



# Chosen Equity Instruments

**01**

**AAPL**

AAPL-MAFlat

**02**

**EXC**

EXC-BMK-MA

**03**

**GE**

GE-MAShort

**04**

**INTC**

INTC-BB

**05**

**PFE**

PFE-BB





## Other Chosen Instrument

**06**

**FBNDX**

FBNDX-MAShort

**07**

**SPGSCI**

SPGSCI - MAFlat

**08**

**GBP**

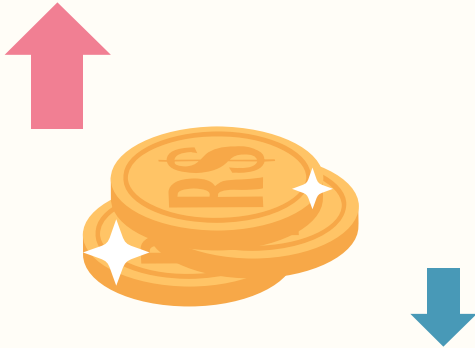
GBP-MAShort



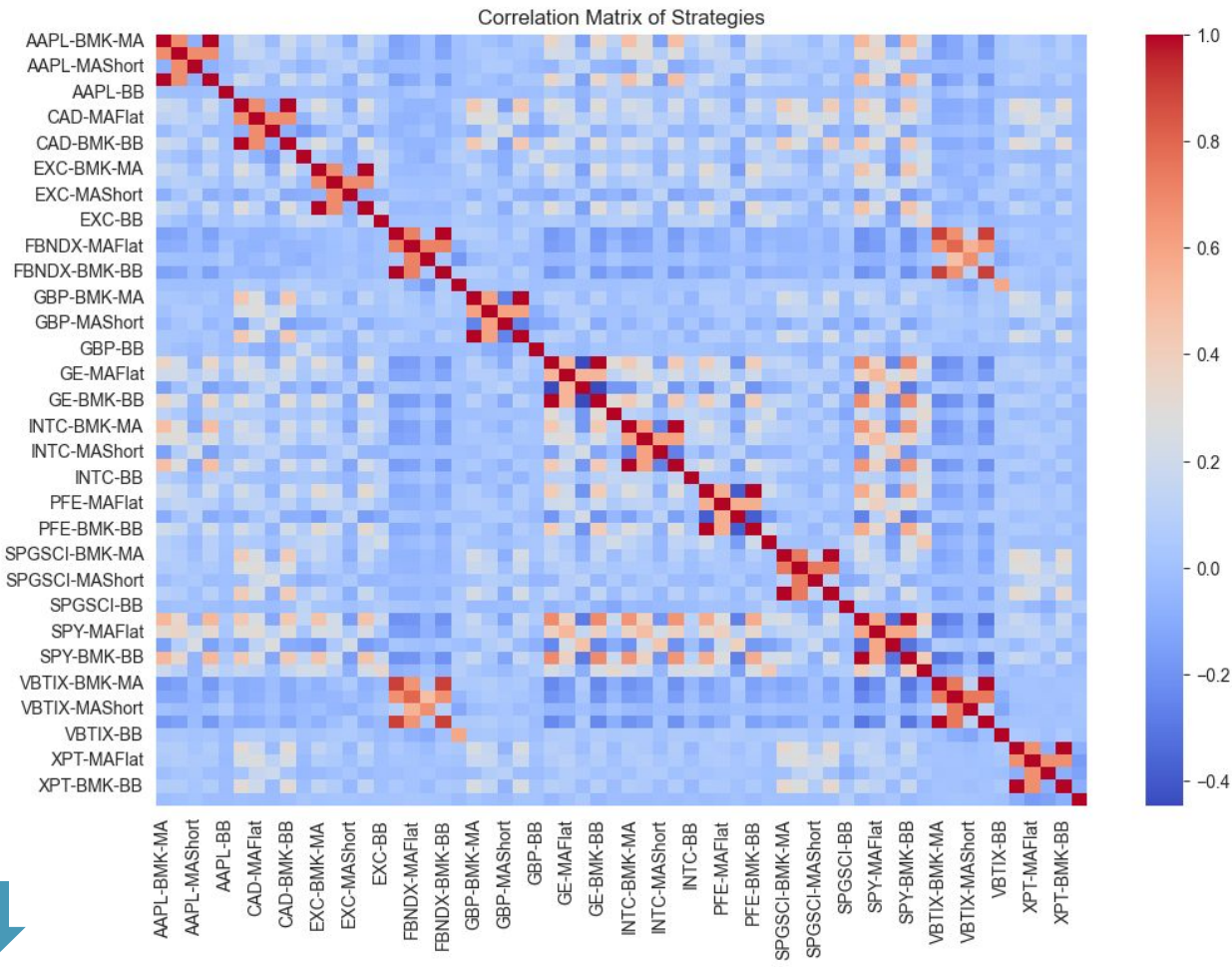


# Reasons for Chosen Instruments

- Equity instruments showed high correlation with SPY
- Non-equity instruments (FBNDX, SPGSCI, GBP) showed lower correlation, improving diversification

