Deutsche Bank

24 June 2011

Breaking News

IEA Release

Emergency? What Emergency?

Paul Sankey
Research Analyst
(+1) 212 250-6137
paul.sankey@db.com

David T. Clark, CFA
Research Analyst
(+1) 212 250-8163
david-t.clark@db.com

Adam Sieminski, CFA
Strategist
(+1) 202 662-1624
adam.sieminski@db.com

Politically driven decisions worsen the global oil "emergency"
We have long argued that there is no geological problem with oil – there's plenty in the ground. The problem is governments. Today's "emergency" oil stock release by the IEA can be seen as an aggressive move by the White House on gasoline prices in an election year. It does crush speculators and push down prices right before July 4th. But it also encourages demand (by artificially lowering prices) and discourages supply (by adding uncertainty & volatility to prices which is damaging for long term oil market); it adds risk, questioning Saudi spare capacity.

If this is an emergency then what does the future hold?
What are the clients saying to us? First, if this is an oil emergency situation, then the future looks worrisome indeed. In fact, what is the emergency right now? The price spike on the sudden loss of Libya production was not an emergency situation but this is? Oil prices are falling naturally, refiners have no problems sourcing crude, and global oil demand is rising at or above trend. In this note we run through the questions we took today from our clients, and our best attempted answers fielded.

All sorts of random theories emerge from a surprise announcement
What are they – the "market" – saying? The "emergency" is seen to be that in an election year (November 2012) maybe that QE2 failed, which makes QE3 incredibly risky, with the timing of this announcement no accident after Bernanke's comments that downplayed QE3 yesterday. Some think that the President's Afghanistan withdrawal announcement is related, although we don't. Another considered "emergency" is that gasoline pump prices would be above $4/gallon for the July 4th weekend – and corn for the grill is really pricey too (Senate votes against ethanol subsidy), with 9%+ unemployment in the US, with election campaigning starting – time for a drawdown.

There is only one real "emergency" that has not been worse at some point prior in this cycle. That is the forecast that the call on OPEC to rise aggressively in Q3 which would cause… OECD inventories to decline. Is that a reason to reduce stocks? Of course the conclusion would be that oil prices would rise with reduced stock. It seems the Saudis/US/IEA saw this and urged, under the Presidency of Iran, OPEC to raise production, but there was no such decision. The Saudis have announced a unilateral increase in production to 10mb/d, but have struggled to "push on the string"(another 2007/8 phrase re-surfaces) because refiners don't want more relatively high priced heavier sourer barrels and European refiners can't or won't raise runs on the available crude, we have an emergency situation. It seems to us to be an unnecessary distortion that bears all the characteristics of a short-term gain that only adds greater long-term potential pain. No recommendations changed, as this amounts to the fulfillment of one of our key themes: as governments become inexorably tangled in oil markets, so the very problems that oil markets face: lack of demand response to high prices, lack of supply response to high prices, become worse.

Deutsche Bank Securities Inc.

All prices are those current at the end of the previous trading session unless otherwise indicated. Prices are sourced from local exchanges via Reuters, Bloomberg and other vendors. Data is sourced from Deutsche Bank and subject companies. Deutsche Bank does and seeks to do business with companies covered in its research reports. Thus, investors should be aware that the firm may have a conflict of interest that could affect the objectivity of this report. Investors should consider this report as only a single factor in making their investment decision. DISCLOSURES AND ANALYST CERTIFICATIONS ARE LOCATED IN APPENDIX 1. MICA(P) 146/04/2011.

SPR stock drawdown

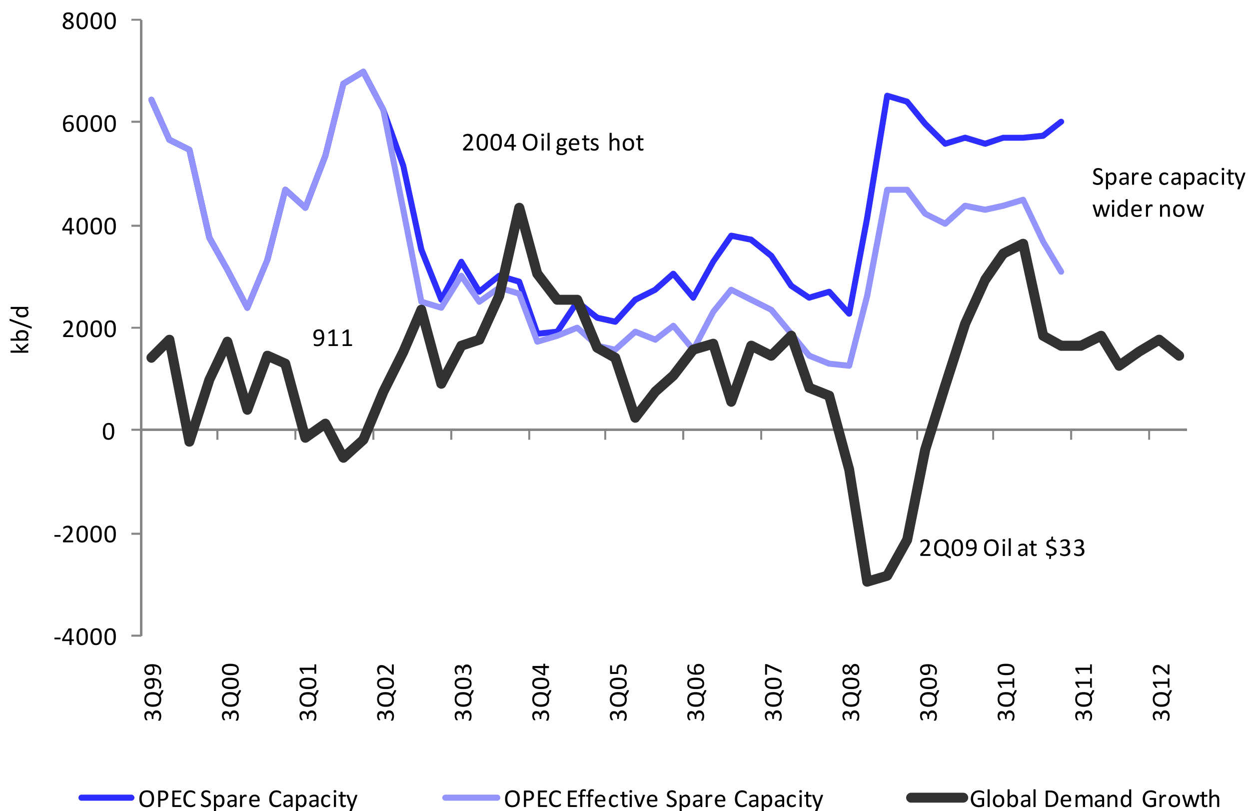
Questions on our mind

- Was there really an oil emergency that needed to be addressed?

No refiners are talking about oil shortages. There is no emergency in oil supply even with the lost 1.7Mb/d of light sweet Libyan oil. And then, the timing is clumsy and basically inexplicable, given the situation in terms of volumes and prices was far worse earlier this year. Against previous standards of IEA releases (Gulf War I, Katrina) this is in no way an emergency. So this release has deeply questioned the IEA definition of “emergency”. For example, there was no release in the speculative frenzy of 2008.

In short, with global oil prices falling, we are not in a speculative frenzy – until today’s announcement. On balance, the release has increased the nervousness of markets by adding uncertainty and randomness. Recently, White House comments about an SPR release were dismissed by oil markets over the past few weeks as highly unlikely – as the move was seen as illogical. The illogical move has been made, and now, both producer (say, Iran) and consumer (say, the USA) governments are acting in unpredictable ways. Now, adding to the effect of Saudi commentary, every oil market comment from the White House will become a market-moving event. In short, this move has added to oil markets’ fear of volatility.

