Elliott Wave Principle

(A short introductory material about Elliott Wave Principle, meant for those who encounter wave predictions for the first time).

If you look at currency trading charts at the international FOREX market, you will easily notice that sometimes price moves upwards or downwards by leaps and bounds, and it is clear that all market participants prefer buying one currency and selling another one (or vice versa) almost unanimously. And sometimes market participants hesitate, and price starts rolling back a bit from a previous trend or oscillating almost in its place during quite a prolonged interval.



Analysts of financial and commodity markets noticed this phenomenon long ago and called these movements trend and correctional market phases correspondingly (trend and correction). But it was an American accountant and author Ralph Elliott, who discovered in the first half of the XX century that a rapid trend breaks down into **five** smaller complete price movements or five **waves** (five wave models as he called these movements) on closer examination. Such five-wave movements – "fives" – always show direction of development of a trend, which is currently dominating.

And corrections (rollbacks) break down into **three** smaller waves or three-five groups consisting from three waves (so-called "threes") on closer examination. Such "threes" give a hint that a correctional market phase is being formed, and the dominating trend will continue its movement in the previous direction after it is finished.

It is hard to overestimate the Elliott's discovery, because if you know objective laws of construction and change of market phases, you can predict further price movement and benefit from it. That is why you should look attentively at Elliott Wave Principle.

Market Phases – "Fives and Threes"

Pay attention to the descending trend on the example below (Pic 2). This trend (red descending line) breaks down into five smaller green waves, and the ascending correction (red ascending line) breaks down into three smaller green waves. The first green trend line breaks down into five smaller blue waves in the same way, and if you look a bit lower, you will notice that the second green correction does the same thing by breaking down into three smaller blue waves.



Of course, it is not necessary to explain that any wave model can contain only odd number of waves.

Fractal Structure of Market

As you've probably noticed, it is very confusing and difficult to describe waves by means of words and colored lines. That is why there is a special terminology and system of symbols for describing waves in the Elliott Wave Principle that allows finding a necessary area on a chart without mistakes.

Swift five-wave movements are called **impulses** within the scope of this theory. Impulses are marked by Arabic or Roman numerals 1-2-3-4-5 (i-ii-iii-iv-v) on a chart. Odd waves always develop in direction of a dominating trend. That is why when zooming a chart in all odd waves also turn out to be smaller "fives" and are marked by numbers (wave symbol always stands next to its end).

For example, a large impulse 1 breaks down into five basic waves of a smaller wave level [i]-[ii]-[ii]-[iv]-[v] of 1, and a wave [i] (as well as waves [iii] and [v]) breaks down into five basic waves of an even smaller wave level (i)-(ii)-(iii)-(iv)-(v) of [i].

As opposed to trend models, all basic waves of counter-trend (correctional) "threes" are marked only by Latin letters. Since even waves of an impulse develop in the opposite (counter-trend) direction, as a rule, they consist of smaller "threes", each wave of which is marked by one of Latin letters A-B-C-D-E-W-X-Y-Z.

For example, a wave 2 breaks down into three basic waves of a smaller wave level [a]-[b]-[c] of 2, and a wave [iv] breaks down into three basic waves of an even smaller wave level (a)-(b)-(c) of [iv].

Here are some examples of the most important feature of financial markets within the scope of the wave theory – fractal structure of markets, when the same types of waves are the basic material for construction of analogous but larger wave models. At the same time, these waves consist of analogous but smaller types of waves.





Notation of Wave Marking

Look at the Pic 4. Here you can see an example of a real marking of the given area of a chart of EUR/USD currency pair without colored lines.



In order not to get confused in belonging of waves to models, wave marking has a strict hierarchy from a higher wave level to a lower wave level; waves of the same level are marked by symbols from one and the same line on a chart.

Firstly Arabic numerals and capital letters in square brackets are used for higher timeframes, then symbols in round brackets are used for lower wave levels, and then symbols without brackets are used. As far as wave levels become lower and lower, Roman numerals and lowercase letters in square and round brackets (and then without brackets) are put into service. Each level has its own color for quicker visual recognition of waves of the same level ([green], [blue], [red])

[1]-[2]-[3]-[4]-[5]-[A]-[B]-[C]-[D]-[E]-[W]-[X]-[Y]-[Z] (1)-(2)-(3)-(4)-(5)-(A)-(B)-(C)-(D)-(E)-(W)-(X)-(Y)-(Z) 1-2-3-4-5-A-B-C-D-E-W-X-Y-Z

$$\label{eq:constraint} \begin{split} &[i]-[ii]-[iii]-[iv]-[v]-[a]-[b]-[c]-[d]-[e]-[w]-[x]-[y]-[z] \\ &(i)-(ii)-(iii)-(iv)-(v)-(a)-(b)-(c)-(d)-(e)-(w)-(x)-(y)-(z) \\ &i-ii-iii-iv-v-a-b-c-d-e-w-x-y-z \end{split}$$

When all six rows of symbols were used up, everything begins over again, but symbols are down-sized for descriptive reasons. You can do it endlessly both in case of zooming out and in case of zooming in.

