GOLD EVOLUTION AND ANALYSIS ON THE COMMODITY EXCHANGE

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ABSTRACT
In this article we want to emphasize the evolution of the Gold, on the commodity exchange and its analysis in present. Most investors follow the evolution of a certain market to forecast its course on the chart, this being one of the most important things that must be taken into account by an investor – the history repeats itself. Therefore because of this, we studied the gold’s evolution within the commodity exchange, to have a better possibility of analyzing it in the present, for greater winnings. The research method consists in using literature of specialty, using the trading program XTB Trader and using the technical analysis through technical indicators. In conclusion, the importance of the evolution of the Gold was highlighted in the article, so we analyzed the Gold on the time frame H1 and W1, using technical analysis and candle formations. Finally it was demonstrated the importance of the Gold’s history for its current and further analysis.

Key words: gold, evolution, forecast, analysis, commodity exchange

Introduction
The commodities markets, especially the oil, gold, silver and as well as of the industrial metals like copper, zinc and aluminum prices were found in the center of the investors once with the crisis that takes place in the last years. The prices increase at the most important raw materials had a huge influence on the global economic picture.
The commodity markets are the oldest exchange in the world. Their beginnings are somewhere in the ancient era, and the first commodity exchanges can be found already in the XII century in the countries of Western Europe.
Currently the mining companies around the world estimates that the current high gold prices will maintain during 2011, according to the PwC Global Gold Price Survey. About 82% of the gold producers expect that the level of their precious metal production to increase in this year. Almost three quarters of the mining companies that are exploiting gold deposits expect that the gold’s price to increase until the third quarter of 2011.
However, the current gold price is still, in real terms (adjusted to inflation) much below the level reached in 1980. The representatives of the mining companies estimate that the gold’s price will range between 1.400 and 3.000 U.S. dollars an ounce, 40% of respondents estimate this value at about 1500 U.S. dollars.
Given the high demand for gold, it will be interesting to see if those mining companies who have identified gold marginal deposits will start the production in a faster rhythm than they would in a normal market condition.
The PwC survey shows that 70% of the gold producers intend to use additional liquidity obtained from the high price of
gold to find some new deposits or extent the current ones to ensure a high recovery of gold reserves. The main strategies used are organic exploitation, Brownfield type (78%) meaning the expansion of some already active exploitations, organic exploitation, Greenfield type (54%), which involves the search for new deposits of gold, fusions and acquisitions (37%).

Last year it was registered a significant increase of the transactions number in the mining sector, a trend similar to that shown in 1980 when the gold price was at the highest level. The concerns about the fragility of coins, particularly of the U.S. dollar and euro coin, contribute at the increase of the gold price. The substantial budget deficits and degree of increasingly high public sector debt in the United States and Europe put pressure on the two global circulation coins. As a result, increasingly more states are turning to the gold reserves as a substitute to keep the reserves in currency.

**Research methodology**

We used in research methods of technical analysis concerning the implications of the fundamental indicators which may affect the market through the element of price, by using the platform Metatrader v 4.0.

The technical analysis combines the influence of all the fundamentals that affects a market in a single element, the current price. To research, all the fundamental indicators, the investors can analyze the price movements on a graphic, knowing that the price summarizes each known factor by the market at the current moment – at least in the investors’ perception. The price is the visible reflection of all the forces that are at the base of the market, as well as the limbs and branches are the visible parts of a tree while the fundamentals are the roots that feed the tree’s growth. For a better understanding of the future graphics from within this article we present the used technical indicators:

1. The moving average is certainly the easiest indicator to use.

   The moving average is a confirmation indicator not being able to predict, being use to confirm the current trend. The moving average is of 4 types: simple moving average, exponential moving average, smoothed moving average and linear weighted moving average. In the case study we will use only 2 types of the 4 listed above: simple moving average, exponential moving average.

   a) Simple moving average

   This moving average is calculated through the use of arithmetic average of the quotations of an instrument for a number of selected periods. For calculation there can be used different values from within a period as: opening, closing, maximum, and minimum or why not and combinations between them). For example for 12 periods the moving average is calculated by adding the values of the last 12 periods and divided by 12.

   b) Exponential moving average

   The technical analysts use such type of moving average to determine a more rapid adjustment of the current prices. This type of average reduces the present delay at the simple moving average giving a higher share in the calculation of recent quotations. The share given to the most recent quotations is determined by the number of periods used. The lower this number is, the last quotations receive a higher share.

