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TRIVARIATE RESEARCH

SHOULD YOU ADD TO YOUR LOSERS AND SELL YOUR WINNERS?

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BACKGROUND AND RESEARCH SUMMARY

Background: In practice, most fundamental PMs naturally follow a contrarian sizing discipline—adding to positions where their conviction remains intact despite recent underperformance and trimming positions after strong gains to manage risk and realize profits. The results of today’s analysis suggest that this behavior added modest value over the long run. However, this approach is not regime-neutral. In periods like the recent market, where momentum is unusually strong and trends persist, this discipline can become a headwind—cutting exposure to the very stocks driving returns while reallocating capital into laggards that continue to underperform. The key implication for portfolio managers is that position sizing decisions embed an implicit factor bet: a consistent “buy low, sell high” approach is effectively long mean reversion and short momentum, and its effectiveness will vary materially depending on regime.

Methodology: We used a path-dependent Monte Carlo back-testing framework to evaluate how different rebalancing rules impact portfolio outcomes across multiple US equity universes, including the Top 500, and Top 1000 Technology portfolios. These simulations are conducted every month since 1999 and for each month, we randomly select 50 stocks from the chosen universe and construct an equal-weight portfolio. The portfolio is then evolved over a two-year horizon using daily returns, with 200 independent random portfolios simulated for each start date to capture dispersion across stock selection. Within each simulation, we test three distinct threshold-based position management approaches applied at a daily frequency: (1) a contrarian rebalancing strategy, where positions are trimmed when weights rise above a threshold and added to when weights fall below a threshold (“buy low, sell high”); (2) a buy-and-hold approach, where positions are left to drift with no rebalancing; and (3) a momentum-based rebalancing strategy, where positions are increased as they outperform (weights rise) and reduced as they underperform (weights fall). This setup allows for a direct comparison of how different implicit bets — mean reversion versus momentum versus no intervention — affect portfolio performance across repeated simulations and market environments.

INVESTMENT CONCLUSIONS

Investment conclusion: Nothing historically mattered that much vs. buy and hold, except for buying smaller positions for crisis recoveries. Because of that, it looks like mean-reversion was better than momentum for position sizing over the long-term. Over the last three years, this appears to have changed – though largely isolated to Technology – where buying winners and selling losers has sustainably worked in the big market upcycle since 2023. Whether that continues remains to be seen, but our main conclusions are:

- 1) Don't trade too much.
- 2) If you buy losers, make sure you are confident a market bottom is near and a large recovery is coming.
- 3) Within Technology, momentum has destroyed mean-reversion as a sizing approach in the big up market since 2023. Knowing when this will end is challenging.
- 4) If you insist on buying laggards and selling winners, using fundamental overlays can be helpful. Overall, adding to stocks with forecasted revenue growth and gross margin expansion with upward revisions helps, and avoid adding those with weak revenue growth and margin outlooks, with recent downward revisions, also helps. Within Technology, avoid selling those with strong momentum.

SIMULATION FRAMEWORK DETAILS

Each month since 1999, we randomly selected 50 stocks from the Top 500 by market cap. and assigned them equal starting weights (so 50 2% positions). The portfolio is then updated every trading day for the next two years: weights first drift naturally with daily stock returns, and the sizing rule is then applied. This process is repeated 200 times for each start month to estimate the distribution of outcomes, with no transaction costs or taxes assumed because we assume they are similar for each of the strategies we investigate.

Details on the rules we simulated:

The rule “buy-1.90%-2.00% / sell-2.10%-2.00%” is a standard contrarian rebalancing rule: if a position falls below 1.90%, it is bought back to 2.00%, and if it rises above 2.10%, it is trimmed back to 2.00%. This is meant to be a tightly traded and rebalanced portfolio based on mean-reversion.

