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FuturoFX Users Manual



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The "FuturoFX Spread" indicator is a sophisticated correlation engine that is able to show a projection about future price action, based on the correlations identified in the history. It works on any timeframe and on any financial instrument (currency pair, commodity, future contract) that is available on a MT4 platform.

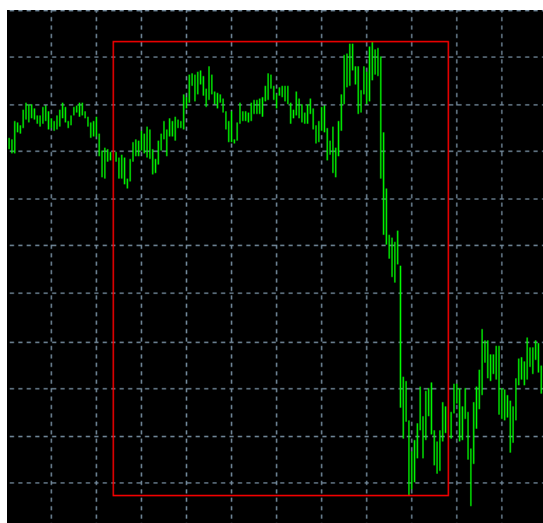


The installation process:

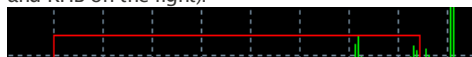
1. Copy the "Cerbero.dll" file into the "experts/libraries/" folder of your MetaTrader 4 installation.
2. Copy the "FuturoFX.ex4" file into the "experts/indicators/" folder of your MetaTrader 4 installation.
3. Restart the Metatrader 4 platform.



It is important to understand the basic principles behind the large amount of calculations performed by FuturoFX. FuturoFX looks at the last N bars on your chart (let's call them a "recent history block", or RHB) and then goes back in the past for analyzing all past sequences that are N bars long (let's call each of this sequences an "old history block", or OHB). Therefore FuturoFX compares 1 RHB against multiple OHB. This "comparison" is a mathematical computation called "correlation". The correlation basically measures the extent of correspondence between two arrays of numbers. The result of this mathematical computation is a number between -100 (maximum inverse correlation) and +100 (maximum positive correlation). When the correlation is above a threshold like 70/80 you would easily say that RHB and OHB are "similar", like in the example below (OHB on the left and RHB on the right):

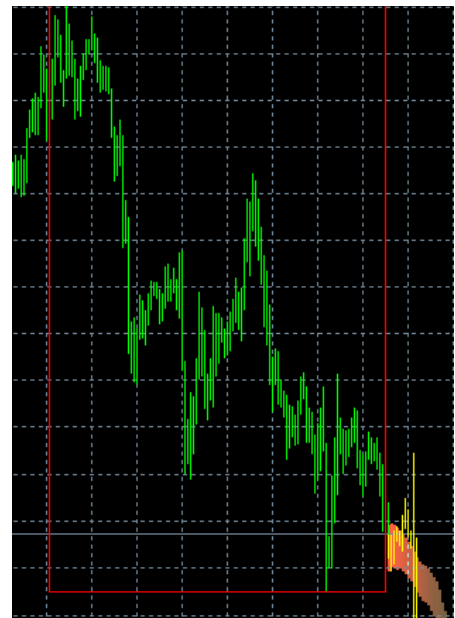


When the correlation is below a threshold like -70/-80 you would say again that RHB and OHB are similar, however they are just specular, like in the example below (OHB on the left and RHB on the right):



Web2PDF

converted by Web2PDFConvert.com



FuturoFX by default looks only for strong positive correlations between RHB and OHB. However the user can also change the settings in order to take into account both positive and negative correlations.

Usually **FuturoFX** finds a number of OHB that show a "good" correlation with RHB. The next step is analyzing the M bars just after each OHB (let's call each of them OHB_future), in order to build a projection of M bars in the future of RHB (let's call it RHB_future). The average of the best OHB_future sequences is shown by **FuturoFX** in a coloured trail (red tomato by default), while the absolute best OHB_future sequence is shown by **FuturoFX** as a sequence of bars (yellow by default).



