GEORGE MORRIS CENTRE

Canada's Independent Agri-Food Think Tank

Canadian Pork Industry Issues and Challenges

Prepared for: Canadian Pork Council

Attention: Martin Rice

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Executive Summary

The Canadian pork industry, from producer through packer, is at a critical point in its evolution. Pending decisions and stated intentions by the two leading pork-packing companies in Canada have placed the industry at this critical point. In addition, smaller firms across the country have gone through closures, changes in ownership, and difficult labour disputes. The two leading packers have made decisions or have begun to make plans that have major ramifications for the entire industry. Moving forward, the industry faces at least two possible paths. One will result in rationalization due to the packer actions, while the other path involves taking advantage of opportunities created by the packer actions.

Regardless of the path that is eventually taken by the industry, it is important to realize how the Canadian pork industry and, in particular, the packing sector evolved to this critical point in its development. The industry needs to have these factors enunciated and understood before it can move forward.

The bulk of this project deals with Canada's issues, challenges and disadvantages regarding pork production and packing. Before beginning that task, however, it is worthwhile to review Canada's strengths in pork production:

- Canada has greater availability of fertile arable land relative to human and animal requirements; better animal health; a climate that is conducive to hog production efficiency; less intrusive production; and abundant and clean water.
- Most of the industry has a mature and efficient production and marketing infrastructure and logistics system.
- The management and entrepreneurial foundation of the industry is proven and successful. The scientific and research base is renowned as a world leader.
- Most importantly, the pork and most of the hog marketing business climate is based on supply-demand pricing, as well as open competitive markets and good access to the US and world markets.

Issues and Challenges

Hog Production

The Canadian hog and pork industry is struggling with competitive tests throughout the supply chain. The following are some of the key factors at the producer level:

1. Lagging feed grain productivity relative to the United States
2. Declining feed grain acreage
3. Higher cost feed grains relative to the United States.
4. Higher cost of feeding hogs relative to the United States.
5. Significantly higher sow productivity in Canada relative to the United States.

The net result is that when all the components of production are compared, based on the George Morris Centre hog cost of production model, it is reasonable to assert that a typical prairie hog operation could have total costs that are about C$5-10/head higher

than its counterpart in the US mid-west. The situation would be at least as difficult in Ontario or Eastern Canada. This differential, in turn, plays a material role in lagging hog production profitability between Canada and the US.

The first objective of this project was to assess the trends in the key drivers of costs at the producer level in Ontario and the Prairies relative to the US. In that regard, it is readily apparent that the trends have been working against Canadian hog production to the point where the industry finds itself at a material competitive disadvantage. The order of magnitude of that disadvantage will vary greatly depending on operations, but it is not out of order to generalize that the production sector is fighting from at least a $5/hog disadvantage compared to the US mid-west.

Labour

Canadian livestock production and packing is facing a mounting labour shortage. This shortage has been brought on by many factors including an aging work force, a dramatic reduction in local youth enrolling in agriculture related programs/farm careers, and an inability to compete in the labour market with other sectors. This new labour environment is directly impacting hog production and packing from coast to coast.

The Canadian pork packing industry faces many challenges but the lack of labour is arguably the most significant. Depending on methodology, it is very straightforward to assert that labour availability is costing the Canadian pork packing industry $600 million to $1 billion per year. (See section 4.0) Furthermore, when the packing industry suffers due to this or any other challenge, the ramifications are felt directly by producers as well.

The meat industry needs the federal government to make changes to its Foreign Worker Program. The legislation needs to be changed to facilitate the more rapid entry of workers in sectors where there are labour shortages. As noted by the Canadian Meat Council in its Submission to the House of Commons Standing Committee on Finance Pre-Budget Consultations for 2006, this includes: a simplified, efficient process to get workers into the country; an approval process that unions/competitors cannot block; and a clearer process for foreign workers to eventually become permanent residents. Further to that point, the most important change needed is to increase the period of time that foreign workers can stay in Canada to at least 18 months.

International Trade

The following are some of the key reasons why international trade is crucial to the success of the Canadian pork industry:

- Pork exports have been the driver of the exceptional growth of pork production in Canada
- Canada is a world leader in pork exports (Figure 12).
- Canada has diversified its export markets to over 100 countries and is increasingly less dependent upon the US market.
- Pork export demand has been rapidly growing while domestic demand has been stable.

- Pork exports of $2.8 billion in 2005 are responsible for economic activity amounting to $7.7 billion and 42,000 jobs.
- Pork exports support the incomes of about 6,000 farmers and about $2 billion in farm cash receipts.
- Premiums derived from the export market due to value differences in those markets could result in enhanced producer income of up to $9/hog.

Looking to the future, the Food and Agricultural Policy Research Institute specializes in longer term macro economic forecasting. In that regard, FAPRI sees pork trade increasing by 2.4% annually by 2015. Over that period of time, the market share of the enlarged EU drops by 3.3 points by 2015. Canada, the US, and Brazil gain 1.9, 2.7, and 4.2 points of market share, respectively.

The FAPRI analysis shows that the world's leading pork producers, including Canada, will continue to grow and compete for share in world markets.

The main message garnered from FAPRI, however, is that the major import markets will remain very strong, growing markets for the world's pork producing countries. This means that the export market will continue to grow and be a source of dynamic change. The export market will always be exceptionally competitive. At the same time, however, the FAPRI research suggests that the export market will not be a zero-sum game. That is, growth amongst competitors will not necessarily be at the expense of competitors.

Pork Packer Issues and Challenges

The Canadian pork packing industry is now the focal point of industry competitiveness. The sector is in the midst of large scale restructuring and rationalization. In order to understand why this is occurring and where the industry is likely heading, it is necessary to understand some of the key drivers in the industry. The following points are key pork packing plant characteristics that determine successor or failure of plant operations.

- Scale economies
- Plant location/utilization
- Labour costs
- Hog Weights
- Credits

The Canadian pork packing industry appears to be at a competitive disadvantage across a range of critical success "drivers." Each Canadian plant can vary in terms of advantages and disadvantages so it is not prudent to add each of the items together to derive an average Canadian shortcoming. Within that context, however, there is little doubt that there are real, measurable weaknesses facing Canadian packers for each of the competitive drivers. For the industry as a whole, a conservative estimate of the disadvantage would be at least $8/hog, but more likely over $10/hog.

Appreciation of the Canadian Dollar

The appreciation of the Canadian dollar has had an impact on Canadian packers in two ways.

The first is that it has modestly resulted in reduced gross margins, due to the fact that appreciation has reduced pork cutout revenues at a slightly faster rate than it has reduced hog costs.

The second is that operating cost competitiveness relative to the US competition has also been impacted. For example, assume that labour costs in Canada amount to C$20/hog. When the exchange rate was at 0.65, the US equivalent was just US$13/hog. At a .90-cent dollar, that same US equivalent becomes US$18/hog. As such, the appreciation results in a relatively higher cost structure. The same principles can be applied to all aspects of packer operations. The appreciation of the C$ resulted in a dramatic escalation in operating costs in US dollars. This, in turn, meant that strictly due to appreciation, common plant costs that may have been competitive at a .65-cent dollar became uncompetitive at a .90-cent dollar.

Implications for Producers of Packer Profitability

The profitability of a packer is the greatest determinant of the ability to pay for hogs. Increased costs or reduced profits result in lower hog prices. Conversely it is equally true that lower costs and greater profits help to drive hog prices higher.

The key point is that lower profits in the packing sector as well as relative inefficiency and lack of profitability of packers during the last three years have been detrimental to producer pricing in Canada.

Future Direction

This report focused on issues and challenges facing the production and processing sector. The report also briefly touched on some of the factors that have made Canada one of the world leaders in pork production and exports. While the challenges are many and difficult, the Canadian advantages ultimately mean that the industry can and likely will continue to be a world leader and a strong competitive presence.

Within that optimistic context, however, the key challenge relates to feed grain and packer competitiveness. The industry needs to address lagging productivity in feed grains and its pricing disadvantage relative to the United States. In addition, the packing sector is going to have to undergo a restructuring to better compete in world and domestic markets, particularly against the United States. The likely result will be a period of accelerated attrition in producer and packer operations for the next five years. Within that difficult period, however, the industry remains poised to continue to grow, compete and succeed both domestically and internationally.

This report will further examine the issues and challenges facing the industry, examine the causes of recent developments, and highlight the advantages that would allow the

Canadian industry to continue as a world leader competitively. The target audience for the report is senior decision makers in the industry and government.

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1.0 Introduction

1.1 Purpose and Objectives

The purpose of this project is to provide a report that explains the state of the pork packing industry in Canada and the causes of recent developments.

In order to accomplish the purpose of this project, the following objectives must be met:

1. Assess the trends in the key drivers of costs at the producer level in Ontario and the Prairies relative to the US.
2. List the competitive situation in major competitor countries and trends in world pork exports.
3. Evaluate the impact of labour costs and availability on the Canadian packing industry.
4. Explain the main components of cost competitiveness at the packer level.
5. Compare the main drivers of competitiveness at the packer level between Canada and the US.
6. Assess the basic impacts of the appreciation of the Canadian dollar on the main drivers of competitiveness at the packer level.
7. Compare general profitability trends between Canada and the US at the packer level.
8. Explain how packer competitiveness impacts producer pricing and profitability

Sources of Information and General Approach

This project has been completed utilizing George Morris Centre pork industry databases, as well as data from Statistics Canada, Agriculture and Agri-Food Canada (Red Meat Section), Alberta Agriculture Food and Rural Development and the USDA. In addition, staff from leading Canadian and US pork processors and recognized US market analysts have been interviewed.

2.0 Canada's Advantages in Pork Production

In an environment of uncertainty such as the industry is currently undergoing, it is easy to forget that Canada is the fifth largest pork producer in the world and is still the second largest exporter. Furthermore, during the last ten years, the Canadian sow herd has grown by 40%. That is four times the growth in the United States. This kind of growth and world leadership comes due to distinct and sustainable advantages. The following is a very brief overview of some of those advantages:

Canada has water advantages

- 7-9% of the worlds renewable water supply
  - >1% of population
- Renewable per capita freshwater supplies exceed other countries
  - 9x U.S.; 21x Mexico; 4x Australia; 2x Brazil
- Future water scarcity scenarios show little to no water scarcity for Canada

Hog Production Densities and Arable Land

Compared to the United States and other countries, hog production densities are not remotely an issue for this industry. For example based on productive land, Iowa's hog production densities are eight times greater than Alberta's.

In addition, Canada has the second most arable land per person in the world next to Australia. Canada's arable land per person is nearly double that of competing nations such as Argentina, Brazil and the United States.

In general, according to the Canadian Agri-Marketing Association, Canada has greater availability of fertile arable land relative to human and animal requirements; better animal health; a climate that is conducive to hog production efficiency; less intrusive production; and abundant and clean water.

In addition, most of the industry has a mature and efficient production and marketing infrastructure and logistics system. The management and entrepreneurial foundation of the industry is proven and successful. The scientific and research base is renowned as a world leader. Most importantly, the pork and most of the hog marketing business climate is based on supply-demand pricing, as well as open competitive markets and good access to the US and world markets.

While the challenges are many and difficult, the Canadian advantages ultimately mean that the industry will continue to be a world leader and a strong competitive presence.

3.0 Nature and Status of Competitiveness in Hog Production

A combination of several factors is significant in determining regional competitiveness in hog production. The first is the set of natural factors and growing conditions that influence hog production. These relate to soil type and climate that influence the efficiency of pig growth; the principal factor that varies across regions is feed grains. The second critical factor relates to the availability of a quality workforce to work with livestock. The third factor is the proximity and ease of access to pork packers and processors. A component of this factor is access to and the efficiency of the hog slaughter and pork processing function, which impacts hog pricing. The status of these factors in Western and Eastern Canada relative to the Midwest US is explored below.

3.1 Natural Factors

Grain Yields

Figure 1 presents trends in Alberta barley yields relative to Iowa corn. The figure shows that Iowa corn yields significantly exceed Alberta barley yields and, more significantly, that yield growth in Iowa corn has proceeded at a much faster rate than Alberta barley. For example, when the 2004-06 average yields are compared with the 1986-88 average yields for Alberta barley and Iowa corn, the data show that Iowa corn yields increased by over 45%, while Alberta barley yields increased by 11%. The situation is very similar for Manitoba yields versus Iowa corn. Comparing 1985-87 average yields with the 2004-2006 average, Manitoba yields increased by 22%.

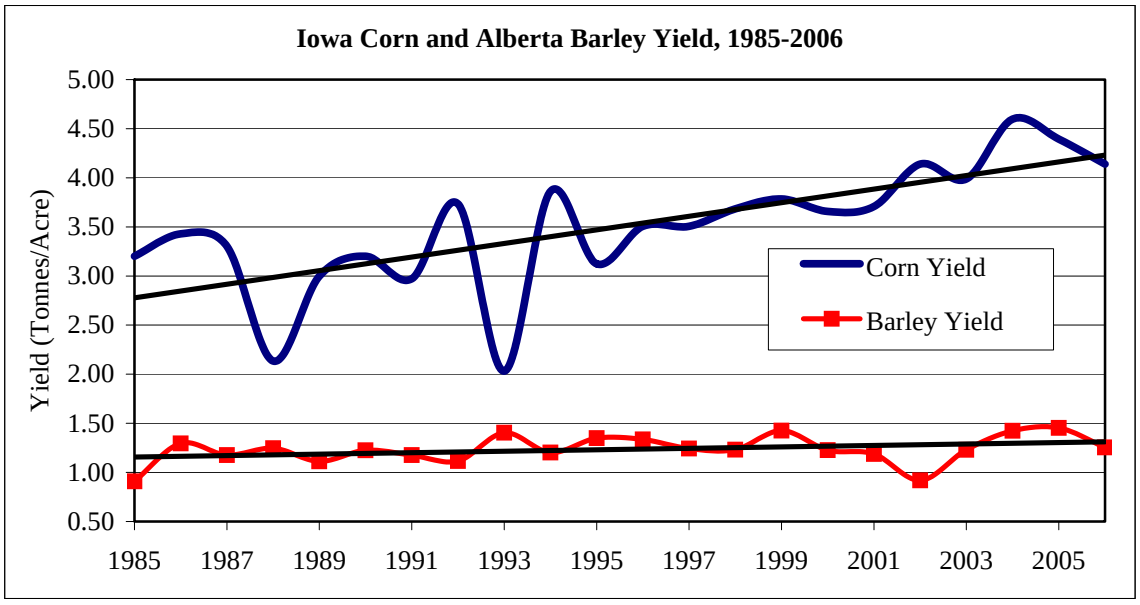

Figure 1 **Source: Statistics Canada and USDA NASS Database**

Figure 2 plots Ontario corn yields relative to Iowa for the period 1985 to 2005. The figure shows that Iowa corn yields have generally exceeded Ontario corn yields. The divergent trends also illustrate that Ontario corn yield growth has lagged behind Iowa.

