

World Energy Outlook



KCTL's Energy Outlook, Q3, 2011

ENERGY MARKET: OVERVIEW

There has been a paradigm shift in oil price performance from Q1 2011 to Q2 2011. Seasonal factor has been a key alarm for such price performance, in conjunction with economic concerns lingering across the globe has been in a depressing wave. The mentioned table suggests oil prices across the globe have declined on an average of ten to fifteen percent from previous quarter. While describing the seasonal factor in detail, we need to understand that oil tends to have a leaning season (*sluggish activity at refineries*) during March over June. In the leaning season the activities holds back at refineries

WORLD CRUDE OIL PRICE PERFORMANCE						
Period	WTI Cushing	Dubai Fateh	Bonny Light	Tapis	BRENT:ICE	WTI:ICE
Jan-11	92.19	94.07	102.08	101.86	101.01	4229
Feb-11	96.97	107.97	114.06	116.68	111.80	4444
Mar-11	106.72	109.47	120.86	122.62	117.36	4744
Q1 PERFORMANCE	16%	16%	18%	20%	16%	12%
Apr-11	113.93	118.65	128.71	131.83	125.89	5047
May-11	102.70	109.39	118.95	124.56	116.73	4631
June (22nd)-11	93.40	106.91	112.80	120.78	111.08	4210
Q2 PERFORMANCE	-18%	-10%	-12%	-8%	-12%	-17%

due to sluggish demand for oil and oil products like gasoline and distillate. Seasonal factor also explains oil prices generally tend to move down during March and April while gradual improvement is seen

through May over June. However, this season has been bearish as the global oil demand was very abortive. The supply-demand (balance sheet) scenario has now turned from deficit to balance since April end. However, the weakness was mostly seen due to less demand from the major consumers. We also understand that oil is mostly used in manufacturing industry and this should be ideal to make a check on manufacturing sector performance across the globe. Below

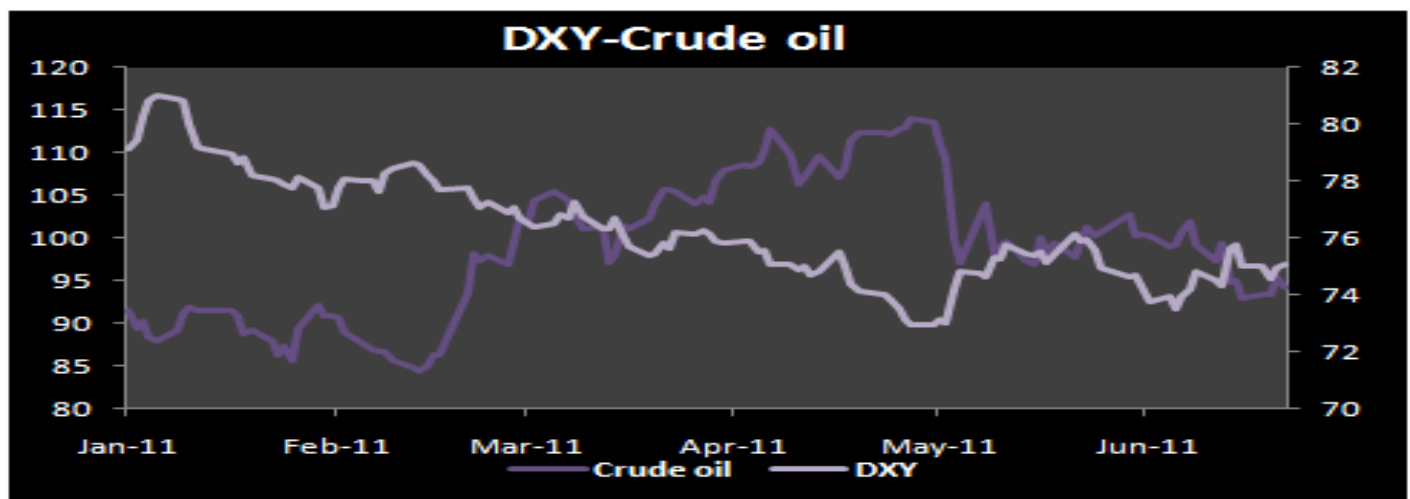
mentioned table gives a glimpse of manufacturing sector (global) performance and its relation with oil. The entire global performance of manufacturing sector is in doldrums. World's largest oil consumer: U.S has been badly hit in this sector causing a decline in oil

COUNTRY WISE PERFORMANCE: MANUFACTURING SECTOR						
Month:2011	US	Euro-zone	China	Japan	German	UK
Jan	60.8	57.3	54.4	51.4	60.5	61.5
Feb	61.4	59	51.7	52.9	62.7	60.9
Mar	61.2	57.5	51.8	46.4	60.9	56.7
Apr	60.4	58	51.8	45.7	62	54.4
May	53.5	54.6	51.6	51.3	57.7	52.1

demand. However, other countries have also been affected which caused oil to trade lower in this quarter. Apart from, manufacturing sector (world wide) and leaning oil season, we may have to examine other economic parameters which have had negative impact on oil price. The relationship between U.S Dollar Index and Crude oil might give ample idea about the global economic performance and its likely impact on oil price trend. The general phenomena is still implying on this commodity as crude oil is up by around 3 per cent since the beginning of the year 2011 where as Dollar index is down by around 5 per cent. While looking at recent data (past two months) oil prices declined by 20 per cent where as dollar index has gained by only 4 per cent. *The basic principle is still holding.* However, the oil prices have declined

substantially in the past two months. Many reasons could be attributed for this decline while the primary reasons should be higher dollar index and reduced demand from euro-zone and rest of the world. The ongoing crisis in euro-zone has prompted economic sentiment into vain which in turn has made oil and other commodities to plunge. Moreover, supply related concerns also pulled oil to trade lower. The talks of Saudi Arabia rising production along with few other countries while the demand has been mediocre has also prompted oil to trade on a lower note.

