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Conclusion

It is not a wise strategy to implement a costly program to inform Americans that 82% of the beef they eat is of U.S. origin when less than 75% of Americans are willing to pay a premium for U.S. beef.

Basics of COOL

The 2002 Farm Bill contained a controversial provision mandating country of origin labeling (COOL) of certain foods (unprocessed beef, pork, lamb, fish, seafood, peanuts, fruits and vegetables) sold through non-small grocery stores (i.e. stores which annually sell more than \$230,000 of fruits and vegetables) beginning on September 30, 2004. The basic concept of COOL appears to be popular with consumers. Much of the controversy about COOL arises from concerns that many in the livestock-red meat industry have that COOL will be a costly regulation with little or no benefit for their sector.

The Cost of COOL

The COOL legislation requires non-small grocers to inform customers “of the country of origin of the covered commodity.” The legislation defines U.S. origin beef as being “exclusively from an animal that is born, raised, and slaughtered in the United States.” Thus, beef imported from Australia must be labeled differently than beef imported from Canada, which must be labeled differently than beef from cattle born in Canada but slaughtered in the U.S., which must be labeled differently than beef from cattle born, raised and slaughtered in the U.S. This labeling requirement can be particularly cumbersome in the case of ground beef since it is often a blend of beef from more than one country.

The cost of implementing COOL depends to a large extent on how accurate and verifiable one wants the labeling to be. In its preliminary statements, USDA has outlined a rigorous procedure designed to make sure that the covered foods are correctly labeled and that the government can conduct audits to verify that the labels are indeed correct. USDA contends that the law allows for nothing less.

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Many in the cattle-beef industry believe that USDA's preliminary plans are too costly and burdensome. A number argue for a self-verification program in which meat packers and the government simply accepts the statements of U.S. cattle producers as to country of origin with little or no recourse to contest a producer's claim.

It is not the purpose of this paper to enter into the discussion of how accurate and verifiable, and therefore how costly and burdensome, the COOL record keeping requirements should be. For our purposes, it is sufficient to say that the cost to the cattle-beef industry of implementing COOL will be greater than zero.

Benefits to U.S. Consumers

The benefits of COOL arise from informing individuals who buy covered food items in non-small U.S. grocery stores as to the country of origin. Surveys show that a majority of Americans are at least mildly curious as to where their food is produced. Some consumers care a great deal about the specific origin of the food they eat.

For consumers, COOL will offer information about the country of production of some of the food they eat at a cost that may be relatively small compared to their total expenditures on food.

Benefits to U.S. Cattle Producers

U.S. cattle producers can benefit from COOL if the implementation costs are modest and if the process of labeling grocery store beef for country of origin results in a significant increase in the price of U.S. origin beef without a loss in market share. The price of U.S. beef needs to increase enough to offset the cost of COOL to producers, processors and retailers (assuming that processors and retailers will pass-back their COOL related costs in the form of lower bid prices). As will be explained below, the fundamentals of supply and demand for beef in the U.S. make such an outcome highly unlikely.

Cattle Supply

Although the U.S. typically imports a little over two million cattle each year, cattle born and raised in the states dominate U.S. cattle slaughter. U.S. commercial cattle slaughter in 2002 totaled 35.7346 million head.

2002 U.S. cattle imports from Canada totaled 1,686,508 head.

1,259,534 of these cattle weighed over 700 pounds

221,782 of these cattle weighed 440-700 pounds

205,192 of these cattle weighed less than 440 pounds

2002 U.S. cattle imports from Mexico totaled 816,460 head

2002 U.S. cattle imports from Australia totaled 4 head

2002 U.S. cattle imports from Guatemala totaled 1 head

Assumptions for this analysis:

Of the Canadian cattle imported weighing over 700 pounds:

80.0% (1,007,627) were slaughtered more-or-less immediately

19.8% (249,388) were fed-out and slaughtered in the U.S.

00.2% (2,519) died before they were slaughtered

Of the Canadian cattle imported weighing between 440 and 700 pounds:

99.0% (219,564) were fed-out and slaughtered in the U.S.

01.0% (2,218) died before they were slaughtered

Of the Canadian cattle imported weighing less than 440 pounds:

98.5% (202,114) were fed-out and slaughtered in the U.S.

01.5% (3,078) died before they were slaughtered

Of the Mexican cattle imported:

99.0% (808,295) were fed-out and slaughtered in the U.S.

01.0% (8,165) died before they were slaughtered.

Of the Australian and Guatemalan cattle imported:

100.0% (5) were fed-out and slaughtered in the U.S.

Slaughter occurs in the year of import (Although this is certainly not always the case, detailing the multi-year nature of imports and slaughter adds considerable complexity to this analysis without changing the conclusions.)

The slaughter weight of imported cattle is the same as for cattle born in the U.S.

Consequences:

In 2002, U.S. commercial cattle slaughter consisted of:

1,007,627 (2.82%) cattle that were born and raised in Canada

671,066 (1.88%) cattle that were born in Canada and fed-out in the U.S.

