Current and Potential Losses to the U.S. Red Meat Industry from Retaliatory Tariffs and Non-Tariff Barriers
Focus on China – Pork & Beef

U.S. Meat Export Federation, June 25, 2018

Executive Summary - Pork

- On April 2, China implemented an additional 25% tariff on most U.S.-origin pork products in retaliation for the U.S. Section 232 trade action on steel and aluminum imports. The duty raises the level of border protection to nearly 50% when factoring in the existing 12% tariff and a 10% value-added tax.
- China announced June 16 that it could impose an additional 25% duty on U.S. pork, U.S. pork variety meats, and U.S. pork fat starting July 6 in retaliation for the Section 301 duties on imported Chinese products. Based on USMEF's latest understanding of how the additional 25% duty will be charged, it could result in total tariffs and taxes of either 78% or 88%. The additional tariffs would effectively increase the cost of U.S. pork and variety meats by 45% or 53% compared to competitors. *NOTE: There have been no clarifying statements from the Chinese government on whether the duties announced on June 16 would be added to those implemented April 2, or how the potential added duties would be calculated.*
- In addition to imposing an extra duty, some ports have increased the inspection rate of U.S. pork shipments. Heightened inspections add costs to the importers who must wait longer for shipments to obtain release documentation, thus creating another disadvantage for U.S. pork.
- In 2017, China was the United States' third-largest pork export market by volume at 309,284 metric tons (mt) and fourth-largest by value ($663 million). Exports of pork/pork variety meats to China/Hong Kong last year totaled nearly 500,000 mt valued at $1.08 billion, and averaged nine pounds for every hog slaughtered ($8.89 per head). For China only, exports averaged 5.62 pounds and $5.47 per head. Exported items are split about evenly between muscle cuts (e.g. hams and picnics) for further processing and variety meats (feet, heads, hearts, tongues) for the wholesale markets.
- The combination of lost market share and lower unit export values means an expected loss in U.S. pork variety meat exports of more than $100 million from May 2018 through December 2018, or about $150 million when projected over a 12-month period.

- Lower values for key China variety meat items could translate into industry losses of around $6.80 per head. For May-December, this translates to losses of about $580 million. Over a 12-month period, losses could reach $860 million. Adding in estimated losses for hams and picnics, the key muscle cut exports to China, could bring **losses to more than $9.00 per head, or $770 million in May-December with full-year losses reaching $1.14 billion.**
- Chinese buyers are extremely price-sensitive, with the U.S. import market share of 13% reflecting both keen European and Canadian competition and a restrictive requirement that all pork must be ractopamine free. Exporting to China requires up-front investments by U.S. producers, packers and exporters who must build a supply chain of China-compliant hogs and pork.
- The new duties come at a particularly inopportune time as Chinese pork production is on the rebound and overall imports are falling. As the Chinese market is extremely price-competitive, U.S. producers and exporters must lower prices to maintain sales with the higher duty.
- For some lower value items, exports are no longer feasible with the additional duties and products must either be exported to other markets at lower prices or, in many cases, rendered.
- The U.S. pork industry views China as one of its most significant long-term export growth opportunities. Chinese pork prices continue to hover significantly above U.S. and world prices, creating the world's largest pork import market. Ongoing transformation of many elements in the imported pork supply chain, ranging from logistics infrastructure to consumer purchasing behavior, suggests that pork imports will follow an upward long-term trend line, and that self-sufficiency will continue to drop from its current 96% level.

Tariff Details

On April 2, 2018, the Chinese government announced that effective immediately, it would begin levying additional tariffs on selected U.S.-origin products in retaliation for the U.S. 232 trade action (U.S. imposed tariffs on steel at 25% and aluminum at 10%). China's retaliatory tariffs were applied to the most commonly imported U.S. pork products (HS codes 02031200, 02031900, 02032190, 02032200, 02032900, 02064100, and 02064900). From that day, importers were forced to pay a 25% tariff in addition to the existing 12% duty. Following customs clearance and payment of the duty, importers are assessed an additional 10% value-added tax (VAT).

