

Still bearish

We continue to believe that benchmark light oil prices will trend downward over the balance of the year. The OECD economic backdrop is clearly deteriorating partly under the weight of high oil prices, China and other developing countries are increasingly battling inflation and Saudi output is being stepped up. In our view, the oil supply/demand balance will be nothing like as tight in Q3 and Q4 as currently assumed by the bullish consensus.

Supply/demand balance

Consensus forecasts call for global oil demand to increase between Q2 and Q3 by 2mmb/d or so driven by rising power related usage in China, Japan and the Middle East. However, we believe that the forecasts fail to fully allow for the weak demand backdrop in many other parts of the world. Furthermore, the supply position is far from dire. Importantly, non-OPEC production is developing more positively in 2011 than many expected, OECD inventories are still above the five-year average and OPEC production is regaining upward momentum.

Crude oil prices

Benchmark light crude prices came under heavy pressure in early May with falls of over \$15/barrel in key grades. This was driven by evidence of a significant economic slowdown globally along with growing signs of softening demand in the OECD world. Between early May and early June WTI trended broadly flat, but Brent regained some lost ground. Reflecting growing concerns about the world economy, benchmark crudes came under renewed downward pressure in mid June with declines in three days of \$6-7/barrel. A price surge in Q3 and Q4, to perhaps more than \$130/ barrel for Brent and \$115/barrel for WTI, as suggested in some quarters, could portend a double-dip recession in the US and maybe elsewhere. The upshot would be a collapse in prices.

Brent-WTI spread

The Brent-WTI spread was around \$13/barrel in April and May but has subsequently widened substantially and hit an unprecedented \$22/barrel on 14 June. The underlying issues concerning the widening Brent premium relate to temporarily constrained supplies and buoyant demand internationally for this grade, plus the WTI inventory overhang at Cushing, Oklahoma. Recently the former has appeared the more influential of the two factors. A sizeable Brent premium is likely to persist over the coming months, although a narrowing from recent exceptionally high levels would not be surprising. This would apply particularly in the event of an end to the civil war in Libya or if the business slowdown gathers momentum in China.

21 June 2011

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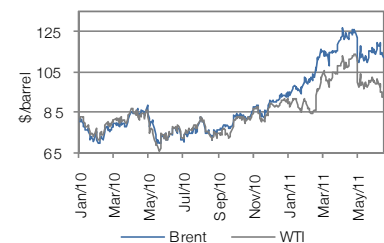
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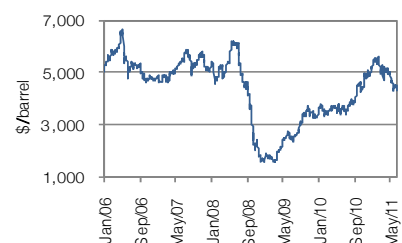
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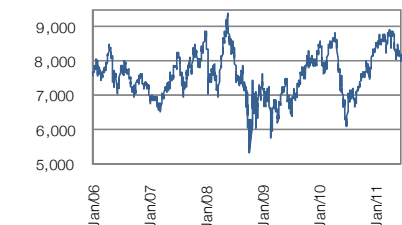
WTI vs Brent



AIM Oil & Gas Index



FTSE 350 Oil & Gas Index



Price trends

	WTI \$/barrel	Brent \$/barrel	Henry Hub \$/mmbtu
2007	72.2	72.7	6.96
2008	99.9	97.7	8.89
2009	62.0	62.0	3.94
2010	79.5	79.7	4.37
2011e	95.0	107.2	4.28
2012e	89.0	101.0	4.60

Note: Prices are yearly averages

Crude oil market dynamics

Price overview: Prices under pressure in mid June

Benchmark light crude prices came under heavy pressure in early May 2011 which broke the strong upward trend apparent since the third quarter of 2010. Prices then recovered moderately through the second half of May but remained significantly below the 30-month highs of April. Interestingly, May's dip in prices occurred despite the virtual loss of Libyan exports following the outbreak of civil war in the country. Maybe the oil market is not quite as tight as many observers believe.

Heavy downward pressure on oil prices in early May was part of a broader sell-off in commodities and reflected a variety of factors. As far as oil was concerned, the key factors were growing statistical evidence of a slowdown in the world economy, a strengthening US dollar, albeit fleeting, and intensifying fears that historically high oil product prices were beginning to depress petroleum demand and indeed economic activity. On the statistical front, evidence of a business slowdown has been widespread regionally and has included the US, Europe and China. In addition, interest rates in a number of developing economies, notably Brazil, China and India, have been hiked in response to growing inflationary pressure. The imminent termination of the US quantitative easing programme has also, arguably, attracted increasing market attention.

Brent, the key international light crude benchmark, ended April at \$126.1/barrel, only marginally under the high for the month of \$126.7/barrel reached on 8 April. Through the first five days of May Brent plunged a hefty \$16/barrel or 13% to \$109.9/barrel. This was around a two-month low. Over the balance of May Brent trended higher driven at least in part by a reversal of the earlier dollar strength and closed the month at \$116.7/barrel. For May Brent averaged \$114.5/barrel, down \$8.5/barrel from April.

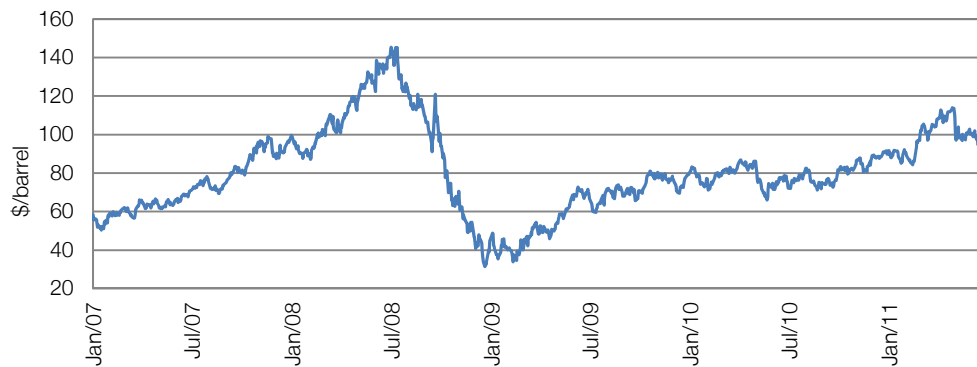
During the first two weeks of June light crude prices essentially ebbed and flowed based on economic data out of the US, Europe and China and speculation on how OPEC production is going to unfold. After softening in early June Brent firmed towards mid month hitting a 30 day high of \$119.5/barrel on 14 June. A sharp fall of \$5/barrel on 15 June left Brent down \$12/barrel from end April, but still up \$20/barrel from end 2010. Compared with a year earlier Brent was a hefty \$38/barrel or 50% higher.

Continuing the pattern over much of the past year the trend in WTI, the US light crude benchmark, has turned in a considerably weaker performance than Brent of late. After hitting a 2011 high on 29 April of \$113.9/barrel, WTI declined \$17/barrel or 15% over the subsequent 12 working days. A firming tendency over the balance of the month took WTI to \$102.7/barrel on 31 May. The average for the month was \$101.3/barrel, down \$9/barrel from April. During the first half of June WTI traded on a closing day basis between \$97/barrel and \$102/barrel, but on 15 June dropped outside the trading range and closed at \$95/barrel. This was \$19/barrel or 17% under the end April high. Compared with a year previously WTI on 15 June was up \$18/barrel or 23%.

Real prices

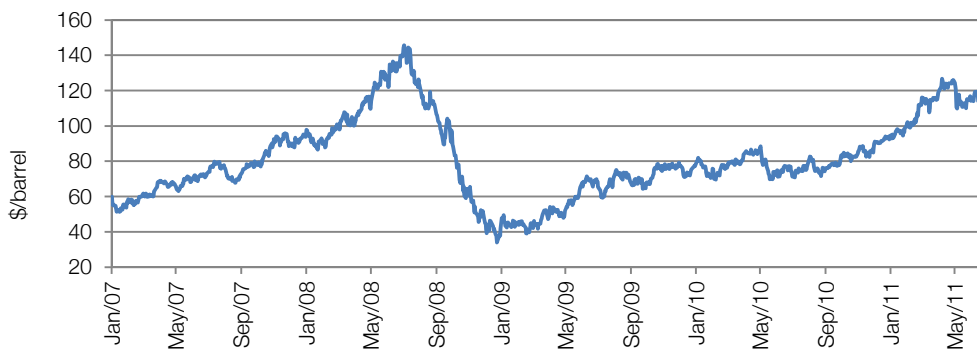
From the perspective of the past 40 years, light crude oil prices in real terms have only been significantly higher than at present for a short period in the second and third quarters of 2008. Adjusted for inflation Brent is currently about 22% below the July 2008 high, while WTI is off 35%. It needs to be remembered that the record prices of 2008 were only sustained for a very short period before the subsequent collapse. Compared with the early 1980s high, current light crude prices are at roughly the same level. It might be argued that due to advances in technology real prices at the levels of 30 years ago are now more sustainable. While there is some truth in this argument, by no means all the capital stock incorporates the latest, cutting edge technology. In practice, current real oil prices are likely to severely constrain economic development.

