

Bigger is better when it comes to capital markets and oil company liquidity

Ruud Weijermars* explains how the impact of worldwide recession has created an unequal playing field among oil companies seeking project finance.

This report reconstructs how the financial markets have become more prominent agents in the chances of survival for smaller oil and gas companies, as well as for operators of unconventional oil and gas fields. Most oil professionals focus on E&P's operational excellence in technology and delivery of production rate and improved recovery factors. But as oil and gas companies compete to restore their earnings to match those prior to the Great Recession, competition for access to capital markets has intensified. The declining cash flow from oil and gas operations means companies must compete for additional cash raised from financing activities (debt and equity financing), until restructuring and cost-cutting programmes that diminish operating expenditure (OPEX) will start to restore past earning levels. A close balance between operational and financial value chains is required to ensure any cash flow shortage is swiftly mitigated. Access to capital markets was an option for some but remained barred for others in need of capital at the height of the 2008/2009 recession. Recommendations are made as how to mitigate liquidity problems. Ultimately, M&As may offer a final escape from insolvency for some, and a fast track to corporate growth for others.

Cash flow analysis

Oil companies rely on earnings from a commodity produced from finite hydrocarbon fields with production life-cycles ranging from a couple of years (small fields) to decades (elephant fields). Companies therefore must continually budget for new capital

expenditure (CAPEX) to explore for new fields, develop them, and build infrastructure to evacuate the hydrocarbons. Figure 1 shows the principle diagram for the cash flows related to oil CAPEX programs.

To fund the CAPEX for new projects, credit track records have now become increasingly important to support companies in their growth ambitions. The cost of credit went up and 'smaller' companies that customarily draw cash from the capital and equity markets faced steep increases in bond rates as well as reluctance in the market to provide further credit in the first place.

A corporate strategy commonly includes assumptions about the preferred growth rate and associated financial risk policies, but in spite of such financial

risk management, cash flow decline was troubling nearly all operators over the recession. Most companies invested in capital intensive projects started at an all-time oil price high in 2008, which was followed by a global recession, steep drops in demand volumes, commodity prices, and refinery margins. Finding adequate financing options has been challenging in the past two years and credit options remain tight today.

To find out how serious the cash flow pressure is for the various types of oil and gas companies, this study investigated the degree to which 'smaller' and 'bigger' companies rely on external financing sources to fund their CAPEX programmes. The total sample group comprised 24 companies covering the range of traditional peer

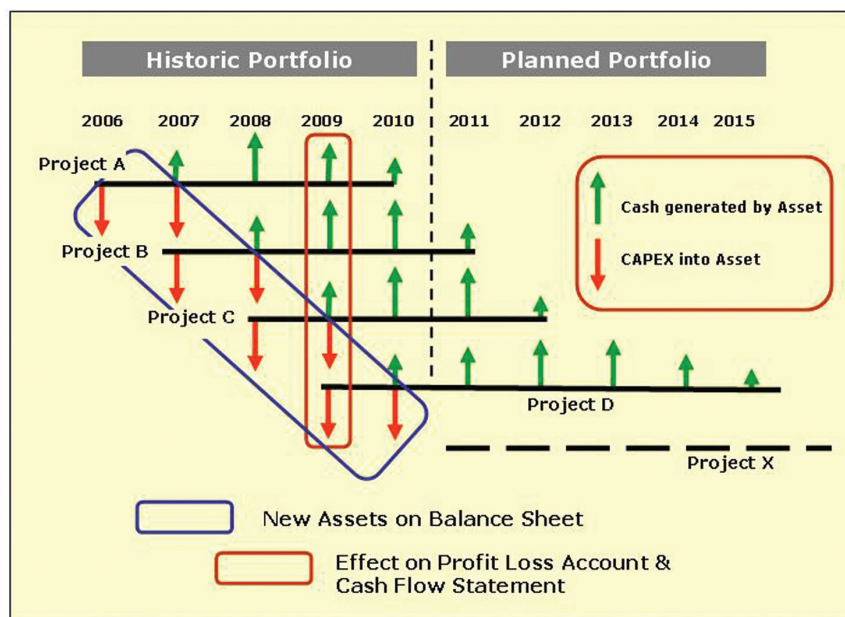


Figure 1 Prudent financial management is of paramount importance for corporate success. For example, if tight funding for field development projects prevents balanced project phasing in the corporate portfolio, operational cashflow from the new assets may kick-in too slowly or with interruptions. Cash flow shortfalls may lead to illiquidity and further declines could herald insolvency.