Statistically speaking the coefficient of correlation (US dollar Index and Crude oil) now has improved to 0.70, where as in the beginning of this year correlation used to be at mere 0.20 to 0.30 levels. Hence, going ahead economic outlook of U.S should be a major factor for deciding oil performance in short to medium term.



2011' June effect:

1: *This summer has really been tough for U.S:* The experience of summer driving season is likely to remain worse as the economic concern would not permit U.S citizens to swell their spending. In other words, the implied demand for oil and oil products are seen declining. However, as we progress we might see fresh demand for driving season should come though may be little late.

2: *International Energy Agency:* The decision of releasing 60 Million barrel by IEA was well coordinated to curb oil price. This decision was though impulsive but necessary. The recently held OPEC meeting has not got any conclusion for improving production scenario which perhaps prompted IEA to take such action. Moreover, releasing of oil was needed to make up for the loss of 132 million barrels of crude oil from Libya after an armed rebellion halted exports from the holder of Africa's largest reserves since February. Now, on 5th July the news has come that IEA has successfully released the emergency oil supply.

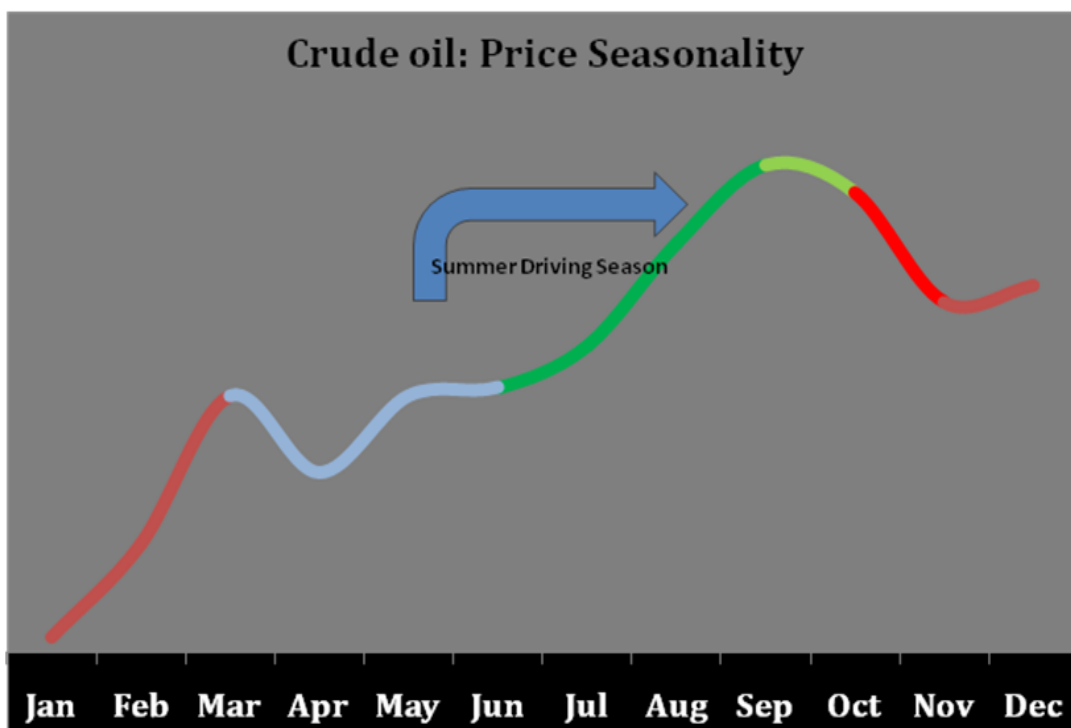
3: Greece: Euro-zone concern: Europe's lingering debt crisis is still recurring in investors' mind. Starting with Portugal, who was sought to get 75 billion Euros bailout, it was Greece who became the first European country with largest debt burden. The Bank of England said that the inflation remains uncomfortably high as the officials raised their forecasts for consumer prices and cut their prediction for economic growth. Besides, S&P cut Greece's credit rating from B to BB-, renewing concern that the region's debt crisis is escalating. Greece was set to sell 1.25 billion Euros in an auction of 182-day bills. A further credit rating down gradation was likely to take place for Greece as the risk of default rises, would make the country lowest rated country in Europe. The Greek government therefore endorsed an asset sale plan and 6 billion Euros budget cuts to win the relief fund and arrest a market slide.

A restructuring of Greece's huge debt seemed to be off the table now, which was viewed as negative for the Euro as it could prompt a flight away from Euro zone bonds and damage the EU's credibility.

