

An analysis of the stock:
GOOG

Introduction

This report will analyse the stock: GOOG using several technical indicators and other techniques which will give an idea about the future trends of the given stock.

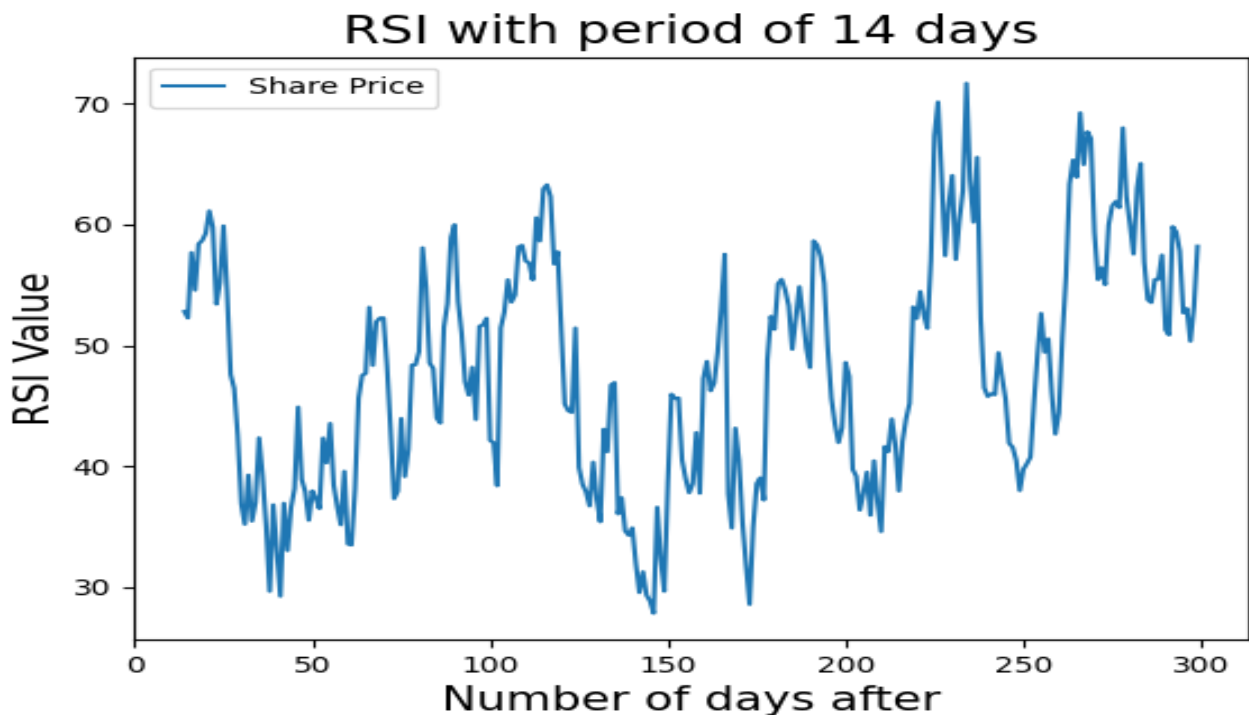
Indicators Used

1. RSI
2. Bollinger Bands
3. OBV
4. MACD
5. Momentum

RSI

The RSI or the Relative Strength Index gives us an indication if the stock/asset is overbought or oversold. An $RSI \geq 70$ indicates that a stock has been overbought and a potential drop in price could be near, while a $RSI \leq 30$ indicates that a stock has been oversold and can potentially have a bullish trend in the near future.

RSI chart over the year for: GOOG is given below.