Figure 1: OPEC Spare Capacity vs. Oil Demand Growth



Source: Deutsche Bank, Bloomberg Finance LP

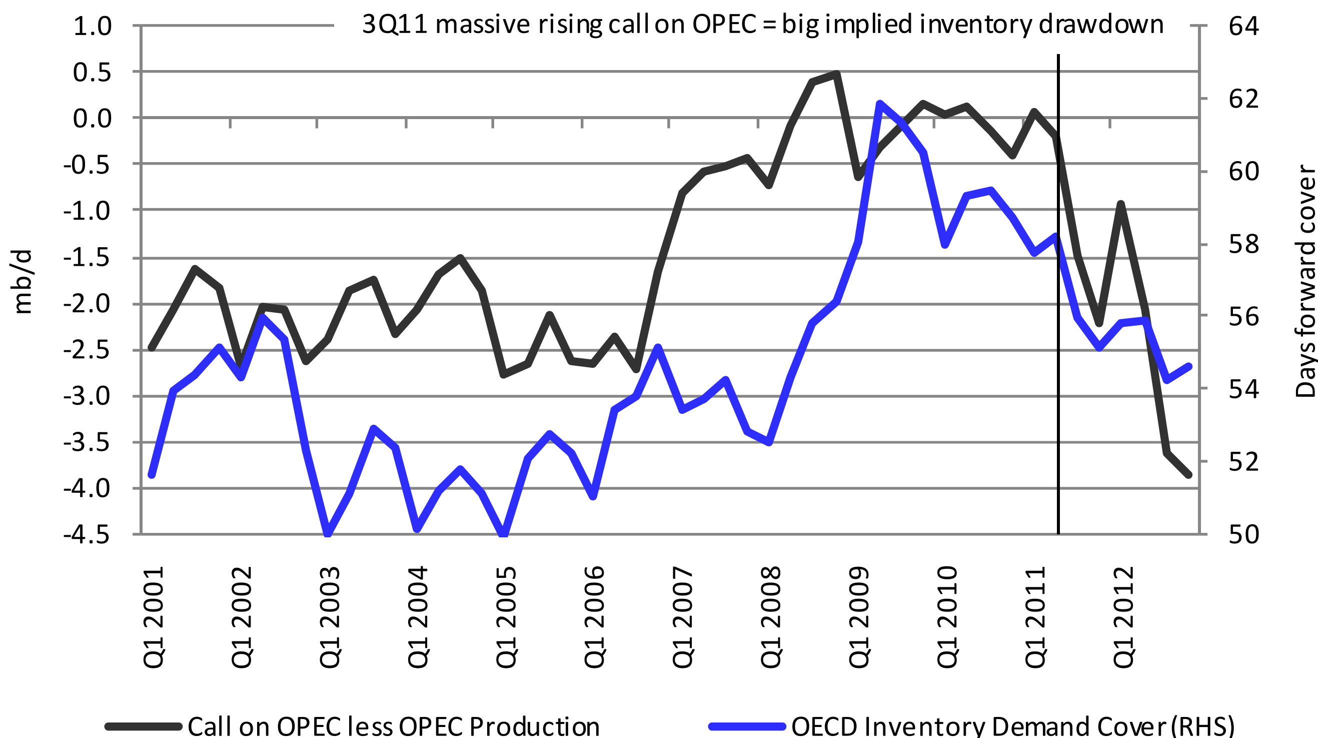
It seems the IEA stock release is an effort to break the logjam and provide oil to markets, giving the Saudis time to gear up output and maybe buy time to see if the opposition forces in Libya can ship some oil from the eastern part of the country. The IEA action could also be aimed at the nature of the oil markets – which often seem to which typically hover in a premium equilibrium that seems unrelated to true supply/demand. There is little evidence – the market has not had time to settle – that $120/bbl for Brent is a stable short-term equilibrium given what we know about the economy. The IEA's action might be viewed as an effort to kick the system into a lower ($100/bbl Brent) equilibrium that might be more supported by industry costs and consumer affordability. But this seems to be the setting of a price target on an exogenous basis, without an explicit price target or reasoning. Not good.

- Why did the IEA do this when there is no emergency?

This action has the superficial appearance of a political move by the US government, related to gasoline and diesel fuel prices in the OECD. The alternate, and official reasoning, is that major forecasting houses, including DB, calculate that the "call on OPEC" (simply global oil demand growth less Non-OPEC supply growth) will be up more than 1Mb/d between 2Q and 3Q on seasonal and developing country economic demand strength. Saudi Arabia and its Gulf producer allies recognise this, but OPEC, under the presidency of Iran, refused to raise production at their recent meeting to accommodate the squeeze. It is well established that Iranian-Saudi relations are poor. This release is designed to prevent a spike going into 3Q.

But equally it roils markets by absolutely raising the question of how much spare capacity Saudi really has, including the knowledge that the Kingdom has become a major demand growth driver in its own right, particularly in summer. That raises the question, in tandem with a known move by Saudi to secure more rigs, even as they announced move to 10mb/d of production, of how much spare capacity there really is. Furthermore, assuming that Non-OPEC is producing all-out, how much spare capacity there is globally. The answer seems to be: less than you think.

Figure 2: Rising call on OPEC implies big inventory drawdown



Source: Deutsche Bank, Bloomberg Finance LP

- Was this a move against OPEC?

The IEA was set up under Henry Kissinger and perceived as an "Anti OPEC" effort to avoid consumer countries (OECD nations) competing to buy oil in oil crises, such as occurred during the 1970s. The issue today is defining OPEC. Originally an Iraqi, Saudi, Kuwaiti combine with Venezuela, that included Iran but tested loyalty in the first oil crises based on the Shah's western allegiance, now both Iran and Venezuela are openly US hostile. But neither seem to have any spare capacity of oil production to actually pro-act with oil markets. We have had years of aggressive rhetoric with little material outcome other than gently declining supplies and known social issues.

With Iran taking the OPEC Presidency, clearly the last OPEC meeting, described by Saudi oil minister Al Naimi as "one of the worst ever" has led to disarray, without even considering the impact of the "Arab spring" that has thrust Sunni vs Shiite tensions to the fore in OPEC nations such as Bahrain. Underlining the tension, this move has been made with Saudi approval, further underlining the suspicion that OPEC tensions are insurmountable, there is little the organisation can do to control oil markets, and that Saudi may have less spare capacity than the market perceives. The IEA (and US) have explicitly said they consulted Saudi on this plan, and a number of our sources in Washington believe that the IEA stock release has the tacit support of the Saudis. Modestly lower prices that put political/economic pressure on Venezuela and Iran would be a politically positive by-product, given their anti-US/anti Saudi rhetoric.

- Was this a move against market speculators?

For sure it was a brutal move against "speculators" that – for example – had recognized the tightness of the Q3 "Call on OPEC" and taken long position to recognise that, adding liquidity to the market and price information to Washington DC, and global markets. This surprise

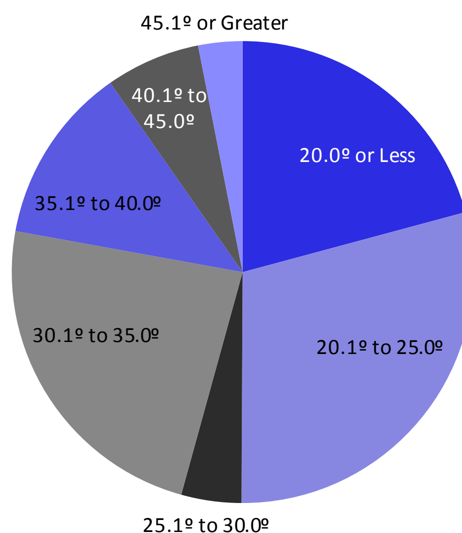
statement has distorted price information (see later section in this note) and, by hurting speculators, damaged market information, given less liquidity will now be available.

When considered, it can be said that the government has now speculated on the oil price, by deeming this to be an "emergency" and the oil price to be excessively high. But what is the basis for that view? Why is $4/gallon gasoline (vs $10/gallon in Europe) a point of "speculative frenzy". The market is seeking efficiency of US oil use (which would be environmentally friendly) and efficient allocation of the oil resource. There is no coherent way of explaining that this IEA move facilitates either of those processes. In fact, clearly the effect is the opposite. Inefficient US gasoline demand is encouraged, oil supply investment is discouraged. Why is the US government stepping in as a speculator? Note above that as the government builds oil inventories, so the free market reduces those inventory holdings and lets the government carry the cost of inventory holding.

What is the crude quality of the SPR?

The crude in the Strategic Petroleum Reserve is light, with about 40% sweet and 60% sour. Sales are by auction and if prices bid are too low – and they may well be seeing as refiners in the US are fully supplied, then volumes will not be delivered. See below for market reaction regarding various crude supplies (next section),

Figure 3: US Crude Imports by API (light: API > 38º, heavy: API < 22º)



Source: EIA/DOE
Degrees API = (141.5 / (sp. gr. 60ºF / 60ºF)) - 131.5

What are the companies saying?

Today's response from both refiners and integrated oils was extremely limited, but varied from the nonplussed to the aggressively negative. Refiners liked the cheaper gasoline and cheap crude implication, one major E&P commented extremely negatively. Overall the sentiment was bewilderment, another confusion to a tough market. This move will reduce upstream investment, in our view.

- Is this a one-off, one-month program, and if not, how many more could be done?

The IEA's official line on this from the release: "The IEA Governing Board will within 30 days of this notice reassess the oil market, review the impact of their coordinated action and decide on possible future steps." So who knows. The capacity is there to do more, given that OECD inventories are at 146 days forward cover and the requirement is 90.

In this phase, while contracts for the crude will be awarded by the end of next week, delivery of the crude will be mostly in August, depending on logistics. Thus the IEA's assessment will take place before any (or at least most) of the SPR oil has reached a refinery. To a large extent the significance of the SPR drawdown in this instance is in the signaling, thus additional activity may depend on the price action between now and the end of July, as well as the interim supply and demand dynamic. More uncertainty.

- Is this QE3 in disguise?

If we assume that the effect of tapping the SPR is a $10/bbl decrease in the price of oil, there would be a daily saving of $190m/bbl on the roughly 19mb/d that the US consumes, or about $5.7B per month. Annualized, that is $68B/yr, meaningful, but almost an order of magnitude below QE2's $600bn scale.

