

GRAIN MARKETING: PRODUCER PRACTICES AND ATTITUDES

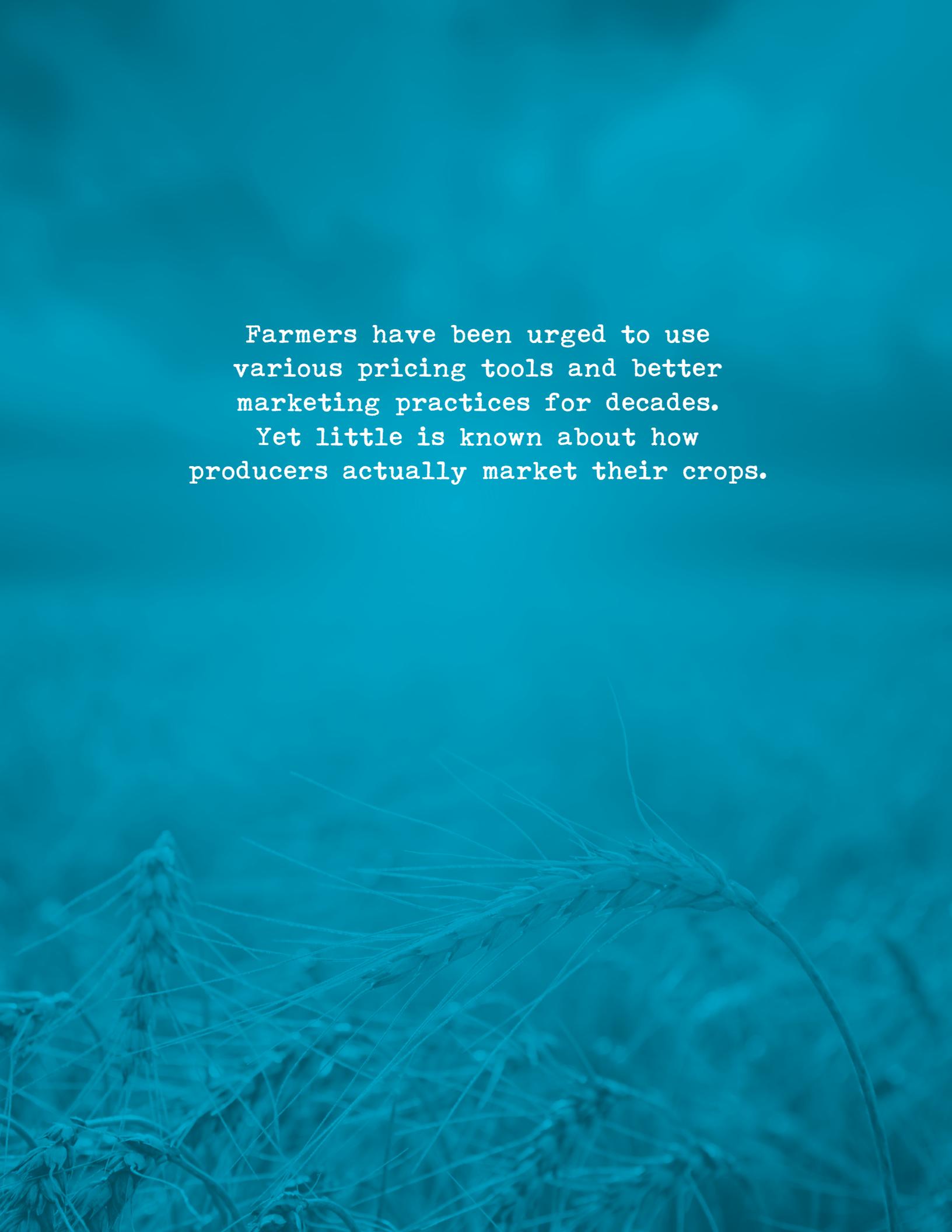
Research reveals insights into the tools and strategies of producers who are satisfied with their grain marketing practices.

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FRONTIER
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Farmers have been urged to use various pricing tools and better marketing practices for decades.

Yet little is known about how producers actually market their crops.

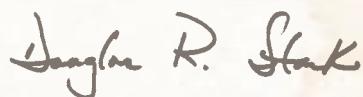
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Frontier Farm Credit is driven by a mission of serving agriculture and rural America. Along with providing specialized products and services to meet agriculture's financial needs, we look for ways to support and grow our customer-owners' successes.

This grain marketing research, conducted in association with Farm Credit Services of America (FCSAmerica), is a part of that effort. We don't profit from grain marketing services, but we do have a stake in helping our customers better understand the challenges they face and ways to overcome them. It's one more example of how we are working to be agriculture's most valued financial partner.

We hope you find the following content insightful and informative.



Douglas R. Stark
President and CEO
Frontier Farm Credit



EXECUTIVE SUMMARY

While many grain producers have adjusted to lower commodity prices by focusing on their cost of production and family living expenses, equally important is the income side of the ledger.

To shed some light on grain marketing practices, especially the approaches used by farmers who say they are satisfied with their marketing success, FCSAmerica recently commissioned a survey of more than 600 Corn Belt producers.

Here are some top-line results:

Marketing Satisfaction

- One-third of producers are mostly or completely satisfied with their marketing practices and results.
- More satisfied than dissatisfied producers say they have a written marketing plan, possess a very good understanding of their cost of production and use it in setting an initial price goal.
- Satisfied producers are more likely to price as soon as they see a profit and to price multiple crop years. They also are more likely to price a quarter or more of their expected crop before planting.
- They are less likely to sell most of their crop right after harvest, price when they need cash flow or price when fear of still lower prices sets in.
- More satisfied producers say they use futures hedges and lock in the carry on stored grain, while dissatisfied producers are more likely to use spot cash sales, cash contracts and put option purchases.
- Dissatisfied producers also are more likely to say they don't understand how to use available marketing tools, and more than a third of them wish they had a mentor.
- More than 20 percent of dissatisfied producers say they studied marketing in college but don't understand how to use the various tools in their operation, while 16 percent say they understand futures and options but don't have confidence using them.

How Producers Market Their Crops

- On average, producers use four to five marketing tools.
- The most popular marketing tool is storage, used by 82 percent at least occasionally; one in five farmers always store.
- Cash forward contracts and spot cash sales are used by more than two-thirds of farmers.
- Only about a quarter of survey respondents use futures or options.

- Almost two-thirds price in small increments; only 5 percent go for the "home run" and price a large portion at a time.
- Almost three-quarters of producers say they have a good understanding of their cost of production, although a smaller percentage use it in setting a price target for marketing.
- Seventeen percent have a written marketing plan.

Factors That Affect Marketing

- Wider use of diverse marketing tools is seen among larger operations (1,000+ acres) and among growers with higher levels of crop insurance – especially 80 percent or higher Revenue Protection (RP) – as part of their risk management.
- Producers with 80 percent or more RP for corn are more likely to price prior to harvest than those with lower insurance coverage.
- Larger operations and younger producers are more likely to use their cost of production to set a selling price.
- Those who are 35 and younger are more likely to use hedge-to-arrive contracts and lock in the carry when they store.

Practical Insights

Interviews with producers offer practical insights for success, whether farmers self-educate or partner with trusted advisors. For example:

- "You can control weather risk with crop insurance. You have to know your cost of production and work off that; you have to know when you need to be marketing. Everyone would like to hit the top, but over time, I've realized that if you beat the average, you are doing well."
- "We thought about hedging and options but didn't really use them until we got to know a trusted broker. Now we set targets and he helps with the timing. With Revenue Protection, we can afford to sell ahead, knowing crop insurance would cover us if we didn't grow enough to meet the contract."
- "I have found that tackling it yourself pays for the rest of your life. You have to know your cost of production to be able to move forward. I know my cost within \$10-20/acre."

INTRODUCTION

As commodity prices for grains and oilseeds declined from the historic highs seen between 2008 and 2013, producers' initial responses were to reduce variable costs. As markets failed to recover, producers next directed attention to fixed costs and balance sheet structure to create additional cash flow and boost working capital.

Today, producers are focusing more intently than ever on improving the revenue side of their ledgers through smarter marketing of their crops. Yet little is known about how they view risk, what pricing strategies they use or what influences their attitudes and practices.

If one looks at USDA's monthly national average corn price and the percent sold, it is easy to believe that there is room for improvement. As the graph below shows, corn deliveries are heaviest in September, October and January, then plunge through the rest of the marketing year. Price, on the other hand, is depressed at harvest when supplies flow into the market and then increases to a peak in May and June. Soybeans and wheat demonstrate similar patterns.



However, USDA's data don't tell the whole story. They are based on surveys of grain elevators and reflect deliveries. No one knows when farmers actually *price* their grain – they could be delivering on forward contracts or against hedges at a higher price.

"Our customers have been challenged with post-harvest prices at or below the cost of production, which puts more pressure on them to take advantage of all marketing opportunities."

- Tony Jesina
FCSAmerica senior vice president – related services

Hence, in the interest of helping farmers identify possible beneficial changes in pricing habits, FCSAmerica recently conducted a survey of Corn Belt grain producers to understand their attitudes and practices related to grain marketing.

This report documents the findings of the survey, including farmers' attitudes toward risks and crop insurance, marketing tools used and timing practices. It also highlights differences between producers of different ages and acreages.

Perhaps most importantly, it identifies differences in marketing between producers who are satisfied with their marketing efforts and those who are not.

FCSAmerica enlisted the assistance of Ted Schroeder, Kansas State University (KSU) agricultural economist and director of the Center for Risk Management Education and Research, throughout the process, from survey design to interpretation of the results.

Tony Jesina, FCSAmerica senior vice president for related services, who oversees the financial cooperative's crop insurance and business services offerings, and Tim Koch, FCSAmerica senior vice president – chief credit officer, also contributed to the report.

"While cost reductions have been slow to materialize, the markets have provided opportunities to lock in better-than-break-even prices for many producers if they take advantage of marketing alternatives."

- Tim Koch
FCSAmerica senior vice president – chief credit officer

¹Based on data from USDA.