Using the same approach as above, from 86-88 to 2004-06 Ontario yields grew by over 40% compared with just over 45% in Iowa.

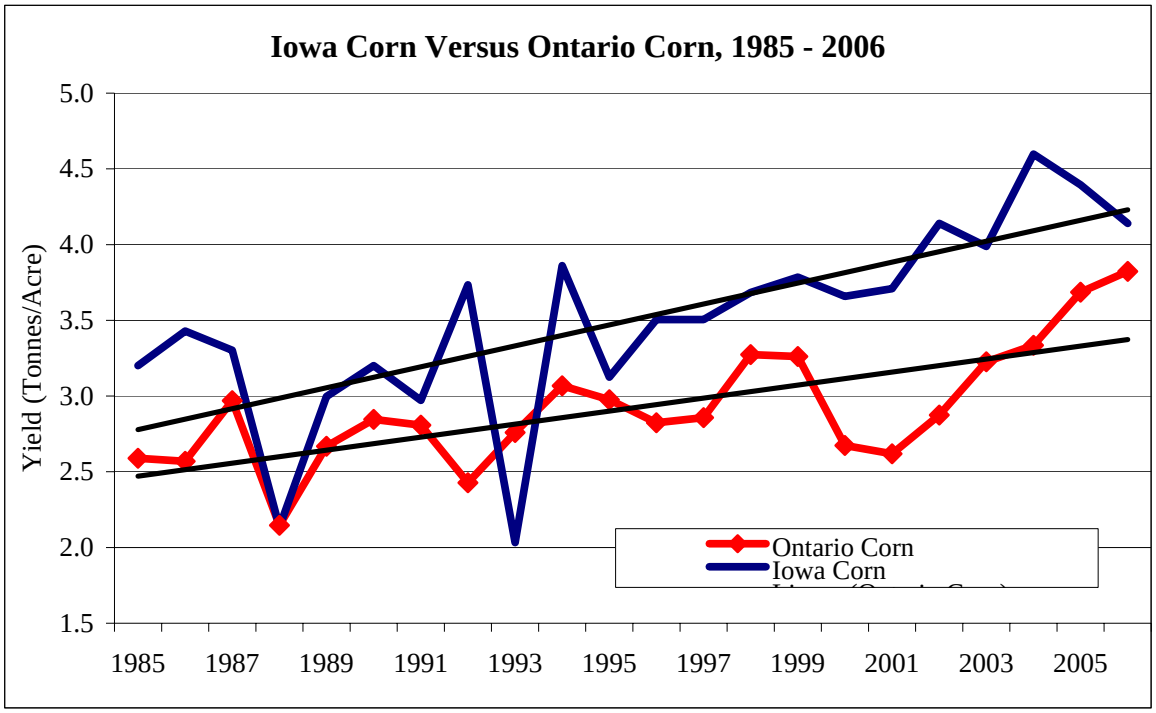

Figure 2 **Source: Statistics Canada and USDA NASS Database**

The reasons for the lagging productivity, particularly on the prairies tend to lie mainly in the regulatory regime and associated production responses to it. Fundamentally, the problems lie in the lack of investment in research into better yielding varieties due to the inability to secure a return on that investment. In addition, the regulatory regime encourages production of lower yielding varieties. These are challenges that prairies producers are recognizing as key barriers to competitiveness, and they have begun the long process of seeking solutions.

Acreage

Broadly speaking, the above information shows that Canadian feed grain productivity has lagged that of the Midwest US. In addition to the lagging productivity of the sector, the harvested acreage has also declined, materially. Figure 3 shows Manitoba barely acreage from 1985 through 2006. The graph shows the material decline in acreage in Manitoba, which is mirrored across the prairies as well. From the mid-1990's to the last few years, acreage in Manitoba has declined by nearly 40%. In Ontario, the situation in corn is not nearly as dramatic. The longer-term 1985-2006 trend in Ontario corn acreage is down but far less discernable compared to prairie barely. With reference to the US, it is noted that from the mid-1990's through to the last few years, corn acreage in Ontario has declined by 10%. Meanwhile in Iowa, corn acreage over the past 10 years has increased modestly.

The causes of declining acreage are varied but ultimately decisions on acreage are tied to profitability and opportunities. US Farm Bill subsidies help to lower grain prices across North American but subsidized production stays steady in the US while it declines in Canada. Alternative crops, particularly canola on the prairies offer better prospects due to yields and stronger markets.

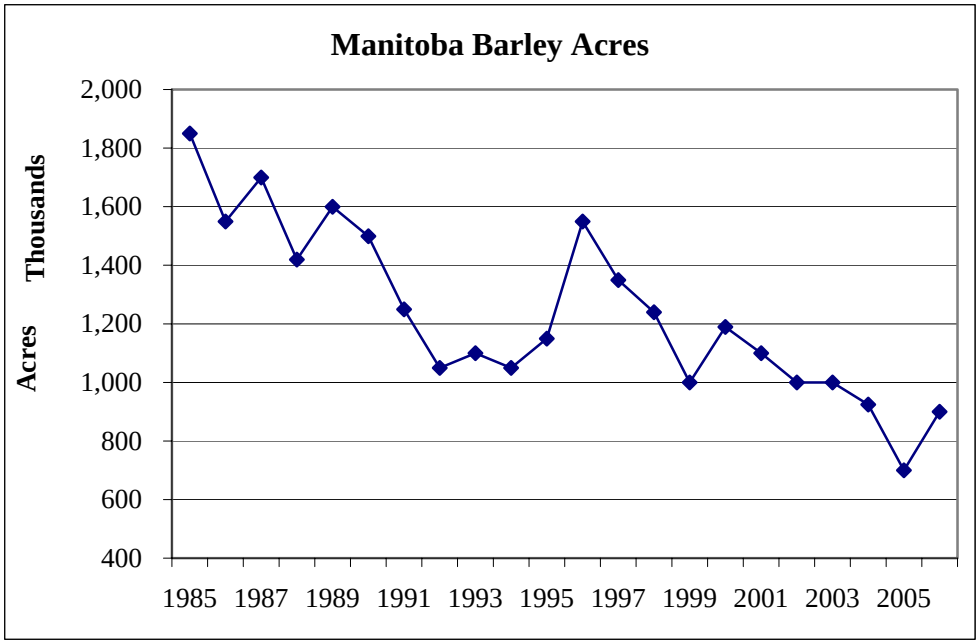

Figure 3 **Source: Statistics Canada**

Grain Pricing

Consistent with mostly lagging productivity in Canadian feed grains relative to the US, Canadian feed grain prices have increased on a relative basis. This is most easily seen with respect to Ontario corn relative to US Midwest corn prices. Figure 4 and Table 1 illustrate the relationship. They show that Ontario and Minneapolis corn prices are very highly correlated, but that the spread between the two has widened over time, particularly since 2001.

Table 1 Chatham-Minneapolis Corn Price Spread

	Chatham-Minneapolis Price Spread, $Can/tonne
1995	12.33
1997	15.91
1999	9.20
2001	24.58
2003	27.91
2005	21.94

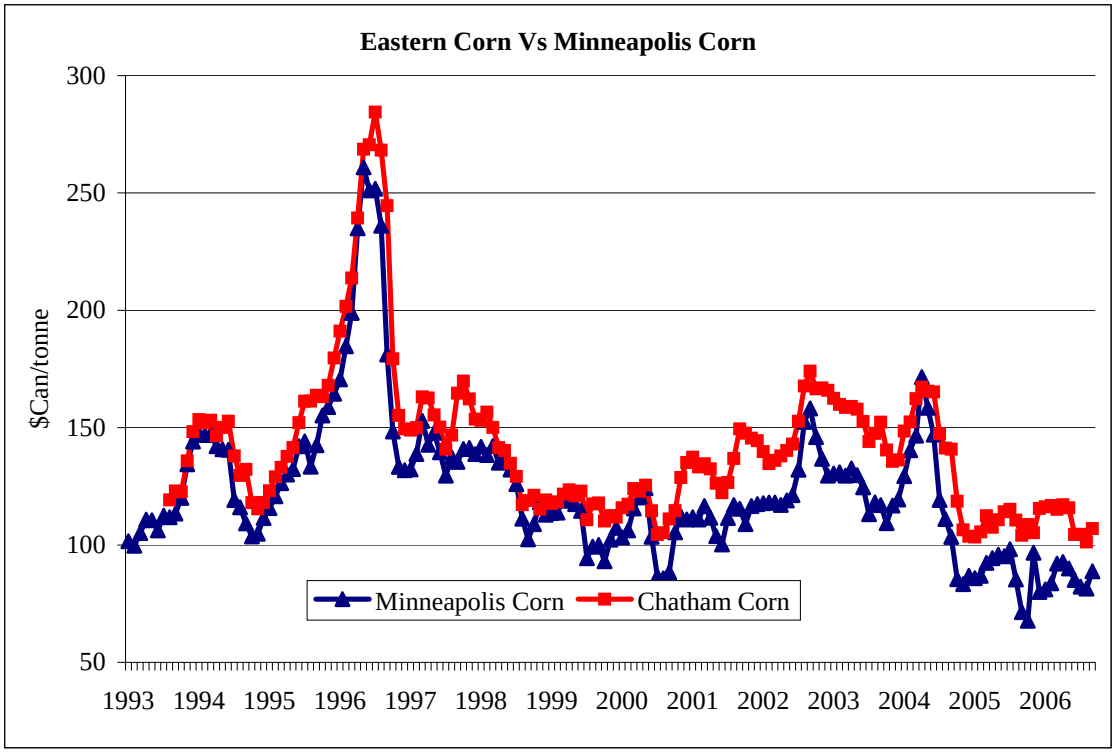

Figure 4 **Source: AAFC, USDA ERS**

Figure 5 plots relationships between barley at Calgary, barley at Winnipeg, and Minneapolis corn. The figure shows that, historically, Winnipeg barley has been at a discount to Calgary barley and to Minneapolis corn. In particular, the discount relationship between Winnipeg barley and Minneapolis corn is some reflection of the fact that barley has about 85% of the feeding value of corn in a livestock ration. During the 2002-03 droughts in Western Canada, barley prices increased above Minneapolis corn prices. Western barley prices have retreated since 2002-03 but remained priced at a premium to Minneapolis corn.

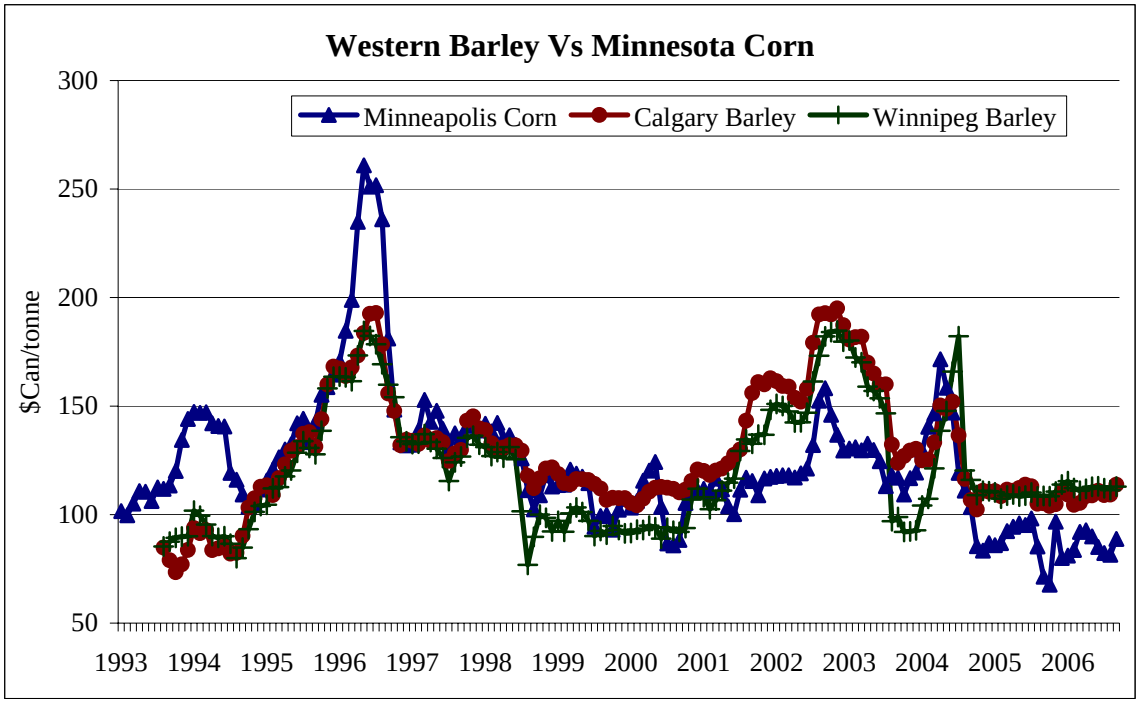

Figure 5 Source: AAFC, USDA ERS

For its part, soymeal pricing in Minneapolis and points in Eastern and Western Canada illustrate a classic frieght cost relationship, in which Minneapolis is the low price point, followed by Winnipeg, Hamilton, and finally Calgary.