808,295 (2.26%) cattle that were born in Mexico and fed-out in the U.S.

4 (0.00%) cattle that were born in Australia and fed-out in the U.S.

1 (0.00%) head that was born in Guatemala and fed-out in the U.S.

33,247,606 (93.04%) cattle that were born and raised in the U.S.

Beef Supply

In 2002, the U.S. produced 27.091 billion pounds of beef of which 2.44732 billion pounds were exported.

In 2002, the U.S. imported 3.217658 billion pounds of beef (carcass weight equivalent) from the following countries:

1.136804 billion pounds from Australia

1.090909 billion pounds from Canada

0.604046 billion pounds from New Zealand

0.200785 billion pounds from Brazil

0.085349 billion pounds from Argentina

0.068208 billion pounds from Central America

0.016707 billion pounds from Mexico

0.014095 billion pounds from Uruguay

0.000756 billion pounds from the rest of the world (ROW)

Assumptions:

- Beef imports from Canada were of the same mix as U.S. beef production
- Beef imports from countries other than Canada consisted entirely of trimmings.
- A factor of 0.7 is used to convert carcass weight to retail weight.
- A factor of 0.669 is used to convert carcass weight to boneless weight.
- The average U.S. cattle carcass will produce:
 - 310 pounds of retail weight steaks and roasts
 - 207 pounds of boneless trimmings
- U.S. beef exports consist entirely of steaks and roasts and are derived proportionately from cattle slaughtered in the U.S.

Consequences:

- In 2002 the net supply of steaks and roasts for U.S. consumption consisted of:
 - 88.70% U.S. born, raised and slaughtered beef
 - 4.66% Canadian born, raised and slaughtered beef
 - 2.69% Canadian born and raised and U.S. slaughtered beef
 - 2.16% Mexican born and U.S. raised and slaughtered beef
 - 1.79% Canadian born and U.S. raised and slaughtered beef
 - 0.00% ROW born and U.S. raised and slaughtered beef

- In 2002, the net supply of beef trimmings for U.S. consumption consisted of:
 - 75.53% of U.S. born, raised and slaughtered beef
 - 8.35% of Australian beef
 - 4.43% of New Zealand beef
 - 3.21% of Canadian beef
 - 2.29% of Canadian born and raised and U.S. slaughtered beef
 - 1.84% of Mexican born and U.S. raised and slaughtered beef
 - 1.47% of Brazilian beef
 - 1.52% of Canadian born and U.S. raised and slaughtered beef
 - 0.63% of Argentine beef
 - 0.50% of Central American beef
 - 0.12% of Mexican beef
 - 0.10% of Uruguayan beef
 - 0.01% of ROW beef

Demand: Consumer Preference

Over the years, a number of studies have been conducted to try to determine the portion of Americans who prefer to consume food produced in the U.S. and the extent to which they are willing to pay a premium for food certified to be of U.S. origin. In the case of beef, most surveys indicate that somewhere between half and three-quarters of U.S. consumers say they are willing to pay more for certified U.S. beef.

A recent analysis of Americans' preference for country of origin labeling of beef was conducted by Umberger, Feuz, Calkin and Sitz. Their research found that 69% to 73% (depending on analytical technique) of individuals surveyed indicated a willingness to pay a premium for beef labeled "Guaranteed USA: Born and Raised in the US." The remaining 27% to 31% of the survey participants were either unwilling to pay a premium for the U.S. guarantee or were willing to pay more for non-labeled beef.

Efforts to use consumer research to predict the likely impact of COOL need to be aware of five limitations of most of these studies.

First, surveys very often find more people who say they are willing to pay for a product enhancement than actual market tests find to be the case.

Second, these consumer preference surveys typically match certified U.S. beef against a generic beef of undisclosed origin. (This was the case with the study by Umberger, et al.) Under COOL there will be no unspecified origin beef in grocery stores. If COOL is implemented without amendment, consumers for the most part will choose between U.S. beef (82.36% of the U.S. beef supply in 2002) and Canadian beef (3.96% of the U.S. beef supply) and Canadian born/U.S. slaughtered beef (4.16% of the U.S. beef supply). Given the generally positive image that most Americans have of Canada, it is highly unlikely that the preference for American steaks over either Canadian steaks or Canadian/U.S. steaks is as strong as the preference found in surveys of American steaks over generic steaks from an unspecified location. (At least we believe that was the case prior to the May 20 announcement of BSE in a cow slaughtered in Alberta.) Of the remaining 9.52% of the beef supply, cattle born in Australia and New Zealand account for nearly two-thirds. Neither of these countries is likely to conjure a negative image in the minds of very many American consumers. The only other country that accounts for more than 1% if the U.S. beef supply is Mexico, which had a 2.06% market share in 2002. Many Americans view Mexico as a third world country; but given that Hispanics make-up 13% of the U.S. population, Mexico's 2% beef market share shouldn't present a major marketing problem.

