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US Equity Mid-Year Outlook | North America

Mid-Cycle Brings More Risk than Reward

We're entering mid-cycle faster than normal. Rate of change on growth & policy has peaked, and valuation is falling. Taxes, tapering & transitions temper index returns. Look for alpha in relative value, themes, and reasonably priced growth and cyclicals as mid-cycle transition runs its course.

Mid-cycle is here, and with it comes a transition from early cycle leadership. This recession and recovery is unique for a number of reasons, not the least of which is its velocity, down *and* up. The rapid recovery has us entering a mid-cycle environment only 1 year in, and market internals are reflecting that — corrections in ultra high growth, small caps, low quality, and early cycle groups like Semis are sending a powerful message about the durability of COVID-economy gains and the next stage for the expansion.

The missing piece, so far, for the mid-cycle transition — lower valuations. Mid-cycle transitions commonly see valuation contractions of 10-20%. Risk premium compresses with excitement around recovery, but eventually higher rates, positioning resets, and a slowing rate of change in growth offset this and send multiples lower. Earnings growth in a strong economy mitigates downside, but rising costs and higher corporate taxes now limit the upside. The net effect is a tug-of-war between earnings/ valuation, tepid returns over the next 12 months, and a likely 10-20% correction between here and there.

Roaring 20s? Try post-WWII. We hear references to the Roaring 20s as a good analog for the post-COVID period. While the similarity with the Spanish Flu is notable, the comparison falls apart from an economic and policy regime standpoint. Our take: it is more likely to resemble the post World War II period where the similarities — a shift to fiscal policy dominance, excess savings, pent-up demand, and constrained supply driving higher inflation — are much stronger.

Styles/Sectors. Favor Reflation (Fins/Materials, both OW) over Reopening (prefer Staples, EW, to Discretionary, UW, in consumer) as the former remains the primary economic/investment narrative and the latter carries high expectations with execution risks. Reasonably priced Growth and Quality offer dependable earnings power in a transition period — look to Health Care (OW) and parts of Comm. Services (EW) rather than Tech (EW). Be selective in cyclicals after a powerful run as the rate of change on growth peaks — we downgrade Industrials to EW. We close our UW on small caps after 12% under-performance, leaving us neutral relative to large caps.

Thematic Alpha. Mid-cycle means returns should be driven by more alpha than beta. We highlight themes to keep in focus: how the economy looks in Life After COVID, inflation, the tech diffusion, and the return of capex.

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Thematic Alpha

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Mid-Cycle Brings More Risk than Reward

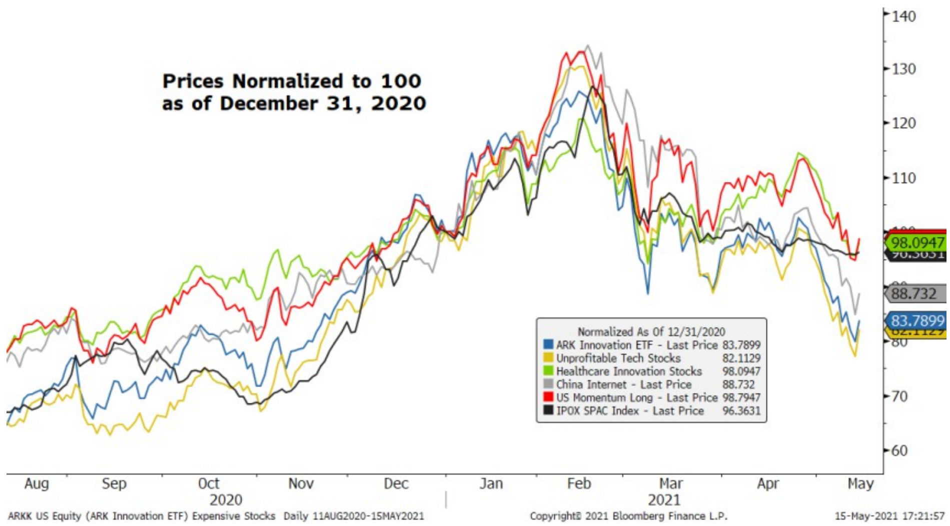
As part of our year ahead outlook back in November (Show Me the Money!), we forecast an accelerated rotation toward low quality cyclicals and small caps based on the vaccine deployment, aggressive fiscal and monetary policy, strong operating leverage, higher interest rates and inevitable shift in the composition of the top decile of price momentum as we lapped last year's 1Q crash that hurt those cohorts the most. **We also forecast a 10-20% de-rating in the P/E for the S&P 500 over the course of the year which is what normally happens in the year after NTM earnings forecasts return to prior peak (i.e., early to mid-cycle transition).** Against this backdrop, we were underweight defensives and expensive growth and high quality stocks. For the S&P 500 Index, much of the multiple contraction would be offset by very strong earnings revisions and lead to approximately 5% upside from year end 2020 levels, or 3900. **Fast forward to today and our sector and style calls have played out in spades while the P/E contraction story is not nearly as advanced. However, we have not lost conviction in that view. Instead, we are doubling down on it in today's Mid-Year Outlook.**

Exhibit 1: Mid-Cycle Transitions Typically Lead to P/E Contractions of 20%

Source: Bloomberg, Morgan Stanley Research

While the P/E for the S&P 500 has fallen only 5% YTD, it *has* been much more severe in the most expensive parts of the market. The nonlinear move in back-end rates we expected this year played out in February and had an outsized effect on the most expensive and speculative parts of the market (Exhibit 2). This was offset by some revaluation *higher* in the more cyclical parts of the market like Financials, Materials, and Energy and especially small caps, leaving the overall multiple fairly stable.

Exhibit 2: Expensive and Speculative Stocks have been hit hard on valuation

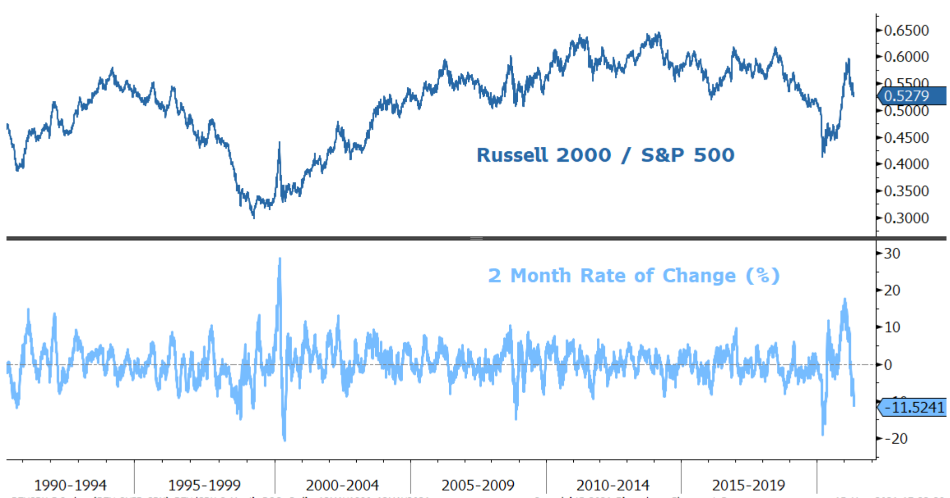


Source: Bloomberg, Morgan Stanley Research

Taking Profits on "Relative" Small Cap Short

In mid-March, we downgraded small caps due to their high relative valuations and the premise smaller companies would struggle with the execution risks involved with the reopening of the economy — i.e., higher costs and labor availability (lack thereof). **Since then, the Russell 2000 has underperformed by approximately 12%** which is about as bad as it gets over any 2-month period (Exhibit 3). In other words, the small cap underperformance is likely finished for now and **we recommend taking shorts off here, at least relative to the S&P 500.** In absolute terms, the Russell likely still has downside as the S&P 500 and other major averages continue to de-rate. We just think it will occur in a more uniform manner now. In many ways, the de-rating of the most expensive and small cap stocks is just a leading indicator for what to expect for the S&P 500.

Exhibit 3: Small Caps have had Historic Relative Underperformance — Time to Cover

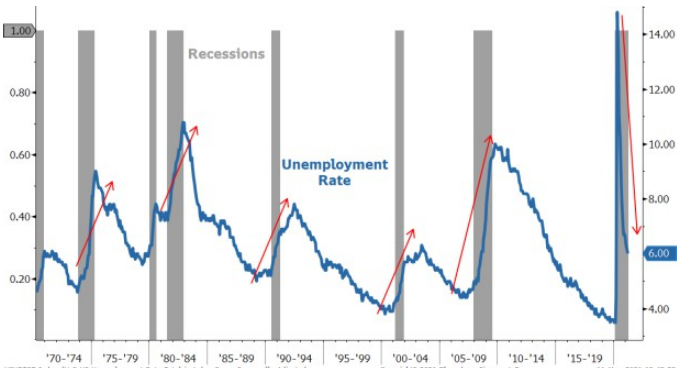


Source: Bloomberg, Morgan Stanley Research

Mid Cycle Transition Means Quality Does Better

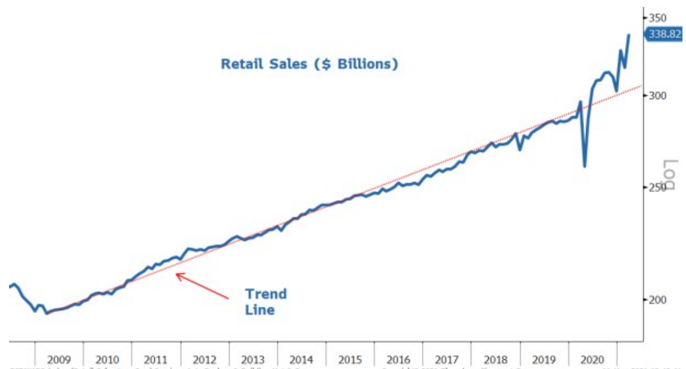
Our call further morphed in late March to a focus on quality, a factor we entered the year underweight. This coincided with our view that the economy was leaving the early cycle recovery phase and entering what we have dubbed the Mid-Cycle Transition. This is very normal in every economic expansion; however, it is happening earlier than usual this time around. As we have often noted, one of the unique characteristics of this cycle versus others is the speed in which it is happening. Starting with the recession itself which arrived instantaneously with the lock downs, the trough occurred just 2 months later with unemployment spiking to 15%. From there, the V-shaped recovery was just as fast. In fact, we have never witnessed a *falling* unemployment rate during a recession. Furthermore, it fell at a record pace, with employment recovering almost 80% of the lost jobs in under a year, something that would normally takes several years (Exhibit 4). With the government supporting the unemployed like never before via fiscal stimulus, retail sales snapped back just as fast and have even surpassed prior pre-COVID levels and trend. Remarkably, COVID and the government response has resulted in higher cumulative retail sales than if COVID had never happened (Exhibit 5).

Exhibit 4: Unemployment falling during a recession is very unusual....



Source: Bloomberg, Morgan Stanley Research

Exhibit 5: ....as are rising retail sales and suggests this cycle is far along



Source: Bloomberg, Morgan Stanley Research

This lightning fast recession and v-shaped recovery resulted in a classic early cycle operating leverage story on steroids and hence the massive relative outperformance of early cycle sectors like retail, autos, materials, semiconductors, home builders/improvement, banks and transports (see This Cycle Could Run Hotter but Shorter). We have been overweight all of these areas until recently, when we downgraded consumer discretionary and recommended avoiding semiconductors. This week we are downgrading industrials to equal weight (see detailed comments later in note). While home builders/improvement fall under the consumer discretionary umbrella, they have held up better than the lower quality cohort of retailers and autos. However, these stocks had a rough week as they start to feel the pinch of higher materials and labor costs; and interest rates. We think that underperformance could continue in the near term.

So what works well in the mid cycle transition? Broadly speaking, **moving up the quality curve** is a good idea as already mentioned. Indeed, the quality factor is starting to outperform (Exhibit 6). We continue to think valuation matters which is why we skew our recommendation toward quality at a reasonable price. **From a sector standpoint,**

two trades we like are healthcare over technology and staples over discretionary.

Exhibit 6: The Quality Factor does well in mid cycle transition

Source: Bloomberg, Moragn Stanley Research

Exhibit 7: Healthcare over Tech in Mid-Cycle...

Source: Bloomberg, Morgan Stanley Research

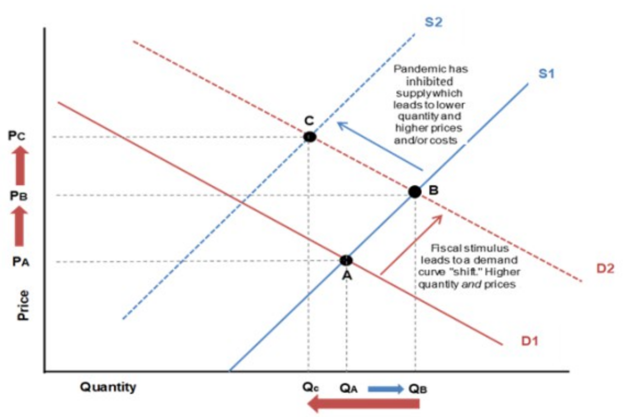
Exhibit 8: ...and Staples over Discretionary

Source: Bloomberg, Morgan Stanley Research

Supply Shortages Abound

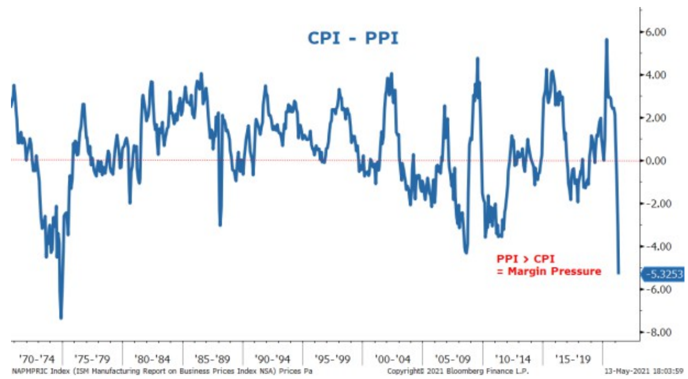
As we have been suggesting for awhile, **dreaming about a reopening is much easier than actually doing it.** Furthermore, given the unusual nature of this recession/recovery and the extraordinary response to the pandemic we think **there is a greater than normal risk to margins as we go through the mid cycle transition.** First, using simple economic theory, it's clear that the stimulus programs have shifted the demand curve out and to the right. However, these same programs and lengthy lock downs have damaged supply chains and labor availability, perhaps permanently in some cases. In essence, the supply curve has shifted in and to the left (Exhibit 9). What this means is higher costs for companies and lower margins for those that can't pass it on which we think is starting to bear itself out in the data (Exhibit 10).

Exhibit 9: Supply < Demand = Higher Prices



Source: Bloomberg, Morgan Stanley Research

Exhibit 10: PPI>CPI = Lower Margins



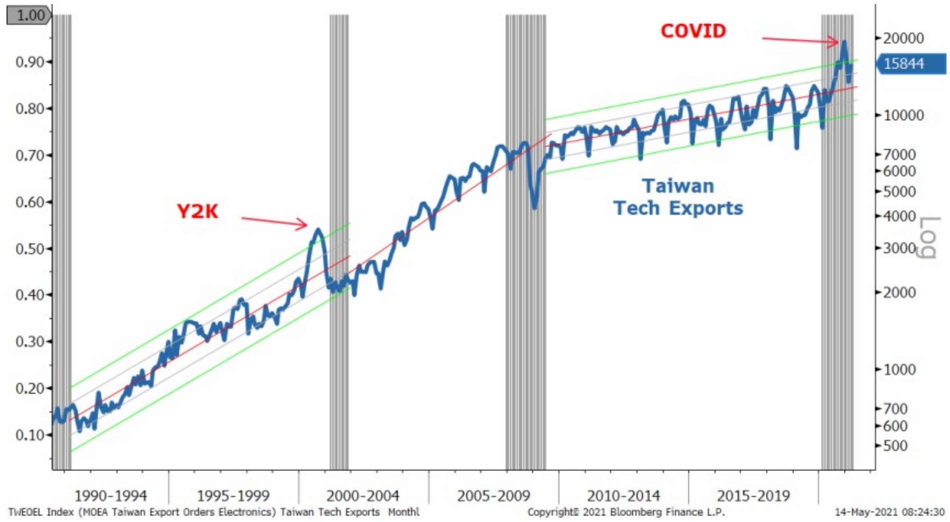
Source: Bloomberg, Morgan Stanley Research

Furthermore, with the reduction in supply there is a chance we also have less quantity, too (point C on Exhibit 9). Given how aggressive earnings revisions have been this year, this may be a recipe for missed sales expectations as demand jumps higher when we reopen the economy without much planning or staging. Nowhere is such risk more apparent or acute than in the semiconductor industry. It's well understood at this point that semiconductors are in short supply, particularly for lower-end chips that go into just about everything. Due to these shortages, production is now begin stopped for some end markets like automobiles. Could we see the same stoppage for other good requiring these chips? It's quite possible, but at a minimum, stretched lead times will delay delivery of many final products. We see this as a good microcosm for the broader economic and **likely earnings constraints over the next few quarters as we go through the mid cycle transition.**

The other theory to consider is that shortages in semiconductors always leads to double ordering as a means of procuring the chips one needs. Of course this creates the appearance of greater demand than reality and once the supply chains loosen up, those orders disappear. This is why semiconductors is a classic cyclical sector that experiences regular boom/bust cycles. Over the past decade, the semiconductor industry has benefitted from several *structural* growth drivers — the cloud, digitization and higher silicon content in autos and many other products. However, it's still a cyclical industry at it's core and we may be at one of those moments when the cyclical outweighs the structural. It could also have implications for the broader economy and equity markets.

First, we believe there was a material pull forward of demand in many technology goods last year as people worked from home and companies were forced to accelerate the digitization of their businesses to compete and survive. **In many ways, this resembled the surge of demand 20 years ago as we furiously upgraded our technological infrastructure ahead of the Y2K transition (Exhibit 11).** In fact, the surge is even greater this time — i.e., 55% above trend versus the 45% above trend in 1999. This likely speaks to the fact that we had a surge in demand for other household items that consume more silicon than 20 years ago. The point is that we think demand is being overstated not just for semiconductors but for many end products that use them. **In short, we expect a payback over the next 12 months that has much wider implications for the economy and broader stock market, not just semiconductors.**

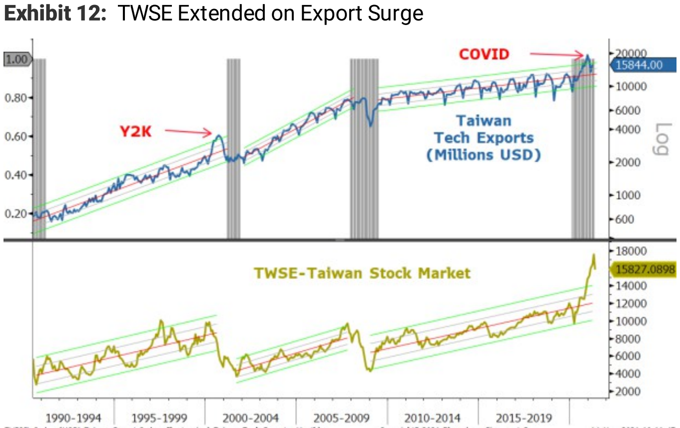
Exhibit 11: Taiwan Tech Exports 50% Above Trend Looks like Y2K — Payback Time?



Source: Bloomberg, Morgan Stanley Research

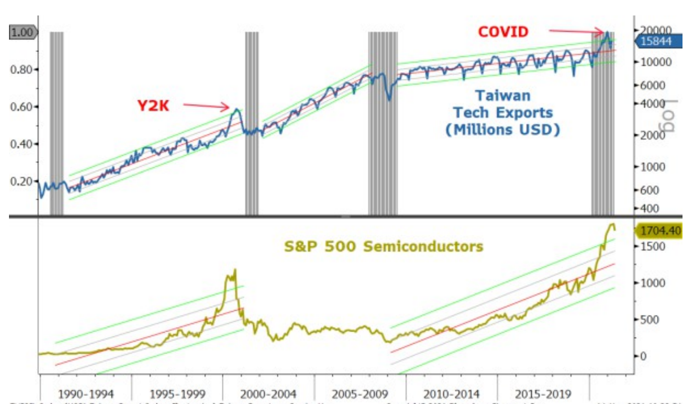
Taking this analysis a step further, we show the relationship between the Taiwan stock market (TWSE) and these tech exports (Exhibit 12). Not only has the TWSE recently made all time highs, but it's never been this extended above trend. In fact, it's about in line with the surge in exports or about 50% above trend today, worse than what we saw in the late 1990s. **Meanwhile, US Semiconductor stocks are showing the same degree of extension above trend, or approximately 50%. Both the TWSE and US semi stocks have started to breakdown recently suggesting the surge in demand has peaked and will likely return to trend.** If we're right about the payback in demand for last year's pull forward, these exports (and component sales) could return to the *low end* of the trend channel much like they did after Y2K demand was satiated. Such a decline is not currently reflected in forecasts.

Exhibit 12: TWSE Extended on Export Surge



Source: Bloomberg, Morgan Stanley Research

Exhibit 13: As are Semiconductor Stocks



Source: Bloomberg, Morgan Stanley Research

For the broader market and economy, we think this has big implications, too. It also supports our mid cycle transition view. First, semiconductors are an early cycle group and tends to lead in any recovery. This time, the very cyclical semiconductor sector did not experience any recession during the COVID pandemic. Instead, sales and shipments surged to all time highs, well above trend as already noted. Could this be representative of other essential business demand that saw the same surge in demand? The retail sales chart shown earlier (Exhibit 5) supports such a risk. The conclusion is **there may not be as much pent up demand for many items that saw a surge in growth last year, goods that have nothing to do with technology spending or digitization.** For example many home improvement items (appliances, landscaping items, furniture, etc.), certain types of apparel, and random "stuff" from Amazon and Walmart could see a precipitous drop as consumers decide to get more active with experiences this year. **In other words, sales and margin expectations may suffer from demand as much as from supply shortages discussed earlier.**

Whichever side of the aisle one sits on with regard to this particular debate, we think it's worth consideration for equity investors given how high earnings expectation are now for this year and next (see our forecast section below). **Even if current earnings estimates prove to be achievable, we think it's very unlikely investors have the earnings *upside* to offset the multiple contraction we think is still to come. Finally, the recent relative underperformance of semis may be the best predictor of how we think markets will trade over the next 3-6 months (Exhibit 14).**

Exhibit 14: Semiconductor Stocks Lead S&P 500

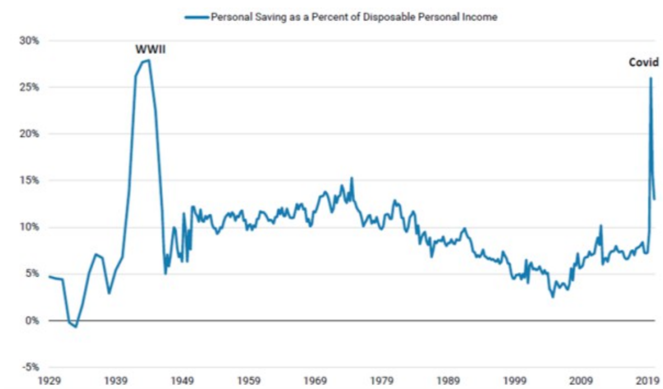
Source: Bloomberg, Morgan Stanley Research

Roaring Twenties or Post WWII Era?

With cycle analysis a big part of our investment strategy process, we spend a great deal of time studying market patterns around certain repeatable events like recessions. As part of this analysis, we also look at important historical events for similarities with current conditions as a means of determining what kind of investment regime we are in and therefore what kind of strategy will work best. **We've heard many strategists refer to the Roaring 20s as a good analog for the post-COVID period. While the similarity with the Spanish Flu is interesting the comparison falls apart after that in our view, at least economically speaking and from a policy regime standpoint. Our take is that it is more likely to resemble the post World War II period,** where the similarities are much more numerous and comparable to today in our view (This Cycle Could Run Hotter but Shorter, March 16, 2021).

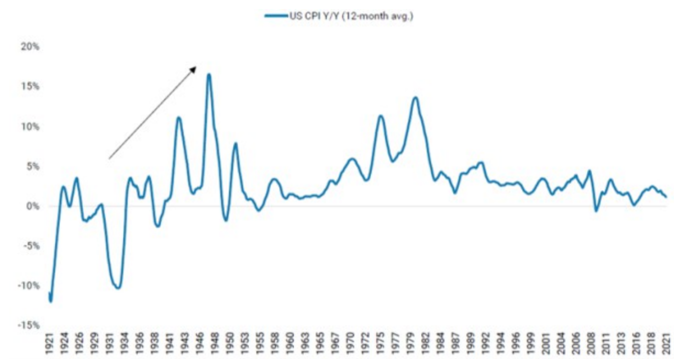
First, the war and COVID-19 created a huge increase in savings unlike any other time in observable history (Exhibit 15). This savings coincided with an economy that was essentially shut for different reasons but precluded consumption of many items. **Second, as the economy reopened post-war, demand surged and led to inflation that proved to be more than transient** (Exhibit 16) for reasons we think will be similar this time….i.e., the lockdown has destroyed supply chains and labor pools much like the war had done in the 1940s. During the Spanish Flu, the economy was *not* locked down as it was during this pandemic and businesses continued to operate normally without any meaningful destruction of supply chains. While labor pools were hurt from the larger number of deaths of younger people, those who survived remained eager to work without the safety net of unemployment benefits and other extraordinary fiscal stimulus. Given the lack of government support, there was little pent up savings during that period.

Exhibit 15: COVID savings rate spike looks more like 1940s than other periods



Source: Haver Analytics, Morgan Stanley Research

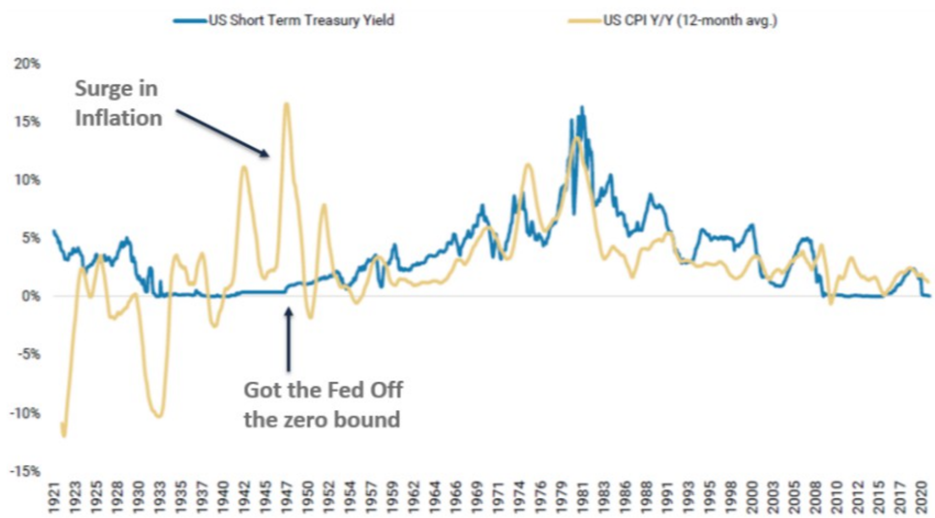
Exhibit 16: Surge in Demand with Supply Destruction was Inflationary



Source: Haver Analytics, Morgan Stanley Research

Third, the Fed was engaged in financial repression during WWII and the years preceding it due to the Great Depression. This is very similar to the current period and the preceding 10 years post the Great Financial Crisis (GFC). It is **the only other time in history where Fed Funds were stuck at the zero bound** for any length of time. **The surge in demand post the war,** much of which was orchestrated by the government (GI Bill, Marshall Plan, etc.), **is what finally forced/allowed the Fed to get off the zero bound and it never looked back (Exhibit 17).** We think this time is very similar and this year's surprisingly (to some) sharp rise in back end rates is the clue the Fed will be moving off the zero bound sooner than it thinks. This may be the most important similarity that provides clues about the policy regime going forward and why we think it's different this time and why equity investors need to embrace the new leadership that has emerged in value sectors and other investments that are positively levered to higher nominal GDP growth, inflation and interest rates. In short, stick with the reflation plays like banks, materials and other commodity price levered equities.

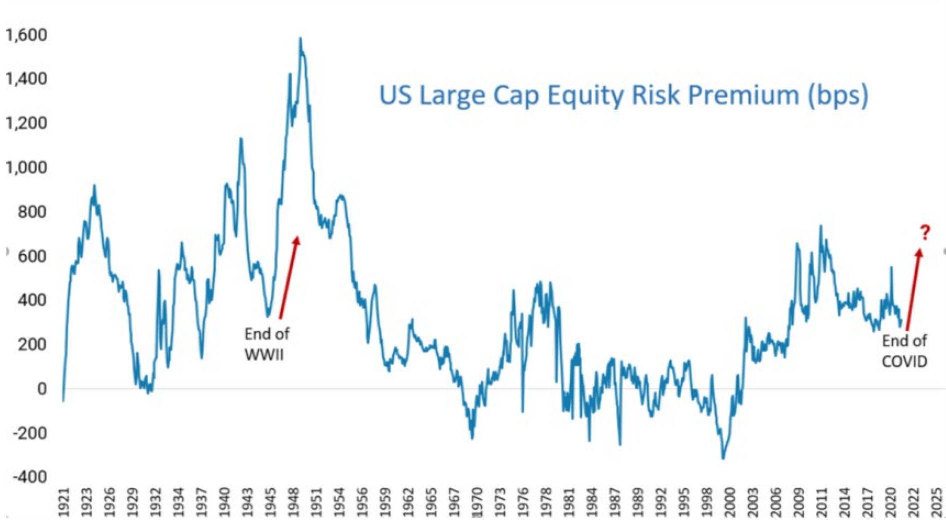
Exhibit 17: Fed Policy Permanently Shifted a year after WWII ended as Inflation Spiked



Source: Haver Analytics, Morgan Stanley Research

Finally, and perhaps most important with respect to the mid-cycle transition, we looked at the Equity Risk Premium closely during this period (Exhibit 18). Here too, we found some remarkable similarities to the 1940s. **During this period, the ERP bottomed simultaneously as the war ended in summer 1945.** The ERP low was 325bps using a 20-year Treasury yield, the official "long bond" at the time. Using a 20-year yield, the ERP today is just 243bps but above its April 13 post-GFC lows of 221bps. **Bottom line, we think the ERP is headed higher as COVID officially ends with the reopening of the US economy. Just like in 1945, we think it could rise sharply as the equity market begins to anticipate higher inflation and demands a greater risk premium.** So while the Fed can continue to jawbone long rates lower with it's guidance and policy intentions, the equity market may no longer "buy it" and instead start to anticipate the next move which is undoubtedly a tightening of some kind. As an aside this is the mirror image of the 1980s and 1990s when the Equity Risk Premium went negative in anticipation of *lower* growth, inflation and rates. Obviously, this would be a sea change for investors who have become accustomed to high multiples due to lower nominal and real rates. The most egregiously valued parts of the equity market have already started this painful re-rating process and it should continue to broaden out to entire market. **Bottom line, we see the next leg of de-rating via the ERP channel not rates and it could be sharp and swift like in the 1940s.**

Exhibit 18: After WWII Ended, the Equity Risk Premium Surged in anticipation of higher inflation and rates



Source: Bloomberg, Morgan Stanley Research

Forecast Update

We extend our S&P 500 price target through June 2022, raising our base case estimate to 4,225 from 3,900. Our new target assumes a multiple of 20x forward 12-month earnings of $211 (our estimate of where the market will project the forward 12-month earnings as of the end of June 2022). Our bull and bear cases also shift higher, to 4,450 (from 4,175) and 3,800 (from 3,375), respectively (Exhibit 19). Our earnings numbers reflect the general positive outlook of our economics team on overall US GDP growth, but with some tempering of expectations on how this translates to earnings (see below). With respect to multiples, we stick with our call that the skew for rates and equity risk premiums (ERP) remain higher, which means the skew for multiples is lower. We see higher rates due to economic growth, inflation, and deficit spending. We see a higher ERP as it currently sits at the bottom of a stable 10-year range and within our forecast horizon we include growth decelerating and Fed tapering. Our mid-cycle de-rating call is consistent with history. On net, we expect higher earnings due to a roll-forward in time to offset multiple contraction, such that return prospects are fairly muted at the index level. While this is the same call we had 6 months ago, we had more upside from earnings than we do now, which gave us more upside to our targets than today.

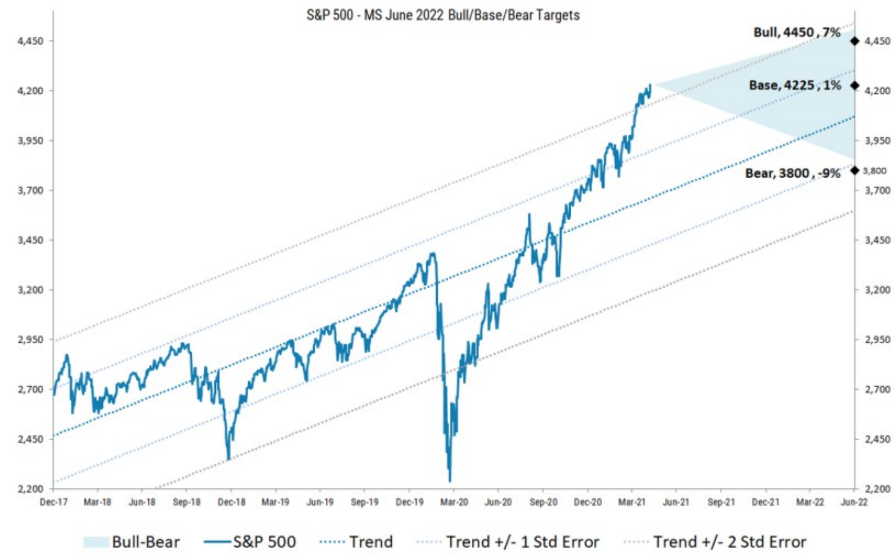
Exhibit 19: Our S&P 500 Bull/Base/Bear Estimates — Risk Reward Skews Lower

Index	Current Price	MS Forecast June-22 (% to Current)	MS Forecast (Prior - YE21) (% Δ)	MS Tgt Fwd P/E June-22	Current Fwd P/E	MS Top-Down EPS / Growth				Consensus Forecast EPS / Growth			
						2020	2021	2022	Jun-23	2020	2021	2022	Jun-23
Bull		4,450	4,175			$140	$193	$210	$222	$140	$188	$210	$219
Net Growth	4,174	*7%*	*7%*	20.00x	21.3x	*-14%*	*37%*	*9%*	*10%*	*-14%*	*34%*	*12%*	*10%*
Organic		--	--			--	--	*15%*	--	--	--	*12%*	--
Tax								*-5%*				*0%*	
Base		4,225	3,900			$140	$189	$200	$211	$140	$188	$210	$219
Net Growth	4,174	*1%*	*8%*	20.00x	21.3x	*-14%*	*34%*	*6%*	*9%*	*-14%*	*34%*	*12%*	*10%*
Organic		--	--			--	--	*10%*	--	--	--	*12%*	--
Tax								*-4%*				*0%*	
Bear		3,800	3,375			$140	$181	$189	$199	$140	$188	$210	$219
Net Growth	4,174	*-9%*	*13%*	19.00x	21.3x	*-14%*	*29%*	*4%*	*8%*	*-14%*	*34%*	*12%*	*10%*
Organic		--	--			--	--	*4%*	--	--	--	*12%*	--
Tax								*0%*				*0%*	

* To be concise in presentation we only represent tax effects for full year 2022 numbers given our expectationsa for tax increases to be effective on Jan 1, 2022.

Source: FactSet, Morgan Stanley Research.

Exhibit 20: S&P 500 Bull/Base/Bear Forecasts for June 2022

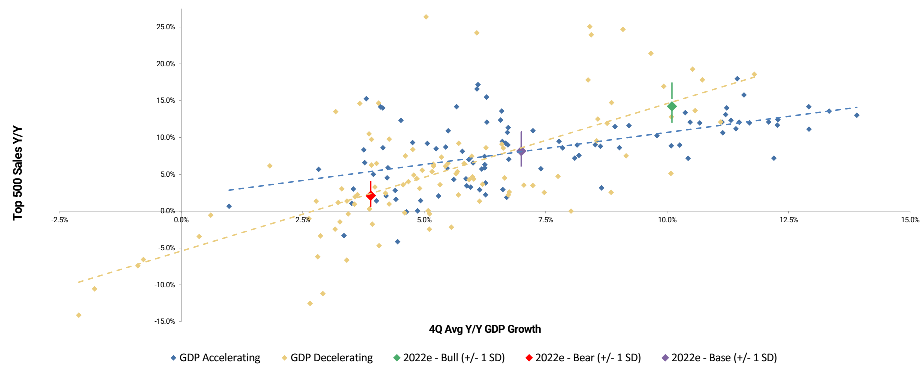


Source: FactSet, Bloomberg, Morgan Stanley Research.

Earnings — strong economic growth vs flow through headwinds and high expectations

A robust environment for sales growth... Our general belief is that after a strong 1Q earnings season, we should expect continued strong y/y growth rates into 2Q earnings season as the economy and markets lap peak lockdown. Despite rising cost pressures, we model modest beats through the balance of 21 and focus our forecasting on 2022, where we expect market focus soon shifts. We model high single digit sales growth into next year based on our economic team's forecasts and a regression based model linking nominal GDP growth to large cap equities y/y sales growth (Exhibit 21). Continued robust GDP growth into 2022, the rolling forward of our forecasts by 6 months, and a mark to market on 2021 numbers after a strong Q1 earnings season are the primary drivers of our increased earnings numbers into next year, but there are some opposing forces.

Exhibit 21: Robust GDP Growth Will Keep Sales Growth Well Supported



Source: FactSet, Bloomberg, ClariFi, Morgan Stanley Research.

... meets mitigating forces on flow through to earnings. A strong economy and continued increases in top line are strong sources of support for forward earnings projections but we think investors should be mindful for a number of factors limiting the direct flow through to earnings. We see a few factors at play here:

- **Public Equities ≠ the economy.** Our bullish call on earnings from the bottom and in our 2021 outlook was predicated on the same axiom. US public equities reflect a broad mix of high quality, scale companies tilted toward best-in-class operators and those with better technical expertise. The COVID economy actually served many in this group well, meaning the comparison base is not as easy for the US public equity universe as it is for the economy writ large. Some groups — airlines, hotels, restaurants — suffered in the COVID economy but many others also saw demand pull forward where we're wary of payback. On net, this suggests some potential for sales expectations misses relative to what our model suggests above.

- **Rising costs and record high margin projections don't mix.** Consensus is projecting margins 60 bps above prior peak this year and an incremental 30 bps of margin expansion next year. We think the reality of reopening is going to bring higher costs and potential capacity constraints. Fed Beige Book commentary and management commentary through earnings indicates issues in supply chain bottlenecks, double sourcing of supply, freight cost, labor availability/cost, and commodity costs among other things. Supply will adjust to lower input prices in many cases but this takes time and will likely come as top line decelerates. To date, easy comps and the initial stages of reopening have mitigated these issues, but they will be more prevalent from 2H21.

- **Mix shift favors lower margin businesses.** The COVID economy favored digital winners, which tend to have structurally higher margin profiles. As the economy reopens and wallet share shifts back closer pre-COVID consumption patterns, this likely also means a mix shift back to lower margin parts of the market. This isn't the primary reason we are taking the under against consensus 2022 margin projections, but we do think it is one more dynamic to consider.

- **Taxes are going up.** We embed a tax increase in our earnings numbers, which bottom-up consensus will not reflect until after passage, even if the market will. The exact details of higher taxes aren't known at this point, but based on our work in Sizing Blue Proposals, we're using a 4% reduction in pro forma S&P earnings as an estimate for the impact. This is on the lower end of potential impacts based on current proposals, but in line with what we think is a politically viable outcome (25% headline rate,15% GILTI, no book profits tax).

Exhibit 22: Potential S&P 500 Implied Change in 2021 Net Income

GICS Sector	White House Proposed: EPS Impact	MS Est: EPS Impact
Communication Services	-10%	-6%
Consumer Discretionary	-8%	-4%
Consumer Staples	-8%	-5%
Energy	-8%	-5%
Financials	-7%	-4%
Health Care	-10%	-5%
Industrials	-6%	-3%
Information Technology	-8%	-3%
Materials	-6%	-4%
Aggregate	-8%	-4%

Source: FactSet, Thomson Reuters, Morgan Stanley Research Estimate.
Note: Assumes a 21% GILTI rate across scenarios.

The bridge to 2022 — sales and buyback accretion vs higher taxes. Notwithstanding the headwinds noted above, we don't view our margin assumptions as bearish. Quite the contrary — we give credit for some incredible efficiency gains seen during the pandemic, while acknowledging that not all will be permanent. Our margin assumptions, before adjusting for higher tax rates, embed margins this year and next that sit roughly 50 bps above prior peak (Exhibit 23). We believe a drop in incremental margins next year to levels usually seen after 30%+ earnings growth years (i.e., 2021) leaving margins flat y/y. Given the acute rise in cost pressures and unique issues around an unequal recovery and pull forward of demand in this recession we feel comfortable with these forecasts. The effect of flat margin projections is that the y/y earnings growth we see is driven mostly by sales growth, with some buyback accretion and an offset from higher tax rates (Exhibit 24).

Exhibit 23: Sales vs Margins Matrix

		MS Econ: Bear Case			MS Econ: Base Case			MS Econ: Bull Case
	SPS vs 2021 → EPS / SPS ↓	102%	104%	106%	108%	110%	112%	114%
	11.75%	$183	$186	$190	$193	$197	$200	$204
	11.90%	$185	$189	$192	$196	$199	$203	$207
Prior Peak Margin	12.05%	**$187**	$191	$195	**$198**	$202	$206	**$209**
	12.20%	**$190**	$193	$197	**$201**	$204	$208	**$212**
	12.35%	$192	$196	$199	$203	$207	$211	$214
MS 2022e Mgn Pre-Tax Adj	12.50%	$194	$198	$202	$206	$209	$213	$217
	12.65%	$197	$200	$204	$208	$212	$216	$220
	12.80%	$199	$203	$207	$211	$214	$218	$222
	12.95%	$201	$205	**$209**	$213	$217	$221	$225

MS Strategy: EPS Range - Bull
** $11 tax increase assumed*

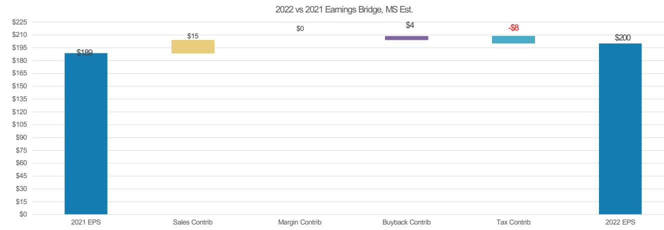
MS Strategy: EPS Range - Base
** $8.3 tax increase assumed*

MS Strategy: EPS Range - Bear
** No tax increase assumed*

Bottom Up Consensus
** No tax increase assumed*

Source: FactSet, Morgan Stanley Research.

Exhibit 24: MSe 2021 to 2022 Earnings Drivers



SouFactSet, Morgan Stanley Research.rce:

For 2023 — a double-digit placeholder. By the end of 2022, we would expect the consensus to follow its historical pattern of projecting low-double-digit earnings growth for "next year" (2023), and we assume 11% across our scenarios. This is actually more bullish than consensus at this time (9% vs. 2022), but we think that embedded conservatism in consensus is more a function of 2023 numbers having not been marked to market, an exercise which won't happen in earnest until early next year. For the purposes of our forecast horizon into 2Q22, the low-double-digit placeholder is in all likelihood the number that will shape expectations. For more on the historically strong precedent for low-double-digit growth projections in out years, see here.

Multiple

The skew for multiples is lower... The market has entered the mid-cycle phase of the economic recovery when multiples compress as earnings move higher. As is typical during a recession, valuations expanded massively as earnings collapsed. This happens as the market understands that a decline is temporary and begins to discount the inevitable recovery. The past 12 months have been no different, with P/Es first collapsing in anticipation of the earnings decline and subsequently rising ahead of the upward earnings revisions.

… due to skews in the direction of travel in the underlying drivers of the multiple, rates and equity risk premium. Our valuation framework is simple, we calculate a 12-month forward earnings yield (EPS/P) by adding a forecast for the US 10-year yield and an equity risk premium. Higher numbers for either mean a higher earnings yield and therefore lower multiple, all else equal. (We don't actually make this all-else-equal assumption as we try to think through what states of the world lead to different combinations.) **With growth expectations largely fairly priced we think the skew for both of these inputs is higher.**

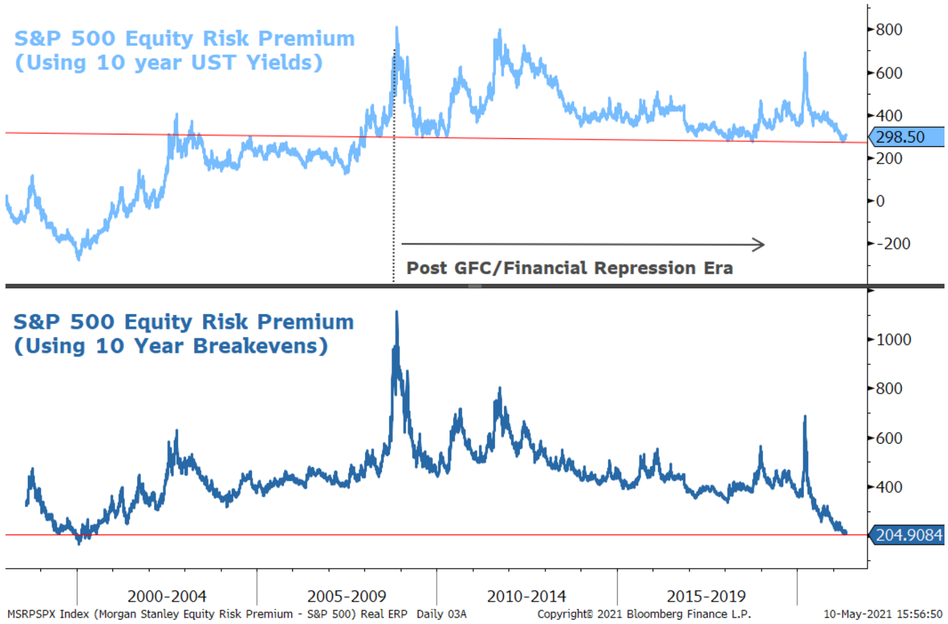
- **Treasury Yields — 2% (+ ~40 bps from current):** Our rates team forecasts 10-year Treasuries to be approximately 2% by the end of June 2022. Those forecasts are a function of better growth, inflation, and higher deficit spending, among other things. We agree that the direction of travel likely continues to be higher for rates, which means equity markets need to find an offset in better growth expectations and/or lower risk premiums.

- **ERP not much left to give:** ERPs post-GFC have traditionally moved in a wide but fairly stable band. 300 bps was a sustainable low and 475 a high (with some short lived overshoots in both directions). See Exhibit 25. We're currently at the low end of that range as several factors have benefitted risk appetite and equity flows — the economic recovery, ample fiscal and monetary support adding liquidity to financial markets, the increased involvement of the retail investor, and the poor risk-reward seen in bonds. While a strong growth environment can keep ERPs lower for longer, we think the skew of potential outcomes tilts higher as high expectations, tapering, and a slowing rate of change on growth all fall within our forecast horizon.

There are literally an infinite number of outcomes, and we present our ERP matrix as a tool to help calculate your own P/E (Exhibit 26). We have a diagonally shaded range to illustrate our view that higher rates have generally lined up with better growth and falling risk premiums. The opposite is also true, so should economic data disappoint, and rates fall in our forecast horizon, we see risk premiums rising to offset the potential benefit to the multiple of lower rates.

The bottom line is that even with fairly generous assumptions around ERP, we still see a ~10% derating in multiples with a downside skew toward 20% in our bear case.

Exhibit 25: Equity Risk Premium Looks Stretched



Source: Bloomberg, Morgan Stanley Research.

