Catalytic converter

Crude oil prices: A range-bound future

Last week's OPEC meeting has fuelled the continuing slide in crude oil prices that began back in June 2014. With crude oil prices down c 40% since that time and no sign of support from either OPEC or non-OPEC producing nations, the world has had to wake up to the burgeoning level of oversupply hampering the crude oil markets. Driven by booming oil shale activity, US oil production reached 8.9mmb/d in October, within reach of Saudi Arabia at 9.75mmb/d. From this perspective it was clear something had to be done. With the industry now beginning to cut spending in response to weaker pricing, we expect that a material reduction in US oil output, and by consequence a stabilisation in crude prices, is on the horizon. In the interim we expect pricing to remain weak, with key investment opportunities in the upstream sector being low-cost operators with significant cash and low debt. We reduce our 2015 oil price expectations to $75/bbl for Brent and $70/bbl for WTI, while leaving our long-term view unchanged at $80/bbl.

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Oil prices collapse in response to OPEC's inaction

Contrary to popular opinion, despite consensus ahead of the meeting being for no change to OPEC quotas, we view the subsequent fall in oil price on just that announcement as completely justified. As long-term OPEC followers will note, the first step for the cartel in reducing an oversupply would historically involve greater compliance towards existing quotas, together with a commitment to hold an emergency meeting should pricing not stabilise. Given OPEC's current output stands at 30.99mmb/d vs a collective quota of 30mmb/d, the producer's cartel certainly had some room to make a modest commitment to existing quotas. However, both a pledge on existing quotas and the potential for an emergency meeting ahead of OPEC's scheduled meeting in June 2015 were conspicuous by their absence.

OPEC group split by budget surpluses: The haves and have-nots

OPEC's inactivity is suggested as evidence of a lack of cohesion within the group, with a split having developed along the lines of domestic budget surpluses. On one side sit Saudi Arabia, UAE, Qatar and Kuwait, with the financial flexibility to absorb production cuts. Iran, Angola, Nigeria, Venezuela and Libya all face their own form of economic crisis, and remain opposed to further cuts. We have doubts this split will threaten OPEC's long-term cohesion as the bulk of spare capacity (and hence power) within the producer group lies with Saudi Arabia (2.85mmb/d), while the fiscally poorer set are already producing at or close to the limits of current capacity.