As such not only is Canadian feed grain productivity lagging, but acreage is also declining, particularly on the prairies. These factors, coupled with increased livestock demand for feed grains helps to explain the change in relative pricing between the US mid-west and the prairies as well as Ontario. That is, while the regions within North America are closely tied together regarding pricing, the relative spreads and basis can change depending on regional supply and demand. The lagging productivity and declining supplies in general, relative to increased demand, have caused Canadian prices to move from under the US mid-west to over the US mid-west. Canada has become a high-cost feeding region compared with the US.

Impact on Hog Feeding

Needless to say, this disadvantage has significant ramifications for hog production competitiveness. Feed comprises approximately half of total production costs on a farrow to finish operation. The George Morris Centre has developed a cost of production model for a 1,200 head farrow to finish operation in Manitoba and Minnesota. According to the George Morris Centre cost of production model, Manitoba feed costs on this 1,200 head model operation amounted to over $50/head during the first ten months of 2006. At the same time, Minnesota feed costs amounted to approximately C$45/head. The total cost differential on feed amounted to up to $8/head in favor of Minnesota.

Figure 6 shows the monthly trend in feed cost for a model hog production unit for Minnesota and Manitoba from 2005 through the first ten months of 2006. As can be seen the differential is material and can vary on a month-to-month basis depending on relative grain prices between the two regions.

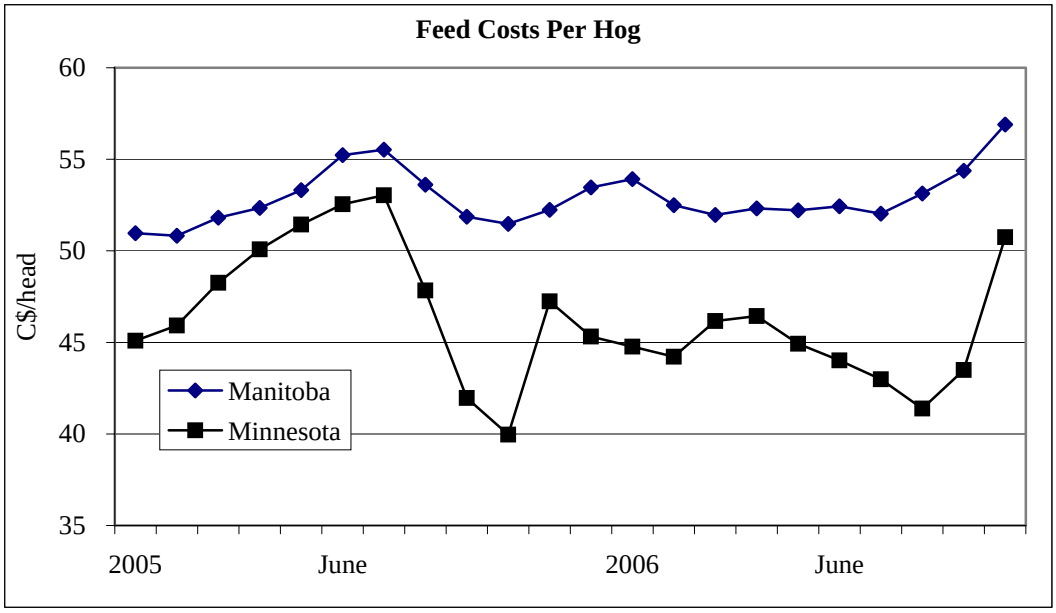

Figure 6 George Morris Centre Cost of Production Model

Impact of Ethanol on Relative Pricing

The increased demand for corn for use in ethanol production in the United States has become the largest single driver of the rapid rise in corn pricing in North America. According to the Renewable Fuels Association, as of the fall of 2006 there were 105 ethanol plants in the United States with 42 new ethanol plants under construction and 7 plant expansions underway. In addition, there are currently more than 300 business proposals for additional ethanol plants.

Given the crude oil price outlook for the next several years, ethanol's expansion is apt to continue for some time. According to grain market analysts in the United States, even under higher corn prices, ethanol returns still look promising. In the 2005/2006 crop year, corn useage for fuel amounted to 1.6 million bushels. That is about double the useage in 2002. Estimates suggest that by the 2007/2008-crop year, corn for fuel will double again.

A key driver of the ethanol based demand for corn is US government subsidies. Due to US subsidies, it is estimated that ethanol users can bid an extra US$1.38/bushel.[1] That subsidy is about two-thirds of the 1998-2005 average price of corn in the United States. Further perspective on the magnitude of the subsidy is that after three years, the subsidy essentially can cover the cost of an ethanol plant.

[1] Ethanol info source: Purdue, Missouri + ISU Econ Depts.

The dramatic increase in demand for corn, due to ethanol subsidies in turn is having a dramatic impact on corn pricing. Ethanol plants can pay $5.50 given late 2006 prices for ethanol. This of course is having a material impact on hog producers and their profitability in both Canada and the United States.

When the corn US price increases, Canadian corn and barely prices also increase. The key point for Canadian producers relates to relative pricing between Canada and the United States. As noted earlier, US feed grain pricing has been relatively lower than Canadian pricing. This relative relationship is due to local supply and demand conditions, primarily declining acreage in Canada. The massive US subsidies may work to change that relative relationship. Acreage will increase in both Canada and the US, which in the case of Canada is a reversal of a trend. In addition, due to the subsidies in the US, relative supply and demand could result in stronger pricing relationships in the US compared to Canada.

At this point it is too early to state whether the relative supply-demand changes will be enough to eliminate or narrow the Canadian feed disadvantage. Furthermore, if the Canadian government increases subsidies for Canadian ethanol, this in turn could erase the US demand-supply increase relative to Canada.

3.2 Labour

A second critical determinant of regional competitiveness is the availability of a farm workforce. This has a couple of dimensions. The most tangible component is labour cost. However, some measure of labour productivity and interest in working with livestock in addition to cost is relevant.

Data on labour costs and wage rates is generally difficult to obtain, however data on wage rates for livestock workers is collected by Human Resources and Skills Development Canada according to National Occupation Classification (NOC) codes, including livestock workers (NOC 8253). The data is obtained from Employment Insurance claim data, and is fragmented by region, exclusive of benefits. In the US, data on wage rates is collected by the USDA National Agricultural Statistics Survey in the Farm Labour Survey for livestock workers. The wage rates collected are exclusive of benefits.

Table 2 below presents a comparison of Canadian regional and US Midwest wages rates, in $Can/hour. The table shows that livestock worker wage rates are clearly the highest in Alberta. This is not surprising, given the competitive influence of the oil industry on Alberta labour markets. Manitoba and Ontario livestock worker wage rates are significantly lower than Alberta. Wage rates for livestock workers in the Midwest US are generally the lowest. Compared with the Midwest US livestock worker wage rates, Manitoba wage rates appear to range around $2/hour higher, and Ontario wage rates range about $3/hour higher. Alberta wage rates appear to range $7/hour over the Midwest US.

Table 2 Livestock Worker Wage Rates

Jurisdiction	Region	Reference	Time Period	Wage Rate ($Can/hour)
Alberta	Red Deer/ Camrose/Olds	NOC 8253	Sep. 2003-Sep 2005	$17.54
Manitoba	Winnipeg	NOC 8253	May 2005	$12.00
Ontario	Kitchener/Stratford	NOC 8253	2005 Average	$13.10
Iowa/Missouri	Cornbelt II	Livestock Worker	July 2005	$10.15*
			July 2006	$11.28*

*Converted to Canadian dollars assuming $Can 1=$US .90

3.3 Pig Productivity

Another aspect of labour relates to pig productivity given management and labour productivity in Canada vs. the US. Data on pig productivity in the U.S. and Canada suggest that Canada has had an advantage in farrowing exhibited by higher performance. Time series data obtained from PigCHAMP regarding breeding herd performance between Canada and the US provide some evidence. Figure 7 compares two key metrics of breeding herd efficiency: liveborn pigs per litter and pigs weaned per sow per year. Since 1998, aggregate data from Canadian producers show a 12 percent average advantage in pigs weaned per sow per year or approximately an advantage of 2.77 pigs weaned per sow per year.

Historic Differences in Canadian and US Sow Productivity

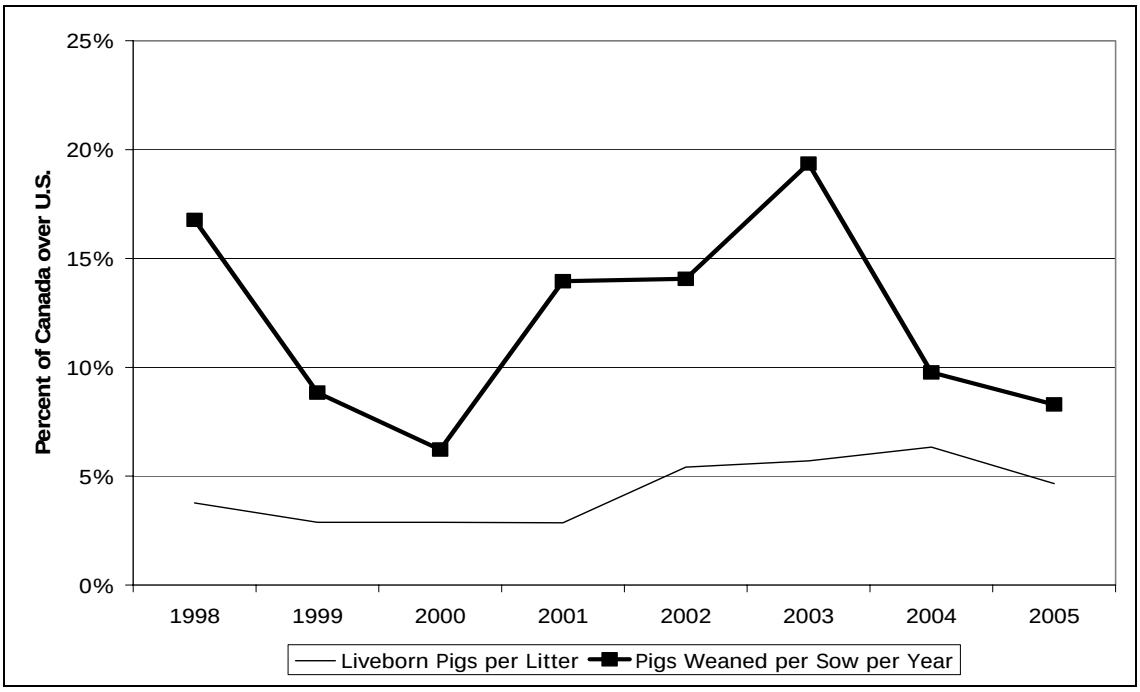

Figure 7 Source: PigCHAMP

Since common swine genetics are in use throughout North American and pig housing is essentially the same in the US and Canada, there is a possibility that labour productivity and management might be a significant determinant of differences in observed pig productivity. This does not necessarily mean that Canadians are intrinsically better hog managers. Furthermore these management factors can be copied and duplicated in the United States. Management, however, could be a factor due to limited marketing options for tail-enders and other off-market pigs. As a result, herd health and survival are more of a priority in Canada than in the US.

While labour productivity and management might be the keys, it is doubtful that they fully explain the Canadian advantage in this area. Another partial explanation for the Canadian advantage relates to herd health and survivability. These factors can be dependent upon management, as well as climate and geographic related herd densities. Cooler climates as well as less dense production locations can both be positive to herd health and survivability. These factors in turn are sustainable Canadian advantages. Finally, with regard to herd health, it is generally acknowledged that diseases common in the US are less common in Canada.

3.4 Capital

One of the key factors influencing labour productivity is investment in capital, and thus the cost of capital. They key measurement of capital cost is the prime business interest rate. This is presented in Figure 8 below. The figure plots Canadian prime business

interest rates and US business prime rates. The figure shows that Canadian interest rates have generally been below US rates through the period, with the exception of a brief period from late 2002 to early 2004.

Meanwhile data from the Dow Jones and TSX indices illustrate that the equity returns are highly correlated in the US and Canada (Table 3). Through the late 1990's, the Dow Jones index grew relative to the TSX; in recent years, the TSX has strengthened relative to the Dow Jones. Since 1990, the average rolling 12 month growth in the Dow Jones Index was about 11%, compared with 10% for the TSX. However, since 2000, the TSX has significantly outperformed the Dow Jones index, with an 11% growth rate compared with 2% for the Dow Jones. The TSX has experienced more volatile returns than the Dow Jones, regardless of which time period is used as a reference.

Thus, the underlying cost of debt capital is relatively low in Canada compared with the US, while the opposite appears true of equity capital. The historic spread between Canadian and US interest rates of 200-300 basis points has re-emerged, making Canadian debt inexpensive relative to the US. At the same time, based on recent performance, the expectation of return on stock equity investments has been higher in Canada compared with the US.

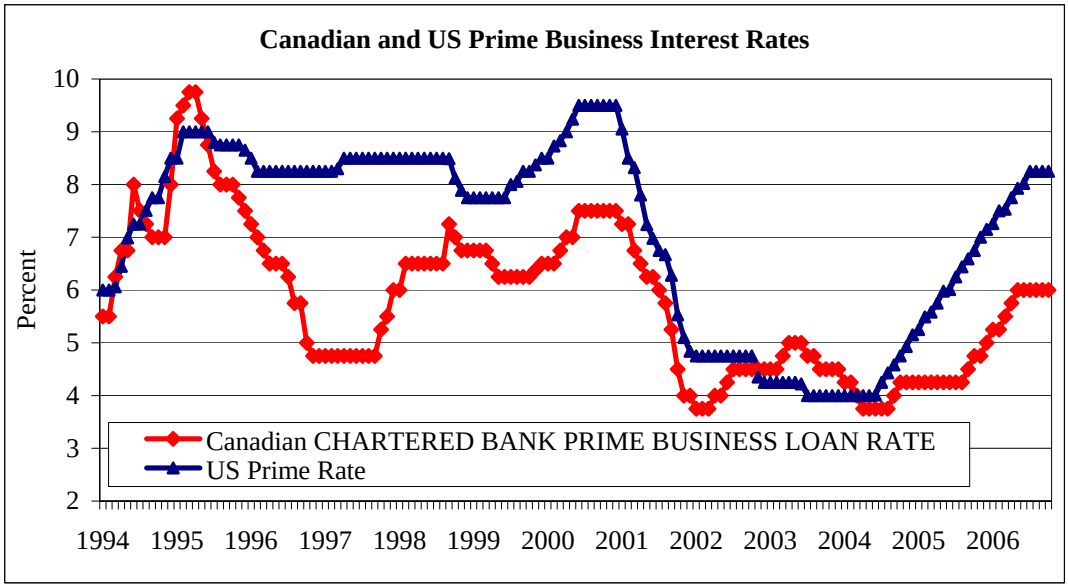

Figure 8

Table 3 Annual Average Rates of Return, Mean and Standard Deviation

	Dow Jones	TSX
1990-2006 Average	11%	10%
2000-2006 Average	2%	11%
Std Deviation 1990-2006	0.133	0.167
Std Deviation 2000-2006	0.115	0.206

3.5 Producer Profitability

Ultimately the implications of the challenges noted above, particularly feed grains, rest with margins and profitability. Figure 9 shows George Morris Centre estimates of average producer profitability in Ontario during the past two years on a weekly basis.

