

# A Global Perspective on Pork Industry Competitiveness

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## ■ Introduction

Since the profit equation is the primary driver of resource allocation and investment, one need look no further than the main components of the profit equation to begin understanding competitiveness in any industry. It is well understood that profits are nothing more than revenues minus fixed and variable costs so competitiveness is effectively wrapped up in the myriad of factors that determine and drive revenues and simultaneously, determine and drive production costs. For some in the industry, a singular focus on live animal cost of production (COP) seems to be the extent of their consideration of competitiveness. Such a view could be a business trap! What I want to demonstrate is that live animal COP, while highly significant, is but one of many factors that will ultimately determine a specific industries ability to survive and prosper in the global market place. The focus for my remarks will be on North America in general and how Canada fits in with the United States in a global manner.

## ■ Competitive Drivers

Sparks Companies, Inc, spent the first half of 2003 conducting a major study for about twenty livestock and meat industry stakeholders. We analyzed the beef, pork and poultry industries in each of the major producing and consuming countries in the world in an attempt to fully understand the full range of cost and revenue factors that has resulted in today's industry. For the pork sector, the analysis was broad based; economic, political, social and cultural factors were all considered in terms of their impacts on various key countries hog and pork sectors. In aggregate, consideration was given to 34 different factors that we

determined had varying degrees of influence on pork industry competitiveness. **Table 1** summarizes the key factors analyzed.

**Table 1. Competitiveness drivers: Livestock and Poultry**

	<b>Driver</b>	<b>Importance</b>
1	Feed availability and cost	High
2	Other inputs availability/cost/regulations	High
3	Herd/flock productivity	High
4	Production scale	High
5	Genetics/quality	High
6	Disease control/animal health infrastructure	High
7	Animal Welfare	Moderate
8	COOL (Country of Origin Labelling)	Moderate
9	Water/air quality regulations	Moderate
	<b>Live COP (cost of production)</b>	<b>High</b>
10	Packing industry scale/investment/branding	Moderate
11	Processing cost	High
12	Transportation/handling infrastructure/cost	Moderate
	<b>Product COP</b>	<b>High</b>
13	Domestic market size/growth/sophistication	Moderate
14	Macro economy/interest rates/capital costs	Moderate
15	Exchange rate	Very High
	<b>Product Net Returns</b>	<b>Very High</b>

When one looks down through this shortened list of competitiveness drivers, it becomes immediately clear that some variables lend themselves to objective, quantifiable measurement while many do not. Feed availability and cost, in most cases, can be measured, as can other key input variables. Herd productivity measures exist for key hog producing countries but for many, that information does not exist other than on a highly proprietary and confidential basis. You also run into problems of comparing apples to apples when looking at different countries data and measurement of key productivity variables not to mention entirely different production systems in some parts of the world, such as South Asia where backyard production is still very prevalent. Quality of hogs

produced can be measured but the true “value” of the animal may be different in one country as compared to another due to consumer tastes and preferences.

There exists a host of what we called “social factors” that either are or will soon become major competitive drivers in the pork industry. Environmental issues (as it relates to air and water pollution) are of high importance and the regulatory burden imposed on the pork industry in various countries ranges from little to none, on one extreme, to highly constraining and costly at the other end of the spectrum. In many cases, the requirements that have been imposed on animal agriculture from regulatory bodies have virtually eliminated any prospect for further growth in such jurisdictions. The cost of compliance to certain regulations precludes the venture from even moving forward.

Animal welfare is becoming another one of these “social” or “cultural” factors that is adding costs to some production systems but not to others. The list can go on and on but in essence, what has and will continue to evolve is a more and more restrictive set of operational requirements all of which tend to add costs to the production system and most of which do not add any value or revenue to the business. For those countries/regions that are in this position, their competitiveness vis-à-vis those that are not is diminished.

While many of the factors that determine hog sector competitiveness are micro in nature; that is, impact specific input or production costs/revenues, there are many that are macro in scope. In particular, general economic features of a country/region can have huge impacts and of course, exchange rates are of significant importance from a trade perspective. How large the domestic market is (its’ population), how wealthy, the age profile of consumers, etc., etc. all come into play. In short, competitiveness is complex from a conceptual perspective and extremely difficult to objectively or even subjectively measure from a practical point of view.

