Global Tactical Asset Allocation

GTAA

Commodities

Third Quarter

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Commodities

Most commodities remain deeply overvalued. As with other assets it does not really matter in the short-term (as long as the trend is positive) but it is paramount for longer-term projections. We have **little doubts that commodity long-only who buy to hold are going to experience a >50% drawdown** (from current levels) **on their industrial metals, crude oil and agricultural positions sometimes in the next 24 months.**

Demand has been artificially boosted by China strategic reserve building, infrastructure intensive fiscal stimulus, booming demand from the rest of emerging economies and, as the trend persisted, by trend followers and money managers new attraction to the sector (you know it is not correlated so you should buy them to diversify your portfolio... **sorry it WAS not correlated...). The introduction of physically-based ETFs is not helping in this matter as it represents a big short-term increase in marginal demand especially when the Fed is still busy implementing QE2.**

This increased elasticity of demand will work both way... and the higher the marginal effect of investment demand, the higher this elasticity. The engine behind the traditional commodity demand might be in the process of slowing as emerging economies authorities are tightening, sometimes aggressively as inflation, credit, the equity and housing markets are rising too quickly for their comfort. Through the inflation channel and the impact on margin, the exponential rise in commodity price is also directly responsible for lower global growth, certeris paribus. We can only repeat that the we would have had a mild recession in 2008-2009 even without financial crisis as a consequence of high commodity prices. Don't underestimate it now.

Do not forget the demand destruction (substitution and "effectivisation") caused by high prices and the potential decrease in subsidies in emerging markets (but now that inflation seems to be the number one issue in subsidizing countries and that they have no problem to finance them, this is not likely to happen in the short-term).

Supply has been hit hard in 2009 by both prices fall and the credit crunch but this is for the history books. Lots of projects which were put on hold have restarted while closed mines/wells have reopened. Capex and its "exploration" components are making new highs. This increase supply could hit the market in full just when demand momentum will turn down... Longer-term, not enough investments have been planned for toward commodity (especially energy) in the various stimuli package around the world… This could come back to haunt us during the next up cycle…After that, human ingenuity will prevail (and this will be sooner that what is currently discounted by the markets).

Speculators/investors have their highest commodity net long position even if they say in surveys that they believe they are overvalued. This might be understandable if they could earn a fat positive roll but the roll is negative. Investors irrationality and herd behavior in all its splendor. **Macro hedge funds have started to cut their net long exposure** significantly in the past few weeks after having been extremely long since the B. Bernanke QE Jackson Hole speech. **Glencore is planning an IPO to raise up to usd 16 bio**. Glencore is runed by very smart people who have seen a lot of cycles. Feels like Blackstone IPO which marked the top of the last private equity boom during the summer of 2007 (hey and Apollo is coming to the market this week...).

The managed money has a huge net long crude oil position. The Bloomberg surveys is indicating too much short-term optimism. The market is still in contango but it has been decreasing in the past few weeks after a strong rebound earlier this year. A move in backwardation would push price higher in the short-term.

The recent price increase is starting to put its toll on the global economy and if crude oil move to 120-125 and above, the risk of a recession-like slowdown would increase materially especially given the concomitant rise in food price.

Crude oil recent behavior was the result of random events which are nearly impossible to predict. If escalation continues and, for example, civil unrest increase in Saudi Arabia and/or Kuwait, crude oil could easily break the 2008 highs in a matter of hours/days. It is tempting to buy deep out of the money calls to play this but they are expensive so if you want to play this “black swan” we would rather buy puts on the Kospi (cheap implied volatility) or other equity indices as a move to such highs would push equity markets sharply lower. Oil is making a potential double top (which will be a fact if it moves below 96 before moving above 106) but the trend is still up so we would not bet on this. The best think to do here is not to do anything. On a cyclical basis, we think that the 35-40 levels will be revisited during the next pronounced global slowdown but more on this in due times.

Gold investor optimism remains high with a large net long managed money position and too much optimism on the Bloomberg sentiment survey but we are seeing some negative divergences. While investments now represents 50% of the total gold demand, **inflows into physically-backed ETFs have ceased** since the start of the autumn. Central Banks in emerging countries are continuing to be net buyers...

We have **yet to see the spike in backwardation and the rise in implied volatility we usually see when gold is making a top**. Real rates remain supportive. Note though that we believe the USD could be in the pocess of making a bottom and rebound 12-15%.

Gold might be in the process of forming another inversed head & shoulders with a 1550-70 target on a move above 1455. The current move continue to look distributive. We would **need a move below 1320 to get worried about the cyclical up trend**. We would profit from the current option skew to hedge some of the structural long position. One can finance the buying of 6-9% puts (2-3 months to expiry) below current prices with the selling of 8-10% OTM calls. We would also buy some implied volatility. We keep our strategic long position the strategic USD 3000/ounce target we fixed on gold in 2002 remains our minimum target…

Copper has corrected after having reached the magical 10'000 level on the LME. A magnificent bubble on its own. Managed money net long position has decreased after it made a negative divergence with prices at the top while producers and merchants are still close to their biggest net short position. Physically-backed ETFs could channel investor money toward the ever rising red metal.

The copper curve moved back to contango (after weeks in backwardation) which has historically been seen at the onset of large corrections or cyclical tops .

Executive Summary

Inventories are rising around the world but the most disturbing is the use of bonded warehouse in China to stock metals to use it as a collateral to get cheap loans which are then relent at a higher yield. Bonded warehouse could represent more than 700'000 kt (more than all the world exchanges inventories, 40% of China refined copper demand or more than the more pessimistic supply deficit forecast for 2011). This will have an huge impact... eventually. Copper price have the potential to spiral down soon so be prepared to take advantage and exit your long position PLEASE.

Copper is completely disconnected with the fundamentals which explained its price level in the past. Is this time different? No it isn't.

Copper has moved down out of the up channel it had formed since May last year. It is now retesting it from below while potentially tracing a head & shoulders top with an initial target of 370 on a break below 410. The recent lows where at the bottom of the channel formed since the 2009 lows. At the current level we are seller of upside price volatility (1-3% OTM calls) and we would use ¾ to all of the proceeds to buy some deep OTM puts (>15%)N. Taleb would love such trade. We are also taking outright structural short positions which will be exited probably below 150. We are expecting the next cyclical lows to be made below 150.

Grains structural appeal can not be contested but the recent parabolic rise is not sustainable if La Niña does not continue into the northern hemisphere summer. According to the UN Intergovernmental Climate Change Committee, the PDO could remain below 0 until 2016 (a stretch which was last seen in the 70's). A La Niña event is 4 times more likely when this is the case. We already had 2 La Niña in the past 4 years leaving food and grain inventories low so...

But we are **not seeing the big increase in backwardation (the market is still in contango with a big negative roll, so high that it is usually seen near short-term bottoms) we see when the near month spike up is only temporary**. This **is worrying with regard to food inflation in emerging markets particularly**. Money managers have a big net long position while producers and merchants have their biggest net short position in history.

Executive Summary

Wheat and agriculture in general tends to perform best when the uncertainties with regard to the harvest are the highest (when the harvest size forecast can change the most I.e. during growth season). Interpret this as a risk premium. Upside surprises tend to occur in the July-September period.

We prefer not to participate at this juncture as too much depend on a variable which no one can predict with accuracy, the continuation or not of La Nina. We even find the odds slightly favoring the downside but we do not want to be caught on the wrong side in this kind of markets. There are many better odds trade to do elsewhere…We would recommend those holding a structural long position as recommended here in 2005 sell some of it and sell some upside volatility (sell calls) on a regular basis as long as the complex rises as we did in early January 2008 (a few weeks but many percent too early…).

Table 1 Industrial Metal and Crude Oil Marginal Cash Cost

Industrial Metals and Crude Oil			
	Current Price	75th Centiles Marginal Cost in 2010	Gain/Loss to Reach Marginal Cost
Copper	442	115	-74.01%
Zinc	2420	1160	-52.07%
Aluminium	2630	1530	-41.82%
Nickel	27200	8780	-67.72%
Crude Oil	106	30	-71.59%

Source: UBS, Brook Hunt, Clue6

There are various methods to gauge commodities valuations.

We use models analyzing the long-cycles around marginal real production cash costs. The principle is the same as with margin at the aggregate economy level I.e. when the price is much higher than cash costs (margins are too fat) supply(competition) will increase and push prices (margins) lower to a point where supply (competition) will be reduced sufficiently for a new cycle to emerge. This is what capitalism is all about.

The main drivers of real cash costs change are labor, energy, machines, currencies fluctuation , grade, technology and government policy initiatives.

It is **important to keep in mind that both supply and demand are very inelastic to price in the short/medium-term and that demand is more elastic to growth than supply.** This is something one can easily forget at the beginning and end of an up cycle.

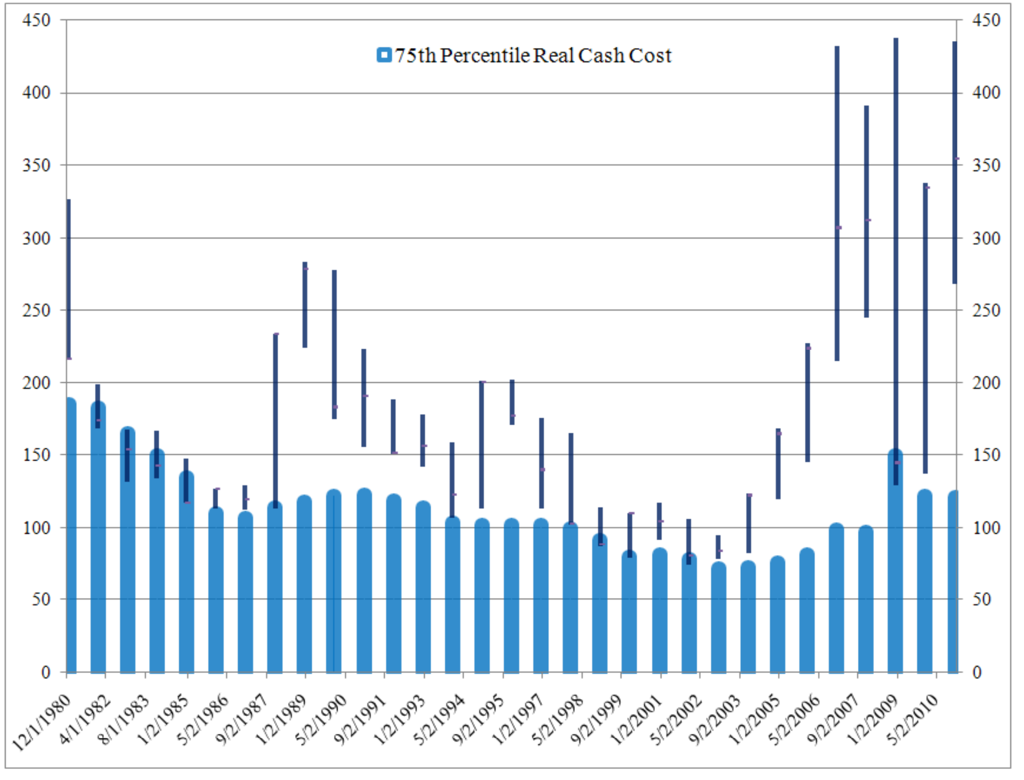
Industrial metals tend not to fall below the 75th percentiles of producers cash costs on a sustainable basis (Table 1). They only do this briefly at the end of a cyclical bear market.

This only happened briefly in 2009 for two reasons. First, China opportunistic stock building which accelerated in 2009. Second, investment demand which, after a dip during the autumn 2008, started to increase again early in 2009…

We are currently in a situation where the entire production curve is profitable for the copper, oil and nickel markets and price could loose 50 to 70% to get to bottom valuation… Looking at production, one can see that many mines/wells/projects which were suspended at the end of 2008-beginning of 2009 are back on line/on the board…

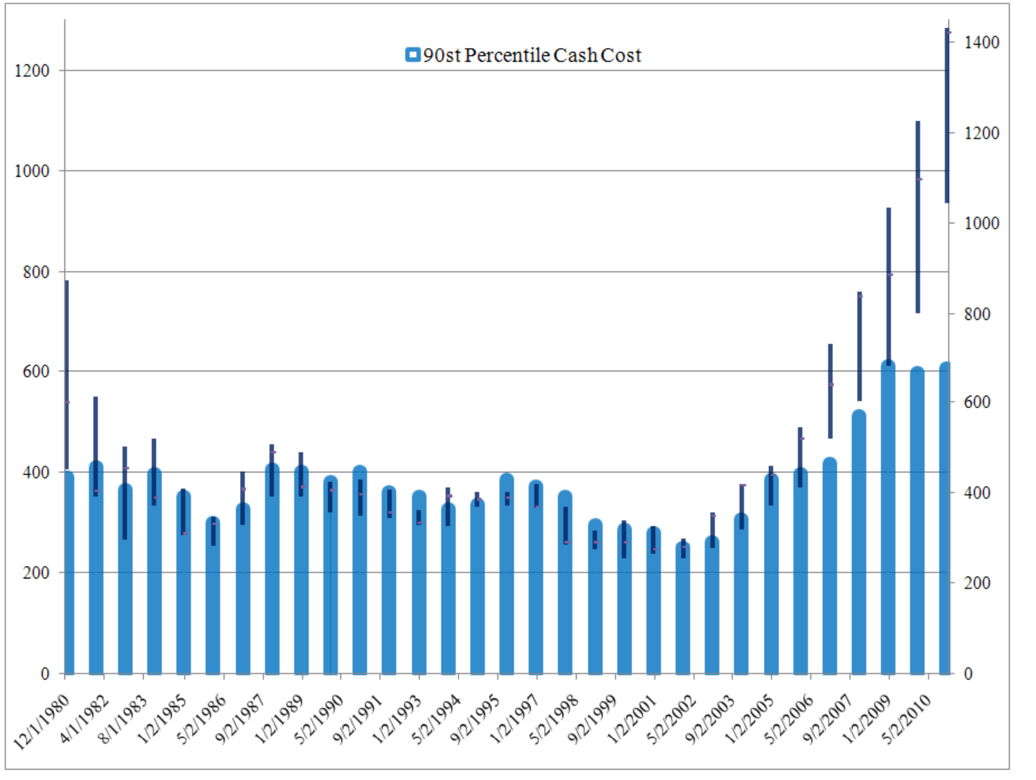
We are back to a demand destruction/supply increase environment…

Chart 1 Copper Marginal Cash Cost



Source: Brook Hunt, Clue6

Chart 2 Gold Marginal Cash Cost



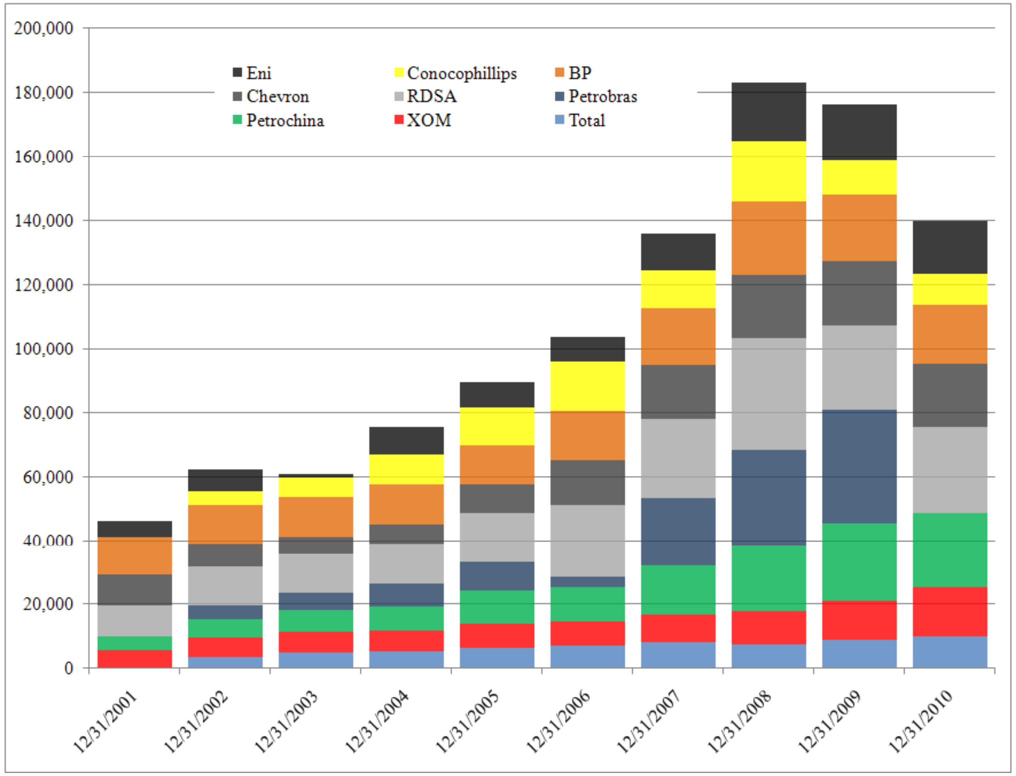
Source: Bloomberg, Clue6

On Chart 1 one can see the **relationship between copper and its marginal cash cost**. Remember that **we will fall below the 75th percentile real cash cost** for at least a couple of weeks at the tail of the next cyclical down move. Those **cash costs are more than 70% below current levels**…

Gold is trading significantly higher than cash costs (Chart 2) but , as you know, even if this is not something to push completely aside, we think gold's prospect are more closely linked to the future of the current monetary system and we maintain our long-held forecast that it won't survive in its current form.

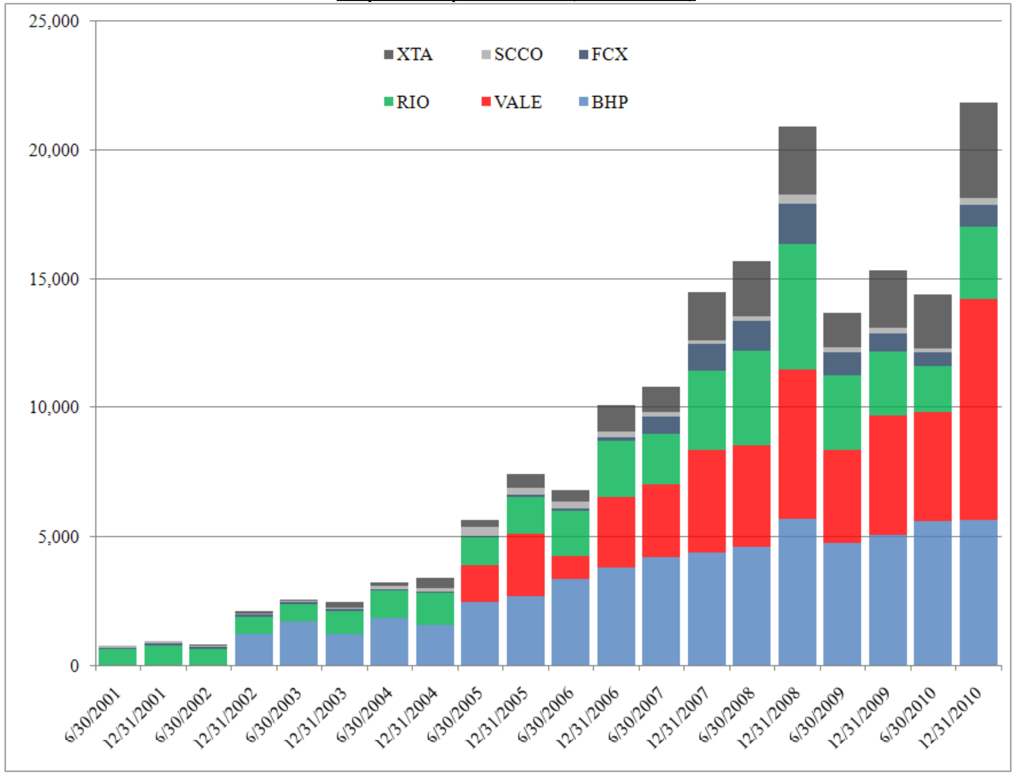
Commodities: CapEx

Chart 3 Big Oil Companies Capital Expenditures (Annual)



Source: Clue6

Chart 4 Big Industrial Metals Mining Companies Capital Expenditures (Semi-Annual)



Source: Clue6

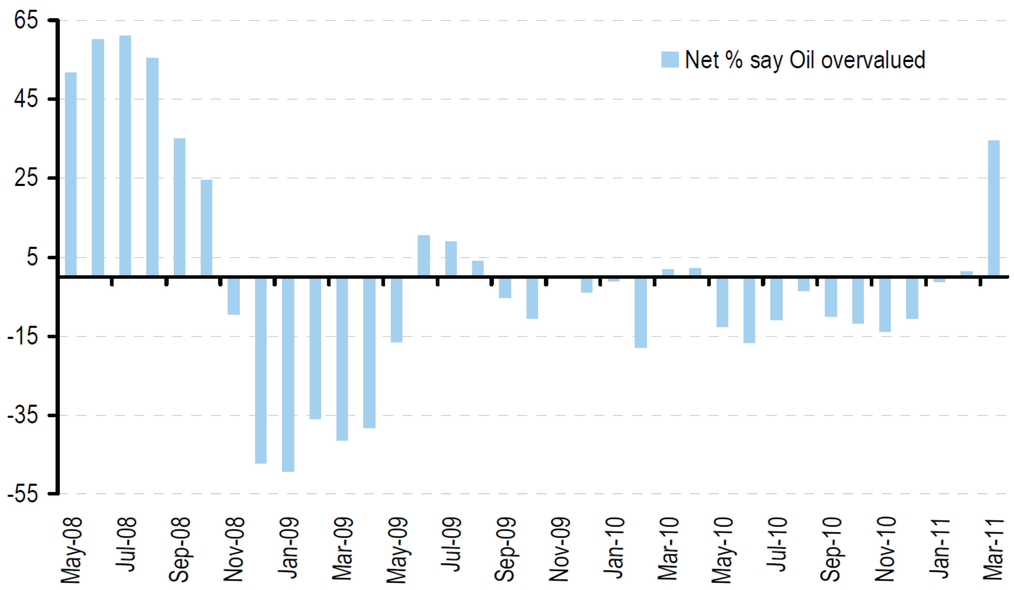
Capital expenditures collapsed at the end of 2008, early 2009 as companies were struggling to find the cash they needed. This is now an old story.

Oil companies could spend more than usd 100 bio. this year on development project only according to Wood Mackenzie (up from usd 85 bio. In 2010).

non-ferrous metals exploration budgets (Nonferrous exploration refers to expenditures related to precious and base metals, diamonds, uranium, and some industrial minerals; it specifically excludes iron ore, aluminum, coal, and oil and gas) are expected to surpass their 2008 highs this year (they were usd 12 bio. in 2010 compared to usd 14.4 bio.). The big three (BHP Billiton, Vale and Rio Tinto) had more than usd 27 bio. in Capex last year surpassing the usd 26.5 bio spent in 2008. Looking at copper specifically Codelco, the Chilean state company, has announced it will invest usd 16 bio in the next 4 years as it increases exploration in other South American countries. Grupo Mexico which has the largest copper reserve is spending very aggressively on mine expansions. It has also reopened the Cananea mine after 3 years of ongoing strikes.

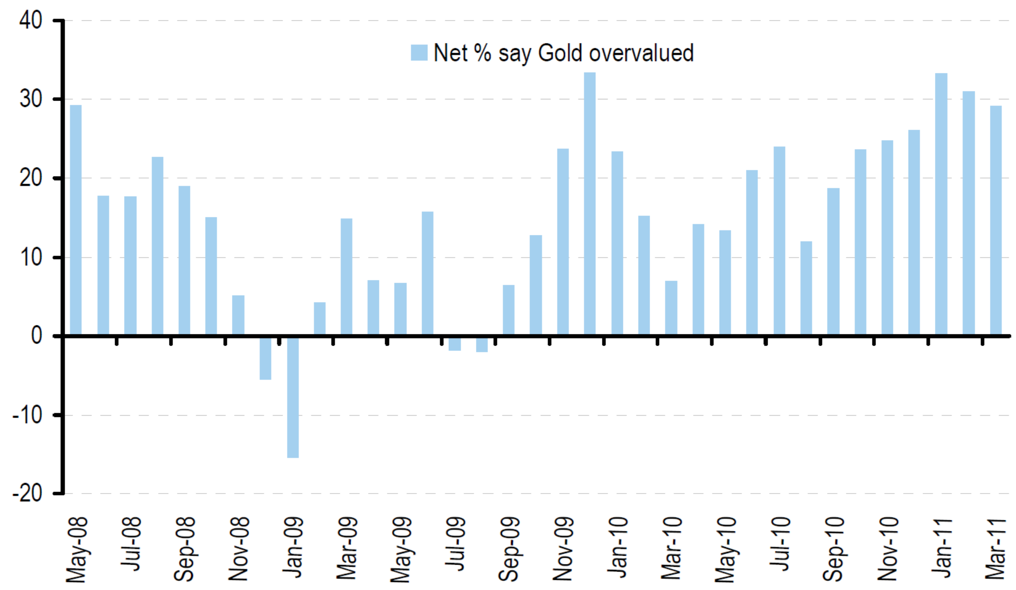
Note that "costs increased" have represented almost 50% of the increase in capital budget up to 2008 but that the ratio has now fallen to significantly lower levels.

Chart 5 ML Fund Manager Survey Crude Oil Valuation Perception



Source: ML

Chart 6 ML Fund Manager Survey Gold Valuation Perception



Source: ML

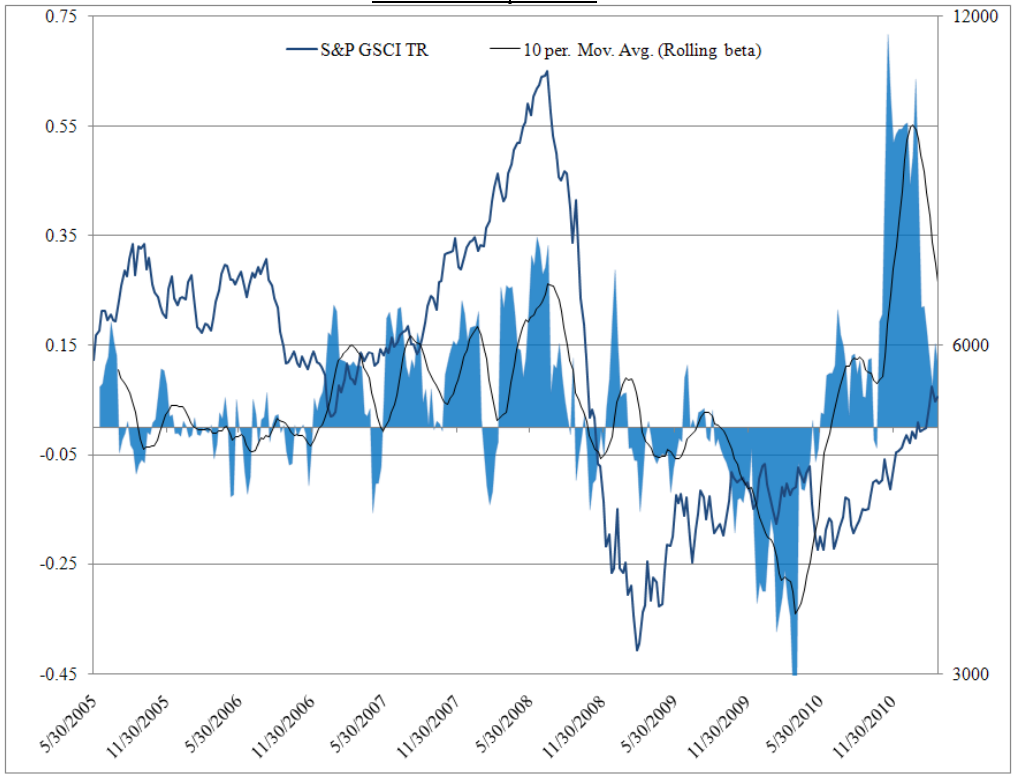
Fund managers valuation perception in the Merrill Lynch is usually pretty right on the mark. We have showed this in the currency and stock sections in the past.

From chart 5, one can see that **they consider crude oil significantly overvalued**.

Gold valuation perception changed dramatically in the autumn 2008 (Chart 6) when gold was considered overvalued even when it was trading in the low 700. The last time gold was considered undervalued it was sitting just above 900. The next time it will probably be near 1000-1100 where one should expect heavy demand.