*Department of Geotechnology, Delft University of Technology, The Netherlands. E-mail: r.weijermars@tudelft.nl

Capitalization Billion USD	0.5<	0.5-5	5 -50		>50	
Category	Juniors	Small Caps	Mid Caps		Large Cap	
			Unconventionals	Independents	PPP Oils	Majors
Name	Oilexco Aurelian Petroceltic Rex Quest	Whiting Premier Dana	XTO Suncor Chesapeake	Occidental Marathon Hess	Eni Statoil Petrobras Repsol	Exxon Chevron Conoco Shell BP Total
Ref in this study	'Smaller' companies			'Bigger' companies		

Table 1 Capitalization categories and panel of peer groups studied.

groups: majors, public private partnership (PPP) oils, independents, unconventional, small caps and juniors. The corresponding market capitalization categories and their division into the two major groups is specified in Table 1.

In-depth analysis of the annual cash flow statements over a five-year period (2004-2008) revealed that the operational income of 'smaller' oil and gas companies (juniors, small caps, and mid-size unconventional players) commonly is insufficient to fund new CAPEX projects (Fig. 2). Operationally generated net cash needs to be supplemented by financing activities that raise cash from new equity issues, long-term debt issues (bond notes), or short-term, current debt agreements (bank loans). Net cash raised externally from financing activities thus helps the 'smaller' companies to cover the CAPEX of new projects (organic growth). Alternatively, the cash raised is used to acquire existing assets from other companies (non-organic growth). Any CAPEX allocation must be covered from the combined net cashflows from operations and financing activities – if not, a company may run into liquidity problems. Delaying CAPEX cannot be sustained for too long by any company, because future earning potential is determined by their current CAPEX programmes (Fig. 1).

The cash flow study revealed that CAPEX of new projects of nearly all junior, small caps, and unconventional companies (Fig. 2) can only be

covered by supplementing net cash generated from operations with cash raised from financing activities (debt and equity issues; some cash surplus may occur). In contrast, oil majors, PPP oils, and independents (Fig. 2) can fully fund CAPEX of new projects from operational cash flow and can amply spend their excess earnings on the bankrolling of their financing activities (retiring or refinancing past debt, paying dividends, and buying back common shares).

Further analysis of the cash flow data at the level of each category dis-

tinguished in Table 1, showed that the dependence on external financing is greatest for juniors and least for the oil majors (Fig. 3). The cash flow data show how the global oil industry provides a complete example of why juniors, small cap, and innovating companies (unconventional oil and gas players) emerge, and struggle for cash to fund growth. The evolutionary paths of juniors, small caps and unconventional is fuelled by earning potential and growth of market capitalization, which is a steep challenge because their operations traditionally

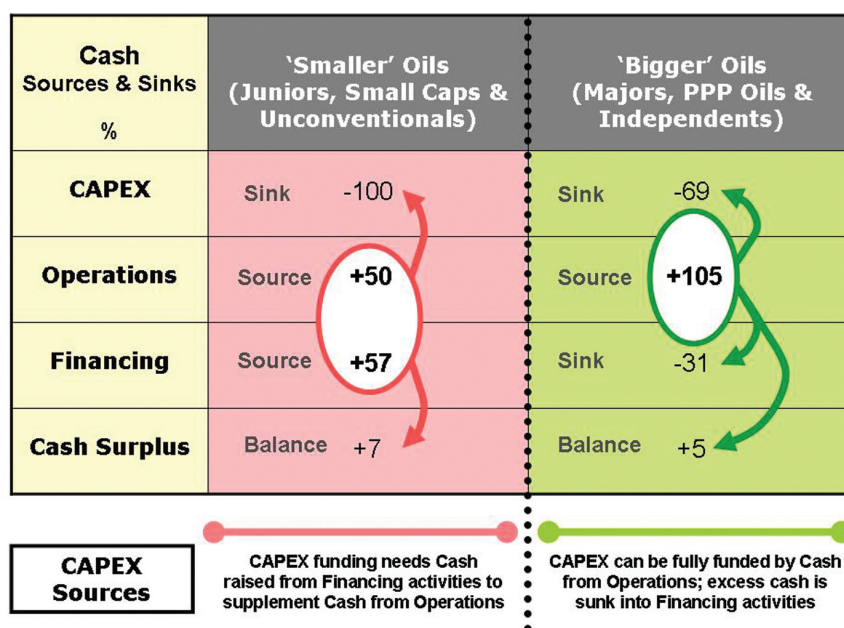


Figure 2 Cash flow numbers show percentage of annualized cash flow sources (+) and sinks (-) based on five year averages (2004-2008). A clearcut dichotomy exists between the cash sources of 'Smaller' companies and 'Bigger' companies. Due to their reliance and dependence on external financing, 'Smaller' companies have been hit hard by the recession.

