

# THREE ESSAYS ON VALUE-ADDED BEEF STRATEGIES

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## ABSTRACT

The first essay examines Missouri cow-calf producer survey data to determine the impact that producer, operation and management characteristics; production risk; and location have on the adoption of reproductive technologies. The results show that producer, operation and management characteristics and production risk influence adoption of artificial insemination and estrus synchronization. The second essay explores the product life cycle of a value-added marketing strategy that was created for a quality heifer program. Known as the Tier II program, the new value-added heifer program essentially created a new product (higher quality bred heifers) by requiring minimum sire expected progeny difference (EPD) accuracies. The hedonic study shows that the Tier II heifers receive a premium compared with traditional Show-Me-Select heifers. The third essay explores risk and tradeoffs, and it determines what buyers are willing to pay to feel indifferent about purchasing calves from alternative sire groups. The study found that buyers who are the most risk-taking will prefer to buy calves that were born to females bred by natural service bulls. Buyers who are slightly risk-takers to moderately risk-averse will prefer to buy high-quality calves that were born to artificially inseminated females bred with high-accuracy sires because they have a higher probability of earning more revenue. Less risk-averse individuals may be wealthier, more educated and innovative. Buyers who are strongly risk-averse will prefer to buy a mixed sire group.