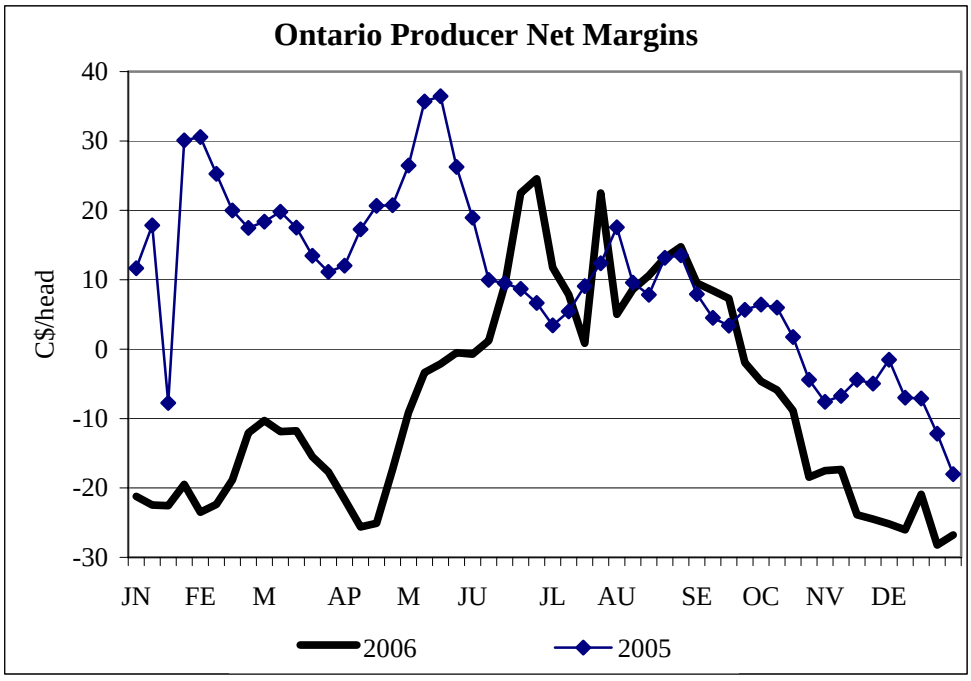

Figure 9 **Source: George Morris Centre**

As can be seen on the graph, Ontario producers were mostly profitable during 2005 with the exception of the fourth quarter. Moving into 2006, however, Ontario producers have been in a loss position for most of that year with the exception of the summer months. This stands in sharp contrast to profit performance in the United States. According to data from Iowa State University, as of the end of 2006, US hog producers had enjoyed an uninterrupted string of 35 months of profitability.

3.6 Observations

The following observations emerge from the above. First, compared with the US, Canada currently appears to have little to offer in terms of competitiveness in hog feeding. This is surprising, particularly given that much of the development of the Western Canadian hog industry was based precisely on an anticipated advantage in hog feeding. However, the data show that US feed grain productivity, measured simply as yield growth, has outstripped that in both Western and Eastern Canada. Furthermore, there has been substantial reduction in feed grain acreage in Ontario and the prairies whereas corn acreage in Iowa has increased. Consequently, feed grain prices in Western and Eastern Canada have increased relative to that in the US. Along with that increase, so too has feed costs per head greatly increased relative to the US.

Interestingly, Canada's comparative advantage in hog production appears to have developed in the area that has least to do with feedgains and feeding costs. The record of performance data obtained from PigChamp suggests that Canadian producers have been successful at obtaining larger litter sizes and in weaning more pigs from sows than their US counterparts. Thus, Canadian producers and hog farm workers have achieved greater sow productivity. However, based on the wage data, this relative performance may be occurring at a higher wage cost, particularly in Alberta. It is also consistent with new investment in the conversion of facilities originally intended for hog feeding to farrowing facilities, which was driven by the above feed grain situation.

Thirdly, the structure of capital costs and returns in Canada relative to the US would appear to favour debt capital over public equity. As illustrated above, interest rates in Canada are currently at a discount to that in the US, similar to what occurred through the late 1990's when much of the investment in Canadian hog production facilities occurred. The equity situation is somewhat less clear, but the leading indicators suggest that rates of return are higher in Canada, and riskier than in the US. Thus, projects in hog production or pork processing attempting to access external equity in Canada would need to offer higher returns than in the US in order to attract Canadian equity. This could be a significant factor, because debt is typically used to fund hog production investment projects, where processing plant projects would likely use a portfolio of debt and equity financing.

The net result is that when all the components of production are compared, based on the George Morris Centre hog cost of production model, it is reasonable to assert that a typical prairie hog operation could have total costs that are about C$5-10/head higher than their counterpart in the US mid-west. This differential in turn plays a material role in lagging hog production profitability between Canada and the United States.

4.0 Labour Challenges Facing Canadian Pork Packers

Labour has become one of the most important issues facing the pork industry in Canada. This section will explain the current challenge and impacts on the industry. The focus is primarily on labour availability and turnover and its impacts on pork packer operations and development. The section also more briefly addresses labour challenges at the hog producer level.

Canadian livestock production and packing is facing a mounting labour shortage. This shortage has been brought on by many factors including an aging work force, a dramatic reduction in local youth enrolling in agriculture related programs/farm careers and an inability to compete in the labour market with other sectors. In Canada, unemployment rates are near all time lows. In Alberta where the situation is most acute, in the 12 months ending in March 2006, 34 of 53 occupational groups had an unemployment rate below 3%, compared to 22 occupational groups in 2003. Statistics Canada says that an unemployment rate of below 4% indicates a labour shortage. In that province, 8 of 10 members of the Canadian Federation of Independent Business report difficulty hiring in the last three years. As competition for limited numbers of low- and semi-skilled workers increases, several industries are finding it difficult to offer the higher wages and benefits that other industries are capable of offering to attract and retain the workers they need.

Again, it is important to note that while the situation is most acute in Alberta, the condition is the same, to varying degrees across Canada. This new labour environment is directly impacting hog production and packing from coast to coast.

Primary Agriculture Employers

The growth of Alberta's and the prairies' resource-based industries creates a downside that affects every aspect of the economy. It is driving up wages; consuming support industries such as construction, engineering, professional services; creating shortages in cement, steel, and other building materials; and has effectively consumed the available labour pool. The resulting supply/demand gap in labour raises fundamental questions about the sustainability of current growth levels, threatens the viability of every province's livestock industry, and impacts the quality of life in rural communities.[2] In fact, in Alberta the situation is regarded as an "imminent labour crisis facing cattle feeders and pork producers in the province."[3]

Dairy, pork and beef feedlot producers have been particularly impacted with labour shortages. Livestock production requires continuous management and labour shortages

[2] Adopted from A Livestock Industry Perspective on BUILDING AND EDUCATING TOMORROW'S WORKFORCE: A framework to enhance Alberta's people capacity 10-YEAR STRATEGY, Alberta Pork and Alberta Cattle Feeders Association, March 2006.

[3] A Livestock Industry Perspective on BUILDING AND EDUCATING TOMORROW'S WORKFORCE: A framework to enhance Alberta's people capacity 10-YEAR STRATEGY Alta pork and ACFA, March 2006

result in owners working longer hours. Numerous producers are struggling with 80-90 hour workweeks and are contemplating significant cutbacks in production, which threaten the viability of their farms. Extension staff in Alberta are increasingly hearing of decisions to keep teenage children home from school to help out with farm duties, and are concerned about risks to their personal and family health from overwork. Many are highly emotional and stressed regarding not being able to find workers, and with the bureaucratic processes involved.

Over the past couple of years, hog production growth in Canada has been curtailed or in the case of the East, inventories have even declined. The lack of growth is due to a variety of reasons ranging from disease to poor financial returns. According to larger producers, however, another reason for the lack of growth is due to a lack of labour availability. There is no definitive measure on this factor yet, but larger producers suggest that they are not able to run their operations at capacity due to a lack of labour. Suggesting a magnitude of the labour-related capacity impact would be misleading now, but there is no doubt that a lack of labour has now become a limiting factor in Canadian hog production.

Pork Packing

Canadian pork packers across the country are suffering due to a lack of labour and crippling turnover rates. The R.A. Chisholm country in Toronto, is one of several Canadian entities that is working with the industry to meet labour availability challenges in the agriculture and food industry. Chisholm notes that in Alberta, pork and beef packers currently require about 1,500 new workers. In Manitoba approximately 600 workers are required. Throughout Ontario and into Quebec and the Maritimes pork packers of varying sizes are in need to additional workers.

The impact of labour availability is both obvious and subtle. From the obvious perspective, the lack of labour results in lower production volumes at the plant and in the industry as a whole.

For example, Maple Leaf Foods has repeatedly stated that the key reason it has not begun a double shift at its Brandon, Manitoba plant is due to insufficient labour. Olymel in Red Deer, Alberta was unable to continue its second shift during 2006 due to a lack of labour. Each of these plants typically process around 40,000 head per week on a single shift. Just using the Brandon and Red Deer examples, it is clear that the industry could be processing an additional 80,000 hogs per week. That translates into lost revenues for the industry of approximately $600 million per year pertaining to those two plants alone.[4]

Another way to look at the lost opportunities is to assess actual slaughter compared to capacity. In that regard, the Canadian pork packing industry is capable of slaughtering approximately 480,000 head per week. During 2006, the industry slaughtered on average about 425,000 head per week. The difference between capacity and actual slaughter amounts to about 55,000 hogs per week. Each week about that same number of slaughter hogs is exported to the US. It is not reasonable to assert that not operating at capacity is

[4] Utilizing an estimated 2006 cutout of about $140/head.

the reason that all hogs are exported each week.[5] Nevertheless, if just half of that is due to a lack of labour, which is reasonable, it represents a lost revenue stream to the industry of over $200 million per year.

The lack of kill in Canada in turn translates to added transport costs on hogs shipped to the United States. Based on fuel costs of 0.80-.90 cents/litre, domestic hog transport costs around $5-6/hog from farm to plant. Shipping hogs to the US is going to cost approximately $13/hog at least. The difference between the two transport costs is the added cost that can be applied to hogs which could have been slaughtered domestically but were not due to operating inefficiencies. If the $8/hog differential is applied to half the 55,000 hogs per week that are shipped south, that means that producers are losing over $11 million per year on added transport costs, due to the lack of labour.

Finally another major cost related to labour availability is the high cost of turnover. The meat packing industry has always suffered from higher turnover rates, but in a labour market that is suffering from shortages, the problem is accentuated. There are approximately 12,000 workers employed by the pork packing industry in Canada.[6] Depending on the plant and the location, worker turnover can be 50% annually or in some cases up to 90%. Alberta Agriculture and Rural Development asserts that in the food industry a conservative labour turnover rate is about 19.5%. The department also asserts that there is a minimal direct labour turnover cost of $5,000 per employee.[7] Even using these conservative estimates, the cost of turnover would amount to about $12 million per year to Canada's pork packers. If a 50% rate is used, the cost increases to about $30 million.

There are more subtle losses associated with the labour challenge as well. One such loss is the fact that packers and processors are often not able to cut pork to more refined specifications due to a lack of labour. That contributes to a loss of value added production in Canada. According to analysis done by R.A. Chisholm, the total potential economic benefit currently being lost by Canada from not further processing pork meat is $410 million per year

Another subtle loss relates to the lack of asset utilization and the associated loss of return on investment. For example, Olymel has invested in plant and equipment in Red Deer in order to facilitate a double shift. That investment is now significantly underutilized and as such the returns indicate a failed investment choice.

Labour availability has obvious implications for Canada's pork market share in both domestic and export markets. It is of interest to note that in recent years, Canada has become one of the United States' fastest growing pork markets. At the same time, Canada has been losing share to the United States in world export markets. Figure 10

[5] Canada would export thousands of hogs each week even at full capacity.
[6] A rough approximation based on 1,000 workers working at a 40,000 head per week plant combined with weekly slaughter typically around 440,000 in Canada.
[7] Labour – Turnover Costs and Retention Strategies, Alberta Agriculture, Food and Rural Development Economics and Competitiveness Division, Competitiveness Unit, August 2006

shows the pork trade trends between Canada and the United States. Figure 11 in the next section shows Canada's export performance over the world. Both graphs clearly show an erosion of market share for Canadian pork at home, in the US and abroad. Again, it would be misleading to place all of the blame on the labour availability issues, but clearly a lack of production due to labour, as discussed above, means a lack of market share.

