TD Economics

Special Report

March 23, 2009

WHEN WILL WE SEE A SUSTAINED RECOVERY IN OIL PRICES?

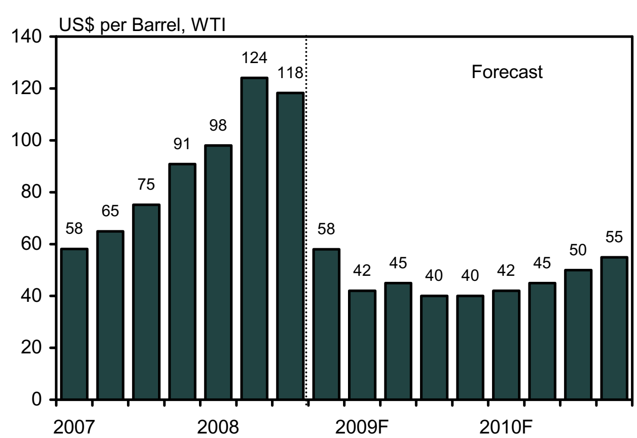
Not in 2009 ... Not in 2010 ... 2011 at the earliest

Emboldened even more by the recent push in the price of crude above US$50 per barrel, most oil-market forecasters continue to bet on a sustained and meaningful recovery in prices in 2010. The February 2009 edition of *Consensus Economics* showed an average West Texas Intermediate (WTI) projection of US$60 next year, about 15-20% above its current trading level. And with analysts anticipating a gradual recovery in the world economy and in oil-market fundamentals, this "average" implies year-end price targets closer to US$75 per barrel. Some pundits are even projecting a return to US$100+ per barrel in 2010.

We not only believe that the recent rally will soon fade, but that next year's expectations of recovery will be disappointed, with a solid bounce in prices off the table until 2011 at the earliest. We build the case on four key arguments:

- The world is likely to remain awash in oil. Despite ongoing output restraint worldwide, next year's rebound in both the global economy and in world oil demand is likely to fall short of current market expectations.
- Although reduced OPEC supply is helping to keep a lid on surplus production, the cartel signaled earlier this month that further substantial near-term cuts are unlikely. Meanwhile, the relative resilience of non-OPEC output is expected to continue to slow the overall supply adjustment.
- The risk premium associated with fears of supply shortages that had helped to inflate prices during the massive run-up in prices earlier this decade is likely to re-

CRUDE OIL PRICE FORECAST



Source: Haver Analytics, Forecast by TD Economics as at March 2009

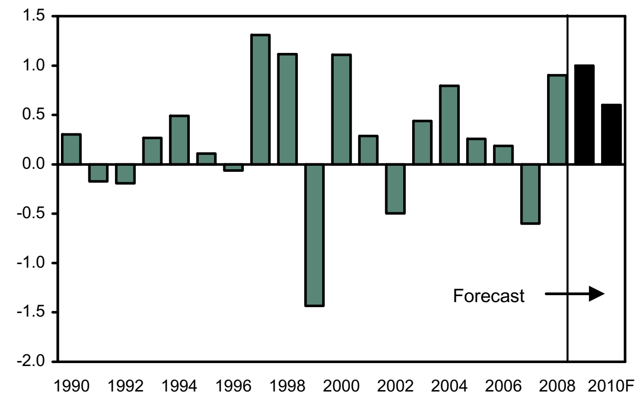
HIGHLIGHTS

- **The consensus view of a meaningful and sustained recovery in oil prices before 2011 will be disappointed**
- **Our base-case scenario shows prices pulling back later this year, and only clawing their way back to US$50-55 by late 2010**
- **TD's oil forecast is built on a below-consensus view on the world economy, which features a deep contraction of 1.5% in 2009 and a recessionary-like 2.1% expansion in 2010**
- **Weak consumption, the failure of OPEC to boost compliance and resilience in non-OPEC production will keep the world awash in oil through next year**
- **Other factors that will impede a sustained rally next year include a ultra-thin "fear" premium and the lure of rebounding equity markets**

