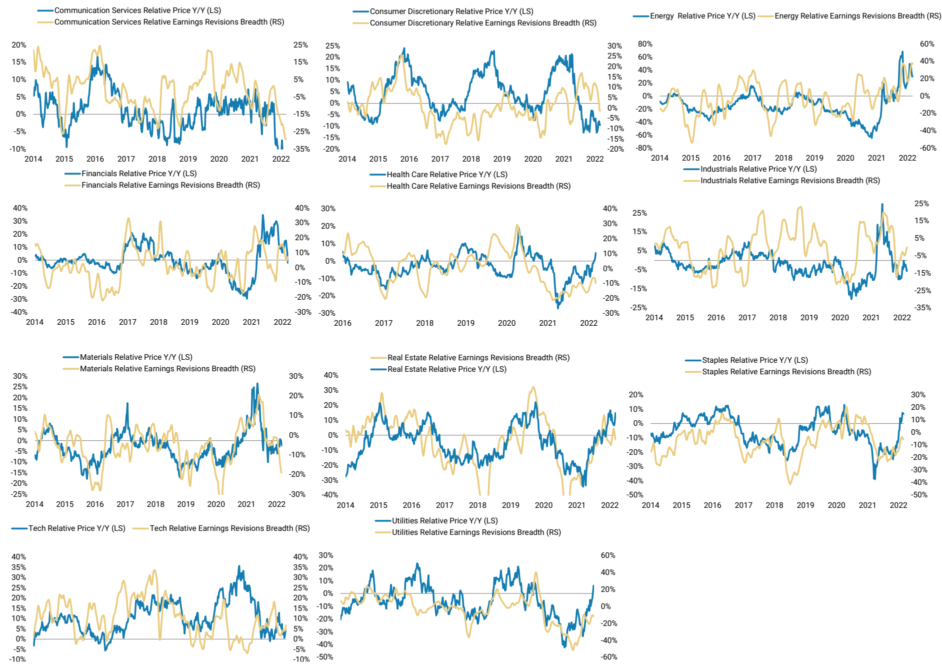
Source: Bloomberg, Morgan Stanley Research. All: As of Mar 11, 2022

Exhibit 39: US Small Cap Equities



Source: FactSet, Morgan Stanley Research. As of Mar 11, 2022

Exhibit 40: Earnings Revisions Breadth vs YoY Performance



Source: FactSet, Morgan Stanley Research. As of Mar 11, 2022

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Equal-weight/Hold	**1524**	**43%**	**372**	**44%**	**24%**	**708**	**45%**
Not-Rated/Hold	**0**	**0%**	**0**	**0%**	**0%**	**0**	**0%**
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TOTAL	**3,565**		**843**			**1562**	

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