

# **US Equity Strategy**

# Time to reposition: scoring themes, upgrade Tech

#### Risks and risk premiums: markets discounted late cycle quickly

As investor worries around inflation/rates, growth/recession and earnings/margins have risen, market internals have been even faster to adjust. According to our model, the probability of earnings being "late cycle" jumped 35pp in 2+ months (as implied by valuations), compared to taking 15+mo in 2018-19 to move 35pp. The shift in Fed expectations YTD was a 3stdev move with the 10-2y curve flattening 2+ stdev. Based on our machine learning model (ML), Russia/Ukraine risk has dominated relative returns since end Feb with some risk still priced. But growth developments are becoming a more important driver after real yields and inflation expectations already reset.

### Scoring the drivers/themes: looking for opportunities amid cross currents

Amid rising risks and shifting relative risk premiums, we reassess how to position across sectors and industries using a weighted score based on key themes and risks. We leverage various data sets and approaches to estimate sensitivities to major drivers.

- 1) ML model implied returns using UBS econ baseline forecasts would support increasing exposure to growth and defensives amid slowing growth and inflation. We adjust for how much industries may have outperformed our model YTD (i.e. Utilities, Staples, Energy) and underperformed (i.e. Cons Dur & App, Banks, Software & Svcs).
- **2) Factor** scores based on measures of value, growth, momentum and quality show a mixed setup. Quality should lead at this stage and has lagged. Low vol stocks are rich.
- **3)** <u>Cycle stage</u> implied returns using the ISM mfg and our earnings indicator as a guide would support tilting away from many cyclicals as we move mid-to-late cycle. Durables +investment as a % of GDP is high and sensitive to rates, posing risks to the mfg cycle.
- **4)** <u>Earnings</u> are well above trend and we account for how much industry sales/EPS/ margins are above/below pre-COVID trends given the relative asymmetries.
- **5)** <u>Pricing power</u> vs cost exposures are set to drive alpha after the inflation surge. We incorporate our comprehensive and proprietary pricing/cost exposures for industries.
- **6)** <u>Dividend growth</u> should matter more for returns amid slowing earnings growth.
- 7) Consumer trends favor higher>lower income exposure and services>goods.

#### Strategy: upgrading Tech and REITs to o/w; downgrading Industrials to u/w

Our frameworks point to a unique stance of being o/w Tech, REITs, Healthcare, Financials and Energy funded by underweights in Materials, Industrials, Utilities and Staples.

**Tech upgrade** is supported by improving relative growth/momentum, higher quality, strong pricing power, lower cost exposures and payout potential. Valuation and higher rates are overhangs but growth/cycle should matter more. Surging labor issues point to big upside in IT/software spend. Software & Svcs are favored over Semis, over Tech Hdwr. **REITs upgrade** is driven by solid growth amid inflation, better pricing vs lower cost exposures, and a cycle stage setup that should be relatively supportive.

**Healthcare stays o/w** given relative P/Es are still well below prior late cycle levels, relative EPS momentum is set to improve and relative returns are better at this stage.

**Financials stay o/w** as relative YTD performance has tracked the curve lower while last cycle it tracked the 10y yield level. Earnings upside amid higher rates and loan growth is not being discounted with relative valuations falling so much YTD.

**Energy stays o/w** on the strongest momentum+growth+value across sectors. **Materials, Industrials are u/w** based on cycle risks and fading inflation. Many parts of Industrials also face large cost headwinds but Rails and Aero & Def score best.

**Utilities, Staples stay u/w** based on weaker growth and some cycle risk already priced. Comm Svcs moves to Neutral from o/w with Interactive Media over Telecom. Consumer Discretionary stays Neutral, with positive tilts to Durables & Apparel and Consumer Svcs.

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# Sector, style and sub-industry views

To better assess relative performance potential based on the key themes and drivers, we standardize different data results by calculating a z-score - across sectors and industry groups based on: 1) ML Model implied returns on macro sensitivities/assumptions (link), 2) Momentum using EPS momentum, revision ratios and price momentum, 3) Quality level+change based on our composite quality measures, and low volatility, 4) Growth based on 12m EPS and sales growth, fwd 2q change in NTM estimates, and 12-24m growth, 5) Value based on composite value scores and our proprietary value framework (link), 6) Cycle focuses on returns through the phases of the earnings and ISM cycles, 7) Fundamentals vs trend based on 2022e EPS+sales vs trend, margins vs avg levels and valuations on trend EPS and sales, 8) Pricing power based on our proprietary score which includes variables such as pricing strength, input costs and margin structure (link), 9) Dividend growth using probabilities from our machine learning model (link), and 10) Consumer for exposure to services vs goods and high vs low income (link).

After upgrading Tech to o/w in March 2021 (link) and downgrading to u/w to start 2022 (link), we again upgrade Tech to o/w as cycle risks increase and relative growth should matter more than rates/inflation risk as a driver of returns.

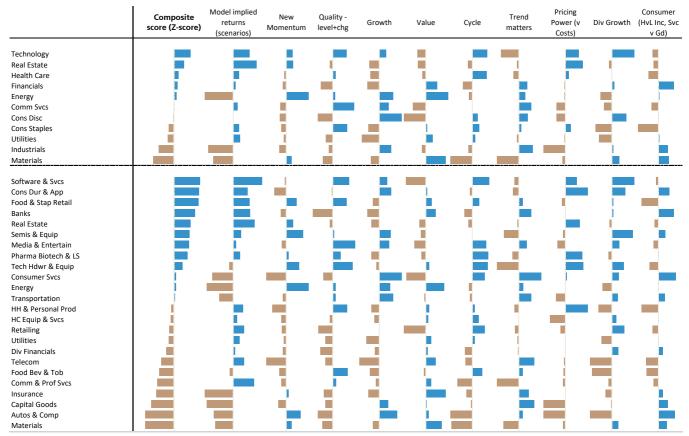
**Overweight: Tech, REITs, Healthcare, Financials, Energy.** Our frameworks point to outperformance of Tech, Real Estate and Healthcare supported by historical performance at this point in the cycle, our ML model implied returns and strong pricing power vs cost exposures. Financials and Energy stay overweights (albeit less so) as valuations are not discounting potential EPS upside and solid fundamental momentum.

Within defensives, we prefer REITs and Healthcare over Utilities and Staples. Within cyclicals, we prefer Financials and Energy over Industrials and Materials.