It is unclear whether the impetus was, as some people are arguing, to implement a kind of QE3, or whether it was a more defensive measure to prevent a recovery-killing oil price spike to $130/bbl+ in August. The economic impact of falling crude/gasoline/diesel prices resulting from the release of the SPR, while potentially significant, falls well short of the infusion from QE2 in 2010, when the Fed implemented its plan to buy $600B of Treasuries. But the SPR release does appear to greatly mitigate the odds of a driving season spike in oil/gasoline prices, which we think was the objective. In other words, less of an economic jumpstart than a reduction of devastating risk.

- What will the impact on US gasoline prices be?

A $10/bbl fall in the price of oil, holding cracks and margins constant, should translate, roughly, into a $0.25/gal drop in the price of gasoline at the pump. But pump prices are sticky so the immediate gasoline price impact for the average American may be far less than the immediate impact of the decision on the average Wall St oil trader, analyst, or salesperson.

At $92/bbl, we are about $22/bbl below the WTI peak in late April, a 19% drop. Yet average US gasoline prices have slipped just 8% from $3.97/gal (in early May) to $3.65/gal now. On the other hand, product prices fell more than oil prices today, on the day of the announcement. The US administration no doubt is hoping for pump prices to fall ahead of July 4, and in all likelihood they will, but there is no guarantee that they will fall in proportion to the lower oil price.

- Does the IEA know something we don't?

This was an argument in the 1991 IEA emergency release. Then, the IEA emergency call caused the market to panic higher before crashing. The answer is, we don't think the IEA knows something we don't.

However we have a structural bias. The structural bias regards all government conspiracy theories, which states that for a government to undertake a conspiracy, it would have to be clever, organised, able to execute, and able to keep a secret. Such a government has never existed in a large-scale democracy. We do think that there was a lack of consensus in the IEA about making an emergency move, with a likelihood that France was particularly reluctant. France joined the IEA late after its formation and has always been very sensitive about its own Middle Eastern positioning, above all in regard to Algeria, but equally across the region; and how the US affects that.

- Why did the Saudis support this move? Does it mean that they are out of spare capacity? Or simply that they couldn't ramp up or ship in time to meet summer demand?

Perhaps the biggest surprise of this announcement, and arguably the most worrisome for oil markets, was that the Saudis are complicit with this move. It seems to indicate, as underlined by IEA statements, that they cannot control oil markets and are making every effort to do so,

but that this will take time. This is the reality of the "emergency". That makes today's announcement overwhelmingly bullish. The IEA comments around the SPR suggest that Saudi is ramping production but wouldn't reach required levels in time to meet the seasonal demand surge.

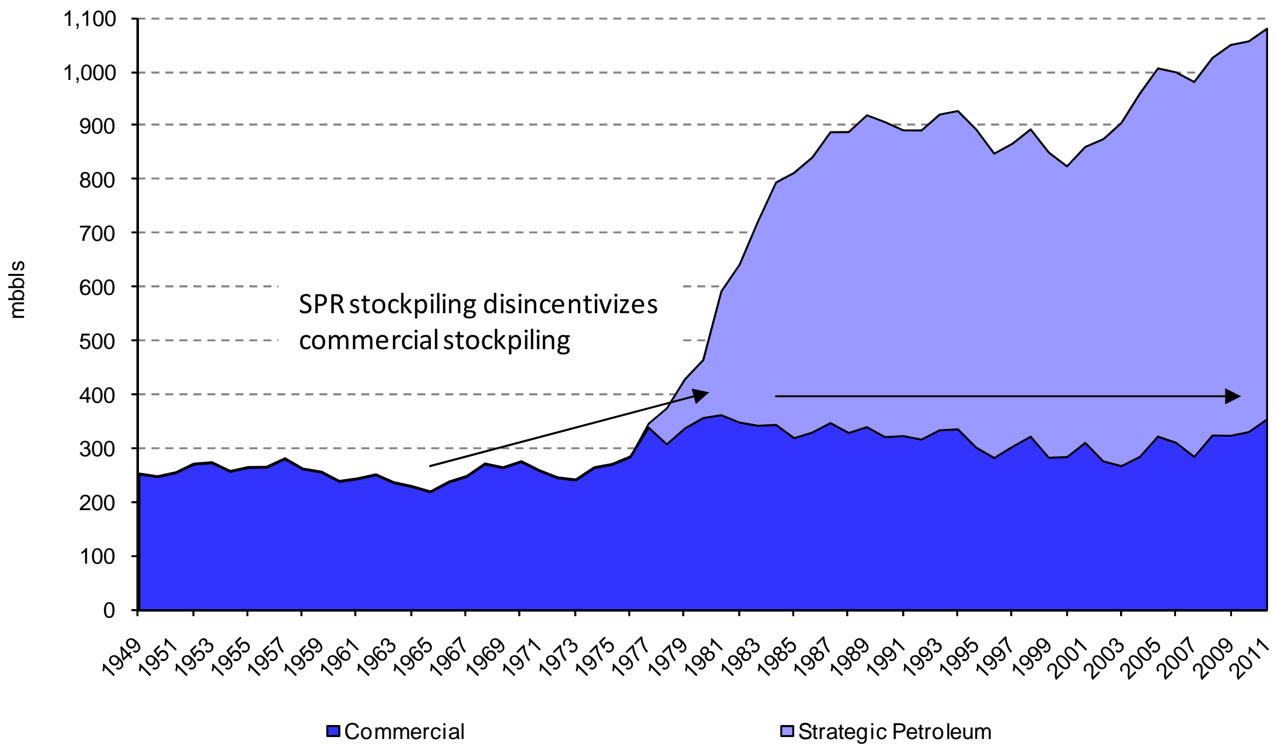
- Will the Saudi's still increase production?

Remarkably, this move comes against a Saudi announcement that they will move to 10mb/d of production – an all-time record high – to temper oil markets. Again that has to be seen as bullish. Markets are unaffected as the available Saudi oil is heavier and higher in sulfur than the missing Libyan barrels. The IEA release will be US light-sweet crude and light-sweet European products. Meanwhile the Saudis will need more oil for their own electricity generation across the summer (average use of oil for electricity is up to 500kb/d this year from 400kb/d last year, and the summer peaks are 200-300kb/d above that average). The IEA is concerned about where the required 1-1.5 Mb/d of exports is going to come from in 3Q, particularly in view of power shortages in China, that are also usually "solved" by burning oil in small generators.

This sets a new standard for use of SPR – but what is that new standard? And what are the knock-on incentive effects that result from the new standard?

The SPR was designed to address oil market emergencies. In this instance, there is no emergency, at least not in the traditional sense. Yes, Libya has taken ~1.5Mb/d out of the equation, but that is less than 2% of the global supply, and those lost barrels have seemingly been largely replaced in the global market – refineries aren't complaining about a lack of access to needed crude. Instead the standard used here seems to be an anticipatory one focused on a potential temporary supply-demand imbalance, rather than an actual existing outage emergency. This move is designed to prevent the *next* emergency. In our view the biggest problem with this action is that it distorts a market that is usually highly efficient and self-correcting, adding volatility that lowers planning assumptions artificially and discourages investment. It also discourages private stock-holding (since government will take care of it) and incentivizes consumers and oil producers to sit back and rely on government protection. It stimulates demand and discourages supply increases, which means that down the road the imbalance (and inevitable price spike) could be accelerated.

Figure 4: SPR stockpiling disincentivizes commercial stockpiling



Source: EIA/DOE

Will all of the SPR crude (and products) be bought?

In the US the SPR crude will be sold via an auction. The US DOE issued a notice of sale for the 30M barrels of light sweet crude today, and plans to have contracts for sale by July 1. There is no stated reserve price, but the DOE has historically rejected bids that it believes are too low. When the SPR was tapped in 1991 during the first Gulf War, 17M out of 30M barrels on offer were contracted. In the 2005 Katrina drawdown, the DOE ended up releasing only 11M out of 30M barrels. It is unclear to us how much of the crude will be released in the current program, and how aggressively the DOE will be in accepting lower bids. We believe that US refiners are fully supplied at the moment, and given the controversy this move has stirred up we believe it might be politically difficult for the government to accept deeply discounted bids. On the other hand, if one of the key underlying objectives is to lower the price of oil and gasoline, injecting maximum crude into the system would make sense. For the sake of argument we are assuming that contracts will be awarded for 15-20M of the 30M barrels in the US portion of the drawdown program.

- How bullish is this signal for long-term oil prices?

In just the second summer driving season of a recovery we are already tapping the SPR. This indicates to us that the IEA and the US administration were convinced that Saudi couldn't handle the coming 3Q call on OPEC, a hugely bullish signal for the future of oil prices in our opinion. Questions regarding Saudi's actual spare capacity will likely move front and center. The market will need to be convinced that this was simply a matter of production ramp-up timing. Beyond a down move on the short-term impact, we believe this move has to be considered a majorly bullish indicator to oil markets.