   The calculation formula of this type of moving average is the following:
EMA = (CLOSE(i)*P) + (EMA(i-1)*(100-P))
I= current period
P= share associated with a period (as a percentage)
Both moving averages can be used as support/resistance lines. For the generation of signals for opening of positions there can be used the intersections between a short-term moving average and a long-term moving average or between the moving average and the price’s chart.

2. MACD
It is calculated as difference between the two exponential averages. A positive value of MACD shows that the moving average on 12 periods has a higher value than that calculated for 26 periods. A negative value of MACD indicates a lower value for the moving average calculated on 12 periods than the 26 period.

3. Stochastic
Developed by George Lane, the Stochastic Oscillator is a momentum indicator that shows the current position of the quotation towards the maximum/minimum interval for a certain number of periods. The closing levels that are close to the maximum of range indicates the buying pressure, and those nearby the minimum, shows the selling pressure. The value below 20 indicates overselling and those over 80 overbought. The signals are generated at decreasing fewer than 80 from the overbought area and at the increase over 20 from the oversell. The signals of taking position can be generated and by the intersection between the lines %D and %K. The intersections are still frequent and may generate false signals. The best signal is generated by the divergences that appear in the overbought zone (negative divergence) and oversell (positive divergence).

Results
Below we have provided an analysis of gold’s evolution in early 2010 for a period of 3 months. The analysis was performed on a Timeframe H4.
In January of 2010 the maximum level which the gold reached was of 1160.33 dollars per ounce, on 11/01/2010 after which followed a downward trend until the end of the month, thus giving sell signal, subsequently reaching a minimum level of 1076.12.
If in January the Gold entered strong on the market, reaching the maximum value at the beginning of the month, in February it had an upward trend during the first days after which it suffered an unexpected decrease, reaching to touch the established minimum value at 1045.60 of U.S. dollars per ounce.
The Gold market of March month has been quite volatile thereby generating several signals to buy respectively to sell. The highest price of the month was of 1143.95 U.S. dollars per ounce, the lowest price was established at the level 1084.89.
We had buy signals by passing the mobile line of the MACD indicator above 0 which means that there will be a growing trend. Further the sell signal was given primarily by the moving averages, the simple one passing upwards over the exponential one, thus generating a buy signal. At this the
MACD indicator gave the same signal but later, by passing the mobile line under the 0 level. The Stochastic indicator was more receptive so that at every deviation of the trend it has responded accordingly generating very good signals. Towards the end of the month the first indicator that gave buy signal the Japanese Candlestick Formation called Hammer highlighted with blue on the graph, at the minimum of the market from this month.

As it can be observed from the chart below, based on the moving averages, of Stochastic indicator and of candle formations, we have strong and clear signals of buy because the price would significantly rise. Once with the intersection of the two moving averages, passing the red one under the blue one, respective the exponential moving average (blue line), over the simple one (red line), it was generated buy signal. From the Stochastic’s point of view, it indicates use the same signal by the intersection of the red line over the blue line, also giving a buy signal, a little late signal but still a very good one. Before of these signals we had a signal given by a candle formation, a reverse Shooting Star formation, highlighted with blue, which indicates the same trend of gold. Furthermore there can be observed the reverse of the trend based on the chart’s intersection with the 2 moving average lines, primarily with the simple one and then with the exponential one. Once with the intersection of the chart with the second moving average the trend is for certainly downward, what actually it happened.

Figure 3. Gold’s evolution in May 2010

On the May chart we drew a trend channel, breaking the channel line representing a changing signal of the trend’s direction. The channel is a downward position, its break generating a buying signal.
The maximum quotation of the month was of 1247.58 U.S. dollars per ounce being the highest value of gold until that date; however the minimum value was of 1157.65 U.S. dollars/ounce. The evolution was of increase up in the first half of the month after which it took a reverse direction being highlighted by the trend channel. Once broken the channel into the top part the quotes have climbed up to the end of the month.