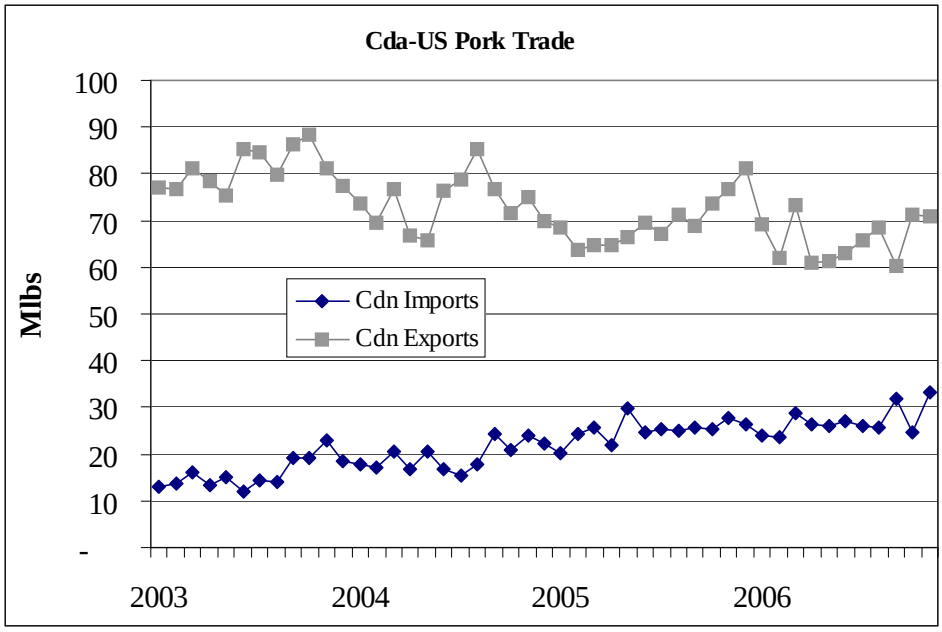

Figure 10 **Source: USDA ERS and Kansas State University**

The Canadian pork packing industry faces many challenges but the lack of labour is arguably the most significant. Depending on methodology, it is very straightforward to assert that labour availability is costing the Canadian pork packing industry $600 million to $1 billion per year. Furthermore, when the packing industry suffers due to this or any other challenge, the ramifications are felt directly by producers as well.

4.1 Foreign Worker Processes and Challenges

The frustrations of finding domestic labour have inevitably led to packers and producers seeking workers from abroad. This of course is not new in Canadian agriculture but the demand has increased the costs and time for both producers and packers. It is estimated by government officials in Alberta and private sector employers that pork packers will bring in around 500 workers in 2006 and over 1,200 in 2007 as the recruitment work they initiated in 2006 starts to work through the system.

It is not the intent of this project to provide details on the processes involved in foreign worker employment. Nevertheless, an outline of the overall process is necessary in order to understand the challenges producers and packers face.

Process

The following schematic was developed by Alberta Agriculture to illustrate the process involved in hiring foreign workers:

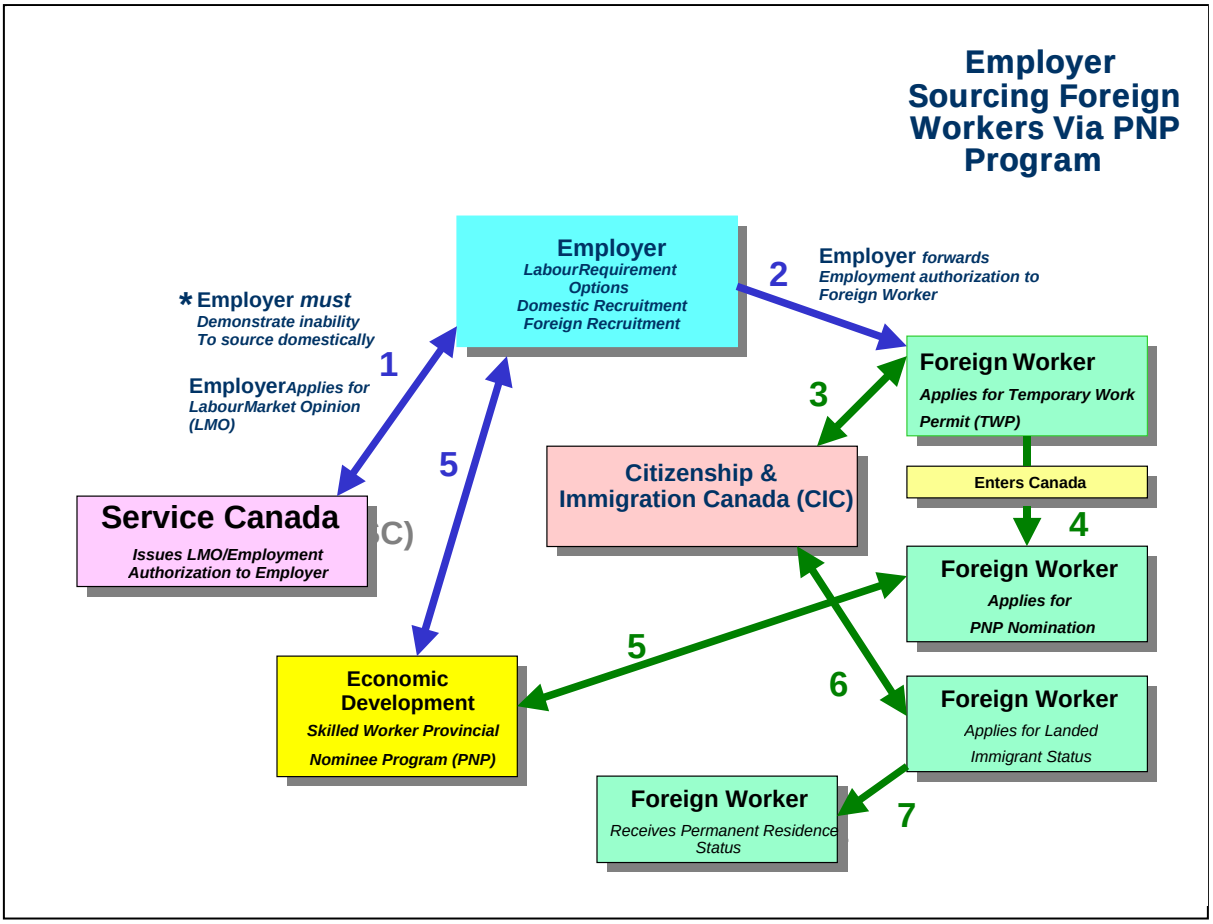

Figure 11 **Source: Alberta Agriculture, Food and Rural Development**

If an employer is having difficulties sourcing and hiring Canadian employees with the appropriate skills, there are two programs available to source foreign workers with suitable skill sets: Temporary Foreign Worker Program (TFW); Skilled Worker-Provincial Nominee Program (PNP).

In both cases the initial step for an employer is to obtain a Labour Market Opinion (LMO) / Employment Authorization from Service Canada. Service Canada reviews employer applications to source foreign workers relative to Human Resources and Skills Development Canada (HRSDC) legislation, which requires employers to demonstrate that they have endeavored to source Canadian workers first. The LMO/Employment Authorization letter enables employers to access the TFW and the PNP program to source foreign workers.

The LMO is assessed based on the following criteria:

- the occupation that the foreign worker will be employed in;
- the wages and working conditions offered;
- the employer's advertisement and recruitment efforts;
- the labour market benefits related to the entry of the foreign worker;
- consultations, if any, with the appropriate union;
- whether the entry of the foreign worker is likely to affect the settlement of a labour dispute.

From that point, assuming a favorable LMO, the process continues in a two-pronged endeavor involving the worker as well as two levels of government. The job offer is made to the foreign employee and Citizenship and Immigration Canada (CIC) are asked to issue a temporary work permit (TWP). In addition to that in some cases the Provincial Nomination Program can come into effect. Most provinces in Canada have an agreement with the Government of Canada that allows them to play a more direct role in selecting immigrants who wish to settle in that province. Provinces will consider the application based on their immigration needs and whether there are genuine intentions to settle there.

The Temporary Foreign Worker Program enables employers to source unskilled foreign workers on a temporary work permit for a period of one year. Unskilled workers must exit Canada at the end of one year and are not permitted to return for four months. In the case of skilled workers, employers can usually obtain a two-year work permit at the discretion of Citizenship & Immigration Canada, (CIC). This temporary work permit is not a visa and does not lead directly to permanent residency and citizenship. Employers can apply to extend a skilled worker's TFW but must obtain a new LMO from Service Canada prior to applying to Citizenship & Immigration Canada for an extension. Citizenship & Immigration Canada's (CIC) Embassy offices typically process Temporary Foreign Worker work permit applications in 4-8 months.

The Skilled Worker PNP program provides employers with a retention tool to retain skilled foreign workers whom they require to maintain their businesses by enabling them to sponsor these workers in applying for a Canadian visa and permanent residency status Only workers whose positions qualify as skilled, National Occupation Classifications (NOC), A & B qualify as skilled workers are eligible under the PNP Skilled Worker Program. PNP applications require approximately 6 months to process, 3 months for the Employers portion and 3 months for the Employee's portion.

The two programs work in sequence with the employer first applying for a Temporary Foreign Worker. If after an initial trial period the employer feels the worker is performing satisfactorily, the employer can apply to sponsor the foreign worker under the Skilled Worker PNP program.

Challenges

Previously primary agriculture employers had reasonable success in sourcing foreign workers. The heightened economic activity in Alberta and the West, however, has outgrown the availability of skilled labour in Alberta / Canada. This has led to a doubling of the total number of foreign workers being sourced by Alberta and many other employers and has caused dramatic increases in processing times (see Table 4). More recent observations have seen some times frames improving as agencies hire additional processing staff.

Table 4 **Source: Alberta Agriculture, Food and Rural Development**

AAFRD Observed Times Frames (*Based on a Berlin Germany submission route)		
Steps Involved in Sourcing Skilled Foreign Workers	**Aug 04 - May 05** (Weeks)	**Aug 06** (Weeks)
Domestic recruitment process - required advertising	3 - 4	3 - 4
Service Canada – LMO/Employment Authorization *(*Assume candidate identified at application time)*	4 - 6	12 - 16
Citizenship & Immigration Canada - TWP approval	6 - 8	26
PNP nomination approval	4 - 6	20 - 24
Citizenship & Immigration Canada - visa approval	26	52
Total Time	**43 - 50**	**113 - 122**

The volume of Labour Market Opinion applications submitted to Service Canada in Alberta has gone from approximately 4,000 in 2004 to 10,000 in 2005 and is estimated at 30,000 in 2006. The increase in overall processing times for LMO's, TWP's, and PNP applications is leading to further delays in getting workers. Some employers have to reapply for LMO's or extensions as temporary work permits expire due to delays.

TWP's for unskilled workers are typically issued for a 12-month periods while skilled workers receive 24-month permits. Foreign workers are still the most expensive labour the packers can source as they have to provide return airfares, arrange living accommodations, provide medical insurance, language and life skills training even though the Temporary Work Permits only allow the worker to stay in Canada a maximum of 12 months. According to Alberta Agriculture staff the cost of sourcing unskilled foreign workers can run in the $3-6,000 range depending on the recruiters fees and how companies human resources expenses are factored.

Unfortunately for hog producers, non-management agricultural workers are classified as "unskilled workers" under the National Occupations Classification, (NOC) even though the industry views them as skilled. Service Canada views non-management workers as unskilled, which is detrimental in obtaining work permits and PNP nominations. Furthermore, despite documented shortages for many skilled worker categories, Service Canada continues to insist employers go through the LMO application process to verify that no domestic worker is available for hire. A similar situation exists for employers

already proceeding with PNP applications where they want to retain their new workers permanently or with employees submitting visa applications.

Recent reports have shown CIC has been rejecting many TWP applications for skilled and unskilled foreign workers citing reasons as " is not well enough established" or "does not have strong ties to his home country". It appears CIC have concerns that a "single" worker may not return to their country of origin at the end of the TWP despite reassurances by the employee and employer.

Another challenge is the fact that the time period for which a TWP is issued is totally at the discretion of the local CIC officer and varies widely from 6 - 24 months regardless of the time period requested by the employer in the LMO application. There is a lack of consistency and transparency involved in the process of applying for the extension of TWP's. This has led to foreign workers being bounced around between applying to CIC offices. The situation is similar when applying for visas. In addition, staffing at CIC and HRSDC offices is critical. For example, the CIC office in Manila is now running at over 10 weeks for applications. HRSDC in Edmonton is over 12 weeks.

From the perspective of both producers and packers in the pork industry, the following are among the most important issues that need to be addressed regarding hiring foreign workers:

- Services Canada should eliminate the requirement for employers to re-apply for LMO's where sector skill shortages / labour are known to exist.
- Service Canada must begin to issue LMOs upon request once position descriptions, employment contracts and details on the foreign candidate are provided.
- CIC should introduce greater transparency and consistency to the review process for obtaining TWP's, renewing TWP's and obtaining visas.
- Farm labour needs to be re-assessed as skilled labour.
- TWP for unskilled workers need to be extended to at least 24 months.
- There should also not be a need to go through the whole process again when applying for extensions for skilled workers.
- The Foreign Worker Program should be re-defined to treat temporary foreign workers in all National Occupational Classification categories both skilled and low skilled workers, the same.
- Low skilled workers who have proven themselves to be good employees and residents of Canada should be allowed the opportunity to apply for permanent residence status.
- HRSDC should allow the approval process to have some flexibility for movement between plants that are approved. This would be a benefit to employer and employee based on seasonal issues and contract negotiation challenges.
- A company should have one master approval rather than specific plants needing the approval.

It is noted that in late 2006, the Canadian Minister for Immigration announced a reduction in the initial processing time for obtaining Labour Market Opinions. It is

questionable as to the impact this will have on sourcing foreign workers. The candidates still have to obtain the Temporary Work Permits, (TWPs), from the overseas CIC offices and they are already overloaded. It appears the main time savings will be relative to the advertising period which has been 3-4 weeks and is now being reduced to what appears to be 1 week. Employers have already been dealing with this though by anticipating requirements and leaving ads in place on a near permanent basis.

In summary, the key point is that the meat industry needs the federal government to make changes to its Foreign Worker Program. The legislation needs to be changed to facilitate the more rapid entry of workers in sectors where there are labour shortages. As noted by the Canadian Meat Council in its Submission to the House of Commons Standing Committee on Finance Pre-Budget Consultations for 2006, this includes: a simplified, efficient process to get workers into the country; an approval process that unions/competitors cannot block; and a clearer process on how foreign workers can eventually become permanent residents. Further to that point, the most important change needed is to increase the period in which foreign workers can stay in Canada to at least 18 months.

