# The Basics of the Wave Principle

The e-learning Series for Traders

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### The Basics of the Wave Principle

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1.00
       Introduction — Ralph Nelson Elliott's Discovery
       Motive Waves
2.00
       Corrective Waves
3.00
4.00
       Rules
       Guidelines
5.00
6.00
       Wave Personalities
       Fibonacci Relationships
7.00
8.00
       Summary
```

#### **Financial Market Behavior Characteristics**

**Emotional (Unconscious)** 

**Subjective** 

**Impulsive** 

**Ignorance and Uncertainty** 

Herding

**Values Cannot Revert To Anything** 

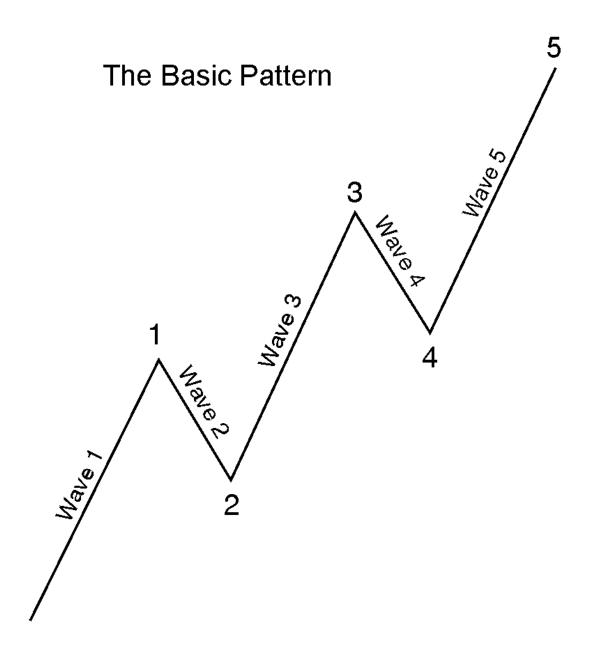
### **The Wave Principle**

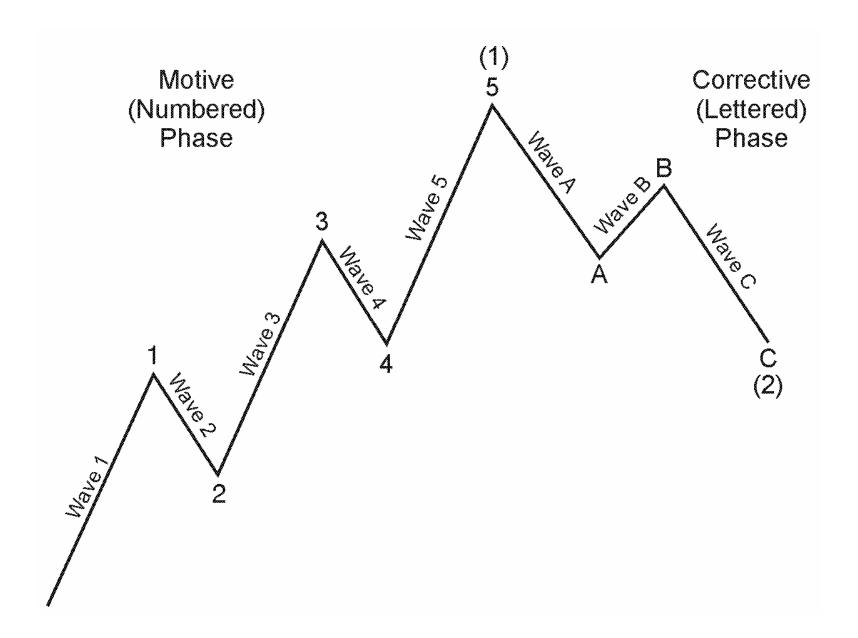
**Financial Markets are Patterned** 

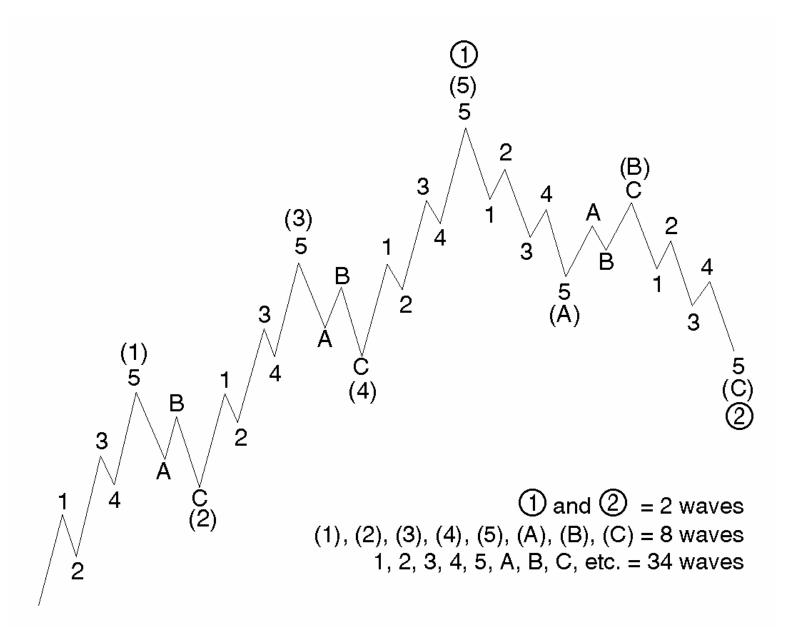


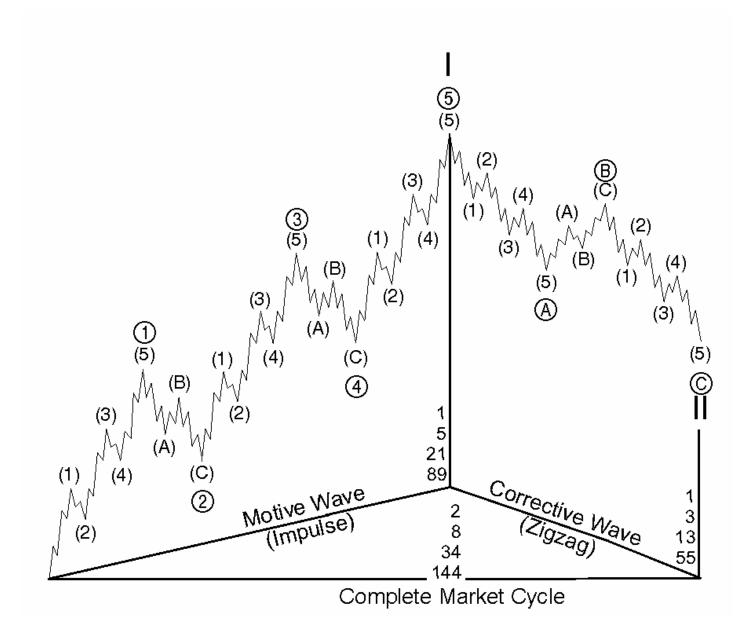
Ralph Nelson Elliott (1871 – 1948)

- Crowd behavior trends and reverses in recognizable patterns, that he called waves.
- These structures link together to form larger versions of the same patterns and how those, in turn, become the building blocks for patterns of the next larger size and so on.
- In 1938, he coined this phenomenon The Wave Principle.
- Nature's Law The Secret of the Universe



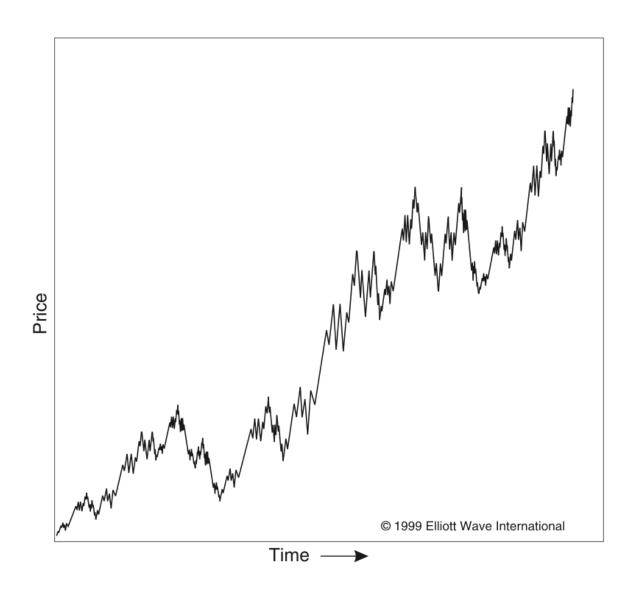


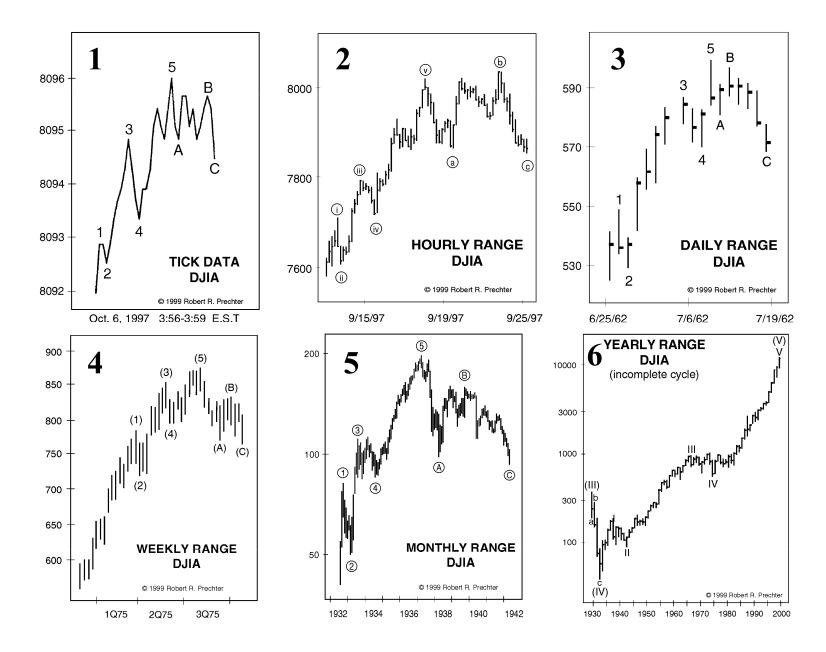


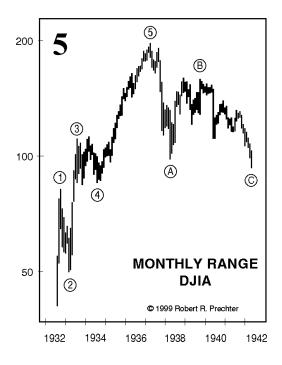


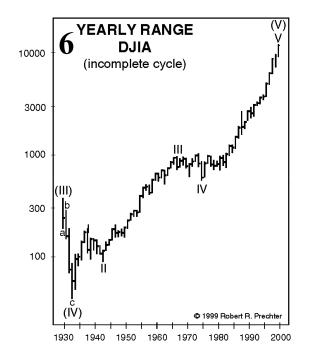
Wave Degree	5's With the Trend				3's Against the Trend	
<ul><li>1 Supermillennium</li><li>2 Millennium</li><li>3 Submillennium</li></ul>	① (1) 1	② (2) 2	③ (3) 3	(4) (4) 4	(5) (5) 5	(A) (B) (C) (A) B C
4 Grand Supercycle 5 Supercycle 6 Cycle	(I) I	(II) II	(III) III	(IV) (IV)	(V) (V)	(a) (b) (c) (a) b c
<ul><li>6 Cycle</li><li>7 Primary</li><li>8 Intermediate</li><li>9 Minor</li></ul>	① (1) (1) 1	(2) (2) 2	(3) (3) 3	(4) (4) 4	(5) (5) 5	a b c  (A) (B) (C)  (A) B C
10 Minute 11 Minuette 12 Subminuette	(i) (i) i	ii) (ii) ii	(iii) (iii) iii	iv (iv) iv	(v) (v) v	(a) (b) (c) a b c
13 Micro 14 Submicro 15 Miniscule	① (1) 1	② (2) 2	③ (3) 3	(4) (4) 4	(5) (5) 5	(A) (B) (C) (A) B C

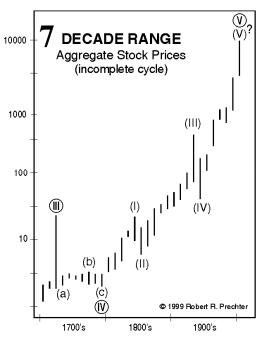
### **A More Realistic Wave Depiction**











#### The Wave Principle

Mankind's progress (popularly measured by stock market valuation) is not a straight line, random or cyclical.

Growth and thereby social systems are moving in a pattern consisting of five waves up and three waves down.

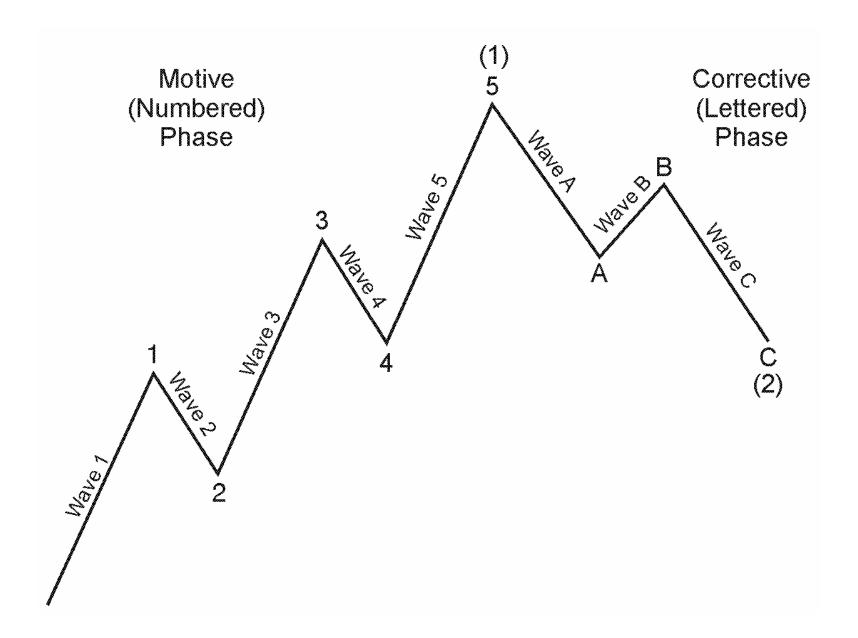
This pattern reflects the alternation of growth and non-growth or decline.

### **The Wave Principle**

**Predict Market Direction** 

**Identify turning Points** 

**Provide Guidance for Entering and Exiting Positions** 



#### **MOTIVE WAVES**

#### **Key Characteristics**

- Five-wave structures, numbered 1-5
- In the direction of the main trend of one larger degree
- Wave 2 cannot retrace more than 100% of wave 1
- Wave 3 can never be the shortest and is often the longest

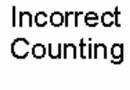
## **MOTIVE WAVES**Five-Wave Structures

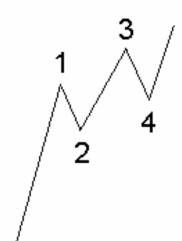
- Impulse
  - 1. Extensions
  - 2. Truncations

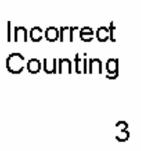
Diagonal Triangles

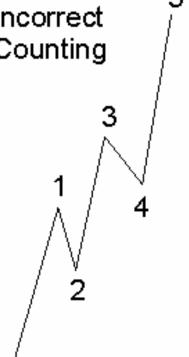
## **IMPULSE WAVES Key Characteristics**

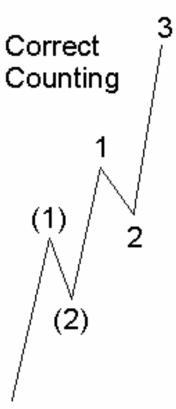
- Wave 4 never enters the price territory of wave 1.
- Actionary waves 1, 3 and 5 are motive waves.
- Wave 3 is always an impulse wave.



