Economic Analysis of Proposed Rule for Bovine Spongiform Encephalopathy: Minimal Risk Regions and Importation of Commodities
(APHIS Docket No. 03-080-1)

John J. VanSickle

Summary of Conclusions

USDA Animal and Plant Health Inspection Service has proposed a rule to amend regulations regarding the importation of animals and animal products to recognize a category of regions that present a minimal risk of introducing bovine spongiform encephalopathy (BSE) into the U.S. and proposed Canada be included in this category. The main commodities considered a threat to U.S. producers and consumers are slaughter cattle, feeder cattle and beef.

The USDA economic analysis of this proposed rule falls short of estimating the larger economic impacts this rule could have on the U.S. economy as it provides only a limited analysis of the effect of imports of Canadian cattle and beef on prices in the U.S.

The USDA analysis ignores the impacts this rule will have on associated industries and their productive output, and it ignores the impact it will have on employment. Our modeling, using Implan multipliers, suggests that a decline in $1 of sales for the cattle ranching and farming sector will have a $3.87 impact on total output in the economy. Accounting for the impacts on associated industries and employment indicates the potential impact on the U.S. economy from this proposed rule is:

- allowing feeder cattle imports from Canada would impact total economic output by $701.5 million and cost the economy 7,883 jobs;
- allowing fed cattle imports from Canada would impact total economic output by $1.7 billion and cost the economy 19,358 jobs;
- imports of beef resulting from this proposed rule would impact total economic output by $5.8 billion and cost the economy 50,874 jobs and;
- loss of exports as a result of this rule would impact total economic output by $16.1 billion and cost the economy 140,068 jobs.

The USDA analysis ignores the cost this rule would cause if a second BSE event occurred on U.S. soil due to the transmission, or market and consumer perception of transmission, resulting from this rule, or even the increased risk that producers and consumers would incur from trade with Canada when there is risk to introduction of BSE. A BSE outbreak would cause demand for beef to decline and an increase in human health concerns. Estimates of the cost of the 1986 outbreak on the British economy, with a herd size of 12.04 million head, are $5.8 billion. Given that the United States herd size is eight times larger, a worst case scenario suggests the impacts on the U.S. could be as large as $46.4 billion.

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1 Professor, Food & Resource Economics Department, University of Florida.
A BSE event in the U.S. is likely to cripple a weakened cattle and ranching industry with lower returns that would be difficult to recover.

Analysis

The U.S Department of Agriculture Animal and Plant Health Inspection Service (USDA APHIS) has proposed to amend the regulations regarding the importation of animals and animal products to recognize a category of regions that present a minimal risk of introducing bovine spongiform encephalopathy (BSE) into the United States via these products and proposed to include Canada into this category. The category being proposed includes: (1) those regions in which a BSE-infected animal has been diagnosed, but in which measures have been taken that reduce the risk of BSE being introduced into the United States, and (2) those regions in which BSE has not been detected, but that cannot be considered BSE-free. The proposed rule lists Canada as the only minimal-risk region at this time. The minimal-risk region would not be limited to Canada, but others regions would have to be evaluated after requesting to receive this listing.

The commodities that would be allowed to enter under the proposed rule are:

- Cattle less than 30 months, sheep and goats less than 12 months, and cervids of any age, imported in all cases for immediate slaughter;
- Cattle sheep and goats imported for feeding at designated feedlots, and then slaughtered at less than 30 months of age for cattle and less than 12 months of age for sheep and goats;
- Meat from ruminants that have been slaughtered within these age restrictions;
- Meat of cervids either farm-raised or harvested on a game farm or similar facility;
- Meat from wild-harvested caribou, musk ox, or other cervids;
- Hunter-harvested wild ruminant products for personal use; and
- Certain other products and byproducts, namely, bovine livers and tongues, gelatin, tallow, and corvine offal.

APHIS later indicated that they would not require beef imported from BSE minimal-risk regions be derived from cattle less than 30 months of age. The main commodities to be considered of threat in trade with the United States are slaughter cattle, feeder cattle, and beef. The additional supplies this rule would allow into the United States are expected to cause prices to fall from an expansion in supply. Experience of BSE in the European Union indicates that major categories of costs from a BSE introduction include agriculture, food consumption, trade and tourism. USDA recently concluded an economic evaluation that only considered the cost of increased supplies and their

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3 Bovine Spongiform Encephalopathy; Minimal Risk Regions and Importation of Commodities, 69 Fed Reg. at 10,635 (2004).
economic impacts on the domestic market. As such, the USDA analysis ignores a large part of the potential impact that would occur if BSE were introduced in the U.S. herd, or if human health issues became a concern because of imported beef that was not properly identified. The United Kingdom Department of Environmental, Food and Rural Affairs estimates that the cost of BSE in the UK from an outbreak in 1996 totals more than $5.8 billion today. There have been 103 human deaths in the UK confirmed as definitely coming from vCJD and another 36 listed as probable from vCJD. There are another 7 definite/probable cases still alive. The impacts assessment also indicates that sales of beef declined 40 percent in the first year and that households cut their consumption 26 percent. The longer run consequences indicate that demand for beef and veal has declined 4.5 percent because of BSE. Clearly, the potential impacts of this rule go beyond the simple supply impact if BSE is introduced.