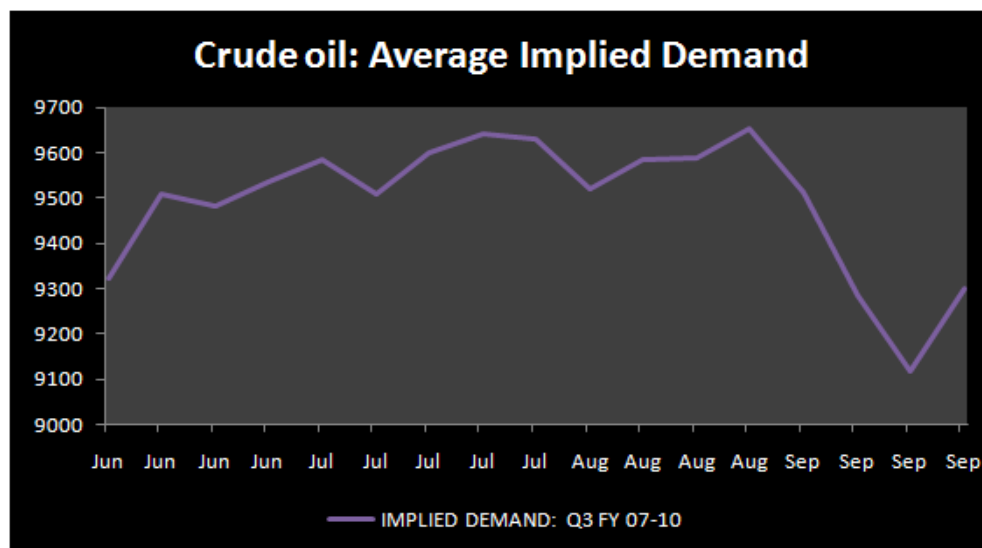
PRICE SEASONALITY

The chart depicts the price seasonality of crude oil. June is the month where official summer driving season starts in U.S which runs for three months and the Hurricane season also starts which goes on for six consecutive months. This summer

has officially started on June fifth. The price seasonality suggests that every year oil tends to move higher during these months ahead of summer driving season. The seasonality index has been prepared by taking historical data of 10 years. Going by the seasonality we should expect oil to move higher. This is important to look at the



oil demand scenario for this year along with ongoing global economic concerns. The first month of driving season is already over and oil has fallen by around ten per cent. The reasons for such move are attributed to weakening oil demand along with faltering global economy. Hence, we need to check the implied demand scenario of oil and oil products in the recent past and how they are likely to perform in the short to medium term. The chart stated here gives an idea of implied



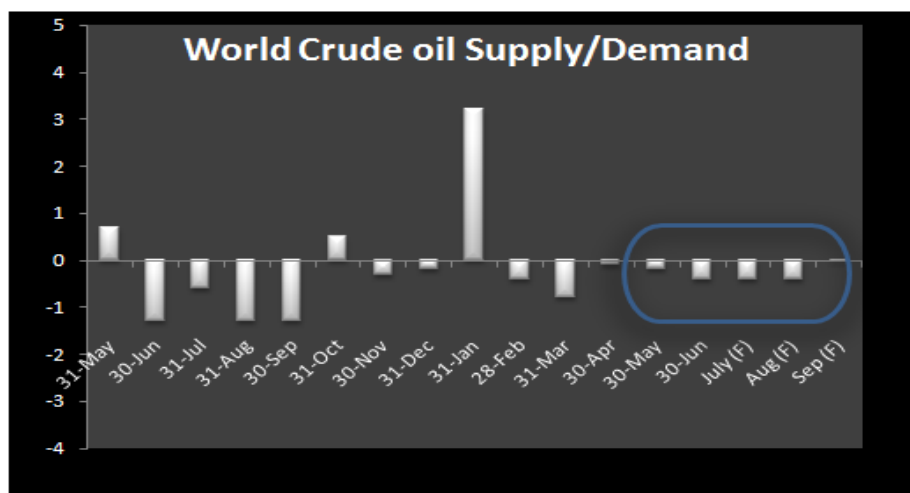
demand of crude oil during the summer driving season. We have taken the data for the last three years of the same period and it is implicit that oil demand tends to stay stable with a slight positive trend until August and there after it declined. However, hurricane activities decide the trend of oil from August onwards. Going by the same scenario we believe

oil may recover soon from July onwards. However, the ongoing global concern is restricting oil to recover sharply. Price seasonality may respect the year 2011, but it should be important to look for the demand-supply scenario.

WORLD CRUDE OIL SUPPLY-DEMAND SCENARIO

The chart here suggests until May the supply and demand scenario has turned into negative (supply-demand).

Going ahead we expect the supply-demand scenario to get into deficit which will create supply crunch in oil driving the prices higher. Looking at the historical year's performance we have derived our own forecasted balance sheet which is suggesting that oil market may remain under deficit mode in the coming months. The logic can also be related to seasonal factor of driving season and



hurricane phase. Nevertheless, we also anticipate deficit to remain stable in the coming months as hurricane activities are looking normal so far for this year as per the NOAA forecast.

This is also important to talk about the detail division of world total supply and demand. It is observed over the years that demand tends to rise during June over August that might continue in the current year also. This is also noticed that demand of oil tends to rise from OECD nations along with rest of the world while increasing of production by OPEC does not meet the demand. The below mentioned table gives a picture of detail supply and demand scenario of world oil.

