

Capita Asset Price Modelling Project Report

By Abhishek Singh

Summary

Using the capital asset price modelling theory calculated the expected return of A security(tesla).

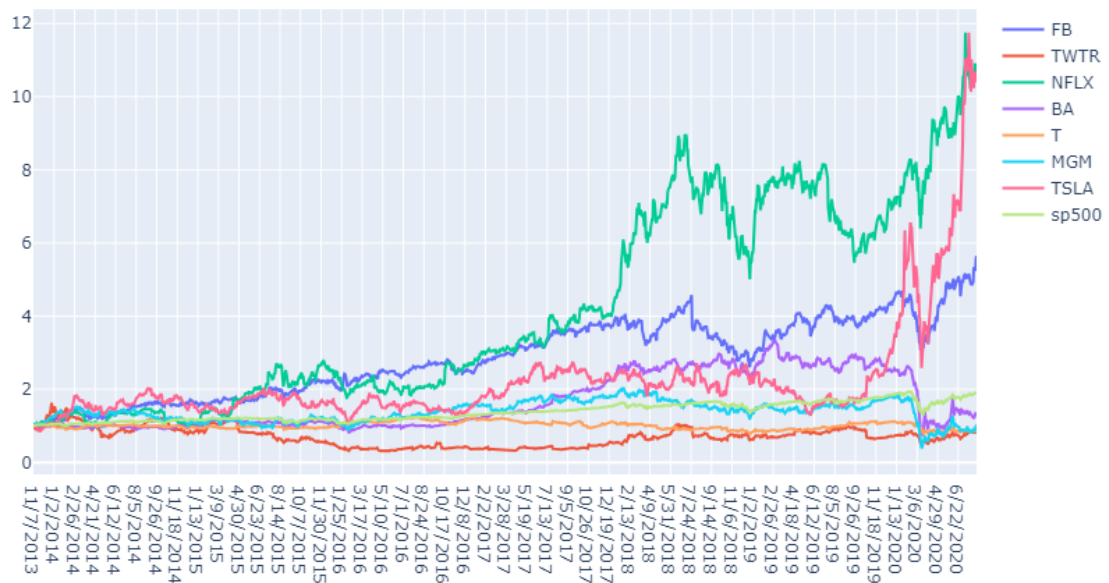
Data Summary

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0 to 1698 Data columns (total 9 columns):
#   Column  Non-Null Count  Dtype
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0   Date    1699 non-null    object
1   FB       1699 non-null    float64
2   TWTR    1699 non-null    float64
3   NFLX    1699 non-null    float64
4   BA       1699 non-null    float64
5   T        1699 non-null    float64
6   MGM     1699 non-null    float64
7   TSLA    1699 non-null    float64
8   sp500   1699 non-null    float64
dtypes: float64(8), object(1)
memory usage: 119.6+ KB
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Results