USDA APHIS estimated the economic impacts of resumed trade with Canada in these products and found that there would be a net economic benefit to the economy as increased imports would create greater benefits to consumers than harm to producers. They estimate net benefits of $6.5 million from resumed trade in slaughter animals and $6.1 million from resumed trade in feeder cattle. The benefits are even larger when trade in beef is allowed with benefits increasing to $23.8 million if trade is reestablished for beef with bone and whole/half carcasses. Those benefits increase to $106.5 million when all reestablished beef imports from Canada are assumed attributable to the rule, with beef values at $3.50 per pound. Those welfare gains would be offset if the U.S. were to lose its export markets for beef with a net welfare loss of $103.2 million if all countries other than Canada and Mexico would bar the import of U.S. cattle and beef.

On the surface, these results suggest there is little concern that resumed trade with Canada would have significant impacts on the U.S. market for beef, when in fact there are large consequences for the U.S. cattle industry. Consumers benefit from increased imports from Canada as prices fall and they pay less for the beef they consume. U.S. producers suffer from this scenario however, as producers suffer from lower prices that will force many to downsize or exit the beef production business. The results measure the impact this trade will have on producers' welfare but ignores the larger economic impact on employment and on associated industries. The results also ignore the increased risk that producers and consumers incur from trade with Canada when there is risk to introduction of BSE. The analysis performed by USDA APHIS focuses solely on the supply impacts that imports from Canada would have on U.S. producers and consumers, and on the impact that a loss in export markets could have on U.S. producers and consumers.

6 Id.
7 CJD Statistics (http://www.cjd.ed.ac.uk/figures.htm).
9 USDA, supra note 4.
The results of the USDA analysis merit a review. The analysis conducted by USDA was completed through 4 different scenarios. The first scenario assumed that imports of fed cattle would resume at 2002 levels of 840,800 head. The second scenario assumed that feeder cattle imports from Canada would resume with 504,500 head of feeder cattle (table 1). The results from these two scenarios indicate that when fed cattle imports are resumed producers’ surplus declines by $448 million. When feeder cattle imports are resumed, producers’ surplus declines by $182 million. USDA concludes that these impacts would be independent and that increased imports of feeder cattle would benefit feedlot owners. Lower prices for feeder cattle are more likely however, to pass through the market channel to consumers and feedlot producers are not likely to realize significant benefits from the lower prices for feeder cattle.\(^\text{10}\) This suggests that the impacts of these events would be additive, implying that opening the border to trade with Canada on fed cattle and feeder cattle would likely have an effect of more than $630 million.

The third scenario (table 2) analyzed by USDA evaluated the impact of increased imports of beef products, one of beef cuts with bone and all whole and half carcasses (84,000 tons), and a second assuming that all imports of beef products are attributable to this rule (382,000 tons). The analyses were performed with 2 different baseline prices for beef, $3.00 and $3.50 per pound\(^\text{11}\). The results of these analyses indicate that producers’ surplus will decline by as much as $337 million when beef with bone and whole and half carcasses are allowed entry (with beef prices of $3.50 per pound). When entry of all beef is tied to the proposed rule, those impacts increase to $1.5 billion. Again, these analyses are performed independently of considerations for imports of fed cattle and feeder cattle.

The final scenario (table 3) analyzed the impacts of losing exports to regions outside of Canada and Mexico as a result of the rule, one assuming 32 percent of all exports (half of all exports outside of Canada and Mexico) are redirected to the domestic market (263,360 tons) and a second assuming 64 percent of all exports (all exports outside of Canada and Mexico) are redirected to the domestic market (546,720 tons). The impacts of these scenarios indicate that producers’ surplus will decline by $1.1 billion when 32% of the export market is lost (with an assumed beef market of $3.50 per pound) and $2.2 billion when 64% of the export market is lost. This result will not happen unless trade in ruminant animals or ruminant animal products is allowed in the U.S. and our other trading partners feel that rule is too high a level of risk for continuing imports of beef from the United States.

\(^{10}\) Brett Debrucker. Telephone discussion on April 1, 2004, on how feeder cattle prices are set. Feeders typically estimate what fed cattle will sell for using the futures market and other sources. They then calculate feed and other input costs and deduct those from the fat cattle value. That value then represents an upper value on what they can pay for feeder cattle. The market uses cattle on feed reports and other sources to estimate the value of fed cattle in the future. If supplies of feeder cattle increase, the market will translate that into an increase in supply of fed cattle when those feeders are ready for market and expected fed cattle prices will decline, lowering the price for feeder cattle. Ultimately, it is the consumer who benefits from lower feeder cattle prices and feeders realize little to no benefit.

