



Uncertainty in the Grain Belt: Navigating Today's Volatile Fertilizer Markets

On June 15-17, 2011, CoBank's Knowledge Exchange Division sponsored a Fertilizer Industry Forum in St. Louis: **"Navigating**

Today's Volatile Fertilizer Markets: Success Strategies for Ag Co-ops."

It included a panel discussion tasked with giving farm co-op retailers insight into what drives fertilizer prices and information to help them make better buying and selling decisions. This report summarizes the major themes and topics from this discussion.

There were three panelists. **Tim Chrislip** is the director of technical marketing for Compass Minerals. **Tom Blue** is a consultant and president of Blue, Johnson & Associates. **Joseph Fung** is a senior market analyst responsible for Mosaic's short-term and long-term global fertilizer trade, conducting supply and demand analysis. **Mike Jackson**, the moderator, is a senior consultant at Adayana, Inc.

Key Points:

- **Farm co-op retailers have a lot more on their plates today than simply selling fertilizer to growers. The marketplace has become much more dispersed and complicated than it used to be.**
- **Within the last decade, the fertilizer market has expanded far beyond North America and acquired a global reach.**
- **China has emerged as one of the dominant players within global fertilizer markets.**
- **Market participants must ascertain what the Chinese are actually doing about imports and exports, and not be deceived by what they say they'll do.**
- **Amidst the uncertainty and dearth of factual statistics, market participants must pay attention to the background noise – and then rely on trends, "directional changes," and other clues to discern the signal from the background noise.**
- **There is no "silver bullet" for eliminating risk. There is no single source, newsletter, or contact that can lift the veil of uncertainty and reveal where current market conditions are headed.**
- **Farm co-op retailers can mitigate risk by forging relationships and exchanging market information with key producers and traders – especially the successful ones who rely on their own well-established networks of industry contacts.**
- **Farm co-op retailers can further mitigate risk by tracking supply chain swings, talking with growers, and pooling information on their own fertilizer inventories.**

More art than science

Farm co-op retailers have spent many sleepless nights in recent years worrying about the volatility of crop fertilizer prices. Consider, for example, the price of urea. It was trading at around \$800/ton in July 2008. The price dropped below \$200/ton by year end, jumped to \$388/ton in June 2010, and soared to \$567/ton in June 2011. Many other fertilizer prices have acted in a similar fashion.

Every retailer wishes for a crystal ball to reveal what fertilizer prices will be in the future. No one can predict future prices with certainty, of course, but understanding the forces that drive the market can provide some clues.

The shift of fertilizer manufacturing from a largely North American industry to a more global one began in the mid-to-late 1990s. As environmental regulations became stricter in the U.S., fertilizer producers responded by moving some of their manufacturing capacity offshore. Today, China leads the way. It and other new players are exerting a huge impact on prices. The market is also pressured by industry consolidation as well as shifts in supply and demand, crop and energy prices, and monetary policy.

As a result, managing volatility is more art than science. Still, farm co-op retailers can take some risk out of the equation by developing close relationships with key producers and traders, tracking supply chain swings, talking with growers, pooling information on inventory – and doing their homework. “You can go outside for some help, but you’re going to do the best job possible by understanding what’s going on yourself,” Panelist Tom Blue said.

A new world, a new day for us

A new day dawned for farm co-op retailers after the bankruptcy of Farmland Industries, the largest agronomic cooperative in North America, in 2002. In 2005, CF Industries became a publicly-traded, stockholder-owned entity, ending 56 years as a federation of agricultural cooperatives. These two market developments drastically altered the price protection and cooperative buying structure that so many co-ops in the United States had become accustomed to.

“It was a new world, a new day for us,” Panelist Tim Chrislip said of the Farmland bankruptcy. “You could argue about whether they were great marketers or not... but they had a connection to the dealer, and they gave that dealer some cover and, they forced the other players in the world to do the same.”

But the tremors didn’t stop there. Further consolidation occurred, with fewer suppliers controlling a bigger share of each fertilizer product, thus shrinking the market power of retailers. In the early 1980s, almost 90 corporate entities owned NPK capacity in Canada, the

“*Within the last decade, the fertilizer market has expanded beyond its former North America boundaries and acquired a global reach.*”

United States, and the Caribbean. Today, there are 22, with eight controlling 87 percent of the capacity. In the anhydrous ammonia business, five companies control 90 percent of the supply, Blue said.

Those tremors, moreover, have extended to the rest of the world. Within the last decade, the fertilizer market has expanded well beyond North America and acquired a global reach. For example, the U.S. is the No. 1 importer of ammonia and potash and the No. 2 importer of urea, according to the International Fertilizer Association. Phosphate is the only major crop nutrient that the U.S. has in plentiful supply domestically. (The U.S. leads the world in phosphate exports). Eastern Europe and Central/West Asia are major international suppliers of nitrogen. Potash is largely influenced by the North American, Eastern Europe, and Central Asia supply (based on production capacity). Asia and Europe control around 62 percent of total NPK fertilizer production capacity. Asian markets are not only large producers of fertilizers but also consume vast quantities.