Exhibit 1: WTI Crude oil price trend

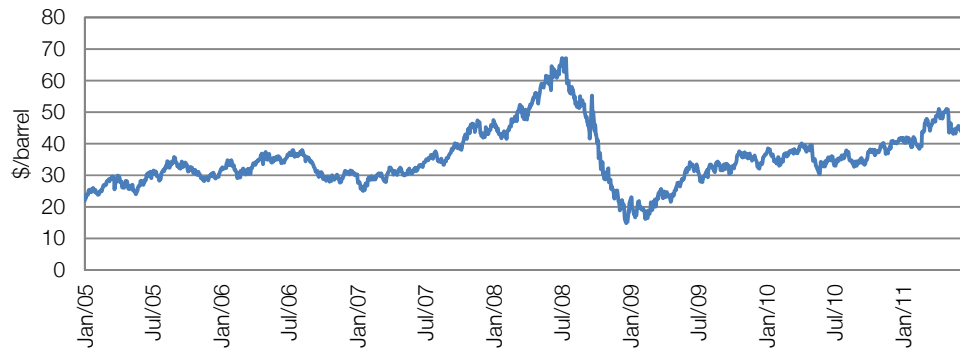


Source: Bloomberg

Exhibit 2: Brent crude oil price trend



Source: Bloomberg

Exhibit 3: WTI inflation adjusted

Source: Bloomberg

Exhibit 4: WTI 2007-11 quarterly prices

\$/barrel	Q1	Q2	Q3	Q4	Average
2007	58.1	65.0	75.2	90.5	72.2
2008	97.9	123.8	118.2	59.1	99.9
2009	43.2	59.7	68.1	76.0	62.0
2010	78.8	77.9	76.1	85.2	79.5
2011	93.9	104.0e	93.0e	89.0e	95.0e

Source: Bloomberg and Edison Investment Research

Exhibit 5: Brent 2007-2011 quarterly prices

\$/barrel	Q1	Q2	Q3	Q4	Average
2007	58.1	68.7	74.9	88.9	72.7
2008	96.5	122.2	115.9	56.2	97.7
2009	45.1	59.4	68.4	75.0	62.0
2010	76.8	78.6	76.4	86.9	79.7
2011	104.9	117.0e	106.0e	101.0e	107.2e

Source: Bloomberg and Edison Investment Research

Light crude spreads

WTI-Brent: WTI discount widens to over \$20/barrel

WTI has continued to trade at a sizeable discount to the similarly specified Brent in recent weeks in contravention of the historical experience. The discount averaged \$13.0/barrel in April and in May was similar at \$13.2/barrel. A marked widening in the discount has occurred so far in June and on June 13 hit an unprecedented \$22/barrel. The persistence of the WTI discount reflects two broad influences. The most important is the build up of inventory to near record levels at the Cushing, Oklahoma tank farm, which significantly is the price settlement point for the NYMEX WTI quote. The inventory build up stems from growing production in Mid-Continent oilfields, notably the Bakken in North Dakota and growing supplies from the Canadian oil sands following the completion in February 2011 of Phase 2 of TransCanada's Keystone pipeline from Hardisty Alberta to Cushing.

Currently, Cushing is connected to Mid-Continent refineries but has no direct high volume pipeline link to those on the Gulf Coast. With the current infrastructure Cushing is, in practice, landlocked. In recent weeks the supply build up at Cushing has been constrained due to two outages on the Keystone pipeline. These have stemmed from small leakages which have necessitated closures for repairs.

The second and arguably more significant reason of late for the persistence and indeed widening of late in the WTI discount relates to WTI's lack of sensitivity to bullish international market influences and heavily constrained supplies of Brent. Bullish international influences relate to the political convulsions and armed rebellions in the Middle East and North Africa (MENA) plus buoyant demand in China and elsewhere in the Far East for premium grade refinery feedstock. Particularly significant of late has been the loss of premium grade Libyan exports following the descent into civil war in the country. As the dominant premium quality international marker crude, Brent has been the key beneficiary of bullish international influences. Providing further support for Brent has been constrained supplies of Brent due to a variety of technical problems in the North Sea. The most significant of these relates to an outage at the Buzzard field, the largest in the UK sector.

WTI looks like trading at a significant discount to Brent for the foreseeable future. The underlying issues remain the build up of production in the US Mid-Continent and the Athabasca oil sands and bullish international demand influences plus tight Brent supplies. There may however be scope for a moderate narrowing of the WTI discount in the second half of 2011 reflecting a possible cessation of hostilities in Libya, a more rapid slowdown in the Far Eastern economies than currently allowed for in consensus forecasts and higher Brent production. After averaging \$11/barrel in the first quarter of 2011 we would expect the WTI-Brent discount to average \$13.5/barrel in the second quarter and possibly around \$12/barrel in the third and fourth quarters.

Conceptually the WTI-Brent discount could be at least partially erased if and when new pipeline connections are made between Cushing and the refinery complexes of Houston and Port Arthur, Texas. The most significant of these is the Keystone XL extension, but other projects are also under consideration. The Keystone extension, plus a shorter pipeline route from Hardisty to Cushing, is presently being reviewed by the US State Department (the State Department is involved because the pipeline from Hardisty crosses an international border). A decision on whether to approve the Keystone XL extension and upgrades is expected in the coming months. An answer in the affirmative would seem obvious given the undoubted economic and security of supply benefits but objections may be raised by environmental groups. In support of Keystone XL it might be mentioned that pipelines constitute the safest, most environmentally secure and lowest cost solution to transporting large quantities of crude over long distances.

Assuming that State Department approval is given soon, TransCanada has indicated that the extension of Keystone XL from Cushing to Port Arthur can be completed by end 2013. Even if this occurs WTI will retain a very definite North American continental bias by virtue of the considerable extra quantities of high quality crude likely to become available in the years ahead. This stems from the anticipated development of more shale oil capacity (near-term the Eagle Ford and Bakken and potentially the Niobrara formations of the Denver and Powder River Basins in Colorado and Wyoming) and increasing supplies from the Athabasca oil sands. Note, the planned new Keystone

pipeline from Hardisty to Cushing is expected to boost availability by 500,000b/d to 600,000b/d, while new shale developments could boost production in the Mid-Continent and Texas by 200,000b/d to 300,000b/d by end 2013. By 2015 the incremental volume from shale sources could be over 1mmb/d. We therefore continue to believe that a WTI discount to Brent of several dollars a barrel may well be a long term phenomenon. Increasing North American supplies will effectively displace imports along the Gulf Coast.

Exhibit 6: Recent benchmark light crude prices

Note: All prices are averages other than where indicated

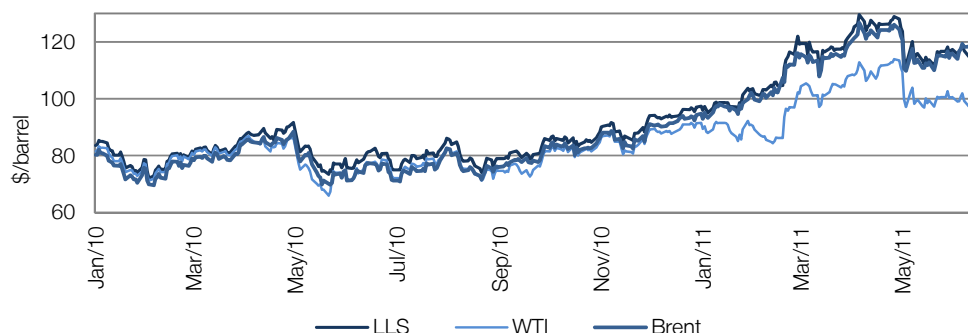
\$/barrel	2010			2011					
	Oct	Nov	Dec	Jan	Feb	Mar	Apl	May	15 Jun
WTI	81.9	84.2	89.2	84.4	89.5	102.9	110.0	101.3	94.8
Brent	82.9	85.7	91.8	96.3	104.0	114.4	123.4	114.5	114.4
Dubai	80.3	83.7	89.1	92.4	100.3	108.6	115.7	108.5	110.8
Bonny	84.5	87.5	93.4	98.5	105.9	117.8	126.2	117.1	116.3
Tapis	89.9	91.6	95.2	101.2	107.7	118.7	129.2	121.9	126.6
LLS	85.3	88.2	94.4	97.9	106.3	117.6	126.0	116.5	112.0
Spreads									
WTI-Brent	-1.0	-1.5	-2.6	-6.9	-14.5	-11.5	-13.4	-13.2	-19.6
Brent-Dubai	+2.6	+2.0	+2.7	+3.9	+3.7	+5.8	+7.7	-6.0	+3.6
Brent-Bonny	-1.6	-1.8	-1.6	-2.2	-1.9	-3.4	-2.8	-2.6	-1.9
Tapis-Dubai	+9.6	+7.9	+6.1	+8.8	+7.4	+10.1	+13.5	+13.4	+15.8
LLS-WTI	+3.4	+4.0	+5.2	+13.5	+16.8	+14.7	+16.0	+15.2	+17.2
LLS-Brent	+2.4	+2.5	+2.6	+1.6	+2.3	+3.2	+2.6	+2.0	-2.4

