S. HRG. 115–173

EXAMINING THE FARM ECONOMY: PERSPECTIVES ON RURAL AMERICA

HEARING

BEFORE THE

COMMITTEE ON AGRICULTURE, NUTRITION, AND FORESTRY

UNITED STATES SENATE

ONE HUNDRED FIFTEENTH CONGRESS

FIRST SESSION

MAY 25, 2017

Printed for the use of the
Committee on Agriculture, Nutrition, and Forestry

Available via the World Wide Web: http://www.govinfo.gov/

U.S. GOVERNMENT PUBLISHING OFFICE

28–500 PDF WASHINGTON : 2019

COMMITTEE ON AGRICULTURE, NUTRITION, AND FORESTRY

PAT ROBERTS, Kansas, *Chairman*

THAD COCHRAN, Mississippi
MITCH McCONNELL, Kentucky
JOHN BOOZMAN, Arkansas
JOHN HOEVEN, North Dakota
JONI ERNST, Iowa
CHARLES GRASSLEY, Iowa
JOHN THUNE, South Dakota
STEVE DAINES, Montana
DAVID PERDUE, Georgia
LUTHER STRANGE, Alabama

DEBBIE STABENOW, Michigan
PATRICK J. LEAHY, Vermont
SHERROD BROWN, Ohio
AMY KLOBUCHAR, Minnesota
MICHAEL BENNET, Colorado
KIRSTEN GILLIBRAND, New York
JOE DONNELLY, Indiana
HEIDI HEITKAMP, North Dakota
ROBERT P. CASEY, JR., Pennsylvania
CHRIS VAN HOLLEN, Maryland

JAMES A. GLUECK, JR., MAJORITY STAFF DIRECTOR
ANNE C. HAZLETT, MAJORITY CHIEF COUNSEL
JESSICA L. WILLIAMS, CHIEF CLERK
JOSEPH A. SHULTZ, MINORITY STAFF DIRECTOR
MARY BETH SCHULTZ, MINORITY CHIEF COUNSEL

CONTENTS

EXAMINING THE FARM ECONOMY: PERSPECTIVES ON RURAL AMERICA

Thursday, May 25, 2017

UNITED STATES SENATE,
COMMITTEE ON AGRICULTURE, NUTRITION, AND FORESTRY,
Washington, DC

The committee met, pursuant to notice, at 10:00 a.m., in room 328A, Russell Senate Office Building, Hon. Pat Roberts, Chairman of the Committee, presiding.

Present or submitting a statement: Senators Roberts, Hoeven, Ernst, Grassley, Thune, Daines, Strange, Stabenow, Brown, Klobuchar, Bennet, Gillibrand, Donnelly, Heitkamp, Casey, and Van Hollen.

STATEMENT OF HON. PAT ROBERTS, U.S. SENATOR FROM THE STATE OF KANSAS, CHAIRMAN, COMMITTEE ON AGRICULTURE, NUTRITION, AND FORESTRY

Chairman ROBERTS. Good morning. I call this hearing of the Senate Committee on Agriculture, Nutrition, and Forestry to order.

We started off this year by holding two field hearings, one at Kansas State University, followed by another in Senator Stabenow's home state of Michigan. Two great hearings. We had 600 in Kansas. We had a smaller place but they crammed in 250-plus.

We were there to do one thing, and that was to sit on the wagon tongue and listen, and we will continue to do that. We listened to farmers, ranchers, lenders, cooperatives, many others in rural America regarding what is working, what is not working, what needs to be improved in the 2014 Farm Bill.

One thing is very clear. Times are extremely challenging, right now, in farm country, and that is why we are here today, to examine the economic landscape of rural America.

When the 2014 Farm Bill was written and passed, times were relatively good in agriculture, but as everyone knows, or should know, a lot has changed since then. At the time, net farm income was at record highs. In the years since, the farm sector is expected to face a 50 percent decline in farm income. Low commodity prices are continuing to weigh on farm sector profits for both row crop and livestock producers. It hits everybody. Crop receipts are expected to decline by over $42 billion and livestock receipts over $23 billion.

On the credit front, reduced farm income over the past four years has continued to weaken credit conditions in the ag sector. Demand for farm loans, as well as renewals and extensions, has increased, due to ongoing cash flow shortages, and prolonged tight profit margins which are creating additional declines in repayment rates for our farm loans.

Right now weakness in the crop and livestock sector is causing producers to expend more working capital to meet short-term obligations. Many farmers are becoming more leveraged as working capital is decreasing while debt levels continue to rise.

Obviously, this is a trend that should be monitored very closely, and, if possible, reversed, but let us not forget there are a number of economic factors which are different now than what was seen during the 1980s.

Over the past few years, we have global production that has exceeded global demand. The fundamentals of supply and demand are certainly working. At the same time, our government is spending money it does not have. Our national debt is approaching $20 trillion—that is trillion with a T. That is 20, and then you put 12 zeroes behind it. That is hard to even imagine.

Despite these difficult conditions, time and time again agriculture has been asked to do more with less. I would remind everyone in this room that the last farm bill voluntarily cut spending, and the previous crop insurance contract negotiation cut $6 billion from the program, on top of a previous $6 billion cut from the 2008 Farm Bill. Whoever did that had some relationship with Lizzie Borden.

That is why virtually everyone on this Committee agrees that ag has already given at the store. Farmers, ranchers, and rural families understand fiscal responsibility. They want to do their part, but now is not the time for additional cuts. We need to review what is working and what is not working.

What is needed is certainly bold thinking and new ideas that address today's challenges in these tough times in the agriculture economy. We need to ensure that producers have risk management tools at their disposal. Let me emphasize that crop insurance is the most valuable tool in the risk management toolbox. Let me emphasize that crop insurance is the most valuable tool in the risk management toolbox.

Heidi, did you get me?

Senator HEITKAMP. I did. I think it bears repeating, though, Mr. Chairman.

Senator DONNELLY. I second that motion.

Chairman ROBERTS. Let me emphasize—would the distinguished new member of the Committee like me to repeat that?

Senator STRANGE. Yes, please, Mr. Chairman.

Chairman ROBERTS. Let me emphasize that crop insurance is the most valuable tool in the risk management toolbox. We need to find ways to reduce regulatory burdens that hurt our producers' bottom lines, and we need to strengthen our export markets for not only the things that we make but also for the things that we grow. I think we are making some progress on that front.

As I have said before, we need a farm bill that meets the needs of producers of all regions and all crops. Let me emphasize that—all regions and all crops. The challenges are so great, given the critical times we live in, it is essential that small differences do not get in the way of a larger goal, and that is to pass a farm bill. Today we will take a deeper look and work to understand expectations of the economic landscape and the challenges that all regions of rural America face.

I remind my colleagues that the occupation of farming can be a very challenging profession. Earlier this year, farmers and ranches from Kansas, Oklahoma, Texas, and Colorado experienced devastating wildfires, prairie fires, the largest prairie fire in the history of the country on non-Federal lands. It affected more than 1 million acres across the four states.

On top of that, just a couple of weeks ago, a massive blizzard dumped over 20 inches of snow that has the potential to impact roughly 40 percent of the wheat acreage in Kansas. Our producers in other states are also facing floods, diseases, and poor planting conditions. These weather events, layered on top of the economic conditions, are exactly why it is important that we have strong risk management tools available to help producers manage during the times of loss. I think I mentioned the importance of crop insurance.

We know that times are tough in the agriculture economy. Going forward, we can do one of two things. We could focus on narrow interests that do not serve all of agriculture, or we can work together to get things done, like we have in the past. This may require compromise, and all sectors of the agriculture economy will have to work together to achieve that goal.

At the end of the day, our role on this Committee is to pass a farm bill that provides certainty, and stand stability to farmers, ranches, and rural communities across the country.

I would like to thank our witnesses for taking time out of their valuable schedule for being with us here today. I look forward to hearing your testimony. But before we hear from our distinguished panel members, I now recognize the distinguished Ranking Member, Senator Deborah Stabenow for her opening remarks.

STATEMENT OF HON. DEBBIE STABENOW, U.S. SENATOR FROM THE STATE OF MICHIGAN

Senator STABENOW. Well, thank you very much, Mr. Chairman, for convening this very important hearing today, and we welcome all of our witnesses. I also want to just indicate we have a member who has a birthday today, and I want to say happy birthday to Senator Amy Klobuchar. We will not ask you how old you are, but happy birthday.

Senator DONNELLY. Just old enough.

Senator STABENOW. Yes, that is right. Just old enough to serve.

Chairman ROBERTS. Who is going to lead us in that song?

Senator STABENOW. Do you want to sing a song?

Chairman ROBERTS. Well, I think it is most appropriate. Go ahead.

[Singing.]

Chairman ROBERTS. Stand up, Amy.

[Applause.]

Senator KLOBUCHAR. Are you going to give me one of those portraits, unpainted? I thought that might be nice.

Senator STABENOW. Wait. Your time is coming.

Chairman ROBERTS. We just have a large picture of the crop insurance toolbox.

Senator STABENOW. That is right. Yes. Yes.

Chairman ROBERTS. Right next to Blanche.

Senator STABENOW. Yes. The Chairman will give you a crop insurance policy. So happy birthday.

So on that note, let me reiterate how important it is that we continue talking about the 2018 Farm Bill. It is hard to believe we are already talking about that, Mr. Chairman. But as you noted, we started the process by holding field hearings in Kansas and Michigan to hear directly from those who have a stake in every part of the farm bill.

