A STUDY TO UNDERSTAND ELLIOTT WAVE PRINCIPLE

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<u>ABSTRACT-</u> The Elliott Wave Principle states that markets move in natural patterns according to changing investor psychology and price momentum. Specifically, crowd psychology will move from optimism to pessimism, and back up again, making it possible to forecast the progression of certain market trends. "The Wave Principle" is Ralph Nelson Elliott's discovery that social, or crowd, behavior trends and reverses in recognizable patterns. The Wave Principle is not primarily a forecasting tool; it is a detailed description of how markets behave. Many areas of mass human activity follow the Wave Principle, but the stock market is where it is most popularly applied. Indeed, the stock market considered alone is far more important than it seems to casual observers.

According to the Elliott Wave theory, market move in the five distinct waves existing on the upside and the three distinct waves existing on the downside. The upwards waves that lie in the bull move are termed as Impulse waves and the other three waves that are against the trend direction are termed as Corrective waves. In the Financial market, major trend is determined by the major waves and the minor trend is determined by the minor waves.

Key words: Elliott wave principle, optimism, psychology, price momentum, stock market.

INTRODUCTION

The dilemma faced by the market participants in the secondary market as to predict the movement of stock prices is well managed with two approaches, Fundamental and Technical analysis. Due to high volatility in the stock markets it is considered as a very rigorous job to predict the future movement of the stock prices. Secondary market participants often use two forecasting techniques, Fundamental and Technical analysis. According to this distinction fundamentalists are market participants who predict movements of stock prices by analyzing the underlying economic conditions upon which they assume changes in the stock prices. Fundamental analysis believes that analyzing the economy, strategy, management, product, financial status and other related information will help choose shares that will outperform the market and provide consistent gains to the investor.

Technical analysts have developed tools and techniques to study past patterns and predict future price. Technical analysis is basically the study of markets only. Technical analysts study the technical characteristics which may be expected that may or market turning points and their objective assessment. The previous turning points are studied with a view to develop some characteristics that would help in identification of major market tops and bottoms. Human reactions are, by and large consistent in similar though not identical reaction; with the help of various tools, the technician attempts to correctly catch changes in trend and take advantage of them.

Thus, "Technical analysis is directed towards predicting the price of a security. The price at which a buyer and seller settle a deal is considered to be the one precise figure which synthesizes, weighs and finally expresses all factors, rational and irrational quantifiable and non-quantifiable and is the only figure that counts".

Stock market:

Stock market is a market where the trading of the company both listed and unlisted takes place. It is different from the stock exchange as stock markets include the stock exchanges of the country.

The stock market can be or the capital market can be divided into two segments

- Primary market
- Secondary market

Primary market:

Most of the companies are usually started privately by their promoters. However the promoter's capital and the borrowed capital from the banks or financial institution might not be sufficient for running the business over the long term. That is when the corporate and the government looks at the primary market to raise long term funds by issuing securities in the form of debt and majorly equity.

Secondary market:

The secondary market is the place which provides liquidity to the investors in the primary market. Today we would not invest in any instrument if there was no medium to liquidate our position. The secondary market provides an efficient for trading of those securities which are initially offered in the primary market.

Trading in the secondary market is done through the stock exchanges; the stock exchange is the place where the buyers and sellers meet to trade in shares in organized manner.

There are two leading stock exchanges in India which help us to trade in shares

• Bombay Stock Exchange (BSE):

BSE was set up in the year 1875 is the oldest stock exchange in Asia. It has evolved in to its present status as a premier stock exchange. At BSE you will find some scrip's not listed in NSE. Also BSE has the largest has the largest number of scrip's listed.

• National Stock Exchange (NSE):

NSE incorporated in the year 1992 provides trading in the equity and as well as the derivative market. Maximum volume takes place on NSE than compared to BSE and hence enjoys leadership in the cash segment. Not just the cash segment NSE holds a virtual monopoly in terms of derivative trading commanding more than 96% in the market.

Fundamental analysis

The basic purpose of buying a security is to earn dividends and ultimately sell it at a higher price. An investor therefore is interested in obtaining estimates of future prices of the share. These in turn will depend upon the performance of the industry to which the company belongs and the general economic situation of the country.