By contrast, “buy-2.10%-2.50% / sell-1.90%-1.50%” is momentum-oriented: once a position rises above 2.10%, it is increased further to 2.50%; once it falls below 1.90%, it is cut further to 1.50%. Importantly, the re-trigger or “episode reset” behavior applies only to this one-sided rule: after a stock has been scaled up to 2.50%, it must first fall back below the equal-weight anchor of 2.00% before another scale-up can occur, and after it has been scaled down to 1.50%, it must first rise back above 2.00% before another scale-down can occur.

We show various contrarian and momentum strategies in today’s work, including buying stocks that fall to 1.5% positions back up to 2% (and selling 2.5% back down to 2%), and buying 2.25% positions up to 2.5%, and selling 1.75% down to 1.5%, as well as just buy and hold the initial 50 positions for the whole two years.

Don’t hesitate to reach out to us if you want more specifics on our approach.

BUY-LOW/SELL-HIGH WAS SUPERIOR UNTIL RECENTLY

We compare the performance of three types of position-sizing rules in the Top 500 universe over both the full sample since 1999 (left) and just during the recent period since 2023 (right). Over a longer horizon, the standard buy-low / sell-high approach holds up reasonably well, indicating that trimming positions after strong performance and adding after weakness was beneficial over time. **In the more recent period, however, that edge is weaker, as a more momentum-driven market has made it harder for contrarian rebalancing to keep up.** The comparison suggests that the value of this sizing discipline is not stable through time and depends on the underlying market. **Since 2023, buy and hold was very competitive, particularly since the below table does not include trading impacts and transaction costs.**

Top 500 Stocks
Average Metrics By Various Portfolio Strategies
1000 Simulated Portfolios Each Month
1999 Through End-February, 2026

Strategy	2-Year Return	Volatility	Max Drawdown
buy-1.90%-2.00% sell-2.10%-2.00%	26.4%	27.1%	(32.3%)
buy-1.50%-2.00% sell-2.50%-2.00%	25.6%	27.0%	(32.2%)
buy-1.00%-2.00% sell-3.00%-2.00%	25.4%	26.8%	(32.1%)
buy-2.10%-2.50% sell-1.90%-1.50%	24.4%	26.8%	(32.4%)
buy-and-hold	24.3%	26.7%	(32.5%)
buy-2.25%-2.50% sell-1.75%-1.50%	24.3%	26.8%	(32.5%)
buy-2.50%-3.00% sell-1.50%-1.00%	24.2%	26.8%	(32.5%)

Source: Trivariate Research

Top 500 Stocks
Short-term Average Metrics By Portfolio Strategies
2023 Through End-February, 2026

Strategy	2-Year Return	Volatility	Max Drawdown
buy-2.50%-3.00% sell-1.50%-1.00%	35.9%	15.5%	(18.0%)
buy-2.10%-2.50% sell-1.90%-1.50%	35.4%	15.4%	(17.9%)
buy-2.25%-2.50% sell-1.75%-1.50%	35.3%	15.4%	(17.9%)
buy-and-hold	34.6%	15.3%	(17.8%)
buy-1.00%-2.00% sell-3.00%-2.00%	33.4%	14.9%	(16.9%)
buy-1.90%-2.00% sell-2.10%-2.00%	33.2%	15.2%	(17.1%)
buy-1.50%-2.00% sell-2.50%-2.00%	33.0%	15.1%	(17.0%)

Source: Trivariate Research

BUY-LOW / SELL-HIGH WORKS BEST IN RECOVERY REGIMES

We then compared the same sizing rules across different market return environments to see more clearly when buy-low / sell-high helps and when it hurts. This strategy works best when the market environment is down to modestly positive, roughly in the down 20% to up 10% range. When the market is up 10% or more, the value of buying losers and selling winners is negated.