1)Normalized share. Prices vs time

Normalized Prices

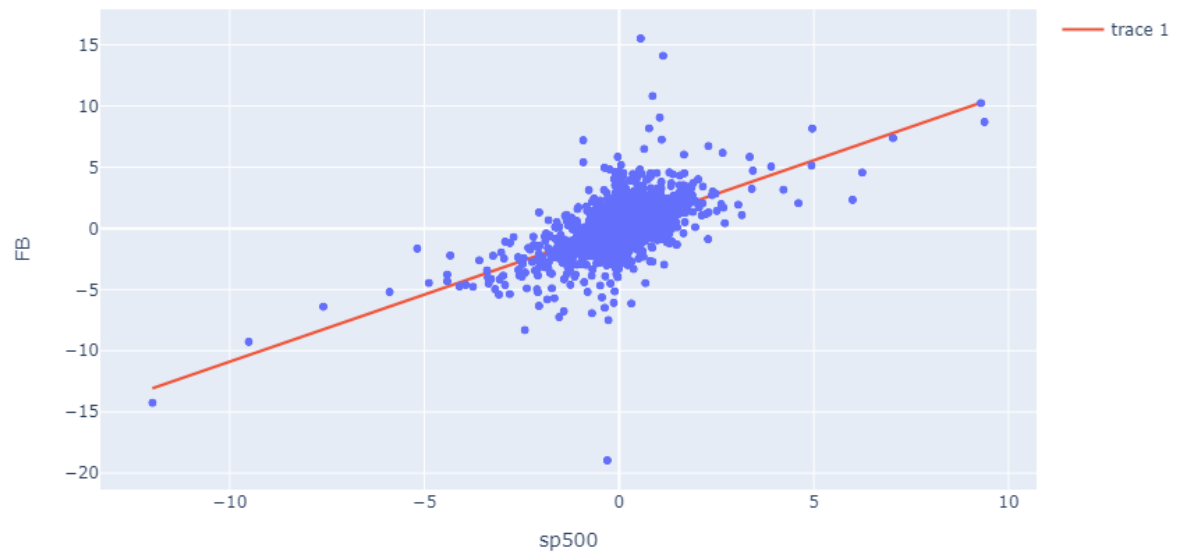


Inferences

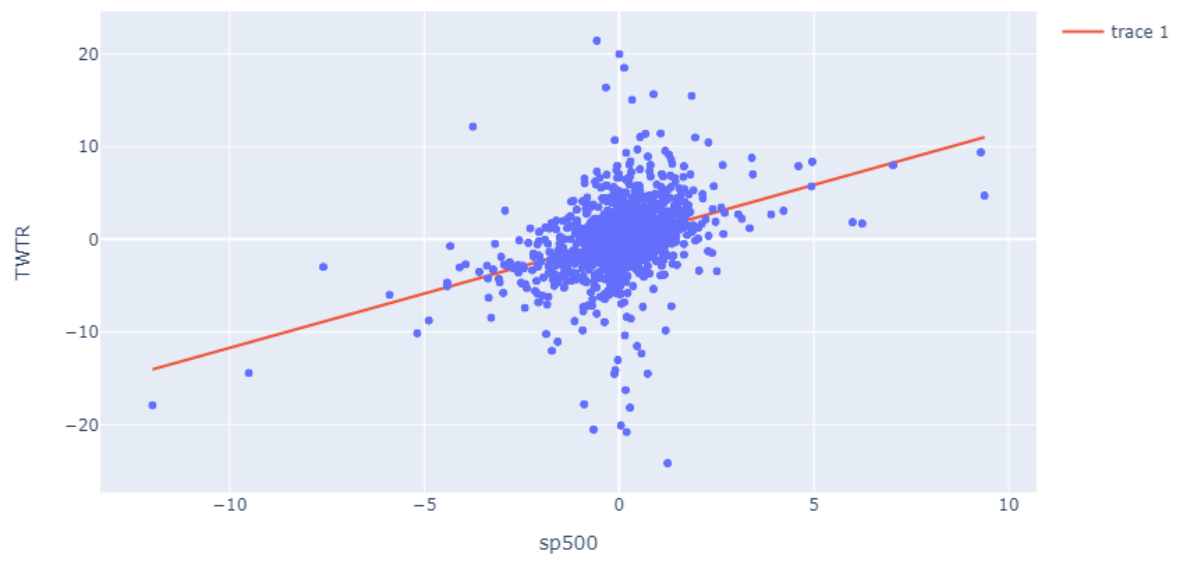
We see qualitatively that Tesla and Netflix were the best performers
While other stocks more or less remained closely in movement with
S&P500

2) Calculating beta for all stocks while plotting their normalized prices on y axis
and S&P normalized price on x axis and choosing a best fit line and getting the
slope of the line to get the particular stock beta

