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January 2015

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Features

LMR White Paper - ***Hog Price Discovery and Livestock Mandatory Reporting*** (You'll find it in the back of the issue, after the *Margin Watch* reports.)

Dear Ag Industry Associate,

As the Livestock Mandatory Reporting Act (LMR) is set to be reauthorized by Congress in September, the hog industry is at a critical juncture. Since the original law was enacted in 1999, there has been a steady decline in the number and percentage of negotiated hogs being reported by AMS in their Market News reports. This has presented a number of issues for the swine industry, which the white paper in this issue's *Margin Manager* seeks to address as reauthorization of LMR approaches later this year. (You'll find the White Paper in the back of the issue, after the *Margin Watch* reports.) The white paper provides some background on the issue and offers both short and long-term solutions that may help to reverse the decline in negotiated hogs being reported by AMS.

Livestock Mandatory Reporting provides useful information for the hog industry, and there is an opportunity to strengthen the current law by improving the information being provided in the AMS reports. As the industry considers the reauthorization of LMR, it is important that the original purpose of the law to improve the price and supply reporting services of the Department of Agriculture is addressed. In addition to this month's featured content, the current *Margin Manager* also reviews the latest outlook for profitability in the crop, swine, cattle and dairy industries. In particular, there has been a noticeable improvement in dairy margins which is providing opportunities for milk producers who have witnessed sharp margin deterioration recently.

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Margins deteriorated sharply over the second half of January due primarily to slumping hog prices with feed costs marginally lower as well over the past two weeks. Spot margins in Q1 are now just barely above breakeven while Q4 margins are currently negative. The strongest margin in Q2 is still above the 70th percentile of the previous 10 years, offering the best opportunity to hog producers right now. Weakness in hogs appears to be the result of a few different factors weighing on price independently. First, PEDv accessions continue to track lower than last year and below industry expectations heading into the winter. Pork production last week was up 5.8% from a year ago which is weighing on the supply side. In terms of demand, the West Coast port slowdown has caused a major disruption to pork exports with reports of shipping cancellations to some Asian customers. Meanwhile, the dollar continues to strengthen relative to a host of currencies – particularly the Euro – reducing competitiveness for U.S. pork in the global market. Increased poultry production also means that additional pork supplies must compete with cheaper protein alternatives in the domestic market. On a positive note, feed costs continue to moderate with both corn and soybean meal trending lower. Negative ethanol margins and expectations for higher yields in South America are pressuring both the corn and soy markets, respectively. With continued deterioration in forward margins, our clients have been focused recently on making strategic adjustments to existing positions. Adding flexibility to nearby hog positions has been a priority along with strengthening feed hedges.

The Hog Margin calculation assumes that 73 lbs of soybean meal and 4.87 bushels of corn are required to produce 100 lean hog lbs. Additional assumed costs include $40 per cwt for other feed and non-feed expenses.

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Dairy Margin Watch: January

Dairy margins improved significantly over the last half of January following a sharp rally in milk prices coupled with declining feed costs. Margins are now at or above the 70th percentile of the past 10 years. There was a noticeable improvement in Q2 which climbed from the 35th to the 80th percentile since the middle of the month. Milk prices have rallied sharply on news that New Zealand dairy coop Fonterra cut their dairy production forecast by 3.3% due to dry weather. Fonterra also announced along with the forecast production cut that they would reduce the quantity of product offered on the Global Dairy Trade (GDT) auction platform. More traditional production practices including drying off cows early, culling poor performing cows and limiting the use of supplemental feeds were cited by Fonterra by dairy producers responding to the low payout forecast. USDA released their semi-annual cattle inventory report Friday which showed the total inventory of milk replacement cows up 1% from a year ago and on the high end of the range of expectations. Total dairy cows/heifers calved likewise was reported up 1% from last year. Corn meanwhile has succumbed to recent pressure from negative ethanol margins along with continued strength in the value of the U.S. dollar which has compromised export competitiveness in the global market, particularly relative to Ukrainian-origin corn. Soybean meal is drawing weakness along with the rest of the soy complex on expectations for higher yield and production to be realized in Brazil. Our clients are responding to the improved margins by scaling into new coverage in deferred periods. Strategic adjustments to lighten delta and increase flexibility on milk hedges recently have also proven quite beneficial. Strengthening feed hedges has been another area of focus following the recent weakness in corn and soybean meal.

The Dairy Margin calculation assumes, using a feed price correlation model, that for a typical dairy 62.4 lbs of corn (or equivalent) and 7.34 lbs of meal (or equivalent) are required to produce 100 lbs of milk (includes dry cows, excludes heifers not yet fresh). Additional assumed costs include $0.90/cwt for other, non-correlating feeds, $2.65/cwt for corn and meal basis, and $7.00/cwt for non-feed expenses. Milk basis is $0.75/cwt and non-milk revenue is $1.00/cwt.