Chart 7

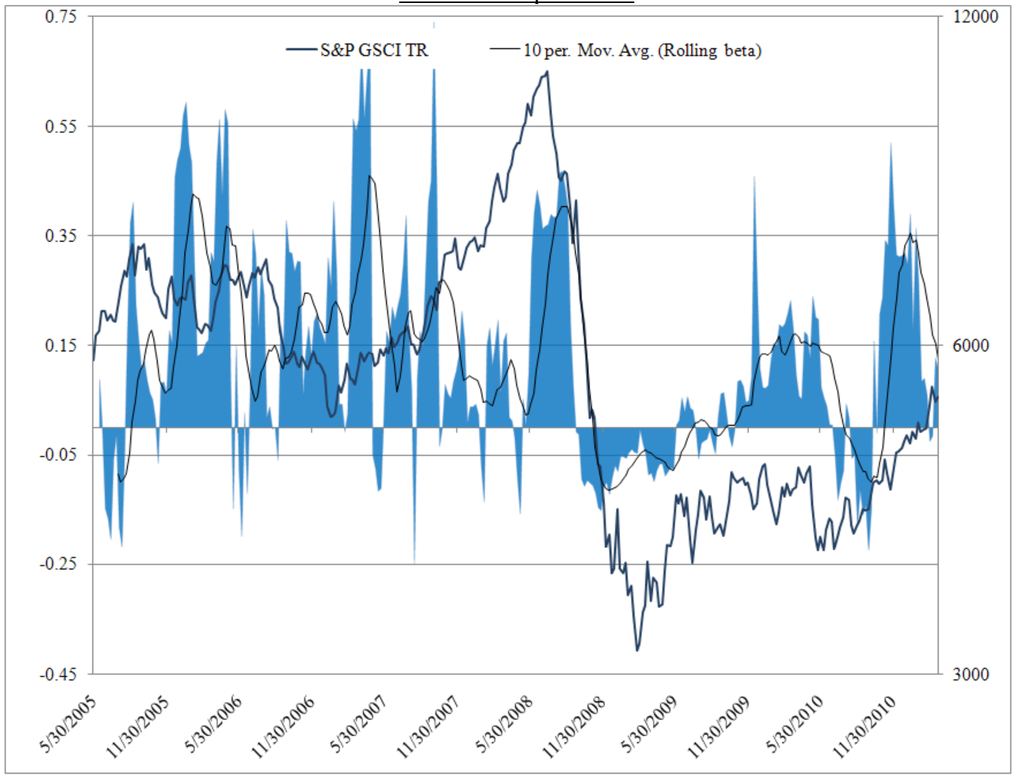
S&P GSCI Total Return Index and DJ CS Blue Chip Macro



Source: DJ Credit Suisse, Clue6

Chart 8

S&P GSCI Total Return Index and DJ CS Blue Chip Futures

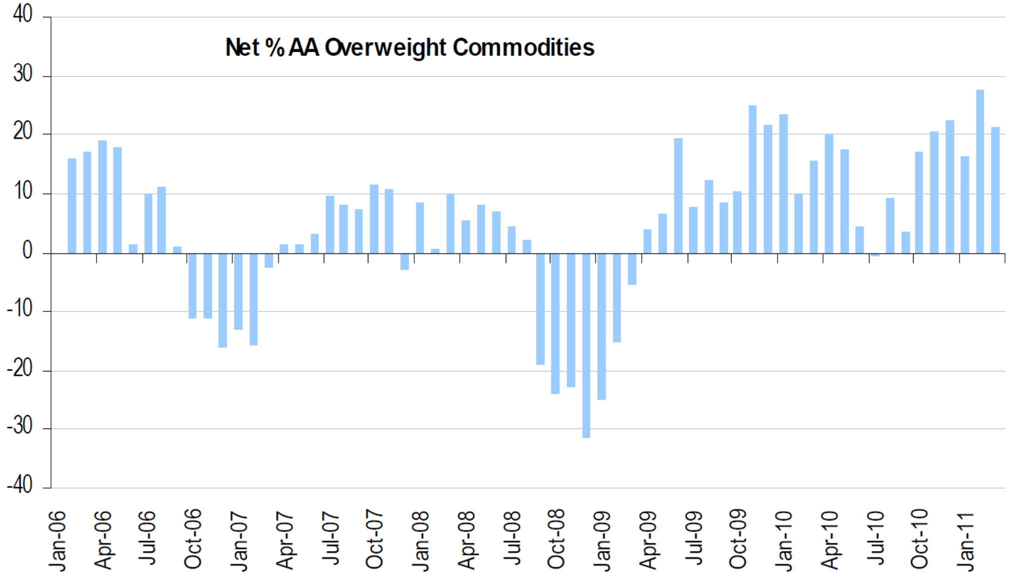


Source: DJ Credit Suisse, Clue6

Macro Hedge Funds have significantly cut their net long exposure from the post-Bernanke QE Jackson Hole speech (Chart 7). They started to cut while the S&P GSCI index was still rising which is a negative divergence.

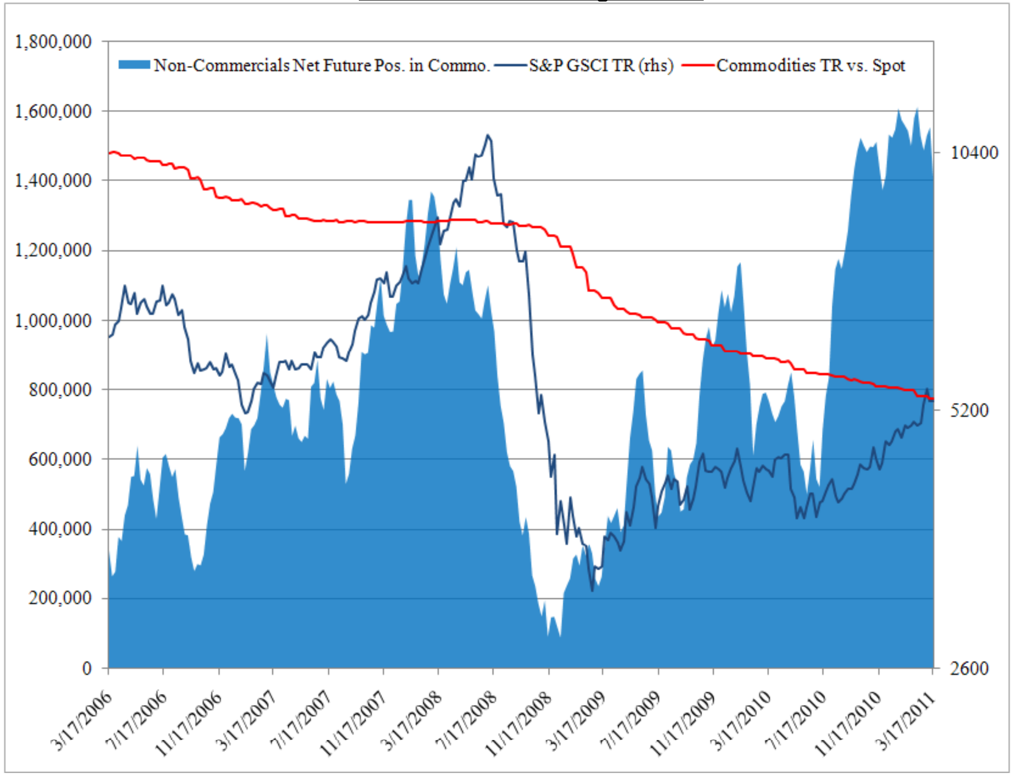
CTA are in a similar posture (Chart 8) which is strange given the strength of the trend but…

Chart 9 ML Fund Manager Survey Commodity Allocation



Source: ML

Chart 10 Commodities Total Outstanding Non-Commercials Net Long Position



Source: Bloomberg, Clue6

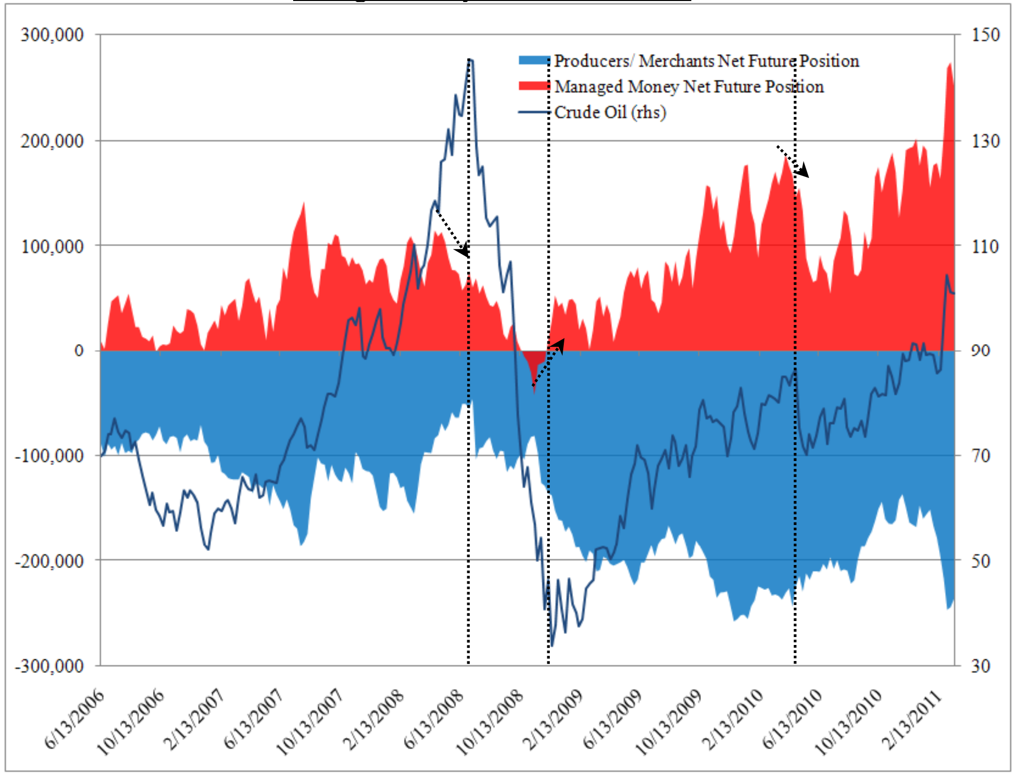
While managers consider commodities slightly overvalued, they are very overweight (Chart 9). Puzzled? We are as they seems to be overweight everything except cash and government bonds.

If markets were in big backwardation, this could still be justified but they are not. So overvalued spot and negative roll are not a winning combination.

Looking at the overall non-commercial commodity net futures position (Chart 10), one can see that they have a larger net long position than in 2008. Note the negative divergence too (non-commercials less long while price is continuing to move higher, as in 2008).

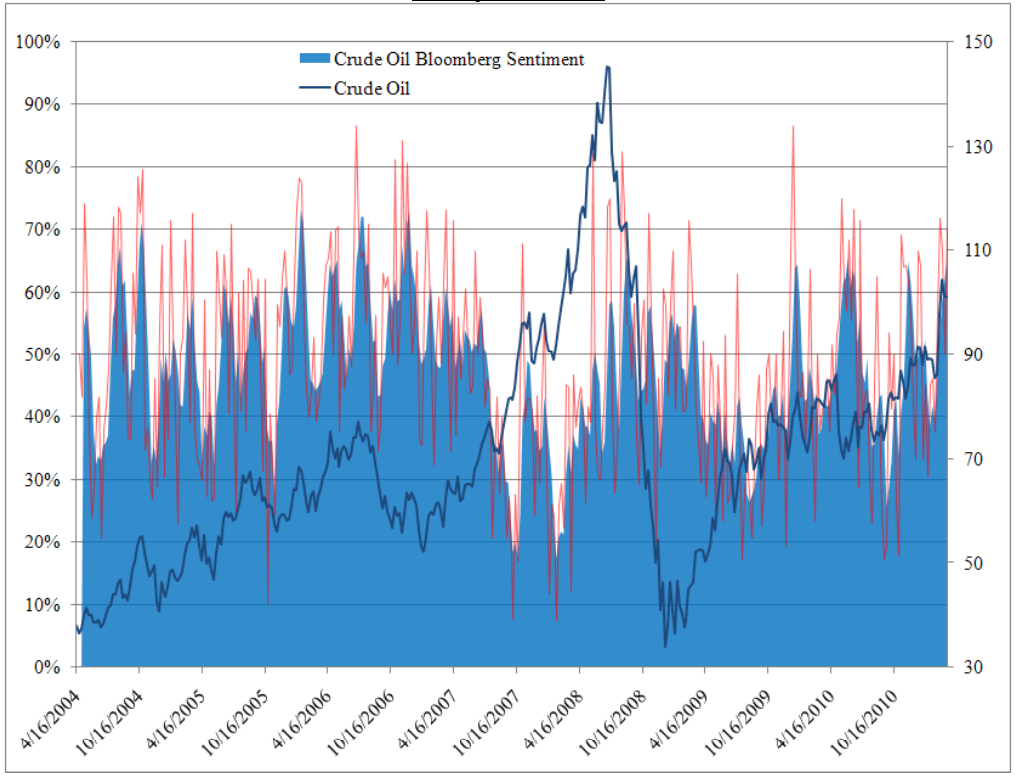
Commodities: Sentiment – Crude Oil

Chart 11 — Crude Oil and Producers/Merchants vs. Managed Money Net Future Position



Source: Bloomberg, Clue6

Chart 12 — Crude Oil and Bloomberg Sentiment Survey Bull Ratio



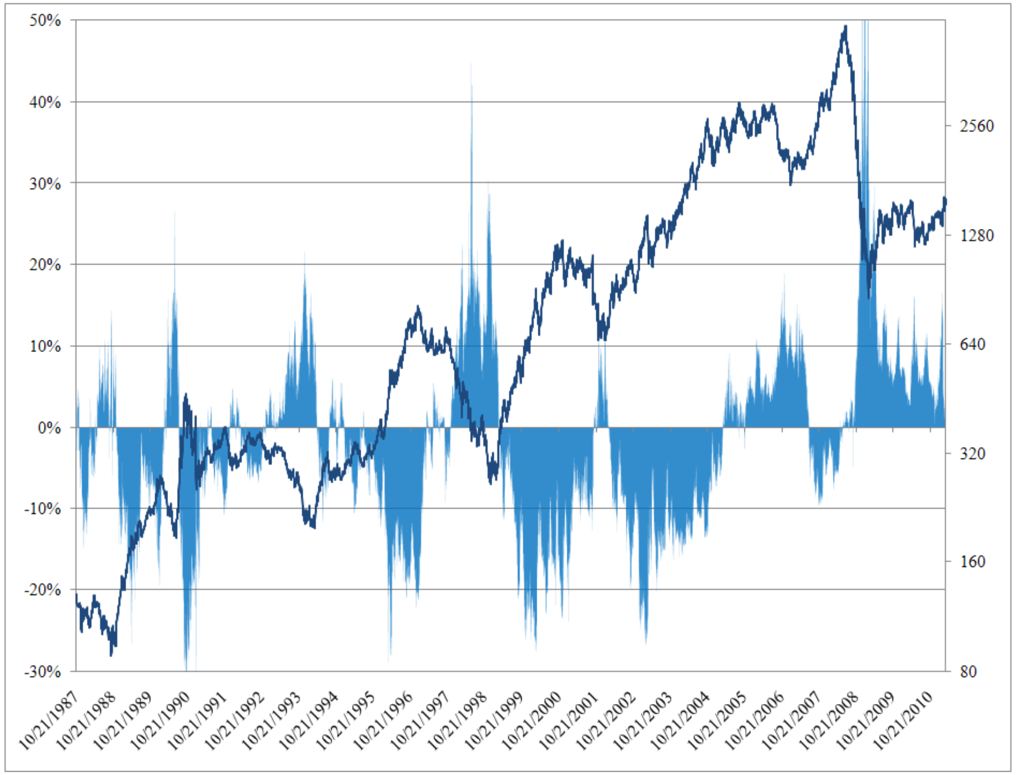
Source: Bloomberg, Clue6

Managed money has increased its net long crude oil position in the past 12 weeks while producers and merchants have increased their net short position (Chart 11). The latter positioning can be partially explained by the huge contango which make arbitrage (storing and sell further down the curve) profitable. Swaps dealers have increased their net long position. With regard to managed money , local peaks in positioning tend to be coincident with short-term tops. **For cyclical top to form you usually see a divergence between rising prices and speculators net positioning.** Prices makes new high while net long positions are not. This is a sign of waning risk appetite and this is what happened in April 2010.

The Bloomberg Crude Oil Survey bull ratio has recently reached levels which are usually followed by correction/consolidation (Chart 12).

Chart 13

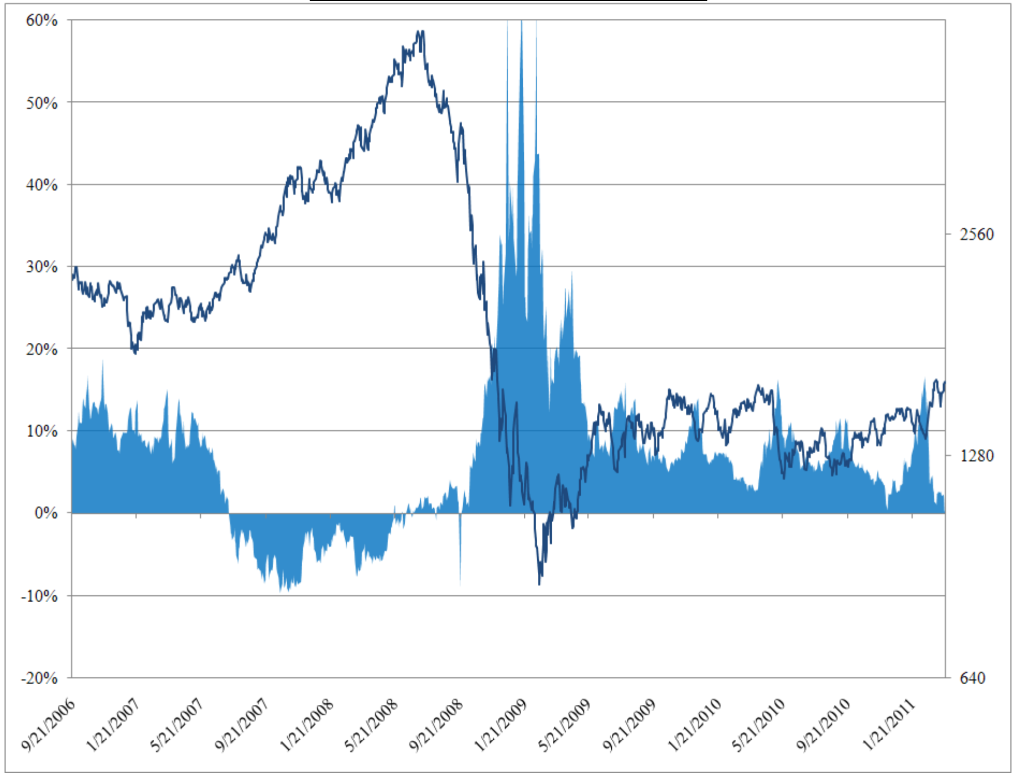
Crude Oil Total Return and 12 Months Forward Contract Premium/Discount



Source: Bloomberg, Clue6

Chart 14

Crude Oil Total Return and 12 Months Forward Contract Premium/Discount

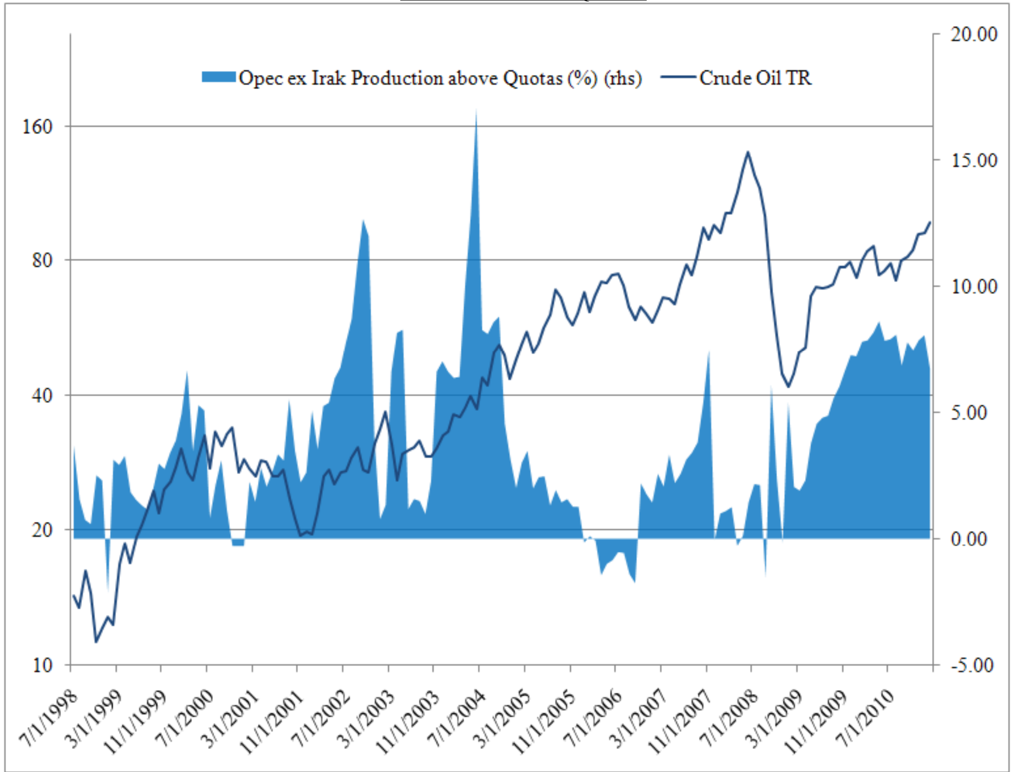


Source: Bloomberg, Clue6

The crude oil contango has been decreasing rapidly during the recent rebound (Chart 13-14).

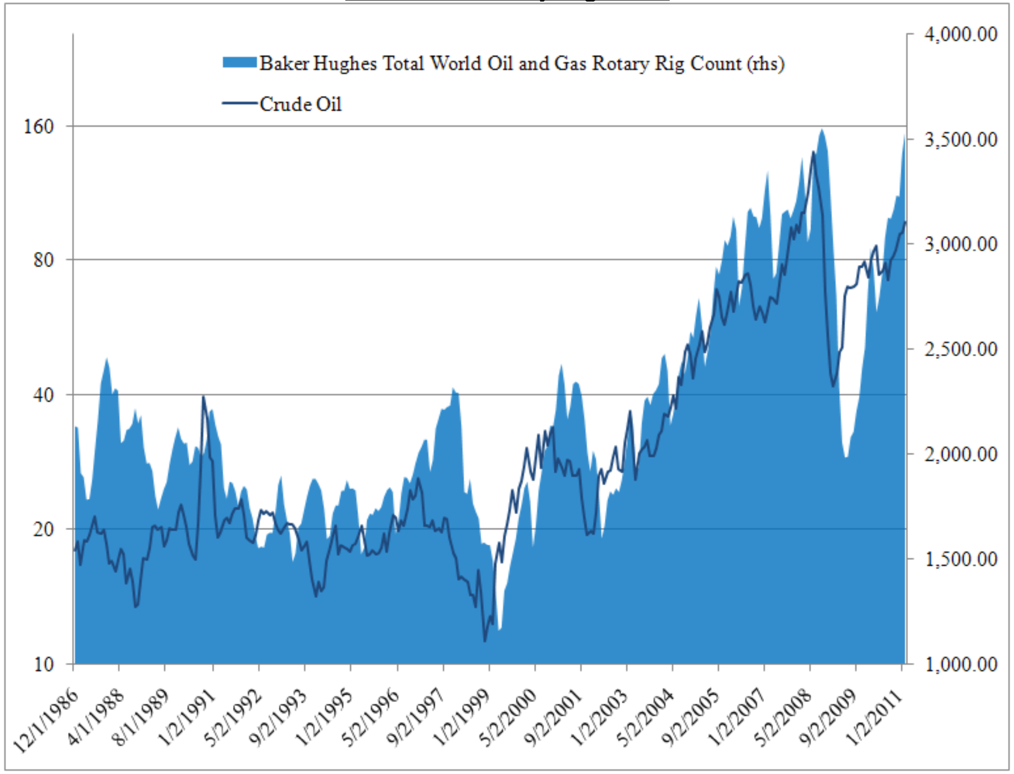
Note that historically **up move have accelerated just after a move from contango to backwardation** as those who didn't buy because of the negative roll, rush to buy **and that a move back to contango has usually been a very bad omen**.

Chart 15 Crude Oil and OPEC Production Deviation from Quotas



Source: Bloomberg, Clue6

Chart 16 Crude Oil and Baker Hughes Total World Oil and Gas Rotary Rig Count



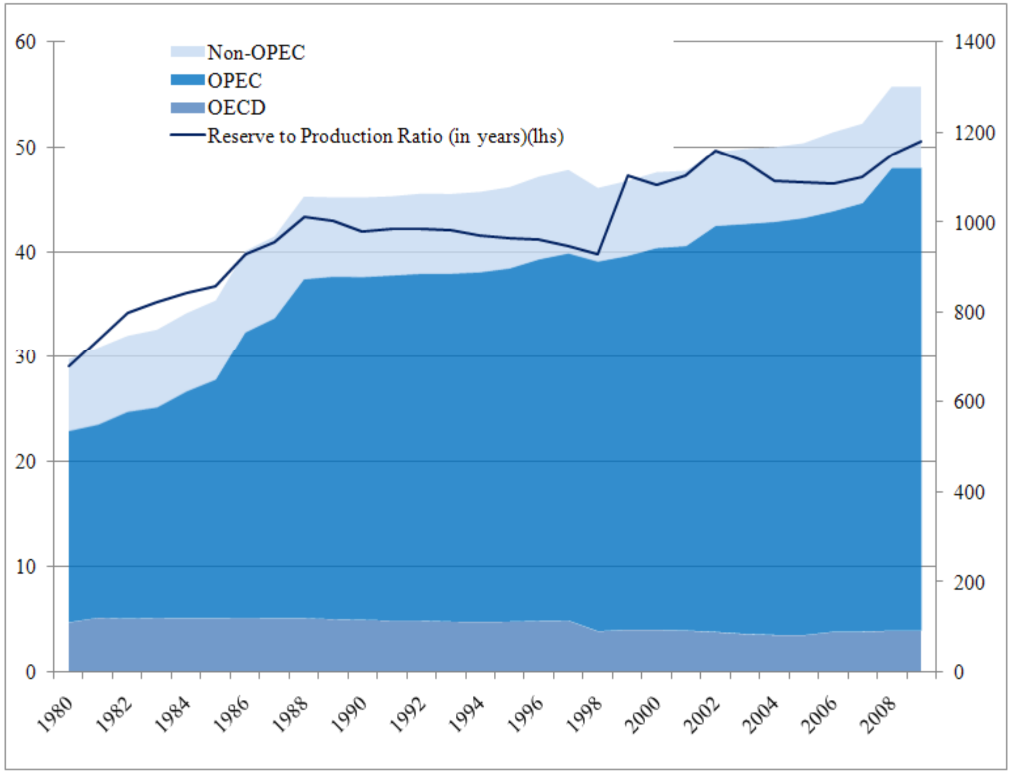
Source: Gibson Consultancy and Research

We are moving from a phase where inventories accumulated during the 2008-2009 crisis are worn down to a phase where OPEC and others spare capacity are eaten into. There are still approximately 135 mio. barrels above normalized stocks (including floating storage). Note that in 2010 oil demand has been much stronger that consensus forecast (almost 2.5 mio. b/d, 1.9 coming from emerging economies). Production has also increased more than expected for non-OPEC producers as a consequence of the decline in depletion rate, faster project completion and increase in non-traditional crude supply. Don't forget either that Iraq will add more than 3.5 mio. b/d by 2017.

OPEC members are cheating (Chart 15). There are a lot of debate on how much spare capacities OPEC have and some IB Goldman Sachs notably, have said that they are much lower than commonly believed.

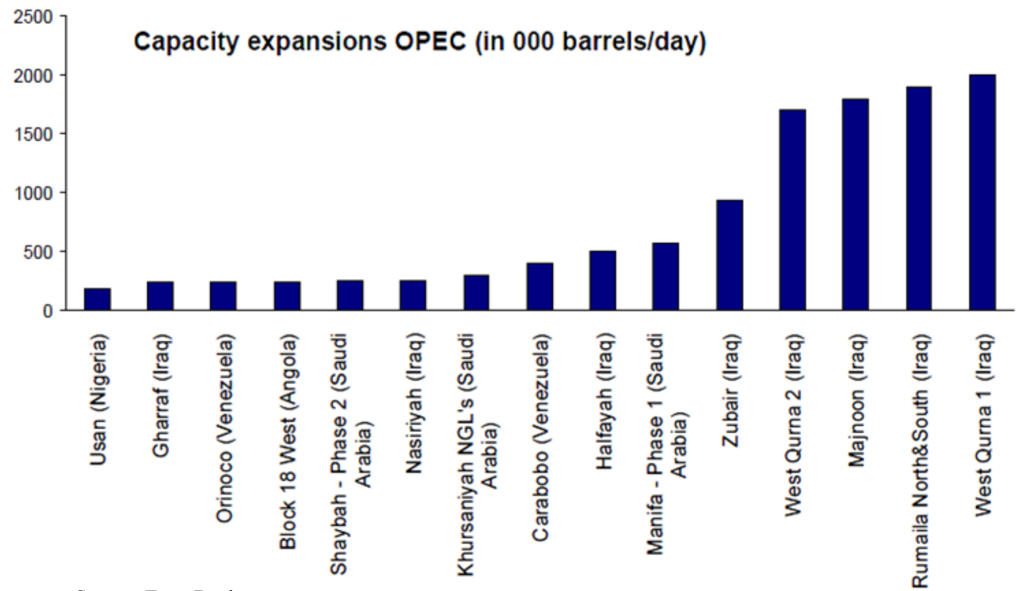
Oil and gas rotary rig count has continued to expanded rapidly (Chart 16). For example, OPEC has increased its number of oil and gas rigs 78% in 2010 and there are report that Saudi Arabia is planning to increase its rig counts by nearly 25% this year.