	Juniors	Small Caps	Unconventionals	Independents	PPP Oils	Majors
Current ratio	N/A	0.88	0.92	1.14	1.17	1.20
Quick ratio	N/A	0.71	0.70	0.85	0.79	0.83
Financial leverage	2.26	2.10	2.34	2.26	2.74	2.24
Debt/Equity	0.70	0.70	0.71	0.33	0.44	0.20

Table 2 Liquidity and debt ratios (5 year averages 2004-2008).

cannot yet generate enough cash for capital growth projects. Additional cash must be raised by such companies from financing activities (Figs. 2 & 3). In contrast, the more mature oil and gas operators (majors, PPP oils, independents) sink a substantial proportion of operationally earned cash into financing activities – no new *net* cash has been raised by them over the study period 2004 to 2008 (Figs. 2&3).

Juniors need to jump-start new projects to begin generating positive net income from operations. As such companies succeed in increasing both market capitalization and cash flow to mirror the performance of the ‘bigger’ conventional oil companies, their need for cash-supplements from financing activities decreases. In fact, mid-cap size (independents) oil companies are already able to fund financing activities using 16% from operationally earned excess net cash, of which the other 84% suffices to cover all CAPEX needs (Fig. 3). The extreme net earnings realized by the oil majors allow them to use only half of the cash generated from operations for new CAPEX projects, the other half is used to fully fund all financing activities (debt-retirement, refinancing, dividend payments, and share buy-backs), and some cash surplus for the yearly end result (Fig. 3).

Gearing room in balance sheets

While even oil majors embarked upon major operational and financial restructuring programmes in 2009, juniors, small caps, and companies engaged in unconventional plays (termed here ‘unconventionals’) had less flexibility in their balance sheets to take on more debt. Table 2 shows the

typical liquidity ratios and debt ratios for the various types of oil companies. Small caps and unconventionals typically have current and quick ratios below unity, which means every dollar of their current liabilities can only fractionally be covered from dollars in their current assets, if immediately called for redemption. For example, The quick ratio of Suncor (an unconventional player) was 0.65 in 2008, which indicates that for every dollar of liability only 65 cents of current assets is immediately available if liquidation was needed. The gearing or debt ratio for juniors and unconventionals is also much higher than for mature companies (majors, PPP oils, independents), see Table 2. This situation means that

raising new cash from debt-financing is very difficult for juniors, small caps and unconventionals. Even when successful, new cash will only be offered to such companies at unattractive, expensive interest rates.

The reason why oil majors are doing so well in terms of cash flow (as compared to the ‘smaller’ companies) is that they have flexible balance sheets and gearing room for more debt (low historic debt ratios, Table 2), favourable credit ratings, room for equity financing, and diversified operations: these factors make them less vulnerable to market changes. In contrast, ‘smaller’ companies are commonly handicapped by less flexible balance sheets and little room for an increase of debt

