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Theme Issue Overview: Emerging Issues in Global Animal Product Trade

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JEL Classifications: F01, F13, F43
Keywords: Free Trade Agreements, Meat Trade, Tariffs

Global meat, poultry and dairy consumption and trade have been steadily increasing for decades, driven largely by rising incomes and expanding populations as well as productivity growth in animal production. While there are a range of emerging issues in global animal product trade, an enduring issue appears to be the impact on trade of free trade agreements, the influence on technical barriers to trade (TBTs), and sanitary and phytosanitary (SPS) barriers. The pillars for success of many bilateral and multilateral free trade agreements are market access, export competition, and domestic support. The object of these trade agreements is to reduce trade barriers, especially tariffs on a range of products, for all participating countries. However, a range of nontariff barriers often associated with SPS or TBT barriers on animal product trade can influence trade negotiations and the capacity for effective free trade agreements. The effects of animal disease, food safety, country of origin labeling legislation, hormone use, and acceptance of GMO crops on free trade agreements and trade levels have been felt by many countries.

This themed set of articles originated from a conference on emerging issues and anticipated trends in global animal product trade hosted by the Economic Research Service (ERS), USDA in partnership with Farm Foundation, NFP, the Larry Combest Endowed Chair for Agricultural Competitiveness, and S-1043 Regional Research Group on Sept. 27-28, 2012 in Washington, DC. For this theme, four articles were selected from presentations made during the first day of the conference. While they by no means exhaust the range of topics covered during the conference, they provide an illustration of some of the key issues discussed. The first article by Brett W. Stuart and Richard G. Fritz of *Global Agri Trends* looks at the potential impact of China on the U.S. Poultry and Livestock Sectors. The authors contend that the population size of China has long fueled optimism for U.S. poultry and livestock traders. However, the authors argue that the way forward could be challenging given relatively high Chinese prices, their self-reliance ambitions, and the U.S's. desire for unfettered exports.

The second article by Ted Bilyea of the Canadian Agri-Food Policy Institute provides a Canadian perspective on emerging issues of the North American Free Trade Agreement (NAFTA) and competitive liberalization in the global meat trade. The article chronicles the early dependence of the Canadian meat export market on preferential tariff access to the British market and the benefits gained from market openness of the Japanese and the Canada U.S. Free Trade Agreement (CUSTA), which expanded into NAFTA in 1994 with the inclusion of Mexico markets after the loss of British preferential access. The paper outlines some of the challenges faced by the Canadian livestock sector

Articles in this Theme:

despite the free trade agreements, but argues for continued bilateral free trade agreements, largely providing similar arguments to Manger (2005) as to why more and more industrialized countries join FTAs with emerging markets, and Furtan and van Melle (2004) on the declining border effects for agricultural trade between the United States and Canada and between Mexico and Canada.

The third article by Thad Lively of the U.S. Meat Export Federation outlines lessons learned from past experiences and the ongoing issues surrounding reopening market access for U.S. beef and pork. The author argues that the ongoing efforts to reopen foreign markets for U.S. beef after the bovine spongiform encephalopathy (BSE) discovery in 2004 have shown the vulnerability of the domestic industry to sanitary barriers to trade as well as the difficulty of reentering markets after they have been closed due to SPS issues. It provides a commentary on the ongoing technical barriers associated with technologies commonly used in the United States, but which are not as readily accepted in other countries, such as beta agonists and hormones in meat production. The author argues for a joint approach by the leading meat producing countries to assure a safe and abundant food supply for the world's growing population.

The fourth article by Alfred Breuer of the National Pork Producers Council cites the importance of trade in expanding the U.S. pork industry given the relatively stable domestic demand. The author cites the strong correlation between increases in U.S. trade agreements and increased U.S. pork exports. The impact of NAFTA and the Uruguay Round in creating market access is highlighted. The article chronicles the added market access for the U.S. pork industry created by a series of free trade agreements between 2004 and 2011 and outlines how the future of pork exports could be further enhanced by the elimination of non-science-based SPS barriers on US pork. The potential TPP agreement was cited as one such agreement where, despite the United States having completed FTAs with 6 of the negotiating countries, U.S. pork exports could be enhanced with the elimination and/or reduction in current barriers.

For More Information:

Manger, M. 2005. Competition and Bilateralism in Trade Policy: The Case of Japan's Free TradeAgreements. Review of International Political Economy 12(5): 804-828

W. H. Furtan and Blain M. van Melle. 2004. Canada's Agricultural Trade in North America: Do National Borders Matter? Review of Agricultural Economics 26(3):317-331

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China's Impact on U.S. Poultry and Livestock Sectors

Brett W. Stuart and Richard G. Fritz

JEL Classification: Q13, Q17, N55
Keywords: Agriculture Trade, China, Livestock, Poultry

The statement that "1.3 billion times any number is a BIG number" has fueled optimism, speculation, and prognostication throughout the U.S. farm sector for years. While China has been the "market of the future" for decades, the future is now. It became the largest overseas buyer of U.S. agriculture goods in 2012. . China's 1.3 billion people are joining global consumerism in waves, and income growth for many Chinese still lies ahead. Diets are evolving and expanding, opening doors for foreign food suppliers.

Table 1: China/United States Agriculture Comparison

Arable land (acres per capita)	0.4	0.24
Average farm size (acres)	0.2	68.4
Wage per day of on-farm labor	$10.50	$86.56
Cropland per agricultural worker (acres)	0.2	31.8
Annual per capita renewable water resources (m3)	2,138	10,231
Percent of harvested land irrigated	47%	18%
Tractors per 100 square mi of arable land	91	154
Cereals yield (pounds / acre)	4,938	5,910

Sources: USDA, NASS, "2007 Census of Agriculture: United States Summary and State Data," December 2009
Industry officials, interviews by Commission staff, Beijing and Shandong province, China, September 6–15, 2010
USDA, NASS, "Farm Labor," August 19, 2010; The World Bank, Data: World Development Indicators; USDA, ERS, "Briefing Rooms: China: Basic Information."
Notes: (1) Daily wage rates for on-farm labor in the United States are based on an 8-hour workday and the $10.82 hourly average reported by USDA, NASS, "Farm Labor," August 19, 2010. (2) Cereal yield includes wheat, rice, corn, barley, oats, rye, millet, sorghum, buckwheat, and mixed grains. The Chinese average does not account for double-cropping, so Chinese yields are likely much lower on a per-planting basis than represented in the table.

From a meat, poultry, and livestock standpoint, China is a world superpower. According to USDA's Foreign Agriculture Service (FAS) database in 2011, 60% of the world's hogs resided in China versus only 8% in the United States (USDA/FAS Production, Supply and Distribution Tables). Twenty three percent of the world's beef cows are in China versus only 15% in the United States (USDA/FAS PSD Tables). While this production scale is huge, China's export influence in global pork is minimal. China's meat exports only amount to 3% of global exports, versus 28% for the United States. China's trade policy shows their strong desires to be self-reliant in the meat, poultry, and dairy sectors but in reality, they are becoming bigger importers of beef, pork, and poultry.

From a self-sufficiency standpoint, China is largely self-reliant in most products but by a very narrow margin. Rising demand for meat products, mainly pork, has increased the demand for livestock and poultry feed. While China's corn crop has steadily grown, 71% of growth has come through planting more acres. Only 29% of the total growth has been gained from higher yields (USDA/FAS PSD Tables). And while some believe that yield growth has a limit, we all know acreage growth is limited. China maintains corn self-sufficiency rates near 100%, but such levels of sustainability are questionable due to rising demand for feed grains and limited potential for acreage expansion to meet the ever-increasing demand for meat and dairy products.

Although prices continue to rise, so does the Chinese demand for pork, dairy, poultry, and beef. Meat price inflation in China has outpaced overall food price inflation in recent years. The calendar year 2011 saw a basket of retail meat prices rise by 24%; beef leg prices at retail averaged 35% annual inflation in November 2012 according to National Bureau of Statistics China.

Prices are central to this story. China's producers have attempted to expand to meet rising demand, but supplies of feed grains and forage are limited. Higher feed prices are manifest in meat prices. Additionally, China's new-found interest in enhancing domestic food safety and environmental regulations has resulted in the closure of 5,000 small and unlicensed slaughterhouses in the past year; the goal being to consolidate production into larger processing plants. Moreover, the exodus of rural laborers to work in cities has undermined the traditional low-cost "backyard" mode of production. All lead to rising Chinese food prices.

Most of China's meat prices continue to run above U.S. meat prices, and both China's inflation rate growth and per-capita income growth rates are outpacing the equivalent U.S. growth rates. As an example, China's pork prices could double over the next 10 years, and using current Chinese income growth rates, consumers would continue to pay the same proportion of their income for pork during that time. U.S. consumers would need 24 years of current per-capita income growth rates to absorb the same 100% price hike. Chinese citizens' ability to pay for food is outpacing the United States. A growing price disparity between domestic and imported foods leads to more imported meat, poultry, and dairy products. Any market with domestic prices well above U.S. prices or global prices will import products if access is granted. However, this stands in stark conflict to China's self-reliance aims.