Chart 17 Oil Production and Reserve to Production Ratio



Source: BP, Clue6

Chart 18 OPEC Capacity Expansion



Source: Erste Bank

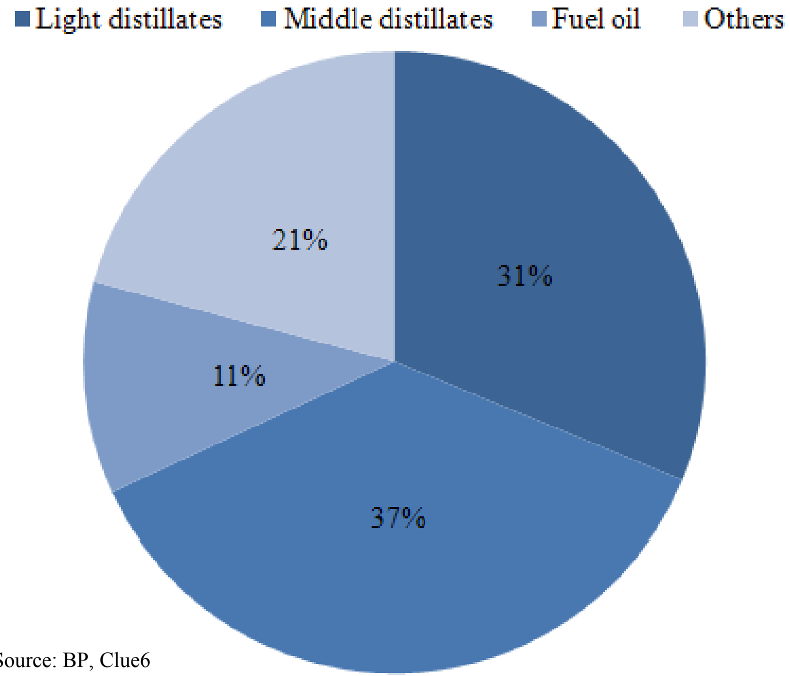
The seven top majors are expecting to increase their oil supply by 19% until the end of 2014 which compares favorably with the 1% increase in the preceding 5 years. On chart 17, one can see that the Reserve to Production ratio has been increasing in the past 30 years.

On chart 18 one can see the major new OPEC fields being developed. And you have to add Iran to the picture with the 2nd largest oil reserve in the world even if the country is underexplored. Then you have the new 3 EPNZ fields in the Arctic See which will be developed by BP and Rosneft could yield some 40 bio barrels and what about Africa…

Oil recovery usually is 15% of the reserve processed and new technologies could boost the recovery to 50-75%. Fracking technology for oil shale, "Enhanced Oil Recovery" and "Improved Oil Recovery" are some of them with promising results. They are still expansive but prices are expected to decline sharply.

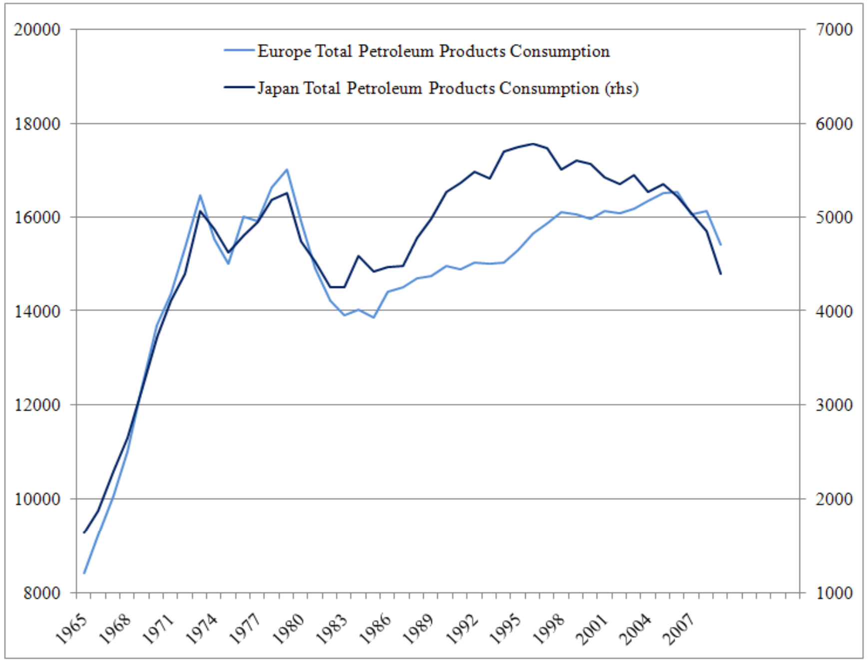
And then what about shale gas in Europe and China…

Chart 18 Petroleum Products Demand (2008)



Source: BP, Clue6

Chart 19 Europe and Japan Total Petroleum Products Consumption



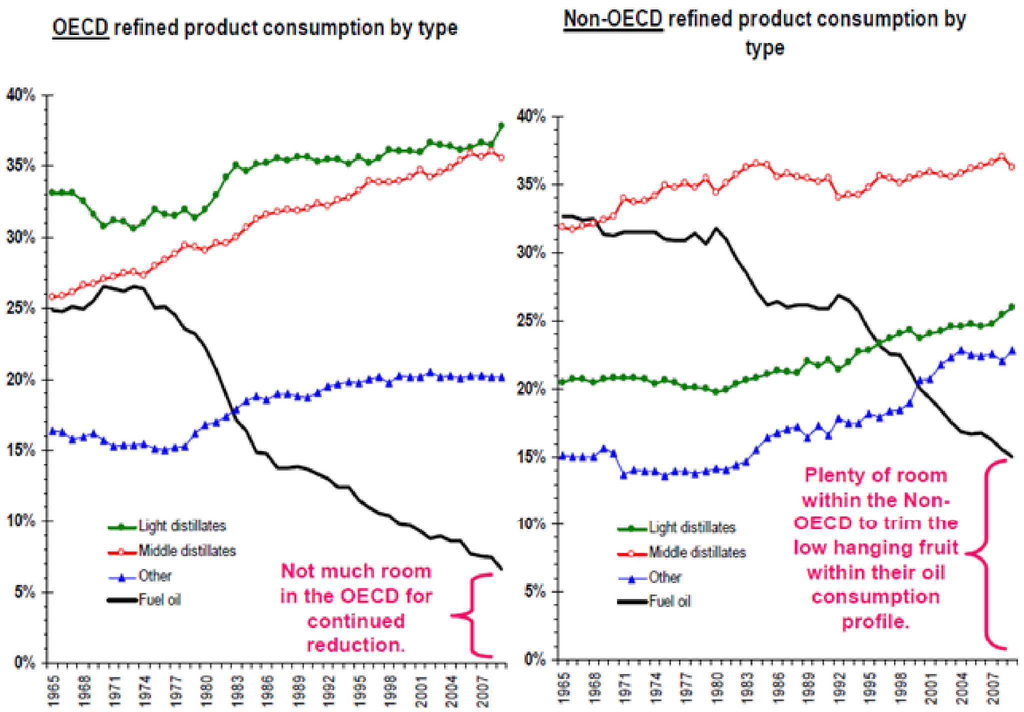
Source: BP Clue6

We have tried in the past to give a balanced view between the "peak oil hypothesis" and the "Supply won't be a problem hypothesis"… Given the resurgence of peak oil talks now that oil have rebounded from the 2009 doldrums, let's review the no-problems argument… First we repeat that this has not much to do with short-term movements as the short-term supply/demand curve are extremely steep. The perceived lack of spare capacity contributing to short-term volatility. This is crucial for crude oil price far away in the curve…

The main argument is that supply might or might not peak, this does not really matter as demand will decline… We see many graphs comparing the US consumption of energy per capita to China used to tell us that China consumption will increase by many, many fold… This won't happen… China demand will rise but not that much and demand in developed country will decline (and note that we are talking about the next 3-5 years as beyond that we think alternative energy will be able to replace fossil energy source exponentially). On Chart 18 one can see the total demand per products. Light distillates are used for transport, middle distillates is 2/3 used for transport and 1/3 for heating and fuel oil for heating… So transport represent a bit more than 50% of the total consumption… and according to the UN, cities represents nearly 70% of the total oil consumptions so… Can you imagine all the economy that can be made… with electric cars, more effective building, better public transport… The IEA future demand projection are too high… by a mile…

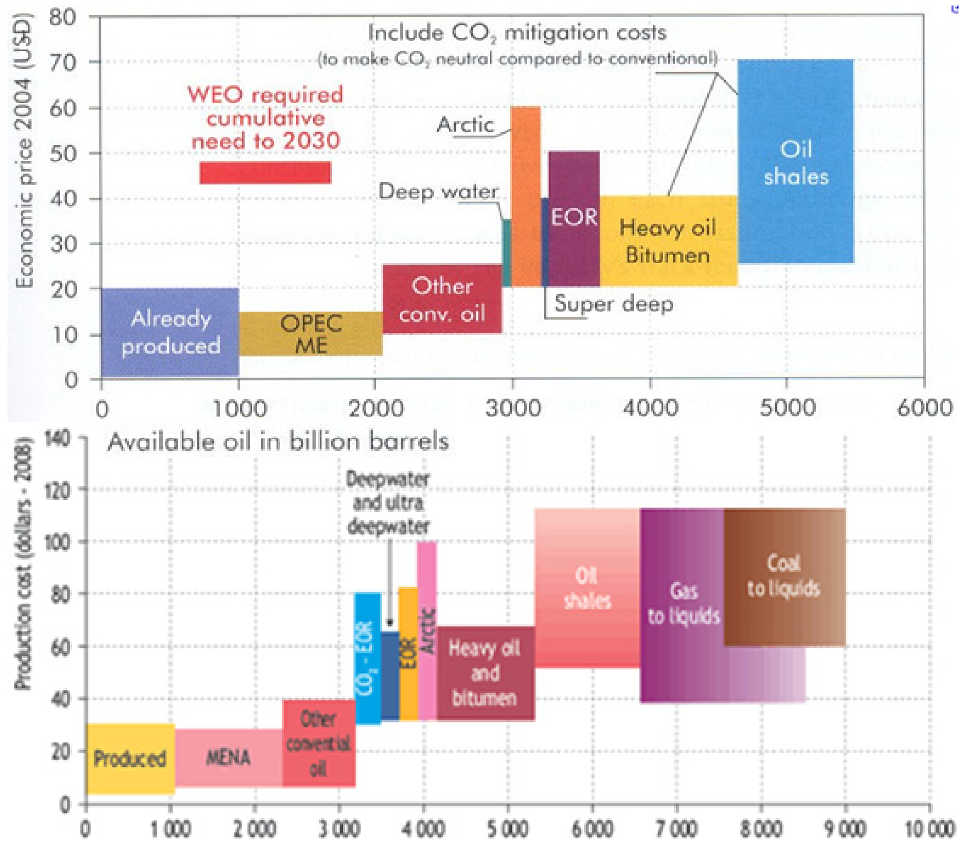
And as we said in 2008 price had risen too much for those change not to occur, demand was destroyed, permanently… The decline was so steep that we moved to a supply destruction theme in early 2009 but now price are high again… human beings need crisis to make bold change and the very high oil price is just what was needed… It did it in the past…did you know for example that Europe and Japan consume less oil than in 1979 with a dramatic decline in 2009 (Chart 19).

Chart 21 Oil Consumption by Type



Source: Stifel Nicolaus

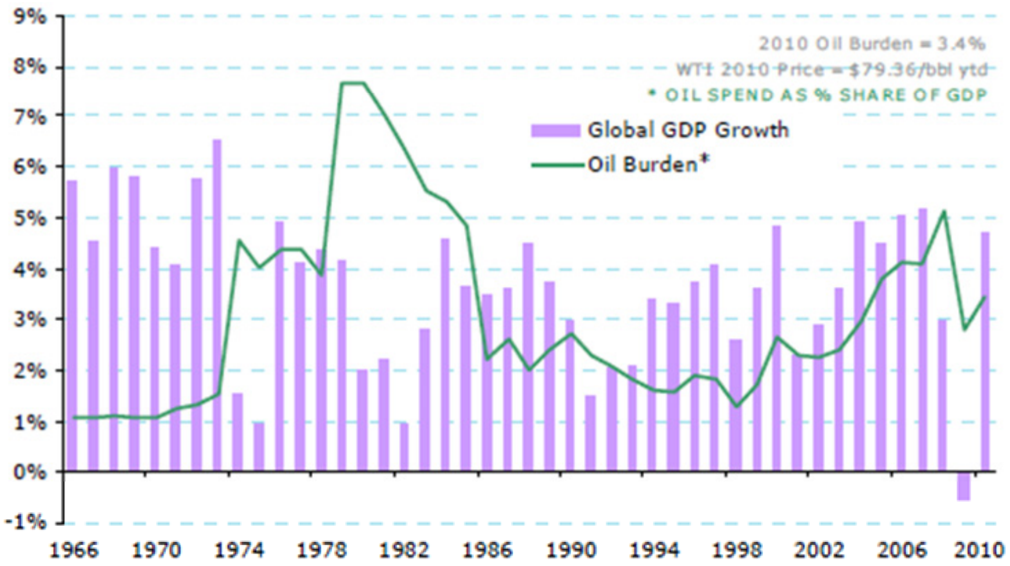
Chart 22 Available Oil and Economic Price



Oil-fired electric power reduction in non –OECD countries to OECD average would lower oil consumption by 4 mb/d (Chart 21).

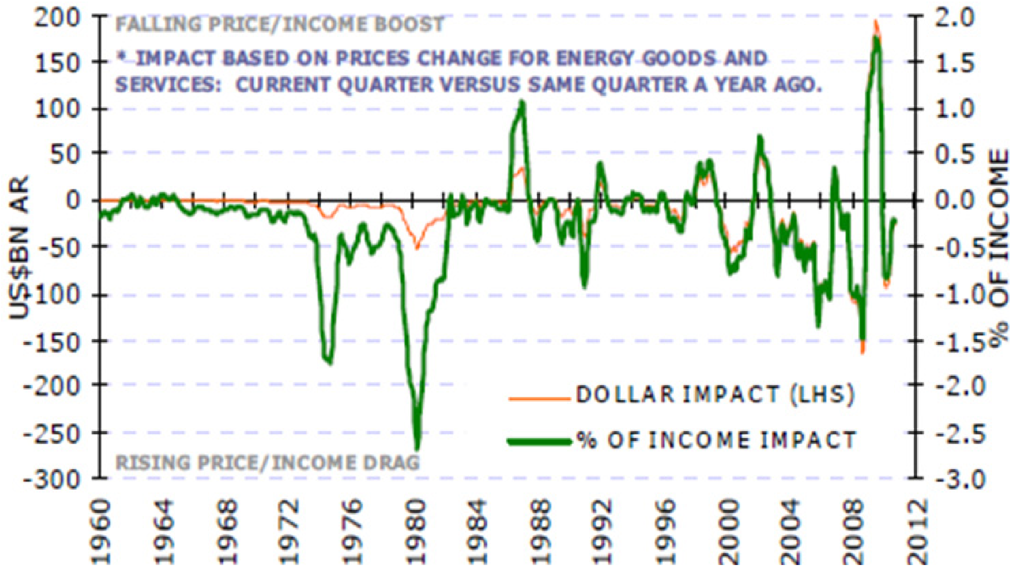
On chart 22 one can also a magnificent example of anchoring. We already criticized the IEA on this point but have a close look a the graphs. The first one is from 2004, the second one from 2008. Note that the economic price have been rising sharply along the spot price (and this can not be justified by costs increase).

Chart 23 Global GDP Growth and the Oil Burden



Source: MS

Chart 24 Impact of Changing Energy Costs



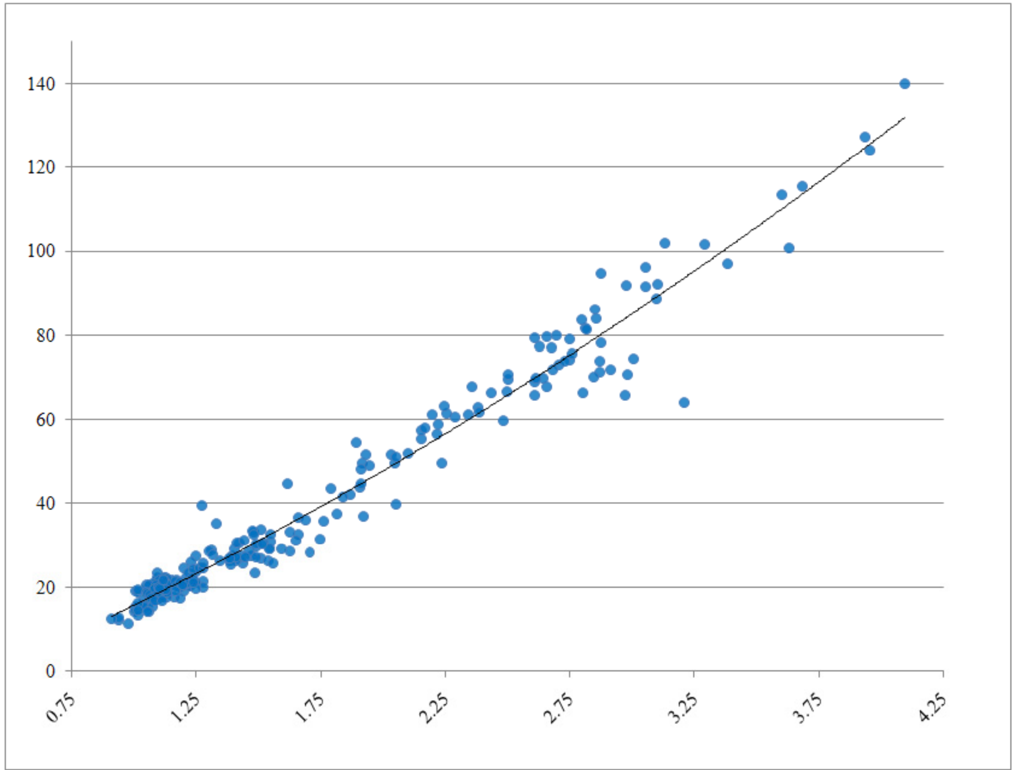
Source: MS

Developed economies are suffering from commodity inflation which is not a consequence of their own strength but of emerging economies' and more recently of social unrest in the Middle-East. This is causing a term of trade shock for net commodity importer (imports price rising more that exports price). You have more inflation in what is consumed than what is produced, this is bad. The problem are compounded if net commodity importers currencies fall.

Looking at the **oil burden** (Chart 23) we are **above levels which have led to important slowdowns in the past** (the graphs doesn't include the most recent spike).

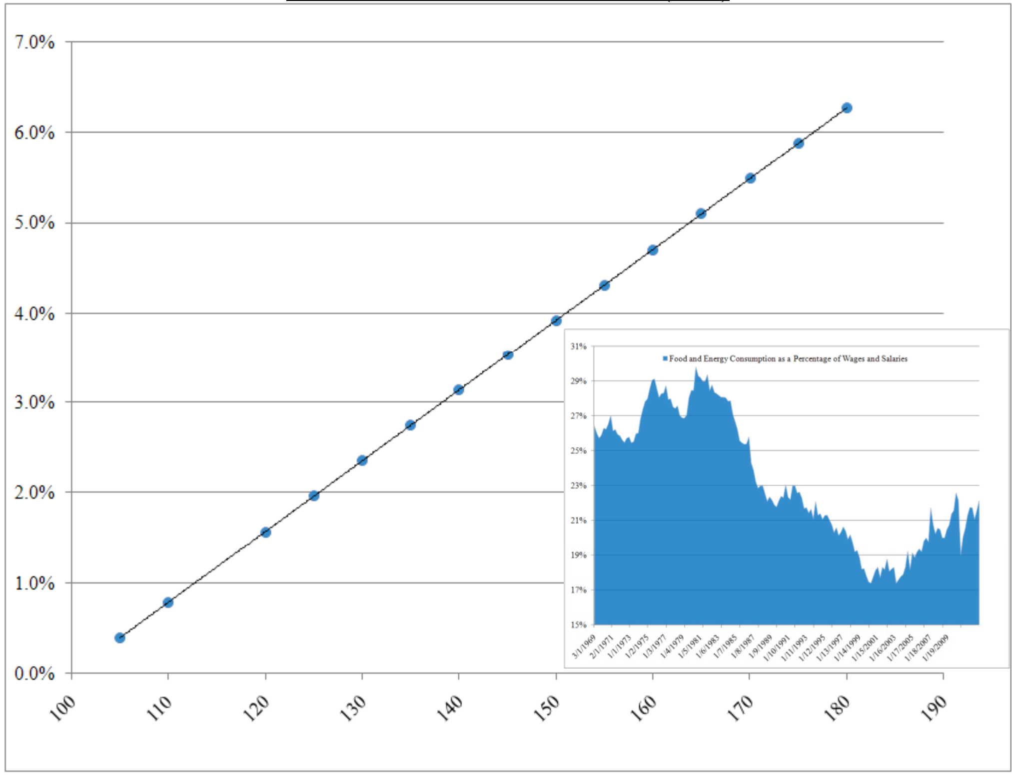
When looking at the impact of rising energy costs relative to incomes in the US (Chart 24) one can see that, while the sharp decline in 2008-early 2009 added almost as much in the pockets of consumers as all the tax cuts, it is now subtracting to an already anemic income growth (and one has to take the chart 21 into account to put things in perspective (lowering incomes while already at a high absolute level relative to them).

Chart 25 Crude Oil and Unleaded Gas Price



Source: Clue6

Chart 26 Crude Oil Prices and its Negative Impact to US Median Household Incomes (in %)



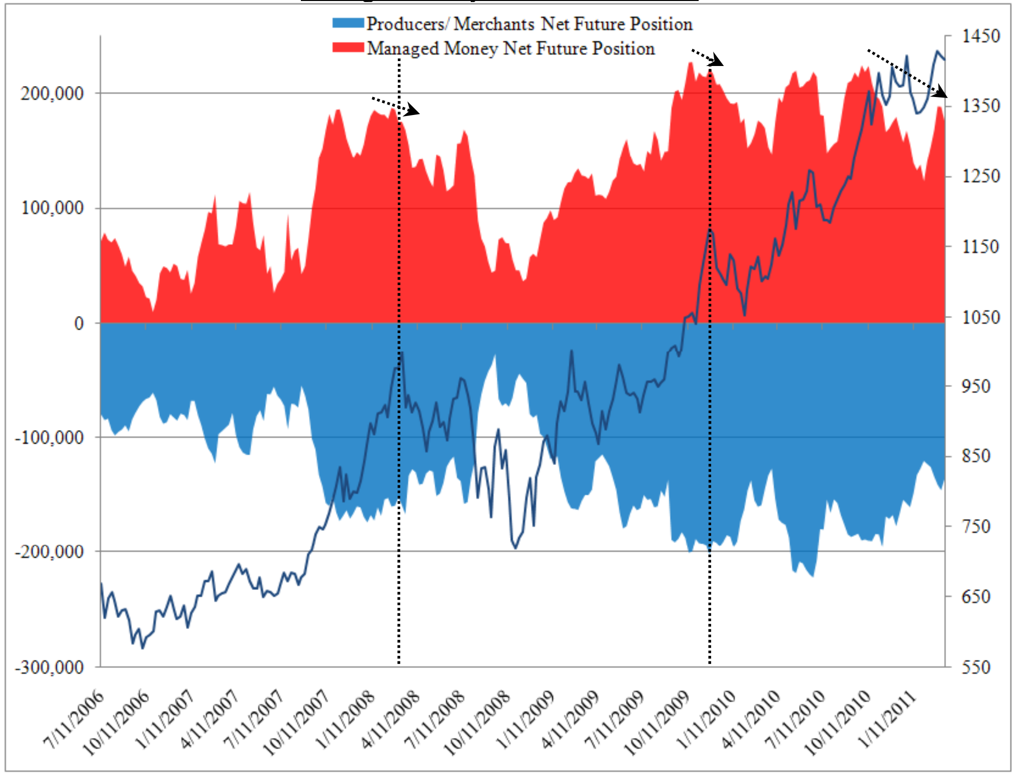
Source: Clue6

On chart 25 one can see the relationship between crude oil and unleaded gas price in the US.

On Chart 26, one can see the impact on median household income of rising crude oil prices (using the equation derived from chart 23). We are only looking at households unleaded gas expenditures and not taking any secondary effects into consideration.

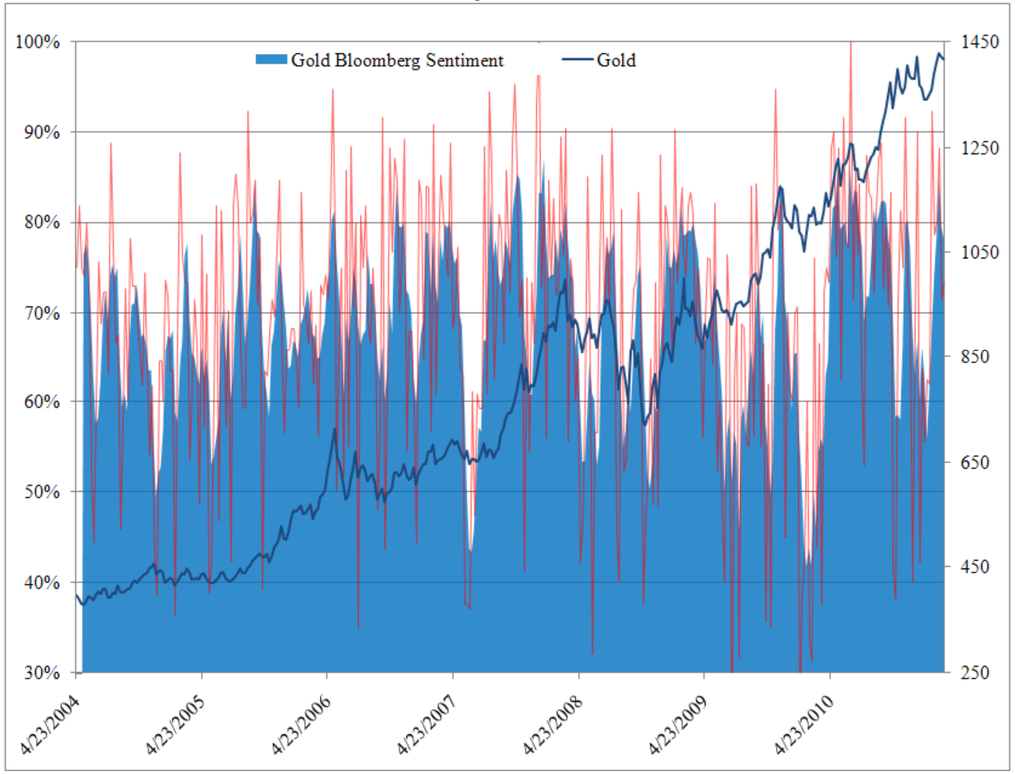
To put this in perspective the extension of the Bush tax cuts represented 4.3% of income for a median household. If you add the social security tax reduction, the number is 5.9%

Chart 27 Gold and Producers/Merchants vs. Managed Money Net Future Position



Source: Bloomberg, Clue6

Chart 28 Gold and Bloomberg Sentiment Survey Bull Ratio

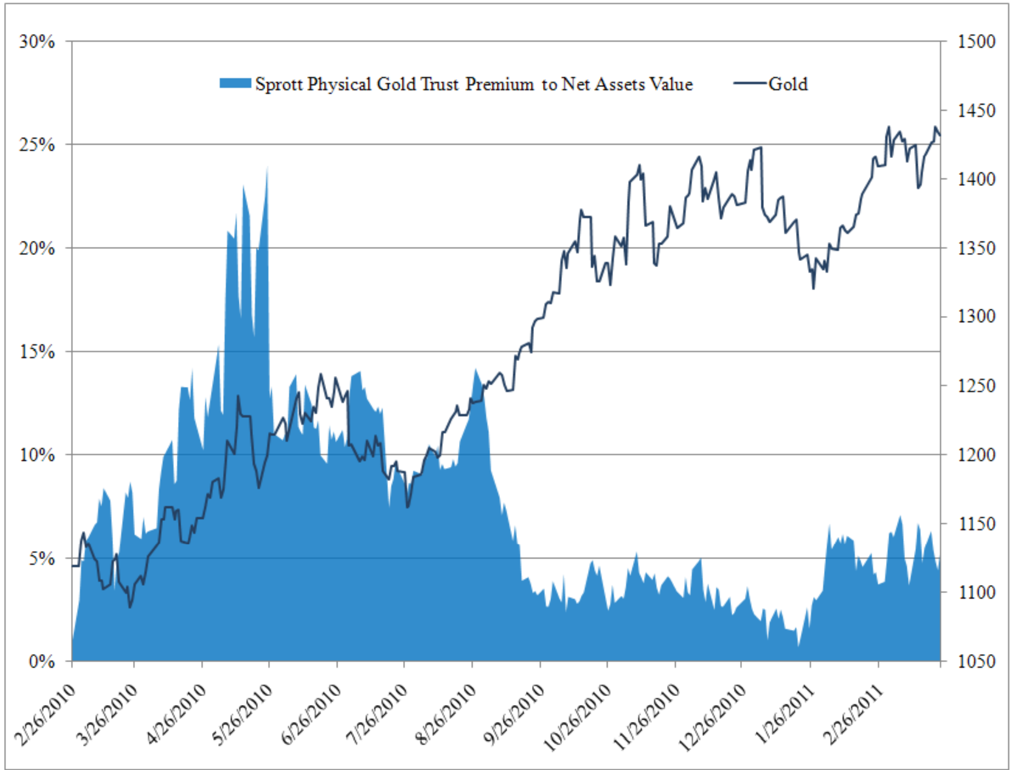


Source: Bloomberg, Clue6

Managed Money has been cutting its net long position while prices are making new highs (Chart 27). This is the kind of negative divergences which have preceded corrections/consolidations in the past.