Mr. Chairman, I enjoyed hearing from producers at your alma mater, Kansas State University, where I wore Wildcat purple, and when you came to Michigan earlier this month I was grateful that you came sporting your best Spartan green. So thank you. While Kansas and Michigan farmers grow different crops, many of them face similar challenges. I have always said, farming is the riskiest business there is.

A pre-harvest hailstorm on the ridge, or a late spring snowstorm, as your wheat growers in Kansas know all too well, can destroy an entire year's paycheck if you are a farmer.

Similarly, the economic downturn in the farm country presents challenges for our producers all across the country. We know that farm prices for many crops—not all, but many—are down nearly 50 percent from their highs just a few years ago. Challenging market conditions have pinched margins and many producers are struggling to make ends meet. The U.S. has a diverse agricultural economy and these recent challenges extend to farmers in all corners of the country on farms of all sizes.

We know that many farmers are facing hard times due to low prices. This is especially challenging for our dairy farms, who lack an adequate safety net. Specialty crop producers are struggling to find a stable workforce. New and beginning farmers are experiencing unique challenges in gaining access to credit in the current economic climate. All aspects of agriculture, including organics and local food systems need tools to survive these challenging conditions.

We are also hearing that many of our small towns and rural communities are still facing tough economic times. Recognizing this slow economic recovery, the Agriculture Department has made historic, targeted investments in rural communities, to spur job and opportunity over the last several years. As a result, we are beginning to see small towns all across our country on the road to recovery. But there is much to do for these communities, which is why it is deeply troubling that this administration has proposed sharp budget cuts that would roll back a lot of the progress we have seen.

Earlier this week, the Trump Administration released their budget proposal, which would have devastating effects on our farmers and rural communities. This proposal cuts $231 billion from farm bill programs, 10 times more than what we worked so hard to achieve in the last farm bill. Frankly, it would make a five-year farm bill virtually impossible to pass. It cuts crop insurance by $29 billion, which would take away a crucial part of the farm safety net in a time when it is needed the most.

The budget also calls for sharp cuts to the family safety net, gutting SNAP by nearly 30 percent. Proposed closings of USDA offices would reduce customer service for our agriculture producers, and make their tough jobs even harder. Elimination of specialty crop and market access programs weakens our farmers' ability to recover from price slumps or pest and disease issues. The budget also ignores the needs of small towns and rural communities.

USDA Rural Development programs support the health of our small towns by supporting home ownership, strengthening water and sewer and road infrastructure, and providing access to critical health and safety services. Cutting these critical services would have a devastating impact on rural quality of life and eliminate much needed jobs. I am looking forward to bipartisan efforts to make sure that these cuts do not happen.

This devastating budget proposal comes on the heels of a USDA reorganization announcement that would eliminate the Under Secretary of Rural Development, a key voice for our small towns. While I was pleased that the reorganization included plans to add an Under Secretary for Trade, as required by the 2014 Farm Bill, we have now learned it was not necessary to remove Rural Development from the subcabinet.

Agricultural exports and rural development are both critical missions that deserve and require high-level, accountable, and focused leadership. The combination of devastating budget cuts to critical services and the planned elimination of the Under Secretary for Rural Development unfortunately sends a powerful message that this White House is not concerned with the needs of America's small towns and rural communities. I look forward to working with the Chairman and the Secretary and others to reverse that.

Our farmers and rural communities have done their part to reduce the deficit, as the Chairman said. In the 2014 Farm Bill, we made responsible bipartisan reforms to cut $23 billion. The farm economy was in a much better place, and the bill is still estimated to save $80 billion more than expected.

But a lot has changed since then, and looking ahead to the next farm bill, we need to put our farmers and our small towns on the road to recovery. More than 500 groups, representing farmers, conservationists, rural communities, and food advocates wrote a letter that we should not make further cuts, and I agree.

I look forward to hearing from today's witnesses and continuing this Committee's bipartisan process to reauthorize a comprehensive five-year farm bill.

Thank you, Mr. Chairman.

Chairman ROBERTS. I want to extend a welcome to our panel of witnesses before the Committee this morning. I believe we have compiled a panel that will be informative in providing an update on the general agriculture economy, and I am eager to hear testimony from all of you on this very important issue.

Without objection, I am going to go out of order and ask our newest member of the Agriculture Committee, the distinguished Senator from Alabama, Senator Strange—Senator Strange is in charge of all rebounds that we may have to get, and we will probably have to get a whole bunch. I am going to ask you to—and Senator Strange has to be in charge of the Senate at 10:30. No small task. So to introduce our next witness, or our third witness, Alex Sheffer, I am going to turn to him.

Senator Strange.

Senator STRANGE. Thank you very much, Mr. Chairman. I will be happy to handle the rebounds for you. It is not a problem. I appreciate the courtesy. I am honored to serve on this critically important committee for our state and for the country, and I am very honored to introduce Alec Sheffer to our witness panel today.

Alec is here—he serves as Director of Retail Sales for Agri-AFC. It is based in Montgomery, Alabama. He is a graduate of Auburn University, where he studied agronomy before beginning a 40-year career in the ag retail industry. In addition to his day job, he has served as past President of the Alabama Agricultural Chemical Association, and serves as a board member of the Alabama Agribusiness Council as well.

He lives in Prattville, Alabama with his wife, Carol, and is the father of three children and seven grandchildren.

I want to thank Mr. Sheffer for traveling to be with us today and I look forward to your testimony, as do my colleagues, and I will—I shall return, as they say, shortly, to ask my questions, Mr. Chairman. So thank you very much for the courtesy.

Chairman ROBERTS. I thank the Senator. The other witnesses, in order, Dr. Rob Johansson. Rob serves as the Chief Economist for the U.S. Department of Agriculture. In that role, Dr. Johansson is responsible for the Department's agricultural forecasts and projections, as well as advising the Secretary on the economic implications of alternative programs, regulations, and legislative proposals. He serves as Chairman of the Federal Crop Insurance Corporation Board—I am just pausing for effect here—and is also responsible for the World Agriculture Outlook Board, the Office of Risk Assessment and Cost Benefit Analysis, and other economic initiatives.

Dr. Johansson received his bachelor of arts in economics from Northwestern University and his master of science and Ph.D. in agriculture economics from his home state's land grant at the University of Minnesota.

Welcome, and thanks for being here today, Dr. Johansson.

Our next witness is Dr. Nathan Kauffman, from the Federal Reserve Bank of Kansas City. Dr. Kauffman serves as an Assistant Vice President and Omaha Branch executive for the Federal Reserve Bank of Kansas City. In this role, he serves as the bank's regional economist and is the Kansas City Fed's lead expert in agriculture economics. Dr. Kauffman oversees several bank and Federal Reserve System efforts to track agriculture in rural economics, including the quarterly publication of the 10th District Survey of Agriculture Credit Conditions and the Federal Reserve System's Agriculture Financial Data Book.

Dr. Kauffman received his Ph.D. in economics from Iowa State University, home of the Fighting Cyclones.

Thanks for being with us today, Dr. Kauffman.

We have had the introduction by Senator Strange of our next witness.

For our final witness we have Dr. Bruce Weber. Dr. Weber is Professor Emeritus of Applied Economics at Oregon State University, and the former Director of Oregon State University's Rural Studies Program. He is currently a Senior Economist with the

Rural Policy Research Institute. His research focuses on upward mobility in rural and urban areas, rural and urban economic interdependence, the impacts of social safety net programs and the impacts of federal forests in rural development policies on rural communities.

Thank you for being here with us here, Dr. Weber.

Dr. Johansson, why don't you proceed?

STATEMENT OF DR. ROBERT JOHANSSON, CHIEF ECONOMIST, U.S. DEPARTMENT OF AGRICULTURE, WASHINGTON, DC

Mr. JOHANSSON. Thank you, Mr. Chairman, Ranking Member Stabenow, and the members of the Committee. I am pleased to have this opportunity to discuss the farm and rural economy in the United States today. I have submitted a detailed statement for the record and so I will direct my comments to focus on a few main themes. First, what is the current farm financial situation; second, what is the outlook for production and prices in 2017; and finally, what are the prospects for ag trade.

First, financial stress continues in the agriculture sector, with income expected to remain flat in 2017 and credit continuing to tighten. Based on the prices we projected earlier on this year, in 2017, we expected to see net cash income rise slightly in 2017, but net farm income, a broader measure, to fall, although the change is relatively modest compared to previous years.

Since that first farm outlook in February, our expectations for many crop prices have changed to be a little bit lower. Currently the low prices for wheat and rice did spur a decrease in area, in terms of planting intentions, which, coupled with regional adverse weather effects, as you mentioned earlier, has sparked a modest rebound in expected prices for the coming crop year. However, corn and soybean price expectations have weakened.

Livestock production is expanding fractionally more than initially anticipated, but despite large supplies, prospects for prices in 2017 have improved. Milk price expectations for 2017 are lower than initial estimates but are expected to rebound in 2018.

The continuing strength of farmland values has kept farm assets high, but we have seen land values and cash rents recently declining. Evidence suggests moderate declines in land values will continue into 2017. As a result, we are seeing an increase in debt-to-asset ratios, though, in aggregate, they are rising slowly and still remains low by historic standards. For some farm businesses, however—wheat, cotton, poultry, and hogs, in particular, or those with higher shares of rented land and those with younger operators—debt-to-asset ratios are generally higher and they will be most vulnerable to low commodity prices.

Commercial loan demand remains high while loan repayment rates continue to weaken, as I am sure Dr. Kauffman will discuss. Demand for Farm Service Agency loans this year has seen only a small 6 percent decline from last year's $6.3 billion record level, with an increase in delinquencies of only about 1 percent in the last 12 months. Fixed and variable interest rates have been increasing for farm loans but remain low again by historic standards.

