Key Points to Survival in the New Swine Industry

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"Age old keys to making money in agriculture; cost containment and survive the bad times"

Historically the U. S. swine industry has enjoyed modest profits (Table 1). We have the grains, infrastructure and people to participate in the world production of pork. Despite this, the past 2 years have been described as the worst period in the North American swine industry in more than 40 years by veteran agricultural economists such as Glen Grimes of the University of Missouri. Dating back to September 2007 spot margins have been in the red 86 of the past 91 weeks (Graph 1).

Table 1

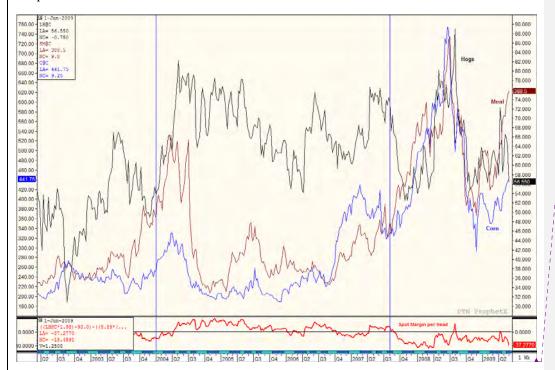
| Month sold | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | Avg 98-07 |
|-----------------------------|---------|-------------------|----------|--------|---------|--------|-------|----------|---------|--------|-----------|
| January | -25.39 | -32.77 | 4.70 | -8.40 | 0.93 | -19.12 | ~5.83 | 41.98 | 5.94 | -0.60 | (4.80) |
| February | -26.62 | -31.65 | 2.78 | 0.24 | 1.76 | -14.07 | 9.83 | 34.86 | 12.35 | 12.69 | 0.22 |
| March | -26.76 | -33.58 | 5.95 | 14.44 | -5.79 | -10.49 | 14.49 | 35.46 | 10.63 | 0.08 | 0.44 |
| April | -24.19 | -24.32 | 22,17 | 23.46 | -18.40 | -9.85 | 12.17 | 37.68 | 8.33 | 8.98 | 3.60 |
| May | -3.78 | -9.30 | 23.58 | 31.54 | -12.31 | 10.61 | 39.40 | 46.82 | 27.32 | 22:44 | 17.63 |
| June | -3,53 | -16.11 | 25,07 | 41,57 | -3.79 | 20.69 | 37.26 | 31,32 | 46.65 | 23.23 | 20.24 |
| July | -15.87 | -21.01 | 21.44 | 39.46 | 3,53 | 12.16 | 40.38 | 31.33 | 32.19 | 14.65 | 15.83 |
| August | -16,91 | -2,16 | 11.57 | 35,73 | -21.94 | 1.40 | 35.14 | 34.83 | 40.12 | 17.77 | 13.56 |
| September | -28.90 | -8.24 | 6.40 | 19.34 | -37.07 | 2.70 | 36.76 | 29.47 | 28.89 | 2.28 | 5.16 |
| October | -32.28 | -9.48 | 7.28 | 4.24 | -27.35 | -5.68 | 30.40 | 23.21 | 21.39 | -9.73 | 0.20 |
| November | -54.59 | -10.27 | -5.80 | -12.01 | -33.58 | -11.66 | 46.16 | 14.04 | 13:39 | -28.82 | (8.31) |
| December | -63.68 | -6.11 | 1.33 | -13.06 | -26.40 | -14.22 | 35.49 | 16.05 | 5.20 | -25.28 | (9.07) |
| Average | (26.88) | (17,08) | 9.76 | 14.71 | (15.03) | (3.13) | 27.64 | 31.42 | 21.03 | 3.14 | 4.56 |
| During the 1998-2007 Period | | Month sold Profit | | ofit L | Loss | | Range | Months | | | |
| Same and Continue | | January | | 30% | 70% | Profit | | Over 50 | 0.0% | | |
| Range | (63:68) | 46.82 | February | 70% | 30% | Profit | | 40 - 50 | 5.8% | | |
| | | March | | 60% | 40% | Profit | | 30 - 40 | 13.3% | | |
| Months profitable | | 58.3% April | | 60% | 40% | Profit | | 20 - 30 | 10.8% | | |
| | | May | | 70% | 30% | Profit | | 10 - 20 | 12.5% | | |
| Months unprofitable | | 41.7% June | | 70% | 30% | Profit | | 0 - 10 | 15.8% | | |
| | | July | | 80% | 20% | Loss | | 010 | 14.2% | | |
| | | | August | 70% | 30% | Lo | 088 | -1020 | 10.8° a | | |
| | | September | | 70% | 30% | Loss | | -2030 | 10.0% | | |
| | | October | | 50% | 50% | Loss | | -3040 | 5.0% | | |
| | | November 3 | | 30% | 70% | Loss | | -4050 | 0.0% | | |
| | | December | | 40% | 60% | Loss | | Over -50 | 1.7% | | |