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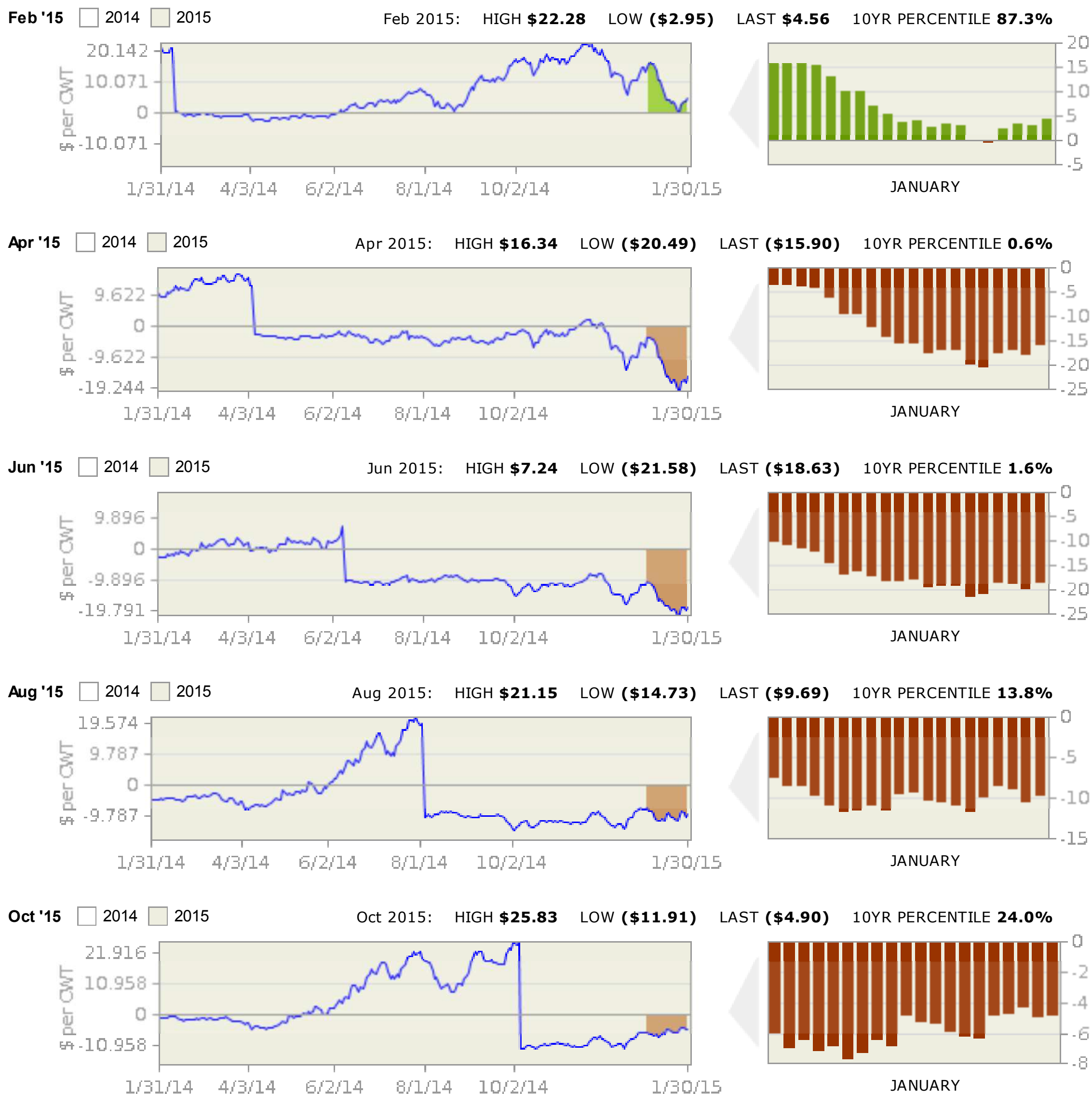
Beef Margin Watch: January

Beef margins were generally flat over the past two weeks with lower corn and cattle prices roughly offsetting one another. As has been the case for some time now, all forward margins are negative with the exception of the spot marketing period against February Live Cattle, and at the bottom quartile of the previous 10 years. Cattle continue to be pressured by reduced export competitiveness for beef in response to the stronger dollar. In addition, the latest USDA Cold Storage report showed beef inventories increased sharply during December, with boneless beef stocks on December 31 at 403.5 million pounds, up 11.4% from November and 1% higher than a year ago. December was the first and only month in 2014 when boneless beef stocks exceeded the prior year and 5-year average. USDA released their semi-annual cattle inventory report on Friday which was seen as bearish. The annual calf crop was reported up 1% from a year ago when on average the market was expecting a 1.5% reduction from the prior year. Supplies of beef replacement cows were up 4% from last year and bulls over 500 pounds were reported at 3% over 2014 compared to market expectations of supplies even to last year. The report clearly signals that rebuilding of the beef herd is well underway. On the feed side, corn prices continue to be pressured by negative ethanol margins and strength in the U.S. dollar which has limited export competitiveness – particularly relative to Ukraine. The market is looking ahead to the USDA Outlook Forum next month for more insight on new-crop dynamics, but given the current carryout, it would take a combination of lower acreage and a significant weather issue this summer to cause any major concern. Our clients continue to focus on adjustments to existing positions, particularly adding flexibility to cattle hedges and strengthening feed hedges following recent price action.

Live Cattle Marketing Periods:



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The Beef Margin calculation uses Feeder Cattle futures to price inbound animals and assumes each will consume 55 bushels of corn and cost approximately $250 per head (for other feed and non-feed expenses) to gain 550 pounds and reach a market weight of 1,250 pounds.

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Corn Margin Watch: January

Corn margins continued to fall through the remainder of January and are back to mid-October levels. Demand has been positive in the period as both export sales and corn use for ethanol have been strong. Corn export sales now stand at 71% of the USDA estimate compared to 63% on average for this point in the crop year. While sales have picked up over the past two weeks, the shipment pace has remained steadily behind what is needed to meet the USDA forecast at 33% compared to 38% on average. Ethanol production has remained strong seasonally, with production running 5.6% above last year versus the USDA expectation of a 0.8% increase year-over-year. Ethanol stocks have grown over the same period and have recently been reported at 20.63 million barrels, the highest on record for this time of year. Ethanol stocks seasonally continue to build into mid-February. Crop revenue insurance prices are determined through the month of February for Midwest producers and will be one input to help determine actual planted acres this spring. A range of expectations for spring corn plantings have been offered ranging from 84 million acres in the USDA Baseline report to 88 million acres from Informa. The debate will continue into the end of March when NASS reports the results of their annual producer survey in the Prospective Plantings report. On the world front, Safras & Mercado, a Brazilian news agency, estimates Brazilian corn production down to 74.7 million metric tons from 75.5 in December. While lower, global supplies of corn remain ample to meet future needs. Our consultants are working with clients to help make strategic adjustments to existing protection strategies that previously increased the delta in current hedges to capitalize on the higher price. Now that market prices have moved lower, some of our customers are considering adjustments to hedge positions that would capitalize on the lower market while still maintaining protection to lower prices.

