Perspective

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The Upstream Survivors of 2009
How to Live to Tell the Tale

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EXECUTIVE SUMMARY

The world is witnessing a widespread recession, precipitated by a financial meltdown. The situation is a first of sorts. When compared to the downturn in the late 1990s, which hit Asia and later Russia quite hard, we see a more widespread impact, with Europe and North America badly affected. Most notable, the credit crunch is a new factor in the equation and is curtailing investments that otherwise would still be attractive, further fueling the economic slowdown. In this context, we find the global oil and gas industry exposed to both a sharp drop in oil price and a credit squeeze that affects the four major stakeholders: national oil companies (NOCs), international oil companies (IOCs), oil field services (OFS), and engineering, procurement, and construction (EPC) companies. The dynamics of the crisis are slightly different for each player—but all are affected in significant ways by a historic recession of global reach. Those that are repositioning their resources wisely now will be those that survive the storm and live to tell the tale.

DEALING WITH LOW OIL PRICES AND THE CREDIT CRUNCH

Despite an OPEC production cut of 1.5 million barrels in October 2008, and another cut of 2.2 million barrels in December, oil prices continue to trade in the range of US$40 to $60 per barrel—far from the July 2008 peak of $147 per barrel. In fact, commodity prices overall continue to slide, with a similar trend in petrochemical feed stocks, which suggests that the economic slowdown is gaining momentum. Furthermore, the constrained credit environment is especially challenging for the oil and gas industry, given that industry's capital-intensive nature. These two factors are playing out in different ways for each of the stakeholders within the industry.

Oil Field Services and Engineering, Procurement, and Construction

Plummeting prices and the credit crunch have had significant ripple effects throughout OFS and EPC companies. Many NOCs and IOCs have responded to the downturn by delaying or canceling projects or by pressing hard to renegotiate existing or upcoming service contracts; these decisions have hit EPC and OFS companies very hard, dramatically affecting their market capitalization. Indeed, the share prices of OFS and EPC firms, which have fallen almost 40 percent, have proven more sensitive to the oil price drop than those of IOCs, whose value has dropped 24 percent *(see Exhibit 1)*. As the oil price inflation rent of 2007 vanished, a scenario that we have seen in many other industries has begun to play out *(see Exhibit 2)*. Highly leveraged OFS and EPC firms have had to scramble for cash to maintain operations or consider merging with the competition.

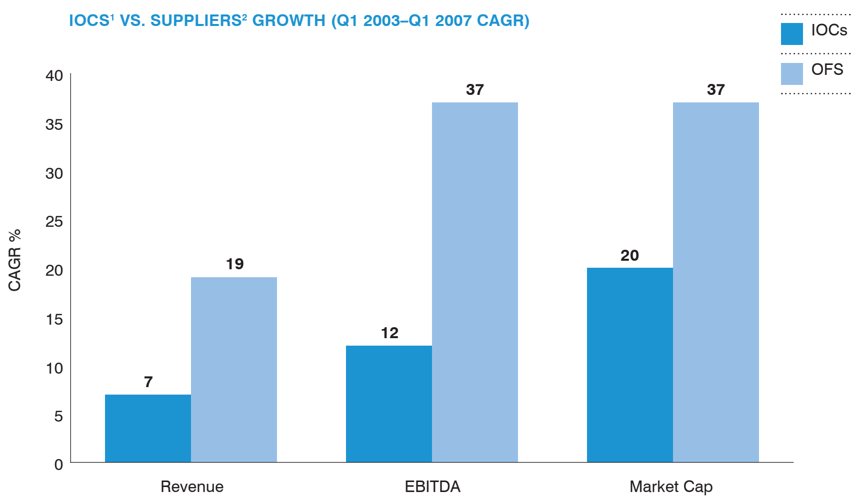
National Oil Companies

Middle East NOCs and, to a lesser degree, Asian upstream companies had limited exposure to equity markets or international financial institutions (including those that have defaulted). Thus, they remain in a good position to continue investment programs, boosted by robust balance sheets as a result of five years of rising oil prices. However, these NOCs are anxious about the decline in oil prices, which is expected to continue well into 2009. Even though

