TRIVARIATE RESEARCH

SELL-SIDE ANALYST RATINGS ARE MOSTLY USELESS

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BACKGROUND AND RESEARCH CONCLUSIONS

Analyst ratings on stocks are a regular feature in financial news coverage. Upgrades, downgrades, and price target changes can often create volatile one-day price movements, but the sustainability of that price action is frequently dubious. In today's research, we analyzed whether there is any investable information to be gleaned from analyst ratings, changes in ratings and price targets, or the amount of upside analysts forecast, to determine if there is value in their stock-level views.

Buy ratings don't equate to outperformance: The S&P Capital IQ (CIQ) database has a quintile summary score for the sell-side analyst recommendations. We analyzed the subsequent cumulative return and found that the best performing stocks over the last 25 years are those that are in the disfavored quintile. The fourth and fifth quintile (i.e., the 40% of stocks least loved by the sell-side) historically have performed best. Overall, the performance of stocks that are loved has lagged those that are disfavored by 30% over the last 25 years with periods of volatility in efficacy. **A signal that is cumulatively ineffective and volatile IS NOT A SIGNAL investors should use for stock selection. We would not look for ideas that have a high percentage of buy recommendations from sell-side analysts.**

Upgrades / downgrades also don't matter: The month-over-month change in CIQ rating also wasn't an effective predictor of subsequent return, with increasingly liked stocks by analysts not outperforming those with recent downgrades over the last 20 years. We defined "Buy Percentage" as the number of analysts with a "Buy" recommendation on a stock divided by the total number of analysts covering a stock. We then looked for newly and incrementally loved stocks and compared their subsequent stock performance to those with the most month-over-month downgrades. These incrementally loved stocks did beat the incrementally disfavored ones from 2001 through 2013 but have generated no additional return over the last dozen years.

INVESTMENT CONCLUSIONS

Volatility not upside in price targets matters: We took the standard deviation of every stock's price target at each point in time and sorted by lowest to highest. Companies with the lowest standard deviation around their analyst price targets have tended to strongly outperform those with high variability in targets, though the metric peaked in its efficacy in September of 2022 and has not been efficacious since. Stocks with "lots of upside" from the current price to the median price target might be perceived as ones where lots of analysts are bullish, but they are often stocks with bad recent price momentum and the analysts were previously too bullish. Stocks with lots of upside to their respective price targets were best from 2009-2016, but the signal has failed over the last decade.

Cohorts: Analysts tend to have more buy ratings on growth stocks and high beta stocks. Stocks with an overwhelming number of buy recommendations underperform those with fewer buy recommendations in Technology. Notably, Healthcare currently has the highest number of buy recommendations and the fewest sell recommendations in over 25 years—an unusual trend given the sector's poor recent price performance.

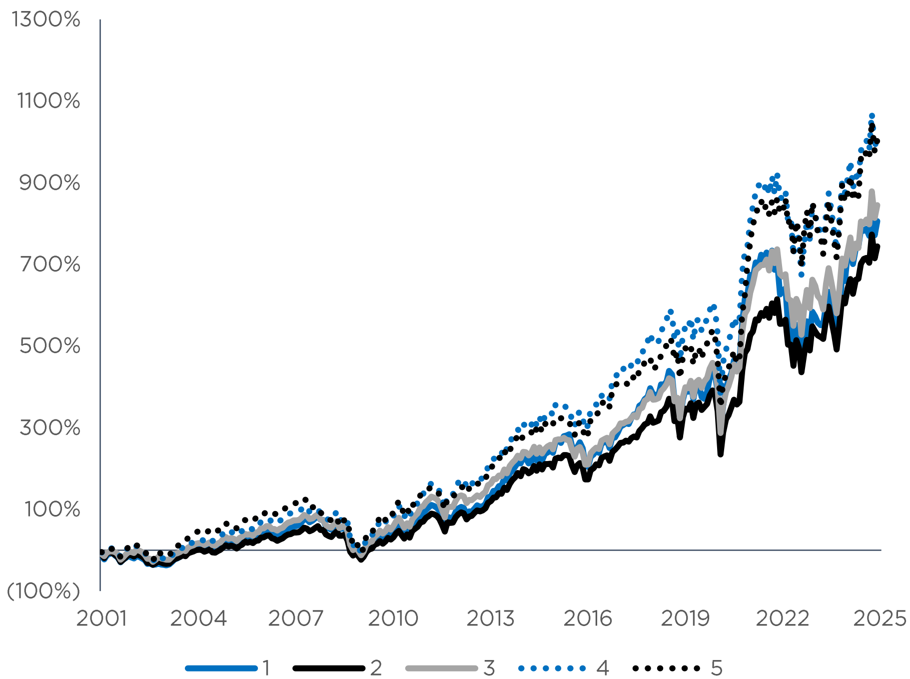
Price target changes: We evaluated whether changes in analyst price targets has any information at the sector level. The answer is sell-side price target changes are somewhere between counter-indicators and useless, depending on the sector and horizon. **For every 10% the median price target moves higher, we would expect the average Real Estate stock to go DOWN 2.7% over the next 12 months.**

Conclusion: Do analyst recommendations, price targets, and ratings changes matter? The answer in general is – no. The buyside will always find merit in consensus estimates, and we did find some value in the volatility of the price targets, but relying on analyst ratings and ratings changes has not been a good strategy historically– and is not today. Based on our recent beta work, we would not be surprised to see many sell-side analysts proven wrong given their high beta recommendations skew.