\(^{11}\) It should be noted that these values for beef may be low. USDA Econ. Res. Serv. quotes beef prices at $4.32 per pound in November, 2003, a record-high (http://www.ers.usda.gov/news/BSECoverage.htm).
It should be noted that these estimates are conservative in that they assume that the effects of this rule are only felt through trade impacts. There are other potential impacts that could be felt by U.S. producers. Clearly, if the U.S. were to lose export markets, it is also likely that U.S. consumers would lose some confidence in beef as a safe consumer product. The analysis conducted by USDA ignores the potential consequences of a U.S. animal being diagnosed with BSE as a result of introduction from Canada. The analysis also ignores the consequence of a potential human case of a variant of Creutzfeldt-Jakob Disease (vCJD). Clearly costs would rise significantly if either of these events would occur. A diagnosis of BSE in an animal of U.S. origin would likely cause concern with consumers and result in a decline in domestic demand for U.S. beef. The impact on the export market would depend on the nature of the event and on the response of the U.S. government. A diagnosis of vCJD could have even larger consequences. The UK experience suggests that following the 1996 outbreak in the UK, sales of UK beef fell 40% in the first year and household consumption in the UK fell 26%. The long run impact on shares of beef and veal in the UK diet were estimated to be a decline of 4.5%. These results suggest that the risks are high for U.S. producers of beef. It has been estimated that the 1996 outbreak in the UK resulted in a $5.8 billion impact on the UK economy. The 1996 herd size in the UK was 12.04 million head of cattle. This compares with the U.S. herd size of 96.1 million head in 2003. The U.S. herd size is 8 times larger than the UK herd when their BSE outbreak occurred in 1996. Using the 8 multiple on impacts that have been estimated for the UK indicates that impacts in the U.S. could be as large as $46.4 billion if impacts are related to herd size.

The analysis performed by USDA did consider the impact on consumers through product availability and price, but it ignores the consequences of a change in industry output on the overall economy. Implan multipliers were used on the results presented in tables 1 through 3 to determine the overall economic impact of the proposed rule. The Implan data suggest that a decline in $1 of sales for the cattle ranching and farming sector will have a $3.87 impact on total output in the economy. Implan also provides an employment multiplier of 43.5 for this sector, indicating that every million dollars in sales of cattle or beef is associated with 43.5 jobs generated in the economy. Multipliers are also available for the meat processing sector. Implan indicates that the total economic output multiplier for the meat processing sector is 4.22, indicating that $1 in sales of product from this sector creates $4.22 in total economic impact. The employment multiplier for this sector indicates that each $1 million in sales is associated with 36.6 jobs created.

The Implan multipliers were applied to the results derived by USDA by first identifying an impact from the lost sales that were attributable to quantity. Quantity impacts from each scenario were identified by multiplying the change in quantity supplied by U.S. producers by the baseline price used in the analysis. The quantity impact expected from allowing Canadian feeder cattle into the U.S. market as a result of this rule is $181.2 million (table 4). Using the quantity impact and the multipliers from the Implan model, this decline in sales will result in total economic impacts of $701.5 million and a loss of

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12 Mathews and Buzby, supra note 2 at 4.
7,883 jobs in the U.S. economy. Allowing fed cattle into the U.S. market as a result of the proposed rule results in quantity impacts of $445 million as a result of the proposed rule, total economic impacts of $1.722 billion and a loss of 19,358 jobs.

Using the same methodology for the proposed rule on beef yields similar results. If the proposed rule accounts only for the entry of increased imports of beef with bone and whole and half carcasses, then the U.S. domestic industry will realize a quantity impact valued at $305.7 million. The total economic impact of this loss would be $1.29 billion and a loss of 11,189 jobs. If all imports of beef from Canada are attributed to this rule then quantity impacts increase to $1.390 billion and the total economic impact is $5.868 billion from these lost sales with a loss of 50,874 jobs.

The expected impacts from losses in exports that result from the proposed rule can be calculated using the same methodology. If the U.S. loses 32 percent of the export market for beef, then quantity impacts from the proposed rule are $1.843 billion, total economic impacts are $7.781 billion and expected job losses amount to 67,472 jobs. If the U.S. loses 64% of the export market for beef as a result of the rule, then quantity impacts increase to $3.827 billion and total economic impacts increase to $16.154 billion and 140,068 jobs,

None of the above scenarios include producer losses associated with price declines for cattle and beef that continue to be marketed if the proposed rule is implemented. These price impacts can be calculated by multiplying the cattle and beef quantities that are expected to be marketed from U.S. sources after the proposed rule is implemented by the change in unit sales value computed by USDA in their analysis. The results of this analysis indicates that U.S. producers of feeder cattle would lose $179.5 million on the feeder cattle they would continue to market as a result of the $5.77 per head decline in price if the proposed rule was implemented. Fed cattle producers would lose $437.7 million as a result of the lower prices ($15.69) they would receive. U.S. producers would lose $296.9 million in sales revenues from the price decline (1.3 cents per pound) if beef with bone and whole and half carcasses are attributed to the rule and that loss would increase to $1.374 billion in price impacts (6.1 cents per pound) if all beef imported from Canada is attributed to the proposed rule. Price impacts from the loss of 32% of the export market are $1.019 billion. These impacts increase to $2.015 billion when 64% of the export market is lost.

