A POWERFUL TOOL FOR TRADING

By Adrian Douglas

I have been pioneering a novel analysis technique called Market Force Analysis (www.marketforceanalysis.com). It has proved to be very reliable in identifying major turning points in commodity markets, and in particular the gold and silver markets. However, a breakthrough discovery in the last few weeks has taken it to a whole new level of utility. Many investors have a core position that they hold but they may typically also have a position they trade that aims to profit from the strong uplegs and the violent corrections. Choosing the buy and sell points for the traded position is notoriously difficult but our latest development makes this relatively simple and reliable. Like many scientific breakthroughs I discovered it almost by accident. Once I realized the significance of what it meant I was able to alert subscribers to a correction in gold to $875. Gold was trading $928/oz at the time. Had I made the discovery two weeks earlier the alert would have been given at $1000/oz!

I will explain in this article the principles behind this technique. First of all a little bit about the theory behind market force analysis and then we will see how the latest development spring-boards the power of this analysis.

Market Force Analysis (MFA)

Any economist would agree that it is the imbalance between supply and demand that drives the free market price of any commodity. Supply and demand are usually only estimated on a macro-level and are notoriously inaccurate and generally have little to no utility in determining the outlook for any commodity market. As a result most analysts are constrained to analyzing price to estimate forward market trends. This is fraught with inherent errors because price trends can not be extrapolated over long periods of time and the pattern recognition approaches of various “technical analysis” methods are quite often hit and miss.

Market Force Analysis (MFA) is a unique approach to commodity market analysis (patent pending). A unique algorithm has been developed to extract accurate supply and demand information from futures market data. The difference between supply and demand is the market imbalance which is called “market force”, so named because it is that which drives price. This is an extremely powerful and accurate way of analyzing commodity markets. It brings clarity to past market action and predicts future market trends.

Because it is derived from accurate futures market data it is not subject to the errors inherent in macro-level estimates of supply and demand.

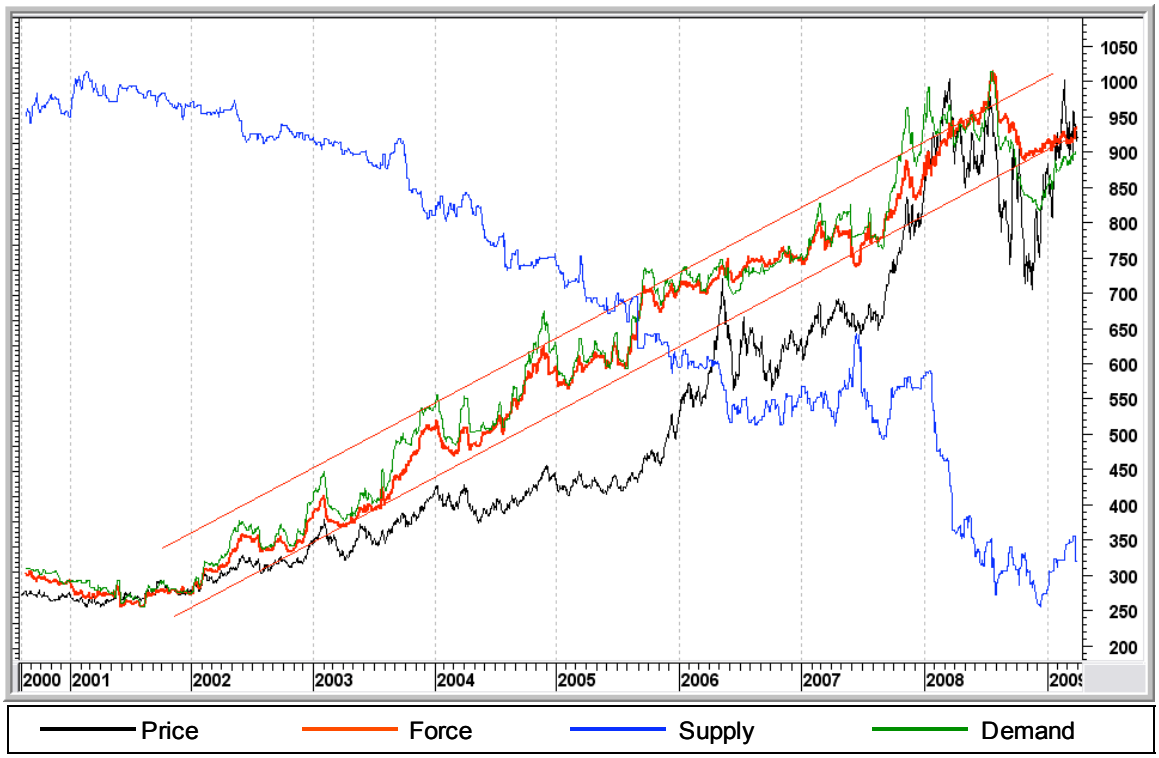
Market Force Analysis (MFA) has three outputs

