Written Testimony of

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On

Present and Future Challenges on the Availability of Feed for Livestock and Poultry

for the

House Committee on Agriculture
Subcommittee on Livestock, Dairy, and Poultry

September 14, 2011

National Cattlemen's Beef Association

Mr. Chairman and members of the committee, my name is Steve Meyer. I am president of Paragon Economics, Inc., a livestock and grain marketing and economic advisory company based in Adel, Iowa. I have analyzed and advised clients in the livestock and, by extension, poultry industries for the past 24 years since receiving my doctoral degree in agricultural economics from Iowa State University.

I address you today with grave concerns regarding the ability of U.S. livestock and poultry industries to continue to provide affordable, high quality protein in the form of meat, poultry, eggs and dairy products to U.S. consumers as well as customers around the world. My concerns are ongoing but primarily center on what will happen to U.S. producers and their animals in the event of a significantly smaller-than-usual U.S. corn crop any year in the next decade.

My comments today will be confined to the livestock and poultry meat segments since those are the ones with which I am most familiar. They apply equally, though, to the dairy and egg sectors which are also major users of corn.

Though some make some interesting claims about the non-culpability of corn-based ethanol in the current record-high prices, I believe Figure 1 speaks for itself. While U.S. corn exports and food and industrial usage other than ethanol have remained relatively constant since 2000, the amount of corn used for ethanol has increased 8-fold with three-quarters of that increase occurring since 2005. Since 2005, the use of corn for feed has fallen by 20 percent.

First, allow me to point out that I am not opposed to ethanol. I have often joked that I prefer ethanol to be aged in oaken casks or cooled in long-neck bottles. But I am not even opposed to fuel ethanol made from corn. I believe it to be a reasonable reaction to expensive and dwindling oil supplies, especially when those supplies are, in many cases, held by countries that we view as, at best, unsupportive of America's best interests and, at worst, enemies of our great nation.

My difficulties with U.S. fuel ethanol policy arise from the provision of subsidies for the product's usage, protection against imports which have, until recently, been lower-cost that U.S.-produced ethanol, and, most of all a mandate that forces ethanol to be used regardless of the economic circumstances, especially those that pertain to competing users of corn.

We Cannot Go Back To Where We Were

I realize that we cannot "un-ring the bell" on ethanol subsidies and tariffs. In combination with the promise of an ever-growing market through the Renewable Fuel Standard (RFS), these policy instruments drove the rapid construction of an ethanol production segment that has for several years been large enough to meet the ultimate 15 billion gallons of forced ethanol usage in 2015 contained in the RFS. The policies have achieved their intended purpose of establishing a significant U.S. corn-based ethanol industry.

But there is no such thing as a free lunch. Subsidized ethanol has meant record-high corn prices, record-high costs of production for meat and poultry, resulting lower per capita meat and poultry output and, finally, record-high meat prices. The U.S. pork industry lost $6 billion in equity from 2007 through 2009 but improved profitability did not stop the exodus of pork producers in 2010. From 2007 through 2010, 6,350 hog operations exited the industry and 84% of them held 500 of fewer hogs in inventory. During that same 5 year, 30,510 cattle and calf operations and 24,350 beef cow operations exited the industry. The vast majority of these closures, too, was among small operations.

And if you hear from anyone that "The government should not be deciding on winners and losers," please realize that you have already done so. These policies have created a stream of winners who eventually lost the advantage that was handed to them. Ethanol plants were big winners early on when Methyl tert-butyl ether (MTBE) was banned as an oxygenate in gasoline. Plant builders were next as they reaped huge rewards during the pell-mell expansion. Corn

farmers saw large profits next as corn prices rose in 2007 and 2008 but even those profits were short-lived as cash rents and input costs rose to take away the extra-ordinary profits or “rents” as we economists call them. Corn producer profits have returned in 2011 but they, too will be short-lived as cash rents, land prices in input costs rise.

David Ricardo taught us in 1817 that rents, or super-normal returns on capital, accrue to the holders of the scarce resources – those that cannot be duplicated. This chapter in American agriculture will be used for decades as an example of Ricardo’s theory as the profits created by these policies accrue to landowners and to owners of non-duplicable technology such as patents and trade secrets. That does not mean that no one between these parties and the producers of ethanol made a profit. It only means that those profits were transitory while the rents accruing to landowners and patent holders will be relatively permanent.

The damage has been done to other users of corn while the benefits from here forward will accrue almost solely to landowners and companies that have patents on various products and processes to provide inputs to corn farmers. Has that been a good deal for American society in general? Perhaps, but it has not been a good deal for those thousands of operations that have ceased producing cattle and hogs – and milk and chickens and turkeys and eggs. One principal of a fair society is that winners compensate losers when policies create winners and losers. There has been no fairness for livestock and poultry producers.

