

Behavioral Analysis of Stock Using Selective Indicators from Fundamental and Technical Analysis

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Abstract : In the current digital era of free trading and pandemic-driven remote work culture, markets worldwide gained momentum for retail investors to trade from anywhere easily. The number of retail traders rose to 24% of the market from 15% at the pre-pandemic level. Most of them are young retail traders with high-risk tolerance compared to the previous generation of retail traders. This trend boosted the growth of subscription-based market predictors and market data vendors. Young traders are betting on these predictors, assuming one of them is correct. However, 90% of retail traders are on the losing end. This paper presents multiple indicators and attempts to derive behavioral patterns from the underlying stocks. The two major indicators that traders and investors follow are technical and fundamental. The famous investor, Warren Buffett, adheres to the "Value Investing" method that is based on a stock's fundamental Analysis. In this paper, we present multiple indicators from various methods to understand the behavior patterns of stocks. For this research, we picked five stocks with a market capitalization of more than \$200M, listed on the exchange for more than 20 years, and from different industry sectors. To study the behavioral pattern over time for these five stocks, a total of 8 indicators are chosen from fundamental, technical, and financial indicators, such as Price to Earning (P/E), Price to Book Value (P/B), Debt to Equity (D/E), Beta, Volatility, Relative Strength Index (RSI), Moving Averages and Dividend yields, followed by detailed mathematical Analysis. This is an interdisciplinary paper between various disciplines of Engineering, Accounting, and Finance. The research takes a new approach to identify clear indicators affecting stocks. Statistical Analysis of the data will be performed in terms of the probabilistic distribution, then follow and then determine the probability of the stock price going over a specific target value. The Chi-square test will be used to determine the validity of the assumed distribution. Preliminary results indicate that this approach is working well. When the complete results are presented in the final paper, they will be beneficial to the community.

Keywords : stock pattern, stock market analysis, stock predictions, trading, investing, fundamental analysis, technical analysis, quantitative trading, financial analysis, behavioral analysis

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