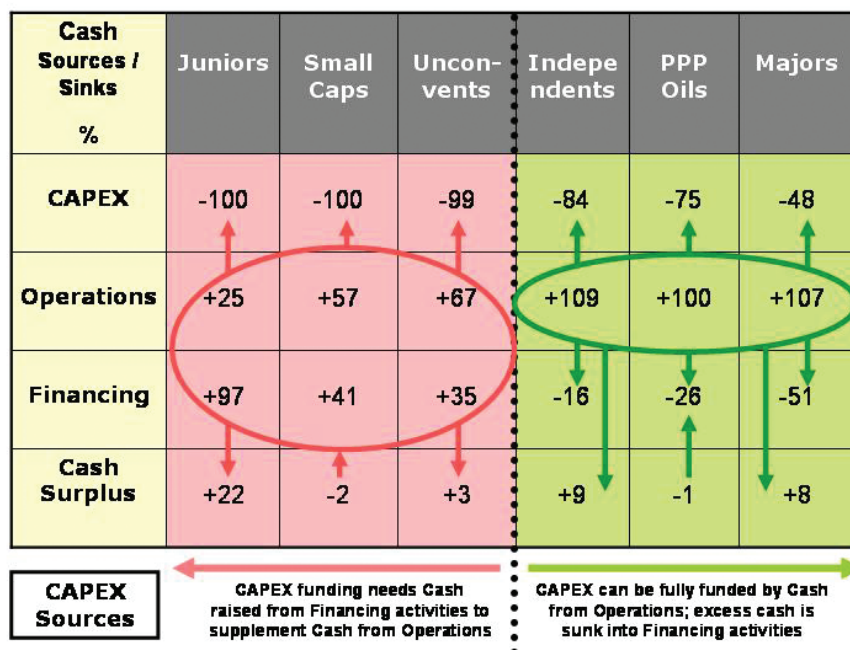


Figure 3 Juniors fund 75% of their CAPEX projects from external financing. The dependence on external financing sources decreases as companies grow bigger. In principle, Independents, Public-Private-Partnership (PPP) Oils and the Majors can all do without external financing. Oil Majors can fully fund CAPEX of new projects from operational cash flow and spend excess earnings on financing activities (retiring or refinancing debt, paying dividends and buying back common shares). Numbers show percentage of annualized cash flow sources (+) and sinks (-) based on five year averages (2004-2008).

Percentage	Exxon	Chevron	Conoco	Shell	BP	TOTAL
CAPEX	-29	-52	-69	-48	-44	-69
Operations	+112	+111	+97	+111	+104	+118
Financing	-71	-48	-26	-52	-56	-32
Cash Surplus	+12	+11	+2	+11	+4	+16

Table 3 Cash Flow sources (+) and sinks (-) for oil majors (5 year averages 2004-2008).

gearing (high historic debt ratios, Table 2), unfavourable credit ratings, little room for equity financing in times of recession, and less diversified portfolios make them vulnerable to segment underperformance.

Strategic advantage from operational cash flow

Exxon is the outperformer of its oil major peer group in terms of positive cash flow (Table 3), with margins and turnover from operations resulting in a net cash flow of which only 29% is needed to cover all CAPEX projects. A hefty 71% is sunk into its financing activities such as debt retirement, some refinancing, dividends, and primarily major share buy-back programmes. The six oil majors, the three American companies (Exxon, Chevron, and Conoco) and three European companies (Shell, BP, and Total), have different strategies for stashing away excess cash earned after tax (Table 3). After CAPEX for new projects is paid, half or more of the remaining cash from operations is mainly used on share buy back programmes by Exxon, and Chevron, whereas Shell and BP spent the remaining cash primarily on dividends. ConocoPhillips and Total are still conservative with use of excess earnings and sink about 30% of operational net earnings into

the funding of financing activities and 69% in new CAPEX projects to unlock future cash flows.

Unconventional players: operational cash flow vulnerability

The credit crunch has hit the juniors, small caps, and unconventional players particularly hard. Although very successful in replacing the North American conventional production with unconvensionals (tight gas, shale gas, tar sands), operational margins are not as profitable as for the conventional operators. Typically, of every dollar spent on CAPEX for new projects by unconvensionals, operations cover only 67 cents, and the additional 35 cents needs to be raised from external financing sources such as the capital markets or equity investors (Table 4).

With lower credit ratings, tighter capital markets, and reluctant equity investors, unconventional oil and gas companies became willing takeover candidates in the aftermath of the financial crisis. Among the US majors, Exxon took advantage of the market opportunity presented by falling natural gas prices to acquire the natural gas assets of cash strapped XTO Energy in a \$41 billion acquisition announced in December 2009. Total in January this year acquired a

25% stake in Chesapeake's Barnett shale gas field paying \$800 million in cash and \$1.45 billion to meet Chesapeake's OPEX for developing production expansion of the field over the next two years. Chesapeake also swapped assets of around \$10.8 billion in three earlier deals in late 2008 and 2009 with BP, Statoil, and Plains E&P company. Suncor announced a merger with PetroCanada in April 2009. Suncor's capital spending will still exceed cash flow from operations, leading to increased debt. Its oil sand assets can still support an increased level of debt, but a further downgrade of its credit rating beyond investment grade would create serious financial pressure for the company. Petrochina's \$1.8 billion acquisition of Mackay River and Dover Oil sand projects held by Athabasca Oil Sands was also approved in December 2009.