On June 16, China's Ministry of Finance (MOF) announced that it will place additional retaliatory duties of 25% on imports of U.S. agricultural commodities including pork and pork variety meat items in the HS codes listed above, and pork fat (HS020910). As of June 25, it was unclear whether the duties announced June 16 would be added to the first round of retaliatory duties. If added, duties on U.S. pork would total 62% or 71.25%, depending on the calculation, and adding the VAT would bring total taxes to 78% or 88%. The tariff calculation options are as follows, using $1 per pound as an example:

A. 12% + 25% + 25% = 62% applied to $1.00/lb = $1.62 * 1.10 for VAT = $1.78
B. (12% + 25%) * 25% = 71.25% applied to $1.00/lb = $1.71 * 1.10 for VAT = $1.88

Market Background

The U.S. exported 275,344 metric tons of pork products under the affected HS codes last year, with a value of $488.6 million. Unlike in Mexico, the U.S. market share of total pork/pork variety meat imports into China is fairly low at 13%. EU exports account for 67% of total imports with Canada, Brazil and Chile rounding out the remaining 20%.

China is by far the largest importer of pork variety meat in the world. China and Hong Kong combined to account for 67% of global pork variety meat imports last year. For the United States, China/Hong Kong accounted for 59% of pork variety meat exports with Mexico as the other dominant buyer. For the EU, more than 70% of pork variety meat exports were shipped to China/Hong Kong in 2017. China is a price-sensitive market, and due to its dominance in buying and commoditization of popular imported items such as feet, stomachs, bone by-products, and other variety meat – and raw materials for processing such as hams – there is little scope for exporters to increase prices. For example, additional tariffs effectively lower the market clearing price of U.S. hams by the same percentage as the duty hike, while forcing U.S. exporters to lower offer prices for variety meat where they compete with EU suppliers. For several variety meat items such as front and hind feet, there are few if any alternative markets. Some U.S. exporters are now rendering China-only export items due to poor market conditions and the new duties.

Price Impact

China's 25% duty, along with the overall bearish market conditions, has certainly contributed to the drop in prices for some items. U.S. prices for key China variety meat items from April through mid-June averaged significantly lower than in the same period in 2017, including:

- Front feet, -20%
- Hind feet, -28%
- Neckbones -26%
- Brisket bones -18%

Even before Mexico imposed new import duties in June, heavy bone-in hams were down 25% year-over-year and export rollout ham prices were down 17%. For April through mid-June, prices for heavy bone-in hams averaged 14% less and roll-out export hams averaged 12% less.

Comparing prices for front and hind feet and neckbones from April through mid-June 2018 compared to year-ago levels, per-head losses were $1.32. Adding estimates for other key variety meat products, including snouts, tongues, stomachs, and ears, brings the per-head loss total to $3.30. Adding other bone products, heads and skins brings potential losses to $6.80 per head. Lower prices for just three major China export items (front and hind feet and neckbones) translate into estimated industry losses of $112 million for May through December and $167 million on an annual basis. Adding other major variety meat products and bone and skin items brings potential industry losses to $578 million for May-December and $858 million on an annual basis. These losses are estimated using actual April through mid-June price trends (USDA/AMS MPR), competitor offer prices in China and actual reported domestic or rendering prices assuming lower export volumes and values (USDA/AMS MPR and voluntary reports). Lower values for these China items are expected to impact the value of every U.S. hog slaughtered. Given the unique nature of the Chinese market, which requires dedicated supply chains, it is possible that the full impact of lower values will not translate across the entire U.S. industry. But the decrease in demand from China due to the prohibitive tariffs will drive prices lower across the entire industry as alternative markets are unlikely to be found for all products and certainly not at the prices Chinese buyers were paying.

Such estimates are focused on variety meats, but the added tariff has limited sales of U.S. cuts (mainly hams for processing) to China. Even if the impact of smaller demand from China accounts for just a small share of the decrease in U.S. ham prices, or a 5% year-on-year decline, the losses could amount to $1.65 per head. As noted above, U.S. heavy ham prices averaged 14% lower than last year from April through mid-June. USMEF expects Mexico's retaliatory tariffs will have the biggest impact on U.S. ham prices and the value of the primal could average 15% less for the remainder of this year, or a loss of $4.75 per head.