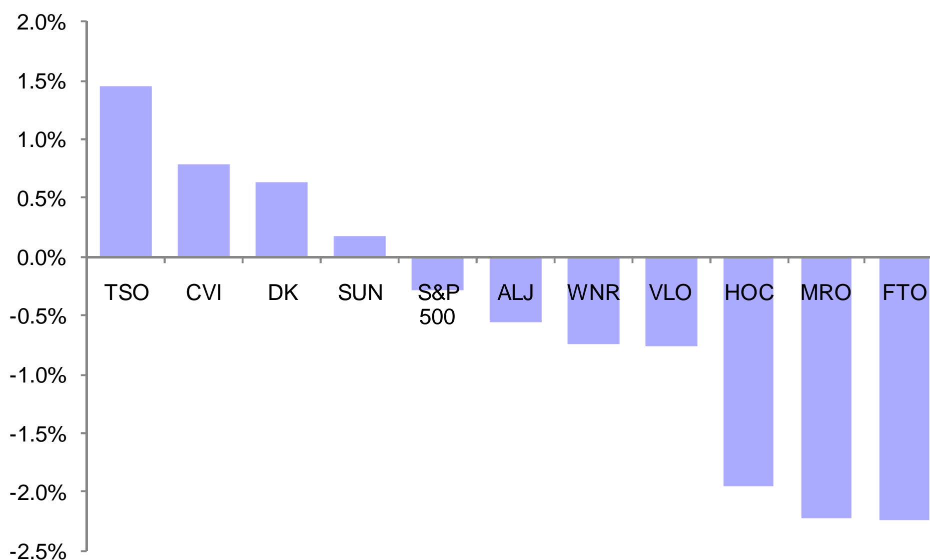
The impact on refiners

Equities hold up well to a withering distillate impact

Product prices usually tend to lag crude price changes and for that reason one would think refiners would be actually positively impacted in the short term. Most of the US independent refiners use LIFO accounting, and a decline in crude prices would mean lower cost of products sold, almost immediately reflected in the financial statements. However, gasoline and distillate markets "read through" the ultimate aim of reducing prices to the consumer and quickly priced in bigger declines than the crude markets. Despite this, we keep our positive stance on the refiners due to our view that the reduction in gasoline prices prevents demand destruction by keeping gas prices below $4/gallon (we have shown that the negative correlation between gasoline demand and gas prices increases at $3.75-4.00) and may stimulate consumption. US Mid Con margins, despite the sharp daily decline, are still at record high levels, indicating a good profitability level for our preferred plays CVI, MRO, and WNR.

US refiners gapped down -3%/-4% at the beginning of the trading session this Thursday with the IEA announcement, but recovered during the day as details of the use of the reserves were released. We were particularly intrigued with the moves of TSO, opposite to what crack spreads would indicate.

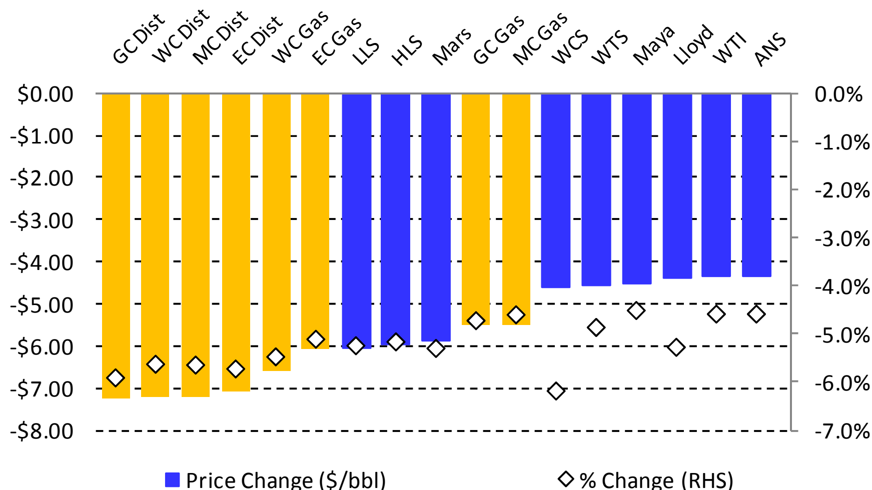
Figure 5: Refiners price performance on 06/23



Source: Deutsche Bank, Bloomberg Finance LP

Crude and product price changes on 06/23 were bearish for the refiners, with crude prices falling less than gasoline and product prices. In particular, ANS (together with WTI) has the lowest decline among the major North American crudes and distillates across de board and West Coast gasoline had the biggest declines. This would negatively impact TSO, given the weaker WC product spreads without the same benefit on the cost side (ANS, ~42% of crude slate).

Figure 6: Crude and product price changes on 06/23



Source: Deutsche Bank, Bloomberg Finance LP

The matrix below shows the relative price changes of the different North American crudes and products. The red cells indicate a relative decline, the white cells a relative increase, e.g. the price change in LLS vs the change in WTI, -$1.70 in red, means that LLS declined more than WTI declined by $1.70. One can see that the top right side of the matrix, where we have products vs crudes, is all red, meaning gasoline and diesel prices fell more than crudes, to the refiners' disadvantage.

Figure 7: Crude and product price changes on 06/23 (in $/bbl)

Chg in less Chg in	WTI	WTS	LLS	HLS	Mars	Maya	ANS	WCS	Lloyd	EC Gas	EC Dist	MC Gas	MC Dist	GC Gas	GC Dist	WC Gas	WC Dist
WTI	0.00	-0.20	-1.70	-1.60	-1.50	-0.16	0.00	-0.25	-0.03	-1.71	-2.72	-1.13	-2.84	-1.13	-2.91	-2.25	-2.84
WTS	0.20	0.00	-1.50	-1.40	-1.30	0.04	0.20	-0.05	0.17	-1.51	-2.52	-0.93	-2.64	-0.93	-2.71	-2.05	-2.64
LLS	1.70	1.50	0.00	0.10	0.20	1.54	1.70	1.45	1.67	-0.01	-1.02	0.57	-1.14	0.57	-1.21	-0.55	-1.14
HLS	1.60	1.40	-0.10	0.00	0.10	1.44	1.60	1.35	1.57	-0.11	-1.12	0.47	-1.24	0.47	-1.31	-0.65	-1.24
Mars	1.50	1.30	-0.20	-0.10	0.00	1.34	1.50	1.25	1.47	-0.21	-1.22	0.37	-1.34	0.37	-1.41	-0.75	-1.34
Maya	0.16	-0.04	-1.54	-1.44	-1.34	0.00	0.16	-0.09	0.13	-1.55	-2.56	-0.97	-2.68	-0.97	-2.75	-2.09	-2.68
ANS	0.00	-0.20	-1.70	-1.60	-1.50	-0.16	0.00	-0.25	-0.03	-1.71	-2.72	-1.13	-2.84	-1.13	-2.91	-2.25	-2.84
WCS	0.25	0.05	-1.45	-1.35	-1.25	0.09	0.25	0.00	0.22	-1.46	-2.47	-0.88	-2.59	-0.88	-2.66	-2.00	-2.59
Lloyd	0.03	-0.17	-1.67	-1.57	-1.47	-0.13	0.03	-0.22	0.00	-1.68	-2.69	-1.10	-2.81	-1.10	-2.88	-2.22	-2.81
EC Gasoline	1.71	1.51	0.01	0.11	0.21	1.55	1.71	1.46	1.68	0.00	-1.01	0.58	-1.13	0.58	-1.21	-0.54	-1.13
EC Distillate	2.72	2.52	1.02	1.12	1.22	2.56	2.72	2.47	2.69	1.01	0.00	1.59	-0.12	1.59	-0.20	0.47	-0.13
MC Gasoline	1.13	0.93	-0.57	-0.47	-0.37	0.97	1.13	0.88	1.10	-0.58	-1.59	0.00	-1.71	0.00	-1.79	-1.13	-1.72
MC Distillate	2.84	2.64	1.14	1.24	1.34	2.68	2.84	2.59	2.81	1.13	0.12	1.71	0.00	1.71	-0.08	0.59	0.00
GC Gasoline	1.13	0.93	-0.57	-0.47	-0.37	0.97	1.13	0.88	1.10	-0.58	-1.59	0.00	-1.71	0.00	-1.79	-1.12	-1.71
GC Distillate	2.91	2.71	1.21	1.31	1.41	2.75	2.91	2.66	2.88	1.21	0.20	1.79	0.08	1.79	0.00	0.66	0.07
WC Gasoline	2.25	2.05	0.55	0.65	0.75	2.09	2.25	2.00	2.22	0.54	-0.47	1.13	-0.59	1.12	-0.66	0.00	-0.59
WC Distillate	2.84	2.64	1.14	1.24	1.34	2.68	2.84	2.59	2.81	1.13	0.13	1.72	0.00	1.71	-0.07	0.59	0.00

Source: Deutsche Bank, Bloomberg Finance LP

The matrix below shows the product spreads. Mid Con diesel still at record high levels (~$30/bbl), only slightly below premium California market.