Exhibit 26: Equity Risk Premium vs Rates Matrix for S&P 500 P/E

NTM S&P PE Sensitivity - ERP & 10 Yr Yield

10Y Yield	Equity Risk Premium (bps) 285	300	315	330	345	360	375
1.40	23.5x	22.7x	22.0x	21.3x	20.6x	20.0x	19.4x
1.55	22.7x	22.0x	21.3x	20.6x	20.0x	19.4x	18.9x
1.70	22.0x	21.3x	20.6x	20.0x	19.4x	18.9x	18.3x
1.85	21.3x	20.6x	20.0x	19.4x	18.9x	18.3x	17.9x
2.00	20.6x	20.0x	19.4x	18.9x	18.3x	17.9x	17.4x
2.15	20.0x	19.4x	18.9x	18.3x	17.9x	17.4x	16.9x
2.30	19.4x	18.9x	18.3x	17.9x	17.4x	16.9x	16.5x
2.45	18.9x	18.3x	17.9x	17.4x	16.9x	16.5x	16.1x

Current Range (22x current)

Target Range (Avg ≈ 20x)

S&P 500 Price Matrix Using Current Consensus NTM EPS Est - $195

10Y Yield	Equity Risk Premium (bps) 285	300	315	330	345	360	375
1.40	4,588	4,432	4,286	4,149	4,021	3,900	3,786
1.55	4,432	4,286	4,149	4,021	3,900	3,786	3,679
1.70	4,286	4,149	4,021	3,900	3,786	3,679	3,578
1.85	4,149	4,021	3,900	3,786	3,679	3,578	3,482
2.00	4,021	3,900	3,786	3,679	3,578	3,482	3,391
2.15	3,900	3,786	3,679	3,578	3,482	3,391	3,305
2.30	3,786	3,679	3,578	3,482	3,391	3,305	3,223
2.45	3,679	3,578	3,482	3,391	3,305	3,223	3,145

S&P 500 Price Matrix Using MS June 2022 NTM EPS Est - $211

10Y Yield	Equity Risk Premium (bps) 285	300	315	330	345	360	375
1.40	4,965	4,795	4,637	4,489	4,351	4,220	4,097
1.55	4,795	4,637	4,489	4,351	4,220	4,097	3,981
1.70	4,637	4,489	4,351	4,220	4,097	3,981	3,872
1.85	4,489	4,351	4,220	4,097	3,981	3,872	3,768
2.00	4,351	4,220	4,097	3,981	3,872	3,768	3,670
2.15	4,220	4,097	3,981	3,872	3,768	3,670	3,576
2.30	4,097	3,981	3,872	3,768	3,670	3,576	3,488
2.45	3,981	3,872	3,768	3,670	3,576	3,488	3,403

Source: FactSet, Morgan Stanley Research.

Why can't equity risk premiums go below the post-GFC range? Among more bullish investors this is a commonly cited reason for more upside in equities. They cite the fact that the ERP was lower in the 00s and even lower (negative) in the dot-com bubble. We think the critical differences between those periods and the current are (1) higher potential growth expectations and (2) higher rates. Markets are forward looking but also tend to extrapolate current trends. With nominal GDP running higher during these prior periods the forward outlook embedded in investor expectations was also higher, which arguably supported a lower risk premium based on a 1-year forward earnings yield. Further the deflationary risk seen across DM markets in the recent past was not a real threat that markets needed to discount in someway. If we're right that (1) fiscal policy has moved us to a new regime that favors investment, (2) some return to inflation mitigates deflationary fears, and (3) COVID economy efficiency gains can translate to higher productivity, then there is an argument to be made for a a higher growth path going forward that shifts the post-GFC ERP range lower. *But* even with a a 25- to 50-bps parallel shift lower, we're *still* at the lower end of a hypothetical new range and this new fiscal policy regime likely introduces increased volatility to markets and the economy, which may offset some of that better growth outlook.

Scenario Forecasts

Base Case: 4,225

In our 4,225 base case, the market puts a 20x P/E multiple on NTM EPS (2H22 + 1H23) of $211. In our base case a material rise in earnings, that is partially offset by higher taxes, drives a roughly flat index as the earnings multiple falls. Looking to 2023, we suspect the market will assume another 11% earnings growth into 2023, a typical assumption for earnings growth — and one that seems realistic given we expect a continued recovery. With margins already at prior peak and ample evidence of rising input costs, our earnings growth relies primarily on better sales growth and buyback accretion. Our forecast embeds $222 in 2023 EPS, which sits a touch below current consensus with margin forecasts and higher taxes the biggest drivers of the spread. We see multiple compression as rates rise with a recovering economy, but with limited offsets from falling ERP or better growth expectations given what's already in the price. While we assume that ERP stays at the low end of its historical range a skew higher in rates and ERPs could both be material headwinds at some point in the forecast horizon, which will likely see Fed tapering, a rise in corporate taxes, and a slowing rate of change in economic growth. We assume a dividend yield of approximately 2% and price appreciation of 1% for a total return projection of ~3.5%.

Bull Case: 4,450

In our 4,450 bull case, the market puts a 20x P/E multiple on NTM EPS (2H22 + 1H23) of $222. The primary difference between our bull and base cases comes down to earnings growth. We assume stronger beats through the remainder of 2021 and a margin in line with current bottom up consensus forecast, pre-tax reform. In this scenario, margin pressures and bottlenecks prove to be transitory and manageable by companies as efficiency gains from the pandemic and strong economic demand more than offset their potential drag. Our assumptions around buybacks remain around the same 2% level as in our base case and we project a marginally worse earnings loss due to higher taxes as a robust earnings environment should make relatively higher taxes more politically feasible. Our multiple assumptions remains unchanged from he base case as we expect this state of the world to see a greater rise in yields, requiring ERP to move even further below its typical range to support a 20x multiple on P/E. We assume a dividend yield of approximately 2% and price appreciation of 7% for a total return projection of ~9%.

Bear Case: 3,800

In our 3,800 bull case, the market puts a 19x P/E multiple on NTM EPS (2H22 + 1H23) of $199. In this scenario a combination of higher costs, reopening difficulties, and larger than expected payback on demand lower earnings expectations for the current year and lead to only MSD earnings growth in 2022 as GDP growth falls to low single digits. As an offset we assume that this slowing growth environment makes raising taxes politically more difficult such that we do not assume higher corporate taxes in our bear case. As a result, margin forecasts in our bear case are organically lower than in the base/bull cases, but after accounting for different tax rates in the various scenarios are roughly equal. We see the misses relative to growth expectations elevating the equity risk premium to the mid-300s, but a lower rate forecast helps offset this, limiting derating in the multiple. Our buyback and dividend forecasts both remain around 2% given cash on balance sheets and the historical resilience of dividends. With a dividend yield of 2%, our scenario implies a total return of approximately -7%.

Higher Taxes and Corporate Earnings

We credit Todd Castagno, Snehaja Mogre, and Li Tao on our Accounting and Valuation team for their leadership in the analysis below.

As discussed above, along with our forecast update today, we explicitly incorporate higher corporate tax rates into our forecasts. The analysis below provides some additional information regarding our modeling of the impact of higher taxes on earnings.

We built a proprietary and flexible model to stress various tax changes across equity cohorts. We built a bottom-up model of the S&P 1500 that allows us to model and sensitize potential changes in: 1) the US statutory rate, 2) foreign minium taxes (GILTI), and 3) a "book tax" based on GAAP profitability. In the table below, we show the result potential impact to EPS based on White House proposals and the Morgan Stanley base case (25% headline rate, 15% GILTI, no book tax).

Exhibit 27: Potential S&P 500 Implied Change in 2021 Net Income

GICS Sector	White House Proposed: EPS Impact	MS Base Case: EPS Impact
Communication Services	-10%	-6%
Consumer Discretionary	-8%	-4%
Consumer Staples	-8%	-5%
Energy	-8%	-5%
Financials	-7%	-4%
Health Care	-10%	-5%
Industrials	-6%	-3%
Information Technology	-8%	-3%
Materials	-6%	-4%
Aggregate	-8%	-4%

Source: FactSet, Thomson Reuters, Morgan Stanley Research Estimate.

Based on our model's outputs, we assume a low-mid single digit impact on 2022 S&P pro forma earnings... Our policy team's current base case outcome is a 15% GILTI tax, a 25% headline rate, and no book tax. This scenario would result in a net income drag of ~4.0%.

... but the range of outcomes and relative impact differentials are still highly uncertain. While we use 4% as an estimate we note the inherent uncertainty in a projection of tax policy and its impacts. This is especially true in this instance given the multiple tax levers — GILTI, headline rate, book tax — which are potentially in play at this time. The uncertainty around the base case also yields disparate impacts across sectors and styles. To illustrate this we present scenario tables as above but for the S&P 1000 small/mid index (Exhibit 28) as well as for various investment styles (Exhibit 29).

Exhibit 28: Potential S&P 400/600 Implied Change in 2021 Net Income

GICS Sector	White House Proposed: EPS Impact	MS Base Case: EPS Impact
Communication Services	-5%	-2%
Consumer Discretionary	-7%	-3%
Consumer Staples	-8%	-5%
Energy	-10%	-7%
Financials	-5%	-1%
Health Care	-6%	-3%
Industrials	-5%	-2%
Information Technology	-7%	-3%
Materials	-7%	-4%
Aggregate	-6%	-2%

Source: FactSet, Thomson Reuters, Morgan Stanley Research Estimate

Exhibit 29: Potential Style/Factor Implied Change in 2021 Consensus NI

Factor	White House Proposed: EPS Impact	MS Base Case: EPS Impact
Growth	-8%	-4%
Value	-7%	-4%
Cyclicals	-6%	-3%
Defensive	-9%	-5%

Source: FactSet, Thomson Reuters, Morgan Stanley Research Estimate

Taxes will likely be part of a larger package, with some offsetting impact from deficit expanding fiscal stimulus. To assume that tax increases pass on their own would be overly punitive to our earnings forecasts given they are being discussed in the context of a multi-trillion-dollar fiscal package. We incorporate the potentially positive offsets in our forecasts via house GDP forecasts (which assume a 2022 fiscal deficit expansion of ~$300 billion) that feeds into our y/y sales growth projections.

Sector Preferences

Our sector recommendations reflect our preference to lean into reflation and GARP, but after a tremendous rally we see much of the market, including more cyclically geared stocks as well priced. Our bullish view on the economy means that we favor GDP sensitivity on dips, but we'd be selective at current levels. In the sections below we address our views sectors (Exhibit 30).

Exhibit 30: Morgan Stanley Strategy Sector Preferences

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

Source: Morgan Stanley Research.

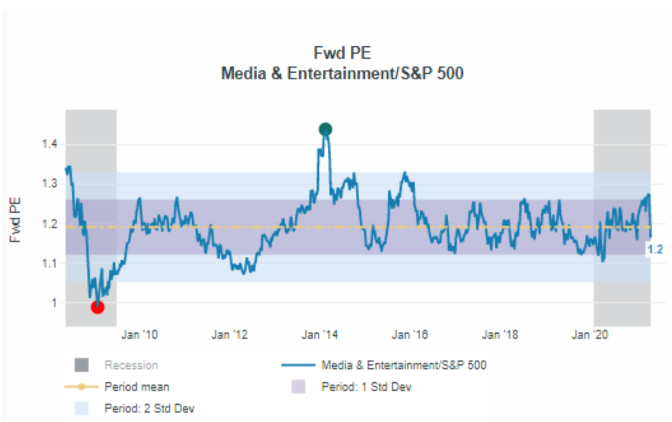
Communication Services: Equal Weight

Bottom Line: We remain equal weight communications services, but with a positive skew on attractive GARP characteristics. Our overweight preferences lean toward the primary economic narrative of reflation. That said we also favor GARP on the other side of the barbell and see Comm. Services as offering some attractive characteristics in that regard with internet exposure generally offering some structural growth support. Valuations for component industry groups are on the cheaper side of their own history relative to the market, relative earnings revisions look to be bottoming, price performance continues to display relative strength, and we see some insulation from budding margin risks that will impact other parts of the market relatively more. A potential lingering regulatory overhang, outsized exposure to a book tax (even if not our base case), some concerns around payback of demand for parts of the sector, and rate sensitivity in the Telecommunications Services industry group are considerations on the other side, but on net we lean positively.

Ultimately we decided to take our GARP exposure via Health Care given much cheaper relative valuations vs history, relative revisions bottoming at a lower level, potential removal of a political overhang as policy focuses on other priorities, and its more defensive characteristics. On the back of any sell off or run in Health Care's relative performance we think Comm. Services is a sector to revisit.

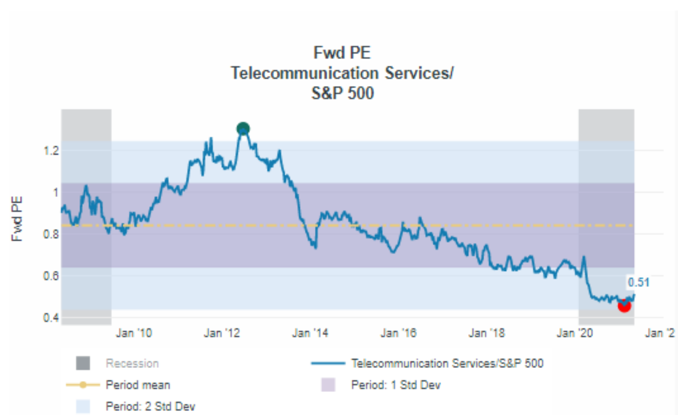
Given the dynamics above we note Comm. Services as a potentially target rich environment (we have GOOGL on our Fresh Money Buy List) and show stocks with more than 15% upside to Morgan Stanley analyst price targets on our Life After COVID quadrants below (Exhibit 34). Most have seen a nice derating relative tot he market — a benefit in a market that is generally richly priced.

Exhibit 31: Media/Entertainment Is on the Cheaper Side vs. the Market



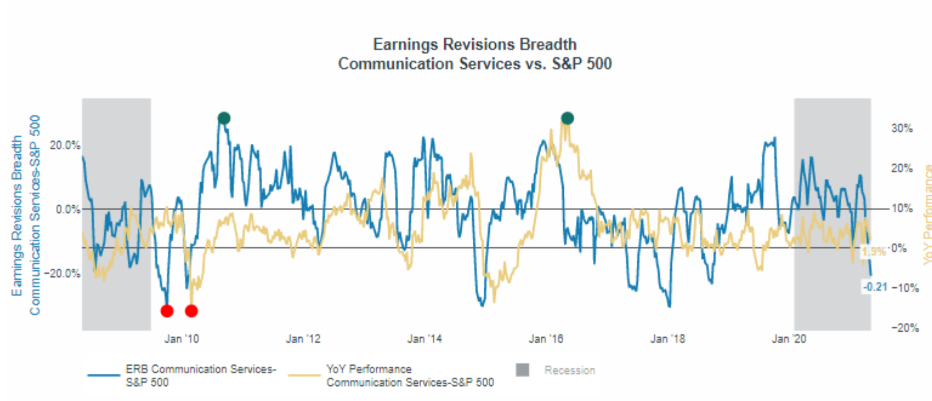
Source: FactSet, ClariFi, Morgan Stanley Research

Exhibit 32: Telco Looks Cheap vs. History but the Pattern Is Not Mean Reverting



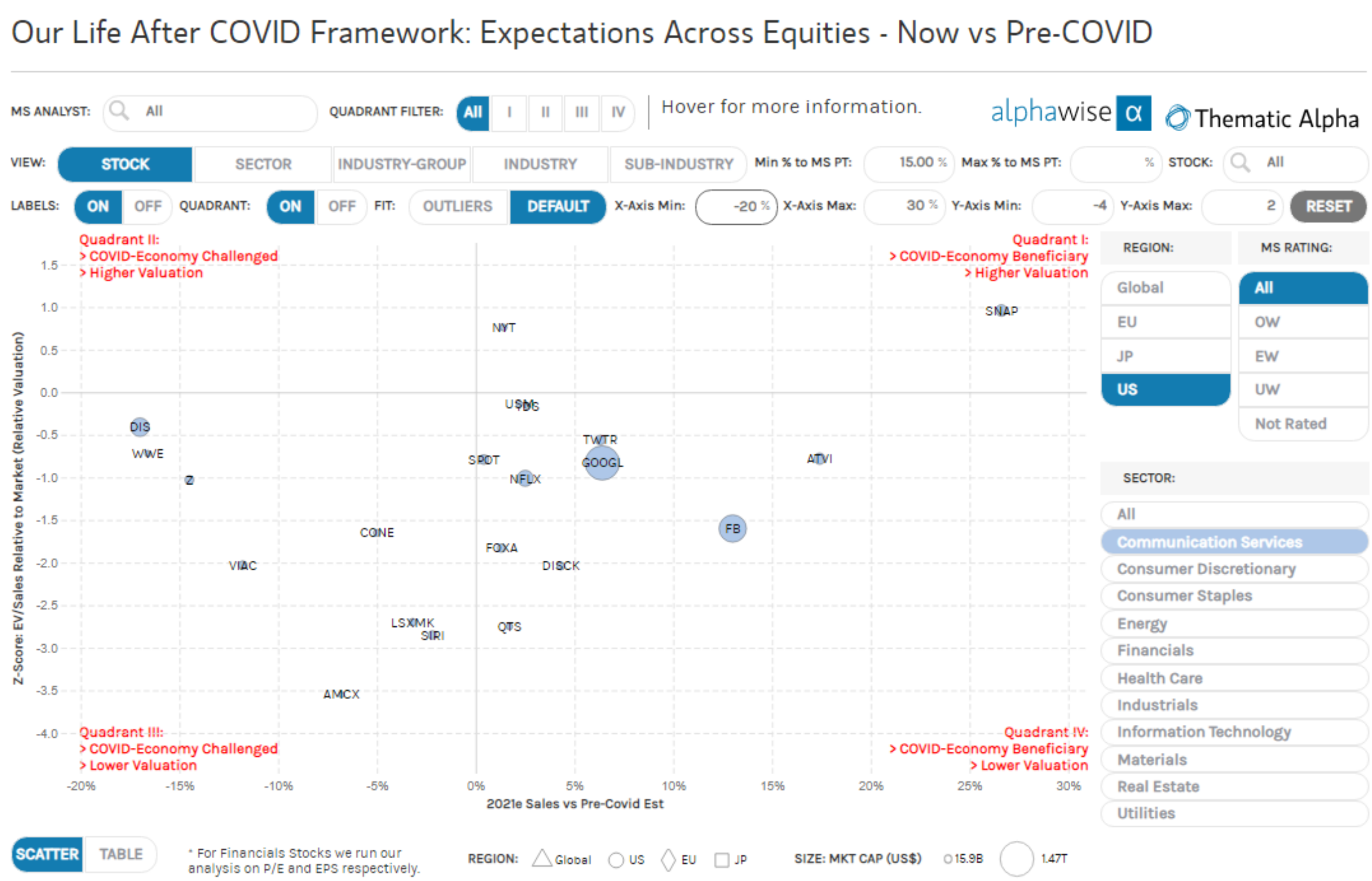
Source: FactSet, ClariFi, Morgan Stanley Research

Exhibit 33: Comm. Services Relative Revisions Breadth Is Troughing



Source: FactSet, ClariFi, Morgan Stanley Research

Exhibit 34: Comm. Services Stocks with 15%+ Upside to Morgan Stanley Price Targets; Most Screen Cheap vs the Market



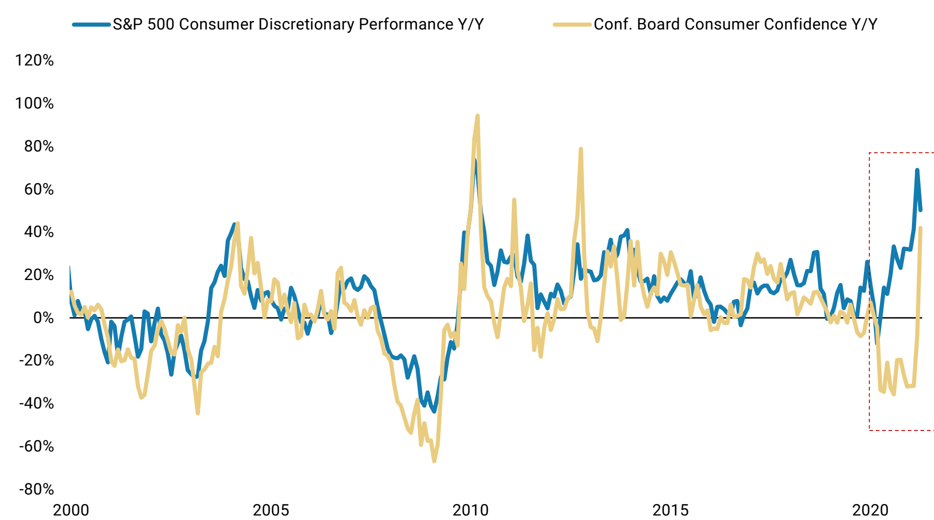
Source: FactSet, Morgan Stanley Research

Consumer Discretionary: Underweight

Bottom Line: We remain underweight Consumer Discretionary as this cohort has discounted a lot of positive news around the recovery, and we see much of the sector as vulnerable to rising costs as well as expectations misses on demand. The V-shaped growth recovery has pushed multiples for this cohort to ~2 standard deviations above the historical mean on forward P/E. On top of that, hedge fund positioning in the sector remains crowded. We see idiosyncratic opportunities in certain pockets of Consumer Services that have not yet discounted the reopening, but advise investors to remain cautious on the overall sector.

As Exhibit 35 below shows, **price performance for the Consumer Discretionary sector moved well ahead of the rebound in Conference Board Consumer Confidence as the stocks discounted the reopening in advance.** The chart shows that performance remains above trend based on this historical relationship. Note that these series are on the same axis, and this relationship has largely held for ~20 years.

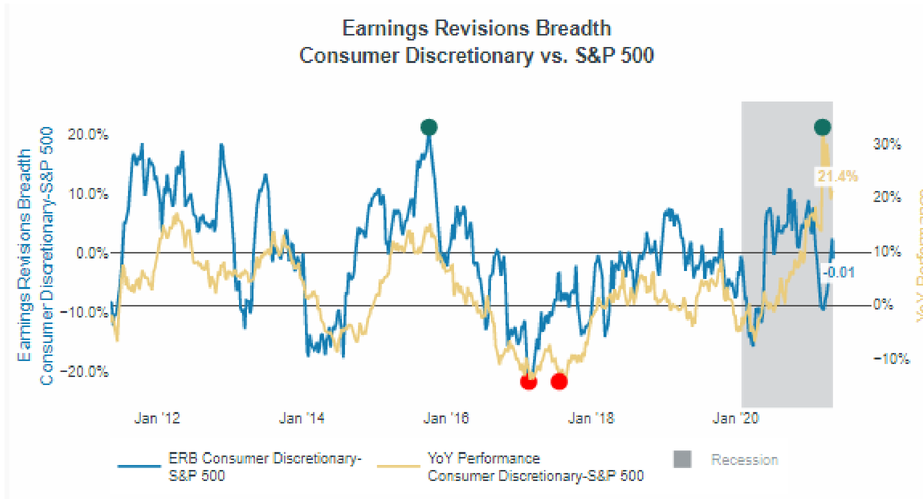
Exhibit 35: Consumer Discretionary Has Already Priced a Big Rebound in Consumer Confidence



Source: Bloomberg, Morgan Stanley Research.

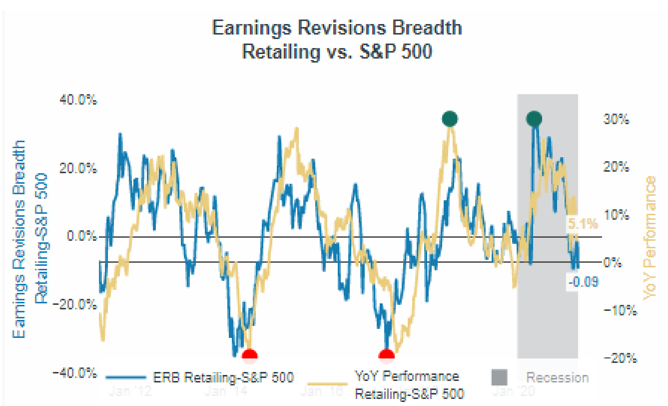
We think it's important to note that relative performance for Consumer Discretionary has also significantly outpaced earnings revisions breadth for the sector (Exhibit 36). Exhibit 37 through Exhibit 40 show that this trend has been driven by Retailing Ex-AMZN, Consumer Durables, and Consumer Services.

Exhibit 36: Relative Performance Has Moved Well Ahead of Relative Earnings Revisions



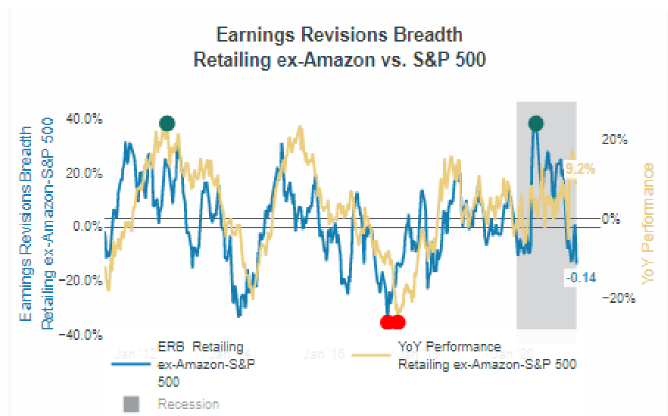
Source: FactSet, Refinitiv, Morgan Stanley Research.

Exhibit 37: Retailing Relative Earnings Revisions vs. Performance



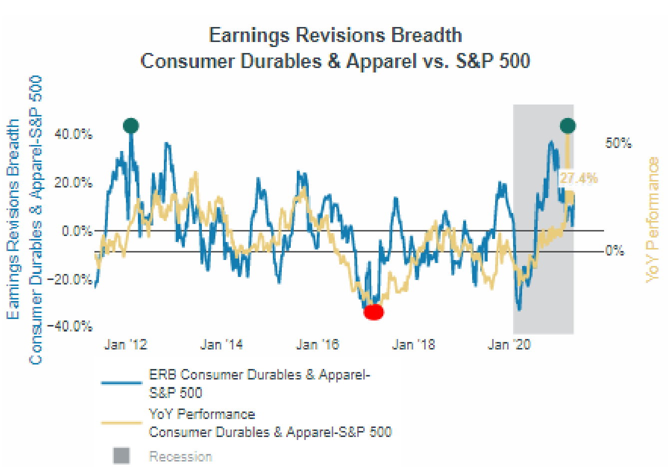
Source: FactSet, Refinitiv, Morgan Stanley Research.

Exhibit 38: Retailing Ex-AMZN Relative Earnings Revisions vs. Performance



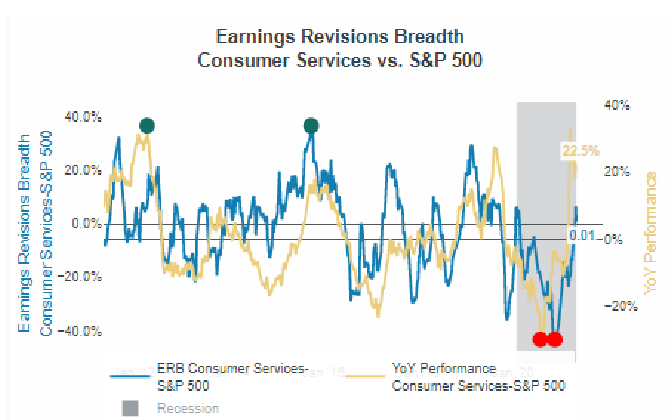
Source: FactSet, Refinitiv, Morgan Stanley Research.

Exhibit 39: Consumer Durables Relative Earnings Revisions vs. Performance



Source: FactSet, Refinitiv, Morgan Stanley Research.

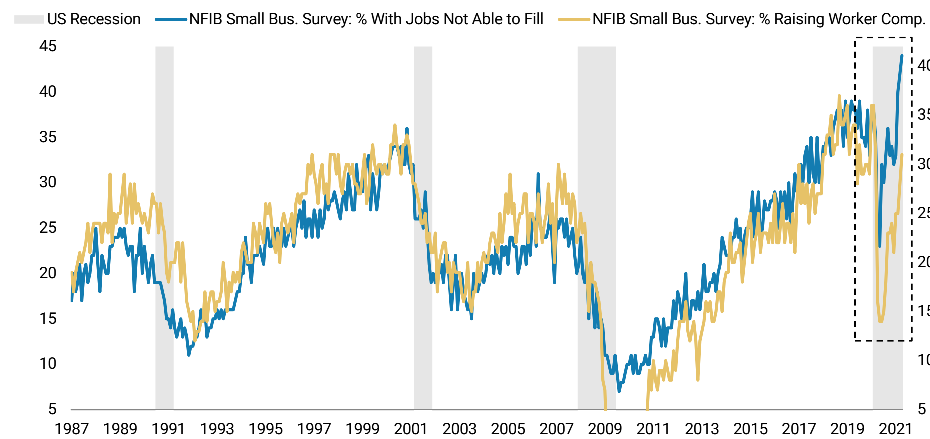
Exhibit 40: Consumer Services Relative Earnings Revisions vs. Performance



Source: FactSet, Refinitiv, Morgan Stanley Research.

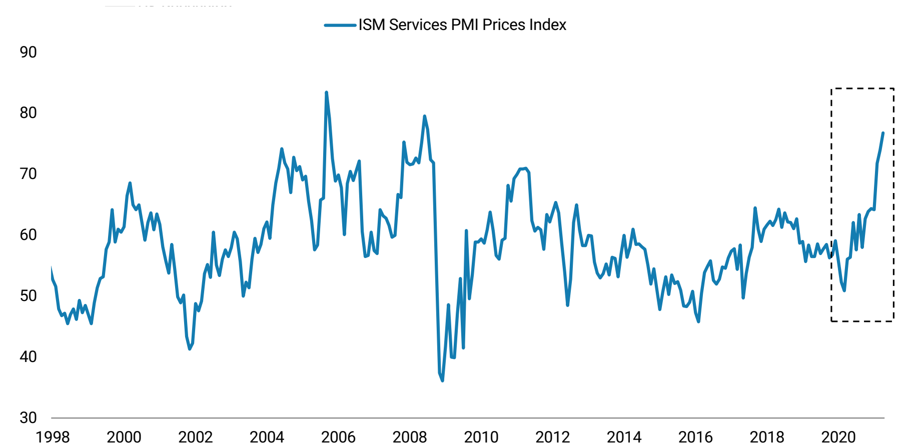
Exhibit 41 shows that corporates are having a difficult time filling jobs. **The NFIB Small Business Survey: Percent with Jobs Not Able to Fill Index is at historical highs, indicating labor shortages — a trend being driven by expanded unemployment benefits and fiscal stimulus directed at consumers.** This labor shortage series (blue line) tends to trend closely with the NFIB Survey's sub series on higher worker compensation. Interestingly, a divergence has formed over the past year between these two indicators. We would not be surprised if the higher worker compensation series catches up to the labor shortage series as corporates are forced to raise wages in order to bring workers back. We would expect this could have a negative impact on profit margins within Consumer Discretionary as wages are a key cost across the sector. Further, it's worth noting that the ISM prices paid index for services companies has surged as well, indicating that costs are going up broadly. While companies may be able to pass on cost to consumers for a time given the excess savings accumulated during the pandemic, we think there is a good deal of uncertainty around their ability to do so over a sustained period of time. This could put further pressure on relative earnings revisions for the sector.

Exhibit 41: Labor Costs Starting to Inflect Higher Driven in Part by Labor Shortages...



Source: Haver, Bloomberg, Morgan Stanley Research.

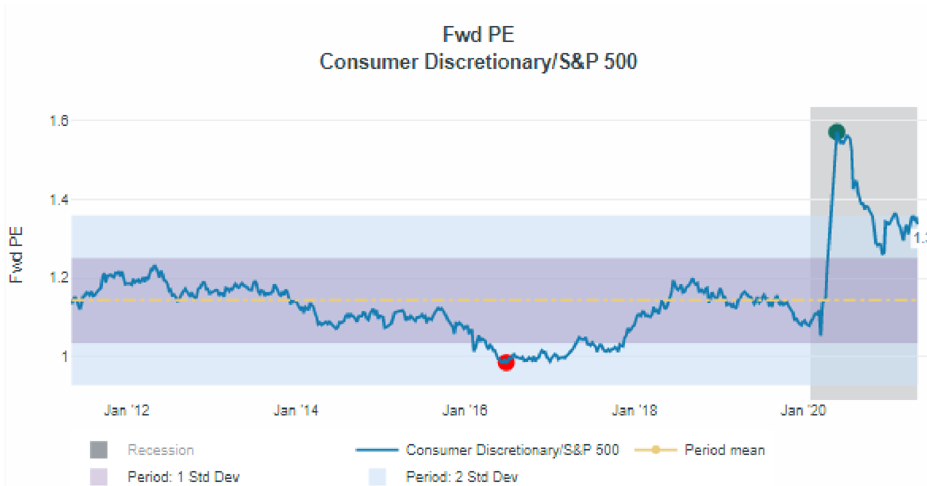
Exhibit 42: ...as Are Other Input Costs for Services Companies



Source: Haver, Bloomberg, Morgan Stanley Research.

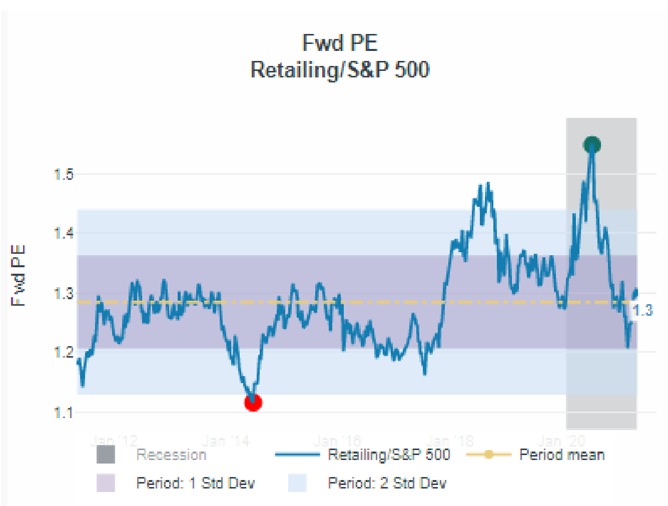
Relative valuation for Consumer Discretionary remains extended. Exhibit 43 shows that the sector's relative forward P/E ratio remains ~2 standard deviations above the historical mean. As Exhibit 44 through Exhibit 47 show, Consumer Services appear most extended on this basis as their forward earnings have yet to normalize higher and the stocks have moved well ahead of that rebound. Retailing and Retailing Ex-AMZN relative multiples are slightly above the historical average, and the Consumer Durables multiple is slightly below. Finally, it's worth noting that hedge fund positioning within the sector is crowded. Exhibit 48 highlights that net exposure to the sector is in the 93rd percentile since 2010.

Exhibit 43: Consumer Discretionary Relative Forward P/E Is Still ~2 Standard Deviations Above Historical Mean



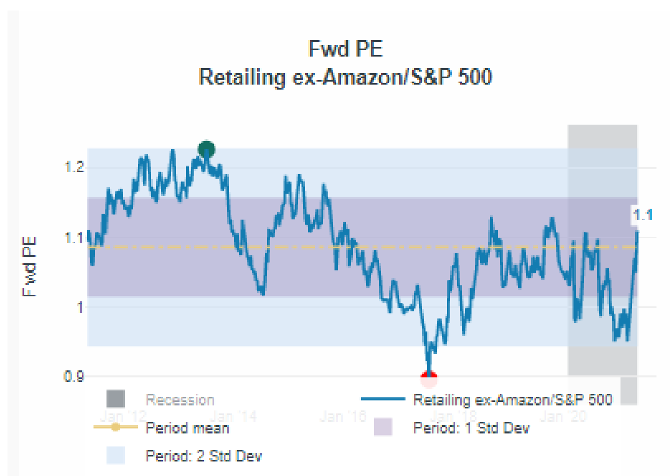
Source: FactSet, Refinitiv, Morgan Stanley Research.

Exhibit 44: Retailing Relative Forward P/E Ratio



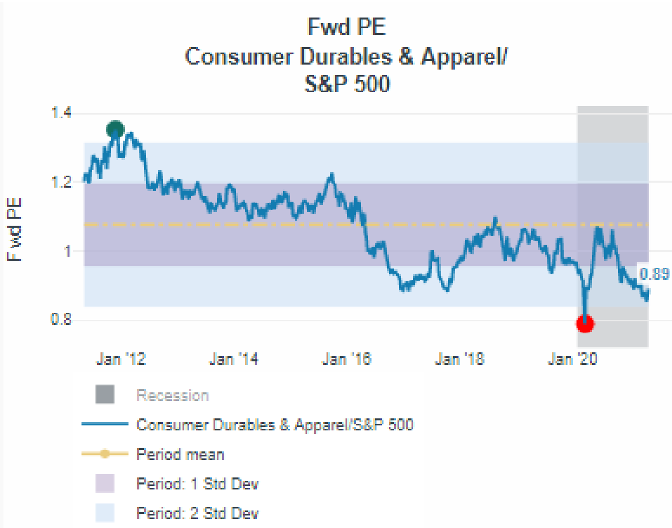
Source: FactSet, Refinitiv, Morgan Stanley Research.

Exhibit 45: Retailing Ex-AMZN Relative Forward P/E Ratio



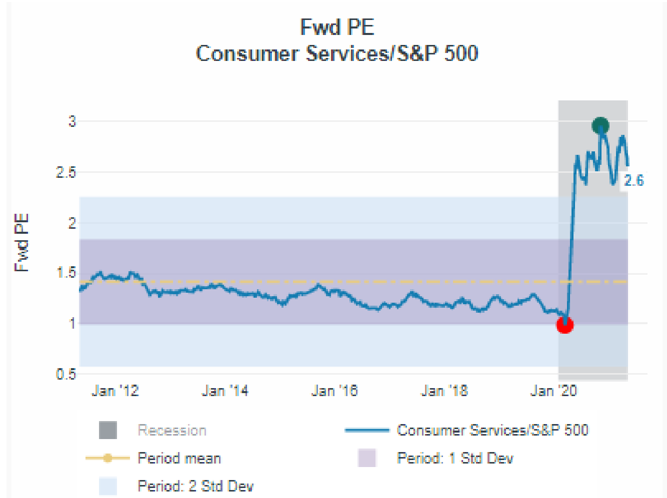
Source: FactSet, Refinitiv, Morgan Stanley Research.

Exhibit 46: Consumer Durables Relative Forward P/E Ratio



Source: FactSet, Refinitiv, Morgan Stanley Research.

Exhibit 47: Consumer Services Relative Forward P/E Ratio



Source: FactSet, Refinitiv, Morgan Stanley Research.

Exhibit 48: Hedge Fund Net Exposure to the Consumer Discretionary Sector Is Historically Elevated

	Net Exp as % of Gross		L/S Ratio	
Sector	**Current Level (%)**	**% Rank Since Jan '10**	**Current Level**	**% Rank Since Jan '10**
Comm Serv	5.7	96%	3.52	97%
Cons Disc	4.9	93%	2.11	96%
Cons Stap	(0.3)	4%	0.84	2%
Energy	0.6	15%	1.69	54%
Financials	2.3	17%	1.81	36%
Health Care	5.1	88%	2.37	96%
Industrials	3.0	98%	2.00	97%
Info Tech	10.4	96%	2.92	97%
Materials	0.9	19%	1.90	36%
Real Estate	0.2	59%	1.18	62%
Utilities	0.1	14%	1.19	30%

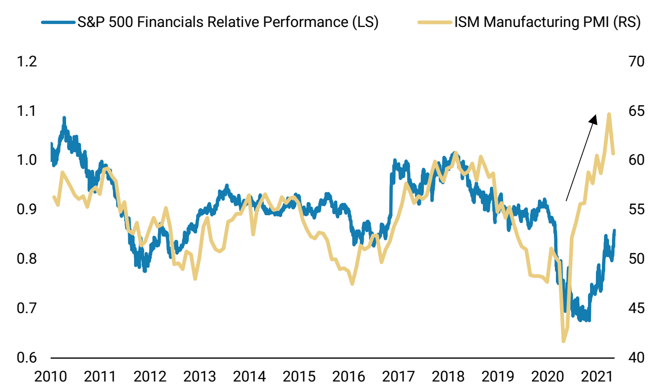
Source: Morgan Stanley Prime Brokerage.

Financials: Overweight

Bottom Line: We remain overweight the Financials sector and constructive on Banks given historically depressed relative valuation levels, improving macro conditions/loan growth, and the potential for higher nominal yields. The earnings backdrop for Financials has also improved significantly and the group is still catching up to accelerating earnings revisions.

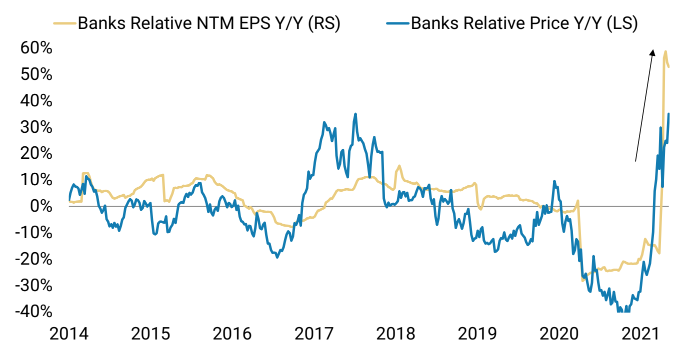
Financials are a highly cyclical sector that tend to benefit from improving macro conditions, especially in the early innings of a new cycle. Given that we are in a new cycle and economic conditions are accelerating at a historic clip (our economists see real GDP growth of 7.5% in 2021, the highest annual level of GDP growth since 1951), Financials should continue to outperform on a relative basis. While Financials have outperformed the broader S&P 500 since October 2020 (+33% relative performance since October 14), their relative performance has lagged the rapid acceleration in PMIs (Exhibit 49). In a similar vein, Banks' relative performance is still catching up to higher earnings estimates (Exhibit 50). We think the divergences shown in Exhibit 49 and Exhibit 50 argue for a further catch up in Financials relative performance from current levels.

Exhibit 49: Financials Relative Performance Still Catching Up to Acceleration in PMIs



Source: Bloomberg, Morgan Stanley Research.

Exhibit 50: Banks Relative Performance Also Still Catching Up to Earnings Expectations



Source: FactSet, Morgan Stanley Research.

Financials spread between 2021 EPS weight and its market cap weight is 6.3% is the largest of any sector. **In other words, Financials is a significant contributor to both 2021 aggregate EPS and EPS growth, but it is arguably not priced for such a contribution to earnings (Exhibit 51).**

Exhibit 51: Financials Is the Largest Expected Contributor to 2021 EPS Growth Based on Consensus Estimates

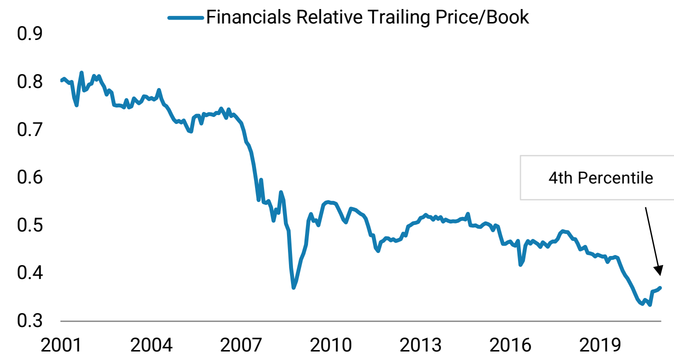
Source: Refinitiv, FactSet, Bloomberg, Morgan Stanley Research.

In our view, **a key reason why Financials' performance has lagged accelerating macro indicators and earnings revisions is that interest rates have remained depressed until recently,** a headwind to the profitability of the group. This headwind has also kept relative valuation for the cohort historically depressed (Exhibit 52 and Exhibit 53). Exhibit 54 shows that Financials relative performance is highly correlated to the 10-year Treasury yield and only really started to rise when 10-year yields began to trend higher over the past few months. **We see upside to yields from current levels over the intermediate term, which should be bullish for Financials, and believe equity investors may now start to discount that yield upside in advance.**

Exhibit 52: Financials Relative Forward P/E Ratio Is Historically Depressed...

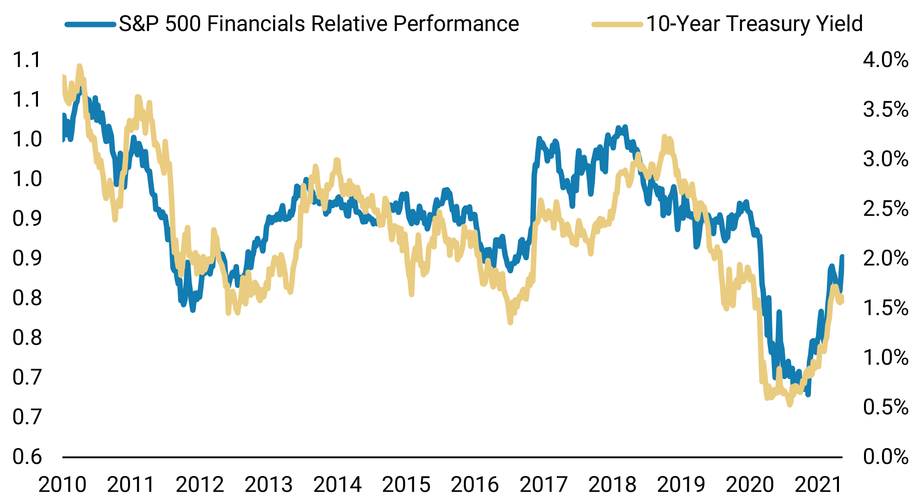
Source: FactSet, Morgan Stanley Research.

Exhibit 53: ...as Is Financials Relative P/B Ratio



Source: FactSet, Morgan Stanley Research.

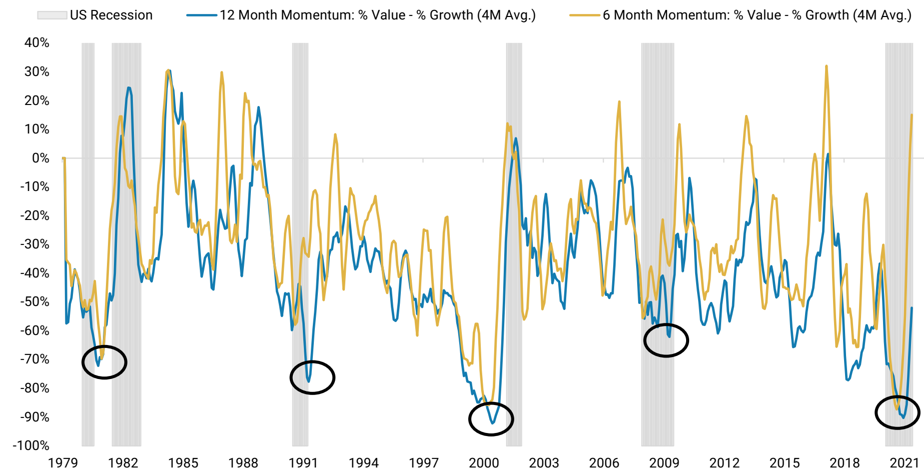
Exhibit 54: Financials Performance Lagged Accelerating Macro Indicators and Earnings Revisions Because Interest Rates Have Remained Depressed Until Recently



Source: Bloomberg, Morgan Stanley Research.

As happens around recessions, the current ongoing rotations should tilt the composition of the momentum factor more toward Value (from Growth) over time. **The 6-month composition of momentum does a good job leading the 12-month composition and the signal is clear — momentum is moving more toward Value (Exhibit 55). We expect momentum to continue toward more pro-Value styles, potentially drawing additional supportive flows throughout 2021.** This could disproportionately benefit the Banks industry group as it is among the largest weights in Value.

Exhibit 55: Value's Weight within the Momentum Bucket Appears to Be Turning Higher — a Typical Occurrence Around Recessions; This Would Be Positive for Banks, Which Is a Large Weight within Value



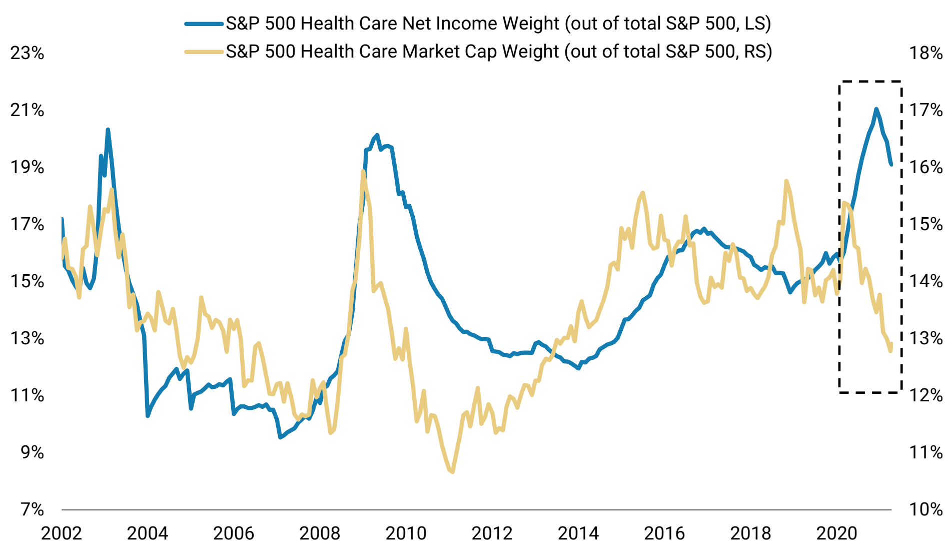
Source: ClariFi, Bloomberg, Morgan Stanley Research.

Health Care: Overweight

Bottom Line: In recent months, we have called for a rotation towards higher quality areas of the market as several macro and earnings risks have surfaced. The Health Care sector fits into that bucket and offers a defensive hedge to our otherwise pro-cyclical overweights. We especially like Health Care for defensive exposure as it is not sensitive to a potential rise in interest rates like several other defensive sectors. Policy risk continues to weigh on the sector, but we think policy priorities look to be elsewhere and that relative multiples are already near historical lows while relative earnings revisions appear to be bottoming. We think a catch up trade is very feasible.