[1]-[2]-[3]-[4]-[5]-[A]-[B]-[C]-[D]-[E]-[W]-[X]-[Y]-[Z] (1)-(2)-(3)-(4)-(5)-(A)-(B)-(C)-(D)-(E)-(W)-(X)-(Y)-(Z) 1-2-3-4-5-A-B-C-D-E-W-X-Y-Z

Trend Models

We can only add that Elliott and his follower made a full catalogue of wave models for each market phase (trend and correction), which describe all possible variants of market behavior. There are not as many models as it may seem at first.

Only three types of five-wave models describe the trend part of market: an **impulse** and two types of **diagonal triangles (ending** and **leading)**. Distinctive characteristic of these models is that they always show direction of a trend, which is currently dominating, and their basic waves are marked only by numerals.

An **impulse** is a basic five-wave model, which is the basis for construction of all other wave models, including corrections. We will speak about it in the following. Its wave formula is 5-3-5-3-5 (numerals show, to which type each basic wave of a model belongs in succession – to "fives" or to "threes"). According to this formula, all odd waves of an impulse can only be "fives", and even waves can only be "threes" (see Pic 5).

A distinctive feature of an impulse is swiftness; it allows its mail waves not to intercross. Look at Pic 5, where you can see impulses [1], [3], [5] of v of (i); [1], [3], [5] of iii of (iii); i, iii, v of (i);); i, iii, v of (iii); (iii).

Ability of impulses to form **extension** is one of their remarkable features. This phenomenon characterizes swiftness and strength of a trend, when one of odd waves starts extending at the expense of increase of nesting of impulse waves of small levels. An impulse iii of (iii) and the impulse (iii) by itself are examples of extension. Extension can be marked on a chart by a lowercase Latin letter "x" (extension).

A wedge or a leading diagonal triangle differs from a five-wave impulse by the fact that impulses of lower wave level, which make odd waves, deeply intercross. Its formula is the same as the formula of an impulse – 5-3-5-3-5 (see Pic 5). The most important feature of a wedge is that <u>it can only be the first</u>, <u>initial wave in a model of highest wave</u> <u>level</u>. Look at Pic 5: a wedge is the first wave (i) of an impulse (i)-(ii)-(iv)-(v) of (iii). A wedge is always marked out by lines, which form it, for descriptive reasons.

A diagonal triangle or an ending diagonal triangle outwardly resembles a wedge and is a five-wave model with deeply intercrossed basic waves, but its odd waves are not five-wave impulses, but three-wave zigzags (see Pic 5). That is why its formula is 3-3-3-3. A diagonal triangle is always marked out by lines, which form it, for descriptive reasons.

The most important feature of a diagonal triangle is that <u>it can only be the last, ending wave in a model of highest</u> <u>wave level.</u> Look at Pic 5: a diagonal triangle is the last five wave (v) of an impulse (i)-(ii)-(ii)-(iv)-(v) of (iii).



Correctional Models – Zigzag and Flat

Unfortunately, there are much more correctional models than trend models, and it complicates prediction of the correctional phase of market. However, it is easy to divide correctional models into small groups according to problems they solve within the scope of the wave theory.

The most elementary groups are only two three-wave basic models: **Zigzag** and **Flat.** They are always marked by initial letters of alphabet on a chart – A-B-C. All other corrections regardless of their complexity consist of different combinations of these two models.

A Zigzag is the most widespread model apart from an impulse. It is easy to believe in it, because two waves of a zigzag are impulse models (the first wave can be an impulse or a wedge, and the last wave can be an impulse or a diagonal triangle). A formula for a Zigzag is 5-3-5. A Zigzag is a swift and deep correction because of swiftness of waves, which form it (see Pic 6).

A Flat, as opposed to a zigzag, develops sideways in most cases and, as a rule, is not a deep correction, as its name says (see Pic 6). A formula for a flat is 3-3-5. I. e., in spite of first two waves of a flat always being some "threes", its last wave will be an impulse of a diagonal triangle by all means.



