Current Methodology for Calculating PredictWallStreet's One-Day Stock Forecast Profit Results

May 2017

This brief paper describes the methodology used to calculate the One-Day Stock Forecast Results shown on PredictWallStreet's site.   Before describing the methodology in detail, it may be helpful to review the history of the White Papers preceding this one, for context.

Previous White Papers

On Feb 5, 2008, PredictWallStreet released our original White Paper entitled: Investing with PredictWallStreet Data. That paper described how we gather investor sentiment data by polling users for their stock predictions. Further we described how these stock predictions were processed by proprietary quantitative algorithms to produce daily Forecasts which we began releasing publicly, before the U.S. markets open for trading, starting on May 24, 2007. Since then, we have continued to release our daily Forecasts, ahead of market open, both on our own site as well as on partner sites. In September of 2013, we released an update to our original paper, that kept all methodology the same, but simply brought the analyses up to date.

Changes to Simulation Methodology as of Feb 1, 2013

Starting in February 1, 2013, we added detail to the daily Forecasts that we released, categorizing each Forecast as having a Strength of either 1, 2, or 3. The Strength metric indicates how confident we are in the Forecasts. Forecasts with strengths 2 or 3 indicate higher confidence, and are also rarer, than Forecasts with Strength 1.   All Forecasts were assigned a Strength metric which was published, along with the direction of the Forecast, **ahead** of market open. That is, both the Forecast direction and Strength were, and continue to be, forward-looking.

Once a sufficient number of Forecasts with associated Strengths existed, we began to report performance of the stronger Forecasts (Strengths 2 & 3). We felt that these contained the most useful information.

We also decided to address some of the limitations in our earlier simulations which we noted at the time. For example, we now include retail commission costs in our simulation methodology. Because our methodology assumes entering a position at market open and closing out the position at market close of the same day, commission costs can be quite significant over time. Our simulation reflects 100% turnover every day. By including retail commission costs, we felt we would provide a more accurate and realistic estimate of performance.

Except for these changes, primarily designed to provide a more accurate and realistic estimate of performance, the methodology and source of the Forecasts remains essentially the same as described in the original February 2008 white paper and the September 2013 update.

Summary of the Current Simulation Methodology

To recap, here is the current simulation methodology used to produce the results which are published on the PredictWallStreet website as of May 2017.

- Methodology for producing the Forecasts is essentially unchanged from 2008 except that a Forecast Strength metric began to be published as of February 1, 2013.
- We simulate trading every Forecast with a Strength of 2 or 3, beginning February 1, 2013.
- Since February 1, 2013 through April, 2017, there were 1,279 Forecasts with Strength 2 or 3. This is a reasonably large sample size, which increases with each subsequent month.
- As in our original white paper, we simulated trading only stocks with a previous day's closing price >= $5. (This avoids including potentially unrealistic returns from "penny stocks.")
- Each day, we assumed that whatever trading capital was available would be equally distributed across whatever Strength 2&3 Forecasts were available that day. For example, if there were 10 Strength 2& 3 Forecasts on a given day, 10% of the capital would be placed on each Forecast that day.
- If the Forecast was for a stock to close HIGHER than its open, we calculated the number of shares to purchase based on the capital allocation. Then, based on the closing price of that stock, we calculated the dollar made (or lost) on that position to get the Gross % P&L on that stock Forecast. Then we subtracted $13.90 (2X the current typical retail commission cost of $6.95 per trade) to obtain the % P&L net of commission costs.
- If the Forecast was for a stock to close LOWER than its open, we calculated the number of shares to short based on the capital allocation. Then, based on the closing price of that stock (buying to cover), we calculated the dollar made (or lost) on that position to get the Gross % P&L. Then we subtracted $13.90 (2X the current typical retail commission cost of $6.95 per trade) to obtain the % P&L net of commission costs.
- No money was held overnight. We began and ended each day 100% in cash.
- No leverage was used.
- We assumed that initial capital was $250,000 and that any profits or losses increased or decreased the amount of capital available to trade the following day (daily compounding).
- No market impact or other transactions costs or fees, other than the commission costs detailed above, were assumed.

Comparison to the S&P 500

For comparison purposes, we also show the performance of simply buying and holding the S&P 500 Exchange Traded Fund (SPY) over the same period covered by our simulation.

It is extremely difficult for any trading strategy to reliability beat the S&P 500 by even 1 or 2 percentage points annually. Strategies that trade frequently, like the one we simulated, faces the additional headwind of having to pay commissions twice per day, which tends to erode returns. Despite these difficulties, as of May 2017, our stronger Forecasts (Strengths 2 & 3) have outperformed the S&P by a wide margin.

The meaningful sample size (over 1,200 forecasts), together with the degree of outperformance, suggests our outperformance is unlikely to be due to chance.

Our explanation is that PredictWallStreet has been successful at harnessing the collective intelligence of investors and processing that intelligence using algorithms developed over the last decade to generate Alpha, or excess return compared to the S&P.

Finally, we need to point out some important cautions.

1) Past performance is no guarantee of future performance. Saying that our historical results seem unlikely to be due to chance is NOT the same thing as saying that the result will continue in the future. Results may NOT continue, for a wide variety of reasons. As just one example, the market is always changing, and new participants are continually entering with new strategies of their own. Some of these could negatively affect the strategy we simulated and it would be virtually impossible for us to determine that in advance.

2) Hypothetical simulations are NOT the same as actual trading. We have presented results of a simulation. Although we included estimated retail commission costs, there are lots of reasons why actual trading could differ from a hypothetical simulation. For example, we simulated beginning with $250,000 of capital. If you were to trade less, the impact of commissions would be proportionally more. If you traded more, at some point you would begin moving the market (what is called market impact). Our simulation did not include any effects of market impact.

3) On many days, we published only a single Forecast with Strength 2 or 3. Our simulation methodology would assume all of the capital would be allocated to a single position on those days. Although, historically, over the time period we have been able to simulate, this strategy resulted in outperformance, it may well be beyond the risk tolerance of many individuals – particularly if this strategy represented anything more than a tiny fraction of their overall investment portfolio.

4) The strategy can and did lose money. Just look at the first four months of the simulation when the strategy under-performed the S&P. Again, there is no guarantee of outperformance, even in the long run.

Finally, and very importantly: **This paper was written to demonstrate theoretical performance of our forecasts. We do not make trading recommendations. We do not advocate any trading methodology including the one described in this paper. Past results do not guarantee future results. Ideas and methods that worked once might stop working at any time. PredictWallStreet, LLC is not an investment adviser and all investors should consult with a financial professional before placing any trades in the stock market.**