METHODOLOGY

FCSAmerica conducted an online survey in January 2017. Producers with 350 acres or more of corn, soybeans and/or wheat were invited to participate. A total of 648 qualified producers in nine states responded. For details on demographics, see the appendix on page 38.

Number of Respondents by Crop



Corn
632

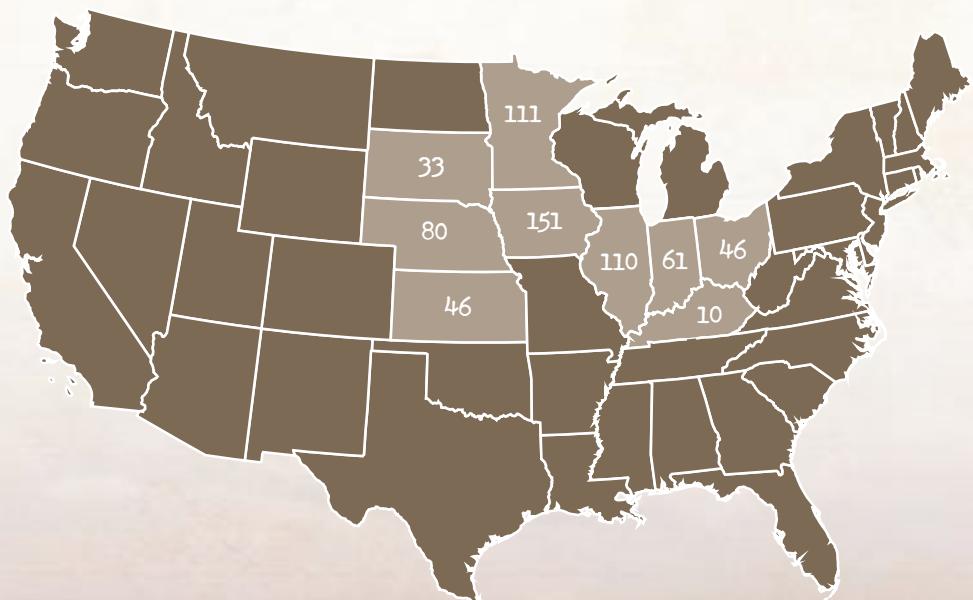


Soybeans
610



Wheat
169

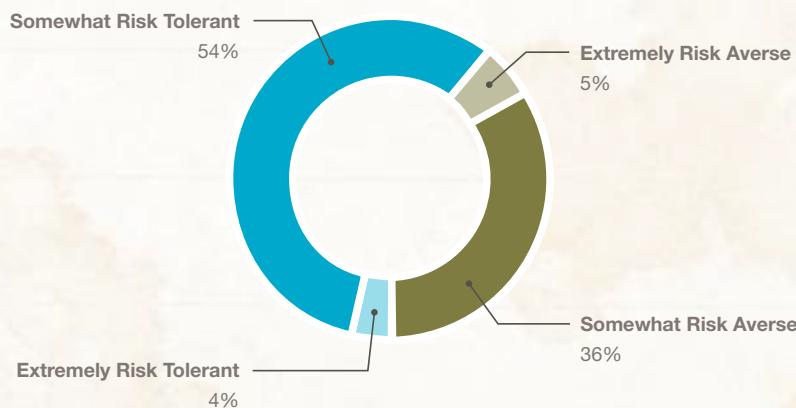
Number of Respondents by State



HOW PRODUCERS VIEW RISKS

As expected, the majority of producers view themselves as being risk tolerant rather than risk averse: 58 percent versus 42 percent.

Risk Tolerance/Aversion



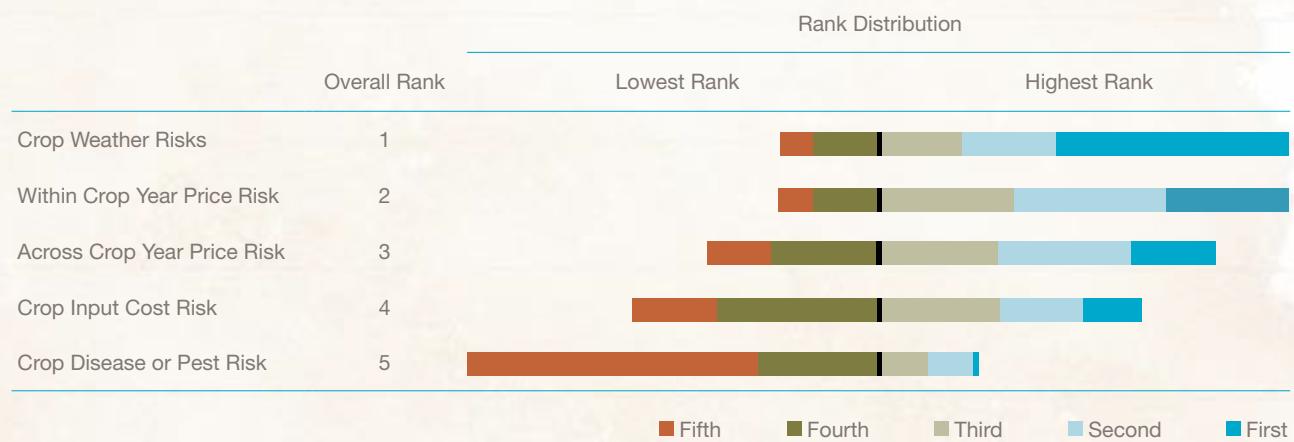
Note: "Averse" percentages appear to not equal 42 percent due to rounding.

"Agriculture, by its very nature, is an inherently risky profession. Nobody should be surprised that the majority of farmers responding to this survey consider themselves somewhat to extremely risk tolerant."

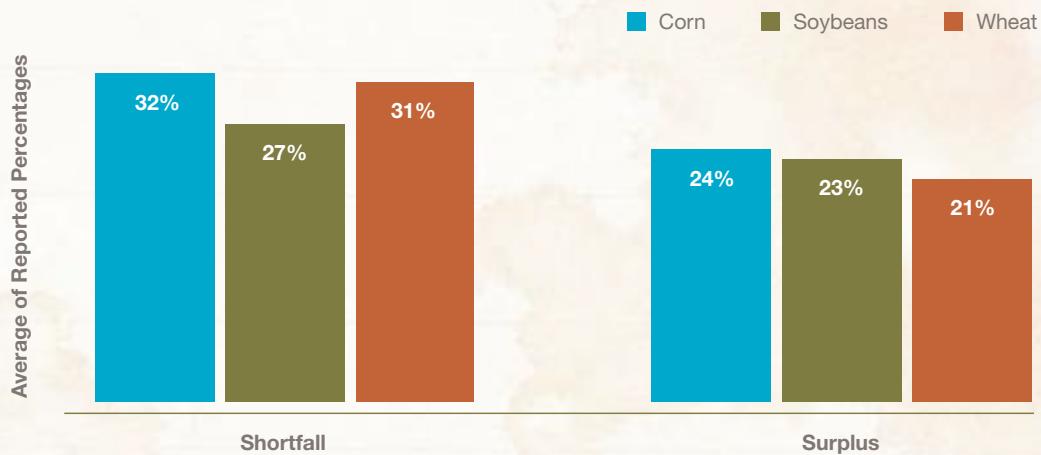
- Ted Schroeder
KSU agricultural economist and director of the Center for Risk Management Education and Research

When grain producers were asked to rank their concerns about five common risks, number one was weather, followed by within-year price risk, year-to-year price risk, input costs and crop disease or pest risk.

Potential Risks



10-Year Yield Experience



Behind weather's top risk rating is this fact: When all three crops are considered, 69 percent of the respondents have seen yields fall 40 percent or more *below* expectations at least once in the past 10 years. The average loss experienced was 32 percent for corn, 27 percent for soybeans and 31 percent for wheat.

On the flip side, only 58 percent say they have seen yields 40 percent or more *above* expected yield, with the average increase over expected crop yields being 24 percent for corn, 23 percent for soybeans and 21 percent for wheat.

"A single bad weather event like hail or high winds can cause dramatic downside yield loss, but it takes a whole season of outstanding weather to get a windfall yield. The downside risk here is much larger than the upside potential."

– Ted Schroeder
KSU agricultural economist and director of the Center for Risk Management Education and Research

PRODUCERS' ATTITUDES ABOUT RISK MANAGEMENT TOOLS

Crop insurance was clearly identified as an important part of respondents' risk management strategies. Two-thirds of producers say they *mostly* or *completely agree* with the statement: "*Crop insurance is an important part of my risk management.*"

More than a third also agree, "*Crop insurance gives me the confidence to market my crop before harvest.*" This gives them the opportunity to forward price, and that means they are better able to capture seasonal price strength during the growing season.

Crop insurance is an important part of my risk management.

63%

Crop insurance gives me the confidence to market my crop before harvest.

34%

Percent who mostly agree or completely agree

Producers who understand how crop insurance – especially Revenue Protection – underpins forward pricing are able to seize opportunities offered by seasonal rallies, at least on covered bushels. While prices don't follow the same pattern every year, the odds favor better pricing results during that time frame. For more information on how crop insurance – especially Revenue Protection – helps producers market, visit frontierfarmcredit.com/connection.

"In the Midwest, more than 90 percent of grain acres are insured, and that's a function of the significant investment crop production requires. It's the only safety net in the current farm bill and the only input cost that can guarantee revenue."

- Tony Jesina
FCSAmerica senior vice president – related services

HOW PRODUCERS MARKET THEIR CROPS

Grain producers use a variety of pricing tools in their marketing efforts. The survey asked all 648 survey respondents to indicate which of 13 tools they use in marketing their grain.

- One respondent selected all 13.
- Twenty-eight respondents selected only one.
- The most common number of tools chosen was three, selected by 124 respondents.
- On average, respondents selected 4.8 tools.

"This illustrates that producers typically use a combination of crop marketing methods over time, which would be expected, given combinations of pre-harvest pricing for a portion of expected production, cash sales and post-harvest storage activities. In addition, pricing at different times and using different tools, in itself, reduces risk."