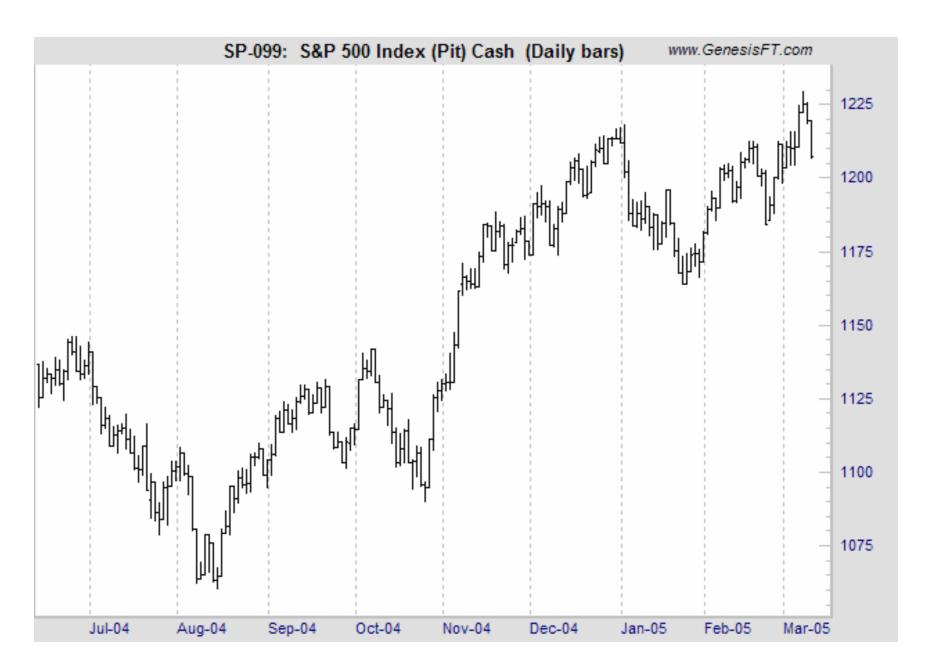


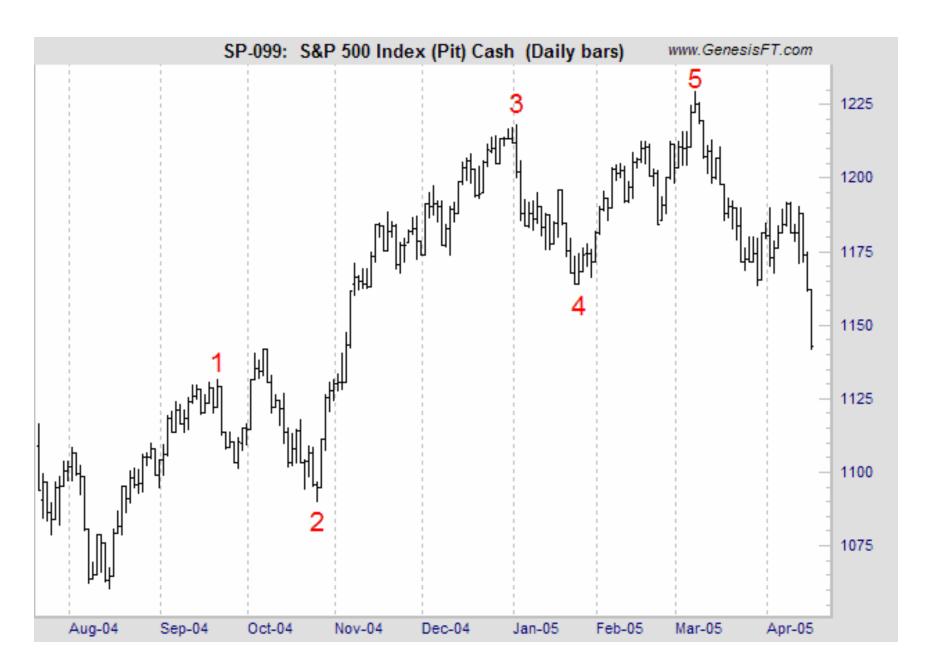


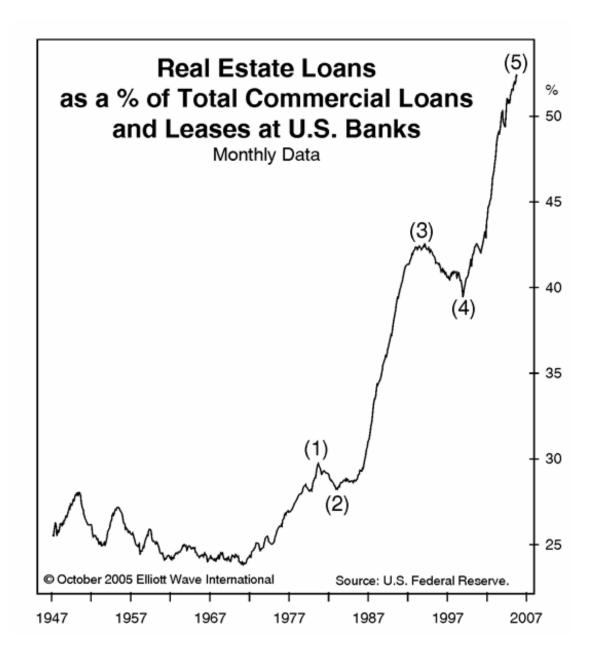


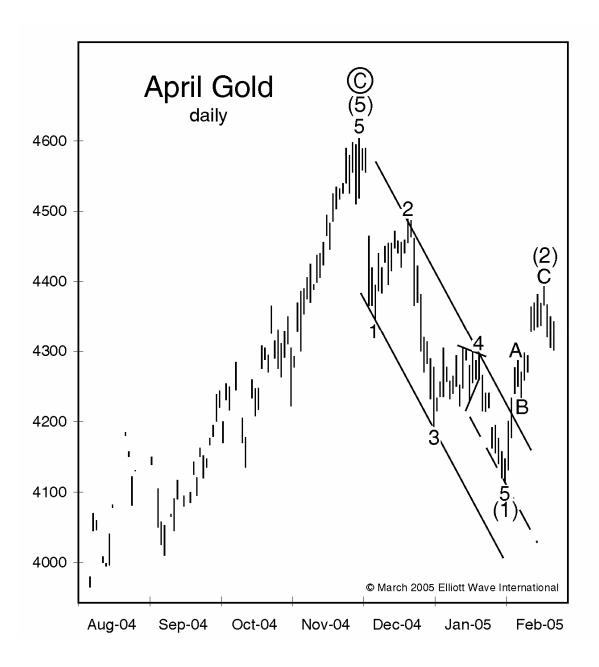


© 1978-1998 Elliott Wave Principle



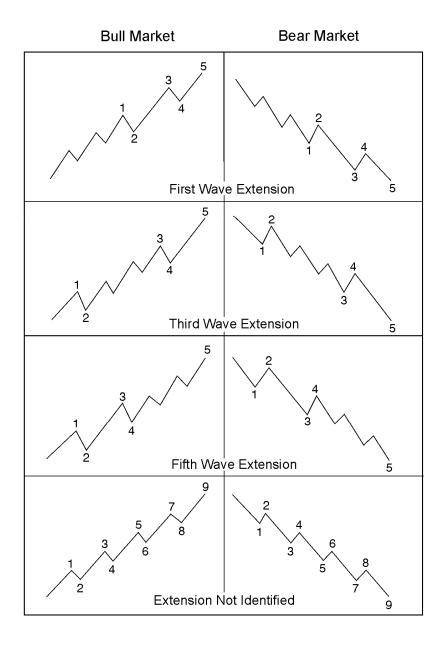


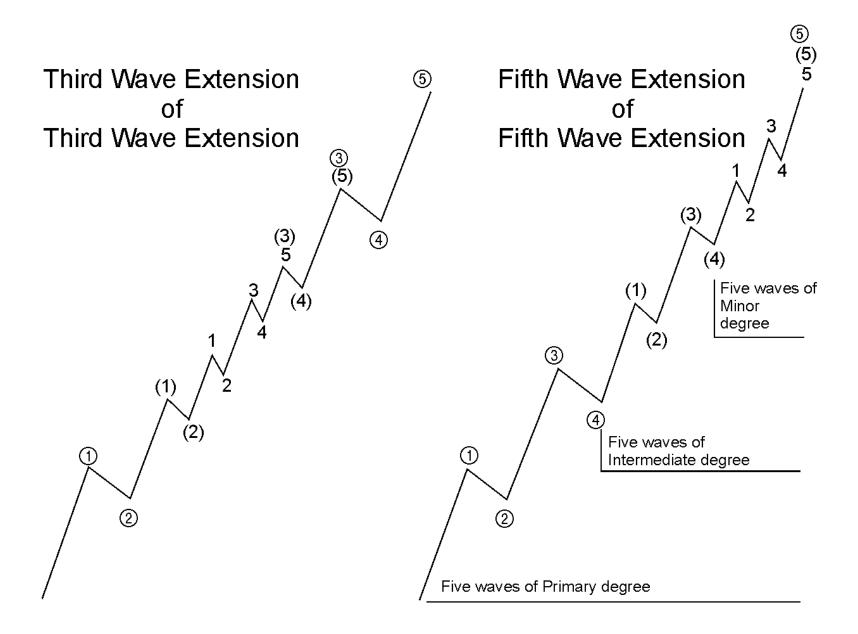


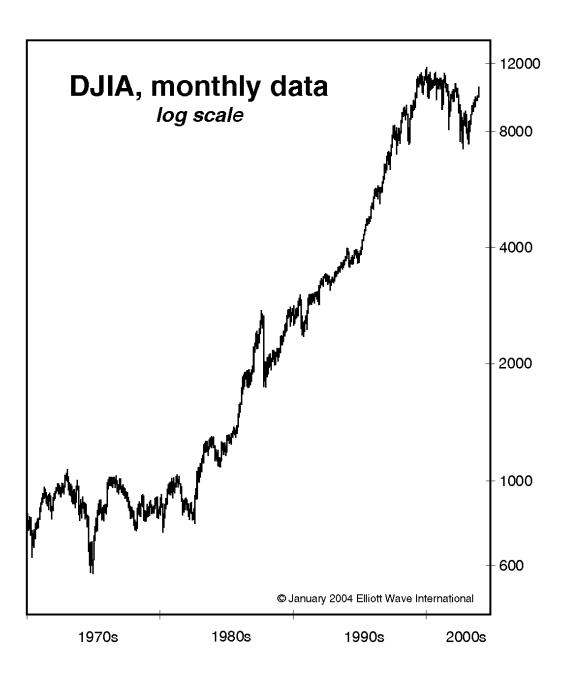


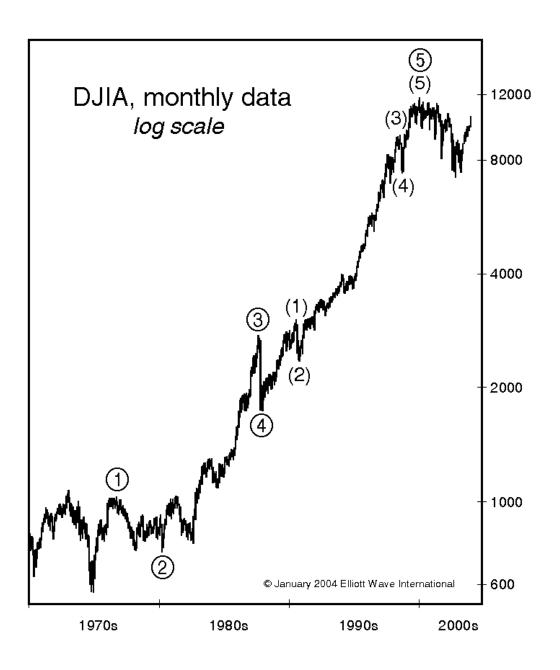
## **EXTENSIONS**Key Characteristics

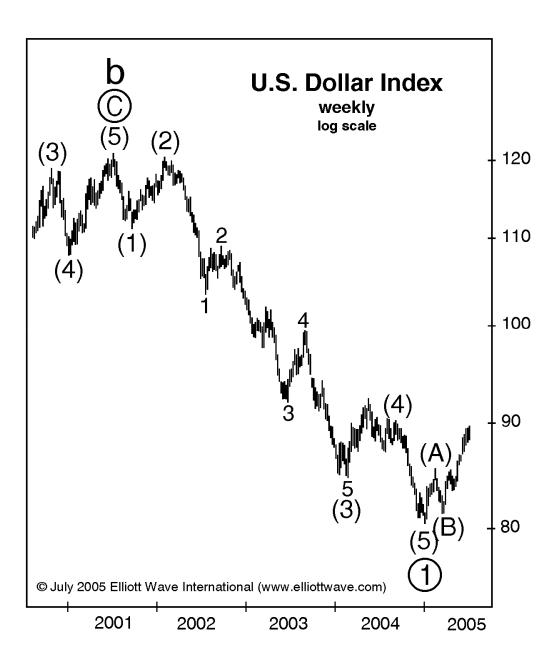
- Elongated impulse wave
- Appears in either wave 1, 3 or 5
- Often seen in wave 3 for the stock market
- Often seen in wave 5 in commodities





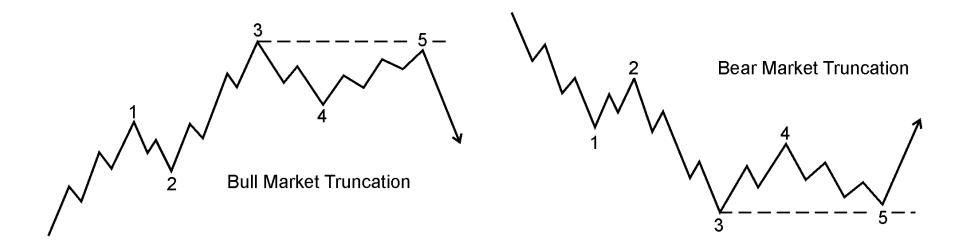






## TRUNCATIONS Key Characteristics

- Wave 5 does not exceed the end of wave 3
- Contains necessary five subwaves
- Often occurs after a strong third wave





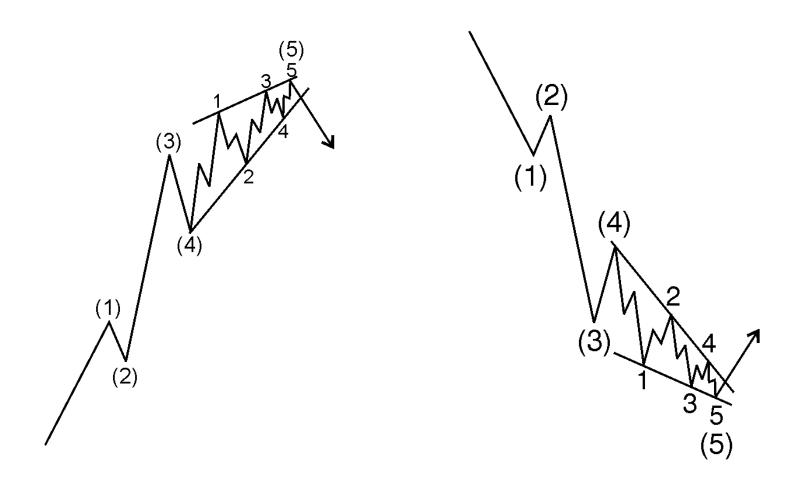


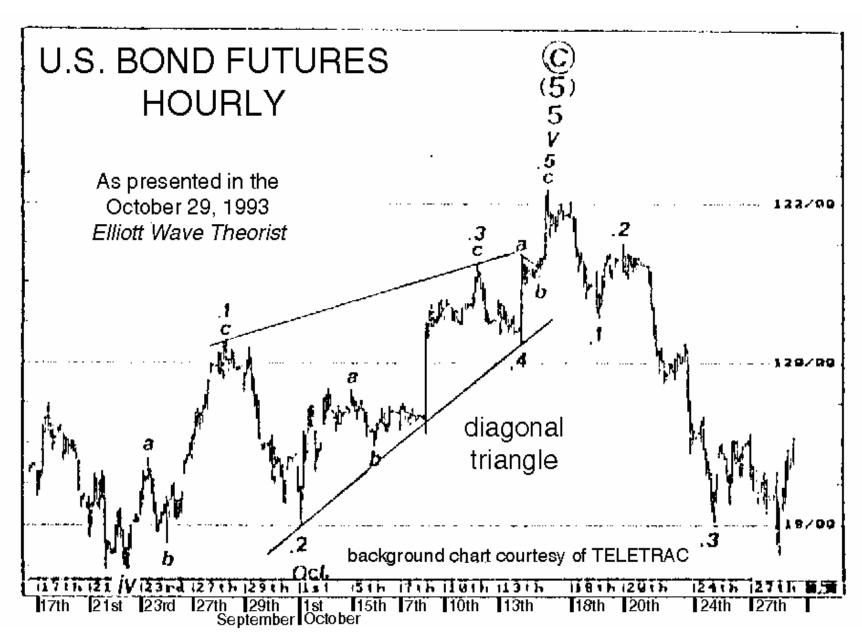
2.18

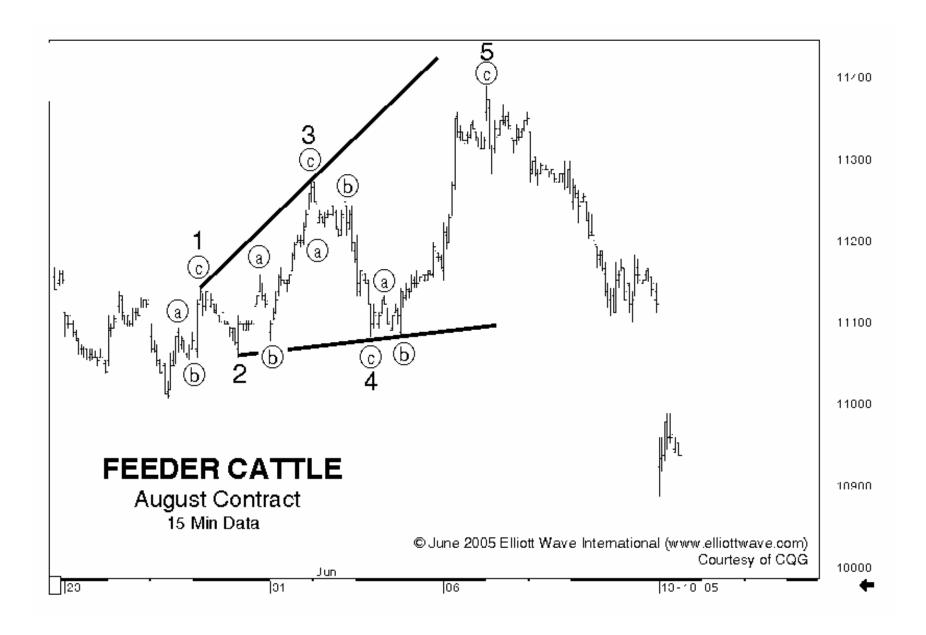
## DIAGONAL TRIANGLES Key Characteristics

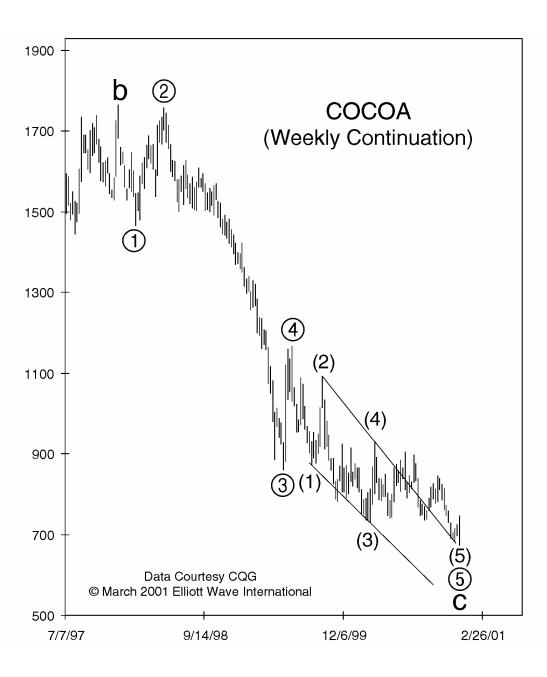
- Wave 4 almost always moves into the price territory of wave 1
- Waves 1, 3 and 5 are composed of three subwaves, not five
- Found at termination points of larger pattern, indicating exhaustion of larger pattern