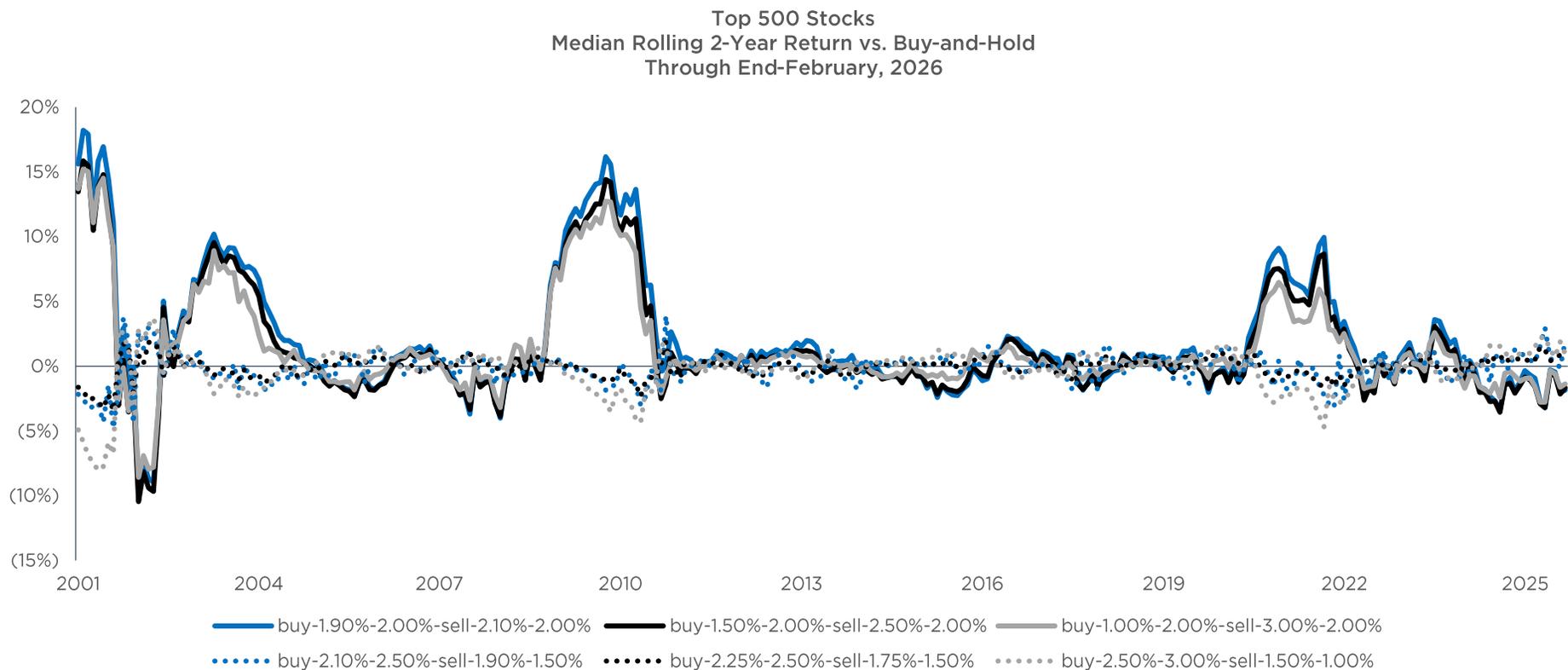
Top 500 Stocks
Average 2-Year Strategy Returns by S&P 500 2-Year Return Bucket
1999 Through End-February, 2026

Strategy	<(20%)	(20%) to (10%)	(10%) to 0%	0% to 10%	10% to 20%	20% to 30%	>30%	Overall
buy-1.90%-2.00% sell-2.10%-2.00%	(21.2%)	5.5%	11.4%	8.0%	16.8%	27.5%	45.7%	23.9%
buy-1.50%-2.00% sell-2.50%-2.00%	(22.0%)	3.8%	10.3%	7.5%	16.7%	27.1%	45.1%	23.3%
buy-1.00%-2.00% sell-3.00%-2.00%	(21.7%)	3.3%	9.8%	7.3%	16.9%	27.1%	45.0%	23.3%
buy-and-hold	(24.4%)	(6.5%)	1.3%	5.7%	16.8%	26.9%	44.5%	21.9%
buy-2.25%-2.50% sell-1.75%-1.50%	(24.1%)	(7.8%)	0.6%	5.5%	17.0%	26.9%	44.4%	21.8%
buy-2.10%-2.50% sell-1.90%-1.50%	(24.0%)	(8.2%)	0.3%	5.6%	17.0%	26.9%	44.3%	21.8%
buy-2.50%-3.00% sell-1.50%-1.00%	(24.0%)	(9.9%)	(0.8%)	5.3%	17.0%	26.9%	44.3%	21.7%