Farm budgets are expected to tighten into the 2017–18 season. However, with flat commodity prices and an expectation of more normal yields, unlike the records we saw last year, we expect to see financial conditions continuing to tighten.

Farm bill programs will help some producers, with payments under the ARC and PLC programs expected to increase from $8 billion for crop year 2015 to $9.8 billion for crop year 2016, before falling off in the final two crop years of the 2014 Farm Bill.

In addition, nearly 90 percent of all major crops are covered by crop insurance—pausing for effect——

[Laughter.]

Mr. JOHANSSON. —with coverage for other crops increasing as new crops and policy types are added. An expected 4 percent rise in median farm household income as a result of continuing increases in off-farm income will provide some support as well.

Cotton and dairy producers, as mentioned, have had more limited farm program support. Cotton producers have had the option of purchasing supplemental crop insurance coverage through STAX, but most have found it not beneficial, with less than 30 percent of cotton acres covered by STAX policies in the last two years. Dairy producers enrolled in the Margin Protection Program paid premiums of more than $20 million for 2016 coverage, but only received about $11 million in payments. Estimates for 2017 are for another year of minimal or no payments under the MPP program, as feed costs remain low relative to improving dairy prices.

Second, producers are responding to tepid price signals by reducing and reallocating acres. The backdrop to the 2017 outlook is similar to last year, with generally softer commodity prices, tighter producer margins, and flat farm income. Producers in the United States and other countries did respond to the high prices in 2008–12 by increasing plantings and production, and after four years of record or near record production, stock levels for many commodities have risen and are expected to rise again for soybeans and wheat.

Given favorable global harvests and ample stocks, we expect crop prices to remain flat into 2017–18, as I mentioned. Based on the NASS survey of farmer intentions in March of this year, U.S. planted acres for the eight major crops is expected to decline by two million acres this year, as narrowing margins push some acres out of production.

Low wheat prices resulting from large domestic supplies and large crops among our global competitors resulted in record low winter wheat seedings this year—32.7 million acres. Prospects for better returns in some crops, notably cotton and soybeans, resulted in an expected reallocation of acres with producers, increasing soybean acreage to 89.5 million acres and cotton to 12.2 million acres.

We can easily observe what farmers are facing by looking at crop budgets for places like Kansas. Based on the Kansas State Extension crop budgets for northeast Kansas, soybeans, with an expected return at $65 an acre, offer the best opportunity for a positive return, compared to only $15 an acre for corn and negative returns for wheat and sorghum. The budgets offer insight into producer options, and we saw Kansas farmers plant a million fewer wheat acres this last year, offset by intentions to plant nearly a million more acres of soybeans and 100,000 more acres of corn. We have seen record plantings of corn and soybeans expected this year in North Dakota, Nebraska, and Kansas.

All right. I am running out of time so I am just going to go to my summary and turn it over to Nathan.

Finally, we expect the global economy to see continued recovery, improving prospects for trade. Expanding export opportunities for U.S. farm products is critical for the agricultural economy. U.S. ag exports account for about 20 percent of the value of U.S. ag production, rising even higher for some commodities, about 50 percent for soybeans, wheat and rice; 75 percent for cotton, and 90 percent for crops like almonds.

Trade is not only important to U.S. farm incomes but to the broader U.S. economy. USDA estimates that each dollar of U.S. farm exports produces an additional $1.27 in economic activity, and every $1 billion in ag sales overseas supports about 8,000 American jobs.

In summary, some commodities may see improving returns. Interest rates and energy prices remaining near historic lows. Export values are projected up. Median farm household income is expected to rise. But, nevertheless, the ag sector will continue to adjust to lower prices for most commodities, both in the U.S. and abroad. The net effect of this financial stress over time is difficult to forecast, but certainly we might expect consolidation in some farm sectors, certain regions, and movement of the most leveraged operators out of farming.

A key component of measuring that change will be the NASS Ag Census, which is going to be put into the field this December. We expect results to be available at USDA's Agriculture Outlook Forum in February of 2019.

Mr. Chairman, that concludes my opening statement. I am happy to answer questions and follow-up questions that you may have now, or later for the record. Thanks.

[The prepared statement of Mr. Johansson can be found on page 40 in the appendix.]

Chairman ROBERTS. Doctor, we thank you. We turn now to Dr. Kauffman.

STATEMENT OF DR. NATHAN KAUFFMAN, ASSISTANT VICE PRESIDENT, ECONOMIST, AND OMAHA BRANCH EXECUTIVE, FEDERAL RESERVE BANK OF KANSAS CITY, OMAHA, NE

Mr. KAUFFMAN. Thank you and good morning, Chairman Roberts, Ranking Member Stabenow, and members of the Committee. Thank you for the opportunity to testify today.

My name is Nathan Kauffman and I am an economist and Omaha Branch executive with the Federal Reserve Bank of Kansas City, a regional reserve bank that has long devoted significant attention to U.S. agriculture. In my role, I lead several Federal Reserve System efforts to track the agricultural economy with a focus on farm finances and agricultural credit conditions. Our bank is committed to including perspectives from rural America in discussions on the national economy, and I am here to share recent developments in the U.S. farm sector.

Before I begin, let me emphasize that my statement represents my views only and is not necessarily that of the Federal Reserve System or any of its representatives.

At a high level, the U.S. farm economy has weakened notably over the past several years. The primary cause of the downturn that began in 2013 was a sharp drop in agricultural commodity prices and this remains a top concern in the agricultural community today.

In a recent survey of agricultural banks, conducted by the Kansas City Fed, about 85 percent of lenders in our region, in the Central United States, identified the current environment of low commodity prices as a leading concern. In addition, while agricultural commodity prices have dropped sharply and remain low, farm sector input costs have declined only gradually and profit margins generally have remained weak.

Reduced profitability has gradually intensified the level of financial stress among farm borrows. Nationally, debt-to-asset ratios and farm loan delinquency rates have edged higher over the past year, but only slightly. Federal Reserve data also show that the rate at which farm loans are being repaid has fallen steadily in each of the past four years, alongside persistent increases in borrowers' financing needs.

The degree of financial stress in the farm sector, however, has varied regionally. In the first quarter of this year, nearly 60 percent of agricultural bankers surveyed in Colorado and western portions of Nebraska, Kansas, and Oklahoma, reported that loan repayment rates had fallen from the previous year. This is a region that is highly concentrated in cattle and wheat production. In contrast, only 25 percent of respondents in the eastern portion of our district, a region that is more concentrated in corn and soybean production, reported lower repayment rates.

Other measures of agricultural credit conditions in our region tell a similar story and are consistent with other parts of the country. This is to say financial stress in the farm sector has increased more significantly in regions where cropland is generally less productive and in regions concentrated in markets that have been particularly weak, such as cattle and wheat, for example. In other areas, strong crop yields last fall resulted in cash flows that were better than expected, and financial conditions have been more stable recently in those regions.

In a similar vein, farm real estate values have also declined in the past few years, but only at a modest pace, and regional disparity has also been notable. Federal Reserve surveys show that the average value of high-quality cropland has fallen by about 10 to 20 percent since 2013, in states with a high concentration of crop production. Since the beginning of 2015, however, farmland values have decreased more significantly in regions where the land is considered to be less productive, or where the local farm economy has weakened more dramatically.

Despite regional variation, the relative strength in farm real estate markets has likely shielded the farm economy from potentially more severe financial stress, since farmland accounts for more than 80 percent of the farm sector assets, and is an important source of collateral for other farms. The strength in land values has given agricultural lenders some opportunities to work with borrowers by restructuring loans and requesting additional collateral in response to heightened risk in their loan portfolios.

To briefly summarize, the U.S. farm economy is in the midst of a prolonged downturn, and financial stress in the farm sector has risen gradually over the past two years. Despite recent signs of stabilization in some areas, farm income has continued to decline overall, due to persistently low agriculture commodity prices and elevated production costs. Alongside the reductions in farm income the past four years, agricultural credit conditions have weakened steadily and farm real estate values have trended lower. In general, I expect these downward trends to continue in the near term as global supplies are likely to continue to weigh on agricultural commodity prices and profit margins.

Although a farm crisis does not appear imminent, some regions appear to be notably weaker than others, and there are still risks that could lead to more widespread challenges in the coming years.

This concludes my formal remarks and I would be happy to answer questions at the appropriate time. Thank you.

[The prepared statement of Mr. Kaufmann can be found on page 56 in the appendix.]

Chairman ROBERTS. Thank you, Doctor.

Mr. Sheffer.

STATEMENT OF ALEC SHEFFER, DIRECTOR OF RETAIL SALES, AGRI–AFC, MONTGOMERY, AL

Mr. SHEFFER. Good morning, Chairman Roberts, Ranking Member Stabenow, and distinguished members of the Senate Ag Committee on Agriculture, Nutrition, and Forestry. Thank you for allowing me to testify in regard to America's farm economy.

My name is Alec Sheffer and I serve as Director of Retail Sales for Agri-AFC, headquartered in Decatur, Alabama. At Agri-AFC, our roots have been firmly planted in the Southeast since 2003. With offices in Georgia, Mississippi, Florida, and Alabama, we have made a name supporting crops of all varieties. From cultivation to harvest, our goal is to provide an abundance of information and resources to help guide farmers.

I also appear before you today on behalf of Agriculture Retailers Association. ARA advocates, influences, educates, and provides services to support its members in their quest to maintain a profitable business environment.