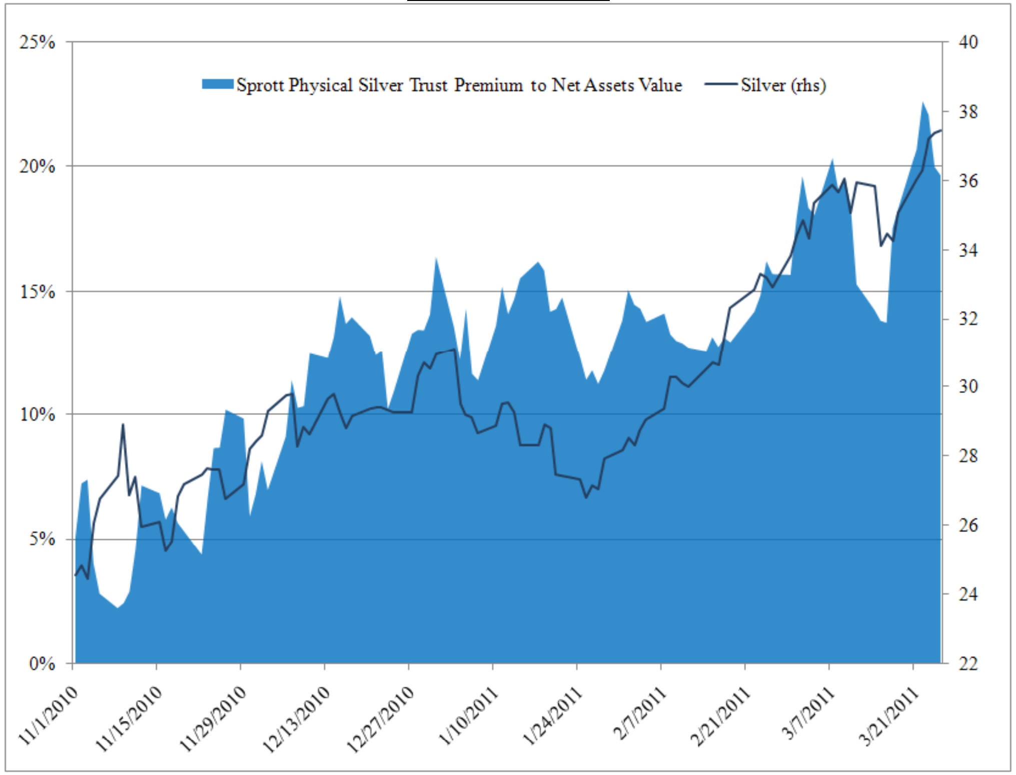
The Bloomberg survey gold bullish sentiment is also diverging negatively with price (Chart 28). We would like to see a single reading in the 40-45% to grade this survey as mildly bullish.

Chart 29 Sprott Physical Gold Trust Premium to Net Asset Value



Source: Bloomberg, Clue6

Chart 30 Sprott Physical SilverTrust Premium to Net Asset Value



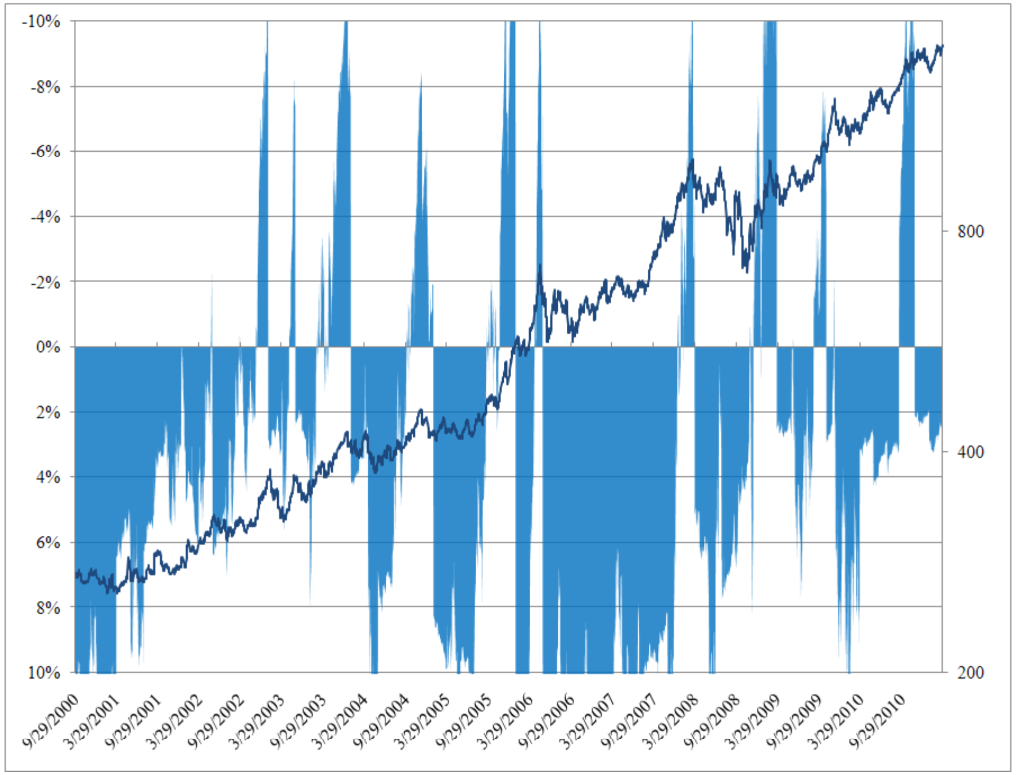
Source: Bloomberg, Clue6

Last April we recommended to arbitrage the Sprott Physical Gold Trust premium to net asset value (Chart 29). The premium has come down since but look at the behavior of the Sprott Physical Silver Trust (Chart 30).

Fancy another trade?

Chart 31

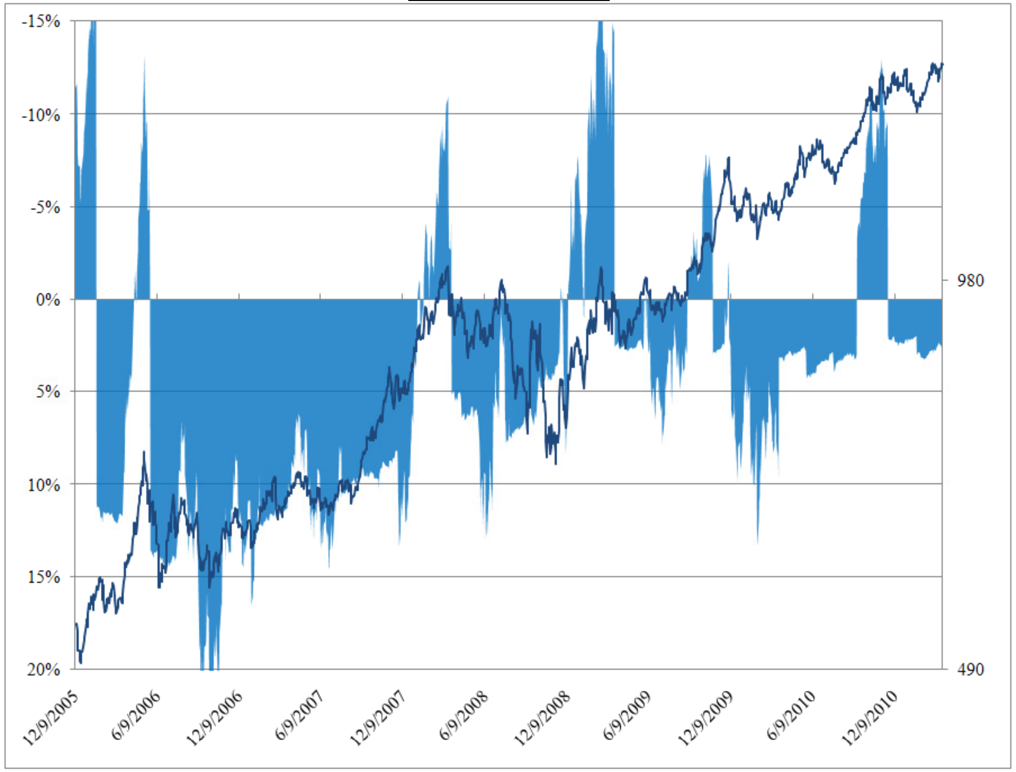
Gold and 12 Months Forward Contract Premium/Discount



Source: Bloomberg, Clue6

Chart 32

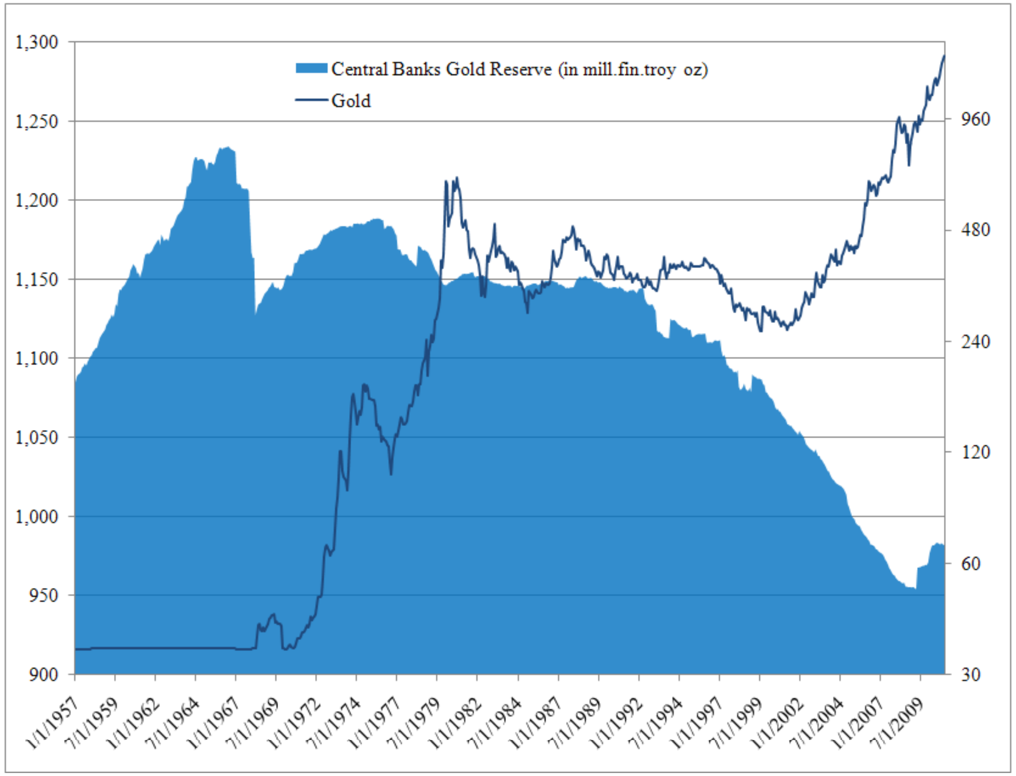
Gold and 12 Months Forward Contract Premium/Discount



Source: Bloomberg, Clue6

The curve is in contango (chart 231-32). We had a big move in backwardation in February. Remember that gold has had some nasty reversals when the curve was spiking in backwardation.

Chart 33 Gold and Central Bank Gold Reserve



Source: Bloomberg, Clue6

Table 2 Gold and BRIC's Central Bank Gold Reserve

	FX Reserves (US$ BN)	Gold (tonnes)	Gold (US$ BN)	% of Reserves
China	2,685	1,054.1	45.6	1.70%
Russia	501	775.7	33.6	6.70%
India	298	557.7	24.1	8.10%
Brazil	291	33.6	1.5	0.50%

Gold Purchases Needed to Meet Specific Targets (tonnes)

	Target	China	Brazil	Total
(% Reserves)	4.0%	1,426	235	1,661
	5.0%	2,046	302	2,349
	6.0%	2,666	370	3,036
	7.0%	3,286	437	3,723
	8.0%	3,906	504	4,410

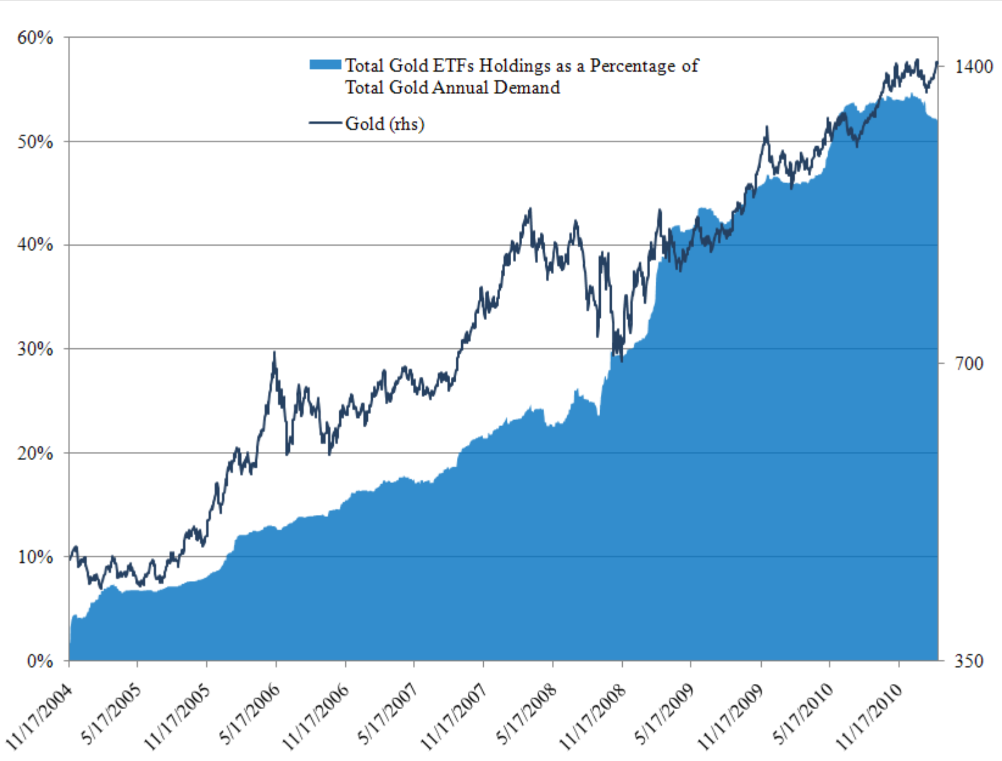
Source: macromon.wordpress.com

Central Banks have been net buyers (chart 33). G7 Central Banks have approximately 35% of their reserve in Gold while the 13 other members of the G20 only have 3.5%...

If they were to move to 10% gold, this would imply a purchase of a bit less than 400 mio. Troy ounce or approximately 30% of total Central Bank gold holding or 20% of all the gold ever mined not in the hand of Central Banks…

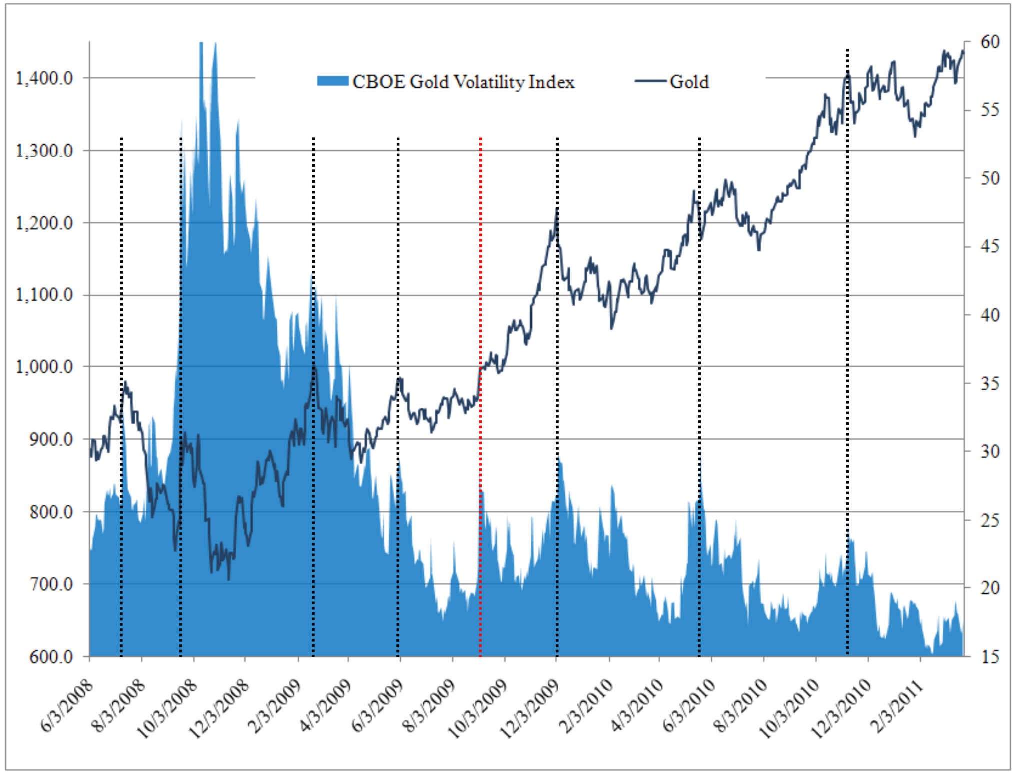
The recent rise comes from emerging market official buying as advanced economy Central Banks have continued to sell… for now.

Chart 34 Aggregate Gold ETFs Holding



Source: Bloomberg, Clue6

Chart 35 Gold and CBOE Gold Volatility Index

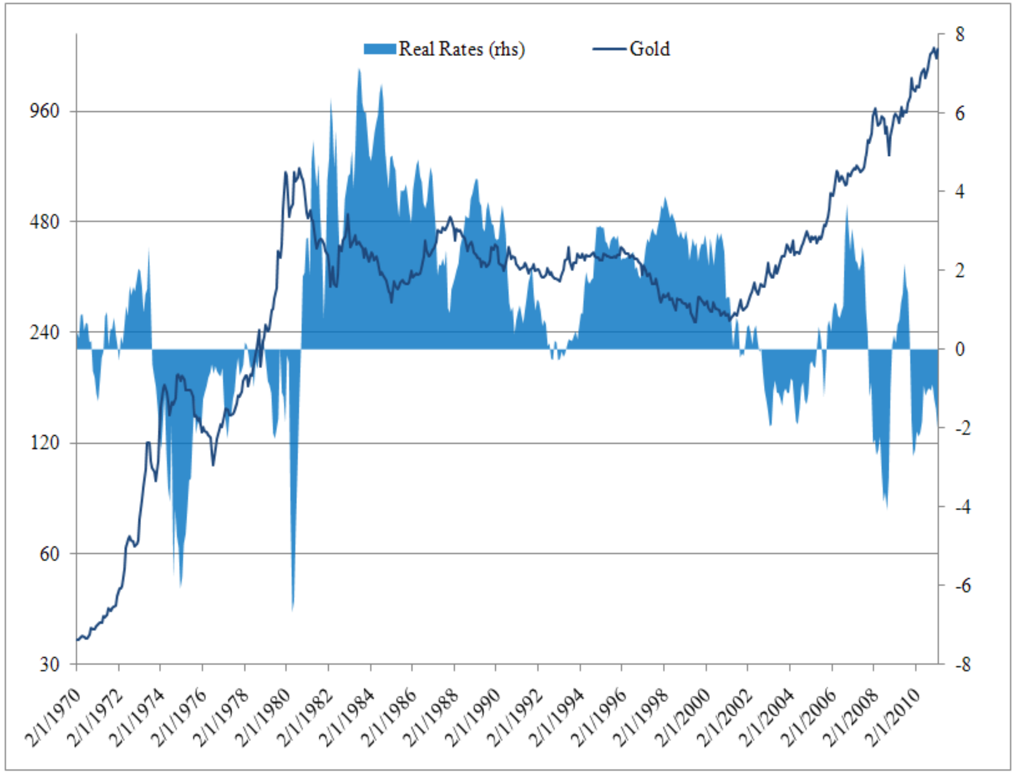


Source: Bloomberg, Clue6

The recent move has not been supported by inflows into gold bullion ETFs (Chart 34). Investment demand represents today 50% of total demand (one of our bull-case assumption back in 2002). Investment demand is paramount as in in 2009 and 2010, mines' production exceeded fabrication demand for the first time since the mid 80's. And remember that you have to add scrap (which is approximately half the size of mines production currently) and official sector sales (currently net buying). Note also that the value of investible gold is today less than 4% of global financial assets while it was 16% in 1982. **Did you know that the volume of gold mined by mankind would fit into a cube 20 meters on a side.**

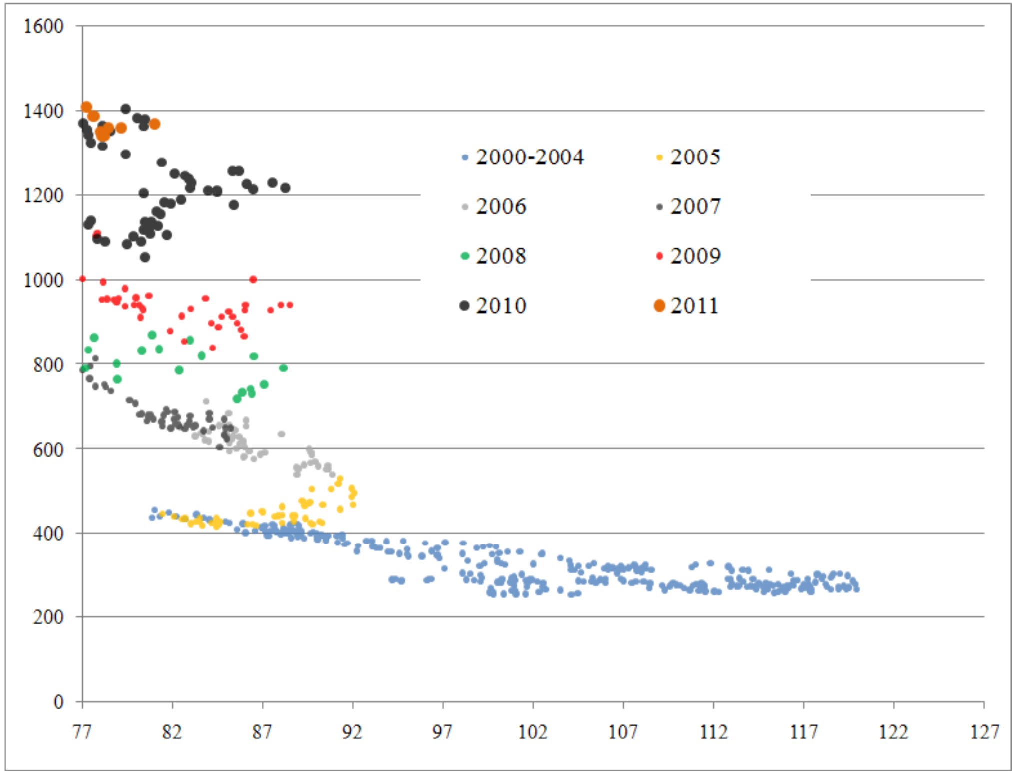
The CBOE gold volatility index is currently at a multi year low (Chart 35). Note that implied volatility tend to rise substantially when gold is forming a short to medium-term top and continue to rise if the decline after a pullback if the decline is greater than 10-12%. We would really consider the buying of gold implied volatility as an hedge, especially at current levels. An hedge we could sell into strength if implied volatility rise significantly (we would then buy puts on golds with part of the gains to remain protected against a sharp decline)

Chart 36 Gold and US Real Rates



Source: Federal Reserve, Clue6

Chart 37 Gold Price Vs. Dollar Index

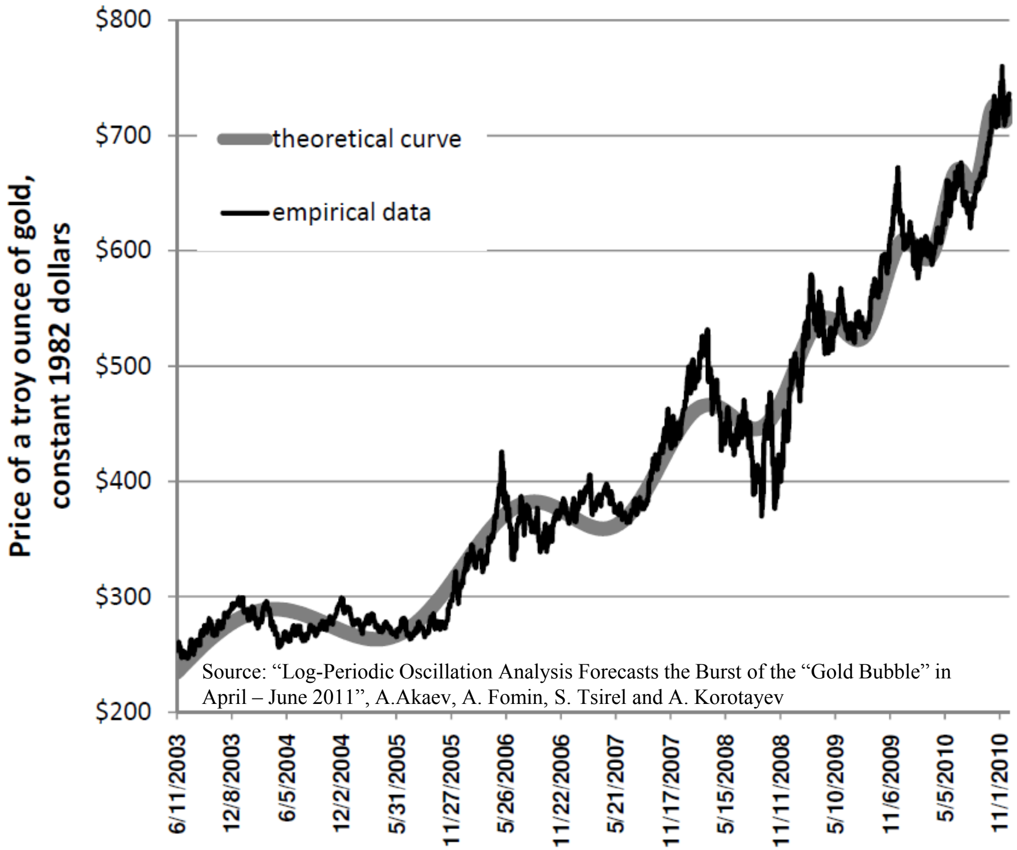


Source: Bloomberg, Clue6

Real rates in the US (and in many other places) **remain negative** which is supportive for gold (Chart 36).

So far in 2010 we have seen the clearest disconnection between the performance of gold and the USD (Chart 37). Our assumption has always be that a prolonged disconnection would mark the beginning of the end of our current monetary architecture.

Commodities: Econophysics – Gold

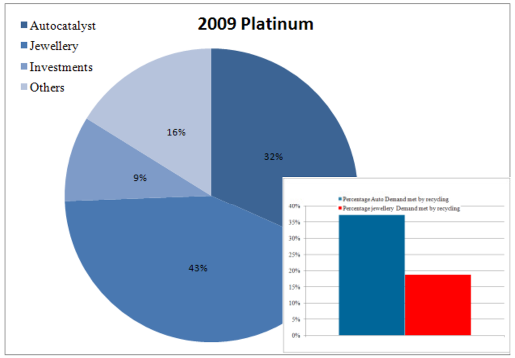


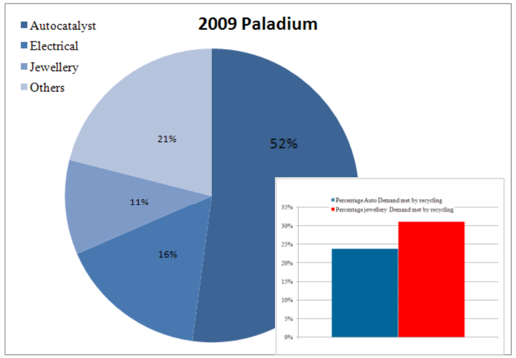
Based on the work of Didier Sornette on bubble dynamic combining increased log-periodic oscillation and exponential growth.

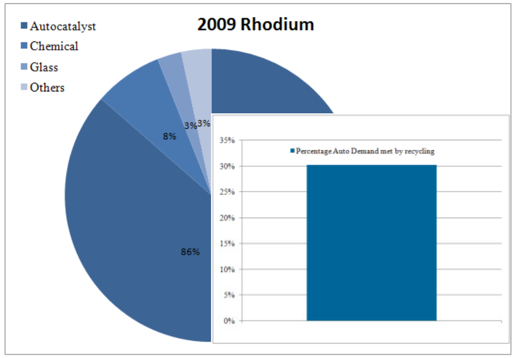
We last used his work in the summer of 2009 when it was indicating that the Chinese equity market would top during a 2 weeks time window which it did.

The graph above indicates, according to the authors that gold should top out between April and June this year.

