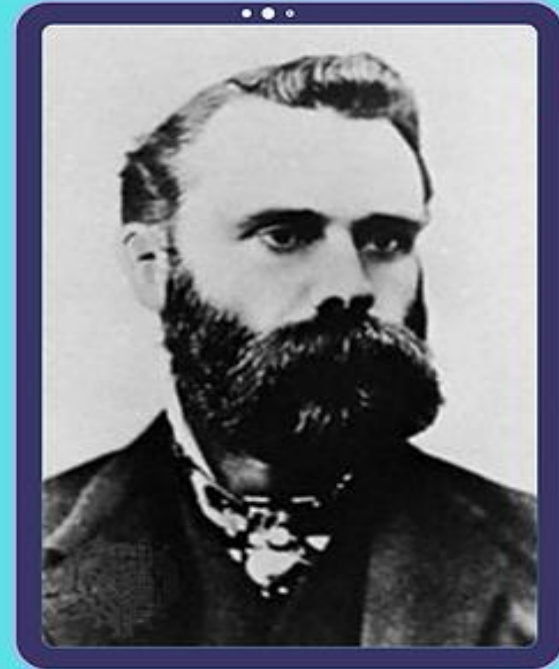


Theories of Technical Analysis

The Dow Theory



Dow Theory

- Charles H. Dow, (1851-1902) , Father of Technical Analysis.
- It's a basic theory & more than 100 year old , but still remains the foundation of TA.
- He never wrote any theory &/or book on TA.
- His followers & associates have published work based on his theory from 255 wall street editorial written by him.

Samuel A. Nelson , He is the first person to use the term Dow Theory and he selected fifteen articles by Charles Dow for his book The ABC of Stock Speculation.

William P. Hamilton's "The Stock Market Barometer" (1922)

Robert Rhea's "The Dow Theory" (1932)

E. George Schaefer's "How I Helped More Than 10,000 Investors To Profit In Stocks" (1960)

Richard Russell's "The Dow Theory Today" (1961)

<https://www.investopedia.com/terms/d/dowtheory.asp>

https://www.youtube.com/watch?v=OwlwD_qI3N4

The Dow Theory is a technical framework that predicts the market is in an upward trend if one of its averages advances above a previous important high, accompanied or followed by a similar advance in the other average.

The theory is predicated on the notion that the market discounts everything in a way consistent with the efficient markets hypothesis.

In such a paradigm, different market indices must confirm each other in terms of price action and volume patterns until trends reverse.

Principles of Dow Theory

1. The Stock Market discounts all information.
2. The Stock Market has Three Trends.
3. Primary Trend has Three Phases.
4. Stock Market Indexes must confirm each other.
5. Volume must confirm the Trend.
6. Trend remains intact until & unless clear Reversal Signals occurs.

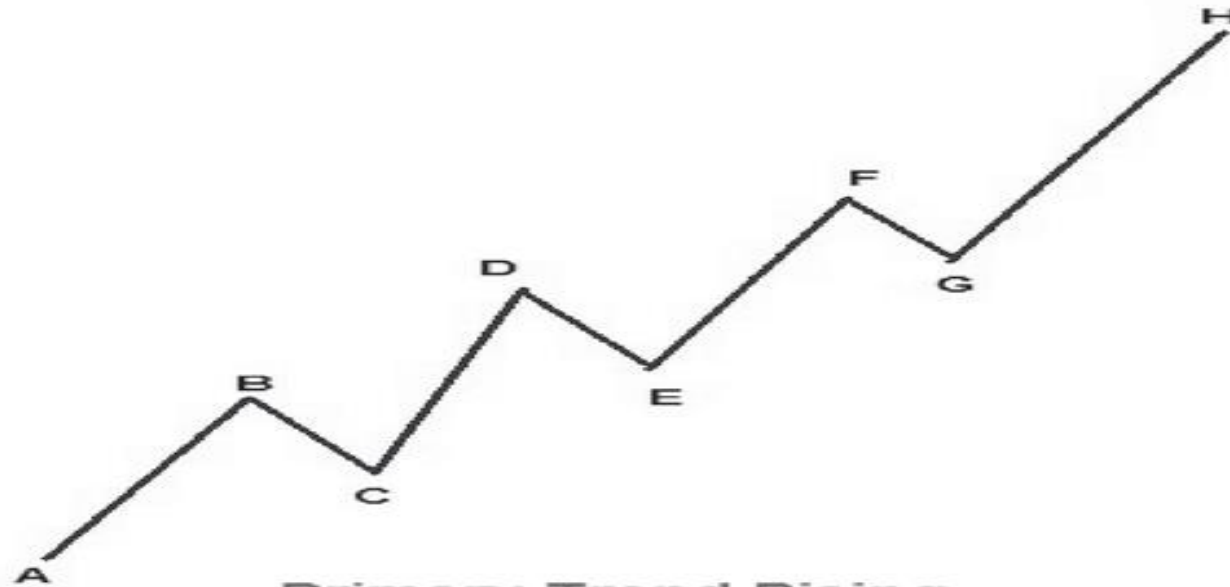
1. The Stock Market discounts all information.

- Stock price represents sum total of hopes, fear & expectation of participation.
- Market Discounts Information.
- Interest Rate movements, Microeconomic Data, Central Bank Decisions or Future earnings.
- Act of God. (Natural Calamities)
- Stock market is barometer of the economy.

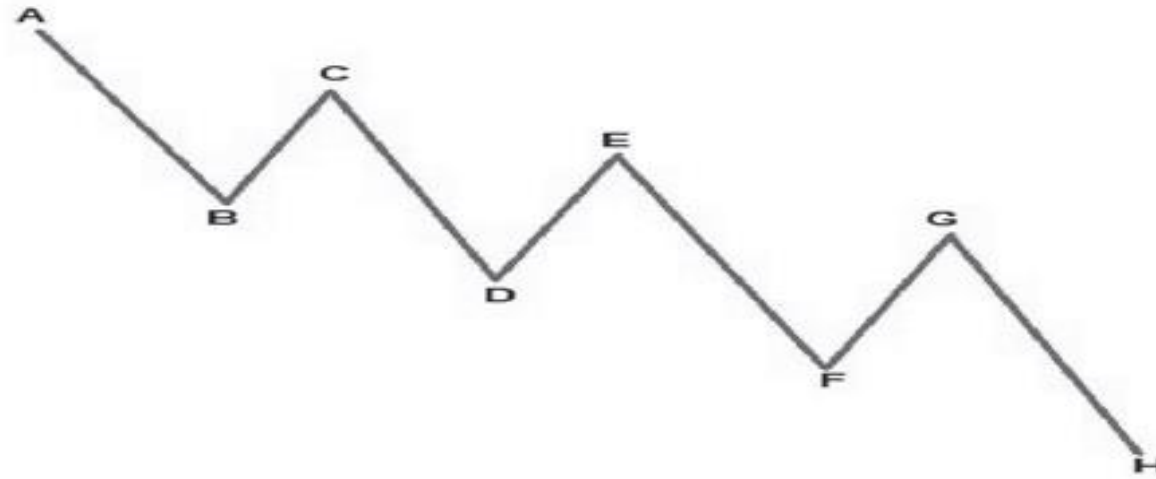
2. The Stock Market has Three Trends.

- Market Trend : Primary, Secondary & Minor.
- Primary Trend: Main trend & trader should trade in direction of trend.
- Primary Trend is trader's best friend & which never ditch.
- Bullish : Higher Tops & Bottoms.
- Bearish : Lower Tops & Bottoms.
- Primary Trend last for more than one year.

Primary Trends

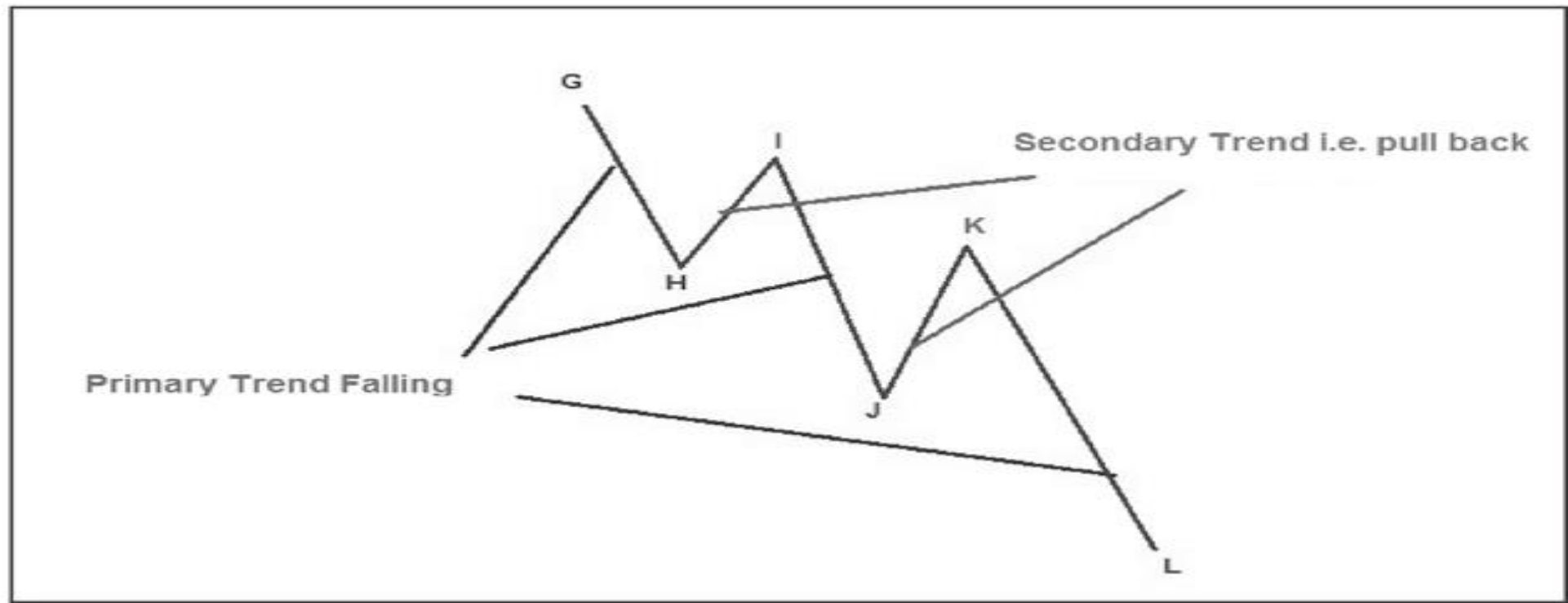
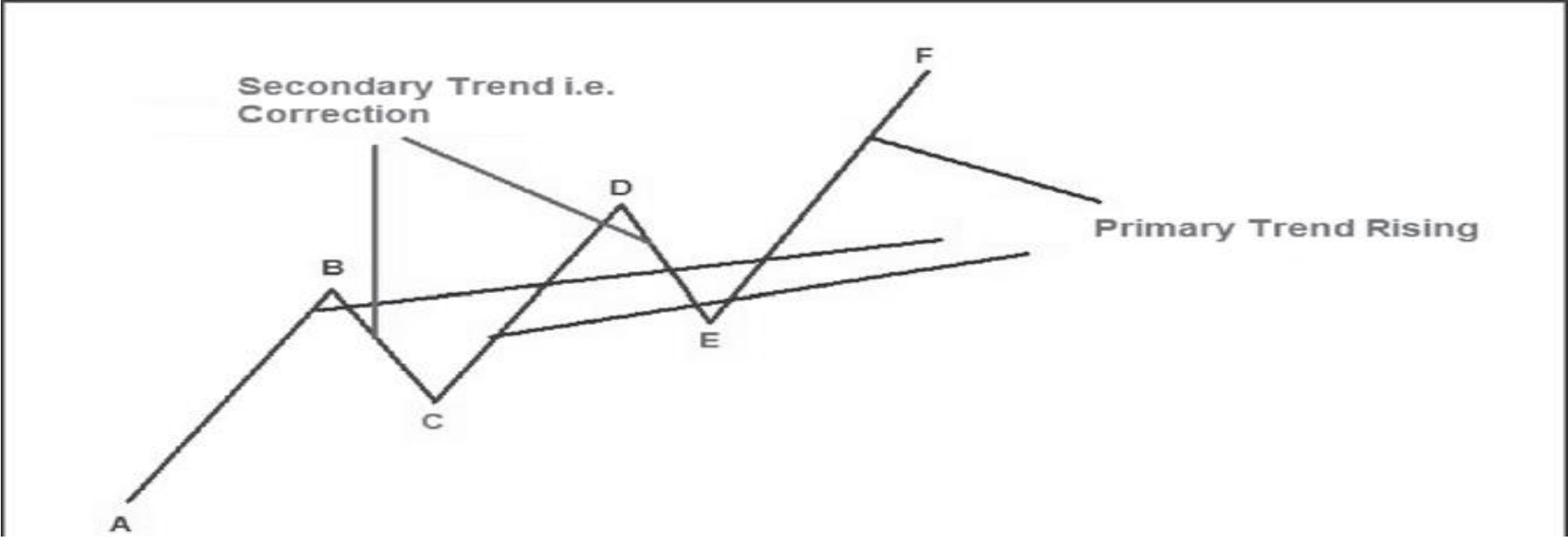


Primary Trend-Rising



Primary Trend-Falling

- Secondary Trend are found within Primary Trends.
- Corrections when primary trend is rising
- Pullback when primary trend is falling.
- Secondary Trend move against the direction of primary trend.
- Secondary Trend consists of short term movement which is called as Minor Trends.
- Minor Trends are corrective move within secondary trends.
- Minor Trend moves against the direction of secondary trend.