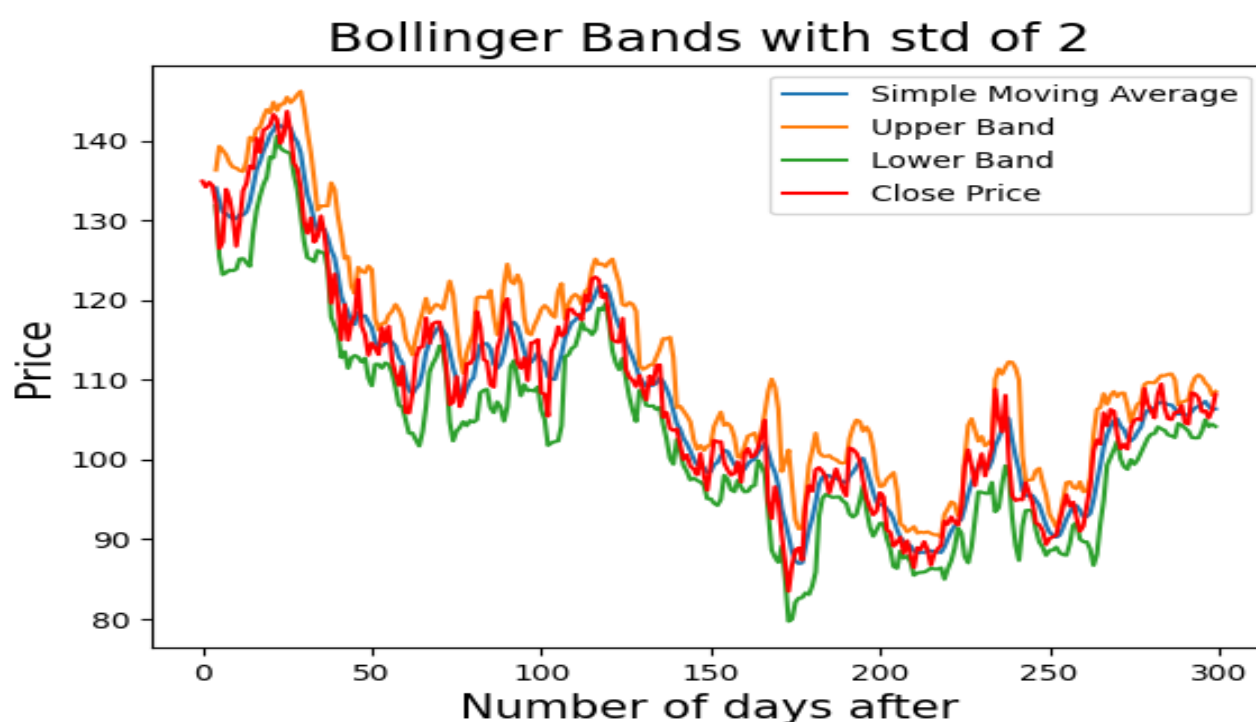


As it is seen the current RSI is: 58.19 which is considered high relative to a 1 year trend of the stock. In a normal scenario such an rsi is considered medium. Thus this indicates that there has been more of buying and that there can be an downward trend in the near future. Keep in mind that this is a meare technical indication which does not take into account any sentiments of people regarding the company or the general performance or profitability of the company, thus there is a risk to using this strategy. This does not hold true for this but all the other indicators also used henceforth.

Bollinger Bands

Using bollinger bands one can get an idea about the volatility about the stock market and if there are any major trends in motion. Bollinger bands when supplemented with the RSI give us a very clear picture regarding the state of a stock.

A visualization of the Bollinger Bands for: GOOG over the year.



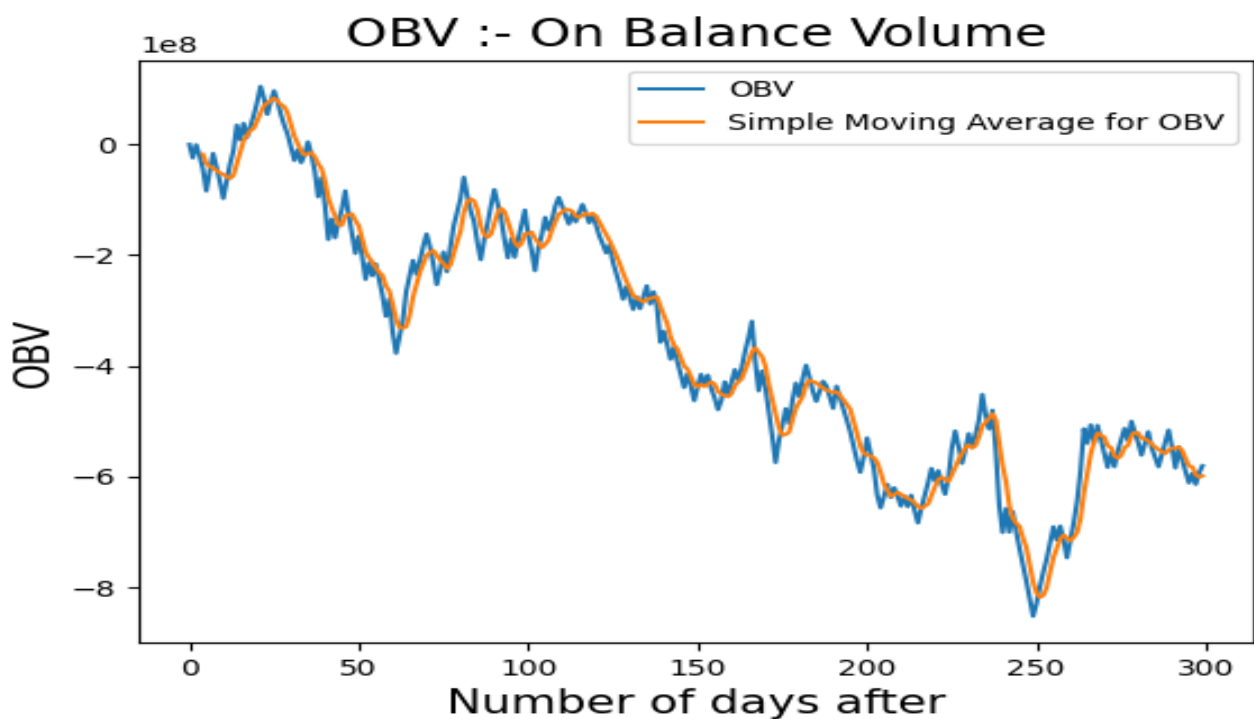
In this case we can see that the current close price is above the simple moving average computed over a 5 day period this means that the stock is showing a bullish trend over the SMA period which in this case is 5 days.