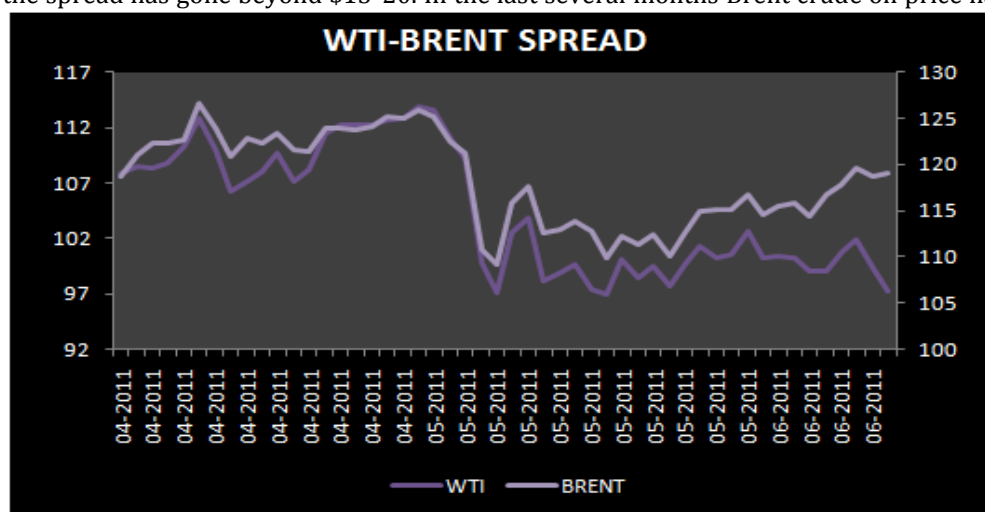
PERIOD	WORLD TOTAL SUPPLY				WORLD TOTAL DEMAND			
	OPEC	OPEC NGL	NON-OPEC	PROCESING GAIN	TOTAL SUPPLY	OECD	REST OF THE WORLD	TOTAL DEMAND
30-Jun	28.50	5.60	49.10	2.40	85.60	45.70	41.20	86.90
31-Jul	28.80	5.70	49.70	2.40	86.60	46.20	40.80	87.00
31-Aug	29.10	5.70	49.00	2.40	86.20	46.60	40.90	87.50
30-Sep	29.20	5.70	49.40	2.50	86.80	46.70	41.30	88.00
31-Oct	29.00	5.70	50.70	2.50	87.90	46.40	41.00	87.40
30-Nov	28.70	5.70	51.30	2.50	88.20	46.80	41.60	88.40
31-Dec	29.70	5.90	51.40	2.60	89.60	47.60	42.20	89.80
31-Jan	30.60	6.00	51.50	2.50	90.60	45.80	41.40	87.20
28-Feb	29.80	6.00	51.10	2.60	89.50	47.00	42.80	89.80
31-Mar	29.00	6.00	50.90	2.60	88.50	46.60	42.70	89.30
30-Apr	29.20	6.00	51.10	2.50	88.80	45.10	43.80	88.90

Above data is from 30th June 2010 to 30th April 2011

If we look at the 2010 October and 2011 January supply demand figure looks very uncommon but once the month progresses demand figure tends to move higher than the supply.

WTI-BRENT: OIL SPREAD

Brent is trading at premium over WTI for the past few years, however, the spread has widened substantially in the recent time. Especially in the year 2011 the spread has gone beyond \$15-20. In the last several months Brent crude oil price has picked up and increased more than WTI spot price. Here in this analysis, we shall discuss about the reasons for such spreads and its likely future outlook for the remaining months of 2011. Brent oil originates from the North Sea, and as such is mostly exported to Europe, while WTI oil is based in Texas and southern

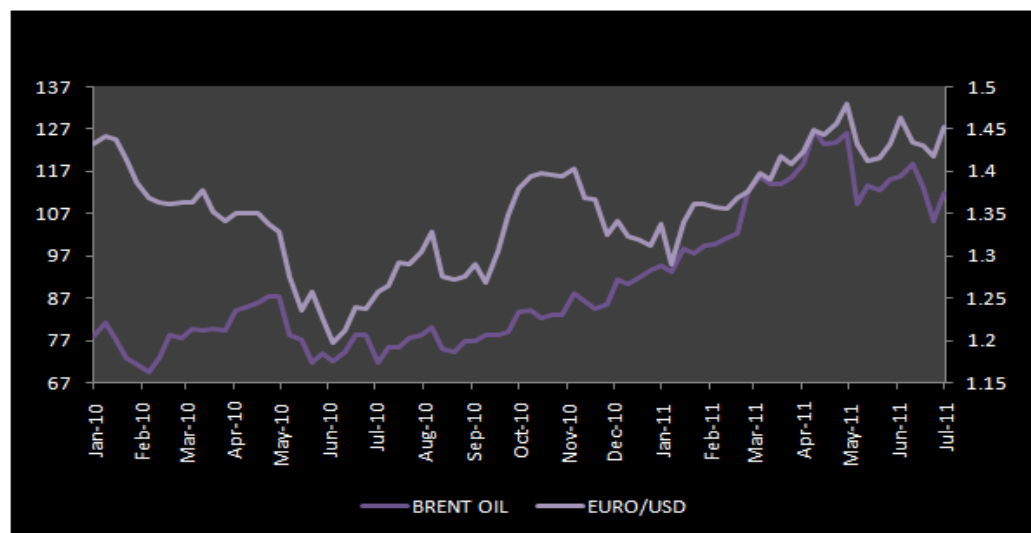


Oklahoma, i.e. its priced pertaining to the North America crude oil market. Therefore, we need to understand the

variables which influence the spread between Brent and WTI oil prices. The variables should be crude oil stocks trend in U.S, the currency movement (EURO/USD) rates, consumption pattern of oil in Europe and U.S and obviously the economic growth rate of these regions.

This should be important and logical to look at the economic growth rate of U.S and Europe to make a comparison study. Although this may not give a direct picture about the oil consumption pattern but we will be able to deduce and make a check on economic performance. The data (GDP growth rate) suggests that European economy is performing much better than the U.S however; oil consumption pattern in Europe has declined. There could be other factors which would have declined the oil consumption in Euro zone and thereby made Brent crude oil to trade lower in the recent time.