3. Primary Trend has Three Phases.

- Phases : Accumulation, Participation & Distribution.

Accumulation Phase

- Made up of buying by intelligent investor who thinks stock is undervalued & expects economic recovery & long term growth.
- New Trend emerges, environmental is pessimistic & majority of investors are against equities.

- Accumulation phase comes after significant down moves in market. (Everything is Worst)
- This shows the beginning of the New Bull Market.

Participation Phase

- Features by improvising fundamentals, rising corporate profits & improving public sentiments.
- More trade participation leads to price rise.
- Longest phase in primary trend & one of the best phase for traders.

Distribution Phase

- Featured by too much optimism, robust fundamentals & nobody at this time believes that market could decline.
- Participants feels comfortable buying more & more in the market.
- Investors who bought during accumulation phase will start selling in anticipation of a decline in market.
- It's a time for analyst to look for reversal in the trend.

4. Stock Market Indexes must confirm each other.

- Belief: Stock market as a whole reflected the overall business condition of the country.
- Benchmark Indicator : Economic Conditions.
- Index : Dow Jones Industrial Index & Dow Jones Rail Index. (Transportation Index)
- USA : Industrial Nation, Urban Centres & Production Hubs.
- Factories -> Goods -> Urban Centres. (Rail)

Index Analysis

- **Rise in these two indexes reflects that overall business condition of the economy is good.**
- Production Increase -> Customer Demand -> Performance of Company.
- Average should move in the same direction.
- **The divergence in this two indexes is a warning sign.**
- Reversal is not signalled until & unless both indexes confirm the same.

5. Volume must confirm the Trend.

- Trend should be confirmed by the volume.
- Volume should increase in the direction of the primary trend.
 1. If primary trend is down, then volume should increase with the market decline.
 2. If primary trend is up, then volume should increase with the market rally.
- Volume is used as a secondary indicator to confirm the price trend.

6. Trend remains intact until & unless clear Reversal Signals occurs.

- Stock market is controlled by money & money flows very fast across borders to reap the benefits.
- Stock price do not move smoothly in a single line.
- Price Movements -> Up : Down : Zig Zag.
- One should not assume reversal of the trend until & unless clear reversal signals are there.

Significance

- Concept : Higher Top – Bottom & Lower Top- Bottom.
- Made foundation for Technical Analysis
- Helps investors to understand market better.
- Identify & follow correct trend.
- Helps in investment / trading decisions.
- Guiding base for research.

Problems

- A trend is considered reverse when security makes a significant move in particular direction.
- Uptrend : When price makes lower top & bottom.
- Downtrend : When price makes higher top & bottom.
- One may miss the opportunity.
- Two index are not major part of economy today.
- Technology & Financial Services has replaced the index.
- Economic cycle changes & new sectors are replacing industry.



***What Is Elliott Wave
Theory,
And How Do You Trade
With It?***

Lightspeed

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Introduction

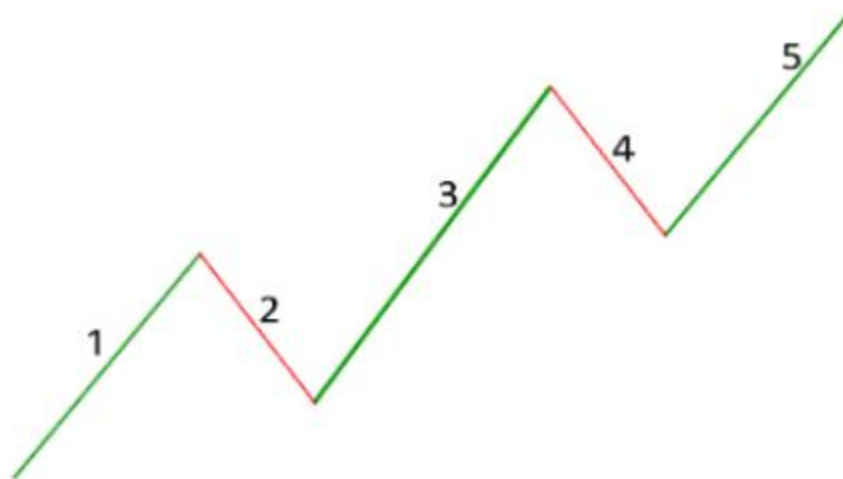
- Developed by Ralph Nelson Elliott (1871-1948)
- 1930's Theory
- To analyse stock market to forecast market trends.
- It is based on the hypothesis that stock prices move between optimism & pessimism of all market participants psychology & wide swings in the participants psychology makes stock prices move in certain patterns/ trends.

Fundamental Concept

- Prices moves in trends.
 1. Dominant Wave (5 Waves)
 2. Corrective Wave (3 Waves)



Elliott Wave Theory Principle

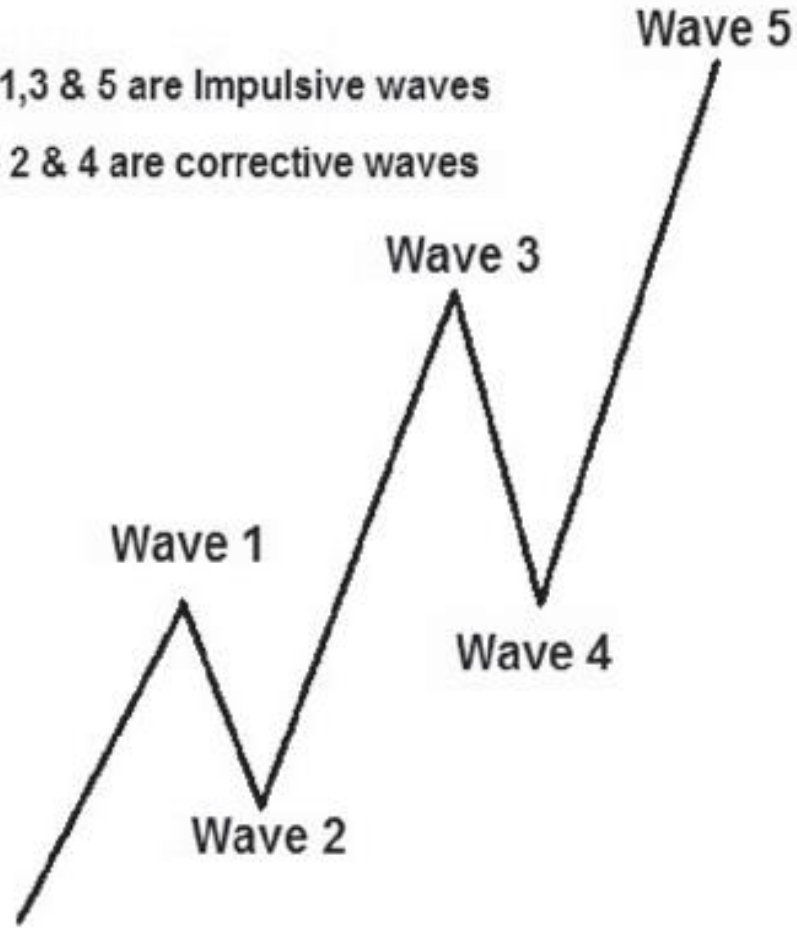


Dominant Wave

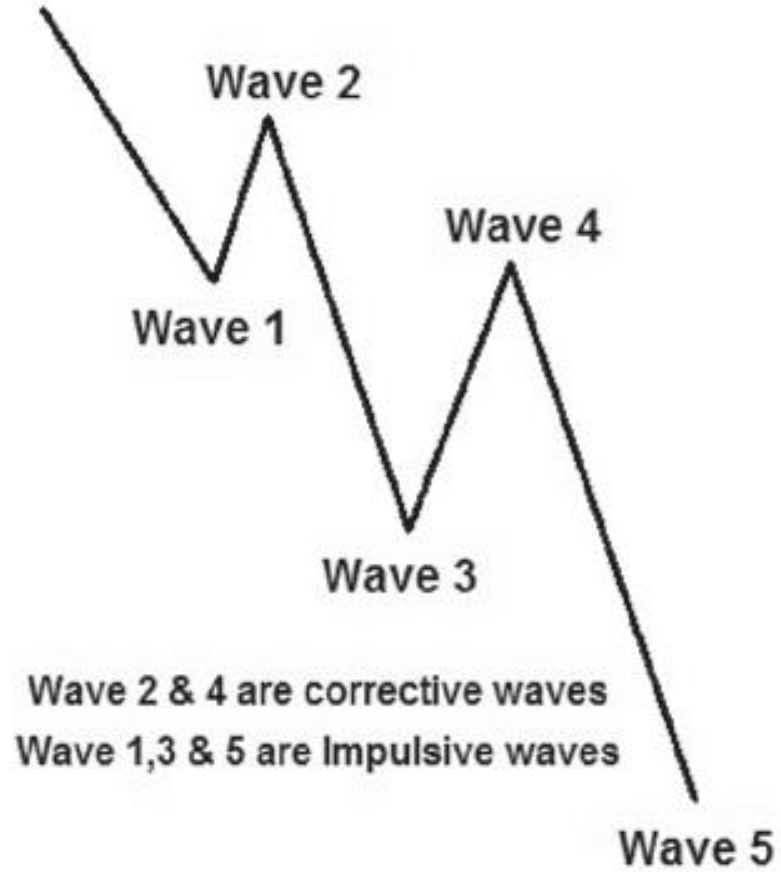
- Dominant Wave consist of 5 Waves.
- It can be either up or down.
- In Up direction: Advancing wave-> Impulsive Waves & Declining Wave -> Corrective Waves.
- In Down direction : Declining Wave -> Impulsive Waves & Advancing Waves -> Corrective Waves.

Wave 1,3 & 5 are Impulsive waves

Wave 2 & 4 are corrective waves



**Elliott Wave-Basic 5 Wave Sequence
(When markets are rising)**



Wave 2 & 4 are corrective waves
Wave 1,3 & 5 are Impulsive waves

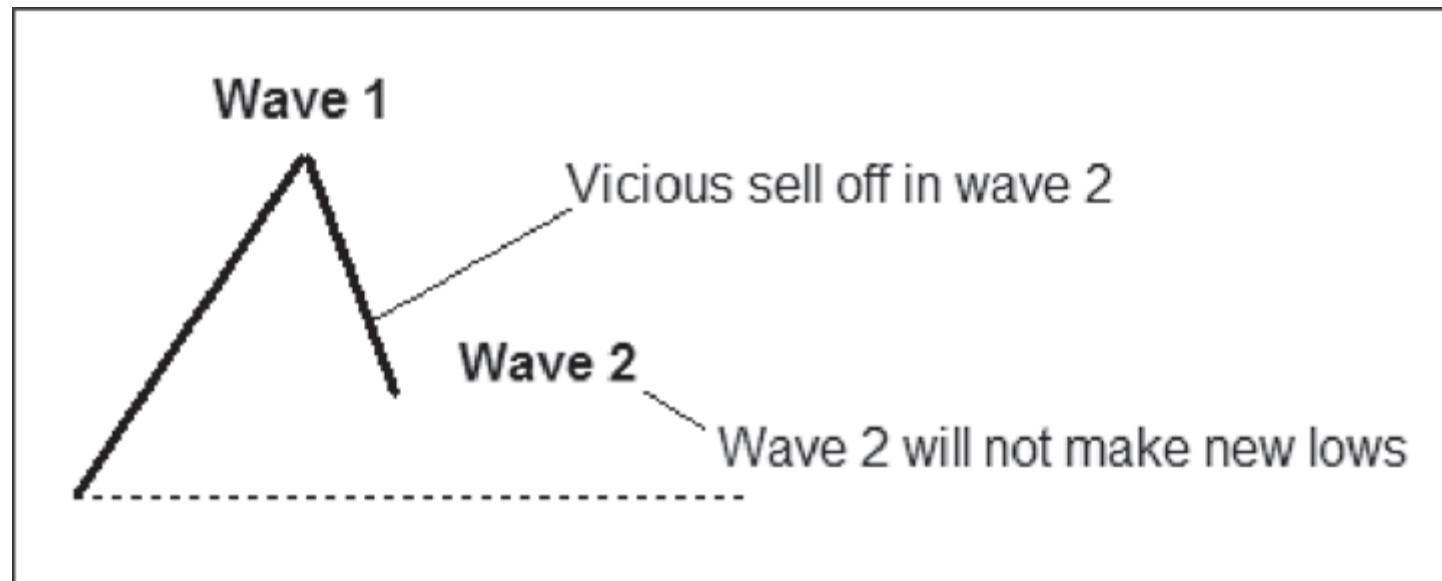
**Elliott Wave-Basic 5 Wave Sequence
(When markets are declining)**

Dominant Trend (Rising)

- **Wave 1:**
- Wave 1 is usually a weak rally with only small number of traders participating in the market.
- This is because fundamental news is still negative and above all previous trend which was declining is still considered strong to be in force.