Source: Trivariate Research

THE REASON BUYING LOSERS WORKS IS FOR THE CRISIS RECOVERIES

When evaluating the various strategies over time, the buy-low / sell-high approach tends to outperform most clearly in recovery periods, especially after major drawdowns, while its advantage narrows or disappears when the market shifts into a more persistent momentum regime. When we look here, we almost think having a momentum or mean-reversion policy probably doesn't make sense vs. just buy and hold, except when there is a large recovery coming, which isn't always easy to see when in the midst of a crisis. But, if you have some stocks that are down a lot, and there is a massive amount of government stimulus, adding to those losers worked. Recently, it is starting to look like momentum position adding has worked better, as we previously have shown.



Source: Trivariate Research

AMONG TECH STOCKS, MOMENTUM SIZING IS BEST SINCE 2023

We decided to focus on the most momentum-biased part of the market, the Technology sector, by running the same simulated portfolio strategies just among the Top 1000 Technology stocks by market cap. Over the long run, buy-low / sell-high slightly outperforms, but in the recent period it massively underperforms both the buy-and-hold and the more momentum-oriented rules that add to winners and cut losers. This suggests that Technology has been a far more trend-driven and winner-take-most universe, where trimming strength too early and reallocating into weaker names has been particularly costly. Contrarian rebalancing becomes much less effective — and can become a meaningful drag — when applied to a universe dominated by persistent leadership and strong momentum, particularly in the strong up markets we have seen since AI began impacting NVDA's revenue in 2023.

Top 1000 Technology Stocks
Long-term Average Metrics By Portfolio Strategies
1999 Through End-February, 2026

Strategy	2-Year Return	Volatility	Max Drawdown
buy-1.90%-2.00% sell-2.10%-2.00%	26.4%	27.1%	(32.3%)
buy-1.50%-2.00% sell-2.50%-2.00%	25.6%	27.0%	(32.2%)
buy-1.00%-2.00% sell-3.00%-2.00%	25.4%	26.8%	(32.1%)
buy-2.10%-2.50% sell-1.90%-1.50%	24.4%	26.8%	(32.4%)
buy-and-hold	24.3%	26.7%	(32.5%)
buy-2.25%-2.50% sell-1.75%-1.50%	24.3%	26.8%	(32.5%)
buy-2.50%-3.00% sell-1.50%-1.00%	24.2%	26.8%	(32.5%)

Source: Trivariate Research

Top 1000 Technology Stocks
Short-term Average Metrics By Portfolio Strategies
2023 Through End-February, 2026