- Ted Schroeder
KSU agricultural economist and director of the Center for Risk Management Education and Research



Use of Marketing Tools

Store a portion of my crop for later sale

82%

Cash forward contract

69%

Spot cash sale

67%

Basis contract

50%

Hedge-to-arrive contract

35%

Contract production

27%

Options – buy puts

27%

Futures hedge

25%

Managed pricing

24%

Elevator “hybrid” contract

21%

Options – other strategy

18%

Replacement/re-ownership

17%

Lock in the carry when I store

15%

Percent of respondents

By far, the marketing tool most used by producers is grain storage, at 82 percent of all respondents.

"The widespread use of grain storage as a marketing strategy makes sense because even producers who are aggressive in pricing a crop before harvest will likely have some yet to market at harvest, when basis and prices often are at their lowest, encouraging storage."

- Ted Schroeder

KSU agricultural economist and director of the Center for Risk Management Education and Research

Looking at frequency of use, 20 percent of producers say they *always* store a portion of their crop and another 28 percent say they do *most of the time*. However, 18 percent say they *never* store.

The second most-used pricing tool is cash forward contracting. Twenty-three percent indicate they use it *always* or *most of the time*, and another 47 percent note they use it *often* or *occasionally*.

Spot cash sales are used by two-thirds of producers, but only 13 percent employ them *most* or *all* of the time. A very small number – 9 percent – agree that *"Only cash sales worked for my parents and it continues to be my preferred method of marketing."* Perhaps more surprising is that a third say they *never* use spot cash sales.

"It might be that producers don't think of storing and then selling as a spot cash sale."

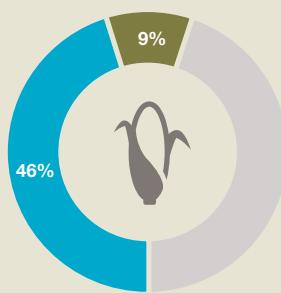
- Ted Schroeder

THOSE ROUTINELY STORING 75 PERCENT OR MORE OF CROP

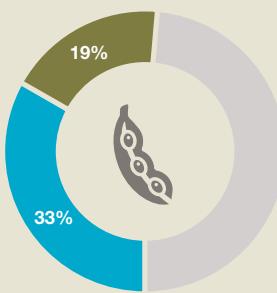
More than half of respondents indicate that they routinely store 75 percent or more of their corn and soybean crops. Only 37 percent do so with their wheat crop.

Forty-six percent of producers store 75 percent or more of their corn crop on-farm, while only 9 percent do so commercially. The commercial storage number jumps to 19 percent for soybeans and 20 percent for wheat.

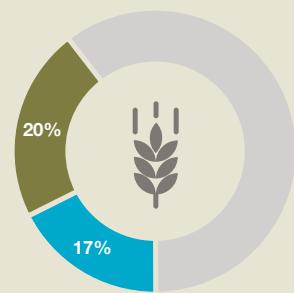
■ On-Farm ■ Commercially ■ Don't routinely store 75 percent or more of crop



Corn



Soybeans



Wheat

In addition to using a variety of tools, producers access a variety of resources to inform their marketing decisions, as indicated in the chart below.

Use of Marketing Practices

I check prices at several buyers before making a cash sale.



I subscribe to one or more marketing advisory services for *information*.



I subscribe to one or more marketing advisory services for *advice*.



I separate my pricing and basis decisions.



I belong to a farmer marketing club or have a peer group I rely on.



Percent of respondents

NEBRASKA GROWER USES MULTIPLE TOOLS TO REDUCE RISK

Craig Smith grows corn and soybeans and backgrounds feeder cattle on grass near Arnold, Nebraska. When it comes to ranking risk, a combination of weather and price top his list.

"Price risk is really the biggest because our costs are not falling as much as the price of our products," he said. "You can control weather risk with crop insurance. Plus, we have irrigation so we aren't dependent solely on rain. Hail is a more acute concern, but we usually cover some of that with insurance as well."

Smith noted that hail initially was an add-on, but as hail premiums rose, he found it more economical to boost the level of his overall coverage. "We have an amount in mind to spend and we aim to get the most bang for our buck," he explained.

Last year that meant 85 percent revenue coverage in place of his prior 75 percent plus hail.

MARKETS INFLUENCE PRICING STRATEGY

Like many of the farmers who completed the survey, Smith works the income side of the ledger using a number of marketing tools. "Which I choose depends a lot on where I think the market is headed," he said. "If I am pretty sure it's going to go lower, I'll use a futures hedge. I'll also buy put options. Or in some cases I'm willing to buy a put and sell a call. That lowers the cost to set a floor, but it also limits the upside."

He'll also assign about 25 percent to an elevator-managed pricing program. "They charge 10 cents a bushel for the service, but I don't have any margin calls. They do ok, and that's a portion I don't have to think about," he said. His cash sales are often to a local feedlot where he can lock in the basis in advance.

"You have to know your cost of production and work off that. You have to know when you need to be marketing."

- Craig Smith
Nebraska grain producer

Timing-wise, Smith will generally sell up to half his expected crop in advance of harvest.

"You have to know your cost of production and work off that," he said. "You have to know when you need to be marketing."

Smith reads market advisory newsletters but doesn't follow the advice of any one service. "Weather is the big variable and if you could guess that, you wouldn't have to work for a living."

Overall, he says he's satisfied with his marketing results. "No one is ever totally satisfied," he said. "Everyone would like to hit the top. But over time, I've realized that if you beat the average, you are doing well."

PRODUCERS' ATTITUDES ABOUT FUTURES AND OPTIONS

Compared with cash-oriented pricing tools, use of exchange-traded futures and options is comparatively low. One-quarter of respondents indicate they use futures contracts, 27 percent put options purchases and 18 percent use other options strategies at least occasionally. Considering that some people may use more than one of these, the percent of total producers is even lower.

Respondents were asked to indicate their level of agreement with statements based on whether they use futures or options. The survey indicates that about a fourth of producers who don't use futures and a third who don't use options feel they don't understand them well enough.

Of those who don't use futures, the potential for margin calls was by far the most common reason.

Attitudes About Futures Contracts Among Those Who Don't Use Futures Contracts

I don't want to pay margin calls.

60%

I don't understand futures well enough to use them.

26%

Futures markets are too risky.

25%

Percent who mostly agree or completely agree

When the 159 producers who do use futures were asked to indicate their level of agreement with the three statements shown below, 40 percent or more indicated they *mostly* or *completely* agree with each statement.

Attitudes About Futures Contracts Among Those Who Use Futures Contracts

Futures hedges reduce my price risk within a crop year.

50%

Futures hedges improve the price I get for my crop.

50%

Futures hedges reduce my price risk across crop years.

40%

Percent who mostly agree or completely agree

Of those who *don't* use options, a third *mostly* or *completely* agree that they don't understand options well enough to use them effectively.

Attitudes About Options Among Those Who Don't Use Options

I don't understand options well enough to use them effectively.

33%

Options are too expensive.

23%

Percent who mostly agree or completely agree

The 206 producers who use options were asked how much they agree with the statements shown below. More than half indicate they recognize options as a form of insurance.

Attitudes About Options Among Those Who Use Options

Options cost me money but provide insurance.

52%

Options reduce my risk within the crop year.

46%

Options improve the price I get for my crop.

24%

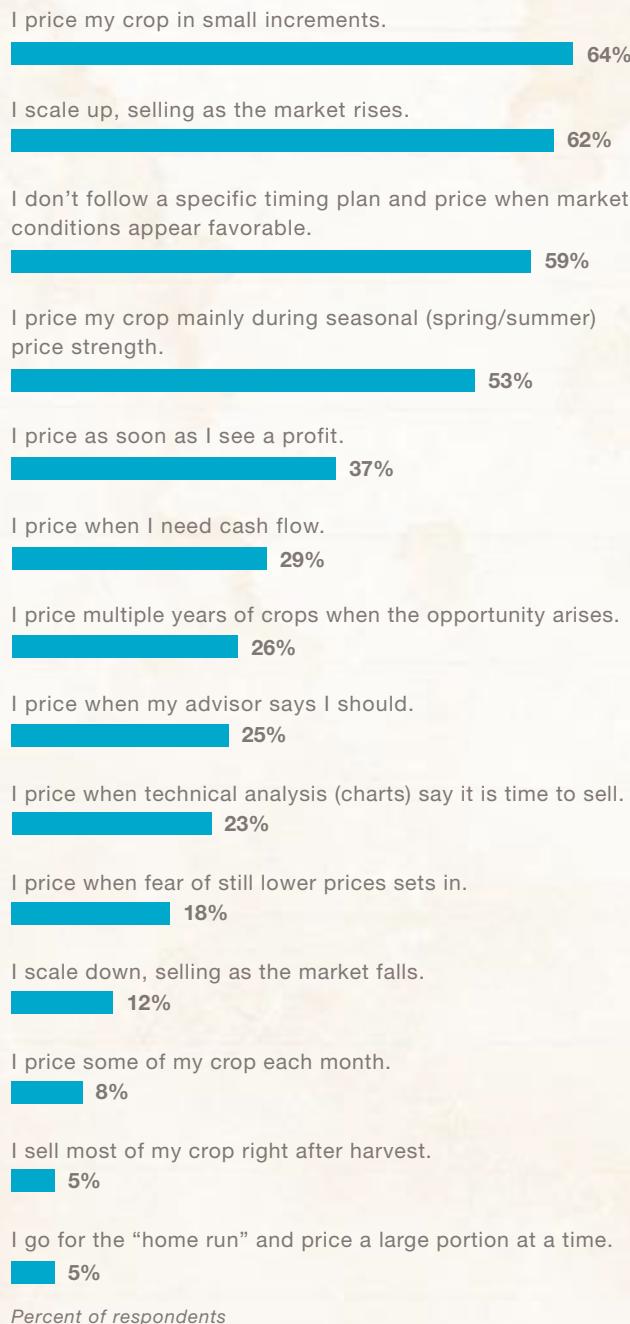
Percent who mostly agree or completely agree

HOW PRODUCERS TIME SALES

In addition to using a variety of tools for pricing their crops, farmers also use multiple strategies for deciding when to price grain or make sales.