**Underweight: Materials, Industrials, Utilities, Staples.** Industrials move to u/w based on greater cost issues and ML model expectations for underperformance amid growth/cycle risks. Materials remain an u/w and have held up on a relative basis amid inflation worries despite being among the worst performers at this stage of the cycle. Utilities and Staples have outperformed our model implied returns as rates have risen, and stay underweights given weaker growth and more cycle risks being priced.

Comm Svcs moves to neutral from o/ w while Discretionary stays neutral amid a mixed setup for the consumer.

Figure 1: Sector and industry group summary recommendations and scoring across themes

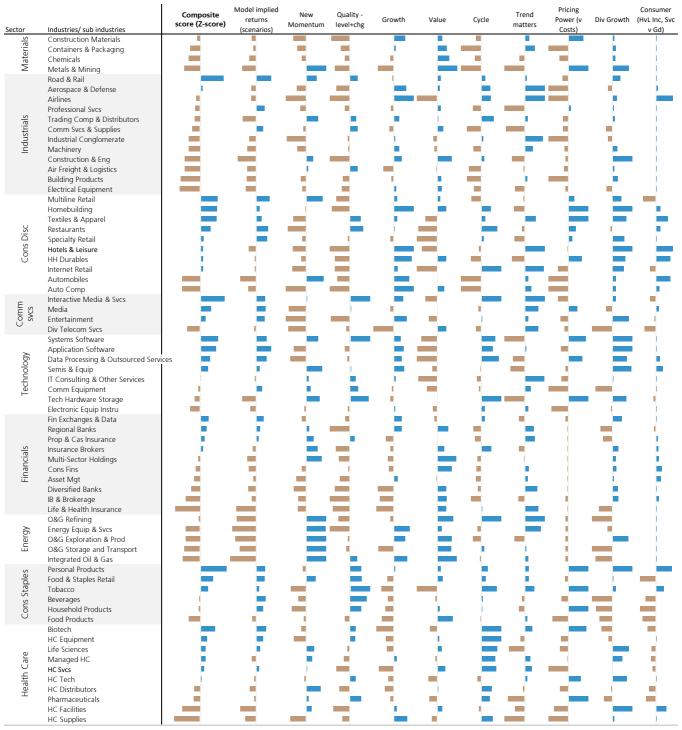


Source: UBS

# Industry and sub-industry scorecard

We also lay out how industry and major sub industries scored across the themes.

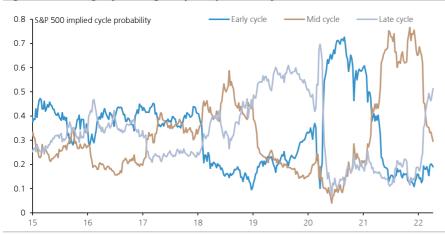
Figure 2: Industry and sub-industry scorecard



Source: UBS

# Late cycle abruptly being priced, so are higher rates

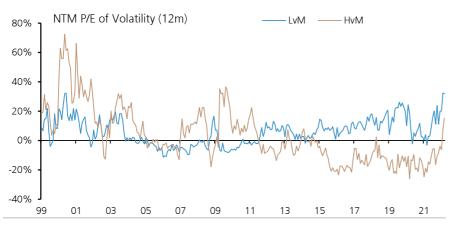
Figure 3: Earnings cycle stage implied probability for S&P 500



The market is pricing more of a latecycle earnings backdrop, similar to early 2019.

Source: FactSet, Bloomberg, UBS

Figure 4: Valuation spreads of high and low volatility stocks vs the median (sector neutral)



The price for defensives has increased significantly as investors worry about cycle risks.

Low volatility stock valuations relative to the market median are at the highest levels since May 2000 on a sector neutral basis. But high volatility stocks aren't cheap relative to the median, currently at the 78th percentile relative to history.

Source: UBS Quant Research, UBS. Based on top vs bottom quintile on 12mo price return volatility.

Figure 5: Valuation of stocks based on duration / rates sensitivity

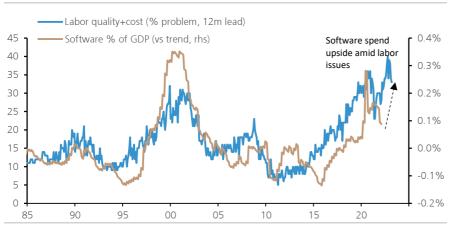


The most rate sensitive stocks in the top 5pctl of duration based on our work have derated considerably since late last year, with valuations close to pre-COVID levels. On the other hand, valuations of stocks positively geared to higher rates are still fairly low.

Source: FactSet, Bloomberg, UBS

## Technology o/w led by Software; vs Industrials u/w

Figure 6: Software spending % of GDP (vs trend) and labor quality+cost issues

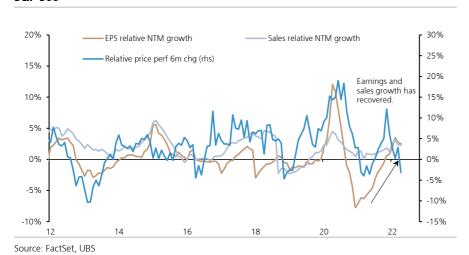


Source: NFIB, Haver, UBS

Historically, labor quality and cost issues from the NFIB survey have led US software spending relative to GDP by 12mo with a 70% correlation. We upgrade the Tech sector to overweight with Software the most attractive industry in our scorecard, and labor issues supporting productivity related IT and software spending.

Software underperformed the S&P 500 index by 10% in the last 6 months. We believe Software can outperform the index supported by strong forward earnings and sales growth relative to the S&P 500.

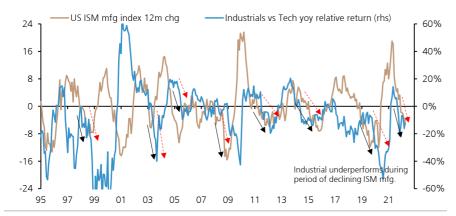
Figure 7: Technology earnings and sales growth vs change in price relative to S&P 500



Tech 12m forward earnings and sales growth have recovered from recent lows and are both now above S&P 500 growth. As the market worries more about recession risks, an improving relative growth profile for Tech should support Tech outperformance - as is typical at this stage of the cycle.

Rates risk remains an overhang for the Tech sector, but relative underperformance YTD was notably more than our ML model would have predicted. Assuming rates consolidate in line with UBS rates strategy's view, relative growth for Tech should matter more after the YTD de-rating.