US output continues to grow at a staggering pace

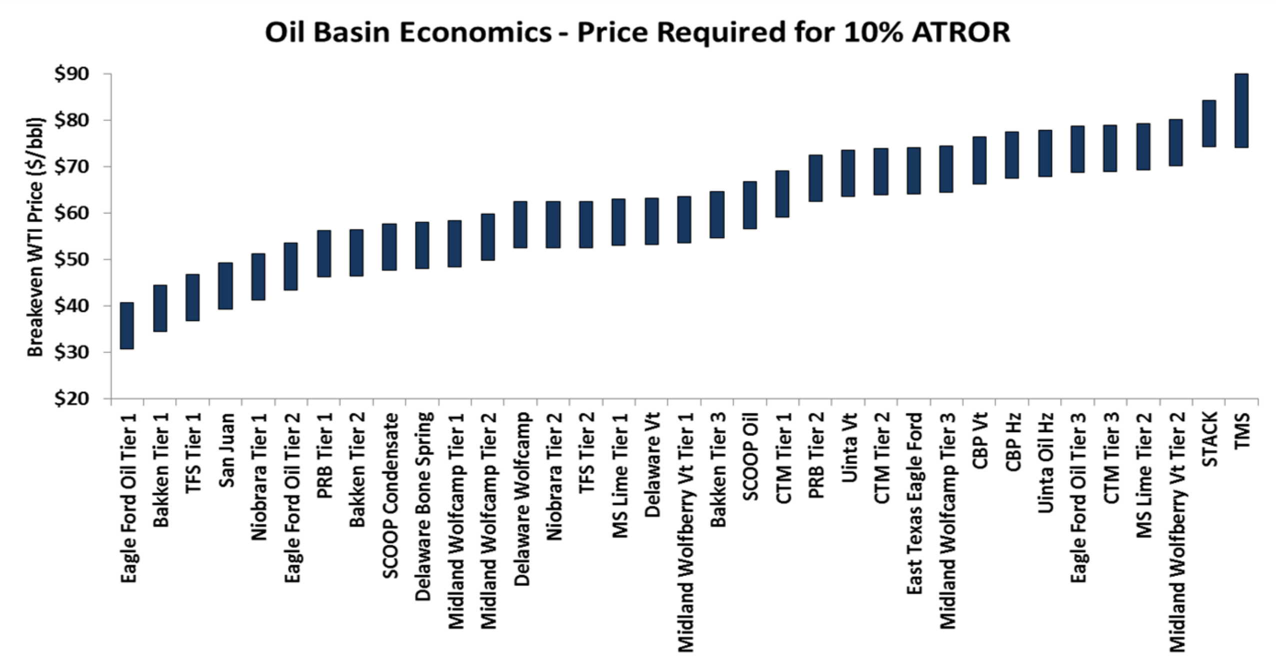
Understandably, the oil market has taken OPEC's inactivity as the starting gun in an all-out battle for market share with the US. The motivation for OPEC to tip the surging US oil shale industry into recession, or at least arrest the pace of growth, is clear. US liquids production (oil, condensate and NGLs) currently stands at 12.62mmb/d, having grown at a remarkable 1.3-1.5mmb/d over the last few years, and is forecast to reach a staggering 13.8mmb/d in 2015. Within that figure, US oil production reached 8.9mmb/d in October. To put the pace of US growth in to perspective, the 1.5mb/d current level of oversupply in the crude oil market (as estimated by OPEC) will likely double on an annual basis if the pace of production growth in the US is left unchecked.

North American spending beginning to react to lower prices

As highlighted in the International Energy Agency's monthly oil market report (www.iea.org/oilmarketreport), North American capital spending has begun to shrink in response to crude oil falling below $80/bbl. In the US, the Bakken shale has seen at least two companies reduce 2015 spending estimates: Continental Resources and Oasis Petroleum. In Canada, both Cenovus and Canadian Natural Resources have announced cuts to previous spending forecasts in response to lower crude prices.

Below, we highlight the break-even economics of the key North American shale basins, as produced by Tudor Pickering Holt (TPH). As can be seen, at least a third of basins look prone to spending cuts, requiring over $60/bbl (WTI) to deliver a 10% return on investment (after-tax rate of return). Based on TPH estimates, a $70/bbl long-term oil price assumption would necessitate a 20% reduction in capital spend across the key US basins in 2015.

Exhibit 1: North American shale economics



Source: Tudor Pickering Holt (with permission)

Without permanent demand substitution, pricing power returns naturally

Has the world changed materially since last week? We don't think so. As workable technologies, teleportation and the hydrogen car remain some way off commercial proliferation. What we know from history teaches that without material demand substitution, the naturally declining nature of oil production means oil will return to being expensive at some point in the future. The key question for producers and investors is when.

How quickly or permanently will US production growth be slowed?

In the short term, it is likely that absolute North American production levels can be maintained as the industry benefits from existing hedges and efficiency gains and begins implementing cost-reduction programmes in earnest. In the long term, we view a material reduction in US crude output as inevitable as budgets are cut in response to weaker pricing.

Crude range bound on price sensitive shale investment

The level to which pricing can recover depends largely on how permanently the pace of North American shale oil activity can be slowed. Given the fragmented, interruptible nature of capital investment in the shale industry, we suggest activity levels could pick up relatively quickly in response to higher pricing. This dynamic is likely to leave oil prices range bound, with pricing limits determined by the best and worst economics of the North American shale basins.

