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Upstream Supply Chain Challenges

In 2009

*Managing Spend and
Capacity in a Volatile
Economic Environment*



Contact Information

Dallas

Dennis Cassidy

Principal
214-746-6500
dennis.cassidy@booz.com

Christopher Click

Principal
214-746-6543
christopher.click@booz.com

Houston

Andrew Steinhubl

Partner
713-650-4183
andrew.steinhubl@booz.com

Matt McKenna

Senior Executive Advisor
713-650-4156
matt.mckenna@booz.com

Muqsit Ashraf

Principal
713-650-4170
muqsit.ashraf@booz.com

Mark Uffhausen

Senior Associate
713-650-4191
mark.uffhausen@booz.com

McLean, VA

Eric Spiegel

Senior Partner
703-903-3813
eric.spiegel@booz.com

EXECUTIVE SUMMARY

The financial crisis and its impact on global economies has reduced the world's hydrocarbon demand and in turn driven a significant reduction in oil and gas prices. Unfortunately for upstream producers, input costs have not fallen as quickly, especially for long-term, complex capital projects. As a result, oil and gas executives are pursuing cost reductions and reassessing capital programs. Because today's upstream companies are so dependent on third-party material and service providers, with as much as 80 percent of total operating costs driven by third-party spend, any attempt to improve cash flow or contain costs must start with effective management of a company's supply chain.

However, many of the aggressive negotiating tactics that upstream producers may have employed with suppliers during previous downturns are the wrong approach to take in today's environment. That is because, unlike previous periods of price discontinuity, most oil executives—and the forward markets—believe there is a light at the end of the tunnel. Prevailing supply constraints will push prices higher as the global economy rebounds and demand grows. Therefore, the role of upstream chief procurement officers just became increasingly difficult: They must help their companies conserve cash and reduce costs in the short term while not impairing, or ideally improving, the long-term supply relationship and access to capacity necessary to secure access to key materials and services when growth does return.