- Supply
- Demand
- Force (the difference between supply and demand)

The unique insight provided by the supply, demand and market force trends allows market dynamics to be much better understood.

The linearity of the market force leads to it having utility for predictive purposes even when the price goes parabolic.

MARKET FORCE ANALYSIS - GOLD (Figure 1)



In figure 1 the MFA analysis for gold is shown from 2000 to 2009. One can see that the supply has been generally declining and demand rising since 2001 which is a classic bull market. The difference between demand and supply is the red line which is called the “force” as it is this that drives the price. This supply and demand imbalance, the force, has been rising since mid 2001 and indicates the primary market trend is up as shown by the rising red channel trend. However the force ebbs and flows and fluctuates within the channel. When the force is at the bottom of the channel the demand to supply imbalance is at an interim low (less demand, more supply) and so is a “low risk” entry point while when it

reaches the top of the channel it is an excellent trading exit point (more demand, less supply) or a time to tighten up stop loss triggers.

It can be seen that the force reached a high at the top of the channel in July 2008 and indicated an exit point for trading. The force dropped all the way to the lower support line of the channel reaching it in October when gold was trading at $730 (I put out a buy alert at that time). Since then the force has moved along the lower support line of the uptrend channel indicating a rising market but all the time indicating a low risk entry point for those not yet invested. This means that despite gold having risen from a low of $730 the upleg has hardly gotten started yet! So while the MFA serves very well to have re-entered gold at $730 and to be still fully invested what about being able to trade the ebbs and flows along the way, such as the recent correction from the high of $1002 reached Feb20, 2009? This is where the latest development comes into play.

First of all let's look at economic theory of how price and supply-demand imbalance (force) should be related.