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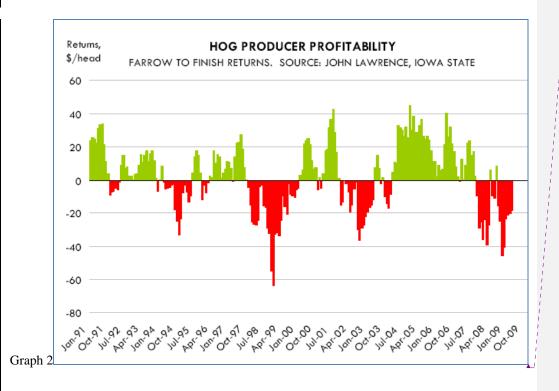
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Graph 1



Below is a graph from Chicago Mercantile Exchange (CME), reiterating the same message (Graph 2). The past 21 months have been tough. But going back to 1991 in this chart, you can see just how cyclical these profit margins are. Something does have to change sometime soon. But when? The last 2 negative margin cycles were approximately 30 months duration. We are currently at the 22 month point of red margins. So we can hope that these negative margins only last another 8 months or so.





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It has been estimated that the average U. S. swine producer's equity position was 70% in October 2007 and has now fallen to less than 30%. Since that time the U.S. swine industry as well as the North American swine industry has had to accept several economically devastating events. These would include: 1) the introduction of Type II circovirus in absence of adequate supplies of effective vaccine in 2006 resulting in significant mortality and morbidity in growing swine, 2) the world wheat shortage that drove up prices of all energy and protein commodities (Graph 3), 3) the new bio-fuels mandate which changed the economic dynamics of all energy and protein commodities. Ethanol production now uses 31% of the U.S. corn production (Graph 4), 4) the index funds driving the pricing of the energy and commodity markets. In 2004 and 2005 was the start of when the worlds Index Funds started becoming familiar to anybody in the commodity industries. Prior to 2006, Index Fund activity in commodities had an impact, but not near like the impact they had from 2006 through today. In corn specifically, they approached 2006 around 250,000 contracts long, and peaked last May around 450,000 contracts long. During that timeframe, corn went from approximately \$2.25 per bushel to \$6.00 per bushel, 5) the world economic crises and slowdown and now most recently, 5) the novel H1N1 2009 influenza that was inappropriately named "Swine Flu". This sequence of events has resulted in economic devastation for the U.S. swine industry.

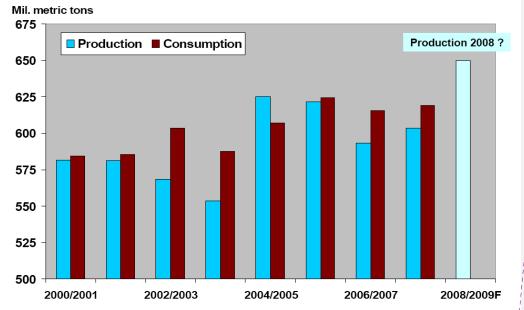
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It was estimated that at the time of the announcement of the H1N1 influenza virus in April the average U. S. owner's equity was already down to 40%. The average cash price received on April 24, 2009 was \$61.73 per carcass hundred weight or \$123.46 per head. The average cash price received on May 4, 2009 was \$51.97 per carcass hundred weight or \$103.94 per head. This was a decline of \$19.52 per head in just 10 days. Current costs of production at that time were \$140 per head resulting in losses of \$36.06 per head for a total loss of \$14,964,900 per day in the U. S. swine industry. This was after estimated losses of \$25 per head over the last 18 months. It has been estimated that with the current input prices and sales prices for the next 12 months that the average U. S. owner's equity will be reduced to less than 27% which is well below acceptable lender underwriting standards in the U.S.

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Graph 3



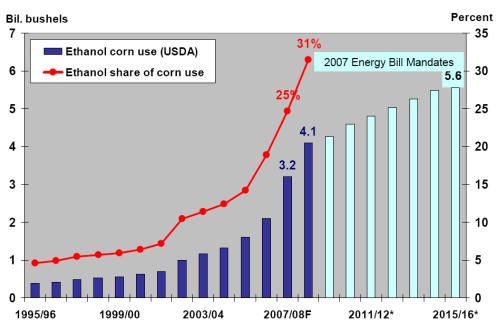
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Note: 2000/01 through 2007/08 from World Agricultural Supply and Demand Estimates, February 8, 2008. 2008/09 is a preliminary projection

(Source: USDA – J. Glauber)

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Graph 4



Note: 2007/08 and 2008/09 are USDA projections. *Projections for 2009/10 and beyond are based on RFS mandates for corn starch based ethanol under the Energy Independence and Security Act of 2007.

