

Elliott Wave Theory: Rules, Guidelines, & Usage

1 - Degrees of Waves

Elliott Wave Theory (EWT) utilizes a degree system to classify the waves it sees. The theory posits nine degrees that are time specific. The abbreviations are how I shorthand the degree name and the graphical identifier is how the trading site Trading View depicts each one.

Degree	Title (Abbreviation)	Time Frame	Graphical Identifier
1	Grand Super Cycle (GSC)	Multi-Century	Circled Capital Roman Numerals
2	Super Cycle (SC)	Multi-Decade	Parenthetical Capital Roman Numerals
3	Cycle (C)	One to Several Years	Capital Roman Numerals
4	Primary (P)	Months to Years	Circled Numbers
5	Intermediate (I)	Weeks to Months	Parenthetical Numbers
6	Minor (M)	Weeks	Numbers
7	Minute (m)	Days	Circled Undercase Roman Numerals
8	Minuette (mm)	Hours	Parenthetical Undercase Roman Numerals
9	Sub-Minuette (sm)	Minutes	Undercase Roman Numerals

2 - Fibonacci and Other Important Ratios

There are 13x major ratios that EWT utilizes, but there are extra ones that help with overall analysis.

Fibonacci
14.6%
23.6%
38.2%
61.8%
76.4%
85.4%
100%
123.6%
161.8%
200%
261.8%
323.6%
423.6%
Other
50%
90%
300%
361.8%
400%
461.8%

3 - Basic Wave Pattern

A full wave pattern is composed of an Impulsive (also called Motive) and a Corrective Wave. The Impulsive Wave is composed of 5x sub-waves and the Corrective Wave has 3x sub-waves. The first, third, and fifth wave of the Impulsive Wave are uptrends while the second and fourth are minor corrections. The Corrective Wave is typically labeled as an ABC correction where A and C are the corrective portion with B being a slight reversal to the upside. The end of the Corrective Wave tends to be around the end of sub-wave 4 of the Impulsive. In the next section I'll go over the typical relations each wave has to each other, but for now I need to say one thing. Since the 1930's (when the theory was formed) our stock markets have show that 5x wave patterns are quite common, but 3x wave patterns have emerged. So, don't always go around forcing each pattern to be a 5x wave when it isn't.

3 - Scenarios & Rules

There are 4x typical scenarios Wave 2 to 5 have, thus there are 256x scenarios to consider once Wave 1 is established. Running the scenarios in MS Excel only 188x of the 256x abide by the rules of EWT (assuming I did the coding correct). Here are the 4x rules from [2, "3.1 Impulse - Guidelines"]:

Rule	Description
1	Wave 2 can't retrace past Wave 1's start
2	Wave 3 can't be the shortest of the Impulsive Waves
3	Wave 4 can't overlap into Wave 1's Price Range
4	Wave 5 needs to end with Momentum Divergence

Momentum Divergence is the "deviation of price and volume demonstrated as a continuation of a trend without the necessary momentum to sustain the move. For example, the price of a stock may continue to rise, however, the volume begins to decline behind the ascension, indicating a lack of conviction from the buyers. Momentum divergence can signal a pending trend reversal." [5] I had to look up that term so I thought I'd share it with you as well. Below are the typical scenarios each wave exhibits from [2, "3.1 Impulse - Fibonacci Ratio Relationship"]:

Wave Identifier	Fibonacci Ratio
2A	50% of Wave 1
2B	61.8% of Wave 1
2C	76.4% of Wave 1
2D	85.4% of Wave 1
3A	161.8% of Wave 1-2
3B	200% of Wave 1-2
3C	261.8% of Wave 1-2
3D	323.6% of Wave 1-2
4A	14.6% of Wave 3
4B	23.6% of Wave 3
4C	38.2% of Wave 3
4D	50% of Wave 3
5A	123.6% retracement of Wave 4
5B	161.8% retracement of Wave 4
5C	Equal to Wave 1
5D	61.8% of Wave 1-3

If the scale to identify the 5x wave is linear and not logarithmic then the limits for the Wave 5 ending are easily identifiable. From the MS Excel I used, if Wave 1's price movement is standardized to 1 unit, Wave 5 should end between 1.382-4.618x. To give an example, if Wave 1 starts at \$10k and moves a total of \$1k, then the total price movement from \$10k is between \$1,382-\$4,618. The lower bound is found from this path 2B-3A-4C-5D and the higher is 2B-3D-4A-5B in case you wanted to know. Both are Fibonacci Ratios (FBR) if you didn't notice ... who would've guessed!