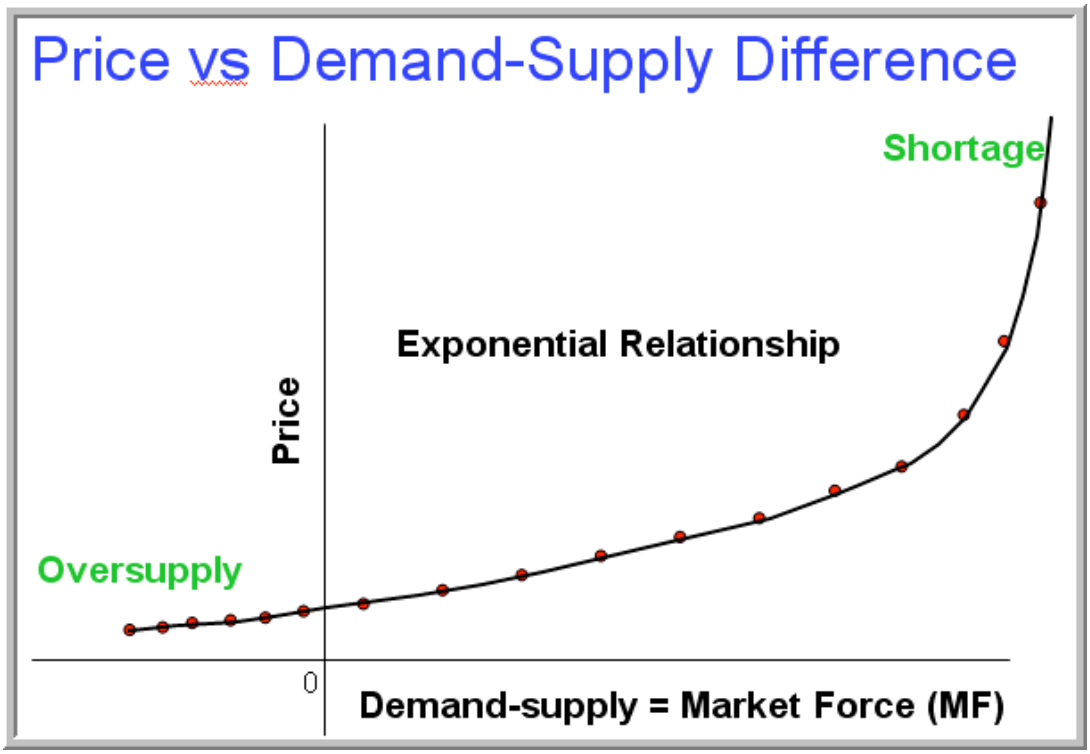


FIGURE 2

Figure 2 shows the theoretical relationship between price and demand-supply imbalance. The right-hand side of the chart (shortage) is when demand greatly exceeds supply and so price rises almost vertically. The price will tend to infinity (or a very big number) as demand massively outstrips supply. If supply is greater than demand then demand minus supply is negative and we are on the left-hand

side of the chart (oversupply). In this case the price is low and will tend to a zero value price at infinite supply. Joining the two extremes we get a curve which is exponential in nature.

We would expect any commodity to follow this relationship. However, this is the 'equilibrium' relationship of price to market force. If an entity buys 100 contracts per day for 5 days it is essentially the same demand as if he bought 500 contracts on the market open on Monday but clearly the affect on price would not be the same. There are transient affects that cause perturbations of the price from the equilibrium. It is these that we want to be able to trade.