Debt hangover to impede shale industry's future access to financing

As a caveat to the theory that investment in North American shale returns once pricing recovers, we would highlight the significant portion of debt that has largely financed the oil shale boom. Estimates suggest $650bn of high-yield debt has been issued to the sector since 2011, with the recent c 40% collapse in crude pricing leaving the banking industry facing losses in the billions. Financing future shale activity is likely to be a trickier proposition regardless of pricing levels.

Restorative nature of low crude oil prices for the flagging global economy

The positive economic benefits of low energy prices are difficult to over-estimate, as despite years of quantitative easing, the economic recovery remains in a precarious state. Previously the powerhouse of Europe, Germany has seen its GDP growth reduced to something approaching a rounding error, prompting the ECB to table a further round of quantitative easing in the new year. This requirement could be offset by the stimulus provided by weaker crude oil prices. Under an 'OPEC free' market for crude oil this stimulus would have occurred naturally back in 2008. However, at that time OPEC proved effective in reducing output, artificially supporting prices in the face of collapsing global demand. This proved beneficial for OPEC in terms of supporting higher crude prices, but in hindsight may have proved too quick a recovery, depriving the global economy of a sorely needed stimulus.

Global oilfield services sector: The place not to be

One sub-sector of the energy industry bracing itself for a tough ride is the global oilfield service sector. With spot oil prices falling precipitously below critical levels associated with long-term planning assumptions for new projects – $100/bbl, then $90/bbl and now below $70/bbl – there is likely to be a dramatic slowdown in oilfield development activity. This slowdown will be exacerbated, in our view, by a requirement among the smaller E&P names to remain liquid and hence conserve cash, in addition to suspending projects in response to weakening economics.

Personality traits and key facets of the companies that thrive

Regardless of where crude oil finds support, if history is to be believed, the equity markets are likely to overreact. On this basis, dependent on timing, the current weak oil price environment could represent an investment opportunity for investors and corporates alike.

Investors looking to profit from this point in the cycle should be selective along strict criteria. Along with exposure to the downstream market (refining and chemicals) and natural gas (particularly LNG), investors should target companies with balance sheet strength, particularly large cash balances and serviceable debt; long-term performance will be determined by low-cost operators with disciplined management teams in addition to adequate financing. In particular, we would highlight E&P companies with fully funded exploration programs in place, as rig rates are likely to fall further in response to the continued cut back in spending.

As a result of these thoughts, we are reducing our modelling assumptions for Brent and WTI, as detailed below.

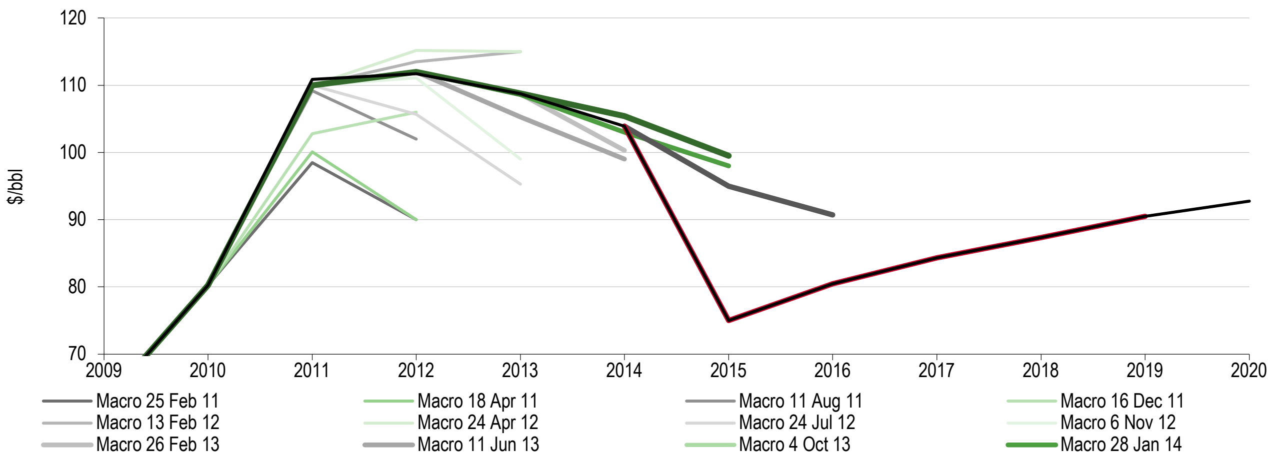
Exhibit 2: History of oil price assumptions