How Have These Policies Impacted Feed Availability

Since 2004, corn used for ethanol production increased from 1.378 billion bushels to an estimated 5.05 billion bushels in 2010-2011. That is a total increase of 382% or an average of 65% per year. During that same period, total corn usage has increased by 24.8% or 6.1% per year. But corn production has increased by only 5.4% or 0.9% per year. To be fair, the 2004 corn crop was record large so it may not be the best base year to use for production growth.

But comparing the average crops for 2008-2010 to the average for 2003-2005 still shows that corn production has increased by only 16.5% or an average of 2.7% per year.

These differing rates of growth, which I argue were caused primarily by subsidies and a guaranteed market for ethanol which spurred a buildup far too fast to be supported, has caused carryout stocks to fall to unprecedented lows and forced the pricing system to ration potentially scarce corn supplies very early in crop years.

They have also resulted in less and less corn and other feed grains being used (ie. available) for feed. Figure 2 shows the amount, in million metric tons, of U.S. corn, wheat, barley, sorghum and oats used for feed and residual for 2000 through 2011-12 as estimated in August by USDA's World Agricultural Outlook Board. From 2000 through 2004-2005, feed/residual usage was relatively stable. But everything changes in 2005-2006 and feed/residual usage has declined in every year but one since then. Projected feed/residual usage in the coming crop year is 20.7% lower than in 2004-2005 and 13.7% lower than in 2007-2008 when corn prices first moved to this much higher plateau.

The availability of DDGS from ethanol plants has indeed mitigated this decline but it has not done so fully by any means. Figure 3 shows the same data as did Figure 2 but has domestic DDGS availability (DDGS production less DDGS exports) added to the columns. The downtrend is slower but it is still a downtrend. Total grains plus net DDGS availability is projected to be 166.8 million metric tons in 2011-2012, 5.4% lower than in 2007-2008.

U.S. livestock and poultry producers have met this challenge thus far by becoming more and more efficient. While total feed/residual usage has declined 5.4% since 2007-2008, U.S. beef production declined only 0.4% from 2007 to 2010 while pork and chicken production INCREASED 2.2% and 2.1%, respectively. <u>But how long can such efficiency improvements continue</u>? Lower

feed availability will eventually mean lower meat and poultry output and still higher meat prices.

There is a concern, however, that is much more immediate: **What happens when the United States faces a year of widespread drought in major corn producing states?**

The United States has enjoyed an almost unprecedented run of good corn growing seasons. As can be seen in Figure 4, the last major drought in the Midwest occurred in 1988. That came closely on the heels of a major drought and heat induced crop failure in 1983. The national average yield in those years was 84.6 bushels per acre and 81.1 bushels per acre, respectively. Those yields were 26% and 22% below the 1960-2010 trend yield for those years.

But neither caused major disruptions in the U.S. livestock and poultry industries because U.S. farmers and the federal government had HUGE stocks of corn on hand (see Figure 5). Having 49% and 55% of an entire year's usage in grain bins around the land provided ample supplies and resulted in only slightly higher prices than were considered the norm for the time.

What would happen if we had a national yield 22% or 26% below the trend yield now? Frankly, I would rather not contemplate the possibility. An 11% shortfall in 1995 pushed 1996 carryout stocks to only 4.9% of total usage and drove corn to then-record highs of just over $5.00 per bushel. A projected 5.2% yield shortfall this year (USDA's August estimate of 153 bushels/acre) has pushed projected year-end stocks to 5.4% of total usage and resulted in corn futures well over $7.50/bushel.

It is clear from Figure 4 that we have enjoyed an extraordinary stretch of good growing weather. Logically, that stretch must someday be punctuated by another drought. According to Dr. Elwyn Taylor of Iowa State University, the longest period between Iowa droughts in over 400 years of tree ring data is 23 years.

2011 marks 23 years since the 1988 drought and, while growing conditions were not perfect in Iowa this year, 2011 will certainly not be classified as a drought year. So, we are still counting and are now well overdue.

2011-2012 will mark the third straight year in which total corn usage has exceeded 13 billion bushels. The 600 million gallon annual increases in ethanol blending prescribed by the RFS for each of the next four years will add 215 million bushels to the ethanol line for corn usage each year. If all other uses were to stay the same, it would mean we would need 14 billion bushels of corn in 2015. If harvested acres remain near 85 million, that crop would require a yield of 165 bushels per acre, a figure that can be reached if yield progress continues at the past trend and the weather is good.

