Economic Evaluation of the Cotton Checkoff Program

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ABSTRACT

The Cotton Research and Promotion Act was initiated to provide for the development of an industry-wide research and promotion effort. In 1990, Congress amended the Act to eliminate producer refunds and to add a new levy on imports. The 1990 legislation also called for a review by the Secretary of Agriculture to assess the effects of these changes and to determine the need for a continuance referendum every five years. The research described in this report was undertaken to provide an economic analysis of the cotton checkoff program. This analysis, plus USDA’s assessment of program implementation and industry support, provided the basis for the Secretary’s review.

The study was designed to answer the following: (1) what were the effects of the research and promotion activities on domestic consumption of cotton, farm-level demand for cotton, and cotton imports; and (2) what was the rate of return associated with the program? Promotion and research activities were successful in contributing to increases in the domestic consumption of cotton and in imports of raw-fiber equivalent cotton textile products. At the mill level, the net return for the current program was in the range of $7.12 to $8.14 per dollar of investment. At the producer level, the net return for the current program was $3.23 to $3.49, and for importers the net return was slightly higher at $3.63 to $4.33.
ECONOMIC EVALUATION OF THE COTTON CHECKOFF PROGRAM

Interpretive Summary

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Promotion and research activities associated with the cotton industry’s checkoff program were successful in contributing to increases in the domestic consumption of cotton, the farm-level demand for cotton, and in imports of raw-fiber equivalent cotton textile products. The rates of return on assessment fees justify the existence and maintenance of the current checkoff program. Data for the period 1986 through 1995 were used in the analysis.

COTTON PROMOTION/RESEARCH FUNDING

Funding for cotton promotion and research was originally authorized through the Cotton Research and Promotion Act of 1966 and was amended later through passage of the Cotton Research and Promotion Amendments Act of 1990. The intent of both Acts was to strengthen the competitive position of cotton against primarily man-made fibers as well as expand domestic and foreign markets and uses for U.S. cotton. The Act of 1990 contains two provisions that authorized changes in funding procedures, thereby distinguishing it from the Act of 1966:

(1) All cotton marketed in the United States, whether from domestic or foreign production, was to share in the cost of the research and promotion program;

(2) The right of cotton producers to demand or refund of assessments was terminated.

The checkoff program is financed through one-dollar-per-bale assessments, plus ½% of market value on domestically-produced cotton, imported cotton, and the cotton content of imported products. The Cotton Board contracts with Cotton, Inc., to carry out research and promotion activities by the legislative Acts.

Total assessment revenue and subsequent funding for cotton promotion and research activities increased from $18.5 million in 1986 to approximately $55 million in 1995. Approximately 66% of the Cotton, Inc. budget is used for promotion, 20% for research and the remainder for agricultural research and administration. Cotton promotion activities include television advertising campaigns, seasonal promotions, and special public relations programs. Cotton, Inc. also assists mills, manufacturers and retailers in marketing cotton and cotton products for domestic as well as international users. Research activities include technical processing and production support to mills, gins and growers, as well as product development and textile development.
RESULTS

The amount of change in consumption directly attributable to Cotton, Inc.’s promotion and research expenditures was identified; these findings also were explained in terms of a rate of return at the mill level, and as a rate of return to producers and importers.

Data were analyzed using two different modeling approaches in order to compare the reliability of their findings. In addition, the modeling procedures examined significant cotton supply and demand fundamentals to ensure these factors were properly weighed in the evaluation.

IMPACTS ON DOMESTIC CONSUMPTION

- Domestic consumption refers to sum of mill consumption plus net imports of raw fiber-equivalent cotton textile products (yarn, thread, and fabric; apparel; and home furnishings).
- After a delay of 8 months, a 10% change in promotion expenditures translates to a 2 million pound change in domestic consumption per month.
- After a delay of 9 months, a 10% change in textile research and technology transfer expenditures gives rise to a 4 million pound change in domestic consumption per month.
- The checkoff program under the Act of 1966 generates a rate of return between 2.24 and 2.44; the checkoff program under the Amendments Act of 1990 generates a rate of return between 7.12 and 8.14. Thus, both checkoff programs were effective in the stimulation of domestic demand. However, the current program was even more effective than the earlier program with a rate of return greater than 7 to 1 at the mill level.

IMPACTS ON DOMESTIC PRODUCERS

- Farm-level demand refers to the sum of mill consumption plus U.S. exports of raw cotton.
- After a delay of 12 months, a 10% change in promotion expenditures generates a 4 million pound change in farm-level demand per month.
- After a delay of 14 months, a 10% change in textile research and technology transfer expenditures leads to a 6 million pound change in farm-level demand per month.
- Domestic producers clearly benefit from the current program, with a rate of return between 3.23 and 3.49. However, under the Act of 1966, the rate of return to domestic producers was between -0.69 and -0.73.

IMPACTS ON IMPORTERS

- Imports refer to raw-fiber equivalent cotton textile products.
- After a delay of 8 months, a 10% change in promotion expenditures give rise to a 1 million pound change in cotton imports per month.
- After a delay of 9 months, a 10% change in research expenditures translates to a 3 million pound change in cotton imports per month.
- Importers clearly benefit from the Cotton Research and Promotion Amendments Act of 1990. A return of between $3.63 and $5.59 is evident for each $1 of assessment.
CONCLUSIONS

- The checkoff program results in increases in domestic cotton consumption, farm-level demand, and imports.
- Three possible choices can be made in regard to the checkoff program:
  1. Eliminate the program
  2. Return to the original program under the auspices of the Cotton Research and Promotion Act of 1966
  3. Maintain the current program under the auspices of the Cotton Research and Promotion Amendments Act of 1990
- According to the study results, the most desirable alternative is to maintain the current program. Under the present checkoff program, on average, the share of assessments is 75 percent for domestic producers and 25 percent for importers.
- Under the current program, the rate of return to domestic producers is between 3.23 and 3.49.
- Under the current program, the rate of return to importers is between 3.63 and 5.99.
- Clearly, importers and domestic producers benefit from the Act of 1990. However, the rate of return from the checkoff program is greater for importers than for domestic producers.