If U.S. pork is assessed an additional 25% duty on the 37% effective tariff rate currently in force, export volumes could fall significantly, and lower pricing on China-dependent export items would result in higher per-head losses for producers. Products such as pork hearts, livers, heads, femur bones and other lower-cost variety meat items and by-products could become commercially unviable at a 71.25% duty rate, leading to export cessation. HS0206 variety meat exports to China totaled 147,450 mt in 2017 ($250 million). If U.S. market share drops from the current 15% (the U.S. share of 0206 variety meat imports has averaged 15% while U.S. market share of total pork/pork variety meat averaged 13%) to 8% and unit export values fall by 25%, the decrease in export value (due to smaller volume and lower prices) would be close to $100 million from July through December and $150 million on an annual basis.

If alternative markets cannot be found, items will have to be rendered at a value of roughly $0.18 per pound and lower for some items like kidneys, at about $0.12 per pound. Assuming the average value of variety meat exported to China last year was $0.76 per pound, a drop in value to $0.18 per pound equates to a per-head loss of $1.55 for just the volume exported to China from each hog processed last year (exports to China last year averaged 2.68 pounds per head). But as noted above, if we assume prices for all main variety meat items are negatively impacted by the decrease in China's demand due to the added tariffs, losses could range from $3.30 to $6.80 per head—even when only the lowest value items are rendered.

The new duties come at an inopportune time for U.S. producers and exporters, as expansion in the U.S. industry and corresponding record-large production has been driven by the expectation that the U.S. was best positioned to meet the growing global demand for pork. At the same time, China's rebounding pork production following major industry restructuring has caused overall imports to fall and competition to intensify. For January through April 2018, global pork and pork variety meat exports to China/Hong Kong were down 6% to 929,330 mt with smaller volumes from the big three exporters — EU, U.S. and Canada — while exports from Brazil were sharply higher following Russia's ban on Brazilian meat, which took effect Dec. 1, 2017. The EU accounted for 60% of exports to China/Hong Kong (557,885 mt, -8%) while the U.S. had 15% share (141,450 mt, -16%). Brazil (107,768 mt, +60%) displaced Canada (96,761 mt, -23%) as the third-largest supplier from January through April 2018.

U.S. pork production will be record-large again this year, and EU production has rebounded from a slight downturn last year, so supplies are abundant for the major exporters. Because China/Hong Kong accounts for 35% of global pork trade by volume, China remains one of the most critical markets for all suppliers. U.S. unit export values for pork variety meat to China are consistently significantly higher than the competitors. This is likely due to a number of factors, including higher value products accounting for a larger share of the product mix (e.g., feet and stomachs). This means that U.S. exports will be hard-hit by the sharp increase to 71.25% in the ad valorem duties, while competitors continue to pay the normal 12% rate.

TABLE 1:
Estimates of U.S. Pork Industry Trade and Value Losses from China's Additional Import Duties

Factor	$/head	2018 May - December	Annual basis
Export loss: monthly 5,500 mt decrease in exported tonnage of HS 0206 pork variety meat to China from baseline forecasts plus 25% drop in price*		$100 million	$147.5 million
Value loss variety meat: reduction in U.S. pork output value resulting from a drop in exports to China and fall in average variety meat values**	$3.30 to $6.80	$277 million to $578 million	$412 million to $858.5 million
Value loss muscle cuts: reduction in U.S. pork output value resulting from a drop in exports to China and fall in average ham & picnic values***	$1.65 to $2.25	$140 million to $190 million	$207 million to $283 million
Value loss all variety meat & cuts:	$9.08	$769 million	$1.14 billion

**Note that exports not going to China will likely be shipped to other markets at lower prices and/or rendered; it is not appropriate to add the export losses and value losses above but the possible decrease in exports to China will mean lower pork variety meat and hog prices as shown in the value loss estimates.*

***The decrease in pork variety meat values is based on actual USDA/AMS price reporting, both mandatory and voluntary data depending on the products, and in some cases comparisons to competitor offer prices for China. Per head losses for just front and hind feet and neckbones have averaged $1.32 from April-mid June and above estimates include a wider range of variety meat (like snouts, tongues, and stomachs), with losses estimated at $3.30 per head and up to $6.80 per head when adding skins, heads and other bone products.*

****Assume most of the decrease in ham values for the rest of the year will be due to Mexico's tariffs (estimated to average 15% less resulting in losses of $4.75 per head). But the decrease in buying from China could contribute to a 5% decrease in the ham primal or a loss of $1.65 per head. The higher range loss above includes the assumption that China causes picnic prices to also lose 5%, translating to $0.60 per head. As with hams, Mexico is expected to have the biggest impact on picnic values, with losses estimated at $1.90 per head.*

The calculations above represent estimates of direct losses due to the implementation of the tariffs by China. Disruptions in access to one market can have repercussions for trade with other partners. For example, buyers can add momentum to a market downturn by holding off purchases with the expectation that prices are going to go down further. Commodity pork buyers in other Asian markets such as South Korea and the Philippines keenly watch market conditions of neighboring markets, especially China. Problems in China reverberate to other markets and cause buying reticence; losses to U.S. exporters and producers can be amplified.