ANNUAL CRUDE OIL SUPPLY AND DEMAND PROJECTIONS	2007	2008	2009F	2010F
Demand (mb/d)	**85.9**	**85.5**	**83.1**	**84.2**
Y/Y % change	1.0	-0.4	-2.8	1.3
Supply (mb/d)	**85.3**	**86.4**	**84.1**	**84.8**
Y/Y % change	0.1	1.3	-2.7	0.8
Balance (mb/d)	**-0.6**	**0.9**	**1.0**	**0.6**
Days Supply	**89**	**92**	**94**	**91**

Source: Energy Intelligence Group,
Forecast by TD Economics as at March 2009

SUPPLY-DEMAND BALANCE



Source: Energy Intelligence Group
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CRUDE OIL SUPPLY AND DEMAND PROJECTIONS

	2007				2008				2009				2010			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
	mb/d															
Demand	**85.7**	**85.2**	**85.7**	**86.8**	**86.8**	**86.1**	**84.4**	**84.8**	**83.6**	**83.0**	**82.8**	**83.2**	**83.6**	**84.0**	**84.4**	**85.0**
US	20.8	20.6	20.7	20.6	20.0	19.8	18.9	19.4	18.9	18.9	18.5	19.2	18.9	19.0	19.1	19.4
China	7.3	7.7	7.6	7.6	7.8	8.3	7.9	7.5	7.6	7.8	8.0	8.1	8.1	8.2	8.3	8.4
Supply	**85.0**	**84.9**	**84.9**	**86.3**	**86.8**	**86.6**	**86.1**	**86.0**	**84.5**	**84.1**	**83.9**	**83.9**	**84.3**	**84.8**	**85.0**	**85.3**
OPEC	29.6	29.6	30.1	30.7	31.1	31.1	31.2	29.8	27.8	27.4	27.4	27.6	27.9	28.1	28.4	28.8
Non-OPEC	49.0	48.8	48.1	48.8	48.9	48.7	47.9	48.9	49.3	49.1	48.9	48.7	48.8	48.8	49.0	49.1
NGL's, processing gains	6.4	6.5	6.7	6.8	6.8	6.9	7.0	7.2	7.4	7.6	7.6	7.6	7.6	7.9	7.6	7.4
Balance	**-0.8**	**-0.3**	**-0.8**	**-0.5**	**0.1**	**0.6**	**1.6**	**1.1**	**0.9**	**1.1**	**1.1**	**0.7**	**0.7**	**0.8**	**0.6**	**0.3**
Days Supply	**88**	**89**	**89**	**88**	**90**	**92**	**93**	**93**	**95**	**95**	**94**	**93**	**92**	**91**	**91**	**90**
WTI US$/barrel	**58**	**65**	**75**	**91**	**98**	**124**	**118**	**58**	**42**	**45**	**40**	**40**	**42**	**45**	**50**	**55**

Source: Energy Intelligence Group, Haver Analytics, Forecast by TD Economics as at March 2009

main relatively thin through 2010 amid high stockpiles and rising OPEC spare production capacity.

- Even as the future begins to brighten in 2010, investor interest in crude oil will be dampened by the lure of rebounding equity markets.

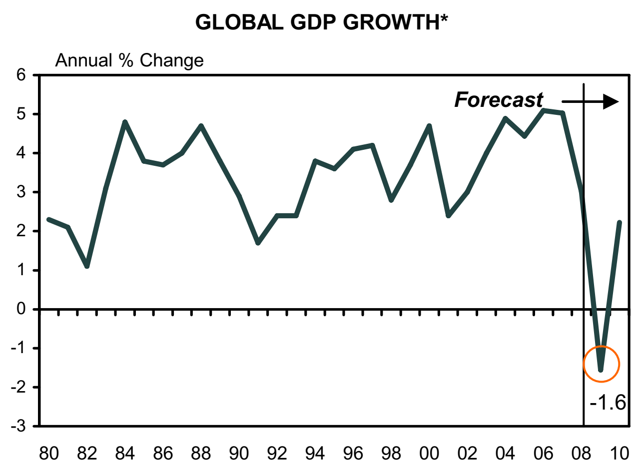
These developments will likely translate into a relatively flat trend path for prices throughout 2009 and 2010, with WTI falling back to US$40 on average by Q3-2009 before clawing only its way back to the US$55 mark by the tail end of next year. In the short term, the key impediment in the way of any further, sustained rally is the likelihood that news out on the world economy continues to sour, causing markets to further downgrade their expectations and quashing hopes for a quick recovery in oil demand. Such an adjustment will also likely ease recent budding concerns about inflation related to the current actions of central banks. Later this year, we wouldn't be surprised to see prices break above US$50 per barrel when there is evidence that the global economy has bottomed. Still, similar to our view on the recent bout of upward pressure, that rally is likely to prove temporary.