The estimated yield for the 2015 crop is 180 bushels per acre and the non-land operating cost is $612 per acre. Land cost for 2015 is estimated at $243 per acre [1]. Basis for the 2015 crop is estimated at $-0.18 per bushel.

The estimated yield for the 2016 crop is 174 bushels per acre and the estimated operating cost is $615 per acre. Land cost for 2016 is estimated at $238 per acre [1]. Basis for the 2016 crop is estimated at $-0.25 per bushel.

[1] The Corn Margin Watch yield, land and non-land operating cost values are based upon central Illinois low productivity farmland crop estimates in the "Historic Corn, Soybean, Wheat, and Double-crop Soybeans" report published by the Department of Agricultural and Consumer Economics at the University of Illinois.

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Soybeans Margin Watch: January

Soybean margins have continued lower as current supplies remain adequate despite strong demand. Export sales and shipments have remained strong as 94% of the current USDA export estimate has been sold compared to 81% on average for this point in the crop year. Shipments have also remained well ahead of the pace needed to meet the USDA forecast with 72% of the export estimate shipped compared to 57% on average. Demand for soybean product, specifically soybean meal, has also helped keep the monthly crush figures near record territory. NOPA recently reported the December crush to be 165.4 million bushels, below market expectations but a record volume for any month of the crop year. Despite a slow start for the crush due to rail logistics at harvest, the monthly crush has exceeded what is needed to meet the USDA estimate over the last few months. Crop revenue insurance prices are determined through the month of February for Midwest producers and will be one input to help determine actual planted acres this spring. A range of expectations for spring soybean plantings have been offered ranging from 88 million acres in the USDA Baseline report to 89 million acres from the Congressional Budget Office. The debate will continue into the end of March when NASS reports the results of their annual producer survey in the Prospective Plantings report. On the global front, Safras & Mercado, a Brazilian news agency, estimates Brazilian soybean production down to 95.0 million metric tons from 95.9 in December due to continued dryness in the Northeast. While down slightly, global supplies are expected to be record large and nearly 20 million metric tons more than the previous record. Safras & Mercado also estimate soybean harvest to be roughly 8% complete at present. Our consultants are working with clients to help manage existing protection strategies. Some of our clients are that previously increased the delta in current hedges to capitalize on the higher price are now considering adjustments to those strategies that would take advantage of the lower market while maintaining price protection to all lower prices.

The estimated yield for the 2015 crop is 52 bushels per acre and the non-land operating cost is $364 per acre. Land cost for 2015 is estimated at $243 per acre [1]. Basis for the 2015 crop is estimated at $-0.16 per bushel.

The estimated yield for the 2016 crop is 52 bushels per acre and the estimated operating cost is $365 per acre. Land cost for 2016 is estimated at $238 per acre [1]. Basis for the 2016 crop is estimated at $-0.25 per bushel.

[1] The Soybeans Margin Watch yield, land and non-land operating cost values are based upon central Illinois low productivity farmland crop estimates in the "Historic Corn, Soybean, Wheat, and Double-crop Soybeans" report published by the Department of Agricultural and Consumer Economics at the University of Illinois.

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Wheat margins have slipped further and are back to early-October levels as global competition remains. Export sales and shipments of U.S. wheat have picked up slightly over the last two weeks but remain well behind what is needed to meet the current USDA estimate. Cumulative shipments to date are the lowest since 1990. The $U.S. dollar rally has made foreign sources more attractive for importers. U.S. wheat currently holds a price premium to other global supplies, but the gap has narrowed considerably over the last 6 weeks. In mid-December, U.S. wheat prices were nearly $30/MT more expensive than Black Sea offers. Today, U.S. wheat holds an $8/MT premium to the cheapest world supplier. Up until this past weekend, there have been some concerns over a lack of snow cover in the winter wheat growing regions as winter temperatures have fallen, threatening the dormant crop. Crop conditions continue to deteriorate in Texas falling to 42% good-to-excellent from 49% in November. Although still high, wheat prices continue to narrow relative to corn prices with wheat currently holding $1.20 premium over corn. Historically, wheat begins to pencil into feed rations as its premium over corn dips below $0.80/bushel in certain locations. While not there yet, the wheat market is doing its job to search for demand. On the global front, E.U. wheat is now the world's cheapest origin, namely out of France. The strong $U.S. also implies the likelihood of additional spring wheat seeding around the global as prices rise in those countries. Our consultants continue working with clients to protect these forward margins with flexible strategies on existing coverage that will allow for potential margin improvement over time. Some of our clients are considering adjustments to current protection strategies that would capitalize on the recent fall in price while still preserving the opportunity to participate in higher prices should the market move higher.

The estimated yield for the 2015 crop is 67 bushels per acre and the non-land operating cost is $366 per acre. Land cost for 2015 is estimated at $163 per acre [1]. Basis for the 2015 crop is estimated at $0.1 per bushel.

The estimated yield for the 2016 crop is 72 bushels per acre and the estimated operating cost is $328 per acre. Land cost for 2016 is estimated at $158 per acre [1]. Basis for the 2016 crop is estimated at $-0.15 per bushel.

[1] *The Wheat Margin Watch yield, land and non-land operating cost values are based upon central Illinois low productivity farmland crop estimates in the "Historic Corn, Soybean, Wheat, and Double-crop Soybeans" report published by the Department of Agricultural and Consumer Economics at the University of Illinois.*

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Dairy Margin Management
Aug 5-6

Margin Management for Ag Lenders
Oct 21-22

Beef Margin Management
Nov 11-12

Dairy Margin Managment
Nov 18-19

Hog Margin Management
Dec 9-10

Crop Margin Management
Dec 16-17

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White Paper on Hog Price Discovery and Livestock Mandatory Reporting

Prepared by: Protein Sources, LLP and Commodity & Ingredient Hedging, LLC

Executive Summary:

With the number and percentage of negotiated hogs reported by the Agriculture Marketing Service (AMS) continuing to decline, the hog industry is at a critical juncture with reauthorization of Livestock Mandatory Reporting scheduled for later this year. Since its inception in 1999, LMR has provided valuable information to the swine industry, although improvements could be made with how the information is generated from AMS and reported to serve the industry's needs. The swine industry has evolved over the past 15 years since LMR went into effect, and there is an opportunity to improve how information is gathered and reported to reflect the changes that have taken place since the original law was enacted.