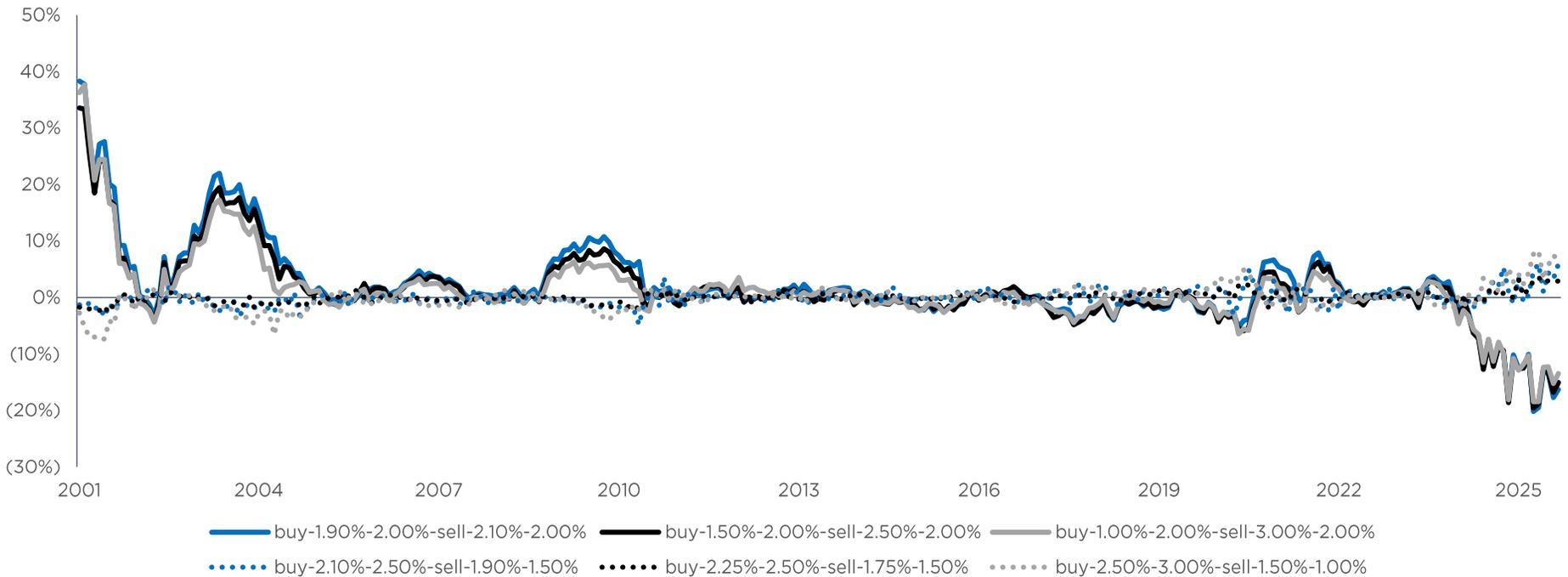
Strategy	2-Year Return	Volatility	Max Drawdown
buy-2.50%-3.00% sell-1.50%-1.00%	55.3%	27.3%	(29.2%)
buy-2.10%-2.50% sell-1.90%-1.50%	53.3%	26.9%	(29.0%)
buy-2.25%-2.50% sell-1.75%-1.50%	52.4%	26.9%	(29.0%)
buy-and-hold	50.6%	26.6%	(28.9%)
buy-1.00%-2.00% sell-3.00%-2.00%	37.4%	25.0%	(27.4%)
buy-1.50%-2.00% sell-2.50%-2.00%	36.8%	25.1%	(27.4%)
buy-1.90%-2.00% sell-2.10%-2.00%	36.6%	25.2%	(27.2%)

Source: Trivariate Research

MEAN-REVERSION FOR SIZING HAS BEEN THE WORST IN 25 YEARS

Over time, the mean reversion rules also worked in tech during the TMT and Financial Crisis recoveries but was less effective during the COVID recovery because some Tech. was “work from home” and not “reopening” focused. Since 2023, winners have kept winning, so trimming strength and adding to laggards has become a much bigger headwind and has hurt portfolios. In fact, the mean reversion approach to position sizing has never been worse in the last 25 years than it has over the last two years. Of course, we worry that this could change and is very AI-regime specific.

Top 1000 Technology Stocks
Median Rolling 2-Year Return vs. Buy-and-Hold
Through End-February, 2026



Source: Trivariate Research

ADD/KEEP HIGH FORECASTED GROWTH HELPS CONTRARIAN

Hence, we thought it made sense to add a simple fundamental overlay to the base contrarian rule by allowing the portfolio to add to or keep a position only when the stock also passes a daily signal screen. In the last three years, some overlays — especially forecasted revenue growth, gross margin growth, and earnings revision signals — modestly improved the base buy-low / sell-high rule. The takeaway is that if you want to stick with contrarian rebalancing, a fundamental overlay can help protect against adding to the wrong losers. So a stock that becomes big, you should keep if it has high forecasted revenue and gross margin growth and recent upward revisions. And don't add to losers with weak growth, margin contraction, and recent negative revisions. Within Technology, buy-and-hold has been really strong, and selling winners has been a bad idea, even worse than buying winners.