Pic 6

Look at Pic 6, where you can see an interesting area of a chart. There are several various wave models collected together. Let's examine it in detail. A zigzag (a)-(b)-(c) of [v], which completes a big diagonal triangle, is the central model of a picture. Its "feet" consist of an impulse (a) with extension in the first wave i of (a) and an impulse (c) with a diagonal triangle v of (c) at the end of it. A link wave (b) is a wave flat a-b-c of (b). First two waves of the given flat are zigzags, and the last wave c of (b) is a diagonal triangle.

Extended Corrections – Horizontal Triangle

Sometimes market participants do not come to common opinion what to do (buy or sell) after formation of the first three-wave correction, and price on a chart continues oscillating almost in its place or rolling back against a trend further out. In this case new elementary corrections are added to the previous corrections, as if being placed on an invisible axis and continuing to increase duration of a correction or extending it. A correction can eventually become a complex combination of elementary "threes".

Les examine the next group of models, which unites the widest class of such combinations within the scope of the wave theory – **extended corrections**. All models of the given group are tied by common signs: they consist of five three-wave groups and form an almost horizontal construction with possible slope in one or another side. Its formula is 3-3-3-3. Such models are intended for increase of common duration of a correction. This vast group of models has one amazing feature: as a rule, **any of them is a penultimate wave in a model of highest level**. Thereby, trend continues its movement in the previous direction after it ends, forming the last wave of the highest model.

All types of **horizontal triangles, skewed triangles** and a complex wave combination – **triple three** –belong to this large group.

Models of the given group can be marked both by first letters of alphabet A-B-C-D-E (all types of triangles are marked like this) and by last letters W-X-Y-Z (triple threes are marked like this). It is done rather by popular tradition than because of day-to-day realities of modern conception of the wave theory.



Look at Pic 7. Here you can see a large divergent horizontal triangle a-b-c-d-e of (iv) and a small convergent triangle (A)-(B)-(C)-(D)-(E) of [X] of d. Please, notice that lines, which are used for highlighting the triangle, are inclined **every** which way.

As you can see, both triangles are penultimate waves in a model of highest level; it allows to predict further price movement with a sufficient amount of accuracy.

Extended Corrections – Skewed Triangle

Look at Pic 8. Here you can see a couple of skewed triangles: a large triangle A-B-C-D-E of (4) and a small triangle (a)-(b)-(c)-(d)-(e) of [b] of D. Please, notice that lines, which are used for highlighting triangles, are inclined in one direction **along** the dominating trend (the name of a model originates from this fact).





As you can see, here both triangles are penultimate waves in a model of highest level, too; it allows to predict further price movement with a sufficient amount of accuracy as well.

Extended Corrections – Triple Three

As a matter of fact, a triple three is an unsuccessful horizontal or skewed triangle. I.e., there are two possibilities: either lines, which form it, remind some kind of triangle, bur price disturbed its geometry (look at Pic 9 – a wave [Z] crossed boundary of a wave [Y]), or lines, which form it, are inclined in one direction **against** the dominating trend.



The given model differs in no way with triangles in other respects and is also a penultimate wave in a model of highest level; it allows to predict further price movement with a sufficient amount of accuracy.

Triple Zigzag

The next group includes the swiftest and deepest correctional model – a **triple zigzag**. It also has a formula 3-3-3-3, but the name of this model implies that zigzags are the basis of this correction. The main goal of this model is not increase in duration, but increase in depth of correction, and it handles the job well.

A triple zigzag doesn't concern elementary models and triangles, so it is marked by last letters of alphabet W-X-Y-X-Z. It should be noted that only odd waves W, Y and Z must be zigzags in this model. Link waves X can be any other "three", including zigzags.

Look at Pic 10. A triple zigzag w-x-y-x-z of (ii) is a second correctional wave of some large impulse.



Double Three and Double Zigzag

We've examined both the most elementary models consisting of only three waves (one three-wave group) and the most complex models consisting of five three-wave groups. We've missed only two intermediate models consisting of three groups of elementary "threes" – a double three and a double zigzag.

Both models have a formula 3-3-3. They are marked by last letters W-X-Y as far as they don't concern elementary models. Their basic difference is that a **double three** is formed almost horizontally and can consist of a set of any "threes". From the other hand, odd waves of a **double zigzag** (W and Y) must be zigzags, and the model itself must be steeply inclined against the dominating trend.

A double zigzag on Pic 12 is relatively easy for understanding, but it is quite difficult to examine a palisade of waves of a double three on Pic 11, because it complicates its construction by each "three". Its first "three" represents an elementary zigzag w of (iv), a link wave x of (iv) is already a double zigzag, and the last "three" y of (iv) is quite a rare kind of double three by itself, which combines a zigzag and a horizontal divergent triangle. Well, there are many surprises in corrections.





Information About Elliott Wave Indicator is Available Here: <u>http://elliottindicator.com</u>