In the short-term, producers are encouraged to better understand how their hogs are being reported In the AMS market reports and take steps to assure that their sales to packers are accurately represented in these reports. Longer-term, modifications to the existing act would be beneficial for the hog industry. In particular, clearer language and definitions of the various hog reporting categories would help provide more useful information to packers, producers, and other industry professionals, improve the reporting services of the Agriculture Department and foster more competition in the swine slaughtering industry, consistent with the original purpose of LMR.

This white paper on Hog Price Discovery and Livestock Mandatory Reporting discusses the issues and background surrounding the decline in negotiated hogs reported by AMS, and offers some potential solutions to this growing problem for the swine industry. It is our hope that this white paper helps educate the industry on an important issue affecting the marketplace and facilitate a dialogue which can lead to improvements that benefit all involved. We thank you for taking the time to read this white paper and carefully consider the information presented. We also encourage and welcome your feedback on this critically important issue for our industry.

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Introduction:

Many in the hog industry have expressed concerns about the declining number of hogs that are reported as "negotiated" in USDA's Agricultural Marketing Service (AMS) Market News reports; in particular, the LM_HG201 Slaughtered Swine report as well as the various purchase reports such as the LM_HG206 Iowa/Minnesota Afternoon report. From over 15% of the total hogs marketed in 2002 to less than 4% by 2013, the percentage has steadily declined over time (see Table 1). Industry changes including the increase in packer-owned hogs as well as how market hogs are contracted between producers and packers along with requirements on how these hogs are accounted for under mandatory reporting appear to have accelerated the decline in the number of negotiated hogs being reported to AMS. Some in the industry are concerned that the declining number of negotiated hogs is increasing the instances of prices not being reported due to confidentiality. Some are also questioning the validity of the reported negotiated price as a benchmark due to the low volume of hogs categorized as negotiated in the report. In addition, the CME Group has recently proposed changes to the specifications of their Lean Hog futures and options contracts. Some of the proposals put forth for these changes have stemmed in part from the industry concerns expressed above. This paper seeks to address the issue by providing background and proposing both short and long-term solutions that may help solve some of the problems that have arisen from the decline in negotiated hog numbers over time.

Table 1. Hog Volume Summary by Alternative Marketing Arrangements:

(May-April by Year, Source: Oklahoma State University)

	Year	*Weekly Mean (head)*	*percent of Yr Total*	*Min*	*Max*
Negotiated Cash	2002	167,636	15.5	110,266	200,739
	2003	178,288	14.5	106,009	203,734
	2004	157,752	12.7	108,516	203,421
	2005	143,198	10.9	89,385	211,169
	2006	148,585	11.4	102,207	225,797
	2007	111,391	9.5	85,385	137,749
	2008	135,940	10.3	102,207	180,064
	2009	112,629	8.5	55,897	161,896
	2010	77,578	6.2	55,813	97,579
	2011	66,071	4.9	41,595	101,658
	2012	61,115	4.5	32,054	90,294
	2013	51,880	3.8	28,487	79,009
	2002-13	117,672	9.4		

Background – History of LMR:

The history of Livestock Mandatory reporting began when the LMR law was enacted in 1999. The purpose of the law was three-fold: to provide information that can be readily understood by producers, packers, and other market participants; to improve the price and supply reporting services of the Department of Agriculture; and encourage competition in the marketplace for livestock and livestock products. [1] The law applies not only to swine, but cattle and lamb as well. The original 1999 law also states that the Agriculture Secretary shall establish a program of swine price information reporting that will provide timely, accurate, and reliable market information; facilitate more informed marketing decisions; and promote competition in the swine slaughtering industry.[2] The LMR law is scheduled to be reauthorized by Congress in September, 2015 which makes this issue timely as the industry considers how the existing structure of LMR is satisfying its original intended purpose.

The process and mechanics of how prices are reported began with the AMS Market News reports that commenced in the fall of 2001. Some of the language and definitions from the original law were subsequently amended in 2007. According to the Federal Register, there are four reporting categories with the following definitions:

1.) *Negotiated purchase* – the term "negotiated purchase" means a cash or spot market purchase by a packer of livestock from a producer under which the base price for the livestock is determined by seller-buyer interaction. The livestock are scheduled for delivery to the packer not more than 14 days after the date on which the livestock are committed to the packer.
2.) *Other market formula purchase* – the term "other market formula purchase" means a purchase of swine by a packer in which the pricing mechanism is a formula price based on any market other than the market for swine, pork, or a pork product. The term "other market formula purchase" includes a formula purchase in a case which the price formula is based on 1 or more futures or options contracts.
3.) *Swine or pork market formula purchase* – the term "swine or pork market formula purchase" means a purchase of swine by a packer in which the pricing mechanism is a formula price based on a market for swine, pork, or a pork product, other than a future or option for swine, pork, or a pork product.
4.) *Other purchase arrangement* – the term "other purchase arrangement" means a purchase of swine by a packer that is not a negotiated purchase, swine or pork market formula purchase, or other market formula purchase; and does not involve packer-owned swine.