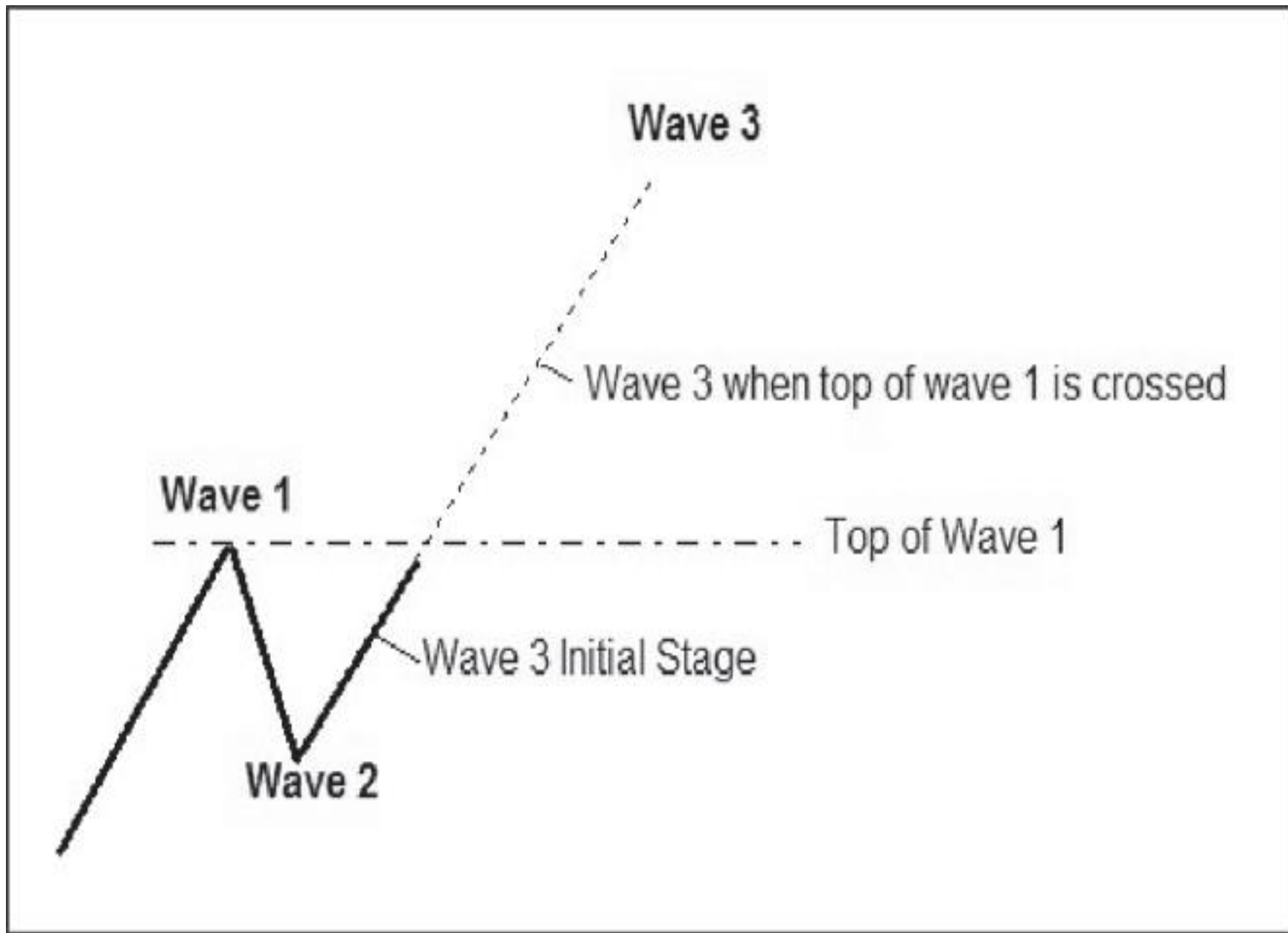
- **Wave 2:**

- Wave 2 is a sell off once wave 1 is over and this sell off is very vicious (sharp).
- But wave 2 never extends beyond the starting point of wave 1.
- Wave 2 finally ends without making new lows and prices turn for another rally.



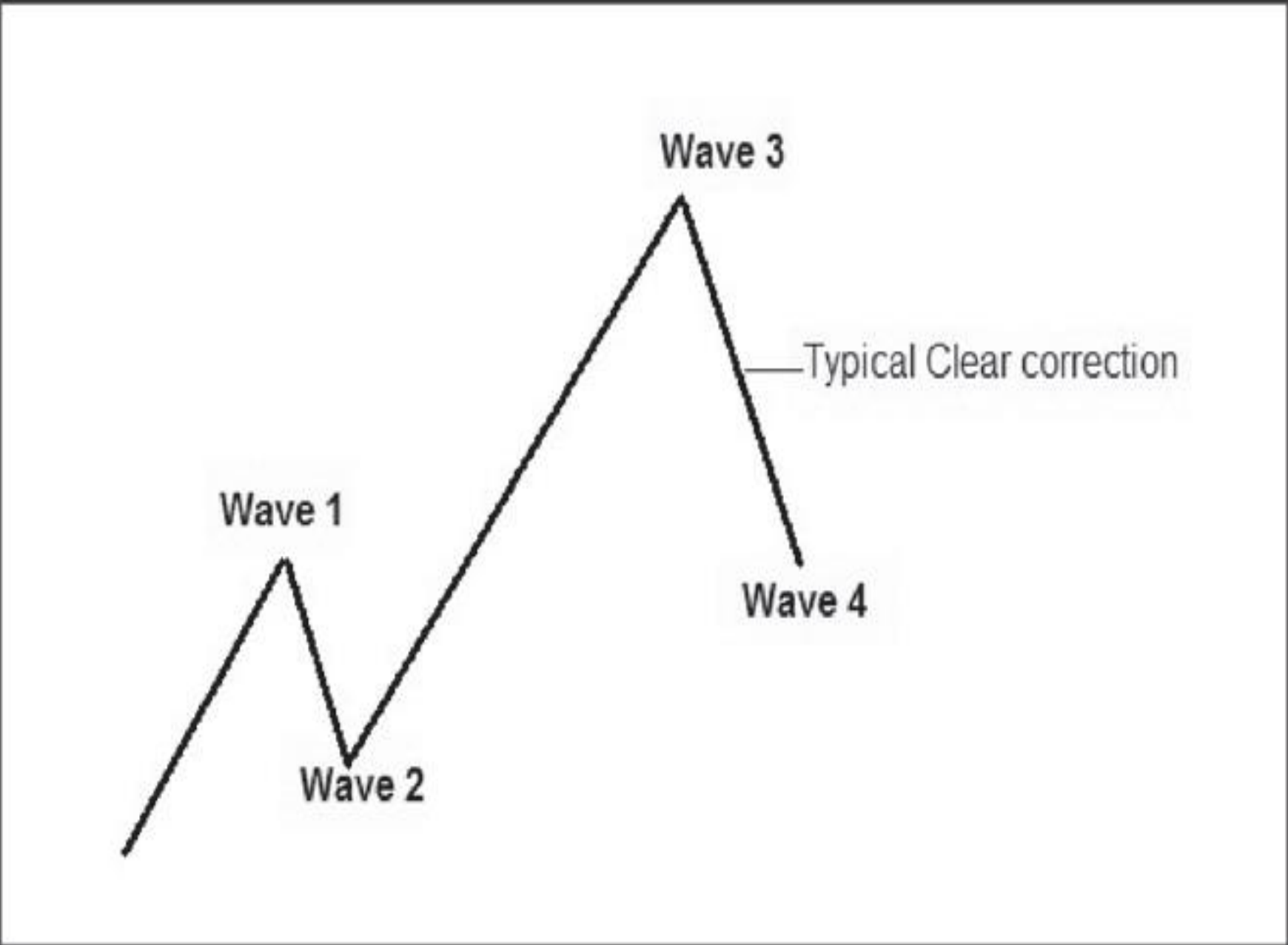
- **Wave 3:**

- The initial stage of the wave 3 is a slow rally as market participants are not convinced about the rally.
- Practically lot of sell side positions are there in the market and these get squared off as and when markets rally and finally sell side positions are closed when top of wave 1 is crossed.
- This is the time when top of wave 1 is crossed market participants are convinced about the rally and there is sudden buy side interest in the market.
- Wave 3 is usually the largest and most powerful wave of dominant trend.



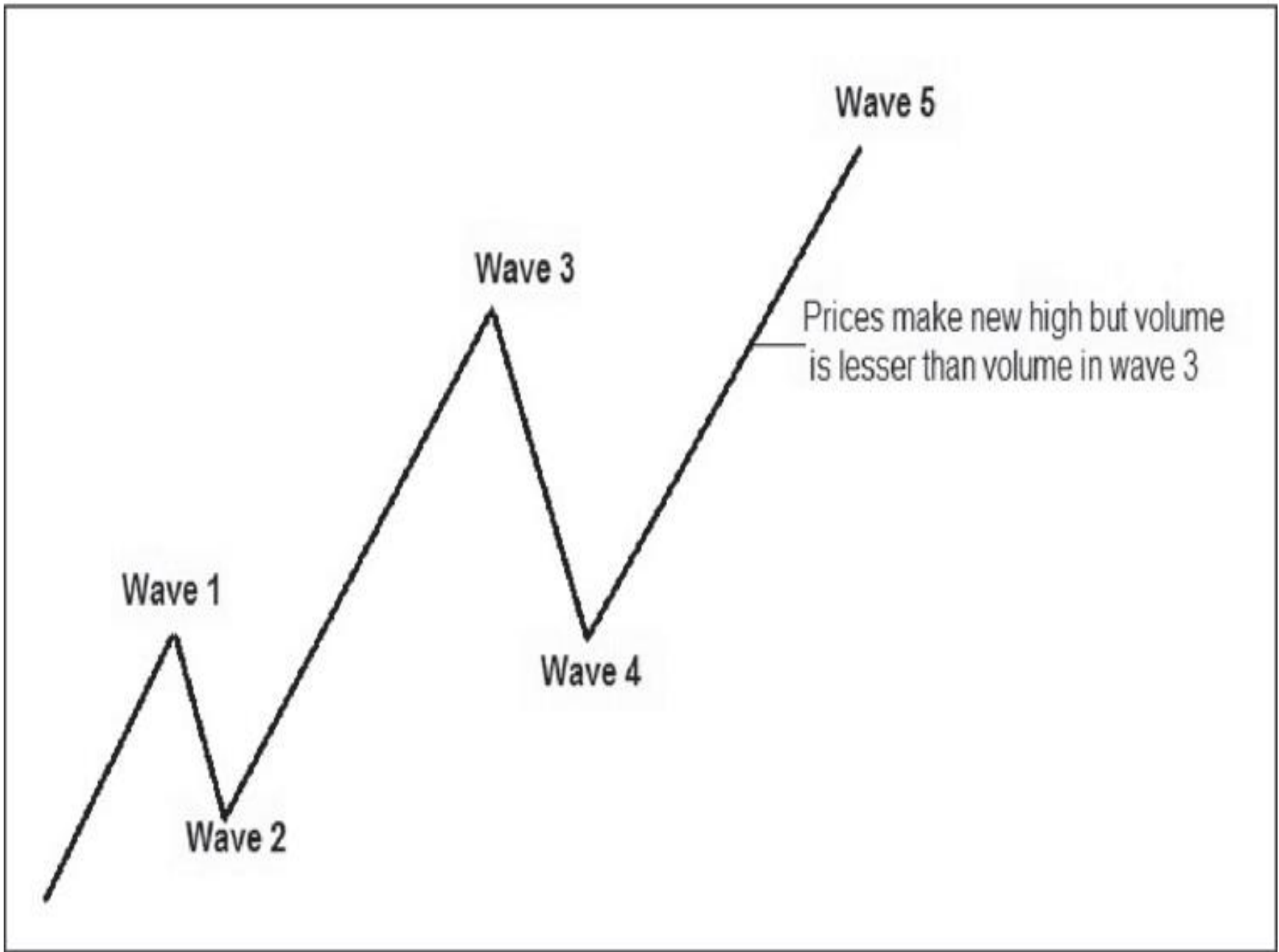
- **Wave 4:**

- Finally wave 3 ends as traders who were long from the lower levels takes profits, hence profit taking starts.
- Basically wave 4 is a clear correction on lesser volume than wave 3.
- While profit taking is on, majority of the market participants are convinced that trend is up.
- There are two schools of thoughts here to trade Wave 4.
- One is to buy on decline if one understands the potential ahead for wave 5.
- The other is to wait for wave 4 to end and buy when market rallies again.



- **Wave 5:**

- Wave 5 is the last wave of dominant trend. Although prices make new high above wave 3 but volumes is usually lesser than volume in wave 3.
- The wave 5 lacks the strength witnessed in wave 3 rallies and finally markets tops out and enter new phase.