World will remain awash in oil in 2010

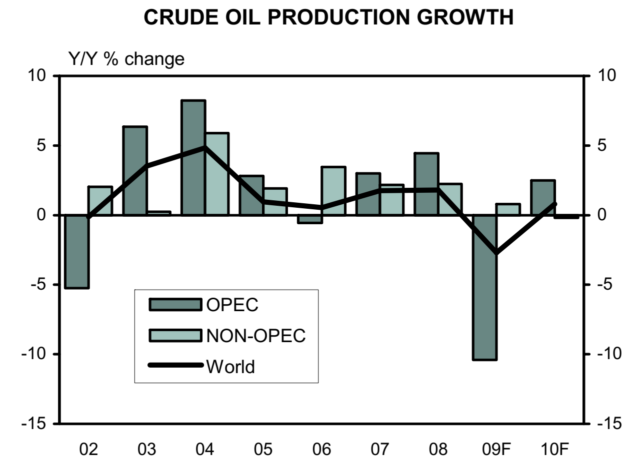
We provide our assessment of global supply and demand in the table on page 2. Figures from Q4 2008 – the last quarter of actual data – highlight the fundamental softness in the market as 2009 began. During that period, the Y/Y contraction in global oil demand continued to worsen, as global financial and economic problems spread further from industrialized to emerging market economies such as China. The overall world supply-demand surplus has managed to move lower since September as OPEC cut production quotas by a substantial 4.2 million bpd. Still, not only did the surplus remain lofty, but world stockpiles of crude held at 93 days worth of sales – well above the longer-term average of 87 days.

Looking ahead, we expect that the global supply overhang will only grow further over the next few quarters. Some improvement in the fundamental position is forecast in 2010. But the quarterly world supply-demand profile is projected to remain in a surplus position, suspending inventories (as measured by number of days supply) above historical norms.

The main culprit holding the market back will remain weak demand. While the recent spiral in prices down from about US$150 per barrel has provided support to consumption, this impact has been dominated by shriveling global activity and incomes. Our bet is that ongoing global deleveraging will continue to weigh on economic performances into 2010. In fact, even after coming off an unprecedented year in which real GDP contracts by an estimated 1.5% in 2009, world economic activity is likely to eke out a gain of only 2.2% next year – a rate that is at least 0.5 percentage points below most other forecasts and still falling short of the 3% world recession/expansion threshold. Stimulus measures by governments will only help to mitigate the downside rather than give the world economy a major tug.



*Real GDP at PPP exchange rates;
Source: IMF, TD Economics



Source: Energy Intelligence Group,
Forecast by TD Economics as at March 2009

Many analysts continue to place their hopes on China to pull the oil market out of its funk. There, too, we remain cautious. Despite fiscal measures, real GDP in China is expected to strengthen only moderately – to 8.4% in 2010 – and remain well below the 12% clip posted during the heydays of the leveraged world in 2006-07. In our forecast, we have incorporated the plan by the Chinese government to add 10 million barrels to its reserves by the end of 2010. We assume that most of these purchases are front-end-loaded into 2009.