But what happens when a drought hits? That depends on many, many factors. Most agree that the yield reduction will not be as great as in the past due to the drought tolerance characteristics built into today's hybrids. But even if it was 12%, roughly half as large as the 1980s declines, it would mean a corn crop of less than 12 billion bushels in a world that needs well over 13 billion bushels and may need as much as 14 billion bushels. How would the industry ration the demand for one to two billion bushels of corn?

A completely free market would push prices high enough that the lowest value users would cease buying, reducing pressure on supplies and allowing the short crop to be used in its highest-value uses. But the corn market today is not free. The RFS decrees that "Thou shalt blend XXX billion gallons of ethanol into gasoline or we will fine you." By extension that means that ethanol plants must produce XXX billion gallons of ethanol and use XXX/2.8 billion bushels of corn to do it. The ethanol sector is not free to participate in any rationing that must be done.

Logically, exports would be next in line since corn should have a higher value before transportation than afterward. But in a world with a near-record low U.S. dollar and growing demand for meat and poultry in Asian markets, I don't believe this will be true. We witnessed record large exports in 2007 and have seen relatively strong – considering the price is over $7 in the U.S.! – exports in 2011.

A similar argument can be made for corn usage in high fructose corn syrup. Should a shortfall happen when sugar is expensive, as it is now, HFCS output would not fall by much, if any.

That leaves feed/residual and feed users have a huge problem: They cannot shut down a production system quickly. Most animals –and this especially applies to pigs and chickens – are worth far less if they have to be sold prior to reaching market weight, if they can be sold at all. The hitch is that someone else has to have a place for them and the broiler and pork industries simply do not have a lot of empty facilities sitting idle. The cattle sector has more flexibility given the bovine's wondrous ability to utilize forages but even there, a forced reduction of corn usage would be very difficult to implement.

The only way to effective short-circuit hog and chicken production systems to quickly reduce feed usages is to destroy the animals. This happened in the summer of 2008 when weaned pig values went to zero due to high feed prices, low hog prices and a strong Canadian dollar. There were rumors that it happened on a few occasions in the U.S. in the summer of 2009. Destroying chicks or poults is not an unusual occurrence in the broiler and turkey industries but the scale would be multiplied many times in the case of a drought-driven crop failure under these circumstances.

Destroying animals runs against every fiber in a producer's being! It is wasteful and psychologically draining. Most would do about anything to avoid it but economic realities may force them to do it.

What Can Be Done?

If oil and gasoline are expensive, there is nothing anyone can do without ordering the shutdown of ethanol plants. The market would tell us that corn is needed more for fuel than for other uses. The reason, of course, is that all of those subsidy-driven ethanol plants exist so this "market driven" situation is still a consequence of our past policies. But those cannot be undone so we must deal with facts: High oil prices would mean corn will be used for ethanol and livestock and poultry growers will have to either pay the price or destroy animals to reduce usage quickly.

If oil and gasoline prices are low, however, there will be a conflict between what the market may say should be done and what current law says must be done. Low oil and gasoline prices would mean that corn has a lower value in use for ethanol and that less should be used there and more diverted to livestock feed. But the law does not allow that and the current waiver features put that decision in the hands of the Administrator of the Environmental Protection Agency. Will he/she want to reduce ethanol use and its alleged environmental benefits when gasoline is cheap and the incentive is there for motorists to burn more and thus add to carbon emissions? I think the answer is obvious.

I urge your committee and the House Agriculture Committee as a whole to quickly adopt a plan to provide an automatic waiver of the RFS in the circumstance of a pending crop failure in major corn growing areas and relatively low oil and gasoline prices. I would envision this "trigger" to be a function primarily of supply indicators such as grain stocks, acreages and crop conditions which, when met, would allow the Secretary of Agriculture to take action regarding the RFS. I believe it is imperative to give the Secretary of Agriculture some authority in this matter since it is so important to our meat and poultry supply.

I may be wrong, but ethanol blenders and, perhaps, manufacturers should support this idea. Do they really want to make and blend ethanol made from $8 or $9 or $10 corn when gasoline prices are cheap? Maybe they believe they will just pass the higher costs along. In that case, U.S. gasoline consumer should be VERY supportive of this idea.

I do not have a specific proposal for you at this time. I know that several agricultural economists have worked on potential trigger mechanisms. I can assure you that some of the best minds in our profession can be assembled quite quickly to devise a plan or a few alternatives that will work.

I sincerely hope that this is all an exercise in futility and that we never have another short corn crop. But I have studied statistics and probability and know that we are living on time borrowed from a sometimes-fickle Mother Nature. We should honestly recognize that fact and prepare for the day when that calamity comes.