- Normally has wedge shape within two converging lines

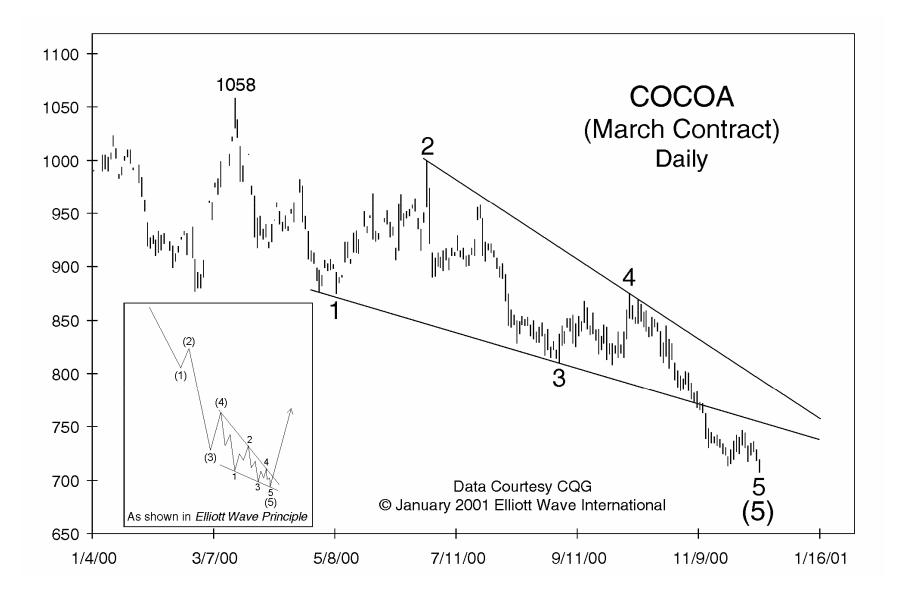
### **Diagonal Triangles**

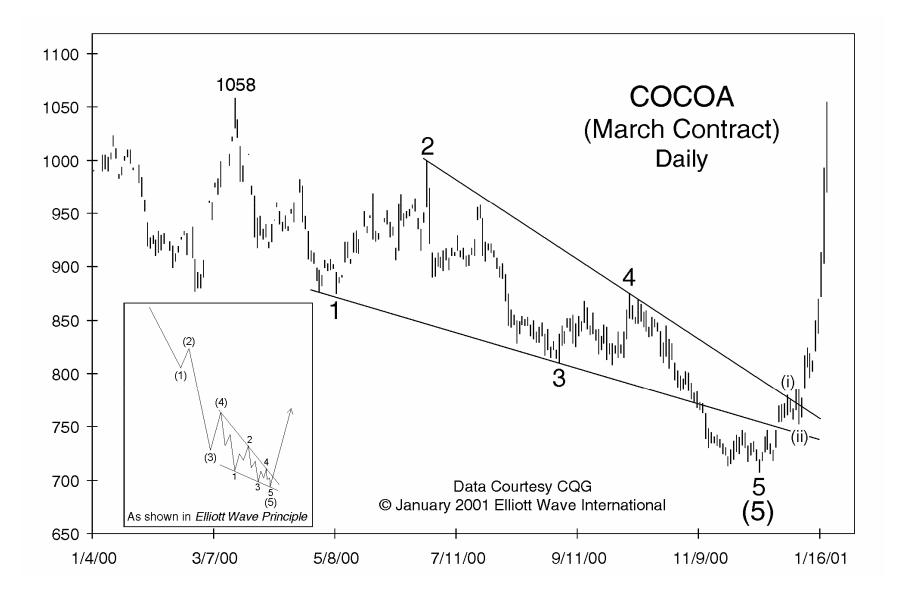


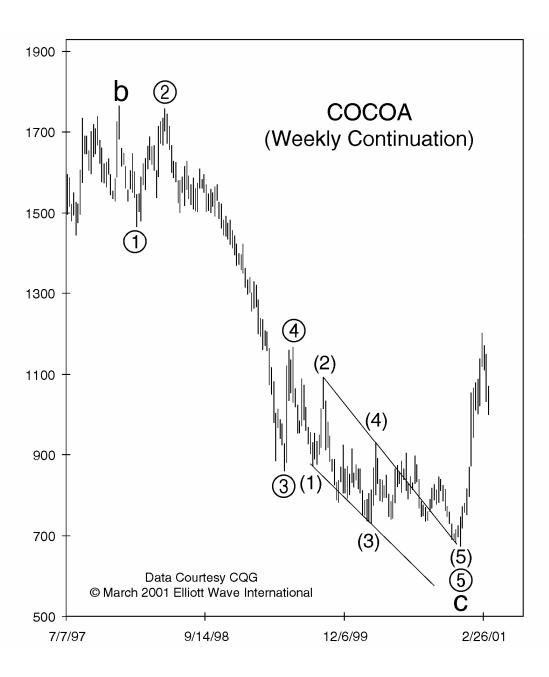












#### **SUMMARY**

The Wave Principle = Graphic of Mass Psychology

**Motive Waves = 5 Wave Structures, Main Trend of One Larger Degree** 

Types of Motive Waves = Impulse, Diagonal Triangle

Impulse: Waves 1, 3, 5 = 5 Impulse Subwaves

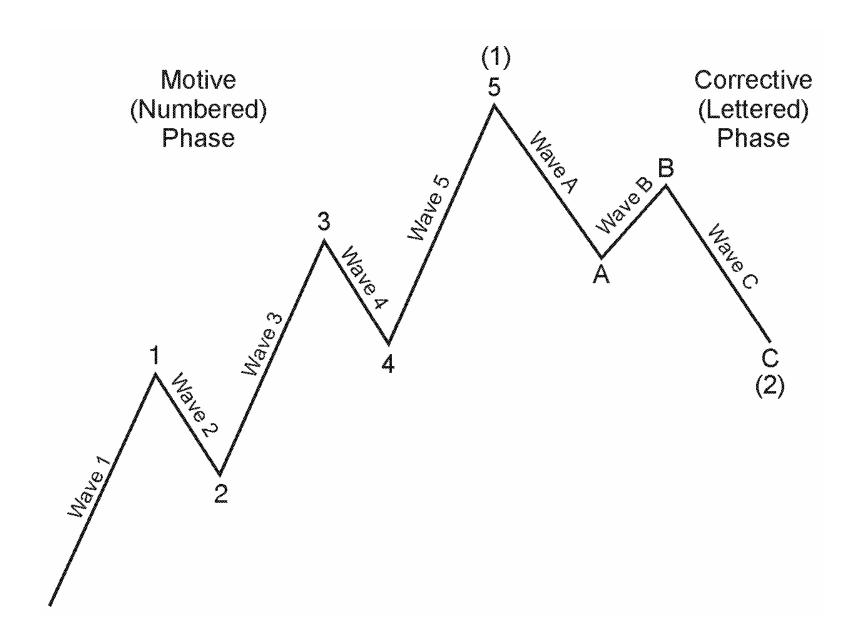
(Extensions, Truncations)

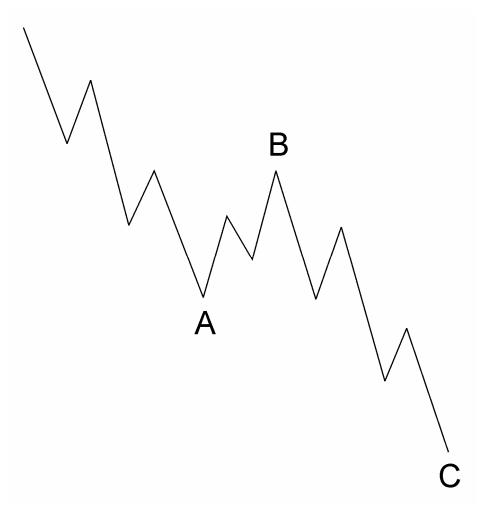
Wave 4 ≠ Price Territory of Wave 1

**Diagonal Triangle: Waves 1, 3, 5 = 3 Subwaves** 

Wave 4 = Price Territory of Wave 1

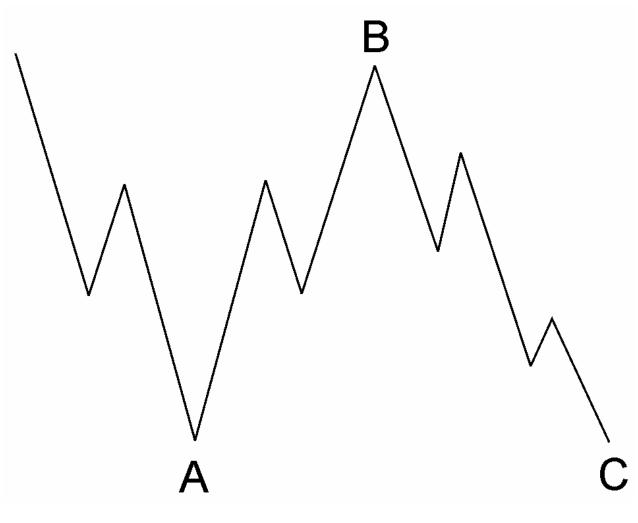
**Signal = Imminent Major Trend Reversal** 

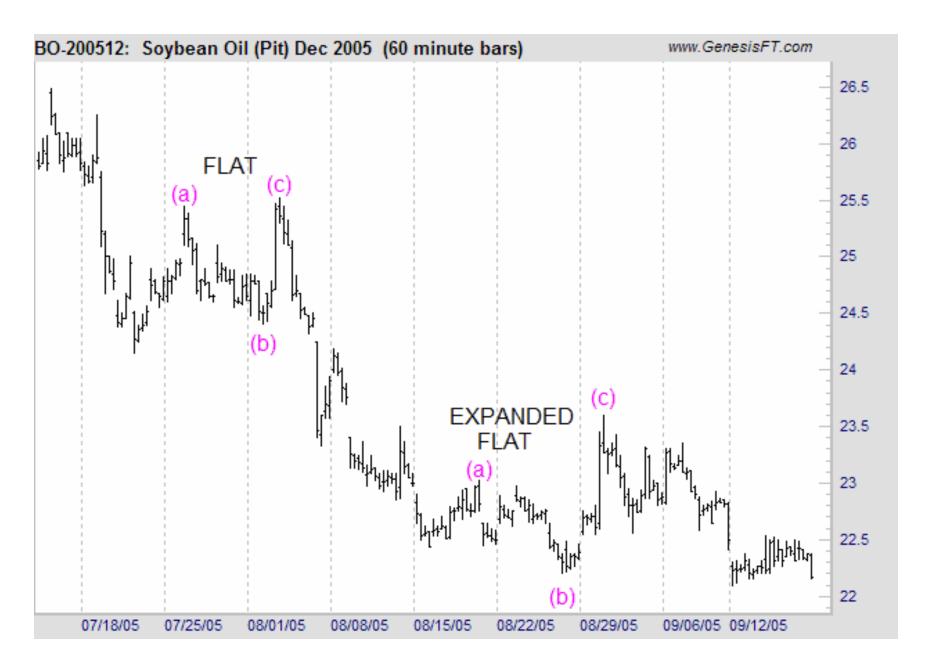


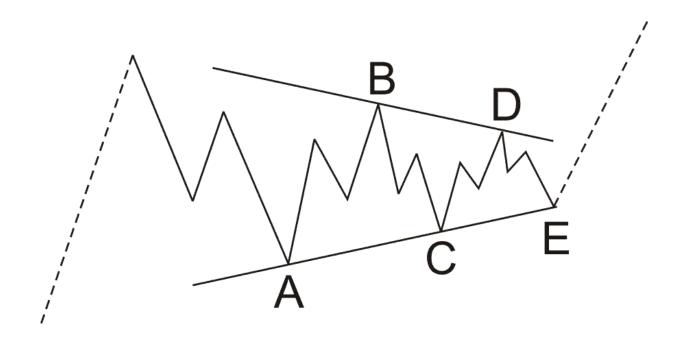


Zigzag



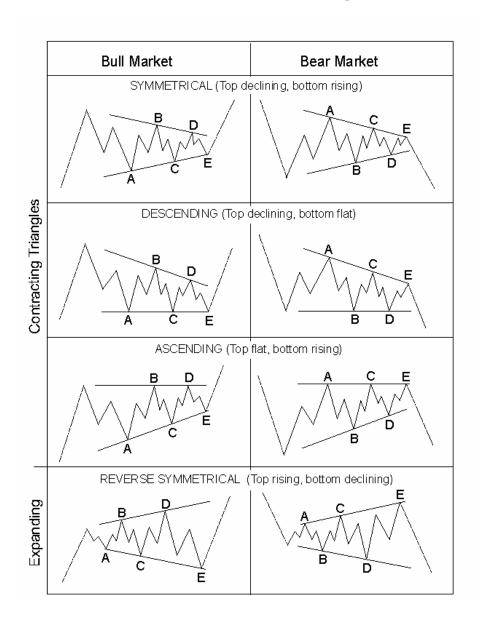






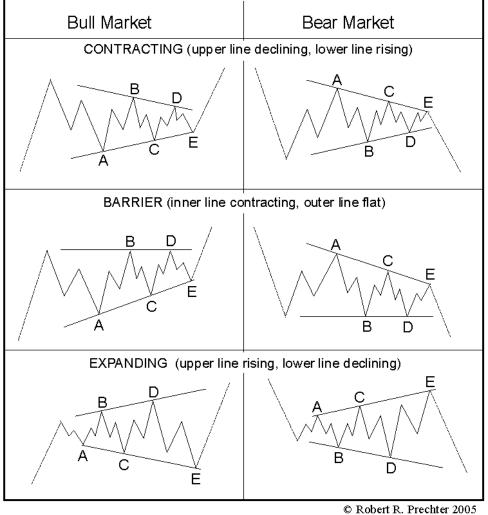
Triangle

# **Horizontal Triangles**

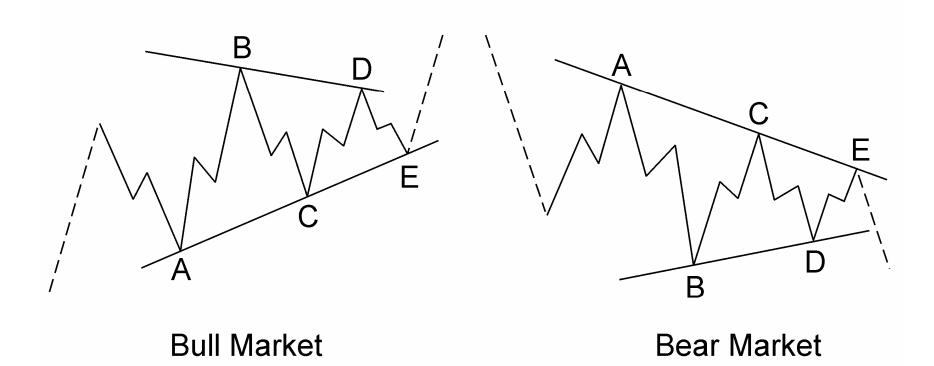


# **Barrier Triangles**

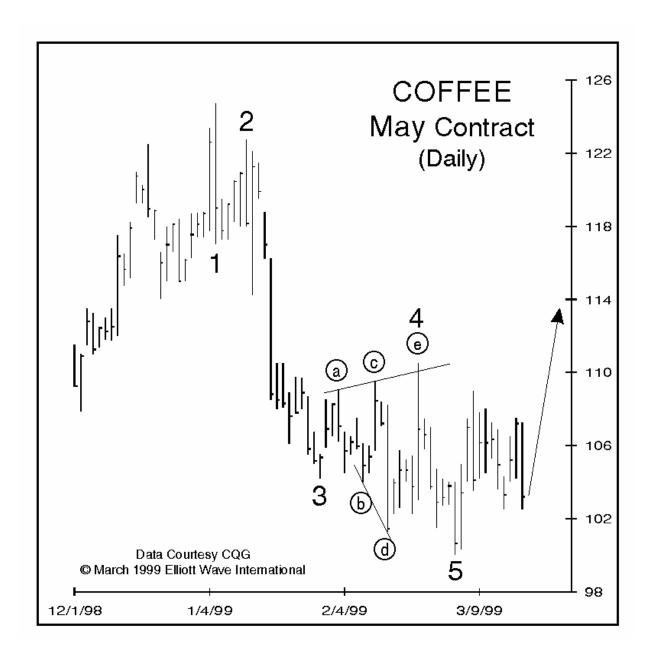
Proper List of Elliott Wave Triangles

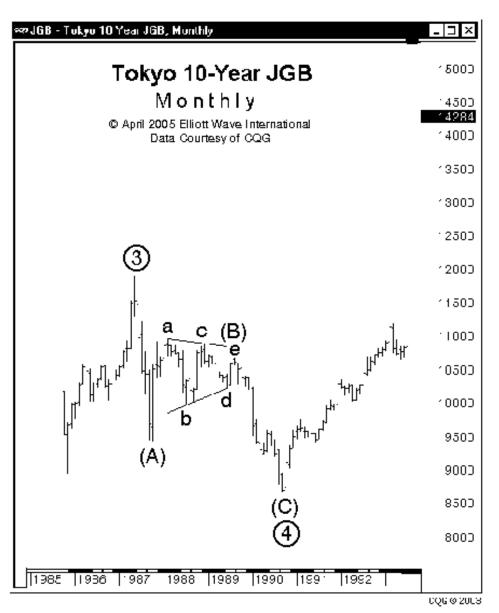


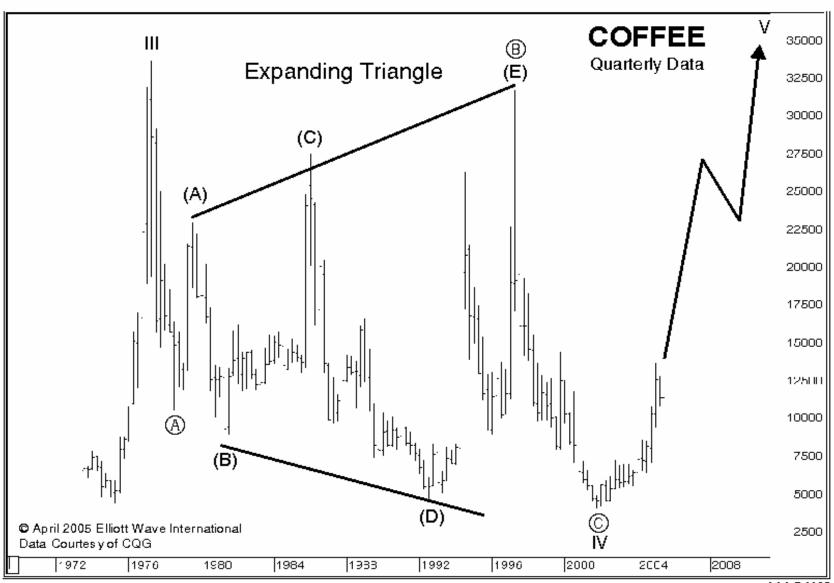
