

Stock pattern Analysis

Homework 2 of Web application S20

Jin Xu

jx217@scarletmail.rutgers.edu

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ECE, School of Graduate Studies

Rutgers University

Support and resistance

Definition

Generally speaking, support and resistance lines identify price levels where the price historically reverse.

Support is a price level where a can be expected to pause due to a concentration of demand. As the price of assets or securities drops, demand for the shares increases, thus forming the support line.

On a chart, the support line can be used to indicate the floor preventing the price from pushing downward.

Similarly, resistance reacts as the ceiling because the price levels prevent the market from moving upward. It reveals that the trend is weakening and the shares decreases.

Example

Fig 1 shows the one year stock trend of NVDA . In this example, the yellow lines indicate the resistances and the red lines indicate the supports.



Fig. 1. Stock trend of NVDA from Sept. 2017 to Aug. 2018

Features

The most common feature of support and resistance is that the support and resistance lines would switch roles between each others.

In Fig 2, a prior resistance has changed into a support latter, and vice versa.

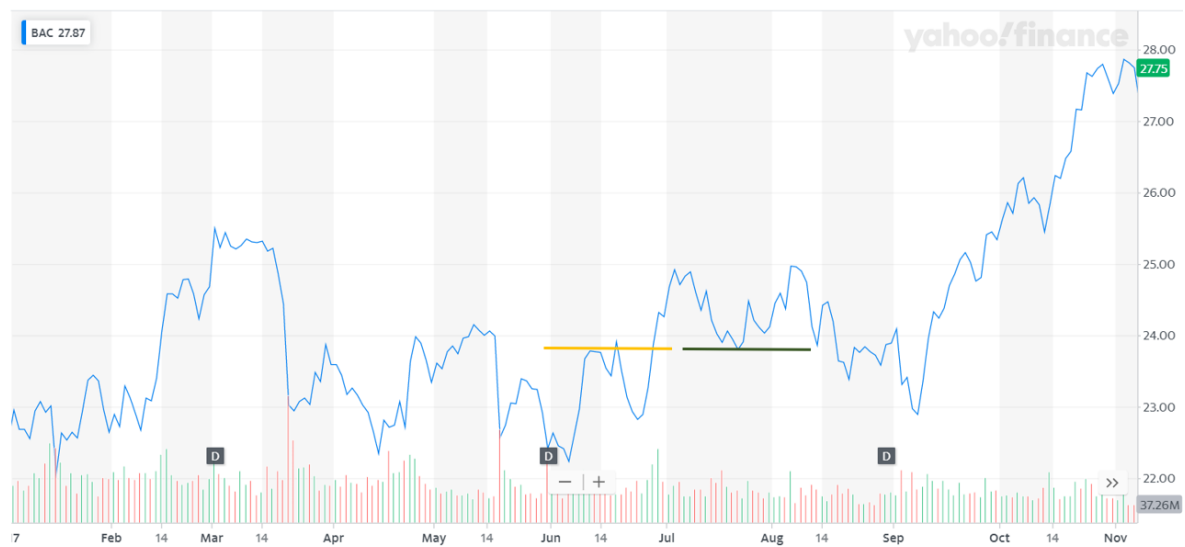


Fig. 2. Stock trend of BAC from Feb. 2017 to Nov. 2017

Head-and-Shoulders

Definition

On a chart, a head-and-shoulders pattern resembles a baseline with three peaks, the outside two are close in height and the middle is highest.

The right shoulder is formed when prices move up again but remain below the central peak called the Head and fall down nearly equal to the first valley between the left shoulder and the head or at least below the peak of the left shoulder. Volume is lesser in the right shoulder formation compared to the left shoulder and the head formation.

Example

Following figure shows a peak(head) at 12:05pm with two lower peaks(shoulders) around.



Fig. 3. Stock trend of AMZN at Feb. 13

References

- [1] <https://www.investopedia.com/articles/technical/121201.asp>
- [2] <https://www.investopedia.com/trading/support-and-resistance-basics/>
- [3] <https://investorplace.com/stock-quotes/nvda-stock-quote/>
- [4] <https://finance.yahoo.com/quote/AMZN/chart>
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