LOVED STOCKS DON'T OUTPERFORM HATED STOCKS

The S&P Capital IQ (CIQ) database has a quintile summary score for the sell-side analyst recommendations. Ratings of 1 represent stocks that are loved, and ratings of 5 are those that are universally disfavored. We analyzed the subsequent cumulative return and found that the best performing stocks over the last 25 years are those that are in the disfavored quintile. The fourth and fifth quintile (i.e., the 40% of stocks least loved by the sell-side) historically have performed best (left). Little cumulative deviation was realized between those rated in the middle of the pack vs. those most loved (the top quintile). Overall, the performance of stocks that are loved by the sell-side has lagged those that are disfavored by 30% over the last 25 years (right), with periods of volatility in efficacy. **A signal that is cumulatively ineffective and volatile IS NOT A SIGNAL investors should use for stock selection.**

Consensus Rating
Cumulative Return of Quintiles (Q1=High, Q5=Low)
Through End-January, 2025



Source: Trivariate Research

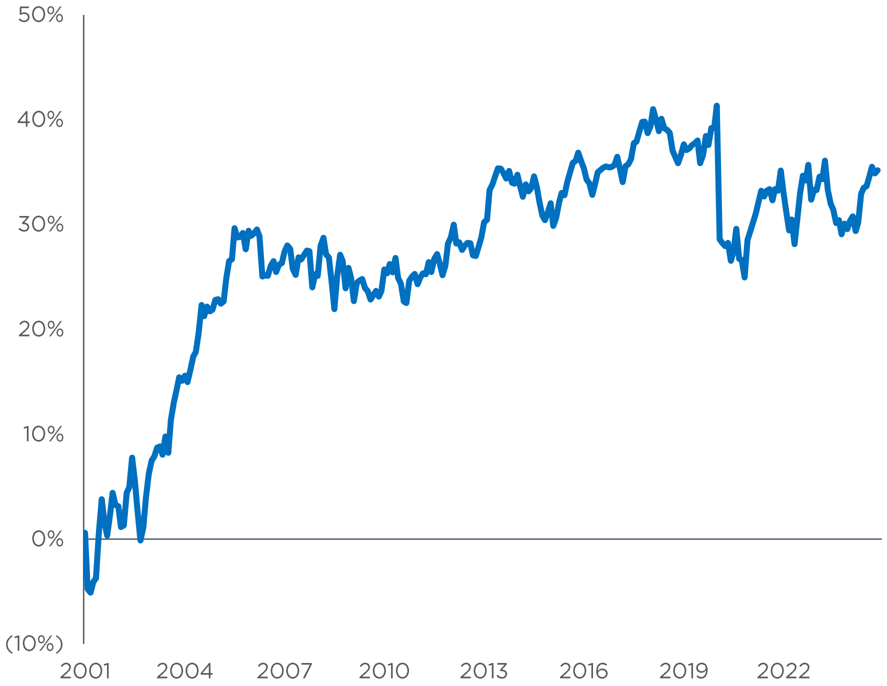
Consensus Rating
Cumulative Return of Q1 (High) - Q5 (Low)
Through End-January, 2025

Source: Trivariate Research

RECENT UPGRADES DON'T OUTPERFORM RECENT DOWNGRADES

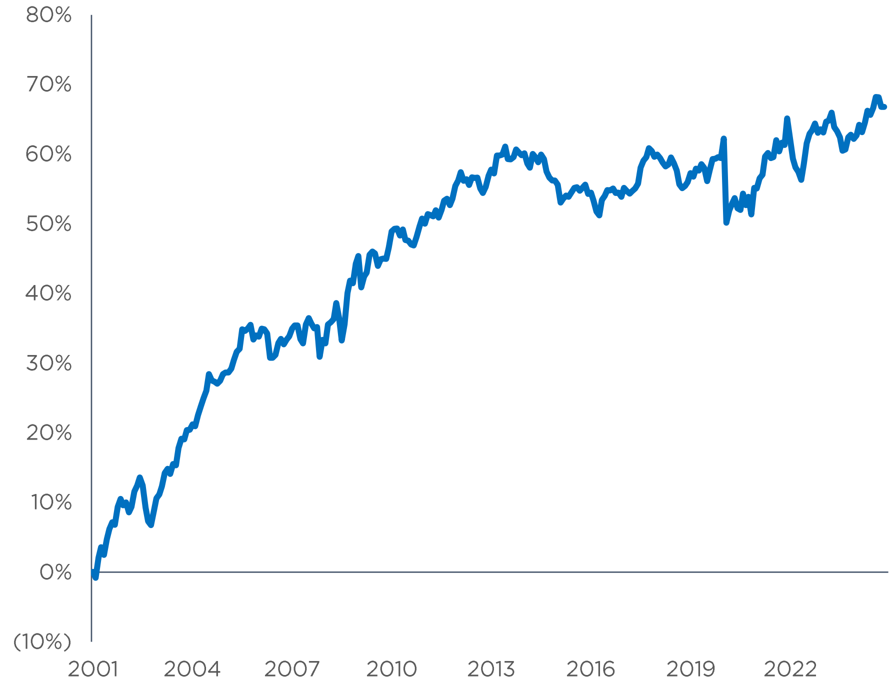
It is not just the level that has no predictive value, the change of consensus rating and buy percentage have also been largely useless over the last decade. The month-over-month change in CIQ rating also wasn't an effective predictor of subsequent return, with increasingly liked stocks by analysts not outperforming those with recent downgrades over the last 20 years (left). We defined "Buy Percentage" as the number of analysts with a "Buy" recommendation on a stock divided by the total number of analysts covering a stock. We then looked for newly and incrementally loved stocks and compared their performance to those with the most month-over-month downgrades. These incrementally loved stocks did beat the incrementally disfavored ones from 2001 through 2013 but generated no additional return over the last dozen years (right). **Recently upgraded stocks don't outperform recently downgraded stocks.**

MoM Change In Consensus Rating
Cumulative Return of Q1 (High) - Q5 (Low)
Through End-January, 2025



Source: Trivariate Research

MoM Change In Buy Percentage
Cumulative Return of Q1 (High) - Q5 (Low)
Through End-January, 2025

