

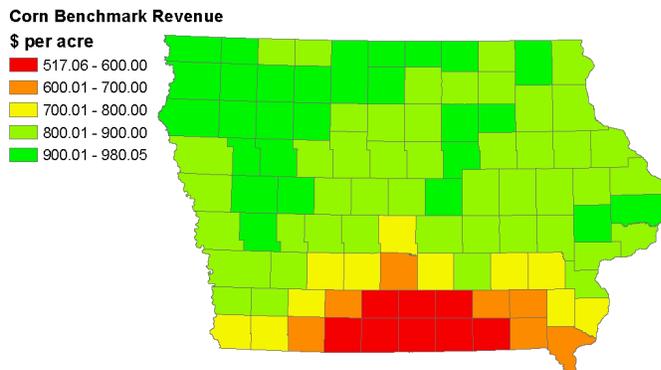
Farm Bill update, continued from page 1

Both the House and Senate eliminate direct payments and construct new programs to support farmers when crop prices or revenues fall below targeted levels set either by historical averages or defined by Congress. Both continue the marketing loan program and reestablish disaster assistance programs. Both attempt to protect against “shallow losses,” losses not covered by crop insurance.

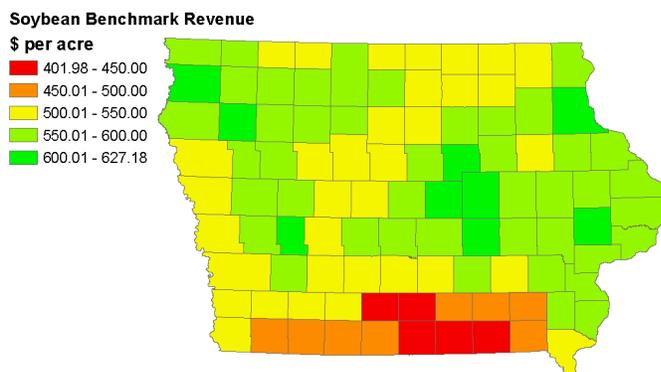
The price protection programs are basically updates of the current Counter-Cyclical Price program (CCP). The House version is called Price Loss Coverage (PLC) and the Senate version is called Adverse Market Payments (AMP). Both protect against prices falling below “reference” levels. For PLC, Congress would set the reference price and any payments would be made on 85 percent of a farm’s planted acreage. For AMP, the reference price is set at 55 percent of the Olympic five-year average of market prices and any payments would be made on 85 percent of a farm’s base (historical) acreage. As the bills currently stand, PLC reference prices would be \$3.70 per bushel for corn and \$8.40 per bushel for soybeans. Based on USDA Sept. 1 estimates for 2013 corn and soybean prices, the 2014 AMP reference prices would be \$2.99 per bushel for corn and \$6.44 per bushel for soybeans.

The revenue-based programs look very similar to the Average Crop Revenue Election (ACRE) program that is currently in play. The House version is called Revenue Loss Coverage (RLC), while the Senate version is titled Agriculture Risk Coverage (ARC). Payments are released when actual crop revenues fall below a set percentage of “benchmark” revenues. Benchmark revenues are set as the product of the Olympic five-year averages for yield and national price. In the House version, this benchmark is established using county yields, and 85 percent of the benchmark revenue is covered. In the Senate version, the benchmark revenue can be established using county or farm yields, and 88 percent of the benchmark revenue is covered. Both RLC and ARC pay on planted acres, with RLC paying on 85 percent of planted acres and ARC paying on 80 percent of planted acres when the county benchmark is used and 65 percent of planted acres when the farm benchmark is used.

The two maps below show what the benchmark revenues would have been for Iowa corn and soybeans in 2013. As the maps indicate, the benchmark revenue tends to increase as you move farther north in the state. The range for the corn benchmark revenue goes from \$517.06 in Clarke County to \$980.05 in O’Brien County.



The range for the soybean benchmark revenue goes from \$401.98 in Wayne County to \$627.18 in Marshall County. These benchmark revenues will update each year, again using the Olympic five-year average yields and national prices. But these maps show the general structure of the revenue protection that RLC and/or ARC would provide.



In essence, Congress seems to be moving the farm safety net programs to mimic what farmers have chosen with crop insurance, building on the safety net already provided there. This shift started with the CCP and ACRE programs in the 2008 U.S. Farm Bill. It continues with the proposals for PLC, AMP, RLC and ARC.



CSR gets a makeover in forming the new CSR2 Productivity Index

by Jim Jensen, extension farm management field specialist, jensenjh@iastate.edu, 319-385-8126

Over the years, the term CSR has become a household word among farmland owners and tenants in Iowa. CSR (corn suitability rating) is a soil productivity rating for Iowa soils that ranges from a low of 5 to a high of 100. It was introduced in 1971 by Thomas Fenton from Iowa State University and has gained in popularity ever since. CSR values are often used when figuring farmland indexes such as land values and cash rents. The index has also been correlated to crop yields although part of the intent of the index was to establish a system for equitable tax assessment, a way to level the playing field by measuring a soil's productivity and not how well the operator was doing yield-wise with the land. All Iowa counties presently use the CSR rating when figuring individual real estate property taxes.