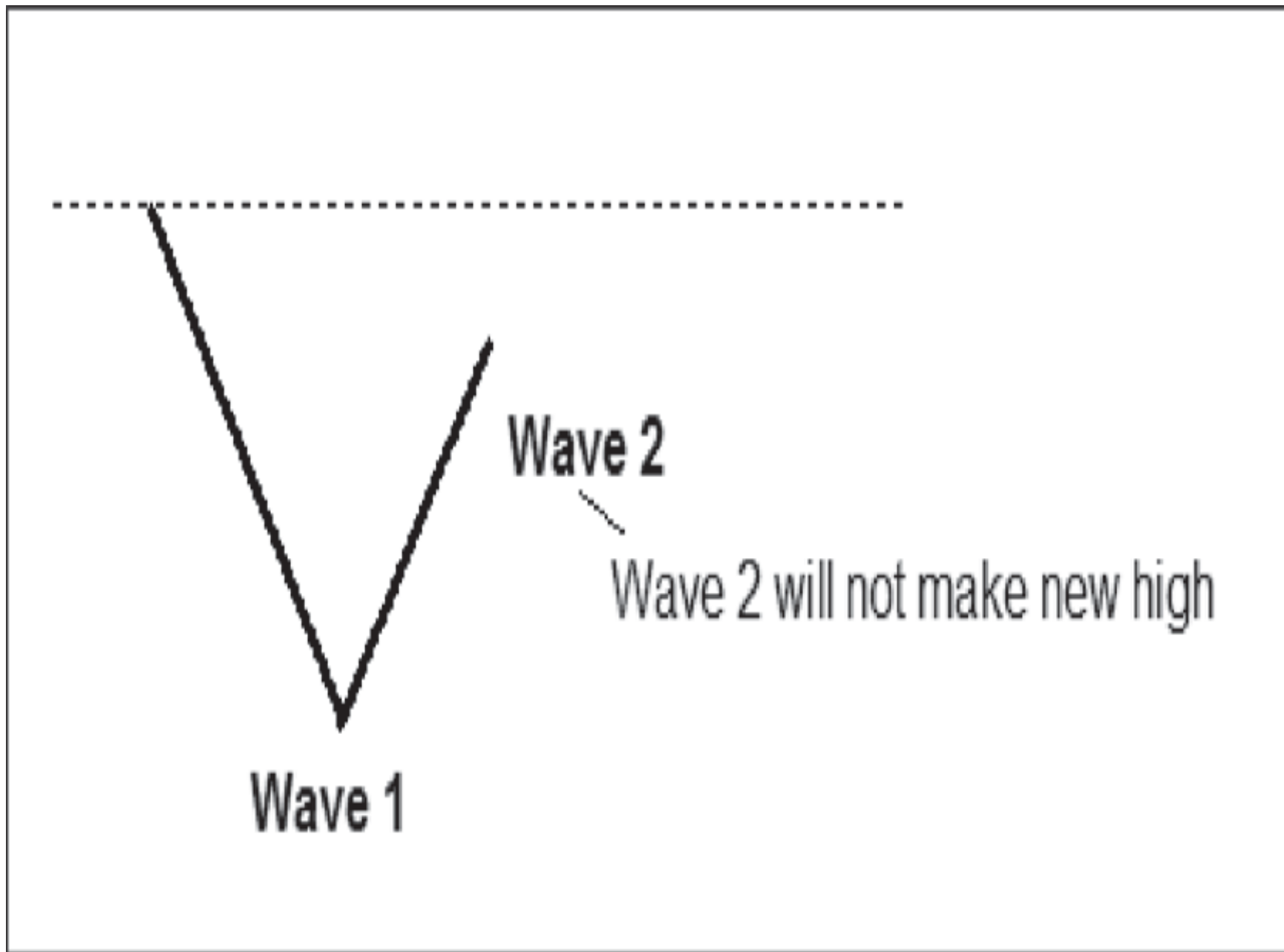
Dominant Wave (Declining)

- **Wave 1:**

- Wave 1 is usually a small correction with only small number of traders participating in the market.
- This is because fundamental news is still positive and above all previous trend which was rising is still considered to be strong in force.

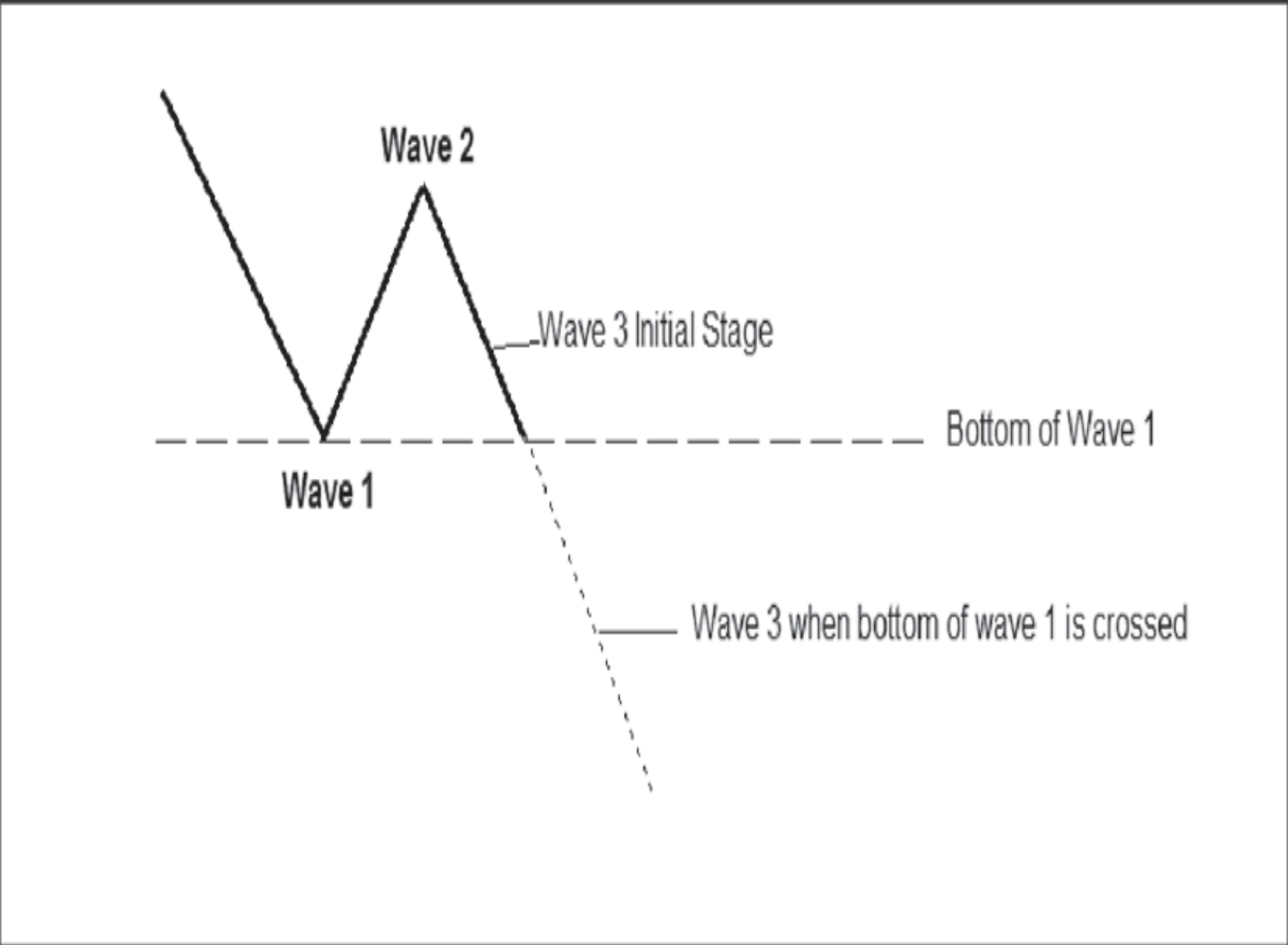
- **Wave 2:**

- Wave 2 is a strong rally once wave 1 is over.
- But wave 2 never extends beyond the starting point of wave 1.
- Wave 2 finally ends without making new highs and prices starts declining again.



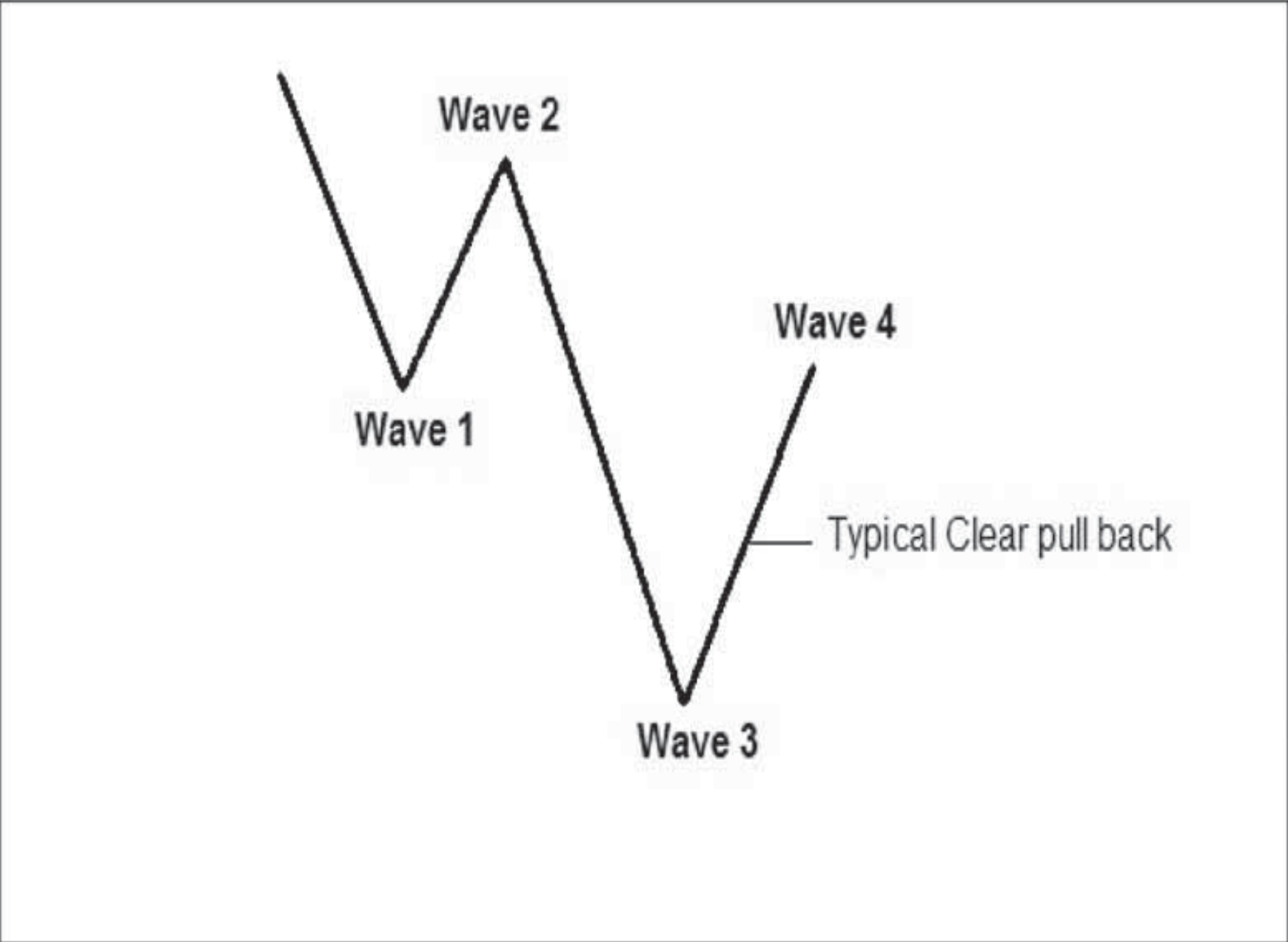
- **Wave 3:**

- The initial stage of the wave 3 is a slow decline as market participants are not convinced about the decline.
- Practically lot of buy side positions are there in the market and these get squared off as and when markets declines and finally buy side positions are closed when bottom of wave 1 is crossed.
- This is the time when bottom of wave 1 is crossed, market participants are convinced about the decline and there is sudden sell side interest in the market.
- Wave 3 is usually the largest and most powerful wave of dominant trend.