The result of applying the proposed rule to fed cattle yields price impacts of $437 million, quantity impacts of $445 million, total economic output impacts on the economy of $1.722 billion (which includes the quantity impact of $445 million) and a job loss of 19,358. The expected result of applying the proposed rule to feeder cattle yields price impacts of $179 million, quantity impacts of $181 million, total economic output impacts of $701 million and a loss of 7,883 jobs.

The cumulative loss of allowing the proposed rule to be implemented for feeder cattle and fed cattle is the sum of the impacts in each scenario, i.e., $616 million in price impacts, $626 million in lost sales due to fewer cattle being sold by U.S. producers, a
total economic output impact on the U.S. economy of $2.423 billion and a loss of 27,241 jobs.

Implementing the proposed rule for beef separately without the feeder cattle and fed cattle would have the results previously presented. Implementing the beef portion of the proposed rule with the feeder cattle and fed cattle also included would have larger impacts than previously calculated for the cattle or beef, but it would not be additive as it was for feeder cattle and fed cattle. The cumulative scenarios were not computed by USDA. It has been argued that the impacts on feeder cattle and fed cattle are additive. It is expected that an analysis of the combined rule for feeder cattle, fed cattle and beef would likely be larger than that calculated for the cattle and beef, but not as large as the additive sum of the feeder cattle, fed cattle and the beef. The same would be expected for the loss of export markets. The impacts would not be additive, but would be greater than any individual impact.

The proposed rule will have serious effects on U.S. producers simply because of the additional product that will be sold in U.S. markets as a result of the rule. These results do not however measure the potential loss that would occur if a BSE event is documented on U.S. soil with a U.S. animal that affects U.S. demand for beef. Discovery of BSE in a U.S. animal is likely to have impacts several times larger than the impacts presented by USDA. The impacts in the UK have been estimated at $5.8 billion with a herd one-eighth the size of the U.S. cattle herd. This proposed rule will weaken the U.S. domestic industry because of the lower returns that will result after the rule is implemented. A BSE event is likely to cripple a weakened cattle and ranching industry with a loss that would be difficult to recover.
Table 1. Impacts of resumed trade with Canada for fed cattle and feeder cattle.

### SLAUGHTER CATTLE

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<th></th>
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<th>Change</th>
<th>%Change</th>
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<tbody>
<tr>
<td>Cattle Slaughter (head)</td>
<td>29,302,300</td>
<td>366,350</td>
<td>1.25%</td>
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<tr>
<td>S&amp;H Price ($/Head)</td>
<td>938</td>
<td>-15.64</td>
<td>-1.66%</td>
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<tr>
<td>S&amp;H Price ($/cwt)</td>
<td>78.16</td>
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<td>-1.66%</td>
</tr>
<tr>
<td>S&amp;H US Supplied (head)</td>
<td>28461500</td>
<td>-474450</td>
<td>-1.67%</td>
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<tr>
<td>CD Imports (head)</td>
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<td>Producer Surplus</td>
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<td>Consumer Surplus</td>
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<td>Net</td>
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### FEEDER CATTLE

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<td>Number fed</td>
<td>32,728,500</td>
<td>221,318</td>
<td>0.68%</td>
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<tr>
<td>Price ($/head)</td>
<td>640</td>
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<td>Price ($/cwt)</td>
<td>80</td>
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<td>US Supplied</td>
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<td>Canadian Imports (head)</td>
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<td>504,500</td>
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<tr>
<td><strong>Change ($million)</strong></td>
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<td>Producer Surplus</td>
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<td>Net</td>
<td>$6.1</td>
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Table 2. Impacts of resumed trade with Canada for beef

**INCREASED IMPORTS OF BEEF WITH BONE & WHOLE/HALF CARCASSES ONLY**

<table>
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<tr>
<th></th>
<th>Baseline</th>
<th>Change</th>
<th>%Change</th>
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<tr>
<td><strong>U.S. Consumption (tons)</strong></td>
<td>12,453,000</td>
<td>40,324</td>
<td>0.32%</td>
<td>-1.1</td>
<td>-1.3</td>
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<td></td>
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<tr>
<td><strong>US Supplied (tons)</strong></td>
<td>11,465,000</td>
<td>-43,676</td>
<td>-0.38%</td>
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<tr>
<td><strong>Canadian Imports (tons)</strong></td>
<td>0</td>
<td>84,000</td>
<td>0.67%</td>
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<table>
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<tr>
<td><strong>Producer Surplus</strong></td>
<td>-$289.4</td>
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<td><strong>Consumer Surplus</strong></td>
<td>$313.2</td>
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<td><strong>Net</strong></td>
<td>$23.8</td>
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**INCREASED IMPORTS OF ALL BEEF**