Exhibit 1
Impact of Falling Oil Price on Stock Price Performance for IOC, OFS and EPC

Note: Selected operators are BP, Total, Chevron, ExxonMobil, and Shell; OFS companies are Baker Hughes, Schlumberger, WFT, and Halliburton; EPCs with Fabrication Yards are McDermott, Gulf Island Fabrication, Chicago Bridge & Iron, Tenaris, and Shaw Group.
Sources: Bloomberg; Booz & Company analysis

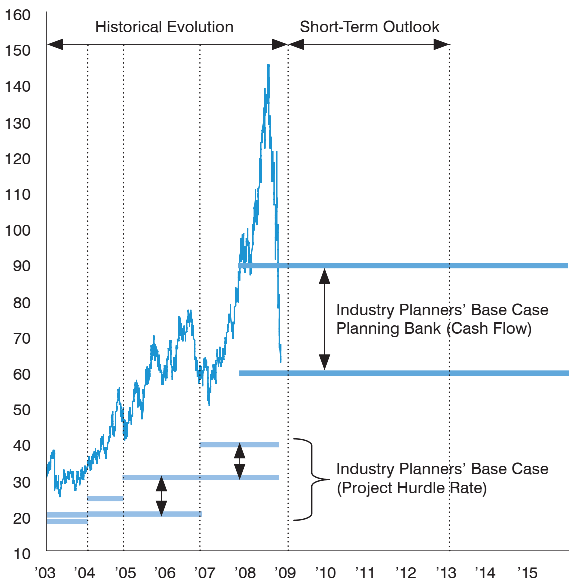
Exhibit 2
Impact of High Oil Price on IOC, OFS, and EPC Market Capitalization



1. Super Majors are defined as BP, Royal Dutch Shell, ExxonMobil, Total, Chevron, and ConocoPhillips.
2. "Suppliers" here includes 30 suppliers from Bloomberg OFS Index, e.g., Halliburton Schlumberger, Baker Hughes.
Sources: Bloomberg; Booz & Company analysis

Exhibit 3
Oil Price Bands and Oil Price Assumptions for Industry Planners

OIL PRICE AND PLANNING OIL PRICES BANDS



INDUSTRY PLANNERS' OIL PRICE ASSUMPTIONS

	2003	2004	2005	2006	2007	2008
Petrobas	18	20	20	20	22	
Maersk	18	20	20	20	35	
Statoil hydro	18	20	20	30	35	60
Shell	18	20	25	25	30–40	
Total	18	20	20	25	60–80	60–90
ExxonMobil	18	20	20	20	40–50	40–50
BP					38	60
Middle East NOCs						35–55

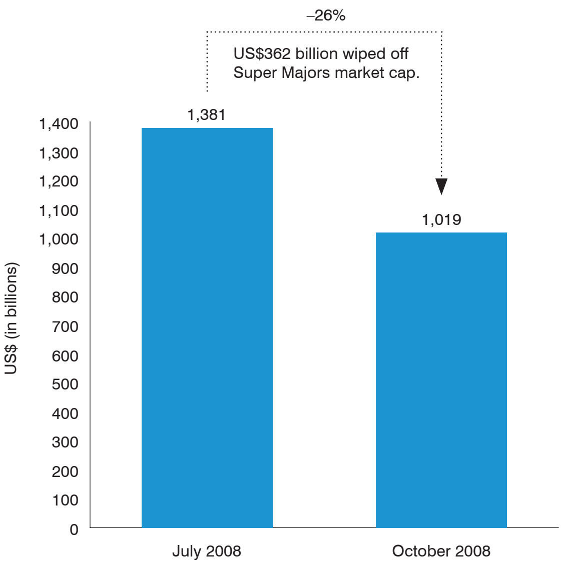
Oil price planning assumptions quoted relate to capital investment decisions