Figure 1

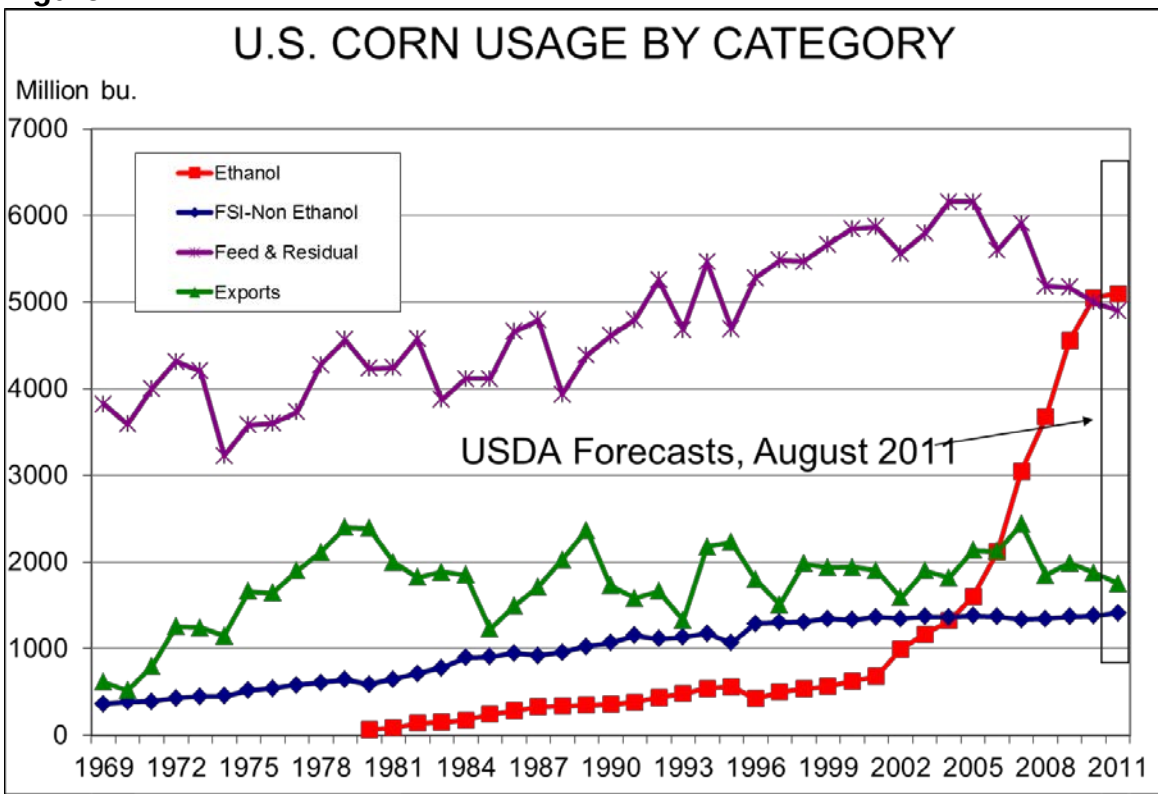


Figure 2

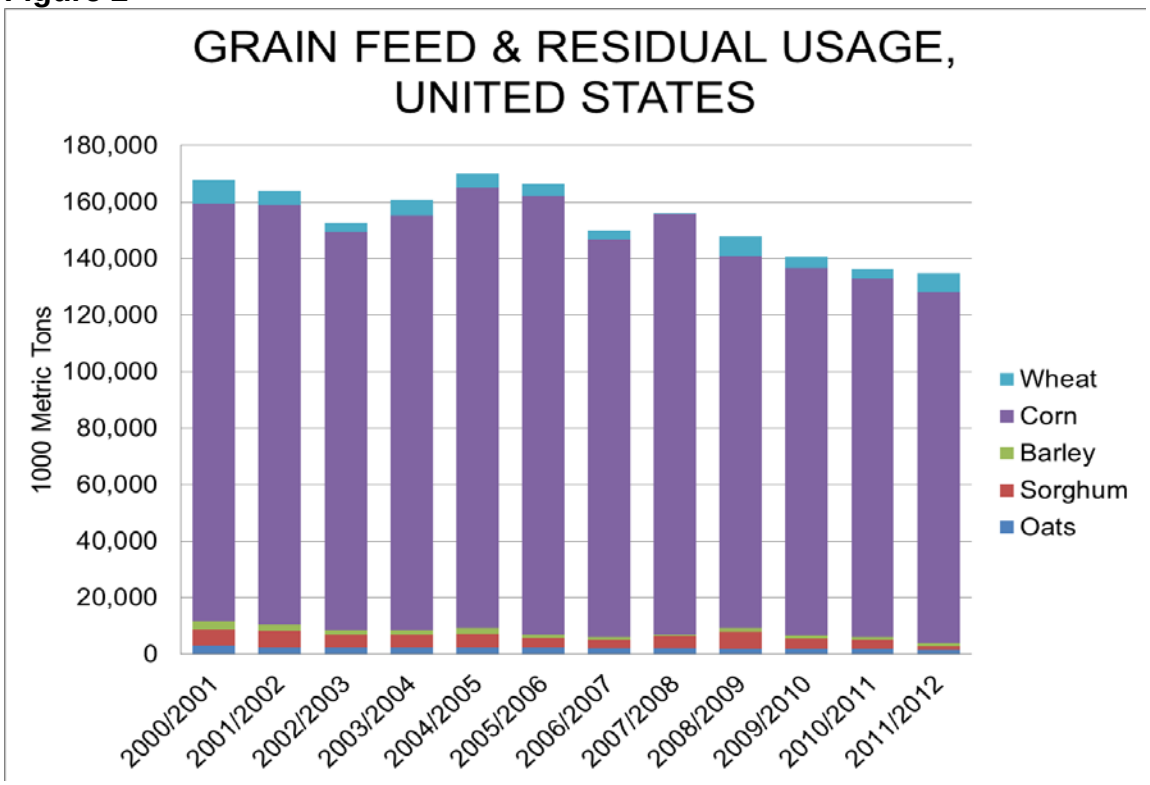