U.S. Ag Trade and China

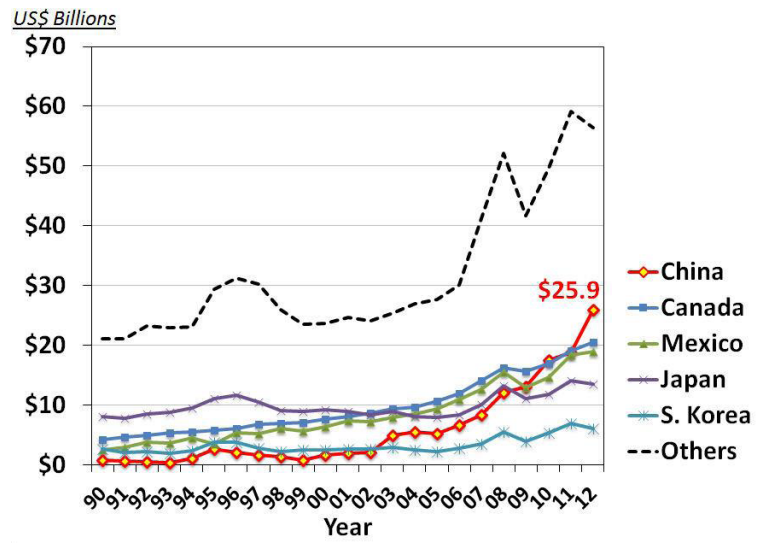
Abundant feed supplies, economies of scale and production gains have allowed U.S. agriculture exports to thrive over the past two decades. The stage was set through global tariff reductions granted through the conclusion of the Uruguay round of the General Agreement on Trade and Tariffs (GATT), and subsequent establishment of the World Trade Organization (WTO) in 1995. In the nearly two decades since, U.S. agriculture exports have thrived as shown in the chart below.

China became the single largest buyer of U.S. agriculture products in 2012. China imported $25.9 billion in 2012, up 38% from 2011. China's appetite for U.S. agriculture products grew a staggering twelve-fold since 2002. With rising incomes and the massive population base, China's influence on U.S. commodity prices will continue to grow.

The following chart shows the dollar value of U.S. livestock and product exports to China and Hong Kong over the 1990-2012 time period (Hong Kong is included due to the large volume of "inter-trade" with China). These export values have more-than-tripled over the past decade to an estimate of $4.3 billion in 2012. U.S. success in exporting livestock products to China has been partially due to Chinese demand for raw hides to be processed into leather and leather products, often for reexport. Hide and skin exports to China and Hong Kong topped $1.48 billion in 2012, slightly ahead of red meat exports of $1.31 billion.

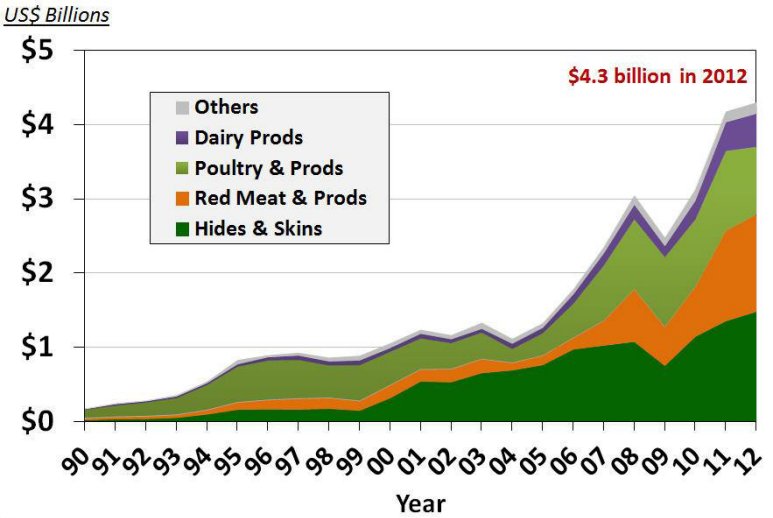
Pork comprised 39% of all U.S. red meat exports to China and Hong Kong in 2012. These U.S. pork exports have found growing acceptance in the Chinese processing sector. Variety meat items such as ears, stomachs, and intestines bring a much higher value in China than here in the United States. Whole muscle cuts of pork have been imported for further processing into sausage and other processed products. The following chart breaks out the $1.3 billion exported to China and Hong Kong as red meat.

Figure 1: U.S. Ag Exports by Destination



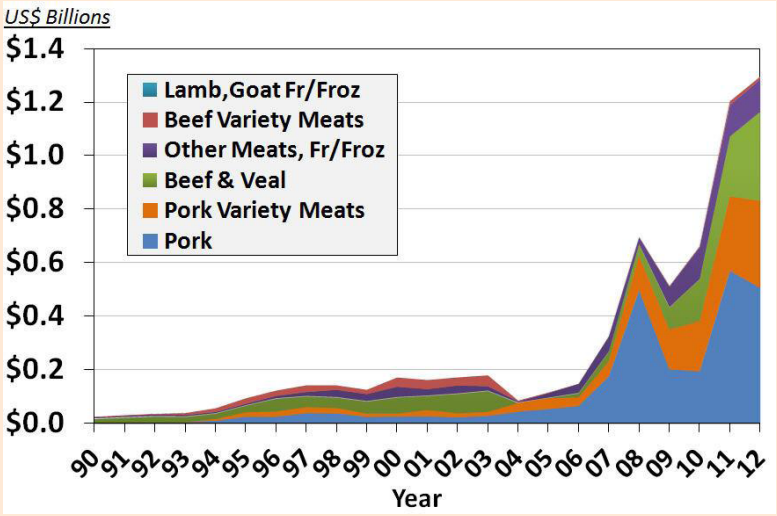
Source: United States Department of Agriculture, Foreign Agricultural Trade System

Figure 2: U.S. Livestock and Products Exports to China/H. Kong



Source: United States Department of Agriculture, Foreign Agriculture Service, Global Agricultural Trade System

Figure 3: U.S. Red Meat Exports to China/H. Kong



Source: United States Department of Agriculture, Foreign Agriculture Service, Global Agricultural Trade System

Chinese demand for U.S. pork rocked U.S. markets in 2008 when food inflation rates topped 23% in China. During May and June of 2008 the United States exported 8% of the nation's total domestic pork production to China and Hong Kong, a six-fold increase from the prior year levels. While that peak soon ebbed, Chinese demand skyrocketed again in 2011 following a year of significant disease issues in Chinese pig production. In October and November of 2011, 7% of U.S. pork production was exported to China.

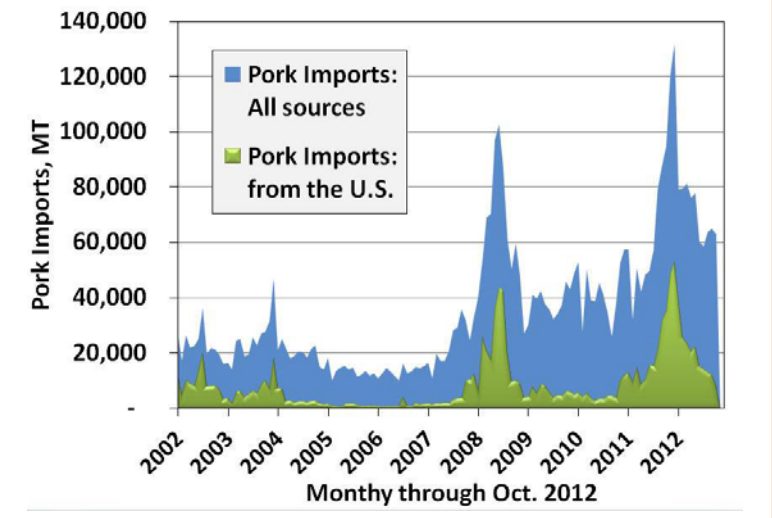
These volatile scenarios will likely continue into the future. The massive scale of China's pork sector makes even small declines in production translate into significant demand-pull from the much smaller U.S. pork supply. The U.S. hog/pork markets of the future may be more driven by decisions in Beijing than by the decisions in Washington D.C.

U.S. broiler exports have also found success in China. An estimated 85% of U.S. chicken paws (feet) have been exported to China and Hong Kong in recent years. U.S. leg quarter exports were also increasing until Chinese antidumping and countervailing duty cases were brought against U.S. exporters resulting in punitive import duties.

The U.S. beef industry continues to stand by, watching pork's phenomenal growth into China. Following the discovery of Bovine Spongiform Encephalopathy (BSE) in a dairy cow in Washington State in December 2003, China closed their doors to U.S. beef and has yet to reopen them. U.S. beef is exported to neighboring Vietnam, Macau, and Hong Kong, but ten years later, China remains closed.