America's retail farm suppliers have been hit hard by the downturn in the agricultural economy over the past decade. There are a growing number of factors that have led to this decline, including a steep drop in farm commodity prices, increased regulatory burdens, and market uncertainty. However, we are confident these winds are beginning to shift. We believe Congress will make changes in the upcoming farm bill to help strengthen the safety net provided by crop insurance programs and assist in improving conservation efforts.

Secretary of Agriculture Sonny Perdue, testified before the House Agriculture Committee last week and I was heartened to hear that, despite the steep drop in commodity prices and market uncertainty, he was hopeful rural America will strengthen in the coming years as the United States Department of Agriculture looks to improve existing safety nets for farmers and ranchers.

As referenced in my written testimony, USDA's Economic Research Service reported a dim outlook for farm profits. Other indicators of a weakening farm economy include a decline in farm credit access while the demand for loans remains strong, creating a higher uncertainty level among America's farmers. In addition to declining farm revenues, USDA ERS predicts a decline in crop cash receipts. This means safety nets through USDA are crucial in making sure our industry receives full support.

I fully expect your committee will work swiftly to ensure these gaps are filled when crafting the upcoming farm bill. We also feel it necessary to push for comprehensive tax reform to help agriculture retailers and their farm customers. In addition to a full repeal of the estate tax, we believe it equally important for Congress to preserve policies which will help keep farm businesses intact and families in agriculture.

U.S. farmers and ranchers understand and appreciate the roles of taxes in maintaining and improving our nation's infrastructure, but believe the most effective tax code is a fair one. For this reason, we respectfully request that any tax reform legislation considered in Congress will strengthen the business climate for farm and ranch families while ensuring agriculture businesses can be passed to future generations.

The ag community also understands the need for infrastructure improvement, especially in rural America. Roads, bridges, ports, locks, and dam systems all play crucial roles in our delivery of essential farm inputs. Additionally, expansion of broadband infrastructure throughout rural America is sorely needed. From precision agriculture technology to rural health care needs, a greater and more robust broadband network will mean more effective, efficient, and safer farm communities.

Farmers continue to be America's best stewards of land conservation and work diligently to follow best management practices when applying pesticides and fertilizer. The legislative, regulatory, and judicial landscape is vastly different from what the agriculture retail industry experienced decades ago.

In the past eight years, federal regulators completed hundreds of major rules that have impacted many sectors, including agriculture. The EPA has targeted several important crop protection products over the years in an attempt to remove these important compounds from the marketplace. Our industry asked the new administration and EPA reset the process to be based on sound science and a predictable registration and regulatory review process.

Another regulatory burden for ag retailers has been EPA's assessment of National Pollutant Discharge and Elimination system, under the Clean Water Act, which is the result of a Federal court ruling in 2009. The court invalidated decades of precedent and congressional intent of EPA regulation and created a duplicative permitting system. Additionally, we support the administration plans to review and restructure WOTUS rule, promulgated under the last administration.

As a farm retailer, I am confident that improvements to safety nets in the upcoming farm bill, free and fair trade for agriculture producers and consumers, tax reform, infrastructure improvements, and changes to the regulatory landscape hindering farm production will all contribute to once again growing farm economy.

Thank you for your continued commitment to supporting America's agriculture industry and I look forward to your questions.

[The prepared statement of Mr. Sheffer can be found on page 69 in the appendix.]

Chairman ROBERTS. Thank you very much for your testimony. All the way from Oregon, Dr. Weber. Thank you for coming. Did you use the Oregon Trail to get here through Kansas?

Mr. WEBER. I did not. Alaska Airlines provides a very direct route here.

STATEMENT OF DR. BRUCE WEBER, PROFESSOR EMERITUS OF APPLIED ECONOMICS, SENIOR ECONOMIST, RURAL POLICY RESEARCH INSTITUTE, OREGON STATE UNIVERSITY, CORVALLIS, OR

Mr. WEBER. Thank you, Chairman Roberts, Ranking Member Stabenow, and Committee members. I am honored to offer testimony today. I hope you will find this useful as you develop the Rural Development Title of the farm bill.

I would like to begin with four fundamental structural realities that drive the future of rural America and the farm economy. These are discussed in greater detail in my written testimony.

Number one, the incomes of farm families, and thus the health of the agricultural sector, are very dependent on the health of rural communities. This is because most farms get most of their income from off the farm.

Number two, each rural community is unique, and a diverse set of non-farm sectors provide the primary economic base for most rural counties.

Number three, the health of rural communities is very tied to urban centers, and rural economic health requires increasingly strong connectedness with urban centers.

Number four, and critically, rural communities face inherent structural challenges due to their small populations, their low density, and their remoteness. This Committee has long recognized this, as you have developed a remarkable set of programs tailored specifically to address these challenges.

My colleagues here at the table have discussed the structural challenges in the agricultural economy and the farm programs, how they can address these challenges. I would like to discuss the challenges facing the rural economy and how the Rural Development programs can address these challenges.

The takeaway is that place-based federal rural investments have stimulated income and job growth and reduced poverty in rural areas. Several recent studies support this conclusion. USDA economists, Reeder and Pender, have recently analyzed the impact of Rural Development projects funded by the Delta Regional Authority in distressed Mississippi delta counties. They found that income and earnings grew more rapidly in these counties—in the DRA counties, than in similar, non-DRA counties.

In some of the ongoing research that I am involved in, there is some preliminary evidence that spending by the USDA Rural Development Agency on business and economic development loans have increased employment and reduced poverty. A colleague of mine at the University of Missouri and I are finding that counties that received more of these RD loans during the 2000–2010 decade had lower poverty rates at the end of the decade, controlling for other factors that might affect poverty. Research currently underway with colleagues at Penn State University and Texas A&M Galveston show a positive impact of these same programs on employment growth over time.

In closing, I would like to suggest some specific examples of rural investments that I believe are important for rural people and places, based on my 40 years of studying the rural economy.

First, as Mr. Sheffer has eloquently noted, accessible and affordable high-speed broadband connections are now essential for rural economic development and are critical infrastructure investment for rural places.

Second, food assistance is a different kind of investment in rural America that not only provides a safety net for vulnerable people but also is a significant boost to the economies. ERS research on the impacts of the SNAP program, for example, suggests that $1 billion in SNAP payments generates over $100 million in farm income and over 3,300 farm jobs, as well as $1.8 billion in total economic output in the overall economy.

Finally, as the Pender and Reeder study shows, regional approaches that use federal place-based investments to leverage other public and private sources of funds can increase income and jobs in rural communities.

Chairman Roberts, Member Stabenow, and members of this Committee, the rural development programs that you have developed over many decades have had a significant positive impact on America's rural communities. Many of these programs are currently at grave risk. This is a critical moment for the Senate to exercise leadership in ensuring that rural communities have the supports that they need to thrive as they face the future.

Thank you for the opportunity to testify today, and I will be pleased to answer any questions you might have.

[The prepared statement of Mr. Weber can be found on page 76 in the appendix.]

Chairman ROBERTS. Thank you, Doctor.

Dr. Johansson, and also Dr. Kauffman, well, for that matter, the whole panel, during consideration of the 2014 Farm Bill, the farm sector, as has been stated, experienced high commodity prices, record net farm incomes. But as you have all testified since then, we have seen our commodity prices received by producers drop drastically—corn, 43 percent; soybeans, 31 percent; wheat by 40 percent, and that will probably go up with the freeze we have just had; and cattle by 16 percent. Obviously we see the trend.

Since that time we are also expected to see net farm income drop by 50 percent. Certainly the ag economy is in different shape than it was back when the 2014 Farm Bill was being considered.

So my question, as we again work on our next farm bill, give me the top three factors, or two factors, in the agriculture economy that we should be considering, given this trend that everybody is talking about and the word "prolonged." I just wrote that down. I do not like prolonged. I do not know any farm that likes prolonged.

But at any rate—and I am not sure that is going to happen. I know Brazil is exporting more soybeans than we are, but Brazil is doing exactly what they do all the time. They are changing leadership. That is a problem if you are going to be trading with Brazil. Russia is exporting more wheat. Who knows? Maybe they will have wheat mosaic next year.

But we are making progress with China, opening it up to beef, and I think other products—1.4 million people, or a billion people—it is hard to keep track there. Then, Bob Lighthizer, our new trade rep, actually mentioned, in one sentence, the repair of NAFTA and strong bilateral agreements with the TPP countries. First time anybody in the administration ever mentioned TPP and bilateral together. What a wonderful idea.

So if you could just list for me maybe the two or three things that you think are most important that this Committee should address.

Mr. JOHANSSON. Well, I will just start with, as you mentioned, stock levels right now are much higher relative to use globally, relative to last time the farm bill was being negotiated. That means that we are in a very flat price environment. As you mentioned, there are ways that we can see prices rebound. Whether we have some supply side stock in some major producing part of the globe, or if we do start expanding trade quickly, those will also push prices up. But for right now, relative to 2014, stocks are relatively high.

So back then the farm bill pivoted towards counter-cyclical types of Title I programs. This time, as you consider farm bill programs, certainly the Title I programs would be one that I would look to, in terms of the fact that counter-cyclical programs may have to be re-examined when we have flat prices relative to volatile prices.

Secondly, as you had mentioned, crop insurance programs changed quite a bit in the last farm bill. We added whole farm revenue, which has been popular. We added STAX, which is not popular. So as you look forward, to new Title II programs, I think you are likely to see the ability to make some adjustments there.

I will leave land values and financial credit to Dr. Kauffman. I will just also mention that on the dairy side, the new program for dairy margin protection has not been very popular with the dairy sector, and so I imagine there will be opportunities to look at changes to the dairy programs as well.