Health Care's relative performance has lagged the broader market in the current cycle as political uncertainty and a return to pro-cyclical leadership has weighed on performance — the sector has underperformed the S&P 500 by 22% since the market troughed in March of last year. As Exhibit 56 shows, Health Care's market cap weight within the S&P 500 has fallen below 13% on the back of this underperformance — the lowest level since 2013. Notably, this trend has diverged from Health Care's net income weight within the S&P 500, which remains elevated at 19%. In fact, Health Care is the third largest contributor to 2021 EPS (behind only Tech and Financials). In simple terms, there is a disconnect between the earnings power of this cohort and its performance.

Exhibit 56: Health Care's Market Cap Weight Has Diverged Meaningfully from Its Net Income Weight — Valuation Depressed

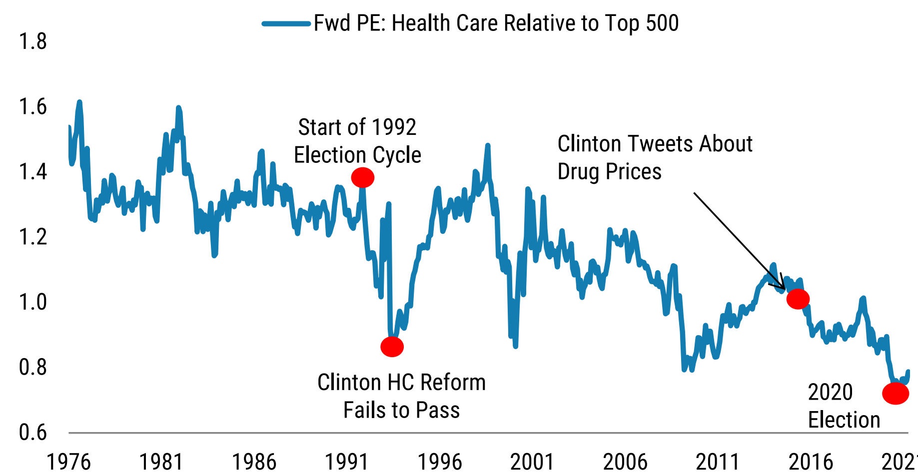


Source: FactSet, Morgan Stanley Research.

Said differently, the Health Care sector's relative forward P/E ratio remains historically depressed. Exhibit 57 shows that this is not a new dynamic and that the sector's multiple has a history of de-rating around political events that drive uncertainty for the space. Our Health Care analysts recently hosted an expert panel focused on potential drug pricing policy. A key conclusion was that the pharma industry is likely to have to help pay for an infrastructure bill in some capacity. The panelists believe that upcoming legislation may involve significant drug industry "pay-fors" (see Key takeaways from drug pricing panel). We acknowledge these risks and note that the political overhang for the sector may continue. However, we also note that the sector's relative multiple is already trading at historically depressed levels and that these risks are now largely known to the market.

Exhibit 58 shows absolute and relative forward P/E for the S&P 500 Health Care sector and industry groups. **Relative valuation levels for Pharma, Health Care Providers & Services, Biotech and Health Care Technology are particularly depressed — all in the 15th percentile of relative levels or lower back to 2010**. Health Care Equipment & Supplies is the only group that appears expensive on a relative forward P/E basis — 74th percentile since 2010.

Exhibit 57: The Health Care Sector Is Trading at Historically Depressed Relative Valuation Levels; Its Relative Multiple Has a History of Reacting to Political Events



Source: Morgan Stanley Research.

Exhibit 58: Pharma, Providers & Services, Biotech/HC Tech Valuation Lowest; Equipment & Supplies Highest

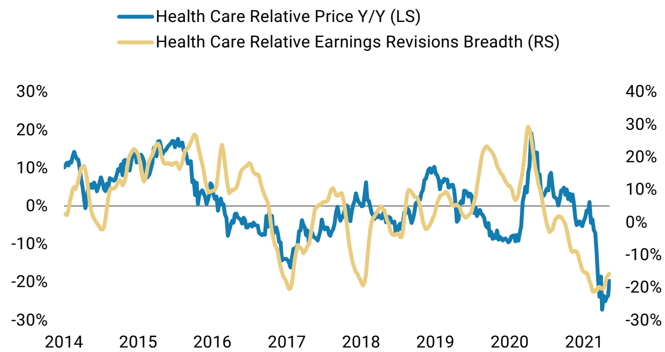
Healthcare Sector and Industry Valuation Table

	S&P 500 Healthcare Sector	Pharma	Health Care Equipment & Supplies	Health Care Providers & Services	Biotech	Health Care Technology
Current Absolute Forward P/E Ratio	16.9	14.0	27.9	15.6	11.4	23.0
Current Relative Forward P/E Ratio	0.8	0.6	1.3	0.7	0.5	1.1
Current Relative Forward P/E Ratio % Rank (2010+)	9%	5%	74%	15%	6%	4%

Source: FactSet, Morgan Stanley Research.

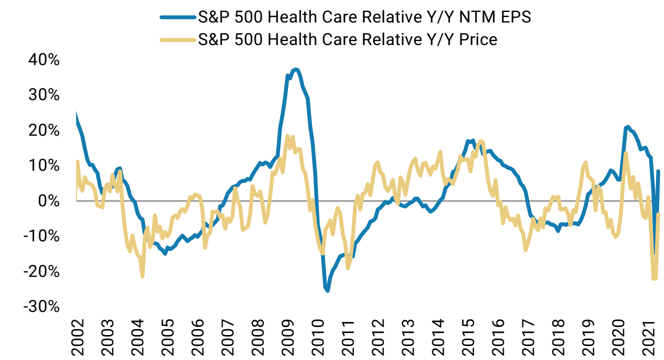
Despite political risk, relative earnings revisions and forward EPS expectations appear to be troughing. Exhibit 59 shows that relative earnings revisions breadth for the sector appears to be bottoming with relative performance. Exhibit 60 illustrates that relative forward EPS on a year-over-year basis also appears to be inflecting higher from depressed levels. The industry group breakdown in Exhibit 61 shows that this is largely being driven by Pharma, but that relative forward earnings growth appears to have bottomed for all subgroups within the sector. We believe this dynamic speaks to the defensiveness and earnings durability of the sector. As the political uncertainty passes, we believe investors will return more of their focus to the fundamentals of the Health Care sector, which remain strong on a relative basis. This could prompt a catch-up trade in the cohort.

Exhibit 59: Relative Earnings Revisions Breadth Appears to Be Troughing



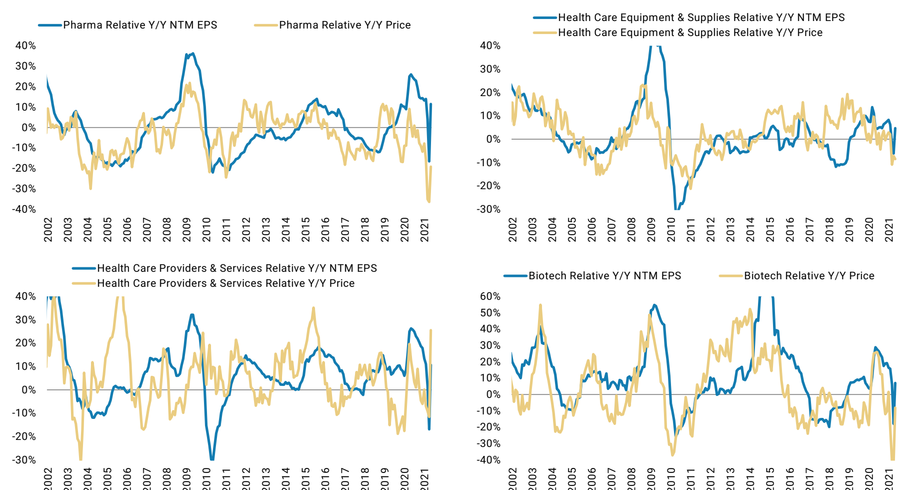
Source: FactSet, Morgan Stanley Research.

Exhibit 60: Relative Forward Earnings Expectations Are Outpacing Relative Performance...



Source: FactSet, Morgan Stanley Research.

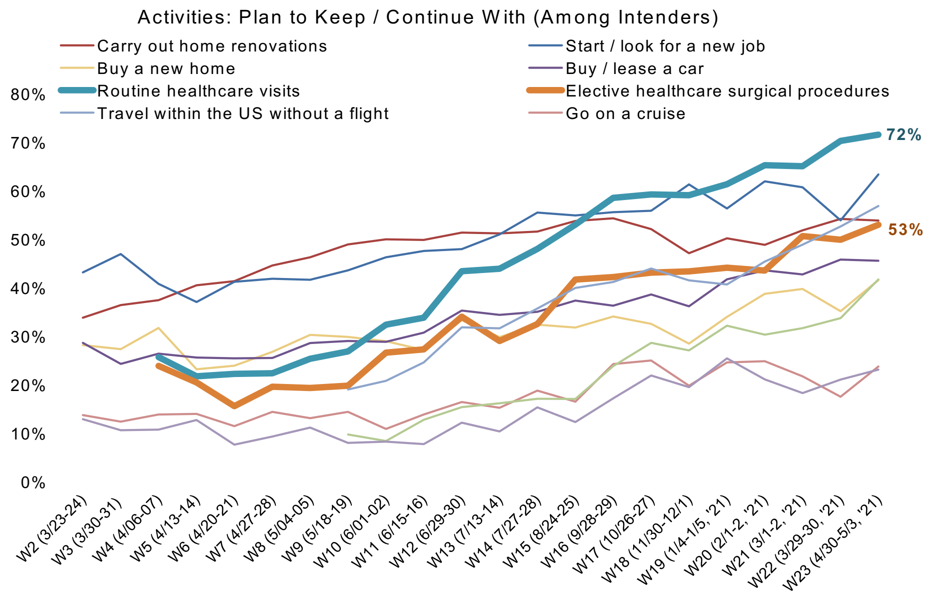
Exhibit 61: ...Driven Largely by Pharma



Source: FactSet, Morgan Stanley Research.

A potential tailwind for the Health Care sector is that consumers are increasingly going in for routine check ups and elective surgeries as the reopening progresses. Our latest AlphaWise US Consumer Pulse Survey and Exhibit 62 below show this dynamic. 72% of individuals surveyed said they are planning to keep/continue with routine health care visits (the highest rate out of all activities) and 53% said they are going to continue with elective procedures. These trends have been steadily rising.

Exhibit 62: Consumers Are Increasingly Going in for Routine Health Care Visits and Elective Surgeries



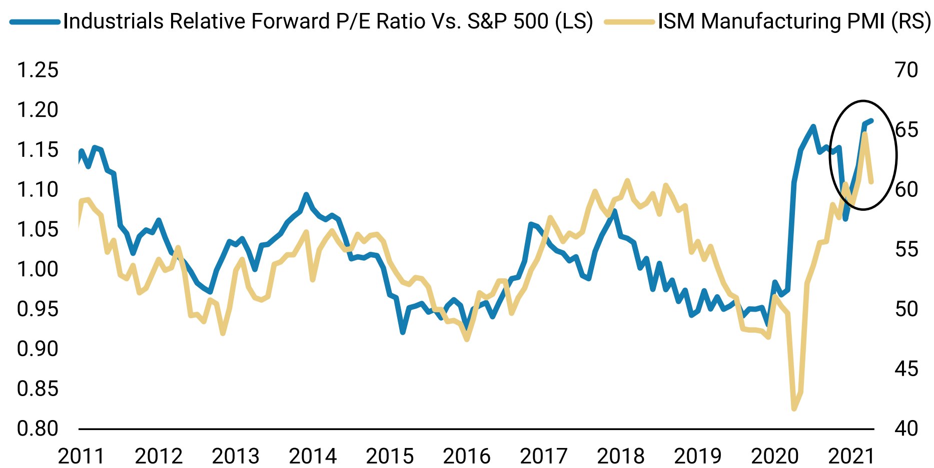
Source: AlphaWise, Morgan Stanley Research.

Industrials: Equal Weight

Bottom Line: We downgrade Industrials to equal weight as PMIs look like they may be peaking around historical highs and margin pressure builds. The sector is trading at rich relative valuation levels and relative performance has outpaced relative earnings revisions. Further, hedge fund net exposure to Industrials is elevated versus history. Over a longer-term time horizon, we think Industrials will be a relative outperformer as capital spending rebounds. However, at current valuation levels, near term risk/reward looks less compelling than it did at the beginning of the year, and we think the group is a market performer in the near term.

Industrials relative forward P/E tends to track with the Manufacturing PMI over time. As the Manufacturing PMI rebounded to near-historical highs, the sector's relative forward P/E ratio expanded to 26X forward EPS, a 19% premium to the broader S&P 500. With PMIs at historical highs and the downtick in April potentially indicating that cycle highs are in, we believe Industrials relative P/E multiple has room to compress from here.

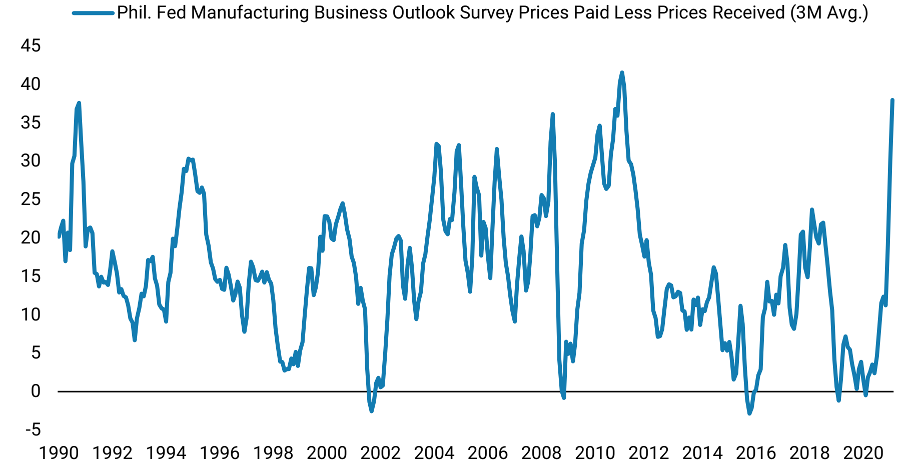
Exhibit 63: Industrials Relative Forward P/E Multiple Tends to Track with the PMI; PMI Looks Like It May Be Peaking — A Negative for the Sector



Source: FactSet, Bloomberg, Morgan Stanley Research.

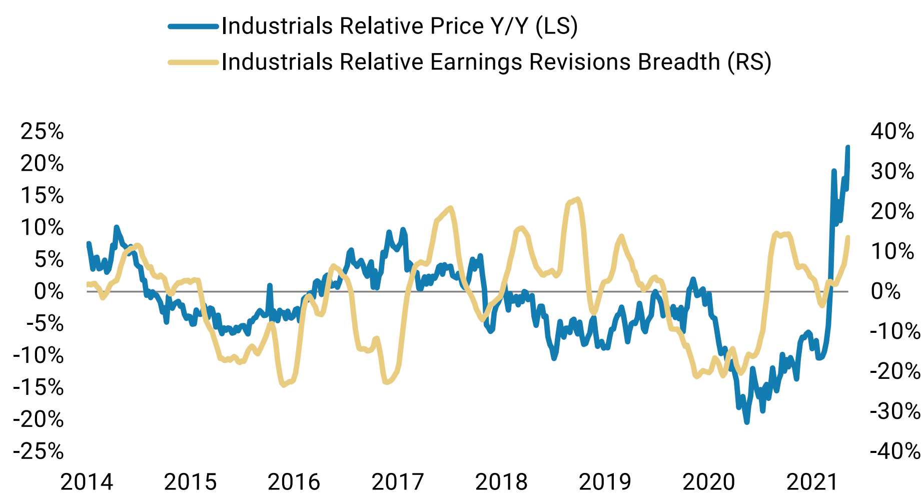
Another key risk which is emerging is cost pressure within industrial supply chains. Along these lines, Exhibit 64 shows that the spread between the Philadelphia Fed Manufacturing Survey Prices Paid less Prices Received indices has surged in recent months as cost pressures have built up. We think this dynamic could pose a risk to profit margins within the space unless corporates can quickly raise prices to offset these cost increases. This potential risk to margins could negatively impact earnings revisions breadth for the sector — a trend we would argue the sector is not priced for given performance is far outpacing earnings revisions (Exhibit 65).

Exhibit 64: Manufacturing Prices Paid Less Prices Received Surging



Source: Bloomberg, Morgan Stanley Research.

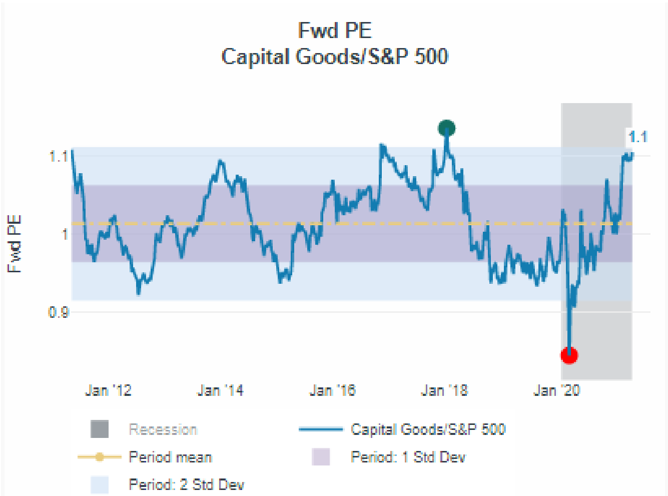
Exhibit 65: Industrials Relative Performance Is Outpacing Relative Earnings Revisions



Source: FactSet, Morgan Stanley Research

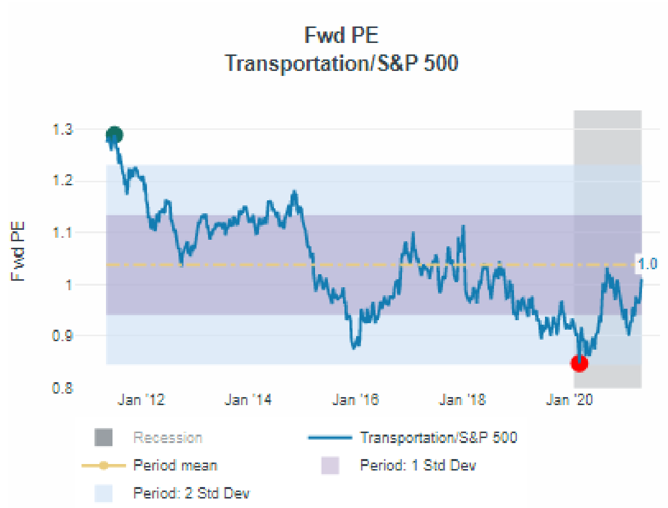
Exhibit 66 and Exhibit 67show valuation under the surface of the Industrials sector (at the industry group) level. We note that Capital Goods is the main driver of the rise in relative valuation for the overall sector (shown in Exhibit 66). Transportation's relative forward P/E ratio is still below its long term mean, but this partially reflects additional leverage in the sector post-COVID as well as the market discounting a transition to mid-cycle in an early-cycle group. (Exhibit 67). Shown another way, we plot US Industrial sub-industries on our Life After COVID quadrants to show that the bulk have re-rated substantially vs. the market on numbers that are 2 years out while many groups also have higher 2021 sales expectations that are higher now than pre-COVID (Exhibit 68).

Exhibit 66: Elevated Relative Valuation Largely Driven by Cap Goods...



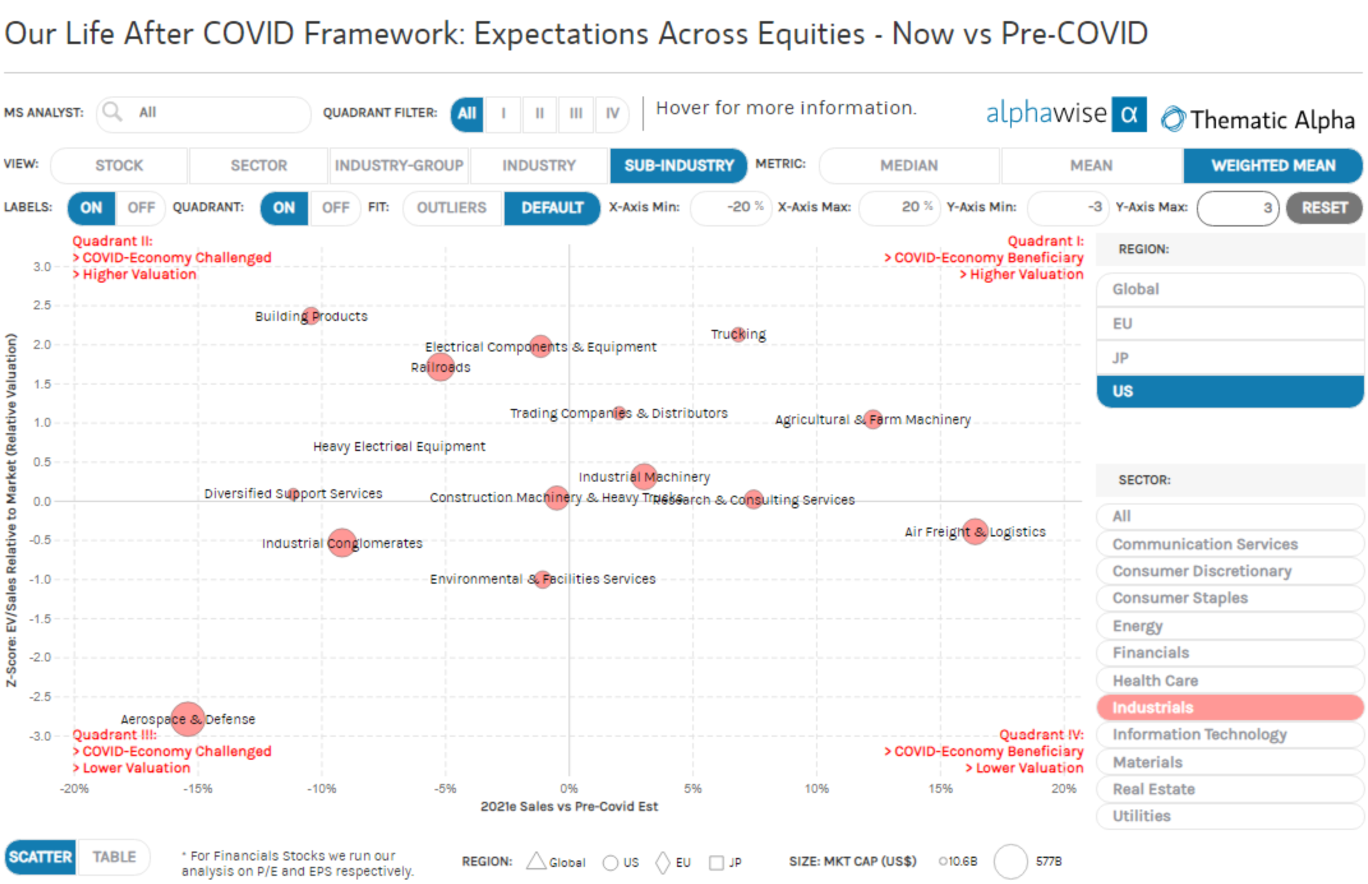
Source: FactSet, Refinitiv, Morgan Stanley Research

Exhibit 67: ...Transports Relative P/E Is Around Historical Mean



Source: FactSet, Refinitiv, Morgan Stanley Research

Exhibit 68: Most Industrial Subsectors Have Rerated vs the Market on 2 Yr Fwd Numbers and Many Now Have Higher 2021 Sales Expected than Before COVID



Source: FactSet, Morgan Stanley Research.

Finally, it's worth noting that hedge fund positioning within the Industrials sector is now at very crowded levels. Exhibit 69 shows that net exposure to the sector is in the

98th percentile of levels back to 2010. This aligns with many of our conversations with investors who have expressed that Industrials are a preferred way to play the V-shaped rebound that has evolved over the last year.

Exhibit 69: Hedge Fund Net Exposure to the Industrials Sector Is Very High

	Net Exp as % of Gross		L/S Ratio	
Sector	**Current Level (%)**	**% Rank Since Jan '10**	**Current Level**	**% Rank Since Jan '10**
Comm Serv	5.7	96%	3.52	97%
Cons Disc	4.9	93%	2.11	96%
Cons Stap	(0.3)	4%	0.84	2%
Energy	0.6	15%	1.69	54%
Financials	2.3	17%	1.81	36%
Health Care	5.1	88%	2.37	96%
Industrials	3.0	98%	2.00	97%
Info Tech	10.4	96%	2.92	97%
Materials	0.9	19%	1.90	36%
Real Estate	0.2	59%	1.18	62%
Utilities	0.1	14%	1.19	30%

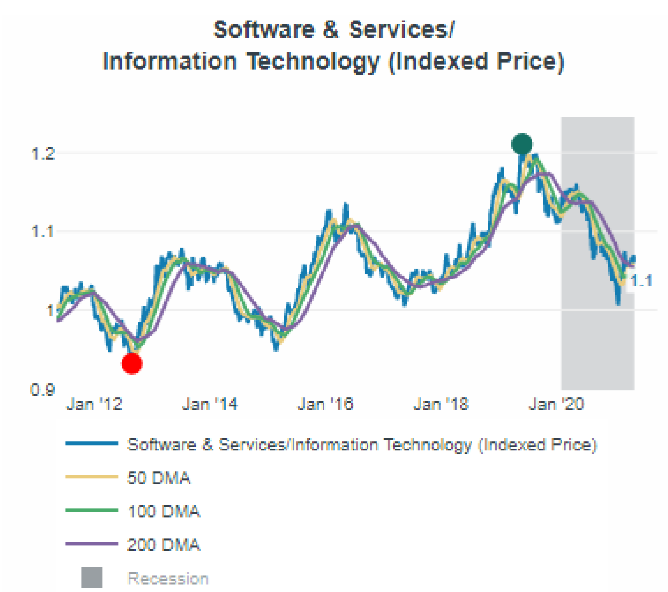
Source: Morgan Stanley Prime Brokerage.

Information Technology: Equal Weight

Bottom Line: We remain equal weight with a preference for high quality Software (outside the most expensive pockets of the group) and broad Tech Hardware. Within Software, we continue to favor high quality, GARP-oriented stocks within the space. This view aligns with our call for higher quality leadership within the US equity market. While multiples have expanded for Tech Hardware broadly (i.e., ex-Apple), relative valuation levels versus the overall Tech sector are still below historical averages. We continue to think the group has underpriced the growth recovery relative to many other cyclical areas of the market. Conversely, we believe Semis as a group have largely priced the V-shaped macro recovery. We see the cohort underperforming the broad Tech sector in the near to intermediate term.

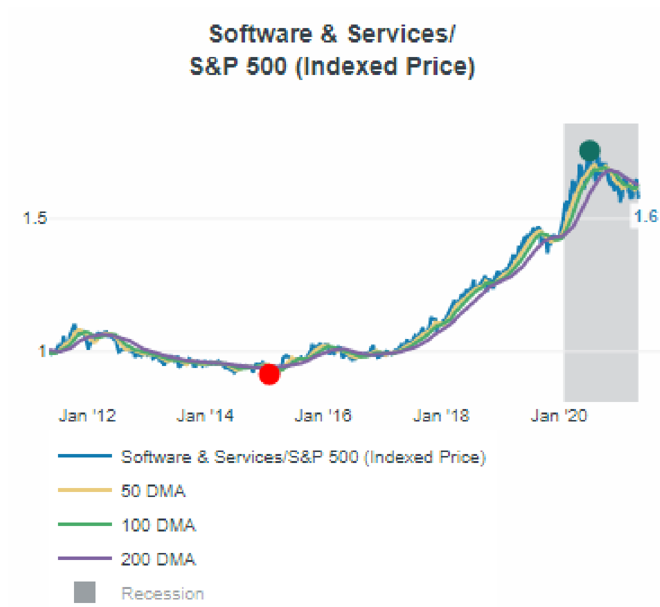
Software: Our relative preference for GARP-oriented Software & Services stocks is in line with our broad pro-quality call. Our Software team, led by Keith Weiss, upgraded the Software industry to Attractive in March, driven by an improving demand environment and stability in interest rates. The earnings durability and margin stability of the high quality pockets of Software are attractive to us at a time when a number of potential broad market risks (decelerating PMIs, cost inflation/margin pressure, peaking earnings revisions for the overall market) are emerging. It's interesting to note that relative performance for Software & Services peaked versus the Tech sector in May 2019 and the S&P 500 in July 2020. We think a relative performance catch-up is warranted given the durable earnings profile of the cohort and the emergence of macro risks that may weigh on the overpriced cyclical areas within Tech and the broader market.

Exhibit 70: Software & Services Relative Performance Peaked in May 2019 vs. the Tech Sector...



Source: FactSet, Refinitiv, Morgan Stanley Research.

Exhibit 71: ...And in July 2020 vs. the S&P 500

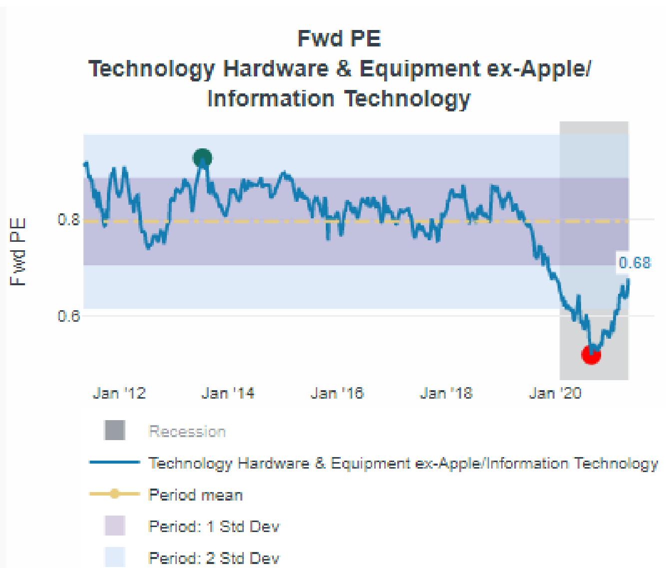


Source: FactSet, Refinitiv, Morgan Stanley Research.

Tech Hardware: We continue to see fundamental support. Morgan Stanley IT Hardware analyst Katy Huberty continues to view the robust IT spending recovery as a positive for earnings revisions in the space (Raising Estimates on Enterprise IT Demand Recovery).

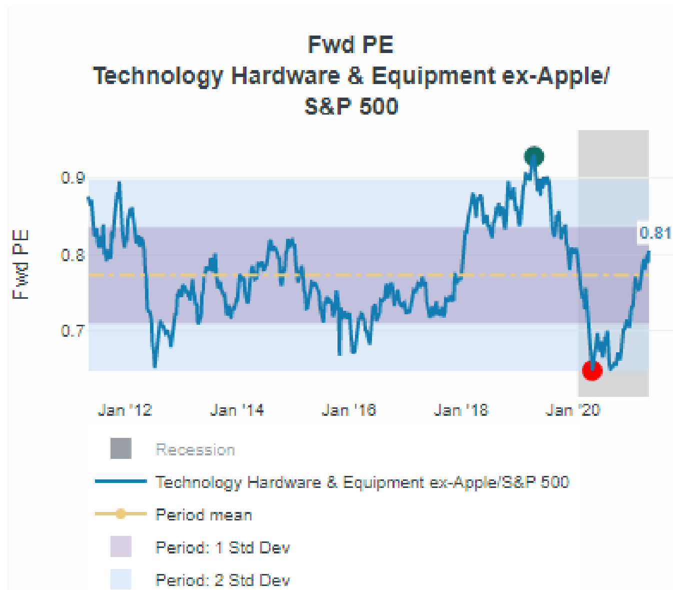
Our work is supportive of the view that the Technology Hardware industry group is cyclically levered and tends to benefit in times of improving macro conditions. Relative valuation levels versus the Tech sector and the overall market appear to have bottomed for this cohort and have accelerated YTD. However, relative valuation versus the Tech sector remains below the long term mean level, implying there is further room for a re-rating (Exhibit 72). We maintain our relative preference for Hardware (within the overall Tech sector) as IT budgets continue to inflect from trough levels (see 1Q21 CIO Survey – Data Suggests IT Acceleration for more on IT spending).

Exhibit 72: Tech Hardware's Relative Valuation Versus the Tech Sector Is Still Below Average Despite Recent Re-Rating...



Source: FactSet, Morgan Stanley Research.

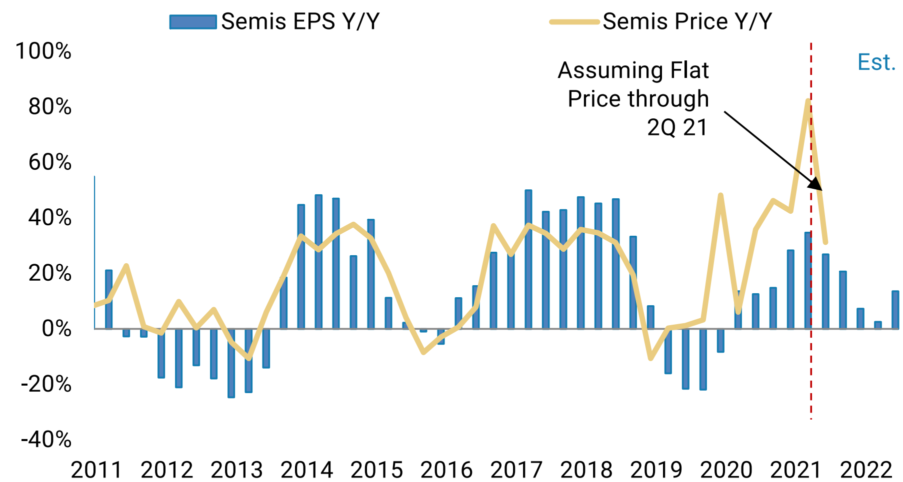
Exhibit 73: ...Relative Valuation Versus the Overall Market Is Now Just Above Average



Source: FactSet, Morgan Stanley Research.

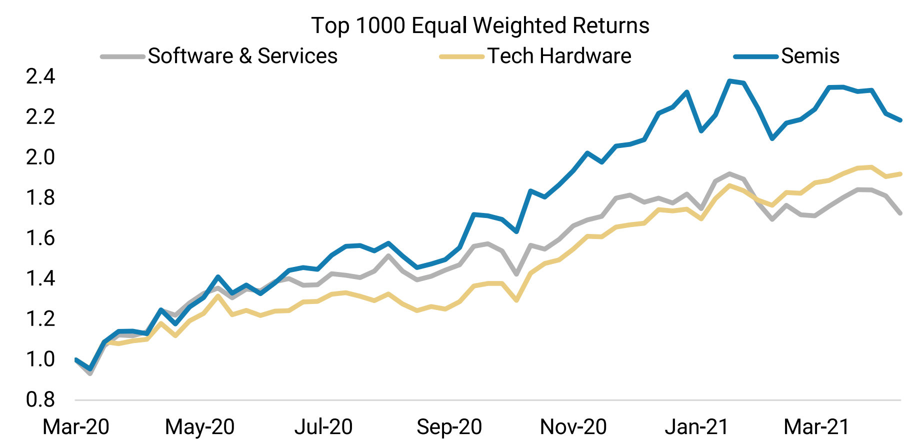
Semis: A lot of good news already in the price. Semis is a highly cyclical group that has benefitted from the rapid rebound in macro conditions over the past year. That said, we believe that from a macro standpoint, we are heading into a more challenging environment for Semis as PMIs have potentially peaked for the cycle. Further, as Exhibit 74 illustrates, Semis performance surged ahead of a rebound in EPS growth. Going forward, consensus EPS growth is expected to decelerate over the coming quarters — Semis performance could follow based on this historical relationship. Exhibit 75 shows that the Semiconductor industry group has outperformed Software and Tech Hardware since the market trough last March as the cohort discounted the V-shaped growth recovery. We now see a potential reversal in this relative performance trend and believe Semis could underperform Software & Services and broad Tech Hardware in the near to intermediate term.

Exhibit 74: Consensus EPS Growth Expected to Decelerate Over Coming Quarters — Semis Performance Could Follow



Source: FactSet, Morgan Stanley Research.

Exhibit 75: Semis Have Outperformed Tech Hardware and Software Amid the V-Shaped Recovery; We Believe Hardware and Software Could Now Begin to Outperform Semis



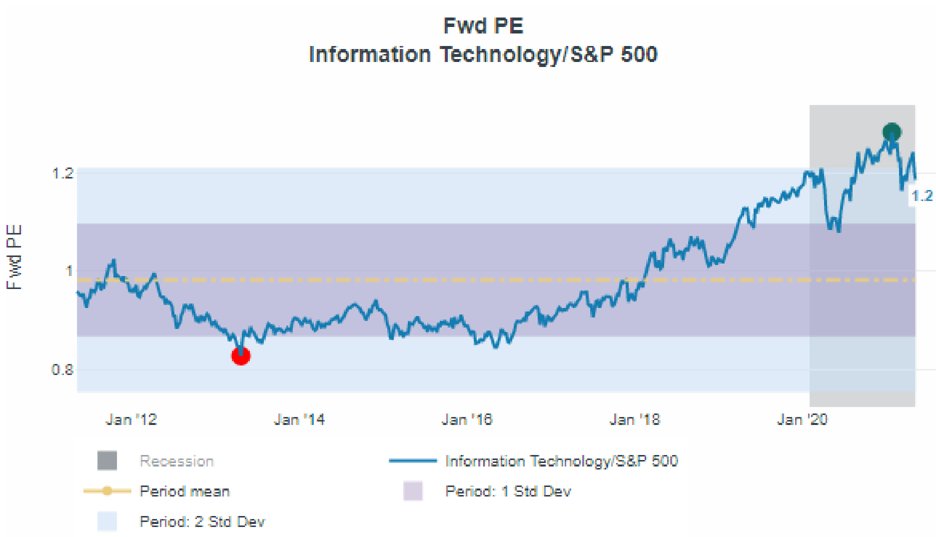
Source: Refinitiv, Morgan Stanley Research.

Tech Sector Valuation: A Big Premium, but Not Without Some Justification

Relative valuation for the overall sector continues to hover around pre-Covid peak levels (~20% premium to the overall market on forward P/E; Exhibit 76). While we view this as a headwind in terms of near-term outperformance versus the overall market, we continue to believe that the sector should trade at a healthy premium to the overall market given Tech's relative EPS durability and structural growth characteristics. While consensus 2021 EPS growth for Tech (21%) is below the market's expected growth rate (32%), we think it is important to remember that Tech's 21% growth rate is off of a *positive* 9% in 2020. The overall market's EPS *declined* by 13% in 2020.

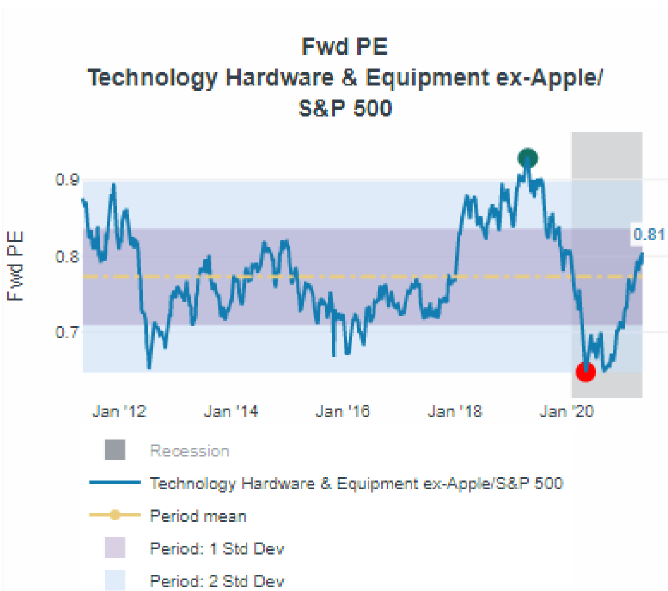
Exhibit 77 through Exhibit 80 shows that **rich valuation is a trend that is pervasive across the Tech sector, with the exception of Tech Hardware ex-Apple.** We think this speaks to the dynamic just discussed around earnings durability. The Tech sector is also unique in that it captures both cyclicality (beneficial amid a reopening environment) and structural growth (beneficial during the lockdown). Investors continue to pay a premium for these unique characteristics.

Exhibit 76: Tech's Relative Forward P/E Ratio Is Extended, but Not Without Some Justification Given Earnings Durability



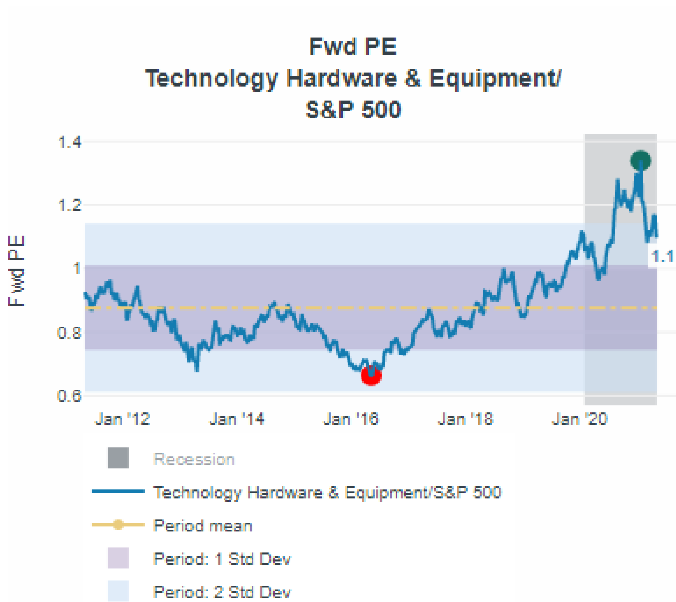
Source: FactSet, Morgan Stanley Research.

Exhibit 77: Ex-Apple, Tech Hardware's Relative Forward P/E Sits Just Above Long-Term Mean...



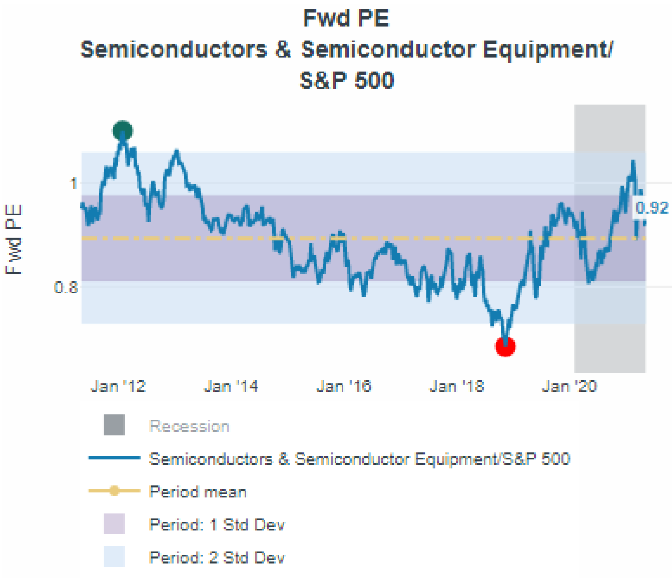
Source: FactSet, Morgan Stanley Research.

Exhibit 78: ...The Story Is Different for the Overall Tech Hardware Industry Group



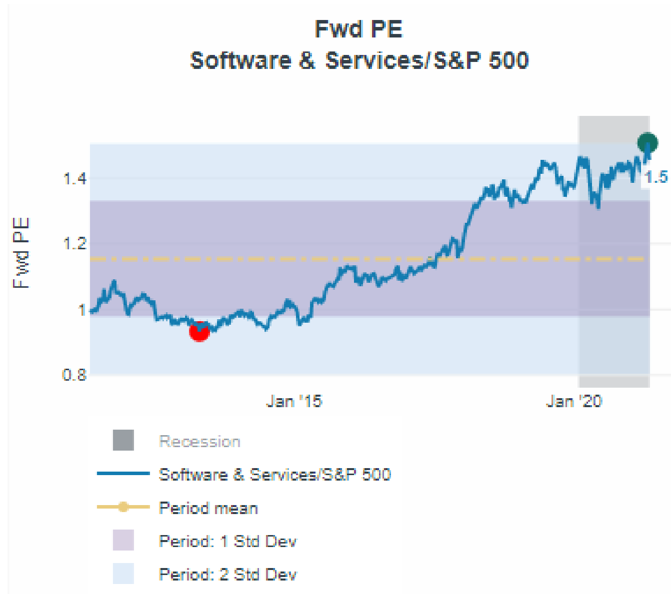
Source: FactSet, Morgan Stanley Research.

Exhibit 79: Semis Relative Valuation Is Extended vs. History...



Source: FactSet, Morgan Stanley Research.

Exhibit 80: ...As Is Software's Relative Forward P/E Ratio



Source: FactSet, Morgan Stanley Research.

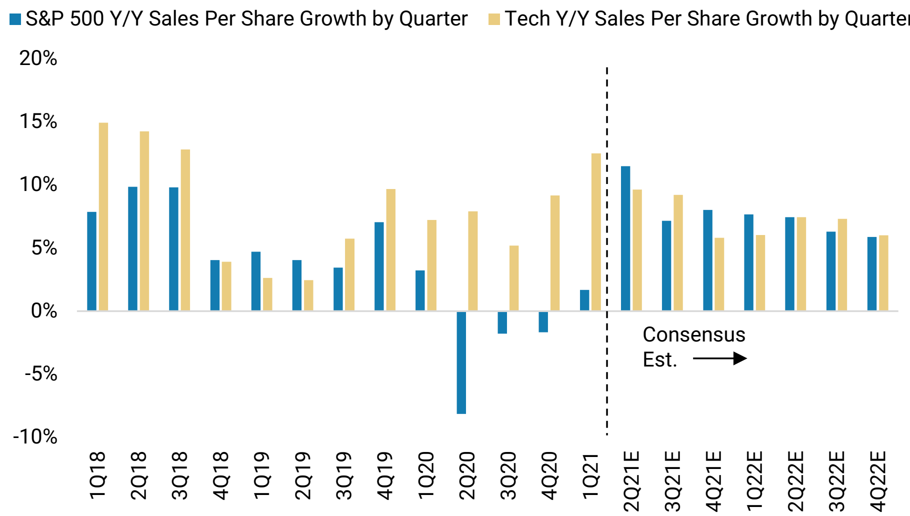
Tech Earnings: Stability Through COVID Makes 2021 Comps Tougher

Exhibit 81 illustrates that **Tech earnings growth outpaced the overall market's EPS growth by 22% during 2020. Even in 2Q at the height of COVID, the Tech sector saw EPS growth of *positive* 4%,** significantly above the overall market's negative growth of -34%. **This relative EPS growth dynamic versus the overall market is expected to reverse in 2021 as Tech faces much tougher growth comparisons than the overall market, which saw EPS growth plummet last year** (in 2021, Tech's EPS growth is expected to be 21%, whereas the S&P 500's EPS growth is expected to be 32%). This dynamic should be especially acute in 2Q of 2021. Exhibit 82 shows that Tech sales growth also significantly outpaced the overall market's top line growth last year. In fact, it never dipped below 5% in any one quarter last year. In contrast to the relative earnings picture, however, Tech's sales growth is expected to be stronger than the overall market's sales growth in 2021 (12% versus the overall market at 9%).

Exhibit 81: Tech's EPS Growth Significantly Outpaced that of the Overall Market in 2020 During COVID; That Dynamic Is Expected to Create Relatively Tougher Compares for Tech EPS Growth in 2021, but Growth Is Still Expected to Be 21% for 2021

Source: Refinitiv, Morgan Stanley Research.

Exhibit 82: Sales Growth Remained Highly Durable During COVID and Is Expected to Remain Strong in 2021



Source: Refinitiv, Morgan Stanley Research.

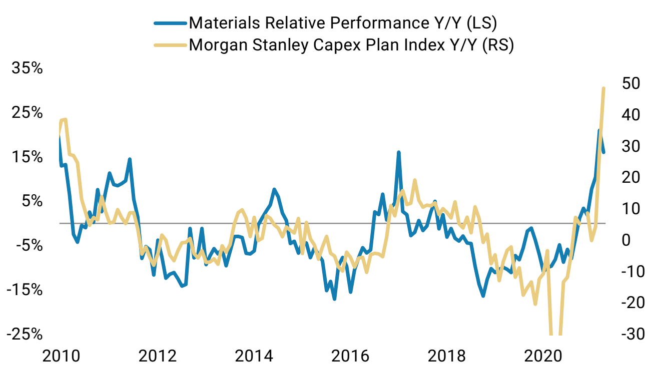
Materials: Overweight

Bottom Line: We remain overweight the Materials sector as a play on improving capex plans and sustained inflation pressures. Despite outperformance since the March market trough last year (+42% outperformance versus the S&P 500), relative performance of the Materials sector remains well below historical highs, and relative valuation levels remain undemanding. Relative earnings revisions breadth for the sector also looks strong and supportive of relative outperformance.