Figure 8: Industrials vs Tech yoy relative returns vs US ISM mfg 12mo change



Source: ISM, Haver, Factset, UBS

Industrials have also fallen considerably in our scorecard to u/w with risks to the manufacturing cycle. Tech has outperformed the Industrials sector when the ISM manufacturing index has declined.

# REITs upgrade to o/w

Figure 9: Real Estate vs S&P 500 price performance vs forward sales growth

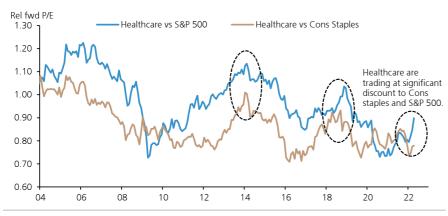


Real Estate forward sales growth has improved since early 2021 but performance is yet to follow. We see better relative growth expectations amid inflation as supporting REITs, particularly since most of the market cap for the sector is in higher growth segments (i.e. towers, industrial, storage, etc) compared to at risk retail and office.

Source: FactSet, UBS

## Healthcare o/w remains; prefer over Staples

Figure 10: Healthcare relative valuation vs S&P 500 and Cons Staples



Healthcare's forward P/E multiple is still at a  $\sim$ 20% discount to Consumer Staples and still relatively low vs the S&P 500.

Source: FactSet, UBS

Figure 11: Healthcare relative forward earnings expectations vs relative valuation

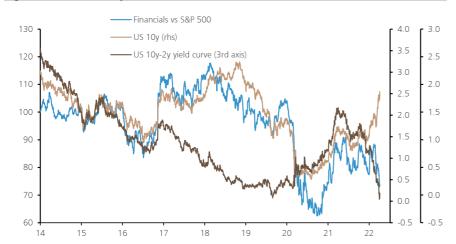


Source: FactSet, UBS

Healthcare earnings momentum is likely bottoming on a relative basis, as relative valuations have considerable upside to prior late cycle levels.

# Financials stay o/w: tracking curve vs 10y prior

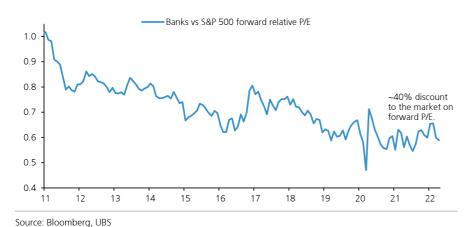
Figure 12: Financials performance relative to S&P 500 vs rates and curve



Financials performance relative to the S&P 500 has followed the US 10yr yield since 2014, but performance has started moving with US 10yr minus 2yr curve more recently.

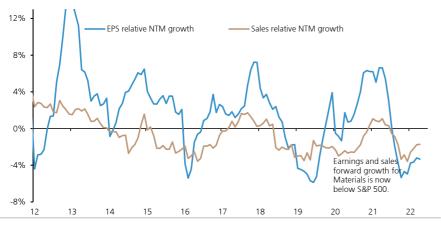
Source: Bloomberg, UBS

Figure 13: Banks relative valuation back near recent lows



Banks are back to trading at a ~40% discount to the market on forward P/E.

Figure 14: Materials forward earnings and sales growth relative to S&P 500



Source: FactSet, UBS

# What's driving stocks returns?

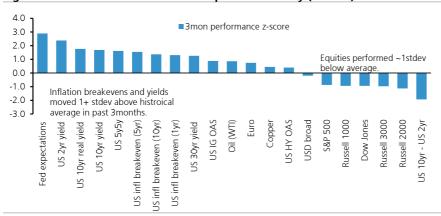
Figure 15: Drivers of S&P 500 relative returns over time



Russia's war on Ukraine continues to be the biggest market driver according to our ML model (link), followed by Fed policy expectations. Growth has become more important for stocks as proxied by the yield curve and economic activity rising as contributors to relative industry returns recently.

Source: Bloomberg, UBS Quant research, UBS

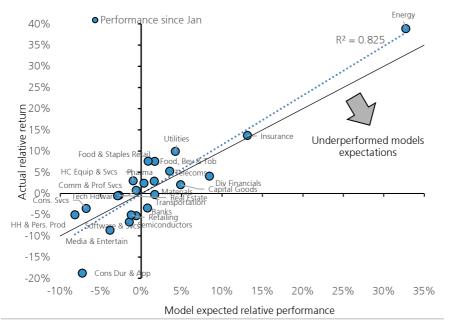
Figure 16: Cross asset moves YTD compared to history (z-score)



The YTD moves in macro variables have been extraordinary. Relative to history, the shift in Fed expectations was a near 3stdev change driving ~2stdev moves in rates as well as the 10-2y curve flattening. The jump in inflation expectations have also been considerable while credit spreads have been fairly well behaved.

Source: Haver, FactSet, Bloomberg, UBS

Figure 17: Industry group actual vs ML model expected returns since Jan

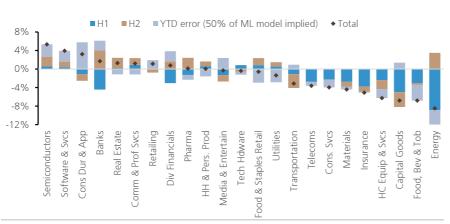


Source: Bloomberg, UBS

Recent sector rotations have been in line with our model's expectations. Energy has been the biggest since January. Cons Dur & Apparel stands out as the largest underperformer and Utilities as one of the biggest outperformers. Banks and most of TMT also overshot to the downside YTD based on our model.

## ML model implied industry returns through '22

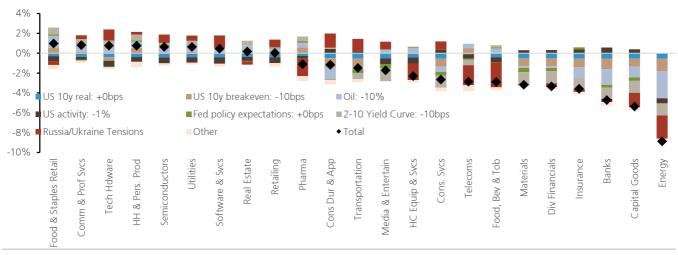
Figure 18: Industry group estimated performance in '22 based on machine learning model



Source: Bloomberg, UBS. For our scorecard, we assume a 50% reversal of the YTD "error" from the outperformance or underperformance vs our ML model implied returns.