4 - Impulse Extensions

There are 3x scenarios for extensions: Wave 1, 3, or 5 and only in one. The Stock Market and FOREX will usually see a Wave 3 Extension, while Commodity Markets typically have Wave 5 extensions. [2, "3.2 Impulse with Extension - Guidelines"] For graphical depictions consult Figure 3 from [2, "3.2 Impulse with Extension - Guidelines"] and Figure 11 from [3, p7].

Each of these extensions has identifiable FBR relationships. In a Wave 1 Extension the magnitude of Wave 2 to 5 is 61.8% of Wave 1. In a Wave 3 Extension the magnitude of Wave 4 to 5 is equal to Wave 1's. In a Wave 5 Extension the magnitude of Wave 4 to 5 is 161.8% of Wave 1 to 3. For a graphical depiction consult Figure 21 from [3, p12]. If Wave 1 isn't the extension, Wave 4 is often a defining price for larger Wave Degrees. The FBR for Wave 4 can be either 38.2 or 61.8% of the total length of the completed Wave. [3, p12] For a graphical depiction consult Figure 22 from [3, p12].

5 - Leading and Ending Diagonals

Leading Diagonals occur in either Wave 1 or during Wave A in Corrections. Leading Diagonals are formed by two lines: a line connecting sub-wave 1 to 3 and sub-wave 2 to 4. For a graphical depiction consult Figure 3 from [3, p4] or Figure 4A - B in [2, "3.3 Leading Diagonal"]. Sub-wave 1 and 4 may overlap, but it isn't a condition. "The subdivision of a Leading Diagonal can be 5-3-5-3-5 or 3-3-3-3-3." [2, "3.3 Leading Diagonal - Guidelines"] Ending Diagonals are quite similar, occurring in either Wave 5 or during Wave C in Corrections, and can form the same subdivision as a Leading Diagonals. For a graphical depiction consult Figure 5A - B in [2, "3.4 Ending Diagonal"].

6 - Types of Corrective Patterns

There are 5x types of corrections: Zigzag (5-3-5), Flat (3-3-5), Triangle (3-3-3-3-3), Double 3, Triple 3.

6.1 - Zigzag Corrections

For Zigzag Corrections there are 16x scenarios with these FBR relations found in [2, "5.1 Zigzag - Fibonacci Ratio Relationship"]:

Wave Identifier	Fibonacci Ratio
B1	50% of Wave A
B2	61.8% of Wave A
B3	76.4% of Wave A
B4	85.4% of Wave A
C1	61.8% of Wave A
C2	100% of Wave A
C3	123.6% of Wave A
C4	161.8% of Wave A

6.2 - Flat Corrections

Flats can occur in 3x different forms: Regular, Irregular (also called Expanded), and Running. Flats generally see Wave C terminating around Wave A, unlike Zigzags where Wave C ends further away, and Wave C needs to have Momentum Divergence.

In a Regular Flat Wave B ends near Wave A's origin and Wave C terminates beyond Wave A. For Regular Flats there are 3x scenarios with these FBR relations found in [2, "5.2.1 Regular Flats - Fibonacci Ratio Relationship"]:

Wave Identifier	Fibonacci Ratio
B	90% of Wave A
C1	61.8% of Wave A
C2	100% of Wave A
C3	123.6% of Wave A to B

Irregular Flats are characterized by Wave C ending well beyond Wave A. Irregular Flats are debated to be more common than Regular, but that's for another post. For Irregular Flats there are 2x bounded scenarios with these FBR relations found in [2, "5.2.2 Irregular Flats - Fibonacci Ratio Relationship"]:

Wave Identifier	Fibonacci Ratio
B	90% of Wave A
C1	123.6% of Wave A
C2	123.6 to 161.8% of Wave A to B

Running Flats are the least likely of the bunch and are characterized by Wave B retracing notably above Wave A's origin and Wave C being unable to completely go back to Wave A. For Running Flats there are 2x bounded scenarios with these FBR relations found in [2, "5.2.3 Running Flats - Fibonacci Ratio Relationship"]:

Wave Identifier	Fibonacci Ratio
B	123.6% of Wave A
C1	123.6% of Wave A
C2	61.8 to 100% of Wave A to B

For graphical depictions of Flats consult Figures 5 to 7 from [3, p5].