FuturoFX comes with a detailed textual interface that can be enabled/disabled by the user. When it is enabled, the textual interface is displayed on a blue background that gets brighter when the average correlation approaches +100.

```

FuturoFX v1.01
by www.pimpmys.com
-----
Current Open Time: 2012.11.07 12:00
Candles analyzed: 1440 out of 3148
Correlations[120] performed: 1200
Correlation >= 75.0% : 22 matches (79.44%)
Best correlation = 86.43% [2012.02.17 08:00]
Std Dev (pips) = 52.5 on Highs, 54.0 on Lows
Potential (pips): Long 163.9 -- Short 20.0
CONFIDENCE SCORE = 67.1%
-----

```

The interface changes with each new incoming bar. Here is the exact meaning of each row from top to bottom:

- the Indicator name (FuturoFX) and version number (first released version is v1.00)
- a copyright notice (www.pimpmys.com)
- the open time of the last bar displayed on chart (this is useful when setting **FuturoFX** to take screenshot automatically – please read the "Options" section for understanding this important feature)
- the number of candles analyzed in the past with respect to the whole history available on MT4 (the user can also make FuturoFX to analyze the whole history)
- the number of correlation performed (number of OHB in the analyzed history) and the length of each history block between square brackets
- the number of correlation matches above the threshold, and their average value between brackets
- the number of correlation matches below the negative threshold, and their average value between brackets (this line is displayed only if the user selects also negative correlations)
- the best correlation match identified in the past: both the correlation value and the time in the past when this match occurred (between square brackets) are reported
- the standard deviation on the High and Low values of the colored trail displayed by the indicator (this line is displayed only if the user wants to display STD information on chart)
- the "profit potential" of long and short trades, based on the difference between the Open price of the last candle and Highest High and Lowest Low of the "Best Projection"
- a "Confidence Score" which is a measure of how good the projections in the future should be considered



Three visual elements of **FuturoFX** that are enabled by default are "Rectangles", "Average Projection" (the colored red

tomato trail) and the “Best Projection” (the sequence of yellow bars).



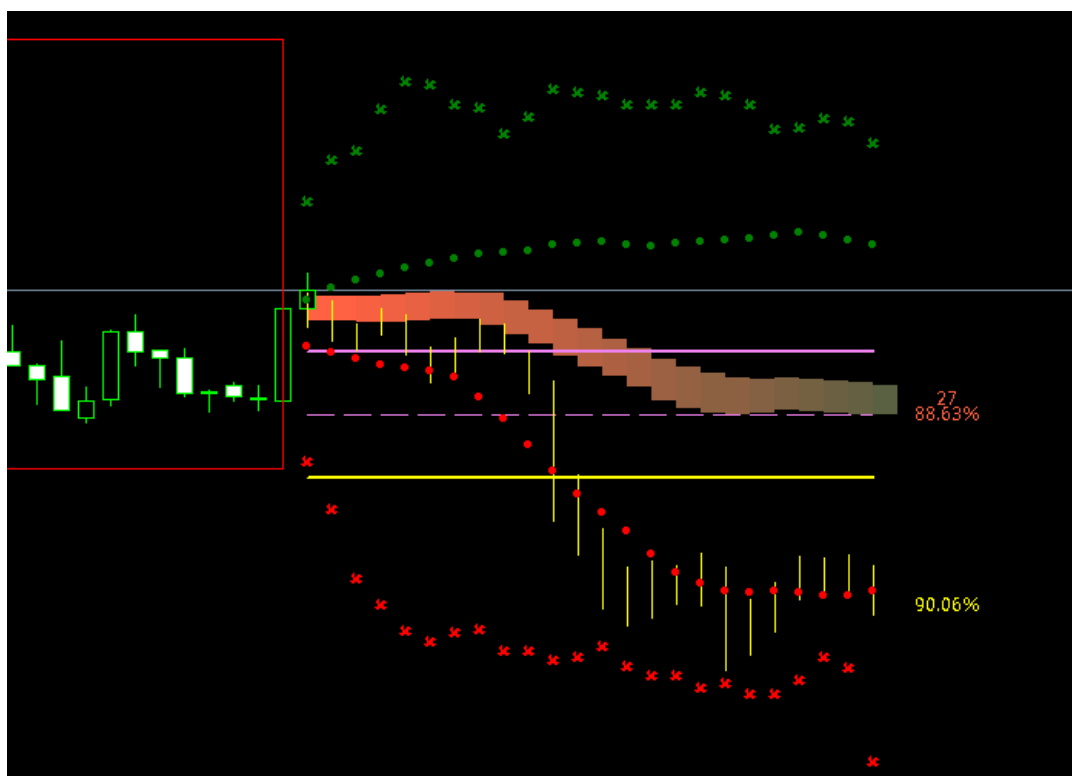
The picture above shows the red Rectangle delimiting RHB (the “Recent History Block”), and scrolling back the chart we can also find another red Rectangle delimiting the OHB (an “Old History Block”) with the best correlation match.

