Managing commodity volatility
Reducing your risks with effective hedging

In the world of commodities, volatility is the one constant. Driven by supply and demand, logistics, weather, consumer sentiment and geopolitical factors, the price of commodities from oil and natural gas to corn and wheat moves with surprising force and speed — rising much further than expected, only to fall precipitously and then to rise again.

As changes in commodity prices appear higher on stakeholder agendas and they seek to understand why hedging has not been utilized, the days of “let’s wait and see what happens” are history.

Given the historic level of price fluctuation, management of commodity price risk is a top concern for executives and corporate boards. In the recent EY Global Capital Confidence Barometer,1 a global survey of more than 1,600 executives across 18 sectors, 34% of respondents believed that increased volatility in commodities and currencies is the greatest economic risk to their businesses over the next 6 to 12 months.

Historically, corporations – particularly those with indirect exposure to commodity risk – have taken a passive approach, by often categorizing unfavorable price movements as a cost of doing business and absorbed by the company or passed on to the customer. But, given the continued negative impact on their financial performance, companies are increasingly using hedging programs to lower costs, improve cash flow predictability and stabilize operating results in an environment of uncertainty.

1.Oil and Gas Capital Confidence Barometer: deal activity to accelerate, EY. October 2015.
Impacts of commodity volatility

Why hedge

Which approach to a hedging program is most suited to your needs?

Business implications of commodity volatility include negative cash flows, lack of margin optimization and headline risk. It can cause significant earnings loss because of an increase in input costs and, importantly, unmanaged volatility can give a public perception that the company does not understand its business drivers.

On the other hand, price weakness can represent a potential benefit to a company’s bottom line. While market observers and industry players have made wildly divergent predictions about future prices, they all agree that prices will continue to be volatile. For that reason, now may be a good time to consider more effective risk management by establishing a commodity hedging program or refining an existing program.

Companies in a broad range of industries engage in commodity hedging activities. In some fiercely competitive industries, such as consumer staples, companies are typically unable to pass on rising costs to customers over the short term. Without a hedging program, they may see their margins shrink.

Because these companies understand how difficult it is to predict precisely when commodity prices will rebound, most realize that a low-price environment is a good time to consider or revise a hedging program.

The reactive approach to hedging was not effective during periods such as the 2008 financial crisis. A proactive approach, involving analysis of commodity cost impact on financial results and long-term strategies to deal with price risk, can help to:

- Minimize price risk and earnings volatility
- Stabilize procurement costs
- Optimize margins

Companies should consider whether to hedge and how much to hedge, while carefully evaluating the risks and rewards. More importantly, companies must clearly articulate their objectives and risk tolerance, then align the execution of their hedging program with that assessment.

Which approach to a hedging program is most suited to what you want to accomplish?

A. The “price fixer”
- Hedges a fixed percentage of production or requirements; limited or no market exposure
- Locks in hedged revenues and costs for the season mechanically; minimal earnings volatility and price risk
- Low flexibility, no participation in beneficial price moves

B. The “opportunist”
- Extracts additional margins on the basis of market volatility; manages market exposure
- Adjusts percentage hedged and timing of trades on the basis of view of market
- Generally between 40% and 80% of physical hedged
- May win or lose depending on success, but earnings should be within a targeted range

C. The “active hedger”
- Takes more directional views
- May or may not hedge at times depending on view
- Enters and exits hedge positions actively
- May have both “hedge” and “opportunistic” portfolios managed separately
- Needs more sophisticated risk and limit monitoring, and robust systems and controls
- Potential for higher rewards at the cost of volatile results
An effective hedging program must be implemented within a structured framework supported by well-defined processes that cover all aspects of the transaction life cycle and an infrastructure that includes the people, systems, and documented policies and procedures for risk management and accounting.

