

**May 2007**

# **An Economic Analysis of the Effectiveness of the Pork Checkoff Program Final Report**

Prepared for

**National Pork Board**

P.O. Box 9114

Des Moines, IA 50325

Prepared by

**Robert H. Beach, RTI International**

**Chen Zhen, RTI International**

**Nicholas E. Piggott, North Carolina State University**

**Michael K. Wohlgenant, North Carolina State University**

**Catherine L. Viator, RTI International**

**Sheryl C. Cates, RTI International**

RTI International

Health, Social, and Economics Research

Research Triangle Park, NC 27709

RTI Project Number 0210314.000

---

## CONCLUSIONS AND IMPLICATIONS

Based on the results of our analyses, we present the following conclusions about the Pork Checkoff Program's success in meeting its goals:

- The Pork Checkoff Program has a significant positive effect on the demand for hogs and pork.
- The returns to producers, on average, substantially outweigh the costs.
- Marginal increases in Program expenditures would increase producer profitability, on average.
- Although all point estimates of marginal returns are positive and generally fairly large, marginal returns cannot be measured precisely for all expenditure categories.
  - Confidence intervals may be wider for some categories than others based on factors such as differences in data quality, the ability of the expenditure data to accurately represent the Program activity level, and the number of parameters needed for rate of return calculations, as well as underlying variability in the effects of the categories modeled.
  - The confidence intervals for some categories include negative values. As with any investment activity, there is some uncertainty regarding the magnitude and even sign of net benefits. Negative values indicate that certain combinations of model parameters exist that can result in negative returns for these activities. Important considerations are the probability of this outcome and examination of the entire distribution of returns in making decisions.
- Marginal returns for post-farm research, foreign market development, and production research may all be higher than for domestic promotion based on our estimated point estimates and distributions.
- Differences in marginal returns across Program categories imply that there may be benefits from reallocation of Program expenditures towards categories with higher marginal returns, but the imprecision associated with category-level return estimates precludes definitive conclusions regarding optimal reallocation.
  - Although some distributions are more heavily weighted towards larger positive values, the distributions for all of the categories overlap with one another, indicating that the differences in estimated rates of return are not statistically significant.
- When considering reallocation of expenditures, it is important to consider the sizes of the confidence intervals around the rate of return estimates as well as the point estimates.

Overall, the results of the study indicate that the average hog producer experiences net benefits as a result of the Program. It is also important to note that there have been several years of low prices and high production costs for the average hog producer during 1999 through 2005. However, the econometric models presented in this study suggest market conditions for hog farmers would have been significantly worse without the Program.