

Intermediate - Trading Analysis

Technical Analysis

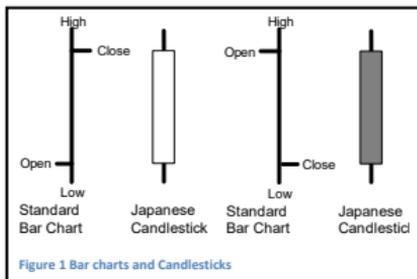
- ▶ Technical analysis is the attempt to forecast currencies prices on the basis of market-derived data.
- ▶ Technicians (also known as quantitative analysts or chartists) usually look at price, volume and psychological indicators over time.
- ▶ They are looking for trends and patterns in the data that indicate future price movements.

Charting the market

- ▶ Chartists use bar charts, candlestick, or point and figure charts to look for patterns which may indicate future price movements.
- ▶ They also analyze volume and other psychological indicators (% of bulls vs % of bears).
- ▶ Strict chartists don't care about fundamentals at all.

Charts

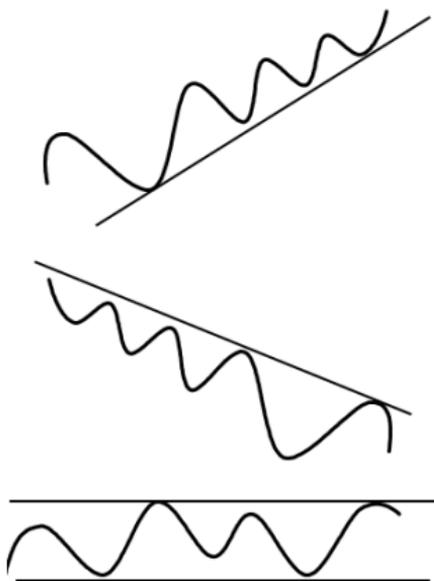
- ▶ Each bar is composed of 4 elements:
 - Open
 - High
 - Low
 - Close
- ▶ Note that the candlestick body is empty (white) on up days, and filled (some color) on down days
- ▶ Note: You should print the example charts (next two slides) to see them more clearly



Basic Technical Tools

- ▶ Trend Lines
- ▶ Moving Averages
- ▶ Price Patterns
- ▶ Indicators
- ▶ Cycles

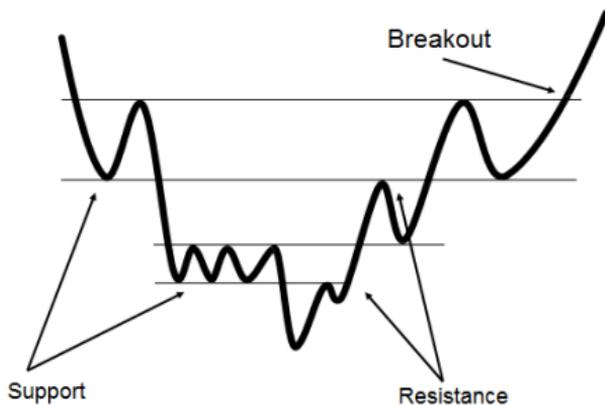
Trend Lines



- ▶ 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.

Support and Resistance



- ▶ Support and resistance lines indicate likely ends of trends.
- ▶ Resistance results from the inability to surpass prior highs.
- ▶ Support results from the inability to break below to prior lows.
- ▶ What was support becomes resistance, and vice-versa

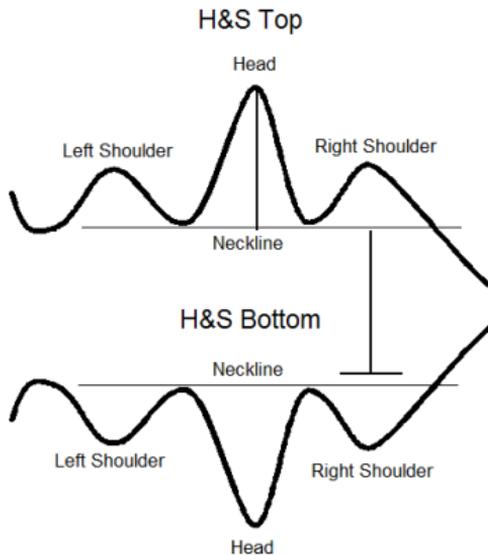
Simple moving average

- ▶ 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

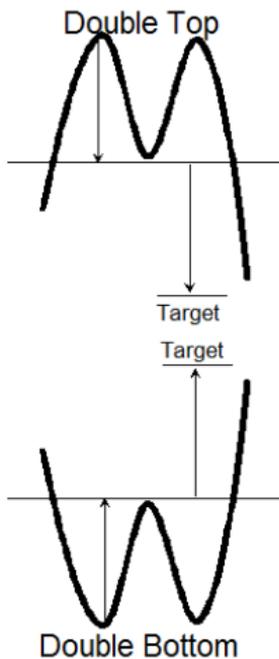
- ▶ Technicians look for many patterns in the historical time series of prices.
- ▶ These patterns are reputed to provide information regarding the size and timing of subsequent price moves.
- ▶ But don't forget that the some say these patterns are illusions, and have no real meaning. In fact, they can be seen in a randomly generated price series.