Exhibit 83 shows the Materials sector relative performance versus the S&P 500 on a year-over-year basis against the Morgan Stanley Capex Plans Index (also shown on a year-over-year basis). These two series are closely correlated over time, implying that Materials relative performance is levered to the Capex cycle. The MS Capex Plans Index has inflected significantly higher in recent months and points to continued outperformance of Materials based on this trend. **Given our economists' bullish view on Capex, we would expect continued strength in capital spending plans which should continue to be supportive of Materials over the intermediate term.**

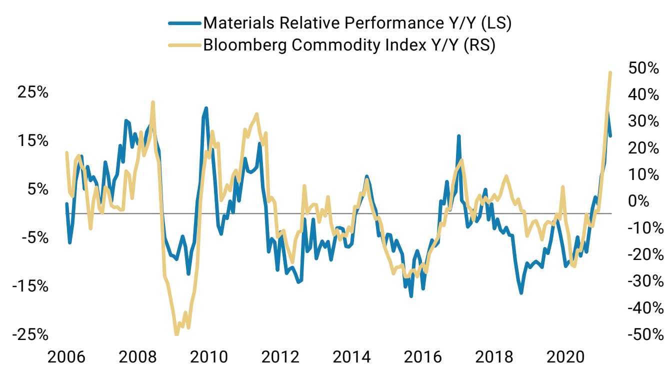
Exhibit 84 illustrates that Materials relative performance is also positively correlated with the Bloomberg Commodity Index over time. In other words, **Materials tends to act as a raw material inflation hedge over time. As accelerating commodity inflation continues to impact supply chains, we like Materials as a pro-cyclical hedge against rising prices.**

Exhibit 83: Materials Performance vs. Capex Plans



Source: Bloomberg, Morgan Stanley Research

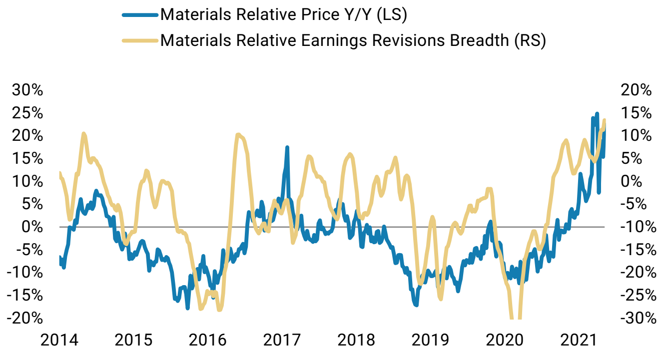
Exhibit 84: Materials Performance vs. Commodity Index



Source: Bloomberg, Morgan Stanley Research

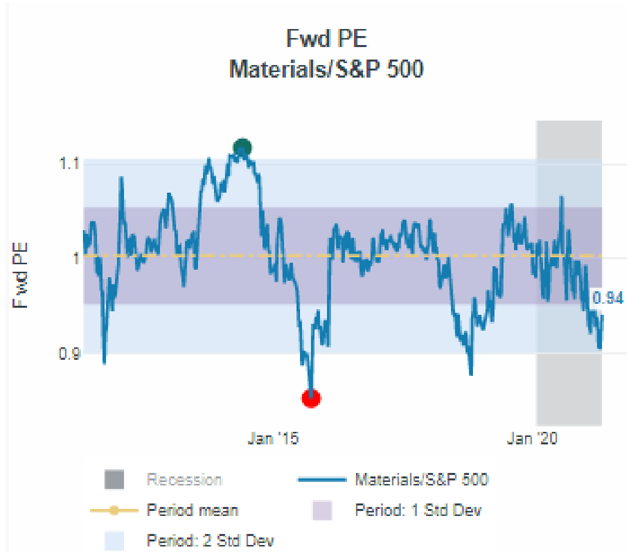
Relative earnings revisions for Materials looks strong, and valuation still appears attractive. Exhibit 85 shows that relative earnings revisions for the Materials sector has maintained its uptrend and has led relative performance higher. On the valuation front, the sector's relative forward P/E ratio remains more than 1 standard deviation below the long term mean (Exhibit 86). Exhibit 87 illustrates that the sector's relative performance level is still well below historical highs despite outperformance since last year's market trough. We think this contextualizes the idea that Materials continues to offer a compelling risk/reward against a backdrop of rising inflation, improving Capex and undemanding mutliples.

Exhibit 85: Relative Earnings Revisions Continue to Look Strong...



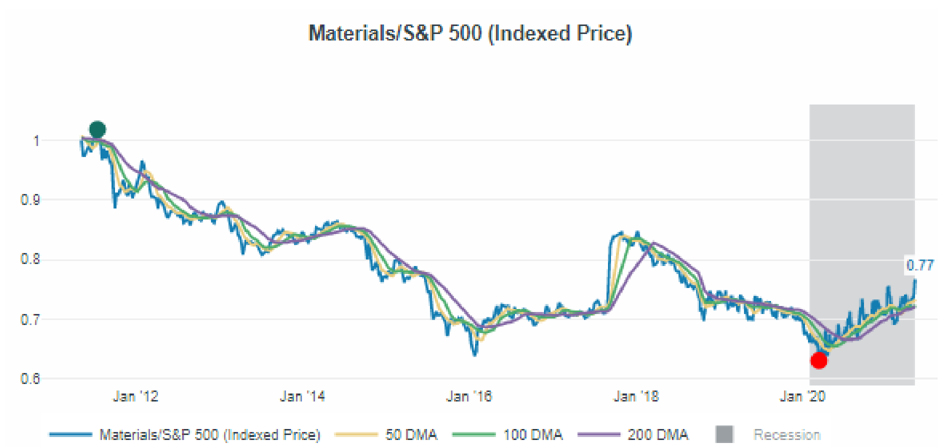
Source: FactSet, Morgan Stanley Research

Exhibit 86: ... and Valuation Looks Undemanding



Source: FactSet, ClariFi, Morgan Stanley Research.

Exhibit 87: Despite Re-Rating Since Last March's Market Trough, Materials Relative Performance Remains Well Below Historical Highs — We Remain Constructive

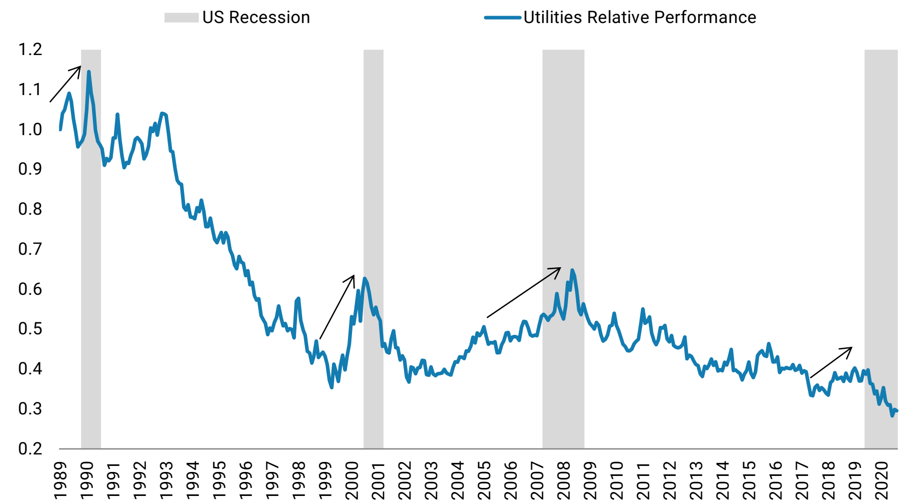


Source: FactSet, ClariFi, Morgan Stanley Research.

Utilities: Underweight

Bottom line: We remain underweight the Utilities sector as its relative outperformance tends to come at the very end of cycles, not in an early/mid-cycle environment (Exhibit 88). Relative valuation is hovering around historical mean levels, and earnings revisions continue to disappoint. While the cohort's relative underperformance may be discounting the next rate move higher in advance, we find it discouraging that relative performance has not picked up again despite bond yields consolidating since late March. Ultimately, we think where we are in the cycle coupled with relatively unattractive fundamentals are the overwhelming drivers of performance for the time being — we stay underweight.

Exhibit 88: Utilities Tends to Be a Very Late Cycle Outperformer ... Not an Early/Mid-Cycle Outperformer



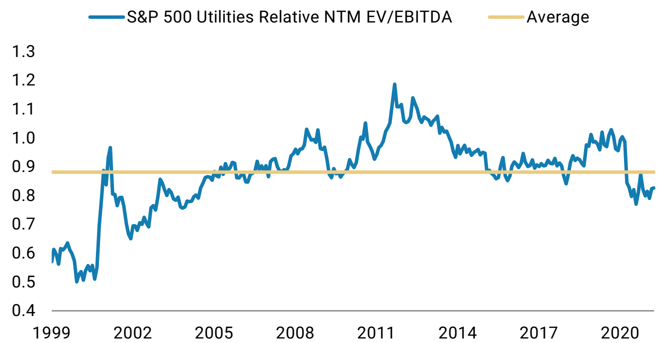
Source: Bloomberg, Morgan Stanley Research.

Relative valuation for the sector is slightly discounted versus historical averages. Exhibit 89 shows that relative forward EV/EBITDA for Utilities is trading slightly below its long-term average. On the yield front, the spread between Utilities' dividend yield and the 10-year Treasury yield is just above the historical average (Exhibit 90).

We think a key reason why relative valuation and relative performance have not re-rated even though Treasury yields have consolidated since late March is that earnings revisions for the sector remain disappointing (Exhibit 91).

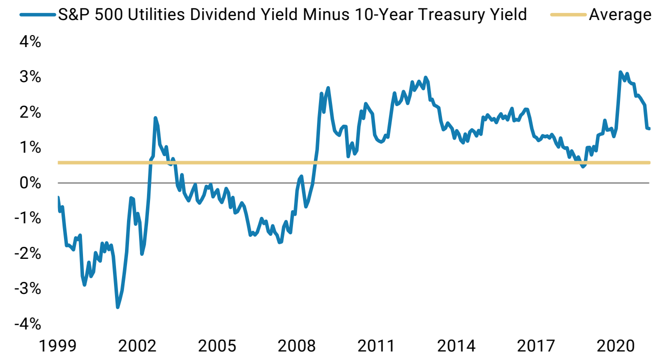
Exhibit 92 highlights that the correlation between Utilities relative performance and bond yields has risen from deep in negative territory to close to 0 in recent weeks. This helps to explain the idea that other factors beyond just bond yields have impacted Utilities performance, and that the group has not benefitted from the reprieve in yields we have seen over the past month and a half.

Exhibit 89: Relative EV/EBITDA Trading Slightly Below Long-Term Average



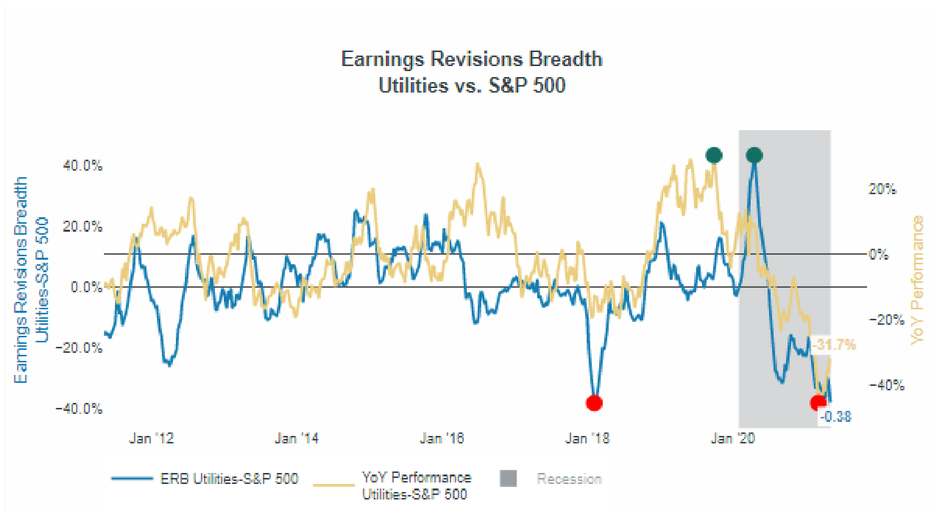
Source: FactSet, Morgan Stanley Research.

Exhibit 90: And Dividend Yield Spread vs. 10-Yr. Yield Is Slightly Above Historical Mean



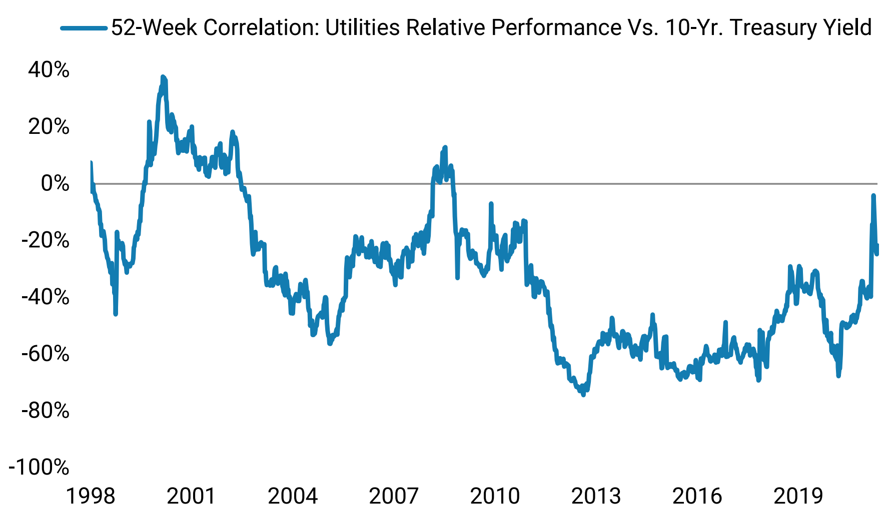
Source: FactSet, Morgan Stanley Research.

Exhibit 91: Earnings Revisions Breadth Remains Disappointing and Helps to Explain Underperformance



Source: FactSet, Refinitiv, Morgan Stanley Research.

Exhibit 92: Strong Negative Correlation Between Utilities Relative Performance and Bond Yields Has Faded



Source: Bloomberg, Morgan Stanley Research.

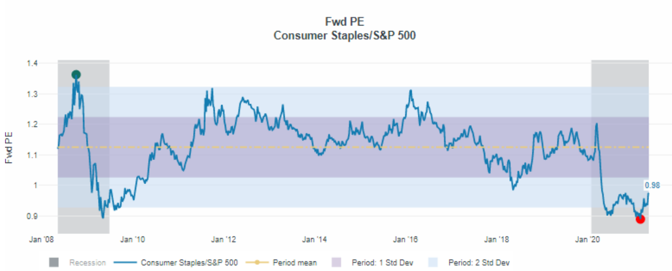
Other Equal Weights: Consumer Staples, Energy, Real Estate

Consumer Staples: We remain equal weight Staples given still depressed relative valuation levels and defensive characteristics. As discussed, we see a number of cyclical risks on the horizon that the overall equity market may begin to discount — peaking PMIs, peaking earnings revisions for the overall market, lofty market multiples, and the transition to a less accommodative Fed, among others. The emergence of these risks prompted us to downgrade the Consumer Discretionary sector recently (which has largely discounted a consumer rebound, in our view) to underweight, and to upgrade the Consumer Staples sector to equal weight (see Weekly Warm-Up: More On The Mid Cycle Transition To Quality; Staples Over Discretionary).

A key point of pushback we received was: Aren't you worried about payback from the COVID economy and nesting? Our response has been that we don't think the average investor appreciates just how much of the Discretionary sector benefited from the COVID environment. We estimate that about 60% of the sector's market cap had 2Q20 (peak lockdown) sales UP > 10% y/y. **This is far ahead of Staples, which was in the single digits.**

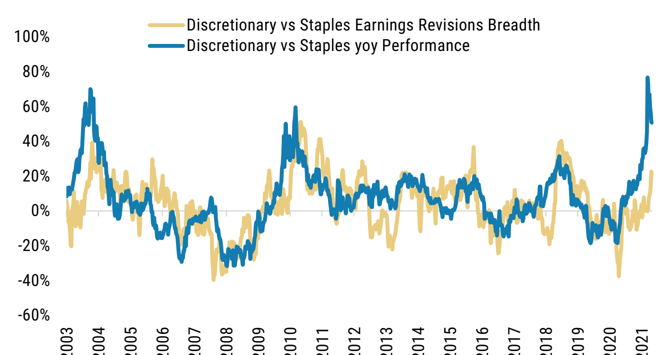
Further, Exhibit 93 shows that despite a recent re-rating, **the Staples sector still trades at ~1 standard deviation below the historical mean on a relative forward P/E basis** versus the overall market. We acknowledge that margin risk as a result of rising cost pressures may be a potential headwind for the sector. However, we'd note that much of this risk may already be in the price given where the sector is trading from a valuation standpoint. One other dynamic worth pointing out with respect to our relative preference for Staples over Discretionary is shown in Exhibit 94— the spread between Discretionary vs. Staples performance is very elevated compared to the relative earnings revisions spread between the two sectors. Based on this dynamic, we think relative price upside for Staples is warranted.

Exhibit 93: Staples Still Trading at a Discount to the Broader Market



Source: FactSet, Refinitiv, Morgan Stanley Research.

Exhibit 94: Staples Relative Revisions vs. Discretionary Suggest a Staples Catch-Up May Be Coming

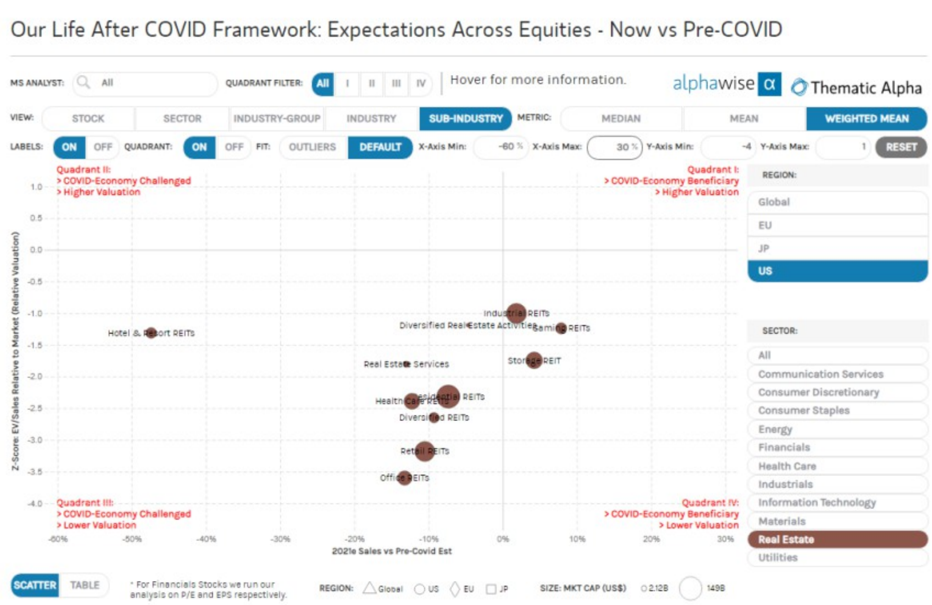


Source: FactSet, Morgan Stanley Research.

Energy: taking our inflation/commodity exposure elsewhere. As noted above, we have retained our overweight rating in Materials, with a focus on metals/mining. We see more limited scope for supply side adjustments that driven prices lower in these sectors relative to Energy, where OPEC and US shale can produce a supply side response with oil production being economic at levels well below current spot prices. We echo the sentiment of our commodity strategists who see more limited scope for oil upside pricing. Additional considerations around the long term value of oil reserves, ESG investing, and the general pattern of energy equities market relative performance lagging price appreciation in the underlying commodity are further considerations behind our equal weight.

Real Estate: a stock picker's sector. We see a number of reasons to like the REITs space. Our analysts recently noted 1) lenders' willingness to work with borrowers to avoid distress, 2) an inflection in net operation income (NOI) as the recovery takes shape, and 3) ample dry powder on the sidelines targeting the asset class. We also note still elevated risk premia in a market where this is hard to find. See REITs / Banks / Asset Managers: The (CRE)bound: 6 REITs with Room to Run (7 Apr 2021). On the other side, we see some reasons to be cautious as many of the end markets serviced by REITs will face some degree of lasting impairment from the COVID-economy. For example, we think the WFH/office hybrid model is likely to weigh on office demand for some time while retail REITs saw an acceleration of demand toward e-commerce that will to some degree linger into the future. Additionally, we continue to think the direction of real rates is likely higher while credit spreads have limited scope to compress further, a potential headwind for one of the more rate sensitive sectors in the public equity space. At the index level we net these factors out to a neutral but with valuations generally having derated relative to the market (see the Exhibit 95for Real Estate sub-industries on our Life After COVID quadrants) we think there are opportunities for alpha in the group. Case in point — 3 of our 10 Fresh Money Buy List stocks reside in the Real Estate sector — Lamar Advertising (LAMR), Simon Property Group (SPG), and Welltower (WELL).

Exhibit 95: Most REITs Sub-Industries Have Derated Against the Market. In Some Cases This Represents Opportunity; In Others, Structural Impairment



Source: FactSet, Morgan Stanley Research.

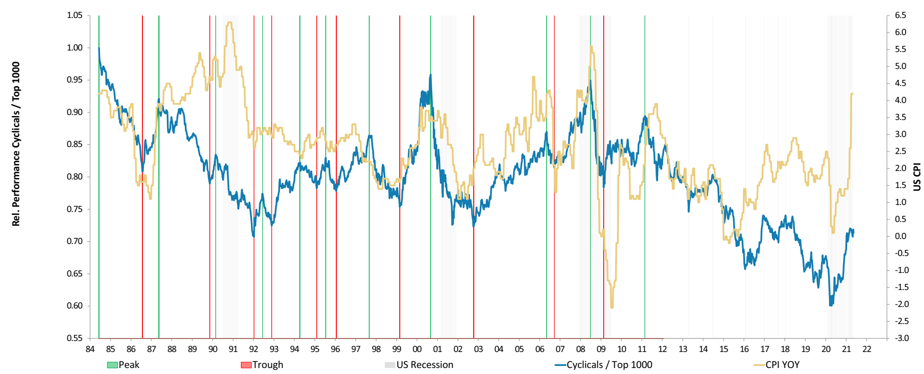
Style Preferences

Cyclicals vs. Defensives: Selectively Cyclical

The Bottom Line: Given our positive views on economic growth, we think that GDP-sensitive companies, or cyclicals, still offer positive fundamental outlooks, but given a strong run, exposure to rising costs, and a slowing in the rate of change of economic growth we'd be more selective. This same logic applies to out moving to equal weight on Industrials. Over the forecast horizon, we think betting with the primary trend, and leaning into Cyclicals over defensives on the back of corrections, is the right approach.

Inflation, Rates and Cyclicals vs. Defensives. Ongoing inflation should provide relative support to the more reflationary sectors within cyclicals (Fins and Materials, for example) but may also be a risk to margins for operating cyclicals who are not able to pass along price as well. Rising rates (a combination of inflation and rising real rates) generally works against the relative performance of defensives, but in line with our message of being more selective, we note that the relative performance of cyclicals vs. defensives has already priced in a fair amount of rising yields and inflation.

Exhibit 96: Cyclical Relative Performance vs. CPI YOY



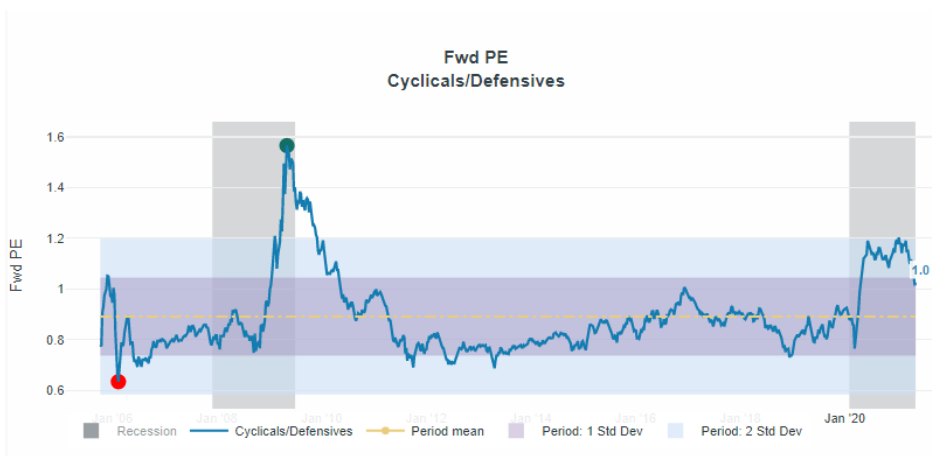
Source: ClariFi, Morgan Stanley Research

Exhibit 97: Higher Rates Would Negatively Impact Defensives

Source: Bloomberg, Morgan Stanley Research.
Note: The index above represents an equal notional pair trade of going long a group of higher beta cyclicals from the Discretionary, Energy, Industrials, Materials, and Technology sectors vs short a group of stocks from more defensive sectors – Health Care, Consumer Staples, Telco Services, an Utilities. The long and short sides are rebalanced to equal notional amounts at the start of each day

Cyclical Relative Valuation Has Started to Correct. Cyclical vs. defensive relative PE peaked in January and has started to correct (Exhibit 98). Since the Financial Crisis, cyclicals have typically traded at a modest discount to defensives. Valuation between the two groups is roughly equal right now and has further room to fall, but with a likely offset from faster earnings growth. A near-term correction would bring cyclical valuation in line with history and create a solid runway for the group to outperform as earnings move higher.

Exhibit 98: Cyclical vs. Defensive Relative Valuation



Source: FactSet, Morgan Stanley Research

Key Items to Watch. We think rate of change in fundamentals is turning in a way that supports a more cautious, lower-risk approach tactically. To isolate the macro variables to focus on for various pairs, we look at the historical relative performance and use an algorithm to systematically identify peaks and troughs. More than a focus on any one variable or its rate of change, we look at the families or clustering of significance around macro data points and use our views on the direction of those clusters to inform our outlook. For more details on methodology please see Weekly Warm-up: Quality Leads as Peak Rate of Change & Costs Appear. Unsurprisingly, cyclicals are highly levered to a variety of variables that hinge on the strength on the economy (Exhibit 99). **Many of**

these variables are near their peak rate of change — like consumer confidence, oil, GDP growth, inflation, and PMIs — and we struggle to see how the rate of change will accelerate further. However, after a near-term correction, we believe these factors will remain supportive for cyclicals and recommend overweight the group on a 12-month horizon.

Exhibit 99: Items to Watch for Cyclicals

Old Economy Cyclicals vs the Market			
Macro Category, Units	Item	Avg - Cyclical Outperformance Periods	Avg - Cyclical Underperformance Periods
Commodities, $	Oil - 1MΔ	$1.12	-$1.46
Commodities, $	Oil - 3MΔ	$2.11	-$2.00
Commodities, $	Oil - ST Momentum: 1MΔ vs Prior 2MΔ	$0.64	-$0.95
Consumer Confidence, Survey Pts	Conf Board Cons Conf - 1MΔ	0.8	-0.7
Consumer Confidence, Survey Pts	Conf Board Cons Conf - 3MΔ	3.1	-3.1
Consumer Confidence, Survey Pts	U Mich Cons Sent - 3MΔ	1.7	-1.4
Disposable Personal Income, bps	DPI MOM - 3MΔ	7.0	-12.9
Disposable Personal Income, bps	DPI MOM - LT Momentum: 3MΔ vs Prior 9MΔ	9.7	-22.0
GDP, bps	US Real GDP Y/Y - 1MΔ	9.4	-5.9
GDP, bps	US Real GDP Y/Y - 3MΔ	18.6	-16.5
GDP, bps	US Real GDP, Q/Q SaaR - 12MΔ	111.2	-61.4
GDP, bps	US Real GDP, Q/Q SaaR - 3MΔ	91.4	-37.2
GDP, bps	US Real GDP, Q/Q SaaR - LT Momentum: 3MΔ vs Prior 9MΔ	71.6	-38.1
Inflation, bps	CPI MOM - 12MΔ	3.3	-8.3
Inflation, bps	CPI MOM - 1MΔ	1.7	-2.8
Inflation, bps	CPI MOM - 3MΔ	3.7	-2.8
Inflation, bps	CPI YOY - 1MΔ	3.4	-7.2
Inflation, bps	CPI YOY - ST Momentum: 1MΔ vs Prior 2MΔ	3.2	-2.4
PMIs, Survey Pts	ISM Manu PMI - 1MΔ	0.5	-0.3
PMIs, Survey Pts	ISM Manu PMI - 3MΔ	1.3	-0.7
PMIs, Survey Pts	ISM Svcs PMI - 1MΔ	0.3	-0.2
PMIs, Survey Pts	ISM Svcs PMI - 3MΔ	0.6	-0.7
Yields, bps	US 10 Yr. Yld. - 1MΔ	2.0	-5.4
Yields, bps	US 3M Yield - ST Momentum: 1MΔ vs Prior 2MΔ	2.0	-1.0

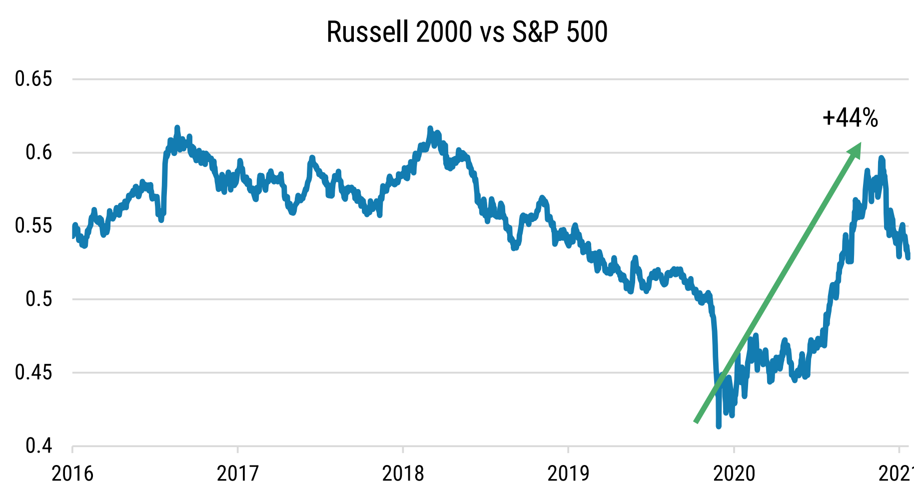
Source: ClariFi, Bloomberg, Morgan Stanley Research

Small vs. Large: Neutral

Bottom Line: Small caps are early cycle outperformers and we think there has been a definitive top in relative performance. The group had a 44% relative return from the March 202 bottom to its recent peak but after giving much of that back we now see the relative outlook as more balanced. While valuation is rich for large caps, small caps no longer offer unusually attractive relative value as they did last summer. Ultimately we think that after the recent correction it makes sense to close our small caps underweight and we move to neutral relative to large caps.

Small cap relative performance has topped. Small caps had an incredible run of relative outperformance since the market bottomed last year. The Russell 2000 vs the S&P 500 had a relative return of 44% between March 2020 and March 2021 (Exhibit 100). We think the time for small cap outperformance has come to a close and it is time to move up the cap spectrum. **Small caps typically lead large caps early in the recovery; we are now past the early stages of the recovery and are mid cycle. The recent mid-cycle correction has now reset the prior outperformance and we see the relative outlook as more balanced from here.**

Exhibit 100: Small Cap vs Large Cap Performance

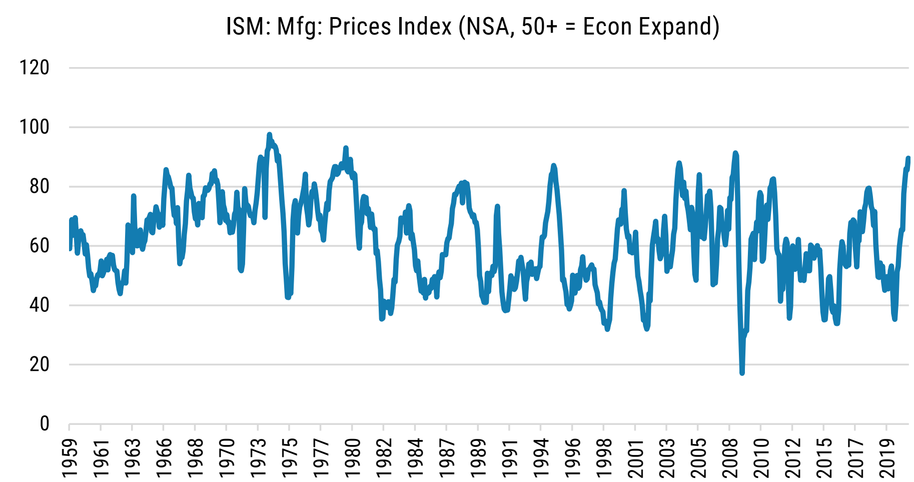


Source: Bloomberg, Morgan Stanley Research

One thing to watch … cost pressures less problematic for large caps. Small cap companies tend to have lower pricing power and lower absolute levels of margins than large caps making their profits more sensitive to margin pressure. We are already seeing companies struggle to hire back low wage labor to fully reopen restaurants and stores. Companies are having to offer signing incentives and raise wages to attract workers which will eat away at margins. **We think labor pressure will only worsen as the economy fully reopens.** Other inflationary measures we track are also pointing to cost pressure trouble. Commodity pricing is becoming increasingly unfavorable for companies and the latest reading on the ISM prices paid index places it at the 99th percentile since 1995 (Exhibit 101). For more on the inflationary measures we track please see, US Equity Strategy: Thematic Alpha: Inflation Data Pack - May 2021. **Overall, cost pressures are mounting. We think this maybe well priced on a relative basis, but we also know that large caps are typically in a better position to defend margins than small caps, making**

this a dynamic to pay close attention to with respect to this pair.

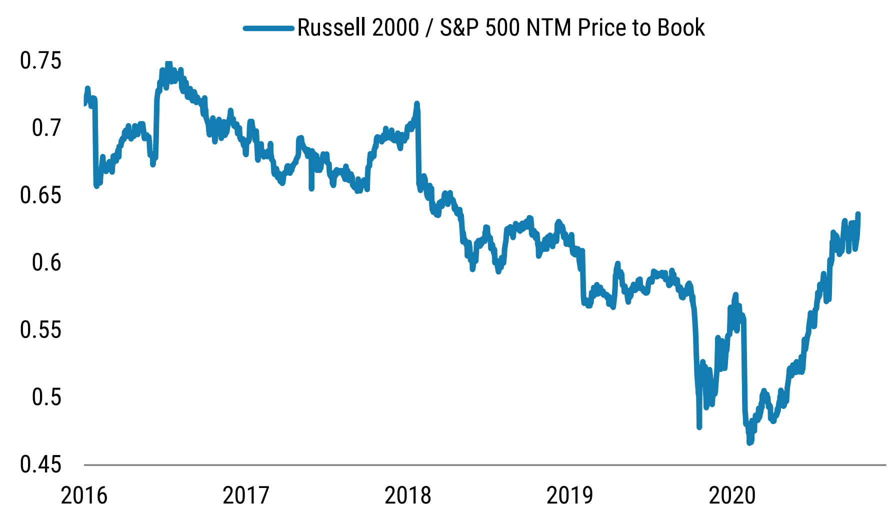
Exhibit 101: ISM Prices Paid is at an Extreme



Source: Haver, Morgan Stanley Research

Small cap valuation now in-line. Small caps typically trade at a significant discount to large caps. We show this on a price-to-book basis in Exhibit 102 to control for the impact of negative earnings around the recession. The ratio reached a multiyear low last summer and has since bounced back. At the lows, the Russell 2000's NTM PB was less half that of the S&P 500. This discount has eroded entirely and relative valuation is now at the level typically seen over the last few years. **While we believe valuation is full for large caps, the relative value offered by small caps last year has disappeared.**

Exhibit 102: Small Caps vs. Large Caps Valuation



Source: FactSet, Morgan Stanley Research

Key Items to Watch. We identified key items to watch for small caps vs large caps using the same methodology as in Exhibit 99. Rate of change in consumer confidence, PMIs, and Treasury yields are the most important factors to watch for small cap vs large cap relative performance (Exhibit 103). These variables have all likely already hit their peak rate of change which we believe the market has begun to reflect.

Exhibit 103: Key Items to Watch for Small vs Large

Small Caps vs Large Caps			
Macro Category, Units	**Item**	**Avg - Small vs Large Outperformance Periods**	**Avg - Small vs Large Underperformance Periods**
Consumer Confidence, Survey Pts	Conf Board Cons Conf - 1MΔ	0.7	-0.6
Consumer Confidence, Survey Pts	Conf Board Cons Conf - ST Momentum: 1MΔ vs Prior 2MΔ	0.5	-1.0
Consumer Confidence, Survey Pts	U Mich Cons Sent - 1MΔ	0.6	-0.7
Consumer Confidence, Survey Pts	U Mich Cons Sent - 3MΔ	1.2	-0.9
Consumer Confidence, Survey Pts	U Mich Cons Sent - ST Momentum: 1MΔ vs Prior 2MΔ	0.3	-0.5
Disposable Personal Income, bps	DPI MOM - 1MΔ	1.1	-1.8
Disposable Personal Income, bps	DPI MOM - LT Momentum: 3MΔ vs Prior 9MΔ	6.4	-12.5
PMIs, Survey Pts	ISM Manu PMI - 1MΔ	0.3	-0.4
PMIs, Survey Pts	ISM Manu PMI - ST Momentum: 1MΔ vs Prior 2MΔ	0.2	-0.3
PMIs, Survey Pts	ISM Svcs PMI - 1MΔ	0.3	-0.5
PMIs, Survey Pts	ISM Svcs PMI - 3MΔ	0.5	-0.6
PMIs, Survey Pts	ISM Svcs PMI - ST Momentum: 1MΔ vs Prior 2MΔ	0.3	-0.4
Yields, bps	US 10 Yr. Yld. - 1MΔ	2.2	-5.0
Yields, bps	US 10 Yr. Yld. - ST Momentum: 1MΔ vs Prior 2MΔ	3.9	-2.4
Yields, bps	US 3M Yield - ST Momentum: 1MΔ vs Prior 2MΔ	1.8	-2.1

Source: ClariFi, Bloomberg, Morgan Stanley Research

Quality: Preference for High Quality

Bottom Line: We recommend investors move up the quality curve as the market shifts to mid cycle leadership. Low quality has already had an impressive run of outperformance and we believe we are at the beginning of a larger shift to high quality. Higher quality companies will be able to manage margin pressure better as labor costs, commodity pricing, and supply chain issues ramp up.

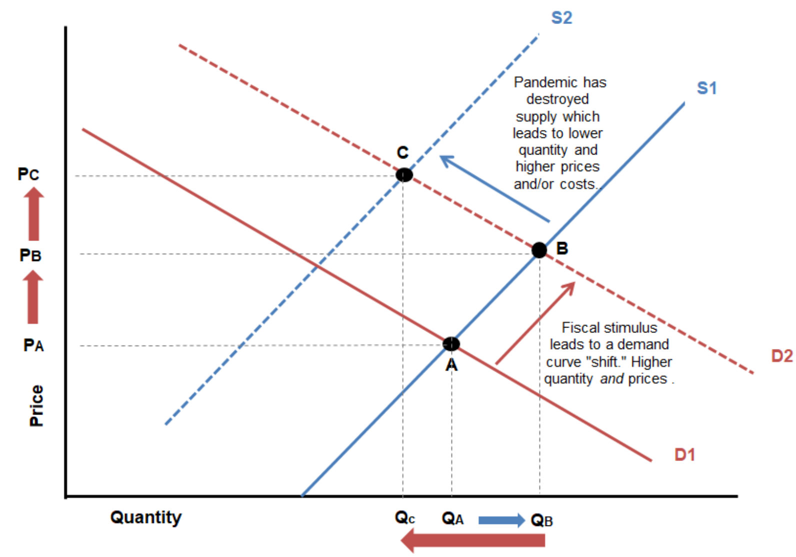
Cycle Timing Favors High Quality. Low quality typically outperforms early cycle and we have already seen a very strong run of low quality outperformance (Exhibit 104). Low quality stocks tend to outperform early cycle because they are more levered to the recovery and there is no need to pay up for quality after a cycle ends. **Low quality outperformed high quality by 57% this cycle, but we are starting to see that reverse. We are still in the early innings of the quality rotation and recommend pairing high quality with growth at a reasonable price and defensives.** The timing of this shift makes sense in light of our view that this cycle will be shorter but run hotter. Quality's outperformance tends to come with slowing rates of change in inflation, personal income, PMIs, and GDP — all places where we think it is reasonable to expect a slowing in the y/y and sequential rate of change into 2Q21.

Exhibit 104: High Quality is Making a Comeback

Source: Bloomberg, Morgan Stanley Research

High Quality Companies Can Better Weather Margin Pressure. Higher quality companies by their very nature have healthier balance sheets than their lower quality peers and will be better able to manage margins. We believe the market is in for a margin squeeze for the reasons outlined in the small vs large cap section. Higher quality companies will likely see less impact from higher labor costs, commodity pricing, and supply chain issues. Supply chains were deeply disrupted during the lockdowns and we expect companies to face serious problems as demand comes roaring back. **Typically, demand comes back slowly as employment gradually recovers. This time, due to the excess savings, that is not likely to be the case (Exhibit 105)**. Instead, demand is likely to ramp much faster as the lock downs have been the gating factor, not employment. **There are likely to be substantial damages to this dynamic in the form of margins vs high embedded expectations and we believe high quality companies are best suited to handle this.**

Exhibit 105: Supply vs Demand



Source: Morgan Stanley Research

Key Items to Watch. We identified key items to watch for the quality spectrum using the same methodology as in Exhibit 99. **We looked systematically at how major macro variables tend to behave when Quality is outperforming and found that Quality's relative outperformance isn't all that volatile and tends to come with slowing rates of change in inflation, personal income, PMIs, and GDP (which we expect heading into 2Q).** We think these items have reached peak rate of change and we are about to enter a long period of high quality outperformance.

Exhibit 106: Key Items to Watch for Quality

Macro Category	Item	Avg - Outperformance Periods	Avg - Underperformance Periods
Rates/Curves, bps	US 10 Yr. Yld. - ST Momentum: 1MΔ vs Prior 2MΔ	-3	4
	US 3M Yield - ST Momentum: 1MΔ vs Prior 2MΔ	-2	4
Oil, $	Oil - ST Momentum: 1MΔ vs Prior 2MΔ	-$0.84	$1.00
Sentiment, Index Pts	U Mich Cons Sent - ST Momentum: 1MΔ vs Prior 2MΔ	-0.2	0.3
Inflation, bps	CPI MOM - 1MΔ	-3	2
	CPI MOM - ST Momentum: 1MΔ vs Prior 2MΔ	-2	2
Income Growth, bps	DPI MOM - 3MΔ	-13	20
	DPI MOM - 12MΔ	-11	19
	DPI MOM - LT Momentum: 3MΔ vs Prior 9MΔ	-12	11
	DPI YOY - 1MΔ	-9	16
	DPI YOY - ST Momentum: 1MΔ vs Prior 2MΔ	-11	17
PMIs, Index Pts	ISM Manu PMI - ST Momentum: 1MΔ vs Prior 2MΔ	0	0
	ISM Svcs PMI - 1MΔ	-1	0
	ISM Svcs PMI - 3MΔ	-1	1
GDP Growth, bps	US Real GDP Y/Y - 1MΔ	-9	4
	US Real GDP Y/Y - ST Momentum: 1MΔ vs Prior 2MΔ	-5	3
	US Real GDP, Q/Q SaaR - 1MΔ	-30	22
	US Real GDP, Q/Q SaaR - 3MΔ	-129	61
	World Real GDP Y/Y - 3MΔ	-20	5
	World Real GDP Y/Y - LT Momentum: 3MΔ vs Prior 9MΔ	-15	5

Exhibit 107:

Source: ClariFI, Bloomberg, Morgan Stanley Research

Themes

Life After Covid

What do I own now? With equities near all time highs, reopening increasingly in the price, and many COVID beneficiaries richly priced, we hear low conviction on what to own now. A lack of clear leadership and stock-specific risk back at long-term averages tell us that returns from here will come from stock selection rather than beta/style. In other words, it's about alpha over beta, but in a tricky environment.

How the market prices retention of, and reversion from, COVID's impacts is critical for stock picking. Exiting the COVID-economy comes with significant uncertainties, and "reopening" does not mean a full return to pre-COVID consumption patterns. Uncertainty and dispersion require a focus on risk vs. reward & what is already priced.

Our Life After COVID (LAC) quadrants frame "what's in the price" ... Over the last few months, we have introduced our LAC quadrant framework in the US, Europe, and Japan to visually frame how markets are extrapolating COVID-economy changes and reopening.

... and we built an interactive tool for clients to use across DM equities. Our AlphaWise team created a dynamic tool for clients to assess opportunities and risks at the stock and industry level in the US, Europe, and Japan.

How to read our Life After COVID quadrant visualization.

The y-axis shows standard deviations between the stock's pre-COVID premium/discount to market and the current valuation — higher positive numbers are more expensive, lower negative numbers are cheaper. We use EV/sales estimates for months 13-24 from the present for individual stocks and the market (P/E for Financials). For each stock we looked at the average premium or discount to the market on this metric in the 3 years prior to COVID and then calculated how many standard deviations away from average the current premium/discount sits. Stocks trading multiple standard deviations above pre-COVID levels may be viewed as beneficiaries of COVID-related changes, while those trading below may be seen as casualties.

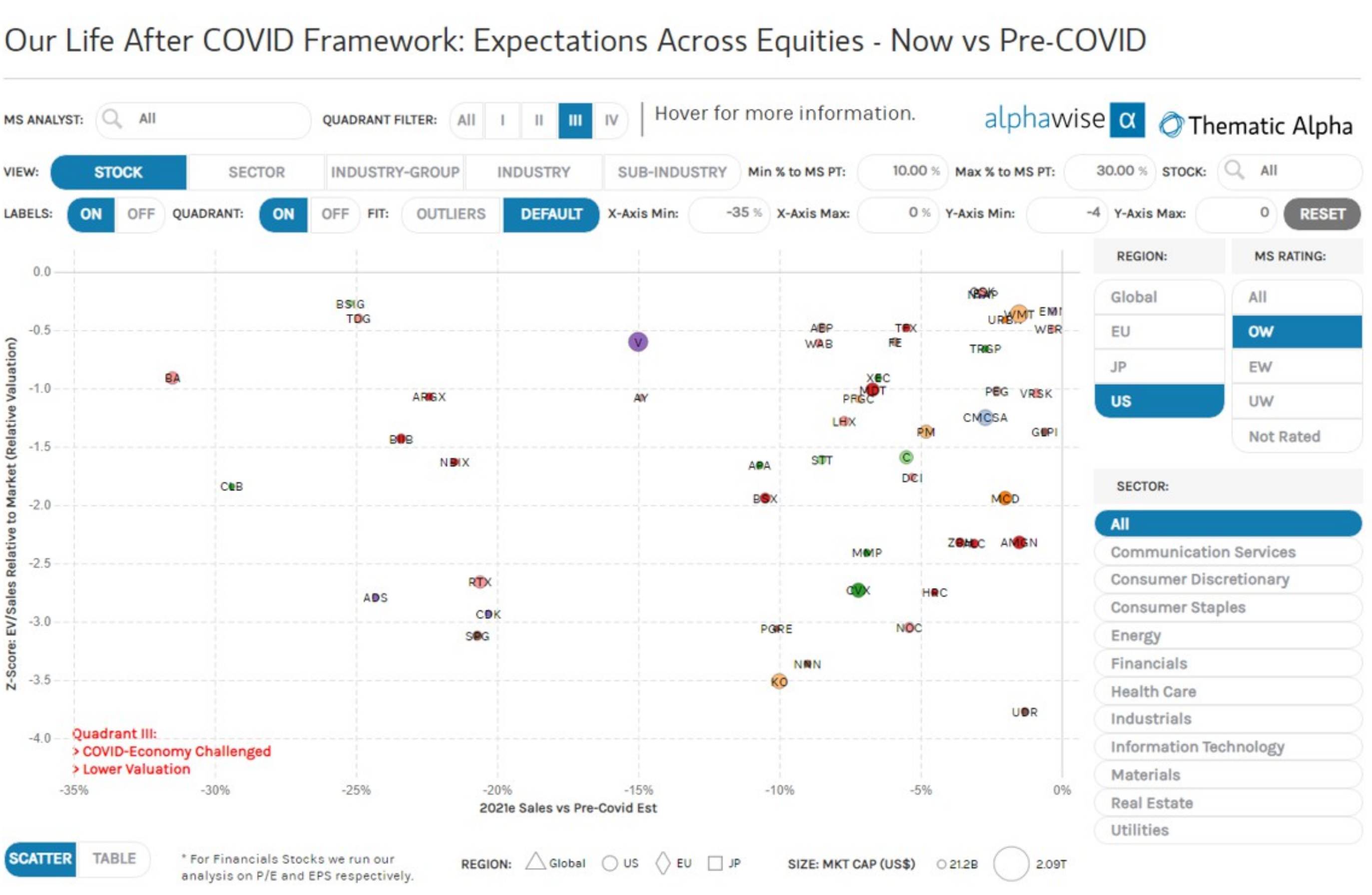
The x-axis shows the percentage deviation from pre-COVID expectations for 2021 sales (EPS for Financials) based on consensus. Reopening and wallet share reversion create potential risk for the stocks in the top right quadrant, as misses versus expectations could shift stocks down/left, hampering relative returns. Conversely, reopening and wallet share reversion may increase potential for upside surprise and outperformance as better-than-expected fundamentals could drive reratings, moving stocks right/up in the quadrant.

For more details on how to use the tool see Life After COVID Interactive - User Notes.

Our interactive generates ideas for what to buy and what to avoid.