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<td>183,378</td>
<td>1.47%</td>
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<td>-6.1</td>
<td>-1.73%</td>
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<td><strong>Price (cents/#)</strong></td>
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<td>-5.2</td>
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<td>-6.1</td>
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<td><strong>Canadian Imports (tons)</strong></td>
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<td>382,000</td>
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<tr>
<td><strong>Producer Surplus</strong></td>
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<td>-$1,545.8</td>
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<td><strong>Consumer Surplus</strong></td>
<td>$1,416.4</td>
<td>$1,652.3</td>
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<td><strong>Net</strong></td>
<td>$91.3</td>
<td>$106.5</td>
<td>$15.2</td>
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Table 3. Impacts of losses in exports to countries outside of Canada and Mexico.

### 32% LOSS OF EXPORTS

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<th>Export Loss</th>
<th>Baseline</th>
<th>Change</th>
<th>%Change</th>
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<tr>
<td>US Consumption (tons)</td>
<td>11,465,000</td>
<td>116,483</td>
<td>1.02%</td>
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<tr>
<td>US Production (tons)</td>
<td>12,288,000</td>
<td>-146,877</td>
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<tr>
<td>Exports</td>
<td>907,133</td>
<td>-263,360</td>
<td>-29.03%</td>
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<tr>
<td>Price (cents/#)</td>
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<td>-3.6</td>
<td>-1.20%</td>
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<table>
<thead>
<tr>
<th>Change ($million)</th>
<th>Change ($million)</th>
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<tbody>
<tr>
<td>Producer Surplus</td>
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<td>Consumer Surplus</td>
<td>$910.9</td>
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<td>Net</td>
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### 64% LOSS OF EXPORTS

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<th>Export Loss</th>
<th>Baseline</th>
<th>Change</th>
<th>%Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>US Consumption (tons)</td>
<td>11,465,000</td>
<td>232,967</td>
<td>2.03%</td>
</tr>
<tr>
<td>US Production (tons)</td>
<td>12,288,000</td>
<td>-293,753</td>
<td>-2.39%</td>
</tr>
<tr>
<td>Exports (tons)</td>
<td>907,133</td>
<td>-546,720</td>
<td>-60.27%</td>
</tr>
<tr>
<td>Price (cents/#)</td>
<td></td>
<td>-7.2</td>
<td>-2.40%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Change ($million)</th>
<th>Change ($million)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Producer Surplus</td>
<td>-$1,919.6</td>
</tr>
<tr>
<td>Consumer Surplus</td>
<td>$1,831.1</td>
</tr>
<tr>
<td>Net</td>
<td>-$88.4</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Product Type</th>
<th>Economic Impact (Million $)</th>
<th>Employment Jobs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Price Impact</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Feeder cattle</td>
<td>$179.5</td>
<td>1,893</td>
</tr>
<tr>
<td>Fed cattle</td>
<td>$437.7</td>
<td>19,358</td>
</tr>
<tr>
<td>Beef with bone</td>
<td>$1,290.1</td>
<td>11,189</td>
</tr>
<tr>
<td>All beef</td>
<td>$1,374.4</td>
<td>50,874</td>
</tr>
<tr>
<td>Loss of Exports 32%</td>
<td>$1,019.8</td>
<td>67,472</td>
</tr>
<tr>
<td>Loss of Exports 64%</td>
<td>$2,015.0</td>
<td>140,068</td>
</tr>
<tr>
<td>Quantity Impact</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Feeder cattle</td>
<td>$181.2</td>
<td></td>
</tr>
<tr>
<td>Fed cattle</td>
<td>$445.0</td>
<td></td>
</tr>
<tr>
<td>Beef with bone</td>
<td>$305.7</td>
<td></td>
</tr>
<tr>
<td>All beef</td>
<td>$1,390.3</td>
<td></td>
</tr>
<tr>
<td>Loss of Exports 32%</td>
<td>$1,843.5</td>
<td></td>
</tr>
<tr>
<td>Loss of Exports 64%</td>
<td>$3,827.0</td>
<td></td>
</tr>
</tbody>
</table>

Note: These impacts ignore any potential impacts on domestic demand and tourism.
JOHN J. VANSICKLE  
Home address: 4216 NW 77th Terrace Gainesville, Florida 32606  
Office address: P.O. Box 110240, University of Florida, Gainesville, Florida 32611-0240  
Home Phone: (352) 373-1638  
Office Phone: (352) 392-1881, ext. 221  
Fax: (352) 392-9898  
E-mail: SICKLE@UFL.EDU

BORN  

EDUCATION  
Bachelor of Science, May 1974, Iowa State University  
Major: Agricultural Business  
Doctor of Philosophy, August 1980, Iowa State University  
Major - Economics; Field - Marketing.  