Commodities: Supply/Demand – Platinum Group Metal

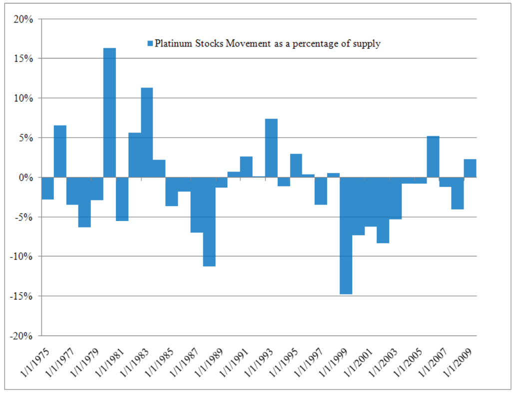


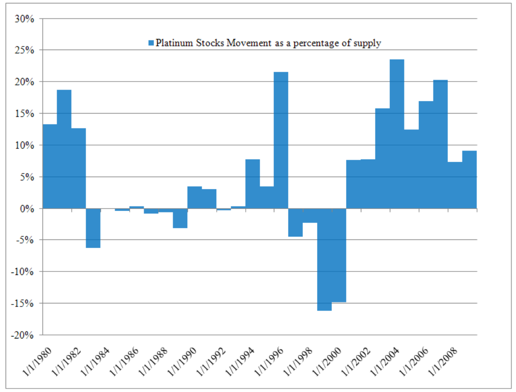




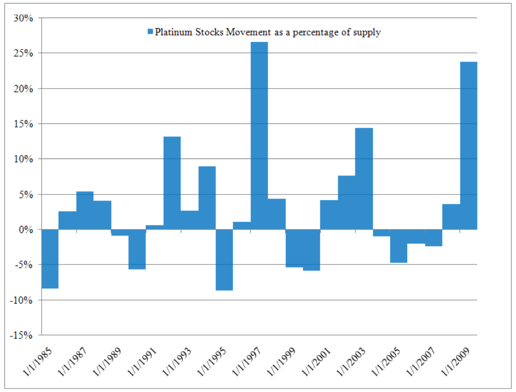
PGM Demand

Source: Johnson Matthey, Clue6





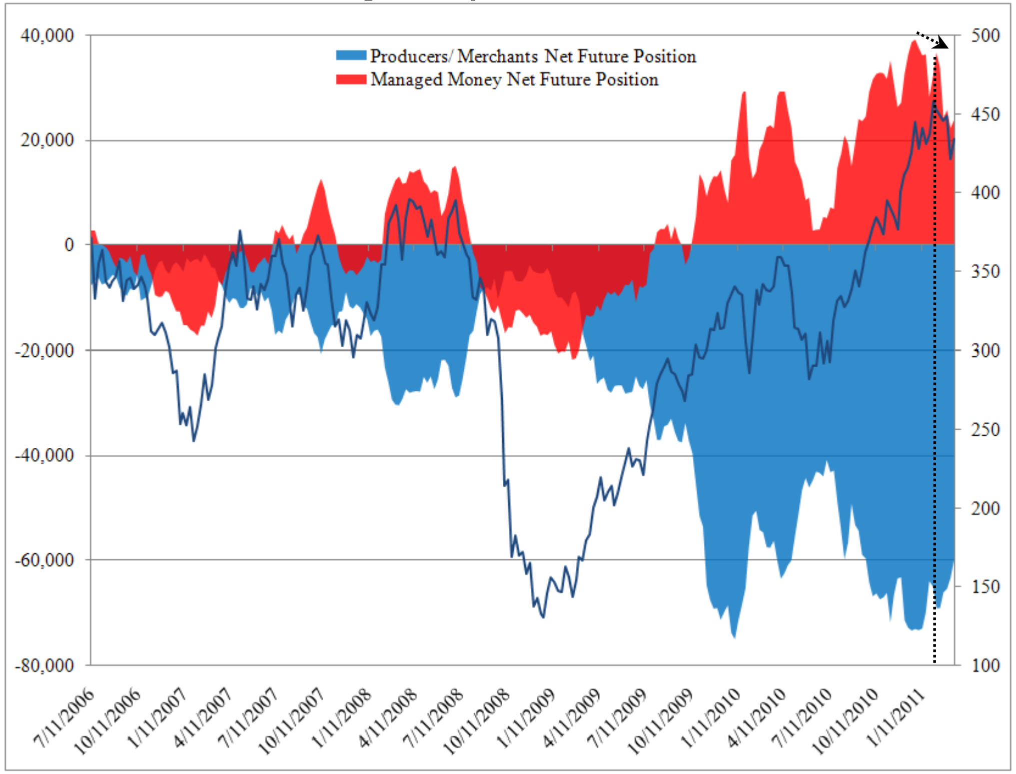
Source: Johnson Matthey, Clue6



PGM Stocks Movement

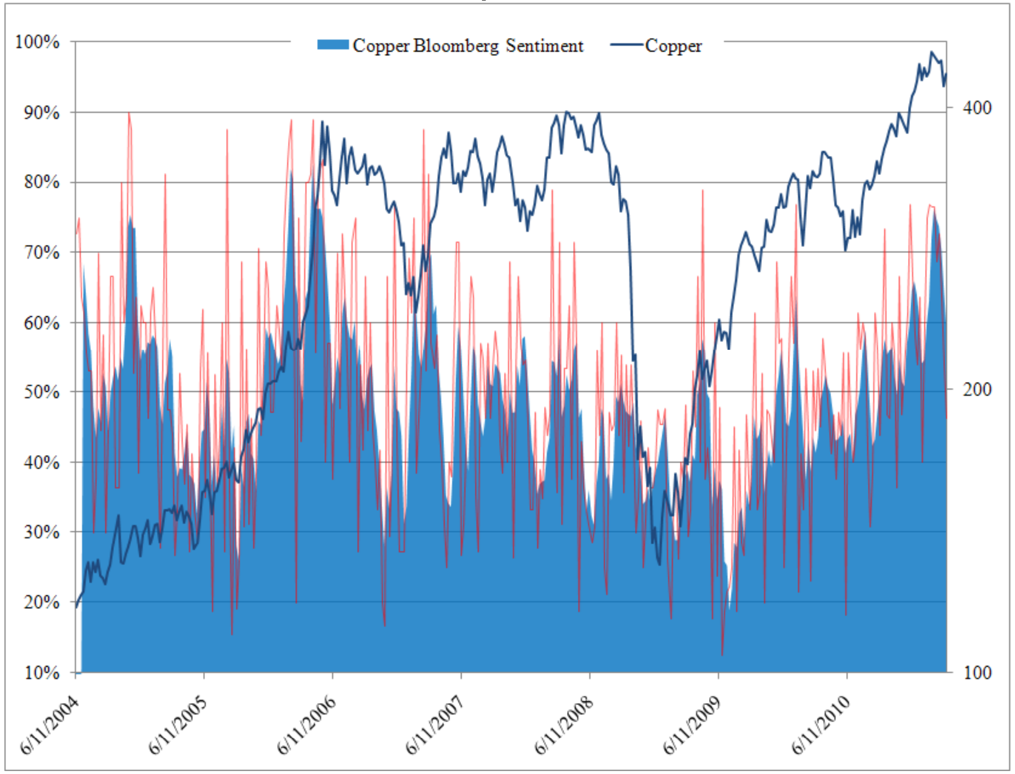
"… never entirely understood why PGMs are considered precious despite their use in jewelry as they really are pretty industrial– auto catalysts, dental fillings, oil refineries and other very non-sexy stuff make up more than 60% of demand... To make matters worse for people of a macro trading bent, these metals as a trade have got pretty crowded recently. Places like Brazil, China and India are actually starting to put vehicle emissions standards in place which has led to a lot of funds being long a lot PGMs expecting those standards + growth = a lot more demand for catalysts and PGMs. EM growth, an inflation hedge and government policy for an added boost?... The problem with this trade is that longer term this whole electric car thing is going to crash the party in big way. No internal combustion engine means no fumes means that no auto catalyst is required. The faster that happens the faster this story looks way out of line...it's a great story until 2015 or so when the demand starts to flat line in the developed world and looks saggy in developing markets – and that's assuming the usual 10-12% growth rate in vehicle demand in China. … But that's ok because the supply side looks dire in the short term as the biggest producers are South Africa with its not-so-under-control wage inflation and issues with infrastructure… Which when you discount for various screw-ups that happen in the mining sector (especially in Zimbabwe) the market does look tight. A few hundred thousand ounces here and there and you might get a shortage. That's great until you realize that by 2016 the market will supposedly have just shy of ten million ounces in stockpiled PGMs, largely held by people looking to hedge inflation and who will be looking to sell all at once since the rationale for stockpiling this stuff breaks down once you realize that 2020s Camaro is probably going to have engine specs measured in Watts and not liters. What's worse, by that time, every marginal car on the road will be replacing some other car that (before being crushed into a cube of steel) will have its catalytic converter removed to be reprocessed and – you guessed it – pushed back into supply. Negative feedback's a bitch ain't it? George Soros has recently described gold as the ultimate bubble but gold isn't facing some looming technical threat that is likely to do really bad things to its demand. So long as people are hoarding shotguns and baked beans they will probably be hoarding gold too." Nemo Incognito

Chart 38 Copper and Producers/Merchants vs. Managed Money Net Future Position



Source: Bloomberg, Clue6

Chart 39 Copper and Bloomberg Sentiment Survey Bull Ratio

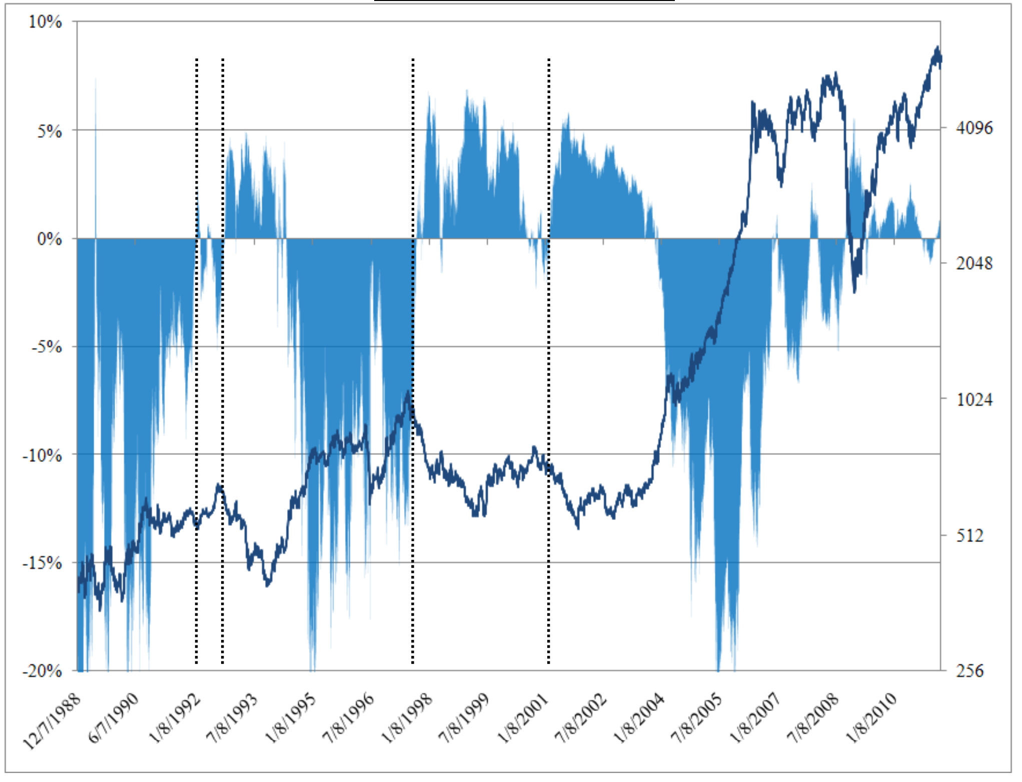


Source: Bloomberg, Clue6

Managed money has its biggest net long position in history while **producers and merchants are almost at their biggest net short position ever** (Chart 38).

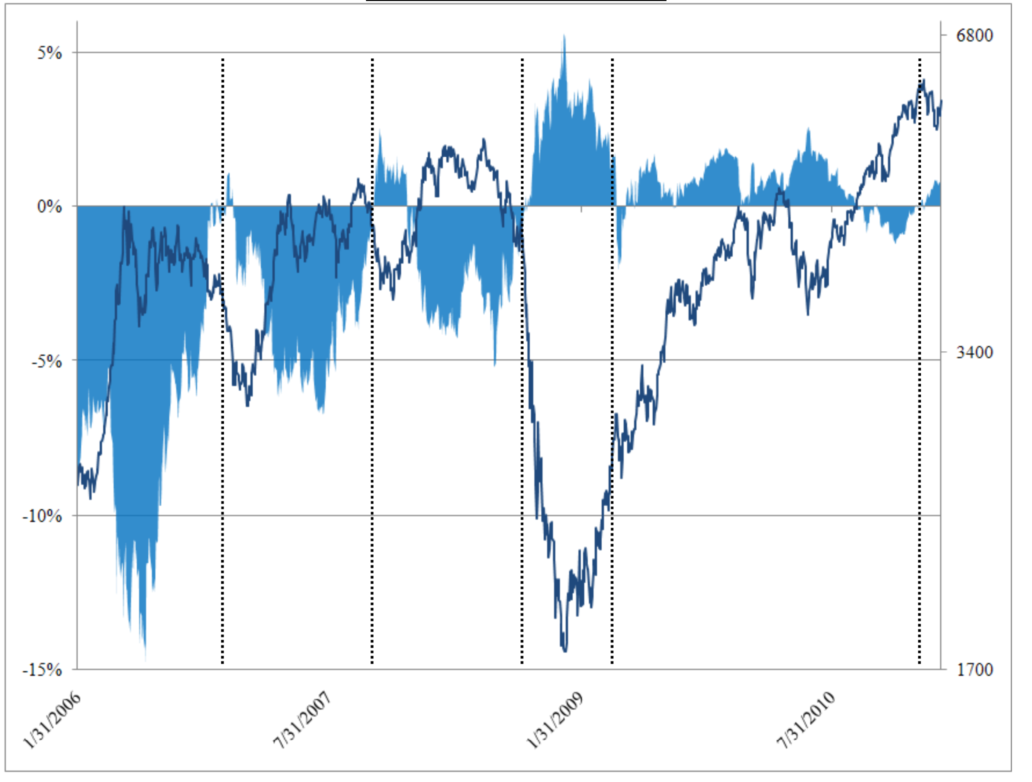
The Bloomberg survey copper bullish sentiment is at a high level (Chart 39). We add a couple of 70%+ readings which have been associated with correction/consolidation when copper was as overbought as it is now (deviation from 50 and 200 days exponential moving average).

Chart 40 Copper Total Return and 12 Months Forward Contract Premium/Discount



Source: Bloomberg, Clue6

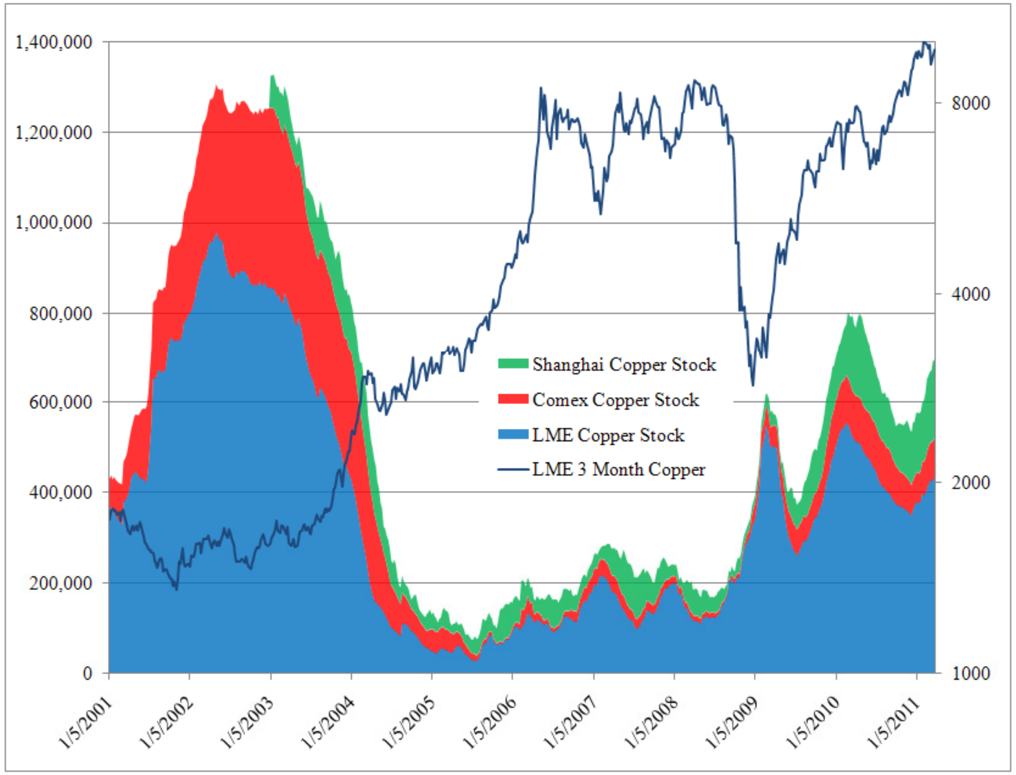
Chart 41 Copper Total Return and 12 Months Forward Contract Premium/Discount



Source: Bloomberg, Clue6

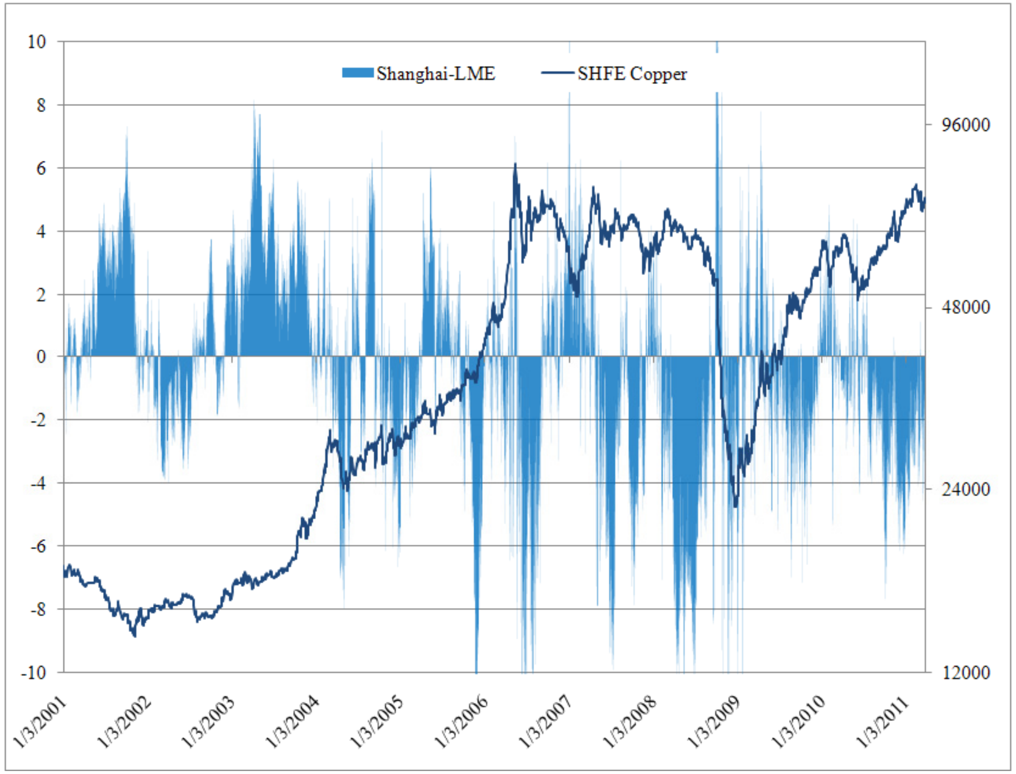
The curve has moved back to contango (chart 40-41). This is a negative.

Chart 42 Copper and Global Exchange Inventories



Source: Bloomberg, Clue6

Chart 43 Copper and Shanghai-London Arbitrage



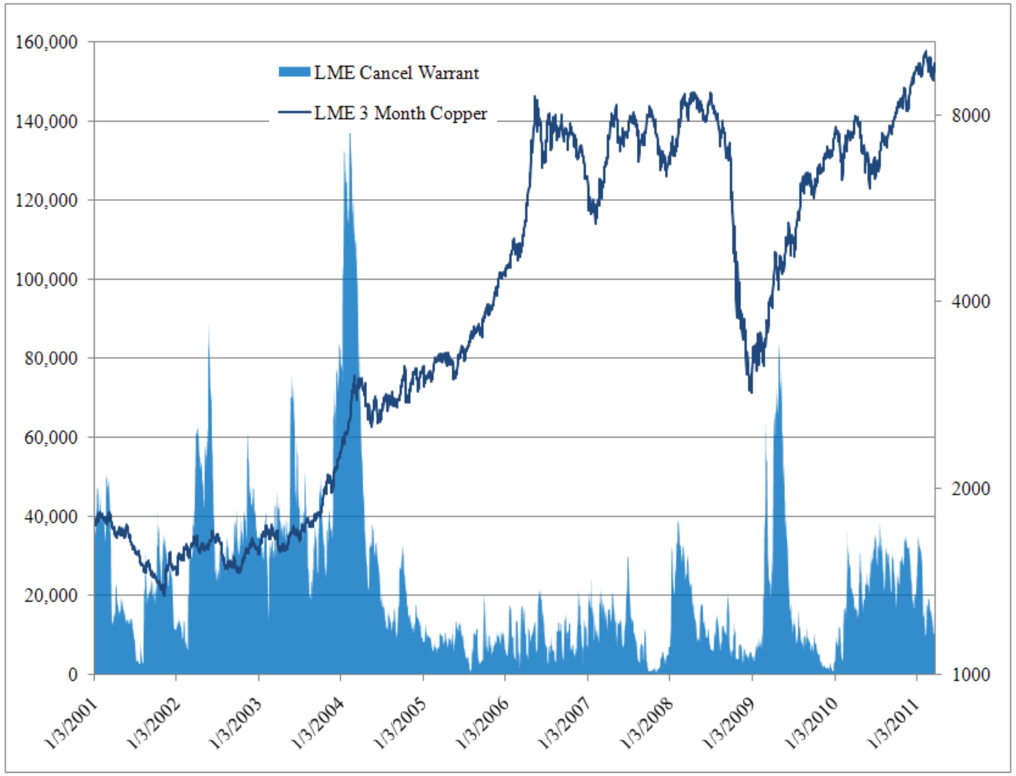
Source: Bloomberg, Clue6

Exchange inventories are rising (Chart 42). Copper has risen strongly historically when stocks have been declining and falling when they have been rising.

Copper held in bonded warehouse are now allowed to be delivered against future positions in China. Jiangxi Copper estimates that there are up to 700'000 mt refined copper stockpiled in such warehouses (more than the total supply deficit for the whole year or 40% of China refined copper demand). It seems that a **large part of those stocks are not production demand**, but are **used as collateral to get loans** (notably to invest in higher yielding assets or to relend the money at a higher rate), **to speculate or to be used as an inflation hedge**. Bonded stocks are believed to have increased by 300'000 mt since the beginning of the year. According to Standard Chartered, property developers are big in this game. So falling real estate prices in China could have a double whammy impact on the red metal.

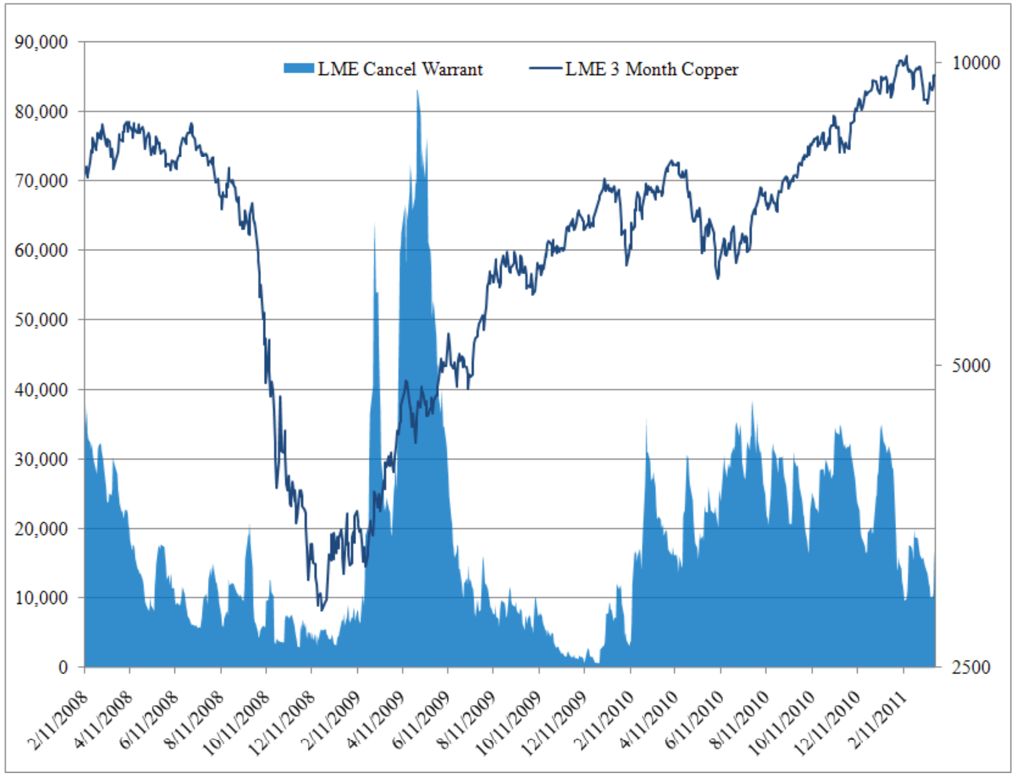
Copper is selling at a discount in Shanghai relative to London (Chart 43). Note that we are still seeing metals being shipped to Shanghai despite this (usually arbitrageurs do the reverse). It seems that the entities using bonded warehouse to store their copper are ready to pay a premium to lay their hand on the metal. The trend is accelerating now that authorities in China are trying harder to limit loan growth.

Chart 44 Copper and LME Canceled Warrants



Source: Bloomberg, Clue6

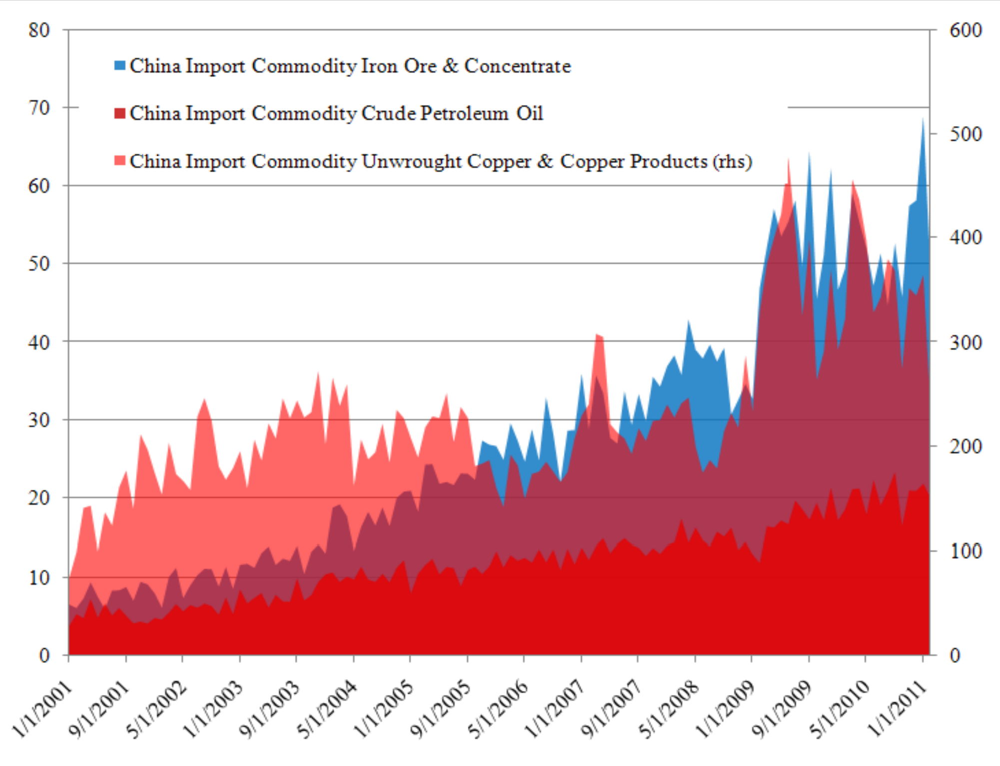
Chart 45 Copper and LME Canceled Warrants



Source: Bloomberg, Clue6

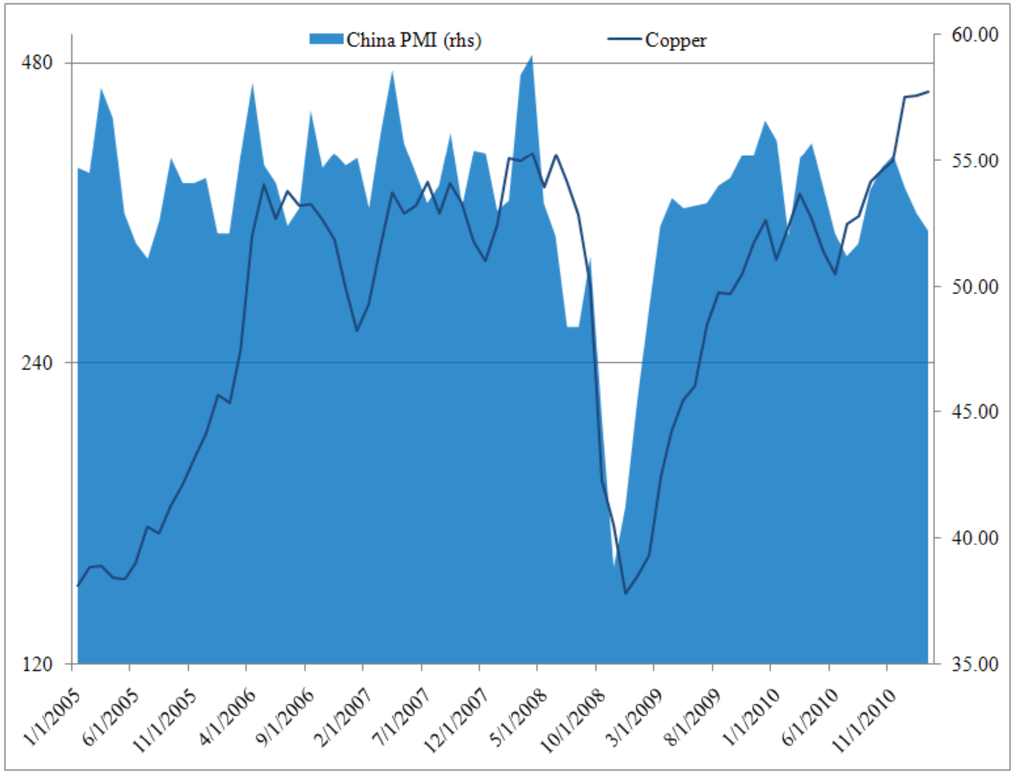
Canceled warrants have been declining rapidly recently (Chart 44-45). Low cancel warrant is an indication that fewer lots of copper are coming out of inventory for delivery

Chart 46 China Import (Volume)



Source: Bloomberg, Clue6

Chart 47 Cooper and China PMI



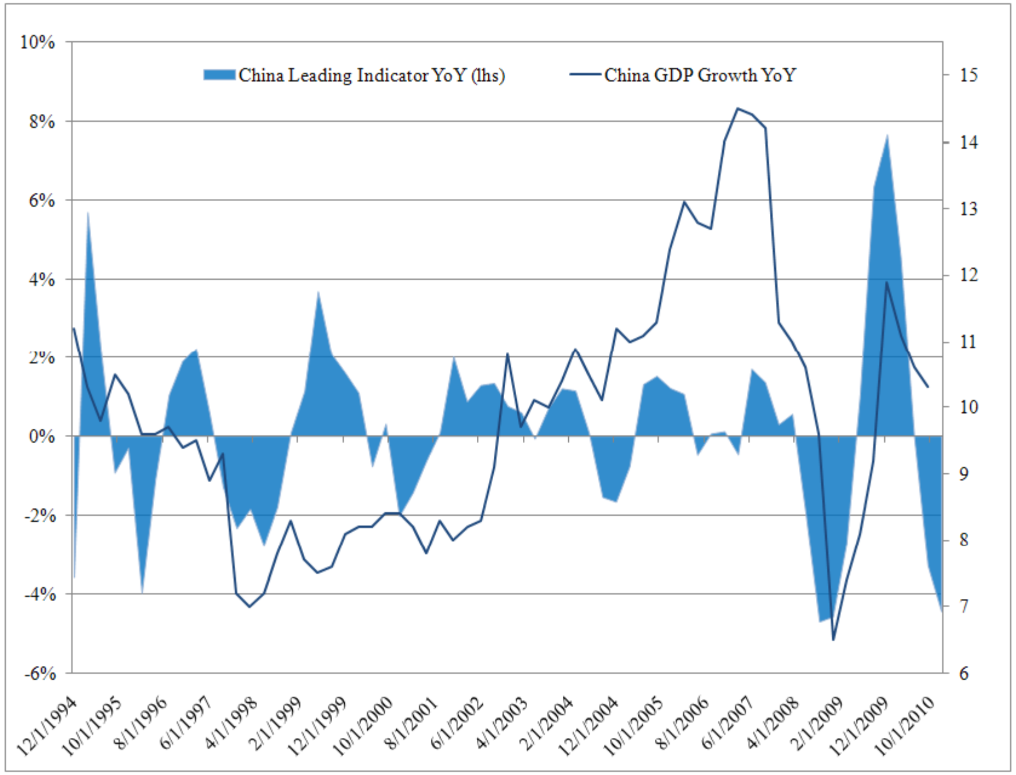
Source: Bloomberg, Clue6

We have written a lot about Chinese influence on the commodity market in the past… At the start of 2009 we said that China would probably use the decline in price to build strategic reserve and secure as much access to natural resource around the world as possible. As transpired in the previous page, It has now large unreported stocks which might hit the market precisely at the wrong moment.

