

# Investment Policy Statement

Ishu Jaswani

## EXECUTIVE SUMMARY

*Investment Policy Statement*

<b>Type of Fund:</b>	Equity
<b>Planning Time Horizon:</b>	1 Year
<b>Investment Return/Spending Policy:</b>	A pool of \$1 million was collected and strategically invested in the equity market, incorporating a carefully crafted investment, trading, and cash management approach. decided to invest, trade, and keep cash in hand

Asset Allocation	In Thousands of Dollars
Equity fund	799.43
Algorithmic Trading	68.84
Cash	131.73
Total	1000

**Evaluation Benchmark:** The weighted return of S&P 500.

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## I. Introduction:

This Investment Policy Statement (IPS) serves as a comprehensive document that outlines the investment guidelines, objectives, and strategies for managing the portfolio. The purpose of this IPS is to provide a clear framework for decision-making and establish a disciplined approach to portfolio management. It takes into consideration the unique circumstances, goals, and preferences of the investor.

## II. Role of the Investment Committee:

The Investment Committee, consisting of Ishu Jaswani as the sole decision-maker and portfolio manager, is responsible for overseeing and implementing the investment strategy defined in this IPS. Ishu Jaswani assumes all responsibilities typically fulfilled by an investment committee, including setting investment objectives, determining asset allocation, selecting specific investments, and monitoring portfolio performance.

## III. Investment Objective and Spending Policy:

The primary investment objective is to achieve long-term capital appreciation while minimizing downside risk. The portfolio aims to outperform the benchmark index by 3% annually over a rolling 1 year period. By focusing on capital appreciation, the objective is to enhance the portfolio's value over time.

The spending policy of the portfolio entails reinvesting all income generated, including dividends and interest, for growth purposes. No regular cash distributions will be made, as the primary aim is to compound the returns and build long-term wealth. Finally, a collection of \$1,000,000 through paper trading will be used to reach this investment objective.

## IV. Portfolio Investment Policies:

### 1. Asset Allocation:

The portfolio will maintain a diversified asset allocation to manage risk and capture opportunities across different asset classes. The target asset allocation is as follows:

- Equities: 79.94%
- Algorithmic Trading: 6.88%
- Cash Equivalents: 13.17%

### 2. Equity Investment Policy:

The equity investment policy focuses on investing in individual stocks selected through a thorough fundamental analysis process. The selected stocks for this portfolio are ['AAPL', 'MSFT', 'AMZN', 'GOOGL', 'JNJ', 'V', 'JPM', 'PG', 'KO', 'UNH', 'WMT', 'DIS', 'HD', 'NVDA', 'PFE']. The investment strategy combines various models and techniques to predict returns, assess risk, and evaluate equity valuation.

#### 1. Mean-Variance Optimization:

Mean-Variance Optimization (MVO) is employed using the Support Vector Regression (SVR), Multiple Linear Regression (MLR), and Extreme Gradient Boosting (XGB) models to predict returns. MVO aims to maximize portfolio returns while minimizing the associated risk. The predicted returns from the models are used to construct an optimal portfolio allocation that balances risk and expected returns.

#### 2. Capital Asset Pricing Model (CAPM):

The Capital Asset Pricing Model (CAPM) is utilized by applying the SVR, MLR, and XGB models to predict returns while considering the risk-free rate. CAPM helps determine the expected return of stock by incorporating its systematic risk (beta) and the risk-free rate. This analysis aids in identifying stocks that are expected to provide higher returns relative to their level of risk.

### 3. Equity Valuation - Dividend Discount Model (DDM):

The Dividend Discount Model (DDM) is employed by using the SVR, MLR, and XGB models to predict next year's dividend. DDM is a fundamental valuation approach that estimates the intrinsic value of a stock based on its expected future dividends. The models' predictions are used to assess the attractiveness of the stocks from a dividend perspective.

### 4. Black-Litterman Model:

The Black-Litterman model is utilized by applying the SVR, MLR, and XGB models to predict the returns of the selected stocks. The Black-Litterman model combines investor views, market equilibrium, and historical data to generate portfolio weights that optimize the risk-return tradeoff. The models' predictions play a crucial role in estimating the expected returns of the stocks.

The investment selection process considers the outputs from these models and the results of the thorough fundamental analysis. Factors such as financial performance, industry trends, valuation metrics, and predicted returns are taken into account to make informed investment decisions. It is important to note that this portfolio is designed for risk-loving purposes, and no investments are made in index funds to maintain control over risk exposure.