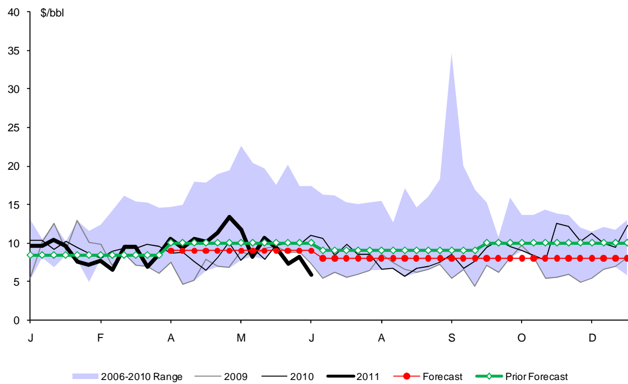
Figure 8: Crude and product spreads on 06/23

Row less Col	WTI	WTS	LLS	HLS	Mars	Maya	ANS	WCS	Lloyd	EC Gas	EC Dist	MC Gas	MC Dist	GC Gas	GC Dist	WC Gas	WC Dist
WTI	0.00	-1.50	18.80	18.75	14.00	4.95	19.00	-20.75	-11.88	22.02	25.80	23.02	29.62	20.02	25.09	23.44	30.07
WTS	1.50	0.00	20.30	20.25	15.50	6.45	20.50	-19.25	-10.38	23.52	27.30	24.52	31.12	21.52	26.59	24.94	31.57
LLS	-18.80	-20.30	0.00	-0.05	-4.80	-13.85	0.20	-39.55	-30.68	3.22	7.00	4.22	10.82	1.22	6.29	4.64	11.27
HLS	-18.75	-20.25	0.05	0.00	-4.75	-13.80	0.25	-39.50	-30.63	3.27	7.05	4.27	10.87	1.27	6.34	4.69	11.32
Mars	-14.00	-15.50	4.80	4.75	0.00	-9.05	5.00	-34.75	-25.88	8.02	11.80	9.02	15.62	6.02	11.09	9.44	16.07
Maya	-4.95	-6.45	13.85	13.80	9.05	0.00	14.05	-25.70	-16.83	17.07	20.85	18.07	24.67	15.07	20.14	18.49	25.12
ANS	-19.00	-20.50	-0.20	-0.25	-5.00	-14.05	0.00	-39.75	-30.88	3.02	6.80	4.02	10.62	1.02	6.09	4.44	11.07
WCS	20.75	19.25	39.55	39.50	34.75	25.70	39.75	0.00	8.87	42.77	46.55	43.77	50.37	40.77	45.84	44.19	50.82
Lloyd	11.88	10.38	30.68	30.63	25.88	16.83	30.88	-8.87	0.00	33.90	37.68	34.90	41.50	31.90	36.97	35.32	41.95
EC Gasoline	-22.02	-23.52	-3.22	-3.27	-8.02	-17.07	-3.02	-42.77	-33.90	0.00	3.78	1.00	7.60	-1.99	3.07	1.42	8.06
EC Distillate	-25.80	-27.30	-7.00	-7.05	-11.80	-20.85	-6.80	-46.55	-37.68	-3.78	0.00	-2.78	3.81	-5.78	-0.71	-2.36	4.27
MC Gasoline	-23.02	-24.52	-4.22	-4.27	-9.02	-18.07	-4.02	-43.77	-34.90	-1.00	2.78	0.00	6.60	-2.99	2.07	0.42	7.06
MC Distillate	-29.62	-31.12	-10.82	-10.87	-15.62	-24.67	-10.62	-50.37	-41.50	-7.60	-3.81	-6.60	0.00	-9.59	-4.53	-6.18	0.46
GC Gasoline	-20.02	-21.52	-1.22	-1.27	-6.02	-15.07	-1.02	-40.77	-31.90	1.99	5.78	2.99	9.59	0.00	5.07	3.41	10.05
GC Distillate	-25.09	-26.59	-6.29	-6.34	-11.09	-20.14	-6.09	-45.84	-36.97	-3.07	0.71	-2.07	4.53	-5.07	0.00	-1.65	4.99
WC Gasoline	-23.44	-24.94	-4.64	-4.69	-9.44	-18.49	-4.44	-44.19	-35.32	-1.42	2.36	-0.42	6.18	-3.41	1.65	0.00	6.64
WC Distillate	-30.07	-31.57	-11.27	-11.32	-16.07	-25.12	-11.07	-50.82	-41.95	-8.06	-4.27	-7.06	-0.46	-10.05	-4.99	-6.64	0.00

Source: Deutsche Bank, Bloomberg Finance LP

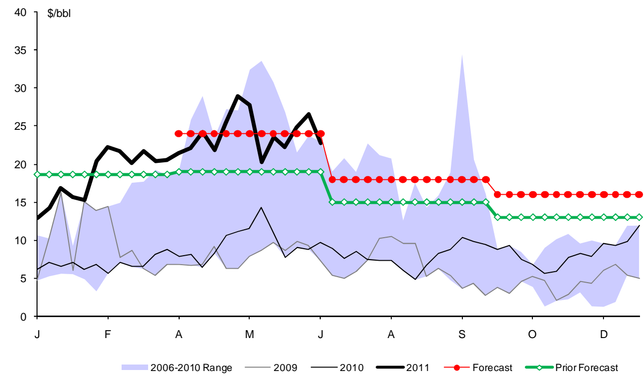
Illustrated against recent history, it should be highlighted that a sharp down move came from record high levels, and leave overall margins at excellent levels in our favoured markets.

Figure 9: East Coast 211 Margin



Source: Deutsche Bank, Bloomberg Finance LP

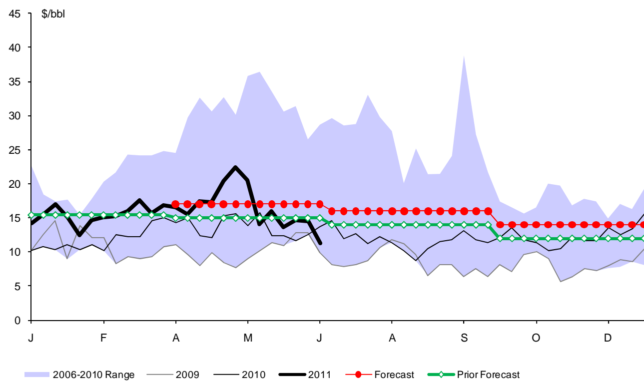
Figure 10: Gulf Coast 321 Margin



Source: Deutsche Bank, Bloomberg Finance LP

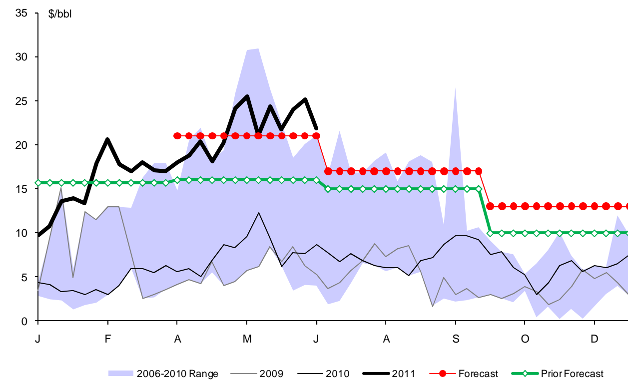
East Coast hurt, but Gulf Coast (simple) and Mid Con margins still at or above historical highs.

Figure 11: Gulf Coast 321 Complex Margin



Source: Deutsche Bank, Bloomberg Finance LP

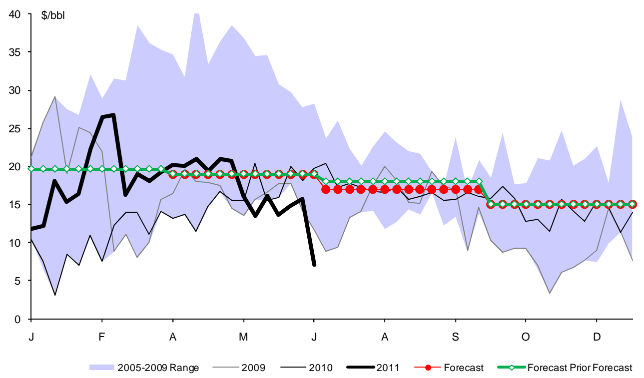
Figure 12: Mid Con 6321



Source: Deutsche Bank, Bloomberg Finance LP

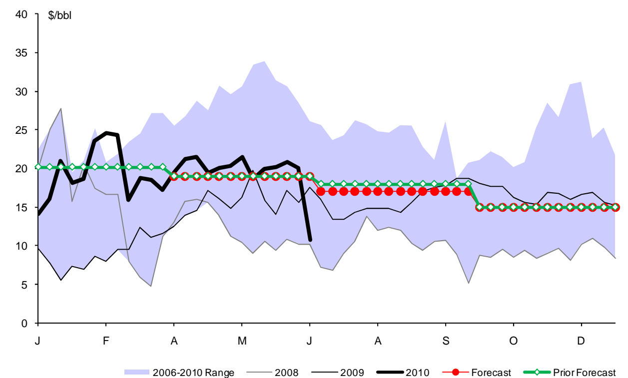
West Coast margins tanked, below 5-year average in California and at the bottom of historical range in the Pacific Northwest, despite the relatively small change in ANS.