Source: Bloomberg

LLS-WTI: Sizeable LLS premium to WTI but discount to Brent

LLS (Light Louisiana Sweet), a Gulf of Mexico sourced light crude with a specification similar to WTI and Brent has traditionally competed with imported crudes at Gulf Coast refineries. In 2011 LLS has trended more in line with Brent than WTI. A sizeable premium to WTI has therefore arisen. This averaged \$11.2/barrel in the first quarter and \$15.4/barrel and \$14.6/barrel in April and May respectively. In early June the LLS premium has widened to about \$17.5/barrel against a dollar or so in recent years. Gulf Coast refineries using LLS as a feedstock therefore are at a considerable cost disadvantage to inland refineries using WTI.

An important development over recent months in light crude spreads has been a narrowing and then a reversal in the normal LLS premium to Brent. After being close to parity in late May LLS was trading at a discount of \$3.4/barrel on 14 June. Historically, LLS has traded at a similar premium to Brent. We believe the swing to an LLS discount is another indication of the Brent supply tightness.

Exhibit 7: Recent trends in WTI, LLS and Brent

Source: Bloomberg

Other key international light benchmarks: Widening of sweet to sour spreads in early June

Internationally sweet to sour spreads narrowed slightly in May, but in early June generally widened again and are now at unprecedentedly high levels. For example, Dubai Fateh, a Gulf sourced light but relatively sour grade popular with Far Eastern refineries, was trading at a discount to Brent of \$6.0/barrel in May, but in early June this had widened to about \$9/barrel. For comparison, Dubai has usually traded at a discount of roughly \$2-3/barrel. Similarly, the premium of the ultra high specification Malaysian benchmark Tapis to Dubai rose from \$13.4/barrel in May to \$16.8/barrel in early June. A more typical premium is \$7-8/barrel. Going slightly against the trend of late has been the discount of Brent to Bonny Light the Nigerian sourced ultra-low sulphur grade. The discount averaged \$2.6/barrel in May and was similar in early June, possibly reflecting rising output in the country. However, the Brent-Bonny discount remains on the high side from an historical perspective.

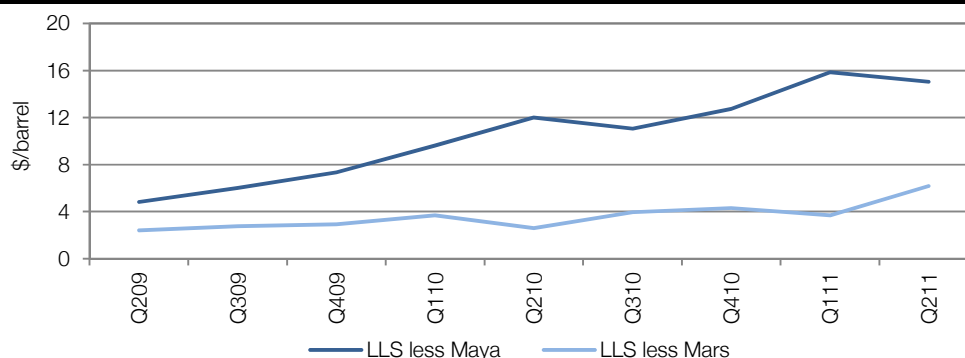
The continuing upward trend in sweet to sour spreads mainly reflects the loss of Libyan exports which, of course, are renowned for their premium specification characteristics. Interestingly Saudi Aramco's newly concocted light-sweet blend called Arab Extra Light has proved of little interest so far to refineries. The reasons for this appear to relate to high premiums vis-a-vis sour grades and uncertainties concerning refinery performance with a new grade. Generally, refineries do not appear to have been unduly fazed so far by the absence of high quality Libyan exports with a key reason being a heavy maintenance schedule in the spring. Clearly, however, a prolonged period without Libyan exports will cause European refineries in particular to more aggressively seek low-cost alternatives. An obvious strategy would be to take advantage of sour grades priced at historically very high discounts.

US heavy crude spreads: Plausible benchmarked against LLS

The spreads to WTI for heavy crudes sourced from the Gulf of Mexico and Latin America remain extremely anomalous. The anomaly has, in fact, become so great that it is now necessary to change the basis of comparison from WTI to LLS. Using the latter as a benchmark, heavy discounts are plausible from a specification viewpoint and broadly in line with historical levels. For example, the discount of Mars, a medium sour grade sourced from the GOM, to LLS was around \$5/barrel in early June. This compares with an average discount between 2004 and 2010 of

\$6/barrel. In the case of Mexican sourced Maya, a heavy sour grade, the discount to LLS is currently around \$13/barrel, which is in line with the average between 2004 and 2010. For both Mars and Maya, the discounts to LLS currently have narrowed significantly from the April highs of \$6.7/barrel and \$17.3/barrel respectively. This possibly reflected an attempt by Gulf Coast refineries to capitalise on historically wide heavy feedstock spreads. Note, many refineries in the region are sophisticated and have the ability to handle heavy sour grades cost effectively.

Exhibit 8: US medium and heavy sour discounts



Source: Valero Energy

WTS-WTI discount

WTS (West Texas Sour) is a US inland medium sour grade with a specification similar to Mars and a delivery point of Midland, Texas. Benchmarking against WTI is therefore relevant. The WTS-WTI discount has been running at about \$2/barrel in early June, well down on recent peak levels of around \$7/barrel recorded in February and the longer-term average of \$3.5 to \$4/barrel. Compared with Mars, WTS currently stands at a discount of about \$12.5/barrel which once again points to the feedstock advantage of inland refineries.

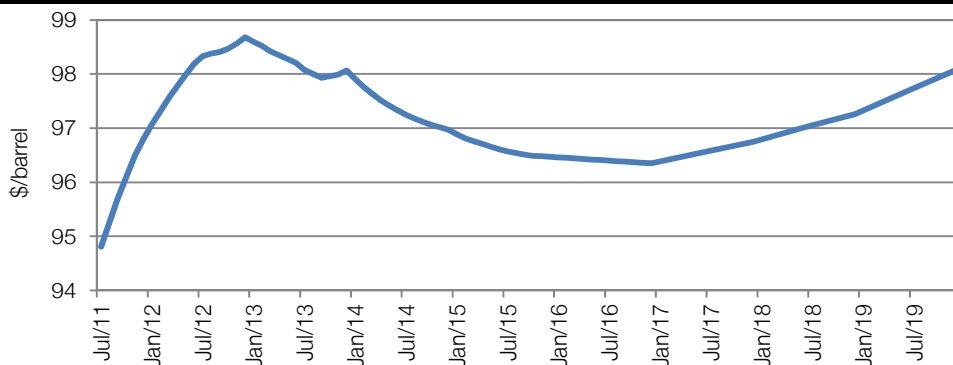
Forward curves: Brent remains heavily in backwardation

Brent remains heavily in backwardation reflecting tight spot supplies due to technical problems and maintenance related outages at North Sea installations. From a spot price of around \$120/barrel the curve trends sharply downward through end 2011 to \$112/barrel, presumably on the basis of an easing of the Brent supply constraints. The forward curve then trends down at a more moderate rate over the next five years, hitting roughly \$100/barrel at the end of December 2016.

Subsequently, the curve is flat at around \$99/barrel through end 2019. We would expect the backwardation to evaporate or at least lessen once the Brent supply situation improves post the completion of scheduled and unscheduled maintenance work possibly in end July. A cessation of hostilities in Libya would also have a similar impact given the potentially positive implications for the supply of high grade crude oil.

