

**Abstract:** Stock market data can be a valuable tool for investors, but it is important to remember that it is not a crystal ball. The stock market is a complex and unpredictable system, and there is no way to guarantee that any investment will be profitable.

**Introduction:** The stock market is a marketplace where companies can raise money by selling shares of ownership in their company to investors. Investors can buy and sell these shares, which allows them to profit from the growth of the company. The stock market is a vital part of the economy, as it allows companies to grow and expand their operations, and it provides investors with an opportunity to earn a return on their investment. In accordance with this information, I want to emphasize my purpose of the assignment is to sell shares of ownership in their company to investors, called shareholders. When shareholders buy shares, they are essentially buying a small piece of the company. They can then sell those shares to other investors or hold onto them and hope that the value of the company goes up. If the value of the company goes up, the value of the shares will also go up, and the shareholders will make a profit.

### **Literature Review**

While stock market data can be a helpful tool for investors, it's important to remember that it's not a guarantee of future performance. The stock market is a complex and unpredictable system, and there's no way to guarantee that any investment will be profitable. However, by using stock market data wisely, investors can increase their chances of making successful investments. Stock market data is a compilation of information about the prices of stocks and other securities. It can be used to track the performance of individual stocks, sectors, and the overall market. It can also be used to identify trends and make investment decisions. = {The relation of the structure of common stock prices to historical, expectational and industrial variables}, = {Finding trading patterns in stock market data},

There are a variety of sources of stock market data. Here are some of them:

- **Exchanges:** Stock exchanges collect data on all trades that take place on their platforms. This data includes the price of the stock, the number of shares traded, and the time of the trade.
- **Data providers:** There are a number of companies that specialize in collecting and distributing stock market data. These companies collect data from exchanges and other sources, and then sell it to investors and other users.
- **Government agencies:** Some governments collect and publish stock market data. This data is typically free to access, and it can be a good source of information for investors who are looking for a comprehensive overview of the market

Stock market data is a valuable tool for investors, but it cannot predict future performance. The stock market is a complex and unpredictable system, and there is no way to guarantee that any investment will be profitable. However, by using stock market data wisely, investors can increase their chances of making successful investments. {Estimating trade flows: Trading partners and trading volumes},

Trading volume measures the number of shares of a security traded during a specific time. It reflects the level of interest in a security. It can be calculated for individual stocks, sectors, and the entire market. *The relation of the structure of common stock prices to historical, expectational and industrial variables* Trading volume is the number of shares of a security that are traded in each period of time. It is an important metric for investors because it can provide insights into the level of interest in a security and the liquidity of the market. Past price changes and current trading volume},{Stock movement prediction from tweets and historical prices