People have asked, "Why did the CSR need to change? They were just getting comfortable with using the index." Some people think that things need to change periodically just because, but in the case of the CSR, there were some good reasons to make changes, including a desire for transparency and uniformity. Additionally, advances in soil-mapping techniques and the adoption of the national soil classification system during the past 50 years provided improved methods for calculating the CSR2 when compared to the original CSR formula. Expert judgment was applied to fine tune the CSR rates, but in some cases there were years or decades between the times the judgment was applied for a given county based on the frequency of county soil reviews. As a result, the publicly available data didn't correspond directly to the soil properties. Not only that, but technology had changed to the point that old soil characteristics used to calculate CSR might not exist and new characteristics with greater accuracy can now be used. The new CSR2 calculates the index on a statewide basis.

The new formula (CSR2=S-M-F-W-D+-EJ) is very transparent in how Iowa soils are rated but could also be applied to soils anywhere in the world. The calculation can be made using publicly available data. At the present time, Iowa is the only state that uses a CSR indexing system but that might change in the future. The letters in the formula stand for:

- S the taxonomic subgroup class of the soil series
- M the family particle size class
- F refers to the field conditions of a particular SMU (soil map unit)
- W the water holding capacity
- D a soil depth and erosion factor T
- EJ an expert judgment correction factor

The original CSR index had a large adjustment built in to allow for the difference in the climate as you moved across Iowa from the southeast to the northwest. In viewing the above items of the formula, you can see that there is not an adjustment for climate in the new CSR2. The western part of the state had a much drier climate when the original CSR index was developed using weather data from the 1950s. The climate has definitely changed in western and northern Iowa as evidenced by the last 20 years of weather data. The climate adjustment in the original CSR penalized soils with similar properties that were located in the north central, west central, west and northwest parts of the state. The CSR formula did not change as the climate changed, but landowners recognized the change and bid up land values in those parts of the state. Good yields encouraged higher land prices as did the development of ethanol plants that helped bid up the price for corn. Iowa State University land surveys now show that the majority of the high-value land in Iowa is in counties in the northwest part of the state.

CSR gets a makeover in forming the new CSR2 Productivity Index, continued from page 3

Another change is that the original CSR values for soils were calculated with adjustments made at the county level. As a result, soils could and sometimes did have different CSR levels in different counties. The CSR2 now assigns the same CSR to all soils of the same type.

The new CSR2 numbers are currently available on the Iowa State University ISPAID website, www.extension.iastate.edu/soils. The data is planned to be uploaded to the NRCS WebSoil Survey site, websoilsurvey.nrcs.usda.gov, around Oct. 1. All future upgrades to the CSR2 index system are scheduled to be introduced once a year, in October, on the Web Soil Survey site. The NRCS uses a continual improvement process in examining soils and will make changes to the CSR2 as needed in the future. The written county soil books will no longer be printed as the Web Soil Survey site will be the official soil information site for the NRCS.

Assessors will probably start using the new CSR2 numbers in 2015. It will take some time to rework the index on all the land in each county as different counties will move at different speeds through the process. You will need to check with your local county assessor to determine when the new number will be used to calculate property taxes.

What things, other than taxes, will be affected by the change from CSR to CSR2? People might see some changes in the CSR2 index number for their land and will need to calculate their CSR2 to see if it is different from the CSR index used previously. In general, the CSR2 index numbers will increase statewide, but individual land parcels may see an increase or decrease. The biggest difference will be seen as you move from the southeast part of Iowa toward the northwest corner because of the elimination of the adjustment for climate. The thing to keep in mind is that you need to keep the CSR and CSR2 separate when comparing properties. Compare properties using the new CSR2 index and do not mix up the comparison by using some of the old CSR calculations.

Is my land worth more or less now that the index has changed? It could be either or may not change at all. The new CSR2 will affect all soil types evenly so if your land is typical of the county, it should change as the county changes. If your land is unique for the area, the CSR2 may move in a different direction from the county average. Appraisers and assessors will use the new CSR2 system and its yearly updates to rate and compare land. What people are willing to pay for land depends on more factors than the CSR rating and those factors will not change with the switch to CSR2.

After much discussion about changing CSR to CSR2, there are some conclusions that can be drawn. CSR2 will be the new index of soil productivity in Iowa. It will be supported and updated yearly on the NRCS Web Soil Survey internet site. CSR numbers will still be around for people to compare how things have changed in the classification of the land productivity potential on their farm. The CSR2 will be used as an index in comparing many land-related items that used the CSR index in the past, but be careful not to mix the two indexes when using them as comparison indexes. Either use CSR2 or CSR but not a mixture. Over time, people will switch to and become comfortable with the new, improved, continually updated land productivity index.