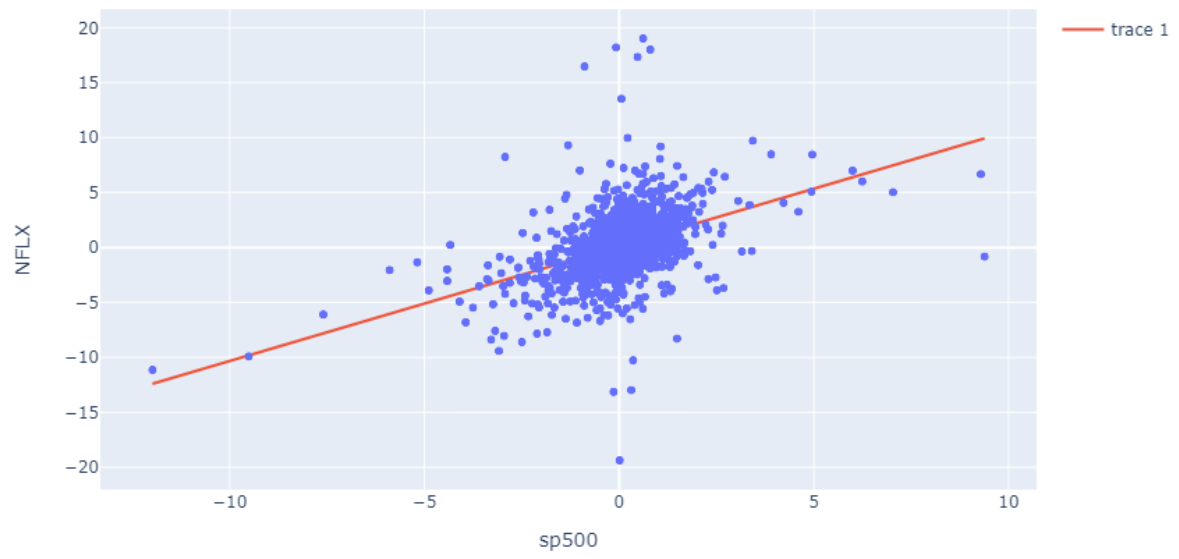
FB



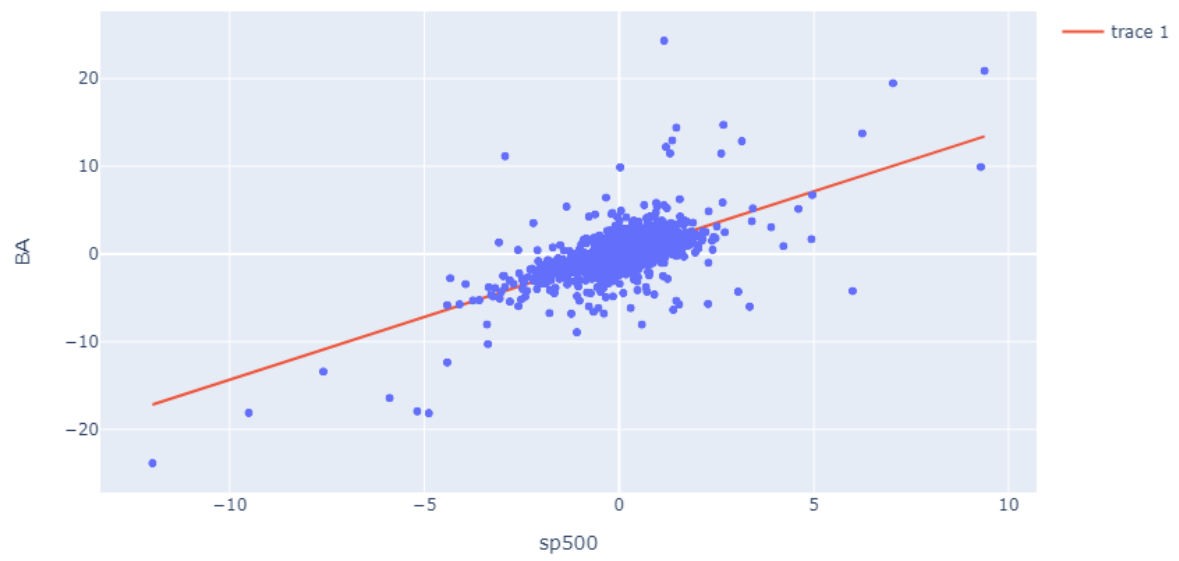
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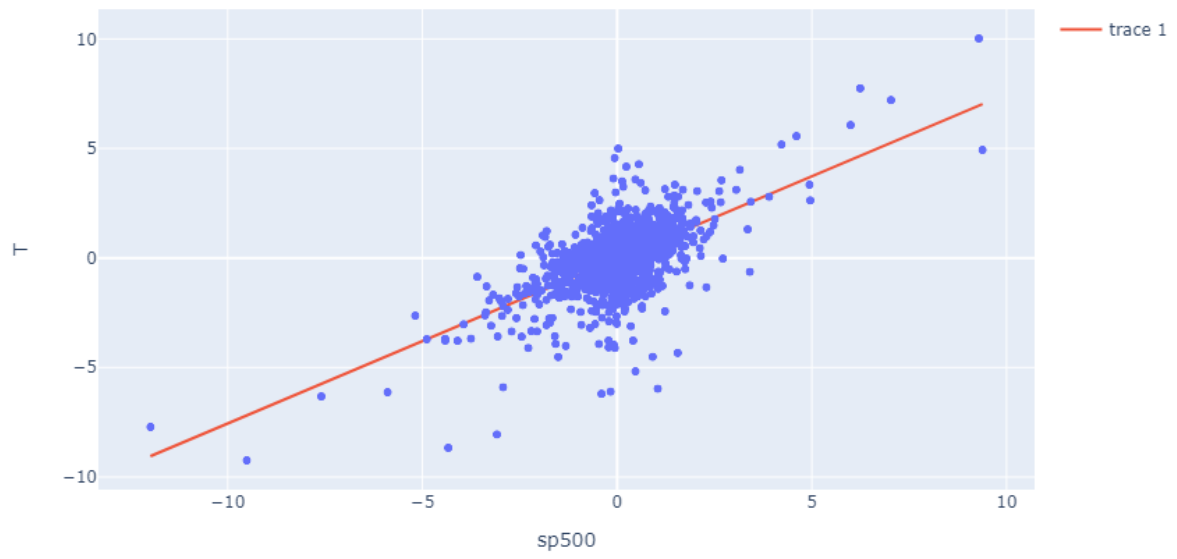
NFLX