Global output cuts falling short

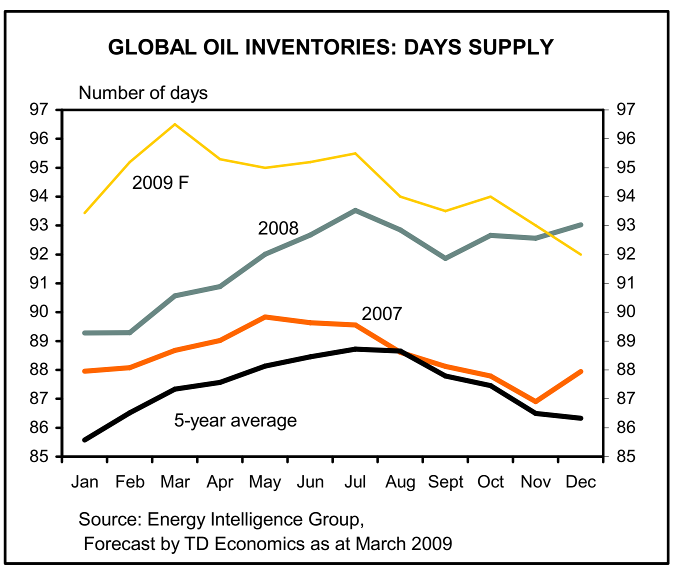
Overall global supply is being tightened this year, but not fast enough to restore balance in the marketplace. OPEC signaled this past weekend that it will sit on the sidelines in the coming months, instead emphasizing in its communiqué the need to boost compliance rates from quota reductions announced since the fall. While the overall compliance rate has been relatively high, at about 80%, this achievement hides the fact that Saudi Arabia has exceeded its quotas while other countries have fallen well short. We are skeptical that compliance rates will rise much further in the coming months (and could even begin to fall back by late 2009/early 2010) due to member countries' reliance on oil receipts in filling gaping holes in their coffers. A second albeit less important factor preventing larger output reductions is the loss of associated natural gas that flows from oil production and which is used for electric power generation.

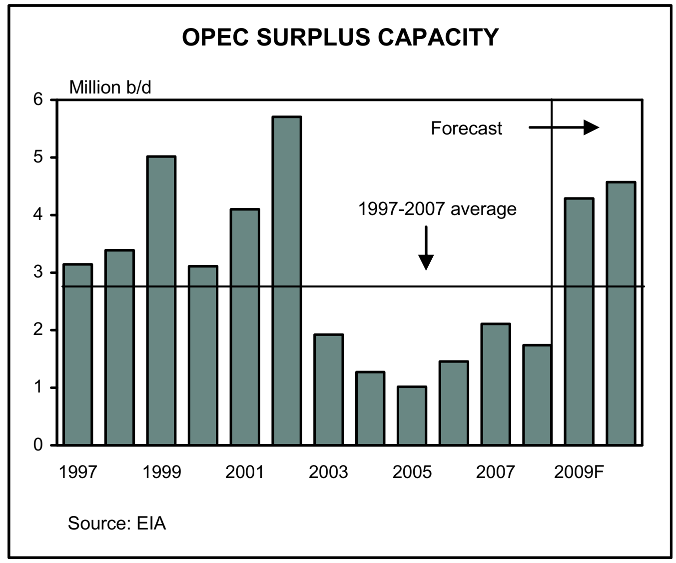
Outside of OPEC, crude oil production has held up surprisingly well, as countries such as Brazil, the United States and Azerbaijan increase production. In addition to facing similar budget pressures in non-OPEC countries, this resilience partly reflects the start-up of newly completed projects. So while it is likely the case that slumping drilling rates since mid-2008 will increasingly weigh on non-OPEC supply going forward, we don't expect a major slippage in output from these regions. As is often the case when profits in the sector come under siege, cutbacks to exploration (as opposed to development) tend to be the most acute, at least initially. Nonetheless, exploration cuts tend to have greater implications for output beyond the next 1-3 years.

Prices will be slow to respond

In sum, the improvement in the fundamental picture will be slow over the next 12-18 months, held back by a tepid bounce-back in demand, limits to OPEC supply cuts and inertia in non-OPEC supply. But one could make the case that oil prices will begin to rally strongly in 2010 as the market begins to respond to the improving *trend*. We don't believe this will be the case. Aside from the slow workdown of global inventories, some other less-obvious factors will likely quash any sustained upward pressure.

- *Risk premium to remain narrow* – the flip side of OPEC cuts is that it increases the amount of spare conventional capacity available to the market in the event of a supply disruption. And with a significant amount of capacity expansions still underway in several OPEC countries, notably Saudi Arabia, this "cushion" is estimated to rise to over 4 million bpd, up from the 1997-07 average of 2.8 million bpd. Refinery supply capacity has or continues to be ramped up in China, the Middle East and, to a lesser extent, the United States. Accordingly, the fear premium built into WTI prices – which rose as high as US$50-75 per barrel at the peak in prices – will remain narrow, likely under US$10 per barrel though 2010.