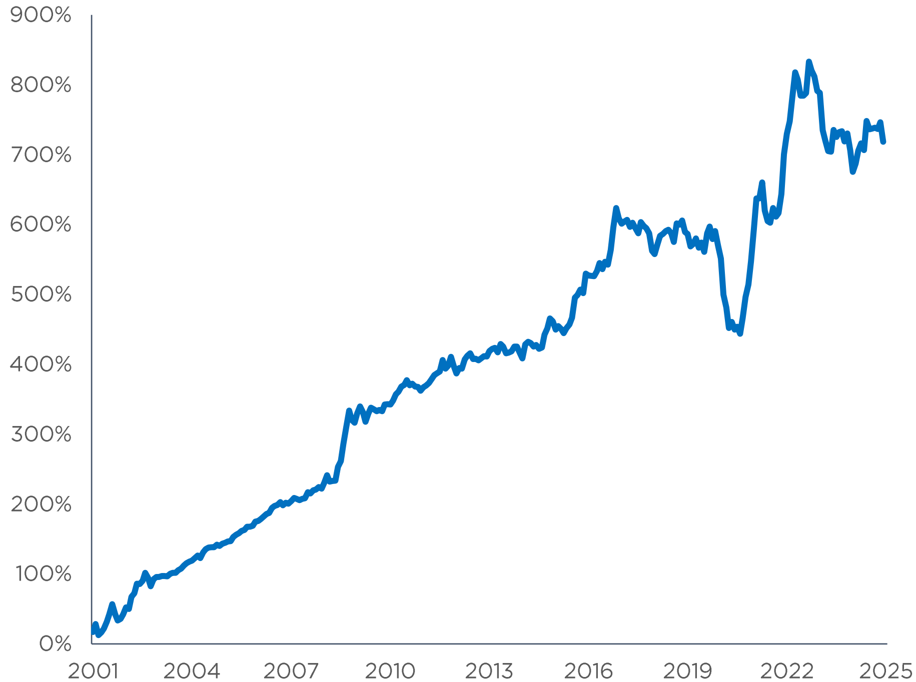


Source: Trivariate Research

STOCKS WITH A NARROW RANGE OF PRICE TARGETS WERE BEST

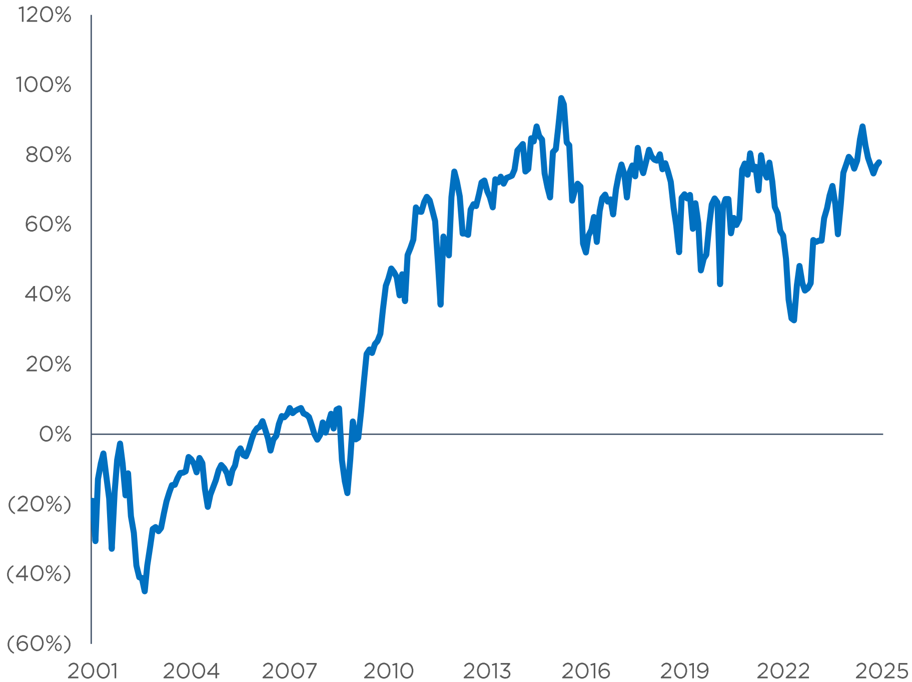
While listening and following sell-side ratings has little value, there does appear to be slightly more information in the analyst price targets. We took the standard deviation of each stock's price target at each point in time and sorted by lowest to highest. Companies with the lowest standard deviation around their analyst price targets have tended to strongly outperform those with high variability in targets (left), though the metric peaked in its efficacy in September of 2022 and has not been efficacious since. The distance between the median analyst price target and the current stock price is a form of price momentum. Stocks with "lots of upside" might be perceived as ones where lots of analysts are bullish, but they are often stocks that recently went down and the analysts were too bullish. Stocks with lots of upside were best from 2009-2016, but the signal has not generated any return over the last decade (right).

Standard Deviation of Target Prices
Cumulative Return of Q1 (Low) - Q5 (High)
Through End-January, 2025



Source: Trivariate Research

Median Target Price-to-Market Price
Cumulative Return of Q1 (High) - Q5 (Low)
Through End-January, 2025