Keeping aside other variables it is also important to look at the currency movement. Since Brent oil is mostly exported to Europe, it is important to look at EURO/USD currency pair performance. Looking at the historical study we believe EURO/USD and Brent crude oil carries a decent correlation of 0.67 per cent.



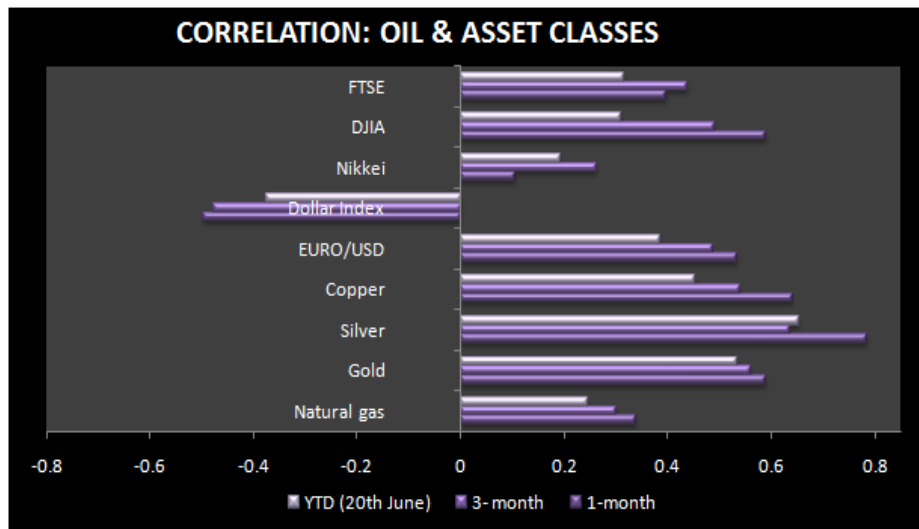
In the recent time the currency euro has depreciated but since 2010 it has been in an appreciating note. Likewise, oil (Brent) has also moved higher. While looking at the recent data oil and the currency both have declined suggesting lower oil demand from euro-zone. Overall scenario holds good for euro/USD and Brent oil.

However, above these variables are not suggesting an appropriate reason for such spread (Brent and WTI). Hence, we need to look at the U.S stocks (oil inventory) trend and its impact on the spread. Various time periods suggest that US crude oil stocks and WTI price have a negative correlation. If we look at data since April 2011 the US crude oil stocks have increased by three percent whereas prices have declined over twelve percent. In the mean time Brent oil has declined by around six percent only. Such price action has increased the spread between Brent and WTI.

The above analysis only tells us about the reasons for such spread movement. Going ahead we believe the spread to narrow down in the next few months as the seasonal demand for WTI is likely to be much higher along with hurricane activities which might restrict higher supply. Meantime, Brent oil demand may remain sluggish or steady as the European economies are still in a faltering stage.

CORRELATION: OIL & ASSET CLASSES

The chart below gives us a clue that crude oil is such commodity which carries positive correlation with global equity

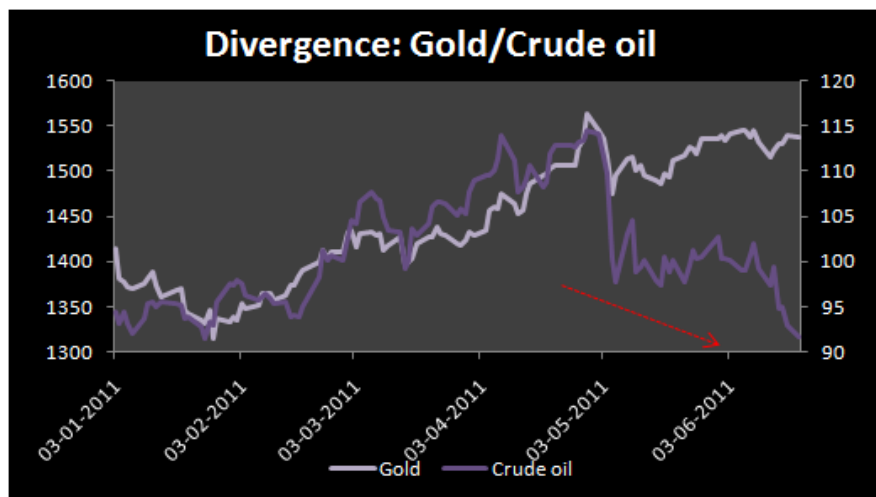


market, currency market and major commodities like gold, silver, copper and natural gas; however, it has a strong negative correlation with U.S dollar index. Predominantly, basis economic fundamental factors are supporting oil trend. However, intensity of correlation is different with different time interval. **The table also gives us a clue to derive oil price target from the other asset class performance.**