The multitude of factors affecting a company's profitability can be broadly classified as:

- 1. <u>Economic wide factors</u>: these include the factors like growth rate of the economy. The rate of inflation, foreign exchange rates etc which affects profitability of all companies.
- 2. <u>Industry wide factors</u>: these include factors which are specific to industry to which the company belongs. For instance the demand supply gap in the industry, the emergence of substitutes and changes in government policies towards industry affects the company belonging to an industry.
- 3. <u>Companywide factor</u>: these factors are specific to a firm. The firm specific factors like plant and machinery, the brand image of the product, and ability of the management to affect the profitability.

Fundamental analysis considers the financial and economic data that may influence the viability of a company. There are many flavors of fundamental analysis centered on such concepts as value, growth and turnarounds. Technical analysis is the study of the price chart. It assumes that by looking at the progress of that little squiggly line you can forecast the future trend of a stock. Fundamental analysis is essential to most investors, and a technical analysi is essential to most traders and speculators.

An investor with rational and scientific approach will therefore be interested in analyzing the influence of the expected performance of the company, industry and economy as a whole on share prices, even before taking the investment decision such analysis is called fundamental analysis.

Fundamental analysis is the method of evaluating securities by attempting to measure the intrinsic value of a particular stock. It is the study of everything from the overall economy and industry conditions, to the financial condition and management of specific companies (i.e... using real data to evaluate a stock's value) - The method utilizes items such as revenues, earnings. return on equity and profit margins to determine a company's underlying value and potential for future growth.

One of the major assumptions under fundamental analysis is that, even though things get mispriced in the market from time to time, the price of an asset will eventually gravitate toward its true value. This seems to be a reasonable bet considering the long upward march of quality stocks in general despite regular setbacks and periods of irrational exuberance. The key strategy for the fundamentalist is to buy when prices are at or below this intrinsic value and sell when they got overpriced.

Technical analysis:

Technical analysis takes a completely different approach; it doesn't care one bit about the "value" of a company or a commodity. Technicians (sometimes called chartists) are only interested in the price movements in the market.

Despite all the fancy and exotic tools it employs, technical analysis really just studies supply and demand in a market in an attempt to determine what direction, or trend, will continue in the future. In other words, technical analysis attempts to understand the emotions in the market by studying the market itself, as opposed to its components.

Elliott Wave Theory

Introduction

Elliott Wave Theory was developed by R.N. Elliott and popularized by Robert Prechter. This theory asserts that crowd behavior ebbs and flows in clear trends. Based on this ebb and flow, Elliott identified a certain structure to price movements in the financial markets. This article serves as a basic introduction to Elliott Wave Theory. A basic 5-wave impulse sequence and 3-wave corrective sequence are explained.

Wave Degrees

GrandSuper Cycle:	((I)) ((II)) ((III)) ((IV)) ((V)) ((a)) ((b)) ((c))
SuperCycle:	(I) (II) (III) (IV) (V) (a) (b) (c)
Cycle:	I II III IV V a b c
Primary:	((1)) ((2)) ((3)) ((4)) ((5)) ((A)) ((B)) ((C))
Intermediate:	(1) (2) (3) (4) (5) (A) (B) (C)
Minor:	1 2 3 4 5 A B C
Minute:	((i)) ((ii)) ((iii)) ((iv)) ((v)) ((a)) ((b)) ((c))
Minuette:	(i) (ii) (iii) (iv) (v) (a) (b) (c)
Subminuette:	i ii iii iv v a b c

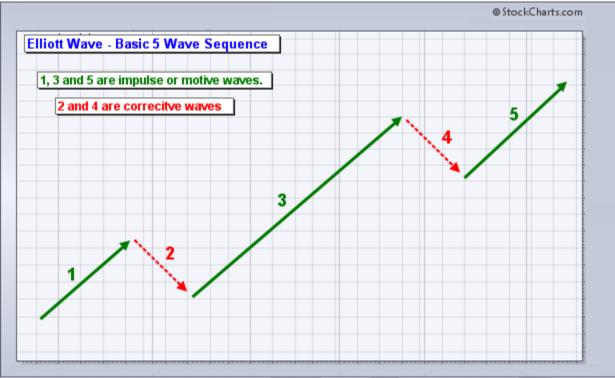
The labeling convention shown above is a hybrid between that is shown in the Elliott Wave book and the Elliott tools from Sharp Charts. In Elliott's book, this labeling convention is used to identify the degree or level of the wave, which represents the size of the underlying trend. The upper case Roman numerals represent the large degree waves, the simple numbers represent the medium degree waves and the small-case Roman numerals represent the small degree waves. The trends start with the largest degree (Grand Super cycle) and work their way down to waves of lesser degree.