- *Global supply costs likely to ease further* – another key support of oil prices during the boom were surging project costs around the world. However, the global recession is pouring cold water on many input-cost elements such as transportation, steel and labour, thus weakening the potency of this argument.

- *Competition from other asset classes such as equities* – during the last phase of the run-up in crude oil prices in 2007-08, speculators and investors stampeded into commodities partly reflecting the poor performance of equity markets and other asset classes. Badly-beaten equities are likely to move to centre stage next year once signs of a bottom in the global economy take root (in fact, equities tend to lead by 1-2 quarters). Part of this lure is that, unlike holding pure commodities, many equities pay out an income stream.

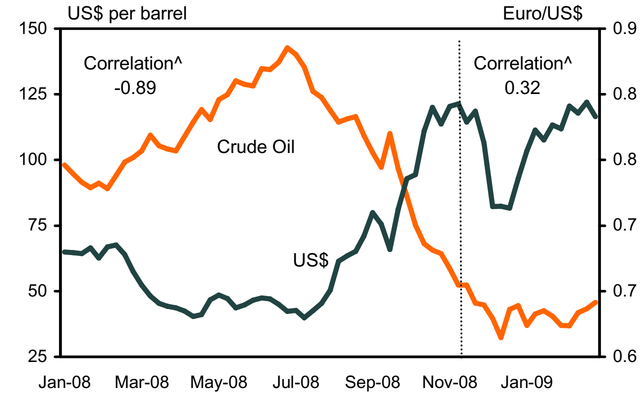
- *No major boost to prices from a falling U.S. dollar* – the inverse relationship between the U.S. dollar and crude oil prices strengthened substantially during the recent boom, as a trading pattern emerged whereby short positions in the greenback were offset by long positions in commodities. But since late last year, we've witnessed a breakdown in this relationship. In fact, an examination of daily and weekly moves shows that this relationship has recently turned slightly positive. In any event, while the U.S. dollar is likely to lose ground against the euro as flight-to-safety flows begin to diminish later this year, we don't see this as a lasting trend in 2010.

- *No major flare-up in inflation on the horizon* – crude oil also benefitted from its status as a hedge against inflation prior to the global meltdown. As noted earlier, there is some chatter that inflation could return with a punch at some point reflecting current actions by the U.S. Fed and other central banks to boost money supply and stimulate their economies. Clearly, this is a risk, but one that isn't likely to transpire until the world economy truly begins to find its footing in 2011. Regardless, the anemic pace of global recovery will buy central banks time to remove monetary stimulus prior to price pressures breaking out.

2011 to see prices return to US$75

Assuming the global economy continues to mend in 2011, our base-case scenario has WTI prices moving back to around US$75 per barrel in 2011 – a level still well short of their recent peak. As usual, the band of confidence around the forecast increases with time. Key upside risks include the negative impact on medium-term supply of cuts in exploration and development, a growing fear premium and rising global price pressures. On the flip side, the U.S. and global economies could stay weaker for longer than anticipated and deflationary forces could worsen, holding prices down for longer. The environment poses a mixed risk. On the one hand, efforts to put a price on carbon would increase costs of development fossil fuels and put upward pressure on oil prices. On the other hand, increasing efficiency standards and the longer-term push towards hybrid vehicles could lead to slower trend increases in gasoline demand.

CRUDE OIL PRICES VS U.S. DOLLAR



^Correlation coefficient on weekly data from Jan-Nov 2008 and from Dec 2008-Mar 2009
Source: Haver Analytics

Still, perhaps the greatest downside risk of all is that markets are still clinging, albeit more tenuously than before, to several of the tenants that drove the recent price bubble. The fact of the matter is that many themes that were bandied about during the 2006-08 surge – notably, that rapid 5%+ annual world growth was the new norm and that soaring demand, combined with insufficient supply gains, would leave the globe short of oil – have been largely dispelled. There is the distinct prospect that the new norm isn't far off the old one, which had prices floating around a longer-term trend of US$35-40 per barrel in real terms, rather than a higher plateau of US$75 per barrel. Only time will tell.

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