While imports seems to have held well (Chart 46), **there are reports that there were no import of copper on a cash basis for March.** The entire demand was related to the financial scheme described earlier.

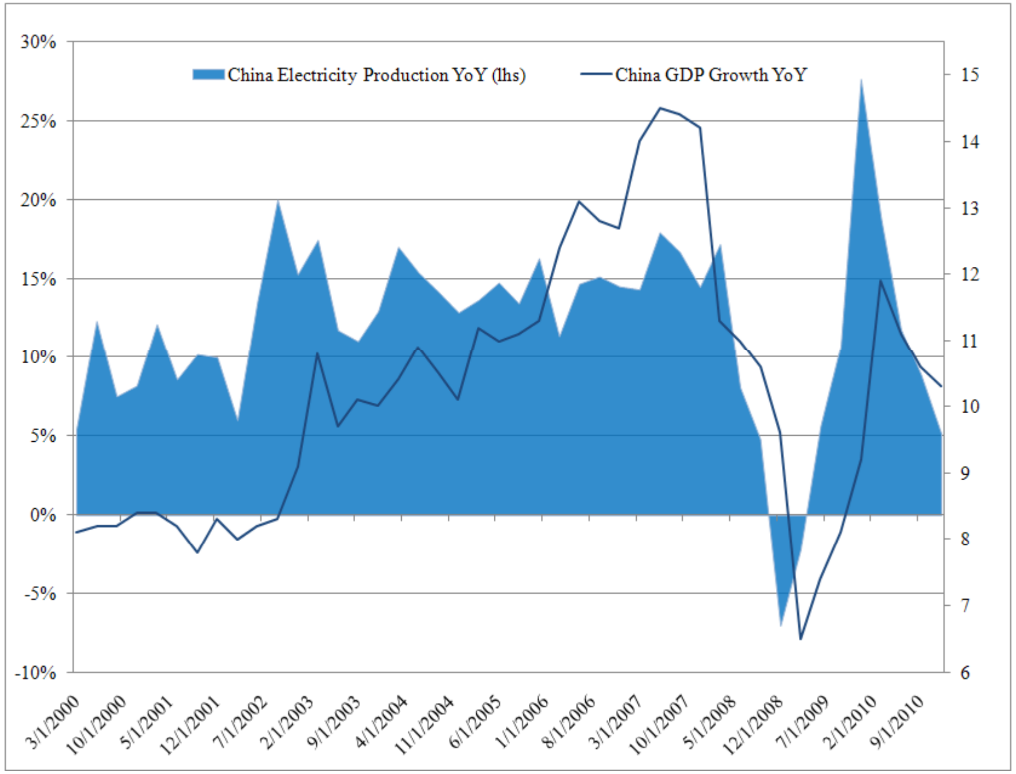
A fall below 50 on the Chinese PMI could set in motion a cyclical decline in many commodities and crude oil and copper in particular (Chart 47). The recent deceleration in M1 growth has furthermore usually been associated with sharp slowdown in industrial production.

Chart 48 China GDP and Leading Indicator



Source: Bloomberg, Clue6

Chart 49 China GDP and Electricity Production

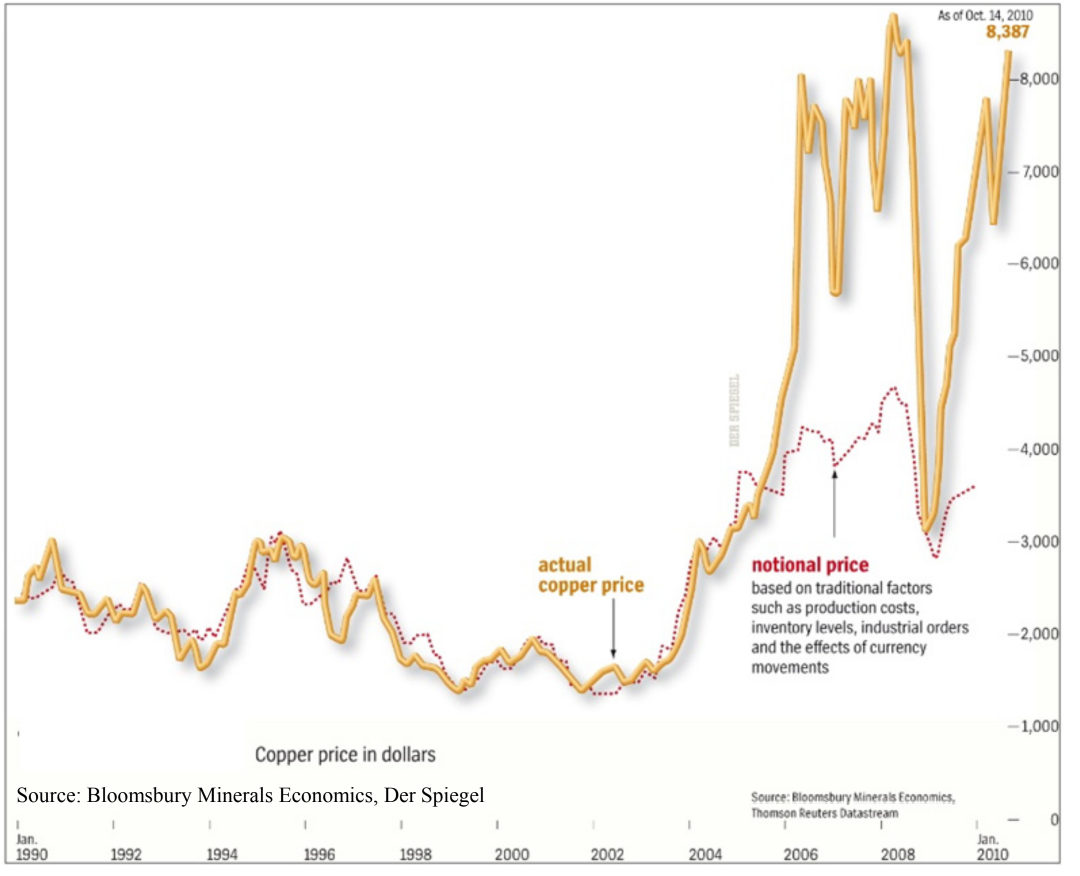


Source: Bloomberg, Clue6

Late last year, we insisted on our belief that emerging markets and the B~~R~~ICs in particular would slow down more than what was discounted in 2011-2012. While tightening does not seem to work at first, it ultimately will… with a vengeance.

China leading indicator (Chart 48) and electricity production (Chart 49) are pointing in the same direction.

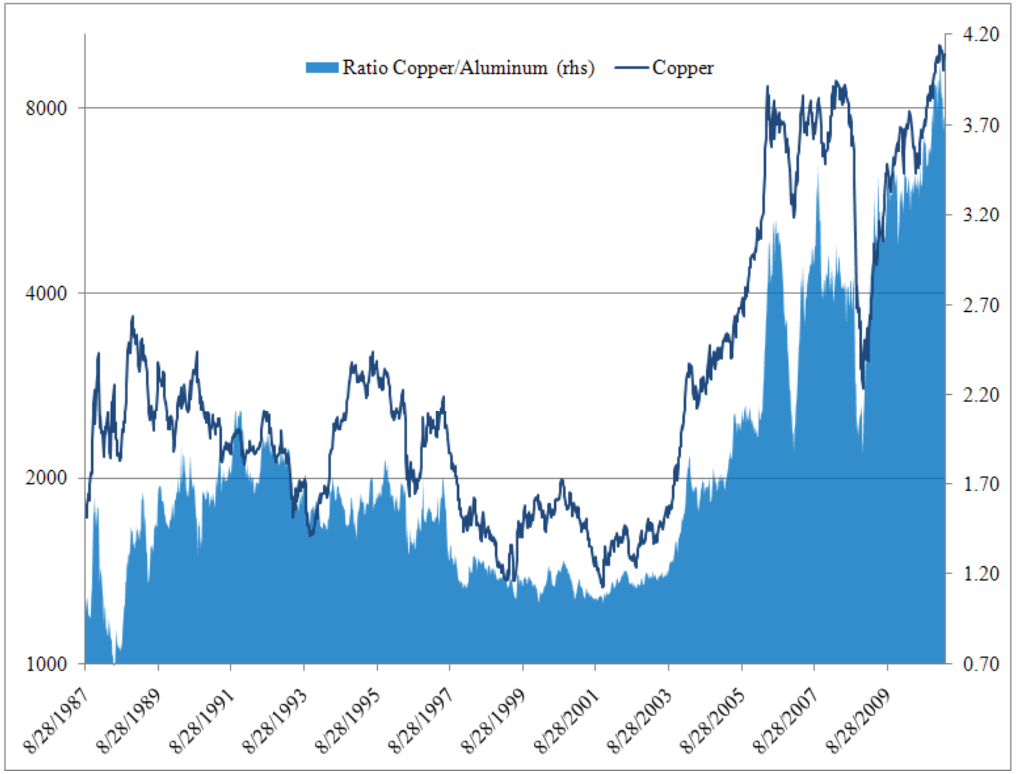
This won’t be commodity friendly.



The notional price is calculated using production costs, inventory levels, industrial demand and currency movements.

The big discrepancies can be partly explained by an increased awareness of the potential future supply shortfalls (for which, we repeat, there are not much things to in the short to medium term but will be sorted out longer term) . Another factor is the increase in investment demand.

The current launch of the JP Morgan physically- backed copper ETFs has been a good example. JP Morgan buying more than half of the copper at the London Metal Exchange late last year. If those ETFs become popular, they could push price further away from fair value, believe it or not.



Source: LME, Clue6

High prices has a main structural consequence: incentive for technological innovation.

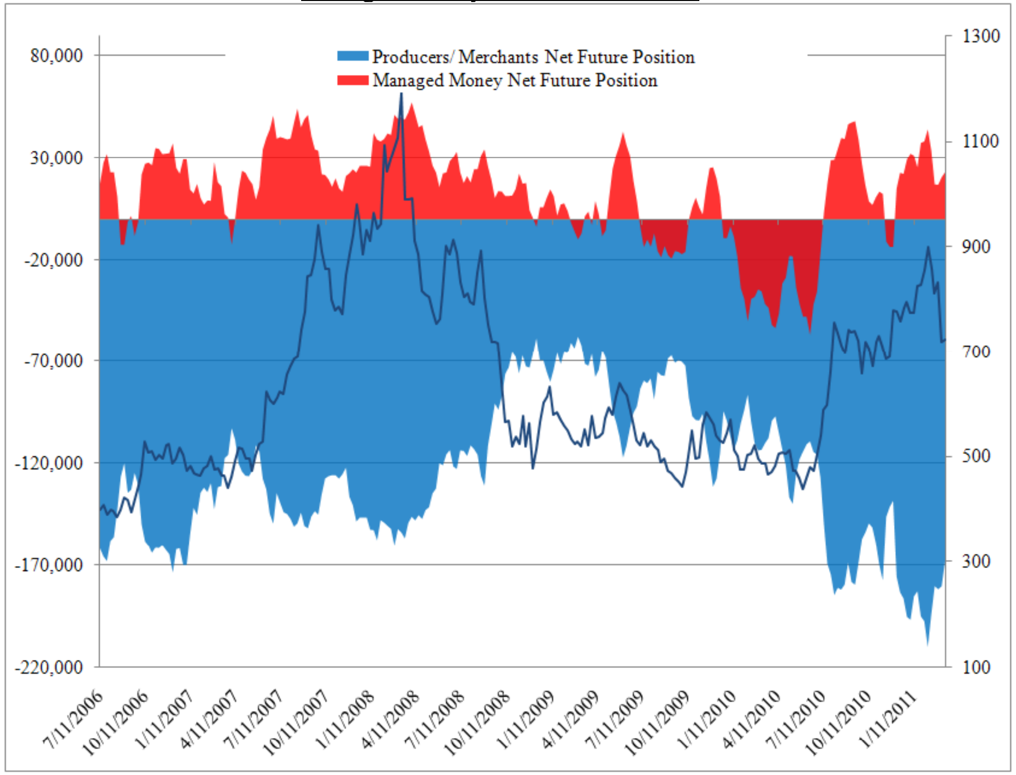
The commodities whose price remains elevated for a long time leads to increased resources dedicated to find ways to use them more effectively or substitute them with a cheaper one. One can be bullish on a multi-years basis as we were from 2001 to 2007 (became negative too quickly) or tactically as we were at the end of 2008. While the tactical argument might still have some merits (but unfortunately only based on the hope of a continuation of the current speculative wave) the structural one has not , at least with regard to crude oil and industrial metals. Being structurally bullish now it to bet against human ingenuity, a bet we are not ready to make.

At current prices, the capital devoted to finding new alternative energy sources is paving the way for “fossilless” energy dependence quicker than one would believe (even if did you know that there are less money spend on researching fusion than mobile phone ringtones globally….) For copper, cables are increasingly been made with aluminum and fiber optics and manufacturers are developing new techniques to use less of it (much less of it). At current prices there is a strong incentive to move from copper to plastic tubing.

High prices have a purpose, as do crisis, it is the only way for human to do what need to be changed (because they realize it much earlier but are not ready to bear the costs).

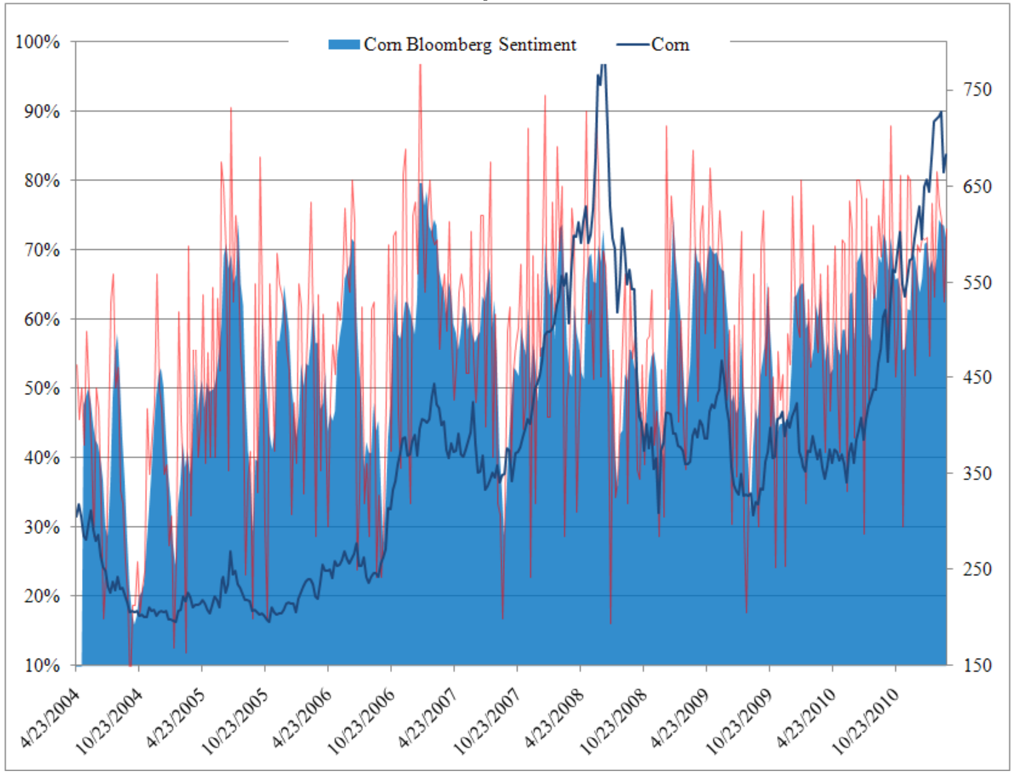
Commodities: Sentiment – Grains

Chart 50 Wheat and Producers/Merchants vs. Managed Money Net Future Position



Source: Bloomberg, Clue6

Chart 51 Corn and Bloomberg Sentiment Survey Bull Ratio

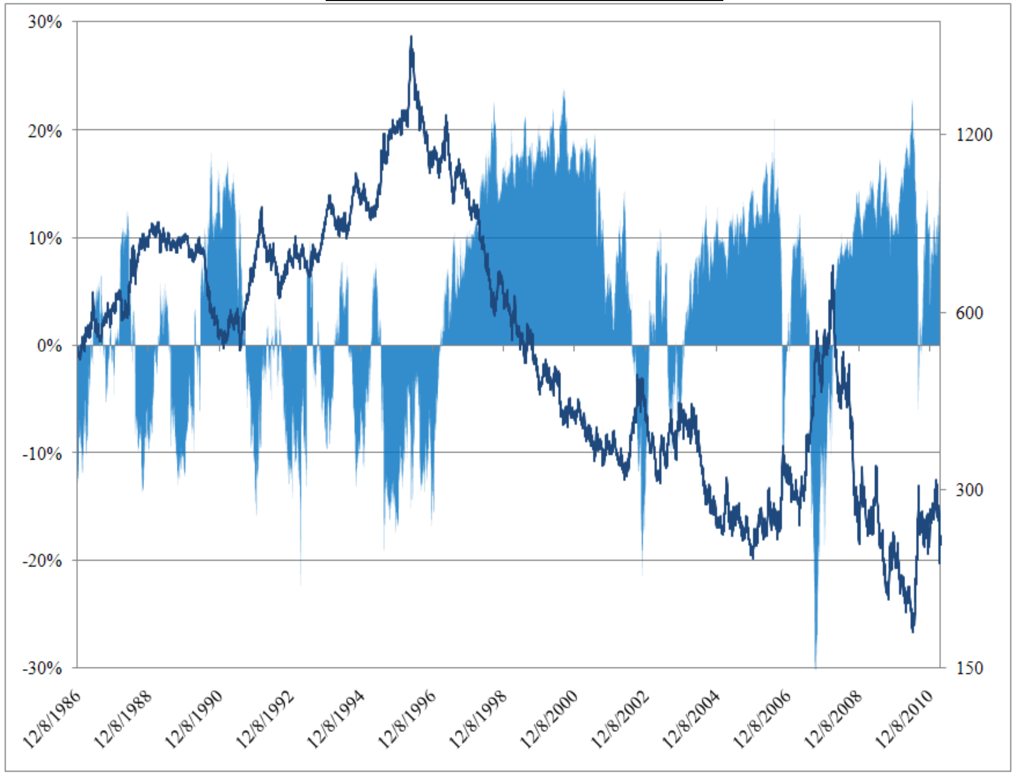


Source: Bloomberg, Clue6

Managed money is net long (Chart 50). Producers and merchants have covered some of their huge net short position. Swap dealers continue to have an important net long position.

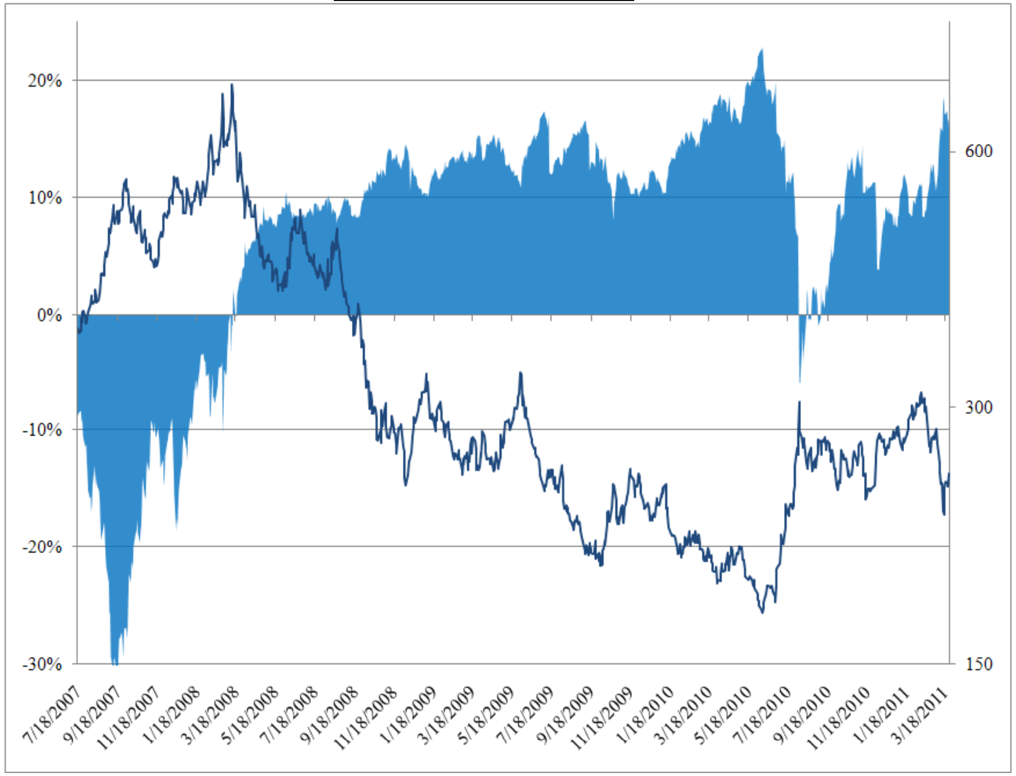
The Bloomberg survey bullish corn sentiment is very high (Chart 51). Any further losses of momentum will be met with heavy speculators selling.

Chart 52 Wheat Total Return and 12 Months Forward Contract Premium/Discount



Source: Bloomberg, Clue6

Chart 53 Wheat Total Return and 12 Months Forward Contract Premium/Discount

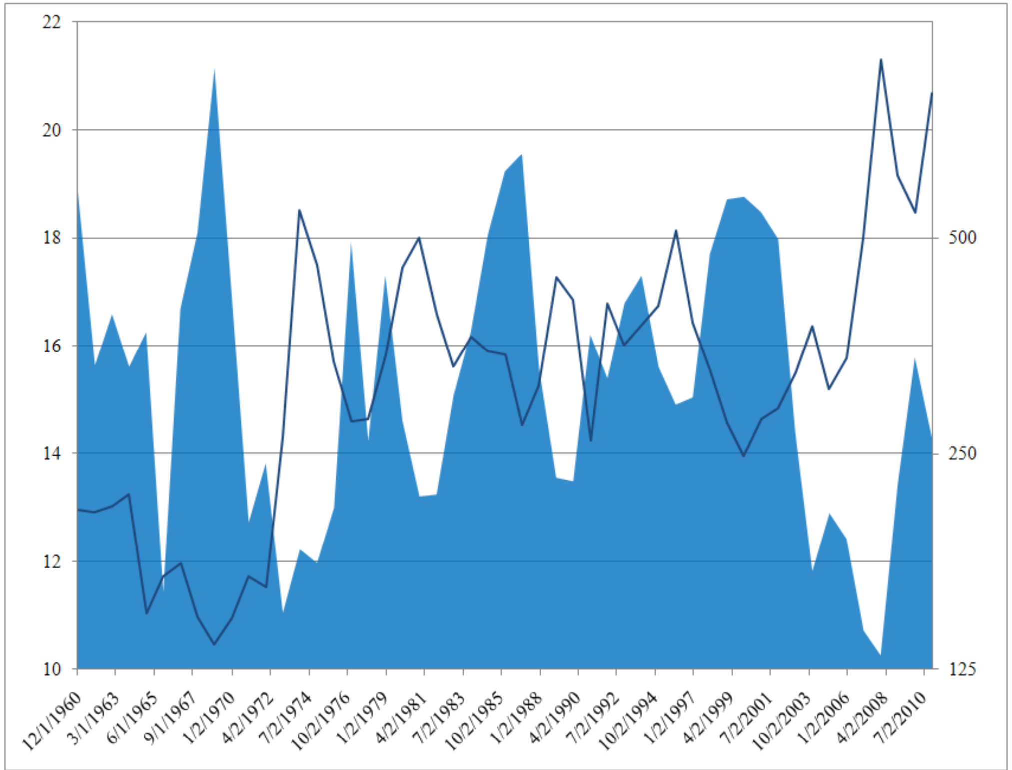


Source: Bloomberg, Clue6

The contango has risen to more than 15%(Chart 52-53). Here again, a move into backwardation usually create a lots of new buying as investors who were not invested because of the negative roll, start to buy. Once this happen, everyone should become a very, very disciplined trader and exit either on a move back to contango or on a technical failure.

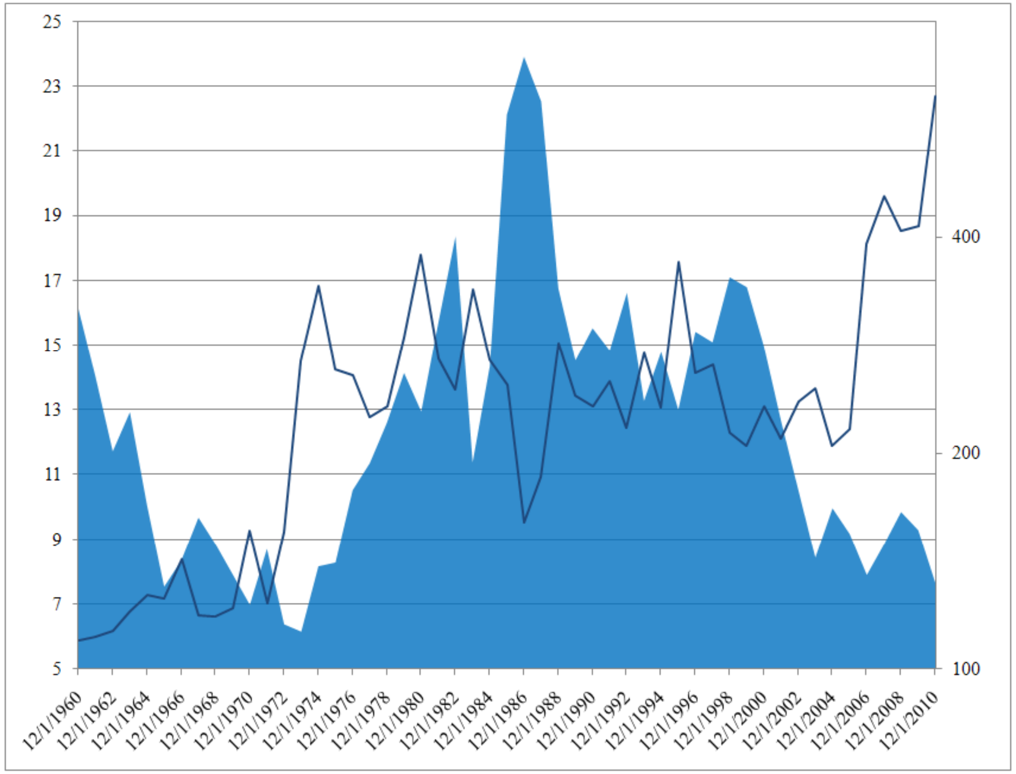
The contango make buy and hold a losing proposition but note that when we see a spike (5-6% contango widening) while the contango is already elevated, wheat tends to put a short-term bottom. Here again you have to be very disciplined if you want to play the long side in this configuration.