# **Running Triangles**



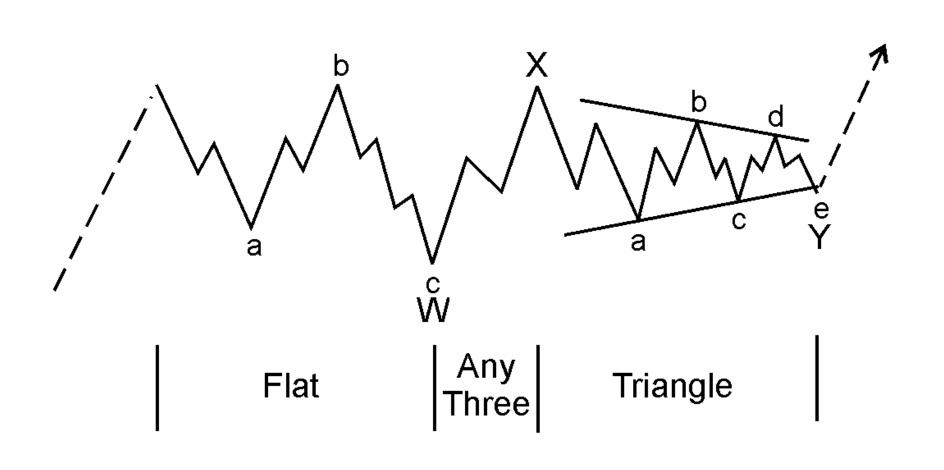






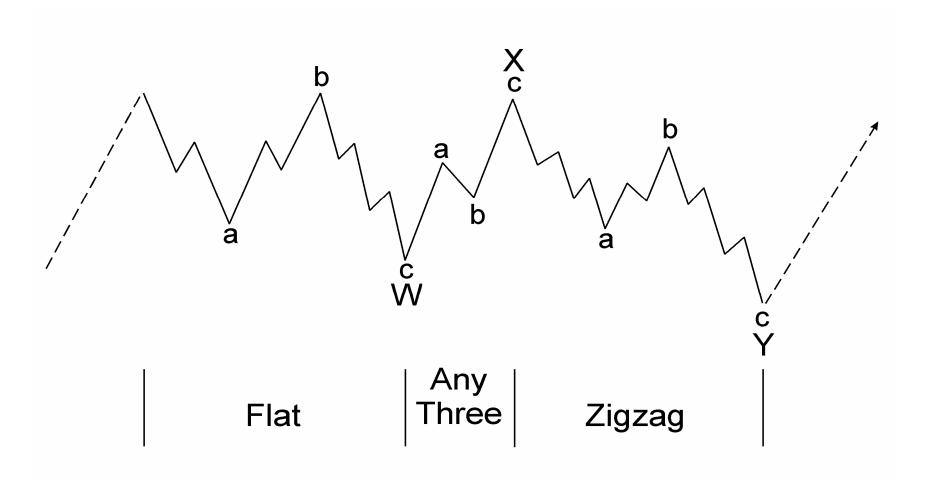


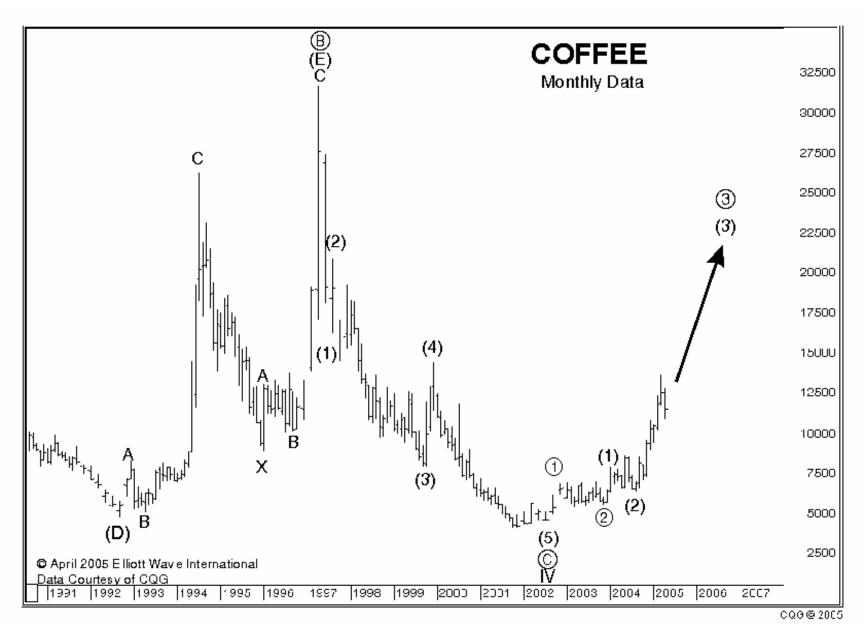
CQ0@2005



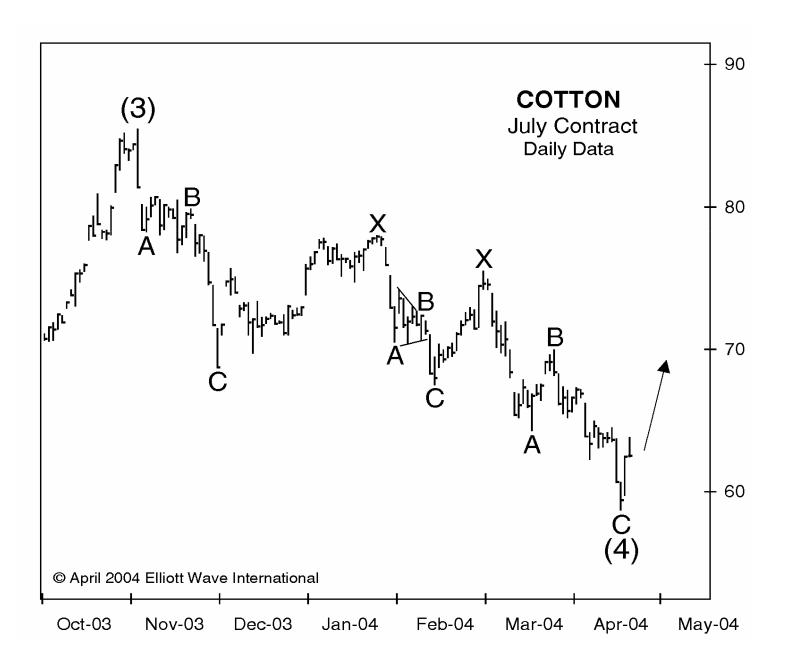
Combination

# **Combination**









# **Corrective Waves Summary**

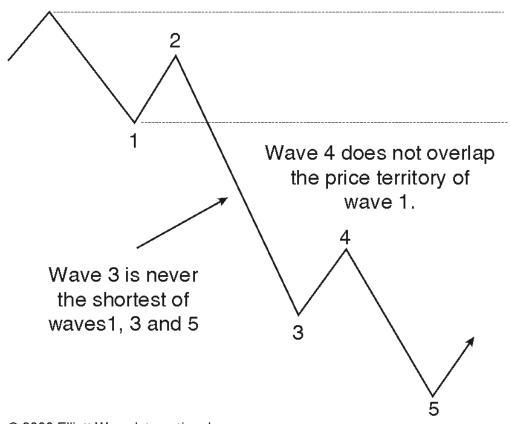
	Α	В	С	D	E	Shape	Position
Zigzag	5	3	5			Sharp	Wave 2
Flat	3	3	5			Sideways	Wave 4
Triangle	3	3	3	3	3	Sideways	Wave 4
Combination	X wave					Sideways	Wave 4

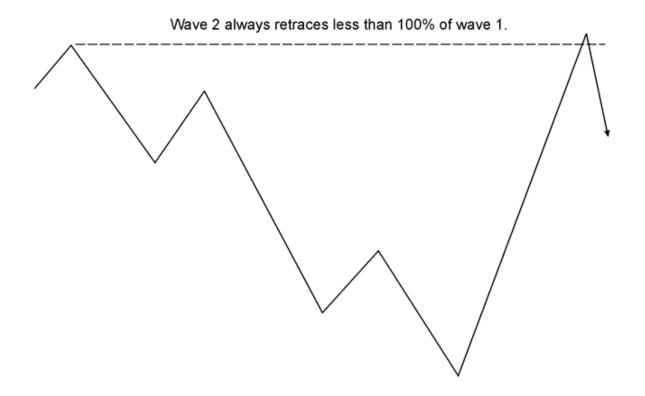
- Of waves 1, 3 and 5, wave 3 can never be the shortest wave.
- Wave 2 can never retrace more than 100% of wave 1.
- The end of wave 4 can never overlap the orthodox end of wave 1.

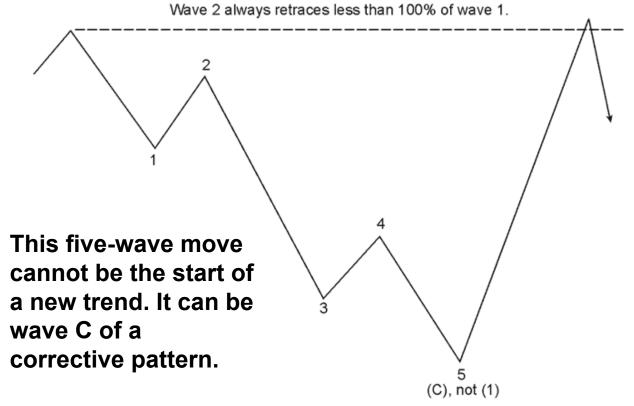
### **Strong Guideline**

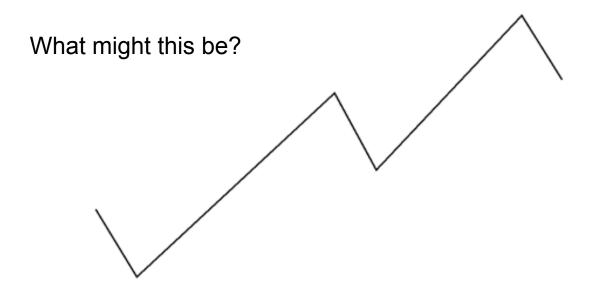
 No portion of wave 4 can enter the price territory of wave 1 or wave 2.

Wave 2 always retraces less than 100% of wave 1.



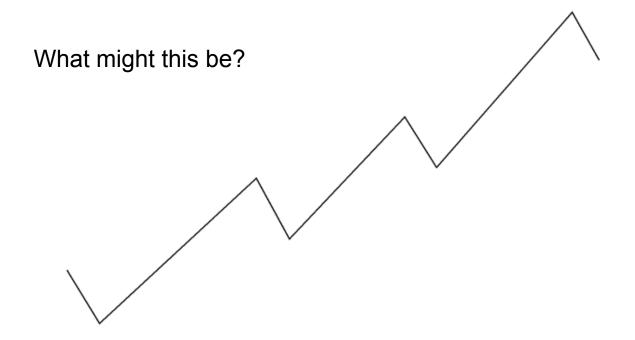


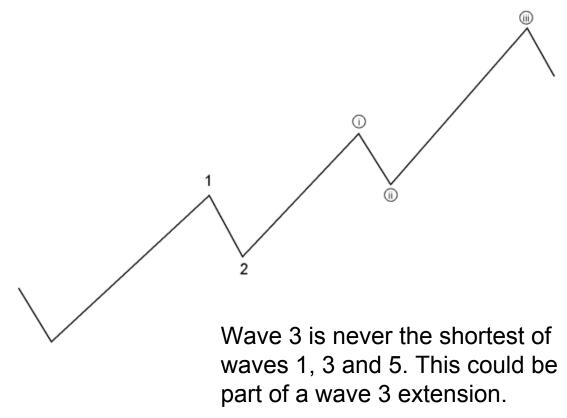


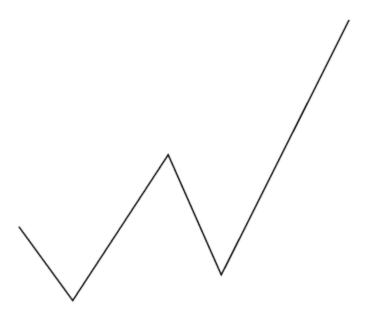


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Significant Bottom

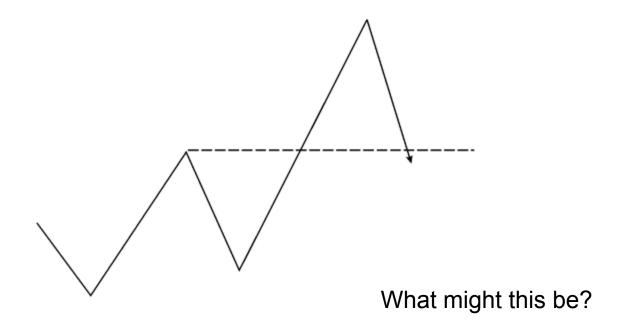


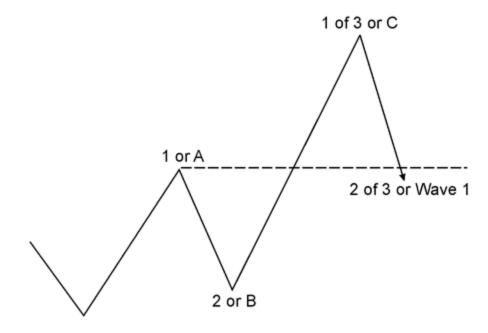




Significant Bottom

What might this be?