Regular monitoring and evaluation of the model's performance, as well as portfolio returns and risk, are conducted to ensure the ongoing effectiveness of the equity investment strategy. Adjustments to the portfolio holdings may be made based on changes in market conditions, stock valuations, or any updated predictions from the employed models.

Please note that investing in equities involves risks, including the potential for loss of capital. The thorough analysis and model predictions are intended to guide investment decisions but should be supplemented with appropriate due diligence and professional advice.

### 3. Algorithmic Trading Investment Policy:

The Algorithmic Trading Investment Policy outlines the investment strategy and guidelines for utilizing machine learning models to predict stock prices and make investment decisions. The objective of this policy is to leverage data-driven approaches to enhance investment returns and manage risk.

## Machine Learning Models:

Three machine-learning models have been employed in this investment strategy:

- A. Support Vector Regression (SVR): SVR is a supervised learning model that uses historical data to predict future stock prices. It aims to identify patterns and trends in the data to make accurate price predictions.
- B. Multiple Linear Regression (MLR): MLR is another regression-based model that analyzes the relationship between multiple independent variables and the dependent variable (stock price). It helps identify the factors influencing stock prices and estimate their impact.
- C. Extreme Gradient Boosting (XGB): XGB is an ensemble learning technique that combines multiple weak models (decision trees) to create a strong predictive model. It is known for its high predictive accuracy and ability to handle complex datasets.

## Stock Price Prediction:

The machine learning models (SVR, MLR, XGB) are trained using historical stock price data and relevant market indicators. These models are utilized to forecast future stock prices based on the identified patterns and relationships in the data. The predictions generated by the models serve as a key input for investment decision-making.

## Investment Strategy:

Based on the stock price predictions, investment decisions are made to allocate capital to different stocks. The strategy aims to identify undervalued stocks with a potential for price appreciation and avoid stocks that are overvalued or expected to decline. The portfolio is constructed to maximize potential returns while managing risk through diversification.

## 4. Cash Management:

Cash equivalents will be held in the portfolio to provide liquidity for potential investment opportunities and meet short-term financial obligations. The portfolio will maintain a minimum cash allocation of 10%-15%, ensuring there is sufficient liquidity for strategic decision-making.

## V. Monitoring Portfolio Investments and Performance:

### 1. Performance Monitoring:

The portfolio's performance will be actively monitored against a designated benchmark index. S&P 500 will assess investment returns, risk-adjusted metrics, and overall portfolio performance to ensure they align with the investment objectives. Regular analysis will be conducted to identify any potential areas of improvement or adjustments to the investment strategy.

### 2. Portfolio Rebalancing:

The portfolio will be rebalanced annually or when the asset allocation deviates significantly from the target allocation. Rebalancing will be done systematically to restore the desired asset allocation and manage risk effectively. This process aims to maintain the portfolio's risk-return profile in line with the established investment objectives.

### 3. Ongoing Investment Research:

Ishu Jaswani will remain proactive in staying informed about market conditions, economic trends, and investment opportunities through comprehensive research and analysis. This continuous effort will provide valuable insights and inform investment decisions and potential adjustments to the investment strategy, ensuring the portfolio remains aligned with the investor's goals.

### 4. Reporting:

Regular reports summarizing the portfolio's performance, asset allocation, investment holdings, and any notable changes or updates will be provided to Ishu Jaswani. These reports will be provided at regular intervals, such as quarterly or semi-annually, to facilitate informed decision-making and maintain transparency in portfolio management. The reports will offer a comprehensive overview of the portfolio's performance, highlighting key metrics and comparing them to the established benchmarks. Additionally, the reports will provide detailed information on asset allocation, including the percentage holdings in

equities, Algorithmic trading, and cash equivalents. Any significant changes or updates to the investment strategy will also be communicated in these reports.

The Investment Committee, consisting of Ishu Jaswani, will review these reports and use the information to evaluate the portfolio's progress toward meeting the investment objectives. The committee will assess the effectiveness of the investment strategy and make any necessary adjustments to ensure alignment with changing market conditions or the investor's evolving goals.

The Investment Policy Statement is a dynamic document that will be subject to periodic review and updates. It is essential to reassess the IPS at least annually, or whenever significant changes occur in the investor's financial situation, risk tolerance, or market conditions. Revisions to the IPS will be made collaboratively by the Investment Committee to ensure that the portfolio remains aligned with the investor's objectives.

By adhering to the guidelines outlined in this Investment Policy Statement, the Investment Committee aims to effectively manage the portfolio, optimize returns, and manage risk in line with the investor's long-term financial goals. Regular monitoring, strategic asset allocation, and ongoing research will facilitate informed decision-making and help position the portfolio for success in the ever-changing investment landscape.