Figure 3

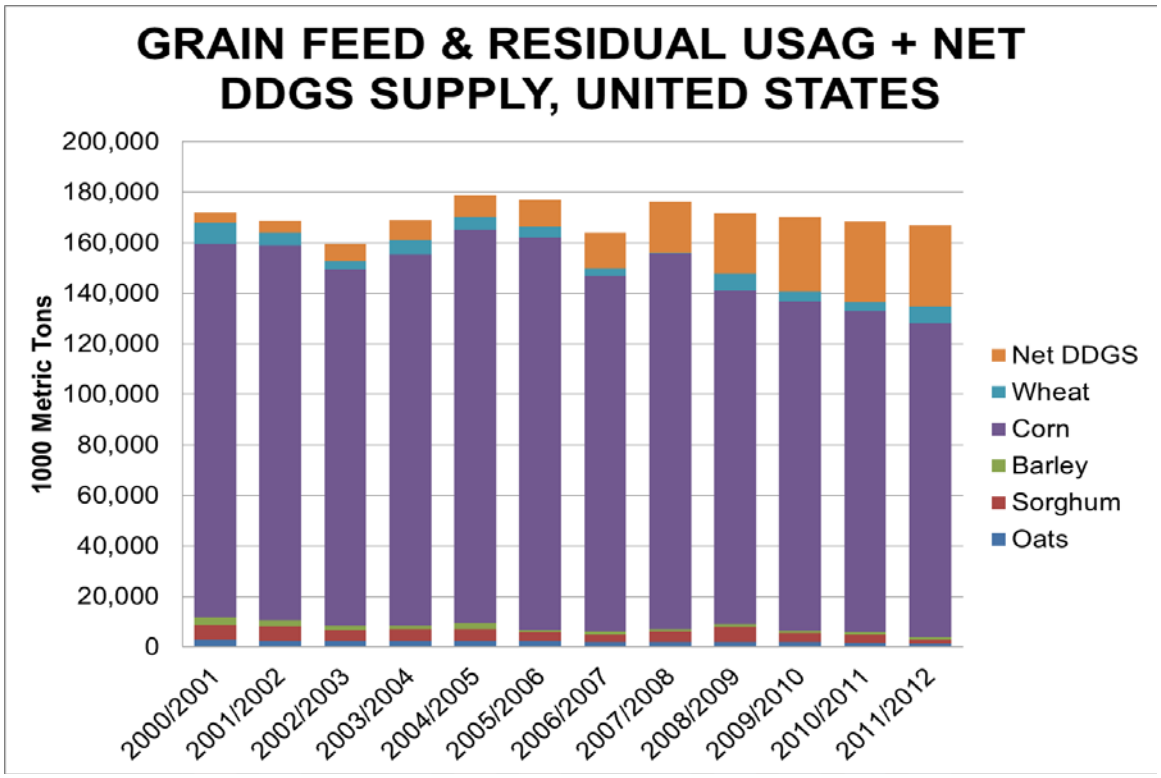


Figure 4

