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O&G looks to align an expected price rise with today's realities

Oil & Gas December 2016

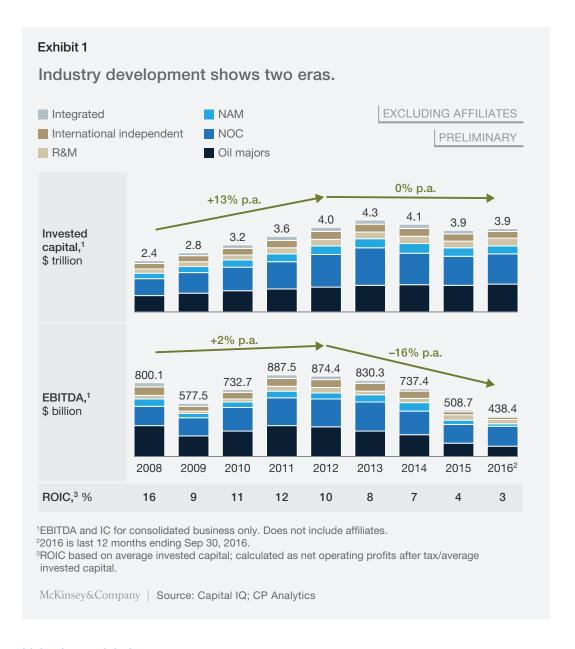
Many oil and gas companies are currently spending more than they earn, anticipating higher oil prices. If prices do not continue to recover, 2017 could be a year of reckoning in the industry.

To get a sense of the financial health of the oil and gas sector, we took a close look at the financials of 100 companies from 2008 to today, and in detail over the last 12 months. We found that despite a slow rise in prices, most of these companies are using cash flow to run their businesses. But despite success in cutting costs, they still require significant annual cash injections to provide for dividends and investments. Many companies, therefore, are living beyond their means, counting on prices to rise. Most investors should be happy about that implied projection, but as the current downturn lengthens, some may be getting jittery, especially at the possibility of OPEC not following through on the 1.2 million barrels/day cut agreed upon in Vienna on November 30. If OPEC cannot control supply, and prices collapse, some firms may need to reevaluate their portfolio strategy and capital expenditures, introduce further cost cuts, and reexamine their dividend strategies.

Less bang for your buck

Our analysis shows the return on invested capital (ROIC) fell significantly from 2008 to 2016. Between 2008 and 2012, the decline was due to capital investment outpacing production growth—which stood at 2 percent per year between 2008 and 2016—resulting in increasing capital intensity. Overall, invested capital grew by 13 percent per annum over 2008–2012, almost doubling from \$2.4 to \$4.0 billion. Then, from 2012 to 2016, ROIC fell further due to commodity price compression without commensurate cost reduction, causing a drop in margins. Represented as earnings before interest, taxes, depreciation and amortization (EBITDA), margins grew only 2 percent from 2008 to 2012, but fell by 16 percent a year from 2012 to 2016. This was a direct result of the collapse of oil prices, which could not be offset by a sufficient cut in costs (Exhibit 1).

The trend was starkest for the majors, which saw their ROIC drop from 23 percent in 2007 to 13 percent in 2012 to 2 percent in 2015 (Exhibit 2). However, compared to many oil field services companies, and companies in the mining sector, O&G has been less affected, preserving profits and cash flow.



Living beyond their means

In Q3 2016, capex in O&G fell to \$50 billion, less than half its value in Q3 2013 (when it peaked at \$110 billion). Still, capex had consumed 96 percent of cash flow over the previous 12 months, leaving too little cash to cover the dividends that were paid. They were financed largely by issuing equity, selling asset and raising debt (Exhibit 3).

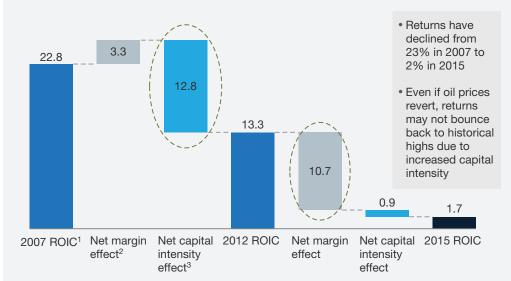
Examining cash cycles by the different types of oil and gas companies, we see a divergence in fortunes:

- The majors have long invested almost all their cash flow, and have driven the increase in the industry's capital intensity. Majors are now spending 39 percent more on their capex than they generate in cash. In addition, they continue to pay hefty dividends, equal to 39 percent of generated cash flow, financed by divestments, new debt, and reductions in cash reserves—all finite levers. This likely indicates either expected top-line growth from higher production, or an anticipated rise in the price of oil.
- NOCs budget more conservatively and spend less of their cash flow on capex. This allows them to direct more revenue to reducing their debt. In the last 12 months, only 74 percent of

Exhibit 2

Increasing capital intensity had eroded majors' returns in 2007–12. Since then, margins are pulling down ROIC further.

Majors upstream return on invested capital (ROIC) and contribution to change, %



¹ROIC is calculated based on SEC O&G reporting.