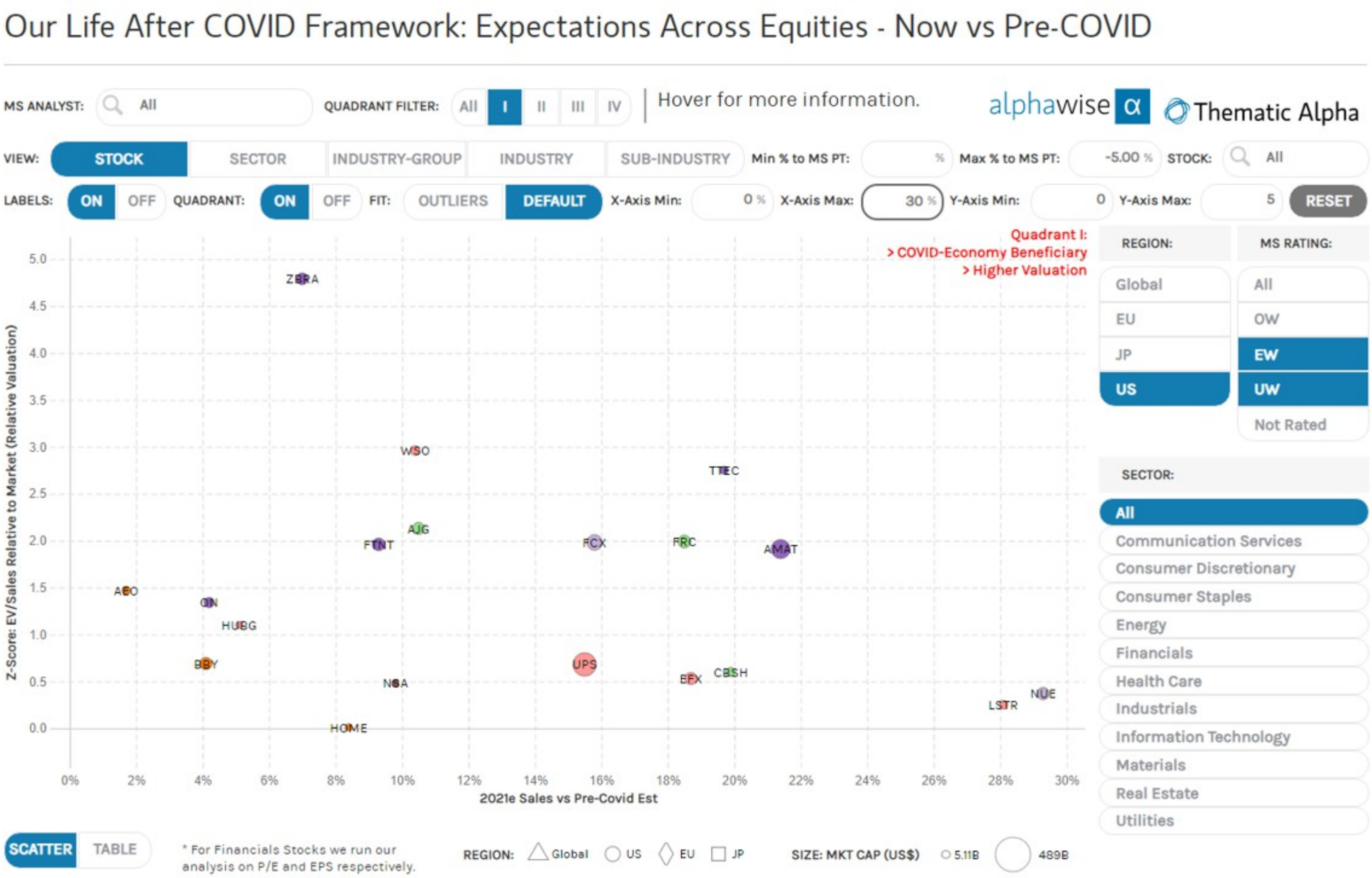
For some stocks, the market is embedding too much COVID economy in the price — good and bad. We screen for upside opportunity where our analysts see 10-30% upside with an OW rating where the market may be pricing in some lasting impairment (Exhibit 108) as well as places where our analysts see >10% downside where the market is pricing in a lasting benefit from COVID trends (Exhibit 109).

Exhibit 108: LAC Quadrants: overlooked upside — challenged quadrant + OW-Rated + 10-30% upside to Morgan Stanley PT



Source: FactSet, Morgan Stanley Research estimates.

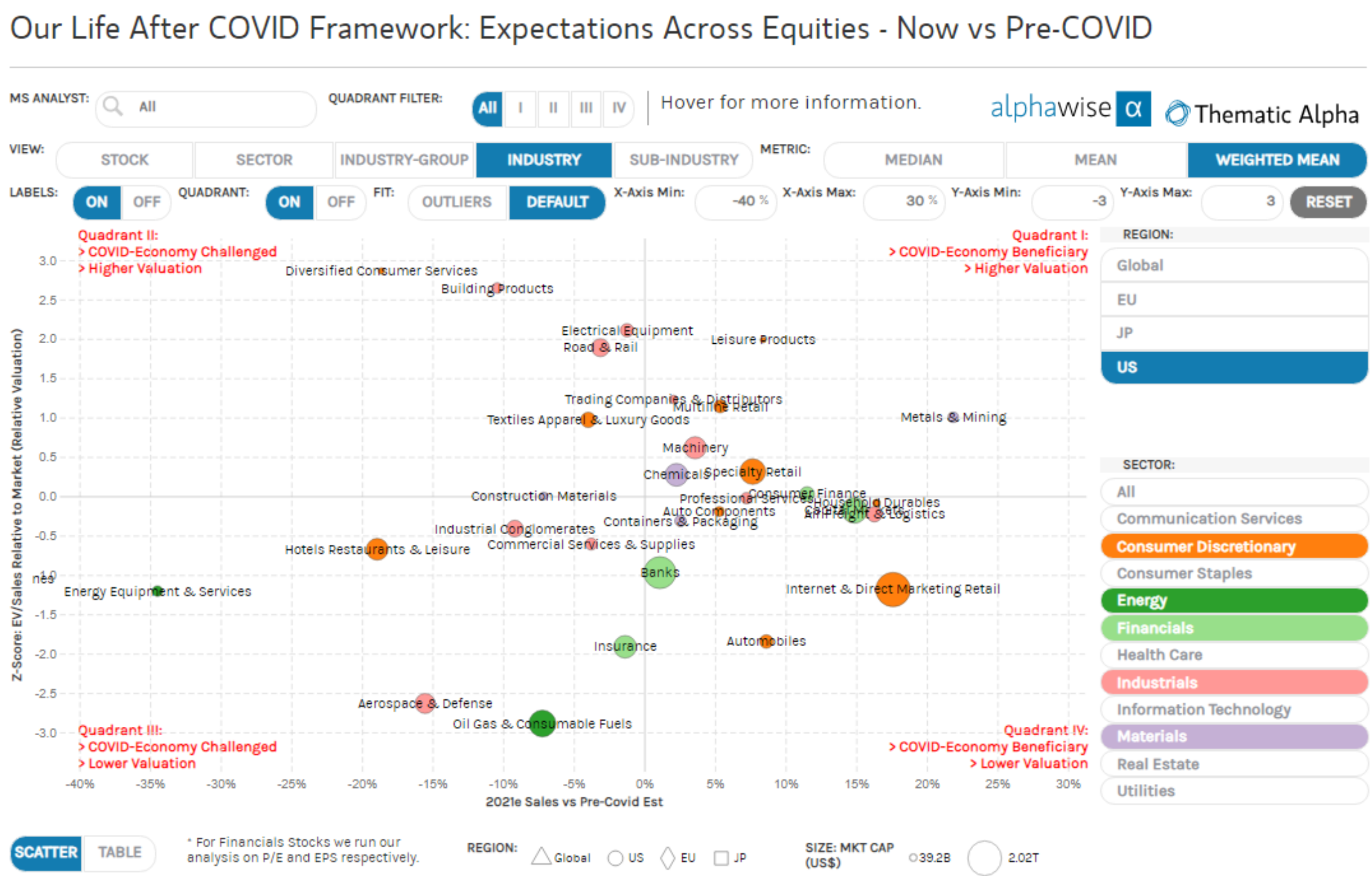
Exhibit 109: LAC Quadrants: high expectations quadrant + UW-/EW-Rated + >10% downside to Morgan Stanley PT



Source: FactSet, Morgan Stanley Research estimates.

A lot of reopening is in the price, but not equally across cyclical stocks/sectors — favor reflation over reopening. Discretionary and Industrials are most aggressively pricing the recovery/reopening; Energy and Financials, less so.

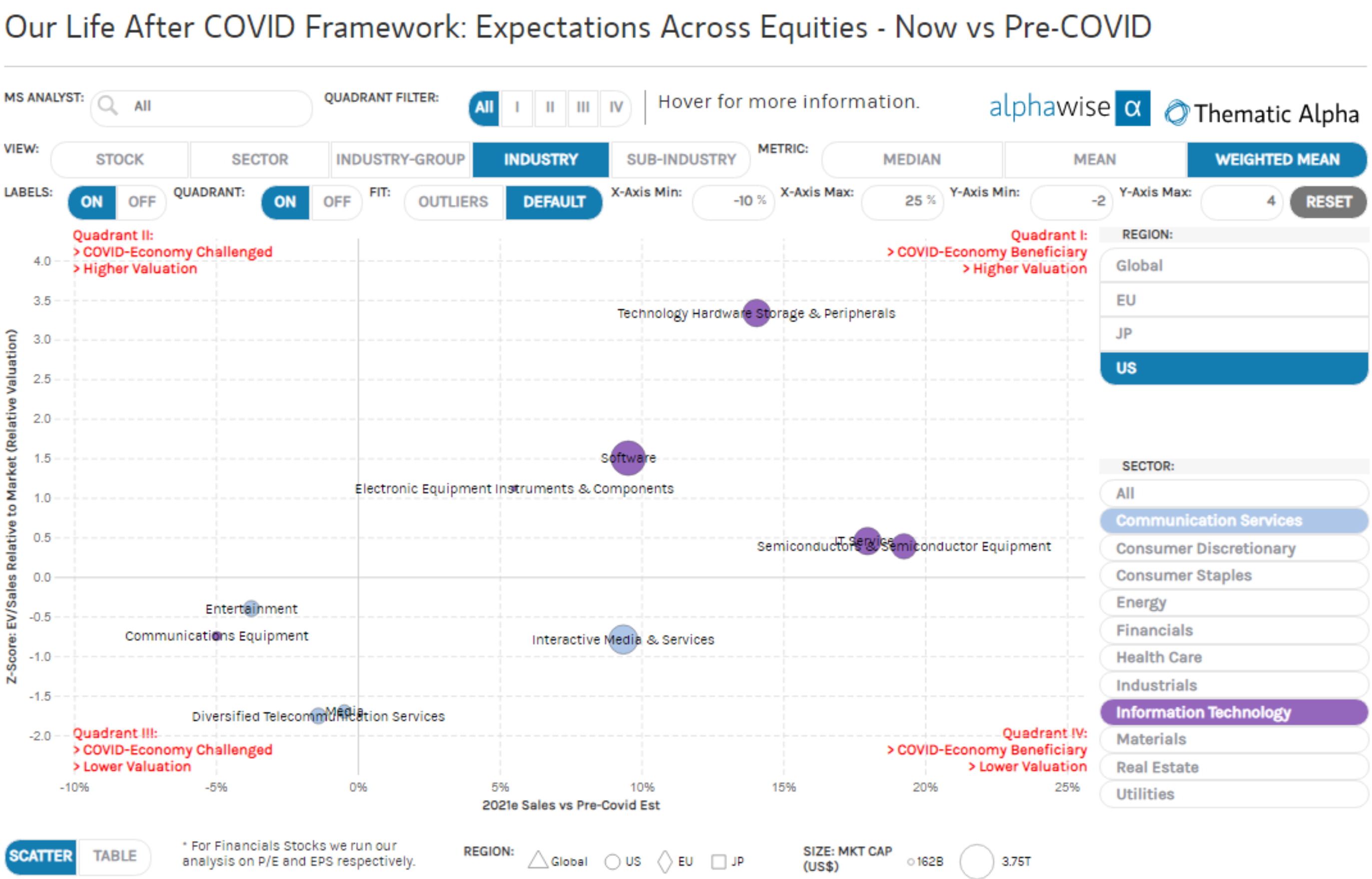
Exhibit 110: Reflation > Reopening: Among Cyclicals Discretionary and Industrials Pricing the Strongest Recovery, while Banks and Energy Lag



Source: FactSet, Morgan Stanley Research estimates.

Markets are pricing Tech keeping COVID-economy gains, but we see some surprising laggards. In Tech, Tech HW (Apple), Semis, and Software stand out among industries as those most priced for structural gains. Interactive Media & Services (video games & some internet) has cheapened despite relative COVID-economy gains.

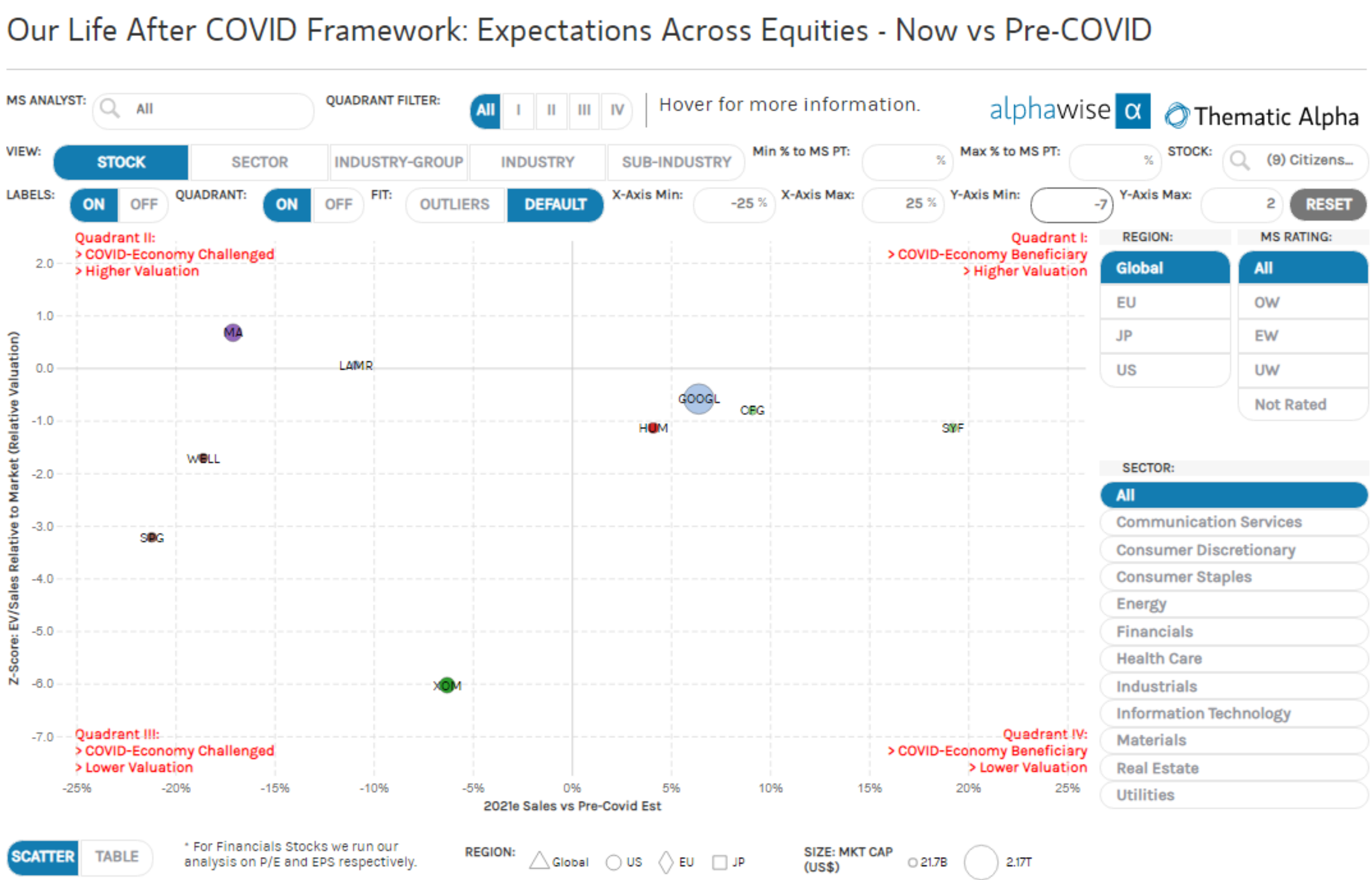
Exhibit 111: US Tech well priced for gains, but with Internet a notable laggard; Semis look well priced



Source: FactSet, Morgan Stanley Research estimates.

Our stock selection has favored laggard reopening cyclicals and cheaper COVID-economy beneficiaries. We assess our US Fresh Money Buy List, showing a tilt toward earnings-driven upside with some potential for re-rating as the market comes to see less impairment over time.

Exhibit 112: Our Fresh Money Buy List skews to stocks that have cheapened vs. the market



Source: Our Fresh Money Buy List skews to stocks that have cheapened vs. the market.

Inflation - Don't Chase Inflation Beneficiaries

Inflation is a key theme for equity investors as the market contemplates a shorter, hotter cycle. We think inflationary pressures will prove more durable than the market expects as fiscal policy, excess savings, pent up demand, and supply chains strained by reopening create a high pressure economy.

Where is inflation running hottest? The heat maps in our monthly inflation tracker for equity investors, show accelerating inflation across a range of metrics. PCE numbers are heating up — the PCE figures we track saw one of the largest month-over-month changes, with readings in the 98th–99th percentile since 1995. The PMI prices paid index surged to 90 which puts it in the 99thpercentile and a level not seen since June 2008. Copper spot prices continued to surge higher increasing 19% over the last month. The change is in the 99th percentile.

Exhibit 113: Price/Index Data Heat Map

Price/Index Data Heat Map - by Producer Exposure & Consumer Exposure

Series	1 Mo Change %ile*	1 Month Delta	3 Month Delta	6 Month Delta	12 Month Delta
Producer Facing Series					
Macro Data Points					
Core PPI	99%	0.7%	1.5%	3.1%	4.6%
Employment Cost Index**	NA	NA	-0.7%	-1.2%	2.5%
Money Supply (M2), $ Bn	96%	1.3%	4.0%	6.9%	24.2%
Trade Weighted Dollar	28%	-0.6%	1.0%	-2.7%	-8.6%
Commodities					
PPI - Food	96%	2.1%	3.9%	4.3%	7.6%
Copper Spot Price, $/Lb	99%	19.1%	30.7%	53.5%	99.4%
Crude Oil - Brent Spot Price, $/barrel	15%	-6.6%	8.9%	54.5%	240.5%
Crude Oil - WTI Spot Price, $/barrel	62%	4.1%	19.8%	60.2%	408.3%
Consumer Facing Series					
Overall CPI					
Core CPI	83%	0.8%	1.6%	1.7%	3.0%
Cleveland 16% Trimmed Mean CPI (%chg)	84%	0.1%	0.3%	0.2%	0.3%
PCE by Category					
Dallas Trimmed Mean PCE (Annual Rate %)	59%	0.13%	0.17%	0.57%	0.90%
Core PCE	99%	0.4%	0.6%	0.9%	1.8%
PCE - Durable Goods	98%	0.5%	0.5%	0.3%	2.0%
PCE - Nondurable Goods	88%	0.8%	2.3%	2.8%	2.7%
PCE - Services	98%	0.4%	0.7%	1.2%	2.3%
Vacation & Transportation Costs					
CPI - Airline Fare	100%	10.2%	5.0%	2.9%	9.6%
CPI - Lodging Away from Home	100%	7.6%	9.2%	9.9%	7.3%
CPI - New Vehicles	83%	0.4%	0.3%	1.3%	2.0%
CPI - Used Cars and Trucks	100%	9.6%	12.7%	9.2%	21.0%
Housing & Shelter Costs					
CPI - Shelter	76%	0.4%	0.9%	1.2%	2.1%
House Purchase Price Index	95%	0.9%	3.1%	7.4%	12.2%
Home Value Index, $	100%	1.2%	3.4%	6.6%	10.6%

Source: Haver, Morgan Stanley Research.

Exhibit 114: Select Annualized Series Heat Map

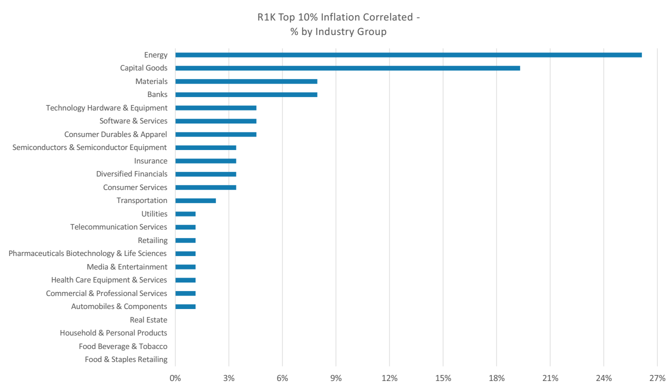
Select Annualzied Series Heat Map

Series	1 Mo Change %ile*	1 Month Delta	3 Month Delta	6 Month Delta	12 Month Delta
Producer Facing Series					
Macro Data Points					
Core PPI	99%	8.4%	6.0%	6.3%	4.6%
Employment Cost Index**	NA	NA	-2.8%	-2.4%	2.5%
Trade Weighted Dollar	28%	-7.5%	4.2%	-5.5%	-8.6%
Commodities					
PPI - Food	96%	24.9%	15.6%	8.7%	7.6%
Consumer Facing Series					
Overall CPI					
Core CPI	54%	10.0%	6.2%	3.4%	3.0%
Cleveland 16% Trimmed Mean CPI (%chg)	84%	1.6%	1.3%	0.4%	0.3%
PCE by Category					
Core PCE	99%	4.3%	2.6%	1.9%	1.8%
PCE - Durable Goods	98%	5.5%	2.1%	0.7%	2.0%
PCE - Nondurable Goods	88%	9.7%	9.2%	5.6%	2.7%
PCE - Services	98%	5.2%	3.0%	2.5%	2.3%
Vacation & Transportation Costs					
CPI - Airline Fare	100%	122.1%	20.1%	5.7%	9.6%
CPI - Lodging Away from Home	100%	91.7%	36.8%	19.7%	7.3%
CPI - New Vehicles	83%	4.6%	1.4%	2.6%	2.0%
CPI - Used Cars and Trucks	100%	115.2%	50.8%	18.5%	21.0%
Housing & Shelter Costs					
CPI - Shelter	76%	4.5%	3.7%	2.5%	2.1%
House Purchase Price Index	95%	10.8%	12.5%	14.9%	12.2%

Source: Haver, Morgan Stanley Research.

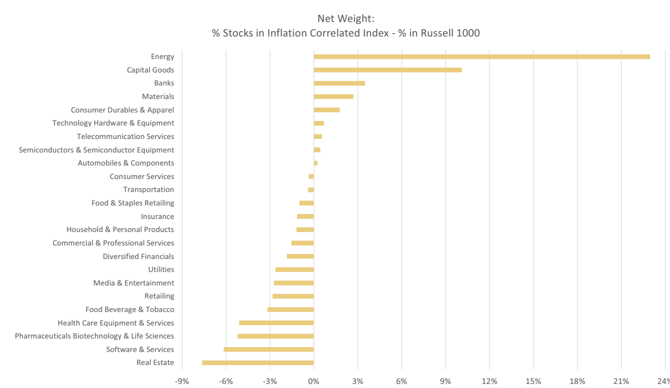
Equities have been efficient in discounting higher inflation expectations. We created a group of the top 10% of the Russell 1000 stocks (where full data was available) based on beta-adjusted residual return correlations with 5-year inflation breakevens. By count, this group tilts toward Energy, Capital Goods, Materials, and Banks both on an absolute basis (Exhibit 115) and relative to the Russell 1000 (Exhibit 116). Equally-weighted, this group of stocks has a clear link between its relative price level vs. the broader market and inflation expectations (r-squared of 74%, Exhibit 117). At this point, though, the group is running about 2 standard errors ahead of what a one-factor, regression-based model would have predicted based on the current level of breakevens (Exhibit 118). We show the full list of this screen in Exhibit 119. Given fairly full pricing relative to already elevated inflation expectations, we're not inclined to chase the "inflation trade," but rather, see the group as an effective portfolio hedge should inflation expectations rise further or a trade to return to on any expectations reset. For the full constituent list of our inflation correlated screen, please see Exhibit 119 and watch for updates via our monthly inflation tracker.

Exhibit 115: Weight by Count of Inflation-Sensitive Screen



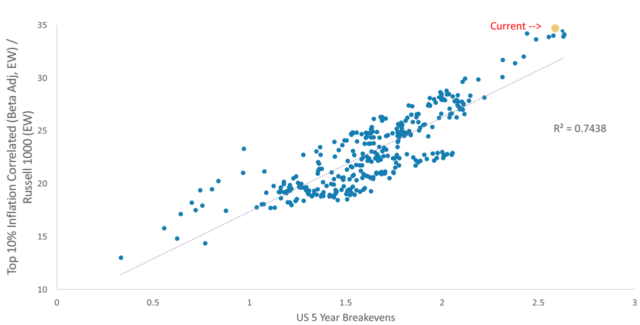
Source: FactSet, Bloomberg, Morgan Stanley Research

Exhibit 116: Inflation-Sensitive Screen Weight by Count vs Russell 1000



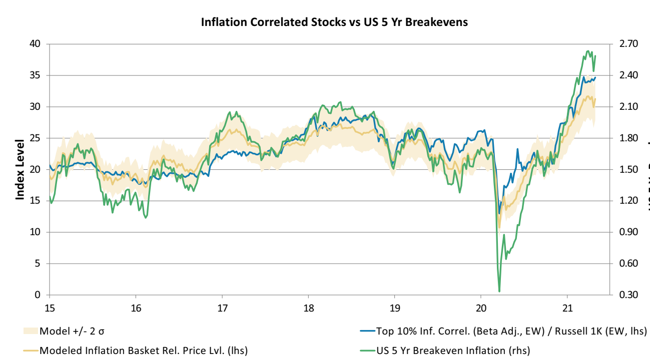
Source: FactSet, Bloomberg, Morgan Stanley Research

Exhibit 117: Breakevens Drive Beta-Adj Returns for Our Inflation-Sensitive Screen...



Source: FactSet, Bloomberg, Morgan Stanley Research

Exhibit 118: ...and Higher Inflation Expectations Look Well Priced



Source: FactSet, Bloomberg, Morgan Stanley Research

Exhibit 119: Russell 1000: Beta-Adjusted Highest Correlation with 5-Year Breakevens

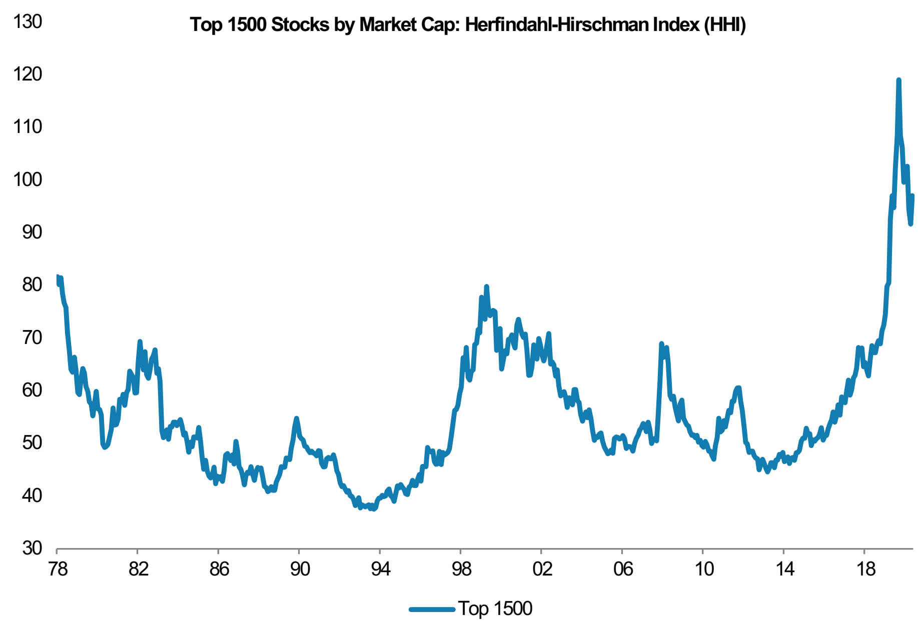
Ticker	Company	Sector	Industry Group	Market Resid. Rtn. Correl. w/ 5 Yr BEs	Market Cap
PWR	Quanta Services, Inc.	Industrials	Capital Goods	38.8%	$14,162
SCCO	Southern Copper Corporation	Materials	Materials	37.5%	$59,186
HAL	Halliburton Company	Energy	Energy	37.3%	$19,974
COP	ConocoPhillips	Energy	Energy	36.2%	$77,397
APA	APA Corp.	Energy	Energy	35.3%	$8,123
CLR	Continental Resources, Inc.	Energy	Energy	35.2%	$10,958
HP	Helmerich & Payne, Inc.	Energy	Energy	35.0%	$3,142
TRGP	Targa Resources Corp.	Energy	Energy	33.1%	$8,712
EOG	EOG Resources, Inc.	Energy	Energy	32.5%	$48,338
MRO	Marathon Oil Corporation	Energy	Energy	32.1%	$9,357
UNVR	Univar Solutions Inc.	Industrials	Capital Goods	30.2%	$4,130
PXD	Pioneer Natural Resources Company	Energy	Energy	30.0%	$36,066
SLB	Schlumberger NV	Energy	Energy	29.4%	$43,908
BKR	Baker Hughes Company Class A	Energy	Energy	29.3%	$18,534
COMM	CommScope Holding Co., Inc.	Information Technology	Technology Hardware & Equipment	28.9%	$3,749
ITT	ITT, Inc.	Industrials	Capital Goods	28.6%	$8,457
DVN	Devon Energy Corporation	Energy	Energy	28.6%	$17,708
OKE	ONEOK, Inc.	Energy	Energy	28.5%	$23,930
NOV	NOV Inc.	Energy	Energy	28.4%	$6,580
MUR	Murphy Oil Corporation	Energy	Energy	27.5%	$3,005
BOKF	BOK Financial Corporation	Financials	Banks	27.4%	$6,279
CFX	Colfax Corporation	Industrials	Capital Goods	27.0%	$5,866
FCX	Freeport-McMoRan, Inc.	Materials	Materials	26.4%	$64,765
HES	Hess Corporation	Energy	Energy	26.2%	$25,503
WDC	Western Digital Corporation	Information Technology	Technology Hardware & Equipment	26.2%	$21,840
FEYE	FireEye, Inc.	Information Technology	Software & Services	25.9%	$4,625
KMI	Kinder Morgan Inc Class P	Energy	Energy	25.8%	$40,445
FANG	Diamondback Energy, Inc.	Energy	Energy	24.2%	$15,172
SWKS	Skyworks Solutions, Inc.	Information Technology	Semiconductors & Semiconductor Equipment	24.1%	$28,911
TWOU	2U, Inc.	Information Technology	Software & Services	23.8%	$2,871
CFR	Cullen/Frost Bankers, Inc.	Financials	Banks	23.2%	$7,831
LEA	Lear Corporation	Consumer Discretionary	Automobiles & Components	23.1%	$11,752
OLLI	Ollie's Bargain Outlet Holdings Inc	Consumer Discretionary	Retailing	23.0%	$5,592
WMB	Williams Companies, Inc.	Energy	Energy	23.0%	$30,557
CAT	Caterpillar Inc.	Industrials	Capital Goods	22.8%	$131,935
XEC	Cimarex Energy Co.	Energy	Energy	22.5%	$7,202
WTFC	Wintrust Financial Corporation	Financials	Banks	22.3%	$4,451
MKSI	MKS Instruments, Inc.	Information Technology	Semiconductors & Semiconductor Equipment	22.3%	$10,147
LYB	LyondellBasell Industries NV	Materials	Materials	21.8%	$38,187
BWXT	BWX Technologies, Inc.	Industrials	Capital Goods	21.8%	$6,291
SEDG	SolarEdge Technologies, Inc.	Information Technology	Semiconductors & Semiconductor Equipment	21.8%	$11,343
FIVN	Five9, Inc.	Information Technology	Software & Services	21.6%	$11,425
EMR	Emerson Electric Co.	Industrials	Capital Goods	21.5%	$56,877
NRG	NRG Energy, Inc.	Utilities	Utilities	21.5%	$8,567
MSM	MSC Industrial Direct Co., Inc. Class A	Industrials	Capital Goods	21.3%	$5,264
LECO	Lincoln Electric Holdings, Inc.	Industrials	Capital Goods	21.3%	$8,013
ACM	AECOM	Industrials	Capital Goods	21.2%	$10,279
AMG	Affiliated Managers Group, Inc.	Financials	Diversified Financials	21.2%	$7,304
CR	Crane Co.	Industrials	Capital Goods	21.0%	$5,768
PRI	Primerica, Inc.	Financials	Insurance	20.8%	$6,418
XOM	Exxon Mobil Corporation	Energy	Energy	20.8%	$263,111
CFG	Citizens Financial Group, Inc.	Financials	Banks	20.6%	$20,941
FLS	Flowserve Corporation	Industrials	Capital Goods	20.6%	$5,548
ROL	Rollins, Inc.	Industrials	Commercial & Professional Services	20.6%	$18,277
PSX	Phillips 66	Energy	Energy	20.5%	$37,643
CPRI	Capri Holdings Limited	Consumer Discretionary	Consumer Durables & Apparel	20.4%	$8,913
OLN	Olin Corporation	Materials	Materials	20.2%	$7,429
NTRS	Northern Trust Corporation	Financials	Diversified Financials	19.8%	$24,677
VOYA	Voya Financial, Inc.	Financials	Diversified Financials	19.8%	$8,464
TPR	Tapestry, Inc.	Consumer Discretionary	Consumer Durables & Apparel	19.6%	$13,625
EQT	EQT Corporation	Energy	Energy	19.6%	$5,722
PKI	PerkinElmer, Inc.	Health Care	Pharmaceuticals Biotechnology & Life Scienc	19.4%	$15,665
PH	Parker-Hannifin Corporation	Industrials	Capital Goods	19.3%	$41,239
HBI	Hanesbrands Inc.	Consumer Discretionary	Consumer Durables & Apparel	19.1%	$7,781
VMI	Valmont Industries, Inc.	Industrials	Capital Goods	19.1%	$5,513
PB	Prosperity Bancshares, Inc.(R)	Financials	Banks	19.0%	$6,955
CF	CF Industries Holdings, Inc.	Materials	Materials	18.7%	$11,731
ALSN	Allison Transmission Holdings, Inc.	Industrials	Capital Goods	18.5%	$4,946
WLK	Westlake Chemical Corporation	Materials	Materials	18.4%	$13,246
UNM	Unum Group	Financials	Insurance	18.4%	$6,087
LNC	Lincoln National Corporation	Financials	Insurance	18.3%	$13,220
UNP	Union Pacific Corporation	Industrials	Transportation	18.1%	$152,361
DLB	Dolby Laboratories, Inc. Class A	Information Technology	Technology Hardware & Equipment	18.1%	$9,813
PLNT	Planet Fitness, Inc. Class A	Consumer Discretionary	Consumer Services	17.8%	$6,471
COHR	Coherent, Inc.	Information Technology	Technology Hardware & Equipment	17.8%	$6,349
MTB	M&T Bank Corporation	Financials	Banks	17.8%	$20,907
ACHC	Acadia Healthcare Company, Inc.	Health Care	Health Care Equipment & Services	17.7%	$5,763
URI	United Rentals, Inc.	Industrials	Capital Goods	17.6%	$25,162
FNB	F.N.B. Corporation	Financials	Banks	17.6%	$4,333
USM	United States Cellular Corp	Communication Services	Telecommunication Services	17.2%	$3,080
CBT	Cabot Corporation	Materials	Materials	17.2%	$3,589
KEX	Kirby Corporation	Industrials	Transportation	17.1%	$4,041
STAY.U	Extended Stay America, Inc.	Consumer Discretionary	Consumer Services	17.1%	$3,498
SATS	EchoStar Corporation Class A	Information Technology	Technology Hardware & Equipment	17.0%	$2,439
WWE	World Wrestling Entertainment, Inc. Class A	Communication Services	Media & Entertainment	17.0%	$4,213
AL	Air Lease Corporation Class A	Industrials	Capital Goods	16.9%	$5,143
GDDY	GoDaddy, Inc. Class A	Information Technology	Software & Services	16.9%	$13,648
RL	Ralph Lauren Corporation Class A	Consumer Discretionary	Consumer Durables & Apparel	16.9%	$10,052

Source: FactSet, Bloomberg, Morgan Stanley Research

Tech Diffusion - Data Era Stocks

A Broadening Market. The impact of the Great Covid Recession (GCR) will be felt for years to come. Our view is that the economy is recovering and the typical Recession Playbook suggests that recovery brings a new bull market and broader market participation for the average stock. Market cap concentration peaked during the GCR and has begun to normalize (Exhibit 5). We think there is a long way to go. Broader participation comes from a cyclical upswing to earnings but we also see a case for enhanced productivity as companies and consumers adapt to a new normal.

Exhibit 120: Market Concentration Is Near All Time Highs; We see Tech Diffusion Changing This



Source: ClariFi, Morgan Stanley Research.
NOTE: HHI is a measure of concentration derived from taking the sum of squared market cap shares among stocks in the index.

'Data Era' to Drive Productivity. We are in the early innings of a technology-driven, decade-long investment cycle centered on data, and digitalization that allows businesses to gain insights, improve business outcomes, and drive productivity. COVID-19 has been a wake-up call to accelerate this digital transformation, as companies with a greater digital presence are showing more resiliency. Many of our analysts already see early evidence that business models are shifting in anticipation of permanent shifts in consumer tastes and preferences, accelerating trends in e-Commerce and e-Services, and wider adoption of productivity-enhancing technologies like cloud computing, collaboration tools, automation, and data analytics. See Emerging Themes in Life After Covid (10 Jul 2020). Additionally, we see a clear mindset shift at the executive level from viewing technology as supporting the business to technology becoming the business.

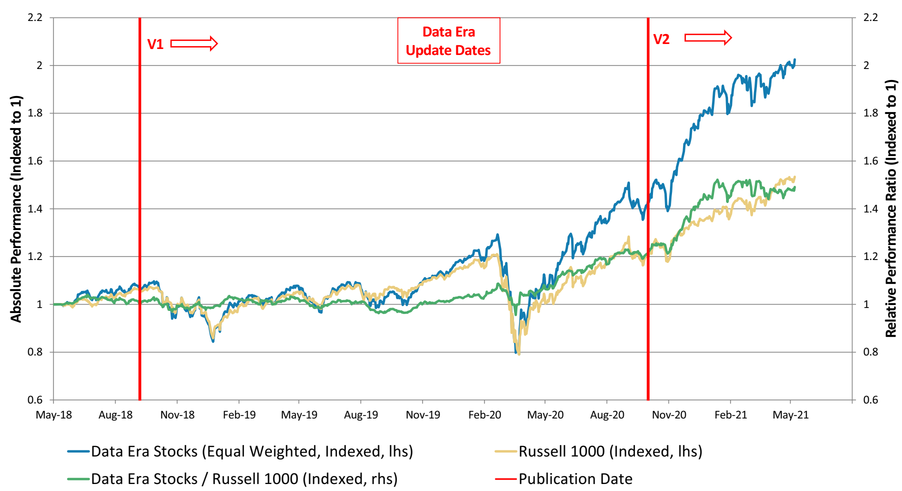
COVID has catalyzed outperformance of our Data Era stocks. In 2018, we created a list of "Data Era" stocks by asking our analysts outside of the Technology sector to highlight companies investing in technology to drive value in the form of improved cost structure and/or incremental revenue streams (What's Technology Worth? - 6 Sep 2018). Last fall, about two years after creating the original list, we repeated the process to create our Data Era 2.0 stock list — a list of stocks that our analysts believed could build a technology edge and help close the significant valuation gap between Technology stocks and the rest of the market (Exhibit 121, What's Technology Worth: Introducing Data Era Stocks 2.0 - 1 Oct 2020). Since publication of our 2.0 list, on an equal weighted basis that group has outperformed the market (Exhibit 122). These stocks tend to show higher EBIT margins and higher forward P/E multiples despite R&D and capex being a larger percentage of sales. A premium to peers also reflects factors beyond tech investment, but we believe the trend speaks to technology advantages enabling companies to improve revenue and profitability, which is rewarded by the market.

Exhibit 121: Investing for Shareholder Returns (*reflects additions not on Data Era 1.0 List)

Data Era 2.0 Stocks	
AES Corporation*	Raymond James Financial, Inc.*
Amazon.com, Inc.	S&P Global, Inc.
BlackRock, Inc.	Schlumberger NV*
Bloom Energy Corporation*	Schrodinger, Inc.*
Caesars Entertainment Inc*	Sherwin-Williams Company*
Citizens Financial Group, Inc.*	Spotify Technology SA
Deere & Company	Stanley Black & Decker, Inc.*
Domino's Pizza, Inc.	Starbucks Corporation*
Estee Lauder Companies Inc.*	Teck Resources Limited*
Honeywell International Inc.	Tesla Inc
Invitation Homes, Inc.*	T-Mobile US, Inc.*
Lemonade Inc*	UnitedHealth Group Incorporated
Mastercard Incorporated	Valero Energy Corporation*
Netflix, Inc.	Verisk Analytics Inc
New Fortress Energy Inc.*	Verizon Communications Inc.*
NIKE, Inc.	Walmart Inc.*
Northrop Grumman Corporation*	Walt Disney Company
Penn National Gaming, Inc.*	XPO Logistics, Inc.
Progressive Corporation*	

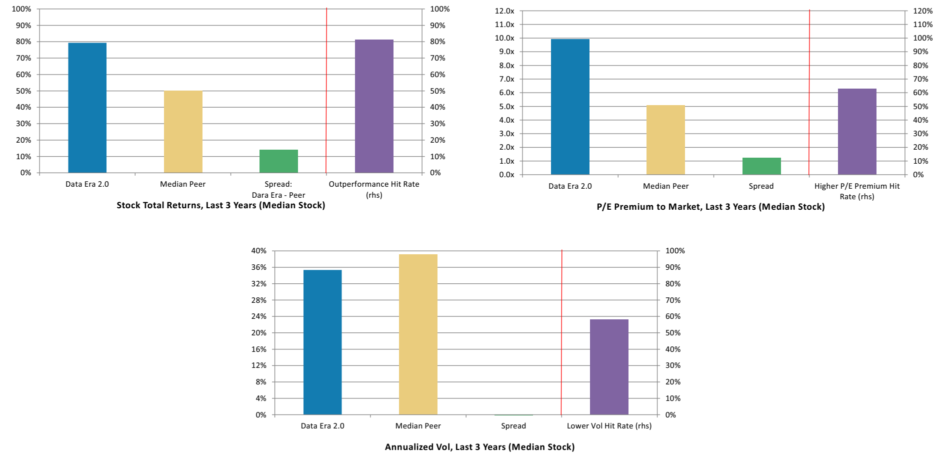
Source: Morgan Stanley Research. Valero Energy (VLO, $81.21, not covered)

Exhibit 122: COVID Catalyzed Outperformance of Data Era Stocks



Source: FactSet, Morgan Stanley Research.

Exhibit 123: Data Era Stocks Have Outperformed with Higher Valuations and Lower Vol Than Peers



Source: FactSet, Morgan Stanley Research.

The Return of Capex

The return of capex and investment is one of the major themes from our economics team with this mid-year outlook. They see an economy running hot dealing with supply side constraints and robust demand combining incentivize business investment. The belief is that businesses will look to boost productivity and output to meet a robust demand environment and counter cost pressures on margins.

This means capex will generally grow above GDP through our forecast horizon, but with some forms of investment driving this more than others. In the exhibit below we show historical growth and our projections for (1) non-resi fixed private investment and it its component parts: (2) intellectual property investment (we omit expenditures on entertainment), (3) equipment ex-information processing, (4) information processing equipment, and (5) other/structures. Here's what stands out:

- **Non-resi investment:** We project non-resi investment modestly outgrows GDP. The overall modest growth above GDP is a function of the mixed relative growth rates of component parts.
- **Intellectual property investment:** IP investment outgrew GDP by an average of 6% last year, as IP spend continued to grow while GDP contracted. Importantly, most of the relative growth differential actually came from continued growth in IP rather than negative growth in GDP, a reflection of the accelerated shift toward a digital economy in 2020. This relative strength also sets this form of investment up for some *relative* slowdown as we project absolute growth remains in the mid-single digits, but this ultimately lags GDP growth which benefits from easier base effects.
- **Equipment, ex-info processing:** Along with structures spending this type of equipment spending contracted in absolute terms and relative to GDP,setting up a rebound on both fronts through 2021. While we expect absolute and GDP relative growth slow down into 2020, both remain quite positive, making equipment investment one of our key sources of capex growth.
- **Info processing equipment:** Info processing equipment spend has a similar pattern to other equipment spend but the magnitude of the rebound seen to date is substantially larger. The absolute growth y/y ran at the highest level in the history of the series which is especially remarkable given the fall in (and therefore base effects for) 2020 were not as big on the downside. We see moderation off high growth rates in 2022, but absolute spending remains fairly robust.
- **Other/structures:** We see a delayed but robust rebound into 2022, with relative growth accelerating as other sources begin to slow.

Exhibit 124: The Return of Capex: Investment Spending Outlook Is Generally Strong

Source: Bloomberg, Haver, Morgan Stanley Research estimates.

Over the last several decades, capex/investment growth has tended to have strong correlation with the relative sales growth of certain industries. With equipment (both with and without info processing) among the bigger growers in investment relative to GDP over the next year, we focus on which industries have tended to see their sales growth relative to the broader public equity universe correlate with relative investment growth. The exhibits below show the 10 most and least correlated industries based on where investment vs GDP growth lines up with higher/lower sales compared to the market. We note that correlation of relative performance vs the market in these same periods is much weaker/more mixed as the market discounts the spending in advance of it coming. In line with the outlook we laid above we make a similar case for being selective

Exhibit 125: Most Correlated Industries: Mkt Relative Sales Growth and Equipment ex-Info Processing Investment vs GDP Growth

Industry	Ind Y/Y Sales Growth vs Mkt Correl w/ Y/Y: Equipment (ex- Info Processing) less GDP
Machinery	59%
Electronic Equipment, Instruments & Components	54%
Health Care Technology	54%
Professional Services	52%
Communications Equipment	50%
Semiconductors & Semiconductor Equipment	47%
Computers & Peripherals	46%
Auto Components	45%
Distributors	44%
Metals & Mining	40%
Health Care Providers & Services	-19%
Diversified Telecommunication Services	-22%
Food Products	-24%
Diversified Consumer Services	-24%
Household Products	-27%
Multiline Retail	-28%
Commercial Services & Supplies	-31%
Health Care Equipment & Supplies	-32%
Food & Staples Retailing	-33%
Aerospace & Defense	-33%

Source: ClariFi, FactSet, Morgan Stanley Research.

Exhibit 126: Most Correlated Industries: Mkt Relative Sales Growth and Info Processing Equipment Investment vs GDP Growth

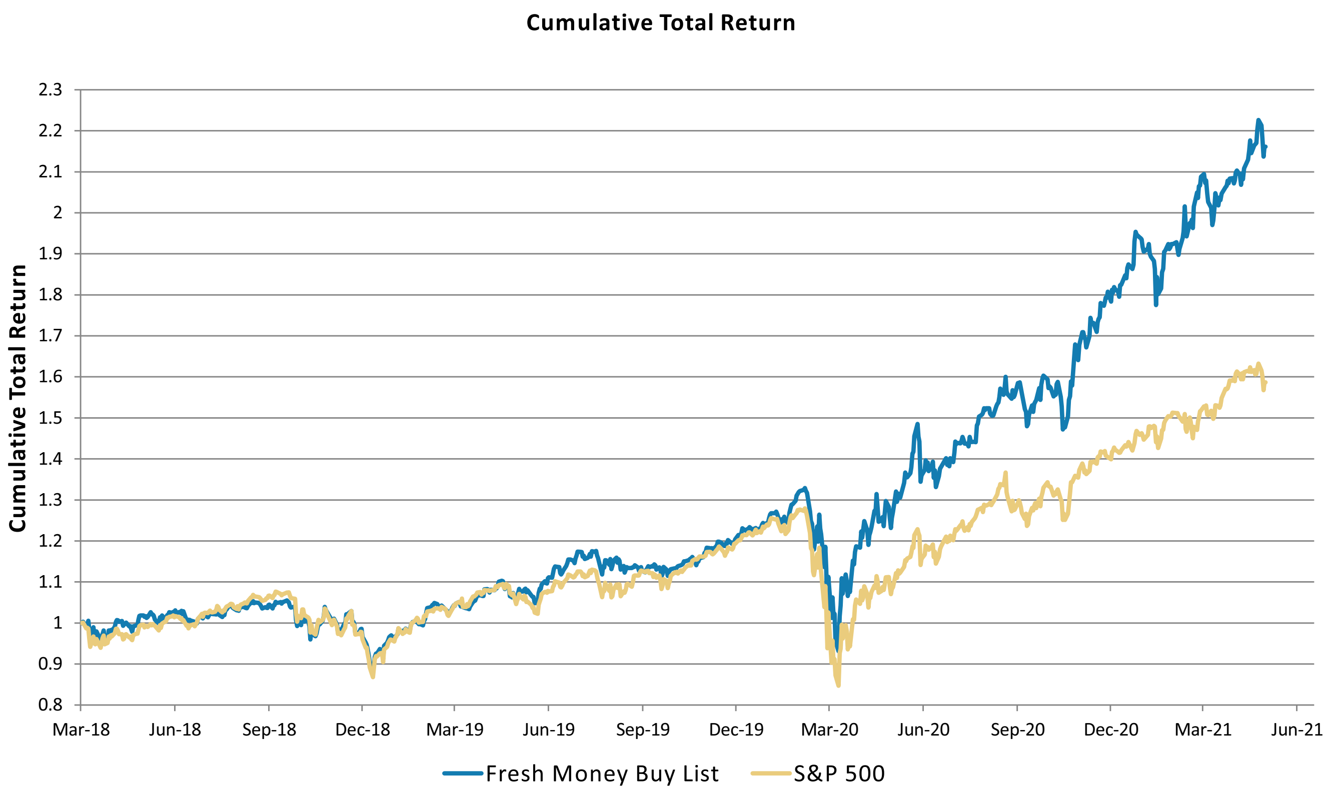
Industry	Ind Y/Y Sales Growth vs Mkt Correl w/ Y/Y: Info Processing Equip less GDP
Semiconductors & Semiconductor Equipment	66%
Communications Equipment	62%
Electronic Equipment, Instruments & Components	58%
Software	56%
Computers & Peripherals	51%
Distributors	46%
Professional Services	41%
Electric Utilities	39%
Gas Utilities	38%
Media	35%
Multiline Retail	-19%
Pharmaceuticals	-21%
Household Durables	-21%
Health Care Providers & Services	-22%
Commercial Services & Supplies	-23%
Construction & Engineering	-25%
Air Freight & Logistics	-26%
Specialty Retail	-27%
Health Care Equipment & Supplies	-27%
Food Products	-30%

Source: ClariFi, FactSet, Morgan Stanley Research.

