

# **A Study On Effectiveness Of Elliott Wave Theory Forecasts For Precious Metals With Reference To Gold & Silver**

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## **INTRODUCTION**

The Elliott Wave Theory is named after Ralph Nelson Elliott. Inspired by the Dow Theory and by observations found throughout nature, Elliott concluded that the movement of the stock market could be predicted by observing and identifying a repetitive pattern of waves. In fact, Elliott believed that all of man's activities, not just the stock market, were influenced by these identifiable series of waves. Elliott based part his work on the Dow Theory, which also defines price movement in terms of waves, but Elliott discovered the fractal nature of market action. Thus, Elliott was able to analyze markets in greater depth, identifying the specific characteristics of wave patterns and making detailed market predictions based on the patterns he had identified.

## **LITERATURE REVIEW**

The Elliott Wave principle was discovered in the late 1920s by Ralph Nelson Elliott. He discovered that stock markets do not behave in a chaotic manner, but that markets move in repetitive cycles, which reflect the actions and emotions of humans caused by exterior influences or mass psychology. Elliott contended, that the ebb and flow of mass psychology always revealed itself in the same repetitive patterns, which subdivide in so called waves. In part, Elliott based his work on the Dow Theory, which also defines price movement in terms of waves, but Elliott discovered the fractal nature of market action. Thus, Elliott was able to analyze markets in greater depth, identifying the specific characteristics of wave patterns and making detailed market predictions based on the patterns he had identified. Fractals are mathematical structures, which on an ever smaller scale, infinitely repeat themselves. The patterns that Elliott discovered are built in the same way. An impulsive wave, which goes with the main trend, always shows five waves in its pattern. On a smaller scale, within each of the impulsive waves of the before mentioned impulse, again five waves will be found. In this smaller pattern, the same pattern repeats itself ad infinitum (these ever smaller patterns are labeled as different wave degrees in the Elliott Wave Principle). Only much later were fractals recognized by scientists. In the 1980s, the scientist Mandelbrot proved the existence of fractals in his book "*The Fractal Geometry Of Nature*". He recognized the fractal structure in numerous objects and life forms, a phenomena Elliott already understood in the 1930s. In the 70s, the Wave Principle gained popularity through the work of Frost and Prechter. They published a legendary book on the Elliott Wave (Elliott Wave Principle...key to stock market profits, 1978), wherein they predicted, in the middle of the crisis of the 70s, the great bull market of the 1980s. Not only did they correctly forecast the bull market but Robert R. Prechter also predicted the crash of 1987 in time and pinpointed the high exactly. Ronald Watson made an attempt in his study that gold and silver stocks are rising again after a long corrective period of a year and a half. The aim of this article is to indulge in some speculation and attempt a guess at where this may end based on Elliott Wave theory. Indeed, the initial rise in stock values has been remarkably bullish and there seems to be an open sky above them. But since all bull markets come to an end, then at some point in the future, it will be time to fully cash in those gold and silver mining equities and (at least for a while) reinvest the profits in other more attractive markets.

## **ELLIOTT WAVE THEORY-AN OVERVIEW**

During the 1920-30s, there was a person named Ralph Nelson Elliott. Elliott discovered that stock markets, thought to

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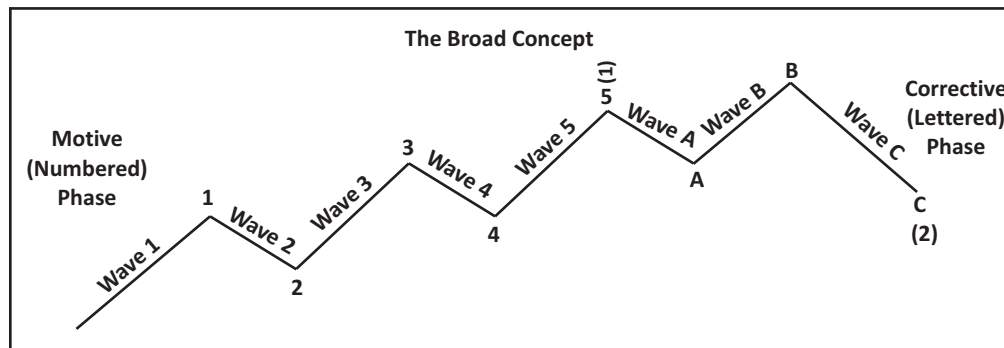
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behave in a somewhat chaotic manner, actually, did not. They traded in repetitive cycles, which he pointed out were the emotions of investors and traders caused by outside influences or the predominant psychology of the masses at the time. Elliott explained that the upward and downward swings of the mass psychology always showed up in the same repetitive patterns, which were then divided into patterns he called “waves”. He needed to claim this observation and so he came up with a super original name: **The Elliott Wave Theory**.