Cost of Other Barriers

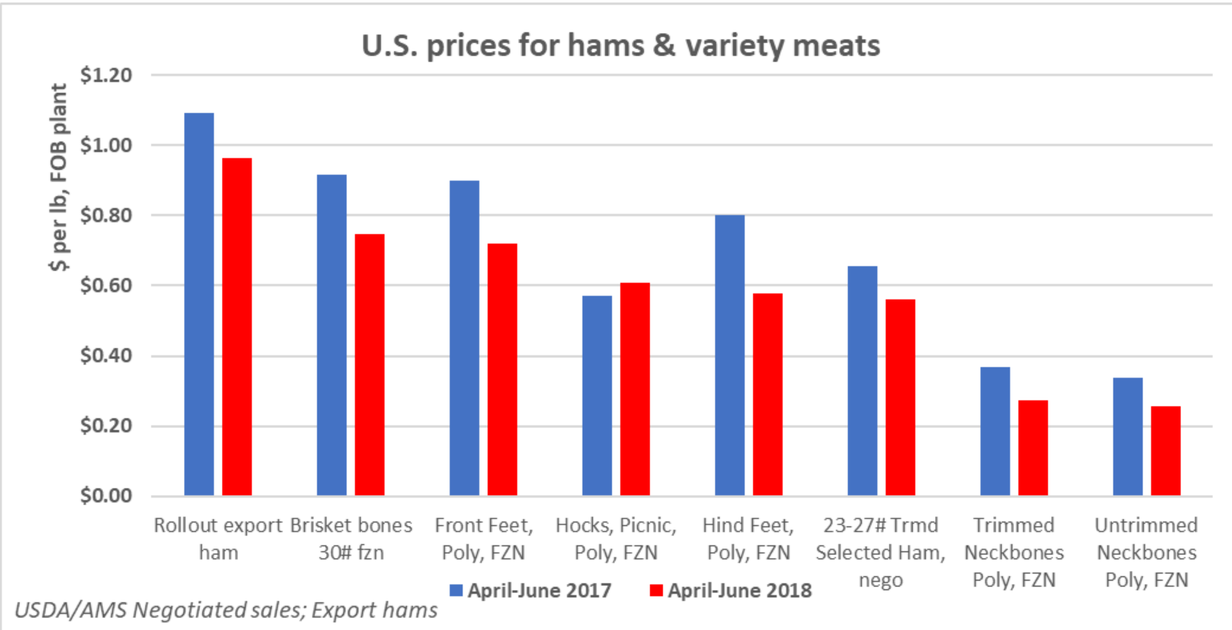
Following the imposition of the additional import duties on April 2, China erected other non-tariff barriers that are adding to the costs of importation. The inspection rate on containers (the percentage of containers opened for visual inspection) of U.S. pork has increased from single digits to 100%, at least in some ports, while the sampling rate of U.S. pork containers subject to laboratory testing has increased to 30%. The heightened inspection of U.S. pork imports can add an estimated $100 to $300 per container due to the longer time required for product clearance. There are unconfirmed reports that port customs officials are closely reviewing invoice prices of U.S. pork imports. China has used reference pricing in the past to establish minimum prices for product declaration. Should China impose reference prices on certain China-dependent items such as pork feet, exports would likely decline sharply. Most U.S. variety meat items compete on price with similar European product, and Chinese buyers will not pay significantly higher prices for U.S. product beyond the minor premiums that exist due to plant and specification preferences.