For example, the Cycle wave is one larger degree than the Primary wave. Conversely, the Primary wave is one lesser degree than the Cycle wave. Wave 1 of (1) would indicate that Wave 1 is part of a larger degree Wave (1). Wave 1 is a lesser degree than Wave (1).

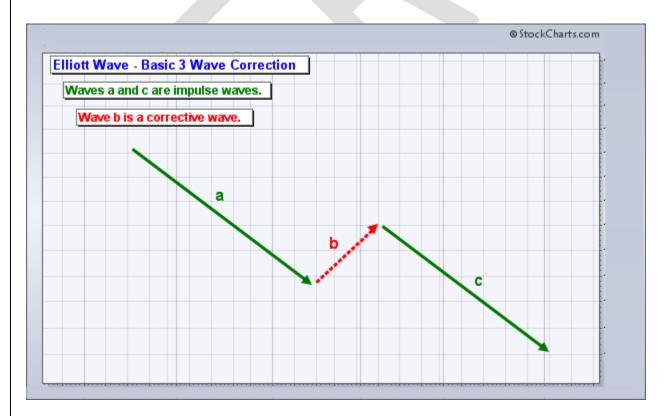
In reality, most chartists will only use 1 to 3 wave degrees on their charts. It can get quite complicated trying to apply nine Wave degrees or even just using the labeling convention in the order provided. Chartists using 1 to 3 wave degrees can simply label the highest degree waves with upper case Roman numerals (I, II, III, IV, V, a ,b, c), the middle degree waves with numbers (1, 2, 3, 4, 5, A, B, C) and the lowest degree waves with lower case Roman numerals (i, ii, iii, iv, v, a, b, c). This provides three distinct groups for labeling various waves.

Basic Sequence

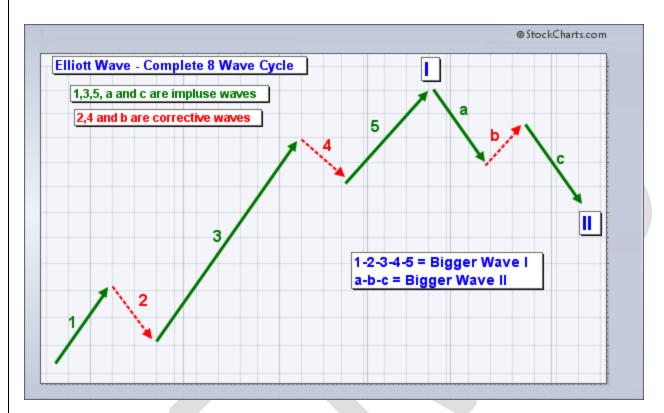
<u>There are two types of waves</u>: **impulse and corrective**. Impulse waves move in the direction of the larger degree wave. When the larger degree wave is up, advancing waves are impulsive and declining waves are corrective. When the larger degree wave is down, impulse waves are down and corrective waves are up. Impulse waves, also called motive waves, move with the bigger trend or larger degree wave. Corrective waves move against the larger degree wave.



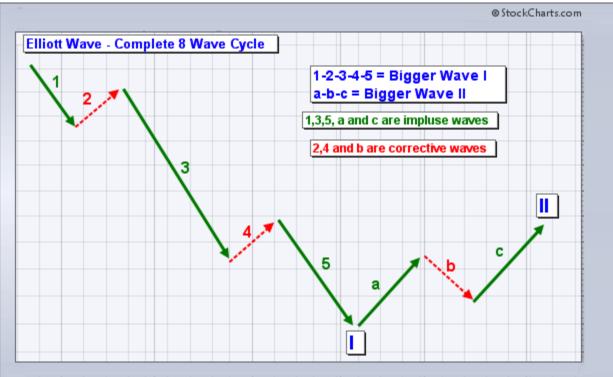
The chart above shows a rising 5-wave sequence. The entire wave is up as it moves from the lower left to the upper right of the chart. Waves 1, 3 and 5 are impulse waves because they move with the trend. Waves 2 and 4 are corrective waves because they move against this bigger trend. A basic impulse advance forms a 5-wave sequence.



