National Check-off Study

QUESTIONS & ANSWERS

The national check-off provides industry funding for the Beef Cattle Research Council (BCRC) responsible for the industry's national research program; the Beef Information Centre (BIC) tasked with market development in Canada and the United States; and the Canada Beef Export Federation (CBEF) which develops export markets in Mexico, Asia, and more recently Russia and the Middle East.

1. Why was the study evaluating the economic benefits from the Canadian beef cattle check-off initiated?

The study was initiated to obtain the first new analysis of national check-off-funded expenditures since the levy came into effect. This study is a comprehensive examination of Canadian beef cattle industry investment in research and marketing activities – and also how the check-off compares globally and to other agricultural commodities. A previous study was done prior to the national check-off and focused on generic beef advertising up to the early '90s.

The Canadian Beef Cattle Research, Market Development and Promotion Agency (also known as the National Check-off Agency)[1] felt it was prudent to take a fresh look at the economic benefits of the national check-off given the many changes and challenges the industry has experienced during the past decade. BSE, severe weather, a robust loonie, economic ups and downs and, more recently, the global recession, have reshaped the industry in ways few could have predicted. As industry has moved to adapt to the changing landscape, the National Check-off Agency wanted to address key questions including producer return on investment; impact on industry competeviness and demand for Canadian beef; and optimal allocation of funds.

2. When was the study initiated and completed?

The National Check-off Agency decided to proceed with an independent review of the Canadian beef cattle check-off in November 2008 after which terms of reference were drafted. Proposals were solicited from various entities capable of providing this kind of economic evaluation. An agricultural economist was selected March 2009 and the study was completed March 2010.

3. Who did the study?

The study author is Dr. John Cranfield who is a professor in the Department of Food, Agricultural and Resource Economics, University of Guelph. Michael von Massow assisted Dr. Cranfield with the study. Dr. Cranfield has published a number of studies relating to agricultural check-off funded programs.

4. What are the key findings from the study?

- The study reports that on average from 2005 and 2008, **every check-off dollar invested in national research and marketing activities earned back $9 for Canadian cattle producers.**

[1] The Canadian Beef Cattle Research, Market Development and Promotion Agency oversees the national check-off. The agency is comprised of industry representatives across Canada and is legislated under the federal Farm Products Agencies Act.

- *Research* delivered a return of $46 in producer benefits for every check-off dollar invested.

- *Marketing* delivered a return of $7.55 in producer benefits for every check-off dollar invested.

- As well, by 2008 the return to the average dollar invested slightly exceeded the return to the average dollar invested prior to the BSE crisis.

- Despite positive benefits, there has been under-investment in research and marketing activities for the Canadian beef cattle industry.

- Refunds of national check-off dollars to Alberta cattle producers have large consequences for all Canadian cattle producers. Analysis shows that for every dollar of national check-off research and marketing investment lost because of a refund request, Canadian cattle producers lose $11 in economic benefits.

5. What was the methodology to calculate return on investment?

The analysis in this study uses an econometric simulation model that mimics the workings of beef and cattle markets in Canada the United States, and explicitly accounts for the impact of Canadian cattle producer investment in beef-cattle marketing and research activities on prices and quantities in these markets. The model enables one to calculate retail and farm level prices, final consumer demand for beef, production of beef, packer demand for cattle, supply of fed and non-fed cattle, and beef and cattle trade (both between Canada and the U.S., and between Canada and the rest of the world) for a baseline situation and under a variety of "what-if" scenarios. The baseline situation reflects what actually happened in these markets and is used as the basis of comparison for the different "what-if" scenarios. The "what-if" scenarios allow one to determine the retail and farm level prices and quantities (i.e. demand for beef, beef production, slaughter, cattle supply and trade volumes) that would result if investment in beef-cattle marketing and research activities was different from the actual level of investment. Once these prices and quantities are determined, they are used to calculate producer benefits associated with the respective "what-if" scenario and compared to the baseline level of producer benefits.

The full study, available at www.cattle.ca/nco-agency, includes appendices that provide detailed information on methodology (econometric analysis and baseline validation, an example of how benefit-cost ratios are calculated, and data sources).