Additional Data Summary

The following points help quantify China's importance for U.S. pork exports:

- China/Hong Kong is the dominant market for the following U.S. pork products:
  - feet (91%), heads (96%), hearts (76%), and tongues (51%)
  - It is also a top market for frozen bone-in cuts (46%), although the share drops to 8% when combining chilled and frozen bone-in cuts with Mexico as the dominant market
- China/Hong Kong also takes approximately one-third of U.S. exports of skins (34%) and other variety meat under HS 0206 (30%)
- Exports of pork/pork variety meat to China/Hong Kong last year averaged 9 pounds for every hog slaughtered ($8.89 per head).
- Of this, HS 0206 variety meats, covered by the additional tariffs, totaled 5.2 pounds or $4.67 per head. For China only, 2.68 pounds and $2.07 per head.
- Feet accounted for the most volume to China/Hong Kong, averaging 3.18 pounds per head, worth $2.96.
- HS 0206 variety meat exports to the rest of the world totaled 2.55 pounds per head and value averaged $1.96 per head.

Some exports are likely to shift to other markets such as Mexico, Korea, Philippines, Central and South America and Taiwan at lower prices, while other items will be rendered. The chart below shows what has already happened to prices, with the decrease in prices for front and hind feet plus neckbones translating to losses of $1.32 per head on average from April through mid-June:



USDA/AMS FOB Plant Prices $/cwt	April-June 2017	April-June 2018	YOY
Rollout export ham	109.34	96.31	-12%
Brisket bones 30# FZN	91.62	74.79	-18%
Front Feet, Poly, FZN	90.08	71.93	-20%
Hocks, Picnic, Poly, FZN	57.26	60.82	6%
Hind Feet, Poly, FZN	80.06	57.70	-28%
23-27# Trmd Selected Ham, nego	65.46	56.15	-14%
Trimmed Neckbones Poly, FZN	36.96	27.22	-26%
Untrimmed Neckbones Poly, FZN	33.87	25.59	-24%

*2018 average prices are for April through mid-June

China Beef

Executive Summary - Beef

- In response to the Section 301 duties, China is set to raise the duty on U.S. beef from 12% to 37%, with the additional 25% duty to be implemented July 6.
- U.S. beef accounts for just 1% of China's surging beef imports, but after gaining access in June 2017, the U.S. beef industry has made tremendous investments in the Chinese market because it holds vast long-term potential as the world's fastest-growing beef import market.
- Due to China's unique import requirements, only a small share of U.S. beef is currently eligible for China, and producing China-eligible beef requires planning, investment and coordination across the whole supply chain. It therefore takes time to build the pipeline of China-eligible cattle and beef, and this product is sold at a steep premium compared to China's imports from other suppliers, including Australian grain-fed beef, the primary competitor. Australia already had a tariff advantage, paying just 7.2% this year under the China-Australia Free Trade Agreement.
- The additional 25% duty will stifle emerging U.S. beef exports to China and severely limit exports in the remainder of this year, meaning export losses of more than $30 million.
- But the real impact is the lost opportunities (or in the best-case scenario, delayed opportunities) for export growth over the next couple of years. Progress had recently been made in expanding the list of plants eligible to export to China, and U.S. officials are working on gaining eligibility for additional beef items. With these access improvements, USMEF had estimated exports could grow from the (pre-tariff) 2018 value of $70 million to $430 million by 2020.
- In short, lost export opportunities over the next couple of years will be in the hundreds of millions of dollars if the tariffs are not quickly returned to the normal 12%.
- Viewed another way, there is still tremendous untapped potential in the Chinese market. If China adopted international standards, thus implementing import requirements similar to other main Asian markets such as Japan, Korea, Taiwan and Hong Kong, U.S. beef exports to China could exceed $4 billion in the five years following expanded access. Therefore the industry continues to highlight the need for expanded access and resolving China's non-tariff barriers.

Tariff Details

On April 4, 2018, in response to the U.S. 301 trade action, the Chinese government announced a proposal to levy a retaliatory additional tariff of 25% on U.S. beef and other agricultural products. The announcement did not specify an implementation date. On June

16, China's Ministry of Finance announced that it would assess an additional 25% tariff on imported U.S. beef and beef variety meat (HS codes 02011000, 02012000, 02033000, 02021000, 02022000, 02033000, 02062900), and other U.S. agricultural products, if the U.S. follows through on implementing its Section 301 duties. According to the announcement, the duties could be implemented as soon as July 6.