The marketing strategy most chosen, by 64 percent of respondents, is pricing in small increments. Other popular strategies include scaling up sales on rallies, pricing when it seems like a good time and pricing during seasonal price strength. Only 5 percent say they go for the “home run” and price a large portion at one time.

Use of Pricing Strategies



HOW IMPORTANT IS MARKETING DISCIPLINE?

Knowing cost of production is widely regarded as a foundation for astute marketing. Yet, while almost three quarters of producers say they have a “good understanding” of their cost of production, only 62 percent say they use it in setting a price point for marketing their crops. Just 37 percent say they begin pricing when they see a profit.

Less than a quarter of producers currently use a managerial accounting system, which helps track profitability, and most producers don’t have a written marketing plan.

Marketing Discipline

I have a very good understanding of my cost of production.

73%

I use my cost of production to set the price where I will begin pricing my crop.

62%

I use accrual (managerial) accounting for farm business analysis.

22%

I have a written marketing plan.

17%

Percent of respondents

"Knowing cost of production is a fundamental input into an effective marketing plan. As a lender, we feel strongly that customers should maintain a financial system that allows them to track accrued earnings and projected production costs."

- Tim Koch
FCSAmerica senior vice president – chief credit officer

Less than 10 percent of the survey respondents are willing to price more than half their expected crop beginning in January. That number increases to 19 percent when crop insurance guarantees are established and to 33 percent during the growing season.

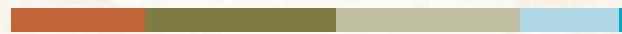
Willingness to Price Expected Crops

■ None ■ 25% or less ■ 26-50% ■ 51-75% ■ More than 75%

Beginning in January



Once I know my crop insurance



Around planting time



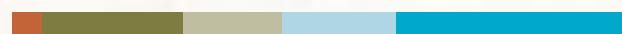
After planting but before harvest



During harvest



After harvest



Given their concern about weather risk, it is not surprising that producers are cautious about how much grain they price ahead of harvest. Yet the best pricing opportunities historically occur during the growing season, as can be seen in the following charts.

Monthly Average December Corn Futures Closing Prices²



Monthly Average November Soybean Futures Closing Prices²



"Most years, the market provides opportunities to lock in favorable prices. However, many find it difficult to sell a crop before it is in the bin."

- Tony Jesina
FCSAmerica senior vice president – related services

²Based on data from CME.

KNOWING COST OF PRODUCTION IS KEY TO THIS GROWER'S MARKETING PLAN

Phil Hofer, who grows corn and soybeans near Bridgewater, South Dakota, is a true believer that time spent learning marketing is time spent well.

After 30 years of refining his skills, he's quite satisfied with what he calls a "fairly aggressive approach" to marketing. "Some people want to hire someone to do the marketing for them, but I have found that tackling it yourself pays for the rest of your life," Hofer said.

He starts at the beginning: "You have to know your cost of production to be able to move forward," he emphasized. "I know my cost within \$10-\$20/acre."

LOCK IN PROFITS WHEN YOU CAN

"Anytime the market – futures minus basis – is above the cost, you have to take a hard look at it," he said. "If there's a profit, you have to lock it in on at least a portion of your crop – even if you are an eternal optimist."

He added that the past few years, the market presented only one opportunity for him to sell at a profit and that was *during* the growing season. "When the market rallies, usually someone is having an issue – such as drought – and hopefully it is not you. But when it is, that's where Revenue Protection comes in – providing the confidence to take advantage of the market opportunity even when your yields fall short."

Hofer takes 80 percent Revenue Protection on corn and 75 percent on soybeans. "I multiply the coverage level by my 10-year APH and sell that amount of bushels with confidence. I try to market most of my insured bushels before July 4."

He noted that the best time to sell corn is often between May 1 and June 15, or a little on either side of those dates. "Last year, the high was \$4.48½ on June 18. Soybeans are a tougher animal to market because price patterns are not as consistent," he added.

"Some people want to hire someone to do the marketing for them, but I have found that tackling it yourself pays for the rest of your life."

- Phil Hofer
South Dakota grain producer

CROP INSURANCE PROVED ITS VALUE

The value of crop insurance to marketing was proven in 2012 – the only year Hofer recalls that he had to rely on an indemnity payment to make good on a contract. "I sold pretty aggressively in the \$5 range. Corn ultimately went to \$8. Yields were hurt severely in this area. I still remember the day I took the indemnity check to the bank and then drove over to the elevator to buy out of the contracted bushels I wasn't able to grow." Hofer noted it worked perfectly, except for the cancellation fee the elevator charged that he had not planned on.

"Over time, what you gain on a forward contract most years far outweighs what you might be out in a severe year," he said.

While he doesn't put a marketing plan in writing, he sits down every fall and figures his cost of production. "Then I put in target orders," he said, explaining that they are sales orders at his elevator. "Say for sake of argument, I offer a certain number of bushels at \$4, then \$4.10, \$4.20, etc. If the price gets there, the corn is sold. You hope your starting point is the worst sale you make."

"Many times, by the time you hear the market has jumped, the opportunity already has passed. February 28 this year was a case in point," he said. March corn opened near its low for the day at \$3.61½ then bounced \$0.18 when the EPA raised the conventional ethanol blending requirement. It closed at below \$3.67. "If you didn't have an order in, you would have missed the highest part of the move, which lasted about an hour," he said.

"Over time, what you gain on a forward contract most years far outweighs what you might be out in a severe year."

- Phil Hofer

Hofer always separates futures from basis. "It pays almost every year to stay in tune with local basis trends," he said. "In December, I usually lock in basis contracts for January through March deliveries based off the March contract. Then I roll to the May contract for April and May deliveries and the July contract for June and July. The basis seems to narrow up like clockwork, at least in this area."

"Periods of thin margins really step up the need for a solid marketing plan."

- Phil Hofer

He also looks at grain storage as a profit center. "It allows you to deliver to the end user when he needs it, not when you need to move it. End users like knowing they have producers who will deliver to them on short notice, and that takes on-farm storage. It's a win for the farmer to control your product."

"Periods of thin margins really step up the need for a solid marketing plan," he emphasized. That's why he's trying to pass on what he's learned about marketing to his son, who is just coming into the operation.



MARKETING HURDLES

When producers were asked to rank eight potential grain marketing hurdles, erratic markets ranked highest, followed closely by uncertainty about yields. Conflicting marketing advice rounded out the top three.

"Erratic markets highlight the importance of Revenue Protection insurance in that it not only includes a yield component, but its harvest price feature offers some price protection as well."

- Tony Jesina
FCSAmerica senior vice president – related services

Few producers rank “*partners or others in my business who don’t agree*” very high on their list. That response is more common among growers under 35 years old – 11 percent of the under-35 group rank it number 1 or 2 compared with only 2 percent of those over 35. However, 61 percent of those under 35 still rate it number 7 or 8. Seventy-seven percent of those over 35 did the same.

Potential Hurdles



MARKETING SATISFACTION

Two-thirds of growers agree they are at least *somewhat satisfied* with their marketing practices and results, but only one-third are *mostly* or *completely satisfied*.

It may be surprising that only 12 percent state they *mostly* or *completely disagree* with the statement, *"I am satisfied with my marketing practices and results."*

What's perhaps more interesting – and more important – are the differences between those producers who are at least *mostly satisfied* with their marketing efforts and those who are *mostly dissatisfied*. More satisfied than dissatisfied producers say they have a very good understanding of their cost of production and use it to set a price where they will begin sales. They also are more likely to have a written marketing plan.