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[1] Public Law 106-78, 106th Congress; Title IX – Livestock Mandatory Reporting; SEC.211.Purpose:

http://www.gpo.gov/fdsys/pkg/PLAW-106publ78/html/PLAW-106publ78.htm

[2] Public Law 106-78, 106th Congress; Title IX – Livestock Mandatory Reporting; SEC.232.Mandatory Reporting for Swine: (refer to same link above, scroll down about three-quarters or more of the page)

Cash Hog Price Discovery:

The price discovery of the cash hog market has changed over time as a function of many different factors including consolidation in the industry, vertical integration with an increasing percentage of packer-owned swine, the availability of shackle space and slaughter capacity, as well as a move towards long-term supply agreements between producers and packers. With regard to the latter two points, the severe disruption to the cash hog market during 1998 caused by the supply of hogs exceeding available shackle space and slaughter capacity led to an increasing number of hogs being contracted on long-term supply agreements. While the terms of these contracts have evolved over time, the general feature of these agreements between packers and producers has remained the same. A set supply of hogs from the producer is agreed to be delivered to the packer in regular intervals over a defined time horizon, typically a year or longer. A benchmark is then set to determine the base price for the hogs that are marketed under these agreements. This could be a USDA market such as Iowa/Southern Minnesota, Western Corn Belt, Eastern Corn Belt, or Cutout. Alternatively, it could be based off of a CME futures market price. A formula is then negotiated between the producer and packer, where the price will be a function of one of these markets plus or minus some premium or discount.

While this type of marketing relationship has many benefits for both the producer and the packer, including guaranteed shackle space and greater visibility on forward hog supply to anticipate future pork production, many hogs are not contracted under long-term agreements and are negotiated in the open market. Some of the reason for this is practical in that producers will not want to commit more supply to a packer under a long-term agreement than they feel comfortable being able to actually produce, and therefore will always have an excess supply above and beyond what was previously committed. Also, it may be a producer's preference to preserve the ability to negotiate without being tied to a previously agreed upon formula. In either case, these are hogs that will be sold in the spot market and delivered within 14 days of establishing a price between the producer and packer.

In terms of the price discovery for these spot sales, producers and packers typically will reference a current market to begin the negotiating process. This may be yesterday's spot futures price on the CME or the most recent USDA swine market for the reference point such as the Western Corn Belt price. With the base price established, the producer and packer will then negotiate the differential to be paid for the hogs on that particular load. As an example, a producer may have a long-term supply agreement with a packer where the packer pays the producer the Western Corn Belt price plus $1.00/cwt. for every load over the term of the agreement. In addition to that, the producer may negotiate with the same packer for excess supply they have to market above and beyond the long-term supply agreement. While the producer may establish the base price for these hogs negotiated as spot sales using the same reference of the Western Corn Belt price, the differential of what they negotiate may change from week to week. Let's say for this example the producer negotiates the Western Corn Belt price plus $1.50/cwt. for a load delivered the following week. This is therefore different from always receiving the same differential as defined in the long-term supply agreement formula.

Despite the differences however in the two separate marketing arrangements just described, these hogs would be reported to AMS the same way. Given the definition of a swine or pork market formula

purchase, both the long-term supply agreement hogs and the hogs negotiated in the spot market are referencing the Western Corn Belt price so they would fall under that category. In other words, there is no differentiation made between hogs that are marketed under a long-term agreement in a forward sale and those sold in the spot market for immediate or near-term delivery within 14 days of sale. Similarly, if hogs are sold to the packer in the spot market referencing a CME futures price as the base, those hogs would be reported to AMS as "other market formula purchase" given that definition as described in the Federal Register. This begs the question of what would actually qualify as a "negotiated purchase." Going back to the definition, the language states that "the base price for the livestock is determined by seller-buyer interaction." While this language is vague, it would appear that hogs are not being reported as negotiated when reference is made to a USDA or CME futures price in the seller-buyer interaction.

Mandatory Price Reporting for Pork Sales:

Some in the industry would maintain that hogs not previously committed to a packer and regularly sold in the spot market would qualify as being "negotiated" in that the price discovered is a function of direct seller-buyer interaction, regardless of what base price is referenced as a starting point for the negotiating process. Interestingly, mandatory price reporting for pork incorporates a forward sales category not included in the livestock groupings for swine. This language was also developed later, with the MPR law for pork sales finalized August 22, 2012. According to the Federal Register, there are three reporting categories for wholesale pork with the following definitions:

1.) *Formula Marketing Arrangement* – when used in reference to wholesale pork, the term "formula marketing arrangement" means an agreement for the sale of pork under which the price is established in reference to publicly-available quoted prices.
2.) *Forward Sale* – when used in reference to wholesale pork, the term "forward sale" means an agreement for the sale of pork where the delivery is beyond the timeframe of a "negotiated sale" and means a sale by a packer selling wholesale pork to a buyer of wholesale pork under which the price is determined by seller-buyer interaction and agreement.
3.) *Negotiated Sale* – the term "negotiated sale" means a sale by a packer selling wholesale pork to a buyer of wholesale pork under which the price is determined by seller-buyer interaction and agreement, and scheduled for delivery not later than 14 days for boxed product and 10 days for combo product after the date of agreement. The day after the seller-buyer agreement shall be considered day one for reporting delivery periods. [3]

In the language of the MPR definitions for wholesale pork, it is interesting to note that there is a distinction drawn in the timeframes between a forward sale and a negotiated sale, although no reference is made to a timeframe in a formula marketing arrangement. For livestock, given that both long-term (forward) agreements and negotiated (spot) purchases typically reference a swine or pork