**What does a sample hedging framework look like?**

**Risk management committee**
- Oversees all hedging activities to ensure compliance with company policies, risk appetite and objectives

**Credit function**
- Sets up and approves all counterparties and credit limits
- Monitors credit exposure

**Risk function**
- Monitors market exposure
- Conducts curve validation
- Performs stress testing and sensitivity analysis

**Commercial team**
- Conducts forward and historic market analytics
- Executes transactions to manage financial risk within the market and credit limits

**Accounting and back office**
- Performs settlement of positions
- Prepares and books journal entries
- Meets derivative accounting rules and disclosure requirements
- Oversees internal controls

**How can EY help?**

Whether you are thinking about putting a hedging program in place or would like to enhance your existing approach, EY’s global team of commodity professionals can advise and provide input into your company’s:

- Risk management effectiveness, functions, roles and reporting
- Pricing, independent valuation, risk-model valuation, structured products and related risk management issues
- Risk budgeting, performance measurement, competitor assessments, and categorization and measurement of risk factors (value and risk, stress testing)
- Cross-functional hedging program processes
- Key performance indicators to monitor the overall performance of your hedging program

**Our approach**

Key commodity risk management infrastructure components must be linked by design.

- Operating model does not support commercial outcome.
- Process does not support operations.
- People cannot perform processes.
- Reports do not provide information for effective management.
- Information is not available for analysis and reporting.

**Why EY**

The Commodities Markets group is part of EY’s Financial Accounting Advisory Services (FAAS) practice. We provide comprehensive assistance on a global basis to companies with trading and hedging operations. Our cross-functional and global team of professionals offers a deep and diverse experience of the industry and understands the specific issues and commodity nuances. We can share insights on global leading practices and can provide advice across a spectrum of topics, including financial volatility, compliance, trading and risk management systems, operations and strategy. Described below are a number of our service offerings on which we can advise you and provide input.
We will work with you and your team to understand your business. Using our methodologies, tools and supporters, we can help you assess, develop or enhance an effective hedging program to lower costs, improve cash flow predictability and enhance stability to your operations and financial results.

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<th>Hedge accounting</th>
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<td><strong>Business transformation</strong></td>
<td>• Risk management effectiveness, functions, roles and reporting</td>
<td>• Trade surveillance business process and systems</td>
<td>• Financial accounting advisory services under both US GAAP and IFRS</td>
<td>• Model risk management (including model validation), independent valuation</td>
<td>• Assessment focusing on front- to back-office controls, regulatory compliance, rogue trader risk, Commodity Trading and Risk Management (CTRM) system application and business readiness</td>
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<td>• Strategy, process analysis, leading practices, industry comparisons and industry training</td>
<td>• International and domestic acquisitions regulatory due diligence</td>
<td>• Complex leases, fair value, derivatives accounting, netting issues</td>
<td>• Risk measurement (value-at-risk, stress testing), risk budgeting, performance measurement</td>
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<td><strong>Technology support</strong></td>
<td>• Technology assessment and strategy</td>
<td>• Global regulatory compliance, such as Dodd-Frank and European Market Infrastructure Regulation (EMIR)</td>
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<th>Name</th>
<th>Title</th>
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</tr>
</thead>
<tbody>
<tr>
<td>Talib Dhanji</td>
<td>FAAS Commodities Markets EY (US)</td>
<td><a href="mailto:talib.dhanji@ey.com">talib.dhanji@ey.com</a></td>
<td>+1 281 844 8222</td>
</tr>
<tr>
<td>Suzie Kupiec</td>
<td>FAAS Commodities Markets EY (US)</td>
<td><a href="mailto:suzanne.kupiec@ey.com">suzanne.kupiec@ey.com</a></td>
<td>+1 713 858 9733</td>
</tr>
<tr>
<td>Andrew Woosey</td>
<td>FAAS Commodities Markets EY (UK)</td>
<td><a href="mailto:awoosey@uk.ey.com">awoosey@uk.ey.com</a></td>
<td>+44 20 7951 8117</td>
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