

CHAPTER V. CONCLUSION

A. Conclusion

Based on the results of this study, the following conclusions can be drawn:

1. There is a stable long-run price integration among maize, feed, and layer chicken egg prices in West Sumatra. This indicates that the three commodities tend to move together in the long run despite experiencing short-run fluctuations. In the short run, maize prices are the primary driver of feed prices, with positive effects persisting for up to three periods, confirming that price transmission operates along the supply chain with different adjustment speeds at each market level.
2. Maize price shocks have a positive and persistent effect on feed prices, although the response is delayed and fluctuates in the short run. Maize prices contribute also significantly to explaining feed price fluctuations. These findings confirm that maize plays a dominant role in feed price determination, reflecting its position as the primary raw material in feed formulation.
3. Shocks in feed prices generate a positive and persistent response in egg prices. The response then gradually declines and stabilizes at a small positive value in the long run, indicating that feed price increases are transmitted to egg prices, but the transmission is incomplete due to market constraints and the inelastic nature of price transmission. Maize has a greater influence on egg prices compared to aggregate feed prices, indicating imperfect price transmission along the supply chain from maize to feed to eggs. This suggests that price signals from maize may affect egg prices through multiple channels beyond the direct feed cost channel, including expectations, speculative behavior, and market structure effects.

B. Suggestion

Based on the findings of this study, the following recommendations are proposed:

1. The government should prioritize policies that maintain the stability of maize prices, as maize is the primary raw material for poultry feed. Efforts to increase maize production, improve the distribution system, and ensure a stable supply of maize are expected to reduce feed price fluctuations and, consequently, contribute to the stability of layer chicken egg prices in West Sumatra.
2. Feed manufacturers are encouraged to improve the efficiency of raw material procurement and inventory management in order to minimize the impact of maize price fluctuations on feed prices. Better management of feed production is expected to help maintain feed price stability and reduce the transmission of price shocks throughout the poultry supply chain.
3. Layer chicken farmers are encouraged to improve feed management and production efficiency to reduce the impact of feed price fluctuations on production costs. Since feed represents the largest component of production costs, efficient feed utilization can help maintain the sustainability and profitability of layer chicken farming.
4. Future research is recommended to include additional variables that may influence the dynamics of maize, feed, and layer chicken egg prices. In addition, future studies may use longer observation periods or higher-frequency data to provide a more comprehensive analysis of price integration and price transmission within the poultry industry.