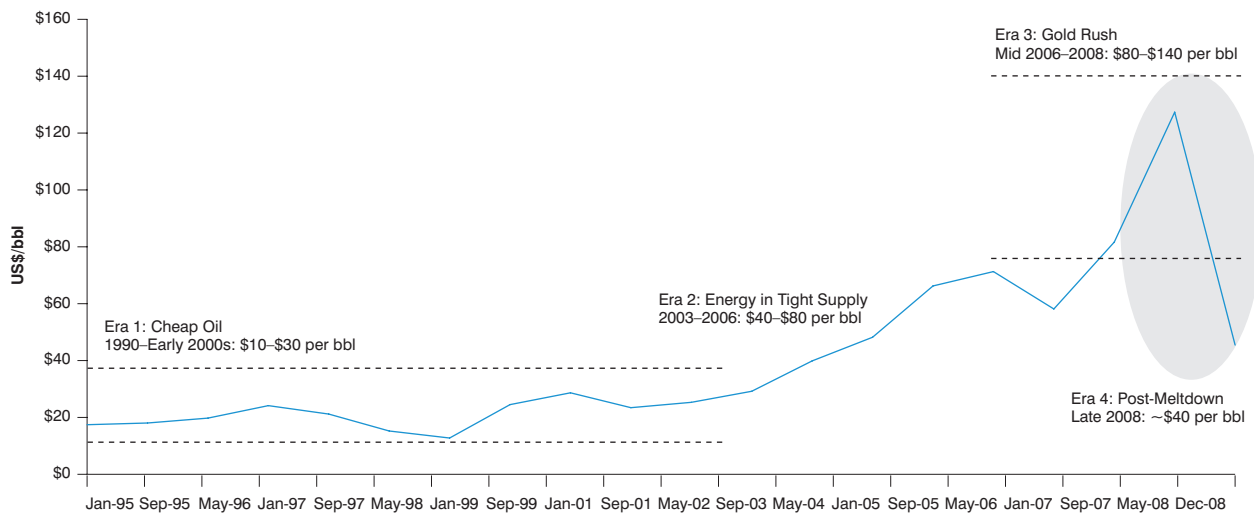
A TEMPORARY END TO THE GOLD RUSH

In the last five years, the oil and gas industry has witnessed an unprecedented run-up in prices, which rose almost 500 percent from 2003 price levels. During this time, input costs increased dramatically as producers were forced to pay virtually any price demanded by suppliers to secure their supply of essential materials and services. While product margins remained high, this rapid increase in cost was considered a necessary evil of growth. But in late 2007 and early 2008, many oil company executives began asking if they could sustain this inflation in operating costs as

runaway project costs were eroding product margins (*see Exhibit 1*). Now, given the volatility and collapse of commodity prices, it is clear that oil companies are in a margin squeeze and are actively deferring projects, reducing capital budgets, and seeking aggressive operating cost reductions. One oil executive captured the sentiment well, stating, “If you already have iron in the ground, then you are probably still OK, but at [with oil at] \$40 per barrel we are not going to commit the additional billions in spending that we were thinking about a few months ago.”

Exhibit 1
Falling Oil Prices Put Pressure on Upstream Companies

NYMEX WTI FRONT MONTH DAILY SPOT PRICE 1995–DEC 2008



Sources: Bloomberg; Booz & Company

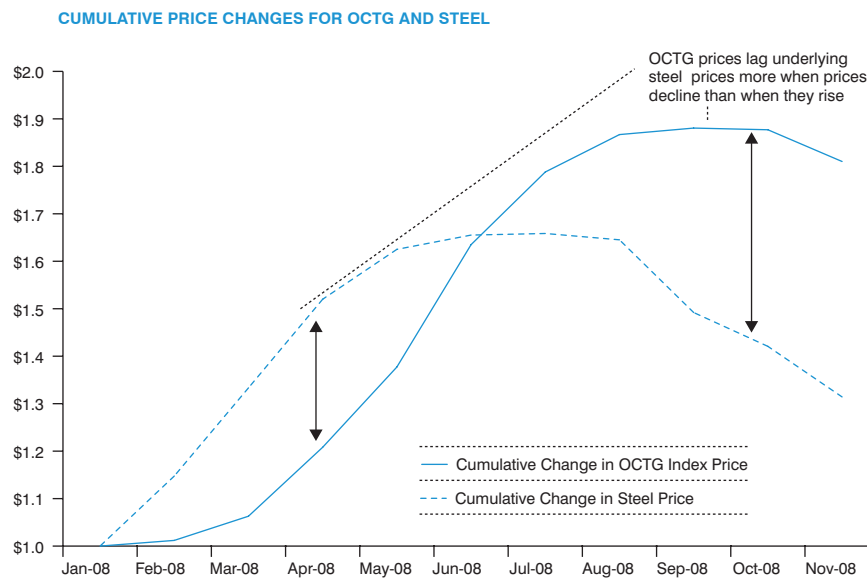
Meanwhile, despite the rapid decline in overall costs for commodities such as steel, prices for associated materials and services (e.g., pipe and casing) have not come down with the same velocity. As shown in *Exhibit 2*, as the price of steel rose steeply, prices for tubular products also rose steeply. But as the price of steel evened out and even dropped, oil country tubular goods (OCTG) prices have been slower to come down than they were to go up. As one would expect, suppliers have been holding on to their advantageous price

position by keeping their prices high as long as possible. Leading upstream companies are leveraging their deep insights about the fundamentals of the raw material market to conduct informed conversations with suppliers and secure lower prices.

During the run-up in energy prices, upstream companies largely extracted value from accelerated asset development via an increasing dependence on suppliers, who were able to provide incremental “swing” capacity. To meet this demand, many

suppliers have scaled up or trained up their work forces and invested in developing the capabilities to support new plays such as horizontal drilling in shale basins, deep water developments, and Canadian oil sands. The result for many producers has been that external spend now constitutes as much as 80 percent of total operating cost. Thus, any attempt to control costs will require a company to focus on its external spend, which means a significant role for sourcing teams.