So now we can move on and look at the upper and lower bollinger bands. We can see that the stock of our choice is closer to the upper band. By looking at this we can identify the trend of the stock and also its strength. Thus this supplements our RSI indicator very smoothly.

OBV

OBV or On Balance Volume can be used to get an idea of the total running volume of an asset and track if it is moving up or down. Any major movements in the OBV of a stock can be used to track any movements made by large institutional investors.

A visualization of the OBV for: GOOG over the year.

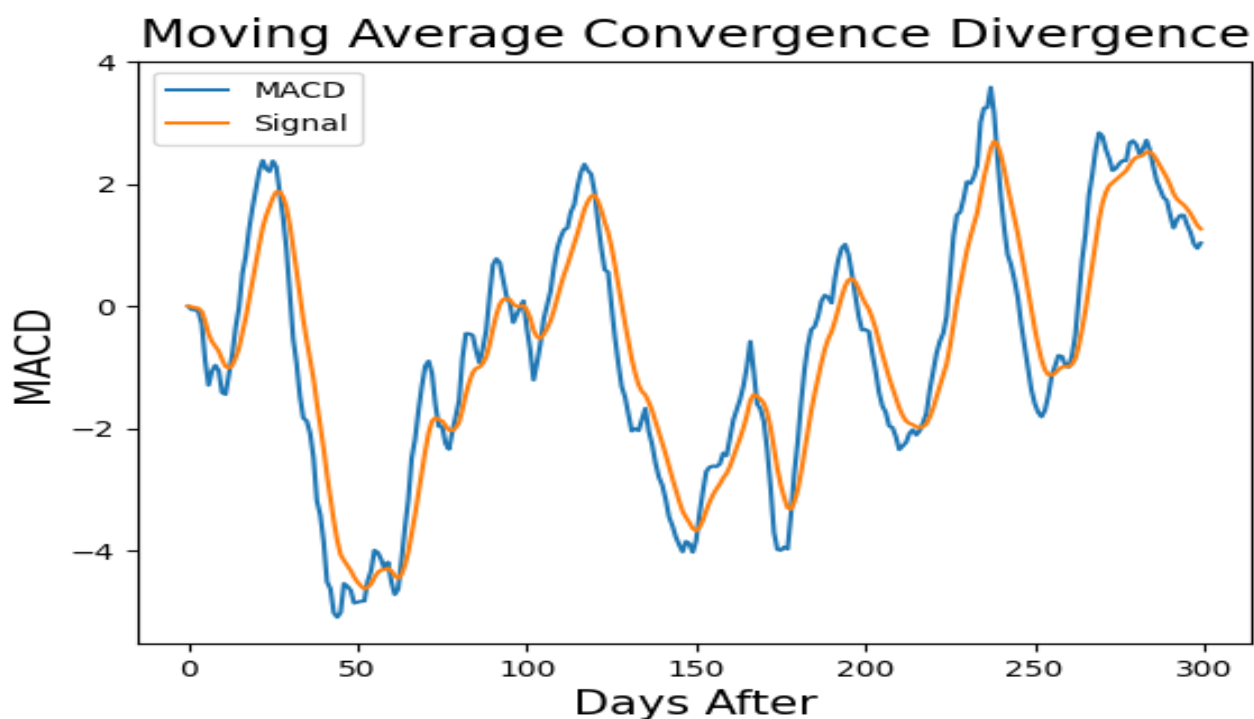


In this case if we look at the recent OBV trend we can get a good idea about the general outlook that the stock has among not just large institutions but even the average investor. Besides this the OBV indicator does not require any further details.