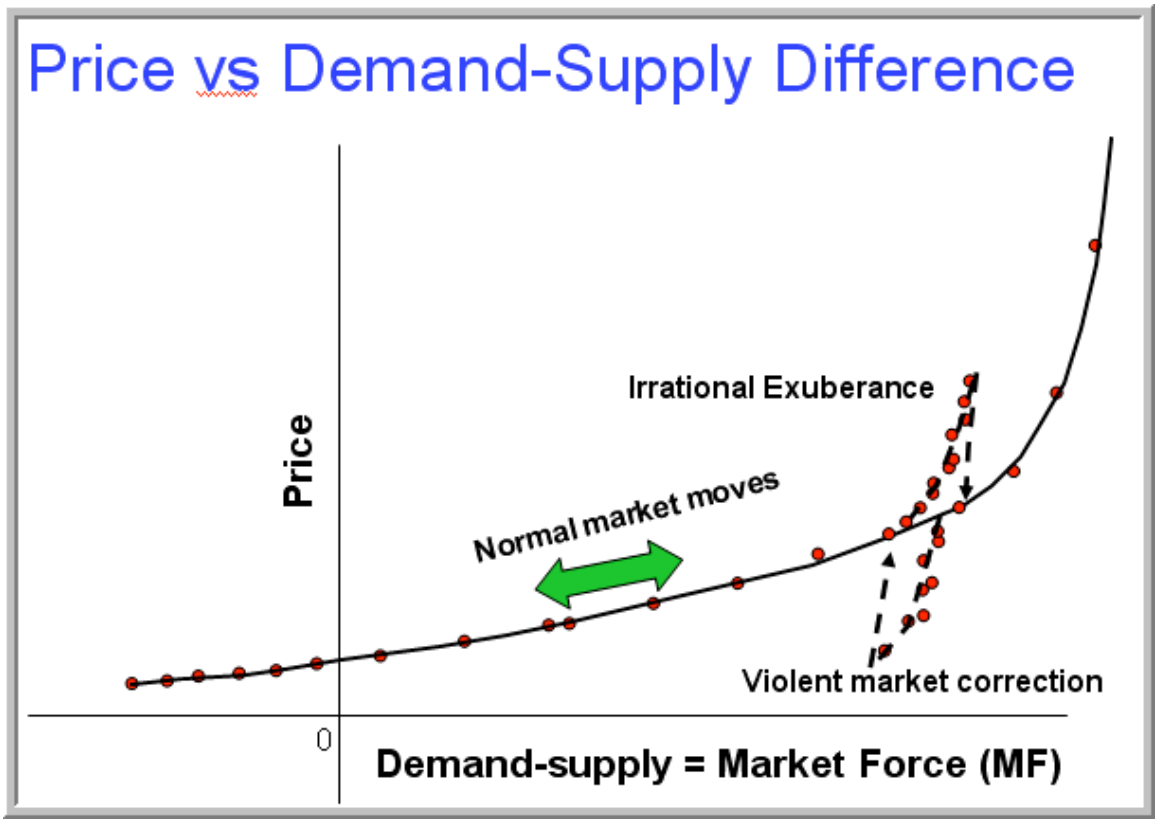


FIGURE 3

Figure 3 demonstrates what happens with short term rallies and violent market corrections. Normal low energy market moves proceed as shown by the green arrow. Prices changes as the demand-supply imbalance changes and follows the exponential relationship. The clustered red dots show what happens with exuberant rallies and violent corrections. The price will move out of the equilibrium relationship between price and force represented by the black exponential curve. However, this is an excellent way of predicting an appropriate

short term trading exit or entry point as the departure from equilibrium can only go so far before there will be an expected return to the mean equilibrium price.

Modeling Commodity Prices

Figure 4 shows a cross-plot for gold and market force from 1982 to 2009. The correlation is fitted with an exponential relationship (the equation is shown on the chart) as was predicted from theory. The chart looks very similar to our theoretical chart of figure 3. It is quite astounding that this relationship is the same for 27 years of data but it is what our economic theory predicts.

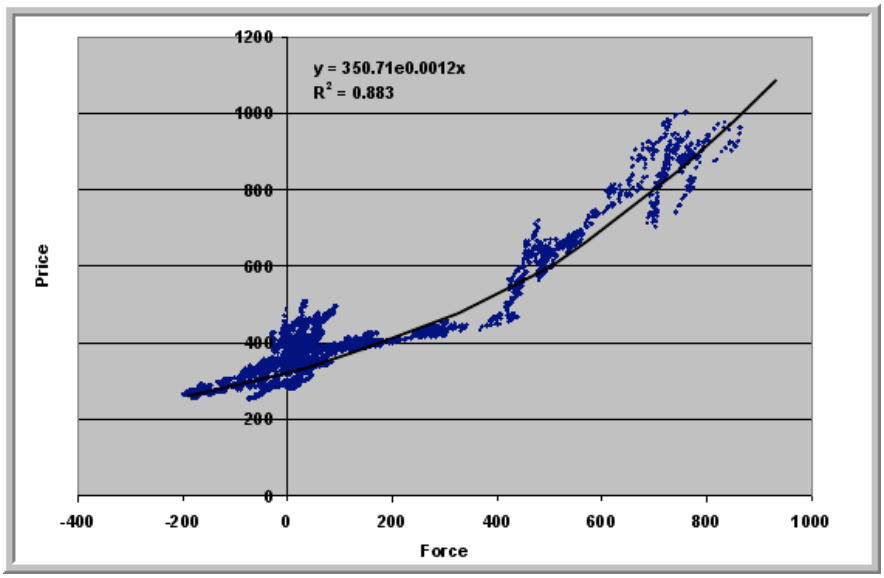


Figure 4: Gold Price versus Force Cross-plot 1982-2009

It can also be seen that there are departures to the upside and the downside from this relationship as theory predicted. What I recently discovered is that using the equation of this exponential relationship and the historical market force data the gold price can be simulated. The simulated gold price and the actual gold price are shown in Figure 5. It can be seen that over 27 years the match is excellent