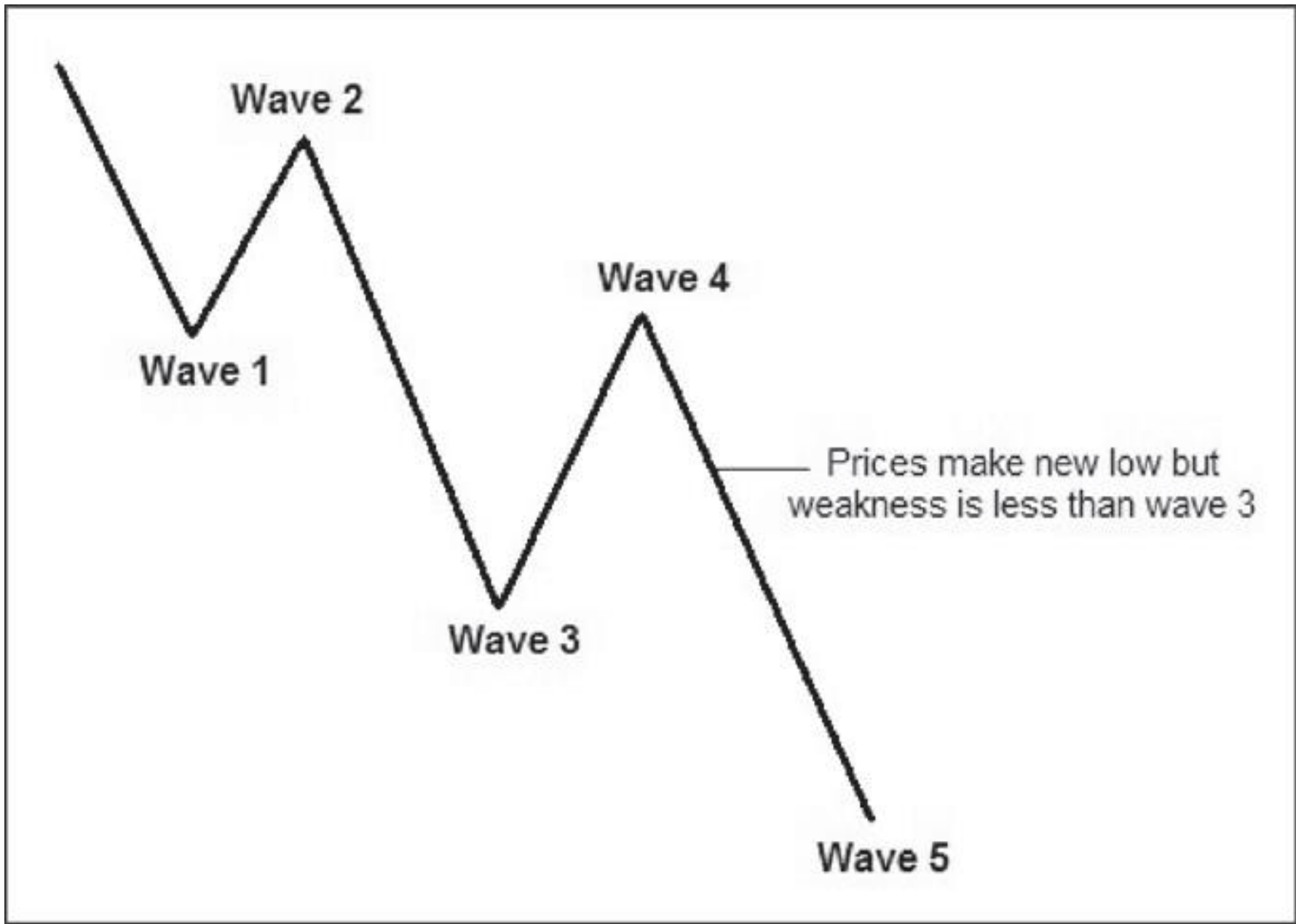
- **Wave 4:**

- Finally wave 3 ends as traders who were short from the higher levels takes profit, hence profit taking starts.
- Basically wave 4 is a clear pull back on lesser volume than wave 3.
- While profit taking is on, majority of the market participants are convinced that trend is down.
- There are two schools of thoughts here to trade Wave 4.
- One is to sell on rally if one understands the potential ahead for wave 5.
- The other is to wait for wave 4 to end and sell when market declines again.



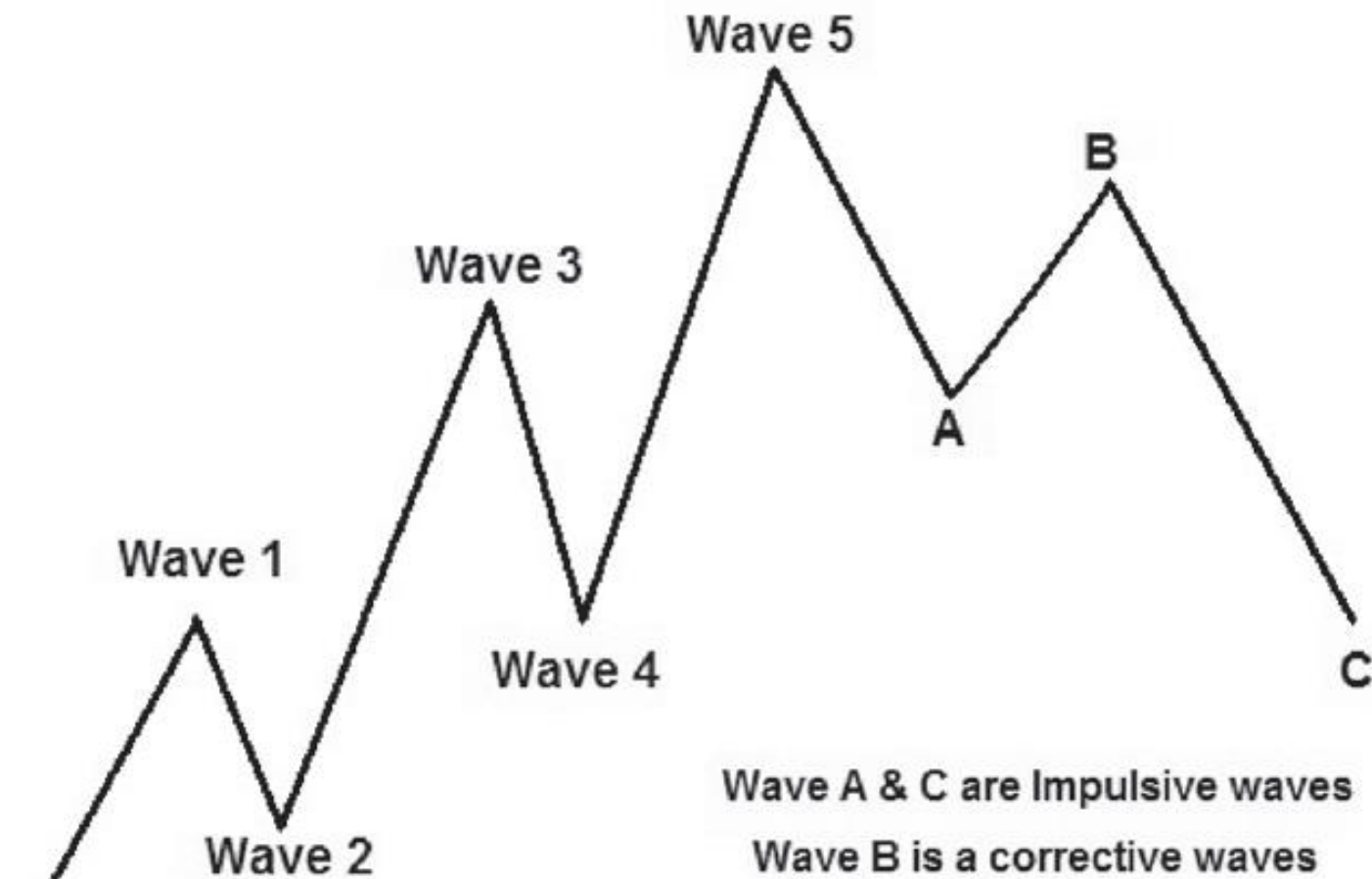
- **Wave 5:**

- Wave 5 is the last wave of dominant trend.
- Although prices make new low below the wave 3 but volumes is usually lesser than volume in wave 3.
- The wave 5 lacks weakness found in wave 3 declines and finally markets bottoms out and enter new phase.



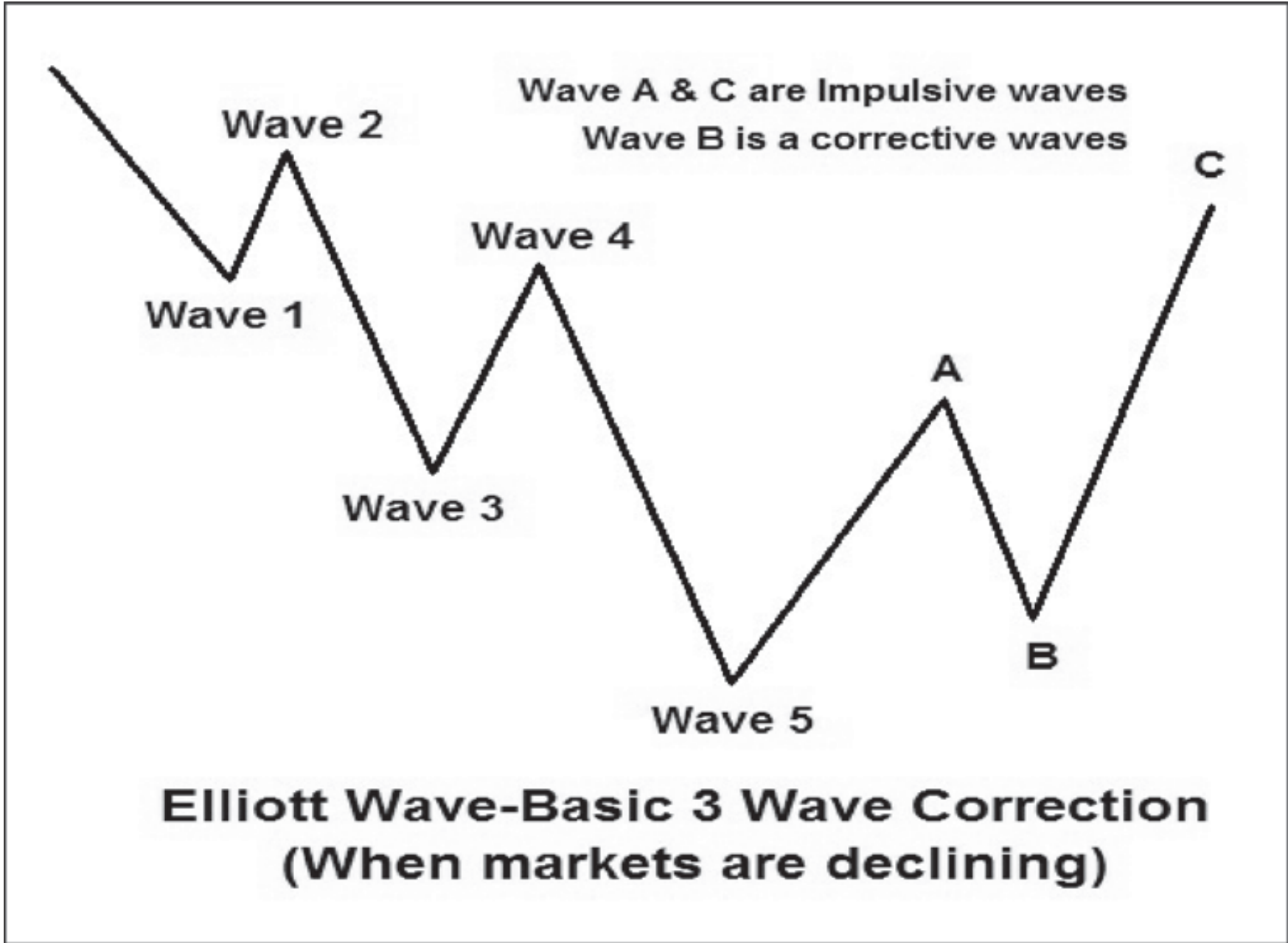
Corrective trend (Three wave pattern)

- Corrective Trend consists of three waves. Basically three wave corrective trend starts when five wave dominant trend ends.
- After market rallies in a basic 5 wave sequence, market top is made and markets enter a new phase i.e. three wave downward corrective phase i.e. A, B and C.



**Elliott Wave-Basic 3 Wave Correction
(When markets are rising)**

- ABC corrective sequence after market rallied in a basic five wave sequence.
- Here entire move is clearly down after Wave 5 is formed.
- Hence Wave A and C are impulse waves and wave B is a corrective wave.
- Similarly After market declines in a basic 5 wave sequence, market bottom is made and markets enter a new phase i.e. three wave upward corrective phase i.e. A, B and C



- ABC corrective sequence after market declined in a basic five wave sequence.
- Here entire move is clearly up after Wave 5 is formed. Hence Wave A and C are impulse waves and wave B is a corrective wave.

Corrective Waves (Market rallies)

- **Wave A:**

- Wave A is the beginning of a new bear market, fundamental news is still positive and nobody is ready to accept the fact that markets can decline.

- **Wave B:**

- Wave B is basically a small rally which gives the feeling that Bull Run has again started but prices fail to make new high and typical volume characteristic here is that Volume in Wave B is lesser than Wave A.