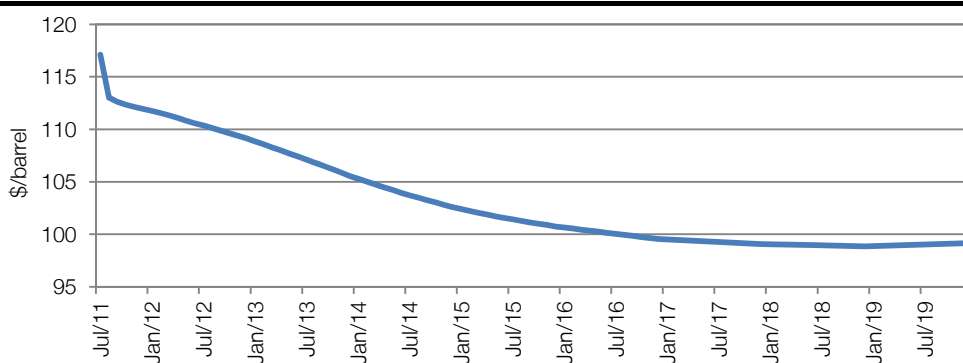
The WTI forward curve remains in near-term contango reflecting general uncertainties concerning the supply situation and the potential for tightening. From current spot levels of about \$95/barrel it rises to about \$99/barrel for December 2012 deliveries. The curve then goes into backwardation over the next four years with the price dropping to \$96/barrel in December 2016. Subsequently the curve goes into moderate contango.

Exhibit 9: WTI forward curve



Source: Bloomberg

Exhibit 10: Brent forward curve



Source: Bloomberg

Supply/demand balance: OPEC capable of filling the void

Recent developments

The key development of late concerning near-term forecasts for the global supply/demand balance has been the EIA's (the statistical arm of the US Department of Energy) upgrading of its demand forecast for 2011 by 0.3mm barrels. This takes demand to 88.4mmb/d a gain of 2% from the previous year. The upgrade reflects forecast greater use of liquids in electricity generation in 2011 in China, Japan and the Middle East.

In the case of China, increasing use of liquids stems from a combination of drought conditions, which have depressed hydro generation, and tight coal supplies, which is constraining thermal power generation. Although these factors are in themselves valid, we believe the forecast upgrade in relation to China may be too bullish given clear signs of a slowing economy. It also needs to be remembered that liquids demand in China in the second half of 2010 was exceptionally strong partly due to a sustained heat wave in the third quarter that boosted air conditioner usage and partly government orchestrated constraints on thermal power generation to meet ill-conceived CO₂ targets. The latter had the effect of boosting private gen-set usage and hence diesel consumption. If some or all these factors are non-recurring the surge in Chinese power related liquids consumption may be more muted than expected.

The outlook for Japan's near-term oil demand remains a wild card in the wake of the earthquake, tsunami and related radiation crisis in mid March. Economic activity during the first and second

quarters has been hit harder than many initially thought likely. The impact of the earthquake and tsunami will continue to be felt over the balance of 2011. For the year a whole Japanese GDP could easily drop by a percentage point or two which, other things being equal, will tend to cut oil consumption. Acting in the opposite direction will, however, be higher generator-set usage given the earthquake induced disruption to the power supply and a higher burn rate at oil-fired power stations to compensate for the roughly 35% of nuclear generating capacity that is offline. The net impact on oil consumption in 2011 of these two countervailing forces is highly uncertain.

The EIA has broadly maintained its non-OPEC oil supply forecast unchanged for 2011 at 52.3mmb/d. This implies growth of 0.6mmb/d, somewhat less than the recent run rate of closer to 0.7mmb/d. A similar amount can be added for OPEC natural gas liquids (NGLs) and unconventional oil, as these are not subject to quota. In this context it should be noted that Shell's Pearl GTL (gas to liquids) project in Qatar has recently come on-stream with production expected to build up to 260,000b/d of liquids over the next year or so. The implied supply deficit of 0.5mm barrels is significant, although in principle not impossible to cover from OPEC sources. Interestingly, despite expecting a wider supply deficit for 2011 the EIA has actually broadly maintained its WTI price forecast for the year.

Contrasting with the EIA, the IEA in May trimmed its 2011 oil demand forecast by 0.2mmb/d to 89.2mmb/d reflecting weakening economic growth in the advanced economies. The IEA is now looking for a gain in global demand of 1.3mmb/d, which is in line with their forecast of the increase in supplies of non-OPEC oil and OPEC natural gas liquids. OPEC itself is currently forecasting 2011 global oil demand growth of 1.4mmb/d and a gain in non-OPEC supply and OPEC NGLs production of 1.1mmb/d.

OPEC production

According to the IEA, OPEC crude production was running at about 30mmb/d in January 2011 before the commencement of the civil war in Libya. By April production was down to about 28.8mmb/d with the shortfall of 1.2mmb/d compared with January attributable to the virtual cessation of Libyan operations marginally offset by net gains elsewhere in OPEC. The initial indications for May point to a gain of around 0.2mmb/d, driven by stepped up production across a number of producers including Angola, Iraq, Nigeria, Saudi Arabia, UAE and Venezuela. Based on industry intimations Saudi output is expected to increase from around 8.9mmb/d in May to 10mmb/d by end June. Assuming this to be the case and given smaller boosts from other producers production could conceivably be around 30.5mmb/d in July without any contribution from Libya.

From an OPEC capacity availability viewpoint, the postulated July production rate should be comfortably achievable. As of April, the IEA estimated capacity at 33.4mmb/d, implying surplus availability of 4.6mmb/d. Based on a production rate of 30.5mmb/d surplus capacity would be cut to 2.9mmb/d. Arguably, this is sufficient for all but the most severe interruptions to output at a major producer.

The wild card remains when Libyan production might resume at a significant pace of perhaps 0.5mmb/d. This is probably contingent on the removal from power of Colonel Gaddafi or possibly an agreed division of Libya into two entities, Tripolitania in the west and Cyrenaica in the east.

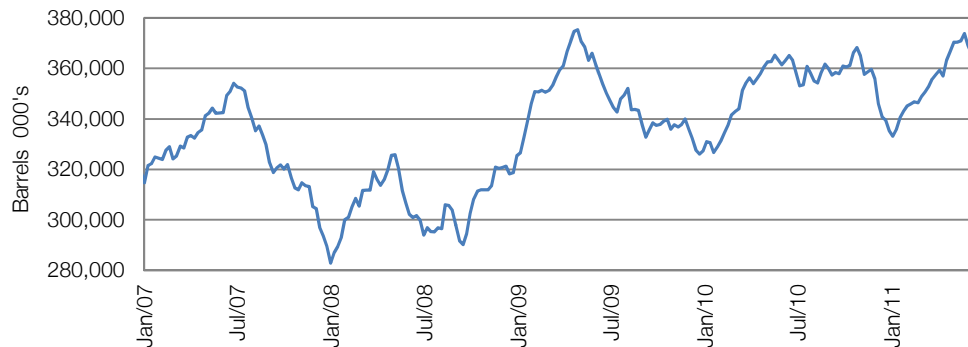
Although it is anyone's guess as to precisely when the Colonel might step down or be removed from power, it is difficult to see him surviving as the nominal head of all Libya through the third quarter of 2011. As NATO and the western powers say, the Colonel's days are numbered, although it must be admitted he has hung on to power for longer than many expected at the commencement of hostilities with NATO in March. Assuming that the Colonel leaves power by one means or another, we believe that production of 0.5mmb/d or so from Libya is a possibility during the fourth quarter. Significantly, in 2012 production could conceivably return to levels of 1mmb/d. Certainly, once regime change takes place in Libya no one is going to want to delay the resumption of oil production at the fastest rate technically possible. At this stage, we believe war related damage to facilities is relatively light.

US inventories

Crude oil: Seasonally above average

There are no signs at this juncture of tightness in US crude inventories. In fact, despite the drop in the week ending 3 June they remain high historically both absolutely and relative to supply. Inventories on 3 June of 369mm barrels fell 4.8mm barrels from the prior week but were up 7.6mm barrels from a year previously. They continue to run significantly above the top end of the range for the time of year. In terms of days' supply, inventories for the week ending 3 June were equivalent to 25.0 days, which was down on the recent peak in early May of 26.3 days, but above the 23.9 days of a year ago. The average for the period since 2000 is 22 to 23 days.