Chairman ROBERTS. Dr. Kauffman, would you like to add?

Mr. KAUFFMAN. I will mention two factors from the perspective of credit conditions, and I would say first is that we have seen some deterioration in liquidity. So we have seen persistent cash flow shortages the last several years, demand for financing. As profit margins have remained weak we have seen liquidity decline. That would be the first, is just monitoring the trend in liquidity.

We have not seen it turn into an issue of solvency, partly because of farm real estate values. Farm land values have remained relatively strong in most areas, although I would cite that as a second area where, if we did see more rapid declines, then we could start seeing more balance sheet problems for farm options as debt-to-asset ratios could rise further from there.

Chairman ROBERTS. What about—what do you see about the possibility—you mentioned the land values, but if those start to tail off, and with the price situation the way it is, and Mother Nature not behaving herself, on a whole series of things, and if we become stagnant on these efforts with NAFTA and China and other bilateral agreements, I am very worried.

Back in the 1980s, I just called them the regulators, from our Federal Government, came marching into our small community banks and they did not practice mark-to-market. They had a certain criteria, and it was that or whatever happened, and it was not very good.

Do you foresee anything like that happening, and if it does, can we get some forbearance with regards to the regulators that do come in?

Mr. KAUFFMAN. I cannot necessarily speak to the forbearance question. What I will say is that most banks have remained pretty well positioned. A lot of banks have taken fairly conservative approaches in recognition of the declines in commodity prices, maybe limiting loan-to-value ratios as an example. They have remained pretty well capitalized. Returns have been fairly strong.

So we have not seen delinquency rates on ag loans rise to a point where it has gotten to be problematic and, in fact, most banks are still doing quite well in that regard. So I would say that it has been a gradual increase in financial stress but it has not yet gotten to the point where I think it would become a problem.

Chairman ROBERTS. That is certainly good news. Thank you.

Senator Stabenow.

Senator STABENOW. Thank you, Mr. Chairman, and thank you to each of you for your testimony today.

First, Dr. Weber, when we are looking at the massive cuts that have been proposed by the administration—21 percent reduction across the board at USDA as well as $231 billion in farm bill programs. Food assistance would be cut by $193 billion, and over 40 different Rural Development service programs would be eliminated—I wonder if you might speak about the impact of those cuts on the farm and rural economy?

Let me first say, I grew up in a Northern Michigan small town and know how, as you speak about the broader question of quality of life is so important. My mom was Director of Nursing at a small hospital that is certainly financially stressed right now, and I know if the hospital closes, the largest employer is gone along with all, the doctors. There is a whole range of things that relate to our quality of life in a small town. Rural development and other investments are part of the way we invest in small towns.

I wonder if you might describe if anything near the kinds of cuts being talked about were to happen, what would be the impact on the farm and rural economy?

Mr. WEBER. Senator Stabenow, I would like to focus on two particular impacts of the kinds of cuts that you have talked about. The Rural Development programs, as you know, provide both consistent funding and an infrastructure that allows regional development approaches to succeed in rural places, and there is not another agency in the Federal Government that could do that if that agency is reduced and eliminated, and if the funds that are available to support their infrastructure, their workforce, and their programs is reduced.

You also mentioned SNAP, and the SNAP program provides demand for farm products, as well as providing a safety net for vulnerable people. So cuts in either or both of the safety net programs of SNAP and the Rural Development programs would have negative effects on the capacity of rural communities to do the kind of—to provide the kind of qualify of life that you experience.

Senator STABENOW. Well, as you are saying, SNAP—helping people who need temporary help with food is a win-win, because the people who make the food——

Mr. WEBER. Right.

Senator STABENOW. —get paid because somebody is purchasing food, and the people who need the food are able to get the temporary help when they are in a bad situation as well. So you agree that is a win-win situation, for farmers and families.

Mr. WEBER. Absolutely.

Senator STABENOW. Thank you.

Let me turn now to Dr. Johansson and talk about a mutually favorite topic of crop insurance. You may have noticed that we have a very strong belief on this Committee and we moved, in the last farm bill, away from payments to farmers when times were good to risk management tools like crop insurance and conservation. Voluntary conservation efforts allow farmers to be able to manage the land and water on their operations, which is becoming an even greater risk management tool.

In the last farm bill we expanded insurance options to more crops, such as fruits and vegetables which are important in my state. We are now seeing a lot of potential for another part of our farm economy that insurance providers, and dairy producers to be able to receive the help along with other commodities. You indicated 90 percent of our commodities were covered under crop insurance. I would like to see that be even higher, and I join with the American Farm Bureau, National Milk Producers and National Farmers Union in supporting something we put into the last appropriations bill, indicating that Congress supports expanding crop insurance for dairy farmers.

So I wonder if you might talk about the impact of crop insurance both to the farmers' bottom line, and its importance in terms of the availability of credit in these difficult times.

Mr. JOHANSSON. Those are great points that I certainly tried to get some more research on, in terms of the linkage between a strong crop insurance portfolio and availability of credit, whether that is better terms on credit or actual primary availability of farm loans. So that is something that I think is generally accepted across research institutions, and we are just trying to get some more data out there to support that, sort of what people take as conventional wisdom, that certainly when you go in to seek farm loans, bankers often assume that you have crop insurance, and most producers do. When we start looking at different coverage levels, we would expect to see higher coverage levels be associated with likely better terms on those loans. So that is something we are looking at.

Senator STABENOW. The Chairman is asking me, and I was about to ask, as well, when do you expect to have that data in? It would be very helpful for us to have that data.

Mr. JOHANSSON. At the meetings this summer in Chicago, the Agriculture and Applied Economics Association meetings being held at the end of July, we have a session on that, and hopefully we will have some papers coming out from that conference that we can share, that will be available online very soon.

Senator STABENOW. Thank you.

Mr. JOHANSSON. As you mentioned, we also expanded, or we have been expanding crop insurance to other commodities. In particular to your state, we have been increasing coverage for specialty crops through different products that we see coming through the Federal Crop Insurance Corporation Board. In addition, of course, FSA also has the buy-up option now for the non-insuranced crops as well.

In liability last year, 4 out of the top 10 insured commodities were specialty crops, including almonds, grapes, nursery, and including whole farm, with a combined liability of $9 billion, so that is about 10 percent of total liability in 2016. So that has been growing really well. In addition, the specialty crops also have been buying up on the Non-Insured Crop Disaster Assistance (NAP) buy-up option since the last farm bill.

So improvements in the ability to extend those products to new crops. We see new ones coming in all the time. Of course, we will see if we see some more livestock and livestock product insurance products coming through as well.

Senator STABENOW. Thank you.

Chairman ROBERTS. Senator Grassley.

Senator GRASSLEY. Thank you, Mr. Chairman, and also I would like to put a statement in the record, since I had two other committee meetings this morning.

Chairman ROBERTS. Without objection.

Senator GRASSLEY. I do not want to take time to read that.

Senator GRASSLEY. My first question would go to Dr. Johansson and Dr. Kauffman. We have read your testimony. It seems that you are portraying farmers as holding on right now financially. I am particular struck by Figure 2 of Dr. Johansson's testimony, that shows the share of farms, by crop, that are highly leveraged, with debt-to-asset ratios between 41 and 70 percent, and the more concerning, very highly leveraged farms with debt-to-asset ratios above 70 percent. With that sort of ratios, I would think more pressure would exist for input and land costs to correct for profitability to return.

So two questions. Why do you think land values and cash rents are declining so much slower than farm income, and are there any specific factors that you can point to? Are outside investors keeping land prices high, is just one example?

Mr. JOHANSSON. That is a great question. I think a lot of people are looking at that issue. Obviously we see cash rents and land values being a little bit more sticky on the way down, due to the nature that often times those contracts, certainly on the cash rent side, are a little bit longer term, so you have a three-year term on your contract. We would expect to see, and we have seen that, cash rents to start coming down a little bit more and I think that will help the bottom line for a lot of producers that are renting land. We have about 50 percent of our crop land that is rented.

As you mentioned, it is not coming down as quickly, so I think there are some reasons for why that is, in addition to the contracting length. There has been institutional investment in land. You often find good farmland still securing fairly high returns when it comes up. Oftentimes you do not see land coming on the market as fluidly as you see other commodities coming on the market, so when something does come up, there are still producers out there that do have cash resources, and of course, interest rates are very low, to be able to purchase that land. Looking forward into the future, it is seen as a fairly good investment.

Some parts of the country, as Nathan had mentioned, are seeing land values continuing to increase. So you do see, in some parts of, for example, in Texas, land values continue to increase, perhaps reflecting the strength in the cattle sector.

So I will stop there and see if Nathan has additional comments.

Mr. KAUFFMAN. I will mention just a couple of things in response to that. I think first is to recognize just the scale of wealth that had been generated during the really good times in agriculture. So you have had a lot of farm operators that had the capacity to add additional land and have really moved that market forward. A lot of farmers also recognize that there are limited alternative investment options available to them, and so they have a propensity to want to buy land as part of their operation, as they look at the long term.

I think that there has been some outside investment, so the demand side has still been relatively strong. On the supply side for land values, there really just has not been a lot of land on the market, because I think most farmers would prefer to try to hold on to the land to the extent that they can. We have not seen a lot of forced asset liquidations that would push a lot of land onto the market. Going back to my previous comment, I would say that is probably something that if we did start to see more of that forced asset liquidation, it would lead to potentially more problems.

Senator GRASSLEY. I think my last question would be just to you, Dr. Johansson.