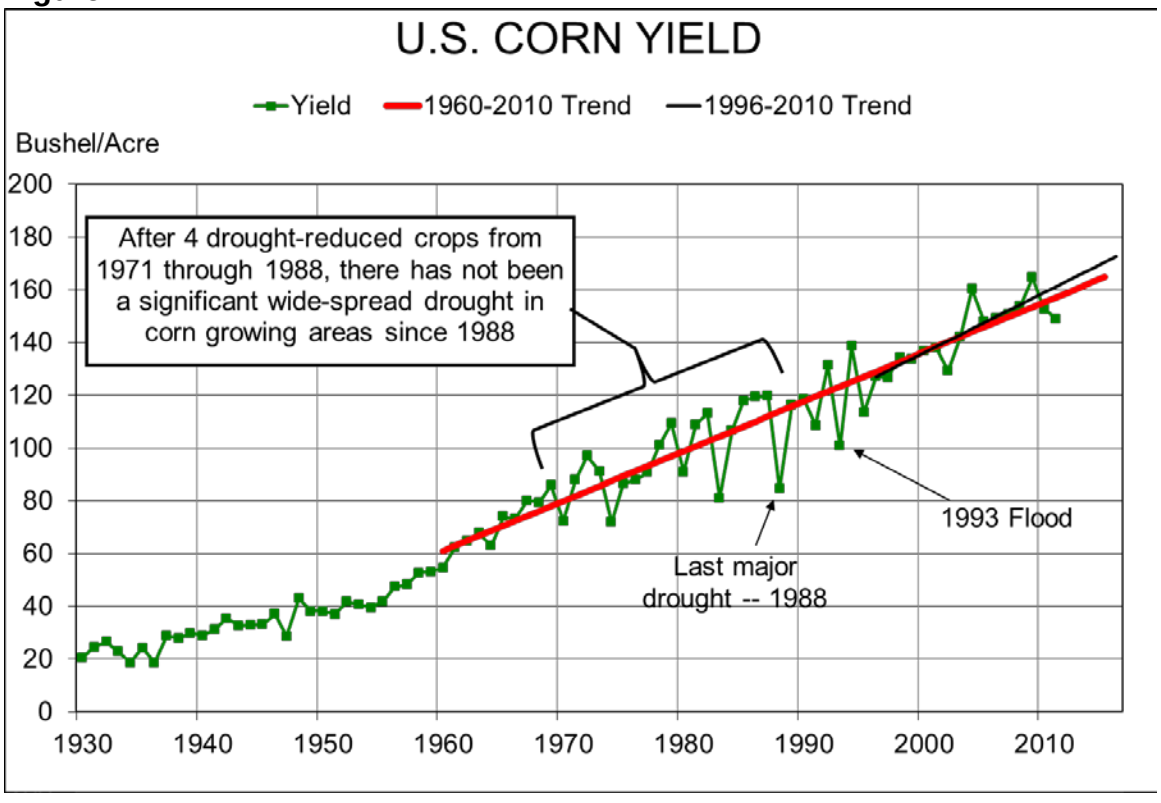
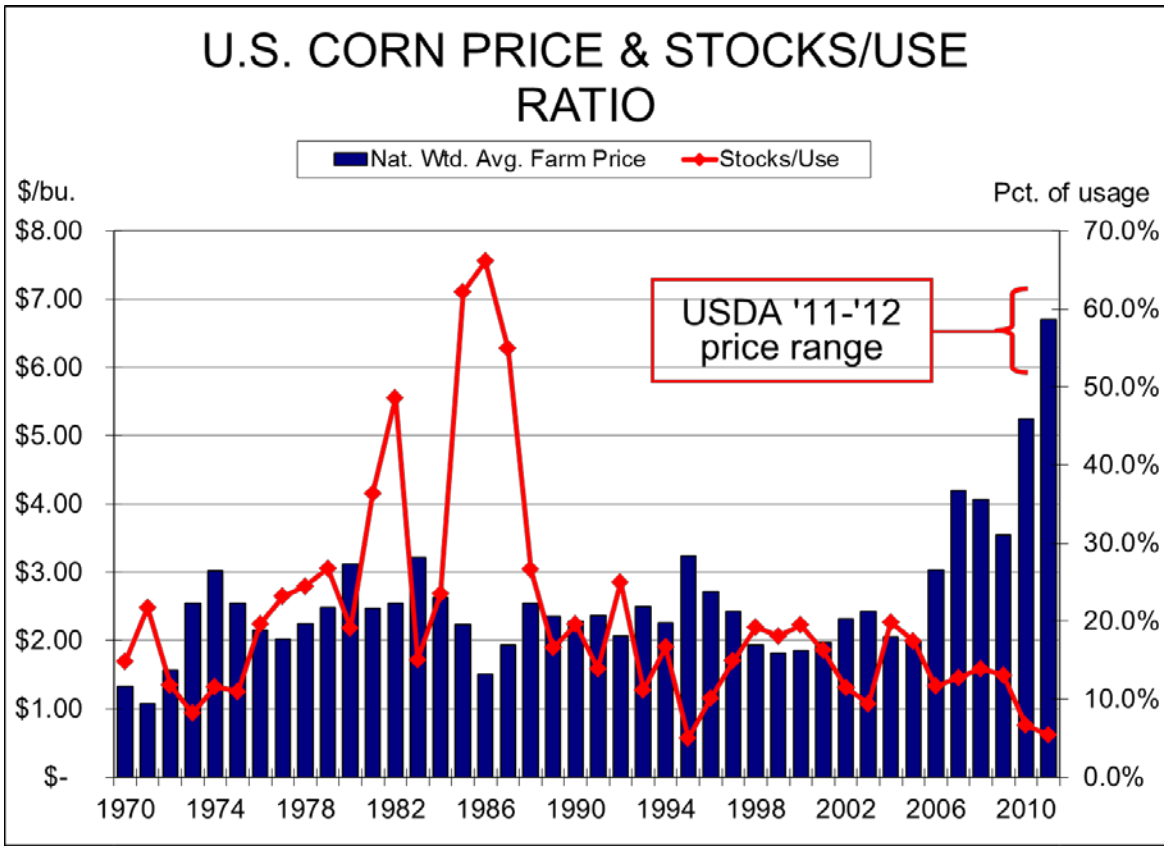


