MISSISSIPPI STATE UNIVERSITY EXTENSION

Preharvest Grain Marketing Strategies for Beginners

Mississippi grain producers operate in a highly volatile price environment. A range of unpredictable factors, including trade policies, global competition, government programs, and weather events, influence market conditions. These forces can cause significant price swings throughout the growing and harvest seasons, exposing producers to substantial risk. To navigate this uncertainty, producers must adopt a proactive, year-round approach to marketing.

Grain markets tend to be seasonal, with more favorable pricing opportunities often occurring before harvest. Fortunately, producers have access to a variety of marketing tools to help manage price risk, including exchange-traded futures contracts and local forward contracts with grain elevators. These tools enable producers to lock in prices and hedge against adverse market movements, helping to protect farm income and improve long-term financial stability.

Getting started with a grain marketing plan can be challenging, especially for beginners. This publication introduces a set of simple, beginner-friendly marketing strategies, using historical price data for corn and soybeans, to demonstrate their effectiveness. Soybean strategies are evaluated using data from Greenville and Greenwood, Mississippi. Corn strategies are assessed using data from Greenville. Each strategy results in a final seasonal sale price, which is then used to compare performance across all strategies and years included in the study.

Data and Strategies

This study uses historical futures and cash price data to evaluate several simple preharvest grain marketing strategies. The futures data includes Chicago Board of Trade (CBOT) November soybean futures, CBOT September corn futures, and CBOT December corn futures, sourced from commodities and futures market data company Barchart. These contract months were selected because they are closest to but after harvest. Weekly local cash price data for corn and soybeans comes from Greenville and Greenwood, as reported in the USDA Agricultural Marketing Service's Mississippi Daily Grain Report.

To calculate a producer's break-even price, estimates from the Mississippi State University Department of Agricultural Economics' planning budgets were used. The break-even price was determined by dividing expected revenue per acre by expected yield per acre.

The specific preharvest strategies evaluated in this study are outlined below, and were chosen to represent a time-based strategy, a target-based strategy, and a strategy that mixes the two. These approaches are ideal for building the framework of a simple marketing plan.

Strategy 1: Harvest. This strategy serves as the control group and represents a producer who makes no marketing decisions and decides to sell 100% of their production to their grain elevator at the posted cash market price during harvest time.

Strategy 2: Target. Using the producer's break-even prices, four separate pricing targets are established to allow for profit opportunities. The four futures pricing targets are breakeven, 10% above breakeven, 20% above breakeven, and 30% above breakeven. With these four increments, producers will price 20% of their expected production at each increment. If a higher target is hit before a lower target, the producer will sell all bushels up to that target (higher targets override lower targets); the remaining 20% will be sold at cash market.

Strategy 3: Timed. The producer will price their grain in 20% increments at four different times during the preharvest season. These times are the first week of March, April, May, and June. This is a routine strategy that will not require the producer to actively observe the market day-to-day. They will simply sell at the predetermined times.

Strategy 4: Hybrid. This is a mix of target and timed strategies. If a producer fails to hit one or more of their pricing targets, they will revert to the timed periods so that they will have 80% of their expected production hedged by harvest time.

Due to data availability, all preharvest sales in this analysis are assumed to be made using futures hedging. While the results are based on futures transactions, they are comparable to those from other preharvest tools such as forward contracts. For soybeans, the November futures contract is used, reflecting an early October harvest. For corn, both the September and December contracts are included to represent a mid-August and mid-September harvest, respectively. The December contract is used for mid-September corn because the September contract expires around September 15, a period often marked by increased volatility as traders close out positions.

While the producer uses futures months for pricing, the actual grain is delivered from field to elevator like normal during harvest, but the delivered grain price will differ due to the producer's marketing decisions.

Each strategy assumes that at least 20% of expected production remains unhedged and is sold at harvest at the local cash price. This buffer accounts for production uncertainty due to weather or other risks, helping to avoid the financial consequences of being over-hedged in a lower-yielding year.

Soybean Results

Tables 1 and 2 show the best-performing, lowest-performing, and overall highest average across time in soybeans for each year. The timed target strategy achieved the highest average sale price for soybeans over the 16-year period of 2008 to 2023. In Greenwood, this strategy resulted in an average price of $10.76 per bushel, which is 37 cents per bushel higher than the average cash price. In Greenville, the same strategy yielded an average of $11.03 per bushel, or 36 cents per bushel above the cash benchmark.