Marketing Discipline – By Marketing Satisfaction

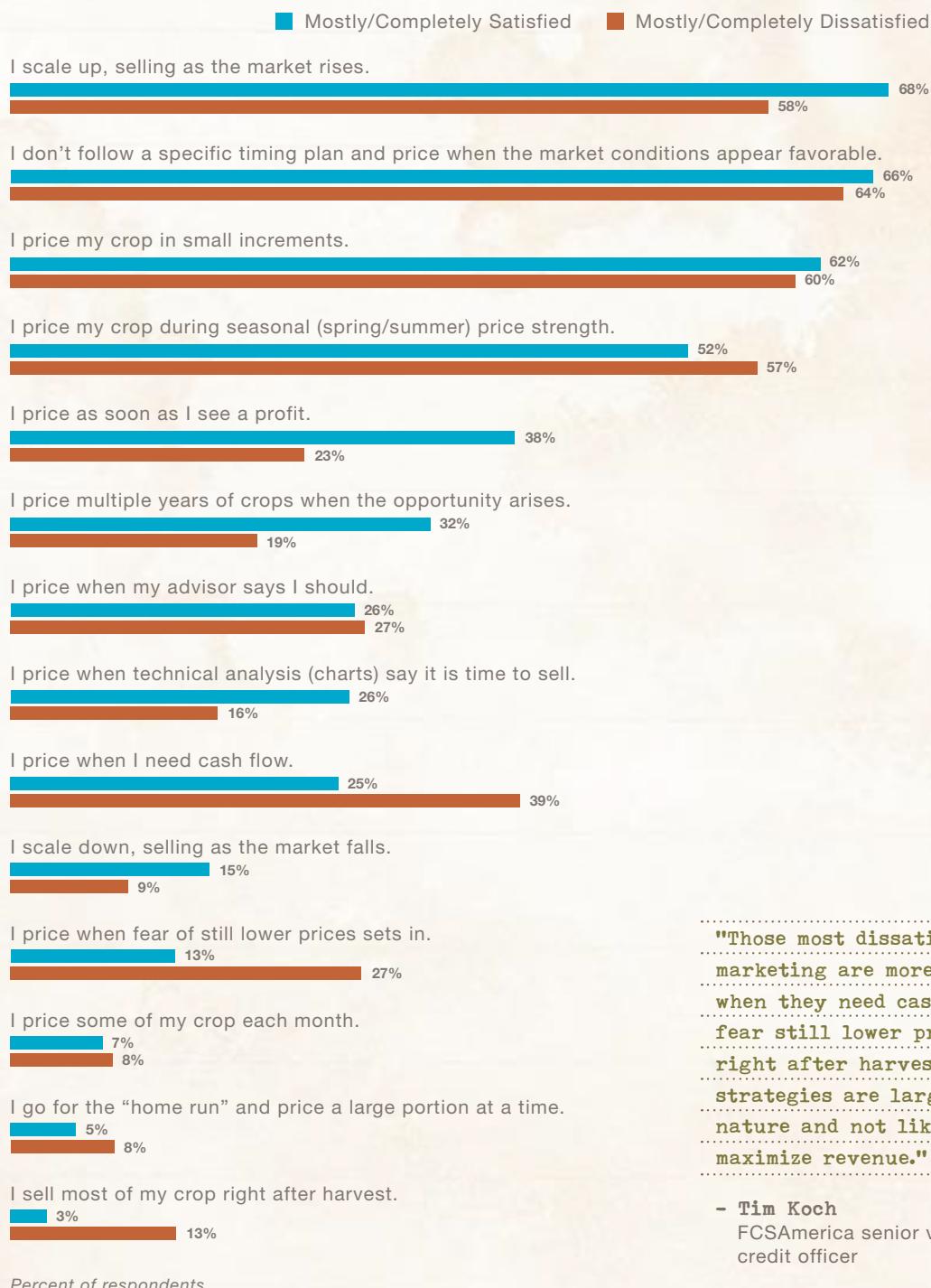


"Producers who know their cost of production – especially those who use accrual accounting and tie it to a written marketing plan – are in a much better position to help financial partners understand pricing decisions. That includes partners in the business and lenders as well."

- Tim Koch
FCSAmerica senior vice president – chief credit officer

Producers satisfied with their marketing also differ in their use of pricing strategies. Satisfied producers are more likely to price as soon as they see a profit and price multiple crop years. They are less likely to sell most of their crop right after harvest, price when they need cash flow or price when fear of still lower prices sets in.

Use of Pricing Strategies – By Marketing Satisfaction



"Those most dissatisfied with their marketing are more likely to price when they need cash flow, when they fear still lower prices, or market right after harvest. These pricing strategies are largely defensive in nature and not likely to consistently maximize revenue."

- Tim Koch
FCSAmerica senior vice president – chief credit officer

Futures hedging as well as locking in the carry on stored grain are more widely used by those who are most satisfied with marketing. Those *mostly or completely dissatisfied* with their marketing are more inclined to use spot cash sales, cash contracts and put option purchases.

Use of Marketing Tools – By Marketing Satisfaction



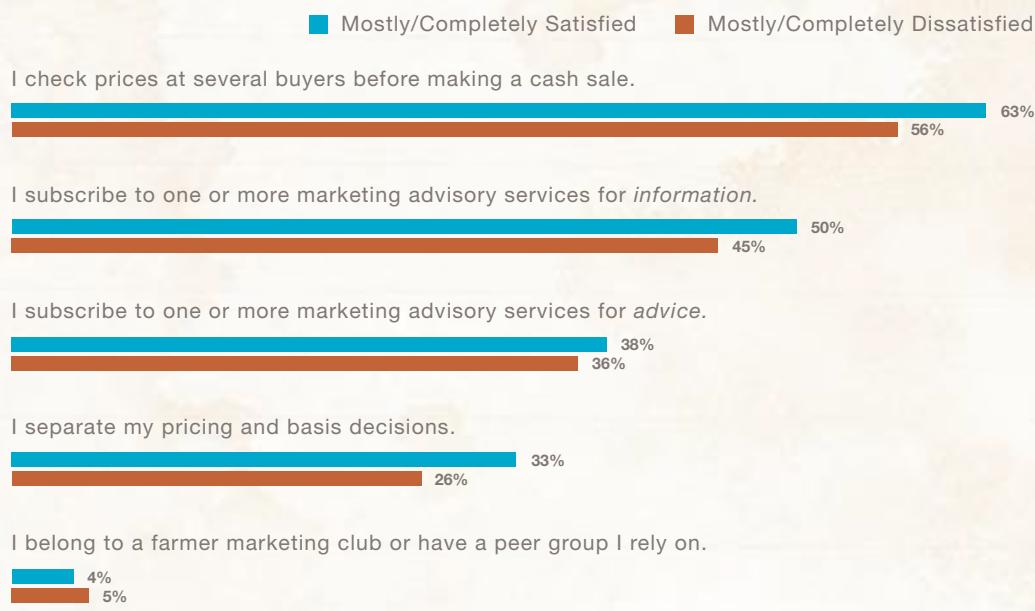
Of those who are satisfied with their marketing and use futures, significantly more agree with the statements that "futures hedges reduce my price risk within a crop year" and "futures hedges improve the price I get for my crop."

More satisfied marketers agree that "crop insurance is an important part of my risk management" and that "crop insurance gives me confidence to market my crop before harvest."

Timing strategies also are different between those most and least satisfied with their marketing. Satisfied producers are more likely to price at least 26 percent of their crops before planting.

Differences are seen in how satisfied versus dissatisfied marketers approach marketing and where they get information and support.

Use of Marketing Practices – By Marketing Satisfaction



Percent of respondents

Interestingly, more of those who are *mostly* or *completely satisfied* with their marketing results list erratic markets as their first or second marketing hurdle (57 percent versus dissatisfied at 42 percent). They also are less likely to list "*regretting when I sell at the wrong price*" (15 percent versus 31 percent) or "*lack of understanding*" (9 percent versus 23 percent) as top marketing hurdles. Dissatisfied producers more often rank "*other issues dominate my attention*" (25 percent) as their top or second hurdle.

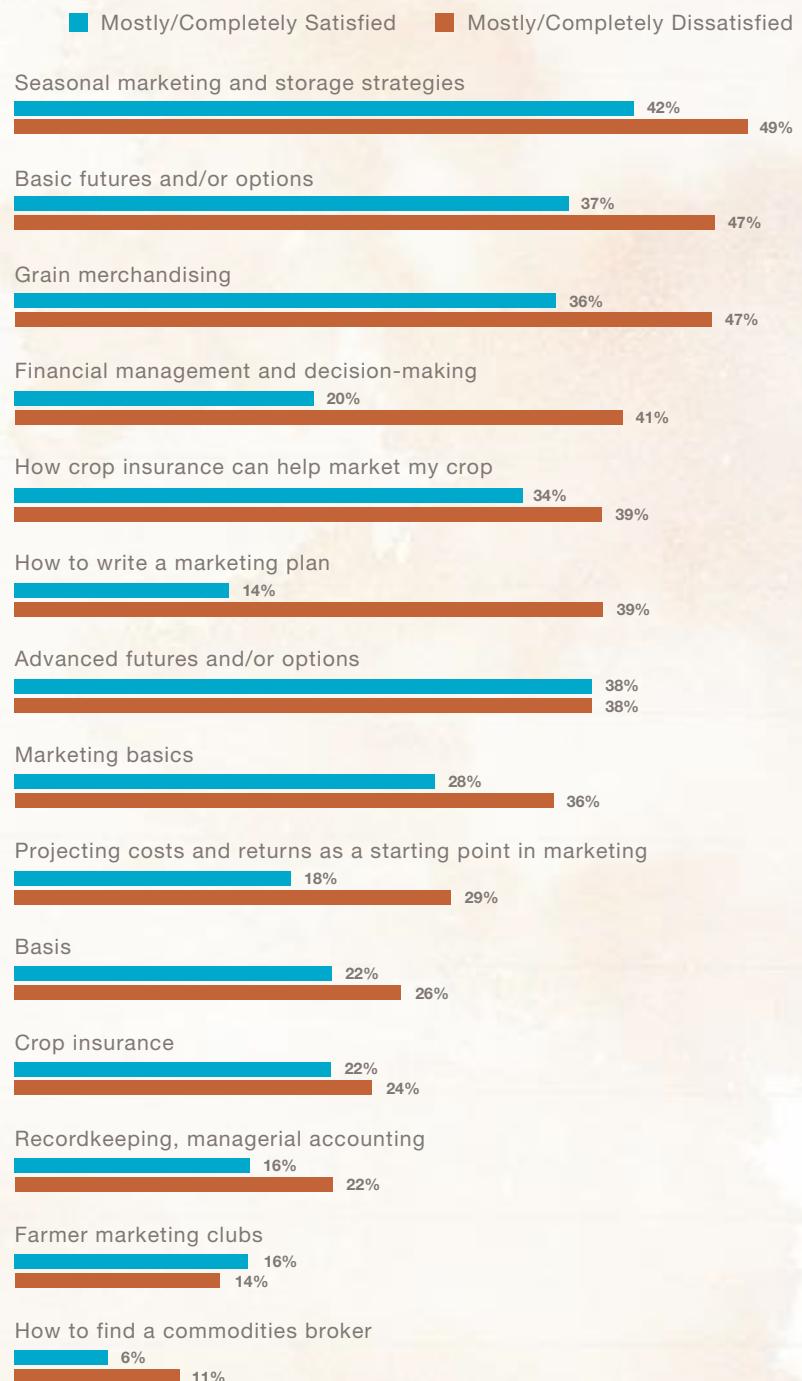
Dissatisfied producers are more likely to say they are interested in learning more about financial management and decision-making, how to write a marketing plan and how to project costs.

Of those *mostly or completely dissatisfied*, 39 percent *mostly or completely agree* that they wish they had a mentor. Only 8 percent of the satisfied group did so.

More dissatisfied producers *mostly or completely agree* that “*I have attended marketing seminars but they don’t equip me to change the way I market*” (30 percent).

Twenty-one percent of dissatisfied producers agree that “*I studied marketing in college but still don’t understand how to use the various tools in my operation*,” while 16 percent agree that “*I understand futures and options but don’t have the confidence to use them*.”

Interest In Learning More – By Marketing Satisfaction



FACTORS THAT AFFECT MARKETING

Crop Insurance Coverage

Producers who buy at least 80 percent Revenue Protection for corn are more likely to indicate that crop insurance is an important part of their risk management plan. They also are more likely to agree that crop insurance gives them confidence to forward contract - and more likely to price their crops - before harvest. They are less likely to say that it is too risky to commit bushels before harvest.