Figure 5


U.S. CORN PRICE & STOCKS/USE RATIO
Nat. Wtd. Avg. Farm Price
Stocks/Use
$/bu.
Pct. of usage
$8.00
$7.00
$6.00
$5.00
$4.00
$3.00
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$-
70.0%
60.0%
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40.0%
30.0%
20.0%
10.0%
0.0%
USDA '11-'12 price range
1970
1974
1978
1982
1986
1990
1994
1998
2002
2006
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EDUCATION:

Ph.D. August 1987, Iowa State University, Ames, IA. Major: Agricultural Economics (Marketing and Industrial Organization); Dissertation: The value of near infrared reflectance measurement of feedgrain nutrient composition. GPA: 3.59

M.S. December 1981, Oklahoma State University, Stillwater, OK. Major: Agricultural Economics (Marketing and Spatial Price Theory); Thesis: Interregional Competition in the U.S. swine-pork industry: An analysis of Oklahoma's expansion potential. GPA: 4.0

B.S. May 1979, Oklahoma State University, Stillwater, OK. Major: Agricultural Economics (Farm and Ranch Management); GPA: 3.93

EMPLOYMENT HISTORY:

President and Owner, Paragon Economics, Inc., Adel, IA October 2002 to present

Director of Economics, National Pork Producers Council/National Pork Board, Des Moines, IA. September 1993 to September 2002.

Swine Technical Representative, Moorman Manufacturing Co., Quincy, IL. April 1991 to August 1993.

Sales and Marketing Manager, Donnell Ag. Products, Inc., Graham, TX. March 1990 to March 1991.

Assistant Professor, Department of Agricultural Economics, University of Missouri, Columbia, MO. July 1987 to February 1990.

Research Assistant, Department of Economics, Iowa State University, Ames, IA. August 1983 to June 1987.

Sales Representative, Dow Chemical USA, Midland, MI. August 1981 to August 1983.

Research Associate, Department of Agricultural Economics, Oklahoma State University, Stillwater, OK. July 1980-July 1981.

Graduate Assistant to the Assistant Dean of Resident Instruction, College of Agriculture, Oklahoma State University, Stillwater, OK. August 1979 to June 1980.

SELECTED PUBLICATIONS:

North American Market Preview, National Hog Farmer's North American Preview E-Letter, Weekly column, July 2003-present.

Daily Livestock Report, Daily, October 2002-present. Chicago Mercantile Exchange, Chicago, IL. Available at www.dailylivestockreport.com.

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Meyer, Steve R. and Joseph E. Williams, "An Integrated Programming Approach to Spatial Studies," paper presented to Southern Agricultural Economics Association Annual Meetings, Orlando, FL. February 1982.