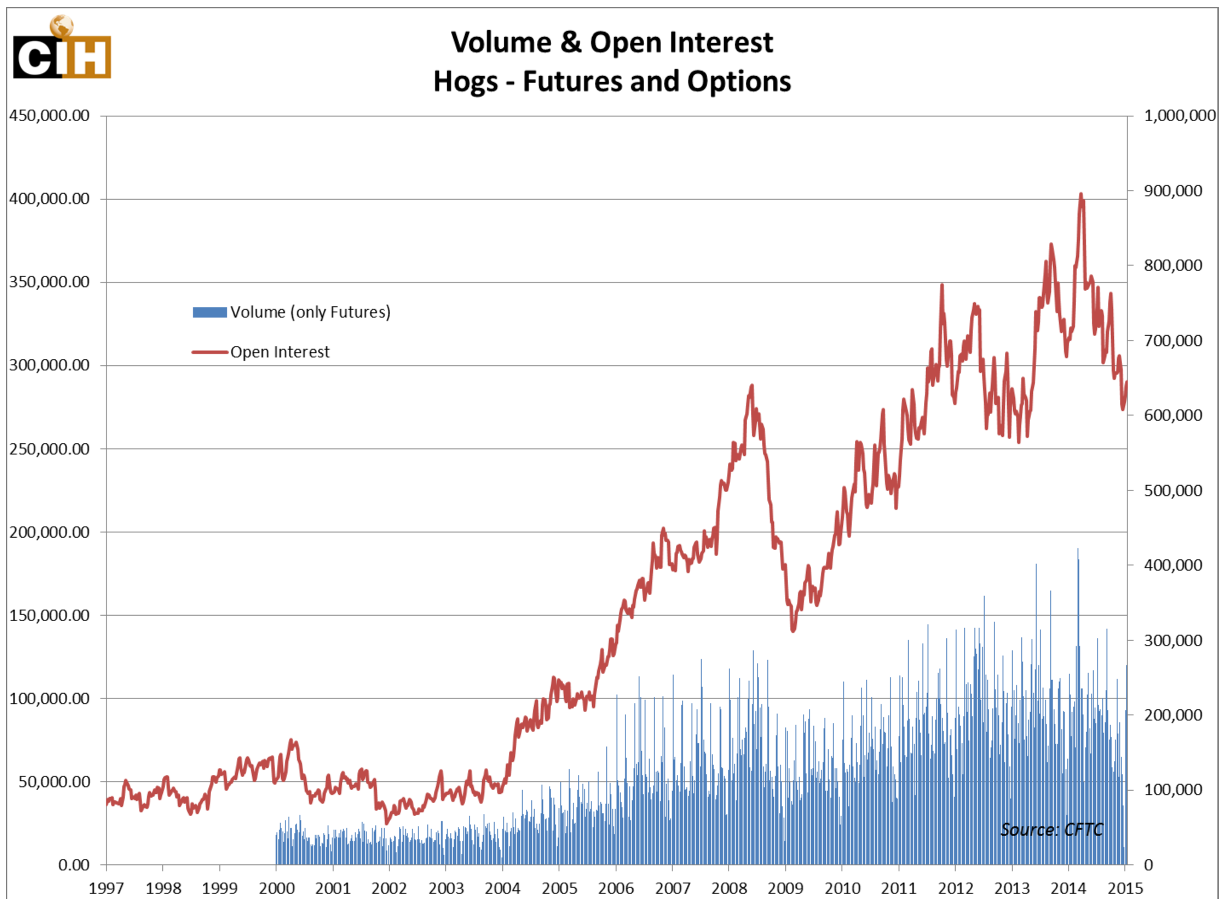
[3] Federal Register – AMS Final Rule 8/22/2012:

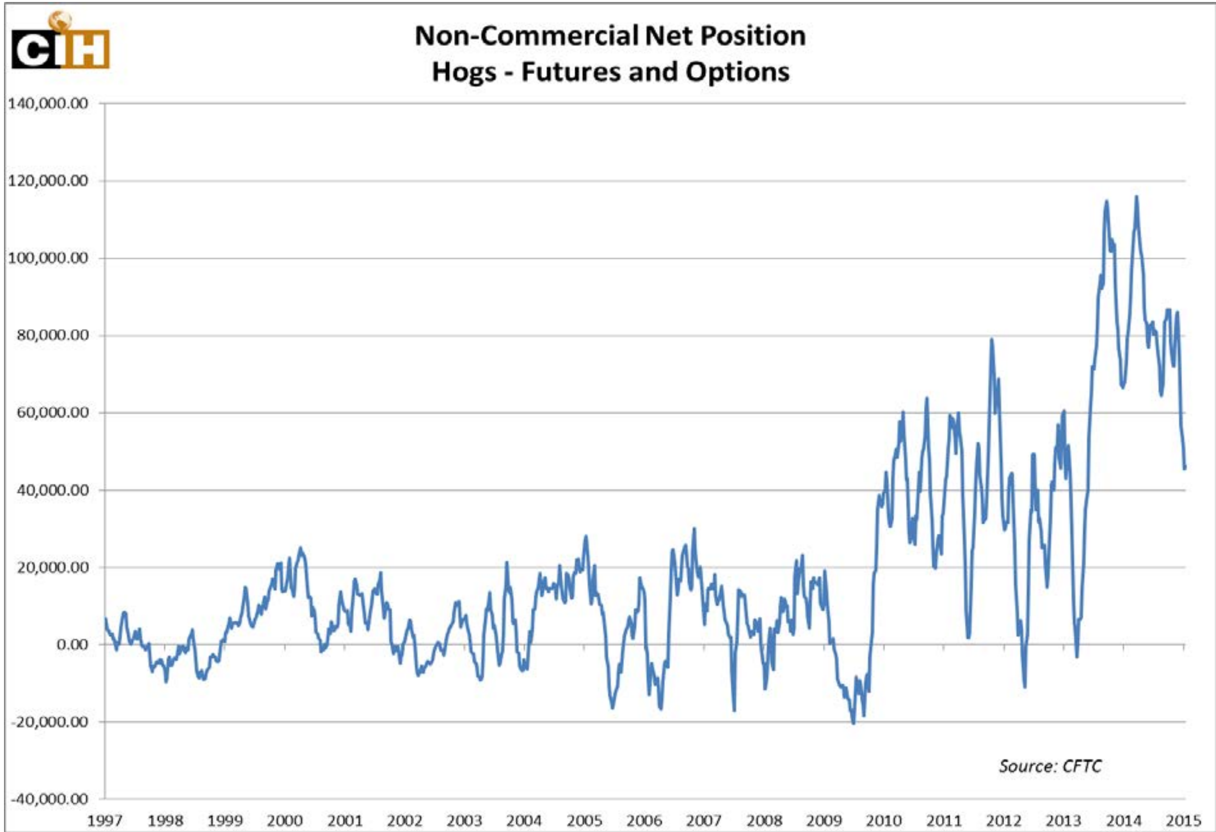
https://www.federalregister.gov/articles/2012/08/22/2012-20443/livestock-mandatory-reporting-program-establishment-of-the-reporting-regulation-for-wholesale-pork#h-7