Beliefs About Risk Management – By Corn Revenue Protection



"The beauty of Revenue Protection is that it allows peace of mind for producers to take advantage of forward pricing opportunities during the growing season."

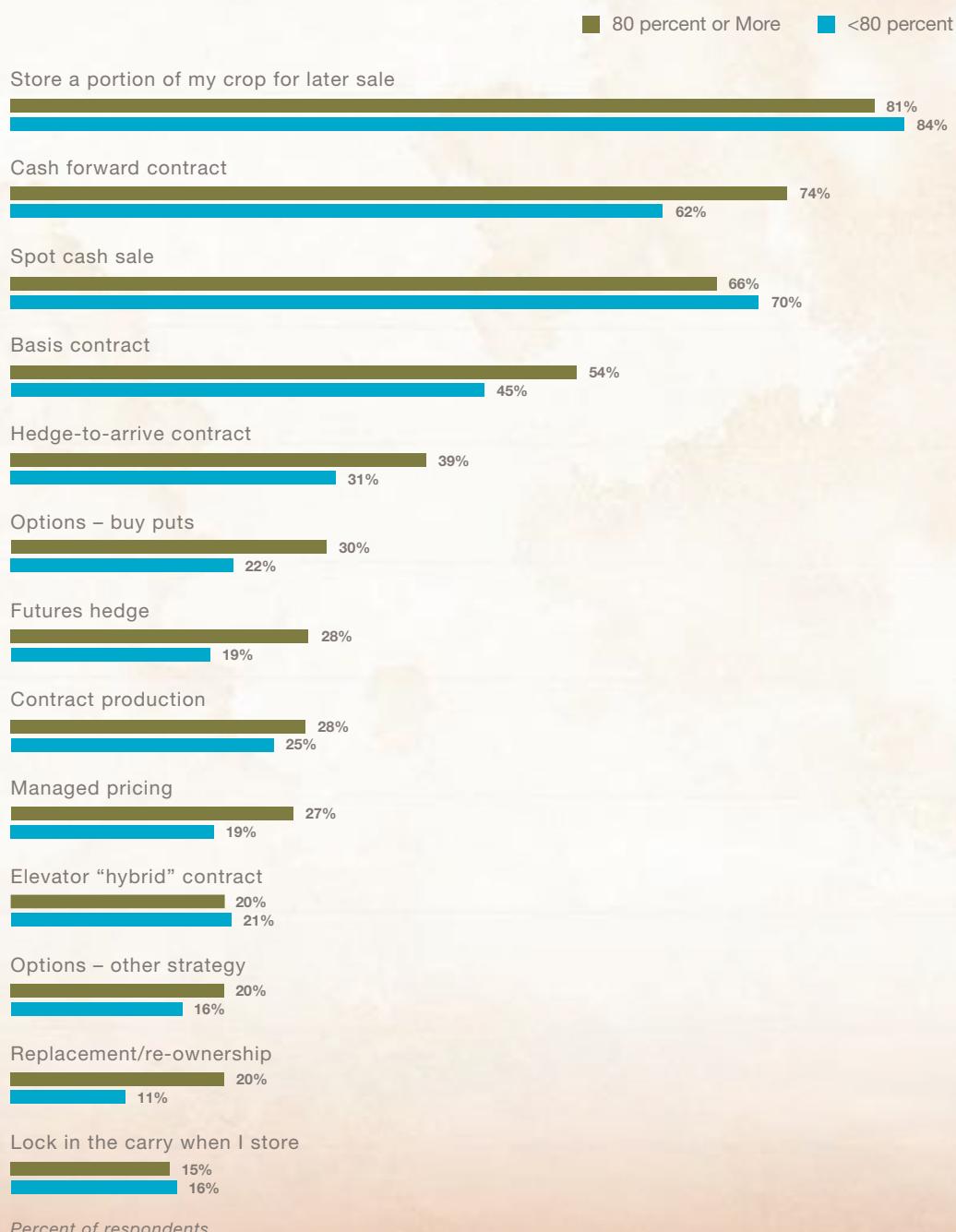
- **Tony Jesina**
FCSAmerica senior vice president – related services

The risk of forward pricing before the crop is harvested in order to capture seasonal price strength is failing to grow enough bushels and being forced to buy replacement bushels to fill the contract – possibly at a higher price. Given Revenue Protection's fall price adjustment, in a year when a weather event causes a shortfall and prices rise, indemnity payments help cover contract responsibilities.

For a mathematical example of how this works, visit frontierfarmcredit.com/connection.

The survey also revealed that the use of most marketing tools – and especially forward pricing – is higher among those having a higher level of Revenue Protection.

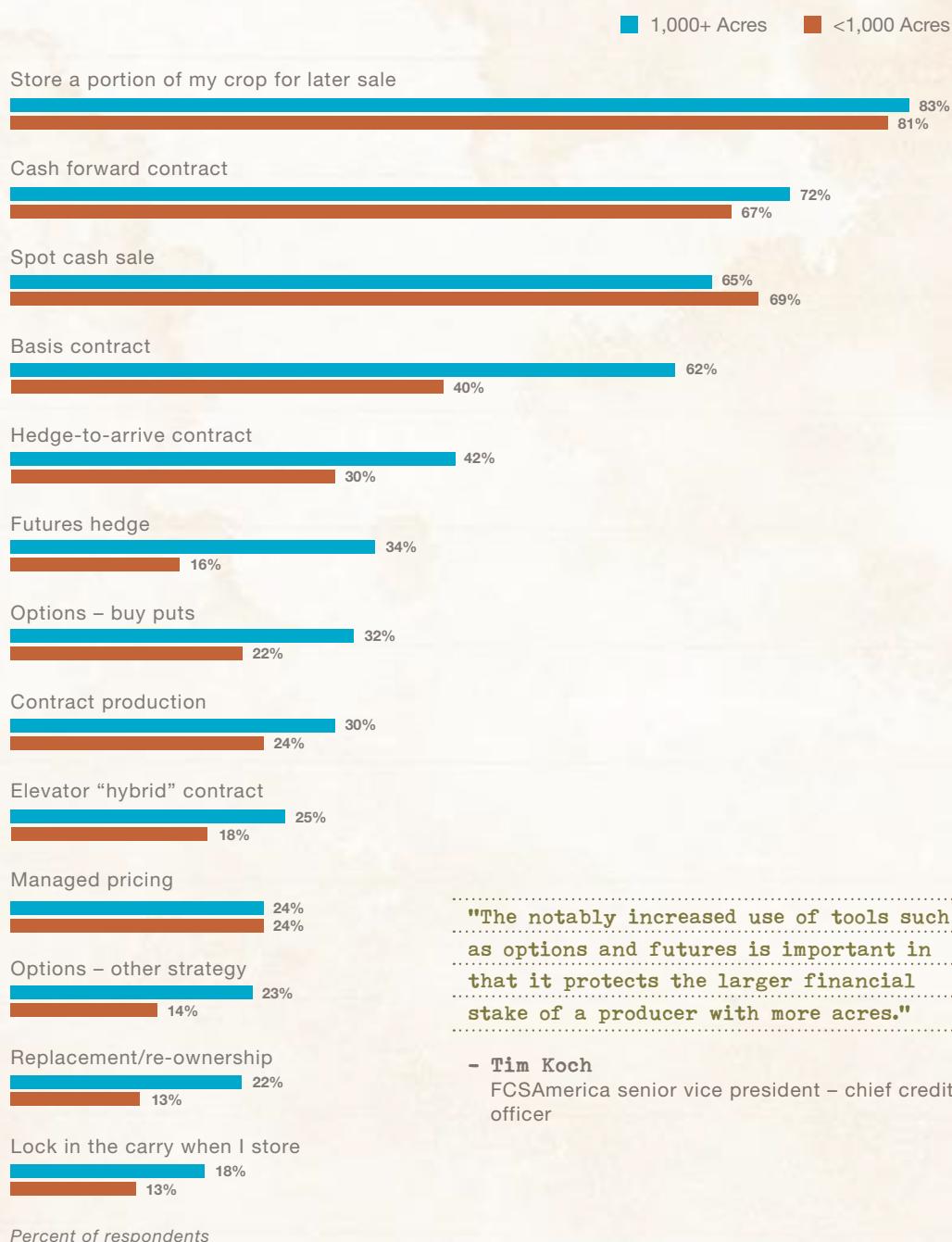
Use of Marketing Tools – By Corn Revenue Protection



Size of Operation

Producers with more than 1,000 acres report using all of the listed marketing tools more except spot cash sales and managed pricing. The greatest difference is seen in their use of basis contracts: 62 percent of the largest farmers use them versus 40 percent of other farmers. There was an 18-point difference in futures hedges, a 12-point difference in hedge-to-arrive contracts and a 10-point spread in buying put options.

Use of Marketing Tools – By Acres



"The notably increased use of tools such as options and futures is important in that it protects the larger financial stake of a producer with more acres."

- Tim Koch
FCSAmerica senior vice president – chief credit officer

The largest producers also are far more likely to check several buyers before making a cash sale, to subscribe to marketing services for advice and/or information and to separate pricing and basis decisions.

Use of Marketing Practices – By Acres



Differences in marketing discipline can be seen for producers with more than 1,000 acres. They are more likely to use all of the practices shown in the chart below, including understanding their cost of production and using it to set a selling price.

Marketing Discipline – By Acres



As the graph below illustrates, more smaller producers than larger ones use the highest levels of Revenue Protection.

Purchase 80 percent or More Revenue Protection – By Acres



"One reason for buying a lower coverage may be because production risk on large operations is somewhat reduced by farming over a larger area. Also, county-based plans may be more appropriate for larger producers, whose acreage represents a larger portion of county farmland and therefore may match county results."