Fresh Money Buy List

We do not make changes to our Fresh Money Buy List today as it generally reflects our broader views on the recovery from here. Exhibit 128 shows our current list along with historical performance statistics. See below for updates on select stocks on the list where our analysts have published in the last week.

Exhibit 127: Fresh Money Buy List vs. S&P 500 Cumulative Total Returns



Source: Bloomberg, Morgan Stanley Research.
Note performance shows from FMBL inception to present. FMBL performance index above is rebalanced to an equal weighting among all members on dates of list changes.

Exhibit 128: Fresh Money Buy List - Stats & Performance

Company Name	Ticker	MS Rating	Sector	Market Cap ($Bn)	Price	MS PT	% to MS PT	Date Added	Total Return Since Inclusion	
									Absolute	Rel. to S&P
Alphabet Inc.	GOOGL	Overweight	Communication Services	$1,537.6	$2,273.58	$2,575.00	13.3%	4/5/2021	6.8%	2.8%
Citizens Financial Group, Inc	CFG	Overweight	Financials	$21.4	$50.13	$56.00	11.7%	4/20/2020	169.6%	121.9%
Exxon Mobil Corporation	XOM	Overweight	Energy	$256.5	$60.59	$71.00	17.2%	2/22/2021	17.4%	10.2%
Humana Inc	HUM	Overweight	Health Care	$58.5	$453.26	$500.00	10.3%	7/19/2018	45.8%	(10.4%)
Lamar Advertising Co.	LAMR	Overweight	Real Estate	$10.3	$102.32	$115.00	12.4%	2/22/2021	20.9%	13.7%
MasterCard, Inc.	MA	Overweight	Information Technology	$359.7	$362.96	$444.00	22.3%	3/2/2020	25.9%	(18.3%)
Simon Property Group Inc	SPG	Overweight	Real Estate	$40.1	$122.11	$135.00	10.6%	2/16/2021	13.0%	6.6%
Synchrony Financial	SYF	Overweight	Financials	$27.2	$46.69	$55.00	17.8%	2/22/2021	23.2%	16.1%
T-Mobile US, Inc.	TMUS	Overweight	Communication Services	$176.8	$141.83	$146.00	2.9%	3/14/2018	118.7%	58.6%
Welltower Inc.	WELL	Overweight	Real Estate	$30.6	$73.31	$79.00	7.8%	2/22/2021	8.1%	0.9%
Current List Performance										
Average (Eq. Weight)				$251.9			12.6%		44.9%	20.2%
Median				$49.3			12.1%		22.1%	8.4%
% Positive Returns (Abs. / Rel.)									100%	80%
% Negative Returns (Abs. / Rel.)									0%	20%
Avg. Hold Period (Months)										11.5
All Time List Performance										
Average (Eq. Weight)									34.4%	15.9%
Median									19.2%	6.6%
% Positive Returns (Abs. / Rel.)									81%	58%
% Negative Returns (Abs. / Rel.)									19%	42%
Avg. Hold Period (Months)										12.4

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

Source: Bloomberg, Morgan Stanley Research.

Simon Property Group (SPG), Richard Hill

- **5 Key Points Post 1Q21 Earnings** - We focus on 5 key questions post 1Q21 earnings: 1) is guide conservative?, 2) what's total portfolio growth, 3) is TRG unconsolidated? 4) why did leasing spreads decline and 5) how are retail investments performing? We think the Q was better than we expected; future beats & raises are in focus.

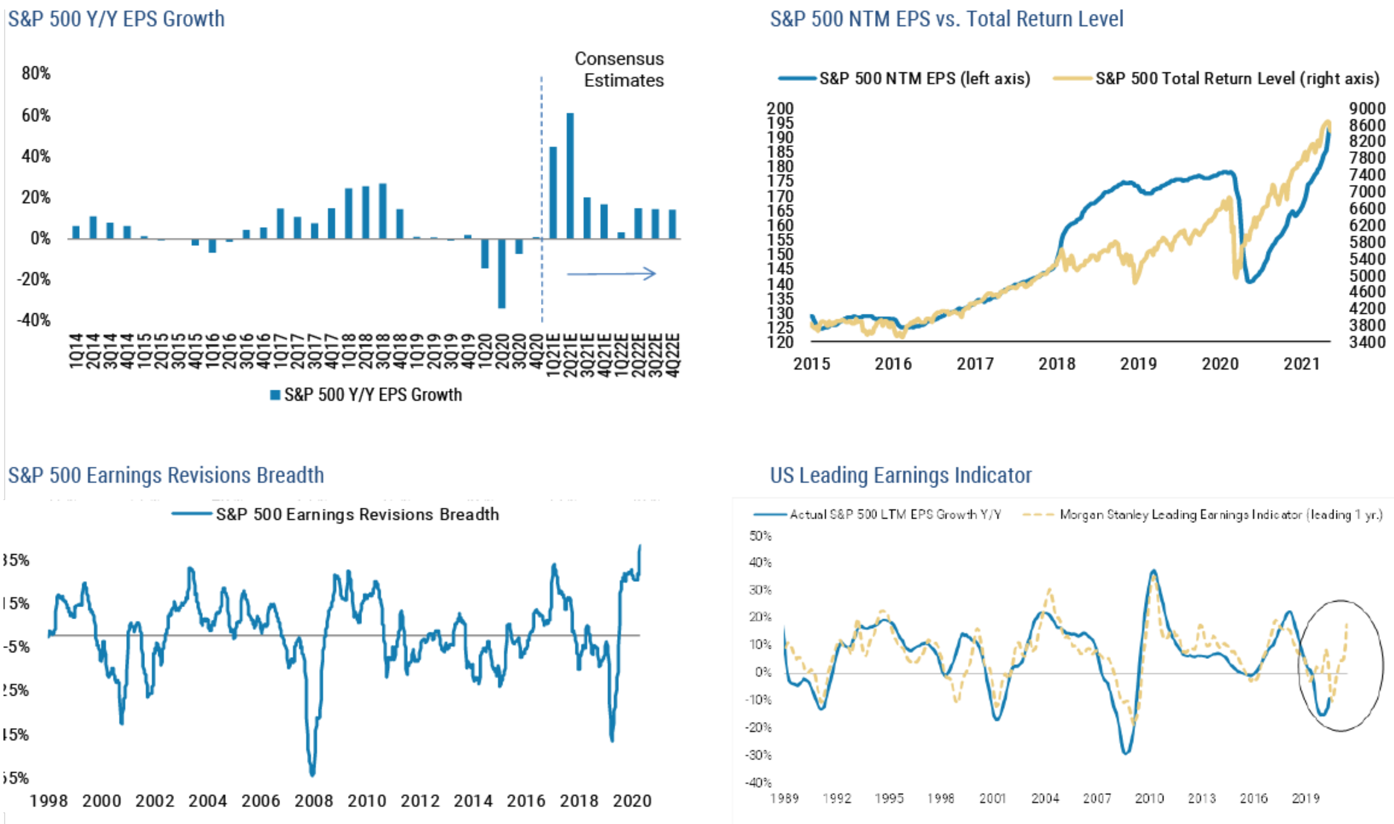
- **FFO Beats & Guide Raised; Metrics Mixed** - FFO beat cons by $0.21, benefitting from $0.10 of lease term. income. Guide raised by $0.13 to $9.75. Domestic NOI improved to -8.4% and total portfolio NOI increased to +4%, but includes Taubman. Base min rent PSF increased, but leasing spreads decelerated and occupancy declined.

Synchrony Financial (SYF), Betsy Graseck

- **Top Pick... 5 Reasons to Be Cheerful** - SYF is an undervalued growth stock. Loan & revenue growth is accelerating in 2H21e. Credit risk is likely to be absent for years, which along with accelerating buybacks boosts ROTCE to above trend levels for several years. PT up by 2% on higher EPS given growing confidence in loan growth through '23.

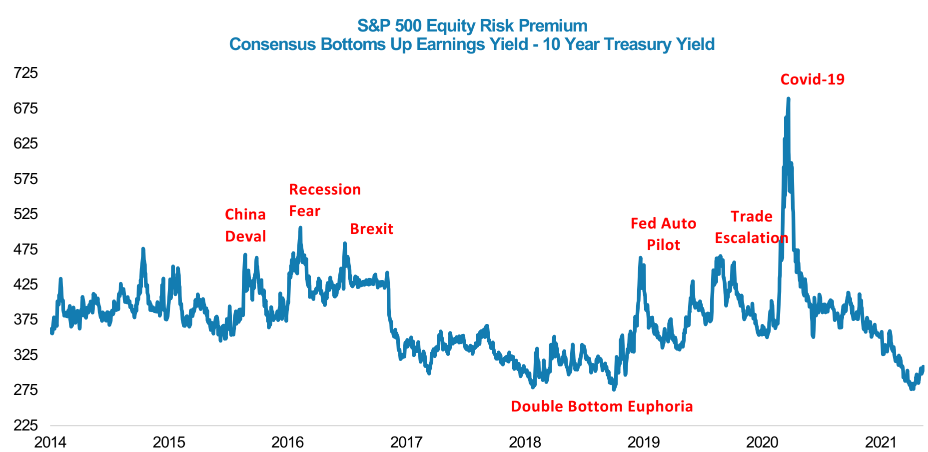
Weekly Charts to Watch

Exhibit 129: US Earnings Snapshot



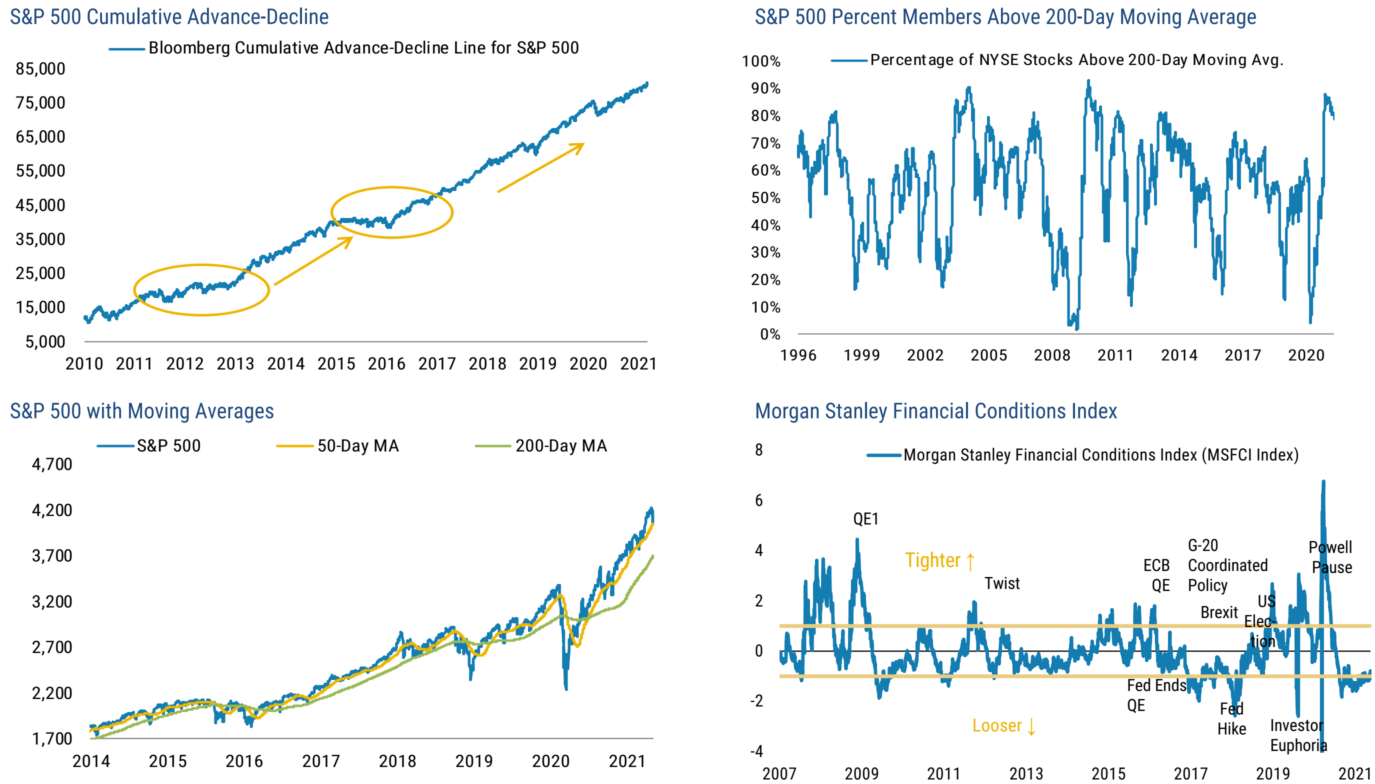
Source: Thomson Financial, FactSet, Morgan Stanley Research. Top and Bottom Left: As of May 13, 2021 Bottom right As of Apr 30, 2020. MS Leading Earnings Indicator is a macro factor based earnings model that leads actual earnings growth by one year with a 0.7 12-month leading correlation. Note: S&P 500 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 130: S&P 500 Equity Risk Premium



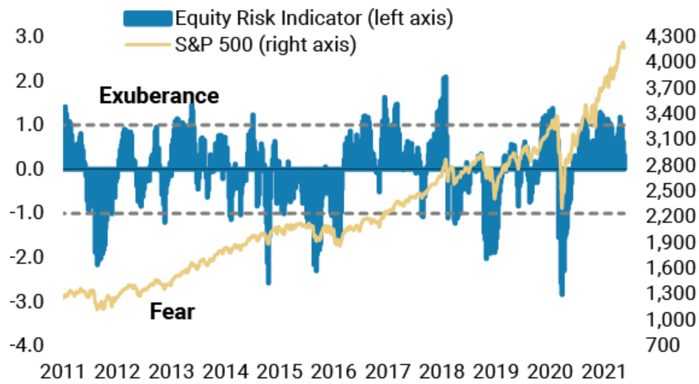
Source: Bloomberg, Morgan Stanley Research. As of May 13, 2021

Exhibit 131: US Equity Market Technicals and Financial Conditions

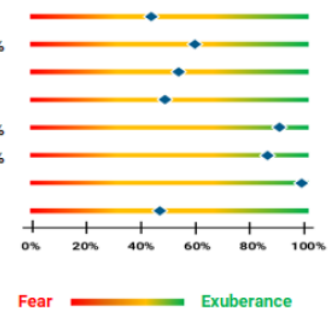


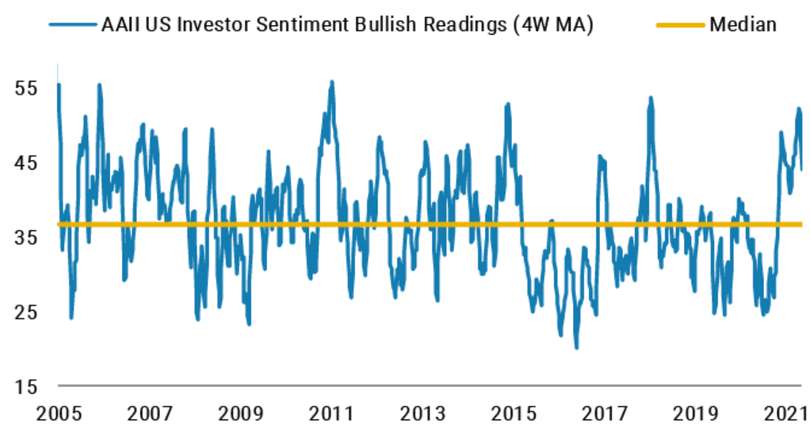
Source: Bloomberg, Morgan Stanley Research. All: As of May 13, 2021

Exhibit 132: US Equity Market Sentiment



Indicator	Latest	% Rank Vs. Last Three Years
MS & Co. Standardized GRDI	0.1	
US AAII % Bulls	36.5%	
S&P 500 Mutual Fund Beta	1.1	
S&P 500 30-Day Rel. Strength Index	56.9	
% S&P 500 Members > 200-Day MA	90.0%	
% S&P 500 >/< 200-Day MA	12.6%	
S&P 500 Put/Call[1]	0.5	
VIX Index[1]	19.1	

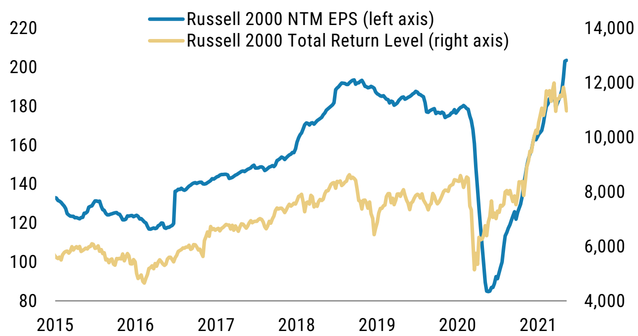




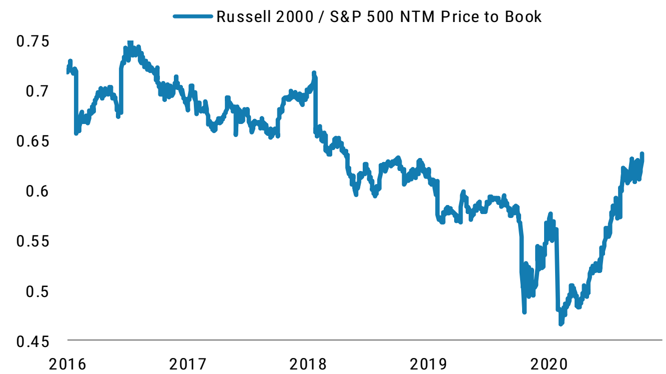
Source: Bloomberg, FactSet, Morgan Stanley Research. As of May 13, 2021.

Exhibit 133: US Small Cap Equities

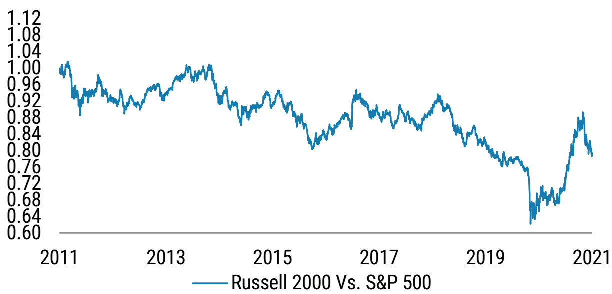
Russell 2000 NTM EPS vs. Total Return Level



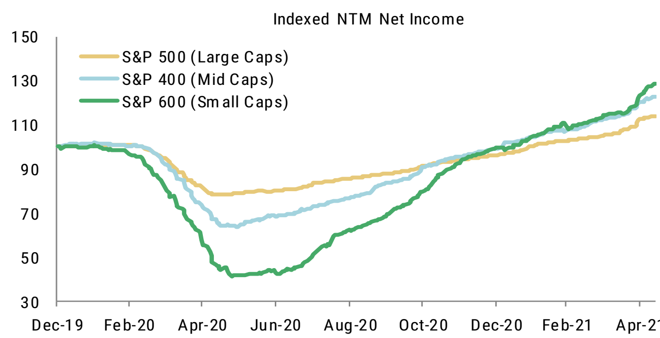
Russell 2000 NTM P/B and Relative NTM P/B vs. S&P 500



Russell 2000 Relative Performance vs. S&P 500

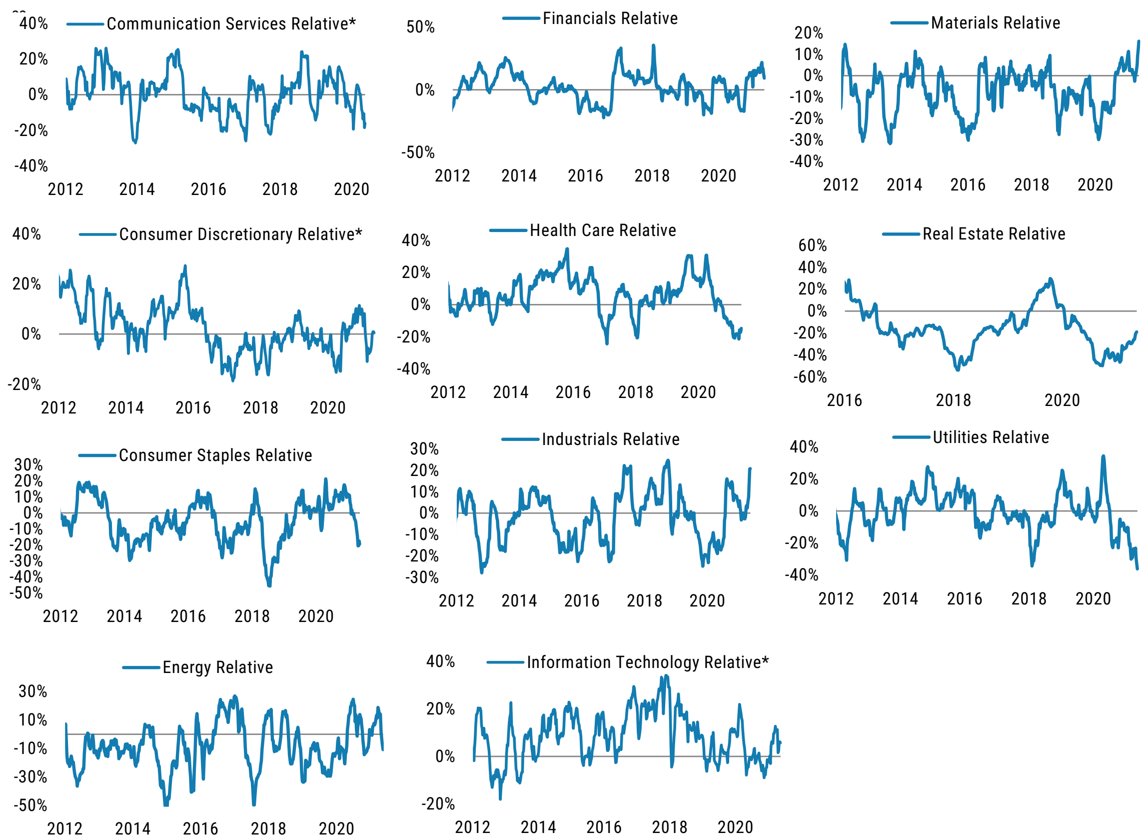


NTM EPS by Cap Size



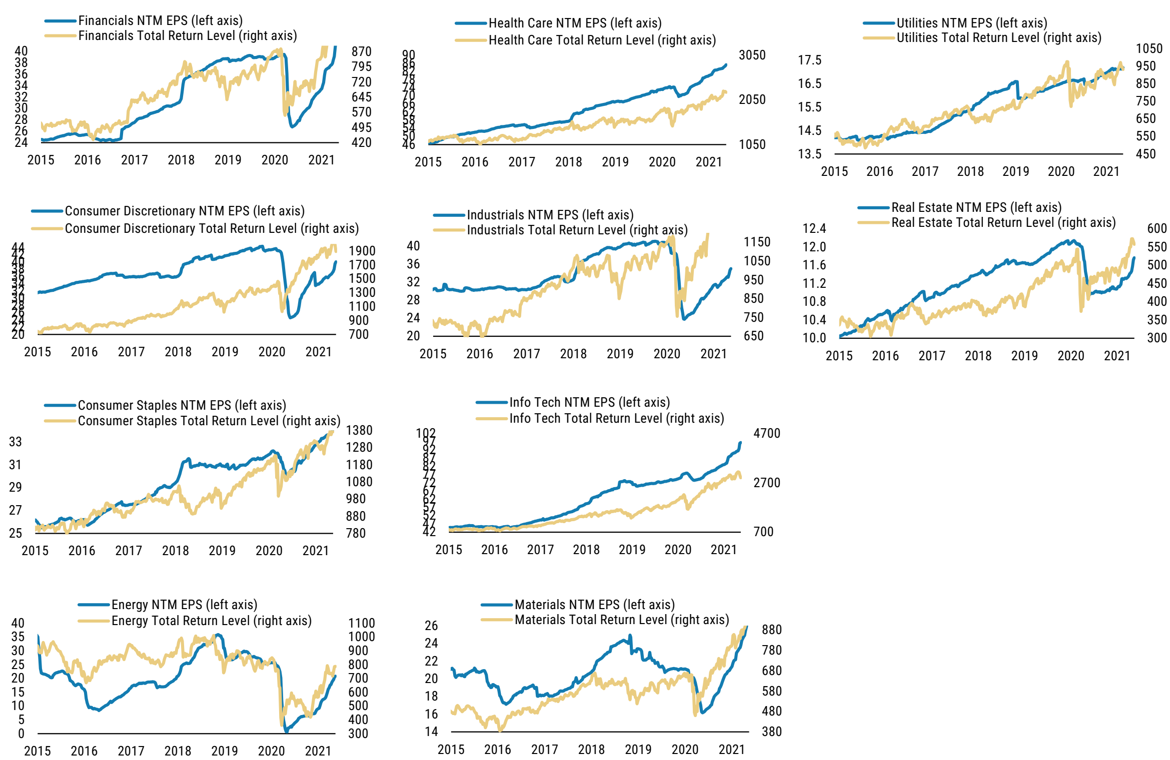
Source: FactSet, Morgan Stanley Research. All: As of May 13, 2021.

Exhibit 134: Earnings Revisions Breadth



Source: FactSet, Morgan Stanley Research. As of May 12, 2021. Sectors with * use current, fixed constituents.

Exhibit 135: US Sector NTM EPS vs. Total Return Level



Source: FactSet, Morgan Stanley Research as of May 13, 2021.

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Holdings Inc, Prelude Therapeutics Inc, Procter & Gamble Co., Prologis, Inc., Public Service Enterprise Group Inc, Public Storage, Pulmonx Corporation, Quantumscape Corp, RealReal Inc, Realty Income Corp, Regeneron Pharmaceuticals Inc., Regenxbio Inc, Regions Financial Corp, RenaissanceRe, Repare Therapeutics Inc, Repay Holdings Corporation., Resideo Technologies Inc, Restaurant Brands International, Inc., Rhythm Pharmaceuticals Inc, Rocket Cos Inc, Root Inc, S&P Global Inc, Sana Biotechnology, Inc, Schrodinger Inc., Seagate Technology, SelectQuote Inc, Shift4 Payments Inc., Shoals Technologies Group, Shockwave Medical Inc., SI-BONE Inc., Sigilon Therapeutics Inc, Signature Bank, Site Centers Corp, Snap Inc., Solaredge Technologies Inc, Spirit Realty Capital, Spotify Technology SA, Square Inc, Stanley Black & Decker, StepStone Group, STORE Capital Corp, Stride Inc, Stryker Corporation, Sunrun Inc, SVB Financial Group, Synovus Financial Corp., T-Mobile US, Inc., Taysha Gene Therapies Inc., Telephone & Data Systems, TELUS Corp., TFI International Inc, The Blackstone Group Inc, ThredUp Inc., Transmedics Group Inc, Tronox Holdings Plc-Class A, Truist Financial Corp, TuSimple Holdings Inc, Twitter Inc, U.S. Bancorp, Uber Technologies Inc, UDR, Inc., United Rentals Inc., UnitedHealth Group Inc, US Cellular Corporation, Valley National Bancorp, Valvoline Inc., Vereit Inc, Verizon Communications, ViacomCBS Inc, ViaSat Inc, VICI Properties Inc, Vistra Energy Corp, Vornado Realty Trust, W.R. Berkley Corp., Warner Music Group Corp., Wells Fargo & Co., Welltower Inc., Werner Enterprises, Westinghouse Air Brake Technologies Corp, WillScot Corporation, Xenia Hotels & Resorts Inc, XPO Logistics, Inc., Y-mABs Therapeutics Inc., Yum! Brands, Inc., Zentalis Pharmaceuticals Inc, Zillow Group Inc, Zynga Inc.

Within the last 12 months, Morgan Stanley has received compensation for investment banking services from 3M Co., Abbott Laboratories, Adagene Inc., ADC Therapeutics SA, ADT Inc, AES Corp., Affirm Holdings Inc, Airbnb Inc, Akero Therapeutics Inc, Albertsons Companies, Inc, Alcoa Corp, Alignment Healthcare Inc, Alliance Data Systems Corp, AlloVir Inc, Allstate Corporation, Ally Financial Inc, Alphabet Inc., Amazon.com Inc, AMC Networks, Inc., American Assets Trust Inc., American Electric Power Co, American Homes 4 Rent, American Int'l Grp, Anthem Inc, Apollo Global Management Inc, Apple, Inc., AppLovin Corp, Aramark Holdings Corporation, Ares Management Corp, argenx SE, Array Technologies Inc, Ascendis Pharma A/S, Assurant Inc., AT&T, Inc., Atea Pharmaceuticals Inc, Automatic Data Processing Inc, AvalonBay Communities Inc., Avanos Medical Inc, Avient Corporation, Avis Budget Group Inc, AVROBIO Inc, Bank of America, Baxter International, Becton Dickinson, Biomarin Pharmaceutical Inc, Bioventus, Inc., BlackRock Inc., Blue Apron Holdings Inc, BNY Mellon, Bolt Biotherapeutics, Inc., Boston Properties, Inc., Boston Scientific, Brightsphere Investment Group Inc., Broadstone Net Lease, Inc., Bumble Inc., C.H. Robinson Worldwide Inc., Caesars Entertainment Inc., Capital One Financial Corporation, Carlyle Group Inc, Carrier Global Corporation, Caterpillar Inc., CDW Corporation, Certara Inc, Charles Schwab Corp, Cheniere Energy Inc, Cheniere Energy Partners LP, Chewy Inc, Chipotle Mexican Grill, Inc., CIT Group Inc., Citizens Financial Group, Inc, Clear Channel Outdoor Holdings, Inc., CNH Industrial NV, Colfax Corp, Colgate-Palmolive Co, Columbia Property Trust Inc, Comerica Inc, Commerce Bancshares, Compass, Inc., Corteva Inc., Costco Wholesale Corp, Cricut Inc, CSX Corporation, Cullen/Frost Bankers, Cullinan Oncology Inc, Dell Technologies Inc., Despegar.com Corp, DHC US, Dominion Energy Inc, DraftKings Inc, Driven Brands Holdings Inc, DTE Energy Co., Duke Realty Corp., DuPont De Nemours Inc., Eaton Corporation PLC, eBay Inc, Editas Medicine, elf Beauty, Esperion Therapeutics Inc, Evelo Biosciences Inc, Everest Re Group, Ltd., Evofem Biosciences Inc, Exelon Corp, Extra Space Storage Inc., FedEx Corporation, Fidelity National Information Services, Fifth Third Bancorp, First Horizon National, First Republic Bank, Floor & Decor Holdings Inc, Foghorn Therapeutics, Ford Motor Company, Fortive Corp, Franklin Resources Inc., Freeline Therapeutics Holdings plc, Fusion Pharmaceuticals Inc, Garrett Motion Inc, Gates Industrial Corporation plc, General Electric Co., General Motors Company, Gilead Sciences Inc., Gogo Inc, GoHealth Inc, Groupon, Inc., Hamilton Lane Inc., Hannon Armstrong, Hayward Holdings Inc, Healthcare Trust of America Inc, Healthpeak Properties Inc, Heartland Express Inc., Helios Technologies Inc, Hilton Worldwide Holdings Inc, Home Depot Inc, Home Point Capital Inc, Honeywell International Inc, Hookipa Pharma Inc, Host Hotels & Resorts, Inc., HP Inc., Hubbell Inc., Huntington Bancshares, iHeartMedia Inc, IHS Markit Ltd, Illinois Tool Works, Inari Medical Inc, Insmed Inc, Instil Bio, Insulet Corp., International Flavors & Fragrances, Interpublic Group, Invesco, Invitation Homes Inc, IRHYTHM TECHNOLOGIES INC, Johnson Controls International Plc, JPMorgan Chase & Co, Kaleido Biosciences Inc., Kansas City Southern, KeyCorp, Kimberly-Clark Corp, Kimco Realty Corp., Kodiak Sciences Inc, Kroger Co., Kymera Therapeutics Inc, L3Harris Technologies Inc, Legend Biotech Corp, Lemonade Inc., Leslie's, Inc., Levi Strauss & Co, Lions Gate Entertainment Corp., Lithia Motors Inc., Live Nation Entertainment Inc., LoanDepot Inc, Lockheed Martin Corp, LPL Financial Holdings Inc., LUMEN TECHNOLOGIES INC, LyondellBasell Industries N.V., Marsh & McLennan Cos, Match Group Inc, MDA Ltd, MGM Growth Properties LLC, MGM Resorts International, Moderna Inc, Moelis & Co, MSCI Inc., Nabors Industries Inc., National Retail Properties Inc, National Storage Affiliates Trust, NetApp Inc, New Senior Investment Group Inc, NextEra Energy Inc, Nike Inc., Norfolk Southern Corp., NRG Energy Inc, NuVasive Inc, Office Properties Income Trust, Old Dominion Freight Line Inc, Open Lending Corp., OUTFRONT MEDIA INC, Outset Medical, Inc., Penn National Gaming, Inc., People's United Financial, Inc., Pharvaris B.V., Playtika Holding Corp, Plug Power Inc., PNC Financial Services, Poshmark Inc, PPG Industries Inc., PQ Group Holdings Inc, Prelude Therapeutics Inc, Procter & Gamble Co., Prologis, Inc., Public Service Enterprise Group Inc, Public Storage, Pulmonx Corporation, Quantumscape Corp, RealReal Inc, Realty Income Corp, Regenxbio Inc, Regions Financial Corp, RenaissanceRe, Repare Therapeutics Inc, Repay Holdings Corporation., Resideo Technologies Inc, Restaurant Brands International, Inc., Rhythm Pharmaceuticals Inc, Roblox Corporation, Rocket Cos Inc, Roku Inc., Romeo Power, Inc., S&P Global Inc, Sana Biotechnology, Inc, Schlumberger NV, Schrodinger Inc., Seagate Technology, SelectQuote Inc, Shoals Technologies Group, Shockwave Medical Inc., SI-BONE Inc., Sigilon Therapeutics Inc, Signature Bank, Site Centers Corp, Snap Inc., Solaredge Technologies Inc, Spirit Realty Capital, Spotify Technology SA, Square Inc, Stanley Black & Decker, StepStone Group, STORE Capital Corp, Stride Inc, Stryker Corporation, Sunrun Inc, SVB Financial Group, Synovus Financial Corp., T. Rowe Price Group, Inc., Taysha Gene Therapies Inc., TECHNIPFMC, Telephone & Data Systems, TELUS Corp., Tesla Inc, TFI International Inc, The Blackstone Group Inc, Thomson Reuters Corp., ThredUp Inc., Tradeweb Markets Inc, Transmedics Group Inc, Truist Financial Corp, TuSimple Holdings Inc, Twitter Inc, U.S. Bancorp, Uber Technologies Inc, UDR, Inc., Union Pacific Corp., United Parcel Service, United Rentals Inc., UnitedHealth Group Inc, Valley National Bancorp, Valvoline Inc., Ventas Inc, Vereit Inc, Verizon Communications, ViacomCBS Inc, ViaSat Inc, VICI Properties Inc, Vistra Energy Corp, W.R. Berkley Corp., Walmart Inc, Walt Disney Co, Watford Holdings Ltd., Wells Fargo & Co., Welltower Inc., Werner Enterprises, Westinghouse Air Brake Technologies Corp, WillScot Corporation, Xenia Hotels & Resorts Inc, XPO Logistics, Inc., Y-mABs Therapeutics Inc., Yum! Brands, Inc., Zentalis Pharmaceuticals Inc, Zillow Group Inc, Zynga Inc.

In the next 3 months, Morgan Stanley expects to receive or intends to seek compensation for investment banking services from 3M Co., Abbott Laboratories, Abiomed, Acadia Pharmaceuticals Inc, Acceleron Pharma Inc, Activision Blizzard Inc, Adagene Inc., ADC Therapeutics SA, ADT Inc, Advanced Drainage Systems Inc, AES Corp., Affirm Holdings Inc, AGCO Corp, Air Products and Chemicals Inc., Airbnb Inc, Akebia Therapeutics Inc, Akero Therapeutics Inc, Albemarle Corporation, Albertsons Companies, Inc, Alcoa Corp, Alcon Inc, Alector Inc, Alexion Pharmaceuticals, Alignment Healthcare Inc, Allegion PLC, Alliance Data Systems Corp, Allison Transmission Holdings Inc, AlloVir Inc, Allstate Corporation, Ally Financial Inc, Alnylam Pharmaceuticals Inc, Alphabet Inc., Amazon.com Inc, AMC Networks, Inc., American Assets Trust Inc., American Electric Power Co, American Express Company, American Homes 4 Rent, American Int'l Grp, Ametek Inc., Amgen Inc., Anterix Inc, Anthem Inc, Aon PLC, Apollo Global Management Inc, Apple, Inc., AppLovin Corp, Aprea Therapeutics Inc, Aptiv Plc, Aramark Holdings Corporation, ArcBest Corp, Arch Capital Group Ltd., Ares Management Corp, argenx SE, Array Technologies Inc, Arthur J. Gallagher, Ascendis Pharma A/S, Assurant Inc., AT&T, Inc., Atea Pharmaceuticals Inc, Automatic Data Processing Inc, AutoZone Inc., AvalonBay Communities Inc., Avanos Medical Inc, Avient Corporation, Avis Budget Group Inc, AVROBIO Inc, Axalta Coating Systems Ltd, Axis Capital Holdings, Axonics Modulation Technologies Inc., Axsome Therapeutics, Baker Hughes Co, Bank of America, Baxter International, BCE Inc., Becton Dickinson, Bed Bath & Beyond Inc., BeiGene Ltd, Berkshire Hathaway Inc, Best Buy Co Inc, Biogen Inc, Biomarin Pharmaceutical Inc, Bioventus, Inc., BJ'S Wholesale Club, BlackRock Inc., Bloom Energy Corp., Blue Apron Holdings Inc, Bluebird Bio Inc, Blueprint Medicines Corporation, BNY Mellon, BOK Financial Corp, Bolt Biotherapeutics, Inc., Booking Holdings Inc, BorgWarner Inc., Boston Properties, Inc., Boston Scientific, Boyd Gaming Corporation, Bright Horizons Family Solutions Inc, Brightsphere Investment Group Inc., Brinker International Inc., Broadstone Net Lease, Inc., Brown & Brown Inc., Bumble Inc., C.H. 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Services Grp., Hayward Holdings Inc, Healthcare Trust of America Inc, Healthpeak Properties Inc, Heartland Express Inc., Helios Technologies Inc, Helmerich & Payne Inc, Hewlett Packard Enterprise, Highwoods Properties, Hill-Rom Holdings Inc., Hilton Worldwide Holdings Inc, Home Depot Inc, Home Point Capital Inc, Honeywell International Inc, Hookipa Pharma Inc, Host Hotels & Resorts, Inc., Houlihan Lokey Inc, HP Inc., Hub Group Inc, Hubbell Inc., Hudson Pacific Properties, Humana Inc, Huntington Bancshares, Huntsman Corp, Hyatt Hotels Corporation, IBM, iHeartMedia Inc, IHS Markit Ltd, Illinois Tool Works, Imara Inc, Inari Medical Inc, Incyte Corp, Innoviva Inc, Insmed Inc, Instil Bio, Insulet Corp., Intact Financial Corp, International Flavors & Fragrances, Interpublic Group, Intuitive Surgical Inc., Invesco, Invitation Homes Inc, Ionis Pharmaceuticals Inc, IRHYTHM TECHNOLOGIES INC, Ironwood Pharmaceuticals, Inc., Israel Chemicals Ltd., J.B. Hunt Transport Services Inc., Jack in the Box Inc., Johnson & Johnson, Johnson Controls International Plc, JPMorgan Chase & Co, Jumia Technologies AG, Kaleido Biosciences Inc., Kansas City Southern, Kennametal Inc., KeyCorp, Kimberly-Clark Corp, Kimco Realty Corp., KKR & CO. Inc, Kodiak Sciences Inc, Kroger Co., Kymera Therapeutics Inc, L3Harris Technologies Inc, Lamar Advertising Co., Landstar System Inc, Largo Resources Ltd, Las Vegas Sands Corp., Laureate Education Inc, Lazard Ltd, Lear Corporation, Legend Biotech Corp, Lemonade Inc., Lennox International Inc, Leslie's, Inc., Levi Strauss & Co, Liberty Oilfield Services Inc, Lincoln Electric Holdings Inc, Linde PLC, Lions Gate Entertainment Corp., Lithia Motors Inc., Live Nation Entertainment Inc., LoanDepot Inc, Lockheed Martin Corp, Logitech International SA, Lowe's Companies Inc, LPL Financial Holdings Inc., LUMEN TECHNOLOGIES INC, Lyft Inc, LyondellBasell Industries N.V., M&T Bank Corp., Madison Square Garden Entertainment Corp, Madison Square Garden Sports Corp, Magna International Inc., MarketAxess Holdings Inc., Marriott International Inc., Marsh & McLennan Cos, Martin Marietta Materials, Inc., MasterCard Inc, Match Group Inc, McDonald's Corporation, MDA Ltd, Medtronic PLC, MGE Energy, Inc., MGM Growth Properties LLC, MGM Resorts International, Moderna Inc, Moelis & Co, Molina Healthcare Inc, Moody's Corp, Mosaic Company, MSCI Inc., MSG Networks Inc, Nabors Industries Inc., National Oilwell Varco Inc., National Retail Properties Inc, National Storage Affiliates Trust, National Vision Holdings Inc., NetApp Inc, Netflix Inc, Neurocrine Biosciences Inc, Nevro Corp, New Senior Investment Group Inc, New York Community Bancorp, Inc, New York Times Co, Newell Brands Inc., NextCure Inc., NextEra Energy Inc, Nextier Oilfield Solutions Inc, Nielsen Holdings NV, Nike Inc., Norfolk Southern Corp., Northern Trust Corp., Northrop Grumman Corp., NRG Energy Inc, Nutanix Inc, NuVasive Inc, Office Properties Income Trust, Oil States International Inc., Old Dominion Freight Line Inc, Omnicom Group Inc., Open Lending Corp., Oshkosh Corp., OUTFRONT MEDIA INC, Outset Medical, Inc., PACCAR Inc, Paramount Group Inc., Parker-Hannifin Corp, Paychex Inc, PayPal Holdings, Inc., Penn National Gaming, Inc., People's United Financial, Inc., Pharvaris B.V., Physicians Realty Trust, Pinterest Inc, Playtika Holding Corp, Plug Power Inc., PNC Financial Services, Poshmark Inc, PPG Industries Inc., PQ Group Holdings Inc, Prelude Therapeutics Inc, Procter & Gamble Co., Prologis, Inc., Prosperity Bancshares Inc, Public Service Enterprise Group Inc, Public Storage, Pulmonx Corporation, Pure Storage Inc, Quantumscape Corp, Quotient Technology Inc., Raymond James Financial Inc., RealReal Inc, Realty Income Corp, Regency Centers Corp, Regeneron Pharmaceuticals Inc., Regenxbio Inc, Regions Financial Corp, RenaissanceRe, Repare Therapeutics Inc, Repay Holdings Corporation., Republic Services Inc., Resideo Technologies Inc, Restaurant Brands International, Inc., REV Group Inc., Rhythm Pharmaceuticals Inc, Roblox Corporation, Rocket Cos Inc, Rockwell Automation, Rogers Communications, Inc., Roku Inc., Romeo Power, Inc., Rubius Therapeutics Inc., S&P Global Inc, Saia, Inc., Sana Biotechnology, Inc, Santander Consumer USA Holdings Inc, Sarepta Therapeutics Inc, Schlumberger NV, Schneider National Inc., Schrodinger Inc., SciPlay Corporation, Seagate Technology, Seagen Inc, SelectQuote Inc, Shake Shack Inc, Shaw Communications Inc, Sherwin-Williams Co., Shoals Technologies Group, Shockwave Medical Inc., SI-BONE Inc., Sigilon Therapeutics Inc, Signature Bank, Simon Property Group Inc, Site Centers Corp, Skechers USA Inc., SL Green Realty Corporation, Snap Inc., Solaredge Technologies Inc, Sonos Inc., Spirit Realty Capital, Spotify Technology SA, Square Inc, SS&C Technologies Holdings, Inc., Stanley Black & Decker, Starbucks Corp., State Street Corporation, StepStone Group, Stitch Fix Inc, STORE Capital Corp, Stride Inc, Stryker Corporation, Summit Materials Inc, SunPower Corp, Sunrun Inc, Sunstone Hotel Investors Inc, SVB Financial Group, Synchrony Financial, Syndax Pharmaceuticals Inc, Synovus Financial Corp., T-Mobile US, Inc., T. 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Berkley Corp., W.W. Grainger Inc., Walmart Inc, Walt Disney Co, Warner Music Group Corp., Waste Connections Inc., Waste Management, Inc., Watford Holdings Ltd., Watsco Inc., Wayfair Inc, Webster Financial Corp, Wells Fargo & Co., Welltower Inc., Werner Enterprises, Western Union Co, Westinghouse Air Brake Technologies Corp, Westlake Chemical Corp, WEX Inc, Williams-Sonoma Inc, Willis Towers Watson PLC, WillScot Corporation, Wingstop Inc, WisdomTree Investments, Inc., World Wrestling Entertainment Inc, WW International Inc, Wynn Resorts, Limited, Xenia Hotels & Resorts Inc, Xerox Corp, XPO Logistics, Inc., Y-mABs Therapeutics Inc., Yelp Inc, Yeti Holdings Inc., Yum! Brands, Inc., Zealand Pharma A/S, Zentalis Pharmaceuticals Inc, Zillow Group Inc, Zimmer Biomet Holdings Inc, Zions Bancorp, Zynga Inc.