Many crops have seen prices decline since the 2014 Farm Bill. Rice and wheat seem to have been hit the hardest, followed by corn and soybeans. Of course, we all wish we were as lucky as cotton farmers right now, with it being fairly high.

As we approach the next farm bill, we have a look at numerous policy options. The 2014 Farm Bill has PLC and ARC. So my question relates to the nuances in both programs, like really highly referenced prices for few crops under PLC, and county-by-county yield variability under ARC, that make comparative effectiveness very hard.

So the question is, which program is better in the long run for farmers considering WTO impact, planted acres distortions, that create price gluts and a lot of other examples that I could give you?

Mr. JOHANSSON. So as you mentioned, wheat and rice are good examples where we have seen prices appear to have bottomed out and start to come back in recovery. Part of that is due to the fact that producers have pulled out of those acres and plant fewer of them. As you mentioned, we have seen corn and soybeans weakened a little bit, also since the beginning of 2017. As you mentioned, cotton has seen very robust sales this past year, in exports. Prices are relatively high. We are seeing producers put in a lot more acres of cotton this coming year, so we are expecting to see prices reflect that and to come down in the 2017–18 crop year.

If you look at other commodities where that price response has not been what we might expect from just market fundamentals, you would have to look at peanuts, for example. So we have seen prices for peanuts coming down since the last farm bill yet acres have been going up. So there are a number of reasons for that, but certainly one might be the fact, as you pointed out, that the reference price for peanuts is relatively high compared to current market prices, and the ability of peanut producers to take advantage of generic base acres. So that is one area where we have seen that sort of normal price response and acreage response not follow what the market fundamentals might be.

Senator GRASSLEY. So, then, what about the fact of—in regard to WTO impacts?

Mr. JOHANSSON. Well, certainly we are well within our commitment levels for WTO, in terms of our aggregate measure of support. Going forward, we certainly want to respect all of our WTO commitments. One of the movements, certainly in U.S. farm policy over the previous farm bills, has been a movement away from market distortions, movement towards programs that are decoupled from planting decisions and production decisions.

I would imagine that the committees, as you take into account the next debate going into the 2018 Farm Bill, to certainly consider keeping to those trends, in terms of moving away from market-distorting policies and towards keeping with programs that are decoupled from planting decisions.

Senator GRASSLEY. Thank you, Mr. Chairman.

Chairman ROBERTS. Senator Klobuchar.

Senator KLOBUCHAR. Senator Heitkamp was here first.

Senator HEITKAMP. Thank you, Amy. Thank you, Mr. Chairman.

I just want to follow on a little bit on Senator Grassley's question, but it is more kind of a request. I think sometimes when you look at land prices and land values, the question that I have been asking is what percentage of agricultural property is actually owned by the producer, whether it is a cattle producer or whether it is a commodity producer? We have been trying to get a number in North Dakota. We think it is only about 25 percent. Now some of that land could be family-held land, where you are farming Grandpa's homestead, or family land.

But I think that the distance of land ownership from agriculture has had an impact on whether people are willing to look at farm adjustments. I think if you own an apartment building in New York, you do not expect prices—rent to go down, but if you own farmland, that farmland has to fluctuate with commodity prices. You know, understanding supply and demand, you still have supply. You know, demand for the land out there, eventually that is going to reach some kind of equilibrium.

But I think it is a complicating factor, from when I was growing up in my small town of 90 people, watching the adjustments. I think it has been a major change.

I want to just point out, none of you have painted a particularly optimistic view of what is going to happen with farm income in the next certainly short term, and maybe even long term, as we move into maybe a sustained lower commodity price environment. Does anyone on this panel want to offer defense of the budget that the President just released, saying that is going to really encourage increases in farm income and actually meet the challenges that we see going forward?

[No response.]

Senator HEITKAMP. Nope. I did not think so.

You know, obviously, one of the things that we are failing is to get people to appreciate and understand that food security is national security, that we have challenging times, and this is the last thing we want to do, which is pull the string on crop insurance that is going to unravel our opportunities to basically continue to produce the highest quality, lowest cost food in the country.

I am particularly concerned about the average age of farmers, and about what we can do, going forward. I guess this is for Mr. Johansson and Mr. Kauffman. As you look at the aging of farmers, which could lead to consolidation, which could lead to, I think, an outcome that none of us would want, can you tell me what additional programs you could recommend for beginning farmers that would help them through this patch and encourage them to actually come forward, or stay in the farm business?

Mr. JOHANSSON. Well, certainly we are seeing, based on the most recent survey that NASS put out, called the TOTAL survey, some better information coming out regarding transition in farming, in terms of types of land that is owned and how that land is turning over to the younger generation. We had 2014 Farm Bill provisions that provided some assistance to new and beginning farmers in securing crop insurance, also securing some loan—additional loan availability for new farmers.

In terms of new programs that might also target that transition, I would suspect that those types of provisions would still be very useful to producers as they get into farming or as they take over operations from their parents.

Senator HEITKAMP. Mr. Kauffman?

Mr. KAUFFMAN. The first thing I will mention, from the credit side, is just the demand for FSA guarantees that is out there right now. That has been pretty strong the last couple of years, and so that is one of the tools that would be in the toolbox for young and beginning farmers.

Senator HEITKAMP. But we have to convince them that they are not mortgaging their future.

Mr. KAUFFMAN. Right.

Senator HEITKAMP. You know, offering them more credit may not be the sole solution here. They need to be offered more income.

Mr. KAUFFMAN. Sure. So the other area that I would go to, then, is from an education perspective. Some of the areas that our lenders have recognized specifically would be in the areas of marketing and finances, and also in risk management. More and more lately, the past couple of years, lenders have required more well-defined risk management practices as part of their lending operation on a regular basis. So those things, I think, providing some assistance, could be useful.

Senator HEITKAMP. I think Mr. Weber—Dr. Weber wanted to comment.

Mr. WEBER. Yes. The thing I think is important to recognize is that particularly small farmers and beginning farmers get a lot of their income from off the farm, and the healthy rural community is maybe the best way of protecting incoming and beginning farmers, because the stability that it provides.

Chairman ROBERTS. Well, thank you, Senator Heitkamp, for reading all those questions that I wrote for you.

[Laughter.]

Chairman ROBERTS. Just as an observation—and Senator Strange, I will recognize you in just a moment—I was trying to remember when we, in the Senate, paid close attention to a President's budget. I think it was back when Reagan was President. I remember we did have a vote in regard to the previous administration's budget one time. I think it was 100 to zip, not in favor.

Senator HEITKAMP. Two votes.

Chairman ROBERTS. Oh, two votes. Okay. Well, they are no longer here.

Now, listen. Do not go running off.

[Laughter.]

Chairman ROBERTS. We were trying to get an OMB economist here. The word came back they were afraid that you and I were going to hold him hostage, so we did not get an answer here from these people here, but that is the only reason. I am sure there is an OMB economist that we could find that could defend the budget, especially with regards to agriculture. I am not talking about everything else. But I just wanted to let you know that.

Senator HEITKAMP. Well, I am excited to meet that person.

Chairman ROBERTS. Well, okay. We will have him report to your office.

Senator HEITKAMP. Thank you. Thank you, Mr. Chairman.

Chairman ROBERTS. You bet. Senator Strange.

Senator STRANGE. Thank you very much, Mr. Chairman. I want to address my question to Mr. Sheffer, if I could, and I apologize for having to step out earlier.

This is sort of a multi-part question, but it is on a topic of very great interest to me. As you look across the sales and service area that your company serves, in the Southeast and Alabama, I wish you would talk about the role of cotton production as it relates to the company you work for. From your perspective, what is the impact of declines in the cotton acreage, the producers that your company serves, and how does that decline affect the industry's infrastructure? How important is it to have a safety net policy for cotton to help producers where there are periods of low prices?

Mr. SHEFFER. I can speak to the area that I mentioned, in our company's market geography, Georgia, Alabama, and southern Mississippi. In the last few years we have seen commodity prices fluctuate, be very volatile, and our growers are very apt to make a decision on planting at the time they are ready to pull it into the field. So planting a crop for inputs has been very hard for our growers to do, whether it is cotton, peanuts, soybean, corn growers, wheat.

The cotton growers, as a commodity, are like all our commodity growers. They have felt the volatility of these price swings and they have an infrastructure on their farm that has been built around a cropping system, and it has caused some of our growers to make major shifts, to change direction, to become more grain oriented, to put storage facilities in to store grain, where they did not have it before. Now, with the uncertainty of pricing, they now are looking at having to switch back and make decisions. It also puts a burden on the retailer, such as myself, trying to supply inputs to those producers. As they are making decision, how do we best prepare to serve them?

So I think the volatility of the commodity pricing for the grower has been throughout, and I think safety nets, for some stability in the upcoming farm bill, is much needed for all our commodities. Cotton, as you mentioned, would be greatly benefitted by safety nets.

Senator STRANGE. Fantastic. Let me ask you, in my remaining time, another question relating to an interest that I am sure share with you. You are a graduate of a great ag research institution, Auburn University. I would like to know what you think, as we address the upcoming farm bill, are things that we can think about to improve ag research to meet the needs of our farmers and ranchers across the country, as we look at our research institutions.

Mr. SHEFFER. A great question. Our land grant universities provide—have provided for years, and still provide, a tremendous amount of information flow for our growers and our producers throughout the country. Again, in my geography, Georgia, Auburn, LSU, Mississippi State, just to name a few—I am leaving a few out—but they are providing good information, current information about the new genetics of the seed as we move into the next realm of seed development. Our growers depend on land grant institutions for their farming decisions, for their cropping decisions.