Dairy exports continue to rise, led by demand for dry milk powder. A Chinese scandal involving melamine (a suspected carcinogen) being added to milk by Chinese processors seeking higher protein values broke in 2008, leading to a massive national investigation. As a key component of baby formula, Chinese dairy product demand plummeted. However, the scandal resulted in sharply higher demand for imported milk power, baby formula and related products. That demand remains strong today as China has restricted the amount of baby formula which may be purchased in Hong Kong and brought across the border. Total U.S. dairy exports surpassed $440 million in 2012, up nine-fold in the past 10 years. It is expected that we will continue to see rapid future growth of dairy product exports to both China and Hong

Figure 4: China Hong Kong Pork Imports



Source: Global Trade Information Services

Figure 5: An Inconsistent Triad

Kong for use as an ingredient in infant formula, candies, sport drinks and numerous other products.

An Inconsistent Triad

An untenable relationship currently exists between China's commodity economics and government policies. China's commodity price inflation above world levels continues to spur import demand, even while Chinese officials seek food self-reliance; and the United States seeks more liberal Chinese agricultural import policies. The graphic below shows these factors as an "inconsistent triad" where any two factors can coexist so long as a third factor does not exist. That is, China cannot 1) be self-sufficient in food production, while 2) having food prices above world market prices, and 3) allow unfettered import access for food products. For example, self sufficiency can be maintained while China's prices remain above world prices, but only if imports are constrained. Or, these higher price levels can exist in China, with unfettered import access, but self-sufficiency rates will fall. The third scenario would be that self-sufficiency can be maintained, with unfettered access to agriculture imports, but only if China's commodity prices drop to a point that they are steady with or below world prices. Chinese and American policy makers must be willing to either sacrifice one point on the triangle or be willing to relent to some degree on multiple points

Current trade friction between the United States and China has its roots in economics, politics, miscommunication, mistrust and retaliation. Today U.S. meat and poultry exports to China are constrained by countervailing duties and dumping margins; restrictions imposed on the U.S. use of Codex approved veterinary drugs (e.g. ractopamine) and a long-standing political impasse on BSE and food safety concerns. On the U.S. side, Chinese poultry exports to the United States are blocked as no processing or slaughter plants in China have been approved by USDA's Food Safety Inspection Service (FSIS) and food products face close import scrutiny at U.S. ports due to food concerns (residues, toxins, melamine, etc.). Add to this mix the drive by Chinese leaders for food security, often translated to mean self-reliance, and you have a challenging trade environment to say the least. These challenges must be addressed in a manner that establishes a strong base of trust and provides for regular and open dialogue at the highest levels of both governments.

What Does the Future Hold?

A healthy and important debate continues within China's academic and policy structure as to the future direction of agricultural production and self-sufficiency. China must realize that policies promoting self-sufficiency, food security, low prices, and meeting their international trade

obligations under the WTO are not congruent.

Chinese top officials have long stressed the need for China to feed itself. Yet, the reality that imports will need to become an integral part of any food security model is finally being discussed and debated. While this debate is focused mainly on pork and grain production, it has large implications for animal production and trade in animal products.

The Chinese and U.S. agricultural trading relationship will certainly grow. There is no doubt that the United States will continue to further develop its sales of feed, beef, pork, dairy and poultry products to China. China will also enhance its output through land consolidation, technological adoption in grain and animal production, better water and waste management, and improved food processing. The path forward, however, is one where a new dialogue is required to light the way.

Before discussion of new engagements between USDA and China's Ministry of Agriculture, it should not be forgotten that many scientific and technological exchanges are currently taking place. In addition, FAS cooperators provide significant capacity-building and information exchange programs for their counterparts in China. While focus is often on the negative side of trade; USDA, China's Ministry of Agriculture (MOA) and the private sector in both nations should be more vocal about such exchanges and the benefits provided to producers, processors, exporters and consumers in each nation.

What structural changes could the two governments undertake to enhance confidence between the two systems while bolstering regular and productive talks that will lead to an understanding that trade is in fact an integral component of secure food supplies?

First, trust must be renewed and strengthened between U.S. agriculture and Chinese policy makers. Secretary Vilsack and Minister Han have begun this process with the February 2012 U.S.-China High Level Agricultural Symposium in Des Moines, Iowa. Agricultural production and trade policy in China is set by many players outside of the Agriculture Ministry and the U.S. government needs to expand engagement to include other Ministries, Commissions, Agencies, "think-tanks", and provincial officials.

Second, the U.S. Congress needs to recognize that FSIS and the Food and Drug Administration (FDA) are professional and highly-competent food safety agencies. As science-based safety agencies they should be permitted to move forward on risk-assessment and regulations unimpeded by political influences not contrary to WTO principles. The United States must not be viewed as a nation which talks of science-based trade but passes laws curtailing imports without scientific justification.

Third, Chinese officials should embrace international standards and provide full transparency per their WTO obligations. As a nation which chairs two Codex Alimentarius Committees (Food Additives and Pesticide Residues) we would argue that China has a greater obligation to adopt Codex standards, announce and provide adequate comment periods for regulatory changes, and promote science-based regulatory development than many other nations.

Concluding Observations

China and the United States have a strong and vibrant agricultural trading relationship. It will only grow stronger in the future. It must be recognized in the United States that a relatively small percentage change in Chinese demand can have profound influences on U.S. and global agriculture markets. Chinese policy makers need to realize that their country may be better served by open, transparent, and science-based polices and regulations on food. Such a change in China will provide greater food security for the nation and allow the United States to prepare for future global demand in feeds, meat and poultry. One way to strengthen the relationship is to have more regular and deeper interaction among high level policy makers and with producer groups.

For More Information:

Global Trade Information Services, available online at http://www.gtis.com

National Bureau of Statistics China, available online at: http://www.stats.gov.cn/english/

United States Department of Agriculture, Foreign Agriculture Service, PSD Online Database: http://www.fas.usda.gov/psdonline/psdHome.aspx

United States Department of Agriculture, Foreign Agriculture Service, Global Agricultural Trade System: http://www.fas.usda.gov/gats/default.aspx

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A Canadian Perspective on Emerging Issues of NAFTA and Competitive Liberalization in the Global Meat Trade

Ted Bilyea

JEL Classification: F10, F13, F53
Keywords: Free Trade Agreements, Integrated North American Market, Preferential Access

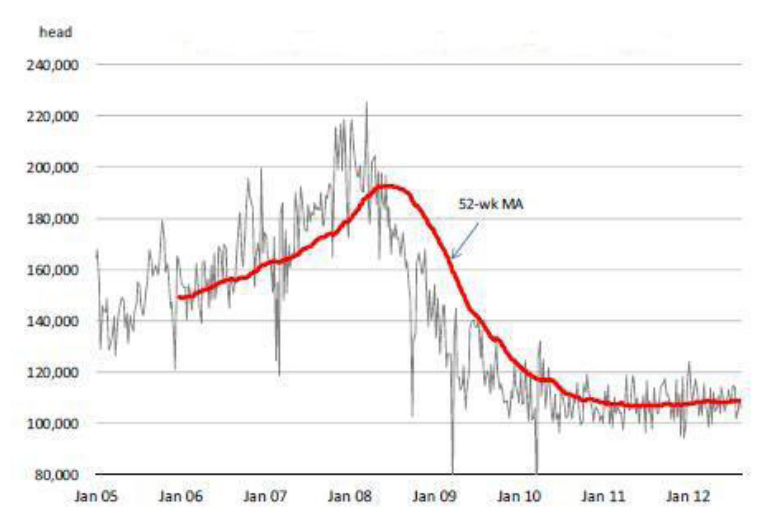
Canada, with a smaller population than California and an enormous agricultural land base of 1.34 hectares per person compared with 0.53 per person in the United States, has always focused on international markets. Without competitive access to international markets, a large part of our land base would be uneconomic, as our small Canadian population simply cannot absorb a major part of what our farmers can produce. Arguably, the success of Canadian agriculture has been linked to preferential competitive access to large foreign markets and developing the ability to supply what those international markets demanded.

As far back as the 1850s, the pioneering Canadian pork producer William Davies was importing British hog breeds such as Yorkshire and Suffolk into Ontario to develop higher quality pork with longer loins and smaller hams and shoulders for export to Britain. This business strategy was considered risky at the time, as the hog favored in the U.S. market was the more rounded, corn-fed lard pig. Davies and other Canadian pork producers became the unintended beneficiaries of U.S. protectionism, following the enactment of the McKinley Tariff in 1890. While the tariffs made it more difficult to export Canadian pork to the United States, they also diverted Canadian grain that would have otherwise been exported from Canada to the United States to hog farmers in Canada. As a result, new packing plants sprang up along the Canadian side of the Great Lakes, including the large William Davies plant in Toronto, which later became part of Canada Packers, and pork exports to Europe rapidly expanded. By 1892, Canada's shipments to the United Kingdom alone had grown to 24 million pounds of bacon and 8 million pounds of ham (Letters of William Davies Toronto, Toronto University Press 1945 pg. 25).

Up until 1973, the Canadian meat business depended on preferential tariff access to the British market and Canada's disease-free status with respect to foot and mouth disease (except for 1951-52). At that same time, Canada faced costly but surmountable tariff access to the United States. As a consequence, Canadian meat exports flowed profitably to the United States, Europe, and the West Indies. Up to the late 1970s, Canada Packers Ltd. led the world in a number of meat technologies and was a rapidly growing player offshore.