McKinsey&Company | Source: Company filings; McKinsey analysis

Exhibit 3

Most players in the industry are raising funds for survival despite significant capex cuts.

Cash flow summary - LTM, 1 cash flow from operations, indexed to 100

Integrated International NAM Majors NOCs O&G independents independents 100 100 100 100 Cash flow from operations Capex Dividends 9 31 20 15 Share issuances/buy backs 13 29 63 Cash from divestment 26 8 Debt issued 43 8 19 8 (net of repayments) Change in cash position -8 -26 9 Capex cut LTM vs FY 2014 31% 58% 62% 25% 27%

Cash flows for last 4 quarters ending Sep 2016.

McKinsey&Company | Source: S&P Capital IQ; McKinsey analysis

PRELIMINARY

²Net margin effect is the impact on ROIC due to change in NOPLAT per boe (ending period vs starting period); NOPLAT is calculated as realization – all operating costs – taxes.

³Net capital intensity effect is impact on ROIC from change in invested capital per boe (ending period vs starting period).

NOC cash flow went to capex, and 9 percent to dividends, leaving 8 percent to pay down debt.

- In terms of cash flow, integrated oil and gas companies are somewhere between majors and NOCs. They have cut capex by more than either, and have maintained a substantial dividend funded by debt.
- International independents are finding it increasingly difficult to sustain equity- and divestment-funded dividends as well as capex, despite already having cut capex by 58 percent.
- The fifth group, North American independents, has always spent more on capex than it earned in cash flow—being focused on growth. In the last 12 months, these companies have reduced capex by 62 percent compared to 2014. But they are still spending 51 percent more on capex than cash flow, along with 15 percent on dividends and 25 percent on paying down debt. With debt markets only slowly opening up to them again, they have recently supported this expenditure by issuing equity and divesting assets—which together represent 111 percent of cash flow.

Implications for the near-term

While there is near-term optimism in the oil and gas industry, reflected in a significant recovery of share prices since early 2016, our analysis indicates that most oil and gas companies are not yet able to increase capex significantly, despite the recent rise in oil and gas prices.

Moreover, if prices remain low for much longer, CFOs will need to reexamine their financial strategies. As noted, many have had to resort to questionable measures (at least by the standards of most industries) such as selling assets and issuing equity to maintain dividends. Of course, the oil and gas business is *not* like most industries, and any responsible oil and gas company's management wants to keep key people working, and its strategic options open for when the recovery comes, as it always has. To do this, they are wise to reduce capex or raise funds, as required. Ironically, as capex reduces, shareholder expectations of higher prices is growing. Investor optimism may sustain this strategy for some time, even if dividends are temporarily squeezed.

Cash flow has been negative in the past, and forward prices suggest the worst is behind us, which should eventually enable cash flow to turn positive, reopening debt markets and returning the industry to normalcy. However, if prices fall back—say, to below \$45/barrel—2017 could be a year of reckoning for the industry. Fortunately, most CFOs have thought through this scenario; their boards and shareholders understand the bet their companies are making and support it.

Hedging the bet: Four strategies

1. If oil prices do not recover, companies will need to make ends meet. Given that capex is

the biggest item of expenditure, companies will have to bring it to less than 100 percent of operating cash flow by examining a range of price scenarios and calibrating capex against them. They can then decide what level of expenditure they can sustain, and assess its impact on growth. For some companies, this may mean modest growth at best.

- 2. Companies may need to alter their dividend policies. Current dividend levels are high by the standards of most industries, and this has attracted a shareholder base of large institutional investors. But prudence may dictate that dividends are reduced.
- 3. Selling off assets to finance a business is a strategy with a finite endpoint. To convince the market that a portfolio is sustainable, companies will need to ensure they allocate capital to the regions and segments with the highest growth potential, with sufficient critical mass to achieve local economies of scale. Some companies may be better able to optimize their portfolios through M&A. The value of proven barrels in the ground has fallen faster than E&P costs, so those companies may be able to boost cash flow by buying upstream assets. This will reduce their cost per barrel, and encourage a further reduction in industry capex in favour of consolidation. M&A activity has been low recently; the global upstream M&A deal count collapsed in 2015 to the lowest figure since 2001, and has remained low this year. More than \$60 billion in unsolicited corporate takeover bids were rejected in 2015, highlighting a disconnect between buyers and sellers on valuations. As confidence grow, deals might become more commonplace again.
- 4. Striving for greater efficiency through cost-control, as well as improving capital efficiency, will continue. The industry has seen a decade of cost expansion, now followed by two years of cost control. Our client work tells us that there are more efficiencies to be achieved. This is particularly true on the capital side, where working capital can be reduced, facilities leased rather than bought, and the capex-to-cash cycle accelerated with investments in smaller, more manageable projects.

There are several scenarios for which the O&G industry must prepare. All of them require executives to examine how their company's spending aligns with each possible future. Right now, there is no right or wrong strategy, but there soon may be, and for those companies that can devise the most flexible strategies—while continuing to achieve efficiency in operations and maximize their return on capital expenditures—the rewards likely will be great. \square

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