Top 500 Stocks Do Fundamental Overlays Improve the 1.9% Buy / 2.1% Sell Rule? 2023 Through End-February, 2026			
Strategy	2-Year Return	Volatility	Max Drawdown
Add/Keep High Forecasted Revenue Growth	35.4%	15.6%	(17.8%)
Buy and Hold	34.9%	15.3%	(17.8%)
Add/Keep High Forecasted Gross Margin Growth	33.8%	15.1%	(17.2%)
Add/Keep Up>Down Earnings Revision	33.6%	15.2%	(17.5%)
Add/Keep High Earnings Revision	33.6%	15.2%	(17.4%)
Base Strategy: buy-1.90%-2.00%-sell-2.10%-2.00%	33.5%	15.3%	(17.1%)
Only Sell 2.10% to 2.00%	33.4%	15.1%	(17.1%)
Add/Keep Positive Earnings Revision	33.3%	15.2%	(17.3%)
Only Sell 2.50% to 2.10%	33.1%	14.8%	(16.9%)
Add/Keep High CSR	32.3%	14.6%	(16.3%)

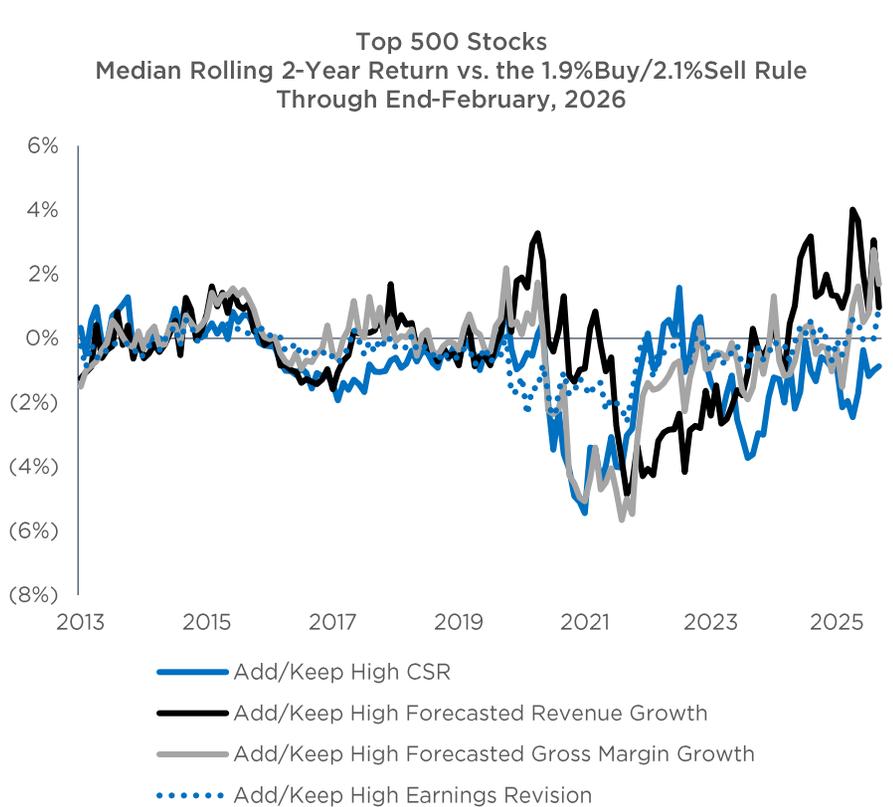
Source: Trivariate Research

Top 1000 Technology Stocks Do Fundamental Overlays Improve the 1.9% Buy / 2.1% Sell Rule? 2023 Through End-February, 2026			
Strategy	2-Year Return	Volatility	Max Drawdown
Buy and Hold	50.4%	26.6%	(28.8%)
Add/Keep High Forecasted Revenue Growth	44.6%	26.2%	(29.1%)
Add/Keep High Forecasted Gross Margin Growth	41.5%	25.8%	(28.7%)