Wave 4 does not overlap the price territory of wave 1. This could be the start of a 3<sup>rd</sup> wave extension or an A-B-C correction.

### **Guidelines**

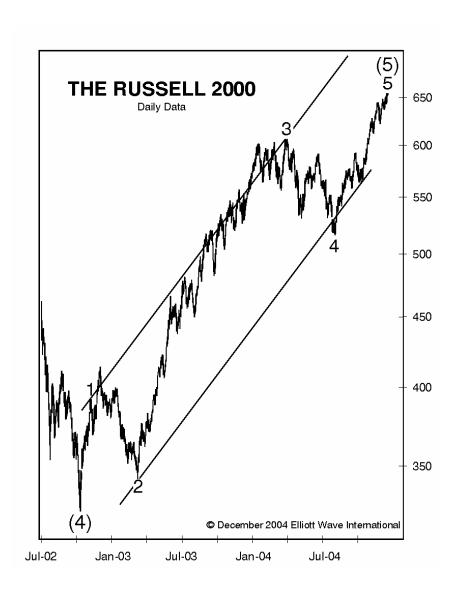
- Equality
- Alternation
- Depth
- Channeling
- Throw-Over
- Volume
- Post-Triangle Thrust Measurement

#### **Guidelines**

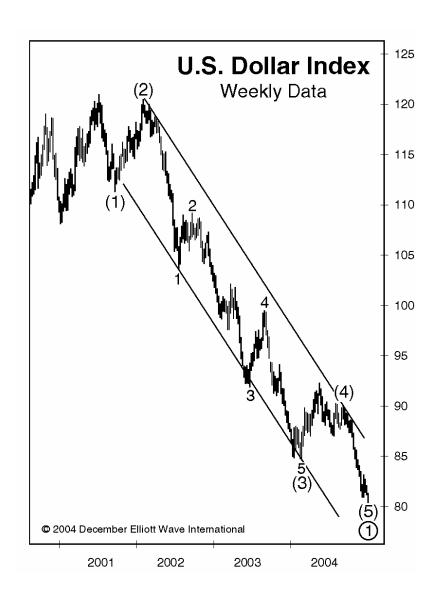
### **Wave Equality**

- Two of the motive waves in a five-wave sequence will tend toward equality in time and magnitude.
- This is generally true of the two non-extended waves.
- For example, if wave 3 is extended then waves
   1 and 5 will tend toward equality.

# **Equality**



# **Equality**

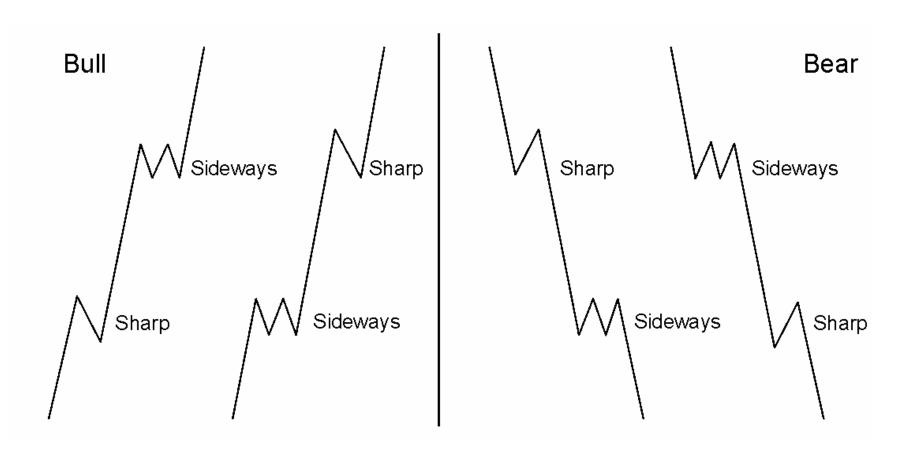


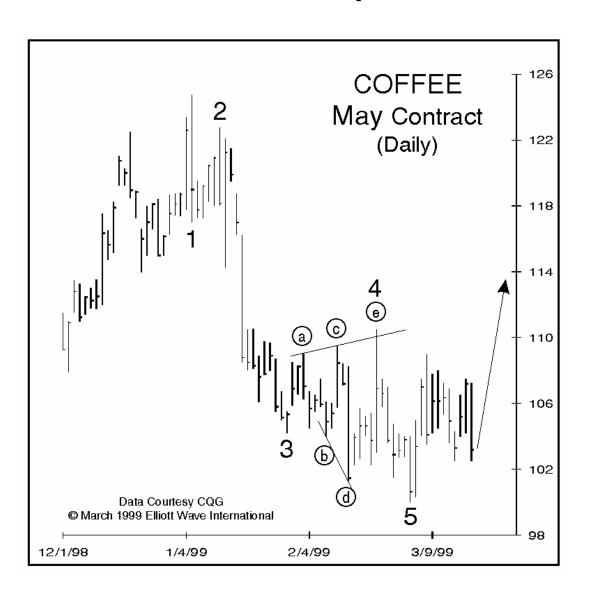
#### **Guidelines**

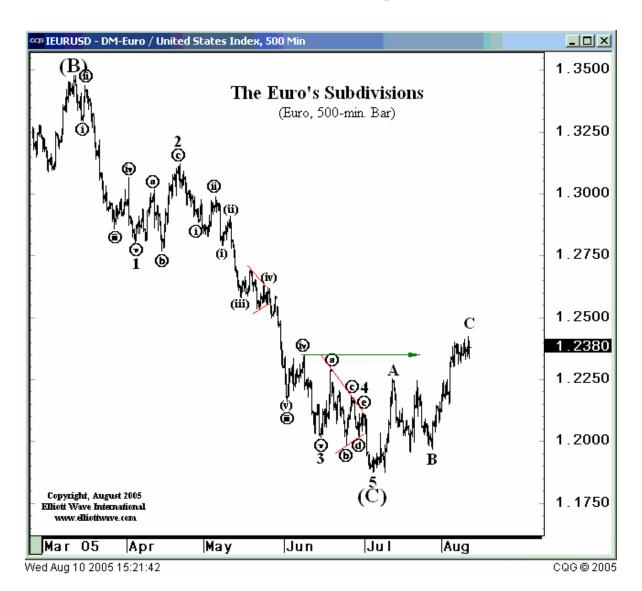
#### **Alternation**

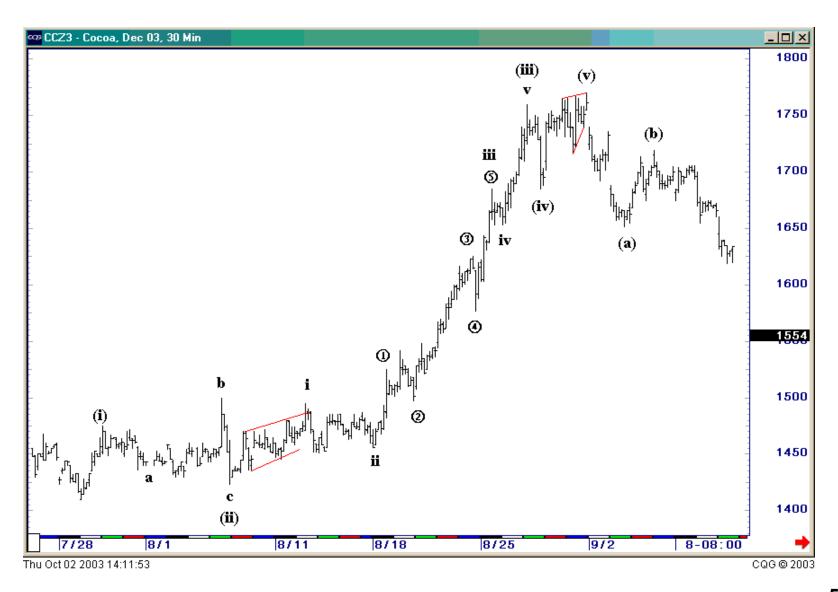
## Within Impulse Waves

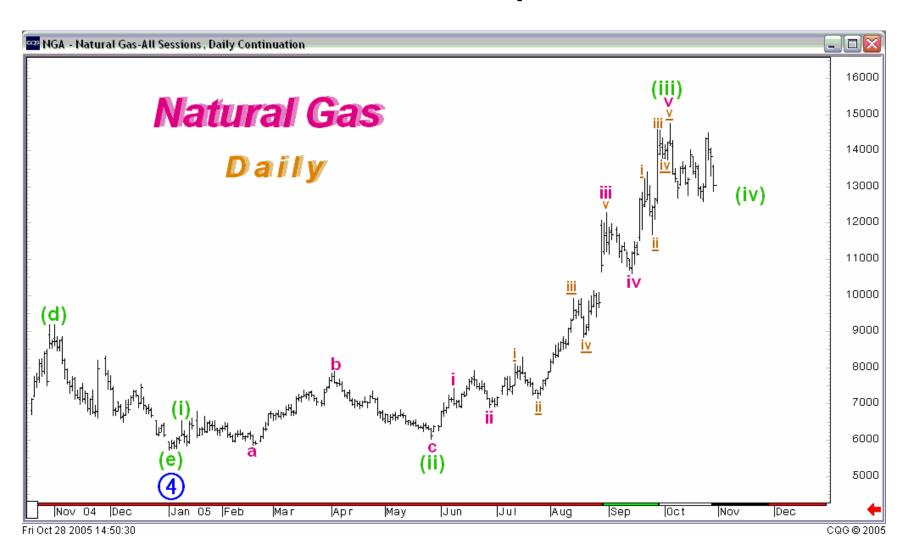
- If wave 2 is a sharp correction, expect wave 4 to be a sideways correction, and vice versa.
- Sharp corrections never include a new price extreme. Example: Zigzags
- Sideways corrections usually include a new price extreme. Examples: Flats, Triangles, and Combinations
- Diagonal triangles do not display alternation in subwaves 2 and 4.











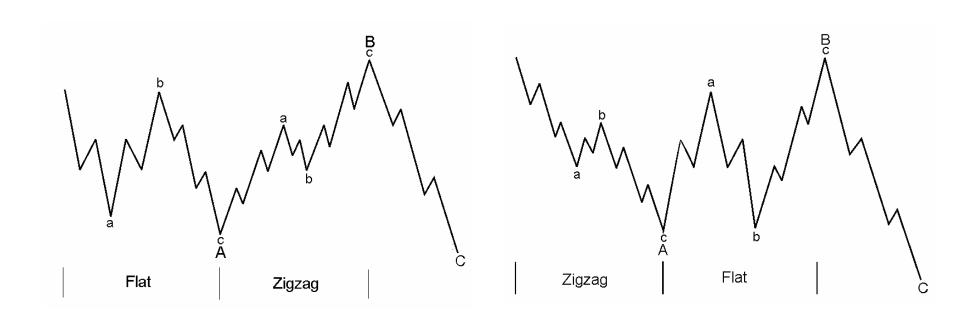
### **Guidelines**

#### **Alternation**

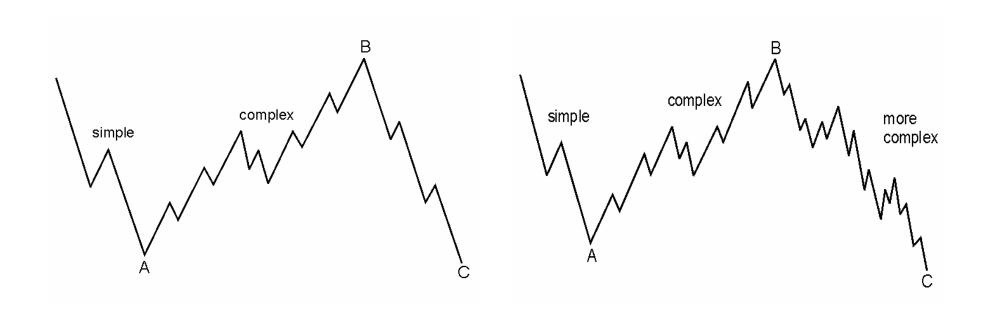
#### Within Corrective Waves

- If a correction begins with a flat a-b-c structure for wave A, then expect a zigzag a-b-c structure for wave B, and vice versa.
- If a large correction begins with a simple a-b-c zigzag for wave A, wave B will stretch out into a more complex a-b-c zigzag.

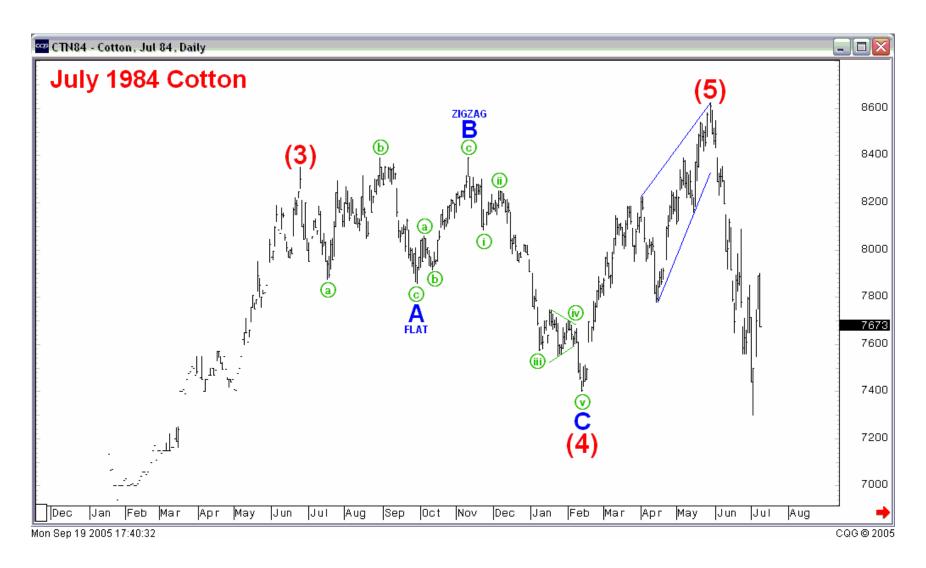
# Guidelines Alternation within Corrective Waves



# Guidelines Alternation within Corrective Waves



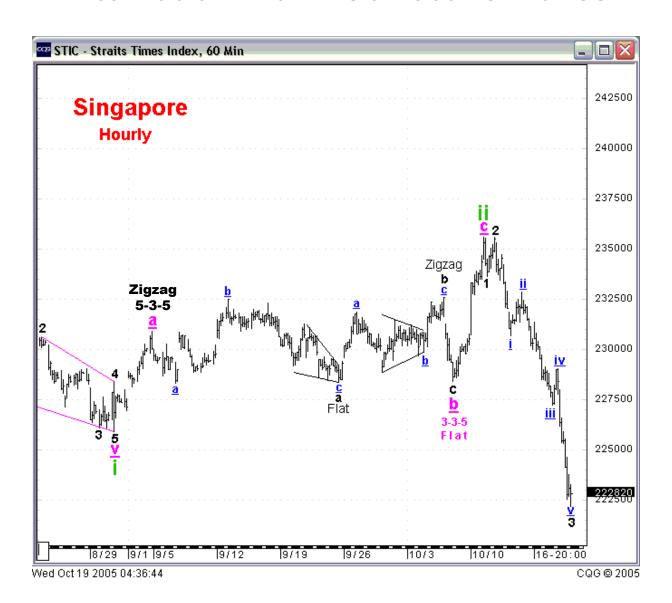
### **Alternation within Corrective Waves**



### **Alternation within Corrective Waves**



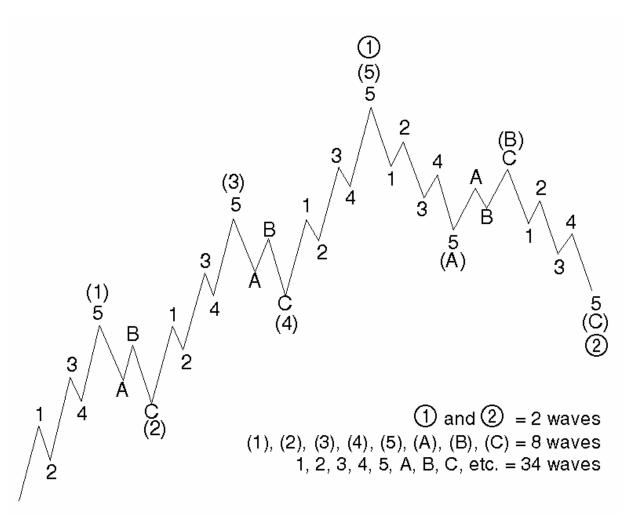
### **Alternation within Corrective Waves**



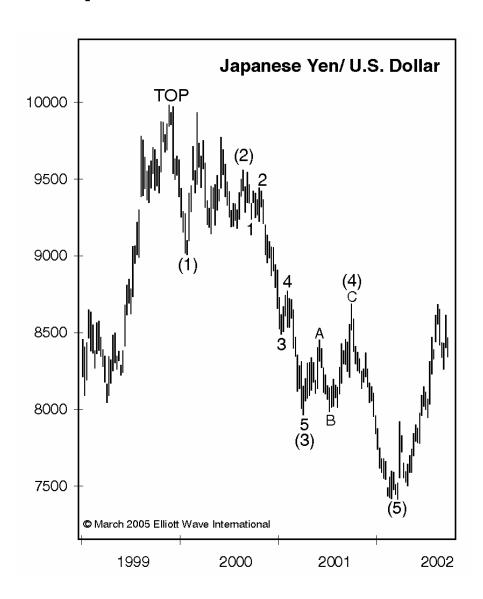
# Guidelines Depth of Corrective Waves

Corrections, especially when they are fourth waves, tend to register their maximum retracement within the span of travel of the previous fourth wave of one lesser degree and most commonly near its terminus.