More information

Web Soil Survey - websoilsurvey.nrcs.usda.gov
ISU Extension Soil and Land Use -
www.extension.iastate.edu/soils



Finding financial measurement standards at the AAEA meetings

by Tim Eggers, field agricultural economist, teggere@iastate.edu, 712-542-5171

The Agricultural & Applied Economics Association (AAEA) is a professional organization for agricultural economists. William Edwards, Mike Duffy, Chad Hart, myself and many of the other authors of Ag Decision Maker articles, decision files and decision tools belong to the organization. At the annual meeting each August, sessions provide the opportunity to learn about the latest research and trends and interact with professionals and students in agriculture and applied economics from across the country. Following is a brief summary of a session on financial measures and how this impacts programming efforts from the ISU Extension and Outreach farm management team.

Comparing ARMS to Farm Management Association Data: Implications for Data Analysis and Research

ARMS is the USDA's Agricultural Resource Management Survey. It is a national standard for costs of production estimates. This session compared ARMS to farm management association data in Illinois, Kentucky and Kansas. The organizer of the session was Nicholas Paulson from the University of Illinois.

Learning more about ARMS and farm management association data was relevant because of their roles in providing benchmarks. Our Iowa farm financial benchmarks come from the Iowa Farm Management Association, www.iowafarmbusiness.org/. Members of the ISU Extension farm management team, including myself, Ann Johanns, Kelvin Leibold and Kristen Schulte, are developing a series of financial management programs to implement across the state this winter. Benchmarks are a key part in each of the three programs.

Rocking the Boat

Your Key Ratio - a 45-minute program focusing on current ratio and working capital
Deep Water or High Tide on the Beach? - a full-day program that will challenge participants to determine whether their case farm is out in deep water or about to be stranded as the tide of economic profits recedes
Moving Beyond the Basics - a multi-session program for agricultural women who benefit from the methodologies used in Annie's Project and want to learn more about managing their farm's finances

The Farm Financial Standards Council develops accounting standards for farm business. The council's 21 standard financial measures of profitability, liquidity, solvency, financial efficiency and repayment capacity for agricultural producers are clearly spelled out in its publication, *Financial Guidelines for Agriculture*. Variables in some of those measures require deep dives into producers' records. The AAEA session helped to illustrate some of the challenges of each set of data when using it for benchmarking purposes.

How deeply do ARMS and farm management associations dive?

ARMS gathers data directly from producers and attempts to be the "mirror in which American farming views itself." ARMS is designed to accurately represent the financial and crop production practices of U.S. agricultural producers.

Farm management associations have the user's need for tax preparation and farm recordkeeping services to assure accurate data. They only have data on their clientele, and their clientele may not represent the average producer in a state or even the range of producers.

Finding financial measurement standards at the AAEA meetings, continued from page 5

Each presenter explained the unique characteristics of his or her state's farm management association. Questions asked by the applied economists in the audience helped to illustrate the limitations of comparing ARMS data to farm management association data. It pointed out how variables in some ratios need to be closely examined before assuming that the ratios can be used to compare farm businesses. For example, how is owner withdrawal for unpaid labor and management determined? Owner withdrawal for unpaid labor and management is a component in the calculations for Return on Assets, Return on Equity, and Operating Profit Margin Ratio. ROA and ROE are highly used ratios, so consistency is important if a farm's performance is being compared to a benchmark.

The discussion helped to illustrate how standardized benchmarks of financial performance are something that many states still do not have. The information shared in this session will result in better financial management programs for Iowans. It can be a real challenge to apply

standards consistently. Helping a producer understand an operation's financial position with clarity is important to see where the farm operation has been and where it is expected to go in the future. Comparing ARMS to Farm Management Association Data: Implications for Data Analysis and Research reminded me that there is still an art to working with the numbers.

More information

AAEA - www.aaea.org/

ARMS - www.ers.usda.gov/data-products/arms-farm-financial-and-crop-production-practices.aspx

Iowa Farm Business Association - www.iowafarmbusiness.org

Kansas Farm Business Association - www.agmanager.info/kfma/

Illinois Farm Business Association - fbfm.ace.uiuc.edu

FINBIN Farm Financial Database - www.finbin.umn.edu

Updates, continued from page 1

Internet Updates

The following information files and decision tools have been updated on www.extension.iastate.edu/agdm.

Corn Stover Pricer – A1-70 (Decision Tool)

Managed Hay and Grazing of CRP Acres – B1-60 (12 pages)

Managed Hay and Grazing of CRP Acres – B1-60 (Decision Tool)

Overview of Confidentiality Agreement – C5-80 (2 pages)

Sample One-Sided Confidentiality Agreement – C5-81 (3 pages)

Sample Mutual Confidentiality Agreement – C5-82 (3 pages)

Capital Budgeting and Decision Making – C5-242 (6 pages)

Time Value of Money and Capital Budgeting Terms – C5-243 (2 pages)

Current Profitability

The following tools have been updated on www.extension.iastate.edu/agdm/info/outlook.html.

Corn Profitability – A1-85

Soybean Profitability – A1-86

Iowa Cash Corn and Soybean Prices – A2-11

Season Average Price Calculator – A2-15

Ethanol Profitability – D1-10

Biodiesel Profitability – D1-15

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Whitten Building, 14th and Independence Avenue, SW, Washington, DC 20250-9410 or call 202-720-5964.

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