Third, even if these surveys do actually reflect consumers' willingness to pay extra for certified U.S. origin beef and even if consumers find Canadian, Australian and New Zealand beef as unappealing as generic beef from an unspecified location, the preference for U.S. beef is not strong enough to expand its market share. In 2002, U.S. origin beef had an 82% market share. It is likely very close to that this year and barring an unexpected trade disruption will be again next year. The premiums that consumers are willing to pay for certified U.S. beef can only be captured if the supply of U.S. certified beef is constrained. For example, the study by Umberger, et al implies that one could charge a \$4 per pound premium for guaranteed U.S. steaks if you restrict their supply to no more than 9% of the available steaks. One could charge a 40 cent per pound premium for guaranteed U.S. beef steaks if you restrict their supply to no more than 56% of the available steaks. One could charge a one cent per pound premium for guaranteed U.S. beef steaks if you restrict their supply to no more than 69% of the available steaks. But 89% of U.S. steaks are currently of U.S. origin. If U.S. cattlemen wish to maintain this

market share, they can't charge any premium for their product, which means they can't expect higher beef prices to offset any of the costs associated with COOL. **The fact that 65% to 75% of Americans profess to be willing to pay a premium for certified U.S. origin beef does not translated into a higher price for U.S. origin beef when 89% of the steaks and roasts and 75% of the trimmings (e.g. ground beef) are already of U.S. origin.** Rather, there is a serious potential that the over supply of U.S. beef, especially of steaks and roasts, may cause U.S. origin beef to sell at a discount to foreign beef, in particular to Canadian beef. With a 4.66% market share, Canadian steaks and roasts are well positioned to develop a niche market for those consumers who are looking for an alternative to U.S. origin beef. Swiss chocolate sells at a higher price than Hershey's chocolate. Americans pay a premium to drink Heineken beer and Italian wines. Once labeled, why shouldn't Canadian beef sell at a premium to U.S. beef?

Fourth, since neither U.S. beef exports nor beef that moves to consumers through the HRI (hotels, restaurants and institutional) trade, small grocery stores, and processed foods is covered by COOL, the meat-food industry has considerable flexibility to adjust the U.S./foreign beef mix in non-small grocery stores to make sure that the amount of U.S. labeled beef is not less than the amount desired by consumers. Unless there is a shortage of U.S. origin beef relative to the demand for U.S. origin beef in non-small grocery stores, there is no reason for U.S. origin beef to sell at a premium to other beef. With the current supply composed 82% of U.S. origin beef, it is highly unlikely that shoppers in non-small grocery stores will have to pay one penny more to get all the American beef they desire. The same cannot be said of American shoppers who might prefer Canadian beef or simply prefer variety in the beef they eat. Because of its limited supply, consumers could well find they have to pay a premium to buy a certified Canadian steak.

A fifth concern regarding COOL is the stability over time of the preference for U.S. origin beef. In the last 40 years, many manufacturers have found that Americans' preference for goods produced in the U.S. deteriorates once consumers gain experience purchasing foreign products. U.S. manufactured cars, electronics and clothing all have a much smaller market share today than they did 30 years ago (and a smaller market share than U.S. beef) despite a longstanding country of origin labeling program. There is a very real possibility that one outcome of COOL will be that Americans will conclude that imported beef is, for all practical purposes, indistinguishable from U.S. beef and the portion of the population willing to pay a premium for U.S. origin beef will decline from its current level.

Summary

For the U.S. cattle-beef industry, the impending implementation of mandatory country of origin labeling does not come without cost. If these labels are to have any credibility there must be some sort of verification program. Verification means increased record keeping and increased segregation and that will add to the cost of marketing beef. Increased marketing costs will either mean reduced bid prices for cattle or retail beef

prices will be less competitive with chicken and turkey, meats that are not covered by COOL.

What is not clear is that COOL offers any benefits to the cattle-beef industry. Most research indicates the number of Americans willing to pay a premium for U.S. origin beef is not large enough to translate into higher prices for U.S. beef. Having 75% of consumers preferring to buy your product is not a good thing when you have an 82% market share.

Mandatory country of origin labeling appears to be a case of unintended consequences. Congress passed COOL in the hope of aiding U.S. farmers and ranchers. COOL has the potential to be very negative for U.S. cattlemen.

Further Information

To obtain a copy of the law and USDA regulations and publications relating to COOL, go to: <http://www.ams.usda.gov/cool/>

To obtain data on U.S. cattle imports, beef imports and beef exports, go to:
<http://www.ers.usda.gov/Briefing/Cattle/> or
<http://www.fas.usda.gov/dlp/traderuns/2002/02-12/Dec2002.html#Beef>

To obtain a copy of the Umberger, Feuz, Calkin and Sitz study, go to:
<http://www.farmfoundation.org/projects/documents/Umberger.pdf>
<http://agecon.unl.edu/mark/COOL/Fact%20SheetCOOLCSU-UNLstudy.pdf>

To find a comprehensive website on COOL, go to:
<http://agecon.unl.edu/mark/COOL/index.htm>