

## Price risk management: What to expect

## Marketing Efficiency and Efficient Marketing

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In the early years of our careers, we tried to convince crop producers that they should use futures, options, and forward contracts to enhance the price received. We explained that if producers did not use futures, options, and forward contracts to enhance prices, the minimum that should be done was to use marketing alternatives to manage price risk.

We noticed that many producers wanted to learn how to use marketing alternatives; however, few actually used the marketing alternatives more than once and most did not use the alternatives at all. Many of these successful producers farmed more than 2,000 acres of wheat and double cropped the wheat by grazing winter stockers.

If producers could be successful without using futures contracts, futures option contracts, and forward contracts, was there any benefit to using the contracts? The answer is that these alternatives may be used to enhance price only if price can be predicted; the contracts may be used to manage price risk.

The objective of this fact sheet is to share what we have learned over the last 20 years about managing price risk. One criticism is that the interpretation of research (both of research conducted by us and by others) is tainted by our biases. We confess that there may be some validity to this criticism. However, we have been as unbiased as possible and our goal is to help producers understand price risk management and to make money.

All we ask is that you read this fact sheet and the referenced research papers. Whether you agree with us or draw different conclusions, you will be better off. You will have a better understanding of price risk management, of what to expect from yourself relative to making marketing decisions, and of what to expect from price prognosticators (analysts).

## Marketing Efficiency and Efficient Marketing

What determines price? Supply and demand? That is what is taught in economic classes and is expounded by economists. Do you believe that supply and demand determines price?

We do not. What determines price is expectations. No one knows what the supply is or what supply will be available. No one knows how much of a commodity is being demanded

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or what demand will be in the future. However, to determine what price will be paid for a commodity, supply and demand is estimated based on available information.

Information is used to develop expectations. Companies spend millions of dollars to obtain information to estimate current supply and demand and future supply and demand. What we believe determines price is not supply and demand, it is expected supply and expected demand or "expectations" that are used to determine price.

"The efficient market theory conceptualizes markets as information." Merchandisers use information to determine supply and demand expectations. Thus, information via supply and demand expectations is used to determine price offers and bids.

"An efficient market is a market that incorporates all available information when determining price." Bunge, Dreyfus, Cargill, IBP, and other large companies spend large amounts of money to obtain information and use this information to determine their sell offers or buy offers and take positions in the futures markets.

One thing that is known with certainty is that prices will change. "It is not enough to know that prices will change. The direction of change must be known." If available information indicates that prices will increase, merchandisers/traders will buy either the cash commodity or take long positions in the futures markets. If available information indicates that prices will decline, merchandisers/traders will sell either the cash commodity or take short positions in the futures markets. As more and more traders obtain the information and take positions, the expectations of lower or higher prices become "self-fulfilling." The simple act of selling by enough people causes prices to decline as expected.

"Profit is earned by people or companies that acquire information relevant to the market before anyone else in the market." If accurate information is obtained that China is going to buy a million metric tons of U.S. wheat (36.74 million bushels) before anyone else, wheat futures contracts may be bought before China's purchase and then sold after the purchase at a profit.

This is why companies pay large amounts of money to hire people to talk to people worldwide about supply and demand conditions. They want to be the first to anticipate changes in supply and demand conditions. However, "information by itself is not useful without analysis that places it in the context of existing information. Therefore, another method to earn a profit is to analyze existing information better than the collective market."

New information is of little value unless current market expectations are known. For example, new information may indicate that placements of cattle on feed are 5 percent higher than last month. If the market were expecting cattle on feed placements to be 8 percent higher than last month, cattle prices would be expected to increase. However, if the market were expecting cattle on feed to be the same as last month, prices would be expected to decline.

The same example could be made for any commodity. New information that indicates hard red winter wheat production will be 1.0 billion bushels is of little value unless current production expectations are known. Whether this information will cause prices to go up or down depends on the change in expectations.

What the "efficient market theory" implies is that prices cannot be predicted. What is known for certain about today's price compared to yesterday's price? Today's price will be different from yesterday's price! What makes the price different? New information changes expectations that result in bid and offer adjustments and different prices.

If you agree with the fact that new information causes today's price to be different from yesterday's price or that what makes tomorrow's price different from today's price will be new information, then by definition, prices cannot be predicted. Prices cannot be predicted because no one knows what the new information will be.

Supporting the "efficient market theory" is the fact that "few people and/or companies consister.tly earn large profits from pricing decisions and these people earn their profits from their information and/or analysis."

Where do most producers fit into the market situation? How many producers obtain relevant market information before anyone else and have the ability to analyze the information better than the market as a whole? If a producer is able to get the information first and analyze it better, then that producer may be better off being a trader than a farmer/rancher.

Facts are that producers rarely if ever get relevant market information in a timely manner, that most producers do not have the ability nor the time to analyze data better than the market, and that producers cannot nor do they know someone that can predict prices.

## Conclusions

To make a profit in the market, you must be the first to obtain relevant information; you must analyze the information better than the collective market, and you must have benchmarks in which to determine the direction of future prices. All this is nearly impossible for producers to do. If the efficient market theory is correct, then prices are nearly impossible or maybe impossible to predict.

Also, if this is true, marketing decisions should be based on probabilities and on what is "normally" right and not based on what is "normally" wrong. Thus, producers should take "a general course of action that is normally right and avoid acts and policies that are normally wrong."

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