- **Wave C:**

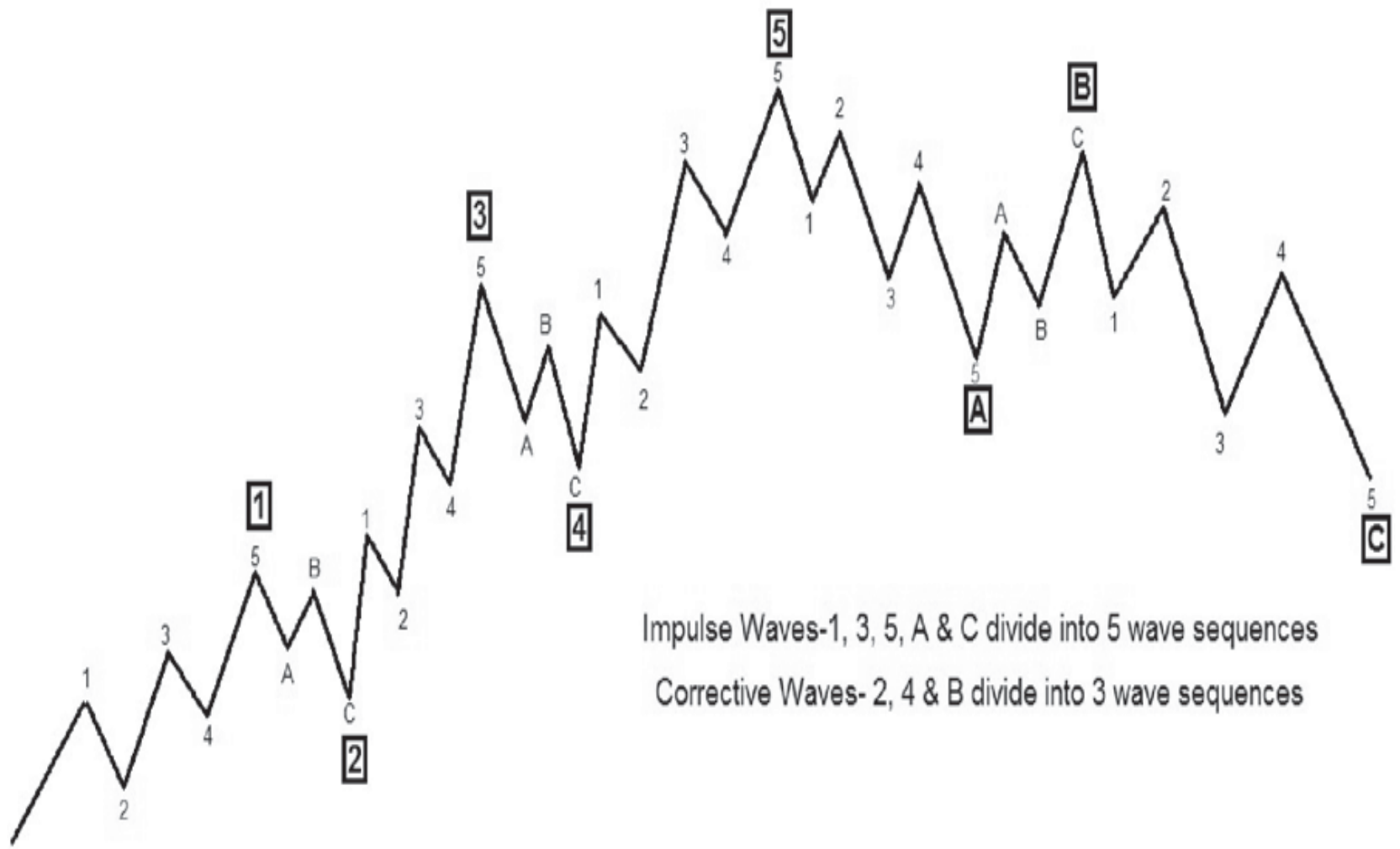
- Here prices again starts declining and volume also pick up and it's in Wave C that everyone realizes that market decline is likely to continue and hence market participation on the sell side increases.

Corrective Waves (Market declines)

- **Wave A:**
- Wave A is the beginning of a new bull market, fundamental news is still negative and nobody is ready to accept the fact that markets could rally.
- **Wave B:**
- Wave B is basically a small decline which gives the feeling that decline has again started but prices fail to make new low and typical volume characteristic here is that Volume in Wave B is lesser than Wave A.
- **Wave C:**
- Here prices again starts rising and volume also pick up and it's in Wave C that everyone realizes that market rally is likely to continue and hence market participation on the buy side increases.

Fractal

- Elliott Wave theory suggests that stock prices move in clear trends which can be defined as five wave dominant trends followed by three wave corrective trend.
- Basically one looks at price chart to define these trends i.e. dominant trend or corrective trend.
- Hence it can be said that these waves move in certain patterns and application of Elliott Wave theory is a form of pattern recognition.



Impulse Waves-1, 3, 5, A & C divide into 5 wave sequences
 Corrective Waves- 2, 4 & B divide into 3 wave sequences

- Elliott Wave theory suggests that irrespective of size of the wave, all impulse waves are subdivided into five smaller waves and all corrective waves are subdivided into three smaller waves.
- Hence Elliot Wave is a fractal (Fractal is typically a self similar patterns appearing at every degree of trend where self similar means they are “the same from near as from far”).

Elliott Wave Rules

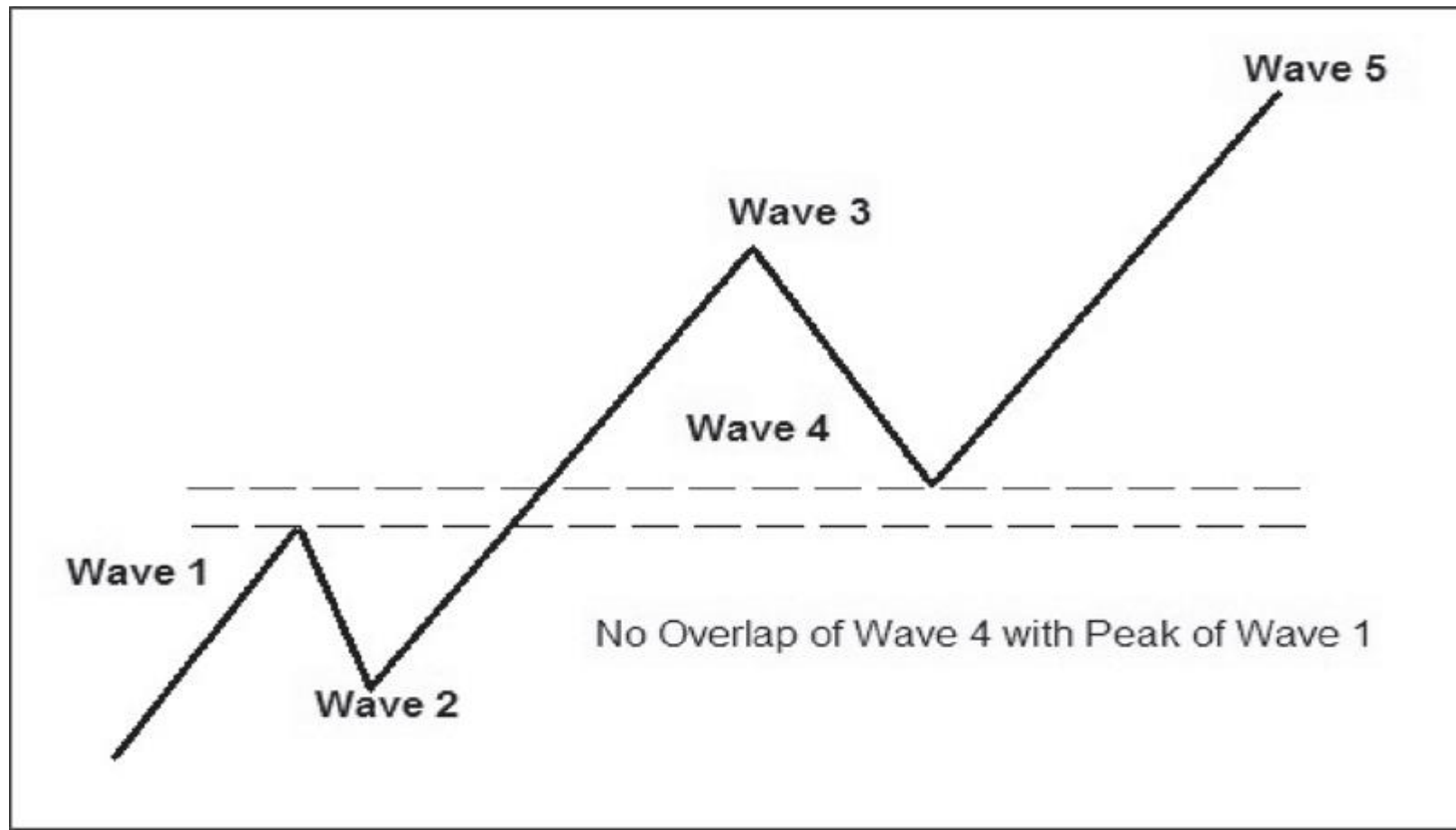
- Elliot Wave Rules-There is basically three indispensable rules i.e. it's necessary that these rules should hold true all of the time.
 - **Rule 1:**
- Wave 2 cannot retrace more than 100% of Wave 1 i.e. in the rising market Wave 2 would not break bottom of Wave 1 and similarly in declining market Wave 2 would not break top of Wave 1.
- If Wave 2 retraces more than 100% of Wave 1 then it means something is wrong with the wave count and there is a crucial need for a wave re-count.

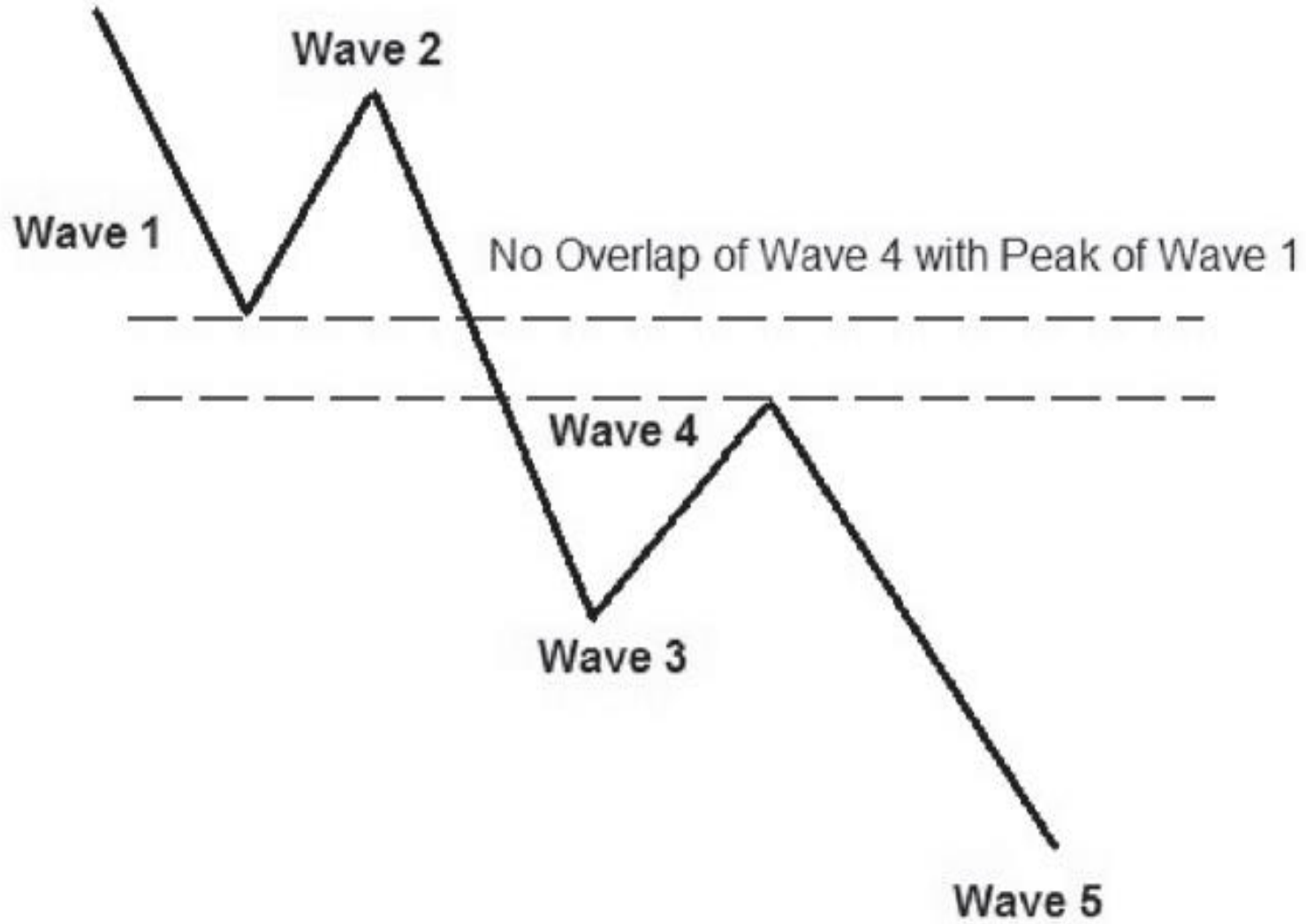
- **Rule 2:**

- Wave 3 is never the shortest- This means that Wave 3 is always longer than other two waves i.e. Wave 1 or Wave 2.
- Practically Wave 3 is longer than other two waves.
- If you find wave 3 shorter than other two waves then it means something is wrong with the wave count and there is a crucial need for a wave re-count.
- Wave 3 may end up being equal in length but never shortest.

- **Rule 3:**

- Wave 4 can never overlap Wave 1 – This means that end of wave 4 should not trade below the peak of wave 1.