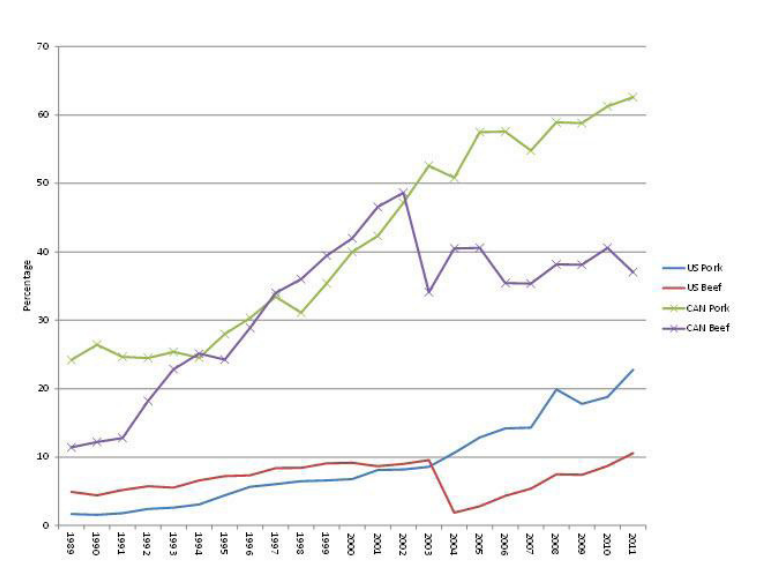
With the end of preferential access to Britain and the Commonwealth, Canadian meat exporters desperately needed new markets. Fortunately, within a few years of the loss of the British market, Japan began to open its market to more beef and pork imports. Canada enjoyed tremendous success in Japan, largely because it produced high quality pork due to its longstanding emphasis on breeding and because throughout the 1980s and much of the 1990s, the United States was a net importer of pork. It is worth noting that the first commercial shipments of chilled pork from North America to Japan originated from Dubuque, Iowa as a result of the Canada Packers International group working with Hormel. However for the reasons mentioned, the technology was more successfully exploited from Canada in the 1990's.

Figure 1: Canadian Hogs in U.S. Weekly Slaughter.



Source: Daily Livestock Report, September 19, 2012.

Figure 2: Percentage of Meat Production That Is Exported: United States and Canada



Source: Livestock Marketing Information Centre & Statistics Canada; CANSIM

By the end of the 1980s, we had the Canada-U.S. Free Trade Agreement (CUSTA), which expanded into the North American Free Trade Agreement (NAFTA) in 1994 with the inclusion of Mexico. With a head start in Asia led by Canada Packers (now called Maple Leaf Foods Inc.) and increasing demand pull from Canada's NAFTA partners, the last decade of the 20th century was initially an expansionary period for the Canadian livestock and meat industries.

However, things in the newly integrated North American market have not always gone smoothly for Canada. From 1985 to 1999, the Canadian hog industry had to deal with a U.S. countervailing duty on live hogs imported from Canada. In 2004, the Canadian swine industry was back battling a renewed U.S. industry attempt to impose countervailing and antidumping duties on Canadian hogs. And from October 1, 2008 until the present, Mandatory Country of Origin Labeling (MCOOL) imposed by the United States has succeeded in placing a systemic cost on Canadian livestock, beef and pork. A study by Ron Gietz released in January 2013 by the Canadian Pork Council details the massive reduction in live swine exports and the suppression of prices in Canada resulting from MCOOL (Figure 1).

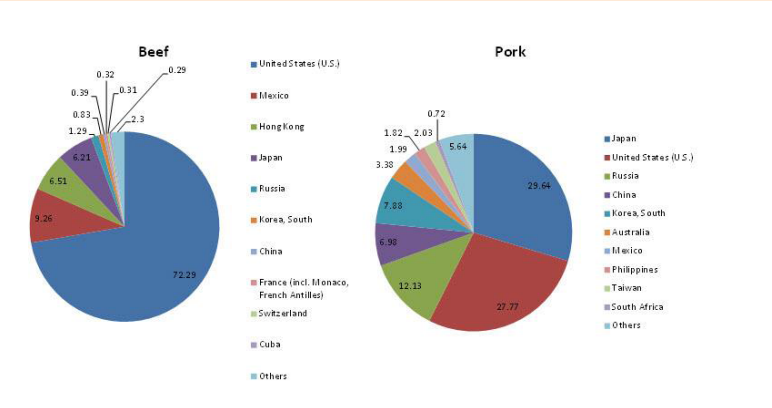
Despite the seemingly incessant border challenges faced by Canadian livestock and meat exporters, NAFTA and the World Trade Organization (WTO) remain far more critical to the Canadian livestock and meat industry than to its U.S. counterpart, as can be seen in the comparison of percentage of red meat production exported by Canada and the United States (See Figures 2 and 3).

Given the proximity of the United States and the tariff- and quota-free access to the U.S. market afforded by NAFTA, it is understandable that the Canadian beef and pork industry has focused on the U.S. market. In 2011, the United States alone represented 85% of our total beef and cattle exports. These exports to the United States included about Canadian $1 billion worth of beef and although not part of the following chart, $800 million worth of cattle. The United States remained also a large foreign market for pork, although other markets accounted for over 72% of the pork exports by value.

Current and Past Challenges

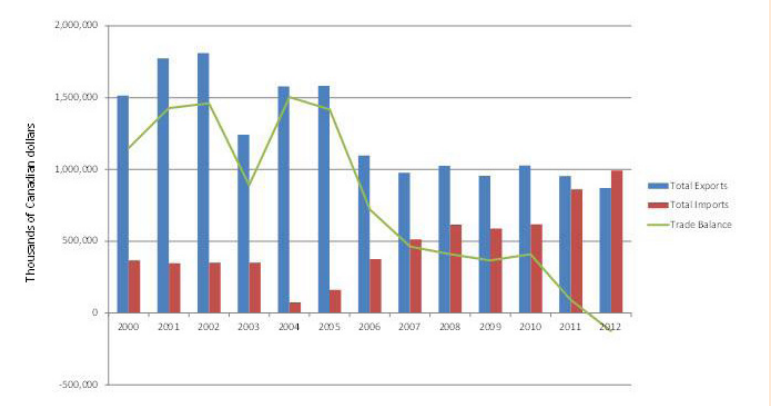
One questionable side effect of the growing importance of the U.S. market for the Canadian livestock industry has been a gradual shift to larger Canadian hogs and cattle in order

Figure 3: Percentage of Canadian Beef and Pork Exports by Value by Destination 2011



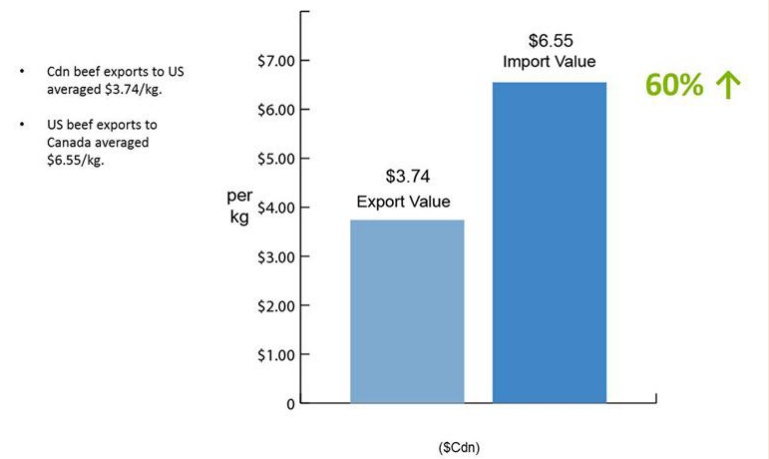
Source: Industry Canada Trade Data on Line

Figure 4: Canada's Beef Trade Balance With the United States



Source: World Trade Atlas, (Does not include tongues, livers or offal)

Figure 5: The Value Differential in Canada-U.S. Beef Trade



Source: Canadian Agri-Food Policy Institute, 2012

to remain in economic alignment with U.S. packer bids. This emphasis on size is quite a departure from the traditional Canadian approach to market positioning which focused on quality rather than quantity when serving export markets.

The Canadian beef industry's historical focus on an integrated North American market and harmonization of product specifications with the United States began to be questioned when Canada actually moved into a trade deficit on beef with the United States in 2012 (See Figure 4).

One upshot of this trade with the United States, particularly in beef, is that Canada is essentially backfilling supply to the greater benefit of the United States (Canadian Agri-Food Policy institute, 2012). Thanks in part to imports of Canadian cattle and beef, the United States has been able to increase its beef exports to several markets, while shipping boxed beef back to Canada at a higher value. In fact, the value of Canadian beef exports to the United States is on average only 60% of the value of U.S. beef exports to Canada. This statistic suggests that the Canadian industry is potentially foregoing significant value-added processing by exporting cattle rather than beef to the United States. Moreover, U.S. beef exports to countries other than Canada have increased by 280% from 2005 to 2011, while Canadian beef exports to countries other than the United States have only expanded by 45% during the same period (See Figure 5).