Chart 54 Wheat World Stock to Use Ratio (Weeks)



Source: Bloomberg, Clue6

Chart 55 Corn World Stock to Use Ratio (Weeks)



Source: WASDE, Clue6

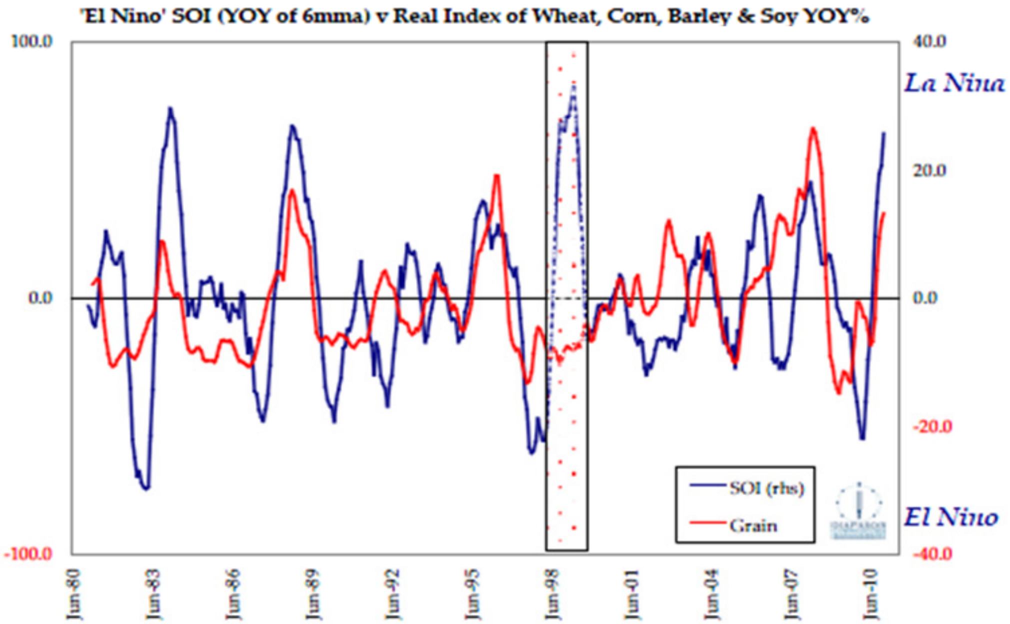
Wheat stock to use ratio has decreased last year (chart 53) but is still higher than the levels which have led to big up moves in the past.

Corn stock to use ratio (Chart 55) is very low.

The structural case for grains, laid out from 2004 remains…

Chart 56

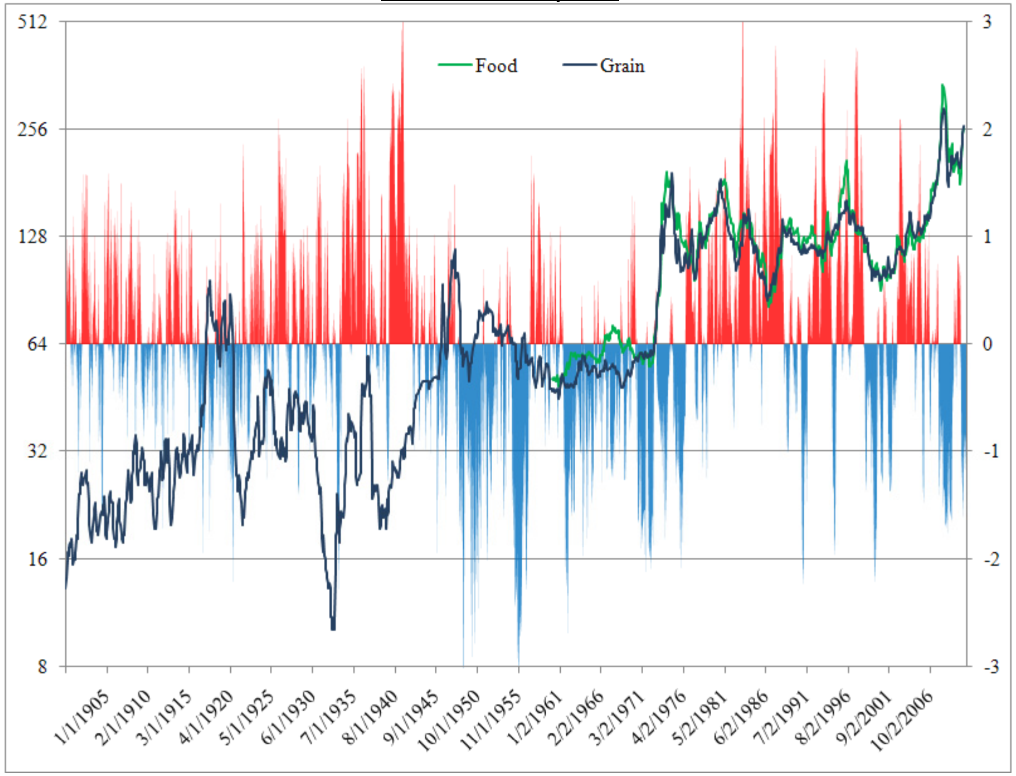
Southern Oscillation Index and Grain Price



Source: Sean Corrigan (Diapason)

Chart 57

Pacific Decadal Oscillator, Food and Grain prices

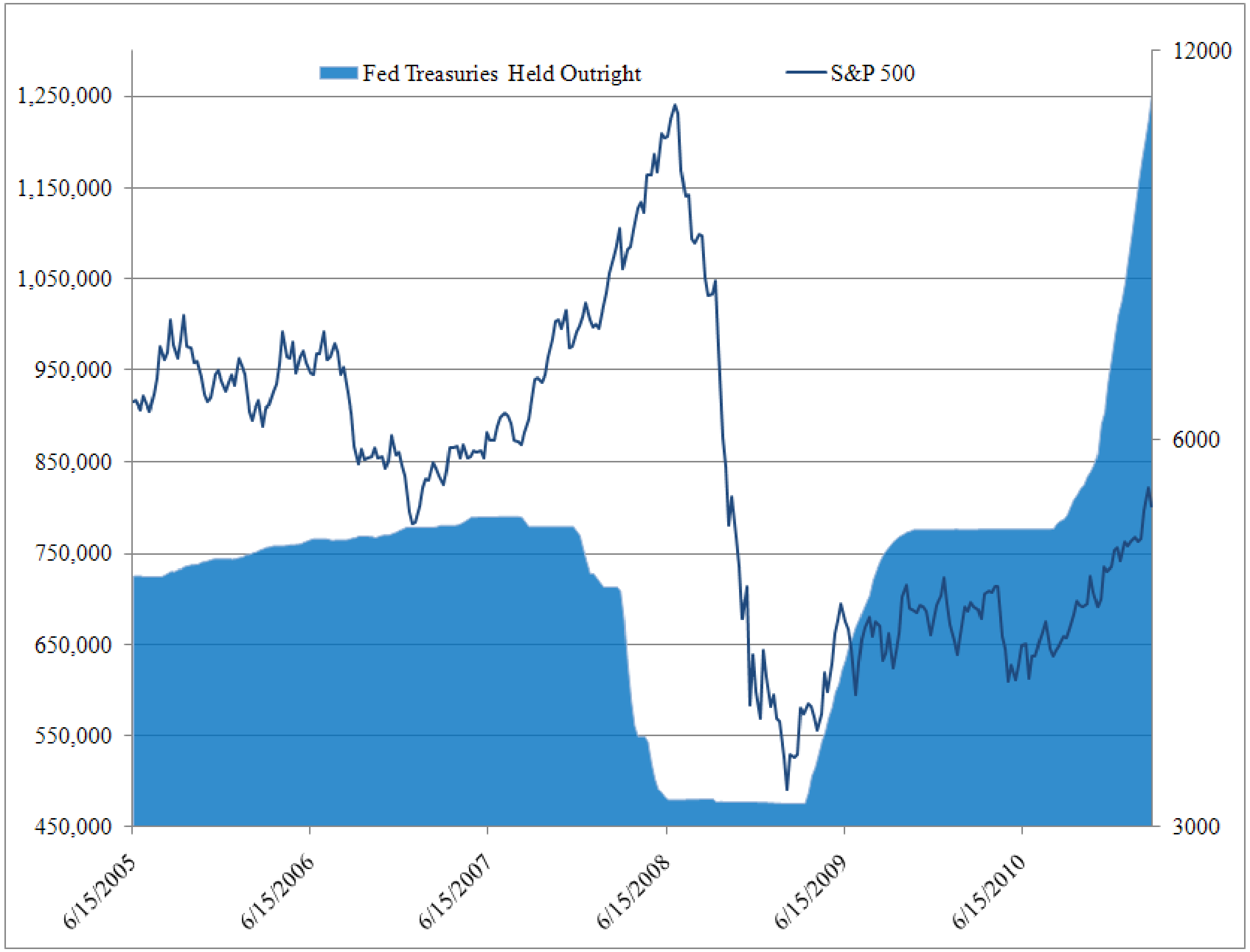


Source: World Bank, N. Mantua, Clue6

La Niña usually affect South American crops hardest. Argentina and Brazil account for 45% of soybeans and 25% of corn global exports. If la Niña was to continue into the summer (which is possible buy not expected my the major weather agencies), this would result in a drought in the US.

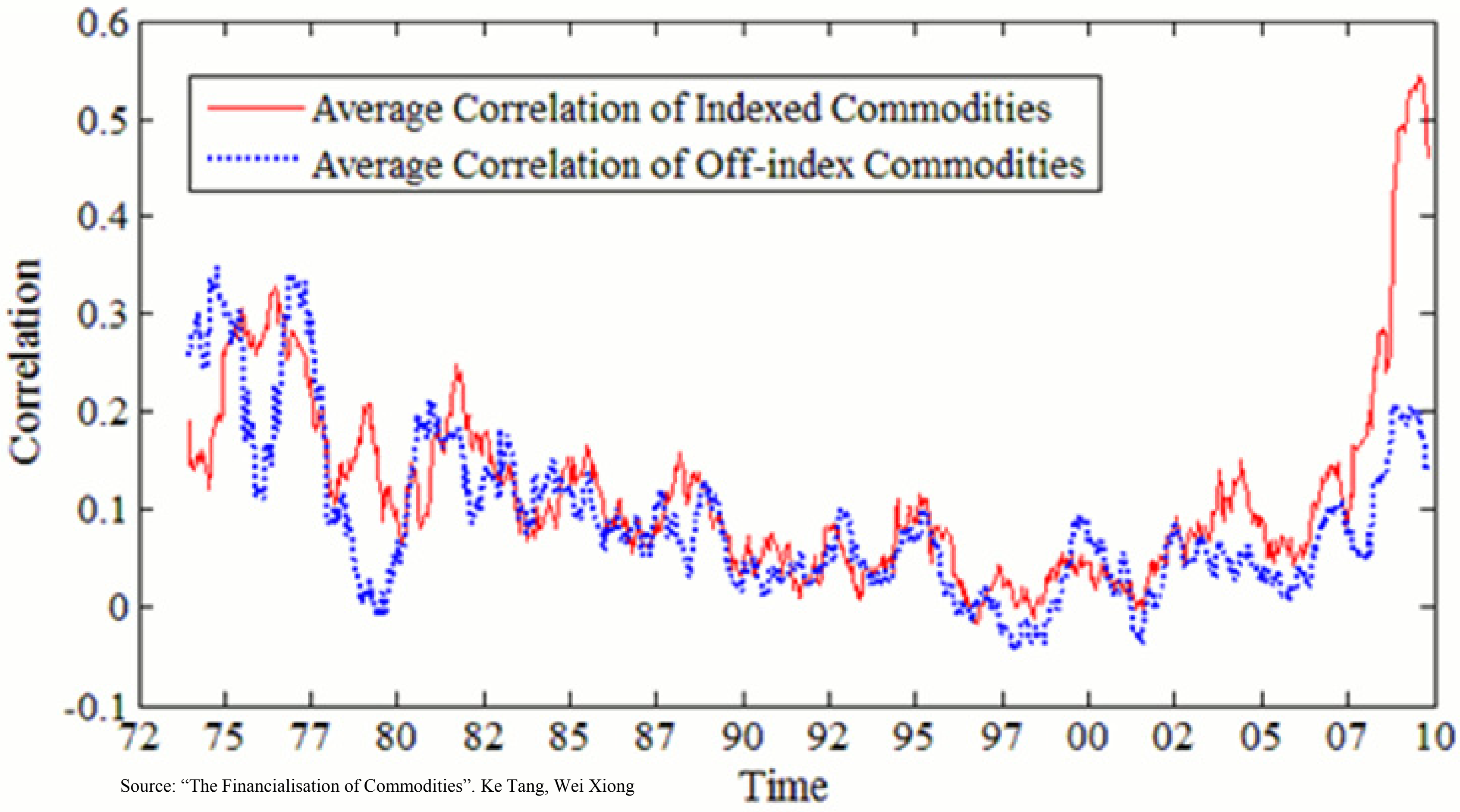
According to the UN Intergovernmental Climate Change Committee, the PDO could remain below 0 until 2016. The likelihood of La Niña to occur is thus four times higher than normal. We already had 2 La Niña in the past 4 years leaving food and grain inventories low.

Another La Niña would have the potential to push food prices much higher.



QE2 mon amour…

Commodities: Intermarkets

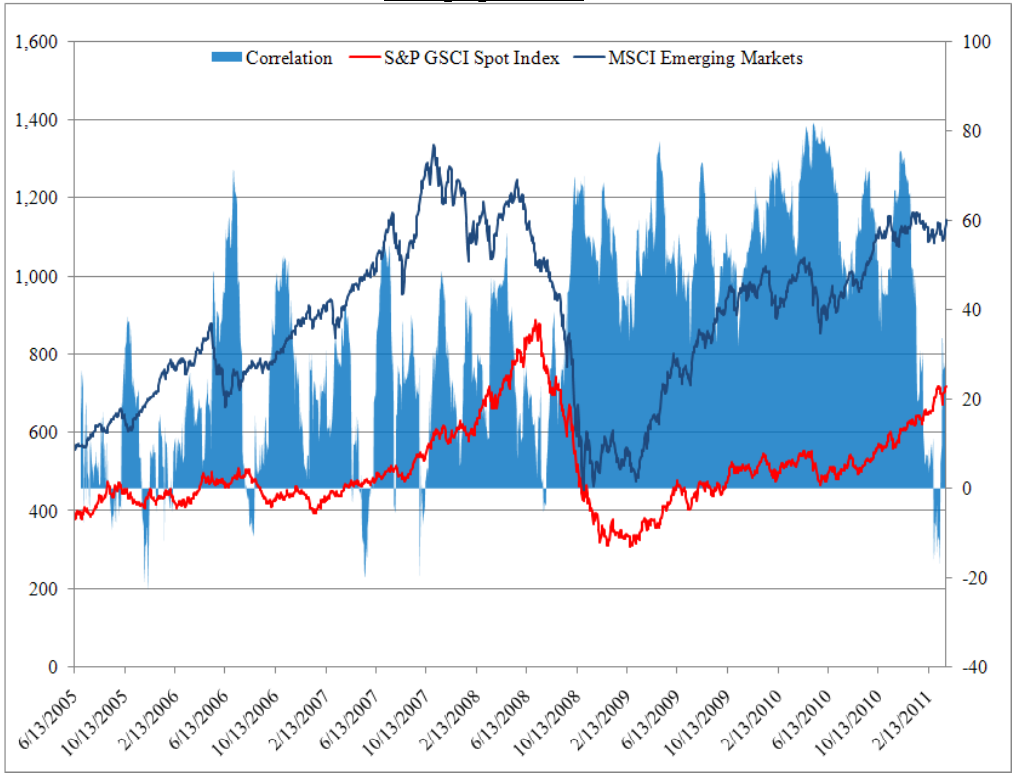


Source: "The Financialisation of Commodities". Ke Tang, Wei Xiong

We have been puzzled by the recent rise in popularity of commodities in the institutional world. Clearly commodities were an excellent d"iversificator" in the past but they will not in the next down cycle.

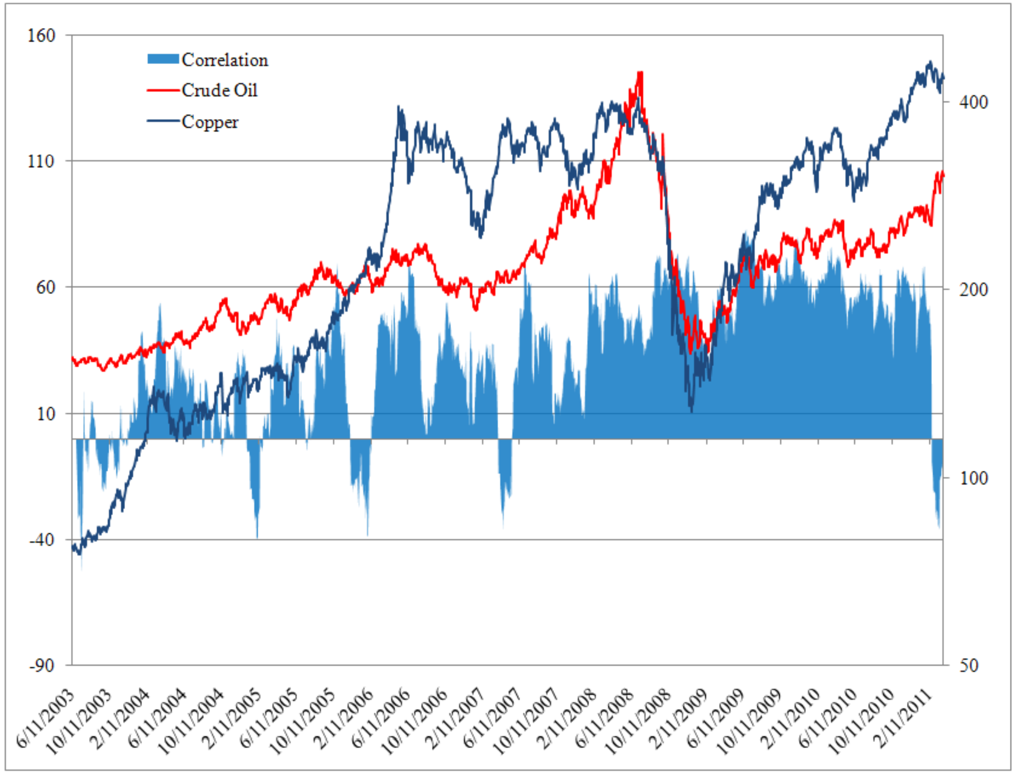
They are too correlated with other risky assets, they are too correlated among them (Chart above) and they are not offering their usual positive roll. If you add their level of overvaluation (relative to marginal cost of "production") and you have a recipe to catastrophe when the macro cycle turns down.

Chart 58 **S&P GSCI Spot Index and MSCI Emerging Markets**



Source: DJ Credit Suisse, Clue6

Chart 59 **Copper and Crude Oil**



Source: DJ Credit Suisse, Clue6

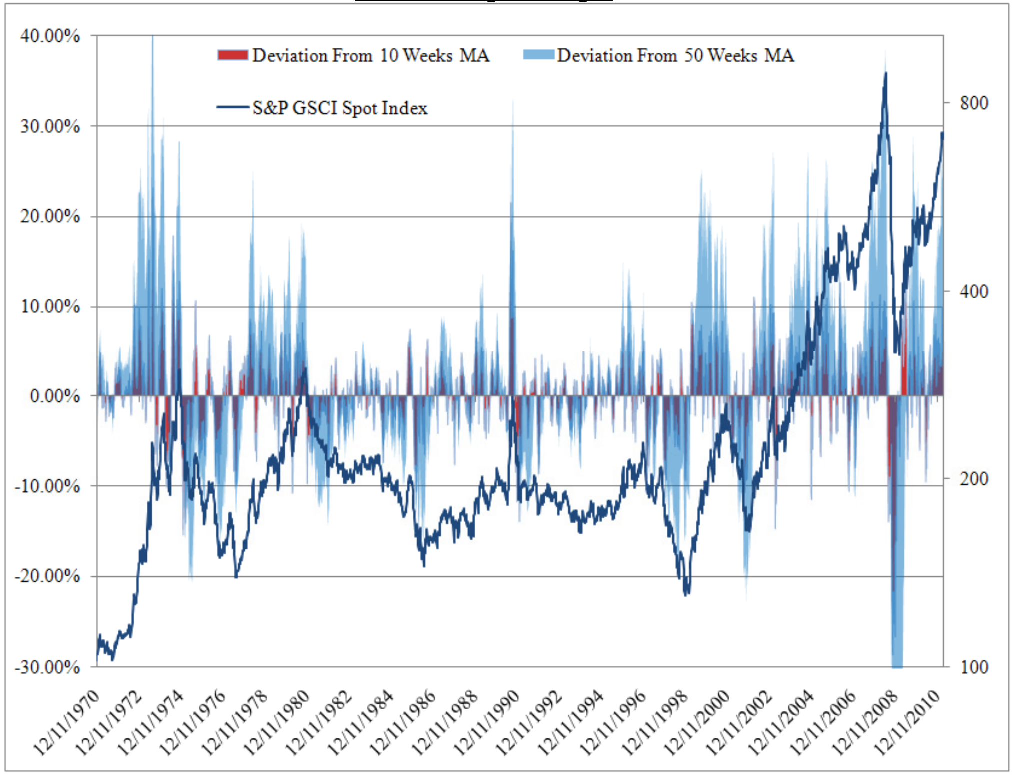
Commodities and emerging markets equities are diverging (Chart 58). When the former continues to rise despite declining emerging market stocks, the odds are high that it will soon follow suit.

Crude oil and copper are also displayed diverging behavior (Chart 59). It indicates that crude oil prices are reaching levels which will impact global GDP growth.

Commodities: Pattern

Chart 60

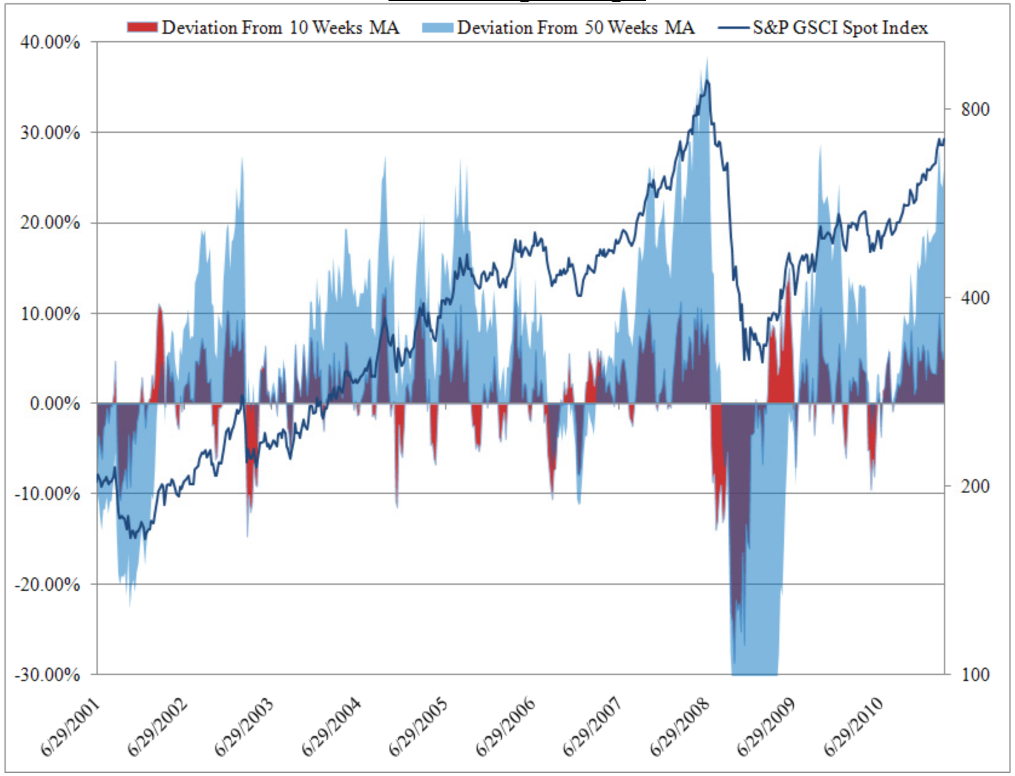
S&P GSCI Spot Index and Deviation from Moving Averages



Source: Bloomberg, Clue6

Chart 61

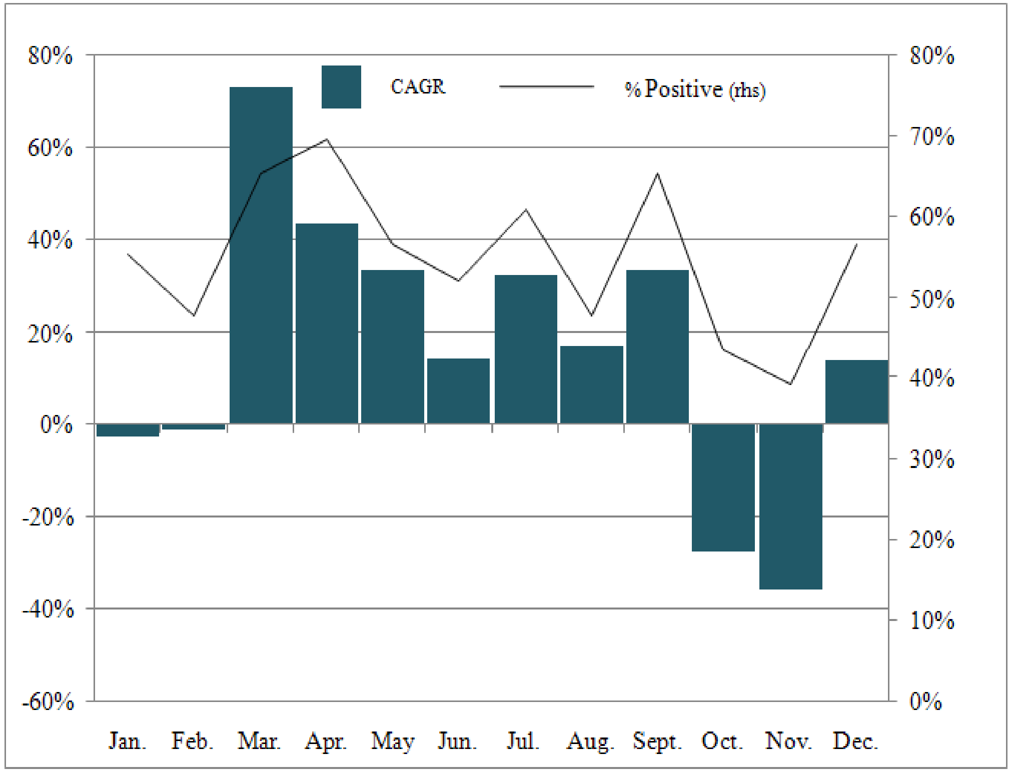
S&P GSCI Spot Index and Deviation from Moving Averages



Source: Bloomberg, Clue6

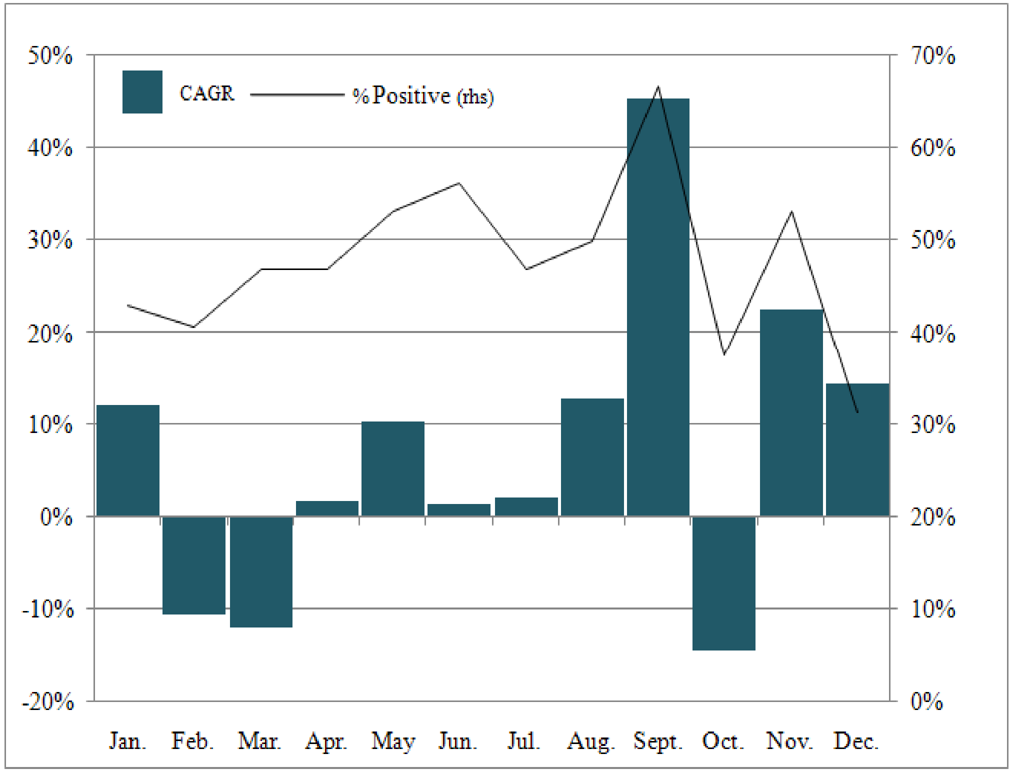
Commodities are very extended and when this happen so late during a cycle, the mean-reversion can be painful for longs…

Chart 62 Crude Oil TR Seasonality (since 1987)



Source: Bloomberg, Clue6

Chart 63 Gold TR Seasonality (since 1977)



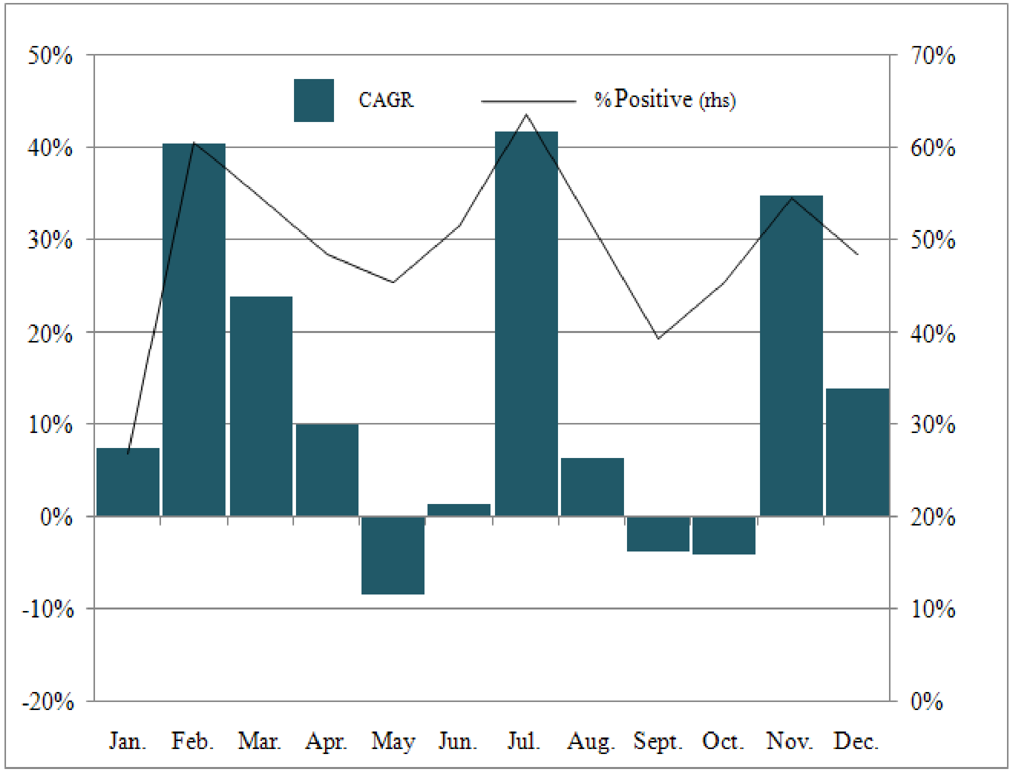
Source: Bloomberg, Clue6

Crude oil seasonality is supportive until the middle of September (Chart 62).

