



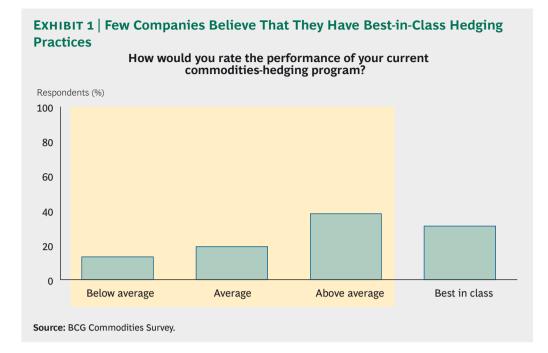
KEY CHALLENGES IN MANAGING COMMODITY RISK

By Robert Tevelson, Petros Paranikas, and Harish Hemmige

BY APRIL 2012, CONOCOPHILLIPS had closed the bidding on its struggling oil refinery in Trainer, Pennsylvania, at a price of \$180 million. The deal might have seemed routine but for the fact that the buyer was Delta Air Lines, hardly a familiar name in the oil-refining industry. Frustrated by fluctuating fuel prices, Delta had decided to take production into its own hands, so it could exercise some control over the "crack spread," the difference between the prices of crude oil and fuel.

That unorthodox deal underscores the difficulty businesses face today in minimizing and stabilizing commodity prices and the drastic steps management is, therefore, willing to take. Although, in strictly financial terms, not a large investment for Delta, the purchase is not without risks, including the possibility of distracting management, incurring operating losses, or, of course, a declining crack spread. Still, if Delta can operate the refinery efficiently, the company could change its cost position in the airline business, creating a unique competitive advantage. The challenges confronting Delta are far from unique. Real commodity prices and their volatility have risen dramatically in recent years. As a result, commodity risk management has become a critical topic for senior business leaders across categories and industries. Despite the importance of the topic, little research has been done on the challenges of commodities hedging-and how companies deal with those challenges. To gain a clearer understanding of the situation, The Boston Consulting Group studied a group of large companies, conducting interviews with and surveys of senior procurement executives to gain insight into current hedging practices and perceptions.

We found that although almost 90 percent of the executives we surveyed viewed commodity risk management as a source of competitive advantage, less than a third believed that their companies had implemented best-in-class hedging practices. (See Exhibit 1.) It is surprising that even highperforming organizations said that their hedging practices fell short in some dimen-



sions. Distinct challenges-depending on the type of commodity and the industryexist for every company, but five common risk-management challenges emerged: setting the right objectives, finding the needed capabilities, engaging senior leadership, measuring performance, and creating incentives for success. Let's look at each of these challenges more closely.

Setting the Right Objectives. The executives we surveyed reported that

their hedging programs had four major objectives: stabilizing commodity costs, achieving the lowest possible cost, ensuring availability of supply, and maintaining the quality of the commodities. (See Exhibit 2.) Cost stability and achieving the lowest cost were cited most frequently as the top goals, but one executive remarked, "The objectives of our company are very difficult to answer, and we debate these questions often."

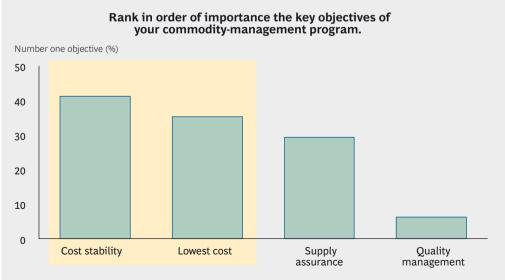


EXHIBIT 2 Companies Reported Four Major Hedging Objectives

Source: BCG Commodities Survey.

We observed that companies with lower commodity exposure and higher pricing power tended to focus more on supply assurance and quality management. One executive stated, "Our high margins make supply availability and quality consistency far more important than price." Most companies with higher exposure or lower pricing power due to the commodities' strategic importance to competitive advantage focused on achieving low cost and stabilizing volatility. Another participant in our study explained, "Commodities are our main product, so we use hedging to manage cash flows and lock in returns on projects."

In many cases, goals such as achieving lowest cost and high-quality management require making tradeoffs. One executive reported paying a premium for long-term contracts to ensure a constant supply of key commodities but noted, "We aren't explicit about tradeoffs in our organization." Another remarked, "Senior executives want to buy better than the market, while the commodities team wants to reduce volatility. We are never on the same page."

The leadership team should reach agreement about which objectives are most important to the company's overall strategy and then strike a balance among those objectives in the company's hedging program. Despite the need for alignment, approximately 25 percent of respondents said that key stakeholders were not aligned on the objectives of their hedging programs.

Common tactics employed to ensure alignment include annual budgeting, strategy sessions, and risk management committees, and less than a third of respondents reported that their companies used all three.

Finding the Needed Capabilities. Many

companies struggle with hedging programs, because the type of people required, their level of specialization, the necessary incentives and rewards, and the risk profile of the trading function overall are fundamentally different from those in the broader organization. Although some company executives said that they were

highly confident in their trading execution, about 25 percent reported that capability levels were low. Despite these gaps, only one-third of low-performing companies had considered using an outside partner to help with execution—the same proportion as high-performing companies. The traditional hedging model is internally executed, but a partially outsourced model can help fill the gaps for companies that lack in-house capabilities. Some study participants had discussed partnering with key suppliers whose strong trading capabilities would support the company's hedging programs in situations for which it lacked internal capabilities. These partnerships ranged from consultative to fully integrated risk managers. A company may lack scale or capabilities to establish an effective hedging program, but it is still affected by commodity price swings. Through a partnership, the company, if it is unable to build those capabilities internally, may be able to access trading expertise.