The picture also shows a red tomato trail which is the “Average Projection” along with two numerical information associated to it: an integer number and a percentage. The integer represents the number of matches taken into account for calculating the Average Projection. The percentage is the average correlation score of this projection. Usually the higher these numbers the better, because the projection in the future is more reliable.

Finally the picture above also shows a series of yellow bars which form the “Best Projection”, along with a percentage which represents the correlation score of the “best match”.



Other three visual elements of FuturoFX can be enabled by the user: “Barycentres”, “Standard Deviations”, and “Outliers”.



The secondary visual elements should be used only by traders who have already some experience with the basic features of FuturoFX, otherwise they may be just confusing.

The three horizontal lines are the “Barycentres”: the solid violet line is the “center of mass” (or average value) of the “Average Projection”, the solid yellow line is the “center of mass” of the “Best Projection”, the dashed violet lines is exactly half-way between the two previous lines. You can consider the space between the violet and yellow solid lines as a

"channel". Usually when price is outside the channel and above it, it can be worth looking for short trades. When price is outside the channel and below it, it can be worth looking for long trades. In both cases the dashed line can be considered a conservative take profit level.

The green dots represent a Bollinger Band calculated on the upper line of the Average Projection. The red dots represent a Bollinger Band calculated on the lower line of the Average Projection. The closer these dots are to the red trial the better, because it means all future projections strongly agree among them, therefore the Average Projection can be considered pretty reliable.

Finally the green and red crosses represent "Outliers", which are the most extreme Highs and Lows that **FuturoFX** detected in the past among the selected correlations. These extreme values can warn the trader about the most violent price excursions that happened in the past (and may happen in the future as well).



FuturoFX can fit many different trading styles. Since it works on any financial instrument and on any timeframe it is a very flexible tool for trading virtually any market. The most simple use of FuturoFX is as a leading indicator that you can integrate in your current trading toolbox. You can use the projections shown by FuturoFX as additional filters in your trading plan, or as your main trade signals.

We found at least three ways of trading that rely on **FuturoFX** as the main (and possibly only) trigger for entering trades:

1. scalping
2. end-of-day trading
3. binary options

Here is the basic trading logic for using **FuturoFX** as a manual scalping tool ([click here to learn more](#)):

- keep **FuturoFX** opened on two timeframes (e.g. M5 and M30)
- make sure the "average projection" and "best projection" on both timeframes are in agreement
- if current price is still "low" compared to a bullish projection, then you can consider entering a Long trade
- if current price is still "high" compared to a bearish projection, then you can consider entering a Short trade
- place the take profit taking into account the projection and relevant support/resistance areas you can spot in the last few bars
- if **FuturoFX** drastically changes its outlook, you should modify the take profit or close the trade

Here is the basic logic for using **FuturoFX** as an end-of-day trading tool ([click here to learn more](#)):

- open two **FuturoFX** charts around 00 GMT each day: H1 and H4 timeframes
- make sure the "average projection" and "best projection" don't look messy on either charts
- determine if the projections on the two charts show "some agreement"
- if you can figure out the probable price pattern for the next day then enter a pending order with fixed SL and TP and with expiry 24 hours later
- in few cases ("strong agreement" between charts) a market order is required instead of a pending order, but always with fixed SL and TP levels
- SL and TP must be placed according to both price action suggested by **FuturoFX** and relevant support/resistance areas
- when you open the trading platform the next day at 00 GMT you should close the trade from the day before, if it is still open; then you can look at the H1 and H4 charts for deciding the next trade
- do not enter any trade if the charts look messy and you cannot figure out the probable price action for the next day (usually you'll enter only 2 or 3 trades per week)