6. How does the Canadian check-off compare to other major beef-producing countries?

Australia, New Zealand and the U.S. have similar check-offs, none of which are refundable. In Canada, the national check-off is non-refundable in all provinces except Alberta which recently changed to a refundable check-off.

Country	*Check-off levy*	*Applies to imports?*	*2008/09 Revenue (millions)*
Canada beef	C$1 per head marketed	No	C$8.2
Australia beef	A$5 per head marketed	No	A$64
New Zealand beef	NZ$3.6 per head sold for slaughter	No	NZ$8.5
U.S. beef	US$1 per head marketed	Yes	US$82

7. How does the Canadian beef cattle return on investment compare to Australia, New Zealand and the U.S.?

Canada's beef cattle check-off return on investment of $9 for every dollar invested (9:1) is higher than Australia and the United States. New Zealand is currently reviewing their check-off.

Australia's 2009 check-off review found an estimated average return of 5:1 to a $1.50 increase in their levy. Australia increased their levy by $1.50 in 2006 (to A$5 per head).

New Zealand's strategic review of their check-off was underway at time of the Canadian study. New Zealand is proposing to increase their check-off to NZ$3.80 per head in 2009/10 and then to NZ$4.60 per head in 2014/2015.

The most recent review of the U.S. check-off (2009) focused on domestic promotion of beef in the U.S. market and did not consider foreign marketing activities. The review of domestic promotion activities showed a 5.55:1 return on investment for 2003-2008.

8. How does the Canadian beef cattle return on investment compare to other agricultural commodities?

Compared to other commodities, Canadian beef cattle check-off return falls squarely within the range of values reported in previous studies for other regions and commodities and is higher in some cases.

The study examined available benefit-cost ratios for agricultural commodities in three categories: domestic marketing, export marketing and production research. The "benefit-cost ratio" is the most common analysis used in check-off studies for agricultural commodities. In the simplest terms, it is an indication of how much has been earned for what was spent. Refer to the study available at www.cattle.ca/nco-agency for detailed information on benefit-cost ratio methodology and calculations.

The study reported that research delivered a return of $46 in producer benefits for every check-off dollar invested.

Research benefit-cost ratios for other commodities ranged from 2:1 to 56:1. Some of the other commodities examined included dairy, sheep, laying hens; Australia dairy; and U.S. pork and soybean.

The study reported that marketing delivered a return of $7.55 in producer benefits for every check-off dollar invested.

Domestic marketing benefit-cost ratios for other commodities tend to range between 2:1 and 6:1 or 7:1. Other commodities examined included fluid milk, butter and cheese; and U.S. pork, dairy, eggs, avocadoes and catfish.

Export marketing benefit-cost ratios for other commodities range from 5:1 (California raisins) to 240:1 (U.S. peanuts). In addition to California raisins and U.S. peanuts, other commodities examined included U.S. pork, poultry, wheat, rice, almonds, pecans and walnuts. Export marketing returns are typically higher than those for domestic marketing due to the more targeted nature of those programs, whereas the scope of domestic marketing activities tends to be much broader (e.g. mass media promotion, provision of consumer information and recipes). The diffuse nature of domestic marketing activities means their impact can be muted when compared to export marketing activities.

9. What will happen with the study and how will results be used?

The Canadian Beef Cattle Research, Market Development and Promotion Agency has undertaken a communications plan to release the study. The study and other communication tools such as a fact sheet and this Q&A have been broadly distributed and are also available at www.cattle.ca/nco-agency.

The Agency is offering presentations highlighting study results to national and provincial industry organizations and wants to ensure cattle producers who pay the check-off receive the information and are aware of the value being received from their investment in research and marketing.

10. Will this study be used as a benchmark going forward?

Yes, this is the first comprehensive study evaluating the economic benefits of the Canadian beef cattle check-off, looking at both research and marketing. It is expected that the information will be updated in the future to provide cattle producers with an indication of return on their investment and to assist with future check-off planning.