GOLD/CRUDE: RATIO

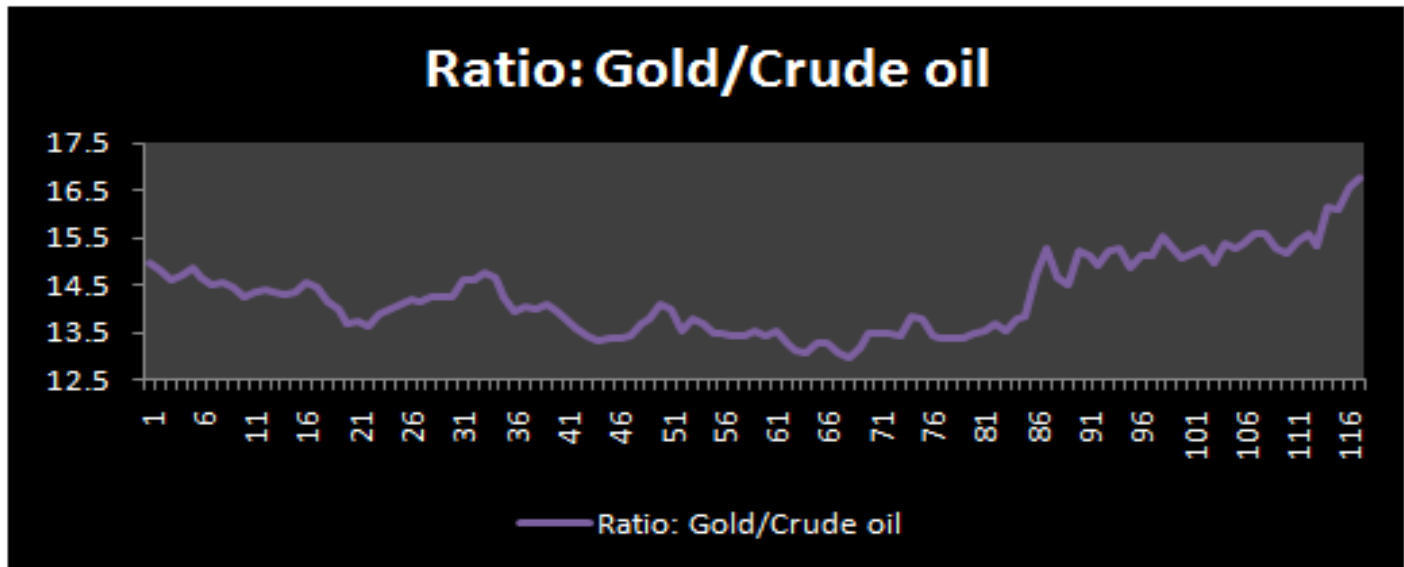
The gold and crude oil have lost their correlation in the year 2011. The price performance also been spoiled. The gold has witnessed a return of 9 per cent until 20th

June where as oil prices have declined by three per cent. There are fundamental reasons which have made oil and gold to trade differently. As we understand gold has been considered as a safe haven asset where as oil prices have been mostly influenced by economic performances. The investment demand has increased for gold while hedge funds are cutting their bets on oil price. Moreover, the investment demand has been steadily good for gold. While looking at crude oil performance, the



leaning season which was during March over May has made less oil demand for crude oil across the globe. The below mentioned chart suggest the gold/crude ratio has now moved higher and hovering around 17. Going ahead we believe this ratio to narrow down and this could be possible as oil is expected to trade higher meanwhile, gold is expected to

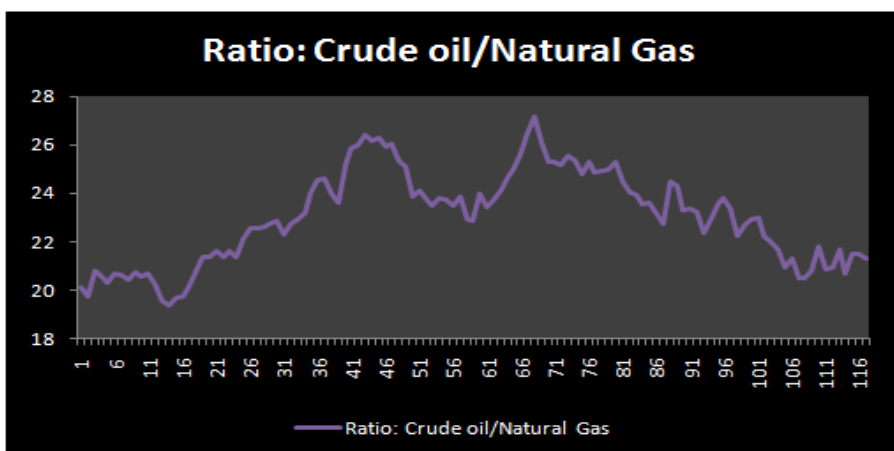
remain firm. Primarily we are attributing such outlook as oil demand is likely to be higher in the next few months due to ongoing summer driving season and uncertain hurricane period in U.S. On the other hand gold may remain firm as the economies have not yet turned positive and still are in a faltering stage. The gold and crude oil ratio which is hovering around 16 to 17 may average around 12 to 14.



Numerically and technically gold is expected to average around \$1530 to \$1550 in the Q3 2011 and assuming oil to gain by around 10 per cent can make gold/crude oil ratio to be around 15. However, any further improvement of Gold quarterly price target should make the ratio to fall below 14 levels.

CRUDE OIL/NATURAL GAS: RATIO

The crude oil and Natural gas ratio is currently hovering around 20, it means crude oil is 20 times of natural gas; although both crude oil and gas belong to energy sector the price performances have been highly diverse. In the above analysis we have discussed about oil price performance but the gas prices are mostly decided by the weather condition in U.S and the inventory figures. Subjectively we may have to give more weights to US weather scenario for gas