Regarding binary options, honestly we are not experts in this field, however **FuturoFX** seems like the perfect ally for "High/Low" trading. The High/Low method of trading binary options is a straightforward speculative position taken by the trader, who determines if the future market price is above or below the current strike price. The trader will experience a gain or a loss based on the prediction of whether or not the price is higher or lower than the entry price. This is exactly the kind of prediction that **FuturoFX** has been built to answer for. Many brokers provide "1 hour" binary options that can be traded throughout the day



email ()

this field must contain the email address used for the transaction for buying the indicator, otherwise it will not be able to authenticate and it will display an "Authorization failed" message on chart.

look_back (120)

this is the number of bars in each history block that FuturoFX uses for computing correlation.

look_forward (24)

this is the number of bars "in the future" displayed by FuturoFX with the "Average Projection" and "Best Projection". Beware: the higher this number the less reliable the prediction on the bars that are most projected into the future.

max_history (1440)

this is the max number of bars that FuturoFX examines in the history when computing correlations. If max_history=0 then FuturoFX takes into account the whole history available on chart.

correlation_data ("OHLC")

these are the data used by FuturoFX when computing correlations. The default value "OHLC" means that FuturoFX actually performs 4 correlations at the same time on Open, High, Low, and Close data, and then it makes an average of these four correlations. The user can choose any combination of data (the order doesn't matter): O=Open, H=High, L=Low, C=Close, M=Median, T=Typical, W=Weighted. As an example correlation_data = "HLT" means that FuturoFX will perform 3 correlations on High, Low, and Typical data.

cor_threshold (75)

this is the threshold set for correlations. Only correlations above this threshold are taken into account by FuturoFX for computing the "Average Projection". If the user sets a negative number (e.g. -75) then FuturoFX will look for both strong positive and strong negative correlations.

select_best_correlations (50)

this is a further filter on the OHB sequences selected by FuturoFX for computing the "Average Projection". The default value (50) means that only the 50 best correlation matches are taken into account for computing the "Average Projection". This feature is disabled when select_best_correlations = 0: in this case ALL correlations matches above the threshold are taken into account.

display_options ("TABR")

this field represents the textual and graphical output of FuturoFX. The default value ("TABR") means that FuturoFX will display the Textual Interface ("T"), the "Average Projection" ("A"), the "Best Projection" ("B"), and the "Rectangles" ("R"). Other available options are "Barycentres" ("C" like "Center of Mass"), "Standard Deviations" ("S"), and "Outliers" ("O"). The user can select any combination of options (the order doesn't matter). As an example display_options "ABC" means that FuturoFX will only display "Average Projection", "Best Projection", and "Barycentres" (and no Textual Interface).

avg_projection_color (Tomato)

this is color of the graphical element "Average Projection".

best_projection_color (Yellow)

this is color of the graphical element "Best Projection".

text_size (10)

this is the size of text associated to the graphical elements "Average Projection" and "Best Projection".

text_font ("Segoe UI")

this is the font of text associated to the graphical elements "Average Projection" and "Best Projection".

window_screenshot ("0")

the default value "0" means that FuturoFX does not take any screenshot of the current chart automatically. When "1" FuturoFX takes a new 1024x768 pixels screenshot of the current chart at each new incoming bar. The file is placed in the "experts/files/" folder of the MT4 installation with a name like "FuturoFX/EURUSD_M5/EURUSD_M5_2012-10-29_0950.gif" (this is a screenshot taken at 09:50 of the 29th October 2012 on a EURUSD 5 minute chart). The screenshots are automatically organized into subfolders. If window_screenshot = "4" then a screenshot is taken automatically each 4 bars, and so on. The user can also put a string like window_screenshot = "H13" and that means a screenshot is taken each time the last incoming bar is a 13 GMT.

A further option is the dimension of the image in pixels. As an example window_screenshot = "2;1000;700" means that a 1000x700 pixels screenshot is taken each two bars.

Since FuturoFX cannot display information in the past, taking screenshot is a convenient way of keeping trace of how it behaved during the trading day.

1



Hi,
I scalp trade using range bars and M1/M5 price charts.
So far I have found that FuturoFX frequently goes to N/A on both M1 and M5 and in fact is rarely gives a reading. Is there a solution for this as it doesn't seem very practical as it is now?
Also have you tried it using Range Bars?
Thanks, Alasdair



Alasdair Anderson
10.29.12 at 7:12 pm
[Permalink Reply](#)

Hi Alasdair, on lower timeframes I usually put the correlation threshold as low as 60. Other ways of increasing the chance of getting a correlation match are decreasing look_back and increasing max_history (or putting max_history=0 which means that the whole history on chart will be examined). I haven't tried yet using FuturoFX on RangeBars, I think it would make sense (if it works).



