Introduction to Fibonacci Retracement and Expansions

Twenty Eighth session of Forex Training

Welcome to Forex professional training in financial markets.

Introduction to Fibonacci Retracement and Expansion, Fibonacci rules and details will be discussed in this session.

Fibonacci Theory

Leonardo Pisano Bigollo, also known as Leonardo Fibonacci, an Italian mathematician, proposed his theory on population growth rate formula.

The sequence of numbers which was calculated by Fibonacci formula is derived from all natural orders, such as distances between stars or even position of human organs.

The numbers are calculated through adding the last two numbers as follows:

1, 1, 2, 3, 5, 8, 13, 21, 34, 55...
The result of a given Fibonacci number divided by another Fibonacci number is used in financial market considerably. The sequence is:

0 - 23.6% - 38.2% - 50% - 61.8% - 76.4% - 88.6% - 1 – 1.27 - ......

The numbers between 0 and 1 can be represented in percentages which develop supportive levels, while numbers above 1 create resistance levels.

The supportive levels are used in Retracement Fibonacci, while resistance levels are used in Expansion Fibonacci.

**Fibonacci Retracement**

Fibonacci Retracement can be drawn between two swings, which show probable supportive levels.
The effect of each level may be applicable unless it is crossed by market price. If price reaches higher levels, trend has more tendency to change direction.

Considering that Fibonacci is drawn between two reverse points, levels are supportive when a trader realizes the whole trend direction; otherwise, if a trader determines direction of the trend after it hits the 0 level, the Fibonacci levels would act as resistance.

Examples on MT4 can be reviewed for further comprehension. Trader can find Fibonacci buttons in the toolbar.

If they are not shown on the toolbar, a trader can right-click on the toolbar, through Customize option in menu a trader can insert any option from Available list to Selected list.

A swing can be selected to draw a Fibonacci Retracement on. The swing high and low points are connected.

After placing Fibonacci, a trader can right-click on the red line to open properties window.
76.4% level can be added to Fibo Levels tab, a trader must enter 0.764 in Level field, plus in description field a trader can enter 76.4.

The main trend is upwards so a trader should consider Fibonacci effects on direction after it hits 0 level.

Price has reached 23.6 support line which had little effect on the trend, while 38.2 and 50 Level did not have significant effect.

Direction has changed to upward when price reached 61.8.

Some Fibonacci levels are not important, so levels have probable effect on trend.

On 61.8 there is another Level so it was supposed price would change its direction toward upside. Another Example can be drawn on another swing.

On the downward trend, a Fibonacci Retracement can be placed on price where trend direction has changed on 23.6, 50, 76.4 and 88.6 while 38.2 and 61.8 did not have any effect on the price movement.
The longer the swing selected, Fibonacci may have more powerful effect on **price trend**.

Considering that level would be effective unless it is crossed by market **price**, 23.6 was not effective anymore after it had been passed by price just like level 50.

Trader can divide Fibonacci into four main parts, first section from 0 to 38.2, second part from 38.2 to 61.8, third on from 61.8 to 88.6, and the last one is from 88.6 to 100.

When price fluctuates in the first region, the **agreeing direction** would be highly probable if market price passes the 0 level.

The power trend towards agreeing direction decreases as market price reaches the higher area of Fibonacci.

If price reaches the second section, it continues its **previous trend** toward 0; after crossing the 0 level, the probability of agreeing direction is normal.

If price meets the 3rd and 4th regions, then the agreeing direction toward 0 level is not presumptive.
If market price passes 0 level, then a trader must update the Fibonacci 0 point.

For instance, a trader would place the 0 level on the end of a swing, which is changed to a lower point after market price proceeded to a new level and again it could be updated to a new rate.

On the last 0 level, Fibonacci showed significant levels on 38.2, 50 and 61.8.

**Fibonacci Expansions**

Fibonacci Expansions indicates probable resistances against current market trend.

It would be useful alongside of some patterns such as Flag or Head and Shoulder. Level rates can be defined on the basis of strategies a trader chooses.

On MT4, a trader can draw a Fibonacci Expansions on an uptrend, which has a middle and an end points.
Through right-click menu, Expansion properties, Fibo levels can be modified by a trader.

The internal and **external Levels** are accessible in this tab, so a trader can modify or add another level in which level rate will be considered higher than 1.

The end point can be relocated by a trader easily.

If the length of the red line from start to **middle point** is considered as 100%, then 61.8 means that level is 61.8% of the swing length which is higher than middle point of Fibonacci.

The gap between the middle point and 100 level equals the length of the swing.

It can be checked easily in MT4 by placing the same Fibonacci over the previous pattern.

Trader can use Fibonacci Retracement on a trend, and enter some levels to display Fibonacci **Expansions**.
Through the Right-click menu, in Fibo Levels of Fibo properties, a trader can add new levels; -0.5 in Level field and h/2 in Description field, -1 in Level field and h in Description field.

The h/2 and h levels add Fibonacci Expansions features to a given Fibonacci Retracement to consider future TP prices and target prices.

There are several Fibonacci types on PForex.com traders can study for further convenience, yet the most widespread types are Retracement and Expansions.

That concludes this session, until next time and another session take care.