Stock Market Analysis Project

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Introduction

This project aims to analyze and identify stocks based on various financial metrics and indicators. By leveraging data extraction and analysis techniques, we can provide insights into stocks' trading volumes, volatility, dividends, P/E ratios, market capitalization, and buy/sell signals.

Data Operations

Data Source

Utilize a .csv file containing past years' stock market data for comprehensive analysis.

Data Cleaning with Power Query

- •Import Data: Seamlessly import the .csv file into Power Query for efficient data processing.
- •Remove Duplicates: Ensure data integrity by identifying and removing duplicate values.
- •Handle Missing Values: Replace null or missing values to maintain data consistency.
- •Format Data Types: Standardize and format data types for accurate analysis and processing.
- •Create New Columns: Derive necessary columns from existing data to facilitate targeted analysis and insights.

Objectives & Analysis

Most and Least Volatile stocks ?

Highest and Lowest dividend stocks ?

Price to Earning ratio ?

Highest and lowest market capital of stocks ?

High and Low stock value in 52 weeks ?

Buying and selling indicators ?

Average Trading Volume ?

Excel Dashboard

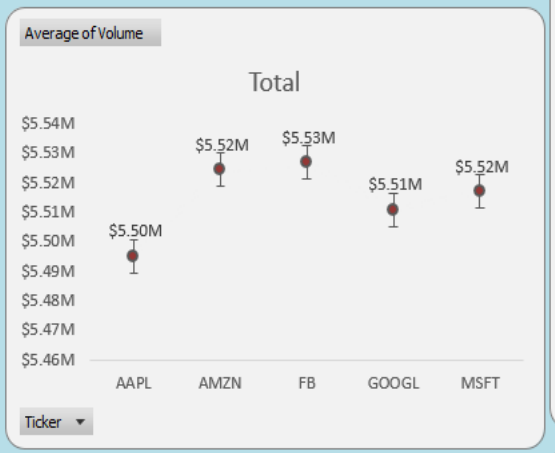
Stock Market Analysis

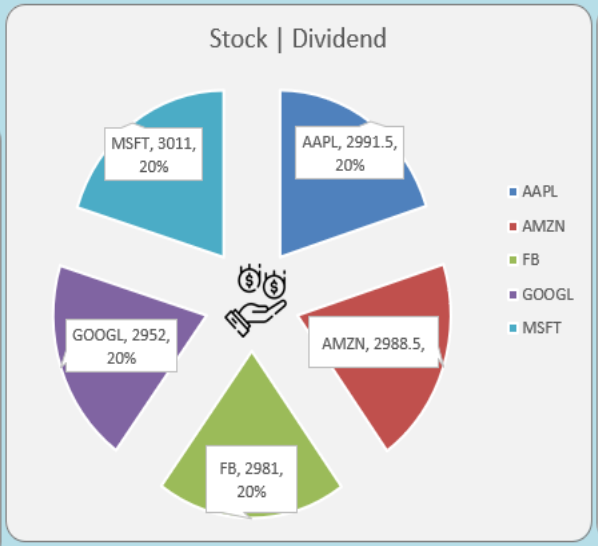
Average Trading Volume	Average P/E Ratio	Avg High Value	Avg Low Price
5.51M	62.91	825.08	775.01

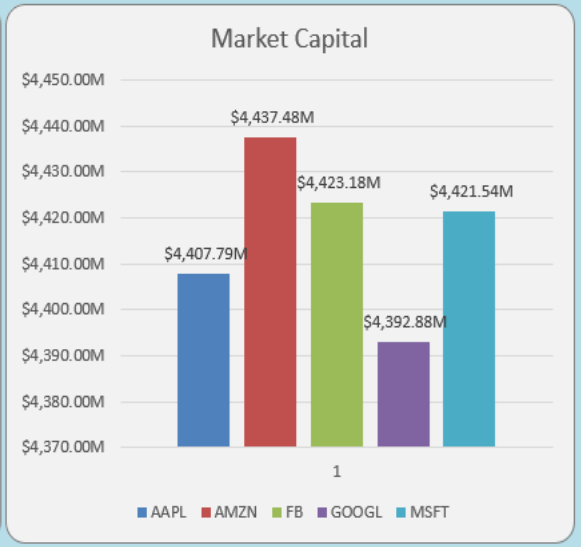
Last 10 Years | Data source | Presentation