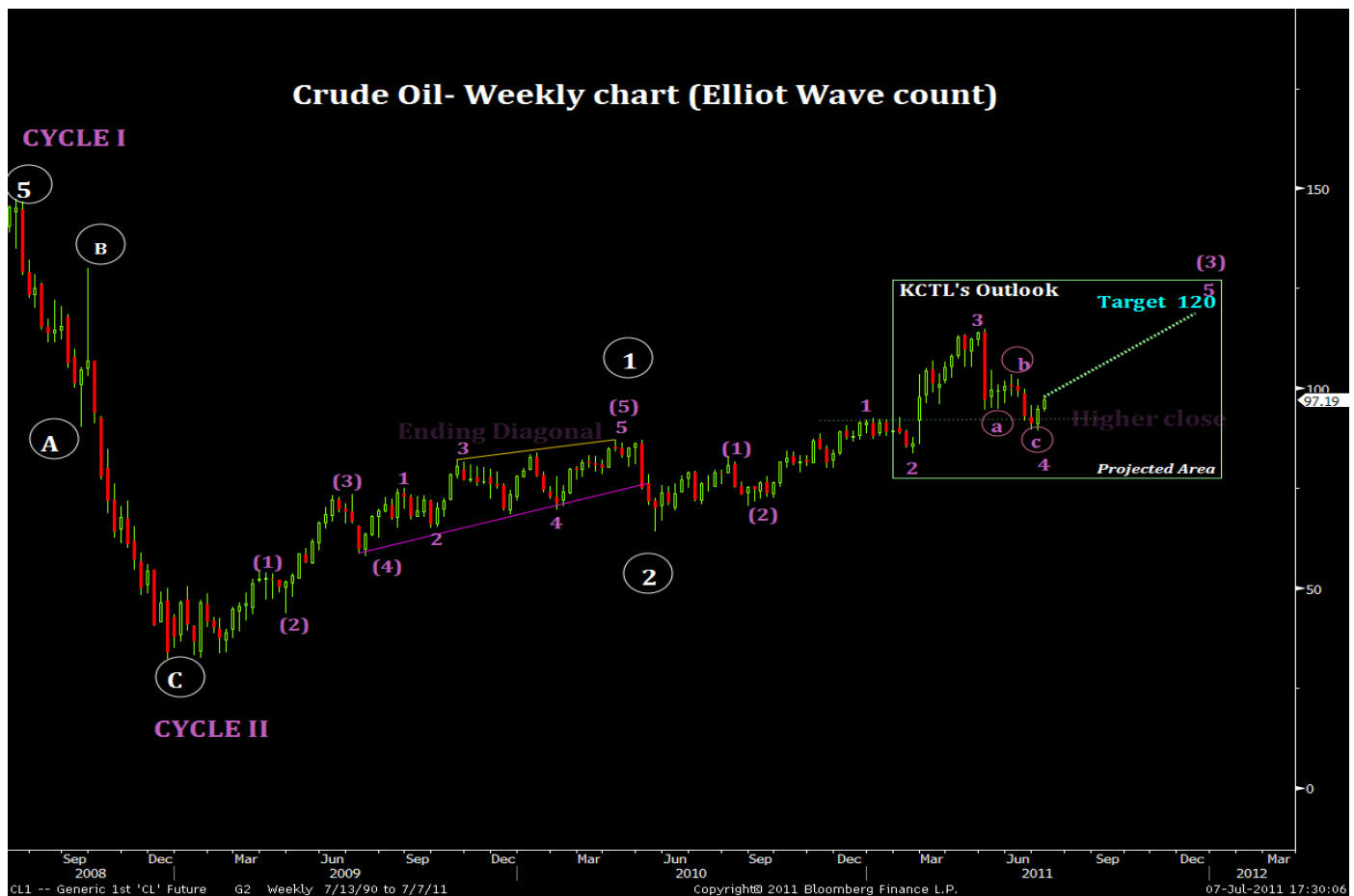
price performance. The price performance of natural gas has been highly volatile but with a cyclical pattern. Going ahead it is important to understand the price outlook of natural gas which will be a tool for deciding crude oil/gas ratio performance in the near future. In the short to medium term, we believe crude oil prices to remain firm and technically anticipating oil to gain by around ten per cent. In the mean time gas is expected to remain volatile but bullish trend can be expected. In this regard ratio may stabilize around 20 levels. However, any further improvement in gas prices may keep the ratio on the lower side.

OUTLOOK:

Quarter three of calendar year is generally known as summer driving period of U.S and beginning of Hurricane season. Officially summer driving season for this year (2011) has begun on June 5th is likely to continue until September, however, the hurricane activities will come to an end by December. The fundamentals of crude oil tend to get disrupted during this period as it creates supply crunch along with higher demand. The supply crunch is basically noticed due to hurricane activities. However, as per NOAA predictions, hurricanes this year are likely to be normal. This may not reduce oil supply, but the rising demand cannot be ruled out. Although this year driving demand for oil is marginally less than the previous years while it is expected to rise soon. This can be understood by looking at the recently released petroleum inventory data by Department of Energy (DOE). The data shows inventories of oil and oil products (Gasoline and Distillate) are drawing down along with higher refinery utilization. Moreover, recently held OPEC meeting has not come to any decision for rising oil production. Certainly, supply issue may not create concern until August but thereafter hurricane activities should be closely watched. We believe demand factor should be the one which will lead oil into deficit for this quarter. Going by the supply-demand scenario it is likely that oil prices to trade higher in the third quarter of 2011. However, we do also have to look at the economic activities which can reduce global oil demand. The global concerns are still lingering and especially the U.S economic figures are not so promising. This looks logical to check the US consumer income/spending trend and it is noticed that since 2011 the incomes have been stable while the spending have been declining suggesting US is still at a vulnerable state. Such result might create a negative impact on oil as US citizens might not spend enough money in this summer driving season.

Looking at the above scenario we believe oil has fallen into bewilderment state, however, the seasonal factors should play the major role which should push oil demand higher in the medium term.

