Managing Supply in Volatile Agriculture Markets

Hedging is not the only way to address volatility. A.T. Kearney research finds that an integrated approach to commodity risk management separates those who react to volatility from those who manage it.
When volatility hits the financial markets, investors shudder. When volatility hits the commodities markets, corporations shudder. The recent U.S. drought reinforced this message as it affected the price of corn, soybeans, animal feed, and other inputs to the food supply. The drought and its impact on future commodity prices are expected to have serious repercussions on all food prices.

We recently surveyed 21 chief procurement officers (CPOs) or heads of the commodity risk management function of major food and beverage companies. This is the first in a series of studies to assess the impact of rising commodity prices and gauge corporate approaches to commodity risk management. CPOs were asked a range of questions, including: What impact is the rise in commodity prices having on your company? What are your expectations for the future? How do you approach and manage risk? How is your company positioned for the future if commodity prices remain volatile for the next several years?

Overall, our participants know that increased volatility in commodity pricing is not a short-term phenomenon. In a global marketplace, weather shocks—hurricanes, tsunamis, floods, or drought—are recurring events that will increase price volatility. Other factors such as more global demand, geopolitical conflicts, and biofuels are causing a host of new headaches.

In response, these CPOs have largely relied on hedging to manage their risk, maintain costs, and ensure a more predictable source of supply. Now, however, given the size and scope of the influencing factors and recognizing that commodity volatility cannot always be controlled, they say hedging alone is no longer a sufficient risk management approach.

Volatility is the New Normal

The past 10 years have seen a rise in commodity volatility and inflation (see figure 1). The increase as a result of inflation is not surprising. What is surprising are the dramatic peaks and valleys in commodity pricing.

Figure 1
Commodity volatility and inflation are rising

Select food commodity price index

Source: IMF primary commodity prices (2011)
The price volatility drama continued into 2012 as U.S. drought conditions dragged on into the early summer and reached critical levels in early July, a crucial time for crop development for corn and other agriculture commodities. From mid-June to mid-August, the share of farms under severe or greater drought conditions increased from 16 percent of all farms to 43 percent. In 2012, the United States experienced the most severe drought in 25 years, affecting approximately 80 percent of agricultural land.¹

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Most of our CPOs believe volatile commodity prices will affect consumer pricing, and 43 percent believe the volatility will also impact company profitability (see figure 2). Most believe that the impact will not go away anytime soon—80 percent think the price hit will last more than a year, and 60 percent say they should increase their buying coverage. Tight supplies at the end of 2011 and lower than expected yields mean that stock will be depleted going into the 2012-2013 marketing year.

Figure 2
Most CPOs believe volatile commodity prices will affect consumer pricing

<table>
<thead>
<tr>
<th></th>
<th>% of total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Consumer pricing</td>
<td>57%</td>
</tr>
<tr>
<td>Company earnings</td>
<td>43%</td>
</tr>
<tr>
<td>New product formulations</td>
<td>29%</td>
</tr>
<tr>
<td>Future growth</td>
<td>14%</td>
</tr>
<tr>
<td>Security of supply</td>
<td>5%</td>
</tr>
</tbody>
</table>


Although U.S. drought conditions caused much of the volatility in the commodity market last summer, weather is not the only challenge for agriculture and other commodities. Risk management requires more than just predicting the weather. It requires using all available tools to manage future volatility.

Hedging is Not Enough

Hedging is the most popular approach to managing commodity risk, with 70 percent of our CPOs saying they will increase their use of hedging and financial contracts and more than half planning to pass some costs along to consumers.

While financial hedging is the most widely used technique among consumer packaged goods (CPG) companies, less than half of our CPOs have primary responsibility for financial hedging, compared to 75 percent responsible for physical hedging and 77 percent for supplier risk management (see figure 3). This shared responsibility could be valuable if it involves coordinated pricing and marketing strategies and incorporates management techniques to ensure a predictable source of supply.

Several study participants talked about their other corporate initiatives—formula flexibility for ingredients, preemptive measures, total margin management, financial impact assessments, and dollar cost averaging—but were quick to point out that these strategies often come in second to hedging, the company’s primary risk management strategy.
Questions about coordination and supply market strategies led to some interesting reactions. When asked about their supply market strategies, only half take a globally coordinated approach, with 45 percent indicating there is little to no alignment because regions are allowed to act independently. And while most agree that risk must be managed holistically across all key risk elements, including quality, assurance, and source of supply, only a handful say they use risk-sharing or collaborative approaches.