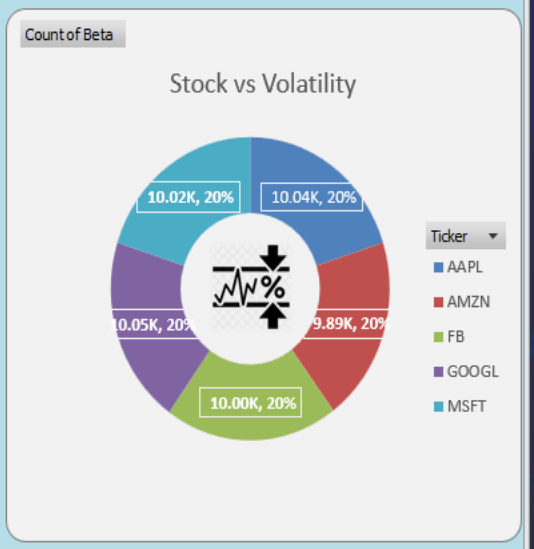
Year: 2010, 2011, 2012, 2013, 2014, 2015, 2016, 2017, 2018, 2019, 2020, 2021, 2022, 2023

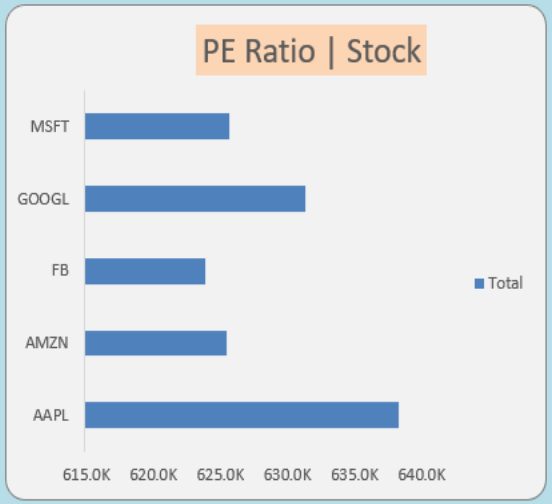
Ticker: AAPL, AMZN, FB, GOOGL, MSFT

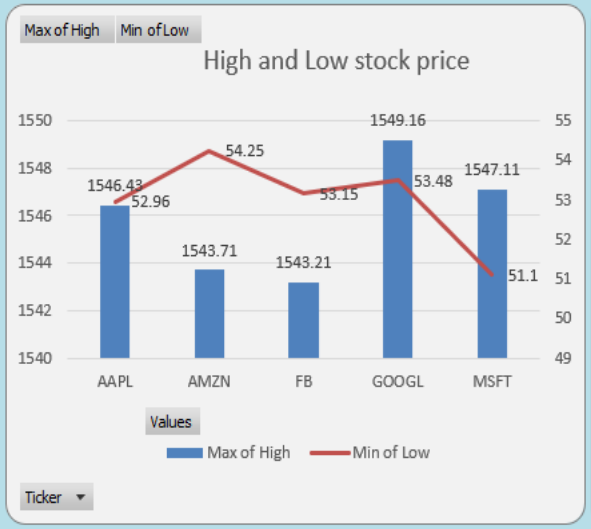


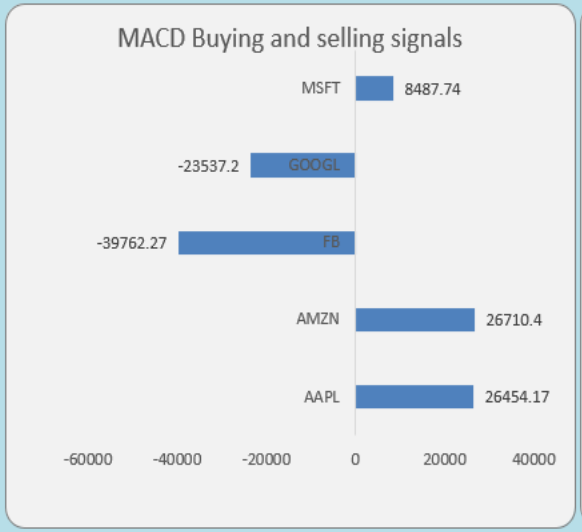


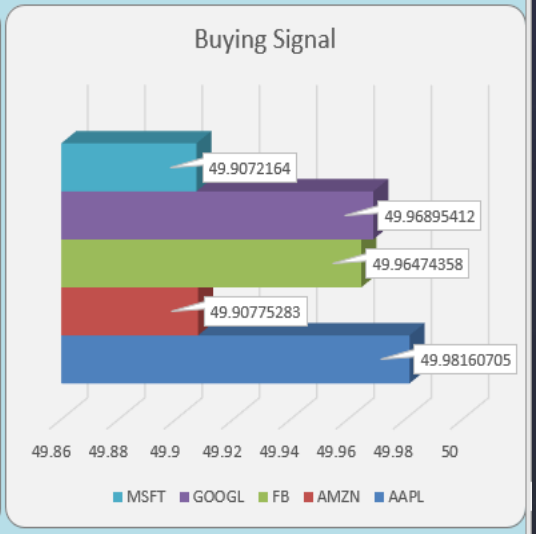






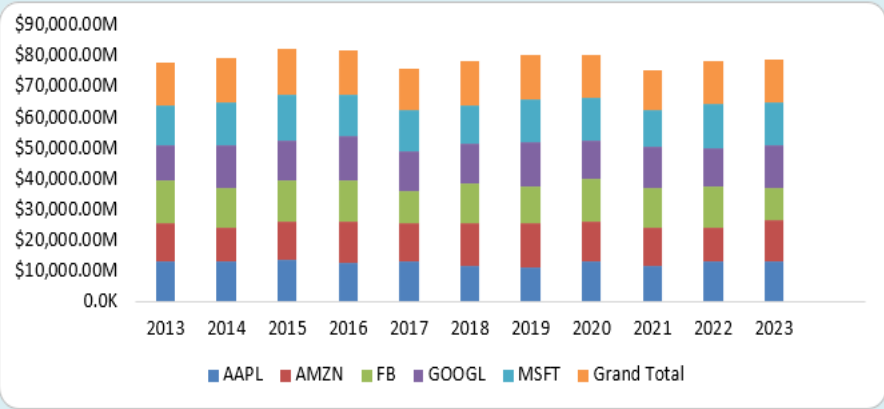




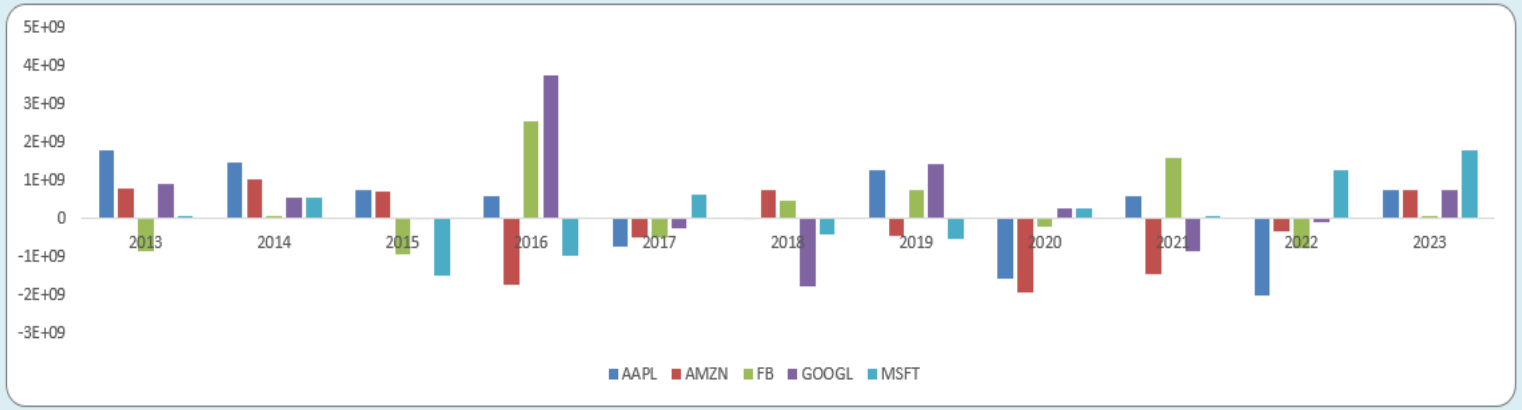


Last 10 Year Statistics

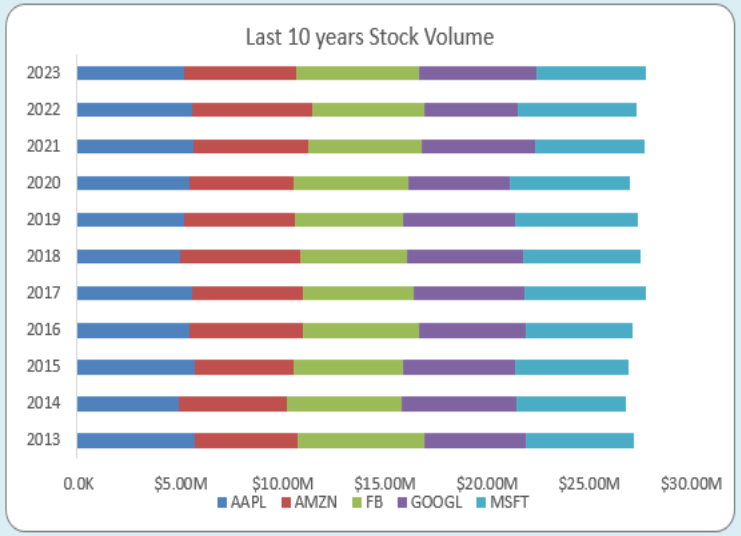
10 Years Market Capital



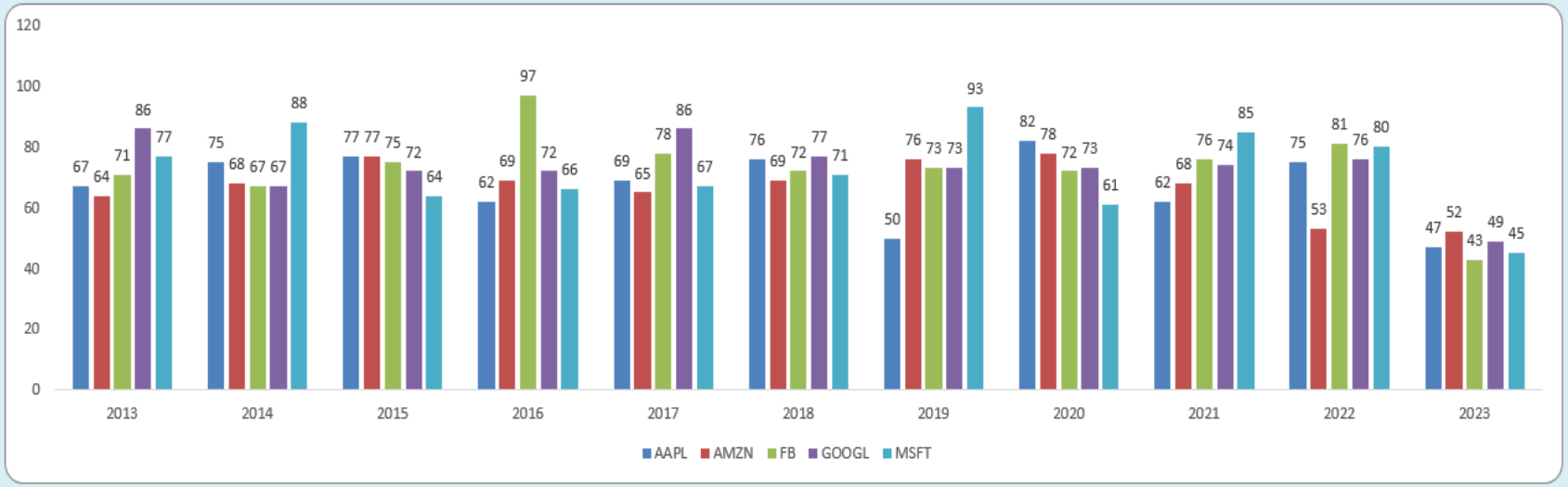
Trading Profit and Loss



10 Years Trading volume



10 Years Market Split



Insights