		2015	2016
Brent ($/bbl) – Old	October 2014	95	90.7
WTI ($/bbl) – Old	October 2014	88.8	85.4
Brent ($/bbl) – New	December 2014	75.0	80.5
WTI ($/bbl) – New	December 2014	70.0	75.3

Source: Edison Investment Research

After this period, we expect Brent to move towards our unchanged long-term assumption of $80/bbl (2014 real). We assume WTI will move towards a long-term price of $75/bbl (2014 real).

Exhibit 3: History of Edison oil assumptions for Brent

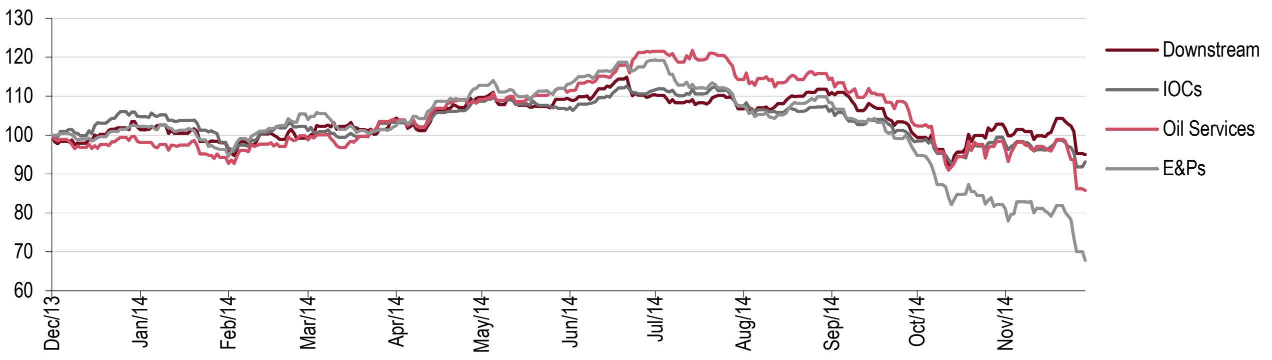


Source: Edison Investment Research

Poor 12-month performance for all oil stocks

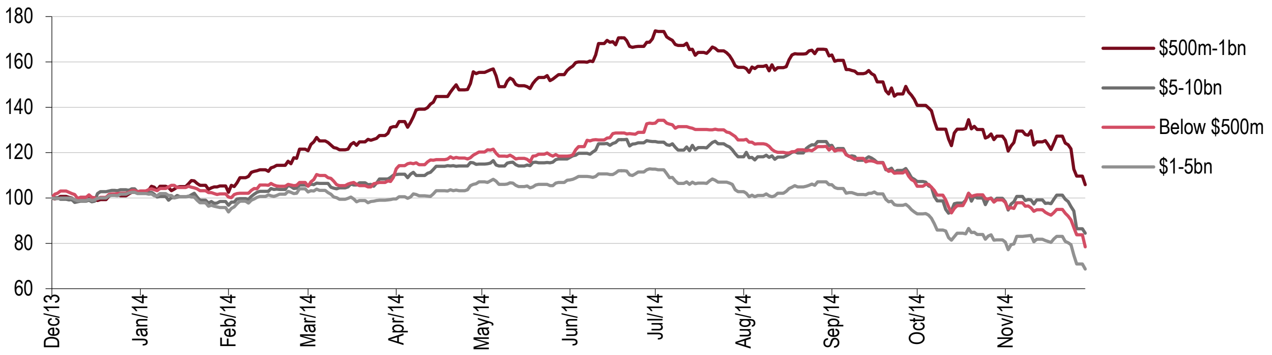
E&Ps have suffered in the last three months, as the September sell-off was further exacerbated by the recent oil price collapse. Unsurprisingly, oil services have suffered on the back of the oil price fall, leaving downstream and IOCs the least worst affected.