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Worldwide Inc., Cadence Bancorp, Canadian Pacific Railway Ltd., Capital One Financial Corporation, Carlyle Group Inc, Carrier Global Corporation, Caterpillar Inc., CDW Corporation, Celanese Corp., Centene Corp, CF Industries, Charles Schwab Corp, Chemours Co, Cheniere Energy Inc, Cheniere Energy Partners LP, Chipotle Mexican Grill, Inc., Chubb LTD, Church & Dwight Co., Inc., Cigna Corp, Cincinnati Bell Inc., Cinemark Holdings, Inc., CIT Group Inc., Citigroup Inc., Citizens Financial Group, Inc, Clear Channel Outdoor Holdings, Inc., Clorox Co, CNH Industrial NV, Colgate-Palmolive Co, Comerica Inc, Commerce Bancshares, Coty Inc, CSX Corporation, Cullen/Frost Bankers, Dell Technologies Inc., DHC US, Discover Financial Services, Discovery Inc., Dollar General Corporation, Dominion Energy Inc, Dominos Pizza Inc., Dover, Dow Inc., Driven Brands Holdings Inc, DTE Energy Co., Duke Realty Corp., DuPont De Nemours Inc., East West Bancorp, Inc., Eastman Chemical Co, Eaton Corporation PLC, eBay Inc, Ecolab Inc., Edgewell Personal Care, Edwards Lifesciences, Electronic Arts Inc, Element Solutions Inc, Equity Residential, Evercore Inc, Exelon Corp, Expedia Inc., Ferrari NV, Fidelity National Information Services, Fifth Third Bancorp, First Horizon National, First Republic Bank, Fiserv Inc., Fleetcor Technologies Inc, Flowserve Corp, FMC Corporation, Ford Motor Company, Fox Corporation, Franklin Resources Inc., Freeport-McMoRan Inc, Gates Industrial Corporation plc, General Electric Co., General Motors Company, Gilead Sciences Inc., Goldman Sachs Group Inc, Goodyear Tire & Rubber Company, H&R Block, Harley-Davidson Inc, Hartford Fin. Services Grp., Hewlett Packard Enterprise, Hilton Worldwide Holdings Inc, Home Depot Inc, Home Point Capital Inc, Honeywell International Inc, HP Inc., Hubbell Inc., Humana Inc, Huntington Bancshares, Huntsman Corp, Hyatt Hotels Corporation, IBM, iHeartMedia Inc, Illinois Tool Works, Ingersoll Rand INC, Intact Financial Corp, Interpublic Group, Invesco, Invitation Homes Inc, Israel Chemicals Ltd., J.B. Hunt Transport Services Inc., Jack in the Box Inc., Johnson & Johnson, Johnson Controls International Plc, JPMorgan Chase & Co, Kansas City Southern, KeyCorp, Kimberly-Clark Corp, Kimco Realty Corp., KKR & CO. 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Rowe Price Group, Inc., TCF Financial Corp., TECHNIPFMC, Teleflex Inc., TELUS Corp., Tenneco Inc., Terex Corp., Terminix Global Holdings Inc, Tesla Inc, Textron Inc., The Blackstone Group Inc, The Travelers Companies, Inc., The Wendy's Company, Thomson Reuters Corp., Timken Co, Tradeweb Markets Inc, Transocean Ltd., Truist Financial Corp, U.S. Bancorp, U.S. Silica Holdings, Inc., Uber Technologies Inc, UDR, Inc., Union Pacific Corp., United Parcel Service, United Rentals Inc., UnitedHealth Group Inc, Valero Energy Corporation, Valvoline Inc., Ventas Inc, Verisk Analytics, Inc., Verizon Communications, ViaSat Inc, Victory Capital Holdings Inc, Virtu Financial Inc, Virtus Investment Partners, Visteon Corporation, Vistra Energy Corp, Vornado Realty Trust, W.R. Berkley Corp., W.W. Grainger Inc., Walmart Inc, Walt Disney Co, Warner Music Group Corp., Waste Connections Inc., Waste Management, Inc., Wells Fargo & Co., Welltower Inc., Western Union Co, Westinghouse Air Brake Technologies Corp, Westlake Chemical Corp, WEX Inc, Willis Towers Watson PLC, WillScot Corporation, WisdomTree Investments, Inc., WW International Inc, Wynn Resorts, Limited, Xerox Corp, XPO Logistics, Inc., Yum! Brands, Inc., Zimmer Biomet Holdings Inc, Zions Bancorp.

Within the last 12 months, Morgan Stanley has provided or is providing investment banking services to, or has an investment banking client relationship with, the following company: 3M Co., Abbott Laboratories, Abiomed, Acadia Pharmaceuticals Inc, Acceleron Pharma Inc, Activision Blizzard Inc, Adagene Inc., ADC Therapeutics SA, ADT Inc, Advanced Drainage Systems Inc, AES Corp., Affirm Holdings Inc, AGCO Corp, Air Products and Chemicals Inc., Airbnb Inc, Akebia Therapeutics Inc, Akero Therapeutics Inc, Albemarle Corporation, Albertsons Companies, Inc, Alcoa Corp, Alcon Inc, Alector Inc, Alexion Pharmaceuticals, Alignment Healthcare Inc, Allegion PLC, Alliance Data Systems Corp, Allison Transmission Holdings Inc, AlloVir Inc, Allstate Corporation, Ally Financial Inc, Alnylam Pharmaceuticals Inc, Alphabet Inc., Amazon.com Inc, AMC Networks, Inc., American Assets Trust Inc., American Electric Power Co, American Express Company, American Homes 4 Rent, American Int'l Grp, Ametek Inc., Amgen Inc., Anterix Inc, Anthem Inc, Aon PLC, Apollo Global Management Inc, Apple, Inc., AppLovin Corp, Aprea Therapeutics Inc, Aptiv Plc, Aramark Holdings Corporation, ArcBest Corp, Arch Capital Group Ltd., Ares Management Corp, argenx SE, Array Technologies Inc, Arthur J. Gallagher, Ascendis Pharma A/S, Assurant Inc., AT&T, Inc., Atea Pharmaceuticals Inc, Automatic Data Processing Inc, AutoZone Inc., AvalonBay Communities Inc., Avanos Medical Inc, Avient Corporation, Avis Budget Group Inc, AVROBIO Inc, Axalta Coating Systems Ltd, Axis Capital Holdings, Axonics Modulation Technologies Inc., Axsome Therapeutics, Baker Hughes Co, Bank of America, Baxter International, BCE Inc., Becton Dickinson, Bed Bath & Beyond Inc., BeiGene Ltd, Berkshire Hathaway Inc, Best Buy Co Inc, Biogen Inc, Biomarin Pharmaceutical Inc, Bioventus, Inc., BJ'S Wholesale Club, BlackRock Inc., Bloom Energy Corp., Blue Apron Holdings Inc, Bluebird Bio Inc, Blueprint Medicines Corporation, BNY Mellon, BOK Financial Corp, Bolt Biotherapeutics, Inc., Booking Holdings Inc, BorgWarner Inc., Boston Properties, Inc., Boston Scientific, Boyd Gaming Corporation, Bright Horizons Family Solutions Inc, Brightsphere Investment Group Inc., Brinker International Inc., Broadstone Net Lease, Inc., Brown & Brown Inc., Bumble Inc., C.H. Robinson Worldwide Inc., Cabaletta Bio Inc, Cactus Inc, Cadence Bancorp, Caesars Entertainment Inc., Canadian National Railway Co., Canadian Pacific Railway Ltd., Capital One Financial Corporation, Carlyle Group Inc, Carrier Global Corporation, Carvana Co, Casper Sleep Inc, Caterpillar Inc., CDW Corporation, Celanese Corp., Centene Corp, Certara Inc, CF Industries, Charles Schwab Corp, Cheniere Energy Inc, Cheniere Energy Partners LP, Chewy Inc, Chipotle Mexican Grill, Inc., Choice Hotels International Inc, Chubb LTD, Church & Dwight Co., Inc., Cigna Corp, Cincinnati Bell Inc., Cinemark Holdings, Inc., CIT Group Inc., Citigroup Inc., Citizens Financial Group, Inc, Clarivate Plc., Clear Channel Outdoor Holdings, Inc., Clorox Co, CNH Industrial NV, Cognex Corp, Colfax Corp, Colgate-Palmolive Co, Columbia Property Trust Inc, Comerica Inc, Commerce Bancshares, Compass, Inc., Corteva Inc., Costco Wholesale Corp, Coty Inc, Cricut Inc, CSX Corporation, Cullen/Frost Bankers, Cullinan Oncology Inc, Cummins Inc., Cytokinetics Inc, Darden Restaurants Inc., Deere & Co., Dell Technologies Inc., Denali Therapeutics Inc, Despegar.com Corp, DHC US, DiamondRock Hospitality Co, Dick's Sporting Goods, Discover Financial Services, Discovery Inc., Diversey Holdings, Ltd., Dollar General Corporation, Dollar Tree Inc, Dominion Energy Inc, Dominos Pizza Inc., Donaldson Company, Inc., Dover, DraftKings Inc, Dril Quip Inc., Driven Brands Holdings Inc, DTE Energy Co., Duke Realty Corp., DuPont De Nemours Inc., East West Bancorp, Inc., EastGroup Properties Inc., Eastman Chemical Co, Eaton Corporation PLC, eBay Inc, Echo Global Logistics Inc, Ecolab Inc., Edgewell Personal Care, Editas Medicine, Edwards Lifesciences, Electronic Arts Inc, Element Solutions Inc, elf Beauty, Emerson Electric Co, Energizer Holdings Inc., Envista Holdings Corporation, Epizyme Inc, Equifax Inc, Equity Residential, Esperion Therapeutics Inc, Estee Lauder Companies Inc, Etsy Inc, Evelo Biosciences Inc, Evercore Inc, Everest Re Group, Ltd., Evofem Biosciences Inc, Exelixis Inc., Exelon Corp, Expedia Inc., Extended Stay America Inc, Extra Space Storage Inc., Facebook Inc, FactSet Research Systems Inc., Farfetch Ltd., Fastenal Co., FedEx Corporation, Ferrari NV, Fidelity National Information Services, Fifth Third Bancorp, First Horizon National, First Quantum Minerals Ltd, First Republic Bank, First Solar Inc, Fiserv Inc., Fisker Inc, Fleetcor Technologies Inc, Floor & Decor Holdings Inc, Flowserve Corp, FMC Corporation, Foghorn Therapeutics, Foot Locker Inc, Ford Motor Company, Fortive Corp, Fox Corporation, Franklin Resources Inc., Freeline Therapeutics Holdings plc, Fulcrum Therapeutics Inc, Fusion Pharmaceuticals Inc, Galapagos NV, Gaming and Leisure Properties Inc, Garrett Motion Inc, Gartner Inc., Gates Industrial Corporation plc, General Dynamics Corp., General Electric Co., General Motors Company, Genmab A/S, Gilead Sciences Inc., Global Blood Therapeutics Inc, Global Payments Inc, Globalstar Inc, Globus Medical Inc, Gogo Inc, GoHealth Inc, Golar LNG Limited, Goldman Sachs Group Inc, Goodyear Tire & Rubber Company, GoPro Inc, Grocery Outlet Holding Corp, Groupon, Inc., GrubHub Inc., Haemonetics Corporation, Halliburton Co, Hamilton Lane Inc., Hannon Armstrong, Harley-Davidson Inc, Hartford Fin. Services Grp., Hayward Holdings Inc, Healthcare Trust of America Inc, Healthpeak Properties Inc, Heartland Express Inc., Helios Technologies

Inc, Helmerich & Payne Inc, Hewlett Packard Enterprise, Highwoods Properties, Hill-Rom Holdings Inc., Hilton Worldwide Holdings Inc, Home Depot Inc, Home Point Capital Inc, Honeywell International Inc, Hookipa Pharma Inc, Host Hotels & Resorts, Inc., Houlihan Lokey Inc, HP Inc., Hub Group Inc, Hubbell Inc., Hudson Pacific Properties, Humana Inc, Huntington Bancshares, Huntsman Corp, Hyatt Hotels Corporation, IBM, iHeartMedia Inc, IHS Markit Ltd, Illinois Tool Works, Imara Inc, Inari Medical Inc, Incyte Corp, Ingersoll Rand INC, Innoviva Inc, Insmed Inc, Instil Bio, Insulet Corp., Intact Financial Corp, International Flavors & Fragrances, Interpublic Group, Intuitive Surgical Inc., Invesco, Invitation Homes Inc, Ionis Pharmaceuticals Inc, IRHYTHM TECHNOLOGIES INC, Ironwood Pharmaceuticals, Inc., Israel Chemicals Ltd., J.B. Hunt Transport Services Inc., Jack in the Box Inc., Johnson & Johnson, Johnson Controls International Plc, JPMorgan Chase & Co, Jumia Technologies AG, Kaleido Biosciences Inc., Kansas City Southern, Kennametal Inc., KeyCorp, Kimberly-Clark Corp, Kimco Realty Corp., KKR & CO. Inc, Kodiak Sciences Inc, Kroger Co., Kymera Therapeutics Inc, L3Harris Technologies Inc, Lamar Advertising Co., Landstar System Inc, Largo Resources Ltd, Las Vegas Sands Corp., Laureate Education Inc, Lazard Ltd, Lear Corporation, Legend Biotech Corp, Lemonade Inc., Lennox International Inc, Leslie's, Inc., Levi Strauss & Co, Liberty Oilfield Services Inc, Lincoln Electric Holdings Inc, Linde PLC, Lions Gate Entertainment Corp., Lithia Motors Inc., Live Nation Entertainment Inc., LoanDepot Inc, Lockheed Martin Corp, Logitech International SA, Lowe's Companies Inc, LPL Financial Holdings Inc., LUMEN TECHNOLOGIES INC, Lyft Inc, LyondellBasell Industries N.V., M&T Bank Corp., Madison Square Garden Entertainment Corp, Madison Square Garden Sports Corp, Magna International Inc., MarketAxess Holdings Inc., Marriott International Inc., Marsh & McLennan Cos, Martin Marietta Materials, Inc., MasterCard Inc, Match Group Inc, McDonald's Corporation, MDA Ltd, Medtronic PLC, MGE Energy, Inc., MGM Growth Properties LLC, MGM Resorts International, Moderna Inc, Moelis & Co, Molina Healthcare Inc, Moody's Corp, Mosaic Company, MP Materials Corp, MSCI Inc., MSG Networks Inc, Nabors Industries Inc., National Oilwell Varco Inc., National Retail Properties Inc, National Storage Affiliates Trust, National Vision Holdings Inc., NetApp Inc, Netflix Inc, Neurocrine Biosciences Inc, Nevro Corp, New Senior Investment Group Inc, New York Community Bancorp, Inc, New York Times Co, Newell Brands Inc., NextCure Inc., NextEra Energy Inc, Nextier Oilfield Solutions Inc, Nielsen Holdings NV, Nike Inc., Norfolk Southern Corp., Northern Trust Corp., Northrop Grumman Corp., NRG Energy Inc, Nutanix Inc, NuVasive Inc, Office Properties Income Trust, Oil States International Inc., Old Dominion Freight Line Inc, Omnicom Group Inc., Open Lending Corp., Oshkosh Corp., OUTFRONT MEDIA INC, Outset Medical, Inc., PACCAR Inc, Paramount Group Inc., Parker-Hannifin Corp, Paychex Inc, PayPal Holdings, Inc., Penn National Gaming, Inc., People's United Financial, Inc., Pharvaris B.V., Physicians Realty Trust, Pinterest Inc, Playtika Holding Corp, Plug Power Inc., PNC Financial Services, Poshmark Inc, PPG Industries Inc., PQ Group Holdings Inc, Prelude Therapeutics Inc, Procter & Gamble Co., Prologis, Inc., Prosperity Bancshares Inc, Public Service Enterprise Group Inc, Public Storage, Pulmonx Corporation, Pure Storage Inc, Quantumscape Corp, Quotient Technology Inc., Raymond James Financial Inc., RealReal Inc, Realty Income Corp, Regency Centers Corp, Regeneron Pharmaceuticals Inc., Regenxbio Inc, Regions Financial Corp, RenaissanceRe, Repare Therapeutics Inc, Repay Holdings Corporation., Republic Services Inc., Resideo Technologies Inc, Restaurant Brands International, Inc., REV Group Inc., Rhythm Pharmaceuticals Inc, Roblox Corporation, Rocket Cos Inc, Rockwell Automation, Rogers Communications, Inc., Roku Inc., Romeo Power, Inc., Root Inc, Rubius Therapeutics Inc., S&P Global Inc, Saia, Inc., Sana Biotechnology, Inc, Santander Consumer USA Holdings Inc, Sarepta Therapeutics Inc, Schlumberger NV, Schneider National Inc., Schrodinger Inc., SciPlay Corporation, Seagate Technology, Seagen Inc, SelectQuote Inc, Shake Shack Inc, Shaw Communications Inc, Sherwin-Williams Co., Shift4 Payments Inc., Shoals Technologies Group, Shockwave Medical Inc., SI-BONE Inc., Sigilon Therapeutics Inc, Signature Bank, Simon Property Group Inc, Site Centers Corp, Skechers USA Inc., SL Green Realty Corporation, Snap Inc., Solaredge Technologies Inc, Sonos Inc., Spirit Realty Capital, Spotify Technology SA, Square Inc, SS&C Technologies Holdings, Inc., Stanley Black & Decker, Starbucks Corp., State Street Corporation, StepStone Group, Stitch Fix Inc, STORE Capital Corp, Stride Inc, Stryker Corporation, Summit Materials Inc, SunPower Corp, Sunrun Inc, Sunstone Hotel Investors Inc, SVB Financial Group, Synchrony Financial, Syndax Pharmaceuticals Inc, Synovus Financial Corp., T-Mobile US, Inc., T. Rowe Price Group, Inc., Take-Two Interactive Software, Target Corp, Taysha Gene Therapies Inc., TCF Financial Corp., TECHNIPFMC, Teck Resources Limited, Teleflex Inc., Telephone & Data Systems, Tellurian Inc, TELUS Corp., Tenaris SA, Tenneco Inc., Teradata, Terex Corp., Terminix Global Holdings Inc, Tesla Inc, Textron Inc., TFI International Inc, The Blackstone Group Inc, The Cheesecake Factory, Inc., The Travelers Companies, Inc., The Wendy's Company, Theravance Biopharma Inc, Thomson Reuters Corp., ThredUp Inc., Timken Co, TPI Composites Inc., Tradeweb Markets Inc, Trane Technologies PLC, Transmedics Group Inc, Transocean Ltd., TransUnion, Trinseo S.A., TRIVAGO NV, Tronox Holdings Plc-Class A, Truist Financial Corp, TuSimple Holdings Inc, Twitter Inc, U.S. Bancorp, U.S. Silica Holdings, Inc., Uber Technologies Inc, UDR, Inc., Ulta Beauty Inc, Ultragenyx Pharmaceutical Inc, Union Pacific Corp., United Parcel Service, United Rentals Inc., UnitedHealth Group Inc, Unity Biotechnology Inc., Urban Edge Properties, US Cellular Corporation, US Xpress Enterprises Inc, Valero Energy Corporation, Valley National Bancorp, Valvoline Inc., Ventas Inc, Vereit Inc, Verisk Analytics, Inc., Verizon Communications, Verra Mobility Corp, Vertex Pharmaceuticals, ViacomCBS Inc, ViaSat Inc, VICI Properties Inc, Victory Capital Holdings Inc, Virtu Financial Inc, Virtus Investment Partners, Visa Inc., Visteon Corporation, Vistra Energy Corp, Vornado Realty Trust, Vulcan Materials Company, W.R. Berkley Corp., W.W. Grainger Inc., Walmart Inc, Walt Disney Co, Warner Music Group Corp., Waste Connections Inc., Waste Management, Inc., Watford Holdings Ltd., Watsco Inc., Wayfair Inc, Webster Financial Corp, Wells Fargo & Co., Welltower Inc., Werner Enterprises, Western Union Co, Westinghouse Air Brake Technologies Corp, Westlake Chemical Corp, WEX Inc, Williams-Sonoma Inc, Willis Towers Watson PLC, WillScot Corporation, Wingstop Inc, WisdomTree Investments, Inc., World Wrestling Entertainment Inc, WW International Inc, Wynn Resorts, Limited, Xenia Hotels & Resorts Inc, Xerox Corp, XPO Logistics, Inc., Y-mABs Therapeutics Inc., Yelp Inc, Yeti Holdings Inc., Yum! Brands, Inc., Zealand Pharma A/S, Zentalis Pharmaceuticals Inc, Zillow Group Inc, Zimmer Biomet Holdings Inc, Zions Bancorp, Zynga Inc.

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Payne Inc, Hewlett Packard Enterprise, Highwoods Properties, Hilton Worldwide Holdings Inc, Home Depot Inc, Home Point Capital Inc, Honeywell International Inc, HP Inc., Hubbell Inc., Humana Inc, Huntington Bancshares, Huntsman Corp, Hyatt Hotels Corporation, IBM, iHeartMedia Inc, IHS Markit Ltd, Illinois Tool Works, Ingersoll Rand INC, Insulet Corp., Intact Financial Corp, International Flavors & Fragrances, Interpublic Group, Invesco, Invitation Homes Inc, Israel Chemicals Ltd., J.B. Hunt Transport Services Inc., Jack in the Box Inc., Johnson & Johnson, Johnson Controls International Plc, JPMorgan Chase & Co, Kansas City Southern, KeyCorp, Kimberly-Clark Corp, Kimco Realty Corp., KKR & CO. Inc, Kroger Co., L3Harris Technologies Inc, Lamar Advertising Co., Las Vegas Sands Corp., Laureate Education Inc, Lear Corporation, Lennox International Inc, Levi Strauss & Co, Liberty Oilfield Services Inc, Linde PLC, Live Nation Entertainment Inc., LoanDepot Inc, Lockheed Martin Corp, Lowe's Companies Inc, LPL Financial Holdings Inc., LUMEN TECHNOLOGIES INC, LyondellBasell Industries N.V., M&T Bank Corp., Macerich Co, MarketAxess Holdings Inc., Marriott International Inc., Marsh & McLennan Cos, MasterCard Inc, McDonald's Corporation, Medtronic PLC, MGE Energy, Inc., MGM Growth Properties LLC, MGM Resorts International, Moderna Inc, Moelis & Co, Molina Healthcare Inc, Moody's Corp, Mosaic Company, MSCI Inc., National Retail Properties Inc, National Storage Affiliates Trust, National Vision Holdings Inc., NCR Corp., NetApp Inc, Netflix Inc, Nevro Corp, New Senior Investment Group Inc, New York Community Bancorp, Inc, New York Times Co, Newell Brands Inc., NextEra Energy Inc, Nielsen Holdings NV, Norfolk Southern Corp., Northern Trust Corp., Northrop Grumman Corp., NRG Energy Inc, Nutanix Inc, Nutrien Ltd, NuVasive Inc, O'Reilly Automotive Inc, Old Dominion Freight Line Inc, Olin Corp., Oshkosh Corp., Parker-Hannifin Corp, Paychex Inc, PayPal Holdings, Inc., Penn National Gaming, Inc., People's United Financial, Inc., Playtika Holding Corp, Plug Power Inc., PNC Financial Services, PPG Industries Inc., PQ Group Holdings Inc, Procter & Gamble Co., Progressive Corp, Prologis, Inc., Public Service Enterprise Group Inc, Public Storage, Pure Storage Inc, PVH Corp., Q2 Holdings Inc, Raymond James Financial Inc., RealReal Inc, Realty Income Corp, Regeneron Pharmaceuticals Inc., Regions Financial Corp, RenaissanceRe, Republic Services Inc., Resideo Technologies Inc, Restaurant Brands International, Inc., Rocket Cos Inc, Rockwell Automation, Rogers Communications, Inc., Roku Inc., S&P Global Inc, Schlumberger NV, Seagate Technology, SEI Investments Company, SelectQuote Inc, Sherwin-Williams Co., Signature Bank, Simon Property Group Inc, Site Centers Corp, SL Green Realty Corporation, Snap Inc., Sonic Automotive Inc, Sonos Inc., Spirit Realty Capital, Spotify Technology SA, SS&C Technologies Holdings, Inc., Stanley Black & Decker, Starbucks Corp., State Street Corporation, STORE Capital Corp, Stride Inc, Stryker Corporation, SunPower Corp, Sunrun Inc, SVB Financial Group, Synchrony Financial, Synovus Financial Corp., T-Mobile US, Inc., T. Rowe Price Group, Inc., TCF Financial Corp., TECHNIPFMC, Teck Resources Limited, Teleflex Inc., TELUS Corp., Tenneco Inc., Terex Corp., Terminix Global Holdings Inc, Tesla Inc, Textron Inc., The Blackstone Group Inc, The Travelers Companies, Inc., The Wendy's Company, Thomson Reuters Corp., Timken Co, Tradeweb Markets Inc, Transocean Ltd., Truist Financial Corp, Twitter Inc, U.S. Bancorp, U.S. Silica Holdings, Inc., Uber Technologies Inc, UDR, Inc., Union Pacific Corp., United Parcel Service, United Rentals Inc., UnitedHealth Group Inc, Valero Energy Corporation, Valley National Bancorp, Valvoline Inc., Ventas Inc, Verisk Analytics, Inc., Verizon Communications, Vertex Pharmaceuticals, ViacomCBS Inc, ViaSat Inc, VICI Properties Inc, Victory Capital Holdings Inc, Virtu Financial Inc, Virtus Investment Partners, Visa Inc., Visteon Corporation, Vistra Energy Corp, Vornado Realty Trust, W.R. Berkley Corp., W.W. Grainger Inc., Walmart Inc, Walt Disney Co, Warner Music Group Corp., Waste Connections Inc., Waste Management, Inc., Wayfair Inc, Webster Financial Corp, Wells Fargo & Co., Welltower Inc., Western Union Co, Westinghouse Air Brake Technologies Corp, Westlake Chemical Corp, WEX Inc, Willis Towers Watson PLC, WillScot Corporation, WisdomTree Investments, Inc., World Wrestling Entertainment Inc, WW International Inc, Wynn Resorts, Limited, Xenia Hotels & Resorts Inc, Xerox Corp, XPO Logistics, Inc., Yum! Brands, Inc., Zillow Group Inc, Zimmer Biomet Holdings Inc, Zions Bancorp, Zynga Inc.

An employee, director or consultant of Morgan Stanley is a director of Allstate Corporation, AT&T, Inc., Caterpillar Inc., CNH Industrial NV, Cummins Inc., eBay Inc, Estee Lauder Companies Inc, General Motors Company, HP Inc., New Fortress Energy Inc, Norfolk Southern Corp., Seagate Technology, Valero Energy Corporation, Walmart Inc. This person is not a research analyst or a member of a research analyst's household.

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LLC makes a market in the securities of 3M Co., Abbott Laboratories, Abiomed, Acadia Pharmaceuticals Inc, Acceleron Pharma Inc, Activision Blizzard Inc, ADC Therapeutics SA, Advance Auto Parts Inc, Advanced Drainage Systems Inc, AES Corp., Affirm Holdings Inc, AGCO Corp, Air Products and Chemicals Inc., Airbnb Inc, Akebia Therapeutics Inc, Albemarle Corporation, Alcoa Corp, Alcon Inc, Alector Inc, Alexion Pharmaceuticals, Alignment Healthcare Inc, Allegion PLC, Allison Transmission Holdings Inc, AlloVir Inc, Allstate Corporation, Ally Financial Inc, Alnylam Pharmaceuticals Inc, Alphabet Inc., Amazon.com Inc, AMC Networks, Inc., American Assets Trust Inc., American Axle & Manufacturing Holdings Inc, American Electric Power Co, American Express Company, American Homes 4 Rent, American Int'l Grp, Ametek Inc., Amgen Inc., Anthem Inc, Aon PLC, Apollo Global Management Inc, Apple, Inc., AppLovin Corp, Aptiv Plc, Aramark Holdings Corporation, ArcBest Corp, Arch Capital Group Ltd., Array Technologies Inc, Arthur J. 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Hunt Transport Services Inc., Jack in the Box Inc., Johnson & Johnson, Johnson Controls International Plc, JPMorgan Chase & Co, Kansas City Southern, Karyopharm Therapeutics Inc, Kennametal Inc., KeyCorp, Kimberly-Clark Corp, Kimco Realty Corp., KKR & CO. Inc, Knight-Swift Transportation Holdings Inc, Kodiak Sciences Inc, Kroger Co., Kymera Therapeutics Inc, Lamar Advertising Co., Las Vegas Sands Corp., Laureate Education Inc, Lazard Ltd, Lear Corporation, Legend Biotech Corp, Lennox International Inc, Lincoln Electric Holdings Inc, Lithia Motors Inc., Live Nation Entertainment Inc., Lockheed Martin Corp, Logitech International SA, Lowe's Companies Inc, LPL Financial Holdings Inc., LUMEN TECHNOLOGIES INC, LyondellBasell Industries N.V., M&T Bank Corp., Macerich Co, MacroGenics Inc, Madison Square Garden Sports Corp, Magna International Inc., Marriott International Inc., Marsh & McLennan Cos, Martin Marietta Materials, Inc., MasterCard Inc, Match Group Inc, McDonald's Corporation, Medtronic PLC, MGE Energy, Inc., MGM Growth Properties LLC, MGM Resorts International, Moderna Inc, Moelis & Co, Molina Healthcare Inc, Moody's Corp, Mosaic Company, MSG Networks Inc, Nabors Industries Inc., National Oilwell Varco Inc., National Retail Properties Inc, National Storage Affiliates Trust, NCR Corp., NetApp Inc, Netflix Inc, Neurocrine Biosciences Inc, Nevro Corp, New Fortress Energy Inc, New York Community Bancorp, Inc, New York Times Co, Newell Brands Inc., NextCure Inc., NextEra Energy Inc, Nielsen Holdings NV, Nike Inc., Norfolk Southern Corp., Northern Trust Corp., Northrop Grumman Corp., NRG Energy Inc, Nutanix Inc, NuVasive Inc, Office Properties Income Trust, Oil States International Inc., Old Dominion Freight Line Inc, Olin Corp., Ollie's Bargain Outlet Holdings Inc, Omnicom Group Inc., Oshkosh Corp., OUTFRONT MEDIA INC, PACCAR Inc, Paramount Group Inc., Parker-Hannifin Corp, Patterson-UTI Energy, Paychex Inc, PayPal Holdings, Inc., Penn National Gaming, Inc., Penske Automotive Group, Inc, Pentair plc, People's United Financial, Inc., Pharvaris B.V., Physicians Realty Trust, Playtika Holding Corp, Plug Power Inc., PNC Financial Services, Polaris Inc., Poshmark Inc, PPG Industries Inc., PQ Group Holdings Inc, Precision Drilling Corp, Prelude Therapeutics Inc, Procter & Gamble Co., Progressive Corp, Prologis, Inc., Prosperity Bancshares Inc, Public Service Enterprise Group Inc, Public Storage, Pure Storage Inc, PVH Corp., Q2 Holdings Inc, Quotient Technology Inc., Radius Health Inc, Raymond James Financial Inc., RealReal Inc, Realty Income Corp, Red Robin Gourmet Burgers, Inc., Regency Centers Corp, Regeneron Pharmaceuticals Inc., Regenxbio Inc, Regions Financial Corp, Repare Therapeutics Inc, Republic Services Inc., Restaurant Brands International, Inc., Rhythm Pharmaceuticals Inc, Rockwell Automation, Rogers Communications, Inc., Roku Inc., Root Inc, RPC, RPM International Inc., S&P Global Inc, Saia, Inc., Sally Beauty Holdings Inc, Santander Consumer USA Holdings Inc, Schlumberger NV, Schneider National Inc., Schrodinger Inc., Seagate Technology, Seagen Inc, SEI Investments Company, SelectQuote Inc, Shake Shack Inc, Shaw Communications Inc, Sherwin-Williams Co., Shockwave Medical Inc., SI-BONE Inc., Sigilon Therapeutics Inc, Simon Property Group Inc, Site Centers Corp, Skechers USA Inc., SL Green Realty Corporation, Solaredge Technologies Inc, Sonic Automotive Inc, Sonos Inc., Spirit Realty Capital, Square Inc, SS&C Technologies Holdings, Inc., Stanley Black & Decker, Starbucks Corp., State Street Corporation, STORE Capital Corp, Stride Inc, Stryker Corporation, Summit Materials Inc, SunPower Corp, Sunrun Inc, Sunstone Hotel Investors Inc, Synchrony Financial, Synovus Financial Corp., T-Mobile US, Inc., T. Rowe Price Group, Inc., Take-Two Interactive Software, Target Corp, TCF Financial Corp., Teck Resources Limited, Telephone & Data Systems, TELUS Corp., Tenneco Inc., Teradata, Terex Corp., Terminix Global Holdings Inc, Tesla Inc, Texas Roadhouse, Inc., Textron Inc., The Blackstone Group Inc, The Cheesecake Factory, Inc., The Travelers Companies, Inc., The Wendy's Company, Theravance Biopharma Inc, Thomson Reuters Corp., Timken Co, Tractor Supply Co, Trane Technologies PLC, Transocean Ltd., TransUnion, Trinseo S.A., Tronox Holdings Plc-Class A, Truist Financial Corp, TuSimple Holdings Inc, Twitter Inc, U.S. Silica Holdings, Inc., UDR, Inc., Ulta Beauty Inc, Ultragenyx Pharmaceutical Inc, Under Armour Inc., Union Pacific Corp., United Parcel Service, United Rentals Inc., UnitedHealth Group Inc, Urban Edge Properties, US Cellular Corporation, Valero Energy Corporation, Valley National Bancorp, Ventas Inc, Vereit Inc, Verisk Analytics, Inc., Verizon Communications, Vertex Pharmaceuticals, ViacomCBS Inc, ViaSat Inc, Virtu Financial Inc, Virtus Investment Partners, Visa Inc., Visteon Corporation, Vivint Smart Home Inc, Vornado Realty Trust, Vulcan Materials Company, W.R. Berkley Corp., Walmart Inc, Walt Disney Co, Warner Music Group Corp., Waste Connections Inc., Waste Management, Inc., Wayfair Inc, Webster Financial Corp, Wells Fargo & Co., Welltower Inc., Werner Enterprises, Western Union Co, Westinghouse Air Brake Technologies Corp, Westlake Chemical Corp, Williams-Sonoma Inc, Willis Towers Watson PLC, Wingstop Inc, WisdomTree Investments, Inc., World Wrestling Entertainment Inc, WW International Inc, Wynn Resorts, Limited, Xenia Hotels & Resorts Inc, Xerox Corp, XPO Logistics, Inc., Yelp Inc, Yum! Brands, Inc., Zealand Pharma A/S, Zentalis Pharmaceuticals Inc, Zillow Group Inc, Zimmer Biomet Holdings Inc, Zions Bancorp, Zynga Inc.

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Global Stock Ratings Distribution

(as of April 30, 2021)

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STOCK RATING CATEGORY	COVERAGE UNIVERSE COUNT	COVERAGE UNIVERSE % OF TOTAL	INVESTMENT BANKING CLIENTS (IBC) COUNT	IBC % OF TOTAL IBC	IBC % OF RATING CATEGORY	OTHER MATERIAL INVESTMENT SERVICES CLIENTS (MISC) COUNT	MISC % OF TOTAL OTHER MISC
Overweight/Buy	**1517**	**44%**	**413**	**47%**	**27%**	**670**	**44%**
Equal-weight/Hold	**1418**	**41%**	**373**	**42%**	**26%**	**649**	**42%**
Not-Rated/Hold	**4**	**0%**	**2**	**0%**	**50%**	**4**	**0%**
Underweight/Sell	**529**	**15%**	**95**	**11%**	**18%**	**210**	**14%**
TOTAL	**3,468**		**883**			**1533**	

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

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Overweight (O). The stock's total return is expected to exceed the average total return of the analyst's industry (or industry team's) coverage universe, on a risk-adjusted basis, over the next 12-18 months.
Equal-weight (E). The stock's total return is expected to be in line with the average total return of the analyst's industry (or industry team's) coverage universe, on a risk-adjusted basis, over the next 12-18 months.
Not-Rated (NR). Currently the analyst does not have adequate conviction about the stock's total return relative to the average total return of the analyst's industry (or industry team's) coverage universe, on a risk-adjusted basis, over the next 12-18 months.
Underweight (U). The stock's total return is expected to be below the average total return of the analyst's industry (or industry team's) coverage universe, on a risk-adjusted basis, over the next 12-18 months.
Unless otherwise specified, the time frame for price targets included in Morgan Stanley Research is 12 to 18 months.

Analyst Industry Views

Attractive (A): The analyst expects the performance of his or her industry coverage universe over the next 12-18 months to be attractive vs. the relevant broad market benchmark, as indicated below.
In-Line (I): The analyst expects the performance of his or her industry coverage universe over the next 12-18 months to be in line with the relevant broad market benchmark, as indicated below.
Cautious (C): The analyst views the performance of his or her industry coverage universe over the next 12-18 months with caution vs. the relevant broad market benchmark, as indicated below.
Benchmarks for each region are as follows: North America - S&P 500; Latin America - relevant MSCI country index or MSCI Latin America Index; Europe - MSCI Europe; Japan - TOPIX; Asia - relevant MSCI country index or MSCI sub-regional index or MSCI AC Asia Pacific ex Japan Index.

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Southern Corp., Northrop Grumman Corp., NRG Energy Inc, NuVasive Inc, O'Reilly Automotive Inc, Olin Corp., Omnicom Group Inc., Parker-Hannifin Corp, Patterson-UTI Energy, PayPal Holdings, Inc., Playtika Holding Corp, PNC Financial Services, PPG Industries Inc., Procter & Gamble Co., Progressive Corp, Public Service Enterprise Group Inc, Public Storage, PVH Corp., Q2 Holdings Inc, Radius Health Inc, Raymond James Financial Inc., Realty Income Corp, Rockwell Automation, Rogers Communications, Inc., Roku Inc., Root Inc, S&P Global Inc, Sarepta Therapeutics Inc, Sherwin-Williams Co., Site Centers Corp, SL Green Realty Corporation, Snap Inc., Square Inc, Stanley Black & Decker, Starbucks Corp., State Street Corporation, STORE Capital Corp, Stride Inc, Stryker Corporation, Sunrun Inc, SVB Financial Group, T-Mobile US, Inc., Target Corp, TECHNIPFMC, Teck Resources Limited, Tesla Inc, The Travelers Companies, Inc., Theravance Biopharma Inc, Thomson Reuters Corp., Timken Co, Truist Financial Corp, Twitter Inc, Uber Technologies Inc, UDR, Inc., Union Pacific Corp., United Parcel Service, UnitedHealth Group Inc, Valero Energy Corporation, Valvoline Inc., Verisk Analytics, Inc., Verizon Communications, Verra Mobility Corp, ViacomCBS Inc, ViaSat Inc, Victory Capital Holdings Inc, Virtus Investment Partners, Visa Inc., Vulcan Materials Company, W.W. Grainger Inc., Walmart Inc, Walt Disney Co, Wells Fargo & Co., Welltower Inc., Western Union Co, Westinghouse Air Brake Technologies Corp, Westlake Chemical Corp, Xerox Corp, XPO Logistics, Inc., Yum! Brands, Inc., Zillow Group Inc, Zimmer Biomet Holdings Inc, Zions Bancorp, Zynga Inc.

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INDUSTRY COVERAGE: Internet

COMPANY (TICKER)	RATING (AS OF)	PRICE* (05/14/2021)
Brian Nowak, CFA		
Activision Blizzard Inc (ATVI.O)	O (09/23/2016)	$93.35
Airbnb Inc (ABNB.O)	E (01/04/2021)	$141.20
Alphabet Inc. (GOOGL.O)	O (08/11/2015)	$2,278.38
Amazon.com Inc (AMZN.O)	O (04/24/2015)	$3,222.90
AppLovin Corp (APP.O)	O (05/10/2021)	$57.26
Blue Apron Holdings Inc (APRN.N)	E (07/24/2017)	$4.32
Booking Holdings Inc (BKNG.O)	E (01/09/2019)	$2,282.48
Compass, Inc. (COMP.N)	O (04/26/2021)	$14.15
Criteo SA (CRTO.O)	E (01/26/2016)	$36.19
Despegar.com Corp (DESP.N)	E (10/16/2017)	$13.03
eBay Inc (EBAY.O)	E (12/12/2018)	$60.86
Electronic Arts Inc (EA.O)	E (01/12/2018)	$138.62
Expedia Inc. (EXPE.O)	E (01/09/2019)	$171.80
Facebook Inc (FB.O)	O (04/27/2016)	$315.94
Groupon, Inc. (GRPN.O)	E (03/05/2018)	$46.24
GrubHub Inc. (GRUB.N)	E (04/18/2018)	$58.55
Jumia Technologies AG (JMIA.N)	E (08/19/2019)	$25.98
Lyft Inc (LYFT.O)	E (10/24/2019)	$49.65
Pinterest Inc (PINS.N)	O (08/09/2020)	$58.05
Playtika Holding Corp (PLTK.O)	O (02/09/2021)	$25.20
Quotient Technology Inc. (QUOT.N)	U (12/19/2019)	$12.11
Roblox Corporation (RBLX.N)	O (04/05/2021)	$70.95
Snap Inc. (SNAP.N)	O (02/21/2021)	$52.99
Take-Two Interactive Software (TTWO.O)	O (02/01/2018)	$166.99
TRIVAGO NV (TRVG.O)	E (09/28/2017)	$3.68
Twitter Inc (TWTR.N)	E (04/17/2018)	$51.73
Uber Technologies Inc (UBER.N)	O (06/04/2019)	$47.42
Yelp Inc (YELP.N)	U (01/10/2019)	$38.50
Zillow Group Inc (Z.O)	E (04/18/2018)	$111.88
Lauren Schenk		
Bumble Inc. (BMBL.O)	E (03/08/2021)	$42.82
Casper Sleep Inc (CSPR.N)	E (03/02/2020)	$9.52
Chewy Inc (CHWY.N)	E (04/16/2020)	$67.75
Etsy Inc (ETSY.O)	U (12/05/2019)	$163.11
Farfetch Ltd. (FTCH.N)	O (11/17/2020)	$41.90
GoHealth Inc (GOCO.O)	E (08/09/2020)	$11.44
Match Group Inc (MTCH.O)	++	$142.19
Poshmark Inc (POSH.O)	E (02/08/2021)	$36.58
RealReal Inc (REAL.O)	E (11/17/2020)	$14.46
SelectQuote Inc (SLQT.N)	E (06/15/2020)	$21.52
Stitch Fix Inc (SFIX.O)	U (11/17/2020)	$43.06
ThredUp Inc. (TDUP.O)	E (04/20/2021)	$18.17
WW International Inc (WW.O)	E (04/07/2021)	$37.31
Matthew Cost		
SciPlay Corporation (SCPL.O)	E (05/28/2019)	$16.17
Zynga Inc (ZNGA.O)	O (02/05/2020)	$10.23

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* Historical prices are not split adjusted.

INDUSTRY COVERAGE: Media

COMPANY (TICKER)	RATING (AS OF)	PRICE* (05/14/2021)
Benjamin Swinburne, CFA		
Cinemark Holdings, Inc. (CNK.N)	E (10/05/2017)	$22.23
Clear Channel Outdoor Holdings, Inc. (CCO.N)	E (11/02/2020)	$2.16
Discovery Inc. (DISCK.O)	E (07/20/2009)	$30.74
Fox Corporation (FOXA.O)	O (10/15/2018)	$37.26
iHeartMedia Inc (IHRT.O)	E (08/26/2019)	$22.64
Interpublic Group (IPG.N)	E (10/15/2018)	$32.52
Lamar Advertising Co. (LAMR.O)	O (11/02/2020)	$102.28
Liberty Braves Group (BATRK.O)	E (05/09/2018)	$27.04
Liberty Formula One (FWONK.O)	E (04/13/2020)	$44.06
Live Nation Entertainment Inc. (LYV.N)	E (10/08/2019)	$85.80
Madison Square Garden Entertainment Corp (MSGE.N)	++	$88.99
Madison Square Garden Sports Corp (MSGS.N)	O (03/26/2021)	$185.42
MSG Networks Inc (MSGN.N)	++	$15.36
Netflix Inc (NFLX.O)	O (06/17/2014)	$493.37
Omnicom Group Inc. (OMC.N)	U (10/16/2017)	$83.64
OUTFRONT MEDIA INC (OUT.N)	E (04/20/2020)	$23.12
Roku Inc. (ROKU.O)	U (12/02/2019)	$315.95
Spotify Technology SA (SPOT.N)	O (04/30/2018)	$223.59
ViacomCBS Inc (VIAC.O)	E (01/24/2020)	$38.91
Walt Disney Co (DIS.N)	O (01/30/2017)	$173.70
Warner Music Group Corp. (WMG.O)	O (12/17/2020)	$34.71
World Wrestling Entertainment Inc (WWE.N)	E (01/31/2020)	$53.69
Thomas Yeh		
AMC Networks, Inc. (AMCX.O)	E (11/02/2020)	$49.22
Lions Gate Entertainment Corp. (LGFb.N)	E (11/02/2020)	$13.44
New York Times Co (NYT.N)	O (10/14/2020)	$42.94

Stock Ratings are subject to change. Please see latest research for each company.
* Historical prices are not split adjusted.