EMPLOYMENT  
University of Florida, Director, International Agricultural Trade and Policy Center, 1998-Present  
University of Florida, Assistant, Associate and Full Professor, 1980-present  
Iowa State University, Research Associate, 1976-80.  
Consolidated Cooperative, Inc., Gowrie, IA, Feed Dept. Manager, 1975-76  
Continental Grain, Allied Mills Feed Division, Janesville, Wisconsin, Quality Control Supervisor, 1974-75

PRESENT JOB DESCRIPTION  
The primary responsibility of my current position is to develop extension education programs for and conduct applied research on the agricultural market. The emphasis of the position has been to develop tools that may be used by growers and growers' associations to assist them in their production, marketing and policy decisions. Educational programs include application of research results and economic analyses of international trade and market alternatives. A large amount of work has been completed in the area of international trade and its impact on U.S. growers. A second responsibility has been to develop extension education programs for and conduct applied research on commodity marketing using futures and options contracts.

MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS  

Florida State Horticultural Society.


HONORS AND AWARDS

Honor Society of Phi Kappa Phi, 1979.
Cooperative League of the U.S.A. Graduate Research Award for cooperative research in a doctoral dissertation, 1980.
The Honor Society of Agriculture, Gamma Sigma Delta, 1986.
Southern Agricultural Economics Association Distinguished Professional Contributions Award for Extension Education Programs, 1987.
Supervised M.S. thesis written by Abby Fromang that won the 1984 American Institute of Cooperation Award for most outstanding M.S. thesis written on the subject of cooperatives in 1983. Supervised the M.S. thesis written by German Molina that won the Food Distribution Research Society Award for Outstanding M.S. thesis in the area of food distribution, 1989. Supervised M.S. thesis written by Kenrick Jordan that was selected by the Food and Resource Economics Department for submission to the American Agricultural Economics Association for Outstanding M.S. thesis and was awarded Fred Prochaska Award for Outstanding M.S. thesis, 1992. Supervised M.S. thesis written by Joseph Ranney that was selected by the Food and Resource Economics Department for submission to the College of Agriculture for Outstanding M.S. thesis and was awarded Fred Prochaska Award for Outstanding M.S. thesis, 1993. Supervised M.S. thesis written by Napaporn Girapunthong that was selected by the Food and Resource Economics Department for submission to the College of Agriculture for Outstanding M.S. thesis and was awarded Fred Prochaska Award for Outstanding M.S. thesis, 2002.

Florida State Horticultural Society Award for Outstanding Paper in the Vegetable Section, 1993, for Florida Mexico Competition in the Winter Fresh Vegetable Industry.
American Society of Horticultural Science, Southern Region, Extension Publication Award, 1994; and the American Society for Horticultural Science Extension Educational Aids Award, 1995, for contribution to extension bulletin Watermelon Production in Florida.
1995 Florida Fruit and Vegetable Association Annual Research Award for vegetable marketing research.
Caribbean Forum Appreciation Award for outstanding contributions to the Caribbean student community, University of Florida, Food & Resource Economics Department, 1996.
U.S. Department of Agriculture Award for Superior Service for outstanding public service to the United States consumers and the vegetable industry by working with congressional leaders and the administration to achieve landmark trade agreements with Mexico, 1996.
University of Florida Professional Excellence Program Award, 1998.
University of Florida Bank Award, 1999. Recognition and salary enhancement for continual scholarly activity. Selected as one of 125 faculty members out of 4,000 faculty to receive this award.
2002 Jim App Award for Outstanding Design Team. Award earned by the FL 107 Design Team, “Vegetable Production, Harvesting and Handling Efficiencies in Florida.”
2002-03 Graduate Student Appreciation Award. Presented by the University of Florida Graduate Student Organization in the Food & Resource Economics Dept.

PUBLICATIONS

Refereed Publications:


**Book Review:**


**Non-Refereed Publications 1986-Present:**


VanSickle, John J. 2002. “The Situation and Outlook in the Fresh Vegetable Market.” AgFirst Farm Credit, Columbia, SC.


**Computer Software:**

"VEG-BUD Fresh Vegetable Budget Generator". Lotus Spreadsheet for budgeting growing and marketing costs of fresh vegetables. 1990. With Emil Belibasis and Tom Stevens.


VanSickle, John J. *MIS Trading Game*. 2001. http://tgame.ifas.ufl.edu With Giancarlo Espinosa. This trading game was developed for use in teaching students how to use the futures and options markets for investing and for risk management.

**MAJOR CONSULTATIONS OUTSIDE THE UNIVERSITY**


"Competition in the Fresh Tomato and Bell Peppers Industries." Law Offices of Stewart & Stewart. Washington, D.C. 1996. As part of the Section 201 petition filed with the U.S. ITC and the Antidumping Petition filed with the U.S. Department of Commerce.


"The Impact of Facet on Arkansas Vegetable Growers." Law Offices of Faegre & Benson, Des Moines, Iowa. 2002-.