## ■ **Where’s the Competitive Advantage?**

Notwithstanding all the known limitations, Sparks did attempt to develop as much hard, factual information as possible on key global pork industry players. When data did not exist or could not be found, a subjective evaluation of relative importance of the variables across borders was made. The complete results of our evaluation are proprietary to the participants in the study so I’ll only be able to discuss some of the key findings. I think of prime importance to producers is how Canada rated in the area of live hog production and of secondary importance is how Canada rated when all segments of the pork supply chain were taken into consideration.

At the live animal levels, we looked at seven factors that we believed reflected key competitiveness drivers for hog production. The core land base of a country is important as it relates to the capability of providing to the hog production sector ample supplies of grain and protein meal at competitive costs. Other factors such as hog weights (which are tied to both genetics and management) and sow herd productivity were evaluated and compared across key producing countries. An evaluation of relative labour costs and industry and market structure was performed, as was an assessment of a country's hog disease status. A weighting system was designed to measure the relative impacts of the different live animal COP factors and then countries were rated on a scale from +5 to -5 with the center pivot point being our assessment of the US industry. A country that was scored positive on a factor meant that that country had a competitive advantage to the US while a negative scoring reflected a competitive disadvantage.

It should be noted that Canada was the only country that the study team identified as having an aggregate index score on live animal COP above the United States. While the assessment reflected slight negatives for hog weights and feed costs, all other factors evaluated were positive to the US industry. Chile, Brazil and Australia were all identified as countries that could potentially be major competitive threats to North America and long term, several countries in Central Europe have potential although that potential will likely remain untapped for at least the next 5-10 years. Bottom line, good news for Canada in terms of core production costs.

Based on my earlier remarks, it is obvious that one cannot end the investigation into competitiveness at the live animal level. An evaluation of the entire supply chain is required as is an evaluation of a country's overall economic situation, social issues, exchange rates and the like. Such an evaluation was performed on the key global pork producing countries and some interesting observations can be made. One very important component of pork sector competitiveness is the scale and efficiency of the processing and up stream distribution and merchandising sector. In all cases, no country was found to be superior to the US in terms of slaughter, processing and up stream distribution. Canada was probably the closest competitor to the US with Chile and the EU not too far behind. Much of the advantage that the US seemed to have in terms of the efficiency of the supply chain was lost when an evaluation of exchange rates and government policies were considered. Both the US and Canada are at extreme disadvantage in the "social costs" area because various environmental and animal welfare burdens have and will continue to be imposed on both US and Canadian supply chain participants. While very difficult to measure, these costs are real and they are significant. At this point in time, only Japan and the EU are more burdened than are the US and Canada.

In an aggregate sense, our assessment of pork industry competitiveness resulted in Canada remaining at the top of the heap but the overall advantage

over the US was relatively slim. While we have not updated our model in the past several months, my guess would be that just the strength in the Canadian dollar since late last year has been enough to bring the US and Canada into balance. Should the Canadian dollar appreciate beyond 75 cents US, we would perceive the competitive advantage shifting to the US. Brazil, Chile and surprisingly, the EU are still long term formidable competitors to North America. The EU must rely on highly restrictive import policies and continued heavy government support to stay close with the other countries that currently lead the way because of highly productive and efficient industries.

## ■ Conclusions

As a result of our detailed assessment of the global pork industry, Sparks came up with several key findings/conclusions:

- The US swine industry is quite mature and can expect a smaller breeding herd in the future. Slaughter volumes will level out at roughly 100 million head and the country will remain as a small net exporter.
- Canada appears to have strong growth potential and especially as its processing sector catches up to efficiencies currently in existence in US operations. Live hog production will remain highly competitive.
- The outlook for both the US and Canadian industries is currently clouded with uncertainties surrounding the implementation of COOL legislation in the US. Disrupting the strong linkage between the US and Canada would probably have negative impacts on both industries.
- Canada should emerge as the clear leader in pork exports over the next decade with most of the growth occurring in the next 5 years. Beyond that, the global pork industry will be much more mature with aggregate growth rates declining which in turn will slow down the rate of global trade growth.
- Brazil could emerge as a major pork competitor but will need to overcome several internal hurdles to become a long-term sustainable competitor in the global marketplace. In the short term, the lack of social costs and a very advantageous exchange rate are huge advantages for the Brazilian industry. Achieving Foot & Mouth Disease (FMD) free status would be a big boost to Brazil's pork industry; until then, FMD concerns will act as a constraint on investment within the country.