Market Background

Just the April 4 threat of higher duties sharply curtailed U.S. beef buying interest. As a premium item, end users such as restaurants and retailers require steady and reliable sourcing – and pricing - in order to build menus and a profitable business model featuring U.S. beef. The implementation of a 25% duty increase on U.S. beef would need to be passed on to wholesalers and end users, likely resulting in an equivalent 25% increase in wholesale prices. Most U.S. beef cuts already sell at a premium compared to grain-fed Australian beef, which is considered a close (though not exact) substitute for U.S. beef. Australia already benefits from a lower duty of 7.2% through the China-Australia FTA, further exacerbating the negative impact of higher duties on U.S. beef. Increasing the U.S. beef premium spread over Australian product would further erode sales and usage of U.S. beef. Unlike U.S. pork, where China is the dominant market for many items (e.g., feet, snouts and stomachs), alternative markets exist for all U.S. beef cuts currently exported to China, and U.S. exporters cannot be expected to lower prices (and take losses) to compensate for the higher duties, especially when China requires a dedicated supply chain and thus significantly higher costs of production for the producer, feeder and packer/exporter.

The threat of additional duties comes at a fragile time in the Chinese market for U.S. beef. After a year of access, importers and distributors are still at a nascent stage of building sales and distribution channels for U.S. beef. As mentioned above, although U.S. beef is viewed as a premium product, it faces competitive challenges from lower priced grain-fed Australian product, which has enjoyed 14 years as the undisputed leader in the grain-fed beef category. Grain-fed beef still constitutes a small fraction of China's total beef consumption, and although growing, consumer awareness of the distinction between grain-fed and grass-fed beef is still low, with price remaining the key determinant of beef purchasing behavior.

Trade Impact

In 2017, U.S. beef exports to China reached 3,020 mt following the June market opening and were valued at $31 million. For January-April 2018, exports totaled 2,300 mt valued at $21.3 million. Since the announcement of the threat of the new duties on April 4, weekly U.S. beef exports to China have averaged 62 mt, down 43% from the weekly pace in the fourth quarter of last year, when sales were ramping up. Following the imposition of the duties on July 6, we expect sales and exports to drop further to 1-2 containers per week (20 to 40 mt). Weekly export sales data showed a new 2018 high for beef sold to China in the first week of June, signaling demand remained even with the threat of tariffs. However, the

June 16 announcement has further chilled U.S. beef buying interest. USMEF has been told by several large restaurant and retail groups that they are delaying decisions to buy U.S. beef because of the trade uncertainty.

The negative long-term impact of retaliatory tariffs derails the building of a foundation for what promises to be a major volume market for U.S. beef in the future. U.S. beef sales to China were expected to grow slowly with the evolution of consumer preferences for grain-fed beef, rising incomes and improvements in importing and distribution infrastructure. In the meantime, China has become a top global importer, and the world's fastest-growing beef import market. Imports in 2017 totaled 716,200 mt valued at $3.14 billion, up from less than $30 million a decade earlier. Imports in the first quarter of 2018 were running 40% ahead of last year's record pace. China has granted access to virtually all major beef exporters, with India being the exception. Its top suppliers in 2017 were: Brazil, Uruguay, Australia, New Zealand, Argentina, Canada, Chile, Costa Rica and the U.S. (following the mid-year market opening).

Although China remains a small market for U.S. beef, ranking only 14th in export volume in the first four months of 2018, the market holds tremendous potential. If China adopted international standards and access conditions similar to those in other major Asian markets including Japan, Korea, Taiwan and Hong Kong, U.S. beef exports could exceed $4 billion within five years.

To more accurately estimate the potential losses due to the 25% retaliatory duty, it is important to consider lost opportunities just as U.S. beef was making progress in the market. Earlier in June, China had updated its eligible plant list to mirror those on the USDA/AMS EV approved list. This vastly increased the number of plants eligible to ship to China. Efforts were also underway to ensure full eligibility for all products agreed to in last year's market opening agreement. USMEF estimated that these additional products and additional eligible plants could have increased exports from the $70 million estimated for 2018 (prior to the tariffs) to $430 million by 2020. **In short, the export loss this year will likely exceed $30 million and the potential losses over the next couple of years could easily be in the hundreds of millions** unless the tariffs are quickly removed and progress is made toward resolving other non-tariff access issues. **The focus must remain on expanding access and aligning China's requirements with international standards, under which the U.S. beef industry could easily see exports to China exceed $4 billion.**