Cash flow assumptions

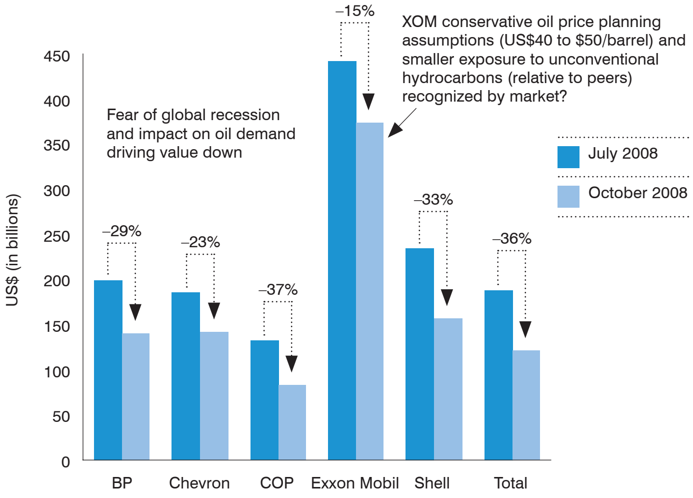
Note: Analysis and comments on market situation are based on current analysis, market views, and available data. Further understanding of implications from financial crisis and oil price drop will evolve with further analysis and information on sector responses.
Sources: Douglas Westwood; Bloomberg; WTI; Global Insight; *Financial Times*; Booz & Company analysis

Exhibit 4
Impact on Market Capitalization of Super Majors

HISTORICAL MARKET CAP OF SUPER MAJORS
Monthly Average



HISTORIC MARKET CAP OF SUPER MAJORS BY COMPANY
Monthly Average



Sources: Bloomberg; Booz & Company analysis the current prices are still above the hurdle rates for most of their projects, NOCs are being conservative in their capital expenditures *(see Exhibit 3)*. As a result, they have already announced delays in exploration projects, which are typically the first to be put on hold.

The impact of the credit crunch is more evident in downstream projects. A drop in demand has resulted in a number of canceled refinery projects and cuts to many other investments; the demand issue is compounded by financing difficulties. In the Middle East and North Africa region, downstream investments are more reliant on debt (with approximately 40 percent equity) than upstream projects, which, especially in Gulf Cooperation Council (GCC) countries, are typically financed in cash.

Overall, for Asia and the Middle East, projects that have already been financed and are due for completion between 2008 to 2012 are expected to move forward—except where specific lending sources or finance/investment partners have been directly hit by the financial crisis. Generally, backlogs aren't subject to many risks: By the time field development starts, about half of all project costs are already sunk. Projects that have not been started will suffer the bulk of the cuts. The cuts will be more prevalent among oil projects; gas and infrastructure projects are expected to stay relatively safe. Indeed, in the GCC region, gas has upstaged crude exports as the focus of energy investments, bolstered by industrial development and the power needs of a growing population. Elsewhere, notably in Russia and Brazil, greater dependence on debt to fund growth has left NOCs concerned about their ability to meet their long-term investment plans.

International Oil Companies and Independents

IOCs and smaller independents, which are more reliant on external financing, are seeing their funding opportunities dry up rapidly. As a result, they are making deep cuts in their projects and significant cuts in their exploration programs. The super majors, despite relatively solid balance sheets, have recently seen colossal value destruction, with some US$362 billion (26 percent) completely wiped off their market capitalization *(see Exhibit 4)*. Those with greater exposure to unconventional oil appear to be hurting more than others. As a result, the companies are undergoing a full revision of their exploration portfo-

