

NPTEL

Course Name: Security Analysis and Portfolio Management

Department: VGSOM, IIT Kharagpur

Instructors: Dr. Chandra Sekhar Mishra & Dr. Jitendra Mahakud

Session 20: Technical Analysis-II

1. How Trend Lines is associated with the process of Technical Analysis?

Trend Lines:

- A trend line is a straight line that connects two or more price points and then extends into the future to act as a line of support or resistance.
- An uptrend line has a positive slope and is formed by connecting two or more low points. The second low must be higher than the first for the line to have a positive slope. Uptrend lines act as support and indicate that net-demand (demand less supply) is increasing even as the price rises. A rising price combined with increasing demand is very bullish and shows a strong determination on the part of the buyers. As long as prices remain above the trend line, the uptrend is considered solid and intact. A break below the uptrend line indicates that net-demand has weakened and a change in trend could be imminent.
- A downtrend line has a negative slope and is formed by connecting two or more high points. The second high must be lower than the first for the line to have a negative slope. Downtrend lines act as resistance, and indicate that net-supply (supply less demand) is increasing even as the price declines.
- A declining price combined with increasing supply is very bearish and shows the strong resolve of the sellers. As long as prices remain below the downtrend line, the downtrend is considered solid and intact. A break above the downtrend line indicates that net-supply is decreasing and a change of trend could be imminent.
- There are three basic kinds of trends: An Up trend where prices are generally increasing, a down trend where prices are generally decreasing, a trading Range (horizontal).

2. What is resistance and how/where it is established?

Ans.

- Resistance results from the inability to surpass prior highs.
- Resistance is the price level at which selling is thought to be strong enough to prevent the price from rising further. The logic dictates that as the price advances towards resistance, sellers become more inclined to sell and buyers become less inclined to buy. By the time the price reaches the resistance level, it is believed that supply will overcome demand and prevent the price from rising above resistance.

- Resistance does not always hold and a break above resistance signals that the bulls have won out over the bears. A break above resistance shows a new willingness to buy and/or a lack of incentive to sell. Resistance breaks and new highs indicate buyers have increased their expectations and are willing to buy at even higher prices. In addition, sellers could not be coerced into selling until prices rose above resistance or above the previous high. Once resistance is broken, another resistance level will have to be established at a higher level.
 - Resistance levels are usually above the current price, but it is not uncommon for a security to trade at or near resistance. In addition, price movements can be volatile and rise above resistance briefly. Sometimes it does not seem logical to consider a resistance level broken if the price closes 1/8 above the established resistance level. For this reason, some traders and investors establish resistance zones.
3. Explain different indicators associated with Technical Analysis?

Ans.

Basic Technical Tools:

- Trend Lines: A trend line is a straight line that connects two or more price points and then extends into the future to act as a line of support or resistance.
- Moving Averages: A moving average is simply the average price (usually the closing price) over the last N periods. They are used to smooth out fluctuations of less than N periods.
- Price Patterns: Technicians look for many patterns in the time series of prices. These patterns are reputed to provide information regarding the size and timing of subsequent price moves.
- Indicators: There are, literally, hundreds of technical indicators used to generate buy and sell signals. Some of them which are more prominently used by analysts includes, Moving Average Convergence/Divergence (MACD), Relative Strength Index (RSI), On Balance Volume, Bollinger Bands
- Cycles: Typically referred to as bull and bear markets. Primary movements represent the broad underlying trend of the market and can last from a few months to many years. Secondary movements run counter to the primary trend and are reactionary in nature. In a bull market a secondary move is considered a correction.

4. Explain Dow Theory.

Ans.

Dow Theory:

- This theory was first stated by Charles Dow in a series of columns in the WSJ between 1900 and 1902.

- Dow (and later Hamilton and Rhea) believed that market trends forecast trends in the economy.
- A change in the trend of the Stock Index must be confirmed by a trend change in the Index in order to generate a valid signal.

Dow Theory Trends:

- Primary Trend: Called “the tide” by Dow, this is the trend that defines the long-term direction (up to several years). Others have called this a “secular” bull or bear market.
- Secondary Trend: Called “the waves” by Dow, this is shorter-term departures from the primary trend (weeks to months)
- Day to day fluctuations: Not significant in Dow Theory