Stock Data Analysis

Abstract

Stock exchanges evolved to fulfil two main needs: liquidity and price discovery. The idea was that liquidity would come from investors basing decisions on reliable price data to which all participants had access. Back when trading venues were owned by their "members," this worked — they exchanged positions among themselves and knew at what price other participants were willing to buy or sell. This provided a "fair" view of the market. Market data allows traders and investors to know the latest price and see historical trends for instruments such as equities, fixed-income products, derivatives, and currencies.

Problem Statement

In this case study, we have to visually analyse stock data for four major companies.

Using this data, we will have to address several questions.

- How large is the impact of open and close values on the volumes?
- What is the trend in high and low values?
- Display monthly peaks and valleys in volumes
- Apply a filter to select a company and view related data.

Data Description

Stock market dataset for Amazon, Apple, Google and IBM is given. The key components of data are daily open, close, high and low value. It also describes the volume of stock traded per day.

Column	Description
Date	The date on which the stock details were recorded
High	High price a stock attended
Low	Low price a stock attended
Open	The opening price of the stock
Close	The closing price of the stock
Volume	The measure of how much of a given financial asset has traded in a period of time
Adj Close	The adjusted closing price amends a stock's closing price to reflect that stock's value after accounting for any corporate actions.

Scope:

- Identify relationships among the features
- Visually analysing factors that affect the stock price

Learning Outcome:

The purpose of this exercise is to look into different Power BI features to create a visual dashboard that analyses stock price data for Amazon, Google, Apple and IBM to assess the OHLC report.