# SHOULD THE SUPPLY CHAIN PLAY FAIR?

*by Brian C. Briggeman and Jayson L. Lusk*

***Editor's Note:*** *This is the second article in a two part series.*

In the first article in our series – Should the Supply Chain Play Fair? — we discussed whether consumers want a just and equitable supply chain. Initial survey results showed that consumers do perceive alternative production systems, in our case organic bread, to partially alleviate some of the inequality of profits across the supply chain. In particular, the perceived profits received by small farmers from the sale of an organic loaf of bread increased by 71% as compared to the sale of one loaf of non-organic bread.

Awareness of this consumer perception is important, but do these beliefs impact the consumer's purchasing behavior? Determining whether and how consumers act on the belief that inequality of profits exists in the supply chain is the objective of this article.

In a recent survey, consumers answered a series of questions that asked them how likely they were to buy a loaf bread that differed according to its price and the profits allocated to different participants in the supply chain, such as small farmers, large farmers, agribusiness processors, and grocery stores. Essentially, consumers were presented with a hypothetical purchasing option and asked to state how likely they would be to purchase this particular loaf of bread. To better illustrate these purchasing options, figure 1 provides a example survey question.

How likely are you to buy a loaf of bread from your local grocery store if it was produced from a food production system with the following characteristics In the first case below, the question is: how likely are you to purchase a loaf of bread if the price you would pay is $2.99, and from that single purchase small farmers would earn a profit of 1 cent, large farmers would earn a profit of 15 cents, agribusinesses would earn a profit of 1 cent, and your local grocery store would earn a profit of 15 cents?

**Fig. 1 CONSUMERS' LOAF OF BREAD PURCHASING QUESTION**

| Product | Not Buy — Maybe — Buy |
|---|---|
| Price of bread loaf: $2.99<br>Profit to small farmers: $0.01<br>Profit to large farmers: $0.15<br>Profit to agribusinesses: $0.01<br>Profit to grocery store: $0.15 | 0 1 2 3 4 5 6 7 8 9 10 |
| Price of bread loaf: $1.99<br>Profit to small farmers: $0.15<br>Profit to large farmers: $0.07<br>Profit to agribusinesses: $0.01<br>Profit to grocery store: $0.15 | 0 1 2 3 4 5 6 7 8 9 10 |

## SURVEY RESULTS

Statistical analysis of these questions provides some insight into which market the consumers cared about the most and whether consumers care about the distribution of profits. First, a dollar increase in the price of bread lowers the likelihood of purchase by 11%. This result implies that consumers care about themselves since they are less likely to buy higher priced bread.

Next, consumers primarily care about the profits received by small farmers. A 10 cents increase in profit going to small farmers increases the likelihood of a purchase by 15%. Also, extra profits to the other supply chain participants did not impact the likelihood of purchasing. This implies that consumers care about small farmers receiving extra profits but not necessarily other supply chain participants.

Finally, if profits are shared unequally across the supply chain, the likelihood of purchasing 10 cent increase in the standard deviation of profits across the supply chain lowers the likelihood of purchase by 21%. Consumers in our study did not want a large distribution of profits, which implies that consumers prefer profits to be shared more equally across the supply chain.

## IMPLICATIONS

These initial findings provide preliminary evidence that preferences for fairness significantly affect people's stated preferences for food. However, much more work is needed. Since these results are based on hypothetical purchasing decisions, we plan to place a new set of consumers in a non-hypothetical environment and have them make purchasing decisions with real money. Putting improvements to our research aside, the results presented in our two articles indicate to us that consumers do consider fairness when purchasing food and, in short, want the supply chain to fair. **AM**

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