Exhibit 11: US crude oil inventories



Source: Bloomberg

Cushing: Keystone pipeline outages trim inventories

Inventories at the Cushing tank farm, the world's largest, have slipped in recent weeks from the record levels in early April of 41.9mm barrels. In the week ending 3 June Cushing's inventories stood at 38.9mm barrels. This was down 1mm barrels on the prior week but up 1.5mm barrels on a year earlier. We believe the recent slippage reflects in part, at least, two outages on the Keystone pipeline of late. Cushing's inventories currently are equivalent to 85% of the effective capacity of 45.9mm barrels. The shell capacity of 55mm barrels is in the throes of being increased by 10mm barrels.

Exhibit 12: Cushing crude inventory

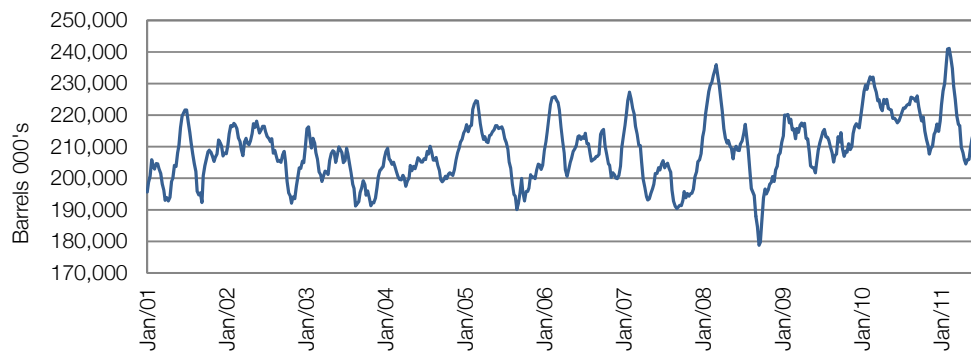


Source: Bloomberg

Gasoline: In the middle of the range

Gasoline inventories experienced a sharper than average seasonal dip between February and April but have since risen. For the week ending 3 June inventories were 214.5mm barrels, up 2.2mm barrels on the prior week, but down 5.5mm barrels on a year earlier. Gasoline inventories are now roughly in the middle of the range for the time of year. In terms of days supply gasoline inventories were equivalent to 23.4 days, slightly down on a year ago but normal for the time of year.

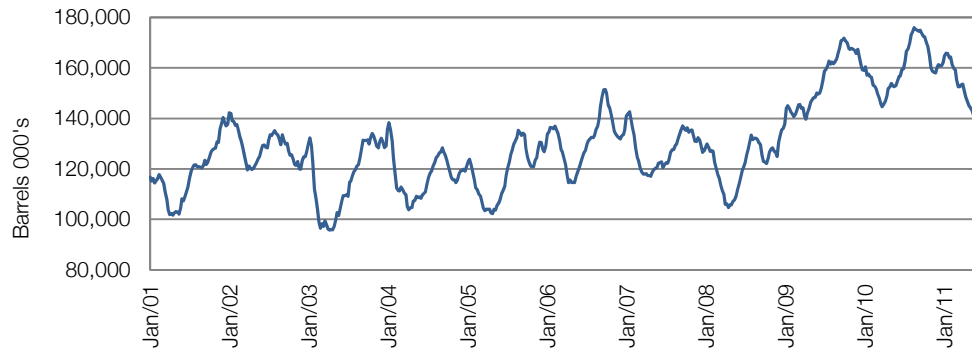
Exhibit 13: US gasoline inventories



Source: Bloomberg

Distillates: Well within the historical range

US distillate inventories have come under seasonally strong downward pressure in recent weeks but remain well within the historical range for the time of year. For the week ending 3 June inventories were 140.9mm barrels, a gain of 0.8mm barrels from the prior week. Compared with a year earlier they were down 13.9mm barrels. Distillate inventories are now running at 37.0 days supply against 38.6 days a year ago. The former is normal based on the experience since 2000.

Exhibit 14: US distillate inventories

Source: Bloomberg

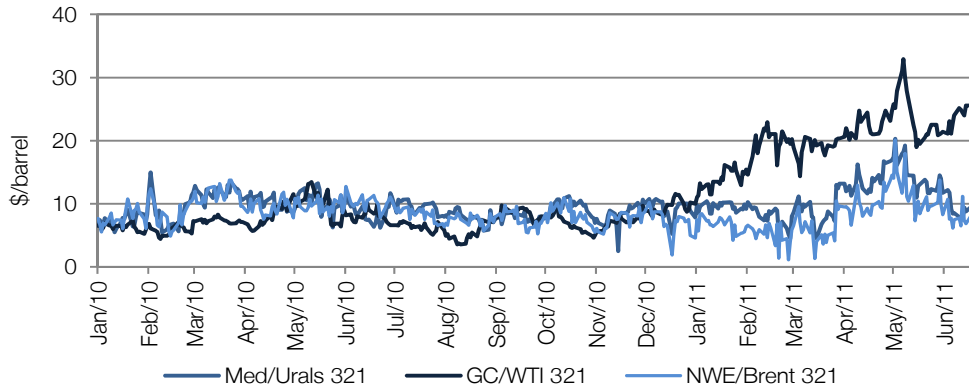
Refinery crack spreads: WTI spreads remain historically high

US refinery crack spreads, using inland feedstock, have been on a powerful uptrend in 2011 and have reached historically high levels. Based on Bloomberg data, the Gulf Coast/WTI 321 crack spread (the margin before refining costs on converting three barrels of WTI into two barrels of gasoline and one of diesel) has surged from about \$10/barrel at the end of 2010 to \$22.1/barrel as of 9 June 2011. For comparison, year earlier levels were running at about \$7.5/barrel. On 10 May the GC/WTI 321 spread actually spiked to \$32.9/barrel, a level not seen since July 2008 and only on two other occasions since 2000. One of these was post Hurricane Katrina in September 2005. This time around the spike reflected a plunge in feedstock costs.

The dramatic widening in US crack spreads in 2011 has been driven by a number of positives from a refining perspective. They include a reasonably buoyant market backdrop globally outside of Europe, the outages in Japan post the earthquake and tsunami in March and relatively low US refinery utilisation rates. Through the first five months of 2011 utilisation averaged 83.2%, roughly in line with the depressed levels of a year earlier. This has clearly held production in check and stems from a combination of heavy maintenance schedules and, it would seem, a restrained refinery policy stance on production runs. The upshot has been Gulf Coast wholesale product price increases that have comfortably outpaced the gain in WTI since end year 2010. For illustration between end 2010 and early June 2011 Gulf Coast gasoline and diesel prices have increased by 21% and 25% respectively, while WTI has risen 11%. Interestingly, utilisation increased between the beginning of May and early June from 81.7% to 87.2%. The latter nevertheless lags the 89.1% of a year ago. Refinery managements therefore appear to be maintaining a restrained stance on production despite some very attractive spreads.

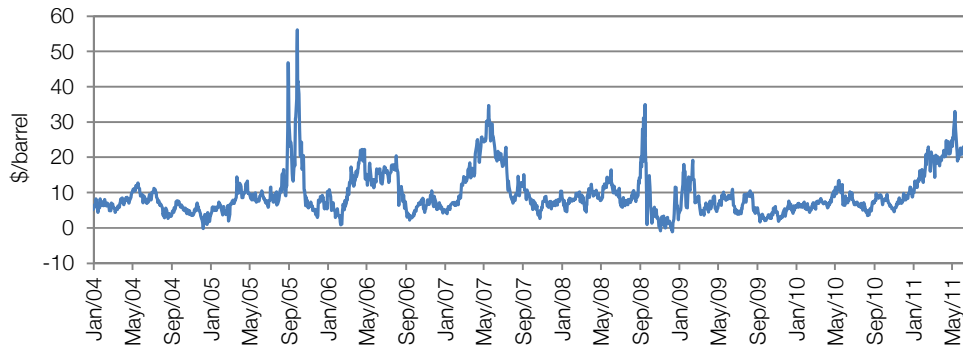
Crack spreads are considerably less enticing from a European refining perspective. The NWE/Brent 321 spread, for example, was \$6.1/barrel in early June while the Mediterranean/Urals 321 spread was \$8.4/barrel. A year earlier spreads were roughly \$10/barrel in both cases. The Brent and Urals spreads both spiked to \$20/barrel in early May 2011 reflecting the plunge in feedstock costs at the time and a tightening in product markets following earlier cutbacks in refinery runs. The sharp narrowing in spreads since early May reflects the rebound in feedstock costs and the lagged response of product prices. The significantly wider spread for Mediterranean/Urals than NWE/Brent 321 currently points largely to the feedstock cost advantage of the former.