Unfortunately, the Doha Development Round of multilateral trade negotiations at the World Trade Organization (WTO) has not yet reached a successful conclusion. Nevertheless, the WTO process remains the logically preferred route for pursuing freer trade for a country of Canada's size. Bilateral free trade agreements (FTAs) are now extremely important to Canada because this is the path that others, including the

United States, Australia, and even the European Union (EU), have pursued in the key markets that Canada also shares. The issue which has arisen is the competitive liberalization of bilateral agreements, which bring advantages to one NAFTA member while disrupting and diverting the trade flows of the others. Each bilateral agreement layers on an additional set of rules; for example, around country of origin which has had the consequence of complicating exports from United States packers using Canadian slaughter cattle and hogs and in some cases breaking cross-NAFTA supply chains. Proliferation of such agreements will progressively undermine the value of NAFTA.

US / South Korea FTA and Market Access Concessions

A clear case in point was the United States gaining market access for beef to South Korea in June 2008. The agreement restricted exports to South Korea to beef from cattle under 30 months (UTM) old and fed in the United States for at least 100 days. This seriously complicates the processing of Canadian slaughter cattle by United States packers as it requires significant segregation and tracing capabilities for packers exporting to multiple markets. Beef began being exported from the United States to South Korea in July 2008. The negotiations with South Korea were not conducted using a unified North American front, leaving Canada without an agreement and without market access. Canada was forced to take its lack of access to South Korea for beef to the WTO and only achieved access in the spring of 2012. However, with the U.S.-South Korean FTA by then completed, gaining access for Canadian beef was a pyrrhic victory. Leaders of the Canadian cattle and beef industry initially held back support for Canada's effort to conclude an FTA with South Korea and succeeded in getting the Canadian House of Commons Standing Committee on Trade in its Study of the Canada-Korea FTA to recommend: "That the Government of Canada make any free trade agreement with Korea conditional on restoring access for Canadian beef exporters to the Korean market". Strategically it would have been wiser to vigorously support the Free Trade Agreement and then deal with the access issue via the WTO.

Canada is effectively cut out of the Korean market for beef and pork due to the substantial Korean tariff and the preferential market access enjoyed by U.S. exporters. The continuing effect on Canadian pork exports is disastrous. Canadian pork exports to South Korea dropped by over $100 million in 2012 (Agriculture and Agri-food Canada Hog Statistics at a Glance, Feb. 9 2013) despite help from a Korean duty free period. It is hard to see any of Canada's $233 million in 2011 pork sales to South Korea remaining as the duty gap widens. The Korean situation coming on top of COOL is forcing the Canadian industry to rethink its strategy based around the concept of one North American industry.

Canadian discussions with South Korea have been shelved for several years, but feelers continue in hope of reengaging where the negotiations left off in 2008. If the negotiations are not resumed, Canada' pork industry will remain at a tariff disadvantage to South Korea's top three foreign suppliers of pork: the EU, Chile, and the United States. Similarly, we will write that market off for the foreseeable future. If Canada is unable to close the tariff gap rapidly, we may see Canadian and U.S. meat exports take quite different paths, with the United States gravitating toward markets where it will have an advantage and to some extent away from other markets. This will create opportunity for Canada to become a reliable supplier to those markets where the United States does not have an FTA. The experience of William Davies and his contemporaries, who sought out new market opportunities when trade barriers blocked access to the most logical ones, is once again instructive.

CETA Negotiations

The EU market—with 500 million people and annual economic activity of over $17 trillion—holds significant opportunities for Canada. Canada and the EU are nearing completion of a Comprehensive Economic and Trade Agreement (CETA). The negotiating text is now well-advanced, and the remaining obstacles largely come down to agricultural issues. The Government of Canada has made the CETA negotiations a priority in its international trade agenda. Having missed the original end of a 2012 target both sides remain hopeful of concluding in 2013.

The CETA discussions are important to the Canadian beef industry, as the EU currently applies a 20% tariff on imported beef. However, the discussions are also important for addressing the sanitary issues influencing trade. The EU has now approved North American carcass washes which clears away one of several non-tariff barriers. Depending on the size of the quotas that the EU allows for beef and pork, and what percentage of these quotas are designated for chilled as opposed to frozen product, a Canada-EU CETA could become a catalyst for significant change in the Canadian meat industry. Should the quotas for chilled meat be large enough, they would spur a transition to the production of more hormone-free beef and pork in Canada and begin to differentiate Canadian product from its U.S. counterpart. The economic prospect for hormone-free product is growing in both emerging foreign markets and domestic niche markets.

Canada / Japan Economic Partnership

On March 25, 2012, Prime Ministers Harper and Noda announced that Canada and Japan had initiated work on an economic partnership agreement between the two countries. This initiative is recognized within the Canadian agricultural industry as being critical to success, as Japan is Canada's largest or second largest market for many of its agriculture and food products. Interestingly, it poses no significant issues for Canada's supply managed industries (eggs, poultry, and dairy). There would be strategic advantages for both Canada and Japan finalizing an economic partnership before moving into the Trans-Pacific Partnership (TPP) as both have interests to protect and precedents to establish and both envisage a wider partnership beyond trade negotiations.

Japan has a 40% tariff on beef and a small tariff on pork but a very significant, indirect tariff-like mechanism on imported pork via the gate price on fresh/frozen pork imports. Pork which arrives in Japan below the minimum gate value of $4.28/kg for half carcasses or $6.25/kg for pork cuts is automatically charged the difference to bring the value of the shipment up to the gate price. Duty is then charged in addition to that measure. The upshot is that it encourages the shipment of high valued cuts and penalizes the export of lower valued cuts. Japan also traditionally pays a premium for better meat quality and ractopamine-free pork, making a Japan Economic Partnership Agreement, combined with CETA, supportive of a quality versus quantity strategy.

TPP

In the TPP negotiations, Canada has a similar geographic focus as the United States: Asia. The big question is whether Japan will ultimately enter the TPP negotiations and whether the TPP can really achieve "free trade". In some respects, the TPP is a necessary distraction for Canada, even if it is not successful, because there is a chance that Japan might join. Without Japan, the TPP simply takes time and energy away from more important bilateral agreements that Canada could secure for its agricultural and agri-food sectors. Timing is critical, as other countries are trying to create market advantages, such as the announcement of the Comprehensive Regional Economic Partnership (CREP). This deal would bring together the ten members of the Association of Southeast Asian States (ASEAN) plus New Zealand, Australia, India, China, Japan, and South Korea. For Canada to be at the front of the cutting edge of meaningful improvements in market access for agricultural and agri-food products, a Canada-Japan agreement and the TPP remain important and in that order.

Growth in demand is going to come from international markets outside North America. Beneficial market access to Asia will be vital to the success of the Canadian meat industry. In the absence of a workable multilateral solution, FTAs have become critically important. Key meat importing countries have significant tariffs, and a reduction of tariffs will increase trade and improve the economic welfare of their consumers. Reductions of those tariff rates allow countries with natural advantages and rigorous health and sanitary systems such as Canada to gain market share.

FTAs influence trade, as there is always more than one potential foreign supplier to a country. As it appears today, the United States will gain a larger market share of South Korea. But to do so, the United States is likely to export less to other markets. Likewise, Canada's FTAs will influence its future exports.

The Canadian industry is at a crossroads, as the Canadian Agri-Food Policy Institute's report on Canada's Beef Food System underscores. In the future, Canada may be less willing to see itself as the backfilling partner of the United States and more likely to focus on securing price premiums for its meat exports, along the lines of the industry's traditional emphasis on selling a high quality product, by perfecting its ability to use information collected by its animal traceability systems to focus on the most valuable markets. This approach would essentially take the Canadian beef and pork industry back to its roots, as exemplified by William Davies and his contemporaries more than a century ago. At the same time, Canada will move to offset the Korean disadvantage by securing FTAs with countries where the United States would find it difficult to achieve a similar agreement. A preferable alternative, of course, would be for the NAFTA partners to negotiate trade agreements as one entity and to allow product to flow freely in North America. This approach, which is just beyond our collective grasp, has yet to truly happen.

For More Information:

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Technical Trade Barriers Facing U.S. Meat Exports

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It has become a cliché to assert that the principal barriers to trade in agricultural products since the creation of the World Trade Organization (WTO) are to be found in the realm of sanitary and phytosanitary (SPS) measures rather than traditional border measures like tariffs and quotas, but this is undeniably the case for trade in beef and pork products. Tariffs and, to a much smaller extent, quotas continue to restrict imports into, and depress consumption in, many of the largest beef and pork consuming countries around the globe. In general these measures have the virtue of operating in a relatively transparent and predictable fashion. Moreover, because most tariffs are applied on a most favored nation (MFN) basis they affect imports from all suppliers equally. Sanitary measures applied to beef and pork imports, on the other hand, are discriminatory by their very nature. At one level, this is a natural result of the fact that animal and public health conditions differ among supplying countries. However, because sanitary measures often are not applied in a transparent or predictable fashion, there is considerable scope for countries to use them in ways that are not consistent with their obligations and commitments under the WTO Sanitary and Phytosanitary Agreement. A short but by no means exhaustive list of sanitary barriers facing U.S. beef and pork exports today is sufficient to illustrate the variety of measures in use by major meat consuming countries.