Add/Keep Up>Down Earnings Revision	38.8%	25.2%	(27.8%)
Add/Keep High Earnings Revision	37.9%	25.4%	(27.7%)
Add/Keep High CSR	37.6%	24.8%	(27.0%)
Only Sell 2.50% to 2.10%	36.7%	24.8%	(27.3%)
Base Strategy: buy-1.90%-2.00%-sell-2.10%-2.00%	36.6%	25.2%	(27.2%)
Add/Keep Positive Earnings Revision	36.5%	25.3%	(27.6%)
Only Sell 2.10% to 2.00%	36.4%	25.1%	(27.3%)

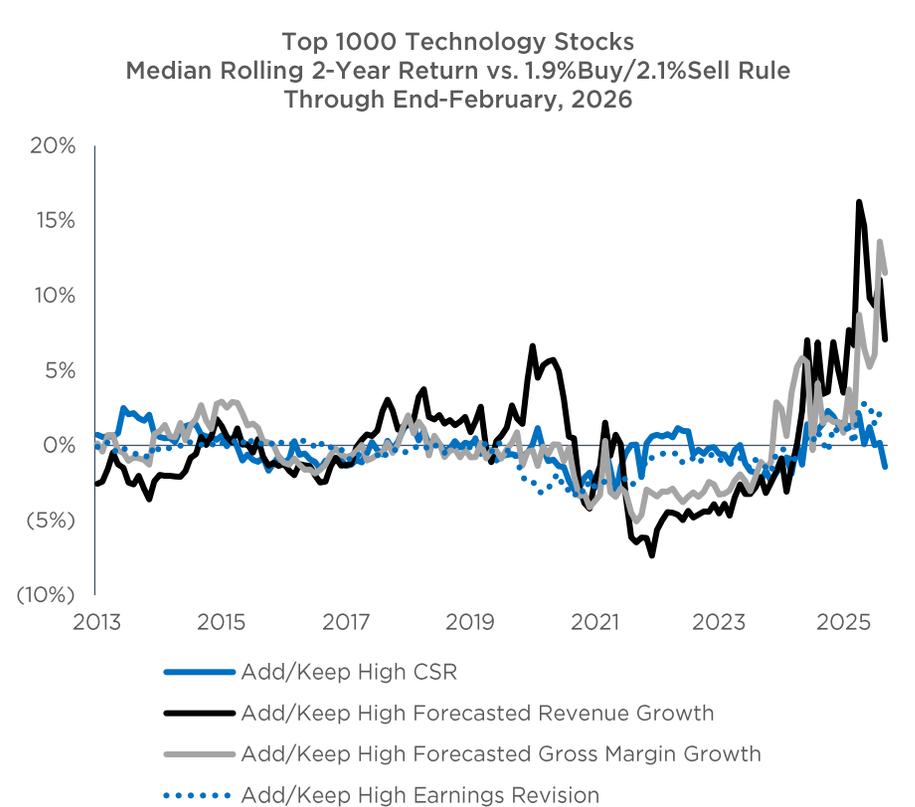
Source: Trivariate Research

FUNDAMENTAL OVERLAYS HELP CONTRARIAN, ESPECIALLY IN TECH

The overlays help more in Tech than in the broad market, but only partially offset the recent momentum headwind. Revenue growth and gross margin growth overlays improved on the base 1.9%/2.1% rule, especially in the most recent period, while company-specific risk (CSR) was less helpful. The takeaway is that if you insist on contrarian rebalancing in Technology, avoiding selling where the fundamental story is still strong will be helpful.



Source: Trivariate Research



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