TECHNICAL ANALYSIS



Elliot wave analysis

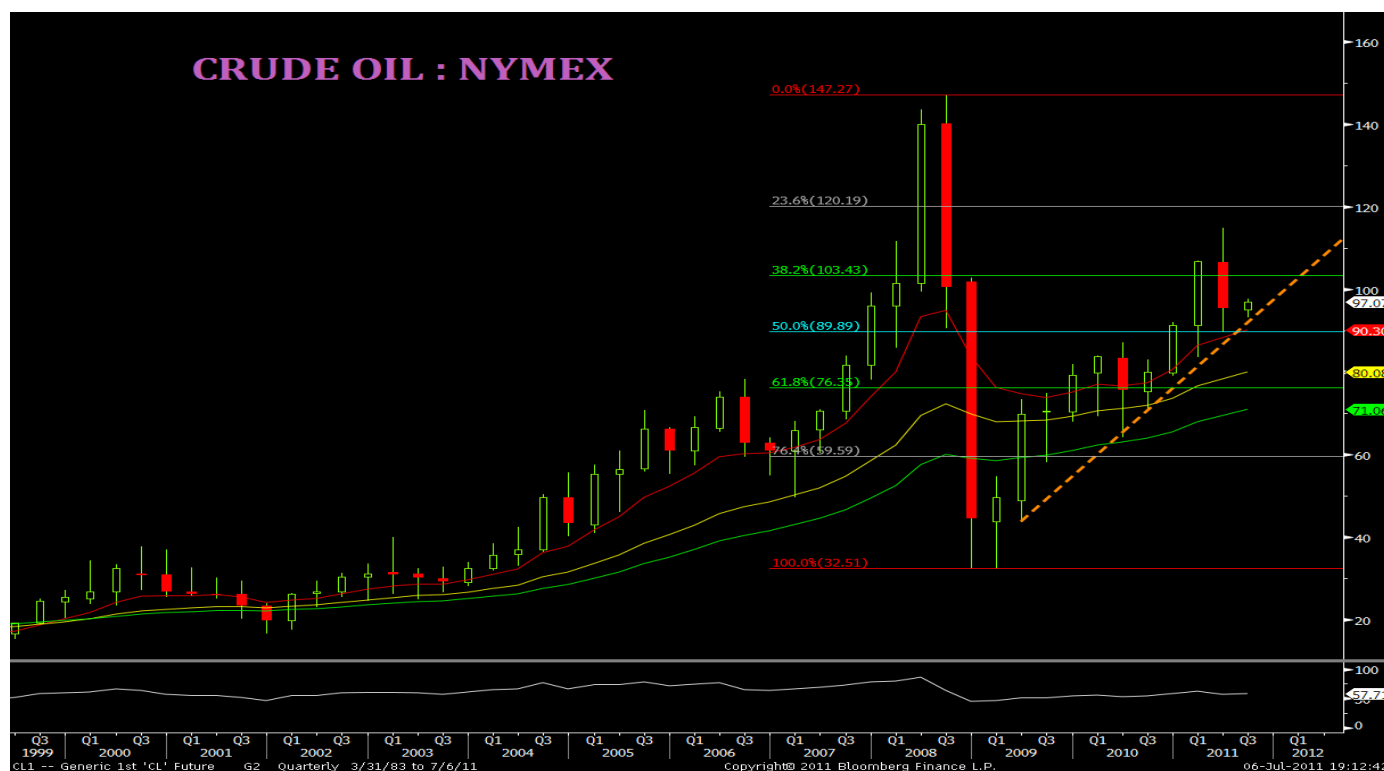
Recent wave: Minor wave 4 of intermediate wave (3) of primary wave 3.

Cycle II ended during December 2008 fall and since then prices starts rebounding. KCTL is presuming that the crude oil prices to continue its bullish phase for the coming quarter also. As per our counts currently minor wave 4 (of intermediate 3 of primary 3) has completed and we expect crude oil prices to gain from here as Minor wave 5 (of intermediate 3 of primary 3) is in action which may take crude oil prices to 120\$ (100% projection of the Minor wave 3 of the given wave count) and then 127(123.6% projection of given wave counts). If market does not respect our projected count and falls below \$88-89 then it may test the next support level of 83 (previous swing low).

The above analysis is done as per the Elliot wave principles and we expect crude oil prices to rebound from here.

In the last quarter crude oil future prices have traded lower side by reversing the previous bull rally and settled at \$95.42 down by -11%. The quarter gone by has made a high of \$114.80 and a low of \$89.61 and settled at \$95.42 levels.

This fall may be considered as smart correction after a long upside rally and still we are continuing our bullish view and expecting oil prices to test \$103.40 then \$114.80 levels which is supported by below mentioned technical studies:



Principle of Fibonacci retracement states that prices are witnessing resistance at 103.40 levels which is 38.2% of the range \$147.20-31.50 levels. On breach and sustain above is likely to test \$114.80 levels which is also previous swing high.

In the meantime, the market is witnessing trend line support at \$91.30-90.30 levels which is drawn by joining lows of \$43.80, \$64.20 and \$70.76 levels. The given support level \$90.30-91.30 is a strong support level to watch as it is also supported by short-term 8-quarter-EMA and also 50% retracement of the given range as per Fibonacci principle.

Above discussed three technical tools (Trend line, Moving average and Fibonacci Retracement) are suggesting crucial support zone is within \$91.30-89.80 levels. In case if prices breach this support zone then next support is seen at \$84 and 80.20 levels which is a 21-quarter-EMA. The momentum indicator RSI-14 is trading at 0.581 still has enough room to enter into overbought zone. However, we would like to make a precaution note that if market breaches \$80.00 then entire scenario will go wrong in the long term.

Recommendation: Buy at 93-96 TP 120 and then 127 SL below 82

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