Source: Trivariate Research

HEALTHCARE HAS THE HIGHEST PERCENTAGE OF BUY RATINGS

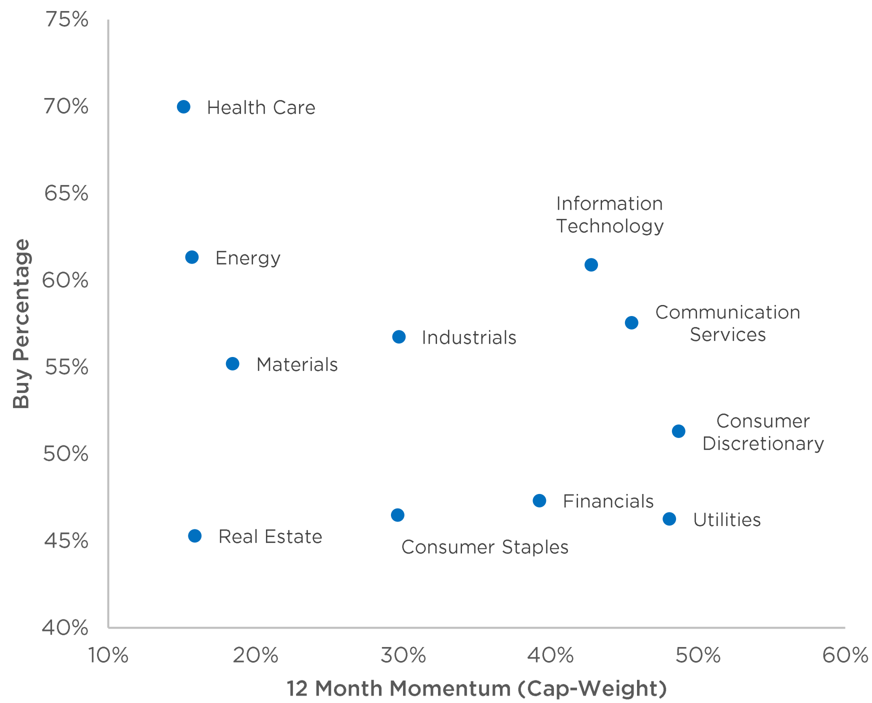
Interestingly, today, Healthcare stocks have the highest Buy Recommendation Percentage than any other sector, with 70%, and only 2.5% of all recommendations are Sell (left). The sector also has the best CIQ rating (1 is better than 5). Energy and Technology are the next most loved sectors, with Real Estate and Utilities having the lowest percentage of buy rated stocks (left). Usually, analysts chase performance and have a high percentage of buy ratings on stocks in sectors that have performed well. However, Healthcare has the worst trailing 12-month performance and the highest percentage of buy ratings (right),

Analyst Ratings, Buy and Sell Percentages by Sector
As of End-January, 2025

Sector	Consensus Rating (CIQ)	Buy Recommendation Percentage	Sell Recommendation Percentage
Health Care	1.85	70.0%	2.5%
Energy	2.06	61.3%	6.1%
Information Technology	2.03	60.9%	4.7%
Communication Services	2.15	57.6%	7.6%
Industrials	2.07	56.7%	4.9%
Materials	2.16	55.2%	5.9%
Consumer Discretionary	2.21	51.3%	7.4%
Financials	2.31	47.3%	5.2%
Consumer Staples	2.31	46.5%	6.4%
Utilities	2.22	46.3%	7.4%
Real Estate	2.30	45.3%	7.6%

Source: Trivariate Research

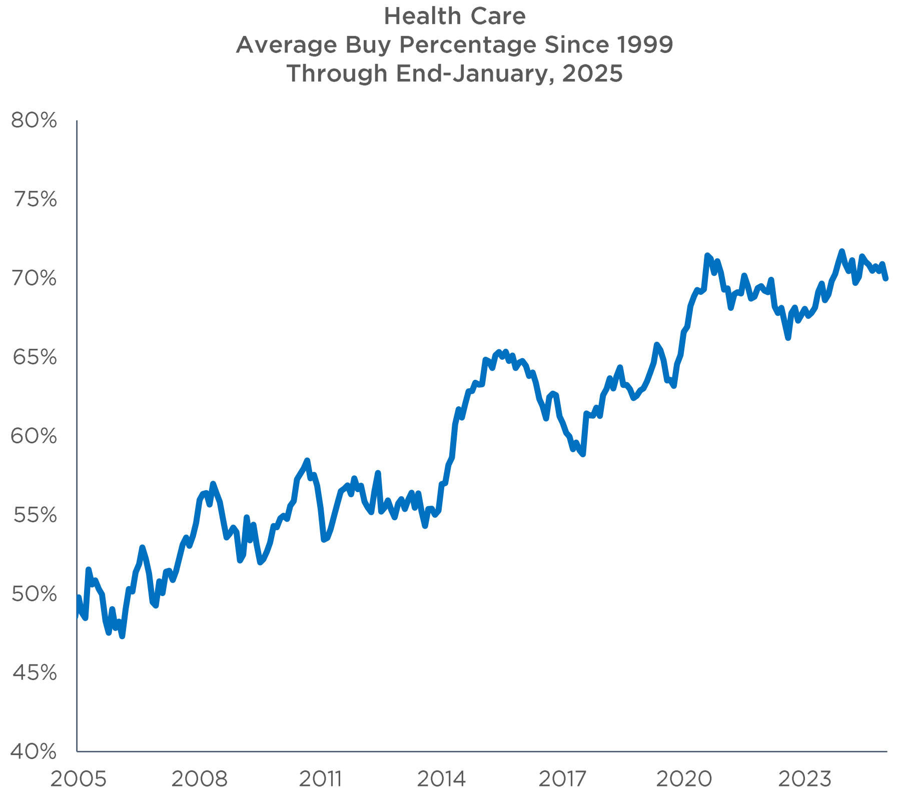
12 Month Momentum and Buy Percentages by Sector
End-January, 2025