A Framework to Manage Risk

Although our CPOs believe they are in a good position to address future volatility, most admit to not having a good commodity risk management framework. “Yes, financial hedging plays an important role in managing risk, but staying ahead of competitors requires other strategies,” explains one study participant.

From our analysis of market dynamics, we suggest four tools to augment a company’s current risk management practices (see figure 4).

Figure 4
Four tools to manage commodity risk and volatility

<table>
<thead>
<tr>
<th>Hedge the risk</th>
<th>Deflect the risk</th>
<th>Transfer the risk</th>
<th>Operate the risk</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hedge positions in advance</td>
<td>Share risk with CPGs, retailers</td>
<td>Partner to share the risk</td>
<td>Take advantage of value zones</td>
</tr>
<tr>
<td>Manage portfolio risks</td>
<td>Reduce costs and target risk exposure</td>
<td>Lock in prices with suppliers</td>
<td>Own more of the upstream</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Direct suppliers to hedging positions</td>
<td>Employ make-versus-buy strategies</td>
</tr>
</tbody>
</table>

**Hedge the risk.** Use financial instruments to systematically hedge positions in advance. Manage portfolio risks through correlated and more liquid instruments. For example, most large CPG companies apply financial hedges to their primary traded commodities such as wheat, soy, corn, and sugar.

**Deflect the risk.** Share risk with CPGs or retailers, and use dynamic pricing strategies. Reduce costs via alternative specifications, sources, or natural hedges and target and systematically reduce demand for volatile commodities. For example, a large processed food company uses dynamic ingredient formulations to optimize their protein specifications based on the underlying changes in the beef trim market.
Transfer the risk. Build innovative partnerships, strike mega deals, or form long-term agreements with suppliers to either share the risk or lock in prices. Leverage purchasing power to get suppliers to share risk, and lock in prices with suppliers via “value zone” opportunities. One client, a commercial bakery, manages price volatility by securing wheat prices through flour millers.

Operate the risk. Take advantage of value zones by stocking up on inventory or owning more of the upstream via agro-models and contract farming. For example, coffee suppliers that contract with farming groups avoid large price swings.

No good risk management strategy begins without discussions with senior executives about expectations and appetite for risk.

Together, these tools provide a collaborative, cross-functional approach to risk management and offer CPOs and their procurement teams a platform to share knowledge and ideas. After all, who knows commodity market dynamics, suppliers’ strengths, and the company’s appetite for risk better than procurement? Who understands how to align these approaches with corporate strategy better than the CPO?

Attributes of Risk Leaders

No good risk management strategy begins without discussions with senior executives about expectations and appetite for risk. Is the company inclined to ride out the market or more interested in predictable costs? Is the objective to beat the competition or to dominate the market? In our work with clients, we often recommend the following:

Understand market dynamics and what “value” is at risk. It is essential to know your markets, your position in them, and your value drivers. What are your capabilities? Is it smarter to make or buy? Do you have access to the latest supply market intelligence? How deep is your exposure to COGS volatility?

Have a mitigation strategy in place. Have a plan in place that outlines the potential risk mitigation strategies—deflect, transfer, hedge, or operate—for all commodities. And update the plan regularly to deal with changing industry dynamics.

Reach market-driven decisions. All decisions about risk factors and mitigation tactics should be made with your markets in mind. Determine which markets need minimum coverage and which ones need maximum coverage, while understanding that these designations could change as markets change. Establishing a global risk council is a good way to make these big, enterprise-wide decisions.

Manage execution and governance. Execution is key. It is important to cost-effectively manage the company’s major risks while also considering the residual risks, such as foreign exchange. Other important aspects: tracking performance and assigning roles and responsibilities.
Managing Volatility

While no one can predict the future of volatile commodity prices, everyone can prepare for it. Hedging alone is only a partial solution. What’s really needed is some creativity—building strategies that hedge, deflect, transfer, and operate commodity risk. An integrated approach to commodity risk management separates those who react to volatility from those who manage it.

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