Paolo
10.30.12 at 9:59 am
[Permalink Reply](#)

Andrea & Paolo

I am running H1 & H4 charts for FUTURO, on the H1 chart I have the red path and the yellow bars, but on the H4 chart it just says N/A. What is the problem please?

Regards,
Graeme.



Graeme
10.30.12 at 6:42 am
[Permalink](#) [Reply](#)

Hi Graeme, sometimes there are no correlation matches with a score above the threshold (default 75%). In this case of course FuturoFX cannot display any relevant information, and it just prints "N/A" (not available).

You can increase the chances of getting a correlation match on chart when you do some or all of the following: decrease the correlation threshold, decrease look_back, and increase max_history.



Paolo
10.30.12 at 10:10 am
[Permalink](#) [Reply](#)

Andrea,
How do I turn on the Barycentres lines please?

Regards,
Graeme.



Graeme
10.30.12 at 7:34 am
[Permalink](#) [Reply](#)

Hi Graeme, the input setting you should change is "display_options". Just add a "C" into this string (C= center of mass = barycenter) and you'll get the Barycenters displayed on chart.



Paolo
10.30.12 at 10:12 am
[Permalink](#) [Reply](#)

Andrea,
Why isn't there any writing on the blue interface square please?

Regards,
Graeme.



Graeme
10.30.12 at 7:55 am
[Permalink](#) [Reply](#)

Hi Graeme, please send to support a screenshot of your chart and any error/warning messages you may see on the Experts/Journal tabs of your MT4 platform. A black text interface is an issue was never reported before this time.



Paolo
10.30.12 at 10:14 am
[Permalink](#) [Reply](#)

Very Interesting piece of work. Well done.
My only issue is I cant get it to save screenshots.
I have followed instructions perfectly.
Nothing in the experts/files folder.
regards
Paul



Paul
11.02.12 at 11:56 am
[Permalink](#) [Reply](#)

All good. Once I click on compatability files they all showed up!
Any chance on the user selecting colours? I like to have red down price bars but it gets confusing when the large box is red as well.

cheers
Paul



Paul
11.02.12 at 12:10 pm

[Permalink Reply](#)

Hi Paul, yes there are two input settings for selecting the colors of best projection and average projection.

Paolo
11.02.12 at 1:00 pm
[Permalink Reply](#)

Hi
I have been figuring best possible set up for trading Binary Option on hourly chart but struggling a lot with the idea, how will you suggest the set up.

Thanks
Ronnie

Ronnie
11.09.12 at 2:07 pm
[Permalink Reply](#)

Hi Ronnie, I've made some experiments this week using multiple "look_back" periods on the same timeframe. As an example 6 EURUSD M1 charts with look_back set at 15, 30, 60, 90, 120, and 180 (from 15 minutes back to 3 hours back). Of course each different look_back period makes FuturoFX predict different targets for Long and Short (I'm referring to "Potential pips Long" and "Potential pips Short" displayed in the Textual Interface). Then I've considered the average value of these Long and Short targets. The interesting thing is that when the open price of a new bar is pretty close to the Long target then it is a good time to sell (because there is negligible profit potential on the upside across multiple periods and a reasonable profit potential on the downside). Viceversa when the open price of a new bar is close to the Short target then it is a good time to buy. This multi-period approach could be the key for using FuturoFX with binary options when the expiry is pretty small (like 1 hour). I've called this new indicator "FuturoFX_Multi" at the moment. I still want to test it for some time before deciding if I should release it along with the original FuturoFX.

Paolo
11.10.12 at 1:03 pm
[Permalink Reply](#)

I trade binary options. What setting do i use for the 5-15 and 30 minute.

Stewart Samuels
11.12.12 at 7:25 pm
[Permalink Reply](#)

Hi Stewart, as we said we are not actively trading binary options, therefore we cannot suggest "best settings" in this field. It depends a lot on the expiry time of your options. However my suggestion is to combine the results coming from multiple "look_back" periods on the same timeframe. When the "Potential pips Long" and "Potential pips Short" agree among multiple look_back periods it is definitely a good sign that price has a high probability to move in a specific direction.