5.0 International Trade

Importance of Pork Trade to Canada

Previous research by the George Morris Centre conducted for the Canadian Pork Council in October 2006 illustrated the material benefits to the Canadian hog industry as a result of pork exports.[8] The following are some of the major points derived from that research:

- Pork exports have been the driver of the exceptional growth of pork production in Canada
- Canada is a world leader in pork exports (see figure 12).
- Canada has diversified its export markets to over 100 countries and is increasingly less dependent upon the US market.
- Pork export demand has been rapidly growing while domestic demand has been stable.
- Pork exports of $2.8 billion in 2005 are responsible for economic activity amounting to $7.7 billion and 42,000 jobs.
- Pork exports support the incomes of about 6,000 farmers and about $2 billion in farm cash receipts.
- Premiums derived from the export market due to value differences in those markets could result in enhanced producer income of up to $9/hog.

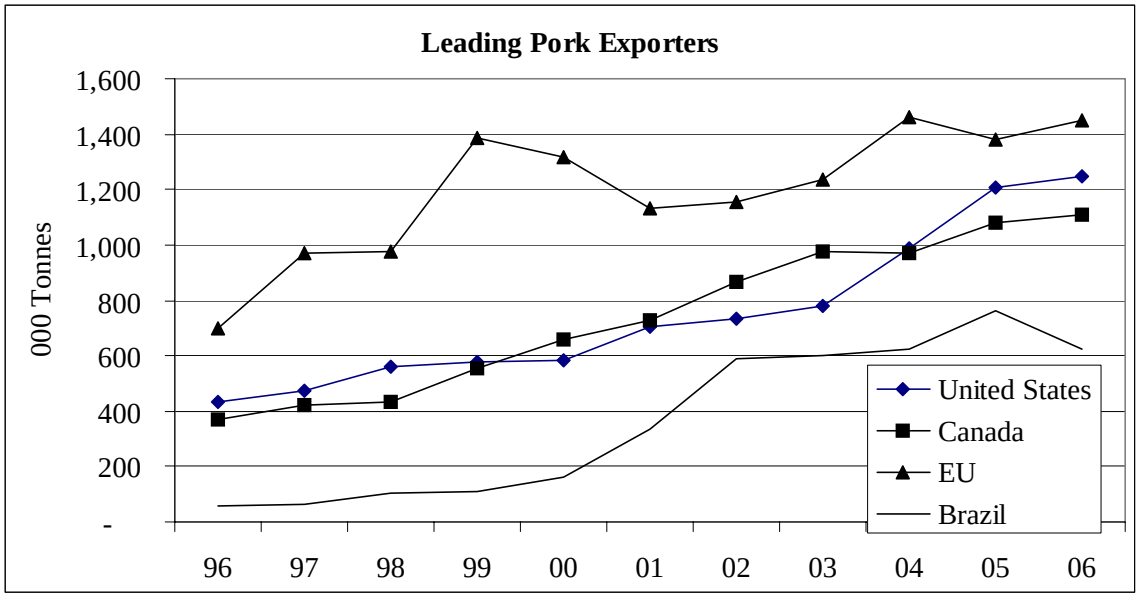

Figure 12 Source: USDA

The key message of the October 2006 report was the importance of exports to the Canadian hog production sector and to the Canadian economy in general. Further to that point it needs to be re-enforced here that pork exports are likely more important to

[8] The Benefits for Canada from Pork Exports October 16, 2006, George Morris Centre

Canada's pork industry than to other industries around the world. The following comparisons make that point clear:

- World exports = 5% of total pork production
- US exports = 10-13% of total production
- Brazil exports = over 25% of total production
- EU's exports = 7% of total production
- Canada exports > 50% of total production

The importance of Canada's pork exports is further well illustrated in figure 13 below. The graph clearly shows that pork exports have been the sole source of growth for the Canadian pork industry.

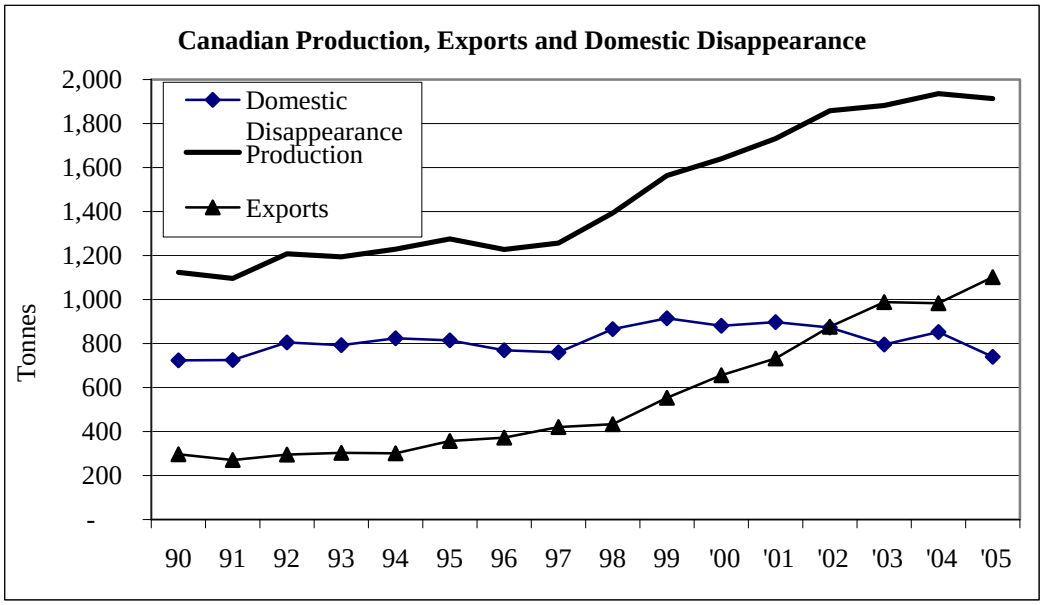

Figure 13 Source: Statistics Canada

5.1 International Trade Prospects

Obviously, relative to other countries, Canada has a greater stake in exports and, therefore, in export market competitiveness. It is therefore important to assess longer-term issues and challenges in the export market. As mentioned in the executive summary, The Food and Agricultural Policy Research Institute (FAPRI)[9] specializes in longer term macro economic forecasting. They see pork trade increasing by 2.4% annually by 2015. Over that period of time, the market share of the enlarged EU drops by 3.3 points by 2015. Canada, the U.S., and Brazil gain 1.9, 2.7, and 4.2 points of market share, respectively.

[9] FAPRI is a dual-university research program. With research centers at the Center for Agricultural and Rural Development (CARD) at Iowa State University and the Center for National Food and Agricultural Policy (CNFAP) at the University of Missouri-Columbia.
The FAPRI paper referenced here is World Meat: FAPRI 2006 Agricultural Outlook

FAPRI asserts that Brazil's long-term prospects are good; new investments are expected to improve infrastructure and raise productivity. Strong domestic and export demand fuels a 3.1% annual expansion in Brazil's pork sector. Net pork exports grow by 6.0%, to 1.2 mmt in 2015. Improvement in productivity (breeding and feeding programs), favorable domestic policies (credit, infrastructure, fiscal), and a weakening currency improve Brazil's competitiveness in the world pork market.

The EU's new member states are currently among the leading pork exporters in the world when grouped together. According to FAPRI, these countries will remain important exporters but their share of world markets will remain relatively stable or even decline by 2015.

In the EU, the decline in market share is driven by strict environmental regulations and animal welfare requirements. These limit the EU's (especially the EU-15's) long-term capacity, and production grows by only 0.7% annually.

China is often viewed as a potentially formidable competitor. FAPRI notes that pork is produced cheaply by backyard producers in China, but commercial producers' costs are comparable to those of other countries. The fact is, however that FAPRI sees China more as a market opportunity than as a major exporter. WTO accession for China will result in more open market opportunities in coastal population centers as tariffs are reduced from 20% to 12% and as foreign firms are allowed to engage in distribution. FAPRI sees net imports expanding significantly by 2015.

Other major importers are expected to remain as major importers. In Russia, FAPRI is forecasting that net imports decline by 1.4% as production grows faster than consumption. Russian however, is expected to remain as one of the major pork importers in the world. With WTO accession, Taiwan's pork production increases only slightly, by 1.0%, and imports expand by 8.5% to meet the 1.3% annual increases in consumption. South Korea's consumption growth, at 2.7%, is faster than its production growth, at 2.6%, and is thus met by more net imports. Improved consumer purchasing power and population growth caused pork consumption in Mexico to increase by 3.0%. Despite some industry integration, a limited supply of cheap feeds and credit problems keep growth in domestic production lagging behind.

Another aspect of FAPRI's work that needs to be considered relates to the prospects for economic growth in the world. FAPRI is forecasting that China and the important Pacific Rim countries will enjoy steady and relatively strong economic growth from now through 2015. In addition, FAPRI sees the lesser developed countries also benefiting from comparatively strong and steady economic growth. This is important because higher income, urbanization, other demographic shifts, improved transportation, and consumer perceptions regarding quality and safety are changing global food consumption patterns. Shifts in food consumption have led to increased trade and changes in the composition of

world agricultural trade. In developing countries, higher income results in increased demand for meat products.[10]

5.2 Conclusions

The October 2006 George Morris Centre report clearly outlined how crucially important the export market is to Canada's pork industry and its hog producers. The FAPRI analysis shows that the world's leading pork producers, including Canada, will continue to grow and compete for share in world markets.

The main message garnered from FAPRI, however, is that the major import markets will remain very strong, growing markets for the world's pork producing countries. This means that the export market will continue to grow and be a source of dynamic change. The export market will always be exceptionally competitive, but at the same time, however, the FAPRI research suggests that the export market will not be a zero-sum game. That is, growth amongst competitors will not necessarily be at the expense of competitors.

[10] Changing Structure of Global Food Consumption and Trade. Anita Regmi, editor. Market and Trade Economics Division, Economic Research Service, U.S. Department of Agriculture, Agriculture and Trade Report. WRS-01-1. May 2001

6.0 Pork Packer Issues and Challenges

This section of the report examines the competitive issues and challenges facing the Canadian pork packing industry. The purpose of the section is to evaluate the strengths and weakness in order to determine future prospects and strategies to compete.

Industry Developments

Growth in exports is usually regarded as a sign of competitiveness. That is, the more an industry exports, the more competitive the industry is regarded. With that said, the Canadian pork packing industry offers a paradox. On one hand, the industry is a world leader in pork exports. That suggests that the Canadian packing industry is competitive on world markets. On the other hand, however, 2-3 million slaughter hogs and 6 million feeder hogs are annually shipped south to the US. That fact suggests that Canadian packers are not competitive with their US counterparts.

In some respects the issue of packer competitiveness is one of the most important factors facing the industry. The massive changes announced by Maple Leaf and Olymel in 2006 and early 2007, are major consequences of the competitiveness problem. Maple Leaf announced that it would close or sell five plants across the country. This is in addition to its earlier decision to exit its stake in plant operations in PEI and Quebec. The announcements in the fall of 2006 by Maple Leaf mean a potential loss of capacity of at least 4.5 million head. The company also said it would double shift its Brandon. The net potential loss of capacity could amount to over 2 million head, mostly in Ontario.

For its part, Olymel has already announced that one of its Quebec slaughter plants will close in 2007. A last minute labour agreement in February 2007 saved its Vallee-Jonction plant from closure. In addition, for a variety of reasons, the company elected not to go forward with its previously announced plans to construct a plant in Winnipeg. Further announcements are expected in light of its late 2006/2007 external evaluation of its pork processing business. As noted earlier, the company was also forced to end its second shift at its Red Deer plant.

In addition to those massive developments, other developments are also occurring. For example there has been a protracted strike during late 2006 and early 2007 at Trahan, a relatively small Quebec packing plant. This has likely been precipitated by poor financial results. The Quebec hog marketing system has been put into disarray due to the collapse in pricing of one of the three pillars of their system. In addition, a packing plant in Moose Jaw was opened and closed in 2006.

There is no question that 2006 and 2007 have been one of the most tumultuous periods in the Canadian hog and pork industry. In response to these developments, producers across Canada are examining the prospects for investing downstream into the packing sector. The motivation, of course, is to secure markets for their hogs in an environment of significant uncertainty.

As a starting point in the discussion of the pork packing issues and what is driving these changes, it is worthwhile to review some of the key drivers to success in pork packing.

6.1 Pork Packing Drivers

The following points are key pork packing plant characteristics that determine successor failure of plant operations.

- Scale economies
- Plant location/utilization
- Labour costs
- Hog Weights
- Credits

Scale Economies

The following provides a good outline of relative plant sizes between Canada and the United States:

Canada
- average daily capacity: 3,200 head
- 5 largest Cdn plants: 8,400 per day.
- 3 of top 29 are >40,000 per week

United States
- average daily capacity: 13,000 head.
    - nearly 4 times greater than in Canada.
- 5 largest US plants: 21,000 head
    - 2.5 times greater than the top five in Canada.
- 20 of top 29 are > 40,000 per week

The main message of the data shown above is that Canadian plants or line speeds are much smaller or slower than in the United States. The following table provides another perspective on the same factor:

Table 5 Relative Packing Plant Sizes

	US	Canada	Quebec
Avg Daily Capacity	13,000	3,200	2,700
Five Largest	21,000	8,400	5,500
# Plants >40,000/head per week	20	3	0

Plant size is an important consideration because economic research as well as statistical analysis and basic cost accounting has consistently showed that larger plants have lower

costs per head than smaller plants.[11] In larger plants, direct and even indirect costs are spread over larger numbers. For example fixed costs such as management, marketing, depreciation, rent and property taxes will not change materially or at all if line speeds are increased or if plant sizes vary from 500 head per hour to 1,000 head per hour. While these cost do not materially increase, the cost per head can be materially reduced in the larger plant. In addition labour is more productive and physical assets are more fully utilized. Plant managers concur that there is a significant increase in labour productivity as line speeds increase. Of course there are limits but the practice consistently results in lower labour costs in larger plants. According to George Morris Centre, USDA and other academic research, costs can be C$2-8/head lower costs for large (1,000/hour) versus small (300-400)/hour.