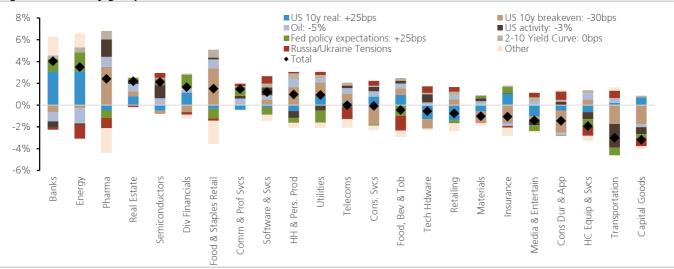
Given the ongoing market volatility and uncertainty, we update our machine learning model, which uses an algorithm known as XGBoost, to understand and estimate market and sector sensitivities under different scenarios (see here for original report). Using this framework we stress test how the S&P 500 and industry groups should have performed YTD and could perform through '22 assuming UBS econ and strategy baseline assumptions for real yields, breakevens, Fed policy expectations and economic activity as well as developments in earnings revisions and the Russia/Ukraine risk premium (link).

Figure 19: Industry group H1 relative returns and drivers



Source: Bloomberg, UBS

Figure 20: Industry group H2 relative returns and drivers



Source: Bloomberg, UBS

# Setup for equities in perspective

With so many cross currents within equities, we look at the setup for relative growth, valuation and performance around this point in the cycle. We lay out how sectors and industries have performed around stages of the ISM mfg and earnings cycles. In later cycle years, top performers tend to rally 30%+ and account for an outsized proportion of returns, while the worst performers tend to fall 20-40%, which is much more than we have seen the last two years. Thus, it is important for investors to avoid those relative "losers" or big underperformers at this stage. Durables+investment has typically declined as a share of GDP when the Fed raised interest rates, while the ISM mfg index has declined for 6 to 8 months at the median following big spikes in metal prices.

S&P 500 earnings would be 25%+ above trend levels this year on our forecast, which means above 6% trend growth will likely be very difficult. Thus, a slower EPS growth trajectory after mid year likely means heightened de-rating risk later this year or next year. Sector and industry would be at risk where earnings and sales are well above the trend levels if there are reversions toward the prior trend. Investors concerns around recession and later cycle risks have increased after recent US 2s10s curve inversion. From a worst case perspective, S&P 500 drawdowns have been down 11-43% from the point of inversion, while S&P 500 returns have averaged 27% from the point that the curve inverts to the subsequent equity peaks. Importantly, sector leadership has persisted after the curve inverted.

# Changes in valuation vs changes in expected growth

To get a better sense of how the growth vs value setup has shifted within industries, we compare changes in FCF yield to changes in expected forward sales growth. The top right quadrant in the chart below includes sectors that have de-rated by more as FCF yields have risen while forward sales growth expectations have also risen - likely providing opportunities in many cases where the relative growth setup may be underappreciated after rates reset.

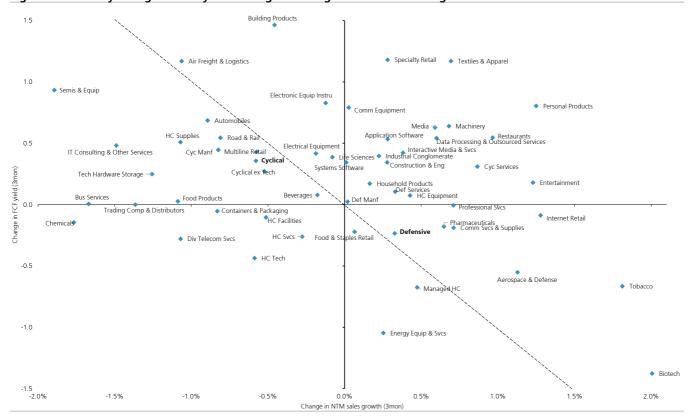
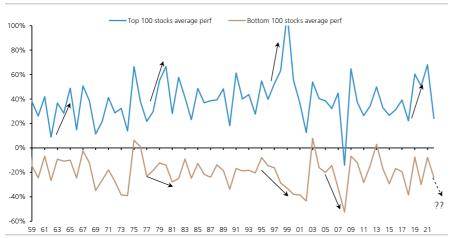


Figure 21: Industry changes in FCF yields change vs changes in forward sales growth

Source: FactSet, UBS

# Return dispersion to rise, key is avoiding the losers

Figure 22: Stock performance begins to diverge more later in the cycle



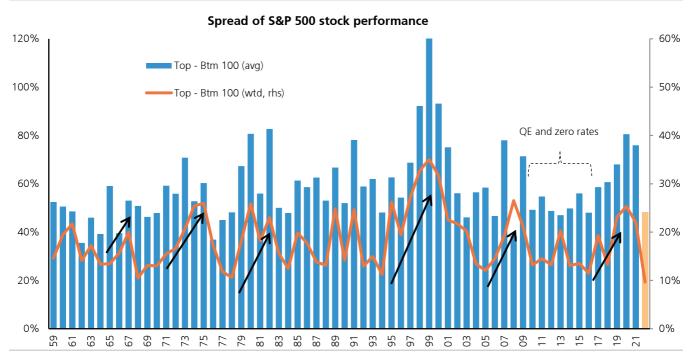
Source: S&P, Factset, UBS

Dispersion between winners and losers is near all-time lows in 2022 as the S&P 500 has fallen.

In later cycle years, top performers tend to rally 30%+ and account for an outsized proportion of returns, while the worst performers tend to fall 20-40%.

We see market dynamics pointing to greater underperformance of the weakest stocks similar to what played out in prior late cycles. Thus, it is important for investors to avoid those relative "losers" or big underperformers at this stage.