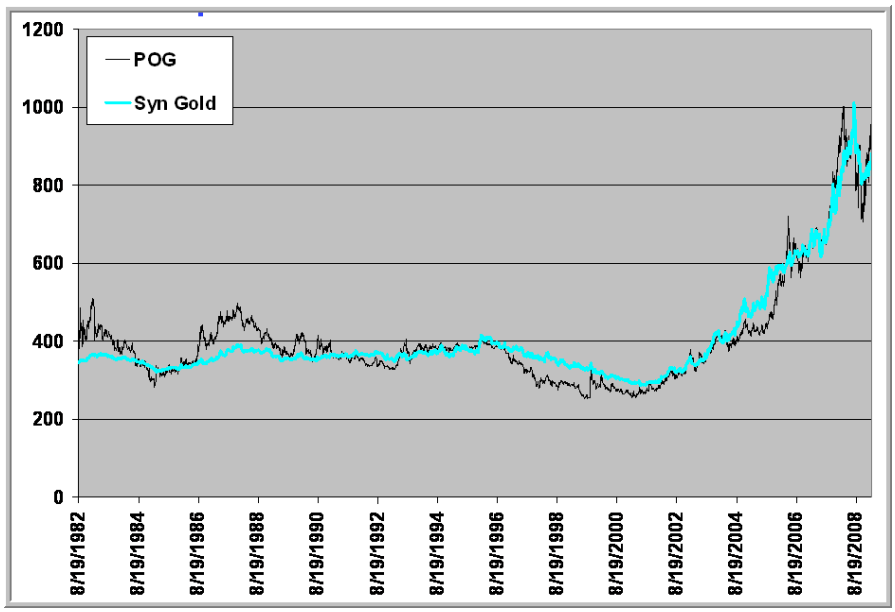


Figure 5: Actual Gold Price & Simulation 1982-2009

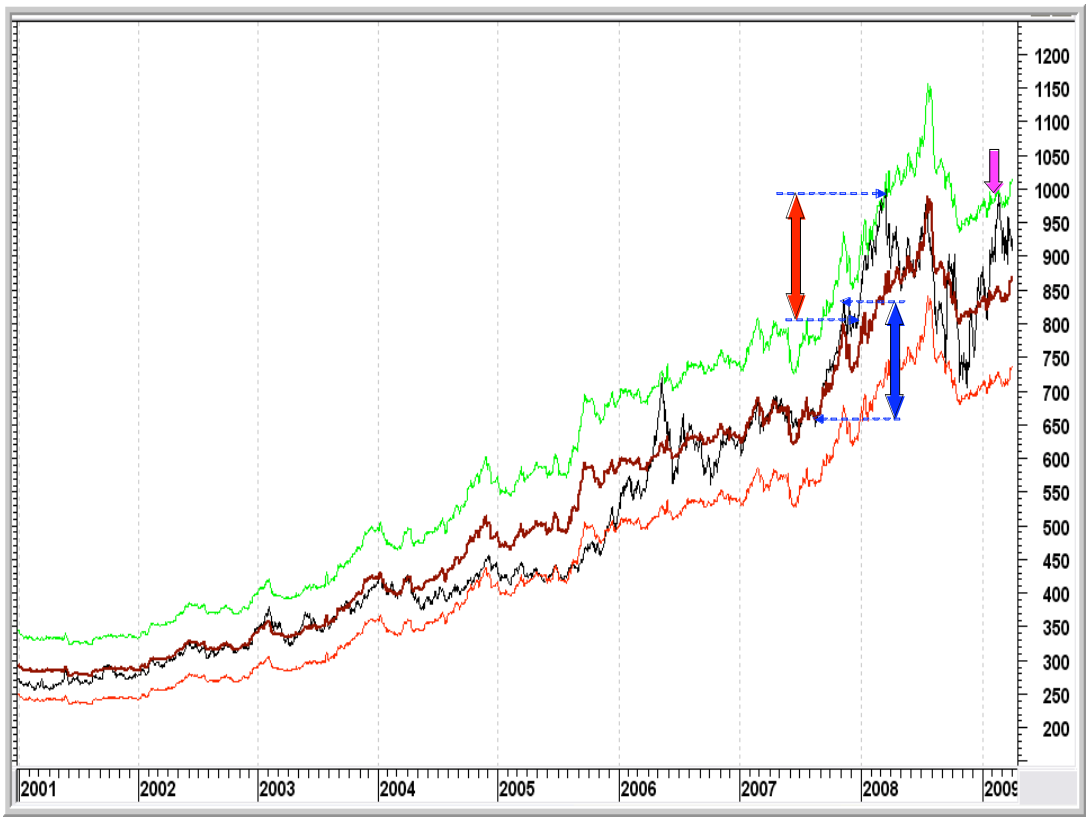


Figure 6: Gold Price & Simulation 2001-2009

In Figure 6 more recent data is shown. The simulated equilibrium price of gold is shown in brown. From the crossplot of Figure 4 the maximum and minimum observed departures from the equilibrium exponential relationship equation can

be determined leading to the green and red curves. The actual gold price is in black.