So I think in retail, such as mine, we provide agronomy staff that do research ourselves, and working in coordination with the research units at Auburn and Georgia, we can help combine some efficiencies in the future.

Senator STRANGE. Well, I appreciate your company providing jobs to some of these graduates, too, and I know you do that as well.

Finally, for the benefit of the Committee and the Chairman, if you would not mind just giving us your view on how Alabama's farmers have fared over the last several years. The Chairman has very clearly described the economic conditions. How have Alabama's farmers, given our diverse ag economy, fared, relative to farmers and ranchers in the rest of the country?

Mr. SHEFFER. I can only speak to our growers in the area I am in, but I would say that we probably have fared equally challenged in the marketplace over the last few years, as growers have, I am sure, in other areas, whether they be in the Midwest or the West Coast, citrus growers, vegetable growers in Florida. It has been a very volatile time in terms of trying to access funds for their operations. Retailers have been put in positions to try to help be a gap for some of that, and it has put retailers at risk.

I think the Alabama farmers, the Georgia farmers, too, have been pushed hard, and the retailers as well, over the last few years, and we look forward to seeing those times behind us in the rear view.

Senator STRANGE. We do too. Thank you very much, Mr. Chairman.

Chairman ROBERTS. Good questions. I appreciate that very much, Senator Strange.

Senator Donnelly, I give you a unique choice.

Senator DONNELLY. That never ends well, sir.

Chairman ROBERTS. What has happened here on the Committee is that we had a celebration of Senator Klobuchar's birthday, so the Chair ignored the seniority rule, or the appearance rule, in terms of recognition. I recognized her, and she, being the kind of person she was, yielded to Senator Heitkamp.

Senator DONNELLY. Yes.

Chairman ROBERTS. So my question——

Senator DONNELLY. So let me get this right, sir. So your choice is I can either be a really awful person and go, or yield my time to Senator Klobuchar. Would that be about—sum up the situation?

Chairman ROBERTS. I would not describe it in that way, no.

[Laughter.]

Chairman ROBERTS. I do not think "awful person" will ever be the——

Senator DONNELLY. No, I think that is what people would think. I think that is pretty accurate.

Chairman ROBERTS. No, I——

Senator DONNELLY. See, my colleague from North Dakota said, "That is probably correct."

Senator HOEVEN. I concur with that analysis.

[Laughter.]

Senator DONNELLY. Thank you. So, you know what? I am going to yield to my amazing colleague from Minnesota.

Chairman ROBERTS. Happy birthday, Amy.

Senator KLOBUCHAR. Okay. Thank you, Mr. Chair. I will do the same for Senator Donnelly on his birthday. I promise.

Thank you for holding this important hearing. I think so often, as we focus on the details and the minutiae of the farm bill, we forget the overall economic picture, and I appreciated your analysis, Dr. Kauffman, of what we know of the changes, and what many of us with the commodity prices, what many of us have seen with the poverty issues, with kids in small towns, and what we are continuing to see with the digital gap having more and more of an impact as we go on, as more and more business is done that way.

I have met people in small towns with businesses that literally are turning business away because they just cannot—they are not able to either get the workers or they are not able to have the Internet capability to actually do what is required, so I appreciate this hearing.

I share the Chair's support for crop insurance and concern with the elimination of the—some of the crop insurance protections that have been discussed. I wanted to focus some on rural development.

Dr. Weber, in your testimony, you discussed how the programs offer some of the most important place-based investments. Where should this Committee focus when thinking about support for different types of rural investments, like broadband?

Mr. WEBER. Thank you, Senator. A couple of places, it seems to me. Thinking about the fundamental challenges that rural communities face is the place I would start. The kinds of investments that the USDA makes in rural places allow the connections to urban places that make them more successful, provide the stability and the capacity to generate regional approaches to economic development that support the rural communities in those areas.

I think it is important to emphasize the infrastructure that is created by the workforce in USDA Rural Development, and other organizations like the Regional Development Commissions, provide both the funding and the deal-making capacity, which allows rural communities to thrive.

Senator KLOBUCHAR. Can you talk about the potential challenges of not having an under secretary at USDA focused on rural development, which is the proposal now?

Mr. WEBER. Right. I think the proposal, basically, to distribute the current things that are done by the under secretary to other agencies really would make it very difficult to focus on the needs of rural communities. The thing that USDA has is the capacity to understand these and develop culturally appropriate programs in these areas. Other agencies do not have that. Not having an Under Secretary for Rural Development would mean that the focus that is needed for rural communities would disappear.

Senator KLOBUCHAR. Very good. I think not very good that would happen, but very good in your answer, because I think so many times people do not see that interconnection with farming but also with all of the other development that goes on in rural areas, and especially the interconnection, whether it is making sure there is a pharmacy or a hospital, but also making sure that the farm equipment repair shop stays in business, or the distributor stays in business.

One last question, Mr. Johansson. By the way, you have the perfect last name for having attended the University of Minnesota. Thank you very much for that, in a Lake Wobegon fashion.

Minnesota poultry producers faced economic losses of $650 million following the 2015 outbreak of avian influenza. As you know, we are number one for turkeys in our state, and I will—okay, that was unnecessary, Senator Hoeven. It is a fact. It is a North Dakota little snide laugh.

Last September a new poultry testing lab opened in Willmar to enhance our state's ability to more efficiently diagnose and respond. As you know there is some fear of some outbreak occurring in other states right now. Can you talk about how we are preparing ourselves to reduce the likelihood of economic impacts from livestock disease, in general?

Mr. JOHANSSON. Well, that is a great question. You know, certainly R&D is one area that I think we have learned that it is important to invest in, regarding livestock diseases, but also our response and producer response has been improved dramatically since 2015. We saw that—while we have seen some minor outbreaks this year, the containment was much more rapid. Producers have improved their biosecurity quite substantially on the poultry operations, so that has helped from the producer side. On the USDA side, certainly we have been quicker about imposing depopulation around those areas.

So from the poultry side, I think we have learned a lot from the 2015 experience. Extending that outwards to other livestock diseases, I think there are lessons to be learned as well, and certainly when we think about whether it is vaccine banks, that type of thing, the Secretary, I am sure, is going to be looking towards that, having his background in the veterinary sciences.

Senator KLOBUCHAR. Okay. Very good. Thank you.

Chairman ROBERTS. Senator Hoeven.

Senator HOEVEN. Thank you, Mr. Chairman. For all of our witnesses, I think you have testified and you would agree that with low commodity prices and a strong dollar it is tough time for ag. Everybody agrees with that; correct? That the projection for this year that it is going to be a tough year for farm income as well. Does anyone disagree with that, or want to elaborate?

[No response.]

Senator HOEVEN. Okay. So the question then becomes, what do we do about it, and I want each of you to weigh in, in regard to crop insurance, support for crop insurance, the importance of crop insurance to our producers; our PLC, the counter-cyclical safety net; ag research; and trade, programs like PL 480, Food for Peace, and Dole-McGovern. Because my contention is that all of these are very important, in terms of supporting our farmers, meaning that they have to be funded in the budget and they have to be authorized in the farm bill.

I would like each of you to weigh in on those four—crop insurance, counter-cyclical safety net, ag research, and trade, in particular, some of the programs like PL 480 and Dole-McGovern.

Mr. JOHANSSON. So I will take a quick start and leave lots of time for my colleagues on the panel. But certainly we understand the importance of crop insurance. Going into the last farm bill, I think one of the reasons why the Committees moved to more of a counter-cyclical Title I programs was due to the success of the Title II programs in dealing with the 2012 drought.

So I think that is a very good illustration of why crop insurance is such an important tool for producers. We did not see any requests for ad hoc disaster assistance in that year. We saw despite the fact that we had a historic disaster on hand, that the crop insurance program was able to deal with that and provide producers with the type of support they needed in getting through that year.

Moving on to ARC/PLC, we certainly know that the programs are, I would say, working as they were engineered in the last farm bill. As prices have come down, the ARC program has provided producers with a cushion as those prices have come down, and we know that the Olympic year average is going to catch up to the ARC program by the end of the farm bill. Whether or not costs have come down as much as prices have come down in that time period, we will wait and see. Certainly, as you pointed out, the financial conditions are tight for farmers right now. We cannot count on a record yield, like we had last year, for years going forward. We have to expect trend yields.

Research and development. Certainly we know that R&D is a great investment in agriculture. We know that it has been flat over the last five, six, seven years. We know that if we invest more in basic R&D for agriculture that it is going to provide larger returns in the future. Obviously, R&D expenditures and investments take a while to come to fruition. So we know that dollars we invest today are going to come back and improve productivity down the road, but certainly I think that is an important component.

Of course, trade is always something that we know is critical for the farm sector. We export at least 20 percent of ag production, but a lot higher for crops coming out of the Northern Plains, for example. We export about half of our soybeans, globally, and about half of those are just going to China. So we know that trade is going to be an important focus going forward, and I know that the administration, certainly, at least, the Secretary, has made that a key component of his focus going forward, as he takes over at the Department.

Senator HOEVEN. I would like each of the four of you to finish your comments with yes or no on whether we need to strongly support these programs in the budget and the farm bill. Yes or no on all four before you—and any other comment you make, but I want a yes or no on that one.

Mr. JOHANSSON. Certainly. I think those are all important components of the farm bill and they should be supported.

Senator HOEVEN. Thank you.