## WAVE MODE

There are two modes of wave development: motive and corrective. Motive waves have a five wave structure, while corrective waves have a three wave structure or a variation thereof. Motive mode is employed by both the five wave pattern and its same-directional components, i.e., waves 1, 3 and 5. Their structures are called “motive” because they powerfully impel the market. Corrective mode is employed by all countertrend interruptions, which include waves 2 and 4. Their structures are called “corrective” because they can accomplish only a partial retracement, or “correction” of the progress achieved by any preceding motive wave.



⊗ **Wave 1:** The stock makes its initial move upwards. This is usually caused by a relatively small number of people that all of the sudden (for a variety of reasons real or imagined) feel that the price of the stock is cheap, so it's a perfect time to buy. This causes the price to rise.

⊗ **Wave 2 :** At this point, enough people, who were in the original wave, consider the stock overvalued and take profits. This causes the stock to go down. However, the stock will not make it to its previous lows before the stock is considered a bargain again.

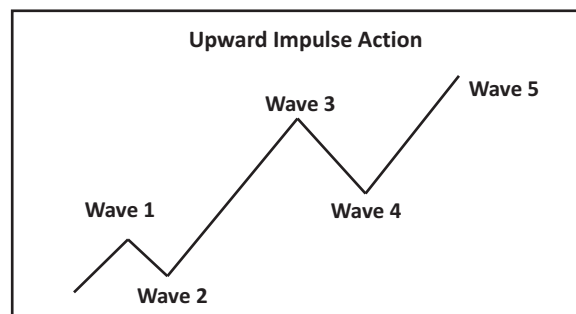
⊗ **Wave 3 :** This is usually the longest and strongest wave. The stock has caught the attention of the mass public. More people find out about the stock and want to buy it. This causes the stock's price to go higher and higher. This wave usually exceeds the high created at the end of Wave 1.

⊗ **Wave 4 :** People take profits because the stock is considered expensive again. This wave tends to be weak because there are usually more people that are still bullish on the stock and are waiting to “buy on the dips”.

⊗ **Wave 5:** This is the point that most people get on the stock, people start coming up with ridiculous reasons to buy the stock. This is when the stock becomes the most overpriced. Contrarians start shorting the stock which starts the ABC pattern.

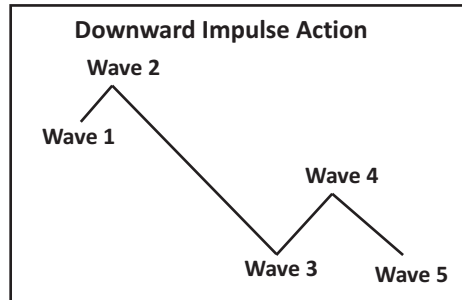
### The Whole Theory Of Elliott Wave Can Be Classified Into Two Parts:

- ⊗ Impulse patterns
- ⊗ Corrective patterns

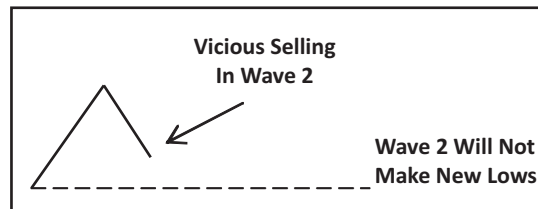


## ELLIOTT WAVE BASICS - IMPULSE PATTERNS

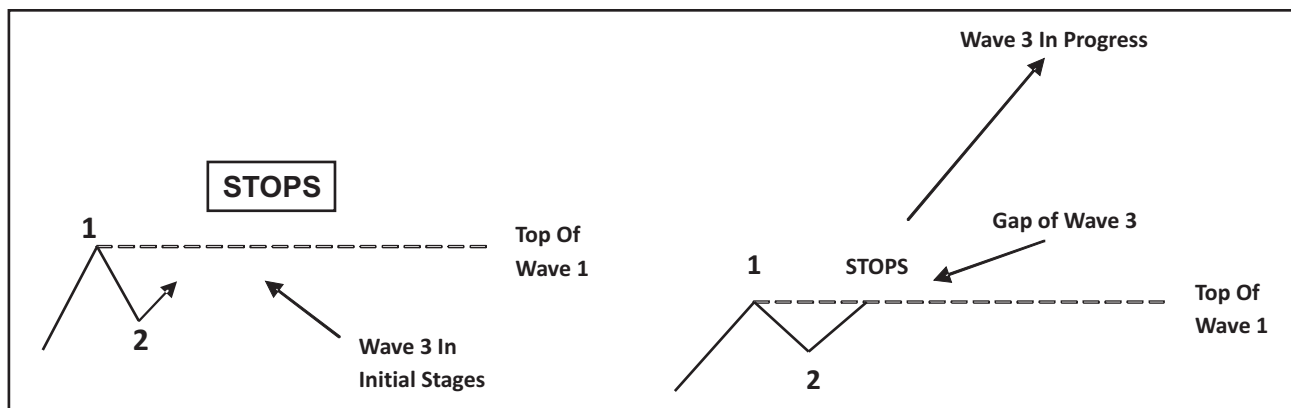
The impulse pattern consists of five waves. The five waves can be in either direction, up or down. Some examples are shown to the right and below. The first wave is usually a weak rally with only a small percentage of the traders participating. Once Wave 1 is over, they sell the market on Wave 2. The sell-off in Wave 2 is very vicious. Wave 2 will finally end without making new lows and the market will start to turn around for another rally.



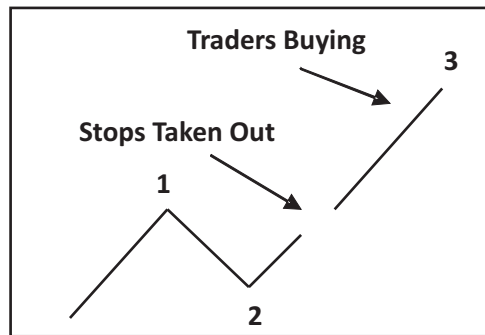
The initial stages of the Wave 3 rally are slow, and it finally makes it to the top of the previous rally (the top of Wave 1). At this time, there are a lot of stops above the top of Wave 1.



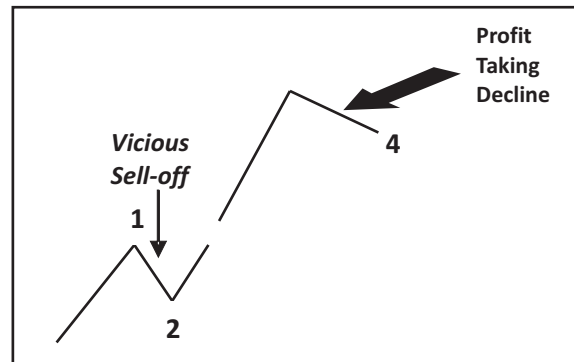
Traders are not convinced of the upward trend and are using this rally to add more shorts. For their analysis to be correct, the market should not take the top of the previous rally. Therefore, many stops are placed above the top of Wave 1.



The Wave 3 rally picks up steam and takes the top of Wave 1. As soon as the Wave 1 high is exceeded, the stops are taken out. Depending on the number of stops, gaps are left open. Gaps are a good indication of a Wave 3 in progress. After taking the stops out, the Wave 3 rally has caught the attention of traders. The next sequence of events are as follows: Traders who were initially long from the bottom finally have something to cheer about. They might even decide to add positions. The traders who were stopped out (after being upset for a while) decide the trend is up, and they decide to buy into the rally. All this sudden interest fuels the Wave 3 rally. This is the time when the majority of the traders have decided that the trend is up. Finally, all the buying frenzy dies down; Wave 3 comes to a halt. Profit taking now begins to set in. Traders who were long from the lows decide to take profits. They have a good trade and start to protect profits. This causes a pullback in the prices that is called Wave 4. Wave 2 was a vicious sell-off; Wave 4 is an orderly profit-taking decline. While profit-taking is in progress, the majority of traders are still convinced that the trend is up. They were either late in getting in on this rally, or they have been on the sideline. They consider this profit-



taking decline an excellent place to buy in and get even.