Gold seasonality is not very informative until the beginning of August (Chart 63).

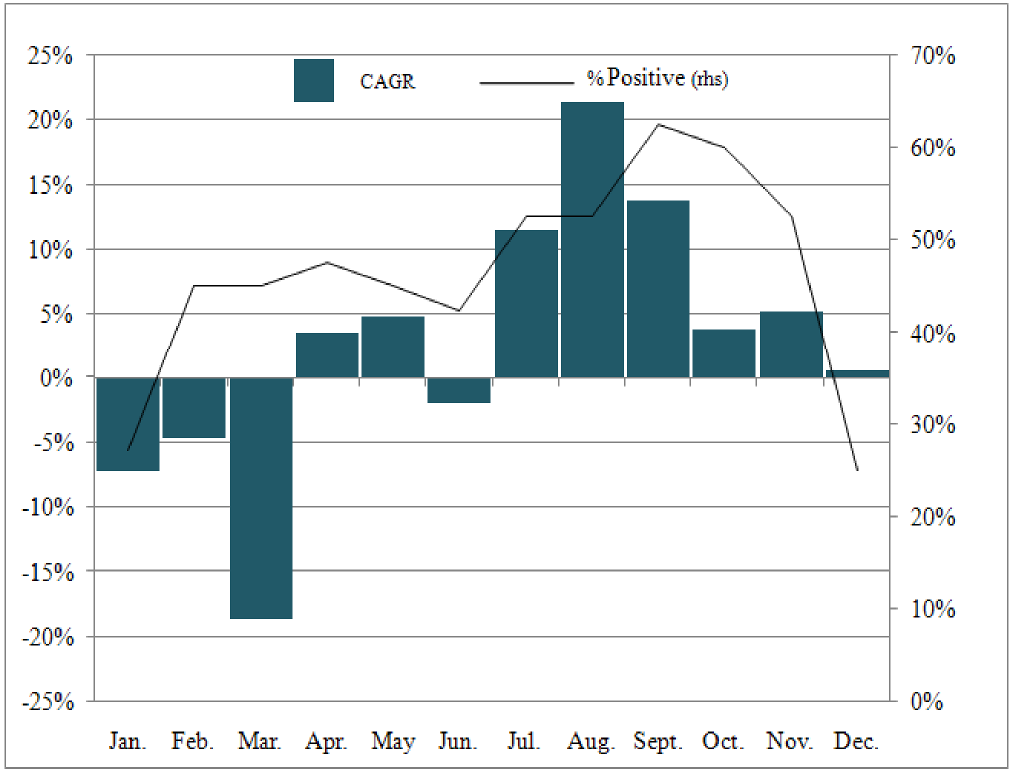
Remember that you should always wait for a chart confirmation before acting on seasonals.

Chart 64 Copper TR Seasonality (since 1977)



Source: Bloomberg, Clue6

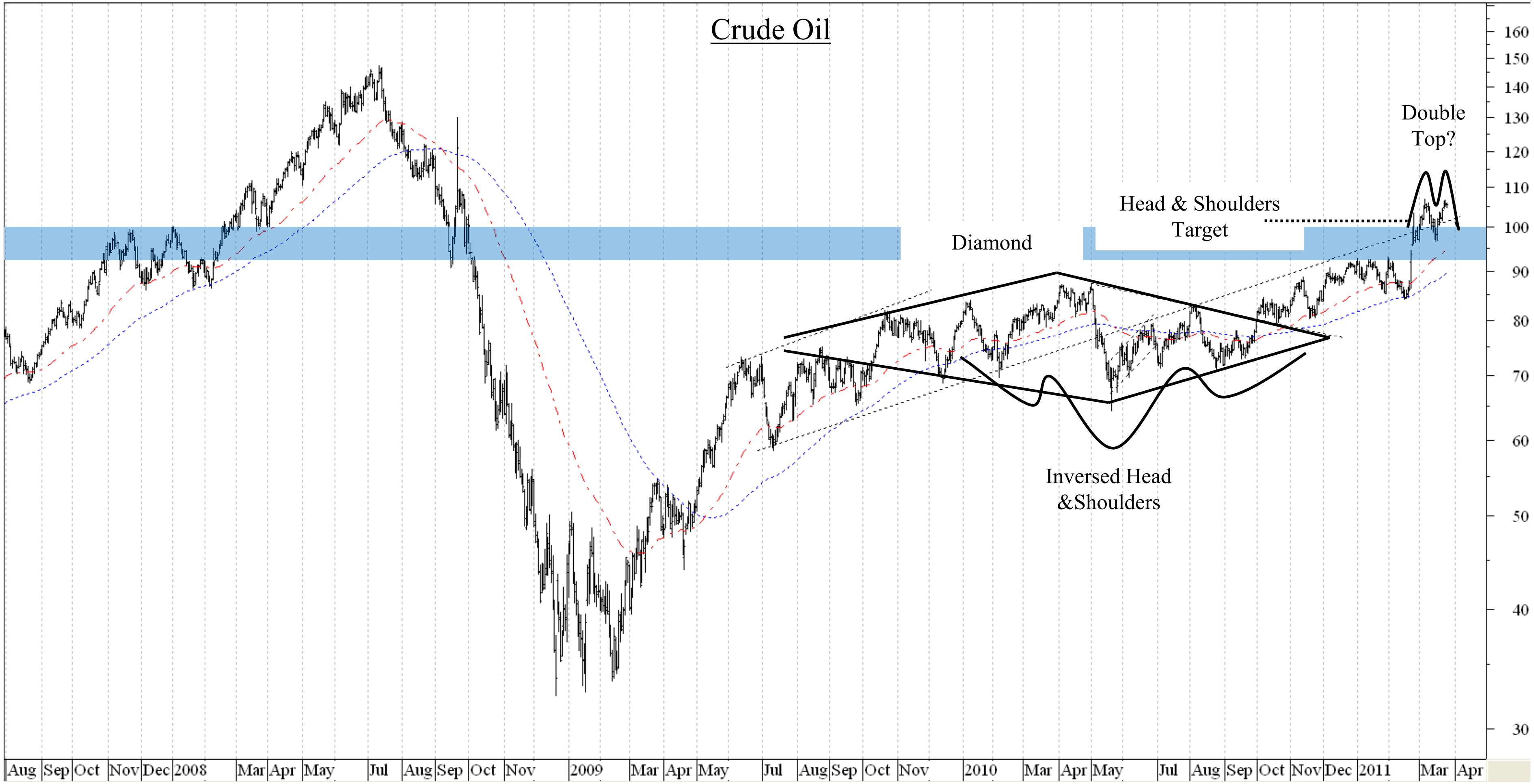
Chart 65 Wheat TR Seasonality (since 1969)



Source: Bloomberg, Clue6

Copper next strong month is July (Chart 64).

Wheat and agriculture in general tends to perform best when the uncertainties with regard to the harvest are the highest (when the harvest size forecast can change the most I.e. during growth season). Interpret this as a risk premium. Upside surprises tend to occur in the July-September period (Chart 65). Last year was a good example… Watch out for the weather, grains could be hit very hard on any evidence of a weakening La Niña.

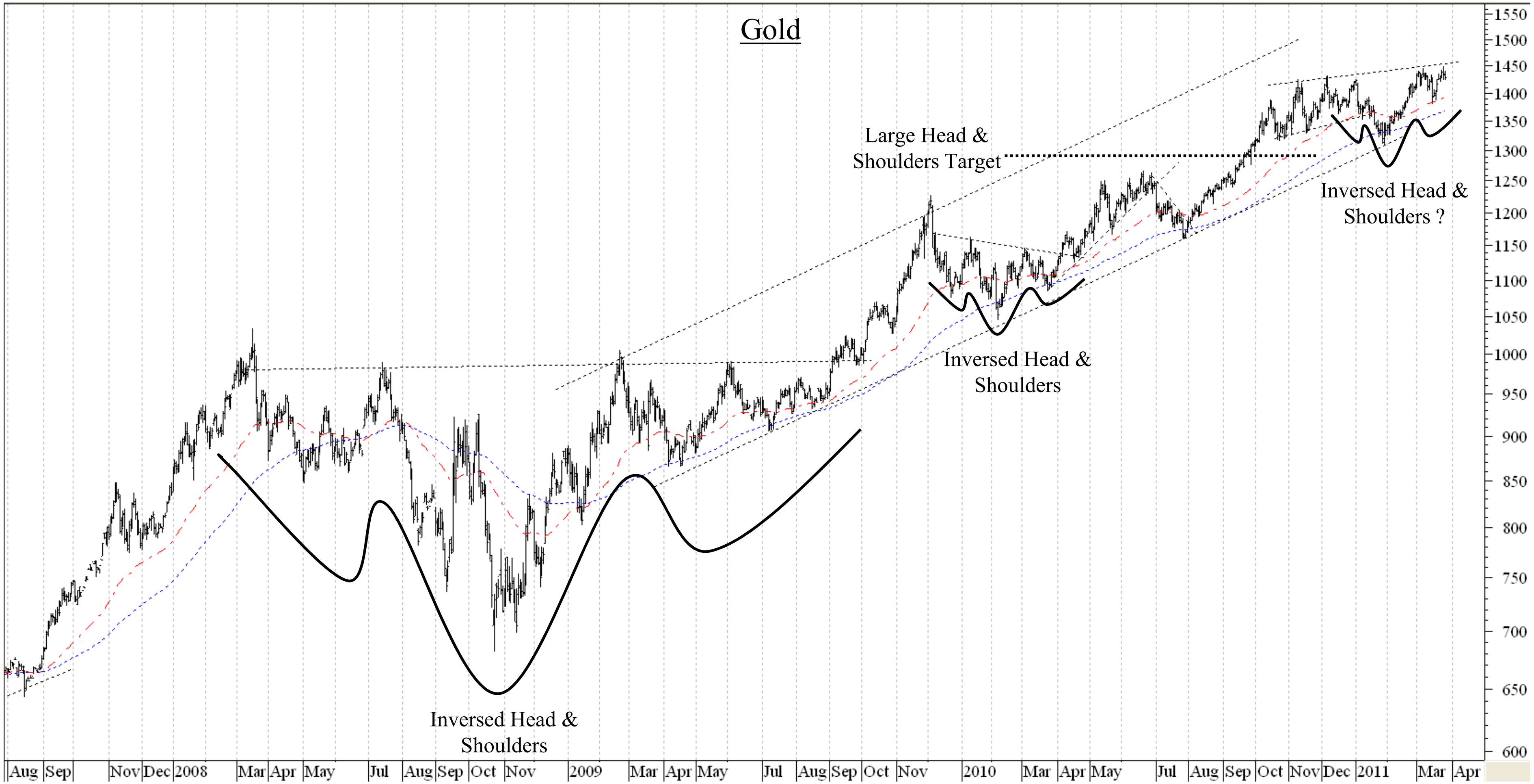


Crude oil recent behavior was the result of random events which are nearly impossible to predict. If escalation continues and, for example, civil unrest increase in Saudi Arabia and/or Kuwait, crude oil could easily break the 2008 highs in a matter of hours/days.

It is tempting to buy deep out of the money calls to play this but they are expensive so if you want to play this “black swan” we would rather buy puts on the Kospi (cheap implied volatility) or other equity indices as a move to such highs would push equity markets sharply lower.

Oil is making a potential double top (which will be a fact if it moves below 96 before moving above 106) but the trend is still up so we would not bet on this. The best think to do here is not to do anything.

On a cyclical basis, we think that the 35-40 levels will be revisited during the next pronounced global slowdown but more on this in due times.

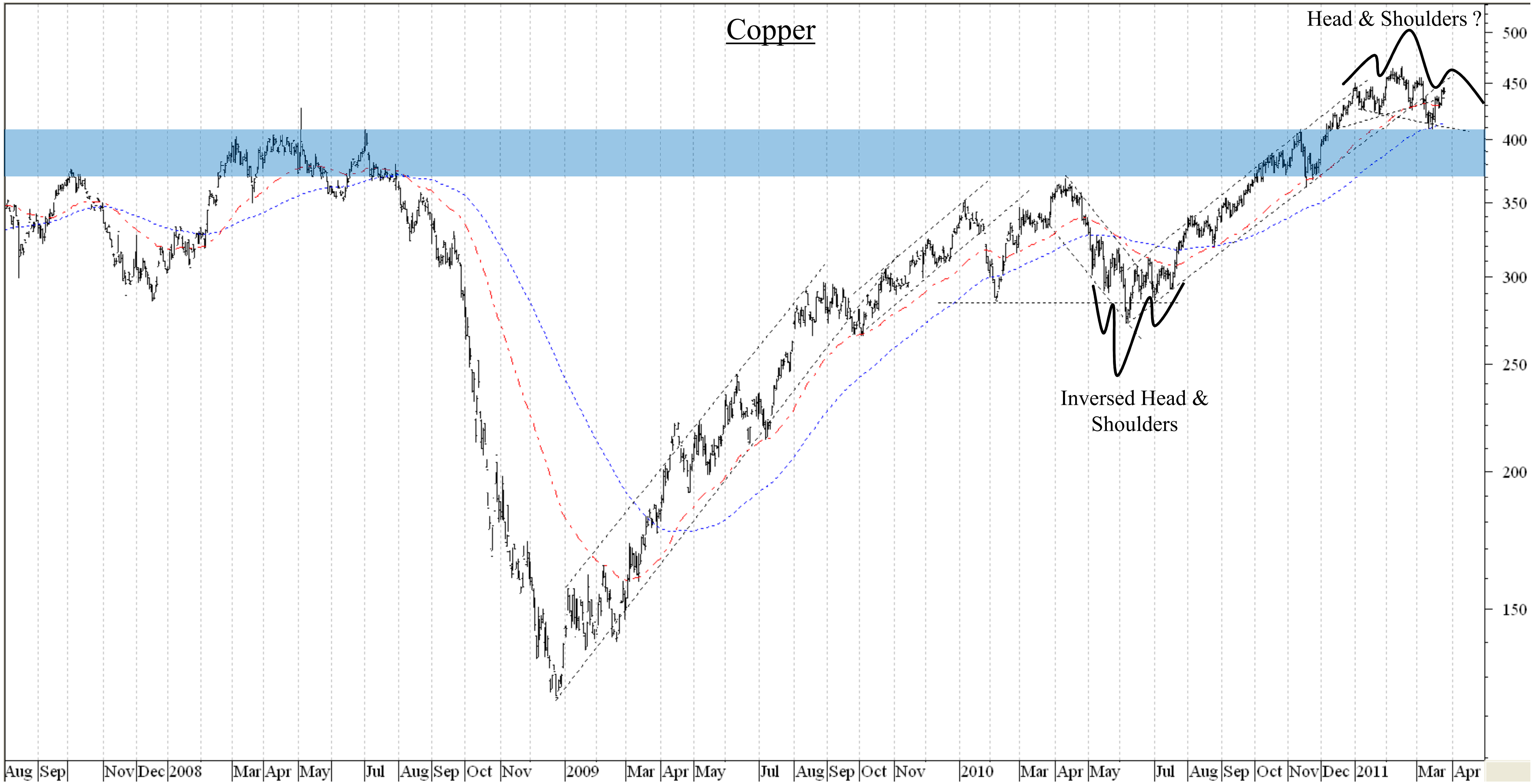


Gold might be in the process of forming another inversed head & shoulders with a 1550-70 target on a move above 1455. The current move continue to look distributive. We would need a move below 1320 to get worried about the cyclical up trend.

We would profit from the current option skew to hedge some of the structural long position. One can finance the buying of 6-9% puts (2-3 months to expiry) below current prices with the selling of 8-10% OTM calls. We would also buy some implied volatility.

We keep our strategic long position the strategic USD 3000/ounce target we fixed on gold in 2002 remains our minimum target…

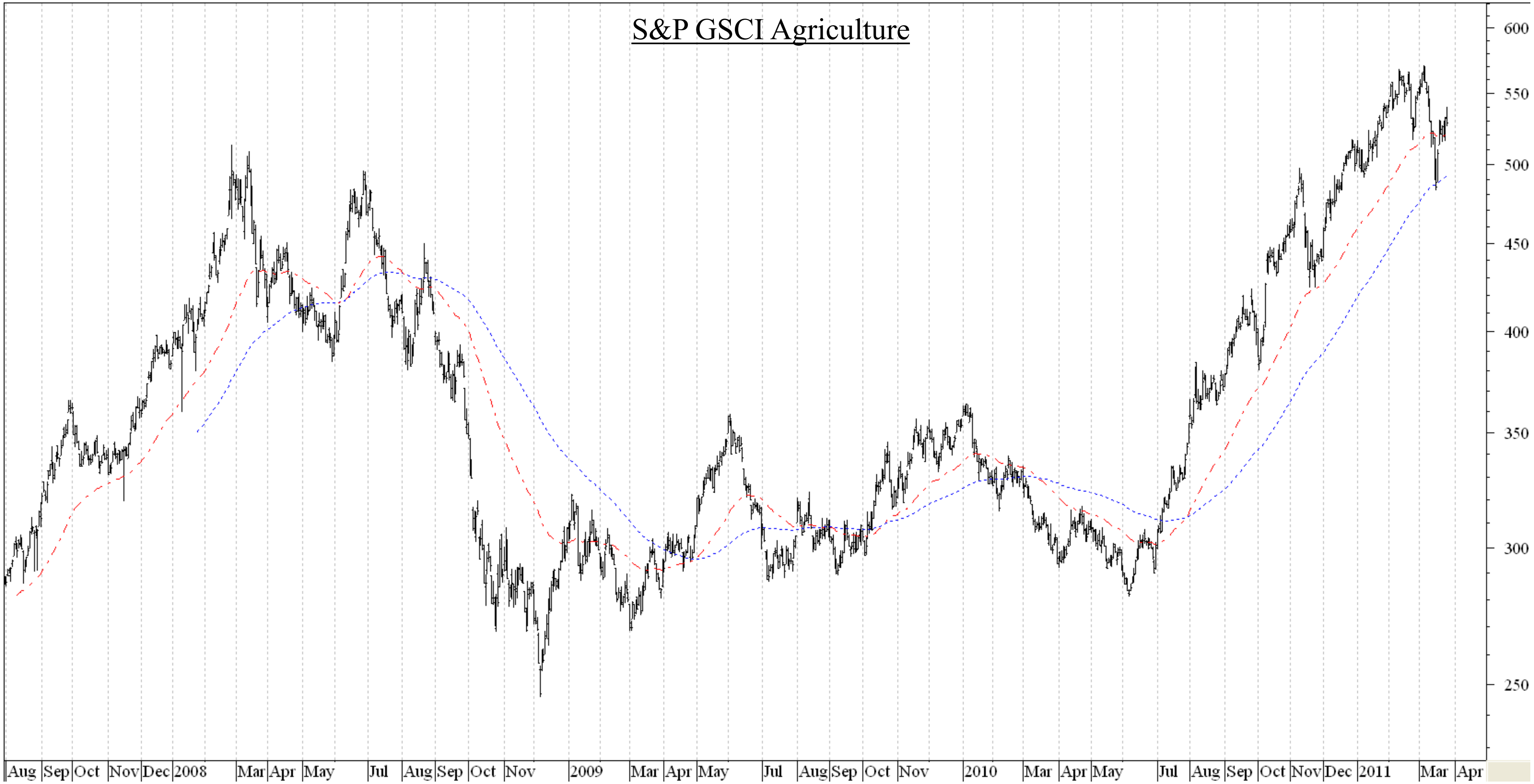
Commodities: Graph – Copper



Copper has moved down out of the up channel it had formed since May last year. It is now retesting it from below while potentially tracing a head & shoulders top with an initial target of 370 on a break below 410. The recent lows where at the bottom of the channel formed since the 2009 lows.

At the current level we are seller of upside price volatility (1-3% OTM calls) and we would use ¾ to all of the proceeds to buy some deep OTM puts (>15%)N. Taleb would love such trade. We are also taking outright structural short positions which will be exited probably below 150.

We are expecting the next cyclical lows to be made below 150.



We prefer not to participate at this juncture as too much depend on a variable which no one can predict with accuracy, the continuation or not of La Nina. We even find the odds slightly favoring the downside but we do not want to be caught on the wrong side in this kind of markets.

There are many better odds trade to do elsewhere…

We would recommend those holding a structural long position as recommended here in 2005 sell some of it and sell some upside volatility (sell calls) on a regular basis as long as the complex rises as we did in early January 2008 (a few weeks but many percent too early…)

Most commodities remain deeply overvalued. As with other assets it does not really matter in the short-term (as long as the trend is positive) but it is paramount for longer-term projections. We have **little doubts that commodity long-only who buy to hold are going to experience a >50% drawdown** (from current levels) **on their industrial metals, crude oil and agricultural positions sometimes in the next 24 months.**

Demand has been artificially boosted by China strategic reserve building, infrastructure intensive fiscal stimulus, booming demand from the rest of emerging economies and, as the trend persisted, by trend followers and money managers new attraction to the sector (you know it is not correlated so you should buy them to diversify your portfolio... **sorry it WAS not correlated...). The introduction of physically-based ETFs is not helping in this matter as it represents a big short-term increase in marginal demand especially when the Fed is still busy implementing QE2.**

This increased elasticity of demand will work both way... and the higher the marginal effect of investment demand, the higher this elasticity. The engine behind the traditional commodity demand might be in the process of slowing as emerging economies authorities are tightening, sometimes aggressively as inflation, credit, the equity and housing markets are rising too quickly for their comfort. Through the inflation channel and the impact on margin, the exponential rise in commodity price is also directly responsible for lower global growth, certeris paribus. We can only repeat that the we would have had a mild recession in 2008-2009 even without financial crisis as a consequence of high commodity prices. Don't underestimate it now.

Do not forget the demand destruction (substitution and "effectivisation") caused by high prices and the potential decrease in subsidies in emerging markets (but now that inflation seems to be the number one issue in subsidizing countries and that they have no problem to finance them, this is not likely to happen in the short-term).

Supply has been hit hard in 2009 by both prices fall and the credit crunch but this is for the history books. Lots of projects which were put on hold have restarted while closed mines/wells have reopened. Capex and its "exploration“components are making new highs. This increase supply could hit the market in full just when demand momentum will turn down... Longer-term, not enough investments have been planned for toward commodity (especially energy) in the various stimuli package around the world… This could come back to haunt us during the next up cycle…After that, human ingenuity will prevail (and this will be sooner that what is currently discounted by the markets).

Speculators/investors have their highest commodity net long position even if they say in surveys that they believe they are overvalued. This might be understandable if they could earn a fat positive roll but the roll is negative. Investors irrationality and herd behavior in all its splendor. **Macro hedge funds have started to cut their net long exposure** significantly in the past few weeks after having been extremely long since the B. Bernanke QE Jackson Hole speech. **Glencore is planning an IPO to raise up to usd 16 bio**. Glencore is runed by very smart people who have seen a lot of cycles. Feels like Blackstone IPO which marked the top of the last private equity boom during the summer of 2007 (hey and Apollo is coming to the market this week...).

The managed money has a huge net long crude oil position. The Bloomberg surveys is indicating too much short-term optimism. The market is still in contango but it has been decreasing in the past few weeks after a strong rebound earlier this year. A move in backwardation would push price higher in the short-term.

The recent price increase is starting to put its toll on the global economy and if crude oil move to 120-125 and above, the risk of a recession-like slowdown would increase materially especially given the concomitant rise in food price.

Crude oil recent behavior was the result of random events which are nearly impossible to predict. If escalation continues and, for example, civil unrest increase in Saudi Arabia and/or Kuwait, crude oil could easily break the 2008 highs in a matter of hours/days. It is tempting to buy deep out of the money calls to play this but they are expensive so if you want to play this “black swan” we would rather buy puts on the Kospi (cheap implied volatility) or other equity indices as a move to such highs would push equity markets sharply lower. Oil is making a potential double top (which will be a fact if it moves below 96 before moving above 106) but the trend is still up so we would not bet on this. The best think to do here is not to do anything. On a cyclical basis, we think that the 35-40 levels will be revisited during the next pronounced global slowdown but more on this in due times.

Gold investor optimism remains high with a large net long managed money position and too much optimism on the Bloomberg sentiment survey but we are seeing some negative divergences. While investments now represents 50% of the total gold demand, **inflows into physically-backed ETFs have ceased** since the start of the autumn. Central Banks in emerging countries are continuing to be net buyers...

We have **yet to see the spike in backwardation and the rise in implied volatility we usually see when gold is making a top**. Real rates remain supportive. Note though that we believe the USD could be in the pocess of making a bottom and rebound 12-15%.

Gold might be in the process of forming another inversed head & shoulders with a 1550-70 target on a move above 1455. The current move continue to look distributive. We would **need a move below 1320 to get worried about the cyclical up trend**. We would profit from the current option skew to hedge some of the structural long position. One can finance the buying of 6-9% puts (2-3 months to expiry) below current prices with the selling of 8-10% OTM calls. We would also buy some implied volatility. We keep our strategic long position the strategic USD 3000/ounce target we fixed on gold in 2002 remains our minimum target…

Copper has corrected after having reached the magical 10'000 level on the LME. A magnificent bubble on its own. Managed money net long position has decreased after it made a negative divergence with prices at the top while producers and merchants are still close to their biggest net short position. Physically-backed ETFs could channel investor money toward the ever rising red metal.

The copper curve moved back to contango (after weeks in backwardation) which has historically been seen at the onset of large corrections or cyclical tops .

Inventories are rising around the world but the most disturbing is the use of bonded warehouse in China to stock metals to use it as a collateral to get cheap loans which are then relent at a higher yield. Bonded warehouse could represent more than 700'000 kt (more than all the world exchanges inventories, 40% of China refined copper demand or more than the more pessimistic supply deficit forecast for 2011). This will have an huge impact... eventually. Copper price have the potential to spiral down soon so be prepared to take advantage and exit your long position PLEASE.

Copper is completely disconnected with the fundamentals which explained its price level in the past. Is this time different? No it isn't.

Copper has moved down out of the up channel it had formed since May last year. It is now retesting it from below while potentially tracing a head & shoulders top with an initial target of 370 on a break below 410. The recent lows where at the bottom of the channel formed since the 2009 lows. At the current level we are seller of upside price volatility (1-3% OTM calls) and we would use ¾ to all of the proceeds to buy some deep OTM puts (>15%)N. Taleb would love such trade. We are also taking outright structural short positions which will be exited probably below 150. We are expecting the next cyclical lows to be made below 150.

Grains structural appeal can not be contested but the recent parabolic rise is not sustainable if La Niña does not continue into the northern hemisphere summer. According to the UN Intergovernmental Climate Change Committee, the PDO could remain below 0 until 2016 (a stretch which was last seen in the 70's). A La Niña event is 4 times more likely when this is the case. We already had 2 La Niña in the past 4 years leaving food and grain inventories low so...

But we are **not seeing the big increase in backwardation (the market is still in contango with a big negative roll, so high that it is usually seen near short-term bottoms) we see when the near month spike up is only temporary**. This **is worrying with regard to food inflation in emerging markets particularly**. Money managers have a big net long position while producers and merchants have their biggest net short position in history.

Wheat and agriculture in general tends to perform best when the uncertainties with regard to the harvest are the highest (when the harvest size forecast can change the most I.e. during growth season). Interpret this as a risk premium. Upside surprises tend to occur in the July-September period.

We prefer not to participate at this juncture as too much depend on a variable which no one can predict with accuracy, the continuation or not of La Nina. We even find the odds slightly favoring the downside but we do not want to be caught on the wrong side in this kind of markets. There are many better odds trade to do elsewhere…We would recommend those holding a structural long position as recommended here in 2005 sell some of it and sell some upside volatility (sell calls) on a regular basis as long as the complex rises as we did in early January 2008 (a few weeks but many percent too early…).