(Source: USDA – J. Glauber)

While the most recent focus for the industry has been how to survive the severe economic pressures there are additional issues that will limit future production through cost increases. Some examples of these would be:

- Taxing Exports
- Discouraging export growth (MCOOL / Trade Barriers)
- Regulating and taxing odor, manure, dust, workers benefits (National Health Care)
- Reducing antibiotic use
- Policies to reallocate feed grains to fuel and raise the cost of production for meat
- · Limiting technology and regulating animal care
- Policies raising the cost of water use
- Policies raising the cost of energy use
- Policies restricting business arrangements (packer ownership, contracting)
- Policies easing the barriers to citizen suits (EPA and Others)
- Employee benefit mandates / easing union formation

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In addition to having to deal with all the factors that have potential to increase the cost of production the U. S. swine industry will also have to deal with the limiting of future meat demand through cost increases and demographics such as:

- MCOOL and other trade regulations
- Educating against and taxing meat consumption (Obesity, National health care, global warming, water and energy use, animal welfare)
- Positioning religious leaders against meat consumption (HSUS and others)
- Natural baby boomer demographics
- Policies requiring locally produced purchasing for government entities (Food Miles)
- Reducing meat in school lunch programs
- CAFOs: Positioned as unfixable by technology
- Goldschmidt hypothesis: CAFOs destroy local fabric of communities
- Raising the cost of meat through supply reduction
- Vegan movement or increase in vegetarianism

With the most recent unpredictable industry setbacks and the perceived future challenges what are the keys to surviving the new swine industry?

Competitive advantages — in the future hog operations will have to have competitive advantages to survive long term. These may be different for different operations. They may include geographic location advantages (close proximity to inputs, processing infrastructure or isolated for health preservation) debt structure or simply productivity advantages. If there are no competitive advantages companies will likely not survive.

Integration—Vertical integration may include any or all of the parts from owning the fertilizer plant, the land to raise the energy and protein sources, the feed mill, the genetic company, the production company and the slaughter plant. Many "integrators" own different aspects of the process but, none own it all.

Capital – recognizing the volatility of the industry and the most recent erosion of equity it is evident that a "survivor" is going to have to have "deep pockets" to make it past the highs and lows of this industry. If we consider that the U. S. swine industry is dependent on 3 very volatile commodities, corn, soybeans, and hogs, we quickly recognize that we do have little control over our own destiny.

Risk management program — the volatility of the commodity markets demand that the risk management plan needs to be regarded as high importance. Profit taking will be modest and there will be times when the plan may be to minimize losses. Predicting cost of production will be difficult due to the wide variations of input costs. From 2005 — 2009 corn price in the U. S. has been from \$1.56 to 7.38 per bushel. The corn price range: \$5.58! 2005 to 2009 soybean

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meal price range has been from \$148.70 to \$459.50 per short ton. The soybean meal range per ton: \$229.34!

Production—In the U. S. productivity in the swine industry has improved by 2% per year for the past 20 years. If operations are not improving each year they are getting closer to being noncompetive. The U. S. swine industry is very competitive and times like this will only make the industry more competitive. The poor production companies will be consumed by better managed companies. Those that survive will then have to compete with those that were acquired and improved.

Dealing with society and working with the government—it is critical that we as leaders in the industry take the time to defend our industry at our government level what we believe are right for the industry and the animals. We cannot let the industry or the animals be the victim of the liberals that represent a small portion of society. These special interest groups do not have the best interest of the animals at their heart nor do they have the best interest of society or the world in mind.

Diversification – due to the volatility of the U. S. swine industry it will be advantageous to be diversified. Times like we have seen may prove that it is economically unsustainable to be 100% vested in the swine industry. The volatility of the industry will likely bring big swings in profits and losses. The key will be to survive the times of losses.

Health of the swine herd - in the past PRV or other viral diseases may have limited productivity. Recently, PRRS and PCV have limited the productivity in some of our herds. In the future, control or elimination of these and other viruses will be key to survival. Good Veterinary care and consultation will be needed for the industry to survive.

Mental toughness – Survival will require a certain level of perseverance and mental capabilities to handle the extreme pressure of the decisions that need to be made on a day to day basis. This industry is not for the "weak minded" only those capable of handling the pressure will survive.

Surviving the new swine industry will still require focus on what were the issues of the past, production, health etc. The future will also demand more emphasis on risk management, capitalization, addressing societal issues, dealing with global issues etc. As with most mature industries margins will be smaller, management requirements will be greater and it won't be as easy as leveraging good production to support growth and profits.

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