The Continuing Consequences of Bovine Spongiform Encephalopathy (BSE)

The U.S. beef industry's experience with BSE stands as the prime example of the impact that the indiscriminate application of sanitary restrictions can have on global meat trade. In 2003 when the United States reported its first case of BSE it was the largest beef exporting country in the world. Overnight, after the first case was announced, countries around the world closed their borders to U.S. beef. Since then the U.S. government together with the industry has pursued a sustained effort to negotiate the restoration of access for U.S. beef and repair the damage that was done to the image of the United States as a beef producing country. Notwithstanding these efforts, the value of lost beef exports over the last nine years is estimated at $15.0 billion and in 2011, exports finally returned to their 2003 level. Contrary to the guidelines of the World Organization for Animal Health (the OIE), most beef importing countries still maintain restrictions on imports from the United States, and China and Australia, among others, ban U.S. beef entirely.

Given the damaging and precedent-setting nature of the U.S. experience with BSE it is worthwhile to ask what the U.S. beef industry has learned from this episode in its history. The list of lessons is long and has had a profound impact on the way the industry thinks about and approaches the export side of its business. At the top of the list is a much greater appreciation for the value of exports to the industry's long-run health. Along with this also came a clear understanding for many in the industry of the vulnerability that is an inherent part of relying on exports to account for a growing share of production.

Beyond these valuable and sobering lessons the industry also gained some useful insights into the realities of agricultural trade in this era of intensive reliance by importing countries on sanitary measures as the preferred means of

restricting imports. For example, the last nine years have shown that having science on your side is a necessary but not a sufficient condition for prevailing in trade disputes that revolve around sanitary measures. Similarly, the BSE experience has shown that a strategy for resolving these disputes that relies primarily on the relevant international standard is likely to fall short in a world where countries, including the United States, are sometimes selective in their adoption of those standards.

The beef industry's long and painful experience with BSE also has reinforced the established fact that countries typically take a very long time to reverse the decision to close their markets to imports. One of the hardest lessons to learn for all countries that have found themselves locked out of markets is that, once markets close, the dynamics of the importer-exporter relationship changes. The importing country is now in the position of setting the terms under which it will reopen its market, and the exporting country has very little, if any, leverage to use in asserting its rights and making arguments for the safety of its products.

When this new dynamic becomes established, importing countries typically prefer to reduce their import restrictions and re-open their markets in a series of steps rather than fully restore access in a single grand gesture. A corollary to this is that, a market-opening negotiating strategy by the exporting country that takes an "all or nothing" approach is likely to produce an impasse. That leaves the importing country's market closed and both countries dug in behind seemingly irreconcilable positions.

Finally, the BSE experience has reinforced to the industry and the U.S. government the truth of the well-known adage that in trade agreements, as in all international undertakings, "the devil is in the details." For this reason it is critically important that governments negotiate the terms of technical trade agreements in close consultation and coordination with experts from the affected industry to ensure that the resulting protocols are consistent with, and supportive of, commercial practices.

Conflicts over the Role of Beta-Agonists in Production

The European Union (EU) is perhaps the obvious place to start any discussion of trade restrictive standards for meat, since it has achieved an unparalleled level of notoriety for adopting and maintaining measures that are inconsistent with the scientific evidence on the health risks associated with certain production technologies. Notable among the EU's restrictions are its ban on the use of hormones and beta agonists in cattle production and its ban on the use of beta agonists in swine production. Beta agonists are a class of compounds that includes some products that are widely accepted as safe (e.g., ractopamine and zilpaterol, both of which are approved in the United States and a number of other countries) and others like clenbuterol that are recognized as dangerous and are banned in most countries. Ractopamine and zilpaterol are feed additives that are used to increase feed conversion efficiency in cattle and pigs.

Beta-agonist and hormone bans in beef and beta-agonist bans in pork by the EU stem from the application of the so-called "precautionary principle," which it has used to justify bans and restrictions on a number of agricultural production technologies. As applied by the EU, the logical and prudent concept of caution has been transformed into a justification for maintaining restrictions on certain food production processes. These processes are considered, on the basis of what it judges to be inadequate evidence to the contrary, to carry unacceptable risks to human or animal health or the environment.

Despite its bans on hormones and beta agonists the EU has maintained a high level of self-sufficiency in beef and pork. This has been possible only because of high tariffs, restrictive quotas, and an expansive structure of domestic supports that result in European consumers paying some of the highest prices for their food of anyone in the world.

If the EU maintains some of the world's most notorious sanitary measures for beef and pork, Russia, as one of the newest members of the WTO, has a long way to go to bring its standards for meat into compliance with its new international obligations and commitments. In addition to its zero tolerance for the presence of residues of beta agonists in beef and pork, Russia maintains similar trade restrictive and non-science-based standards for tetracycline residues, food-borne pathogens, and slaughter plant hygiene. Unlike the EU, Russia is far from achieving self-sufficiency in beef or pork and will continue to rely heavily on imports to meet growing consumption levels for the foreseeable future as the middle class expands and meat becomes a larger part of the Russian diet.

Although China has been a WTO member for more than ten years, its track record for bringing its sanitary measures for beef and pork into compliance with the requirements of the SPS Agreement is, at best, mixed. Like Russia, China maintains a zero tolerance for the presence of residues of hormones and beta agonists in beef and pork and applies trade restrictive, non-science-based standards for food-borne pathogens in meat.

The Intersection of Science and Safety

Last summer the Codex Alimentarius Commission, the international standard-setting body for public health, adopted maximum residue limits (MRLs) for ractopamine residues in beef and pork and agreed to launch

the standard-setting process for zilpaterol. This came after five years during which the EU, with the support of a number of countries including Russia and China, had blocked the adoption of a Codex standard for ractopamine. The EU's opposition to the Codex MRLs was not based on any defensible scientific arguments but instead stemmed from the application of its policy on the use of agricultural productivity-enhancing technologies. According to that policy, the EU will actively work to block the adoption of international standards that recognize the safety of technologies that it has banned, even if its bans are not supported by scientific risk assessments. This policy is itself an extension of the precautionary principle, which has guided many of the EU's most controversial domestic production standards, into the realm of international standards and trade.

As noted above, the EU is not alone in restricting the use of beta agonists; Russia, China, Taiwan, and Thailand also apply restrictions to their use domestically and in meat imports. This group of countries was joined by many others in opposing the adoption of the MRLs for ractopamine by the Codex, and the final vote was extremely close (69 countries for adoption and 67 against). The EU, Russia, and China have all disavowed the outcome of the Codex process and have proclaimed their intention to maintain their restrictions on the use of ractopamine domestically and on residues in meat imports. Under the terms of the SPS Agreement WTO member countries are not required to adopt international standards, but if they apply more trade restrictive standards they are required to support these standards with a scientific risk assessment. None of the countries that currently maintain restrictions on ractopamine have met this WTO requirement.

The current impasse over beta agonists and ractopamine in particular poses a number of especially difficult challenges for the U.S. beef and pork industries. Ractopamine and zilpaterol have been widely adopted by cattle feeders and pork producers in the United States, and most of the beef and pork produced in this country comes from animals that have been fed one of these feed ingredients. On the other hand, most of the other beef and pork exporting countries in the world either have not approved ractopamine or zilpaterol or have provided importing countries where the products are restricted with guarantees that they will not export beef and pork to them from animals that have been fed one of these compounds.

For the U.S. beef and pork industries, losing access to important export markets like Russia and China would come at a high cost. However abandoning the use of beta agonists to meet these countries' requirements could drive up production costs enough to undermine the industries' capacity to compete in these same markets. More fundamentally, agreeing to meet Russia's or China's restrictive policies on beta agonists would represent a retreat from the commitment to science and technology that has fueled the growth in U.S. agricultural productivity over the past 75 years. The beef and pork industries have been at the vanguard of this drive to adopt safe, effective technologies as they have received regulatory approval and have been brought to the U.S. market. Both industries clearly recognize what they would give up in increased efficiency and improved competitiveness in global markets if they agreed to back away from their commitment to technologies like ractopamine and zilpaterol.

The ractopamine vote in the Codex and the deepening dispute over how to regulate the use of this compound highlight a growing divide between countries that have made a commitment to technologically-intensive agricultural production systems and those that have not. If the reservations held by the latter group of countries only manifested themselves in regulations that they apply to their domestic agriculture industries, their policies would not put them at odds with the other group of countries. Nor would they find themselves out of compliance with the obligations and commitments they have taken on as members of the WTO.