INDUSTRY COVERAGE: Real Estate Investment Trusts

COMPANY (TICKER)	RATING (AS OF)	PRICE* (05/14/2021)
Richard Hill		
American Assets Trust Inc. (AAT.N)	E (05/18/2020)	$34.97
American Homes 4 Rent (AMH.N)	E (11/15/2018)	$37.31
AvalonBay Communities Inc. (AVB.N)	E (12/10/2013)	$197.96
Equity Residential (EQR.N)	E (12/12/2016)	$74.07
Essex Property Trust, Inc. (ESS.N)	E (04/01/2020)	$288.37
Invitation Homes Inc (INVH.N)	O (08/11/2020)	$35.11
Kimco Realty Corp. (KIM.N)	O (09/14/2020)	$21.23
Macerich Co (MAC.N)	U (09/14/2020)	$14.01
Regency Centers Corp (REG.O)	E (12/17/2019)	$63.77
Retail Value Inc (RVI.N)	O (01/06/2021)	$18.04
Simon Property Group Inc (SPG.N)	O (02/11/2021)	$122.18
Site Centers Corp (SITC.N)	E (04/27/2020)	$14.77
UDR, Inc. (UDR.N)	O (11/20/2020)	$46.39
Urban Edge Properties (UE.N)	U (12/17/2019)	$18.93
Ronald Kamdem, CFA		
Broadstone Net Lease, Inc. (BNL.N)	E (04/15/2021)	$20.59
Extra Space Storage Inc. (EXR.N)	U (09/16/2019)	$144.63
National Retail Properties Inc (NNN.N)	O (04/15/2021)	$45.13
National Storage Affiliates Trust (NSA.N)	E (08/07/2018)	$43.40
Public Storage (PSA.N)	E (01/22/2021)	$273.45
Realty Income Corp (O.N)	O (05/04/2020)	$65.34
Spirit Realty Capital (SRC.N)	E (05/04/2020)	$45.92
STORE Capital Corp (STOR.N)	E (05/04/2020)	$33.34
Vereit Inc (VER.N)	E (08/02/2019)	$45.07
Vikram Malhotra		
Boston Properties, Inc. (BXP.N)	E (09/10/2019)	$108.20
Columbia Property Trust Inc (CXP.N)	++	$17.95
DHC US (DHC.O)	E (09/05/2019)	$3.64
Duke Realty Corp. (DRE.N)	E (10/07/2019)	$44.95
EastGroup Properties Inc. (EGP.N)	E (04/12/2017)	$154.71
Healthcare Realty Trust Inc. (HR.N)	E (08/15/2018)	$30.28
Healthcare Trust of America Inc (HTA.N)	E (08/15/2018)	$27.73
Healthpeak Properties Inc (PEAK.N)	E (03/20/2017)	$33.08
Highwoods Properties (HIW.N)	O (06/24/2020)	$43.51
Hudson Pacific Properties (HPP.N)	U (04/15/2021)	$26.97
New Senior Investment Group Inc (SNR.N)	E (10/29/2018)	$6.65
Office Properties Income Trust (OPI.O)	U (12/13/2019)	$27.42
Paramount Group Inc. (PGRE.N)	O (10/10/2019)	$10.35
Physicians Realty Trust (DOC.N)	O (03/15/2021)	$18.09
Prologis, Inc. (PLD.N)	O (02/12/2020)	$114.65
SL Green Realty Corporation (SLG.N)	E (05/28/2020)	$72.27
Ventas Inc (VTR.N)	E (03/27/2019)	$54.64
Vornado Realty Trust (VNO.N)	U (05/28/2020)	$45.35
Welltower Inc. (WELL.N)	O (03/20/2017)	$73.22

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INDUSTRY COVERAGE: IT Hardware

COMPANY (TICKER)	RATING (AS OF)	PRICE* (05/14/2021)
Erik W Woodring		
Garmin Ltd (GRMN.O)	E (01/07/2015)	$140.39
GoPro Inc (GPRO.O)	U (01/23/2018)	$9.86
Logitech International SA (LOGI.O)	O (11/11/2020)	$105.31
Resideo Technologies Inc (REZI.N)	E (03/16/2021)	$29.14
Vivint Smart Home Inc (VVNT.N)	E (08/11/2020)	$14.01
Katy L. Huberty, CFA		
Apple, Inc. (AAPL.O)	O (05/26/2009)	$127.45
CDW Corporation (CDW.O)	O (02/03/2021)	$169.45
Cricut Inc (CRCT.O)	O (04/19/2021)	$24.54
Dell Technologies Inc. (DELL.N)	O (07/16/2020)	$98.43
Hewlett Packard Enterprise (HPE.N)	E (01/15/2019)	$16.26
HP Inc. (HPQ.N)	O (12/15/2020)	$32.92
IBM (IBM.N)	E (01/16/2020)	$144.68
NCR Corp. (NCR.N)	O (11/30/2020)	$48.31
NetApp Inc (NTAP.O)	O (12/15/2020)	$78.50
Nutanix Inc (NTNX.O)	E (05/28/2019)	$29.99
Pure Storage Inc (PSTG.N)	E (05/18/2017)	$18.03
Seagate Technology (STX.O)	O (04/09/2018)	$97.97
Sonos Inc. (SONO.O)	O (01/28/2019)	$33.88
Teradata (TDC.N)	E (12/15/2020)	$41.30
Xerox Corp (XRX.N)	U (02/03/2021)	$24.21

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INDUSTRY COVERAGE: Diversified Utilities / IPPs

COMPANY (TICKER)	RATING (AS OF)	PRICE* (05/14/2021)
David Arcaro, CFA		
Public Service Enterprise Group Inc (PEG.N)	O (07/02/2020)	$62.52
Stephen C Byrd		
AES Corp. (AES.N)	O (03/23/2020)	$25.37
American Electric Power Co (AEP.O)	O (03/10/2020)	$86.76
Dominion Energy Inc (D.N)	++	$78.07
DTE Energy Co. (DTE.N)	E (02/26/2020)	$141.12
Exelon Corp (EXC.O)	O (08/27/2019)	$45.09
MGE Energy, Inc. (MGEE.O)	E (09/09/2020)	$74.90
NextEra Energy Inc (NEE.N)	E (04/14/2020)	$73.12
NRG Energy Inc (NRG.N)	O (09/06/2019)	$34.33
Vistra Energy Corp (VST.N)	O (03/25/2019)	$16.38

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INDUSTRY COVERAGE: Brokers & Asset Managers

COMPANY (TICKER)	RATING (AS OF)	PRICE* (05/14/2021)
Michael J. Cyprys, CFA, CPA		
Apollo Global Management Inc (APO.N)	O (11/06/2020)	$57.42
Ares Management Corp (ARES.N)	++	$52.41
BlackRock Inc. (BLK.N)	O (09/18/2015)	$856.87
Brightsphere Investment Group Inc. (BSIG.N)	O (04/08/2021)	$23.08
Carlyle Group Inc (CG.O)	E (11/14/2018)	$43.51
Charles Schwab Corp (SCHW.N)	O (09/26/2016)	$73.25
Franklin Resources Inc. (BEN.N)	U (09/03/2020)	$34.54
Hamilton Lane Inc. (HLNE.O)	E (01/26/2021)	$89.55
Invesco (IVZ.N)	E (01/03/2018)	$27.96
KKR & CO. Inc (KKR.N)	E (02/17/2016)	$56.14
LPL Financial Holdings Inc. (LPLA.O)	O (06/08/2020)	$149.97
MarketAxess Holdings Inc. (MKTX.O)	E (12/21/2020)	$456.30
StepStone Group (STEP.O)	O (10/12/2020)	$31.18
T. Rowe Price Group, Inc. (TROW.O)	E (10/05/2017)	$191.07
The Blackstone Group Inc (BX.N)	O (12/15/2014)	$87.48
Tradeweb Markets Inc (TW.O)	O (03/02/2021)	$83.88
Victory Capital Holdings Inc (VCTR.O)	U (04/08/2020)	$29.54
Virtu Financial Inc (VIRT.O)	U (01/11/2021)	$28.99
Virtus Investment Partners (VRTS.O)	E (06/01/2017)	$268.04
WisdomTree Investments, Inc. (WETF.O)	E (04/08/2021)	$6.65

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INDUSTRY COVERAGE: Clean Tech

COMPANY (TICKER)	RATING (AS OF)	PRICE* (05/14/2021)
Laura Sanchez		
TPI Composites Inc. (TPIC.O)	O (10/21/2020)	$44.48
Stephen C Byrd		
Array Technologies Inc (ARRY.O)	E (03/29/2021)	$14.23
Bloom Energy Corp. (BE.N)	E (01/12/2021)	$20.30
First Solar Inc (FSLR.O)	U (11/04/2020)	$72.58
Hannon Armstrong (HASI.N)	E (02/03/2016)	$48.30
Plug Power Inc. (PLUG.O)	E (04/12/2021)	$24.58
Shoals Technologies Group (SHLS.O)	E (02/22/2021)	$23.08
Solaredge Technologies Inc (SEDG.O)	O (01/21/2021)	$218.87
SunPower Corp (SPWR.O)	U (02/04/2021)	$22.24
Sunrun Inc (RUN.O)	O (03/10/2021)	$41.42

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INDUSTRY COVERAGE: Gaming & Lodging

COMPANY (TICKER)	RATING (AS OF)	PRICE* (05/14/2021)
Thomas Allen		
Boyd Gaming Corporation (BYD.N)	O (12/20/2018)	$61.80
Caesars Entertainment Inc. (CZR.O)	O (04/05/2021)	$98.61
Choice Hotels International Inc (CHH.N)	E (05/05/2017)	$119.23
DiamondRock Hospitality Co (DRH.N)	E (10/27/2020)	$10.06
DraftKings Inc (DKNG.O)	O (01/20/2021)	$44.89
Extended Stay America Inc (STAY.O)	E (08/09/2019)	$19.63
Gaming and Leisure Properties Inc (GLPI.O)	O (07/24/2018)	$45.98
Hilton Worldwide Holdings Inc (HLT.N)	E (01/17/2018)	$123.61
Host Hotels & Resorts, Inc. (HST.O)	E (07/29/2020)	$17.33
Hyatt Hotels Corporation (H.N)	E (03/07/2017)	$79.23
Las Vegas Sands Corp. (LVS.N)	E (01/21/2020)	$57.90
Marriott International Inc. (MAR.O)	E (07/24/2018)	$143.29
MGM Growth Properties LLC (MGP.N)	E (01/21/2020)	$34.79
MGM Resorts International (MGM.N)	O (04/05/2021)	$39.11
Penn National Gaming, Inc. (PENN.O)	E (08/27/2020)	$80.80
Sunstone Hotel Investors Inc (SHO.N)	E (07/29/2020)	$12.69
VICI Properties Inc (VICI.N)	E (05/02/2021)	$30.87
Wynn Resorts, Limited (WYNN.O)	O (11/02/2020)	$126.67
Xenia Hotels & Resorts Inc (XHR.N)	U (01/20/2021)	$19.43

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INDUSTRY COVERAGE: Midcap Banks

COMPANY (TICKER)	RATING (AS OF)	PRICE* (05/14/2021)
Ken A Zerbe, CFA		
Bank OZK (OZK.O)	E (10/19/2018)	$44.00
BankUnited Inc (BKU.N)	E (09/18/2018)	$47.87
BOK Financial Corp (BOKF.O)	E (06/20/2011)	$91.21
Cadence Bancorp (CADE.N)	E (09/25/2018)	$23.09
CIT Group Inc. (CIT.N)	++	$53.59
Citizens Financial Group, Inc (CFG.N)	O (11/03/2014)	$50.47
Comerica Inc (CMA.N)	E (11/26/2019)	$79.43
Commerce Bancshares (CBSH.O)	U (09/20/2016)	$80.12
Cullen/Frost Bankers (CFR.N)	U (11/12/2018)	$124.41
East West Bancorp, Inc. (EWBC.O)	O (07/01/2019)	$78.07
Fifth Third Bancorp (FITB.O)	O (09/25/2020)	$42.64
First Horizon National (FHN.N)	E (08/17/2020)	$19.14
First Republic Bank (FRC.N)	E (11/16/2016)	$188.77
Huntington Bancshares (HBAN.O)	E (12/10/2015)	$15.85
KeyCorp (KEY.N)	E (04/07/2020)	$23.39
M&T Bank Corp. (MTB.N)	E (04/04/2011)	$166.82
New York Community Bancorp, Inc (NYCB.N)	++	$11.76
People's United Financial, Inc. (PBCT.O)	E (06/05/2017)	$19.35
Prosperity Bancshares Inc (PB.N)	E (06/05/2017)	$75.37
Signature Bank (SBNY.O)	O (07/01/2019)	$246.71
SVB Financial Group (SIVB.O)	E (12/07/2020)	$578.42
Synovus Financial Corp. (SNV.N)	O (11/12/2018)	$48.73
TCF Financial Corp. (TCF.O)	E (08/16/2019)	$47.35
Valley National Bancorp (VLY.O)	E (08/07/2012)	$14.52
Webster Financial Corp (WBS.N)	E (07/01/2019)	$56.31
Zions Bancorp (ZION.O)	E (11/16/2016)	$60.20

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INDUSTRY COVERAGE: Machinery & Construction

COMPANY (TICKER)	RATING (AS OF)	PRICE* (05/14/2021)
Courtney Yakavonis, CFA		
AGCO Corp (AGCO.N)	O (12/15/2020)	$145.90
Allison Transmission Holdings Inc (ALSN.N)	E (07/17/2019)	$45.58
Caterpillar Inc. (CAT.N)	U (04/27/2020)	$242.23
CNH Industrial NV (CNHI.N)	++	$17.01
Cummins Inc. (CMI.N)	E (03/02/2018)	$265.67
Deere & Co. (DE.N)	O (03/02/2018)	$384.00
Martin Marietta Materials, Inc. (MLM.N)	O (12/18/2020)	$377.97
Oshkosh Corp. (OSK.N)	O (03/17/2020)	$135.36
PACCAR Inc (PCAR.O)	E (12/15/2020)	$94.66
REV Group Inc. (REVG.N)	E (12/15/2020)	$19.02
Summit Materials Inc (SUM.N)	E (12/18/2020)	$34.29
Terex Corp. (TEX.N)	E (03/02/2018)	$54.59
Timken Co (TKR.N)	E (06/10/2019)	$89.15
United Rentals Inc. (URI.N)	U (12/15/2020)	$341.79
Vulcan Materials Company (VMC.N)	E (12/18/2020)	$191.18
Westinghouse Air Brake Technologies Corp (WAB.N)	O (03/17/2020)	$80.53
WillScot Corporation (WSC.O)	O (07/21/2020)	$27.73
Dillon G Cumming		
Donaldson Company, Inc. (DCI.N)	O (06/26/2020)	$63.72
Kennametal Inc. (KMT.N)	E (06/26/2020)	$41.83
Lincoln Electric Holdings Inc (LECO.O)	E (06/26/2020)	$132.29

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INDUSTRY COVERAGE: Restaurants

COMPANY (TICKER)	RATING (AS OF)	PRICE* (05/14/2021)
John Glass		
BJ's Restaurants, Inc. (BJRI.O)	E (09/16/2015)	$54.96
Bloomin' Brands Inc (BLMN.O)	E (12/19/2018)	$29.22
Brinker International Inc. (EAT.N)	E (08/28/2020)	$63.55
Chipotle Mexican Grill, Inc. (CMG.N)	E (04/17/2019)	$1,356.21
Darden Restaurants Inc. (DRI.N)	O (01/19/2021)	$139.52
Dominos Pizza Inc. (DPZ.N)	O (04/17/2019)	$427.29
Jack in the Box Inc. (JACK.O)	E (05/21/2019)	$118.92
McDonald's Corporation (MCD.N)	O (11/29/2018)	$231.72
Red Robin Gourmet Burgers, Inc. (RRGB.O)	E (01/09/2013)	$33.69
Restaurant Brands International, Inc. (QSR.N)	E (01/19/2021)	$67.65
Shake Shack Inc (SHAK.N)	E (12/07/2017)	$83.25
Starbucks Corp. (SBUX.O)	E (06/20/2018)	$111.20
Texas Roadhouse, Inc. (TXRH.O)	E (01/17/2017)	$98.55
The Cheesecake Factory, Inc. (CAKE.O)	U (01/17/2020)	$59.30
The Wendy's Company (WEN.O)	E (01/08/2015)	$23.40
Wingstop Inc (WING.O)	E (10/18/2018)	$136.23
Yum! Brands, Inc. (YUM.N)	O (01/17/2020)	$119.27

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INDUSTRY COVERAGE: Household & Personal Care

COMPANY (TICKER)	RATING (AS OF)	PRICE* (05/14/2021)
Dara Mohsenian, CFA		
Church & Dwight Co., Inc. (CHD.N)	U (04/19/2021)	$88.55
Clorox Co (CLX.N)	U (04/19/2018)	$181.32
Colgate-Palmolive Co (CL.N)	E (07/22/2020)	$83.56
Coty Inc (COTY.N)	E (11/07/2018)	$8.95
Edgewell Personal Care (EPC.N)	E (06/04/2015)	$43.50
elf Beauty (ELF.N)	O (12/16/2019)	$28.86
Energizer Holdings Inc. (ENR.N)	O (05/18/2020)	$47.99
Estee Lauder Companies Inc (EL.N)	O (08/21/2020)	$296.48
Kimberly-Clark Corp (KMB.N)	E (01/24/2019)	$134.18
Newell Brands Inc. (NWL.O)	E (01/25/2018)	$28.95
Procter & Gamble Co. (PG.N)	O (12/13/2018)	$138.01

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INDUSTRY COVERAGE: Multi-Industry

COMPANY (TICKER)	RATING (AS OF)	PRICE* (05/14/2021)
Joshua C Pokrzywinski		
3M Co. (MMM.N)	E (08/20/2018)	$204.38
Advanced Drainage Systems Inc (WMS.N)	E (02/11/2021)	$113.21
Allegion PLC (ALLE.N)	E (08/20/2018)	$140.25
Ametek Inc. (AME.N)	O (12/18/2018)	$134.34
Carrier Global Corporation (CARR.N)	O (03/28/2021)	$43.64
Cognex Corp (CGNX.O)	U (03/23/2020)	$74.04
Colfax Corp (CFX.N)	E (08/20/2018)	$43.92
Dover (DOV.N)	E (11/23/2020)	$151.40
Eaton Corporation PLC (ETN.N)	O (03/03/2021)	$148.16
Emerson Electric Co (EMR.N)	E (03/23/2020)	$95.84
Fastenal Co. (FAST.O)	E (12/18/2018)	$53.90
Flowserve Corp (FLS.N)	E (05/22/2020)	$43.21
Fortive Corp (FTV.N)	E (02/17/2021)	$70.61
Gates Industrial Corporation plc (GTES.N)	E (12/18/2018)	$17.85
General Electric Co. (GE.N)	++	$13.26
Hayward Holdings Inc (HAYW.N)	E (04/06/2021)	$24.54
Helios Technologies Inc (HLIO.O)	E (05/29/2020)	$78.68
Honeywell International Inc (HON.O)	E (03/23/2020)	$227.36
Hubbell Inc. (HUBB.N)	E (12/18/2018)	$194.09
Illinois Tool Works (ITW.N)	U (07/13/2020)	$238.50
Ingersoll Rand INC (IR.N)	O (11/09/2018)	$48.54
Johnson Controls International Plc (JCI.N)	O (03/28/2021)	$65.55
Lennox International Inc (LII.N)	U (08/20/2018)	$350.84
Parker-Hannifin Corp (PH.N)	O (04/29/2020)	$321.84
Pentair plc (PNR.N)	E (12/03/2020)	$68.78
Rockwell Automation (ROK.N)	O (11/23/2020)	$267.46
Stanley Black & Decker (SWK.N)	O (08/20/2018)	$216.01
Trane Technologies PLC (TT.N)	O (08/20/2018)	$184.20
W.W. Grainger Inc. (GWW.N)	E (12/11/2019)	$467.06
Watsco Inc. (WSO.N)	E (12/18/2018)	$297.91

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INDUSTRY COVERAGE: Insurance - Property & Casualty

COMPANY (TICKER)	RATING (AS OF)	PRICE* (05/14/2021)
Michael W. Phillips		
Allstate Corporation (ALL.N)	E (07/06/2010)	$139.26
American Int'l Grp (AIG.N)	O (05/16/2017)	$51.90
Aon PLC (AON.N)	E (03/06/2019)	$254.24
Arch Capital Group Ltd. (ACGL.O)	++	$40.19
Arthur J. Gallagher (AJG.N)	E (05/31/2012)	$147.30
Assurant Inc. (AIZ.N)	O (07/10/2018)	$161.23
Axis Capital Holdings (AXS.N)	E (08/14/2015)	$56.73
Berkshire Hathaway Inc (BRKb.N)	E (03/20/2017)	$290.68
Brown & Brown Inc. (BRO.N)	E (12/05/2019)	$52.51
Chubb LTD (CB.N)	++	$170.18
Everest Re Group, Ltd. (RE.N)	O (03/24/2021)	$271.43
Hartford Fin. Services Grp. (HIG.N)	++	$66.07
Intact Financial Corp (IFC.TO)	++	C$160.44
Lemonade Inc. (LMND.N)	E (07/27/2020)	$69.45
Marsh & McLennan Cos (MMC.N)	E (02/09/2015)	$134.56
Progressive Corp (PGR.N)	E (10/15/2020)	$107.10
RenaissanceRe (RNR.N)	E (03/09/2015)	$160.62
Root Inc (ROOT.O)	E (11/23/2020)	$9.34
The Travelers Companies, Inc. (TRV.N)	U (01/05/2017)	$160.51
W.R. Berkley Corp. (WRB.N)	E (01/21/2016)	$80.49
Watford Holdings Ltd. (WTRE.O)	++	$34.85
Willis Towers Watson PLC (WLTW.O)	E (02/14/2020)	$264.85

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INDUSTRY COVERAGE: Payments and Processing

COMPANY (TICKER)	RATING (AS OF)	PRICE* (05/14/2021)
James E Faucette		
Affirm Holdings Inc (AFRM.O)	O (02/08/2021)	$54.00
Automatic Data Processing Inc (ADP.O)	E (02/25/2021)	$194.64
Evertec Inc (EVTC.N)	U (03/09/2021)	$43.61
Fidelity National Information Services (FIS.N)	E (12/16/2019)	$150.00
Fiserv Inc. (FISV.O)	E (12/16/2019)	$114.41
Fleetcor Technologies Inc (FLT.N)	E (02/25/2021)	$272.93
Global Payments Inc (GPN.N)	E (10/03/2014)	$198.93
Home Point Capital Inc (HMPT.O)	E (02/23/2021)	$6.47
LoanDepot Inc (LDI.N)	E (03/09/2021)	$13.09
MasterCard Inc (MA.N)	O (03/28/2016)	$363.91
Open Lending Corp. (LPRO.O)	E (04/12/2021)	$35.59
Paychex Inc (PAYX.O)	E (02/25/2021)	$100.11
PayPal Holdings, Inc. (PYPL.O)	O (10/11/2017)	$246.29
Q2 Holdings Inc (QTWO.N)	E (08/10/2020)	$93.99
Repay Holdings Corporation. (RPAY.O)	E (10/05/2020)	$23.12
Rocket Cos Inc (RKT.N)	E (08/31/2020)	$17.34
Shift4 Payments Inc. (FOUR.N)	E (06/30/2020)	$82.79
Square Inc (SQ.N)	E (03/28/2016)	$207.85
SS&C Technologies Holdings, Inc. (SSNC.O)	E (10/28/2019)	$74.26
Verra Mobility Corp (VRRM.O)	O (10/28/2019)	$14.89
Visa Inc. (V.N)	O (03/28/2016)	$226.94
Western Union Co (WU.N)	U (02/02/2015)	$24.86
WEX Inc (WEX.N)	E (02/25/2021)	$191.63

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INDUSTRY COVERAGE: Diversified Natural Gas

COMPANY (TICKER)	RATING (AS OF)	PRICE* (05/14/2021)
Devin McDermott		
Cheniere Energy Inc (LNG.A)	O (05/19/2020)	$83.83
Cheniere Energy Partners LP (CQP.A)	E (09/20/2019)	$41.32
Golar LNG Limited (GLNG.O)		$11.62
New Fortress Energy Inc (NFE.O)	O (05/12/2021)	$41.04
NextDecade Corporation (NEXT.O)	E (03/26/2021)	$1.98
Tellurian Inc (TELL.O)	U (09/20/2019)	$2.21

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INDUSTRY COVERAGE: Branded Apparel & Footwear

COMPANY (TICKER)	RATING (AS OF)	PRICE* (05/14/2021)
Kimberly C Greenberger		
Foot Locker Inc (FL.N)	E (08/08/2019)	$64.60
Levi Strauss & Co (LEVI.N)	O (10/11/2020)	$29.07
Nike Inc. (NKE.N)	O (08/01/2018)	$135.93
PVH Corp. (PVH.N)	O (04/09/2019)	$113.36
Skechers USA Inc. (SKX.N)	O (04/22/2021)	$48.50
Under Armour Inc. (UAA.N)	E (08/01/2018)	$22.78
Yeti Holdings Inc. (YETI.N)	E (03/29/2019)	$88.55

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INDUSTRY COVERAGE: Defense

COMPANY (TICKER)	RATING (AS OF)	PRICE* (05/14/2021)
Kristine T Liwag		
General Dynamics Corp. (GD.N)	U (09/07/2020)	$191.94
L3Harris Technologies Inc (LHX.N)	O (09/07/2020)	$217.04
Lockheed Martin Corp (LMT.N)	O (09/07/2020)	$390.78
MDA Ltd (MDA.TO)	E (04/27/2021)	C$14.84
Northrop Grumman Corp. (NOC.N)	O (09/07/2020)	$371.61
Textron Inc. (TXT.N)	E (09/07/2020)	$67.99

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INDUSTRY COVERAGE: Midcap Advisors

COMPANY (TICKER)	RATING (AS OF)	PRICE* (05/14/2021)
Manan Gosalia		
Evercore Inc (EVR.N)	O (11/20/2019)	$147.63
Houlihan Lokey Inc (HLI.N)	U (12/13/2020)	$74.00
Lazard Ltd (LAZ.N)	O (04/07/2021)	$46.64
Moelis & Co (MC.N)	E (06/21/2018)	$53.20
Raymond James Financial Inc. (RJF.N)	O (06/08/2020)	$134.17

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INDUSTRY COVERAGE: Business & Education Services

COMPANY (TICKER)	RATING (AS OF)	PRICE* (05/14/2021)
Javier Martinez de Olcoz Cerdan		
Laureate Education Inc (LAUR.O)	++	$14.56
Jeffrey D Goldstein, CFA		
H&R Block (HRB.N)	E (06/27/2019)	$24.55
Republic Services Inc. (RSG.N)	E (10/13/2020)	$111.10
Stride Inc (LRN.N)	E (02/01/2021)	$27.57
Waste Connections Inc. (WCN.N)	O (10/13/2020)	$121.26
Waste Management, Inc. (WM.N)	E (10/13/2020)	$141.94
Toni Kaplan		
ADT Inc (ADT.N)	E (05/13/2019)	$9.30
Advantage Solutions Inc (ADV.O)	E (04/01/2021)	$12.24
Aramark Holdings Corporation (ARMK.N)	E (08/10/2016)	$39.10
Bright Horizons Family Solutions Inc (BFAM.N)	U (04/07/2021)	$134.91
Cintas Corp (CTAS.O)	E (01/06/2021)	$358.08
Clarivate Plc. (CLVT.N)	O (03/08/2021)	$28.48
Equifax Inc (EFX.N)	E (01/18/2017)	$239.41
FactSet Research Systems Inc. (FDS.N)	U (07/16/2019)	$330.91
Gartner Inc. (IT.N)	O (01/06/2021)	$231.10
IHS Markit Ltd (INFO.N)	O (03/18/2021)	$104.96
Moody's Corp (MCO.N)	E (01/07/2020)	$334.04
MSCI Inc. (MSCI.N)	E (03/24/2014)	$463.46
Nielsen Holdings NV (NLSN.N)	O (12/14/2016)	$28.01
S&P Global Inc (SPGI.N)	O (03/18/2021)	$379.16
Terminix Global Holdings Inc (TMX.N)	E (08/07/2020)	$48.62
Thomson Reuters Corp. (TRI.N)	E (02/02/2021)	$94.77
TransUnion (TRU.N)	O (01/07/2020)	$108.05
Verisk Analytics, Inc. (VRSK.O)	O (01/07/2020)	$175.00

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INDUSTRY COVERAGE: Oil Services, Drilling & Equipment

COMPANY (TICKER)	RATING (AS OF)	PRICE* (05/14/2021)
Connor Lynagh		
Baker Hughes Co (BKR.N)	O (09/18/2018)	$25.10
Cactus Inc (WHD.N)	O (03/25/2021)	$35.31
Core Laboratories NV (CLB.N)	O (11/10/2020)	$33.96
Dril Quip Inc. (DRQ.N)	E (03/16/2020)	$34.32
Halliburton Co (HAL.N)	E (03/16/2020)	$23.06
Helmerich & Payne Inc (HP.N)	E (07/07/2020)	$29.35
Liberty Oilfield Services Inc (LBRT.N)	O (02/06/2018)	$14.33
Nabors Industries Inc. (NBR.N)	U (07/07/2020)	$99.48
National Oilwell Varco Inc. (NOV.N)	U (11/10/2020)	$17.51
Nextier Oilfield Solutions Inc (NEX.N)	O (11/13/2019)	$4.62
Oil States International Inc. (OIS.N)	E (09/18/2018)	$6.61
Patterson-UTI Energy (PTEN.O)	E (03/16/2020)	$8.52
Precision Drilling Corp (PDS.N)	E (03/16/2020)	$28.10
RPC (RES.N)	U (11/10/2020)	$5.81
Schlumberger NV (SLB.N)	O (09/10/2019)	$32.81
Tenaris SA (TS.N)	O (03/16/2020)	$23.82
Transocean Ltd. (RIG.N)	E (07/07/2020)	$4.02
U.S. Silica Holdings, Inc. (SLCA.N)	U (10/11/2018)	$11.59
Sasikanth Chilukuru, CFA		
TECHNIPFMC (FTI.N)	E (03/01/2021)	$8.21
TECHNIPFMC (FTI.PA)	E (03/01/2021)	€6.75

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INDUSTRY COVERAGE: Biotechnology

COMPANY (TICKER)	RATING (AS OF)	PRICE* (05/14/2021)
David N Lebowitz, CFA, MPH		
Akebia Therapeutics Inc (AKBA.O)	E (09/07/2018)	$3.45
Alnylam Pharmaceuticals Inc (ALNY.O)	O (03/05/2019)	$135.70
Ascendis Pharma A/S (ASND.O)	O (10/11/2019)	$132.18
AVROBIO Inc (AVRO.O)	O (07/16/2018)	$9.60
Blueprint Medicines Corporation (BPMC.O)	E (10/30/2020)	$96.45
Epizyme Inc (EPZM.O)	E (02/25/2021)	$9.13
Ionis Pharmaceuticals Inc (IONS.O)	U (11/07/2019)	$38.24
Ironwood Pharmaceuticals, Inc. (IRWD.O)	E (03/27/2019)	$11.68
Karyopharm Therapeutics Inc (KPTI.O)	O (07/01/2020)	$9.18
MacroGenics Inc (MGNX.O)	U (11/21/2019)	$29.49
Rhythm Pharmaceuticals Inc (RYTM.O)	O (09/07/2018)	$22.55
Schrodinger Inc. (SDGR.O)	E (03/02/2020)	$61.24
Syndax Pharmaceuticals Inc (SNDX.O)	E (10/29/2018)	$18.53
Y-mABs Therapeutics Inc. (YMAB.O)	E (04/29/2020)	$34.19
Zealand Pharma A/S (ZEAL.O)	O (09/12/2018)	$29.00
Jeffrey Hung		
Acadia Pharmaceuticals Inc (ACAD.O)	O (08/20/2020)	$21.77
Acceleron Pharma Inc (XLRN.O)	O (02/03/2020)	$126.09
Aprea Therapeutics Inc (APRE.O)	E (10/28/2019)	$4.12
Cullinan Oncology Inc (CGEM.O)	O (04/27/2021)	$27.66
Cytokinetics Inc (CYTK.O)	O (04/09/2020)	$25.93
Esperion Therapeutics Inc (ESPR.O)	E (03/11/2021)	$22.88
Evofem Biosciences Inc (EVFM.O)	E (08/20/2020)	$1.25
Exelixis Inc. (EXEL.O)	E (03/18/2019)	$25.56
Neurocrine Biosciences Inc (NBIX.O)	O (09/10/2018)	$94.60
NextCure Inc. (NXTC.O)	E (07/13/2020)	$8.14
Prelude Therapeutics Inc (PRLD.O)	E (10/20/2020)	$42.04
Repare Therapeutics Inc (RPTX.O)	O (07/14/2020)	$32.38
Ultragenyx Pharmaceutical Inc (RARE.O)	O (03/27/2019)	$110.88
Voyager Therapeutics Inc (VYGR.O)	E (09/10/2018)	$4.56

Matthew Harrison

Adagene Inc. (ADAG.O)	O (03/07/2021)	$12.70
ADC Therapeutics SA (ADCT.N)	O (06/09/2020)	$21.23
Akero Therapeutics Inc (AKRO.O)	O (09/10/2020)	$28.21
Alector Inc (ALEC.O)	O (03/04/2019)	$17.00
Alexion Pharmaceuticals (ALXN.O)	++	$173.49
AlloVir Inc (ALVR.O)	O (08/24/2020)	$24.00
Amgen Inc. (AMGN.O)	O (12/17/2019)	$251.38
argenx SE (ARGX.O)	O (01/04/2019)	$272.30
Atea Pharmaceuticals Inc (AVIR.O)	O (11/24/2020)	$22.91
BeiGene Ltd (6160.HK)	O (01/17/2020)	HK$186.90
BeiGene Ltd (BGNE.O)	O (01/17/2020)	$319.61
Biogen Inc (BIIB.O)	O (07/27/2020)	$280.21
Biohaven Pharmaceutical Holding Company (BHVN.N)	E (04/09/2019)	$69.85
Biomarin Pharmaceutical Inc (BMRN.O)	E (07/08/2020)	$76.93
Bluebird Bio Inc (BLUE.O)	E (11/03/2017)	$30.32
Bolt Biotherapeutics, Inc. (BOLT.O)	O (03/02/2021)	$18.79
Cabaletta Bio Inc (CABA.O)	O (11/19/2019)	$9.25
Denali Therapeutics Inc (DNLI.O)	O (01/02/2018)	$53.90
Editas Medicine (EDIT.O)	U (01/19/2021)	$33.22
Evelo Biosciences Inc (EVLO.O)	E (05/21/2020)	$10.88
Freeline Therapeutics Holdings plc (FRLN.O)	O (09/01/2020)	$8.75
Fulcrum Therapeutics Inc (FULC.O)	E (08/12/2020)	$9.84
Fusion Pharmaceuticals Inc (FUSN.O)	O (07/21/2020)	$8.18
Galapagos NV (GLPG.O)	O (01/19/2021)	$76.18
Genmab A/S (GMAB.CO)	E (01/19/2021)	DKr 2,231.00
Genmab A/S (GMAB.O)	E (01/19/2021)	$37.08
Gilead Sciences Inc. (GILD.O)	O (01/19/2021)	$68.53
Global Blood Therapeutics Inc (GBT.O)	E (03/21/2018)	$36.18
Imara Inc (IMRA.O)	O (04/06/2020)	$8.05
Innoviva Inc (INVA.O)	U (08/14/2014)	$12.87
Insmed Inc (INSM.O)	O (03/21/2018)	$26.23
Kaleido Biosciences Inc. (KLDO.O)	E (05/21/2020)	$6.32
Kodiak Sciences Inc (KOD.O)	E (11/16/2020)	$84.05
Legend Biotech Corp (LEGN.O)	O (06/30/2020)	$29.60
Moderna Inc (MRNA.O)	E (12/16/2020)	$161.38
Pharvaris B.V. (PHVS.O)	O (03/02/2021)	$21.36
Regeneron Pharmaceuticals Inc. (REGN.O)	E (10/01/2015)	$516.62
Regenxbio Inc (RGNX.O)	O (11/09/2017)	$36.14
Rubius Therapeutics Inc. (RUBY.O)	E (03/13/2020)	$25.55
SAGE Therapeutics Inc (SAGE.O)	E (11/16/2020)	$70.86
Sana Biotechnology, Inc (SANA.O)	O (03/01/2021)	$20.00
Sarepta Therapeutics Inc (SRPT.O)	E (01/08/2021)	$76.05
Seagen Inc (SGEN.O)	E (12/10/2019)	$147.50
Sigilon Therapeutics Inc (SGTX.O)	E (12/29/2020)	$13.16
Taysha Gene Therapies Inc. (TSHA.O)	O (10/19/2020)	$20.94
Unity Biotechnology Inc. (UBX.O)	E (08/18/2020)	$4.20
Vertex Pharmaceuticals (VRTX.O)	E (07/08/2020)	$217.09
Zentalis Pharmaceuticals Inc (ZNTL.O)	O (04/28/2020)	$58.82

Vikram Purohit

Axsome Therapeutics (AXSM.O)	O (09/10/2020)	$58.42
Certara Inc (CERT.O)	E (01/05/2021)	$25.76
Foghorn Therapeutics (FHTX.O)	O (11/17/2020)	$9.68
Hookipa Pharma Inc (HOOK.O)	O (04/08/2021)	$17.56
Incyte Corp (INCY.O)	E (04/29/2020)	$82.62
Instil Bio (TIL.O)	E (04/13/2021)	$18.00
Kymera Therapeutics Inc (KYMR.O)	E (09/15/2020)	$45.52
Radius Health Inc (RDUS.O)	E (05/13/2020)	$20.95
Theravance Biopharma Inc (TBPH.O)	O (10/14/2020)	$18.72

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INDUSTRY COVERAGE: Chemicals

COMPANY (TICKER)	RATING (AS OF)	PRICE* (05/14/2021)
Angel Castillo		
Avient Corporation (AVNT.N)	E (12/14/2020)	$53.66
Huntsman Corp (HUN.N)	O (09/29/2020)	$30.09
Olin Corp. (OLN.N)	E (03/03/2021)	$46.79
PQ Group Holdings Inc (PQG.N)	E (05/04/2021)	$15.45
Trinseo S.A. (TSE.N)		$67.75
Westlake Chemical Corp (WLK.N)	E (01/09/2018)	$104.10
Lisa H De Neve		
International Flavors & Fragrances (IFF.N)	O (04/11/2021)	$141.21
Neel Kumar, CFA		
Element Solutions Inc (ESI.N)	E (01/30/2017)	$22.62
Vincent Andrews		
Air Products and Chemicals Inc. (APD.N)	O (02/09/2020)	$301.05
Albemarle Corporation (ALB.N)	U (02/26/2018)	$163.81
Axalta Coating Systems Ltd (AXTA.N)	E (12/09/2015)	$32.64
Celanese Corp. (CE.N)	E (10/08/2012)	$167.19
CF Industries (CF.N)	E (05/25/2016)	$54.34
Chemours Co (CC.N)	E (01/30/2018)	$33.71
Corteva Inc. (CTVA.N)	O (12/14/2020)	$46.32
Diversey Holdings, Ltd. (DSEY.O)	O (04/19/2021)	$17.02
Dow Inc. (DOW.N)	E (12/01/2019)	$69.83
DuPont De Nemours Inc. (DD.N)		$83.24
Eastman Chemical Co (EMN.N)	O (01/17/2019)	$128.99
Ecolab Inc. (ECL.N)	E (08/15/2017)	$224.06
FMC Corporation (FMC.N)	E (05/20/2019)	$118.19
Intrepid Potash (IPI.N)	U (10/03/2013)	$26.24
Israel Chemicals Ltd. (ICL.N)	E (11/03/2014)	$6.75
Linde PLC (LIN.N)	O (02/09/2020)	$301.17
LyondellBasell Industries N.V. (LYB.N)	O (12/01/2019)	$114.07
Mosaic Company (MOS.N)	E (03/16/2016)	$36.49
Nutrien Ltd (NTR.N)	E (12/11/2018)	$60.54
PPG Industries Inc. (PPG.N)	E (11/01/2019)	$179.10
RPM International Inc. (RPM.N)	E (12/14/2020)	$96.98
Sherwin-Williams Co. (SHW.N)	O (03/19/2014)	$286.09
Tronox Holdings Plc-Class A (TROX.N)	E (01/30/2018)	$23.28
Venator Materials PLC (VNTR.N)	E (01/30/2018)	$4.55

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INDUSTRY COVERAGE: Metals & Mining

COMPANY (TICKER)	RATING (AS OF)	PRICE* (05/14/2021)
Carlos De Alba		
Alcoa Corp (AA.N)	O (03/23/2021)	$39.70
Freeport-McMoRan Inc (FCX.N)	E (03/23/2021)	$42.29
Largo Resources Ltd (LGO.TO)	O (04/18/2021)	C$17.70
MP Materials Corp (MP.N)	O (03/01/2021)	$26.14
Teck Resources Limited (TECK.N)	O (11/07/2019)	$25.47
Ioannis Masvoulas, CFA		
First Quantum Minerals Ltd (FM.TO)	O (06/08/2020)	C$29.52

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INDUSTRY COVERAGE: Autos & Shared Mobility

COMPANY (TICKER)	RATING (AS OF)	PRICE* (05/14/2021)
Adam Jonas, CFA		
Adient PLC (ADNT.N)	U (03/17/2021)	$48.61
American Axle & Manufacturing Holdings Inc (AXL.N)	U (03/24/2021)	$10.63
Aptiv Plc (APTV.N)	O (03/30/2020)	$139.18
Asbury Automotive Group Inc (ABG.N)	O (12/07/2020)	$209.85
AutoNation Inc. (AN.N)	U (07/10/2018)	$105.29
BorgWarner Inc. (BWA.N)	U (11/09/2020)	$51.43
Carmax Inc (KMX.N)	O (07/10/2018)	$124.83
Carvana Co (CVNA.N)	O (02/26/2021)	$237.53
Ferrari NV (RACE.N)	O (05/09/2019)	$198.65
Fisker Inc (FSR.N)	O (02/11/2021)	$10.50
Ford Motor Company (F.N)	U (01/29/2021)	$11.84
Garrett Motion Inc (GTX.O)		$6.09
General Motors Company (GM.N)	O (04/09/2018)	$56.00
Group 1 Automotive, Inc (GPI.N)	O (05/06/2019)	$167.15
Lear Corporation (LEA.N)	O (11/09/2020)	$186.20
Lithia Motors Inc. (LAD.N)	U (02/09/2021)	$369.38
Lordstown Motors (RIDE.O)	U (02/11/2021)	$7.33
Magna International Inc. (MGA.N)	E (04/13/2021)	$96.60
Penske Automotive Group, Inc (PAG.N)	O (07/10/2018)	$92.07
Quantumscape Corp (QS.N)	O (02/11/2021)	$27.29
Romeo Power, Inc. (RMO.N)	U (02/11/2021)	$6.90
Sonic Automotive Inc (SAH.N)	E (11/14/2019)	$50.76
Tenneco Inc. (TEN.N)	U (03/30/2020)	$13.80
Tesla Inc (TSLA.O)	O (11/18/2020)	$589.74
Visteon Corporation (VC.O)	U (03/22/2018)	$116.77
Billy Kovanis		
Avis Budget Group Inc (CAR.O)	E (03/15/2021)	$86.83
Harley-Davidson Inc (HOG.N)	U (04/22/2021)	$47.69
Polaris Inc. (PII.N)	O (01/19/2021)	$134.41
Victoria A Greer		
Goodyear Tire & Rubber Company (GT.O)	E (04/16/2021)	$19.96

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INDUSTRY COVERAGE: Telecom Services

COMPANY (TICKER)	RATING (AS OF)	PRICE* (05/14/2021)
Simon Flannery		
Anterix Inc (ATEX.O)	E (11/11/2019)	$47.96
AT&T, Inc. (T.N)	E (12/17/2020)	$32.24
BCE Inc. (BCE.TO)	E (03/05/2021)	C$59.34
Cincinnati Bell Inc. (CBB.N)	NA (06/23/2020)	$15.41
Globalstar Inc (GSAT.A)	U (01/22/2021)	$1.14
Gogo Inc (GOGO.O)	E (02/23/2021)	$12.00
LUMEN TECHNOLOGIES INC (LUMN.N)	U (01/28/2021)	$14.43
Rogers Communications, Inc. (RCIb.TO)	E (12/17/2015)	C$61.89
Shaw Communications Inc (SJRb.TO)	E (10/23/2020)	C$36.05
Telephone & Data Systems (TDS.N)	O (06/18/2019)	$25.72
TELUS Corp. (T.TO)	O (04/30/2018)	C$26.42
T-Mobile US, Inc. (TMUS.O)	O (04/17/2020)	$141.52
US Cellular Corporation (USM.N)	O (06/18/2019)	$38.29
Verizon Communications (VZ.N)	E (12/12/2018)	$58.69
ViaSat Inc (VSAT.O)	E (12/15/2017)	$48.60

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INDUSTRY COVERAGE: Healthcare Facilities & Managed Care

COMPANY (TICKER)	RATING (AS OF)	PRICE* (05/14/2021)
Ricky R Goldwasser		
Alignment Healthcare Inc (ALHC.O)	O (04/20/2021)	$20.96
Anthem Inc (ANTM.N)	O (09/04/2018)	$393.93
Centene Corp (CNC.N)	O (06/06/2017)	$69.20
Cigna Corp (CI.N)	O (12/13/2018)	$263.52
Humana Inc (HUM.N)	O (07/12/2018)	$452.75
Molina Healthcare Inc (MOH.N)	O (08/17/2017)	$260.48
UnitedHealth Group Inc (UNH.N)	O (06/06/2017)	$409.80

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INDUSTRY COVERAGE: Hardline/Broadline/Food Retail

COMPANY (TICKER)	RATING (AS OF)	PRICE* (05/14/2021)
Simeon Gutman, CFA		
Advance Auto Parts Inc (AAP.N)	O (06/23/2014)	$202.81
Albertsons Companies, Inc (ACI.N)	U (01/20/2021)	$19.19
At Home Group Inc (HOME.N)	E (06/10/2019)	$36.30
AutoZone Inc. (AZO.N)	O (03/16/2020)	$1,527.58
Bed Bath & Beyond Inc. (BBBY.O)	E (10/28/2020)	$25.12
Best Buy Co Inc (BBY.N)	E (01/19/2016)	$120.39
BJ'S Wholesale Club (BJ.N)	E (07/23/2018)	$47.25
Costco Wholesale Corp (COST.O)	O (03/16/2020)	$384.42
Dick's Sporting Goods (DKS.N)	O (08/26/2020)	$87.96
Dollar General Corporation (DG.N)	O (02/16/2016)	$206.20
Dollar Tree Inc (DLTR.O)	E (02/16/2016)	$111.23
Driven Brands Holdings Inc (DRVN.O)	E (02/09/2021)	$28.13
Five Below Inc (FIVE.O)	O (06/30/2019)	$184.25
Floor & Decor Holdings Inc (FND.N)	E (11/12/2018)	$104.59
Grocery Outlet Holding Corp (GO.O)	E (07/15/2019)	$34.75
Home Depot Inc (HD.N)	O (02/23/2017)	$323.63
Kroger Co. (KR.N)	U (01/20/2021)	$37.20
Leslie's, Inc. (LESL.O)	E (11/23/2020)	$27.43
Lowe's Companies Inc (LOW.N)	O (01/21/2015)	$198.91
National Vision Holdings Inc. (EYE.O)	O (11/20/2017)	$49.94
O'Reilly Automotive Inc (ORLY.O)	O (04/01/2020)	$553.33
Ollie's Bargain Outlet Holdings Inc (OLLI.O)	U (01/20/2021)	$80.15
Sally Beauty Holdings Inc (SBH.N)	E (01/20/2021)	$22.96
Target Corp (TGT.N)	E (05/20/2019)	$211.16
Tractor Supply Co (TSCO.O)	E (07/24/2020)	$187.88
Ulta Beauty Inc (ULTA.O)	E (08/29/2019)	$324.28
Valvoline Inc. (VVV.N)	E (10/18/2016)	$31.71
Walmart Inc (WMT.N)	O (01/23/2019)	$139.52
Wayfair Inc (W.N)	E (02/25/2021)	$300.00
Williams-Sonoma Inc (WSM.N)	E (01/20/2021)	$171.77

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INDUSTRY COVERAGE: Freight Transportation

COMPANY (TICKER)	RATING (AS OF)	PRICE* (05/14/2021)
Ravi Shanker		
ArcBest Corp (ARCB.O)	O (12/10/2020)	$84.11
C.H. Robinson Worldwide Inc. (CHRW.O)	U (06/09/2013)	$99.78
Canadian National Railway Co. (CNR.TO)	++	C$130.07
Canadian Pacific Railway Ltd. (CP.TO)	++	C$97.01
CSX Corporation (CSX.O)	U (12/10/2020)	$101.71
Echo Global Logistics Inc (ECHO.O)	E (03/05/2019)	$36.18
Expeditors International of Washington I (EXPD.O)	E (02/25/2015)	$119.61
FedEx Corporation (FDX.N)	E (06/20/2013)	$309.43
Heartland Express Inc. (HTLD.O)	U (05/06/2011)	$18.73
Hub Group Inc (HUBG.O)	E (02/13/2018)	$74.22
J.B. Hunt Transport Services Inc. (JBHT.O)	E (05/06/2011)	$176.49
Kansas City Southern (KSU.N)	++	$309.01
Knight-Swift Transportation Holdings Inc (KNX.N)	O (12/13/2017)	$48.88
Landstar System Inc (LSTR.O)	U (02/23/2016)	$175.12
Norfolk Southern Corp. (NSC.N)	U (06/03/2016)	$289.83
Old Dominion Freight Line Inc (ODFL.O)	O (03/23/2020)	$269.57
Saia, Inc. (SAIA.O)	U (02/23/2016)	$244.01
Schneider National Inc. (SNDR.N)	O (05/01/2017)	$25.73
TFI International Inc (TFII.N)	O (06/10/2020)	$89.42
TuSimple Holdings Inc (TSP.O)	O (05/10/2021)	$36.77
Union Pacific Corp. (UNP.N)	E (03/23/2020)	$227.86
United Parcel Service (UPS.N)	U (02/23/2016)	$216.38
US Xpress Enterprises Inc (USX.N)	O (07/09/2018)	$11.21
Werner Enterprises (WERN.O)	O (02/23/2016)	$48.47
XPO Logistics, Inc. (XPO.N)	E (02/19/2019)	$146.05

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INDUSTRY COVERAGE: Large Cap Banks & Consumer Finance

COMPANY (TICKER)	RATING (AS OF)	PRICE* (05/14/2021)
Betsy L. Graseck, CFA		
Ally Financial Inc (ALLY.N)	O (05/28/2020)	$54.00
American Express Company (AXP.N)	O (04/25/2019)	$157.15
Bank of America (BAC.N)	U (11/30/2020)	$42.36
BNY Mellon (BK.N)	E (11/30/2020)	$51.78
Capital One Financial Corporation (COF.N)	O (11/30/2020)	$158.11
Citigroup Inc. (C.N)	O (11/14/2016)	$76.56
Discover Financial Services (DFS.N)	E (11/30/2020)	$116.82
Goldman Sachs Group Inc (GS.N)	U (11/30/2020)	$368.77
JPMorgan Chase & Co (JPM.N)	U (11/30/2020)	$164.01
Northern Trust Corp. (NTRS.O)	E (06/08/2020)	$120.17
PNC Financial Services (PNC.N)	E (07/25/2013)	$199.38
Regions Financial Corp (RF.N)	O (11/30/2020)	$23.25
Santander Consumer USA Holdings Inc (SC.N)	E (12/20/2016)	$36.32
State Street Corporation (STT.N)	O (11/30/2020)	$86.75
Synchrony Financial (SYF.N)	O (11/30/2020)	$46.80
Truist Financial Corp (TFC.N)	E (01/07/2018)	$61.64
U.S. Bancorp (USB.N)	E (11/30/2020)	$61.91
Wells Fargo & Co. (WFC.N)	O (11/30/2020)	$46.96
Jeffrey Adelson, CFA		
Alliance Data Systems Corp (ADS.N)	O (10/13/2020)	$120.60
Ryan Kenny		
SEI Investments Company (SEIC.O)	E (11/30/2020)	$63.34

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INDUSTRY COVERAGE: Medical Technology

COMPANY (TICKER)	RATING (AS OF)	PRICE* (05/14/2021)
Cecilia Furlong		
Abbott Laboratories (ABT.N)	O (01/02/2018)	$118.31
Abiomed (ABMD.O)	U (02/11/2020)	$268.56
Alcon Inc (ALC.N)	O (04/09/2019)	$68.35
Axonics Modulation Technologies Inc. (AXNX.O)	O (11/26/2018)	$54.03
Boston Scientific (BSX.N)	O (10/16/2015)	$41.55
DexCom Inc (DXCM.O)	E (01/03/2017)	$333.25
Edwards Lifesciences (EW.N)	O (07/06/2015)	$89.49
Inari Medical Inc (NARI.O)	O (10/29/2020)	$80.94
Insulet Corp. (PODD.O)	E (11/02/2015)	$232.42
IRHYTHM TECHNOLOGIES INC (IRTC.O)	E (04/13/2021)	$81.31
Medtronic PLC (MDT.N)	O (12/15/2020)	$125.27
Nevro Corp (NVRO.N)	O (03/20/2019)	$144.84
Pulmonx Corporation (LUNG.O)	E (10/26/2020)	$37.61
Shockwave Medical Inc. (SWAV.O)	E (04/01/2019)	$150.39
Teleflex Inc. (TFX.N)	O (09/06/2017)	$393.00
Transmedics Group Inc (TMDX.O)	E (05/28/2019)	$22.24
ViewRay Inc (VRAY.O)	U (03/27/2020)	$5.18
David R. Lewis		
Johnson & Johnson (JNJ.N)	O (12/17/2019)	$170.22
Drew Ranieri		
Avanos Medical Inc (AVNS.N)	U (10/12/2015)	$39.98
Baxter International (BAX.N)	E (12/17/2019)	$83.86
Becton Dickinson (BDX.N)	O (12/15/2020)	$242.38
Bioventus, Inc. (BVS.O)	O (03/08/2021)	$15.85
Envista Holdings Corporation (NVST.N)	E (10/14/2019)	$45.23
Globus Medical Inc (GMED.N)	E (01/02/2019)	$72.24
Haemonetics Corporation (HAE.N)	E (04/20/2021)	$56.00
Hill-Rom Holdings Inc. (HRC.N)	O (12/17/2019)	$111.07
Intuitive Surgical Inc. (ISRG.O)	E (12/15/2020)	$833.38
NuVasive Inc (NUVA.O)	E (09/14/2015)	$69.53
Outset Medical, Inc. (OM.O)	E (10/12/2020)	$42.13
SI-BONE Inc. (SIBN.O)	O (11/12/2018)	$31.96
Stryker Corporation (SYK.N)	O (01/08/2010)	$252.95
Zimmer Biomet Holdings Inc (ZBH.N)	O (01/05/2015)	$167.27

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