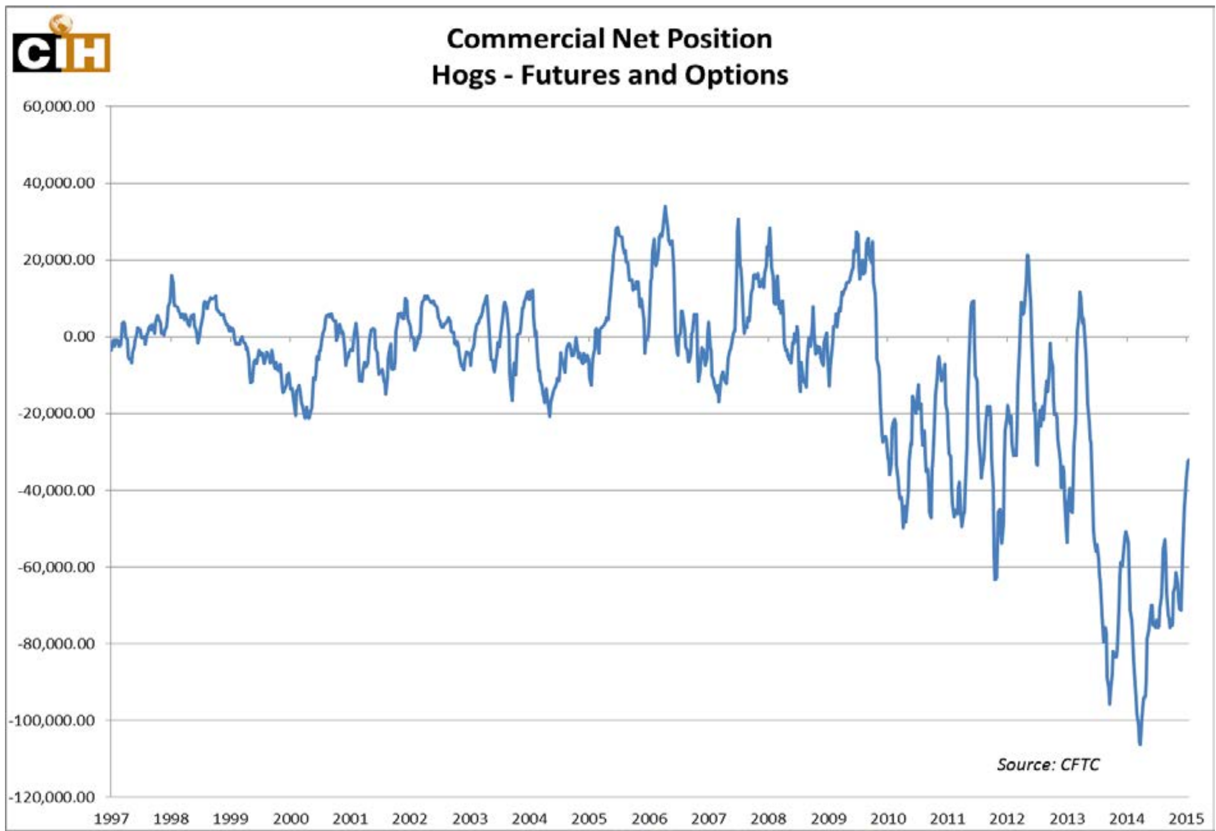
market formula, this may be something that needs to be considered if the definitions are changed in the reauthorization of LMR later this year.

CME Lean Hog Contract:

Meanwhile, the CME Group has recently proposed changes to the contract specifications for their Lean Hog futures and options. In part, these proposals stem from feedback of some in the industry who are concerned that the price discovery and risk transfer functions of the contract have weakened over time. Concerns stem from how the contracts are cash settled to the Lean Hog Index, and how this index is calculated by incorporating prices of negotiated hogs being reported by AMS. Despite these concerns, the current contract has excellent daily volume with growing open interest. Moreover, there has been strong participation from each segment of the market as measured by the CFTC's weekly Commitment of Traders report. The following charts illustrate the latest open interest data from the CFTC:




CIH
Non-Commercial Net Position
Hogs - Futures and Options
140,000.00
120,000.00
100,000.00
80,000.00
60,000.00
40,000.00
20,000.00
0.00
-20,000.00
-40,000.00
Source: CFTC
1997 1998 1999 2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015


CIH
Commercial Net Position
Hogs - Futures and Options
60,000.00
40,000.00
20,000.00
0.00
-20,000.00
-40,000.00
-60,000.00
-80,000.00
-100,000.00
-120,000.00
Source: CFTC
1997 1998 1999 2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015

Given the growing open interest and strong market participation of the CME Lean Hog futures and options contracts, it doesn't appear to be the case that the declining number of negotiated hogs being reported is negatively impacting trading interest. Despite this, concerns remain over how the lean hog index is calculated and how this calculation is affected by the declining number of negotiated hogs. The CME Lean Hog Index is a two-day weighted average of average net prices for slaughtered barrows and gilts as reported by USDA in its National Daily Direct Hog Prior Day Report-Slaughtered Swine (USDA Report LM_HG201). The index calculation takes into account both negotiated hogs as well as swine or pork market formula hogs, and is calculated as follows:

CME Lean Hog Index = 2-Day Combined Total Value / 2-Day Combined Total Weight

Combined Total Value = [Total Head (negotiated) x Average Carcass Weight (negotiated) x Average Net Price (negotiated)] + [Total Head (swine-pork market formula) x Average Carcass Weight (swine-pork market formula) x Average Net Price (swine-pork market formula)]

Combined Total Weight = [Total Head (negotiated) x Average Carcass Weight (negotiated)] + [Total Head (swine-pork market formula) x Average Carcass Weight (swine-pork market formula)]