Compensation for these arrangements varies. One participant explained, "Financial arrangements can range from an embedded physical price to fee and profit sharing, which is skewed toward the customer." But establishing such relationships requires structuring agreements carefully to ensure that incentives for the supplier and for the company are aligned. Factors that affect the fees paid include the level of discretion provided and risk undertaken.

Engaging Senior Leadership. Aligning the hedging strategy with the business strategy requires deep and ongoing engagement by senior leadership. By integrating hedging decisions across the organization, companies improve their strategic alignment, ensure a shared sense of responsibility for results, and improve their ability to respond effectively to changes in commodity prices. One executive stated, "Communication and integration of hedging with the broader organization's decision makers is critical to our success."

Matching clearly communicated hedging objectives to corporate strategy can

contribute significantly to a successful commodity-risk-management program. Among participants who reported that their company's hedging strategy was "very aligned" with overall business strategy, 38 percent described their hedging performance as "best in class." In contrast, of those reporting that hedging strategies were "neither aligned nor unaligned," none described his or her company's performance as best in class.

About 60 percent of the executives we surveyed reported that their companies had room to improve the engagement of senior management. One participant noted that engagement was "unstructured in the past, but we are trying to institute a pilot of meeting monthly or quarterly." The most common forms of engagement were written reports distributed internally, risk committee meetings, and C-suite meetings. In particular, those with C-suite meetings consistently cited the highest levels of satisfaction with their programs and hedging performance.

Engaging senior leaders across the organization on hedging topics can also drive superior results. For instance, companies that formally integrated sales planning with their hedging activities were nearly five times as likely as other organizations to report that their hedges matched their physical consumption of commodities very closely. Simply put, sales and planning integration is essential for ensuring that the correct quantities of the right products are hedged—within the right time frame.

Similarly, companies that integrate product design and hedging activities were far more likely to change product designs in order to help reduce commodity costs. One respondent noted, "Magnets have become much more expensive since the iPhone became popular, so we worked with design teams to substitute products."

Measuring Performance. Companies use metrics to gauge the performance of their hedging program, but doing so effectively is a significant challenge for executives. More than 80 percent of those we surveyed indicated that their companies had room for improvement in this regard. Key problems include competing or ambiguous hedging objectives, an absence of direct external benchmarks, and a lack of visibility into the performance of peers, all of which make it difficult to evaluate hedging programs. One executive said, "Having a usable external benchmark is very challenging because of many different dynamic factors."

Companies typically use market exchange benchmarks when available, but many markets lack true transparency into the actual sourcing costs of inputs. Other companies consider performance versus plan to gauge results, but such evaluations are neither market based nor objective. Many look at peers' financial statements to estimate the relative impact of commodities compared with their own financials, but doing so rarely yields a clear comparison. One participant said, "We use these tools, recognizing that they are highly flawed."

Most current measurement techniques either cannot adequately measure performance against all of a program's objectives or lack the specificity that the business needs. In the absence of strong metrics, many companies overestimate their performance relative to competitors: more than two-thirds of the executives we surveyed believed that they had outperformed their peers over the past three years.

Setting internally aligned, clearly defined metrics rooted in the core objectives of the hedging program enables a company to understand whether the hedging program is performing well.

Creating Incentives for Success. Developing incentives for hedging teams is difficult for two reasons. First, the volatility of commodity markets makes it difficult to implement incentive payment schemes without creating agency problems associated with measuring short-term performance. Second, it can be hard to retain hedging talent—particularly financial traders—because most corporate cultures differ from the typical trading culture. An effective compensation scheme aligns the interests of both the hedging team and the company and ensures that team members' compensation is good enough to keep them with the organization. One executive noted, "Traders usually want to get compensated on how they do, regardless of how the company does."

It's no surprise, then, that implementation of incentives is among the hardest aspects of a hedging program. About half of the companies reported having no incentive system at all for their hedging teams. One executive said, "Creating incentives based on the standard company framework may be ineffective for keeping talent." More than 80 percent of participants said that their hedging team's incentives were not "fully linked" to their hedging objectives, and less than 30 percent explicitly linked incentives to performance metrics. Among those with incentives, the most common forms reported were annual performance bonuses and salary increases. Still, compensation remains relatively conservative, with 75 percent fixed and 25 percent variable in most companies offering incentives.

THE TREND OF rising commodity prices and increasing volatility is a new problem, and it demands new solutions. Corporate hedging programs have had mixed results. Even large sophisticated organizations have struggled with hedging losses and competitive disadvantages as a result of rising commodity prices. In this environment, there is no "safe" answer.

Different companies have different competitive positions and face unique commodity-risk challenges. In practice, approaches to risk management are varied and will continue to evolve, with many businesses planning to make significant investments in or changes to their programs. One constant remains, however: a well-formed and well-executed hedging strategy can create a real competitive advantage. But an effective strategy requires the right objectives, capabilities, executive engagement, performance measurement, and incentives. Companies that achieve success across these five dimensions of commodity risk management will set the gold standard in hedging.

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