11. Was the study done to make the case for an increase in the national check-off?

No, the study was initiated to obtain an independent evaluation of the economic benefits from the Canadian beef cattle check-off.

It provides the first new analysis of national check-off-funded expenditures since the levy came into effect. Other major beef-producing countries such as Australia, New Zealand and the U.S. regularly review their check-offs.

It will be up to industry to decide what it does with study findings. A national check-off increase is a very involved process including approval from beef cattle producers through their provincial organizations, agreement among provincial organizations and the Canadian Cattlemen's Association, and legislative amendment. The national check-off has been $1 per head cattle since it was introduced. Any change in the national check-off would be driven by provincial beef cattle organizations which collect and remit the levy. Provincial beef cattle organizations take their direction from producers in their respective provinces.

While the national check-off provides the core industry funding for BCRC, BIC and CBEF, it does not fully cover the costs of all programs and activities. Supplementary funding is obtained by leveraging the national check-off, attracting on average $6 for every $1 of producer check-off funds.

The study does state that there has been under-investment in marketing and research activities and that in order to maximize producer benefits, investment in these activities should increase. Moreover, the extent of this under-investment has been larger for research activities than for marketing activities.

Further analysis by study authors is underway to examine the impact of Alberta's change to a refundable check-off on future opportunities to enhance national check-off revenue through an import levy as well as an export levy. At the present time, the national check-off does not apply to live animals exported from Canada, nor does the levy apply to imported cattle and beef products. It is estimated that application of the national check-off to imported product would generate an additional $800,000 annually. Once agreements have been finalized to implement the national check-off in all regions of Canada, an import levy can be applied. Agreements are pending in Quebec and Prince Edward Island.

12. Was the study done in part to address the change in Alberta's check-off from non-refundable to refundable?

No. While the study was underway, the Government of Alberta announced that it was amending legislation to make the check-off refundable effective April 1, 2010. Given the sizable number of Alberta cattle marketings, the National Check-off Agency requested that analysis be included on the potential impact. Alberta accounts for over 65 per cent of beef production in Canada.[2] National check-offs are non-refundable in Australia, New Zealand and the U.S., and Alberta is the only province in Canada that has not exempted the national check-off from being refunded.

The study reports that **for every dollar of national check-off refund in Alberta, Canadian beef cattle producers lose $11 in economic benefits** – keeping in mind the national check-off is leveraged six to one to obtain supplementary funding to cover program costs. Less check-off means less leveraging in obtaining matching funds from other sources.

13. Is it expected that allocation of the national check-off between research and marketing will change as a result of the study?

This will be up to provincial beef cattle organizations which determine how they want their $1 national check-off allocated to marketing and research. Historically, the ratio of investment in marketing to research is 93:7 (93 per cent to marketing and seven per cent to research).

In addition to the $1 per head national check-off, provincial levies include funding for provincial organizations and their activities, and provincial dues to the Canadian Cattlemen's Association. **The national check-off solely funds research and marketing activities and does not provide any funding to the Canadian Cattlemen's Association.**

Provincial Levy Levels

Province	***Provincial levy per transaction***	***National check-off portion***	***Allocation of national check-off by province***
British Columbia	$2.00	$1.00	95% to marketing, 5% to research
Alberta	$3.00	$1.00	90% to marketing, 10% to research
Saskatchewan	$2.00	$1.00	90% to marketing, 10% to research
Manitoba	$3.00	$1.00	86% to marketing, 5% to research, 9% to Manitoba research
Ontario	$3.00	$1.00	95% to marketing, 5% to research – portion of funds rebated for veal
Quebec	$7.79 cull cows $5.04 bob calves		Not yet negotiated
New Brunswick	$3.00	$1.00	All allocated to marketing
Nova Scotia	$2.00	$1.00	All allocated to marketing
Prince Edward Island	$4.00	$1.00	All allocated to promotion

In B.C., Saskatchewan and Manitoba the levy is refundable except for the national check-off portion of $1. As of April 1, 2010 the entire Alberta levy including the national check-off portion is refundable.

[2] CanFax Research Statistical Briefer September 2009. Canadian Fed Cattle Production for 2008.