6.3 - Triangle Corrections

Triangles tend to be identifiable by "sideways movement that is associated with decreasing volume and volatility." [2, "5.3 Triangles"] Triangles have an ABCDE structure and are bounded by two lines: (1) the line connecting Wave A, C, and E and (2) the line connecting Wave B and D. These lines create 4x forms: Ascending, Descending, Contracting (also called Symmetrical), and Expanding (also called Reverse Symmetrical).

Triangles typically precede the last Impulsive Wave in a higher Wave Degree and are rarely ever found in Wave 2. [3, p6] The subdivision of the ABCDE structure can be ABC, WXY (see 6.4 - Double 3 Corrections for an explanation), or a Flat. [2, "5.3 Triangles - Guidelines"] In highly volatile markets Triangles tend to form in Wave 5, which tends to have the bias to create an extension. [3, p6] For graphical depictions of these Triangle forms consult Figure 8 from [3, p6].

6.4 - Double 3 Corrections

Double 3's are approximate sideways movement combining 2x Corrective Patterns labeled as WXY. Wave W and Y are any Corrective Pattern, while Wave X is an ABC Correction. For graphical depictions of Double 3's consult Figure 10 from [3, p7]. For Double 3's these are the typical scenarios with these FBR relations found in [2, "5.4 Double 3 - Fibonacci Ratio Relationship"]:

Wave Identifier	Fibonacci Ratio
X1	50% of Wave W
X2	61.8% of Wave W
X3	76.4% of Wave W
X4	85.4% of Wave W
Y1	61.8% of Wave W
Y2	100% of Wave W
Y3	123.6% of Wave W
Y4	<161.8% of Wave W

6.5 - Triple 3 Corrections

Triple 3's are similar to Double 3's as they are basically an extended version with 3x Corrective Patterns. Instead of a WXY it's WXYXZ. Wave W, Y, Z are any correction pattern and both Wave X's are typical ABC Corrections. For graphical depictions of Triple 3's consult [2, "5.5 Triple 3 - Fibonacci Ratio Relationship in Elliott Wave Theory"]. For Triple 3's these are the typical scenarios with these FBR relations found in [2, "5.5 Triple 3 - Fibonacci Ratio Relationship in Elliott Wave Theory"]:

Wave Identifier	Fibonacci Ratio
X1	50% of Wave W
X2	61.8% of Wave W
X3	76.4% of Wave W
X4	85.4% of Wave W
Y	<161.8% of Wave W
Z1	61.8% of Wave W
Z2	100% of Wave W
Z3	123.6% of Wave W

7 - Fibonacci Time Sequences & the Benner-Fibonacci Cycle

Fibonacci Time Sequences are something to note, but specifically be warned that they generally apply to longer periods of time (Wave Degree 1 to 3). To give 2x Examples from [1, pp 84 to 85]:

Supercycle Start	Years Since Start	Event
1929	+3	Bear Market Bottom
	+5	Correction Bottom
	+8	Bull Market Top
	+13	Bear Market Bottom
	+21	Bear Market Bottom
	+34	Crash Bottom
	+55	Major Bottom (off by 1 year)

A similar sequence took place in Cycle Wave 3 of the current Supercycle:

Cycle Wave 3 Start	Years Since Start	Event
1965	+1	Nominal High
	+2	Reaction Low
	+3	Blow-off Peak
	+5	Crash Low
	+8	Bear Market Bottom
	+13	Low for both 4.5 and 9.2 Year Cycles
	+21	High, Low, and Crash

Benner's Theory does create a near Fibonacci sequence as is outlined on [1, pp 86 to 87], but runs on a simpler method. Benner denotes the 3x price indicators as Peaks, Troughs, and Major Troughs, but I'll denote them as Tops, Middles, and Bottoms. Tops use a 8-9-10 pattern with the first top being 1902 (8 to follow). Middles use a 16-18-20 pattern with the first middle being 1903 (18 to follow). Bottoms use a 16-18-20 with the first bottom being 1913 (20 to follow). These patterns repeat over and over forming the Irregular Periodicity of Markets. To see the chart that Benner published see [1, p86].

Hopefully this article helps you in your present/future financial endeavors!

Compiled References

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