A basic corrective wave forms with three waves, typically a, b and c. The chart below shows an abc corrective sequence. Notice that waves a and c are impulse waves (green). This is because they are in the direction of the larger degree wave. This entire move is clearly down, which represents the larger degree wave. Waves a and c move with the larger degree wave and are therefore impulse waves. Wave b, on the other hand, moves against the larger degree wave and is a corrective wave (red).



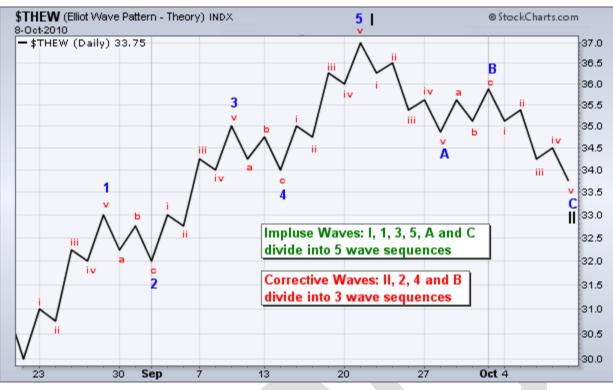
Combining a basic 5 wave impulse sequence with a basic 3 wave corrective sequence yields a complete Elliott Wave sequence, which is a total of 8 waves. According to Elliott, this complete sequence is divided into two distinct phases: the impulse phase and the corrective phase. The abc corrective phase represents a correction of the larger impulse phase.



These 8-wave charts show two larger degree waves (I and II) as well as the lesser degree waves within these larger degree waves. Waves 1-2-3-4-5 are one lesser degree than Wave I. By extension, Wave I is one larger degree than Waves 1-2-3-4-5. Waves a-b-c are one lesser degree than Wave II.

Fractal Nature

Elliott Wave is fractal. This means that wave structure for the Grand Super Cycle is the same as for the minuet. No matter how big or small the wave degree, impulse waves take on a 5-wave sequence and corrective waves take on a 3-wave sequence. Any impulse wave subdivides into 5 smaller waves. Any corrective wave subdivides into three smaller waves. The charts below show the fractal nature of Elliott Wave in action.





Three Rules

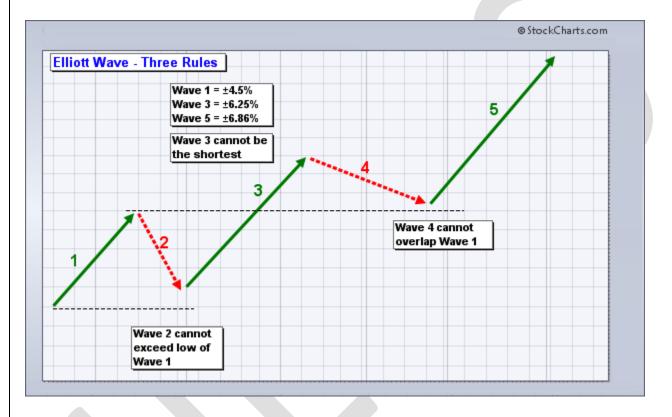
Believe it or not, there are only three rules when it comes to interpreting Elliott Wave. There are many guidelines, but only three HARD rules. These are unbreakable. Guidelines, on the other hand, are bendable and subject to interpretation. Furthermore, these

rules only apply to a 5-wave impulse sequence. Corrections, which are much more complicated, are given more leeway when it comes to interpretation.

Rule 1: Wave 2 cannot retrace more than 100% of Wave 1.

Rule 2: Wave 3 can never be the shortest of the three impulse waves.

Rule 3: Wave 4 can never overlap Wave 1.