Double shifting is important for similar reasons. Indirect costs such as administration and depreciation are spread over a larger number of hogs and assets are generally more fully utilized. All major US plants are double shifted whereas in Canada only two very small plants in Quebec are double shifted. According to George Morris Centre data research, Canadian plant costs are at least C$3 higher than US plants due to a lack of double shifting.

Essentially, Canadian plant costs are likely at least C$5/hog higher than in the US due to the fact that they are smaller and not double shifted. In fact, anecdotal information from Canadian packers suggests that the US advantage is likely closer to C$8/head due to smaller sizes and a lack of double shifting.

[11] Academic and government research into economies of scale and the economies of size are plentiful in the United States. The following are some of the papers that deal with the topic.
Cost Structures of Pork slaughter and Processing Firms: Behavioral and Performance Implications, Hayenga, May 1997, Iowa State Staff Paper
Scale Economies and Consolidation in Hog Slaughter, James M. MacDonald and Michael E. Ollinger; Amer. J. Agr. Econ. 82 (May 2000): 334–346
Size, Cost, and Productivity in the Meat Processing Industries; Yin Xia Department of Agricultural Economics, University of Missouri-Columbia, Columbia, MO 65211 Steven Buccola Department of Agricultural and Resource Economics, Oregon State University, Corvallis, OR 97331; Agribusiness, Vol. 18 (3) 283–299 (2002)
Meatpacking Competition and Pricing, Ward; Research Institute on Livestock Pricing, Virginia Tech, 1988

Capacity Utilization

Capacity utilization is an important component of cost competitiveness. The principle is similar to the concepts discussed above regarding scale economies. The costs of the plant, particularly fixed costs, but also labour costs, are going to be borne by the business regardless if the plant is fully utilized or not. As such, the more that the plant is utilized in terms of hog throughput, the lower the cost per head.

Capacity can be a difficult factor to measure. It can be fluid and constantly changing depending on even modest changes. The Canadian Pork Council conducts an annual survey of Canadian federally inspected packing plant capacity. That annual survey has indicated that Canadian plant capacity has increased from 450,000 to 457,000 to 495,000 from 2004 to 2006. For reference, capacity levels ten years ago were estimated at 320,000 head per week. The big increase in capacity in 2006 was due to the Olymel double shift, which was in place in late 2005 and the first half of 2006.

Another way to determine plant capacity is by tabulating actual slaughter in Canada. Under this method, the maximum weekly slaughter is observed and that number is taken as the weekly capacity.[12] Under this methodology, weekly slaughter capacity in Canada is approximately 475-480,000 head, under the assumption of a single shift at Olymel Red Deer. This capacity includes approximately 20,000 head per week of provincially inspected slaughter.

Meanwhile, actual slaughter in Canada during the later half of 2006 and into early 2007 been averaging around 420-430,000 per week. That in turn yields a capacity utilization rate of about 89%. That is down from the peak utilization rate, which was about 92% in 2004. As noted above, this method of utilization calculation does not take into account the potential for double shift at Red Deer or other plants. For its part, Maple Leaf Foods has made presentations in which it calculates capacity utilization assuming a double shift at Red Deer as well as greater capacity at other plants. Using this method, Maple Leaf estimates Canadian capacity at just 64%.

Using the maximum weekly kill methodology for the United States, it is tabulated that current weekly slaughter capacity there is about 2.2 million head per week. Average weekly kill in the United States has been just under 2 million per week. Combining the two facts means that capacity utilization in the United States has been running about 91%.

The difference in capacity utilization rates between Canada and the United States using the maximum kill method is about 2%. This difference is not great but it does amount to added costs per hog. For example, if total plant costs in a 40,000 head per week operation amount to about $1.1 million,[13] the cost per hog at 91% capacity would amount to about $1/hog less than at 89% capacity.

[12] George Morris Centre methodology typically takes the maximum and reduces it by 5,000 per week under the assumption that a maximum is not necessarily sustainable.

[13] Assuming 750 workers at total labour costs of $18/hour representing half of total costs. (750*$18/hr*40hrs/wk = $540,000/week in labour costs * 2 = $1.08million in total costs/week)

The key point with regard to capacity utilization is that the lower the utilization rate, the greater the costs per hog. In that regard, the trend in Canada has been for lower utilization rates in recent years. This trend has contributed to declining rates of cost competitiveness relative to the United States.

Labour Costs

Labour costs can comprise about half of total operating costs, not counting the cost of the hog. As noted above, labour is one of the most crucial factors facing packers from an availability perspective. Given its importance in terms of operating costs, labour is also a focal point of competitive difference between plants. The following representative wage data was collected independently on behalf of the George Morris Centre. The data is in US dollars and represents the time period from August 2004 to September 2006.

Table 6 US and Canadian Pork Packing Labour Rates, US$

General Labour Rates		
US$/hr from September 2004 to August 2006		
	U.S.	**Canada**
Kill		
Wage + OT	$12.67	$11.75
Benefits	$4.15	$3.97
Total	$16.82	$15.72
Benefit %	32.70%	33.40%
Cut		
Wage + OT	$12.60	$11.91
Benefits	$4.12	$3.96
Total	$16.72	$15.87
Benefit %	32.50%	32.70%

As can be seen, in US dollars, Canadian wage rates tended to be lower than in the United States. The exchange rate over that period of time averaged about US$0.84. That means that the average wage observed over that time was about C$14/hour or about C$19/hour including benefits.

Based on 2006 average exchange rates of about .86, Canadian and US wage rates were basically equal. That is, the appreciation of the exchange rate in 2006 essentially wiped out the wage advantage in Canada.

Particular plants and packers however, can have very different labour rates. Based on other independently collected data, this average observed wage rate of about C$19/hour

is close to what is seen at plants such as Maple Leaf and Quality in Ontario as well as Olymel, Red Deer. Maple Leaf Brandon is likely lower than that average. The Olymel plants in Quebec, however, have seen wage rates average closer to $25/hour including benefits.

A rule of thumb in the packing industry is that every $1/hour in wages equals about $1/hog. For example, in a 40,000 head per week plant, there might be 1,000 workers being paid for 40,000 hours each week. That is one hog per man-hour. Therefore an increase of $1/hour or a $1/hour differential between plants equals $1/hog. As such, plants that are out of line with US or Canadian competitors by $5-6/hour, are actually out of line by $5-6/hog.

In summary, at best it could be said that Canadian wage rates generally appear to be competitive with those in the United States. On a plant by plant basis some plants are more or less competitive than other plants in Canada and the United States.

Other Factors

Other factors that are crucial to packing plant profitability relate to carcass weights and edible and inedible credit items.

With regard to carcass weights, in the United States, carcasses typically generate up to 200 pounds or 91 kilograms of edible meat. In Canada, the average carcass in 2006 might have generated about 190 pounds or less or about 87 kilograms of edible meat. Based on carcass values in 2006, the larger carcass would have resulted in extra revenue of at least $9 per hog.

While the hog weight issue is being addressed by new grids, the fact is that there remains a strong revenue advantage on average in the United States compared to Canada.

Another factor that is of importance is the inedible byproducts or credits resulting from kill and cut operations. A prominent school of thought in the packing sector suggests that the revenues derived from the credit items, whether edible or inedible, can often make the difference between profit and loss.

With regard to the inedible items, the value of items such as bone meal, tallow, lard and blood are established on the open market. This market is worldwide and in theory packers in Canada and the US would be receiving the same pricing for these items, with only local supply and demand spreads between markets. In reality, however, US packers can typically receive more for rendered items due to economies of scale discussed earlier. That is, larger plants or larger networks of affiliated plants can generated a critical mass of credit items for rendering or further processing. Based on third party data collected on behalf of the George Morris Centre, it appears that with regard to credit items, US packers have been earning at least C$5/head more than Canadian packers.

6.2 Canadian Dollar Appreciation

The appreciation of the Canadian dollar has had an impact on Canadian packers in two ways. The first is that it has modestly resulted in reduced gross margins. That is due to the fact that appreciation has reduced pork cutout revenues at a slightly faster rate than it has reduced hog costs. Figure 14 helps to explain the arithmetic of the gross margin erosion.

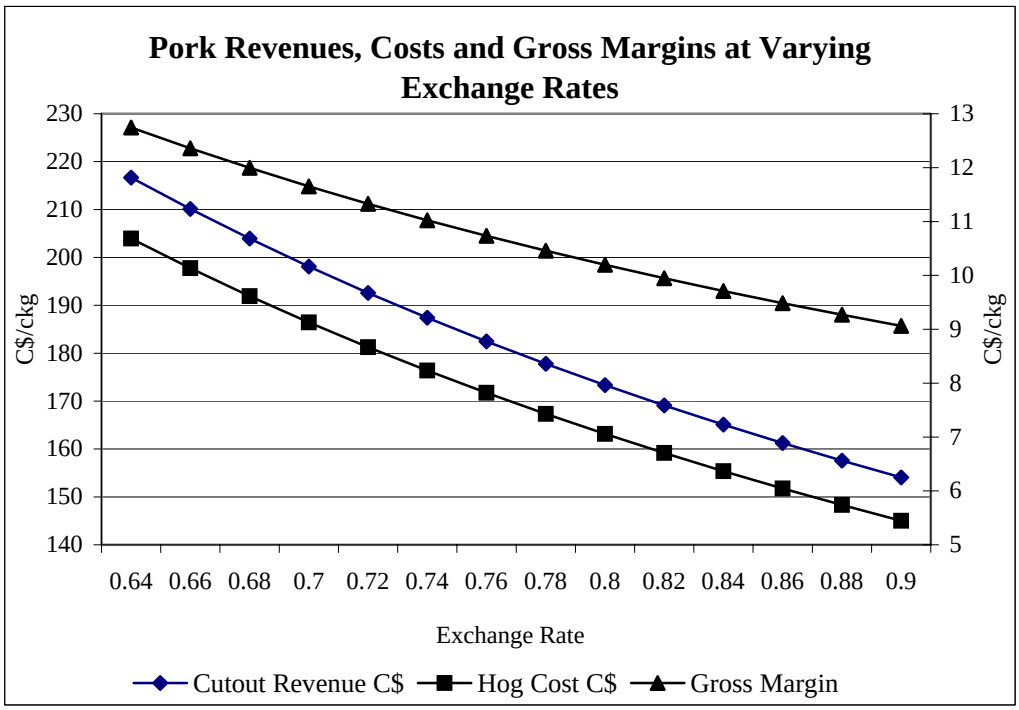

Figure 14 **Source: George Morris Centre**

All hog and pork pricing in Canada is based on US prices whether by formula or by the fact that North America is one, open market. As such, Canadian pork cutout values and Canadian hog values are simply US prices, adjusted by the exchange rate, less transport/basis costs. The graph above is based on a US cutout value of US$68/cwt and a hog carcass cost of US$64/cwt. These values are roughly the average values for those two variables over the four years from 2003 to 2006.

Based on those fixed US values, the C$ values of the cutout and hog cost are adjusted by the exchange rate and converted to Canadian carcass values in kilograms using the typical Canada and US carcass yields. The exchange rate ranges from US$0.64 to 0.90, as it did from 2003 to 2006. As can be seen from the graph, using the left vertical axis as a guide, the cutout and hog cost both declined as the exchange rate appreciated. That is, when the exchange rate was at .64, that same US cutout value was at near C$220/ckg while the hog cost was near C$204. As the exchange rate appreciates, the revenue and costs both decline, but at different rates. The revenues decline faster than the costs as the C$ appreciates. The right vertical axis shows the decline in the gross margin. Essentially

as the exchange rate appreciated from 0.64 to 0.90, the gross margin deteriorated from about C$13/ckg to about C$9/ckg.

As such, gross margins have been trimmed during the period from 2003 through 2006 as the appreciation occurred.

In addition to the impact on gross margins, operating cost competitiveness relative to the US competition has also been impacted. For example, assume that labour costs per hog in Canada amount to C$20/hog. When the exchange rate is at 0.65, the US equivalent was just US$13/hog. At a ninety-cent dollar, that same US equivalent becomes US$18/hog. As such, the appreciation results in a relatively higher cost structure. The same principles can be applied to all aspects of packer operations. The appreciation of the C$ resulted in a dramatic escalation in operating costs in US dollars. This in turn meant that strictly due to appreciation, common plant costs that may have been competitive at a .65-cent dollar became uncompetitive at a .90-cent dollar.

It may be of some interest to speculate or estimate what exchange rate Canadian packers could be competitive relative to US packers. That exercise would be fraught with varying assumptions about plant sizes, throughput rates, wage rates and capacity utilization. At this point therefore, it is best to not assert that the challenge rests with the exchange rate. Instead it is best to assert that the exchange rate appreciation simply exposed the challenge.

6.3 Packer Profitability

The Canadian pork packing industry has suffered through a very difficult period regarding profitability and margins during the past three years. For example, Olymel has publicly stated that by the end of 2006 the company will have lost $155 million since 2003.[14] In fact the company has said that losses have amounted to about $50 million at Vallee-Jonction alone. For its part, during 2006 and earlier Maple Leaf did not report pork earnings separately. Pork operations are included in its Meat Products Group, which also includes poultry. Within the Meat Products Group, Maple Leaf tended to report declining quarterly profits over the last year. This in conjunction with Maple Leaf's announcements of major restructuring indicates that pork-processing profitability was not acceptable, at the very least.

Figure 15 shows George Morris Centre estimates of net profitability of a mid-sized Canadian kill and cut operation. The model uses RA Chisholm pricing reports for revenues and credits in combination with Ontario hog costs. The model also incorporates an assumed kill and basic cut cost of just over $22/head.