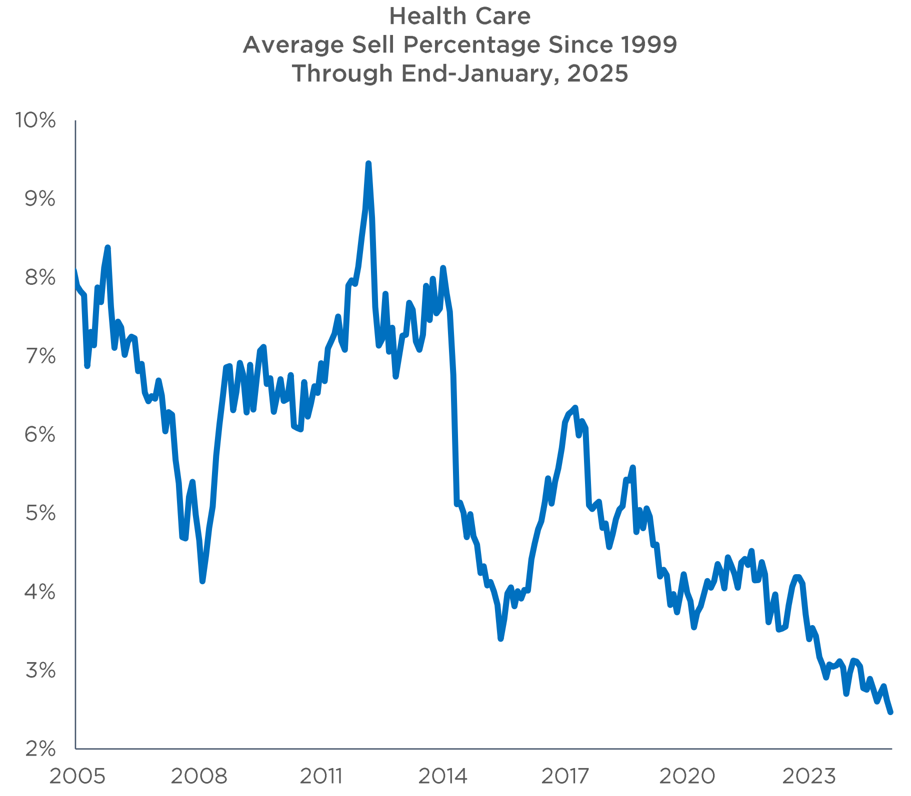
Source: Trivariate Research

HEALTHCARE HAS NEVER HAD MORE BUYS AND FEWER SELLS

The percentage of Healthcare stocks that have a Buy rating is near 25-year highs (left), and the percentage of Healthcare stocks with Sell Ratings is near all-time lows (right), even though the sector's relative performance has been poor.



Source: Trivariate Research



Source: Trivariate Research

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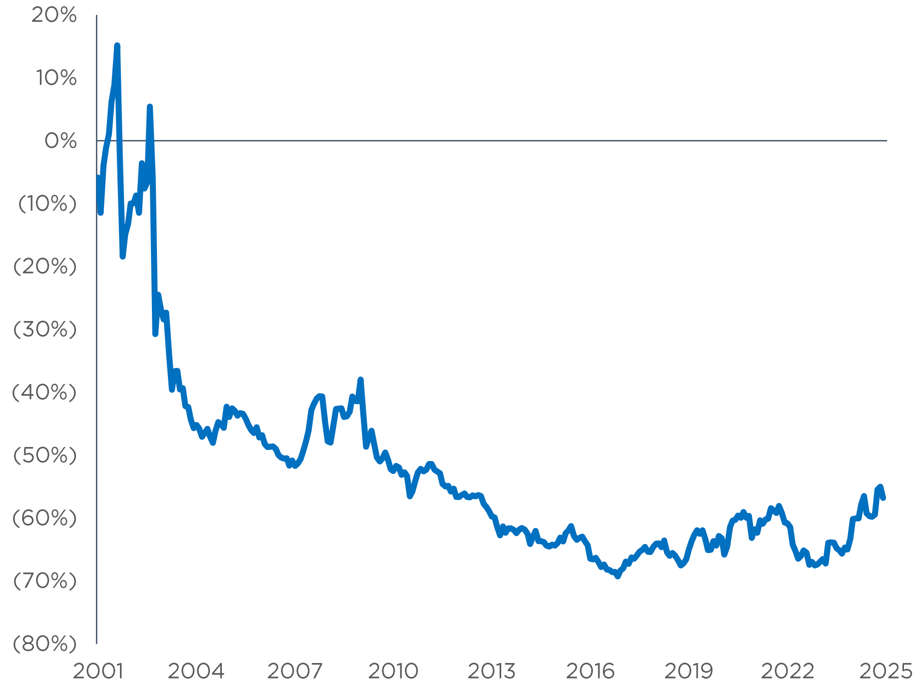
LOVED STOCKS LAG HATED ONES IN TECHNOLOGY AND HEALTHCARE

We were curious whether there was any predictive value in level or change of recommendations or price targets in certain individual sectors, recognizing that for the overall market there was limited value. Stocks in the top quintile of Buy Percentage in the Healthcare sector dramatically underperformed from 2001 to 2010 and have been flat since (left). We are recommending the Healthcare sector for a variety for reasons but can't say the increasing Buy percentage has us incrementally enthused. The same is true in Technology, where the analyst recommendations are in aggregate useless (right).

Buy Percentage: Health Care
Cumulative Return of Q1 (High) - Q5 (Low)
Through End-January, 2025

Source: Trivariate Research

Buy Percentage: Information Technology
Cumulative Return of Q1 (High) - Q5 (Low)
Through End-January, 2025

