

# **Risk Management in a Global and Local Context**

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## **▪ Introduction**

Price variability has increased significantly in the Canadian pork industry due to both global and domestic market factors. In the last 5 years, hog producers have experienced both record high and low hog prices. These price swings are the result of major market forces that are at work as the pork market continues to expand globally, combined with the North American industry going through major consolidation. These structural changes contribute to uncertainty that makes risk management no longer an option, but rather a requirement in managing your commercial hog business.

## **Why is there more price variability now?**

In 1999, about 1 billion hogs were produced in the world with over half of these hogs being produced in China. The United States produced about 10 percent of the world's hogs, while Canada produced less than 2 percent. Of the 2 percent that Canada produced, nearly 40 percent was exported. Our small size relative to the world market creates a situation where hog prices will continue to experience major swings in response to world supply and demand factors.

Consolidation will also add to price uncertainty as processors and hog producers continue to acquire greater market share in order to become more efficient and acquire greater market control. Consolidation in the United States has resulted in the top 3 hog processors expected to slaughter about 60 percent of all the hogs in 2001 compared to the top 3 hog processors slaughtering about 42 percent of all the hogs in 1991. Major consolidation has also occurred in hog production, with the top 15 US hog producers currently having about 40 percent market share compared to the top 15 producers only

having about 14 percent market share in 1994. Similar trends in both hog processing and production operations have also been experienced in Canada.

### **Why do you need risk management?**

There has also been a massive injection of capital into the hog industry over the last decade to finance the hog expansion that has occurred in western Canada. This has resulted in both shareholders and lenders requiring a return on investment that will cover both the company's financial obligations and provide a reasonable profit. Producers have to be much more disciplined in knowing what their cost of production is and the necessary hog prices to keep their shareholders satisfied. While traditional forms of price risk management will remain, new tools will be developed to meet these business challenges. There will also be an increasing reliance on trustworthy business relationships that may also include increased outsourcing of expertise.

The size and management structure of the hog operation tends to reflect the nature and degree that risk management is being used in western Canada. About 5 percent of the hog producers use risk management tools as part of their pricing strategy. This rate is extremely low considering the predictability of the hog price cycle and the amount of equity that was lost in 1998 and 1999. However, more important than the number of producers using risk management is the number of hogs that are under some type of risk management program. In the last two years, about 20 to 40 percent of all the market hogs at any one time were being backed by a forward or futures price contract. Operators of large hog operations involving 20,000 hogs or more realize that is essential to lock in a portion of their hog sales in order to achieve their financial targets.

Risk management allows you to lock in hog prices and/or fix the price of your feed inputs, resulting in predictable hog margins. Predictable margins are extremely important if your operation is highly financed or has specific return on investment being demanded by your shareholders. However, the ability to generate higher returns is a greater benefit in using risk management than the more commonly cited reason of stabilizing hog revenue. Risk management forces you to determine attractive future hog prices relative to historical prices, the market outlook and your cost of production. The ability to acquire higher forward contract prices relative to the cash market is in your favour if you use an on-going disciplined decision making process. This process involves a customized plan that determines your cost of production, evaluates historical prices and takes market outlook information into account. With this information you can use the futures price swings to your advantage. The probability of achieving higher forward contract prices are greatly increased by simply knowing the historical hog prices, seasonal market trends and the continuing hog price cycle.

The main reason producers don't like to use risk management tools is the emotions relating to receiving a forward price that turns out to be lower than the actual cash price. A number of producers will comment that they got "burned" by forward contracting. Ironically, very few hog producers ever comment that they got burned by not forward contracting. However, as the market place evolves, producers are seeing the merits of not taking a chance of pricing their entire hog production on the cash market.

## ▪ Risk Management Programs

There are about 25 different types of risk management programs that western Canadian hog producers can use to lock in hog prices. All of these programs have pros and cons and should be customized to your specific business structure, risk tolerance level and your desire to take an active role in pricing your hogs. The major distinguishing factors among these programs are:

### *Who backs the lean hog futures contract:*

- ▶ You, the producer,
- ▶ The meat processor, or
- ▶ A marketing Agency.

### *Size of individual contract:*

- ▶ Less than 225 hogs,
- ▶ Greater than 225 hogs, and
- ▶ Greater than ~ 10,000 hogs.

**The right program  
can make you \$5 -  
\$10 per hog extra**

### *Who carries the basis risk:*

- ▶ You, the producer, or
- ▶ Packer and/or marketing agency carries.

### *Nature of currency risk:*

- ▶ Payment made in Canadian dollars, or
- ▶ Payment made in US dollars.

Selecting the right program can make you an additional \$5 to \$10 per hog extra. However, it does take an investment on your part to understand these different programs and determine which program will best serve your needs. As a supplier of hogs, it is also essential to develop business relationships with

the processor and/or marketing agency that will be buying your hogs. Greater coordination between you and the company that buys your hogs will also add to your knowledge and your ability use risk management tools more effectively.

### ▪ **Hog Pricing Action Plan:**

You are now forced to get in the driver's seat in pricing your hogs as a result of deregulation, variable hog margins and numerous pricing options. The upside to this new business environment is the ability to increase your hog returns by 10 to 20 percent. The following activities are what I see a number of successful hog farmers doing in order to generate an additional \$10 to \$40 per hog.