On the end of Wave 4, more buying sets in and the prices start to rally again. The Wave 5 rally lacks the huge enthusiasm and strength found in the Wave 3 rally. The Wave 5 advance is caused by a small group of traders. Although the prices make a new high above the top of Wave 3, the rate of power, or strength, inside the Wave 5 advance is very small when compared to the Wave 3 advance. Finally, when this lackluster buying interest dies out, the market tops out and enters a new phase.

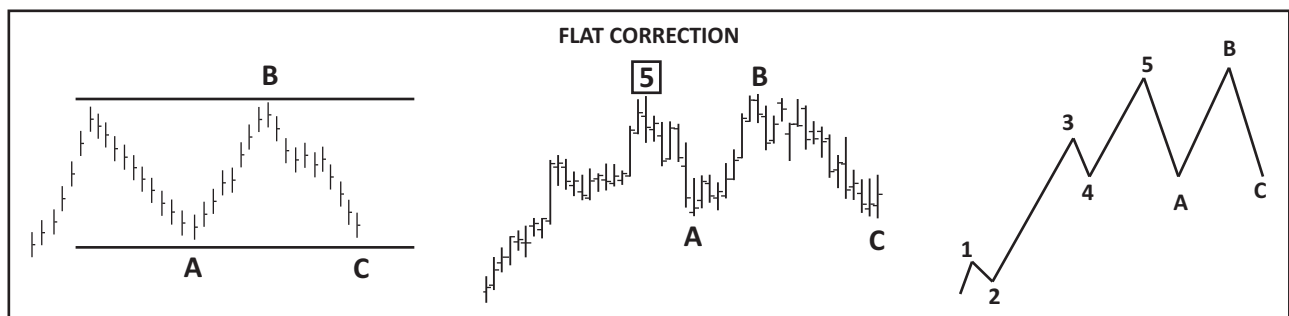
### COMPLEX CORRECTIONS (FLAT, IRREGULAR, TRIANGLE)

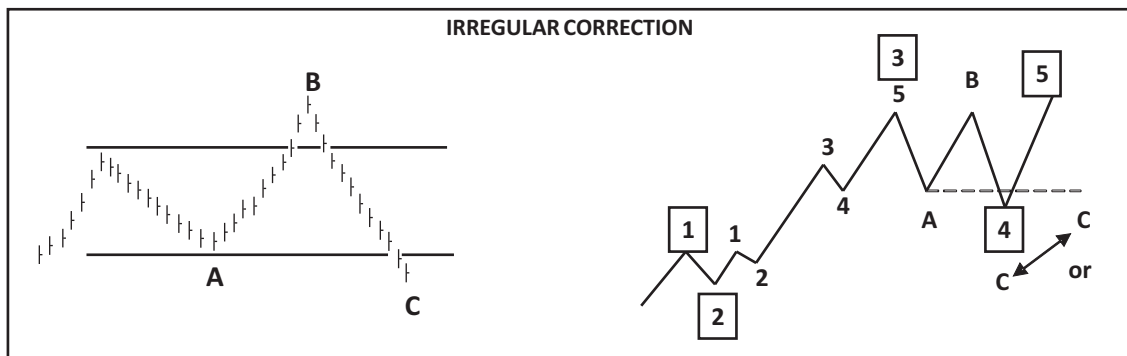
The complex correction group consists of 3 patterns:

- ⊗ Flat
- ⊗ Irregular
- ⊗ Triangle

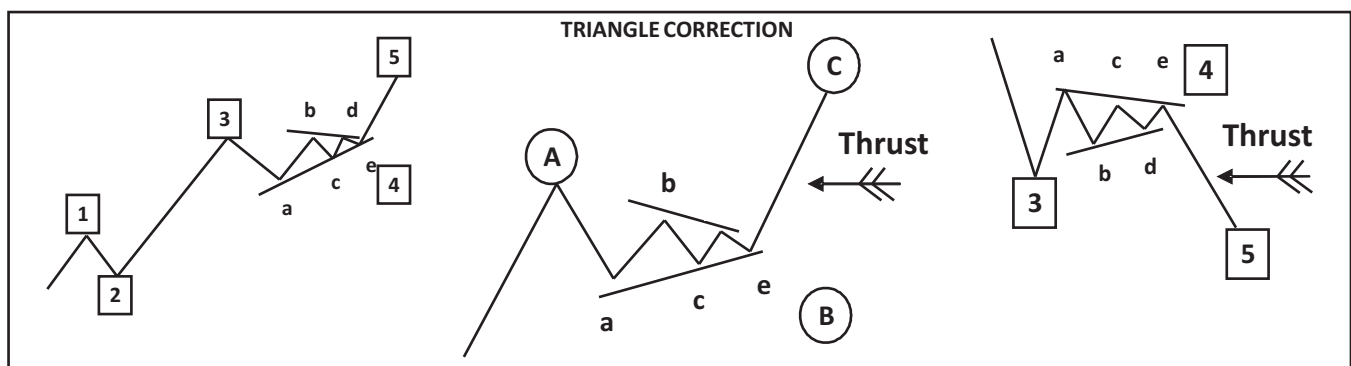
⊗ **Flat Correction** : In a Flat correction, the length of each wave is identical. After a five-wave impulse pattern, the market drops in Wave A. It then rallies in a Wave B to the previous high. Finally, the market drops one last time in Wave C to the previous Wave A low.

⊗ **Irregular Correction** : In this type of correction, Wave B makes a new high. The final Wave C may drop to the beginning of Wave A, or below it.





✿ **Triangle Correction** : In addition to the three-wave correction patterns, there is another pattern that appears time and time again. It is called the Triangle pattern. Unlike other triangle studies, the Elliott Wave Triangle approach designates five sub-waves of a triangle as A, B, C, D and E in sequence.



Triangles, by far, most commonly occur as fourth waves. One can sometimes see a triangle as the Wave B of a three-wave correction. Triangles are very tricky and confusing. One must study the pattern very carefully prior to taking action. Prices tend to shoot out of the triangle formation in a swift thrust. When triangles occur in the fourth wave, the market thrusts out of the triangle in the same direction as Wave 3. When triangles occur in Wave Bs, the market thrusts out of the triangle in the same direction as the Wave A. Elliott Wave Theory interprets market actions in terms of recurrent price structures obedient to the Fibonacci sequence. Basically, Market cycles are composed of two major types of Waves: Impulse Wave and Corrective Wave. For every impulse wave, it can be sub-divided into 5 - wave structure (1-2-3-4-5), while for corrective wave, it can be sub-divided into 3 - wave structures (a-b-c).

## SIGNIFICANCE OF THE STUDY

It will help to understand the different Elliott wave techniques in practice and also help the traders to achieve a good investor's relation through investor's satisfaction. This will help the traders for making effective investment decisions and help the investors to reduce risk by applying various Elliott techniques. It will guide the traders to understand the various techniques, which will help to reduce risk and maximize the profit.

## STATEMENT OF THE PROBLEM

The 1<sup>st</sup> major problem is that it cannot really recognize an Elliot Wave until it has already passed. After all, the Elliot Wave is simply a series of movements with the trend followed by retracements. The only thing that seems to be unique about it is that the retracement of Wave B is less than the 5<sup>th</sup> sub wave. Otherwise, the Elliot Wave would just be a series of up and down movements, which is easily observable in stock charts or prices, but doesn't help in forecasting prices or directions.

The other problem is that the waves are not quantified precisely enough to use in trading decisions. Everyone knows that the stock market goes up and down at various times; however, this information isn't really useful without knowing when it is going to go up or down and by how much.

## RESEARCH QUESTIONS

- ✿ How to find out the effectiveness of Elliott wave analysis for gold and silver forecast?
- ✿ Whether wave principle can improve trading?
- ✿ How the wave principle can be good for investment?