In Greenwood, the hybrid and target strategies followed closely, averaging $10.59 and $10.51 per bushel, respectively. In Greenville, these strategies achieved $10.90 (hybrid) and $10.81 (target) per bushel. In both locations, the timed target strategy consistently outperformed the others in terms of average price.

It is important to note that over the study period, the timed strategy does not deliver the highest overall maximum, nor does it provide the overall minimum. However, the goal of a grain marketing plan is not necessarily to capture the absolute peak price, but to reduce price risk and improve consistency over time. The timed target strategy excels in this regard. It produces the highest average price over the long term without requiring constant market monitoring. Instead, the producer follows a predetermined marketing schedule, making this strategy straightforward and easy to implement.

Additionally, the price range (difference between highest and lowest yearly sale prices) for the timed target strategy is significantly narrower than that of the cash strategy in both locations. This narrower range highlights the strategy's ability to not only generate higher average prices but also reduce price volatility, offering producers more stable and predictable revenue.

Table 1. Preharvest soybean marketing results for Greenwood.

Crop Year	Cash	Target	Timed	Hybrid
2008	9.29	10.17	**11.36***	10.17
2009	9.00	**9.68***	9.17	**9.68***
2010	**10.57***	10.06	9.33	10.06
2011	10.93	11.90	**12.43***	11.90
2012	**15.15***	12.46	13.43	12.46
2013	13.18	13.26*	13.01	**13.26***
2014	8.86	10.59	**11.16***	10.59
2015	8.89	9.67	9.45	**9.74***
2016	9.34	9.56	9.67	**10.09***
2017	8.95	9.08*	8.98	8.98
2018	7.68	8.26	8.99	**9.01***
2019	**8.58***	**8.58***	8.51	**8.58***
2020	**10.06***	**10.06***	8.96	9.99
2021	11.85	11.14	**12.67***	11.07
2022	12.37	11.83	**13.34***	11.83
2023	11.61	11.84	11.67	**12.03***
Average	10.39	10.51	10.76	10.59
Minimum	7.68	8.26	8.51	8.58
Maximum	15.15	13.26	13.43	13.26
Range	7.47	5.00	4.93	4.68
Best frequency	4	5	5	7

* Numbers in bold and followed by an asterisk represent the highest-performing strategy for that year. The highest-performing strategy across the board was timed.

Table 2. Preharvest soybean marketing results for Greenville.

Crop Year	Cash	Target	Timed	Hybrid
2008	9.54	10.42	**11.61***	10.42
2009	9.25	**9.88***	9.42	**9.88***
2010	**10.82***	10.31	9.58	10.31
2011	11.18	12.15	**12.68***	12.15
2012	**15.40***	12.71	13.68	12.71
2013	12.98	**13.06***	12.81	**13.06***
2014	9.17	10.91	**11.48***	10.91
2015	9.11	9.89	9.67	**10.40***
2016	9.64	10.16	9.97	**10.52***
2017	9.25	9.39	9.28	**9.38***
2018	7.98	8.51	**9.29***	9.12
2019	8.95	**9.01***	8.87	**9.01***
2020	**10.40***	10.33	9.30	10.33
2021	12.15	11.37	**12.97***	11.37
2022	12.82	12.28	**13.79***	12.28
2023	12.06	**12.53***	12.12	12.48
Average	10.67	10.81	11.03	10.90
Minimum	7.98	8.51	8.87	9.01
Maximum	15.40	13.06	13.79	13.06
Range	7.42	4.55	4.91	4.05
Best frequency	3	4	6	6

* Numbers in bold and followed by an asterisk represent the highest-performing strategy for that year. The highest-performing strategy across the board was timed.

Corn Results

Corn results can be found in Tables 3 and 4. Like the soybean results, the timed strategy delivered the highest average sale prices for corn in both harvest scenarios. For the mid-August harvest, the timed strategy produced an average price of $5.06 per bushel, which is 16 cents higher than the average cash price. For the mid-September harvest, it yielded $4.84 per bushel, or 13 cents above the cash benchmark.