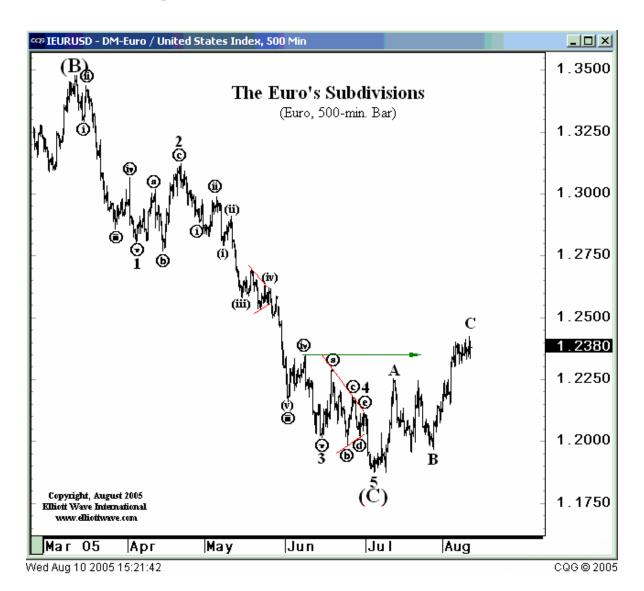
# **Guidelines Depth of Corrective Waves**



# **Depth of Corrective Waves**



# **Depth of Corrective Waves**

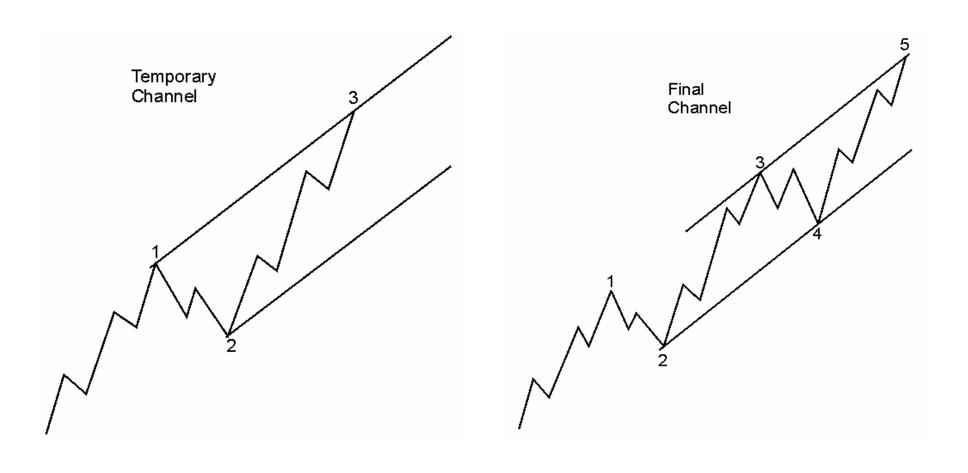


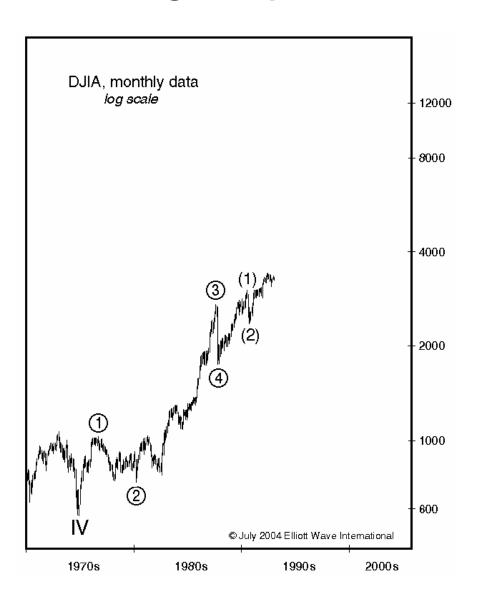
# Guidelines

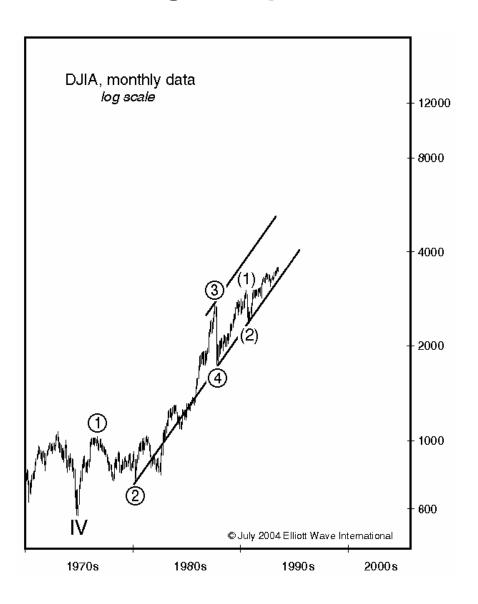
## Channeling

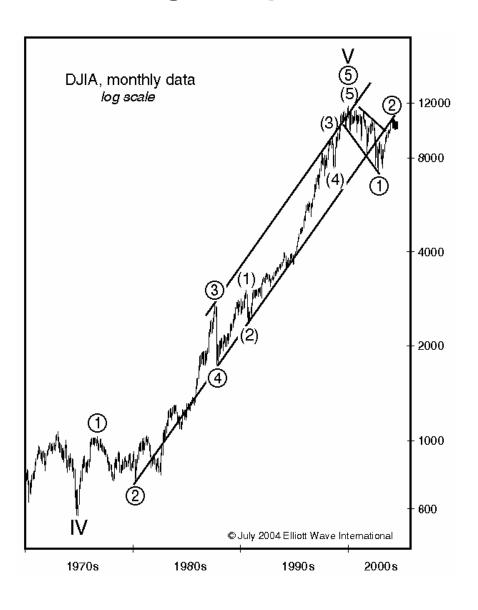
A parallel trend channel typically marks the upper and lower boundaries of impulse waves and zigzag corrective waves.

# Guidelines Channeling in Impulse Waves







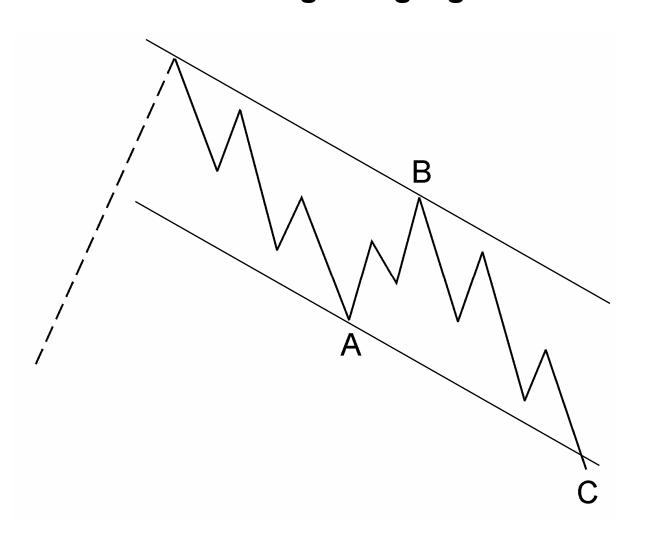








# Guidelines Channeling in Zigzags



## **Channeling in Corrective Waves**



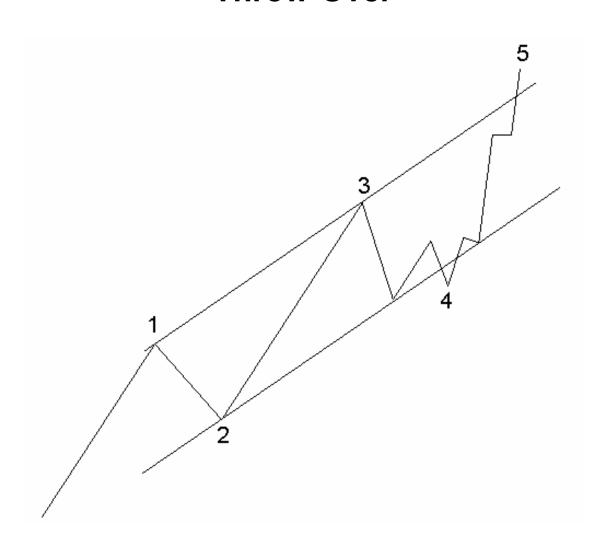
## **Channeling in Corrective Waves**



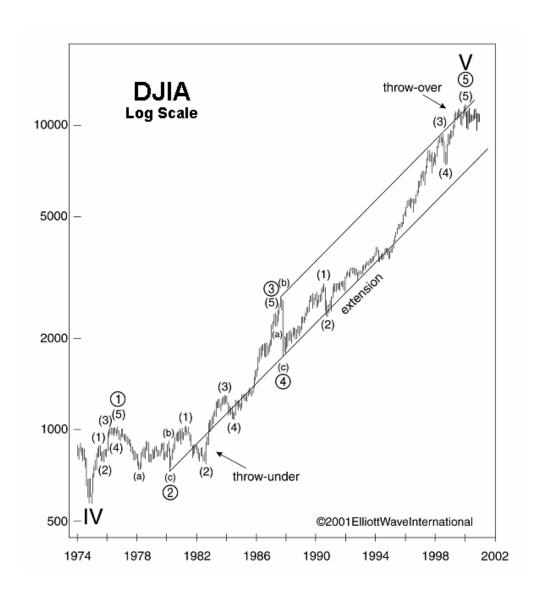
## **Channeling in Corrective Waves**



# **Guidelines Throw-Over**



## **Throw-Over**



#### **Guidelines** — Volume

Waves < Primary Degree

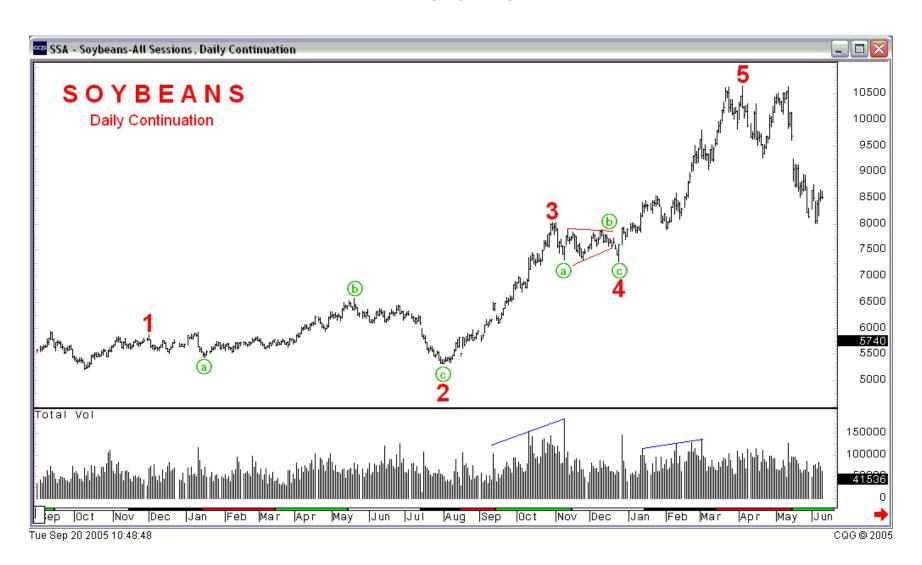
Normally, 3<sup>rd</sup> wave volume > 5<sup>th</sup> wave volume 5<sup>th</sup> wave volume > 3<sup>rd</sup> wave volume = 5<sup>th</sup> wave extension

Waves ≥ Primary Degree

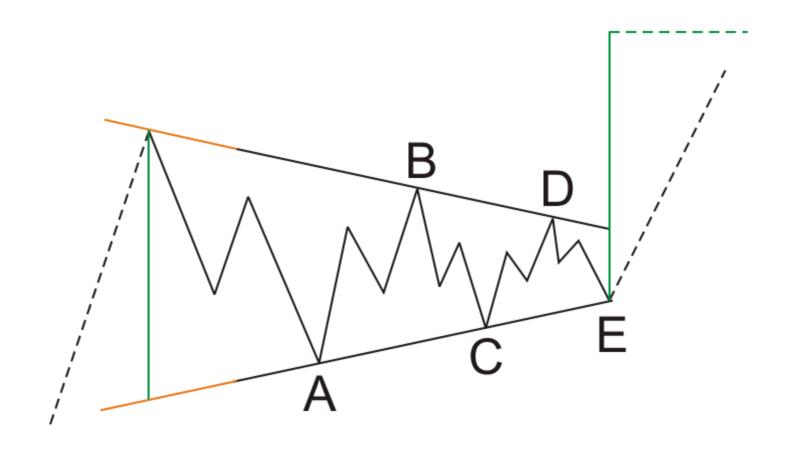
Higher volume in 5<sup>th</sup> waves All-time high volume at terminal points in bull markets

- Volume often spikes briefly at the throw-over point of a parallel trend channel line or a diagonal triangle resistance line.
- Volume contracts in corrective waves.

### Volume



## **Post-Triangle Thrust Measurement**







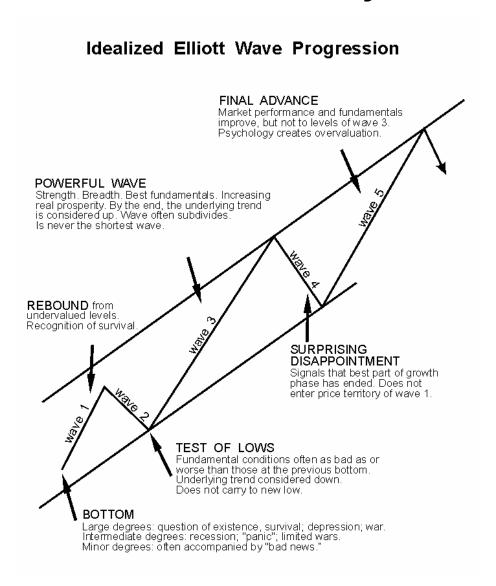
Mon Apr 05 2004 13:48:41

CQG @ 2004

#### Summary

- Two motive waves in a five wave sequence will tend toward equality.
- If the second wave is sharp, then the fourth wave is usually sideways, and vice versa.
- Corrective waves usually end in the span of the previous fourth wave of one lesser degree.
- Impulse waves tend to be bounded by a channel composed of two parallel lines.
- A throw-over/throw-under occurs when wave 5 terminates beyond the trend channel.
- The post-triangle thrust measurement estimates price target for the next wave in the pattern of one larger degree.

#### **Wave Personality**



#### **Wave Personality**

#### Idealized Corrective Wave

#### TOP Large degrees: prosperity and peace appear guaranteed forever. Arrogant complacency reigns. Intermediate degrees: economic improvement, good feeling. Л Minor degrees: often accompanied by NARROW, EMOTIONAL ADVANCE Technically weak, selective. "good news." Results in non-confirmations. Fundamentals weaken subtly. Aggressive euphoria and denial. TECHNICAL BREAKDOWN Trendlines broken. Viewed as buying opportunity. WORST OF BEAR MARKET Strength. Breadth. Prices decline relentlessly. Fundamentals ultimately collapse in response.