Exhibit 15: Recent trends in crack spreads



Source: Bloomberg

Exhibit 16: GC/WTI 321 crack spread



Source: Bloomberg

US refined product demand: Signs of a softening trend

US petroleum demand remains decidedly lacklustre. Indeed, there are clear signs of a softening trend developing. Based on EIA data for the four weeks ending 3 June demand overall was down on a year earlier by 3.7% to 18.95mmb/d. Contrary to the pattern earlier in 2011 gasoline, the largest product group, actually showed a marginal 0.3% year-on-year gain in the latest four week period. Gasoline demand during the four weeks to 3 June averaged 9.17mmb/d, up 0.2% from the four weeks ended 27 May. This is broadly in line with the seasonal pattern. Kerosene demand was 1.2% higher than a year previously in the latest four week period but all other product groups, showed declines of 4.9% to 20.0%. These other categories are leveraged mainly to heavy freight transportation, power generation and petro-chemical applications. Cumulatively in 2011 US petroleum demand has slipped 0.4% year-on-year which contrasts with a gain of a similar magnitude earlier in the year. The cumulative year-on-year movements in the key petroleum product categories in the year-to-date 3 June have been as follows: gasoline -0.3%, kerosene +2.4%, distillates +1.0%, residual fuel oil +0.1%, propane/propylene -3.0% and miscellaneous -2.7%.

The prevailing lacklustre trend in US petroleum demand reflects a combination of factors. These include sluggish economic activity, relatively high unemployment (particularly significant for gasoline

usage), improving fuel efficiency across a broad range of machinery and transportation equipment and fuel conservation measures driven by historically high real petroleum product prices. Recently, petroleum product users have had a little respite from the upward spiral in prices over the past year. Compared with the peaks in early May, regular gasoline has fallen 19 cents to \$3.78/gallon while diesel is off 18 cents to \$3.94/gallon. Prices, however, are still up by \$1.05/gallon and \$0.99/gallon respectively over the past year.

The EIA is currently forecasting US petroleum product demand to increase by 0.8% in 2011 and 0.7% in 2012. The former is marginally ahead of earlier forecasts while the latter constitutes a downgrade from the 1% or so gain predicted previously. Given year-to-date consumption trends and the sluggish economy, the EIA's forecast for 2011 is looking vulnerable. Growth of 0.7% in 2012 will probably necessitate a more buoyant US economy than now seems likely, bearing in mind the structural factors tending to depress demand.

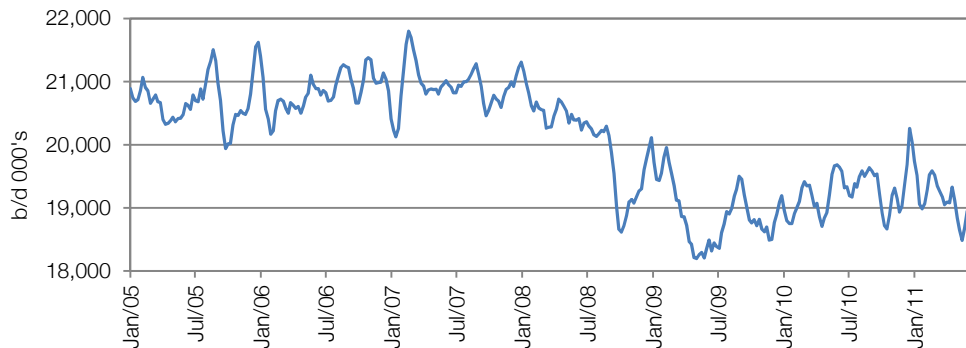
Exhibit 17: US petroleum product demand trend

Note: Data relate to yearly averages.

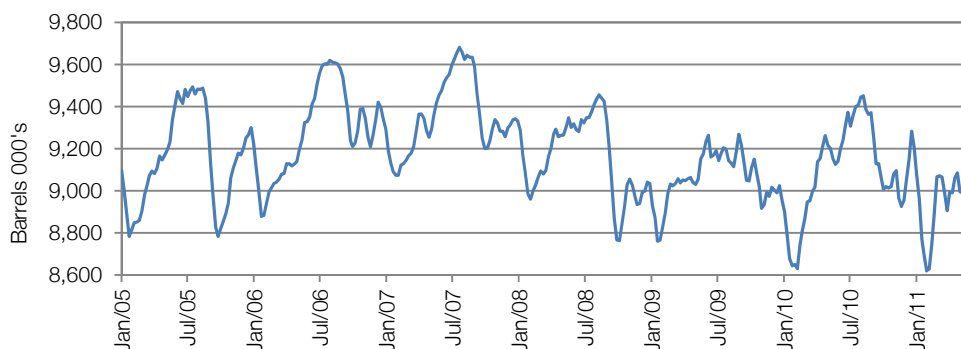
Mmb/d	2004	2005	2006	2007	2008	2009	2010	2011e	2012e
Gasoline	9.11	9.16	9.25	9.29	8.99	9.00	9.03	9.03	9.11
Other	11.62	11.64	11.44	11.39	10.51	9.77	10.12	10.27	10.32
Total	20.73	20.80	20.69	20.68	19.50	18.77	19.15	19.30	19.43

Source: EIA

Exhibit 18: US petroleum products supplied



Source: EIA

Exhibit 19: US gasoline supplied

Source: EIA

Crude oil price outlook: Declining trend into 2012

The consensus view on crude oil prices near term is that a sharp upward movement is on the cards, based on a pending tightening in the market related to a surge in demand and an inadequate supply response. Specifically, the bulls are calling for a 2mmb/d plus increase in crude oil demand between the second (usually the weakest quarter) and third quarters of 2011 driven by previously discussed developments in China, Japan and the Middle East. Based on the bull's scenario, Brent is heading in the coming weeks for \$130/barrel, if not substantially higher.

We would question the bull's scenario on two grounds. Firstly, it is not at all clear that demand will grow by anything like 2mmb/d between the second and third quarters of 2011. The world economy is rapidly losing momentum and even in China and India there are signs of a business slowdown. Heavy power generation needs and fuel substitution are certainly issues in China, Japan and the Middle East, but the slowing world economy is likely to provide a partial offset. Certainly, if we were to experience in excess of \$130/barrel Brent and say \$115/barrel WTI with US gasoline prices by implication of over \$4.20/gallon we could almost guarantee a double-dip recession in the US and maybe elsewhere in the OECD. The subsequent impact on petroleum demand would be highly significant.

The second basis for scepticism concerning the bullish case on crude oil prices is that in the event of stronger than expected 2011 third quarter demand, OPEC, or at least those members with significant spare capacity, is likely to increase production. A further boost, albeit modest, could be provided by Libya in the fourth quarter. Effectively, Saudi Arabia, UAE, Kuwait, Qatar and possibly Nigeria and Angola have the capacity and also the incentive to boost production, albeit with a lag. The incentive stems partly from several of these countries having substantial OECD investment interests and more significantly perhaps a desire to avoid the potential death spiral in prices that would ensue post a spike to say \$150/barrel. A death spiral could conceivably take benchmark light crude prices down to \$50/barrel or less, as in late 2008. After all, oil production is still generally profitable on a pre-tax cash cost basis at this level.

We continue to look for a weakening trend in benchmark light crude prices during the second half of 2011. This stems from the expectation that demand will be weaker than current forecasts suggest and that OPEC production will be stepped up meaningfully in the months ahead. A looser market than generally anticipated should allow at least some of the speculative risk premium

implicitly incorporated in prices of perhaps \$20-30/barrel to unwind. Due, however, to higher than expected prices in the second quarter, lingering geopolitical concerns surrounding the Middle East and uncertainties regarding power generation requirements/fuel switching in China and Japan we are raising our 2011 average forecasts for both Brent and WTI. The former rises from \$100.1/barrel to \$107.2/barrel, while the latter increases from \$90.4/barrel to \$95.0/barrel. Our quarterly price scenarios are as follows: Brent Q1 \$104.9, Q2 \$117.0, Q3 \$106.0, Q4 \$101.0; WTI Q1 \$93.9, Q2 \$104.0, Q3 \$93.0, Q4 \$89.0. These forecasts assume normal weather patterns over the balance of the year and no major geopolitical upheavals in oil producing regions. We are also assuming no QE3 in the US partly because of concerns about reigniting another commodity price boom.