Exhibit 4: Indexed performance of IOCs, E&Ps, oil services and downstream companies



Source: Edison Investment Research, Bloomberg. Note: Priced at 2 December 2014.

Exhibit 5: Market cap index: $500m-1bn vs $1-5bn vs $5-10bn vs greater than $10bn

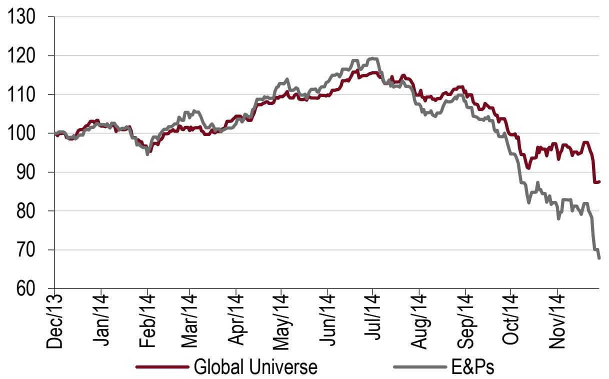


Source: Edison Investment Research, Bloomberg. Note: Priced at 2 December 2014.

E&Ps

The E&P Index continues to trade at a large discount to our Global Universe. This is consistent with what we are witnessing across our subsectors as the market remains risk averse, especially with regard to small- and mid-cap E&Ps.

Exhibit 6: Global Universe vs E&Ps Index



Source: Edison Investment Research, Bloomberg. Note: Priced at 2 December 2014.

Exhibit 7: Winners and losers

One week

No.	Best performers	% change	No.	Worst performers	% change
1	Ruspetro	14%	1	Sefton	-43%
2	Nido Petroleum	8%	2	Touchstone Exploration*	-39%
3	Greka Drilling*	7%	3	JKX Oil & Gas*	-38%
4	MEO Australia*	5%	4	Roxi	-37%
5	Clontarf	5%	5	Petroceltic	-36%

One month

No.	Best performers	% change	No.	Worst performers	% change
1	Greka Drilling*	64%	1	Hawkley Oil and Gas	-67%
2	Max Petroleum*	30%	2	Red Fork Energy	-64%
3	Clontarf	17%	3	Maple	-57%
4	Strike Energy	15%	4	Energy XXI	-53%
5	Cairn Energy	13%	5	Sefton	-52%

Three months

No.	Best performers	% change	No.	Worst performers	% change
1	Aminex	146%	1	Red Fork Energy	-91%
2	President Energy	38%	2	Energy XXI	-81%
3	Greka Drilling*	27%	3	Tangiers*	-78%
4	Ruspetro	24%	4	Petromanas*	-69%
5	Urals Energy*	23%	5	Oilex	-67%

Six months

No.	Best performers	% change	No.	Worst performers	% change
1	Aminex	147%	1	Tangiers*	-97%
2	Clontarf	133%	2	Red Fork Energy	-90%
3	Solo	107%	3	PetroFrontier Energy	-87%
4	Liquefied Natural Gas Ltd*	101%	4	Energy XXI	-83%
5	Roxi	86%	5	Tower Resources	-81%

One year

No.	Best performers	% change	No.	Worst performers	% change
1	Liquefied Natural Gas Ltd*	528%	1	Red Fork Energy	-98%
2	Leni Gas and Oil*	376%	2	Tangiers*	-96%
3	Rose Petroleum*	331%	3	Maple	-93%
4	Roxi	146%	4	Energy XXI	-86%
5	Solo	85%	5	Sefton	-83%

Source: Edison Investment Research, Bloomberg. Note: *Denotes an Edison-covered company. Priced at 2 December 2014.

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