But the EU and the group of countries that opposed the MRLs for ractopamine in the Codex are actively pursuing policies that are designed to go beyond their own borders and blunt the spread of innovation and the development of new, safe, productivity-enhancing technologies. This should be a source of very serious concern for anyone who is thinking about how the world is going to achieve food security for our expanding population in the next 30-40 years. The United States, the European Union, and the other countries at the forefront of this debate have a shared responsibility to find a way to bridge their differences and come together behind a program that will draw on all available, safe agricultural productivity-enhancing technologies to feed our hungry planet in the years ahead.

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Expanding the U.S. Pork Industry Through FTAs

Alfred Breuer

JEL Classification: F13, N50, Q17
Keywords: Agricultural Trade, Free Trade Agreements, WTO Uruguay Round

Pork is important around the world as evidenced by reactions as recently as 2012 when bacon lovers nearly took to the streets with rumors of global shortage. Even heads of state like Cristina Kirchner, president of Argentina, understand the importance of pork. While Argentina has the highest per capita beef consumption, Kirchner publicly lauded the sexual benefits of pork consumption. In China, where pork has become a staple food, the consumer price index is often referred to as the China Pork Index (Rabobank, 2012). With global pork consumption at more than 100 million metric tons (MT), pork is the No. 1 consumed meat in the world (USDA PSD, 2012; FAO-Animal Production and Health: Sources of Meat, 2012).

Only a small number of countries/regions account for over 90% of global pork production. China leads all nations, producing over 52 million MT, over half of global production, followed by the European Union (EU) at 22 million MT, the United States at 10.4 million MT, Brazil at 3.3 million MT, Russia at 2.1 million MT, and Canada producing 1.8 million MT (FAS-Livestock and Poultry: World Markets and Trade October 2012, 2012). Now a good deal of the world's demand falls outside the borders of these producers, and many countries must import pork to satisfy demand. Today, the United States is supplying a large portion of this demand.

Over the years the U.S. pork industry has adopted a number modern production practices and technologies and numerous biosecurity measures. As a result, the U.S. pork industry has become one of the lowest cost producers of safe, healthy pork, which, in part, has led to the United States becoming the number one pork exporting country in the world. Others have claimed this title, but those claims have since faded.

Today, U.S. pork exports generate significant value for the U.S. pork industry and the U.S. economy. In 2012, U.S. pork exports reached a record level of over $6.3 billion. According to the U.S. Department of Agriculture (USDA), each $1 billion of exports in animal production supports approximately 17,200 U.S. jobs (USDA ERS, 2012). At 2012 levels, U.S. pork exports supported nearly 110,000 U.S. jobs. In addition to U.S. jobs, U.S. pork exports have a positive impact on pork producer's bottom-line, adding $55 of value to U.S. live hog prices in 2012. Recent analysis shows U.S. pork exports account for $10.6 billion dollars of agricultural output and $1.8 billion dollars of national income (Hayes, 2012). The fact that over 95% of the world's population resides outside of U.S. borders, and U.S. pork consumption has remained flat, further confirms the growing importance of exports to the U.S. pork industry.

Becoming the world's largest pork exporter did not happen overnight. It has taken an aggressive trade policy agenda that fights for the reduction of tariffs and nontariff barriers though free trade agreements (FTA). Simply, you cannot sell where you don't have access.

NAFTA and the Uruguay Round

In 1995, for the first time, the United States became a net exporter of pork and since then it has not looked back. The U.S. pork industry's early export success came in large part from both the North American Free Trade Agreement (NAFTA) and the Uruguay Round Agreement on Agriculture.

In the early 1990s, NAFTA was a controversial issue, and still today some cast doubts on its overall success. However, for the U.S. agricultural sector NAFTA has been a resounding success. Since 1993, the year before implementation of NAFTA, the value of U.S. agricultural exports to Canada have increased by 287%, while exports to Mexico have seen an increase of over 400%. Under NAFTA, the U.S. pork sector, that obtained a ten-year phase out of tariffs and a significant reduction in nontariff barriers, has achieved high levels of exports to Canada and Mexico. Once an inconsequential market for U.S. pork, Mexico now ranks, in 2012, as the second largest value market for U.S. pork exports, valued at $1.13 billion, and the largest volume market, over 600,000 MT exported, a rate increase of 530% since implementation. Mexico alone now accounts for over 20% of total U.S. pork exports and approximately 4% of U.S. pork production. U.S. pork exports to Canada, as part of NAFTA and previously under the United States-Canada FTA, have grown to over 230,000 MT from just under 7,000 MT in 1989, placing Canada among the top five pork markets.

In tandem with NAFTA, the Uruguay Round provided significant market access for U.S. pork products to many new markets, like Japan, now the number one value export market for U.S. pork, by addressing more than simply tariffs. In the case of agriculture, the Uruguay Round addressed market access issues ranging from permitted levels of domestic subsidies to new rules on sanitary and phytosanitary (SPS) measures—actions taken by governments to protect human, animal and plant health. At the core of these new SPS rules was the requirement that SPS measures be supported by sound science (WTO, 2012). Often governments, in lieu of tariffs, turn to non-science-based SPS measures/barriers, a form of nontariff barriers, to limit imports of sensitive products to protect domestic industries. As part of the Uruguay Round Agreement on Agriculture, countries were to remove trade restrictive non-science-based SPS barriers and set bound tariff rates—maximum level of tariffs—along with a phase-in period, ranging from six to ten years, depending on the defined level of development of a certain country, to gradually reduce tariff levels (FAS-FACT SHEET: Sanitary and Phytosanitary Measures and the World Trade Organization, 2006). As a result, the U.S. pork industry saw steady growth in pork exports during the phase-in period, 1995 to 2004.

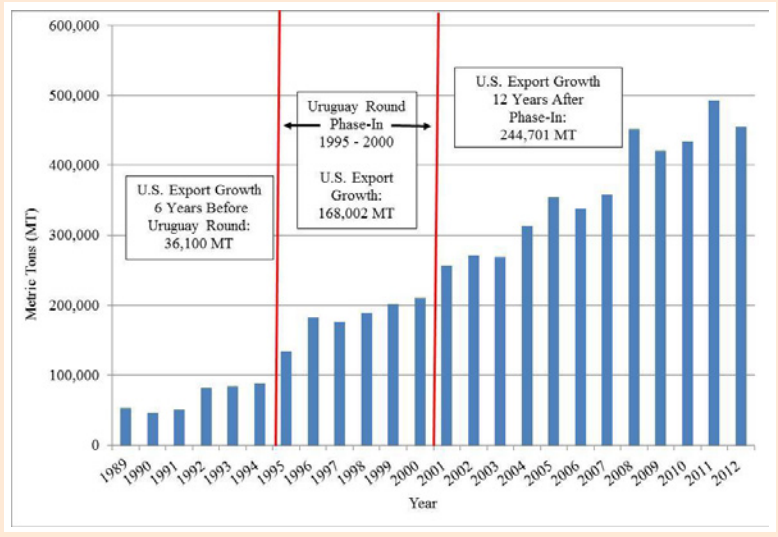
The Uruguay Round and its six-year phase-in period provide a strong example of what the reduction of trade barriers can do for exports. In the six years prior to the implementation of the Uruguay Round, U.S. pork exports to Japan, for example, grew by a little over 36,000 MT, then during the six-year phase-in period, U.S. pork exports increased by more than 168,000 MT. Since the end of the phase-in period, U.S. pork exports to Japan have increased by an outstanding 245,000 MT. U.S. pork exports to Japan, in 2012, reached over 455,000 MT, valued at over $1.9 billion.

Continued Expansion of U.S. Pork Exports

By 2004, NAFTA had eliminated all Mexican and Canadian tariffs on U.S. pork, and the Uruguay Round had significantly reduced tariffs on U.S. pork, globally. Also at this time the United States began implementing a number of new FTAs. Of the 20 countries the United States has FTAs with today, 13 entered into force between 2004 and 2011. During this eight-year period U.S. total pork exports as a percentage of production jumped from around 10% to 27%.