## OBJECTIVES OF THE STUDY

- ✿ To find out the effectiveness of Elliott wave analysis for gold and silver forecast.
- ✿ To find out how the wave principle can improve the trading.
- ✿ To find out how the wave principle can be good for investment.

## METHOD

This study is an exploratory in nature. Secondary sources of data were utilized for this study. The secondary data were collected through books, Journals and web sources for the period from 2006 to 2009.

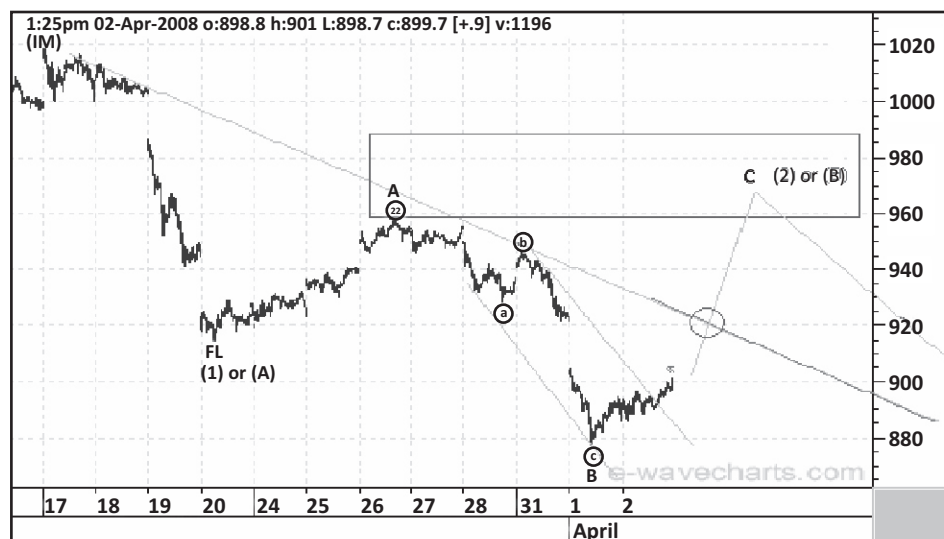
## TECHNIQUES USED

Elliott wave techniques - Triangle pattern analysis and Thrust wave analysis.

## ANALYSIS AND DISCUSSIONS

In this chapter, the data collected were systematically processed and made suitable for analysis and discussions. The results obtained are classified and the following analysis is performed in fulfilling the objectives of the study.

**Graph 1: Elliott Wave Technique Analysis For Gold**



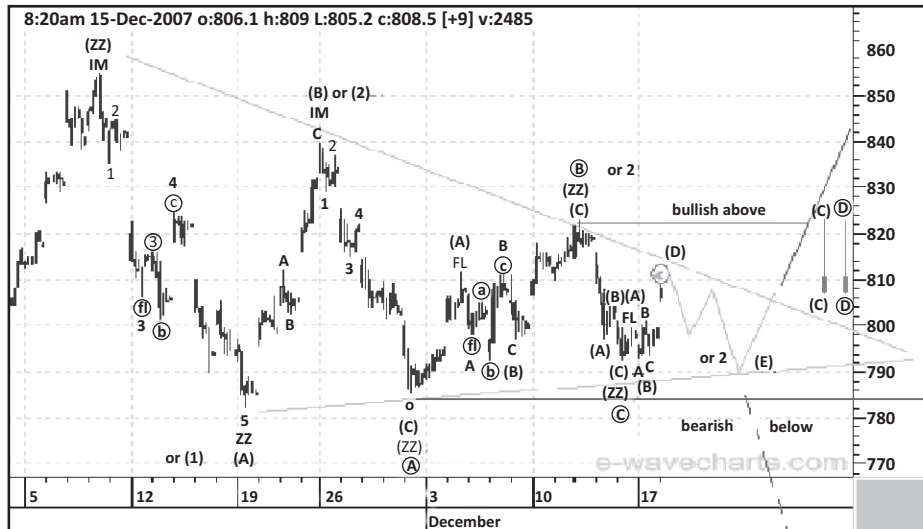
Source: e-wavecharts.com

The price action for Gold appears to be in a wave (2) or wave (B) correction. We should see the price of Gold advance to the recent highs attained on March 26th 2008. This wave up will also confirm if the intermediate highs are in place for the metals.