We continue to look for lower benchmark light crude prices on average in 2012. In our view, the supply/demand relationship should loosen somewhat particularly compared with the first half of 2011. This reflects the expectation that demand globally will be fairly subdued while the supply situation improves. The former stems from a likely continuing weak performance by the OECD economy and a probable slowdown in the larger developing countries as anti-inflation policies begin to bite. Overall, we believe that demand growth globally in 2012 might be kept down to about 1mmb/d which we believe can be very comfortably covered by a combination of capacity expansion in non-OPEC crude (0.5mmb/d) and OPEC natural gas liquids (0.4mmb/d) capacity and higher OPEC crude oil capacity utilisation. A key factor in terms of OPEC capacity utilisation in 2012 should be a return of Libyan production to the semblance of normality.

Despite looking for lower prices on average in 2012 we are nevertheless also raising our forecasts for WTI and Brent. The former rises from \$85.0/barrel to \$89.0/barrel, while the latter goes up from \$90.0/barrel to \$101.0/barrel. The higher forecasts stem in part from the higher starting point in 2011 and in part from a re-appraisal of the Brent-WTI spread. The forecast for WTI in 2012 would imply a regular grade gasoline price on average in the US of around \$3.10/US gallon. While this is anything but cheap from an historical perspective it is probably a level that the US can live with given improvements in vehicle fuel efficiency.

Exhibit 20: WTI and Brent price trends

Note: Data relate to yearly averages, YTD 10 June, 2011 averages WTI \$98.9, Brent \$110.8/barrel

\$/b	2003	2004	2005	2006	2007	2008	2009	2010	2011e	2012e
WTI	31.1	41.5	56.6	66.1	72.2	99.8	62.0	79.5	95.0	89.0
Brent	28.9	38.3	54.5	65.4	72.7	97.7	62.0	79.7	107.2	101.0

Source: Bloomberg and Edison Investment Research

US natural gas market

Production/consumption: Robust production

So far in 2011 the most significant development relating to US natural gas supply/demand fundamentals has been robust production growth. Through the first three months there was a year-on-year gain in dry production of 5.2% to 5.49tcf according to the EIA. This, of course, reflects a continuation of the upward trend that has been apparent over the past five or six years driven by the earlier shale drilling boom. Interestingly, the rising production trend has been despite the declining rig count over the past year or so. Continuing strong production growth has resulted in a surge in exports in 2011 particularly to Mexico. Based on industry estimates US gas exports could hit a record 1tcf for 2011 as a whole.

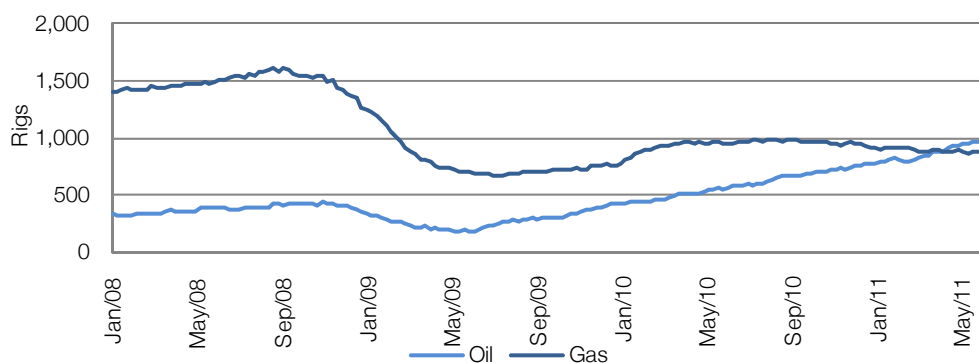
Contrasting with production, US gas consumption in the first three months of 2011 showed only a modest year-on-year gain of 0.4%. Industrial and power generation markets have been buoyant but those for residential and commercial have been soft. Very hot weather along the eastern seaboard in second half of May and early June is, however, likely to have boosted consumption due to stepped up air conditioner usage. Near term, forecasts appear to be pointing to more moderate temperatures along the eastern seaboard than of late but above normal temperatures in the Midwest and south.

Reflecting the strong trend so far this year, the EIA has recently significantly raised its forecast for US natural gas production in 2011. The new forecast calls for a gain from the previous year of 4.5% to 64.6bcf/d or 23.6tcf against 2.3% previously. In 2012 production is expected to be broadly unchanged presumably reflecting the lagged response of the decline in drilling activity over the past year or two. The EIA's consumption growth forecast for 2011 has also been uplifted from 0.8% to 1.4% driven by industrial and electric power generation applications. Forecast growth is curbed somewhat by an expected decline in cooling days. For 2012 the EIA is anticipating very modest US consumption growth of 0.3% to 67.2bcf/d. Declining residential and commercial use of natural gas in heating applications is expected to dampen demand growth in 2012.

Drilling activity: Continues to decline

US natural gas drilling activity has trended broadly flat since the end of the first quarter of 2011 but has slipped from end December 2010. According to Baker Hughes, the natural gas rig count was 879 for the week ending 10 June 2011 down eight from the previous week and one from end March. It was off 40 compared with end December 2010 and 113 from the 13 August 2010 high of 992. Against the peak in recent years of 1,606, the rig count is currently lower by 727 or 45%. US drilling activity continues to be redirected from natural gas to shale oil plays where the economics are conceptually far superior. For both gas and oil development, activity near-term could be limited by a lack of water for fracking operations due to extreme drought in Texas and parts of the Mid-Continent.

Exhibit 21: Baker Hughes rig count



Source: Bloomberg

Inventories: Seasonally comfortable

US natural gas inventories overall are at seasonally comfortable levels presently, despite showing a year-on-year shortfall. Based on EIA data, inventories on 3 June were 2,187bcf, down 255bcf on the same period last year and a modest 58bcf on the five year average of 2,245bcf. Inventories,

however, are well within the five-year historical range for the time of year. Given the robust production trend, we would expect natural gas inventories to remain within the historical range over the balance of 2011 in the absence of very severe weather curtailing production.

Price trend and outlook: Recent weather related surge

US natural gas prices at the Texas/Louisiana and North eastern hubs have surged in recent weeks driven by very high temperatures along the eastern seaboard and consequent heavy air conditioner usage. Taking the benchmark Henry Hub quote at Erath, Louisiana (NYMEX delivery point), the price rose from a recent low on May 20 of \$4.05/mmbtu to around a 10-month high on 8 June of \$4.92/mmbtu. At the Northeast hubs prices rose to considerably higher levels than at the Henry Hub in the week ending 10 June. For example, the Ellisburg NE hub on the border between Pennsylvania and New York and Transcontinental Pipeline's Zone 6 trading point for New York City, recorded recent highs of \$6.00/mmbtu and \$7.35/mmbtu respectively. By contrast, the price at the Opal hub in Wyoming (usually one of the lowest priced hubs) was \$4.35/mmbtu on 10 June. Following an easing of temperatures in the Northeast at the end of the week ending 10 June together with forecasts of a near-term moderating trend, the Henry Hub price slipped to \$4.67/mmbtu on 13 June. This was similar to a year previously. Despite the recent surge, US gas prices remain considerably below those prevailing internationally. The UK price at the NBP hub as of 13 June was \$9.74/mmbtu, while LNG prices in Japan currently average about \$12.6/mmbtu cif.

Exhibit 22: Henry Hub quarterly price scenario

\$/mmbtu	Q1	Q2	Q3	Q4	Average
2007	7.19	7.38	6.18	7.10	6.96
2008	8.66	11.37	9.06	6.45	8.89
2009	4.54	3.70	3.17	4.37	3.94
2010	5.15	4.15	4.32	3.86	4.37
2011	4.18	4.30e	4.35e	4.30e	4.28e

Source: Bloomberg and Edison Investment Research

Exhibit 23: Henry Hub natural gas price trend

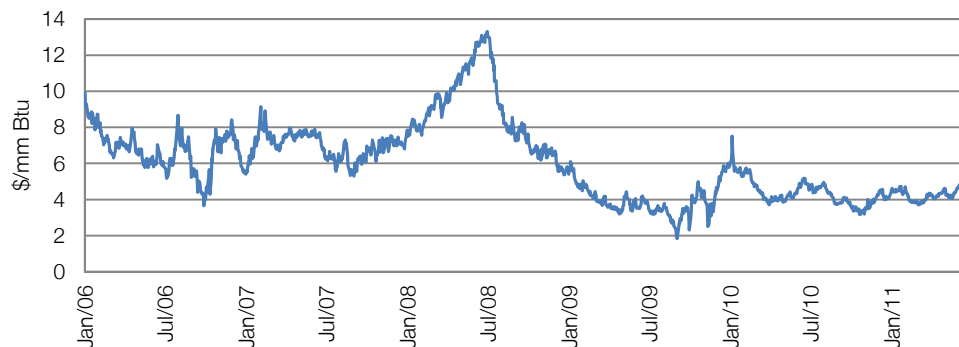
Note: Average price YTD June 13, 2011 \$4.26/mmbtu.