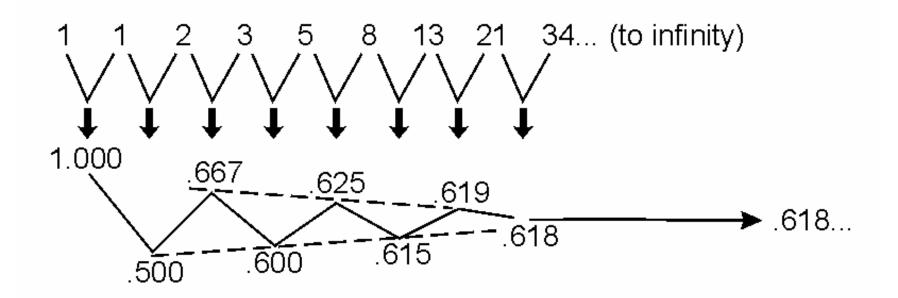
## Fibonacci Relationships In Financial Markets

**The Golden Ratio** 

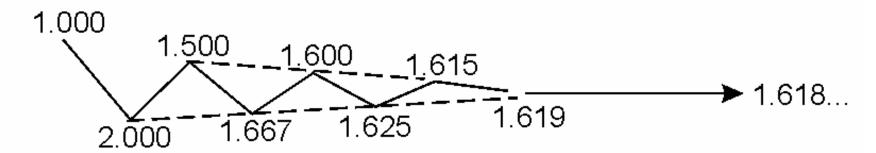
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.618 or 1.618

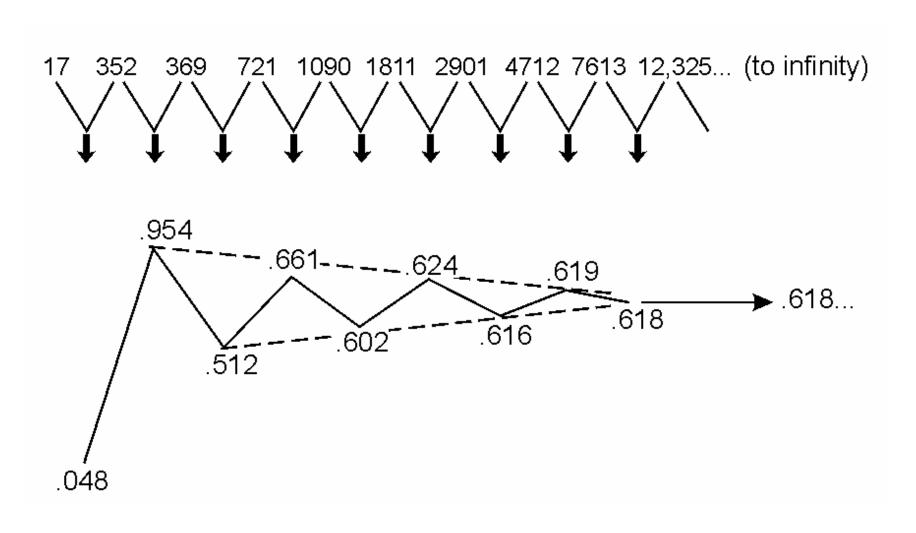
#### Golden Ratio, PHI, Φ



#### Inverses:



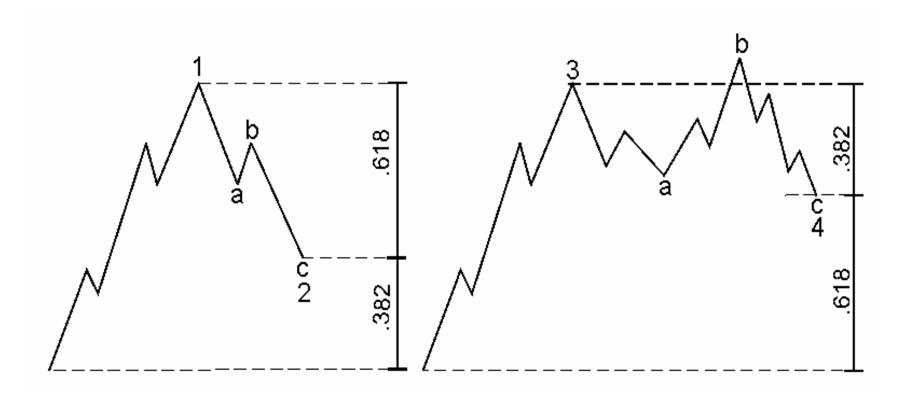
## Golden Ratio, PHI, Φ

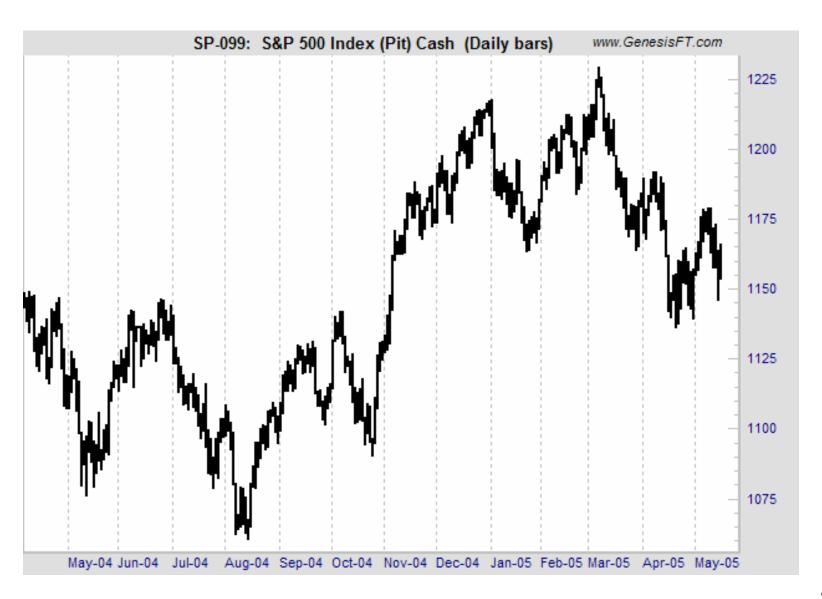


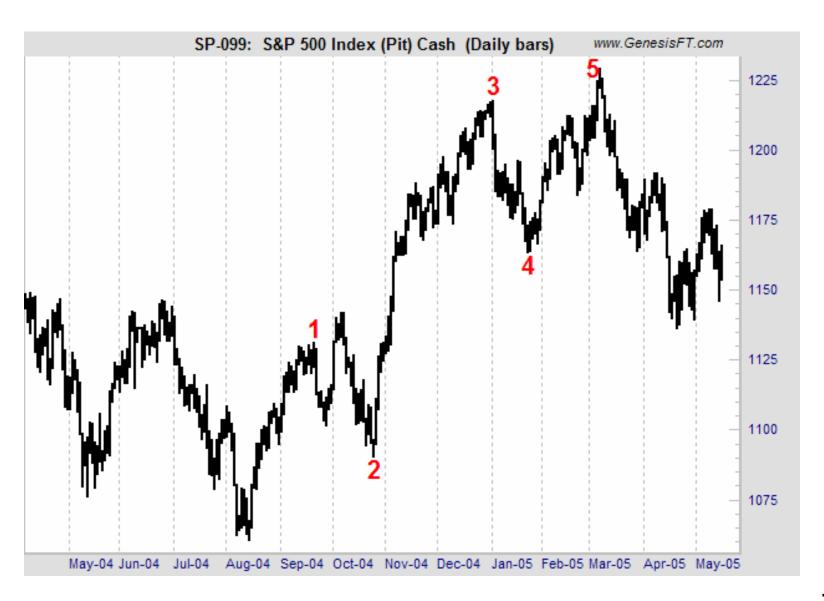
# Fibonacci Relationships are Seen in Time and Amplitude

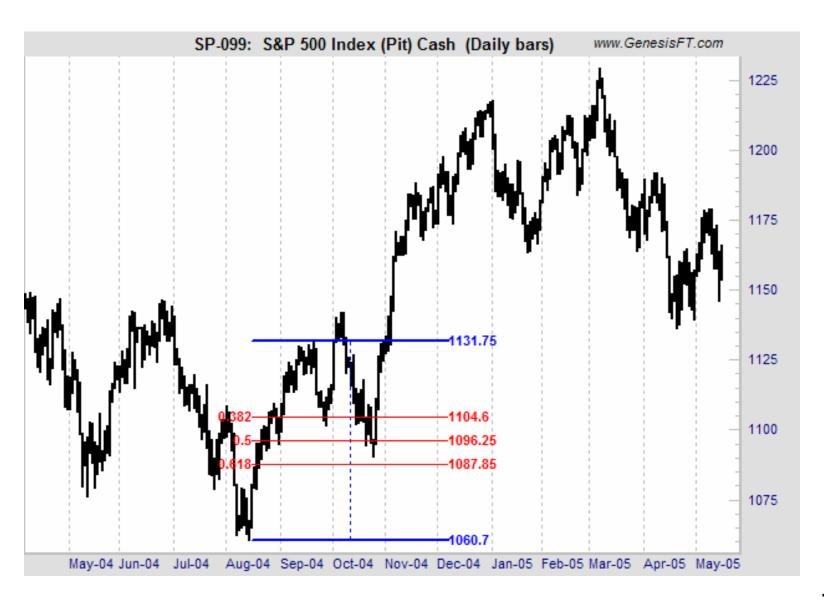
Retracements

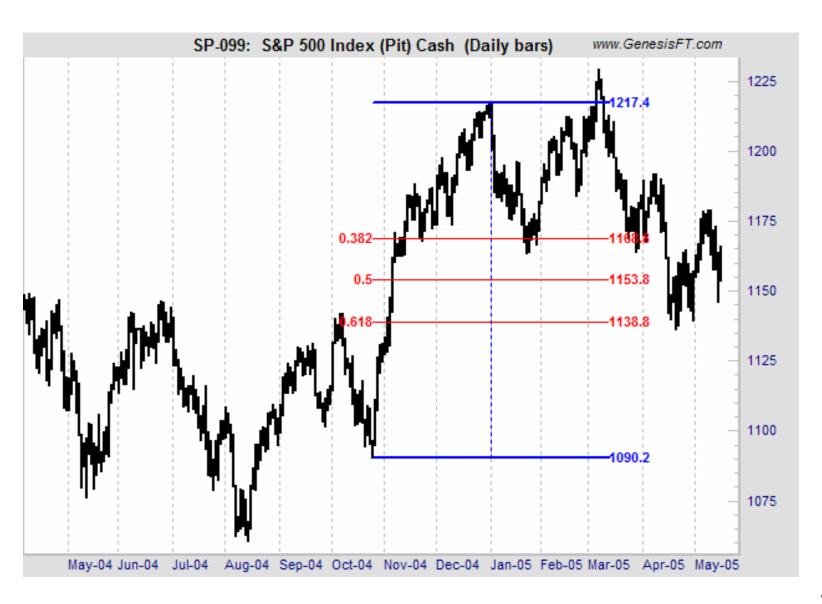
Multiples

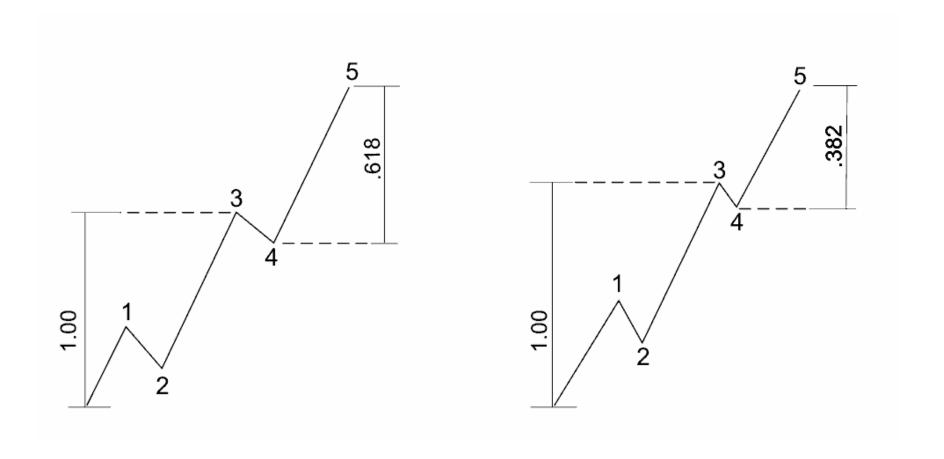


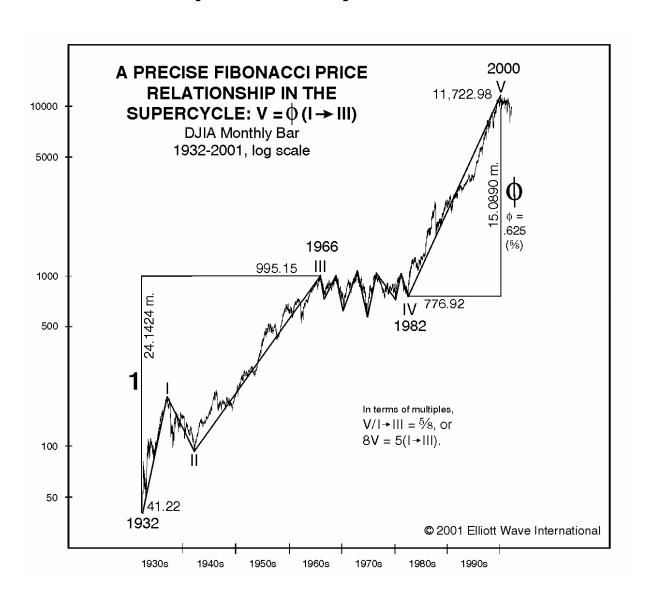


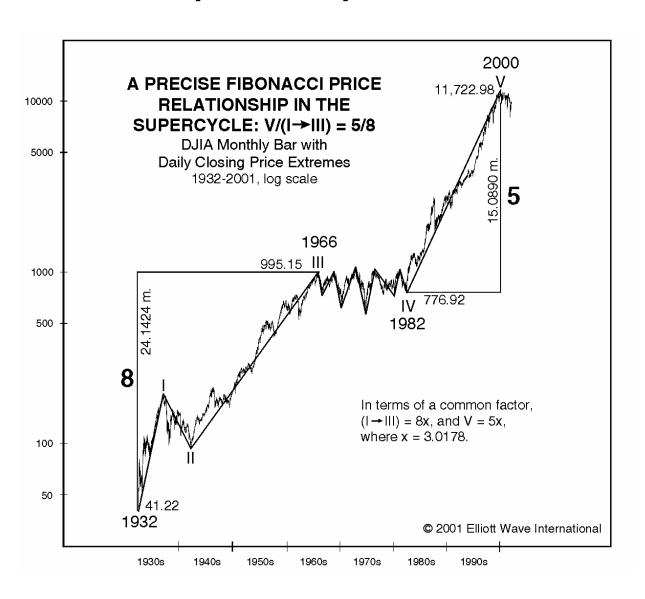




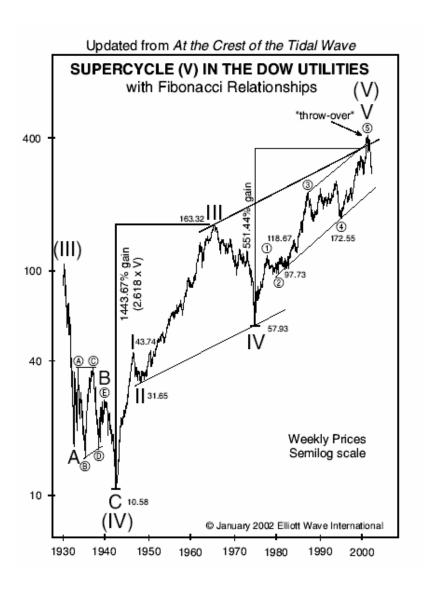








Net of waves 1 through 3 times .382 = percent movement of wave 5



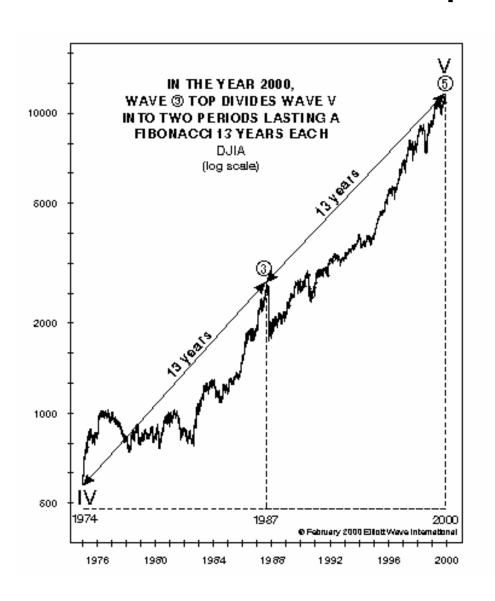
## **Multiples within Corrective Waves — Zigzags**



## **Fibonacci Time Relationships**



## **Fibonacci Time Relationships**

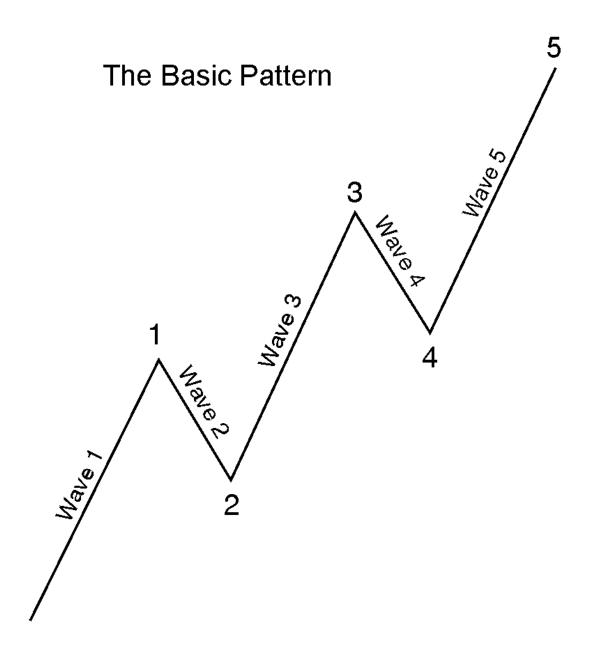


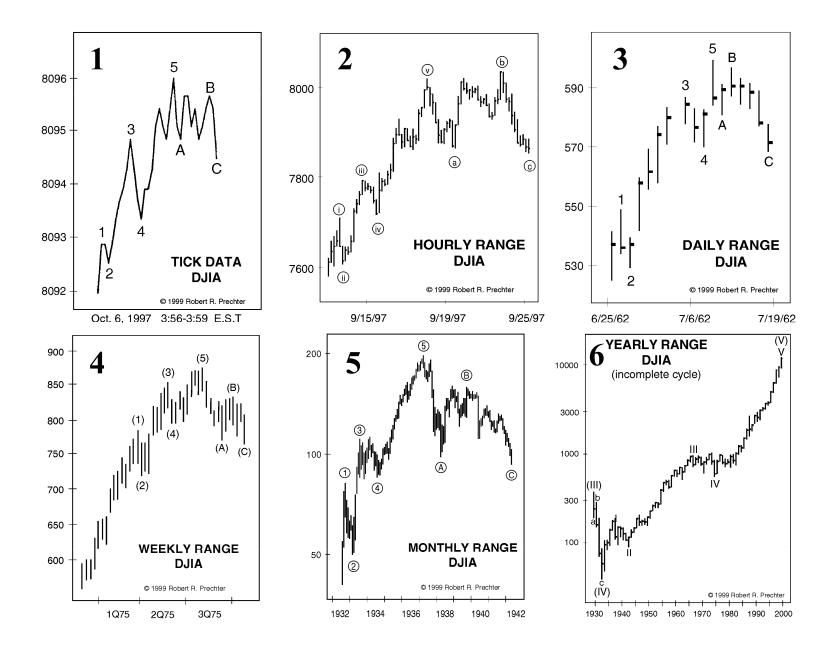
#### Summary

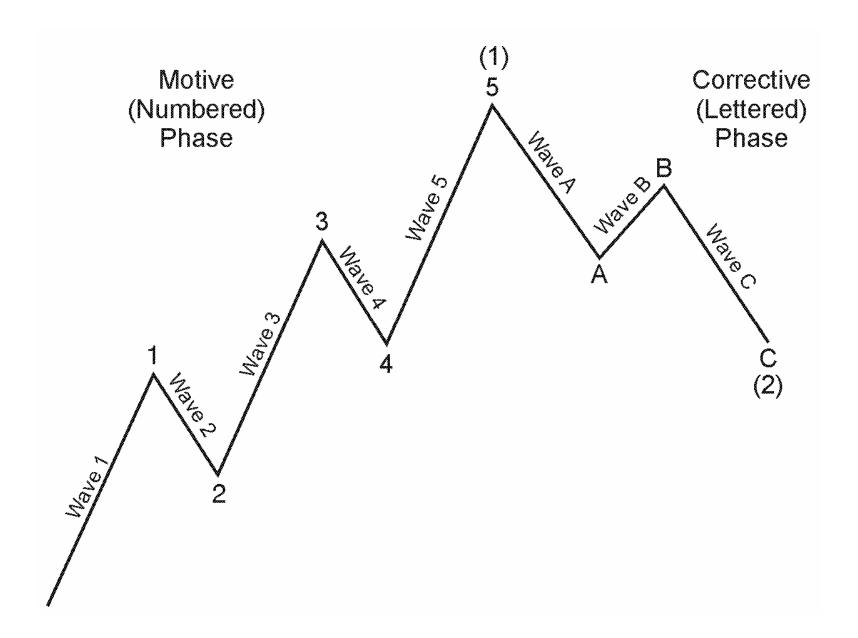
- The Fibonacci Ratio (Φ), an irrational number approximating .618, known as the Golden Ratio, is found in nature, human biology, human thought, and aggregate human behavior such as the stock market.