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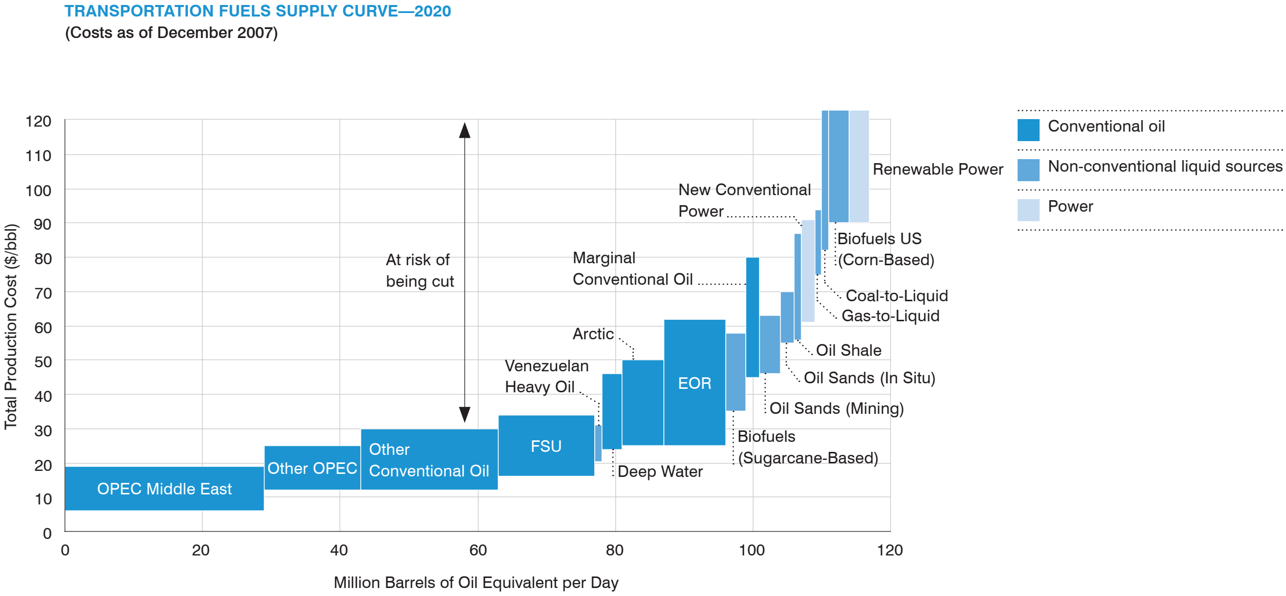
lio with mega projects that require international financing being scaled back and high-cost (unconventional) programs (including some renewable) dropping out of the mix for now *(see Exhibit 5)*.

A Climate of Reaction and Retrenching

IOCs are adopting a more conservative approach to their economic planning for projects and, as a result, are exiting or slowing down unconventional projects, pausing on downstream investments, and being cautious about upstream programs, though they still seem willing to participate even with lower rates of return. NOCs, particularly in the GCC countries, are signaling their governments to review budgets in light of low oil prices for next year. NOCs are also reviewing all projects, re-tendering, applying cost pressure, and, in terms of service and procurement contract negotiations, regaining the upper hand. In response, EPC and OFS suppliers are sorting out their own supply chain, reinforcing financials with creditors, and fiercely competing against one another. Debt-free OFS players are focusing on production-related services and assessing the impact of the slowdown in the exploration and development activities on their offerings. Highly leveraged OFS and EPC players are concerned about their survival.

Exhibit 5
Energy Supply Curve



Source: Booz & Company analysis

WHERE ARE THE OPPORTUNITIES?

Despite diminishing value and bearish price-to-earnings valuations, strong players will find opportunities in several areas. A number of issues should be top-of-mind as players seek to establish a better strategic position during the downturn.

For NOCs, M&A is in the air. NOCs, many of which have a political mandate to purchase overseas assets to address the security of supplies, are likely to seek acquisitions of smaller independents and, even if contentious, should explore opportunities to acquire major players. In order to bridge expected declines in production and to level the playing field against IOCs, NOCs must realize their own increasing role as drivers of new investment. NOCs accounted for one-third of mergers and acquisitions spend in 2006, and that percentage is likely to increase in 2009. In addition, the International Energy Agency (IEA) forecasts a lack of future investment funds to cover expected declines in production. Acquiring an OFS or EPC provider could be a way for NOCs to address such capability gaps.

IOCs, meanwhile, are likely to focus on cost savings and look at shifting their asset portfolios to increase their E&P activities in the Middle East, where exploration cost per barrel remains low. They will also look for long-term investment opportunities to strengthen resource positions. Overall, they should be wary of cutting back too severely on exploration, developments, and production enhancements; companies that followed that course in previous downturns found themselves in a weaker position when the economy rebounded.