Wave 2 cannot move below the low of Wave 1. A break below this low would call for a re-count. Even though Wave 3 is typically the longest of the three impulse waves, there is a specific rule that it cannot be the shortest. 1 or 5 can be longer than Wave 3, but both cannot be longer than Wave 3. It is probably best to use percentages or log scales when measuring Wave length. Elliott Wave indicates that Wave 3 must exceed the high of Wave 1. Failure to exceed this high would call for a re-count. Impulse moves are all about making progress. Failure to exceed the high of Wave 2 would not be making progress. The third, and final rule, is that Wave 4 cannot overlap Wave 1, which means the low of Wave 4 cannot exceed the high of Wave 1. Such a violation would call for a re-count.

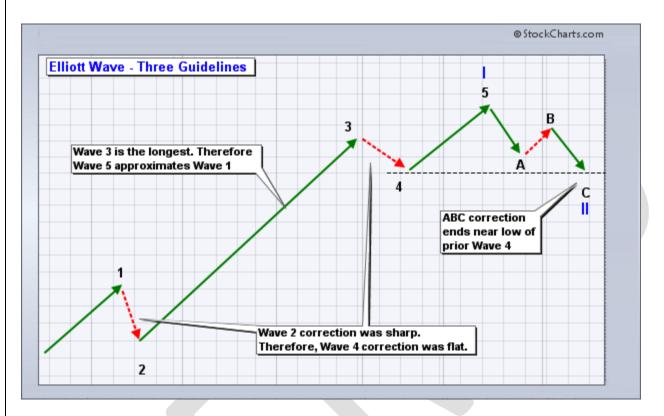
Three Guidelines

There are numerous guidelines, but this article will focus on three key guidelines. In contrast to rules, guidelines should hold true most of the time, not necessarily all of the time.

Guideline 1: When Wave 3 is the longest impulse wave, Wave 5 will approximately equal Wave 1.

Guideline 2: The forms for Wave 2 and Wave 4 will alternate. If Wave 2 is a sharp correction, Wave 4 will be a flat correction. If Wave 2 is flat, Wave 4 will be sharp.

Guideline 3: After a 5-wave impulse advance, corrections (abc) usually end in the area of prior Wave 4 low.



The first guideline is useful for targeting the end of Wave 5. Even though Wave 5 could be longer than Wave 3 and Wave 3 could still be longer than Wave 1, chartists can make initial Wave 5 projections once Wave 4 ends. In a larger uptrend, chartists simply apply the length of Wave 1 (percentage change) to the low of Wave 4 for an upside target. The opposite is true for a 5-wave decline. The percentage decline in Wave 1 would be applied to the high of Wave 4 for a Wave 5 estimate.

The guideline of alternation (2) is useful for determining the time of correction for Wave 4. After a sharp decline for Wave 2, chartists can expect a relatively flat correction for Wave 4. If Wave 2 is relatively flat, then chartists can expect a relatively sharp Wave 4. In practice, Wave 2 tends to be a rather sharp wave that retraces a large portion of Wave 1. Wave 4 comes after an extended Wave 3. This Wave 4 marks more of a consolidation that lays the groundwork for a Wave 5 trend resumption.

The third guideline is useful for estimating the end of a Wave II correction after a Wave I advance. Waves I and II are the larger degree waves. Waves 1-2-3-4-5 are lesser degree waves within Wave I. Once the Wave II correction unfolds, chartists can estimate its end by looking at the end of the prior wave 4 (lesser degree wave 4). In a larger degree uptrend, Wave II would be expected to bottom near the low of lesser degree Wave 4. In a larger degree downtrend, Wave II would be expected to peak near the high of lesser degree Wave 4.

Conclusions

Even though this article just scratches the surface of Elliott Wave Theory, chartists can greatly improve their counting by applying the three rules and three guidelines listed. Elliott Wave counts start with a process of elimination. Apply the rules for the first count attempt and then the guidelines on the second. Eliminating bogus counts paves the way to a more accurate count. Even with accurate counts, chartists will still need to re-evaluate and adjust counts as new price information emerges.

REFERENCES:

- 1. Investment Analysis and Portfolio Management Prasanna Chandra
- 2. Security Analysis and Portfolio Management V.A Avadhani
- Suresh A S (2013), "A study on fundamental and technical analysis", International Journal of Marketing, Financial Services & Management Research, Vol.2, No.5.
- 4. <u>www.moneycontrol.com</u>
- 5. www.stockchart.com