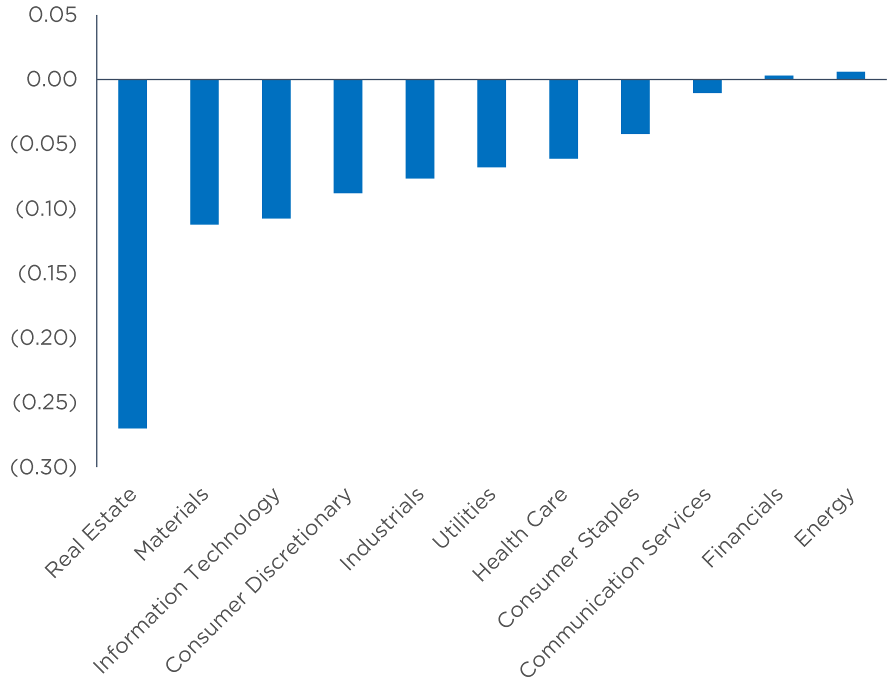


Source: Trivariate Research

HIGHER TARGETS MEAN LOWER RETURN

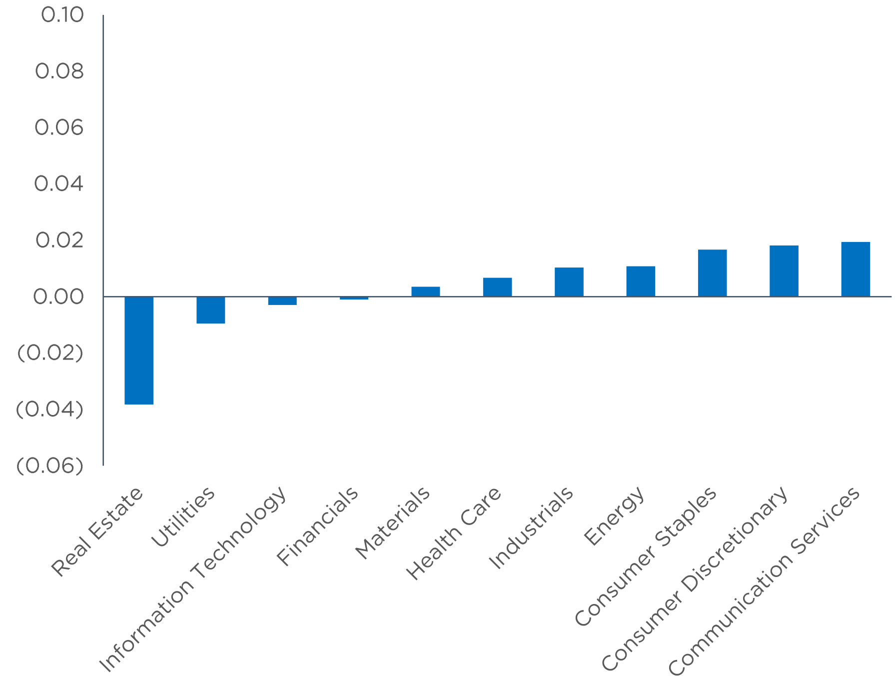
We evaluated whether changes in analyst price targets has any information at the sector level. The answer is sell-side price target changes are somewhere between counter-indicators and useless, depending on the sector and horizon. **For every 10% the median price target moves higher , we would expect the average Real Estate stock to go DOWN 2.7% over the next 12 months** (left). For 9 of the 11 sectors, RAISING the price target on average results in LOWER return, though admittedly the impact is quite close to zero in Communication Services, Financials, and Energy. On a one-month horizon, the average correlation between ratings change and subsequent performance is incredibly low across the board (right).

Monthly Correlation by Sector
12m Changes in Median Price Target vs 12m Forward Return
Through End-January, 2025



Source: Trivariate Research

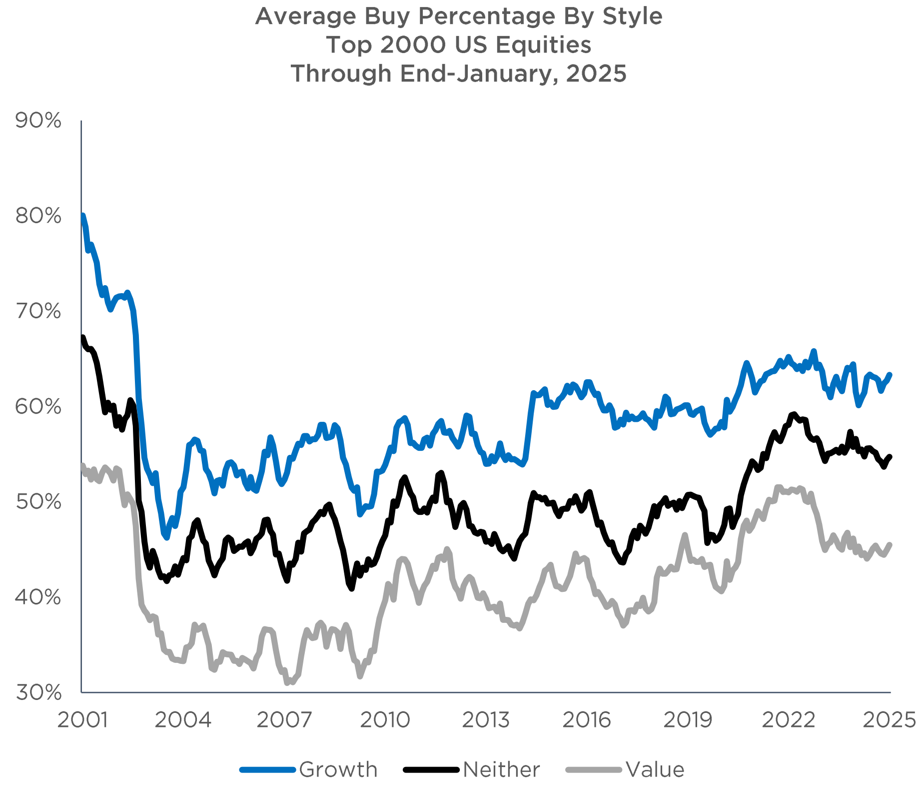
Monthly Correlation by Sector
1m Changes in Median Price Target vs 1m Forward Return
Through End-January, 2025



Source: Trivariate Research

ANALYSTS LOVE GROWTH STOCKS, BUT THOSE RECS DON'T MATTER

Over the last 25 years, the average Buy Percentage is higher for growth stocks than value stocks (left). Only 45% of analysts recommended a Value stock with a "buy" vs. 63% for Growth stocks. However, the Growth-biased analysts' recommendations weren't useful at all. Loved growth stocks materially lagged hated growth stocks from 2001-2010, and the performance since then has been exactly zero. Hence, since 2001, the most loved growth stocks have lagged the least loved by 50% (right)!



