Getting Rich with Math

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Abstract

Stocks have been around for centuries and have been used by many people as their main source of income. It was originally said that the stock market was unpredictable as it is controlled by the "Random Walk Theory". This did not satisfy investors and they began to question if there was any correlation between stock prices and any other relevant factor. Mathematicians began creating complex equations and algorithms with the idea of being wealthy motivating them. Although some have had success, there is no definite way to accurately and consistently predict the stock market. Now, most methods are used to calculate risk and reward which can still be efficiently used to play the market. In this study two methods were used to select stocks to observe and record the changes in price. Fundamental analysis was the first method and it focuses on the actual company and its structure. Technical analysis is the complete opposite of fundamental analysis as the emphasis shifts away from the company and focuses entirely on trends in price and price history. Both fundamental and technical analyses were effective in the long-term for selecting stocks that would increase in price. Short-term proved to be impossible to predict as there was no consistency in the data collected.