TEACHING AND/OR INSTRUCTIONAL ACCOMPLISHMENTS

Course Materials Development and Teaching

Spring 1980 Developed course material and taught AEB 3111, Linear Programming Applications in Agriculture.

Spring 1984 Developed course material along with Dr. Ralph Eastwood to teach new course, AEB 4392, Cooperatives in Agriculture.

Spring 1990 Developed course material and taught AEB 3306, Commodity Marketing.
Spring 1990  Developed course material and arranged for class visit in New York City for AEB 4314, Terminal Markets.

Spring 1991  Taught AEB 3306, Commodity Marketing.

Spring 1991  Developed course material and arranged for class visit in Chicago for AEB 4314, Terminal Markets.

Spring 1992  Taught AEB 3306, Commodity Marketing.


Spring 1993  Taught AEB 3306, Commodity Marketing.

Spring 1993  Taught AEB 4314, Terminal Markets, and arranged for class trip to Chicago, Illinois.

Spring 1994  Taught AEB 3306, Commodity Marketing.

Spring 1994  Taught AEB 4314, Terminal Markets, and arranged for class trip to Chicago, Illinois.


Spring 1997  Taught AEB 3306. Commodity Marketing.

Spring 1997  Taught AEB 4314. Terminal Markets, and arranged class trip to Chicago, Illinois.


Spring 2001  Taught AEB 3306. Commodity Marketing.


Worked individually with numerous undergraduate and graduate students in special problem courses.

Supervised students in senior term projects for the Computer and Information Sciences Department, 1988-89 and 1996/97.

**Served on the following graduate student committees:**

**Master of Agricultural Management and Resource Development:**
Rom Alderman, 1982
Ehode Ekanga, 1983
Master of Agribusiness Management
James Smithson, chairman, 2000
David Wagner, chairman, 2001
Carolina Mendoza, chairman, 2002

Master of Science (non-thesis):
Arafin bin Twang, 1984
Sharon Moon, 1988
Endah Srinarmi, 1991
Columban George, chairman, 1997.

Master of Science (thesis):
Guillermo Alvarado, chairman, 1982
Abby Fromang, chairman, 1983
German Molina, chairman, 1988
Mario Castejon, chairman, 1990
Sam Scott, chairman, 1991
Kenrick Jordan, chairman, 1991
Reginald Adamus, chairman, 1992
Tao Song (Computer and Information Sciences), 1992
Keith Birkhold (Fruit Crops), 1992
Joseph Ranney, chairman, 1993
Michele Andre, chairman, 1996.
Monica Escalares, 1996.
Sara Medina, Chairman, 1997.
Xiangli Zhou (Computer and Information Sciences), 1999
Napaporn Girapunthong, chairman, 2001
Mariano Jimenez, chairman, in progress
Christian Salnars, chairman, in progress

Doctor of Philosophy:
Rigoberto Lopez, 1983
James Ansoanuur, 1988
Sam Scott, chairman, 1996.
Sakavas Nalampang, chairman, in progress
Jione Jung, chairman, in progress

Other Teaching Accomplishments
Abby Fromang M.S. thesis won the 1984 American Institute of Cooperation Award for Most Outstanding M.S.
thesis written on the subject of cooperatives.

German Molina M.S. thesis won the 1988 Food Distribution Research Society Applebaum Scholarship Award
for Most Outstanding Thesis written on the subject of food distribution.

Kenrick Jordan M.S. thesis selected as outstanding MS thesis for the Food & Resource Economics Department,

Joseph Ranney M.S. thesis selected as outstanding MS thesis for the Food & Resource Economics Department,
1993.

Napaporn Girapunthong, M.S. thesis selected as outstanding MS thesis for the Food & Resource Economics
Department, 2002.
EXTENSION PROGRAM

- The focus of my extension program has been to develop materials for the produce industry that may be used by growers, shippers and other members of the marketing system. Numerous manuscripts have been developed to communicate information to those within the agricultural industry. Presentations have been made to academic and industry groups throughout the U.S. and in many foreign countries. Several program areas have been developed to contribute this program.

- Market news has been a focus on which many within the agricultural industry have benefited. Market Information Systems (MIS) have been developed for computer access to a database of all USDA market news by IFAS state and county specialists. The public has been given access to this database by touch-tone telephone through a Voice Market Information System (VMIS), and by computer access through an Internet Market Information System (IMIS). Each of these systems has grown and has become important elements on which the marketing system for agriculture has relied on to become more efficient. IFAS specialists access MIS almost 3,000 times each year. Public access to IMIS exceeds 2,400 each week. These efforts earned the Southern Agricultural Economics Association and the American Agricultural Economics Association Distinguished Extension Program Awards in 1987. Feasibility studies funded by USDA served as foundations on which USDA has upgraded their information networks.