Strong players in EPC and OFS should look for vertical integration and consolidation opportunities (through acquisition of small distressed players) to gain market power. Leaders in the sector will focus on differentiation through more rigorous quality control and timely delivery. Private equity funds will also find good opportunities in smaller OFS companies—and some funds will be looking to do a "roll-up play" of OFS.

For all stakeholders, collaborative partnerships will be a key play. Long-term strategic partnerships can achieve risk sharing and expand capabilities in major project delivery and operations.

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HOW DARK IS THE FUTURE?

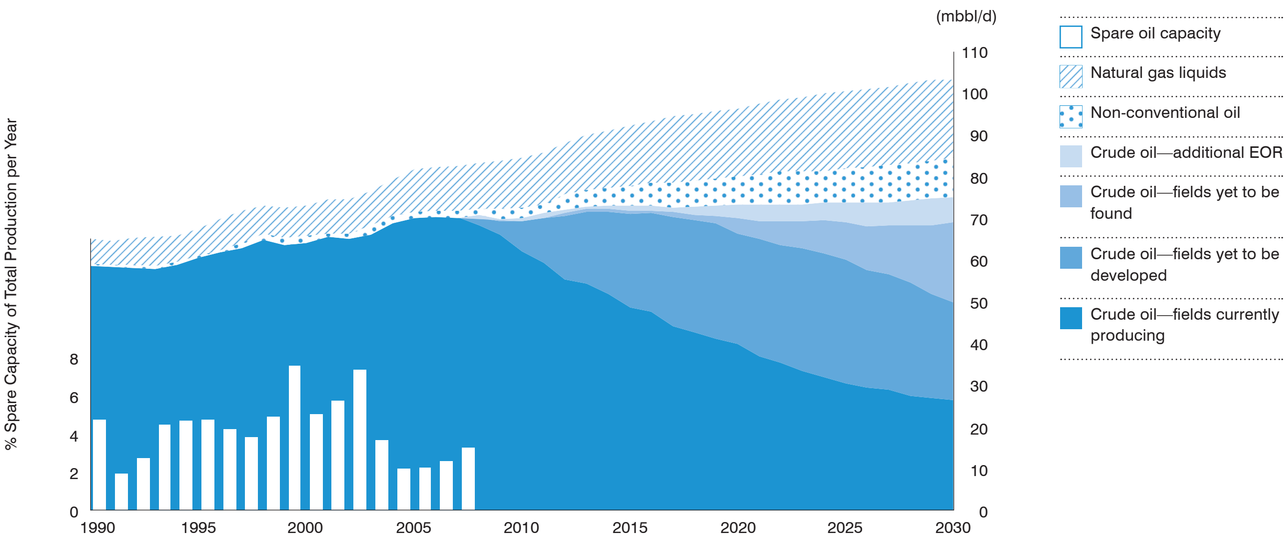
Every kind of company—be it an IOC super major or a large NOC—will see tremendous shifts during the recession, and yet, the long-range prospects of the industry remain strong. After the oil and gas supply-and-demand realities kick in—at the bottom of the recession, toward the fourth quarter of 2009—the IEA believes, oil prices will rebound to more than US$100 a barrel in the medium term. There are two main reasons for this:

- Output from the world's oil fields is declining at a natural rate of 9 percent annually.
- This decline rate is curtailed to 6.7 percent when current investments to boost production are made *(see Exhibit 6)*.

Large investments will be needed to make up for the decline and any growth in demand in the long term.

Replacing existing production is increasingly costly as remaining hydrocarbons are more challenging to find and produce; such activity will increase pressure to find and eliminate costs. The long-term picture for OFS and EPC players is, therefore, far from bleak. A supply crunch is likely to emerge over the next few years and boost oil prices significantly. Thereafter, the long-term market fundamentals suggest oil prices will follow a strong upward trajectory. In this long-term scenario, with demand for oil increasing and supply increasingly challenged, OFS and EPC players will be well positioned to optimize their growth opportunities and to capitalize on their important role in the global industry. In the short to medium term, the winners will be those that manage intelligently through the downturn, consciously and strategically positioning themselves in markets dominated by NOCs.

Exhibit 6
Global Oil and Gas Production



Sources: IEA; Booz & Company analysis

About the Authors

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