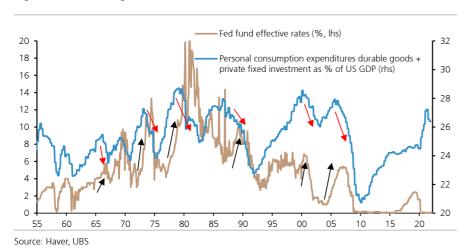
Figure 23: Stock performance begins to diverge more later in the cycle



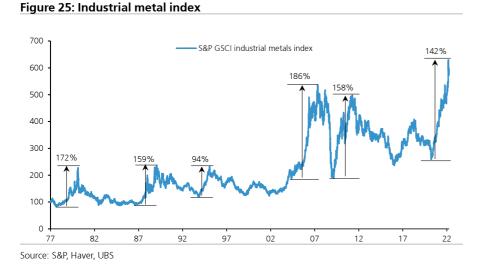
Source: S&P, Factset, UBS

## **Durables overhang and ISM cycle risk**

Figure 24: Durable goods PCE + fixed investment as % of GDP vs Fed fund rates

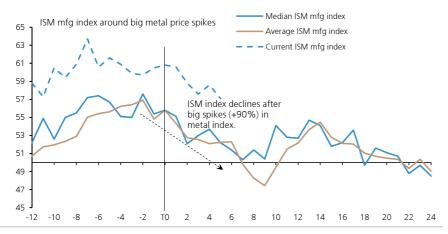


Durables goods consumption and private fixed investment are the most cyclical parts of the economy and their share as a % of GDP is at the highest level since 2005-06. Durables+investment has typically declined as a share of GDP when the Fed raised interest rates.



Industrial metals prices surge more than 140%, similar to previous metal spikes in '77-'80, '86-'89, '04-'07 and '09-'11. This suggests that commodity input inflation is closer to the end than the beginning. Overall, the shock to metals prices has been fuelled in large part by the lack of supply response coupled with the synchronized jump in goods demand.

Figure 26: US ISM index around metal price spikes



for 6 to 8 months at the median following metal price spikes based on the previous 5 episode of metals prices moving more than 90% from the lows. It points to further risks around the manufacturing cycle, with the recent dropoff in ISM mfg new orders another signal of potential further weakening.

The US ISM mfg index has declined

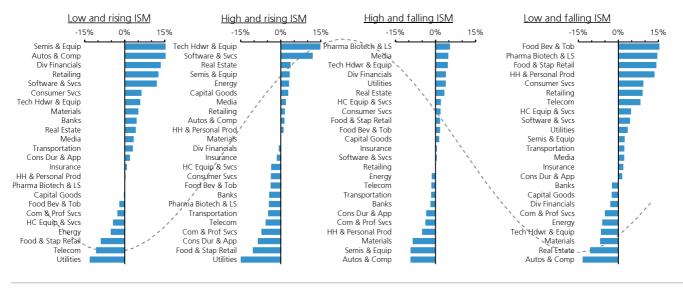
Source: S&P, ISM, Haver, UBS

# ISM cycle as a guidepost for investing

We leverage our prior work on the ISM mfg cycle to understand which industries and factors could outperform the next 3-12mo. We divide the cycle into 4 phases using the median ISM level (~52.5) as the midpoint: 1) trough to mid-peak (avg 9mo), 2) mid-peak to peak (17mo), 3) peak to mid-trough (14mo), and 4) mid-trough to trough (12mo). We find that the cycles have changed since 1983-84, after inflation normalized and services became a more important part of the economy. We use pre-COVID returns to also avoid extremes

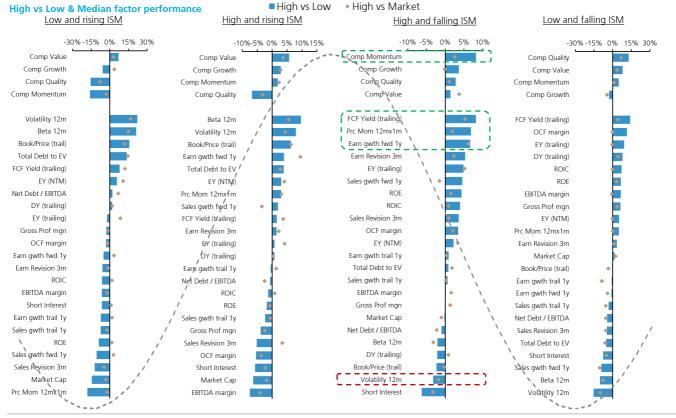
We use the ISM mfg index as a guidepost to assess how equities behave through different phases of the cycle (link).

Figure 27: Industry group relative returns through the phases of the ISM cycle (total returns vs. S&P 500, annualized)



Source: Haver, FactSet, UBS

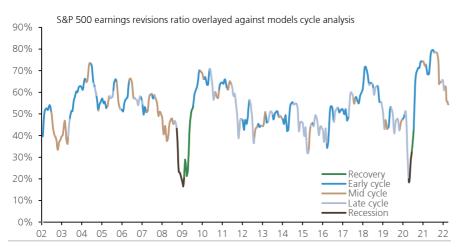
Figure 28: Factor performance through the ISM cycle (high vs low & median, sector neutral)



Source: UBS

# **Earnings cycle and equities**

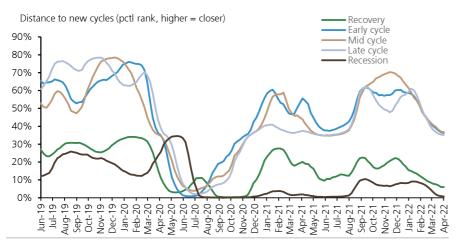
Figure 29: Earnings revisions and our clustering models cycle analysis



Earnings are in a mid cycle stage based on our K-means clustering model.

Source: Bloomberg, UBS

Figure 30: Distance measure to different cycles



Our K-means clustering algorithm also provides a sense of the direction the market cycle is moving towards by calculating the distance of the current data observations to the other cycle clusters (for more detail see here). These distance measures show that we are at a key fulcrum for earnings with similar distances to early, mid and late cycle after the recent COVID driven slowdown.

However, as recession concerns have risen, the recession likelihood according to our model has fallen back toward the lows.