### **Take Advantage of Market Information**

Information is the most important factor in maximizing profits regardless of what business you are in. You should be seeking out information or working with someone to acquire information that is related to your farm operation. There are numerous pricing programs that are available and you should be choosing the combination of programs that works best for you. The prices and specific terms can be adapted to provide you with the highest potential prices. However, to achieve the best prices, you should spend time with your marketing agencies or processor exploring the different options that are available.

### **Know your pricing options**

The loss of western Canadian sales monopolies gives you the opportunity to take an active role in marketing your hogs. Various hog marketing services are now being offered by marketing agencies, hog processors, feed companies and independent marketers. There is a lot to be gained by understanding the marketing services that each of these agencies has to offer. However, you should partner up with a marketing agency and/or a processor that offers you a range of services specific to the needs of your hog operation.

One of the most important services you should require from your marketing partner is the ability to lock-in future hog prices. Being able to price your hogs on both the cash market and the forward market is key to getting the most money for your hogs. Other marketing services that you should require from your marketing agency include:

- Timely market information on pricing opportunities, and
- Flexible pricing and delivery opportunities, and

- The ability to set target prices, which is the price you will receive if hog prices rally to higher levels.

### **Always have a forward position**

The riskiest position you face is having none or all of your hogs forward priced. You face the greatest price fluctuations if all your hogs are sold into the cash market, which creates incredible price uncertainty. If you never take any price protection, then you are 100 percent confident that cash hog price will be higher than any forward prices. The hog price collapse faced in December 1998 could have been minimized had producers taken some price protection when market experts were warning about slaughter capacity constraints 2 and 3 months before the actual price collapse.

Having as little as 5 percent of your hogs forward priced forces you to pay attention to the markets. A forward position will give you an appreciation for additional information that you need to make informed timely decisions. The market is also very emotional at times, with major swings one way or the other. Forward prices are also a way for hog processors to tie up hogs to meet their future pork sales. Therefore, the forward contract prices being offered by packing plants or agencies representing a processor can have a price premium built into the price. Your marketing agency should be able to discuss these pricing opportunities with you.

### **Have an on-going one-year planning horizon**

Hog farmers that generate the most annual revenue are always looking at hog prices for up to one year into the future. These farmers will set price targets according to historic prices, the current cash prices they can receive and an awareness of the future hog price outlook.

On a routine basis, you should also determine what percentage of hogs you want to sell into the cash and forward market for each month for 12 months into the future, based on getting your target prices. This information should be communicated to your marketing partner to ensure that he or she is being challenged to get you the best price. After you have decided the percentage of hogs you want to forward price, you should build your forward contracting program by taking advantage of pricing rallies that occur on a regular basis and regularly updating your prices based on market changes.

### **Know the seasonal price trends**

It is essential that you know the long-term seasonal price trends to take advantage of pricing opportunities. Long-term cash hog prices are the lowest in November, December and January (\$60/cwt or \$132/ckg) and are the highest

in June, July and August (\$73/cwt or \$161/kg). There are also specific times that are best to forward price your hogs. March, April and May are the months when hog futures prices tend to rally the most, giving producers the best opportunity to lock in attractive hog prices for the balance of the year. Your marketing partner should also be able to provide you with “spread” information in making pricing decisions, in addition to evaluating these prices relative to historic prices and market outlook. The spread will show you the past pricing relationship between the different futures months. For example, knowing the typical price discount of December futures under October is very important, especially going into the next year when hog expansion is expected.

### **Your target price should be based on historic prices**

In addition to knowing the seasonal price trends, it is also important that you know what the historic high and low prices have been. When hog prices approach their historic highs, producers should start to take some price protection. Using a benchmark as historic prices to determine forward prices greatly increases your probability of enhancing your prices over the cash price. The historic prices should also be examined relative to market conditions that were prevalent during that year. Knowing where we are in the hog price cycle further enhances your price potential.

### **Know what the “Basis” is**

This is an area that you are able to take an advantage to get the highest price for your hogs. The “Basis” is the difference between the futures and cash price that is used in determining the forward price you receive. The basis should reflect historic pricing relationships between the futures and cash market, as well as, the desire that the processor has to contract hogs in certain time periods. The basis is also subject to change in the same manner as the cash and futures prices. The basis tends to be the greatest in the months of May, November and January, which means that you will receive the lowest price relative to the futures in these months. The narrowest basis is in months of August and September resulting in the highest prices relative to the futures. There are forward price programs being offered that allow you to take the basis risk without having to carry the futures directly. This program provides some excellent opportunities to improve your hog price by \$2 to \$5 per hog by using knowledge of the basis.

### **Know the Effect of the Canadian/US Exchange**

Canadian hog prices are based directly off the US price of hogs. Therefore, the CDN/US exchange rate has to be taken into account in the pricing conversion. For every cent increase in the Canadian dollar, your hog price will drop by about \$2.20/kg. If your market view is that the dollar will increase by 4 cents

(66 to 70 cents US), then your hog price will drop by about \$9/ckg unless you have locked in your exchange rate.

## ▪ **Conclusion**

The North American hog market will continue to change rapidly in the next 5 years. This will place additional pressures on producers to take an active role in pricing their hogs. Pricing hogs into the future by using various risk management tools will become commonplace. This management demand will require additional commitment. However, the financial benefits will greatly outweigh the costs.