- The Wave Principle is a robust fractal governed by Fibonacci mathematics.
- Sharp wave corrections tend to retrace 61.8% or 50% of the previous wave.
- Sideways corrections tend to retrace 38.2% of the previous wave.
- Subdivisions of impulse waves tend to be related by Fibonacci numbers .618, 1.0, 1.618 and 2.618.
- Subdivisions of corrective waves tend to be related by Fibonacci numbers .382, .618, 1.0 and 1.618.

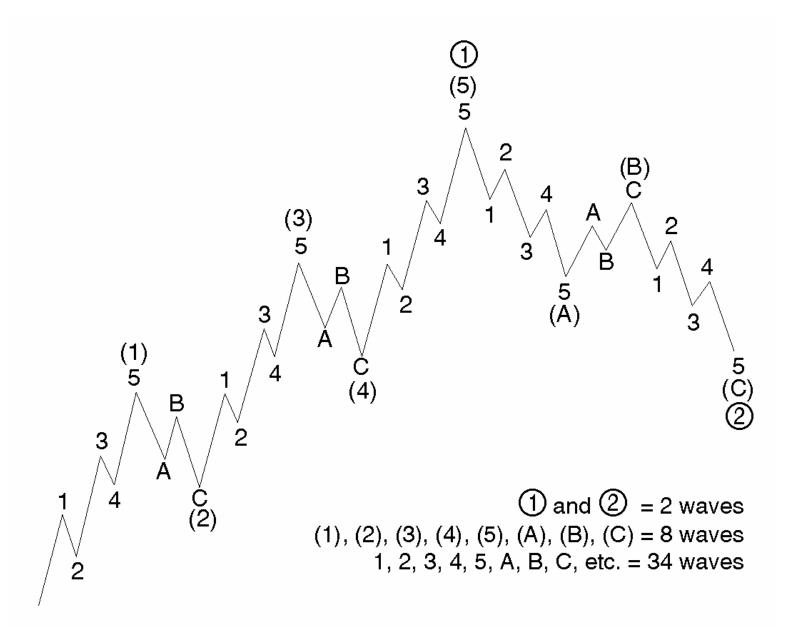
## The Basics of the Wave Principle

**Summary** 



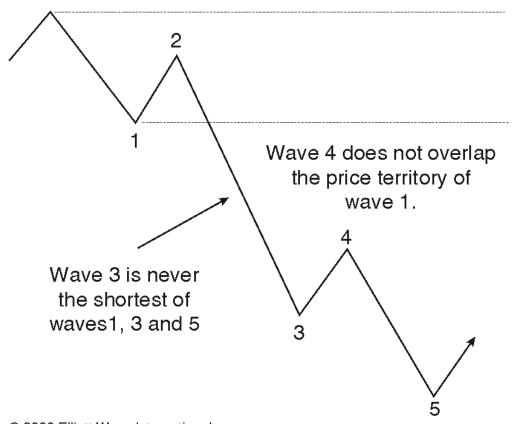




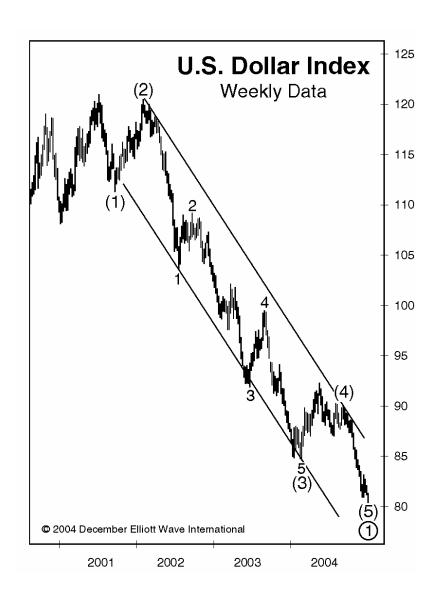


#### Rules

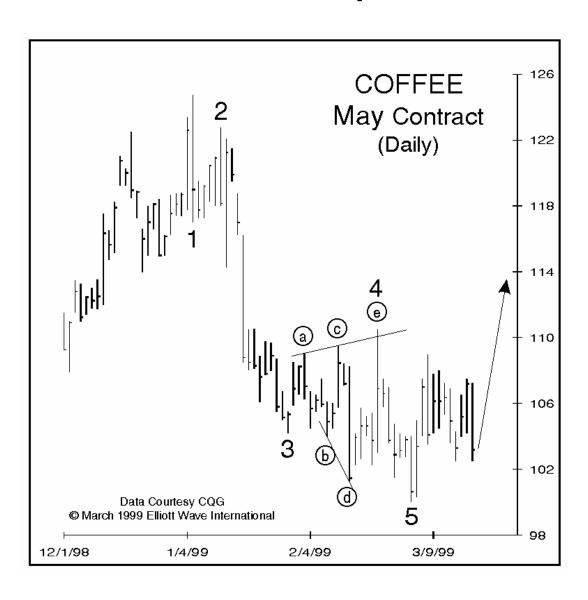
Wave 2 always retraces less than 100% of wave 1.



## **Equality**



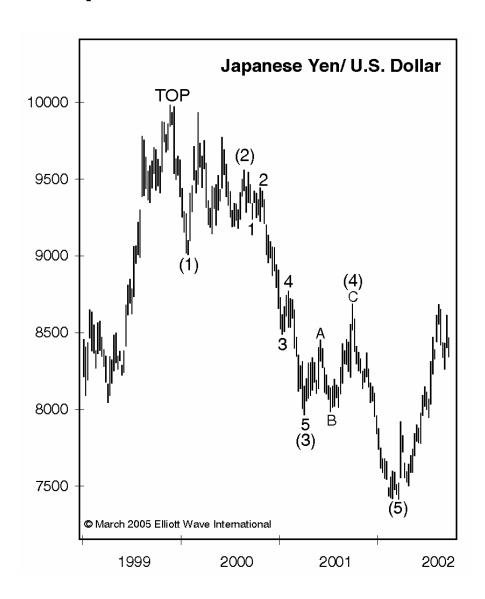
## **Alternation within Impulse Waves**



#### **Alternation within Corrective Waves**



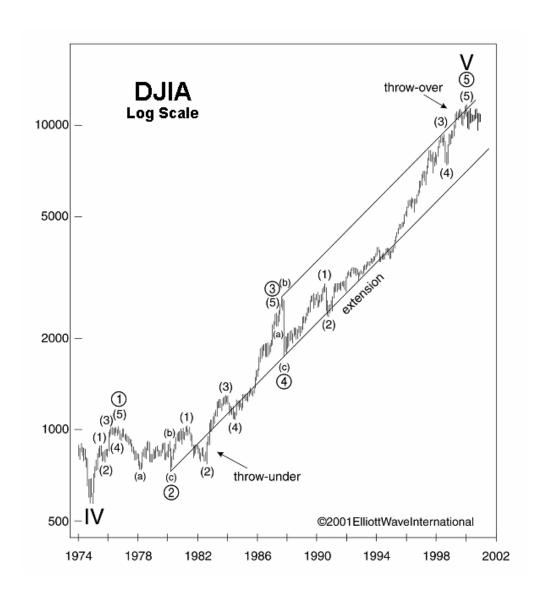
## **Depth of Corrective Waves**



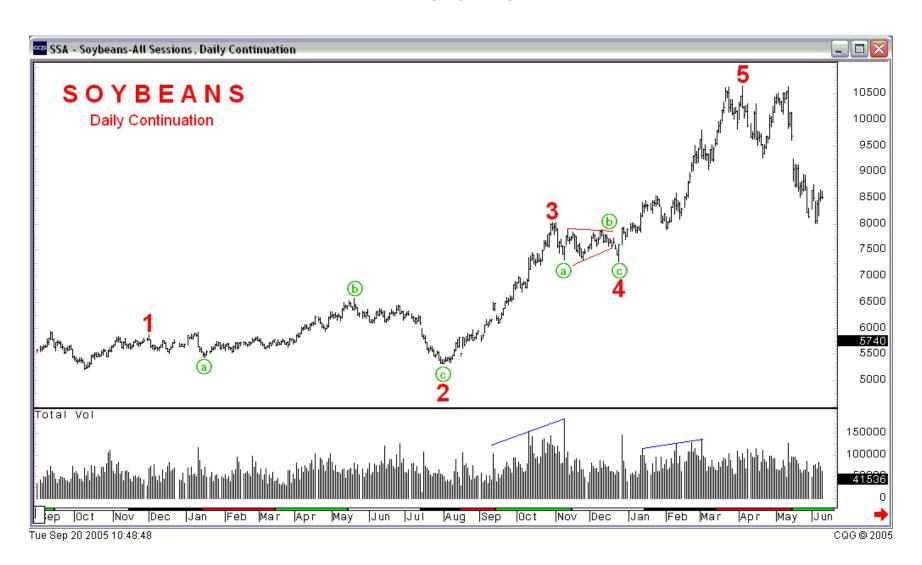
## **Channeling in Impulse Waves**



#### **Throw-Over**



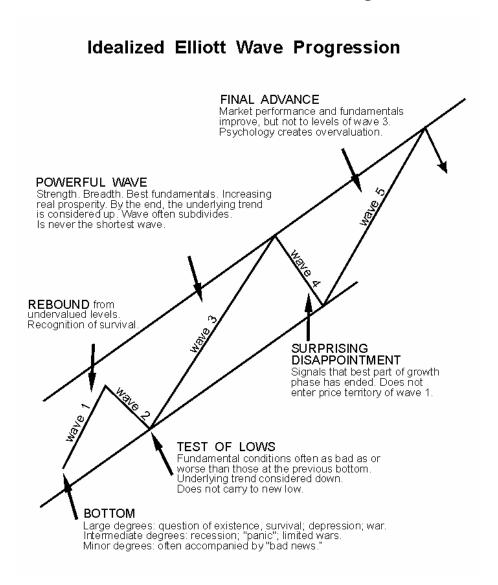
#### Volume



## **Post-Triangle Thrust Measurement**



#### **Wave Personality**

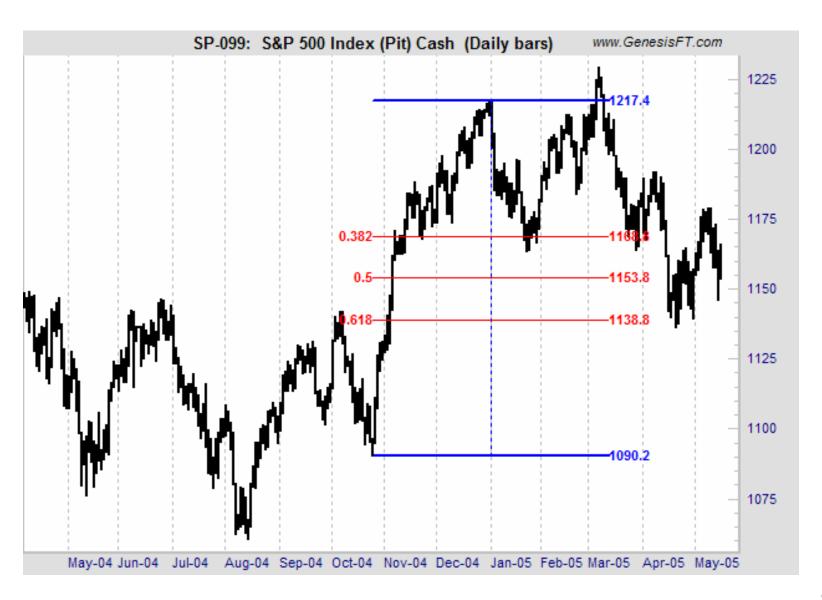


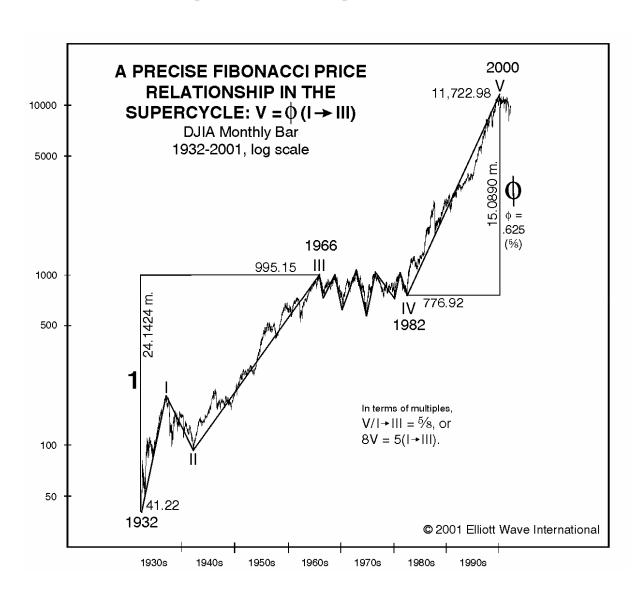
## Fibonacci Relationships In Financial Markets

**The Golden Ratio** 

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.618 or 1.618





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