Source: Bloomberg, UBS

# Industry returns through earnings cycle phases - what's priced?

Figure 31: Industry group cycle probabilities and implied relative return

	Recovery	Early cycle	Mid cycle	Late cycle	Recession	Implied relative return
S&P 500	0%	19%	30%	51%	0%	2.2%
Transportation	0%	13%	30%	57%	0%	0.8%
Utilities	1%	16%	29%	50%	4%	2.4%
HH & Personal Prod	0%	24%	30%	45%	1%	-4.6%
Food & Stap Retail	0%	12%	38%	43%	6%	-0.8%
Pharma Biotech & LS	0%	24%	34%	41%	1%	-0.9%
HC Equip & Svcs	0%	24%	34%	41%	1%	-0.2%
Comm & Prof Svcs	1%	19%	42%	37%	2%	-5.4%
Insurance	1%	31%	29%	36%	2%	2.5%
Div Financials	2%	29%	30%	35%	4%	-1.1%
Media & Entertain	2%	24%	32%	34%	8%	-1.1%
Capital Goods	3%	27%	35%	32%	3%	0.4%
Telecom	1%	44%	25%	28%	1%	-10.1%
Semis & Equip	0%	20%	52%	26%	1%	4.5%
Software & Svcs	0%	27%	49%	23%	1%	9.4%
Food Bev & Tob	2%	20%	53%	21%	4%	-0.2%
Materials	4%	28%	39%	20%	9%	-0.7%
Energy	0%	35%	45%	19%	1%	2.8%
Consumer Svcs	2%	17%	63%	14%	4%	0.9%
Retailing	3%	22%	58%	14%	3%	-0.9%
Banks	7%	25%	36%	13%	19%	-5.4%
Tech Hdwr & Equip	3%	17%	68%	12%	1%	3.6%
Cons Dur & App	4%	13%	71%	9%	2%	-4.3%

Industry groups are split between pricing mid and late cycle.

Transportation, Pharma Biotech & LS, HC Equip & Services, and Utilities are all pricing the Late cycle (>10% difference). Many industry groups however are clearly pricing the mid cycle and by a much larger margin than those pricing late cycle.

Source: Bloomberg, UBS

Figure 32: Average relative industry group returns during different earnings cycle stages

Recovery		Early Cycle		Mid Cycle		Late Cycle		Recession	
Autos & Comp	76.2%	Consumer Svcs	9.6%	Software & Svcs	9.4%	Tech Hdwr & Equip	6.4%	Food Bev & Tob	57.99
Div Financials	69.3%	Real Estate	6.9%	Semis & Equip	4.5%	Retailing	5.9%	HH & Personal Prod	43.59
Tech Hdwr & Equip	64.1%	Banks	5.6%	Tech Hdwr & Equip	3.6%	Semis & Equip	5.7%	HC Equip & Svcs	43.29
Retailing	51.1%	Capital Goods	4.6%	Media & Entertain	3.0%	Real Estate	5.2%	Food & Stap Retail	39.29
Semis & Equip	48.4%	Materials	4.6%	HH & Personal Prod	3.0%	Cons Dur & App	5.0%	Pharma Biotech & LS	35.19
Cons Dur & App	33.8%	Energy	4.2%	Energy	2.8%	Consumer Svcs	3.2%	Telecom	19.69
Transportation	31.8%	Div Financials	3.8%	Consumer Svcs	0.9%	Comm & Prof Svcs	2.9%	Comm & Prof Svcs	17.59
Banks	28.1%	Cons Dur & App	3.5%	Capital Goods	0.4%	Software & Svcs	2.5%	Tech Hdwr & Equip	15.79
Materials	27.6%	Retailing	3.1%	Transportation	0.3%	Insurance	2.5%	Utilities	14.19
Software & Svcs	19.7%	HC Equip & Svcs	3.1%	Food Bev & Tob	-0.2%	Utilities	2.4%	Consumer Svcs	12.79
Media & Entertain	16.0%	Transportation	2.2%	Pharma Biotech & LS	-0.3%	Transportation	0.8%	Software & Svcs	9.99
Insurance	6.2%	Tech Hdwr & Equip	1.8%	Materials	-0.7%	Telecom	0.3%	Retailing	4.69
Comm & Prof Svcs	1.9%	Media & Entertain	1.5%	Retailing	-0.9%	HC Equip & Svcs	-0.2%	Energy	4.09
Capital Goods	1.5%	Food Bev & Tob	0.6%	Food & Stap Retail	-1.2%	Food & Stap Retail	-0.8%	Media & Entertain	1.19
HH & Personal Prod	-4.1%	Semis & Equip	-0.1%	HC Equip & Svcs	-1.4%	Pharma Biotech & LS	-0.9%	Semis & Equip	-3.09
Food Bev & Tob	-8.3%	Comm & Prof Svcs	-0.2%	Insurance	-3.1%	Media & Entertain	-1.1%	Materials	-10.99
Energy	-10.2%	Autos & Comp	-0.9%	Cons Dur & App	-4.3%	Div Financials	-1.1%	Capital Goods	-12.99
Consumer Svcs	-13.7%	Insurance	-1.8%	Div Financials	-5.1%	Capital Goods	-1.5%	Transportation	-13.49
Real Estate	-14.6%	Utilities	-2.5%	Banks	-5.4%	Materials	-1.5%	Cons Dur & App	-17.49
Food & Stap Retail	-27.3%	Software & Svcs	-2.5%	Comm & Prof Svcs	-5.4%	Food Bev & Tob	-2.9%	Insurance	-35.89
HC Equip & Svcs	-27.7%	HH & Personal Prod	-3.6%	Telecom	-7.2%	Banks	-3.6%	Banks	-43.59
Utilities	-30.9%	Food & Stap Retail	-5.7%	Utilities	-7.2%	HH & Personal Prod	-4.6%	Autos & Comp	-44.89
Telecom	-36.2%	Pharma Biotech & LS	-7.9%	Real Estate	-8.2%	Autos & Comp	-4.9%	Real Estate	-45.59
Pharma Biotech & LS	-40.8%	Telecom	-10.1%	Autos & Comp	-9.7%	Energy	-5.1%	Div Financials	-47.79

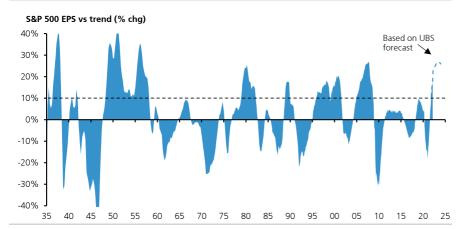
Source: Bloomberg, UBS

## Trend matters: earnings well above trend

S&P 500 EPS has followed a ~6% trend rate of growth since the 1950s and 1930s, with cycles around that trend. Earnings would be 25%+ above trend levels this year on our forecast, which means above 6% trend growth will likely be very difficult assuming the historical paradigm holds. Thus, a slower EPS growth trajectory after mid year likely means heightened de-rating risk later this year or next year.

We also estimate sector and industry earnings and sales vs the pre-COVID trend to better understand where the relative upside vs downside risks to fundamentals may be if there are reversions toward the prior trend.