Exhibit 2
Declines in Commodity Prices Have Not Led to Corresponding Declines in Material Prices



Sources: Bloomberg; Pipe-Logix; Booz & Company

COST CONTROL FOR TODAY AND TOMORROW

Upstream energy companies have traditionally responded to price fluctuations and changes in the balance of supply and demand in one of two ways:

1. *Exploiting buyer leverage:* In times of oversupply (such as now) buyers have often resorted to aggressive negotiations and unsustainably low prices by extracting margin from their suppliers.
2. *Cooperative partnering revisited:* In the other extreme, many companies developed strategic partnerships focused on productivity or other benefits beyond first price.

Exploiting buyer leverage has been the most prevalent approach because it can yield immediate tangible benefits in lower unit prices. But it can also result in the perpetuation of an adversarial relationship (based on who has the advantage in the business cycle). Once supply and demand fundamentals again favor the supplier, it is likely that input costs will rise once again, perpetuating the cycle of margin compression. One oil executive recently said it best: “For the past 50 years, whoever is on top has beaten up the other guy. That’s just the way we have been trained. I’m not sure this industry will ever change.”

Cooperative partnering, on the other hand, offers the prospect of delivering long-term value by better aligning the partners' incentives. However, many of these benefits become evident in the long term and do little to relieve near-term cost pressures. Also, the industry has often struggled to implement and maintain effective strategic partnerships, which often are little more than large transactional contracts with limited objective measures and consequences.

Upstream companies must control near-term costs by aggressively

working with internal clients and suppliers alike to prudently reduce spend. But both suppliers and buyers have an opportunity to also reduce the long-term cyclical pressures created by volatile input costs by adopting a sustainable operating model that emphasizes fair value pricing.

There is a dichotomy between pressure to focus on near-term cost-control opportunities (e.g., stop buying, assess demand, review inventory targets, assessing fair value pricing, review payment terms)

and the need to focus on long-term sustainability. Focusing on near-term cost containment alone will not lead a company out of a tough market. For long-term sustainability, oil companies must also focus on supply chain policies and processes, technology, organizational attributes, and performance management.

In this uncertain and volatile environment, companies are actively looking for ways to preserve cash flows to ensure that expenditures position the company for maximum long-term growth. To do this,

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companies with superior supply chain functions are challenging all purchasing activity to ensure that activity and inventory levels reflect future demand for materials and services, which may be lower than it is at present. This overview includes reviewing orders that have already been placed, as well as orders related to future projects. Since orders for planned activities are placed well in advance of anticipated work dates, they are often dismissed as sunk costs and not acted upon. These sourcing teams are working closely with operations staff and management

to review all outstanding orders and requisitions. They look for opportunities to optimize open orders and pending requisitions that both reduce the company's internal costs and ensure that structural long-term damage is not inflicted upon the supplier or supply industry.

Leading companies are also assessing and recalibrating demand in light of any decline in future capital expenditure and operating expenditure spend. Specifically, the sourcing staff should facilitate a review of major projects currently

in the pipeline to ensure that the economics and business cases are still valid before contracting or ordering services, equipment, and material.

In addition to optimizing orders that have been, or were to be, placed, some supply management teams are looking closely at current inventory levels to check for any excesses. As companies ramped up development activities to take advantage of high energy prices, their focus on supply assurance may have led to excess inventories designed to compensate for long lead times and outright

shortages. Now that prices (and associated development initiatives) have declined, companies may benefit from a fresh look at their inventories to determine whether levels reflect reduced internal demand and changes in availability.

Finally, many companies are reviewing their payables strategies. There are ways to take advantage

of payment terms to conserve cash, such as limiting early payments. Some companies may employ a standard payment process for a broad category of purchases and fail to make use of advantageous payment terms. Of course, companies must address the economic trade-off of paying early and balancing payment incentives with the need for cash to get the most value. Not only should current

payment processes be reviewed and enhanced to reduce the cost of early payments, wherever possible future contract terms should be negotiated to embed advantageous payment conditions.