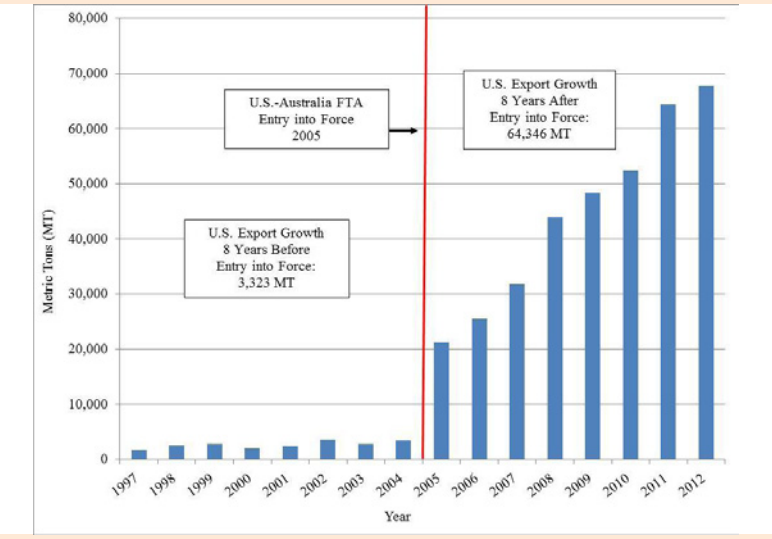
Like under NAFTA, U.S. pork exports expanded rapidly to 10 of these new markets. Among these markets with the most significant U.S. pork export growth was Australia, which in the eight years following implementation saw U.S. pork exports grow by over 64,000 MT. This compared to the small growth of a mere 3,300 MT in the eight years prior to implementation. For the Chilean market the U.S. actually saw negative growth before entry into a FTA. In the nine years

Figure 1: U.S. Pork Exports to Japan



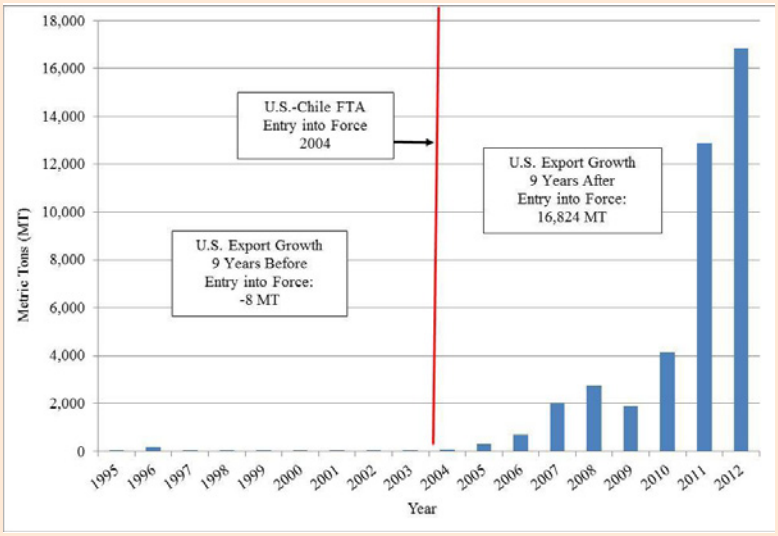
Source: Global Trade Atlas

Figure 2: U.S. Pork Exports to Australia



Source: Global Trade Atlas

Figure 3: U.S. Pork Exports to Chile



Source: Global Trade Atlas

since, the United States-Chile FTA has taken an insignificant market, in terms of export volume, and increased them by almost 17,000 MT.

South Korea, Colombia, and Panama FTAs

FTA negotiations were completed and agreements signed with South Korea, Colombia, and Panama in 2006 and 2007. Unfortunately, these agreements were destined to remain stalled for almost five years when the United States could not come to an agreement on a path toward implementation. Passage of these FTAs would not come until 2011, and only after lingering issues of autos, labor rights, and tax havens were ironed out.

While the United States delayed implementation of the South Korea, Colombia, and Panama FTAs, other competitor nations were actively pursuing FTAs with these countries. In the past, proponents of FTAs expressed the benefits of trade in potential increased exports and new domestic jobs, however, this time around there was a new message. It was one of urgency that free trade agreements are not only essential to expand market access and stimulate an economy, but also to remain competitive and maintain market share. To stand idle is to move backwards, many would say. The U.S. pork industry and the South Korean market provide a good example of what could have been lost by inaction.

The United States and South Korea had developed a strong trade and investment relationship in the absence of a bilateral free trade agreement. South Korea had become a top market for U.S. pork largely due to the Uruguay Round and the U.S. pork industry's position as the low-cost producer. In 2010, the United States exported nearly $190 million in pork products accounting for 30% of South Korea's pork import market share. Though the countries had extensive ties, South Korea's robust trade agenda kept it moving forward. In 2011, South Korea had already concluded or was negotiating FTAs with Chile, Australia, New Zealand, Canada, China, and the European Union, among many others.

As the U.S. pork industry's top competitor, the EU was the greatest threat to maintaining established market share. In a scenario that assumed implementation of an EU-Korea FTA coupled with an unimplemented United States-Korea FTA, Iowa State University economist Dermot Hayes projected U.S. market share to fall by 3% per year, ultimately eliminating the U.S. from the Korean market within 10 years. The employment and financial costs of

such a loss to the U.S. pork industry would have been severe, not to mention to the negative impact to the U.S. economy. Similar scenarios were projected for the Colombian market with respect to the Canada-Colombia FTA. Fortunately, in 2012, these potential crises were averted when all three FTA entered into force.

Pork Market Access in the South Korea, Colombia, and Panama FTAs

For pork producers the market access obtained in the United States-Korea FTA made it by far the most significant FTA since NAFTA. Prior to implementation of the U.S.-Korea FTA, the majority of U.S. pork exports, frozen pork and processed pork, were subject to tariff rates of 22.5% and 25%. Typically, FTAs have phase-in periods for tariff reduction, but under the United States-Korea FTA a date specific tariff reduction was negotiated. In 2016, regardless of the implementation date, all tariffs on frozen pork and some processed pork products will be eliminated. As a result of increased market access, the United States-Korea FTA is projected to generate, within 10 years, an additional $687 million in U.S. pork exports, annually, increase U.S. live hog prices by $10 and create over 9,100 U.S. jobs.

A ten year projection for the Panama FTA, the smallest of the three FTAs, but no less important, has U.S. pork exports reaching $16 million, annually.

Favorable market access terms in the Colombia FTA will enable U.S. pork exports to reach $160 million, annually, within 10 years, including $50 million alone due to the removal of one non-science-based SPS barrier. This $50 million impact reveals just how costly SPS barriers have become. Addressing these SPS barriers has become of key importance to the U.S. pork industry, especially as the United States continues negotiations with the countries of the Trans-Pacific Partnership and enters into trade talks with the European Union.

The Future of U.S. Pork Exports

Continuing its expansion of FTAs and exports, the United States has now turned its focus to the Asia-Pacific region and the European Union. For the U.S. pork industry these markets hold enormous potential for increased exports. Many Asia-Pacific countries are now experiencing rapid growth, and as incomes rise, so will the demand for pork and other meats, some of which we have already seen in recent years. The European Union represents a market of 450 million mostly affluent consumers with domestic pork consumption in excess of 20 million MT (PSD, 2012). Unfortunately, U.S. pork exports are inhibited to these regions by tariffs and numerous SPS barriers. FTAs with these regions represent the best opportunities to remove all barriers.

Trans-Pacific Partnership

The Trans-Pacific Partnership (TPP), touted as a high-standard 21st-century agreement, is an Asia-Pacific regional trade negotiation that includes the United States, Australia, Brunei, Canada, Chile, Malaysia, Mexico, New Zealand, Peru, Singapore, and Vietnam. Although the United States has completed FTAs with six of the negotiating countries, and tariff reductions are already underway, the real payout for the U.S. pork industry will come from the elimination of all non-science-based SPS barriers on U.S. pork. Of the participating countries, Vietnam offers the most potential for expanding U.S. pork exports. To put this potential demand into perspective, Vietnam's domestic pork consumption is 1.8 million MT a year, greater than Mexico, which is currently the largest volume export market for U.S. pork. (USDA PSD, 2012)

Transatlantic Trade and Investment Partnership

This year, the United States and the European Union are set to begin negotiations on a transatlantic free trade agreement. Fortunately, both sides have agreed that agriculture will be included in negotiations, which is a welcomed change as the vast majority of the EU's trade agreements exclude agriculture. An agreement that includes agriculture, however, does not assure significant new access for U.S. pork and other U.S. agricultural products. Tariffs and nontariff barriers must be addressed and removed for the U.S. pork industry to benefit. The United States and the European Union have drastically different philosophies when it comes to agriculture production and regulation. These differences have led to a laundry list of barriers to U.S. pork, restricting exports to fewer than 8,000 MT, less than total U.S. pork exports to some small Central American countries. In addition, these differences in philosophy have led to a contraction in agriculture production and have increased the cost of food within the European Union. The inclusion of agriculture and the successful reduction in current barriers will open the second largest pork consuming market to high-quality, low-cost U.S. pork products.

U.S. Free Trade Agreements: The World's Path to Healthy Affordable Pork

There is a clear and strong correlation between the increase in U.S. trade agreements and increased U.S. pork exports, adding value to the overall U.S. economy and the pork producer's bottom-line. Just as important as the economic benefits trade agreements provide, will be the role they play in providing healthy affordable U.S. agricultural products, like pork, to a growing world population. If the U.S. pork industry is to remain the low-cost producer and meet world

demand for affordable high-quality protein, it must continue to be vigilant in maintaining a level playing field through past and future trade agreements.

For More Information:

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Export numbers for United States' pork exports were sourced from Global Trade Information Services' Global Trade Atlas and the USDA Foreign Agricultural Service's Global Agricultural Trade System. Available Online: http://www.fas.usda.gov/gats/default.aspx

All market potential for pork exports was developed through analyses conducted by Dermot Hayes, Pioneer Hi-Bred International Chair in Agribusiness, professor of economics, and professor of finance at Iowa State University.