Figure 33: Figure 34: S&P 500 earnings per share vs trend (% difference)



There have been only 5 episodes when S&P 500 earnings went 10%+ above the trend – one long episode from the late 40s-mid 50s, late 1970s, late 1980s, late 1990s and 2005-07.

Source: FactSet, UBS

Figure 35: 2022 consensus estimates vs prior trend for sectors and industries



Relative to a 2014-2019 trend, sales and earnings estimates for Consumer Services, Banks, Telecom, Transports and Cap Goods are below trend while Materials, Media & Enter, Consumer Durables and Apparel, Comm & Prof Svcs and Tech Hdwr are most above trend.

Source: FactSet, UBS

# Curve inversion and equities: volatility and leadership persist

Investors are becoming more focused on what the later stages of the business cycle will look like, with US 2s10s curve inverting increasing investors concerns around recession risk. We use the point at which the 2s10s curve hits zero to assess "late cycle" developments (see <u>Rates and equities: "late cycles" in perspective</u>, May 2018, for further details). Historical instances include Apr-68, Mar-73, Aug-78, Dec-88, May-98. Dec-05 and Aug-19.

S&P 500 returns have averaged 27% from the point that the curve inverts to the subsequent equity peaks, which can be as early as 5 days and as late as 27 months from the inversion. Recessions on average start 19 months after inversion, with a range of 8-34 months. From a worst case perspective, S&P 500 drawdowns have been down 11-43% from the point of inversion, though the S&P 500 never fell below inversion levels through 1988-1991.

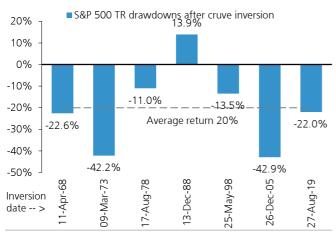
After the curve inverted, sector leadership has persisted until the end of each bull market: Tech 2016-20, Energy '04-'08, Tech'96-'00, Staples '87-'91, etc. This cycle is somewhat unclear with Energy leading since the summer of 2021 but little definitive sector leadership post the COVID recession.

Figure 36: US Treasury curve inversions and S&P 500 performance



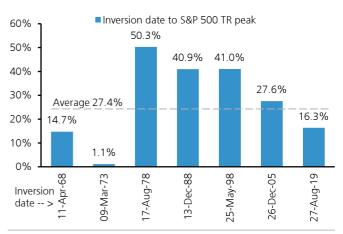
Source: Haver, UBS. Note: UST 10yr minus UST 1yr from 1961 to March 1976 and UST 10yr minus UST 2yr after March 1976

Figure 37: S&P 500 drawdowns after the curve inverts are notable...



Source: Haver, UBS

Figure 38: ...but the rallies are also considerable after the curve inverts



Source: Haver, UBS

Figure 39: Annual S&P 500 returns and sector relative returns - sector leadership has persisted after curve inversions