You absolutely have to watch what China is doing

China has emerged as a dominant player within global fertilizer markets. In the mid-1990s, it imported about 6 million tons of urea, whereas last year it exported roughly 7 million tons. Over a span of 14 years, that’s a swing of about 13 million tons, which is equivalent to more than 90 percent of the world trade, Blue said. One of the reasons why the price of urea is going through the roof is because the international marketplace thinks the

7 million tons that the Chinese exported in 2010 was an aberration and that they will ship less this year. Hence, buyers around the world are scrambling for product and thus bidding up the price.

At present, the Chinese are nurturing the perception that they intend to trim exports. But Blue questioned how much they will actually export by year-end. “You absolutely have to watch what China is doing.” As opposed, we would add, to what they say they’ll do.

Blue went on to tell the attendees, “You’re used to looking at the usual suspects, but I’m telling you that, in your business and especially in this environment, you have to pay attention to the background noise.” But the problem is: how does one discern the signal from the background noise? Or as one audience member put it, “How do you get accurate data out of China and can we trust it?”

Panelist Joseph Fung affirmed the difficulty of getting accurate statistics out of China. “You can talk to five different people,” he said, “and get 15 different answers.” Farm supply retailers can get some answers from newsletters that track global developments, Blue said, as well as from on-the-ground intelligence. “Find some people on the fringes that know that marketplace better and ... establish a dialogue with them.”

It is also beneficial to look at historical statistics for China to infer what is happening directionally. For example, Chrislip said, “You look at what they’ve done on urea; you look at what they’ve done on phosphates. Does anybody have any idea what they’re doing on potash? Do you think they’re heading in the same direction? Those are things that you need to look at and be aware of because those are big changes...So, if you look at [those kinds of trends] over time, you can see some consistency in their patterns and you want to watch how they are developing.”

Fung, too, suggests watching trends as well as directional changes in public policies around the world, not just in Washington DC. For example, the Chinese government has recently tightened monetary policy in an effort to curb inflation, largely in response to the run-up in Chinese food prices and crop input prices. As long as



Tampa shipping port, photo courtesy of CF Industries.

these food prices continue to climb at a rapid pace, Chinese authorities are likely to assign a higher priority to the domestic needs over exports.

Fung urged farm co-op retailers to be on the lookout for other kinds of directional changes besides public policies. “Do you think that [the Chinese will] have to boost their grain production so they have to better manage their nutrient use, boost their potash use in order to get to a more balanced nutrient situation? If you have some contacts there and if you have a view of what these longer-term trends are going to develop, then you will start getting away from trying to track exactly how many tons are coming out from China in one month or the other.” In other words, because accurate, up-to-date global market statistics are simply unattainable, farm coop retailers will have to be alert for hearsay and other market clues signaling directional changes.

A leg up that nobody can touch

China aside, retailers can also find other information and sources to help them navigate these volatile, global markets. At the top of Chrislip’s list is Transammonia. “They’re probably the best at knowing what that nitrogen market is doing...Ameropa is pretty good...Helm has a global presence, as well. CHS is gaining a global presence.” Blue added Agrium, Inc. to that list.

But the best intelligence lies close to home, provided that it can be mined. What Chrislip called a “really powerful piece of information” would consist of knowing just



Grower, anhydrous ammonia application

how big the domestic inventory is – specifically whether retailers are building supplies or replenishing stocks. This information would yield pricing insight and allow retailers to make better informed timing decisions about purchases and sales. Organizing the data would be a challenge, admitted Chrislip, but he suggested that it's worth a try.

“There’s one thing you know that every producer and every trader in the world would love to know and none of them do. And that’s what you have in inventory and how does it compare with last year,” he said. “Where your market power comes from is knowing something somebody else doesn’t know. The one thing you can know is how full is this [domestic] distribution system.... That will give you a leg up that nobody can touch.”

Forge relationships

Chrislip also advised retailers to forge relationships with major producers and major traders – the big ones who are successful and know the industry thoroughly. “They have offices all over the world...They’re not a producer – they have to live and die in their ability to call the market. They can provide a real broad and valuable insight into the market...They know the game, and they know it around the world.”

Growers, too, can offer insight and guidance, particularly about how much fertilizer they’re willing to buy and at what price. Farm co-op retailers can “trade” the information that they’re collecting from the co-op members about their needs and plans for similar

information that traders and producers are hearing from their sources. “Talk to your growers,” Chrislip advises. “Ask them things about — at what point do you say potash is disconnected from corn? What’s the ratio there where you think that comes apart and you quit using it? When do they back off?”

No silver bullet

In the end, farm co-op retailers have a lot more on their plates than simply selling fertilizer to growers. The marketplace has become much more dispersed and complicated than it used to be. Farm retailers need to develop a global perspective and network beyond the usual suspects. There is no “silver bullet” to eliminate risk. However establishing mutually beneficial relationships with market players and developing models that fit your business are essential strategies to navigate volatility.

“The bottom line is... we can develop models to assess price development and develop scenarios to try to handicap those supply drivers to get a sense of what the future will develop,” Fung said. “But ultimately, manufacturers, distributors and farmers will have to bet on those different scenarios...There is a lot of information that you have to decipher, but you do have to develop that experience and that view in order to place your bets and navigate through the volatility in this market.”

Added Chrislip “I think there are people who can help you design programs to try and figure out what information flow you want to have come in and what to do with it when you get it.” But, he also issued a warning: “To rely on someone else to try and inform you on what you should or shouldn’t do is always a dangerous place to go.” ■