The Impact of Marketing Strategy Information on the Producer’s Selling Decision

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**Background:** Agricultural economists have supplied the agricultural industry with many studies regarding the sources of marketing information producers employ, as well as producer marketing strategy recommendations. Nearly all of these studies take a normative approach to the research, deriving “optimal” marketing strategy recommendations. There has also been several producer surveys to determine what information sources producers say they use (Patrick and Ullerich; Batte, Schnitkey, and Jones; Ortmann et al). However, these studies do not test whether producers really use the information they say they do when making marketing decisions. In order to provide producers with more applicable marketing information, we must ask what sources of marketing strategy information do producers actually use in their marketing decisions? Do producers prefer technical analysis, such as market advisory service recommendations or other sources of information, such as changes in futures price spreads? How much influence do these different information sources have on producers’ marketing decisions? The answers to these questions will provide agricultural economists with a clearer understanding of how specific sources of marketing strategy information affect producers’ selling decisions.

**Objectives:** The objective of this study is to determine how Oklahoma wheat producers’ selling decisions correspond with certain marketing information sources, specifically changes in futures spreads and market advisory service recommendations.

**Methods and Data:** The following regression model will be used to determine how producers’ selling decisions correspond with the aforementioned marketing information:

\[
tr_{ikt} = \beta_0 + \sum_{j=1}^{8} \beta_j cy_{yt} + \beta_2 fps_{ikt} + \beta_3 mas_{ikt} + \beta_4 wah_{ikt} + \beta_5 wah_{ikt}^2 + \varepsilon_{ikt}
\]

where \(tr_{ikt}\) is the number of transactions (wheat sales) that occurred at the \(i^{th}\) elevator on the \(k^{th}\) day in year \(t\), \(fps_{ikt}\) is the spread in futures prices, \(mas_{ikt}\) is the percent of the crop market advisory services recommended selling on that date, \(wah_{ikt}\) is the number of weeks after harvest that the transaction occurred, \(cy_i\) is a yearly dummy variable, and \(\varepsilon_{ikt}\) is the error term. Due to the fact that the dependent
variable can take on a value of zero when no wheat transactions take place, the model will be estimated using a Tobit regression. Heteroskedasticity, as well as non-normality, is expected. Misspecification tests will be conducted and the model will be estimated using maximum likelihood.

The study uses data collected from three grain elevators located in the northern, southern, and central areas of western Oklahoma. The data contain daily transactions of wheat sales at each elevator. Each transaction includes the number of bushels sold, price per bushel, date of transaction, and the number of weeks after harvest that each transaction occurred. The wheat market advisory service recommendations were obtained from the AgMAS project at the University of Illinois. Our study uses the average daily selling recommendation from the 34 market advisory services. The futures spreads are used to represent the expected returns to storage and will be calculated based on Kansas City futures prices.

**Expected Results:** Past research shows that the pricing performance of market advisory services for wheat is not strong (Martines-Filho, Good, and Irwin) and that advisory services exhibiting weak pricing performance are not as likely to be implemented into a farmer marketing plan (Pennings, Irwin, and Good). Therefore, market advisory service recommendations are likely followed by only a small portion of wheat producers. Due to its fundamental nature, the change in futures price spreads is expected to have a greater influence than that of the advisory services. While both of these sources of marketing information are expected to have some effect on marketing decisions, Oklahoma producers typically exhibit more mechanical marketing styles and sell close to or at harvest (Cunningham, Brorsen, and Anderson). Therefore, it is likely that the impact on producer marketing decisions for both strategies will be relatively small.

**Discussion:** Studies done with producer surveys typically show producers putting a high level of importance on market advisory service recommendations as a source of marketing strategy information (Patrick and Ullerich; Ortmann et al). However, it is possible that producers are not directly implementing this information into their marketing decisions.
References