Figure 13: California 532 Margin



Source: Deutsche Bank, Bloomberg Finance LP

Figure 14: PNW 5311 Margin



Source: Deutsche Bank, Bloomberg Finance LP

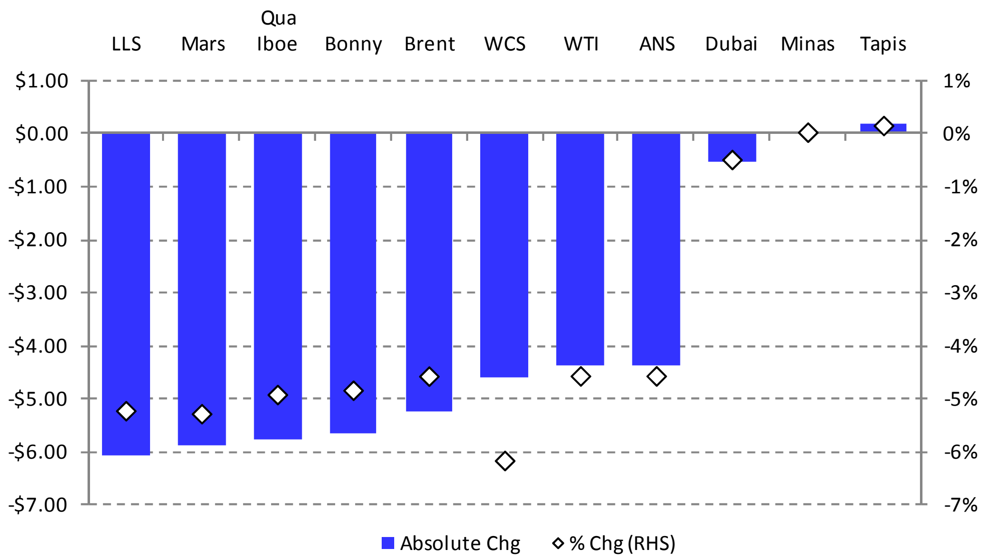
Given the horrendous move in California margins, we are surprised by the positive price action in Tesoro, especially in a down market tape.

Crude Market Dynamics

Price action is logical, Gulf Coast crushed, US vs Asia crushed

The price action in crude markets and differentials was more or less logical, with the surprise announcement of light sweet barrels being released on the US Gulf Coast (location and quality of the US SPR) LLS crude prices fell by far the most in absolute terms, and all North American grades got hammered.

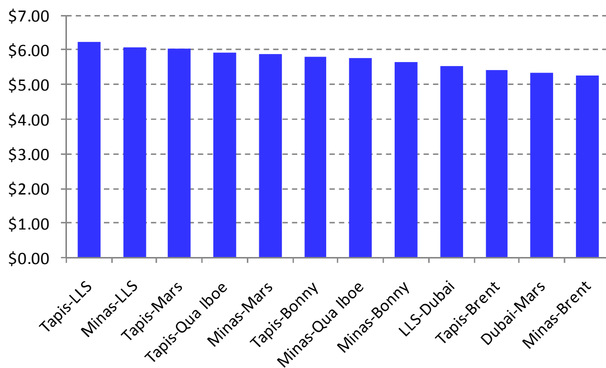
Figure 15: Crude Price Changes (6/22 – 6/23)



Source: Deutsche Bank, Bloomberg Finance LP

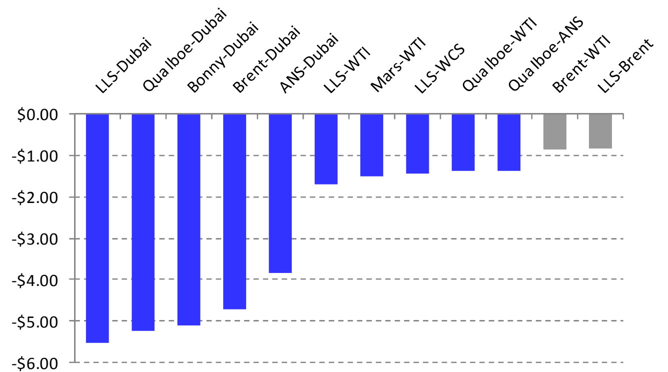
Again, across the board, Asian crudes held up while US crudes went down. At face value the biggest gainer here is Sunoco, with West African crude collapsing relative.

Figure 16: Top 12 Differentials* that widened the most
more expensive crude – less expensive crude



Source: Deutsche Bank, Bloomberg Finance LP
**more expensive crude – less expensive crude*

Figure 17: Top 10 Differentials * that narrowed the most, & Brent WTI & LLS-Brent



Source: Deutsche Bank, Bloomberg Finance LP
**more expensive crude – less expensive crude*

Figure 18: Change in Crude Differentials, 6/22 vs. 6/23 *(showing more expensive crude – less expensive crude)*

	WTI	Brent	LLS	Mars	WCS	ANS	Dubai	Minas	Tapis	Qua Iboe	Bonny
Less											
WTI		-0.87	-1.70	-1.50		0.00	3.83	4.38	4.53	-1.39	-1.28
Brent			-0.83			0.87		5.25	5.40	-0.52	-0.41
LLS						1.70	5.53	6.08	6.23	0.31	0.42
Mars		0.63	-0.20			1.50	5.33	5.88	6.03	0.11	0.22
WCS	0.25	-0.62	-1.45	-1.25		0.25	4.08	4.63	4.78	-1.14	-1.03
ANS								4.38	4.53	-1.39	-1.28
Dubai		-4.70	-5.53			-3.83		0.55	0.70	-5.22	-5.11
Minas									0.15		
Tapis											
Qua Iboe								5.77	5.92		
Bonny								5.66	5.81	-0.11	

Source: Deutsche Bank, Bloomberg Finance LP
**more expensive crude – less expensive crude*

Figure 19: Calculation Matrix behind Differential* Changes above

6/22/2011		95.01	113.87	115.51	110.51	74.51	114.01	106.03	117.00	119.74	116.36	116.06
		WTI	**Brent**	**LLS**	**Mars**	**WCS**	**ANS**	**Dubai**	**Minas**	**Tapis**	**Qua Iboe**	**Bonny**
	Less											
95.01	**WTI**	-	18.86	20.50	15.50	-20.50	19.00	11.02	21.99	24.73	21.35	21.05
113.87	**Brent**	-18.86	-	1.64	-3.36	-39.36	0.14	-7.84	3.13	5.87	2.49	2.19
115.51	**LLS**	-20.50	-1.64	-	-5.00	-41.00	-1.50	-9.48	1.49	4.23	0.85	0.55
110.51	**Mars**	-15.50	3.36	5.00	-	-36.00	3.50	-4.48	6.49	9.23	5.85	5.55
74.51	**WCS**	20.50	39.36	41.00	36.00	-	39.50	31.52	42.49	45.23	41.85	41.55
114.01	**ANS**	-19.00	-0.14	1.50	-3.50	-39.50	-	-7.98	2.99	5.73	2.35	2.05
106.03	**Dubai**	-11.02	7.84	9.48	4.48	-31.52	7.98	-	10.97	13.71	10.33	10.03
117.00	**Minas**	-21.99	-3.13	-1.49	-6.49	-42.49	-2.99	-10.97	-	2.74	-0.64	-0.94
119.74	**Tapis**	-24.73	-5.87	-4.23	-9.23	-45.23	-5.73	-13.71	-2.74	-	-3.38	-3.68
116.36	**Qua Iboe**	-21.35	-2.49	-0.85	-5.85	-41.85	-2.35	-10.33	0.64	3.38	-	-0.30
116.06	**Bonny**	-21.05	-2.19	-0.55	-5.55	-41.55	-2.05	-10.03	0.94	3.68	0.30	-
6/23/2011		90.65	108.64	109.45	104.65	69.90	109.65	105.50	117.02	119.91	110.61	110.42
		WTI	**Brent**	**LLS**	**Mars**	**WCS**	**ANS**	**Dubai**	**Minas**	**Tapis**	**Qua Iboe**	**Bonny**
	Less											
90.65	**WTI**	-	17.99	18.80	14.00	-20.75	19.00	14.85	26.37	29.26	19.96	19.77
108.64	**Brent**	-17.99	-	0.81	-3.99	-38.74	1.01	-3.14	8.38	11.27	1.97	1.78
109.45	**LLS**	-18.80	-0.81	-	-4.80	-39.55	0.20	-3.95	7.57	10.46	1.16	0.97
104.65	**Mars**	-14.00	3.99	4.80	-	-34.75	5.00	0.85	12.37	15.26	5.96	5.77
69.90	**WCS**	20.75	38.74	39.55	34.75	-	39.75	35.60	47.12	50.01	40.71	40.52
109.65	**ANS**	-19.00	-1.01	-0.20	-5.00	-39.75	-	-4.15	7.37	10.26	0.96	0.77
105.50	**Dubai**	-14.85	3.14	3.95	-0.85	-35.60	4.15	-	11.52	14.41	5.11	4.92
117.02	**Minas**	-26.37	-8.38	-7.57	-12.37	-47.12	-7.37	-11.52	-	2.89	-6.41	-6.60
119.91	**Tapis**	-29.26	-11.27	-10.46	-15.26	-50.01	-10.26	-14.41	-2.89	-	-9.30	-9.49
110.61	**Qua Iboe**	-19.96	-1.97	-1.16	-5.96	-40.71	-0.96	-5.11	6.41	9.30	-	-0.19
110.42	**Bonny**	-19.77	-1.78	-0.97	-5.77	-40.52	-0.77	-4.92	6.60	9.49	0.19	-