MACD

The MACD indicator gives us a good idea about the trend of the stock. An increase in the MACD value indicates that the price is showing and probably will show an increasing trend, the converse is also true. Another thing to note is that the intersection of the MACD and the signal line indicates the beginning of a new trend.

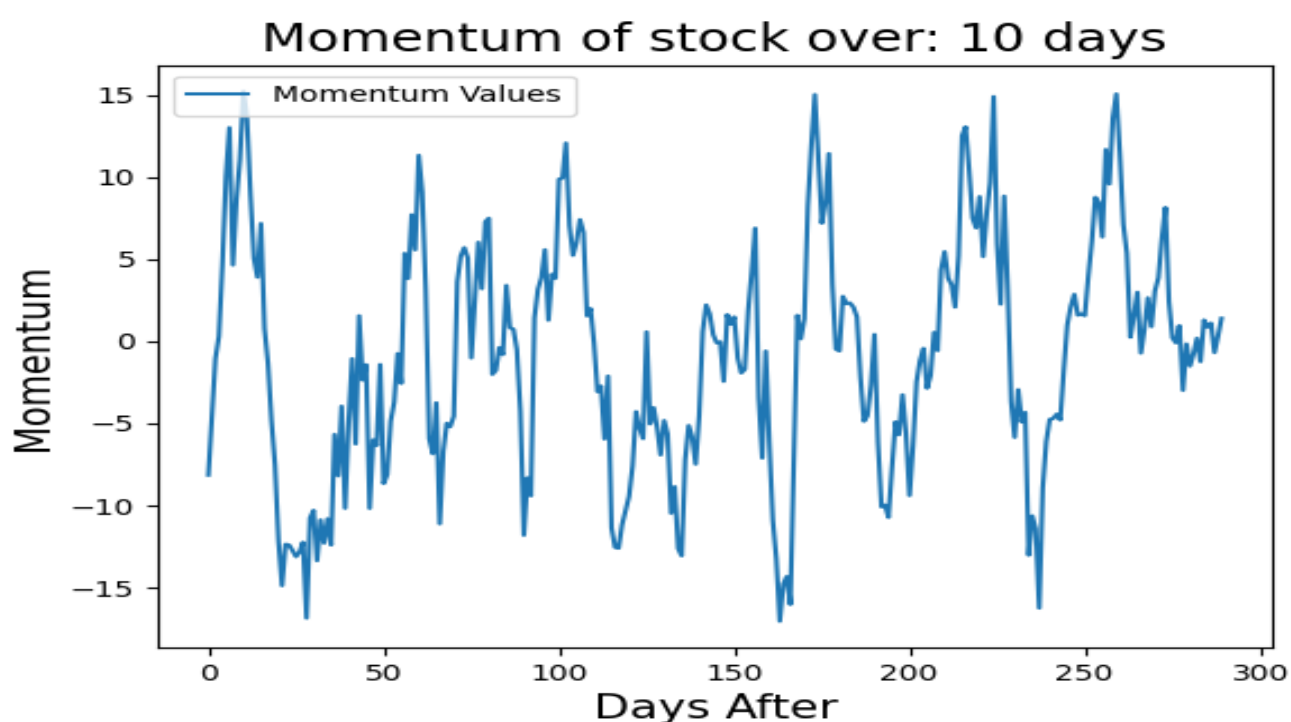
A visualization of the Momentum for: GOOG over the year.



Momentum

The Momentum indicator as its name gives us an idea of a stock's momentum i.e the strength of the trend that a stock has. By taking a look at the momentum we can determine how long a buying, selling, bullish or bearish trend will continue.

A visualization of the Momentum for: GOOG over the year.



By looking at the recent momentum values one can easily deduce the momentum of the stock. The stock currently is having a momentum of 1.4 and an average momentum of -0.88 over the year.

Final Future Trend

Our Machine Learning model's prediction regarding GOOG over 10 days