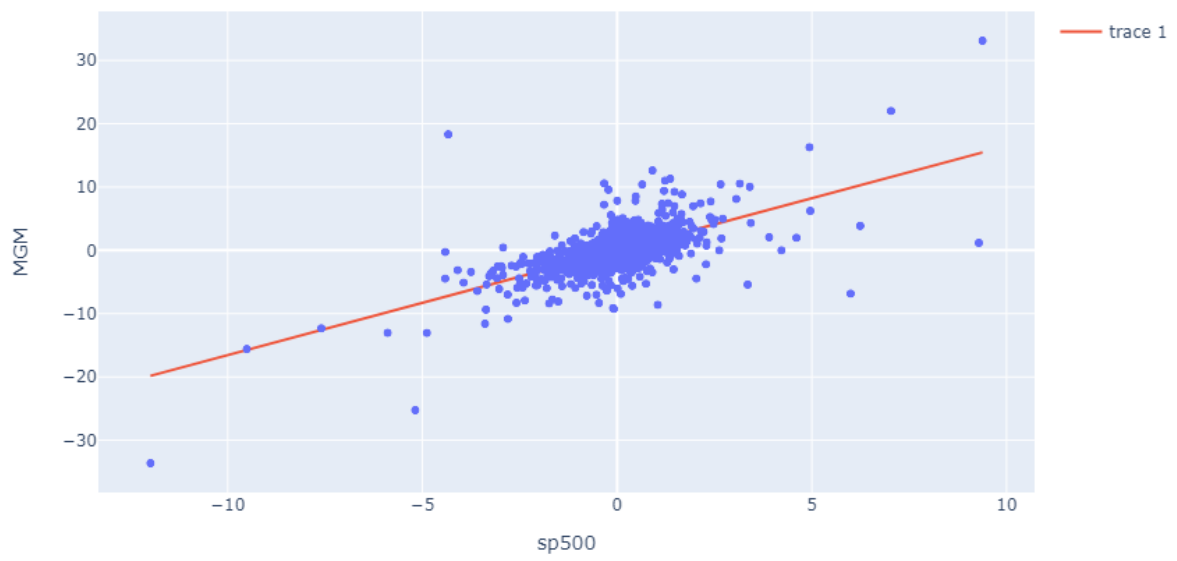
BA



T



MGM



TSLA



Beta values

FB=1.0968

TWTR=1.1723

NFLX=1.044

BA=1.430

T=0.752

MGM=1.652

TSLA=1.236