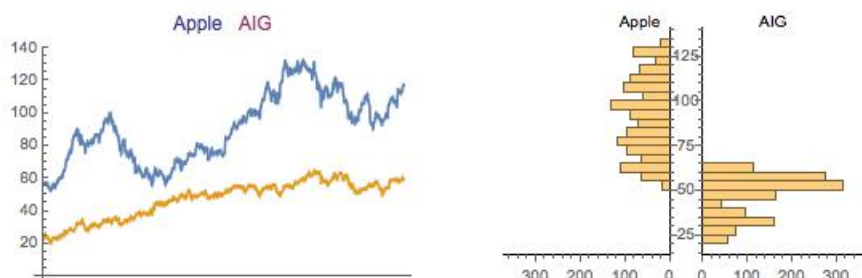# Financial Analysis of Apple and AIG Based On Mathematica

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# 1 This is the last stock price of Apple and AIG in recent five years based on the data collected using mathematica.



# 2 a hypothetical model to show their performance in terms of the standard deviation of the portfolio.

The blue line is where the "efficient frontier" lies. It represents the edge of feasible combinations of risk and return. When the correlation between these two assets is 1.0, there is no risk reduction. As the correlation decreases, we can achieve a portfolio with the highest expected return, given the lowest standard deviation. Therefore, a small correlation is a strategy for diversification. That is what investors are trying to

achieve\[LongDash]low risk, high return. This model turns out to be the foundation
of the famous CAPM model that is widely used in the financial industry today.



0.330143 $x$ + 0.000565878

$R^2$ = 0.117471

AIG

Apple