Source: Deutsche Bank, Bloomberg Finance LP
**more expensive crude – less expensive crude*

Figure 20: Differences in Crude Price Delta (6/22 vs. 6/23)

Chg in / *less Chg in*	WTI	Brent	LLS	Mars	WCS	ANS	Dubai	Minas	Tapis	Qua Iboe	Bonny
WTI											
Brent	0.87										
LLS	1.70	0.83									
Mars	1.50	0.63	-0.20								
WCS	0.25	-0.62	-1.45	-1.25							
ANS	0.00	-0.87	-1.70	-1.50	-0.25						
Dubai	-3.83	-4.70	-5.53	-5.33	-4.08	-3.83					
Minas	-4.38	-5.25	-6.08	-5.88	-4.63	-4.38	-0.55				
Tapis	-4.53	-5.40	-6.23	-6.03	-4.78	-4.53	-0.70	-0.15			
Qua Iboe	1.39	0.52	-0.31	-0.11	1.14	1.39	5.22	5.77	5.92		
Bonny	1.28	0.41	-0.42	-0.22	1.03	1.28	5.11	5.66	5.81	-0.11	

Source: Deutsche Bank, Bloomberg Finance LP

Overall, we hold our view that Mid Con refining will be strong and oil price-levered plays are the better place to be. As the governments struggle with oil markets, so they raise the risk of being unable to manage markets that they themselves have distorted.

Appendix FAQ (source IEA)

How many times has the IEA undertaken such a "collective action"? When was the last time?

On a global scale, this is the third time IEA member-country stocks have been used. IEA member countries released oil stocks in 2005, after Hurricane Katrina damaged offshore oil rigs, pipelines and oil and gas refineries in the Gulf of Mexico. The only other occasion IEA member countries mandated a stock release was at the time of Iraq's invasion of Kuwait in 1990/1991.

How exactly will stocks be made available to the market in each of your member countries? What mechanism is used?

Member countries have different stockholding systems. Some have large reserves of public stocks, like the US, Japan and Germany, which can be offered to the market through loans or sales. Other countries have sizeable stockholding obligations on commercial oil industry operators which can be lowered in order to make these volumes freely available to the market. In some instances, a combination of public stocks and reduced obligation on industry is used, and it would be up to each country to decide how make additional oil available to the market. Finally, stocks can be in the form of crude oil of various grades, products or a mixture of the two.

How much time will it take for these stocks to become available?

Oil supplies from IEA member countries should begin hitting the market around the end of next week.

How much oil will each country release? Will each country release the same proportional amount, or will some countries do more? How is that decision made?

Country shares are based on their proportionate share of total IEA oil consumption – so larger oil-consuming countries obviously have a bigger share in the overall release. In this case, all IEA countries holding strategic stocks and representing more than 1% of IEA final oil consumption are participating. It is expected that North America will release 50 percent of the total, with European countries releasing some 30 percent and Asian countries providing the remaining 20 percent.

The IEA will produce a tally once it has a clear indication of the types of oil that each country will make available.

Has the IEA consulted with OPEC or Saudi Arabia on this decision? Would this IEA action not discourage Saudi Arabia and other willing OPEC members from increasing oil production?

The IEA and its member countries have been in close contact with key oil producing countries, and in particularly with Saudi Arabia, which holds the lion's share of OPEC's spare capacity. The IEA welcomes the announcement made by Saudi Arabia that it intends to make incremental oil available to the market. However it will take time for these incremental barrels to be produced and shipped to consuming markets; the use of IEA strategic stocks now will help bridge the gap until these new supplies are available.

Producers and consumers have a common interest in stabilising oil markets. This point has been highlighted many times before, and is a reason for the IEA's close liaison with key oil-producing countries at all times.

I thought the IEA only does this for supply disruptions in excess of 7%. The 1.5 million-barrels-a-day disruption from Libya doesn't seem all that much, given that global demand is around 88 mb/d, so why go to all the trouble?

As far back as 1984, IEA member countries understood that a disruption of a much smaller scale than 7% could cause significant economic damage, and thus they adopted more flexible response measures. The two previous emergency IEA actions, in 1991 and 2005, each accounted for less than 7% of world demand. Particularly in a tightening market such as the one we see currently, a relatively small disruption can have a significant impact on the market.

If the disruption from Libya is 1.5 million barrels per day, why are the IEA member countries releasing 2 million barrels per day?

By the end of May the Libyan crisis had removed 132 million barrels of crude from the market. Commercial stocks in the OECD countries have tightened as a result. Because crude demand peaks during the summer season in the Northern Hemisphere, we estimate that preventing further market tightening in the third quarter will require 2 million barrels per day of additional supply. Our action aims to provide market liquidity until incremental production comes to the market.

Libyan supplies have been off the market since February. Why are you only doing this now?

The IEA is prepared to act when there is a significant supply disruption or an imminent threat thereof. Since the Libyan crisis began, the market has focused on the potential for further tightening in both OECD industry stocks and OPEC spare capacity. The onset of the Libyan crisis fortuitously coincided with the peak of the European refinery outages, primarily linked to seasonal maintenance work, and thus lower demand for crude oil. Now, heading into the "driving season" in the Northern Hemisphere, demand for crude will rise as refiners seek to replenish product stocks ahead of rising transport fuel demand. This seasonal increase in demand, combined with OPEC's announcement at their 8 June meeting not to increase production to fill the gap with the necessary additional supplies, represents an imminent risk, which is why the IEA has chosen to take decisive action now.

Are IEA countries not putting at risk their capacity to react to more serious oil disruptions that may happen in the coming months considering geopolitical uncertainties in MENA countries?

No; IEA countries benefit from a very large safety net with their stocks: Total IEA stocks amount to more than 4 billion barrels, of which 1.6 billion are public stocks held exclusively for emergency purposes. This is equivalent to 146 days of net imports. So even after this 60-million-barrel collective action, all participating countries' stocks will remain above 90 days of their net oil imports.

Several analysts say this is only likely to have a short-term effect on the market, and that prices will be higher in a month's time. What's your response? Will you extend this by 30 days? How will you decide?

Markets move based on today's fundamentals and expectations of future supply and demand. The coming months, as we head into the driving season, would likely see the impact of the Libyan crisis felt most keenly; this is why the IEA is acting now. Some producer countries have announced their intentions to raise production, but it takes time for

these incremental barrels to be produced and shipped to consuming markets. The use of IEA strategic stocks now will help bridge the gap until these new supplies are available. The IEA will continue to monitor the situation. If supply remains disrupted and markets remain tight in the future, the IEA does not exclude another decision to make additional supplies available to the market.

Isn't the IEA effectively doing this to counter high prices – and in that sense isn't this fundamentally different from a traditional release in response to a supply disruption? Doesn't this therefore set a bad precedent, by making the IEA a market manipulator?

The IEA is prepared to act when there is a significant supply disruption or an imminent threat thereof. Since the Libyan crisis began, the market has focused on the potential for further tightening in both OECD industry stocks and OPEC spare capacity, and we are now heading into the driving season in the Northern Hemisphere, which will witness an increase in demand for motor fuels. Refiners' demand for crude oil is also rising, as plants typically come out of seasonal maintenance and begin ramping up runs to meet peak demand. This action is not about price but rather about ensuring an adequately supplied market to protect the world economy from unnecessary damage when it is in a fragile state.

Appendix 1

Important Disclosures

Additional information available upon request

For disclosures pertaining to recommendations or estimates made on a security mentioned in this report, please see the most recently published company report or visit our global disclosure look-up page on our website at http://gm.db.com/ger/disclosure/DisclosureDirectory.eqsr.

