COLUMN

# Big data and agriculture markets: Part 3

Options-based strategies can help get more out of a chaotic market filled with randomness and unpredictability

**DAVID DERWIN**
Hedging your bets

The previous article in this three-part series addressed some of the main myths and misperceptions of commodity hedging. This final segment looks at some practical solutions for improving farm marketing and commodity revenue protection.

In David Orrell's book <Apollo's Arrow: The Science of Prediction and the Future of Everything>, he writes about the unpredictability and randomness of most evolving systems, especially the financial and commodity markets: "Not only is the market subject to random external effects, but its own reaction to that news will also to some degree be random."

As a result, many hedging and trading strategies struggle with the lack of success by trying to predict prices.

How can farmers apply the findings of the research presented in these articles to sell their commodities more efficiently and effectively?

### The options advantage

The research concludes that markets are random and that we don't know where they are going. That doesn't mean you don't proactively analyze prices to manage your revenues. It just means that option-based protection strategies using puts and calls (similar to insurance) are ideally suited to this type of environment. Options allow you to more effectively manage market exposure and more efficiently adjust hedge positions to balance your physical commodity.

Yet, only five to 10 per cent of Canadian farmers are using open-market exchange-traded risk management tools. Farmers have been hesitant to incorporate hedging into their operations. Why?

Based on hundreds of discussions with farmers, there are three main reasons that, in addition to the myths and misperceptions noted above, make trading psychologically, mentally and emotionally challenging. Option-based strategies using puts and calls offer a solution to the three issues:

- No production commitments or delivery risk.
- Not locking in prices: downside protection you need and the upside potential you want.
- Minimal capital needed with minimal futures contract margin requirements.

Overall, option-based protection strategies offer unique practical benefits because they are:

- Easy to use and understand since they are similar to insurance.
- A better way to set a target price contract. You avoid the all-or-nothing pricing decision. Options protect your downside risk without limiting the upside of your cash market sales.
- A source of staying power to actually capture the longer-term trends that do develop. Since agriculture markets are typically random and non-trending in the short and medium term, you minimize drawdown losses, margin calls and getting "stopped-out," often associated with futures contract trading.
- Better suited to farm operations whose focus is to produce the grain or livestock under uncertain conditions. Futures better suit processors, soybean crushers or grain elevator companies that have a flow-through operation with built-in profit margin. Options are better designed for farm operations whose focus is to produce the grain or livestock under uncertain conditions.
- Suited to various market conditions, allowing you to determine the level and range of protection you want by selecting from a variety of strategies. With options, you have more tools that are right for the job.
- Suited to your unique market advantage, the physical commodity position.

Forward production or futures contracts take away that advantage by locking in a price and giving away the upside potential.

Bottom line, which revenue profile would you most like to have?:

- No hedge: completely subject to market volatility with all the upside potential but all the downside risk.
- Forward production/futures contract: no downside, but no upside.
- Option-based protection: downside protection you need, upside potential you want.

### Your bottom line

We already know that five to 10 per cent of Canadian farmers use all the tools available to fully and properly manage revenue. There are many reasons for this including some very fundamental market-based myths and misperceptions that affect the efficiency and effectiveness of farm marketing.

This research shows incorporating big data analysis and precision farming into a marketing plan gives farm businesses an edge.

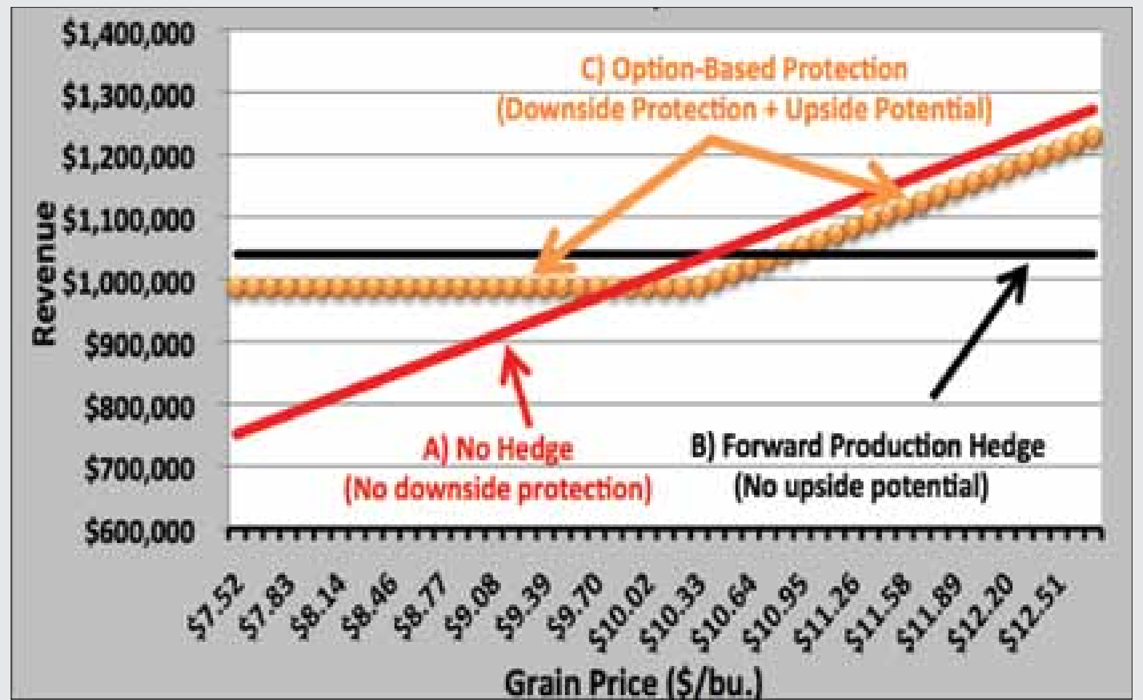
You are not trying to beat the market. You are trying to improve the overall success of your farming operation. Your edge is your physical position, option strategies and the fact that you don't always have to be in the market, or use directional futures or production contracts. (Sometimes the best decision is to be patient and not do anything.)

Exchange-traded commodity options strategies can be used alongside production or basis contracts to enhance delivery and storage decisions.

So don't play the game of guessing where markets are going. Instead, accept and use uncertainty and randomness to your advantage with option-based hedging strategies. Farm businesses can become more profitable by incorporating a robust, disciplined revenue management program rather than overanalyzing markets or trying to predict prices.

*David Derwin is a commodity portfolio manager with PI Financial Corp. The views here are his own, presented for educational purposes, rather than as specific market advice. For a copy of the complete research study "Farming Big Data — Myths, Misperceptions & Opportunities in Agriculture Commodity Hedging" contact him at dderwin@pifinancial.com.*

REVENUE COMPARISON

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