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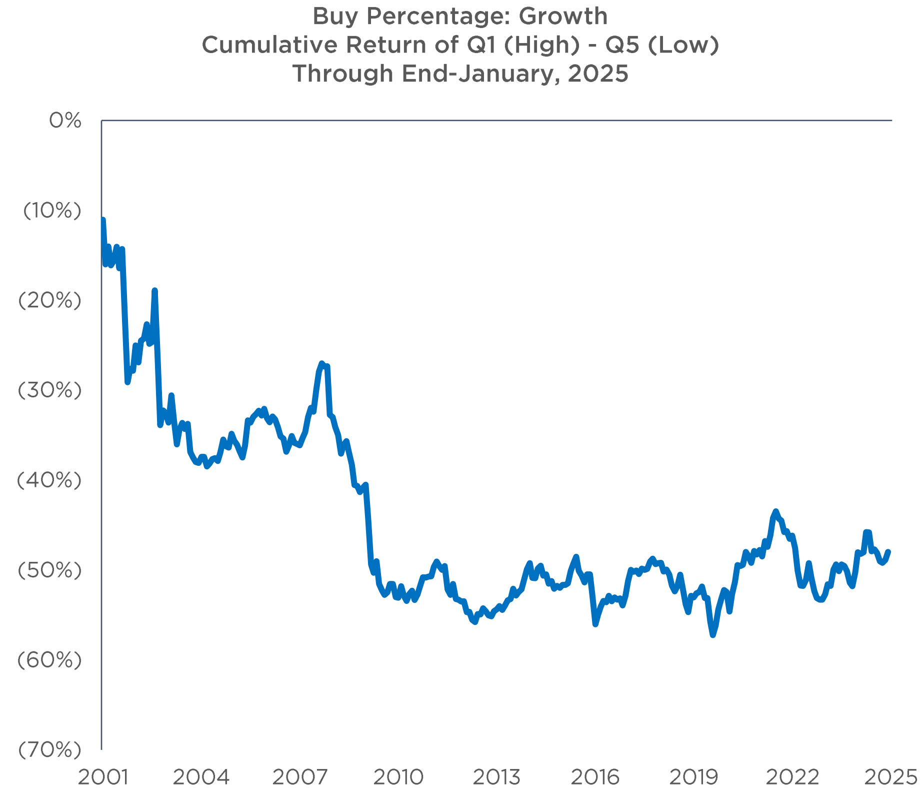


Source: Trivariate Research

QUALITY DOESN'T SEEM TO BE ASSOCIATED WITH BUY PERCENTAGE

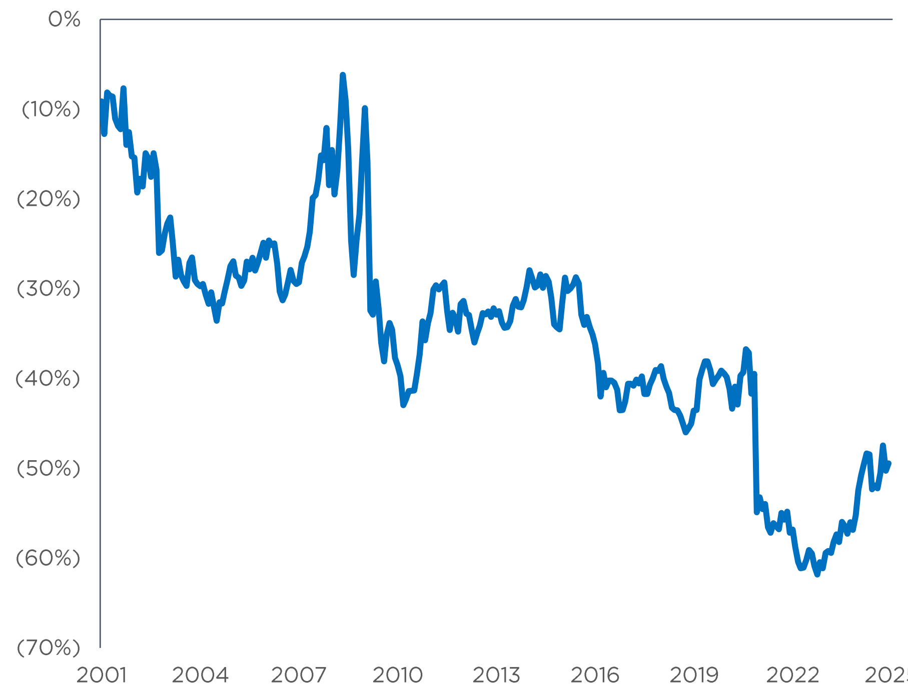
While analysts have way more Buy ratings on growth stocks than value stocks, they have no such collective biases when it comes to quality (left). The CIQ ratings and Buy percentages are largely the same by all quality quartiles (left). Analysts' recommendations have been particularly bad among Junk stocks. Buying stocks with high buy percentage and shorting low buy percentage junk stocks has lost money since 2001 with sharp drawdowns during both the Financial Crisis and COVID (right). This means relying on analysts for their more loved Junk stocks during crises is a particularly bad idea.