![1 Year Gold](image)

Figure 4. Forecasted gold’s evolution on 1 year (June 2010 – June 2011)

Last year in June it was forecasted that in this year, 2011, the gold to reach at the quotation of 1250 U.S. dollars per ounce. But considering the current intense economic activity, the price in this month already jumped this threshold and reached at a unprecedented threshold for decades, 1412.68 U.S. dollars per ounce.

In the following chart we will present the gold’s evolution in January of 2011. It can be observed that the 2010 ended with a quote of 1420.07 U.S. dollars/ounce this being the peak until now, the maximum seen in the last 10 years. Of course as we stated and in the introduction, an important factor of gold’s increase is and the crisis in which we find ourselves today.
The beginning of the year was marked by the candlestick formation, shooting star and the intersection of the moving averages, the simple one (blue) passing over the exponential one (red) from the bottom to up, which gave the sell signal. In parallel and stochastic gave the same signal by lowering the lines from the overbought area located over 80 thresholds. Further there were signs at breaking the support levels and their transformation in resistance level. Thenceforth there were formed 2 trend channels, both downward trends, being broken by the chart, continuing the downward final trend. There can be noted that we have during the month 2 breakings of the support level that were transformed in resistance level. Within the month there were exemplified 2 candlestick formations, respective the evening star which generated a sell signal, as well as and another shooting star which continued to confirm the downward trend of gold’s value.

The maximum of this period was located at the beginning of this year, and the end of the past year, of 1420.07 U.S. dollars per ounce, and the minimum situated at the value of 1312.05 U.S. dollars per ounce. It was difference of 108 pips within January, in downward trend of gold.

Further we present the gold’s evolution in February 2011

Figure 5. Gold’s evolution and technical analysis in January 2011
As we note in February the minimum of gold’s quotation was at 1327.71 U.S. dollars/ounce and the maximum is located at 1414.20 U.S. dollars/ounce, a rise of 86.49 pips. In this month the gold’s evolution was overall upward, but there were also situations in which there were reversed trends, as the one of the begging of the month where it was tested the first support level of Fibonacci Retracement.

We can observe from the chart, that we used Fibonacci Retracements, as level lines. In the first part of the month it was tested the first level of Fibonacci as support level that has resisted, being unbroken. On 8 February it can be noted the test of the resistance level of 61.8 which was broken, but for a short time there was some recovery, after which it was tested the same level of resistance and broken again, but this time permanently, transforming the resistance in support.

On February 15 it was tested the resistance level (50 Fibo), there was a moment of hesitation after which it has continued the upward trend going forward into the next resistance level of 32.8 fibo, testing it and braking on February 16. Further the resistance 32.8 fibo was transformed also in support level, the market continuing its trend towards the next resistance level of 23.6 fibo, which was tested and immediately broken on 21 February.

Conclusions
The commodity markets are the oldest exchange in the world. Their beginnings are somewhere in the ancient era, and the first commodity exchanges can be found already in the XII century in the countries of Western Europe.

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However, the current gold price is still, in real terms (adjusted to inflation) much below the level reached in 1980. The representatives of the mining companies estimate that the gold’s price will range between 1.400 and 3.000 U.S. dollars an ounce, 40% of respondents estimate this value at about 1500 U.S. dollars.

The fact that history repeats itself is true, on such kind of markets; it’s harder to see this phenomenon then on the forex market. At the same time this difficult times as the crisis contributed at the increase of gold’s increase, these being found a secure replacement of the country’s currency. But we observed that at the beginning of 2011 the gold’s price decreased in January, to a minimum of 1312.05 U.S. dollars per ounce, so that in the following month to reach back at the initial price from the beginning of the year. Therefore we can say that history repeats itself on short term, but at the same time the fluctuation of the January and February can be also considered a correction of the market.

The countries rich in natural resources may increasingly focus more towards the investments in gold to limit the strengthening of own coins and could expand the monetary mass to finance the acquisition of precious metal. The states that do not rely on the exploitation of the natural resources, but have a strong component of export, could adopt similar strategies taking into account by the fact that a lower value of the local coins would help at maintain the export competitiveness.

References