- FB is having the maximum number of stocks traded daily with the trading volume 5.53M stocks per day . All stocks are having good liquidity which allows them to traded without significant price change
- Beta values for the stocks indicates their volatility , here Googl is most volatile stock indicating higher price sensitivity to market movements . Amzn is least volatile stock .
- MSFT is providing the maximum dividend whereas GOOGL providing minimum dividends.
- P/E ratio indicates the investors future interests in the stock , Here APPL is having the highest P/E ratio while FB is having the Lowest
- GOOGL dominates in stock market price with max: 1549 & min: 53.58 whereas AMZN have the lowest 55 which is maximum of low as compared to others.
- MACD & RSI helps to indicate the selling and buying signals , stocks MSFT , AMZN , AAPL are having the bullish trend which indicates the buying signal and FB , GOOGL shows the bearish trend which indicates the selling signal.

10 Year analysis

- The market capital of FB has significantly decreased in last 10 years , MSFT , GOOGL , AMZN market capital increased .
- APPL & GOOGL provided attractive returns to traders in past 10 years where FB has overall loss.

Conclusion

Extracted and analyzed critical financial metrics to highlight stocks with notable performance in terms of liquidity, volatility, dividends, P/E ratios, and market capitalization.

Through meticulous data processing and analysis, we were able to identify significant patterns and trends that can inform better investment decisions.