LM_HG201
Des Moines, Iowa Wed, Jan 28, 2015 USDA Market News

NATIONAL DAILY DIRECT HOG PRIOR DAY REPORT - SLAUGHTERED SWINE
Slaughter Data for Tuesday, January 27, 2015

Barrows and Gilts (Live and Carcass Basis): 394,013

	NEGOTIATED	OTHER MARKET FORMULA	SWINE OR PORK MARKET FORMULA	OTHER PURCHASE ARRGMENT	TOTALS/ WTD AVG
Producer Sold:					
HEAD COUNT	10,055	38,883	169,998	46,251	265,187
CARCASS BASE PRICE	68.12	81.61	70.32	74.51	72.81
AVERAGE NET PRICE	70.05	84.49	72.09	75.79	74.56
LOWEST NET LOT	54.99	63.14	54.71	63.55	59.54
HIGHEST NET LOT	75.29	105.33	86.84	102.26	95.61
AVERAGE LIVE WT	271.77	285.55	283.65	280.77	282.93
AVERAGE CARCASS WT	204.56	217.13	215.03	211.09	214.30
AVERAGE SORT LOSS	-1.81	-2.48	-2.10	-1.30	-1.99
AVERAGE BACKFAT	0.72	0.70	0.72	0.72	0.72
AVERAGE LOIN DEPTH (LD)	2.40	2.82	2.74	2.51	2.69
LOINEYE AREA (LD Converted)	7.21	8.49	8.24	7.54	8.08
AVERAGE LEAN PERCENT (Packer Buying Programs)	53.70	55.91	55.47	54.97	55.37

Sample Calculation: For example, the calculation for Jan 27, 2015 slaughter date

- Combined Total Value would be Negotiated 10,055 head * $70.05 * 204.56 lbs + Swine or Pork Market Formula 169,998 head * $72.09 * 215.03 = $27,793,085

- Combined Total Weight would be Negotiated 10,055 head * 204.56 lbs + Swine or Pork Market Formula 169,998 head * 215.03 = 38,611,520 lbs
- The single day calculation for Jan 27, 2015 slaughter would then be $27,793,085 / 38,611,520 lbs = $71.98
- To get the CME Lean Hog Index for Jan 28, 2015 you would take the Combined Total Value from the 26th and 27th reports divided by the Combined Total Weight from the 26th and 27th reports.

[4] Source: CME Group – Understanding the Lean Hog Index

Given concerns over the integrity of the CME Lean Hog Index as it is currently calculated, the industry has identified the issue of steadily declining negotiated hog numbers as a problem that needs to be solved. The following short and long-term solutions may help to increase the number of negotiated hogs being reported as well as alleviate concerns that the CME Lean Hog contract specifications need to be changed should the industry choose to embrace these proposals.

Possible Short and Long-Term Solutions:

On a short-term basis, the industry will need to work within the current strictures of the LMR law. If producers feel that hogs they are selling on the open market should be reported as negotiated, they need to be clear in their language with packers during the negotiating process that they intend those loads to be reported as negotiated sales. Because of the way the current language is written in the Federal Register, this means that they cannot refer to a USDA or CME market during the negotiating process. In other words, in order to conform to current LMR sales category definitions, no reference can be made to a Western Corn Belt, Iowa/Southern Minnesota, CME futures price, or any other reference as a base to start the negotiating process. Doing so will cause those hogs to be categorized as either "swine or pork market formula" or "other market formula" purchases from the packer's perspective. In addition to avoiding this language, the producer should also be clear that they understand their sales to be negotiated and that the packer intends to report them that way. Producers would also be encouraged to follow up with AMS to confirm that their loads were included in the negotiated column for that day's report. In addition, the Market News reports should be tracked to measure whether the negotiated numbers and percent of total daily sales actually increase from these practices.

Longer-term, more thought should be given to how the current language and definitions of the reporting categories are serving the industry's needs. With reauthorization of the current law scheduled for September of this year, there is an opportunity to amend the language and definitions in order to increase clarity and improve the information being reported. One potential solution would be to harmonize the language for livestock purchases with that of pork under MPR and include a forward sale category. This change would help capture the hogs that are marketed under long-term supply agreements and differentiate them from those that are sold on the open market. Another thought would be to differentiate those hogs where a price is set within 14 days of delivery as spot or

[4] http://www.cmegroup.com/trading/agricultural/files/Understanding_CME_Lean_Hog_Index.pdf

negotiated, regardless of how that price was determined. In order for any of these changes to occur though, the industry would need to lobby Congress to amend the language and definitions as this would represent a change to the law.

To be sure, if one of the purposes of LMR is to provide information that can be readily understood by producers, packers, and other market participants, then the existing language and definitions have failed to accomplish this goal. If producers believe hogs they are selling to be negotiated when they are not being reported that way, it is clear that there is room for improvement. Also, a change to bring more clarity to how hogs are currently marketed would help fulfill the second stated purpose of LMR to improve the price and supply reporting services of the Department of Agriculture. With respect to proposed changes in the contract specifications of the CME Group's Lean Hog futures and options, the contract appears to be functioning fine and altering the contract may not necessarily be in the industry's best interest. Some in the industry have advocated changing the index and cash settlement procedure to be a function of the USDA cutout price. This may actually harm the price discovery process by diluting the producer's influence over the cash price of hogs as well as reduce visibility on an important piece of value in the supply chain.

With the number and percentage of negotiated hogs being reported by AMS continuing to decline, the industry is at a critical juncture with reauthorization of Livestock Mandatory Reporting scheduled for later this year. While LMR provides valuable information to the swine industry, there is certainly room for improvement and careful thought should be given to how the information generated from AMS reporting serves the industry's needs. Given how the industry has evolved over the past 15 years in the ways that hogs are marketed between producers and packers, there is an opportunity to improve how information is gathered and reported to reflect the changes that have taken place since the original law was enacted. Clearer language and definitions of the various hog reporting categories will help provide more useful information to packers, producers, and other industry professionals, improve the reporting services of the Agriculture Department and foster more competition in the swine slaughtering industry, consistent with the original purpose of LMR.

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