Competitive advantage from credit ratings

The access to cheap financing sources and superior gearing ratios plus robust operational cash flows of oil majors and PPP oils (all with credit ratings of AAA, AA, or A) placed these companies in a much better position to weather the Great Recession. In contrast, mid caps, small caps, unconvensionals, and junior oil companies (commonly with

Percentage	XTO	Suncor	Chesapeake	Mean
CAPEX	-100	-97	-100	-99
Operations	+61	+91	+50	+67
Financing	+39	+12	+54	+35
Cash Surplus	0	+6	+4	+3

Table 4 Cash Flow Sources (+) and Sinks (-) for Unconventional Oil & Gas players (5 year averages 2004-2008).

Percentage	2005	2006	2007	2008
CAPEX	-100	-100	-100	-100
Operations	-4	-3	+42	+65
Financing	+214	+90	+59	+26
Cash Surplus	+110	-13	0	-9

Table 5 Cash flow sources (+) and sinks (-) for Oilexco junior start-up after refinancing in 2005.

BBB and BB credit ratings, or non-rated) faced costs of credit which rose to several percent above that for AAA, AA, and A rated companies at the peak of the financial crisis in December 2008. Credit costs also climbed for AA rated companies (Chevron, Shell, BP, Total) during 2008 when interest rates (spreads) charged a 2% premium above Treasury bill rates. Meanwhile, the AA spreads (interest rates above T-bills) for major oil companies came down again in the second half of 2009 with interest rates at an attractive T+0.8%. With such cheap credit lines, taking over un conventionals and other cash-strapped companies has become economically beneficial for oil majors. Credit ratings agencies were quick to react and state that the AAA rating of Exxon would not be impacted by its December 2009 acquisition of BBB+ rated XTO Energy. In other words, the liquidity of XTO as EXXON's new subsidiary has been boosted by access to cheaper debt financing, allowing it to retire expensive BBB+ debt and replace it with much cheaper AAA debt financing.

Insolvency in credit crunch

Some smaller oil companies did not succeed in raising new cash during the credit crisis and went insolvent. For example, the 2008 bankruptcy of Oilexco North Sea was wholly due to the credit crunch, as can be inferred from its excellent increase in operational cash flow after restructuring in 2005 (Table 5). The company management tried to raise additional cash in October 2008 via a bond issue, but the rates for non-rated bonds (junk bonds) had then exploded to 12%

or more and left an otherwise fine company stranded without access to affordable cash. Bankruptcy followed insolvency in December 2008, after which Premier Oil moved in to take over Oilexco's prime assets. Premier Oil acquired the assets of Oilexco for \$505 million using favourable credit facilities and raising \$272 million by issuing new equity.

Conclusions and recommendations

What can be concluded and learned from these recent developments on capital markets? Capital markets constrain the strategic options of smaller and unconventional oil and gas companies. The cash flow in such companies has been weaker than for conventional oil companies (oil majors, independents, and PPP oils) over the five year period studied (2003 up to 2008). During the 2008/2009 recession, raising supplementary cash from financing sources (debt and equity issues) became nearly impossible for smaller and unconventional oil and gas players. In contrast, oil majors could still access capital markets under favourable interest rates and thus acquire the assets of cash-strapped juniors and un conventionals at attractive prices.

What can be recommended to the strategy managers of junior, mid cap, and unconventional oil and gas companies? Firstly, freeze all CAPEX programmes instantly if the required investment cannot be covered from operational net cash flow, because relying on access to capital markets for additional financing can be risky. Secondly, be prepared to initiate early merger talks with partners that have

more flexibility in their balance sheets and stronger operational cash flows. Thirdly, consider asset sales and farm-in partners as an alternative to outright corporate mergers.

What is the recommended strategy for managers in oil majors, independents, and PPP oils? Firstly, the tactical response to the global recession to cost-cutting and restructuring of internal programmes should include reviewing external growth opportunities, for example, inventory in companies which provide attractive assets and synergy with an existing portfolio. Secondly, companies need to make sure they benefit from superior credit-rating by leveraging up credit over equity and acquire financially distressed companies that can rapidly turn into cash cows once refinanced under better terms. Thirdly, make sure that new acquisitions really improve the company's financial performance, otherwise consider selective divestment or selective purchases of the target company assets.

The above recommendations are no guarantee for success but may help to mitigate early cash flow problems. No company, big or small, can sustain a cash flow crisis for long. Insolvency and bankruptcy are poor alternatives remaining if all other strategy options have failed.

Acknowledgements

The results of the analysis reported here are original and developed by the author using credit rating data from client reports of credit rating agencies, press reports by Reuters, quarterly and annual SEC-filings by companies, and publicly available white papers by major energy consultancies.