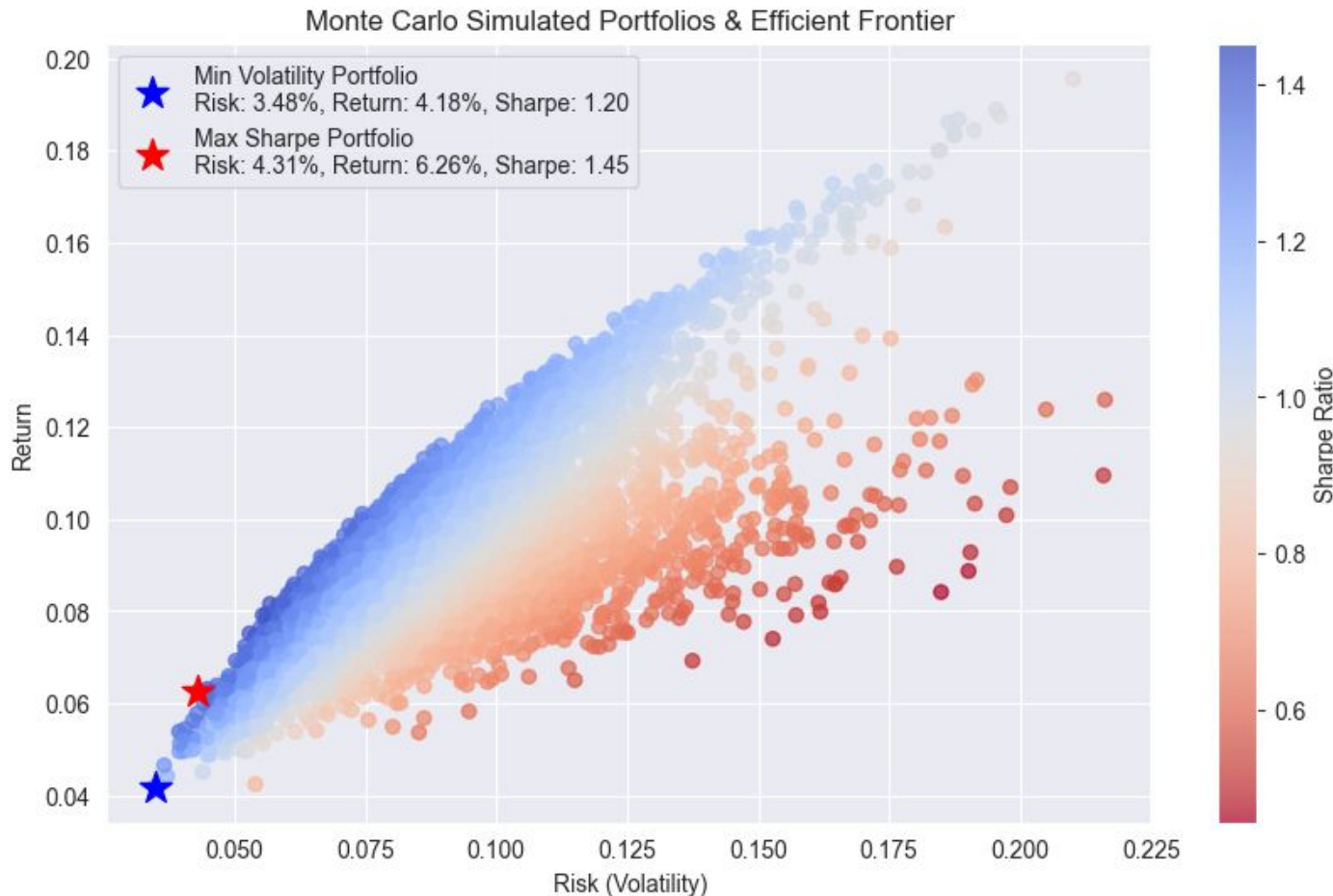


## Correlation matrix of all strategies



# Risk/Return plot for the 5000 simulations

**Max Sharpe:  
1.45**



## Weights for Minimum Volatility

Instrument	Weight
AAPL	0.007
EXC	0.029
GE	0.537
INTC	0.187
PFE	0.028
FBNDX	0.032
SPGSCI	0.145
GBP	0.030

## Weights for Maximum Sharpe Ratio

Instrument	Weight
AAPL	0.0854
EXC	0.023
GE	0.430
INTC	0.160
PFE	0.023
FBNDX	0.131
SPGSCI	0.122
GBP	0.022

## Min Volatility Portfolio

Risk : 3.48%

Return: 4.18%

Sharpe Ratio: 1.20

## Max Sharpe Portfolio

Risk : 4.31%

Return: 6.26%

Sharpe Ratio: 1.45





Equal Weighted  
0.54

(vs)

Optimum Portfolio  
1.45



# Beta for Maximum Sharpe Portfolio



**Beta Value**  
**0.056**

The calculated Beta value is 0.056, which is below 0.5. This implies the maximum Sharpe ratio portfolio has very low market risk and a weak correlation with the S&P 500. The portfolio has extremely low market risk, thus its returns are barely affected by changes in the S&P 500.