- Tim Koch

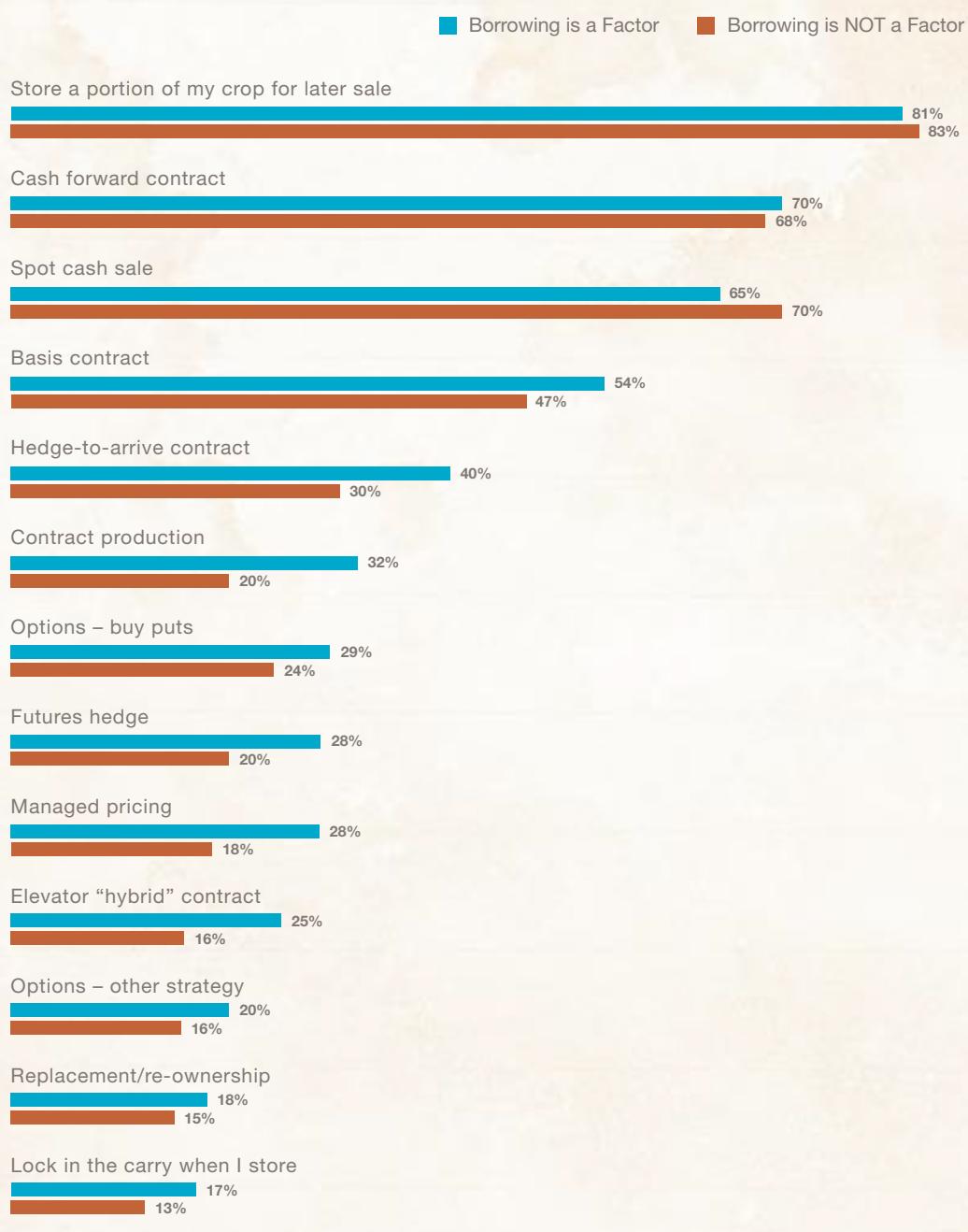
FCSAmerica senior vice president – chief credit officer

Borrowing

The survey asked: “Is borrowing a factor in your need for risk management?” Fifty-six percent say that it is, while 44 percent say it is not. The differences in use of various marketing tools was fairly consistent. With the exception of storing and spot cash sales, borrowers report more use of the tools listed.

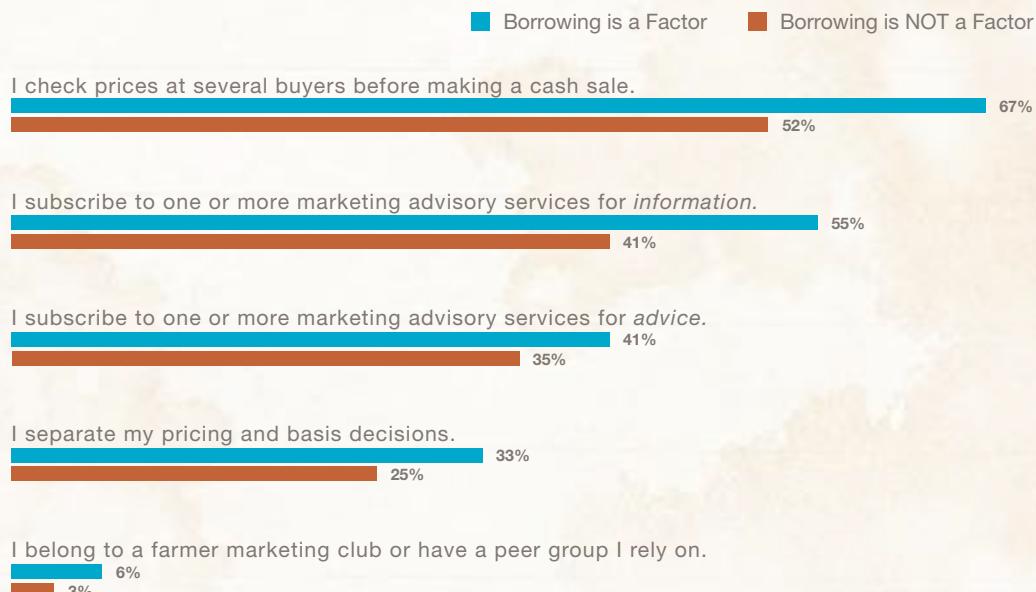
Working closely with a lender who understands marketing may provide a sounding board for decisions.

Use of Marketing Tools – By Borrowing



Those who say borrowing is a factor in their need for risk management also were more likely to check with multiple buyers before making a cash sale, use advisory sources for information and separate price and basis decisions.

Use of Marketing Practices – By Borrowing



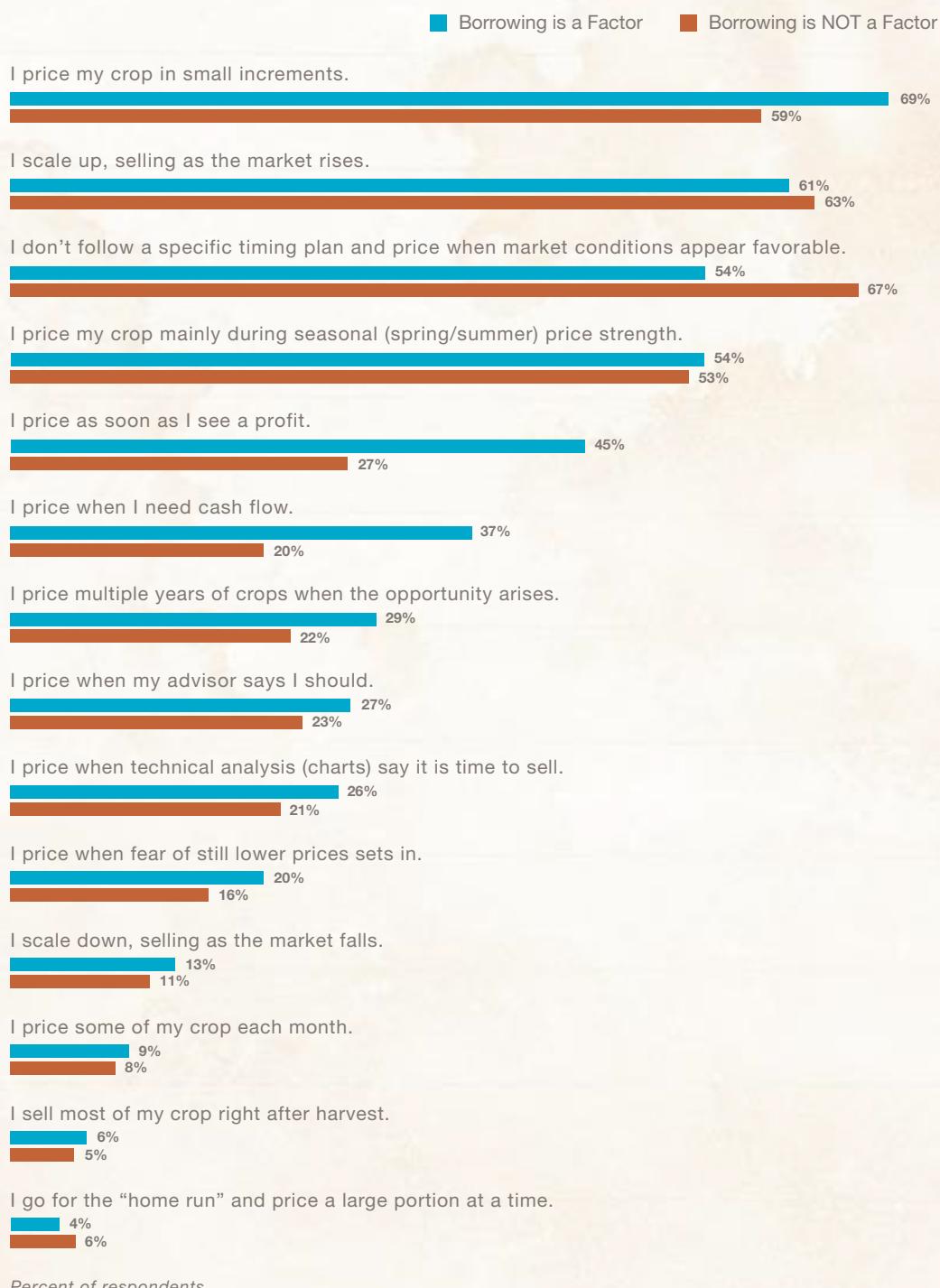
Percent of respondents

"It is critical your lender understands your marketing plan and provides access to the funds to support your risk management needs - from crop insurance premiums to option premiums to margin calls."