In comparison, the hybrid and target strategies for the mid-August harvest averaged $4.89 and $4.86 per bushel, respectively. For the mid-September harvest, these strategies returned $4.67 (hybrid) and $4.63 (target) per bushel. These results reinforce the value of a disciplined, routine marketing approach. For both corn and soybeans, the highest market prices typically occur during the spring and early summer, with a general downward trend as harvest approaches. The timed strategy is designed to capitalize on this seasonal pattern.

Unlike the soybean results, the price ranges for the timed corn strategies are not particularly narrow. This is due to a few years of unusually low prices, which increased the range despite strong performance in most years. As a result, the range alone is not a sufficient indicator of performance. When considering other key metrics—such as average price and frequency of being the best-performing strategy (labeled "best frequency" in the tables)—the timed strategy consistently outperforms the alternatives.

An additional point of distinction in the corn results is that the timed strategy also achieved the highest maximum price across all strategies. This is uncommon, as the cash strategy often benefits from one or two years of exceptionally high spot prices that boost its maximum. In this case, however, the timed strategy outpaced even those rare spikes in the cash market, demonstrating its ability to capture favorable pricing opportunities while maintaining long-term consistency.

Table 3. Preharvest corn marketing results for Greenville (mid-August harvest).

Crop Year	Cash	Target	Timed	Hybrid
2008	5.21	4.26	**5.49***	4.26
2009	3.02	3.77	3.81	**4.04***
2010	4.16	**4.40***	3.83	**4.40***
2011	**6.95***	5.72	6.59	5.72
2012	**7.48***	5.85	5.39	5.85
2013	4.95	5.35	**5.55***	5.35
2014	3.97	4.56	**4.98***	4.56
2015	3.62	**3.91***	3.77	3.91
2016	3.42	3.86	**3.92***	3.91
2017	3.44	3.64	**3.75***	3.74
2018	3.58	3.79	**3.96***	3.79
2019	3.51	**3.80***	3.74	**3.80***
2020	3.41	**3.99***	3.55	**3.99***
2021	**6.62***	5.86	6.71	5.86
2022	8.00	7.29	**8.47***	7.29
2023	6.85	7.69	7.46	**7.80***
Average	4.89	4.86	5.06	4.89
Minimum	3.02	3.64	3.55	3.74
Maximum	8.00	7.69	8.47	7.80
Range	4.98	4.04	4.93	4.07
Best frequency	3	4	7	5

* Numbers in bold and followed by an asterisk represent the highest-performing strategy for that year. The highest-performing strategy across the board was timed.

Table 4. Preharvest corn marketing results for Greenville (mid-September harvest).

Crop Year	Cash	Target	Timed	Hybrid
2008	4.93	4.22	**5.49***	4.22
2009	2.95	3.47	3.87	**3.96***
2010	**4.71***	4.27	3.79	4.27
2011	**6.47***	5.37	5.89	5.37
2012	**6.91***	5.60	4.99	5.60
2013	4.45	5.06	**5.07***	5.06
2014	3.51	4.06	**4.65***	4.34
2015	3.59	3.75	**3.75***	3.72
2016	3.31	3.78	**3.79***	3.69
2017	3.37	3.54	**3.68***	3.61
2018	3.45	3.63	**3.86***	3.63
2019	3.42	**3.78***	3.72	**3.78***
2020	3.73	**3.95***	3.64	3.88
2021	6.35	5.78	**6.48***	5.78
2022	7.75	6.81	**7.87***	6.81
2023	6.44	6.96	6.95	**7.06***
Average	4.71	4.63	4.84	4.67
Minimum	2.95	3.47	3.64	3.61
Maximum	7.75	6.96	7.87	7.06
Range	4.80	3.50	4.23	3.45
Best frequency	3	2	9	3

* Numbers in bold and followed by an asterisk represent the highest-performing strategy for that year. The highest-performing strategy across the board was timed.

Conclusion

There are a multitude of different marketing strategies that a producer can implement; this study examines several simple yet structured strategies involving futures hedging and production costs. In all crops and locations analyzed, the lowest-performing strategy was selling everything in the cash market at harvest.

The key takeaway is that **doing something is better than doing nothing**. Having a structured marketing plan, even as simple as selling at four separate times in the spring before harvest, leads to better results on average than selling everything at harvest. These simple strategies can serve as a solid foundation for beginning marketers to explore other, more complex marketing strategies.

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