A failure to move above the wave (2) or wave (B) target areas would indicate further downside and that a larger correction is in play. A move above the target areas would suggest further upside towards the highs.

In this, it is to be concluded that A's failure to attain the target areas would indicate that a smaller wave 2 correction is in play and further downside would be expected.

## Graph 2 : Gold - Triangle Pattern Analysis



Source: e-wavecharts.com

The price action for Gold appears as a triangle pattern, indicating that an explosive breakout is imminent. This breakout could be to the upside or downside, but we are expecting it to break to the upside. We can let the price action within the triangle tell us which way its going to break.

The chart illustrates that the current advance is wave (D) up, so we should see another pullback in wave (E) before the breakout. A break below the lower trend line or wave (C) low would be bearish. A break below the wave (A) low (red line) would confirm the bearish breakout.

A pullback to the wave (E) target with an advance above the wave (D) high and upper trend line would be bullish. A move above the wave (B) high (green line) would confirm the bullish breakout.

## Graph 3: Elliott Wave On Gold



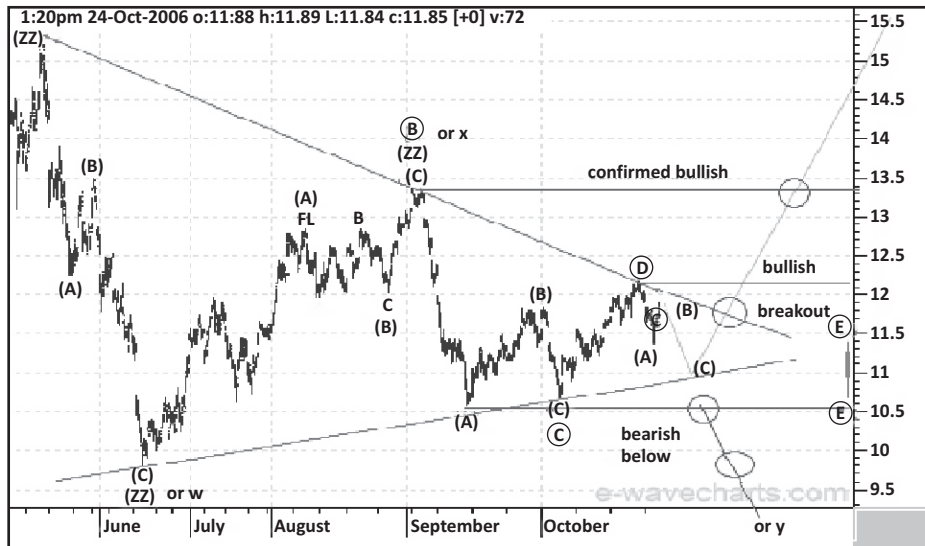
Source: e-wavecharts.com

Gold is in a triangle pattern and it currently appears to have started wave e- down. We should see minor downside for the wave e count, before a reversal and subsequent breakout to the upside. The downside could complete as 3 waves or as 5 waves, with further sideways action in wave e towards the apex of the triangle. A break below the lower trend line and the wave c low in the triangle would be short term bearish, indicating further downside before a substantial move higher. A break above the wave b high before a pullback could indicate 2 possible scenarios. It could indicate a bullish breakout to new highs or more of a corrective pattern as wave (b) up to the \$670-\$680, before a pullback in wave (c).

In this, it to be concluded that the action over the next few days/weeks will provide the clues to the future movements,

but at this juncture, we are expecting a minor 3 wave pullback in wave e and then a subsequent breakout to the upside.