Head and Shoulders



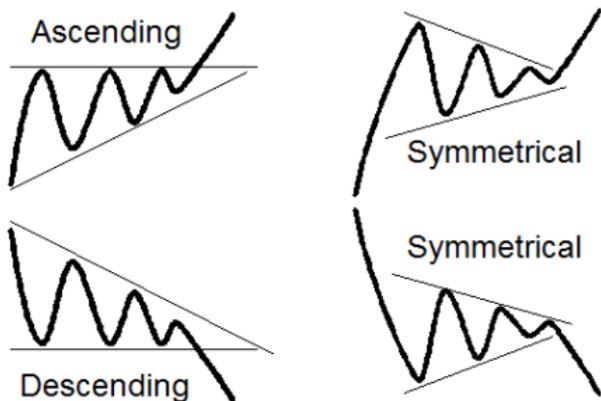
- ▶ This formation is characterized by two small peaks on either side of a larger peak.
- ▶ This is a reversal pattern, meaning that it signifies a change in the trend.

Double Tops and Bottoms



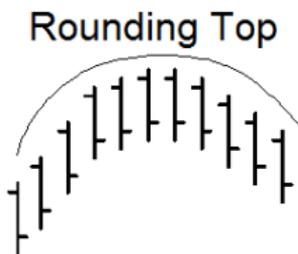
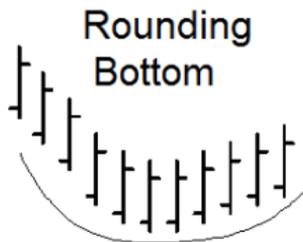
- ▶ These formations are similar to the H&S formations, but there is no head.
- ▶ These are reversal patterns with the same measuring implications as the H&S.

Triangles



- ▶ Triangles are continuation formations.
- ▶ Three flavors:
 - Ascending
 - Descending
 - Symmetrical
- ▶ Typically, triangles should break out about half to three-quarters of the way through the formation.

Rounded Bottoms and Tops



- ▶ Rounding formations are characterized by a slow reversal of trend.

Technical Indicators

MACD

- ▶ MACD was developed by Gerald Appel as a way to keep track of a moving average crossover system.
- ▶ Appel defined MACD as the difference between a 12-day and 26-day moving average. A 9-day moving average of this difference is used to generate signals.
- ▶ When this signal line goes from negative to positive, a buy signal is generated.
- ▶ When the signal line goes from positive to negative, a sell signal is generated.
- ▶ MACD is best used in choppy (trendless) markets, and is subject to whipsaws (in and out rapidly with little or no profit).



Relative Strength Index RSI

- ▶ RSI was developed by Welles Wilder as an oscillator to gauge overbought/oversold levels.
 - ▶ RSI is a rescaled measure of the ratio of average price changes on up days to average price changes on down days.
 - ▶ The most important thing to understand about RSI is that a level above 70 indicates a currency pair is overbought, and a level below 30 indicates that it is oversold (it can range from 0 to 100).
 - ▶ Also, realize that currency pair can remain overbought or oversold for long periods o
- RSI alone isn't always a great timing tool.



Bollinger Bands

- ▶ Bollinger bands were created by John Bollinger (former FNN technical analyst, and regular guest on CNBC).
- ▶ Bollinger Bands are based on a moving average of the closing price.
- ▶ They are two standard deviations above and below the moving average.
- ▶ A buy signal is given when the currency price closes below the lower band, and a sell signal is given when the currency price closes above the upper band.
- ▶ When the bands contract, that is a signal that a big move is coming, but it is impossible to say if it will be up or down.
- ▶ In my experience, the buy signals are far more reliable than the sell signals.



Elliott Waves

- ▶ R.N. Elliott formulated this idea in a series of articles in Financial World in 1939.
- ▶ Elliott believed that the market has a rhythmic regularity that can be used to predict future prices.
- ▶ The Elliott Wave Principle is based on a repeating 8-wave cycle, and each cycle is made up of similar shorter-term cycles ("Big fleas have little fleas upon their backs to bite 'em - little fleas have smaller fleas and so on ad infinitum").
- ▶ Elliott Wave adherents also make extensive use of the Fibonacci series.