Average Analyst Sentiment by Substance
End-January, 2025

Substance	Consensus Rating (CIQ)	Buy Recommendation Percentage	Sell Recommendation Percentage
High Quality	2.15	54.4%	5.2%
Mid Quality	2.14	54.3%	5.0%
Low Quality	2.13	55.2%	5.4%
Junk Quality	2.22	51.1%	7.0%

Source: Trivariate Research

Buy Percentage: Junk Quality
Cumulative Return of Q1 (High) - Q5 (Low)
Through End-January, 2025

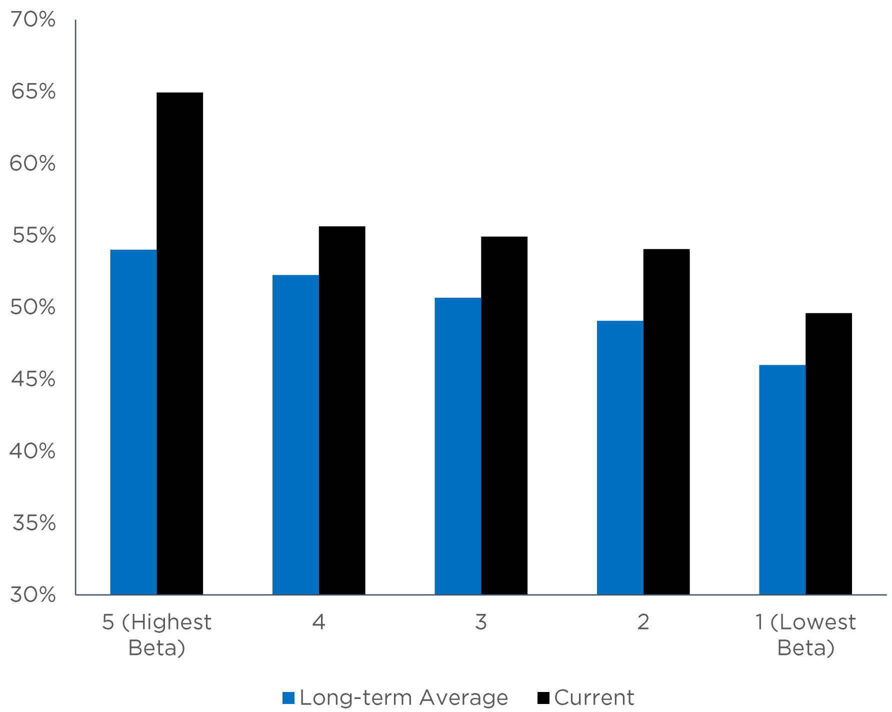


Source: Trivariate Research

ANALYSTS HAVE MORE BUYS ON HIGH BETA STOCKS THAN LOW BETA

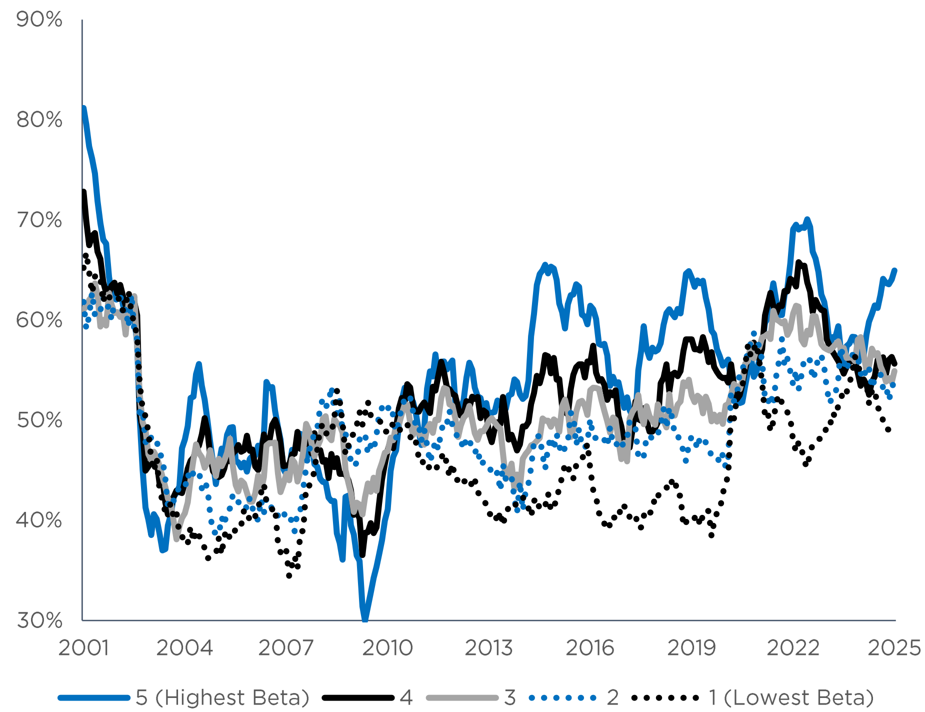
We computed the beta of each stock in the Top 2000 US equities and ranked them by quintile. There are more total buys today than in the past meaning analysts in aggregate are more optimistic on more stocks than usual as black bars are uniformly higher than blue ones. Also, over the long-term, sell-side analysts tend to recommend higher beta stocks more than they recommend lower beta stocks (left). Hence, analysts tend to victory lap without adjusting for the additional beta of their recommendations when the market appreciates. Of note, this high beta bias has become more significant recently, with 65% of recommendations on high-beta stocks being a “buy,” vs. only 49% for stocks in the lowest quintile (right). Based on our recent beta work, we would not be surprised to see lots of analysts be wrong on their high beta recommendations in the coming months.

Buy Percentages by Beta Quintile
Through End-January, 2025



Source: Trivariate Research

Buy Percentages by Beta Quintile
Through End-January, 2025



Source: Trivariate Research

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