Meyer, Steve R. and Joseph E. Williams, "Potential for Profitable Expansion of Oklahoma's Swine Production Industry," Ag. Econ. Paper 81115, Department of Agricultural Economics, Oklahoma State University, Stillwater, OK. December 1981.

HONORS AND ACTIVITIES: Coach of National Agri-Marketing Association Student Marketing Competition Champions (University of Missouri-Columbia, 1989); Outstanding Ph.D.

Dissertation, ISU Department of Economics (1987); ISU Excellence in Research Award (1987); National Science Foundation Fellow (1980-85); American Agricultural Economics Association Honorable Mention Masters Thesis (1982); Phi Kappa Phi; OSU Top Ten Seniors (1979); Blue Key (Secretary); Omicron Delta Kappa; Alpha Zeta (President, Outstanding Member); Aggie-X Club; Block and Bridle; OSU Meats Judging Team (1977); OSU Top Ten Freshman Men (1976); Ten undergraduate scholarships; FarmHouse Fraternity (Rush Chairman, Spring Sing Director); Ralston Purina Summer Agribusiness Management Intern (1978).

PROFESSIONAL ORGANIZATIONS: American Agricultural Economics Association (Industry Committee, 1997-98; Extension Section Executive Committee, 2000-2003), National Association for Business Economists; Executive Committee of NEC-63 Research Committee on Commodity Promotion; Executive Board Member of National Institute for Commodity Promotion and Research Evaluation, 2001-2002.

OTHER INTERESTS AND ACTIVITIES: Member of New Hope Evangelical Free Church, Adel, IA (Worship Team); Adel-DeSoto-Minburn Independent School District Board of Education (September 2006 – September 2009); South Dallas Little League Board of Directors (League Rep (1993), Vice-President (1994), President (1995-1996), Umpire-In-Chief (1997, 2000-2004)), Little League Baseball Coach, Flag Football Coach, Cub Scouts/Webelos (Assistant Den Leader), Adel Community Theatre (2000, 2002, 2004); ADM Athletic Booster Club (Baseball Rep 2005, Football Rep 2007, State Fair Paring Chairman 2007-2011);

Date of last update: March 2, 2011

Committee on Agriculture
U.S. House of Representatives
Information Required From Nongovernmental Witnesses

House rules require nongovernmental witnesses to provide their resume or biographical sketch prior to testifying. If you do not have a resume or biographical sketch available, please complete this form.

1. Name: Steven Roger Meyer
2. Organization you represent: Paragon Economics, Inc / NCBA
3. Please list any occupational, employment, or work-related experience you have which add to your qualification to provide testimony before the Committee: See Resume
4. Please list any special training, education, or professional experience you have which add to your qualifications to provide testimony before the Committee: See Resume
5. If you are appearing on behalf of an organization, please list the capacity in which you are representing that organization, including any offices or elected positions you hold: Consultant to NCBA

PLEASE ATTACH THIS FORM OR YOUR BIOGRAPHY TO EACH COPY OF TESTIMONY.

Committee on Agriculture
U.S. House of Representatives
Required Witness Disclosure Form

House Rules* require nongovernmental witnesses to disclose the amount and source of Federal grants received since October 1, 2008.

Name: Steven Roger Meyer

Organization you represent (if any): Paragon Economics, Inc

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1. **Please list any federal grants or contracts (including subgrants and subcontracts) you have received since October 1, 2008, as well as the source and the amount of each grant or contract. House Rules do NOT require disclosure of federal payments to individuals, such as Social Security or Medicare benefits, farm program payments, or assistance to agricultural producers:**

Source:_____ **Amount:**_____

Source:_____ **Amount:**_____

2. **If you are appearing on behalf of an organization, please list any federal grants or contracts (including subgrants and subcontracts) the organization has received since October 1, 2008, as well as the source and the amount of each grant or contract:**

Source:_____ **Amount:**_____

Source:_____ **Amount:**_____

Please check here if this form is NOT applicable to you: ✓

Signature: Steven R Meyer

* Rule XI, clause 2(g)(4) of the U.S. House of Representatives provides: *Each committee shall, to the greatest extent practicable, require witnesses who appear before it to submit in advance written statements of proposed testimony and to limit their initial presentations to the committee to brief summaries thereof. In the case of a witness appearing in a nongovernmental capacity, a written statement of proposed testimony shall include a curriculum vitae and a disclosure of the amount and source (by agency and program) of each Federal grant (or subgrant thereof) or contract (or subcontract thereof) received during the current fiscal year or either of the two previous fiscal years by the witness or by any entity represented by the witness.*

PLEASE ATTACH DISCLOSURE FORM TO EACH COPY OF TESTIMONY.