The “perfect” bull market would be that the gold price follows the brown curve and the price stays in equilibrium with supply and demand imbalance. But nothing is ever perfect so we get departures from the equilibrium mainly to the upside in a bull market but also it can be to the downside, particularly when the Cartel is active! The green line is the maximum out-of-equilibrium price that is achieved (from historical matching) before a correction back to the equilibrium will ensue. The red line is the maximum departure that can be expected on the downside. You can see that the tops of 2006, 2008 and 2009 were predictable because they reached the green line. Like wise touching the red line in 2005 and 2008 indicated superb absolute “bet all your chips” low risk entry points.

Notice that in 2007 there was a strong upleg starting at around $650. In the first part of the rise to $830 (indicated by the blue arrow) the rise of the actual price was in lock-step with the simulated equilibrium price so there was a very low probability of any meaningful correction. As the upleg proceeded to above $1000 in early 2008 (indicated by the red arrow) the price went much higher than the equilibrium brown curve. The rally then started to get a higher and higher probability of a correction. When the price reached the level of the green curve a correction was inevitable because the departure from equilibrium reached the historical maximum.
By the same token the rise to $1000 on February 20, 2009 was also a large departure from the equilibrium price simulation and had reached the typical maximum such that a correction was inevitable.

When I discovered this new application of MFA a few weeks ago I realized the powerful implications and it was this that led me to say in the latest April 1st MFA bulletin to subscribers that gold was going to pullback to about $875 (which has now happened) because the POG was still above the equilibrium brown line. Since this chart was made the price of gold has fallen and the gap has closed. This has given rise to a new low risk entry point for a trading position.

It can be observed from figure 6 that the gold price tends to follow the brown line most of the time but makes excursions above and below it. These excursions are tradable because they will return to the equilibrium price that is in accordance with the prevailing supply and demand imbalance.

The best trading decisions are derived from use of both the MFA chart and the simulation.

Because the supply and demand imbalance that MFA determines includes the actions of the gold cartel, or anyone else attempting to manipulate the market, the predictions take into account the cartel's influence (which if it is dominant will actually determine the market direction). Market moves may be counter-intuitive

with respect to currency and economic considerations etc but they are NOT counter-intuitive with respect to the prevailing supply and demand imbalance...and it is that which drives price. The key is to know what the prevailing supply and demand imbalance is and then you know what the price will do. This is what this new use of MFA achieves - it determines the prevailing supply and demand imbalance. The cartel influences the supply and demand imbalance to make the price go in the direction they want it to go in; a direction that doesn't make sense to us from macro considerations, but it is totally coherent with their interference.

CONCLUSIONS

The market force analysis is a powerful and novel approach to analyzing commodity markets. The evolution of force versus time allows the primary trend to be identified as well as the low risk entry points and the exit points.

The exponential relationship between force and price is what would be expected from theory. Modeling this relationship and using it to invert the MFA to a simulated price enables the probability of short to medium term rallies or corrections to be determined and traded.

For investors who want to profit from the short term ebbs and flows of the precious metal prices and by extension the mining shares I recommend subscribing to our Gold & Silver Premium Service where we give long term holding and short term trading recommendations on gold, silver and the HUI.

RECENT LONG TERM RECOMMENDATIONS

Commodity	Date	Type	Price	Price Now	Gain
Gold	11/2/2008	LONG	$730	$882	21%
Silver	11/16/2008	LONG	$9.33	$12.36	32%
Copper	1/15/2009	LONG	$1.44	$2.03	41%
Crude Oil	12/16/2008	LONG	$44.60	$51.21	15%
30 Year Bond	12/31/2008	SHORT	$138.04	$127.59	8%

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