	2003	2004	2005	2006	2007	2008	2009	2010	2011e	2012e
\$/mm Btu	5.63	5.85	8.79	6.72	6.96	8.89	3.94	4.37	4.28	4.60

Source: Bloomberg and Edison Investment Research.

Given the comfortable inventory position and strong growth in production we would expect US natural gas prices to trend in a fairly subdued fashion during the third quarter. The caveats are the absence of a sustained period of very hot weather along the eastern seaboard and interruptions to output due to severe weather. We are raising our Henry Hub forecast marginally for 2011 from \$4.25/mmbtu to \$4.28/mmbtu reflecting slightly higher than forecast prices in the second quarter. Our forecast for 2012 is unchanged at \$4.60/mmbtu. The gain from 2011 takes into account an assumed moderate tightening in the supply/demand balance as production growth slows.

Exhibit 24: Henry Hub price trend



Source: Bloomberg

Share price performance

UK indices: Sharpest and most enduring setback since H208

The AIM Oil & Gas Index of E&P juniors has continued to trend down in recent weeks after peaking at a 30-month high on 7 February 2011. As of 15 June the Index was down 22% on the earlier high which is the sharpest and most enduring setback since the plunge of the second half of 2008.

Compared with a year ago, however, the Index is still up by 18%. The AIM All Share Index has also fallen since early February but by a less pronounced 10%. The AIM E&P juniors have underperformed the 27% gain in the broader based AIM Index over the past year.

Deteriorating sentiment surrounding the AIM E&P juniors over the past three months or so is part of a wider flight from high-risk assets in general and those in the commodities space in particular. The key factor here has been growing evidence of a significant business slowdown or worse globally. In addition, the juniors have suffered from some exploration and development setbacks of late with Desire Petroleum's dry wells probably being the most important. Faroe Petroleum's announcement of the abandonment of the West of Shetlands Lagavulin well, in which it holds a 10% stake, is another example of the inherent risks of frontier exploration. The Lagavulin disappointment, of course, follows Faroe's notable drilling success in 2009/10 when it participated in four significant discoveries.

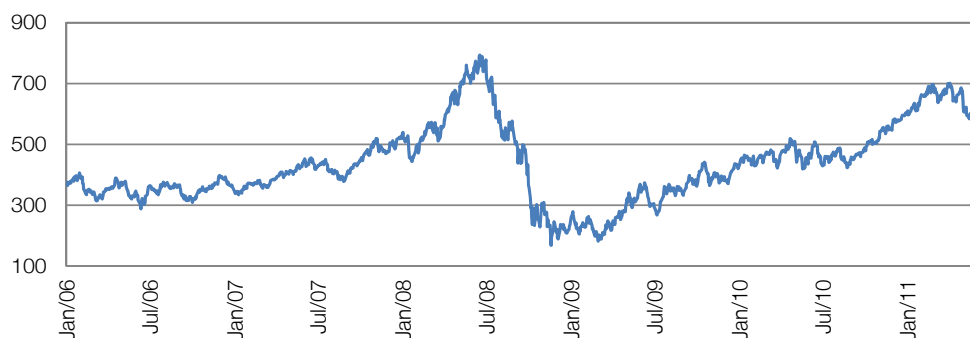
The FTSE 350 Oil & Gas Index has comfortably out-paced the AIM E&P juniors in 2011, but has nevertheless shown significant signs of weakening since end April in tune with the more broadly based UK indices. Compared with the recent high on 8 April, the FTSE 350 Oil & Gas Index on 15 June was down 9%. However, the decline from end 2010 was 2%, while there was a gain of 21% from a year earlier, a modest outperformance of the AIM E&P juniors. The performance of the FTSE 350 Oil & Gas Index since end 2010 has been marginally superior to that of the FTSE 100 Index.

Compared with the May 2008 decade high, FTSE 350 Oil & Gas Index currently is off 13%. By contrast, the AIM Oil & Gas Index is down a considerably greater 29% from its May 2008 high.

US indices: Mid-tier stocks under heavy pressure of late

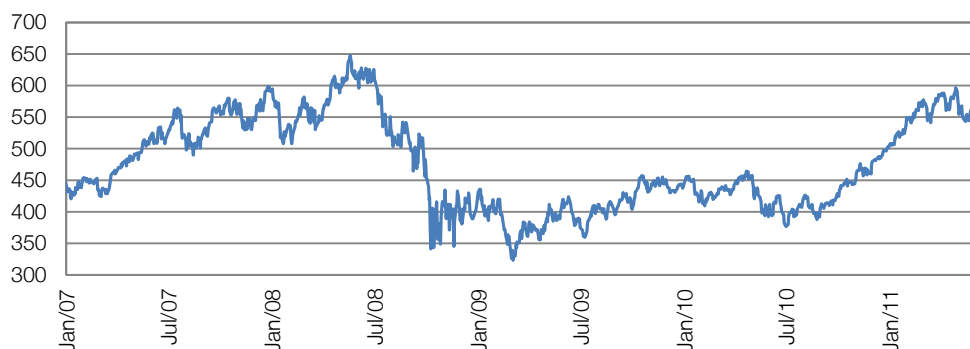
The strong uptrend in US oil and gas stocks that began in the third quarter of 2010 appears to have been decisively broken over the past two months. Since reaching a 33-month high on April 5, the S&P 400 Oil & Gas Index of mid-tier US E&P stocks has plunged 19% taking it to roughly a six-month low. The downward trend, not surprisingly, has gathered momentum post the sharp decline in oil prices at the beginning of May. Interestingly, however, many of the mid-tiers have a product mix weighted to gas, the price of which has firmed of late. The S&P 500 Oil & Gas Index of mid and large capitalisation energy stocks peaked at a 34-month high at the end of April but has subsequently fallen 11%. Compared with a year ago, the S&P 500 Energy Index has risen by 25%, while the S&P 400 Oil & Gas Index has gained 12%.

Exhibit 25: S&P 400 Index



Source: Bloomberg

Exhibit 26: S&P 500 Index



Source: Bloomberg

Marathon-Hilcorp deal: Highly influential

In one of the most influential deals in the oil and gas sector of 2011, Marathon Oil Corporation has recently announced the acquisition of Hilcorp Resources Holdings, a partnership between Hilcorp Energy Company and the private equity group, Kohlberg Kravis Roberts & Co. The transaction, valued at \$3.5bn in cash, involves the purchase of Hilcorp's assets in the core oil zone of the Eagle Ford shale formation located in South Texas around 30 miles south of the City of San Antonio. The Eagle Ford underlies the Austin Chalk and Edwards limestone formation which provides the host

rock for conventional oil reservoirs across much of Texas. Presently, the Eagle Ford is at a relatively early stage of development but is the second largest shale oil play in terms of production after the Bakken of North Dakota and Montana. Production in the Eagle Ford oil zone generally, we believe, is around 100,000 b/d presently against close to 400,000 b/d in the Bakken.

As a result of the Hilcorp deal, Marathon has purchased 141,000 net acres in one of the premier shale oil plays in North America. In the process it has roughly doubled its acreage in the Eagle Ford and now occupies a top five position in the core of the play. The consideration of \$3.5bn equates to a hefty \$25,000/acre which we believe is an unprecedented sum for an acquisition in the Eagle Ford to date and is indicative of its resource and production potential. Marathon has indicated that its new Eagle Ford acreage has net risked resource potential of 400 to 500mm barrels with upside stemming from additional down-spacing and the development of stacked pay zones. The deal therefore equates to a none too demanding \$8/barrel on the current resource assessment and quite possibly significantly less when development of the properties is fully undertaken. It should also be noted that production is currently running at 7,000 boe/d net (80% liquids). Production is expected to reach 12,000 boe/d net by end 2011 and 80,000 boe/d net by end 2016.

We believe the shale oil resource plays of the North American Great Plains are one of the most exciting development stories in the oil and gas sector presently. The resource potential is substantial even at low recovery rates of say 10%, the oil is of high quality, the technology required for development has been cracked and the resources are available in the middle of the world's largest oil consuming region. In this context EOG, one of the largest US independents with large acreage positions in the Bakken, Eagle Ford and Niobrara is now pointing to a boost to US oil production through shale resource development of 1.5mm b/d by 2015. The scramble for shale oil resource acreage in the US and Canada should be expected to continue.

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