- Tim Koch
FCSAmerica senior vice president – chief credit officer

As was the case with their use of marketing tools, "borrowers" also make greater use of various pricing strategies – with the exception of scale-up sales, sell when marketing conditions appear favorable and go for a "home run."

Use of Pricing Strategies – By Borrowing



Age

Farmers under 35 years of age rank risks differently than older farmers, rating weather and yield uncertainty lower than older producers, and a lack of marketing understanding as a higher hurdle to marketing.

Only 48 percent of young (under 35) corn growers and 49 percent of young soybean growers buy more than 80 percent Revenue Protection, compared with 62 percent and 58 percent of older corn and soybean growers. For wheat, however, the percentage who buy more than 80 percent Revenue Protection is the same – 20 percent – for both age groups.

"Subsidy levels materially drop off after 75 percent or 80 percent and that greatly impacts the premium. With an already limited cash flow, it's not surprising younger producers maximize the subsidy levels and don't insure at a higher level unless their lender requires them to do so."

- Tony Jesina

FCSAmerica senior vice president – related services

A higher percentage of under-35 producers use storage, basis contracts, hedge-to-arrive contracts, futures hedges, elevator "hybrid" contracts, lock in the carry on stored grain and managed pricing.

They are more likely to check with several buyers before making a cash sale and belong to a marketing club or peer group.

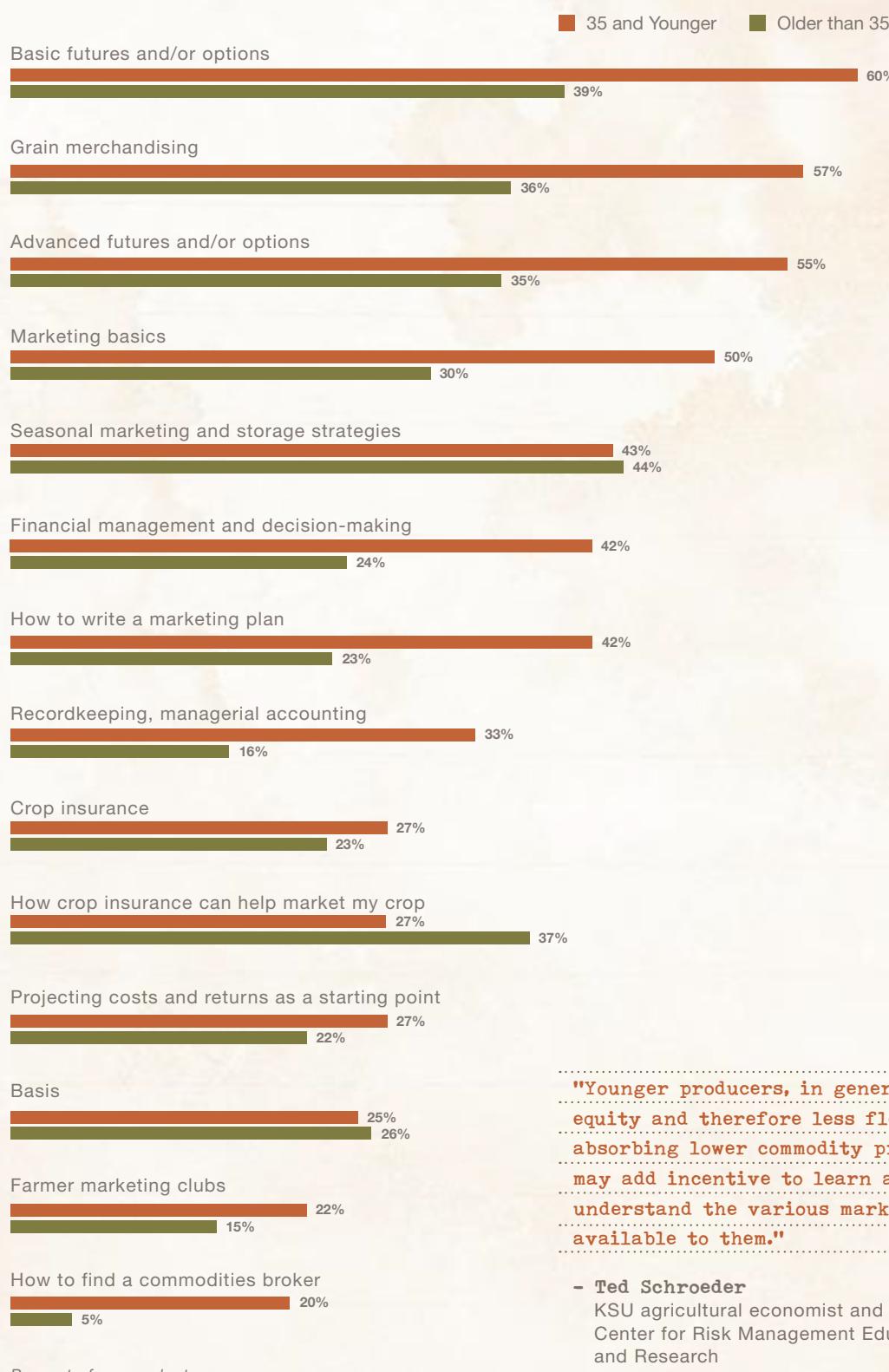
Use of Marketing Tools – By Age



Percent of respondents

Producers age 35 and younger have greater interest in learning more about many topics related to grain marketing, as shown in the chart below.

Interest in Learning More – By Age



"Younger producers, in general, have less equity and therefore less flexibility in absorbing lower commodity prices. This may add incentive to learn and better understand the various marketing options available to them."

- Ted Schroeder
KSU agricultural economist and director of the Center for Risk Management Education and Research

They also are more likely to use their cost of production to set a selling price. About the same percentage as older producers have a written marketing plan.

Marketing Discipline – By Age



Percent of respondents

LOCK IN A PROFIT WHEN YOU SEE IT

Knowing their exact cost of production is the first step to successful marketing, said John Anderson, who farms 7,500 acres with brothers Aaron and Matt near Norfolk, Nebraska.

When market prices offer a profit, they make a sale.

John said they didn't always have a good handle on their breakeven, but working with a spreadsheet provided by their FCSAmerica financial officer, Matt Hoesing, they feel confident they do today.

Overhead and miscellaneous costs are the hardest, he said. "We use university custom rates for equipment costs, but inflate them to be on the safe side," he explained. "Matt also helped us nail our costs based on those of other customers."

John said he liked marketing in school, but it took a close association with a broker he trusts to jump-start his marketing plan. "We thought about hedging and options," he said, "but didn't really use them until we got to know a local commodity broker. Now we set targets and he helps with the timing. He also provides additional discipline."

The brothers use futures rather than options in most cases, though they may buy call options on 20 percent of their crop in case of a harvest rally. "In 2008, we sent \$100,000 to Chicago in margin calls. That was hard," John recalled. "Even though it shouldn't matter in a hedge, it's easier when you get money back."

Their broker also has helped them with some strategies such as initially hedging in December corn futures and then rolling out to July. "We pick up an average of 10 cents on each roll," John said.

They also merchandise their grain, locking in prices on futures strength but locking in basis when it is favorable – often when prices are low.



They moved hedges of 2015 corn to 100 percent by the summer of 2016 and were already at 50-60 percent on 2016 corn ahead of harvest. They also priced some 2017 corn a year ahead. They didn't sell a bushel of 2015 corn under \$4, though they did sell some 2016 production in the \$3.80 range, according to John.

"Compared with the \$8.50 soybean market at the start of last year, we ended with a really good year," John said. "We got a chance to sell all our 2015 soybeans into the cash market in July, and last summer, we also moved new-crop soybean sales close to 90 percent. As soon as we got into a breakeven or profitable level, according to the budget, we started selling beans."

"We were able to just keep scaling up our sales and average price. We didn't sell a lot at the top when unexpected price strength carried beans over \$11, but we did average over \$10."

"It means we can afford to sell ahead knowing that crop insurance would cover us if we didn't grow enough to meet the contract."

- John Anderson
Nebraska grain producer

Advance marketing helps the Andersons meet cash flow needs, including when they buy fertilizer in October-November or January-February time frames. When committing in advance, the brothers view Revenue Protection – which they carry at the 80-85 percent level on corn and soybeans – as crucial. "It means we can afford to sell ahead knowing that crop insurance would cover us if we didn't grow enough to meet the contract," John explained.

Looking ahead to the 2017 crop, the brothers have reduced the number of acres they rent and negotiated a 20 percent reduction in rent on one farm. With their insurance locked in and most inputs purchased, John said, "I believe the marketing opportunities will come. We just have to be ready."

APPENDIX: SURVEY DEMOGRAPHICS

	Number of Respondents	Percentage of Respondents
Total	648	100%
Gender		
Male	628	97%
Female	18	3%
Age		
Young and beginning farmers (35 and younger)	61	9%
36-49	97	15%
50-64	339	53%
Over 65	148	23%
State		
Illinois	110	17%
Indiana	61	9%
Iowa	151	23%
Kansas	46	7%
Kentucky	10	2%
Minnesota	111	17%
Nebraska	80	12%
Ohio	46	7%
South Dakota	33	5%
Education Level		
High school	194	30%
Tech school	81	13%
Associate degree	107	17%
Bachelor degree	216	33%
Graduate degree	47	7%

	Number of Respondents	Percentage of Respondents
Primary Source of Income		
Mostly from farming	528	84%
Mostly off-farm	101	16%
Land Ownership		
Mostly owns farmland	329	51%
Mostly rents farmland	310	49%
Crop Acres		
350 or less	39	6%
351-500	72	11%
501-1000	231	36%
1001-5000	285	44%
5001 or more	18	3%
Crop Type		
Corn	632	98%
Soybeans	610	94%
Wheat	169	26%
Borrowing a Factor in Risk Management?		
No	285	44%
Yes	358	56%
Corn Revenue Protection Level		
Less than 80 percent Revenue Protection	247	39%
80 percent or more Revenue Protection	384	61%



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