As demand for materials and services declines, suppliers will ultimately offer price reductions. However, companies must understand whether

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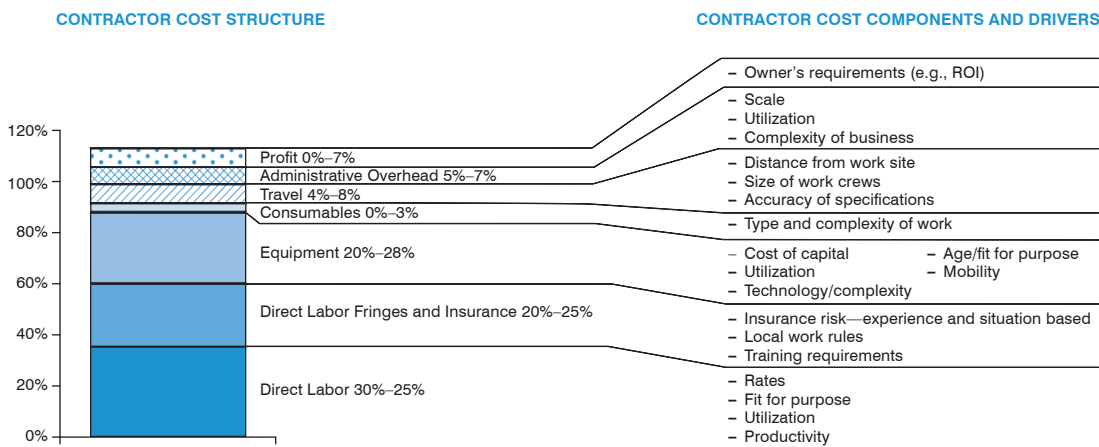
the reduction being offered is fair. For example, a supplier may be offering a 5 percent price reduction, but that is inadequate if market conditions have reduced supplier input costs by 20 percent. Companies must know whether the pricing they are receiving is fair given current market conditions. Leading companies establish a fact base, including a deep understanding of supplier costs and

associated drivers, to help ensure that companies know when they are not receiving fair pricing.

Leading companies understand the fundamentals of supplier costs and the underlying drivers of cost (see Exhibit 3). The price set by a supplier can be broken down into a number of components. As a purchaser, there are ways to impact the costs of direct

labor, such as ensuring that workers are using their time effectively. Being aware of and tweaking the factors that drive your supplier's costs and therefore drive your price can help both organizations concentrate profit in a manner that supports long-term sustainability. This is what we call a "fair pricing" model.

Exhibit 3
The Roots of Supplier Costs



Source: Booz & Company

The use of fair value pricing is particularly important in this volatile climate. Companies forced to react to near-term pressures may become overly aggressive with cost-saving initiatives, which may in turn harm their suppliers by forcing layoffs and limiting supplier responsiveness. Companies that are not well-positioned with their supplier base through these trying economic times will struggle to capture the value of the next upswing. This issue is becoming even more critical as labor in this sector becomes increasingly scarce.

Long-term Operating Model

To sustain long-term benefits and improvement effort, leaders are taking a critical review and refining the long-term procurement operating model in parallel with near-term cost control efforts. To support a sourcing team's ability to deliver a sustainable balance between cost control and supply assurance throughout the commodity cycle, the procurement operating model must be positioned to meet these objectives. This positioning includes elevating the involvement of the sourcing function to directly participate in strategic internal decisions as well as developing the

organization, processes, technologies, and performance management capabilities to leverage this strategic role when dealing with the company's supplier base.

2008 was a difficult and challenging year and 2009 is likely to bring further volatility, which will engender additional challenges. The key to surviving in this market is to have an effective sourcing strategy. With such an approach in place, an oil company can gain a competitive advantage to emerge from the recession in a much better position for growth and to leap past the competition.

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