Relative performance (vs S&P 500) S&P 500 Materials Industrials Cons Disc Cons Staples Health Care Financials Technology Telecom Utilities Real estate Year Energy 1951 23.6% -6.6% -4.9% 1952 19.0% 7.8% -6.3% 23.39 6.8% 0.4% 1953 -1.7% 0.8% -2.0% 6.7% 7.1% 4.6% 8.6% 4.3% 9.8% 10.9% 18.0% 14.1% 1954 53.0% 7.5% 35.79 21.5% 7.9% 28.09 28.7% 1955 31.2% 10.4% 11.9% 4.2% -1.6% -17.0% -2.9% -18.9% -14% -1 1% 1956 6.4% 7.9% 15.5% -7 2% 19.8% -8 7% -10 1% -15 7% 1957 -10.7% -1.1% -0.3% 21.7% 7.1% 11.4% 17.2% -6.5% 1958 43.7% 15.6% 10.9% 12.7% 3.5% -6.3% -3.3% 0.0% -3.4% 14.69 1959 12.5% 18.9% 2.2% 1.8% 14.4% -1.9% 13.8% 20.3% 3.2% -9.8% -11.7% 24.8% 20.5% 1960 0.6% -4.6% -5.4% 6.7% 25.0% -9.6% 27.2% 12.9% -7.5% 15.8% 1961 -2.0% -15.1% 10.9% 16.5% 21.7% 3.6% 1.4% -8.8% 14.19 -2.5% -6.7% 12.4% 2.3% 9.4% 1962 2.5% 0.4% -3.4% 22.7% 1.9% -1.9% 3.7% 0.8% 1963 -0.3% 8.1% 2.9% -6.0% 13.4% 12.1% 1964 16.8% 11.3% -7.0% 23% -48% 11% -4 0% 13.89 -1 4% 1965 12.6% -10.5% 2.4% 8.9% 0.9% -7.2% 11.2% -6.5% 25.4% 19.89 -9.9% 1966 -10.3% -3.1% -1.2% 3.7% 4.4% -1.1% -3.3% -3.4% 14.4% -2.9% 3.9% 0.1% -2.5% 24.0% 1967 24.0% -6.5% -0.8% 1968 11.0% 11.1% 6.2% 7.6% 11.5% -8.9% -0.4% 0.7% -8.2% -1.3% 3.9% 8.3% 13.7% -6.5% -2.7% -6.5% 1969 2.1% 3.2% 4.2% 1970 13.7% -5.0% 3.7% 6.3% -6.0% 7.7% 0.2% 2.6% 13.6% -8.7% 15 2% 12 4% 1971 14 0% -4 7% -2 2% 20.8% 5 4% 10.2% 2 9% 16.7% 12 2% 1972 19.2% 6.2% -9.7% -3.3% -5.1% -1.7% 13.9% 12.0% -5.2% 5.3% 10.3% 1973 -15.1% 17.5% 10.8% -0.9% -1.4% -6.9% -9.6% 10.3% -3.1% 1974 -26.5% 1.9% 1.9% -8.6% 1.2% -1.7% 0.6% 14.4% 6.0% -1.2% 21.0% 12.0% 36.5% 5.5% 4.8% 6.4% 1975 14.49 7.5% 7.8% 7.6% 13.4% -23.0% 1976 23.9% 5.7% 10.1% -10.6% 10.6% 11.0% 4.7% 10.5% 6.8% 1977 -7.4% 1.2% 9.0% 3.4% 2.5% -8.8% 4.2% -3.3% 1.3% 17.0% 3.6% 6.2% -4.3% 1978 -4.0% -0.6% 3.2% -0.9% 10.2% 2.6% 18.5% 1979 30.6% 3.1% -10.1% -3.1% -10.6% -5.1% 5.5% -1.4% -21.9% -4.6% 32.5% 1980 -6.8% -9.6% 12 3% -16.6% -6.1% -3.6% 1.0% -12.5% 38.0% 1981 -5.2% -1.1% -8.5% 19.9% 21.8% 4.4% 7.3% 0.7% 39.1% 10.4% 1982 21.9% -31.3% -6.1% 13.2% 16.4% 3.2% -2.5% 20.9% -5.1% 4.6% 5.6% -0.7% 10.3% 1983 22.2% -0.9% -5.6% 8.8% -3.5% -7.5% 12.5% 1984 6.2% -7.3% 3.1% 19.1% 15.2% 7.3% -2.7% 12.7% 32.0% 11.7% -9.7% 14.39 15.3% 5.1% 2.7% -4.1% 1985 6.5% 13.7% 1986 18.2% -0.5% 8.5% 13.5% -5.0% 5.3% -7.9% 5.6% 5.8% 10.0% -2 2% 10.5% 1987 5.0% 48% 14.3% -3 2% 5 1% 2.8% 20.1% -0.8% 1988 16.7% 3.2% -4.7% -2.3% 8.6% 12.5% -3.7% 0.5% -20.1% 3.8% 0.9% 1989 31.7% 6.7% -10.1% -6.6% -10.9% 16.9% 10.5% 0.4% 1.2% -3.1% 6.0% -4.5% 20.4% 6.1% 2.5% 1990 -7.6% -9.1% 18.4% -10.8% 1991 30.5% 23.6% -5.0% -0.9% 11.0% 11.2% 23.2% 18.6% 21.4% -17.2% -6.6% 7.6% -5.3% 2.6% 1.9% -1.0% 1992 12.1% -23.8% 8.6% -2.3% 15.6% 11.6% 10.1% 5.8% 3.4% 8.5% 13.9% 3.6% 1993 4.6% 0.5% 5.0% 12.5% 1994 1.3% 2.4% 4.5% -9.6% -4.7% -6.1% 13.1% -3.7% 8.5% 18.6% 1995 37.6% -6.6% 17.6% 1.5% 17.2% 2.1% 20.4% 16 5% 1.9% 4.7% -48% 1996 23.0% 2.9% -7.1% 2.3% -10.6% 2.9% -1 9% 12.3% 17.3% 1997 33.4% -8.1% 25.0% -6.3% 1.0% -0.5% 10.4% -4.8% 7.9% -8.7% 28.6% -17.7% 12.6% 49.6% -13.7% 1998 -28.0% 34.8% -12.8% 15.3% -17.2% 23.8% 36.1% -31.7% -16.9% 30.2% 1999 21.0% -2.3% 4.2% 0.5% 4.1% -1.9% -9.1% 24.8% -6.6% 15.0% 46.2% 66.3% 2000 25.9% 34.8% 15.4% 14.7% 18.6% 2001 -11.9% 1.5% 6.1% -14.0% -0.4% 5.5% -0.1% 2.9% 11.0% 7.5% 2002 -22 1% 16.6% -4 2% -17% 17.8% 3 3% 12.0% -7.9% 12.6% 13.6% 18.5% 2003 28.7% 9.5% 3.5% 8.7% 2.3% 21.6% -2.4% 0.1% -3.1% 10.9% 2004 2.3% 7.2% 2.4% -2.7% 0.0% -8.3% 9.0% 13.4% 17.9% 2005 4.9% 26.5% -0.5% -2.6% -1.3% 1.5% 1.6% -3.9% 11.9% 7.6% 15.8% 8.4% 2.8% -2.5% 2.8% -1.4% 8.3% 3.4% -7.4% 21.0% 5.2% 2006 25.7% 2007 5.5% 17.0% 6.5% 18.7% 8.7% 1.7% 10.8% 6.4% 13.9% -37.0% 2.1% -8.7% -2.9% 3.5% 14.2% 18.3% -6.1% 6.5% 8.0% -5.3% 2008 26.5% 12.6% 22.1% -5.5% 14.8% -9.2% 0.6% 2009 -11.6% -6.8% 17.5% -14.6% 2010 15.1% 5.4% 7.1% 11.7% 12.6% -1.0% -2.9% 4.9% 3.9% -9.6% 17.3% 2011 2 1% 2.6% -11.9% -2.7% 4 0% 11.9% 10.6% 0.3% 42% 17.8% 9.3% 2012 16.0% 11.4% -1.0% -0.7% 7.9% -5.2% 19% 12.8% -12% 23% 3.7% 2013 32.4% -7.3% -6.8% 10.7% -6.3% 3.2% -4.0% -20.9% -19.2% 9.19 13.7% 2014 -21.5% -6.8% -3.9% -4.0% 2.3% 11.6% 6.4% -10.7% 16.5% 3.3% 2015 1.4% -9.8% -3.9% 5.2% 5.5% -2.9% 4.5% 2.0% -6.2% 15.4% 12.0% 4.7% 6.9% -5.9% 14.7% 1.9% 7.0% 2016 -6.6% 10.8% 11.5% 4.3% -8.6% -9.7% 2017 21.8% -22.8% 2.0% -0.8% 1.1% 0.2% -11.0% -8.3% 0.4% 4.1% -4.4% -13.7% -8.6% -8.1% 2018 10.3% -8.9% 5.2% -4.0% 8.5% 2.2% 2019 31.5% -19.7% -6.9% -2.1% -3 5% -3.9% -10.7% 0.6% 18.8% 1.2% -5 1% -2 5% 2020 18.4% 2.3% -7.3% 14.9% -7.7% -5.0% -20.1% 5.5% 5.2% -17.9% -20.6% 25.9% 28.7% -1.4% -2.6% 6.3% 5.8% 2021 7.6% -4.3% 10.1% -7.1% 17.5% -5.6% 2.2% 0.3% -3.2% 3.4% 1.1% 1.3% -3.3% 9.0% -1.1%

Source: Factset, UBS

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Sell	FSR is > 6% below the MRA.	8%	22%
Short-Term Rating	Definition	Coverage <sup>3</sup>	IB Services <sup>4</sup>
Buy	Stock price expected to rise within three months from the time the rating was assigned because of a specific catalyst or event.	<1%	<1%
Sell	Stock price expected to fall within three months from the time the rating was assigned because of a specific catalyst or event.	<1%	<1%

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