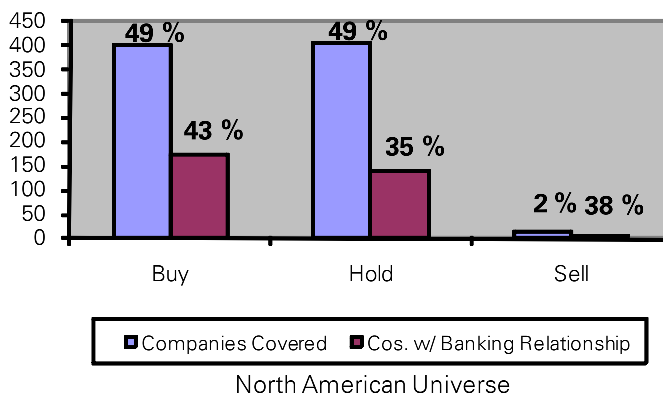
Analyst Certification

The views expressed in this report accurately reflect the personal views of the undersigned lead analyst about the subject issuers and the securities of those issuers. In addition, the undersigned lead analyst has not and will not receive any compensation for providing a specific recommendation or view in this report. Paul Sankey

Equity rating key

Buy: Based on a current 12- month view of total share-holder return (TSR = percentage change in share price from current price to projected target price plus projected dividend yield) , we recommend that investors buy the stock.
Sell: Based on a current 12-month view of total share-holder return, we recommend that investors sell the stock
Hold: We take a neutral view on the stock 12-months out and, based on this time horizon, do not recommend either a Buy or Sell.
Notes:
1. Newly issued research recommendations and target prices always supersede previously published research.
2. Ratings definitions prior to 27 January, 2007 were:
  Buy: Expected total return (including dividends) of 10% or more over a 12-month period
  Hold: Expected total return (including dividends) between -10% and 10% over a 12-month period
  Sell: Expected total return (including dividends) of -10% or worse over a 12-month period

Equity rating dispersion and banking relationships



North American Universe

Regulatory Disclosures

1. Important Additional Conflict Disclosures

Aside from within this report, important conflict disclosures can also be found at https://gm.db.com/equities under the "Disclosures Lookup" and "Legal" tabs. Investors are strongly encouraged to review this information before investing.

2. Short-Term Trade Ideas

Deutsche Bank equity research analysts sometimes have shorter-term trade ideas (known as SOLAR ideas) that are consistent or inconsistent with Deutsche Bank's existing longer term ratings. These trade ideas can be found at the SOLAR link at http://gm.db.com.

3. Country-Specific Disclosures

Australia: This research, and any access to it, is intended only for "wholesale clients" within the meaning of the Australian Corporations Act.

Brazil: The views expressed above accurately reflect personal views of the authors about the subject company(ies) and its(their) securities, including in relation to Deutsche Bank. The compensation of the equity research analyst(s) is indirectly affected by revenues deriving from the business and financial transactions of Deutsche Bank.

EU countries: Disclosures relating to our obligations under MiFiD can be found at http://globalmarkets.db.com/riskdisclosures.

Japan: Disclosures under the Financial Instruments and Exchange Law: Company name - Deutsche Securities Inc. Registration number - Registered as a financial instruments dealer by the Head of the Kanto Local Finance Bureau (Kinsho) No. 117. Member of associations: JSDA, The Financial Futures Association of Japan. Commissions and risks involved in stock transactions - for stock transactions, we charge stock commissions and consumption tax by multiplying the transaction amount by the commission rate agreed with each customer. Stock transactions can lead to losses as a result of share price fluctuations and other factors. Transactions in foreign stocks can lead to additional losses stemming from foreign exchange fluctuations. "Moody's", "Standard & Poor's", and "Fitch" mentioned in this report are not registered credit rating agencies in Japan unless "Japan" is specifically designated in the name of the entity.

New Zealand: This research is not intended for, and should not be given to, "members of the public" within the meaning of the New Zealand Securities Market Act 1988.

Russia: This information, interpretation and opinions submitted herein are not in the context of, and do not constitute, any appraisal or evaluation activity requiring a license in the Russian Federation.

Deutsche Bank Securities Inc.

North American locations

Deutsche Bank Securities Inc.
60 Wall Street
New York, NY 10005
Tel: (212) 250 2500

Deutsche Bank Securities Inc.
One International Place
12th Floor
Boston, MA 02110
United States of America
Tel: (1) 617 217 6100

Deutsche Bank Securities Inc.
222 South Riverside Plaza
30th Floor
Chicago, IL 60606
Tel: (312) 537-3758

Deutsche Bank Securities Inc.
3033 East First Avenue
Suite 303, Third Floor
Denver, CO 80206
Tel: (303) 394 6800

Deutsche Bank Securities Inc.
1735 Market Street
24th Floor
Philadelphia, PA 19103
Tel: (215) 854 1546

Deutsche Bank Securities Inc.
101 California Street
46th Floor
San Francisco, CA 94111
Tel: (415) 617 2800

Deutsche Bank Securities Inc.
700 Louisiana Street
Houston, TX 77002
Tel: (832) 239-4600

International locations

Deutsche Bank Securities Inc.
60 Wall Street
New York, NY 10005
United States of America
Tel: (1) 212 250 2500

Deutsche Bank AG London
1 Great Winchester Street
London EC2N 2EQ
United Kingdom
Tel: (44) 20 7545 8000

Deutsche Bank AG
Große Gallusstraße 10-14
60272 Frankfurt am Main
Germany
Tel: (49) 69 910 00

Deutsche Bank AG
Deutsche Bank Place
Level 16
Corner of Hunter & Phillip Streets
Sydney, NSW 2000
Australia
Tel: (61) 2 8258 1234

Deutsche Bank AG
Filiale Hongkong
International Commerce Centre,
1 Austin Road West,Kowloon,
Hong Kong
Tel: (852) 2203 8888

Deutsche Securities Inc.
2-11-1 Nagatacho
Sanno Park Tower
Chiyoda-ku, Tokyo 100-6171
Japan
Tel: (81) 3 5156 6770

Global Disclaimer

The information and opinions in this report were prepared by Deutsche Bank AG or one of its affiliates (collectively "Deutsche Bank"). The information herein is believed to be reliable and has been obtained from public sources believed to be reliable. Deutsche Bank makes no representation as to the accuracy or completeness of such information.

Deutsche Bank may engage in securities transactions, on a proprietary basis or otherwise, in a manner inconsistent with the view taken in this research report. In addition, others within Deutsche Bank, including strategists and sales staff, may take a view that is inconsistent with that taken in this research report.

Opinions, estimates and projections in this report constitute the current judgement of the author as of the date of this report. They do not necessarily reflect the opinions of Deutsche Bank and are subject to change without notice. Deutsche Bank has no obligation to update, modify or amend this report or to otherwise notify a recipient thereof in the event that any opinion, forecast or estimate set forth herein, changes or subsequently becomes inaccurate. Prices and availability of financial instruments are subject to change without notice. This report is provided for informational purposes only. It is not an offer or a solicitation of an offer to buy or sell any financial instruments or to participate in any particular trading strategy. Target prices are inherently imprecise and a product of the analyst judgement.

As a result of Deutsche Bank's March 2010 acquisition of BHF-Bank AG, a security may be covered by more than one analyst within the Deutsche Bank group. Each of these analysts may use differing methodologies to value the security; as a result, the recommendations may differ and the price targets and estimates of each may vary widely.

In August 2009, Deutsche Bank instituted a new policy whereby analysts may choose not to set or maintain a target price of certain issuers under coverage with a Hold rating. In particular, this will typically occur for "Hold" rated stocks having a market cap smaller than most other companies in its sector or region. We believe that such policy will allow us to make best use of our resources. Please visit our website at http://gm.db.com to determine the target price of any stock.

The financial instruments discussed in this report may not be suitable for all investors and investors must make their own informed investment decisions. Stock transactions can lead to losses as a result of price fluctuations and other factors. If a financial instrument is denominated in a currency other than an investor's currency, a change in exchange rates may adversely affect the investment. Past performance is not necessarily indicative of future results. Deutsche Bank may with respect to securities covered by this report, sell to or buy from customers on a principal basis, and consider this report in deciding to trade on a proprietary basis.

Unless governing law provides otherwise, all transactions should be executed through the Deutsche Bank entity in the investor's home jurisdiction. In the U.S. this report is approved and/or distributed by Deutsche Bank Securities Inc., a member of the NYSE, the NASD, NFA and SIPC. In Germany this report is approved and/or communicated by Deutsche Bank AG Frankfurt authorized by the BaFin. In the United Kingdom this report is approved and/or communicated by Deutsche Bank AG London, a member of the London Stock Exchange and regulated by the Financial Services Authority for the conduct of investment business in the UK and authorized by the BaFin. This report is distributed in Hong Kong by Deutsche Bank AG, Hong Kong Branch, in Korea by Deutsche Securities Korea Co. This report is distributed in Singapore by Deutsche Bank AG, Singapore Branch, and recipients in Singapore of this report are to contact Deutsche Bank AG, Singapore Branch in respect of any matters arising from, or in connection with, this report. Where this report is issued or promulgated in Singapore to a person who is not an accredited investor, expert investor or institutional investor (as defined in the applicable Singapore laws and regulations), Deutsche Bank AG, Singapore Branch accepts legal responsibility to such person for the contents of this report. In Japan this report is approved and/or distributed by Deutsche Securities Inc. The information contained in this report does not constitute the provision of investment advice. In Australia, retail clients should obtain a copy of a Product Disclosure Statement (PDS) relating to any financial product referred to in this report and consider the PDS before making any decision about whether to acquire the product. Deutsche Bank AG Johannesburg is incorporated in the Federal Republic of Germany (Branch Register Number in South Africa: 1998/003298/10). Additional information relative to securities, other financial products or issuers discussed in this report is available upon request. This report may not be reproduced, distributed or published by any person for any purpose without Deutsche Bank's prior written consent. Please cite source when quoting.

Copyright © 2011 Deutsche Bank AG