- Work in the area of international trade has also been important for fresh fruit and vegetable growers. Significant work has been done in assessing competition between Florida and Mexico. USDA funded 2 projects for assessing competition in the winter fresh vegetable industry. Information was developed to help industry participants and policy makers understand the North American Free Trade Agreement (NAFTA) and its potential impacts on the winter fresh vegetable industry. Discussions continue about NAFTA and the effect it is having on U.S. growers. The Florida tomato industry and IFAS have funded efforts to develop tools for monitoring NAFTA. Assistance has been given to the Florida tomato industry in applications to the International Trade Commission for relief from imports of Mexican tomatoes and bell peppers. Information has been developed to help policy makers in their decisions concerning the fresh produce industry.

- Interdisciplinary research and extension have been critical in this program. Cooperative research and extension programs have been developed with production and post harvest specialists in the Horticultural Sciences Department. The importance of using selected pesticide groups for agriculture have been determined in much of this work as has the importance of post harvest handling practices. The Florida tomato industry has awarded grants to study the marketing system for fresh tomatoes and develop proposals for improving the marketing efficiency. Studies of the citrus marketing system also have been conducted to improve the efficiency with which fresh and processed citrus are marketed.

GRANTS AND CONTRACTS


Co-PI, "Computer Extension of Satellite Weather Data to County Extension Offices." Sciences and Education Administration - USDA. 1983-84. $17,000. with David Martsolf, P.I., Fruit Crops Department.


P.I., "Evaluating the Contributions of Computer Aided Marketing of Produce to the Efficiency of the Produce Marketing Industry." Agricultural Marketing Service - USDA. 1985-86. $102,000.


P.I., "Feasibility of Eliminating All U.S. #3 Grade Tomatoes or Only Some Sizes of U.S. #3 Grade." Florida Tomato Committee. 1989-90. $7,500.


Co-PI, "Efficiency in Florida Fresh Citrus Packinghouses." Florida Department of Citrus. 1995-96. $20,000. With Ron Muraro, P.I., Citrus Farm Management and Marketing Economist, Bill Miller, Agricultural Engineer, and Wil Wardowski, Horticulturist, Lake Alfred Research and Education Center.


P.I., "Development of a MIS Historical Database (MISH) for Internet and CD Access." Food & Resource Economics Department Special Project. $5,000. 1995-96.

P.I., "An Evaluation of the Provisions and Programs of the Florida Tomato Committee." Florida Tomato Committee. 1995-96. $52,000. with Steve Sargent, Horticultural Sciences Department.


P.I., "Development of an Internet Futures Market Trading Game." Minigrant supported by the Dean for Teaching. IFAS. 1996-97. $3,000.


UNIVERSITY AND PROFESSIONAL SERVICE

Departmental Committees
Public Relations and Publicity, 1981-86; chairman, 1981-84
United Way chairman 1981
Executive Council, elected representative for assistant professors, 1983-84
Department Freeze Assessment Committee, 1981, 1982
Search and Screen Committee for Undergraduate Teaching Position, 1981
Search and Screen Committee for Extension position with Microcomputer Applications, 1984
Search and Screen Committee for Area Ornamental Horticulture Economist Position, 1984
Advisory Committee, elected representative for 1995-97.
Computer & Information Services Committee, 1997-98.
Graduate Committee, 1999-2002.

Institute of Food and Agricultural Sciences Committees
Agriculture in Transition (Food Industry Productivity). 1980
Review of State-Wide Vegetable Research Program, 1983-84
Search and Screen Committee for County Extension Faculty, 1984, 1992
Florida Tomato Institute Planning Committee, 1983
IFAS Marketing Task Force, 1985-86
IFAS Extension Conference Planning Committee, 1985-86
IFAS Managing Your Farm Alternatives Conference Planning Committee, 1987
IFAS Privatization Committee. 1995.

State and National Committees
Secretary, Southern Regional Research Committee S-129, Organization and Efficiency of the Fruit and Vegetable Production and Marketing Sub-sector in the South, 1980-82.
Chairman, Southern Regional Research Committee S-178, Structural and Operational Efficiency of the Fruit and Vegetable Production Marketing System, 1982-84, Member 1984-86.
Member, 4-State Committee on Cooperative Research and Extension, 1981-84.
Member, Southern Regional Research Committee S-222, Competition and Change in Fruit and Vegetable Production and Marketing Systems, 1987-present.
Member, United Nations Environmental Programme Technology and Economic Assessment Panel. Economic Options Committee Methyl Bromide Task Force. 1997.

Other Professional Services
Chairied the review process for the "Teaching, Extension and Professional Affairs" section of the AAEA selected papers, 1989.
Served on the CSRS USDA review team for Auburn University Agricultural Economics Department, 1991.
Member, Task Force for Comprehensive Analysis of New Jersey’s Wholesale Fruit and Vegetable Marketing System, 2002.
Member, Task Force on Florida Agricultural Trade, convened by U.S. Congressman Adam Putnam, 2002-.
Member, CSRS USDA review team for Auburn University Agricultural Economics Department, 2003.