Elliott Wave Guidelines

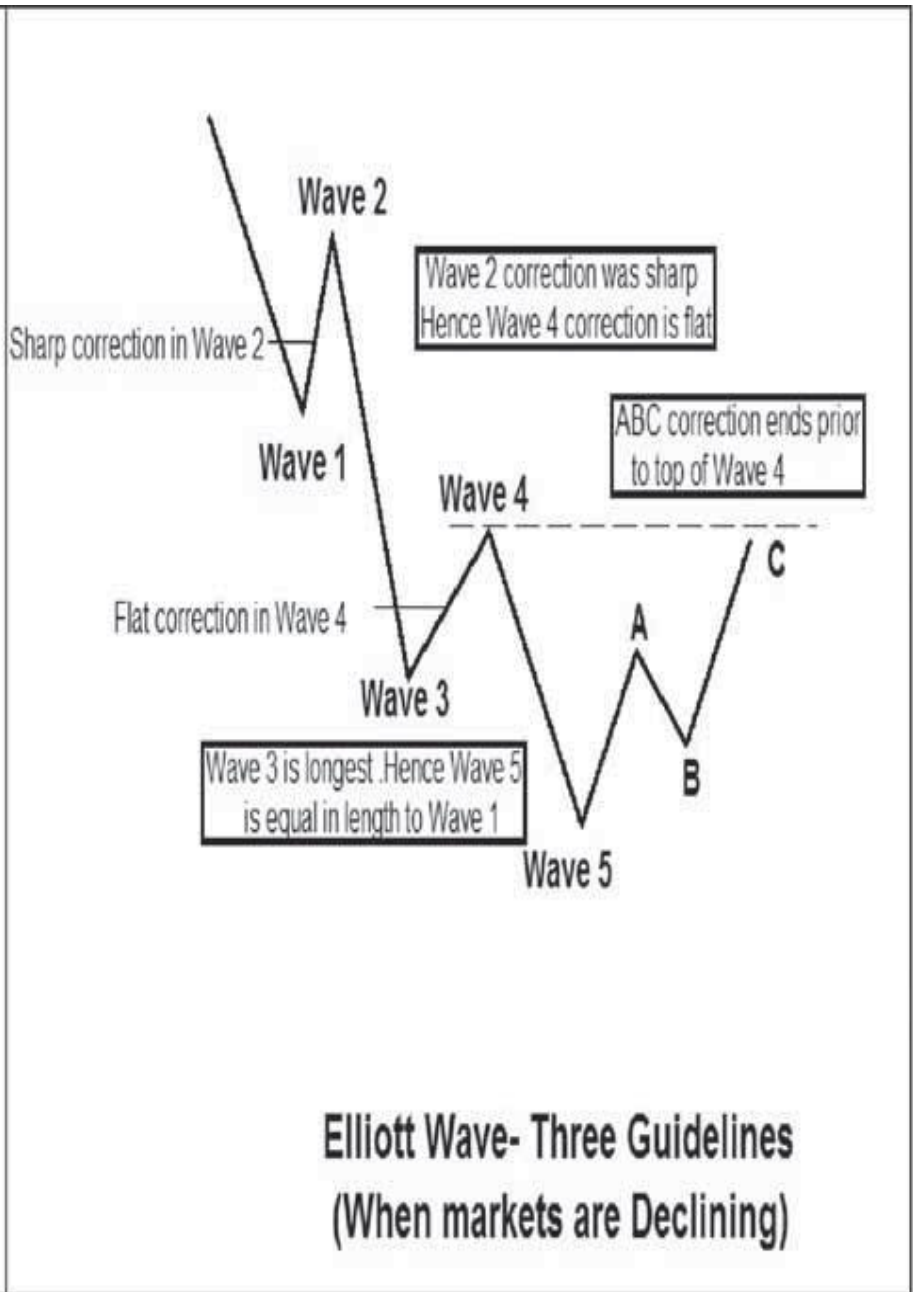
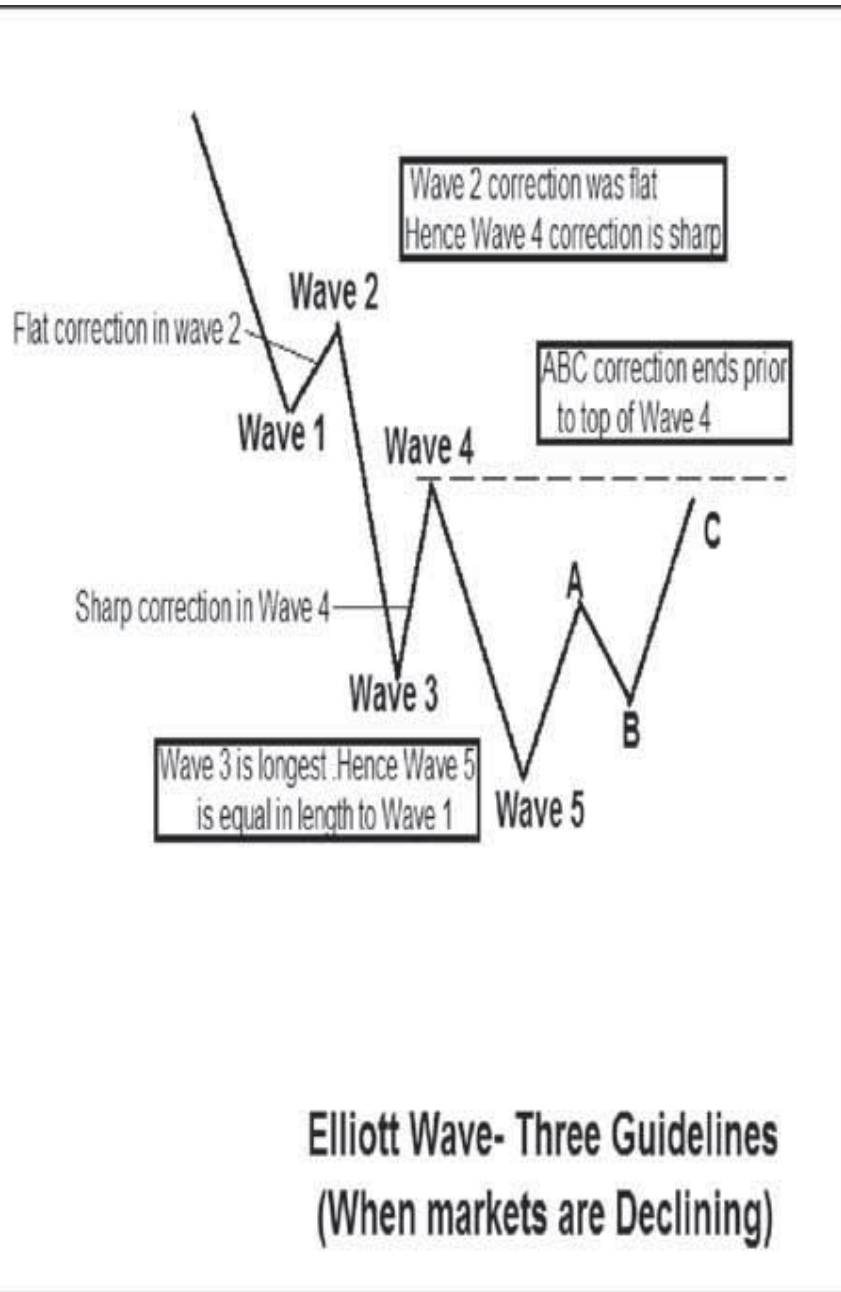
- The difference between rules and guidelines is that it's necessary that rules should hold true all of the time but it's not necessary that guidelines should hold true all of the time, basically guideline hold true most of the time.
 - **Guideline 1:**
- When Wave 3 is longest wave then mostly wave 5 is equal in length to Wave 1.
- This provides target for end of Wave 5. Even though Wave 5 can be longer than Wave 3 and Wave 3 could still be longer than Wave 1 but this helps in providing at least conservative target for end of Wave 5.

- **Guideline 2:**

- The form of Wave 2 and Wave 4 corrections are alternate i.e. if Wave 2 is vicious (sharp) sell off then Wave 4 would be flat correction and if Wave 2 is flat correction then Wave 4 would be vicious (sharp) sell off.

- **Guideline 3:**

- Three Wave corrective pattern (A, B, C) after five wave dominant pattern (1, 2, 3, 4, 5) ends prior to end of Wave 4 of dominant trend.

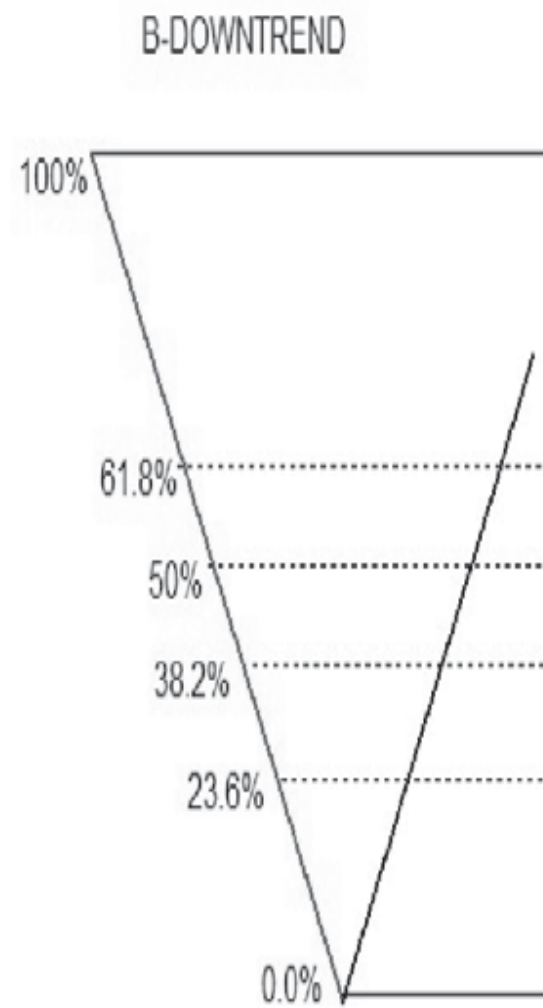
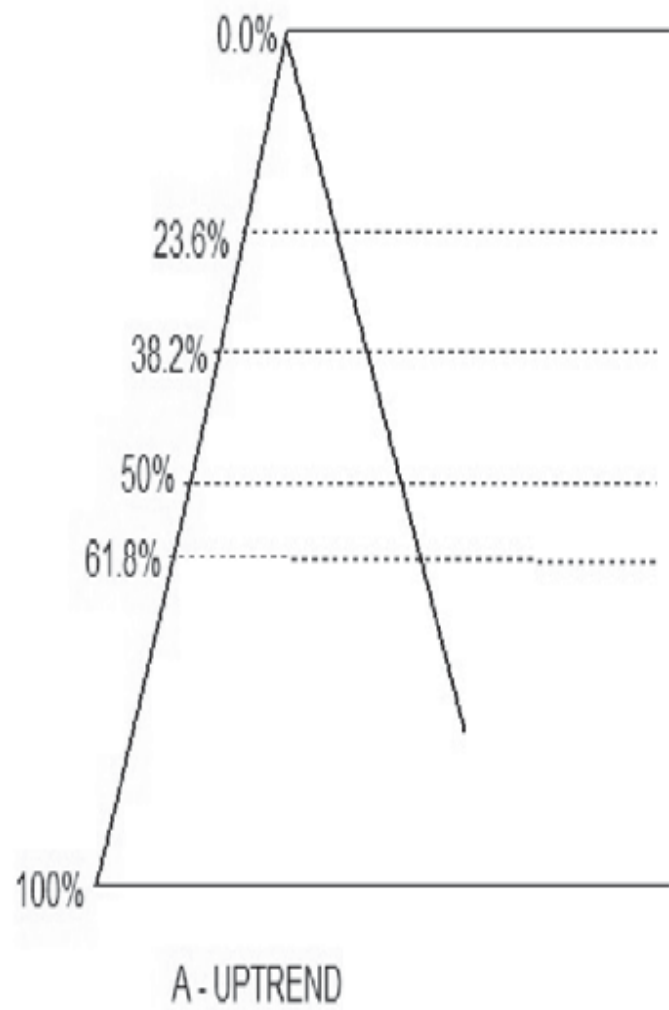


Fibonacci Sequence

- Fibonacci sequence is named after Leonardo Pisano Bogollo (1170-1250), and he lived in Italy.
- The next number is found by adding up the two numbers before it.
- Hence Fibonacci sequence can be defined by a mathematical formula i.e. **$XN = XN-1 + XN-2$**
- Here; XN is term number “N” , $XN-1$ is the previous term (N-1) , $XN-2$ is the term before that (N-2)
- The result are helpful to get percentage form of series.
- Series : 14.6% 23.6% 38.2% 50% 61.8% 78.6% 88.6% 100%.
- Ratio is used to identify the relation between waves.

Fibonacci Retracement

- It's based on the numbers identified in Fibonacci sequence to define area of support and resistance.
- It is created by taking two extreme points (usually a major peak and trough) on a price chart and then dividing the vertical distance by key Fibonacci ratios of 23.6%, 38.2%, 50%, 61.8% and 100%.
- Once these levels are identified, horizontal lines are drawn to indicate areas of support or resistance at the key Fibonacci levels before prices continue to move in the original direction.



Fibonacci Relationship

- It has been observed that the Fibonacci summation series is the basis of Elliot Wave theory as Fibonacci numbers come up repeatedly in Elliot Wave Structure.
- But interesting thing is that after Elliott theory was developed, it was observed that it reflected Fibonacci sequence.