[14] http://www.canada.com/nationalpost/news/story.html?id=4cc6ba5b-4a1b-4560-bc80-b2be556e7076&k=71835

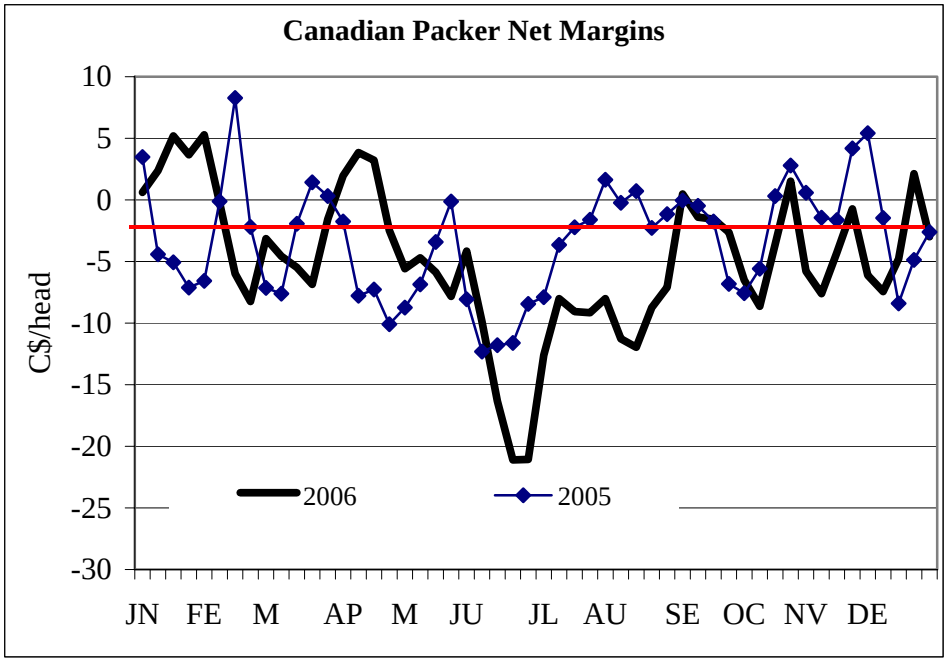

Figure 15 **Source: George Morris Centre**

Basically the model indicates that over the past two years, packers would have lost approximately $5/head on kill and cut operations. This means that a packer slaughtering 20,000 head per week would have lost at least $5 million per year. This is likely a conservative estimate because it does not take into consideration factors such as lower capacity utilization in the past year.

In contrast to the performance of the Canadian packing industry, independent analysts in the United States indicate that US packers enjoyed a profitable year in 2006. Further to that point, the results of Swift and Company can help provide further clarification of US packer profitability. Swift reports its pork operations earnings separately. The company's quarterly results indicate strong, but modestly declining profits on pork operations from mid 2003 through the end of 2006.

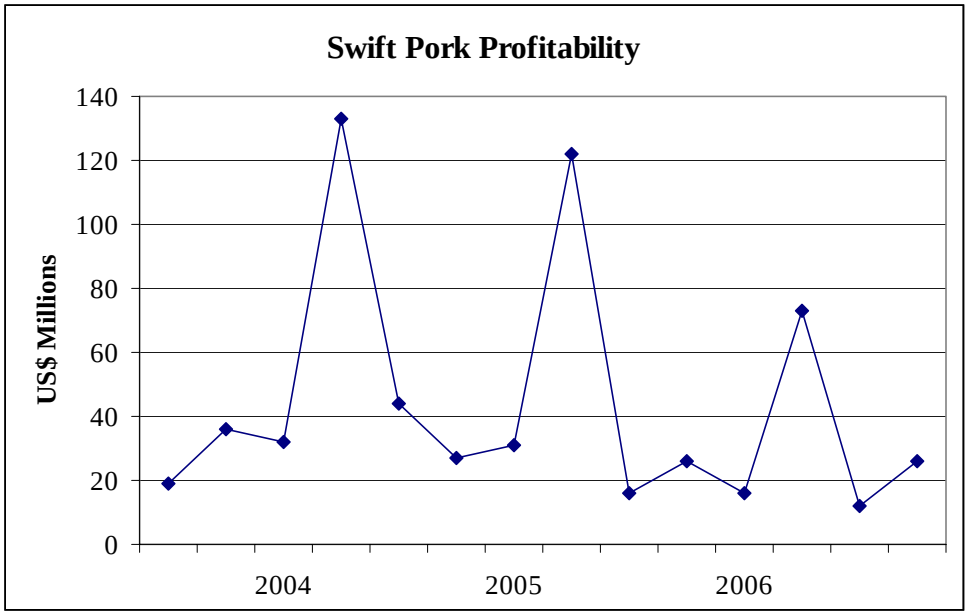

Figure 16 **Source: Swift and Company**

Impacts On Producer Pricing

The Canadian and US hog and pork industries are essentially one North American industry. As with most agricultural commodities, the Canadian hog price will follow the US price because of the ability of Canadian hog producers to sell to US buyers. As with most commodities, this ability results in a price arbitrage, which keeps prices closely correlated. This price arbitrage has historically been a fixture of the North American live hog pricing structure. For Canada this arbitrage exists because there is free and open trade in hogs and pork in both directions. Arbitrage even exists in times of trade disputes involving duties or other barriers. During those periods the cost of the barrier or duty is reflected in the spread or basis.

Recall that prices in Canada are determined and discovered largely by a formula relationship to prices in the United States. Canadian prices are US prices adjusted for the exchange rate less the cost of transport and plus or minus local supply and demand conditions.

Cdn Price = US ÷ Exchange – transport +- (local supply and demand)

The transport and local-supply demand conditions are manifested in the formula pricing through the "Index divisor," in Ontario or the "plant factor, " on the prairies.

Canadian producers and packers cannot influence US prices, the exchange rate or transport costs. Canadian participants do, however, have an impact over local supply and demand conditions. For example in the summer of 2003 Springhill Farms, an 18,000 head packer was temporarily closed. This caused a local supply demand imbalance, which in turn resulted in lower local/prairie bids. Conversely when Maple Leaf opened its Brandon plant in 1999, the abrupt surge in packing capacity caused a supply demand

change in producer's favor. Packers bid higher and even paid transport costs for producers.

Local supply-demand can even alter the parameters of the formula pricing. Changes in supply and demand in Canada during 2003 helped packers succeed in lower formula pricing in both the prairies and Ontario (102.5% to 100%).

The point of these examples is to demonstrate that local supply and demand can alter market leverage even though so much of the market is beyond the control of packers and producers in Canada. Furthermore, based on Canadian price discovery, market leverage can be measured by the degree to which prices change relative to those in the United States. The price spread between the two regions can be a good measure of market leverage in Canada.

Hog Pricing From the Packer's Perspective

The previous section outlined the components of hog pricing from a formula perspective. When a packer needs to buy spot or cash market hogs or when the packer is determining whether the spot market is a profitable alternative, the process boils down to price versus costs.

Packers determine an offer price based on their need for hogs and the competitive offerings of other packers. The key reference will be the prevailing US prices. The main arithmetic of the cash offer price is as follows:

Revenue from pork and by-products
- fixed and variable costs
- a profit target
=Offer price for hogs

The profitability of a packer is the greatest determinant of the ability to pay for hogs. Increased costs or reduced profits result in lower hog prices. Conversely it is equally true that lower costs and greater profits help to drive hog prices higher.

The key point is that the lower profits of the packing sector as well as the relative inefficiency and lack of profitability of packers during the last three years has been detrimental to producer pricing in Canada.

Summary

As discussed above, the Canadian pork packing industry appears to be at a competitive disadvantage across a range of critical success "drivers." Each Canadian plant can vary in terms of advantages and disadvantages so it is not prudent to add each of the items to derive an average Canadian shortcoming. Within that context, however, there is little doubt that there are real, measurable weaknesses facing Canadian packers in each of the competitive drivers. For the industry as a whole, a conservative estimate of the disadvantage would be at least $8/hog, but more likely over $10/hog.

These challenges are being addressed now by the packing sector but the adjustment is going to result in major uncertainty and disruption for producers across the country.

7.0 Conclusions

Hog Production

The Canadian hog and pork industry is struggling with competitive tests throughout the supply chain. The following are some of the key factors at the producer level:

- Lagging feed grain productivity relative to the United States
- Declining feed grain acreage
- Higher cost feed grains relative to the United States.
- Higher cost of feeding hogs relative to the United States.
- Significantly higher sow productivity in Canada relative to the United States.

The net result is that when all the components of production are compared, based on the George Morris Centre hog cost of production model, it is reasonable to assert that a typical prairie hog operation could have total costs that are about C$5-10/head higher than their counterpart in the US mid-west. The situation would be at least as difficult in Ontario or Eastern Canada. This differential in turn plays a material role in lagging hog production profitability between Canada and the United States.

The first objective of this project was to assess the trends in the key drivers of costs at the producer level in Ontario and the Prairies relative to the US. In that regard it is readily apparent that the trends have been working against Canadian hog production to the point where the industry finds itself in a material competitive disadvantage. The order of magnitude of that disadvantage will vary greatly depending on operations, but it is not out of order to generalize that the production sector is fighting from at least a $5/hog disadvantage compared to the US mid-west.

Labour

Canadian livestock production and packing is facing a mounting labour shortage. This shortage has been brought on by many factors including an aging work force, a dramatic reduction in local youth enrolling in agriculture related programs/farm careers and an inability to compete in the labour market with other sectors. This new labour environment is directly impacting hog production and packing from coast to coast.

The Canadian pork packing industry faces many challenges but the lack of labour is arguably the most significant. Depending on methodology, it is very straightforward to assert that labour availability is costing the Canadian pork packing industry $600 million to $1 billion per year. Furthermore, when the packing industry suffers due to this or any other challenge, the ramifications are felt directly by producers as well.

The meat industry needs the federal government to make changes to its Foreign Worker Program. The legislation needs to be changed to facilitate the more rapid entry of workers

in sectors where there are labour shortages. As noted by the Canadian Meat Council in its Submission to the House of Commons Standing Committee on Finance Pre-Budget Consultations for 2006, this includes: a simplified, efficient process to get workers into the country; an approval process that unions/competitors cannot block; and a clearer process on how foreign workers can eventually become permanent residents. Further to that point, the most important change needed is to increase the period in which foreign workers can stay in Canada to at least 18 months.

International Trade

The following are some of the key reasons why international trade is crucial to the success of the Canadian pork industry:

- Pork exports have been the driver of the exceptional growth of pork production in Canada
- Canada is a world leader in pork exports (see graph below).
- Canada has diversified its export markets to over 100 countries and is increasingly less dependent upon the US market.
- Pork export demand has been rapidly growing while domestic demand has been stable.
- Pork exports of $2.8 billion in 2005 are responsible for economic activity amounting to $7.7 billion and 42,000 jobs.
- Pork exports support the incomes of about 6,000 farmers and about $2 billion in farm cash receipts.
- Premiums derived from the export market due to value differences in those markets could result in enhanced producer income of up to $9/hog.

Looking to the future, the Food and Agricultural Policy Research Institute specializes in longer term macro economic forecasting. In that regard, FAPRI sees pork trade increasing by 2.4% annually by 2015. Over that period of time, the market share of the enlarged EU drops by 3.3 points by 2015. Canada, the U.S., and Brazil gain 1.9, 2.7, and 4.2 points of market share, respectively.

The FAPRI analysis shows that the world's leading pork producers, including Canada, will continue to grow and compete for share in world markets.

The main message garnered from FAPRI, however, is that the major import markets will remain very strong and growing markets for the world's pork producing countries. This means that the export market will continue to grow and be a source of dynamic change. The export market will always be exceptionally competitive, but at the same time, however, the FAPRI research suggests that the export market will not be a zero-sum game. That is, growth amongst competitors will not necessarily be at the expense of competitors.

Pork Packer Issues and Challenges

The Canadian pork packing industry is now the focal point of industry competitiveness. The sector is in the midst of large scale restructuring and rationalization. In order to understand how why this is occurring and where the industry is likely heading, it is

necessary to understand some of the key drivers in the industry. The following points are key pork packing plant characteristics that determine successor failure of plant operations.

- Scale economies
- Plant location/utilization
- Labour costs
- Hog Weights
- Credits

Canadian pork packing industry appears to be at a competitive disadvantage across a range of critical success "drivers." Each Canadian plant can vary in terms of advantages and disadvantages so it is not prudent to add each of the items to derive an average Canadian shortcoming. Within that context, however, there is little doubt that there are real, measurable weaknesses facing Canadian packers in each of the competitive drivers. For the industry as a whole, a conservative estimate of the disadvantage would be at least $8/hog, but more likely over $10/hog.

Appreciation of the Canadian Dollar

The appreciation of the Canadian dollar has had an impact on Canadian packers in two ways. The first is that it has modestly resulted in reduced gross margins. That is due to the fact that appreciation has reduced pork cutout revenues at a slightly faster rate than it has reduced hog costs.

In addition to the impact on gross margins, operating cost competitiveness relative to the US competition has also been impacted. For example, assume that labour costs per hog in Canada amount to C$20/hog. When the exchange rate is at 0.65, the US equivalent was just US$13/hog. At a ninety-cent dollar, that same US equivalent becomes US$18/hog. As such, the appreciation results in a relatively higher cost structure. The same principles can be applied to all aspects of packer operations. The appreciation of the C$ resulted in a dramatic escalation in operating costs in US dollars. This in turn meant that strictly due to appreciation, common plant costs that may have been competitive at a .65-cent dollar became uncompetitive at a .90-cent dollar.

Implications for Producers of Packer Profitability

The profitability of a packer is the greatest determinant of the ability to pay for hogs. Increased costs or reduced profits result in lower hog prices. Conversely it is equally true that lower costs and greater profits help to drive hog prices higher.

The key point is that the lower profits of the packing sector as well as the relative inefficiency and lack of profitability of packers during the last three years has been detrimental to producer pricing in Canada.

Future Direction

This report focused on issues and challenges facing the production and processing sector. The report also briefly touched on some of the factors that have made Canada one of the world leaders in pork production and exports. While the challenges are many and

difficult, the Canadian advantages ultimately mean that the industry can and likely will continue to be a world leader and a strong competitive presence.

Within that optimistic context, however, the key challenge relates to feed grain and packer competitiveness. The industry needs to address lagging productivity in feed grains and its pricing disadvantage relative to the United States. In addition, the packing sector is going to have to undergo a restructuring to better compete in world and domestic markets, particularly against the United States. The likely result will be a period of accelerated attrition in producer and packer operations for the next five years. Within that difficult period, however, the industry remains poised to continue to grow, compete and succeed both domestically and internationally.