**Graph 4: Elliott Wave On Silver - Triangle Breakout**



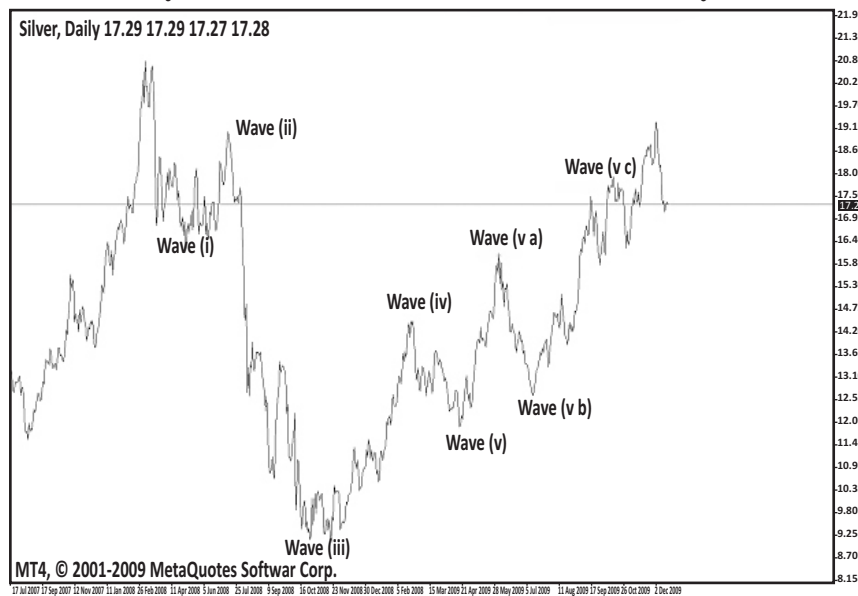
Source: e-wavecharts.com

This chart is an monthly chart. In this chart, Silver appears to be in a triangle pattern currently in wave (E) down. We should see minor downside for Silver before a reversal and subsequent breakout to the upside.

In this, it to be concluding that the downside could complete as wave (C) down or we could see further sideways action in wave (E) into the apex of the triangle.

The following chart exhibits the wave analysis for gold for the period from 17<sup>th</sup> July 2007 to 2<sup>nd</sup> Dec 2009.

**Graph 5: Wave Analysis For Gold For The Period From 17<sup>th</sup> July 2007 to 2<sup>nd</sup> Dec 2009**



Source: compiled by authors

This chart is silver monthly chart, in this chart, the Elliott wave analysis has been made for the period of 17<sup>th</sup> July 2007 to 2<sup>nd</sup> Dec 2009. In this, wave 1 starts from 26<sup>th</sup> Feb 2008 and it ends on 11 Apr 2008 and the breakout has been made and wave 2 rises and on 7<sup>th</sup> June, the third wave gets down, as the principle of Elliott wave theory, the 3<sup>rd</sup> wave falls down aggressively.

In this study, it is to be concluded that during such period, the trader can stop loss by making short and at the end of the wave 3, the trader can make long. Due to applying this theory, the trader can reduce the risk and maximize the profit.



## FINDINGS AND IMPLICATIONS OF THE STUDY

- ✿ Elliott Wave analysis is a collection of complex techniques.
- ✿ Approximately 60 percent of these techniques are clear and easy to use. The other 40 are difficult to identify, especially for the beginners.
- ✿ The practical and conservative approach is to use the 60 percent that are clear.
- ✿ The Elliott Wave Principle does not provide certainty about any one market outcome.
- ✿ Instead, it gives us an objective means of determining the probability of a future direction for the market. At any time, two or more valid wave interpretations usually exist. So, it's important for any investor or trader to carefully assess the probability of each interpretation.
- ✿ The price action for Gold appears as a triangle pattern, indicating that an explosive breakout is imminent. This breakout could be to the upside or downside, but we are expecting it to break to the upside. We can let the price action within the triangle tell us which way it is going to break.
- ✿ Gold is in a triangle pattern and it currently appears to have started wave e down. We should see minor downside for the wave e count, before a reversal and subsequent breakout to the upside. A break below the lower trend line and the wave c low in the triangle would be short term bearish indicating further downside before a substantial move higher.
- ✿ The price action over the next few days/weeks will provide the clues to the future movements, but at this juncture, we are expecting a minor 3 wave pullback in wave e and then a subsequent breakout to the upside.

## CONCLUSION

Applying Elliott wave theory does not provide certainty about any one market income, it gives us an objective means of determining the probability of a future direction for the market, so the trader and investor should carefully access the probability of each interpretation. This will lead to effectiveness of gold and silver forecast which improves trading. Effectiveness of Elliott wave theory is a topic of much importance from the standpoint of investment cycle.

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