- The first wave in Elliott Theory is Wave 1.
- The length of Wave 1 is used for predicting the length of other waves with the help of Fibonacci retracements and ratios.
- Hence each wave is related to some other wave in terms of Fibonacci ratio or retracement and these relationships are known as Fibonacci relationship.
- These relationships are not rules but guidelines in estimating length of the other waves.

- **Fibonacci relationship for wave 2:**

- Wave 2 is always related to Wave 1.
- Wave 2 = either 50 % retracement of Wave 1 or
- Wave 2 = 61.8 % retracement of Wave 1.

- **Fibonacci relationship for Wave 3:**

- Wave 3 is always related to Wave 1.
- Wave 3 = either 1.618 times the length of Wave 1 or
- Wave 3 = 2.618 times the length of Wave 1 or
- Wave 3 = 4.23 times the length of Wave 1

- **Fibonacci Relationship for Wave 4:**

- Wave 4 is always related to Wave 3.
- Wave 4= either 23.6% retracement of Wave 3 or
- Wave 4= 38.2% retracement of Wave 3 or
- Wave 4= either 50 % retracement of Wave 3
- In any case Wave 4 is not more than 61.8% retracement of Wave3.

- **Fibonacci Relationship for Wave 5:**

- A. Wave 5 is related to Wave 1. If Wave 3 is more than 1.618 times the length of Wave 1 then
 - Wave 5 = either Wave 1 or
 - Wave 5 = 1.618 times the length of Wave 1 or
 - Wave 5 = 2.618 times the length of Wave 1.
- B. Wave 5 is related to entire length from bottom of Wave 1 to the top of Wave 3.
 - If Wave 3 is less than 1.618 times the length of Wave 1 then
 - Wave 5 = either 1.618 times the entire length from bottom of Wave 1 to the top of Wave 3 or
 - Wave 5 = 2.618 times the entire length from bottom of Wave 1 to the top of Wave 3.

- **Fibonacci Relationship for Wave A:**

- Wave A is related to Wave 5.
- Wave A = either 23.6% retracement of Wave 5 or
- Wave A = 38.2% retracement of Wave 5.

- **Fibonacci Relationship for Wave B:**

- Wave B is related to Wave A.
- Wave B = either 50 % retracement of Wave A or
- Wave B = 61.8 % retracement of Wave A.

- **Fibonacci Relationship for Wave C:**

- Wave C is related to Wave A.
- Wave C = either 1.618 times the length of Wave A or
- Wave C = 2.618 times the length of Wave A.

Truncation

- A Truncation occurs when wave 5 fails to terminate beyond the end of wave 3.
- A truncated 5th wave still unfolds as a 5 wave structure.
- It is a sign of exhaustion in the main trend at next higher degree, it often preceded by an exceptionally strong 3rd wave of the same degree.
- A truncated 5th wave is often followed by a swift & sharp reversal.



Diagonal

- There are two types of Diagonals; Leading & Ending Diagonals.
- Ending diagonals are very common.
- Ending Diagonal : Sub waves 1 ,2 , 3, 4 & 5 always take corrective wave form , specially either a single or multiple zigzag.
- Ending diagonal can form only as fifth waves of impulse waves & C waves of zigzags & flats.

- It is bounded by two converging trend lines, which gives the diagonal a wedge shape.
- One trendline connects the termination points of waves 1 & 3, & other connects Wave 2 & 4.
- Wave 5 can end either on or slightly above or below the 1 – 3 trendline.
- If wave 5 moves beyond that trendline, it is called “Throw – Over.”
- A swift & sharp reversal usually brings price at least back to where the diagonal began & usually far further.
- The reversal usually takes anywhere from one third to one half the time that it took the diagonal form.

Ending Diagonal in a Bull Market



Ending Diagonal in a Bear Market



- In Leading Diagonal, wave 1,3 & 5 are all impulsive waves or all corrective waves in the form of zigzags.
- Wave 2 & 4 are always zigzag pattern.
- A leading diagonal can form wave 1 of an impulse wave & the first wave of a zigzag, which we call Wave A.
- After wave 1 leading diagonal terminates, expect wave 2 to retrace a significant portion of wave 1.

Leading
Diagonal
in a
Bull
Market

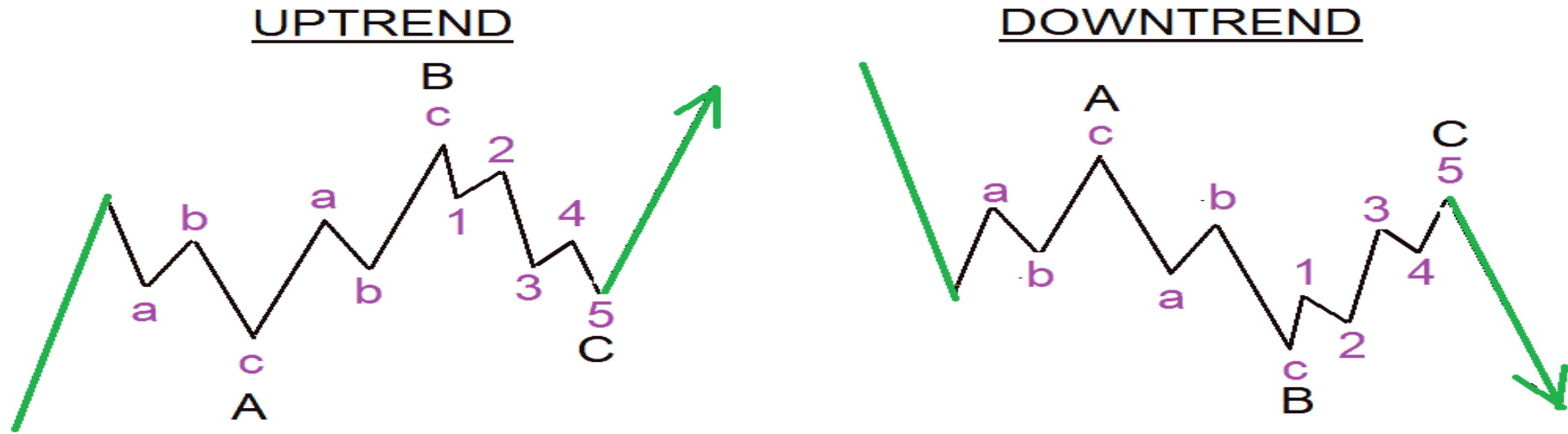


Leading
Diagonal
in a
Bear
Market



Zigzag Correction

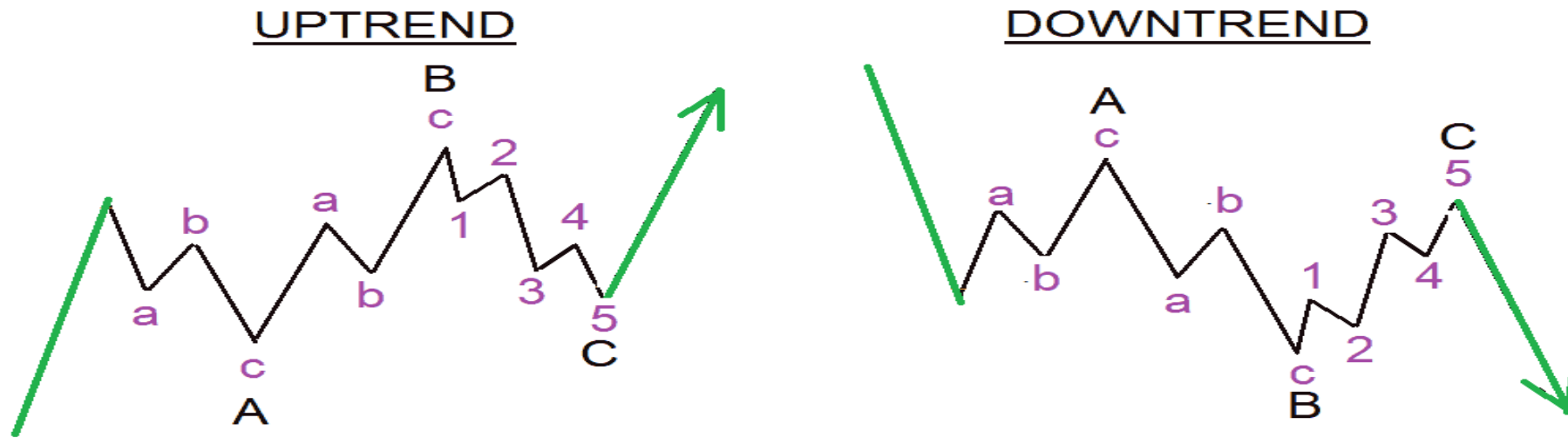
- A zigzag is a sharp, three wave corrective pattern, labelled A-B-C.
- Wave A is always an impulse or leading diagonal, & wave c is always an impulse or ending diagonal.
- Wave B is always a corrective wave, that is zigzag, flat , triangle or combination.
- Zigzag is known as 5-3-5 structure.



- Wave B can never go beyond the start of wave A & Wave C almost always goes beyond the end of wave A.
- If wave C does not go beyond the end of Wave A , it is called as Truncated Wave C.

Flat Correction

- A Flat is a sideways, three wave corrective pattern, A-B-C.
- Waves A & B are corrective waves, & Wave C is always a motive wave.
- It is called as 3-3-5 structure.
- Waves A & B are never triangles & rarely flats.
- Wave B usually traces at least 90 percent of wave A.

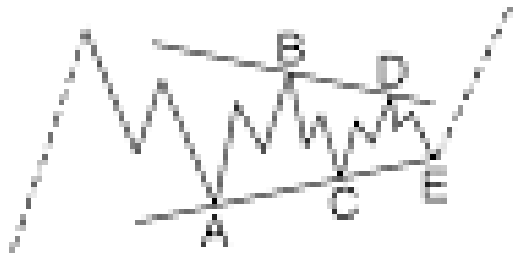
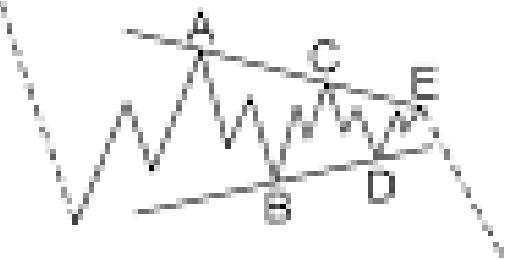


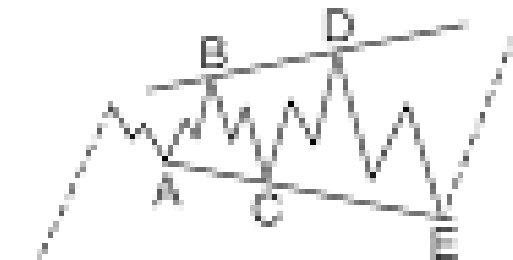



- In regular flat, wave B ends at about the same levels as the beginning of wave A & C ends slightly past the end of wave A.
- Expanded Flats, wave B goes beyond the start of wave A & C end substantially beyond the end of wave A.

Triangles

- A Triangle is a sideways corrective wave with sub waves labelled A-B-C-D-E.
- All the sub waves of a triangle are zigzag to multiple zigzag pattern.
- Triangle is 3-3-3-3-3 structure.
- One of these sub waves take the form of another triangle, & that sub wave is usually wave E.
- Wave C , D & E can be complex.

Variations of Elliott Wave Triangles

Bull Market	Bear Market
<p data-bbox="789 221 1732 264">CONTRACTING (upper line declining, lower line rising)</p>  <p>The diagram shows a zigzag line representing price movement within a triangle. The upper boundary line slopes downwards from left to right, while the lower boundary line slopes upwards. The vertices are labeled A, B, C, D, and E. The price starts at A, moves up to B, down to C, up to D, and finally down to E.</p>	 <p>The diagram shows a zigzag line representing price movement within a triangle. The upper boundary line slopes downwards from left to right, while the lower boundary line slopes upwards. The vertices are labeled A, B, C, D, and E. The price starts at A, moves down to B, up to C, down to D, and finally up to E.</p>
<p data-bbox="751 592 1770 635">BARRIER (outer line flat, inner line sloping with larger trend)</p>  <p>The diagram shows a zigzag line representing price movement within a triangle. The upper boundary line is horizontal, while the lower boundary line slopes upwards. The vertices are labeled A, B, C, D, and E. The price starts at A, moves up to B, down to C, up to D, and finally down to E.</p>	 <p>The diagram shows a zigzag line representing price movement within a triangle. The upper boundary line slopes downwards from left to right, while the lower boundary line is horizontal. The vertices are labeled A, B, C, D, and E. The price starts at A, moves down to B, up to C, down to D, and finally up to E.</p>
<p data-bbox="815 978 1707 1021">EXPANDING (upper line rising, lower line declining)</p>  <p>The diagram shows a zigzag line representing price movement within a triangle. The upper boundary line slopes upwards from left to right, while the lower boundary line slopes downwards. The vertices are labeled A, B, C, D, and E. The price starts at A, moves up to B, down to C, up to D, and finally down to E.</p>	 <p>The diagram shows a zigzag line representing price movement within a triangle. The upper boundary line slopes upwards from left to right, while the lower boundary line slopes downwards. The vertices are labeled A, B, C, D, and E. The price starts at A, moves down to B, up to C, down to D, and finally up to E.</p>