Paolo
11.13.12 at 10:22 am
[Permalink Reply](#)

This indicator works offline charts? If it works what is parameter setting

vin
01.06.13 at 1:50 am
[Permalink Reply](#)

Hi Vin, I've just opened FuturoFX side by side on two EURUSD M1 charts (one standard and the other offline) with the same (default) settings and the output is identical on the two charts. Therefore I guess FuturoFX works just fine on offline charts. I'm not sure what is the benefit of this setup though.

Paolo
01.08.13 at 9:50 am
[Permalink Reply](#)

Hi, i'm looking with interest at your Futurofx and thinking to buy it, but I need a clarification about correlations: if I select threshold -75 will the indicator show up both the possibilities (i mean the possible future move of the direct correlation and the possible future move of the inverse correl. too), or will it make an average between the two and show up only the most probable? said that with threshold -75 should it be more reliable?
thks

RED DEVIL
01.08.13 at 6:52 pm

[Permalink Reply](#)

Hi Red Devil, thanks for your interest. When you select a negative threshold like -75 FuturoFX searches both correlation matches which are >75 and <-75. The indicator treats them the same way and does not distinguish them. However the projections in the future relative to negative correlations are just "reversed" (I think that makes sense). I normally use FuturoFX only with a positive threshold. I think a negative threshold may be useful on small timeframes like M1 and M5, but I have not tested this approach yet.

Paolo
01.09.13 at 2:22 pm
[Permalink Reply](#)

Thank you Paolo, now the new question is: if the indi does not distinguish between the two kinds of correlation, it should show up both, correct? if yes what if it will show up two opposite correlations that have the same value and are going in opposite directions?

Then, why do you think that inverse correlation could be useful only on lower tf's? do you think that inverse correlation should be considered a less reliable pattern?

I think this is a very important point to figure out before using the indi, so please spend some words about it not only for me, should be of interest for all the members too.

Tks

RED DEVIL
01.10.13 at 3:44 pm
[Permalink Reply](#)

Hi Red Devil, FuturoFX displays only one future projection, which is an average of the best correlation matches (or - more precisely - an average of the candles that come immediately after the best correlation matches). When the threshold is negative FuturoFX searches both positive and negative correlation matches, but the end result is always a single future projection. Often financial instruments show a clear bias (bullish or bearish) on the larger timeframes, that's why I'd not consider negative correlation matches on such timeframes. I prefer to use only positive correlation matches in this case. On the contrary this bias is much less visible on lower timeframes, that's why using a negative threshold can be an option worthwhile considering in this case.

Paolo
01.10.13 at 6:26 pm
[Permalink Reply](#)

Hi paolo, ok now it's clear and it makes sense for sure. I'm sorry but there is another point I do not understand: if the best correlation is the OHB that actual price action is reproducing with the highest number of matches within the threshold selected, the logic should be that also the projection of the best correlation should be the most reliable, correct? So why to consider also the average of the other matches that have a lower correlation score though within the threshold? Should I consider the average as the worst case scenario? What should be the best correlations number with threshold 85 ?

Thks

RED DEVIL
01.15.13 at 6:31 pm
[Permalink Reply](#)

Hi Red Devil, thanks for bringing up interesting questions 😊 FuturoFX displays a "best projection" and an "average projection". The best projection is relative to only one OHB, the one with the highest correlation score when compared to RHB. The average projection is relative to all OHB (olds history blocks) that show a correlation score greater than the threshold with respect to RHB (recent history block, or the most recent price action). I think both projections are important. We are crunching numbers in order to put probabilities in our favor, so I always like to consider multiple scenarios. When I see the best projection and the average projection have a similar shape I feel much more confident about the next market move. Similarly when I use the "multi-period" feature of FuturoFX I'm considering an average of best projections calculated across multiple lookback periods. Again this gives me more confidence in my trade setups. It is like when you study a chart on multiple timeframes and you are happy seeing that many of them confirm the same bullish or bearish outlook. I hope this makes sense 😊

Paolo
01.16.13 at 10:07 am
[Permalink Reply](#)

YB

Name (required)

Mail (will not be published) (required)

Website



CAPTCHA Code *

Submit Comment