Mr. KAUFFMAN. Unfortunately, I cannot make specific policy recommendations but I will respond to each of the four. In the first two, for crop insurance and the safety net programs, specifically to recognize that when it comes to availability of credit, certainly the ability to limit the downside risk that producers have weighs into the credit decisions, and I think most lenders would require crop insurance in many places, as part of that risk management profile.

As I mentioned earlier, with a requirement for more well-defined risk management strategies, crop insurance and other things are certainly part of that.

Speaking to the ag research side, I think looking at this from the supply side and recognizing that we have had several consecutive years of really strong yields that has, obviously, improved the productivity, the efficiency, and cash flow for many producers. So it has given them opportunities to be able to improve on the revenue side.

But then to the trade piece, as Dr. Johansson mentioned, certainly that is a key component for our demand for agricultural products. So recognizing what we can get in terms of the gains on the supply side through research, and that can happen in many different ways, but then also recognizing the importance of opening at markets and trade from the demand side.

Mr. SHEFFER. From the retailer point of view, I would say that yes is the answer to all four of those different segments. We would recommend for you to support crop insurance, ag research, safety nets, and the trade.

From the ag research side, I will mention—I think I mentioned it in the written and the oral, but the need to look at improving broadband Internet service in rural areas. Precision agriculture, over the last several years, has grown the acres for our producers, in my geography, in my market area, and the limitations of Internet access is certainly in play in the rural areas, and we need to see improvement in that, so more growers could have more access to two things, like precision ag and specific application of the fertilizers and seed and those applications that growers in other areas are taking advantage of. It would be a huge benefit for us.

So I would say yes to all four.

Senator HOEVEN. Thank you. Dr. Weber?

Mr. WEBER. My colleagues here can speak much more knowledgeably to the effects of these programs you mentioned than I can. I would just say that in order for agriculture to succeed in America, a strong farm economy is really important, but it is also important to recognize that a strong farm economy depends on the rural communities. So some attention and resources to support the rural communities in which farms live is also important.

Senator HOEVEN. So you want to add rural development to that mix.

Mr. WEBER. I would, indeed.

Senator HOEVEN. I sense that. Thank you, Dr. Weber—and it is important.

Chairman ROBERTS. Are you ready?

Senator DONNELLY. Ready to go.

Chairman ROBERTS. Senator Donnelly.

Senator DONNELLY. Thank you, Mr. Chairman, and I want to add on to the Chairman's comments about crop insurance and how incredibly important it is, what a good tool for risk management it is. We need to have a strong crop insurance sector in the farm bill. I have done a farm bill listening tour around the state, and this is a subject that comes up time after time. You are right on target with that, Mr. Chairman.

Mr. Sheffer, you testified about a number of things that I frequently hear, from Hoosiers in rural communities, particularly those who are farming or running small businesses. I wanted to ask you about the importance of making sure we have got the right conditions in place for our rural communities to thrive, especially when it comes to broadband, that you have talked about, which is critical for our businesses, but the importance of access to health care and education, so that people can live in a place where they can raise healthy families.

Can you tell me what it would be like for a small business owner to try to operate a business in a community without broadband access, without access to high-quality health care, and without strong educational opportunities?

Mr. SHEFFER. We have that——

Senator DONNELLY. Right.

Mr. SHEFFER. —in Alabama and other areas of my geography, that I am familiar with. It is very difficult and it is heart-wrenching to see the disadvantages that are there, and what opportunities—with opportunities, what rewards and investments might yield over a period of time, with individuals that certainly have the potential to take advantage of the same——

Senator DONNELLY. Are not those the kinds of building blocks that you look at and say, if this town, if this county had these, it could really take off?

Mr. SHEFFER. You see that, and you see the potential in the farming community to be able to take advantage that. Companies like mine, and others, we invest—that is one reason we have taken the position of investing ourselves in staff that create value for those that may not be able to access it themselves. We have agronomists on staff that pull information so those that cannot gather it themselves, we can provide it to them, a precision ag staff.

So we have made investments and try to take it to those areas that have potential. Yes, sir.

Senator DONNELLY. Mr. Weber, you testified about your research into the positive link that exists between the USDA's Rural Development investments and lowered rates of poverty. Can you talk a little bit more about how infrastructure investments in rural communities can create a positive feedback that increases opportunities for residents, can reduce poverty, and makes it a little easier for rural communities to grow?

Mr. WEBER. Senator, one of the things that you mentioned earlier was the importance of rural health care, and I guess what I would like to highlight in this response is the regional rural approaches that are taken by such agency organizations as the Delta Regional Authority; the finding in the Pender and Reeder paper on the more rapid growth in the DRA counties than in the non-DRA counties really focused on the impact that investments in health care had on that growth.

So, in part, the capacity of these communities in this region to work together and to develop a strategy that was not just focused on small businesses but on the infrastructure as well, appeared to be responsible, in part, for the differences in the DRA and the non-DRA counties.

I guess that is a long answer to——

Senator DONNELLY. No. Thank you. Dr. Johansson, you testified a lot about the record crops and production levels coming from reforms. I would like to highlight the growing importance of exports for our farmers, especially in a situation where we can help feed a growing world.

Can you talk about how important it is to have consistent and predictable rules for farmers when they are looking to export their products, especially to markets like China, where they still have not allowed imports of poultry products for the last several years?

Mr. JOHANSSON. Well, yes, we know the importance of trade. We have been expanding our trade value since the '50s, and certainly a lot more since NAFTA went into place, and then, again, with the advent of clear trading rules under the WTO agreements. So having the ability to both expand our markets into the countries we are in right now but also open up new countries and lower our trade barriers is certainly one that, as an economist, I would say benefits both trading partners, in general. I think evidence backs that up, particularly for agriculture.

As we know, our farms are becoming more productive every year. Certainly we can use that production domestically. We have seen a burgeoning market for a lot of organic products. But for our general row crop production and livestock production, we need to find export markets to sell that additional productivity to.

So I think it is clear that improving our access to China is an administration priority, as well as to try and, as had been mentioned earlier, to go after bilateral agreements with some of the other Asian countries that we have been discussing as part of the TPP negotiations. Certainly improving access to our trading partners to the north and south is important as well to look at. We certainly can make inroads into dairy, poultry, and eggs with Canada and Mexico.

Senator DONNELLY. Great. Thank you. Thank you, Mr. Chairman.

Chairman ROBERTS. Senator Daines.

Senator DAINES. Thank you, Mr. Chairman, and I want to thank Chairman Roberts for holding this hearing, and also for joining me in Montana next week. I think the Chairman is very well aware that within the beltway there is not a lot of ag going on. There is not a lot of ag going on within the beltway here in D.C., but there is in Montana.

Chairman ROBERTS. Well, there is quite a bit going on inside the beltway with regards to ag, that I am not very happy with.

Senator DAINES. Perhaps the south end of a cow going north. But I——

Chairman ROBERTS. Well——

Senator DAINES. —but thank you for coming out to Montana next week to be part of our ag summit.

Chairman ROBERTS. We are going to give the reins to Daines.

Senator DAINES. Thank you. I like it.

As you all know, the state of the ag economy has declined significantly, relative to where it was during the time the last farm bill was negotiated, and unfortunately Montana has not been spared. Our commodity prices are low, in some cases historic, inventories high. Net farm income has declined about 50 percent over the last few years. This makes getting an effective farm bill completely in a timely manner all the more important.

Prior to coming to the Hill, I spent 28 years in the private sector, a lot global businesses, and the reality is 95 percent of the world's consumers live outside our borders, and particularly in light of low commodity prices, declining farm incomes, the importance of trade and the ability to access foreign markets for long-term growth in ag I do not think can be overstated.

In fact, towards that end, six weeks ago I had the opportunity to lead a congressional delegation to China. We had four U.S. Senators, two members of the House. I hand-delivered four Montana steaks—and not just Montana steaks, from Mile City, Montana, steaks, from Fred Wacker's ranch, to the Chinese premier, Li Keqiang, to emphasize the importance of opening that market to U.S. beef.

I was thrilled to hear when President Trump and President Xi met in Florida in early April they had U.S. beef for one of their meals. They had a chance to talk about the importance of U.S. beef and access to China, the world's second-largest beef import market.

I am pleased to see the progress. I am optimistic about the substantial progress being made, and we will be finalizing details to open the Chinese market to U.S. beef within the next few weeks.

Dr. Johansson, what impact would opening China's market for the U.S. beef and cattle industry have?

Mr. JOHANSSON. Well, as you mentioned, it is important to our beef sector to have access to that market. We have been trying to get back there for over a decade now, and we expect that just from a primary beef production perspective it is going to obviously improve the prospects for value-added sales to China. But it also opens up the conversation for other products as well. Certainly we have some issues with our grain trade into China, and we would hope that this would also lead to a more productive relationship in terms of trying to reduce some of those barriers. DDGS, corn, wheat are products that we would certainly like to sell more of to China.

Of course, we also have important discussions regarding our soybean sales into China. We want to make sure that our progress on biotechnology is approved in a timely fashion with our trading partners in Asia. I would expect that would also lead to an additional ability to conclude successful negotiations in some of those other areas.

So beef is important to get into China but also has implications for some of the other crop sectors, in terms of China being our number one trading partner, from an ag perspective, right now.

Senator DAINES. Thank you, Doctor. Switch gears here to Dr. Weber. Access to broadband has the ability to remove geography as a constraint for states like Montana. I spent 12 years in the cloud computing sector and saw how you can build a world-class company in places like Montana, thanks to technology, where we now combine this incredible quality of life we have in a place like Montana, and with now technology at our hands we can bridge that geographical gap, and now can compete with anybody in the world.

So access is increasingly important for ag, and will continue to be. I mean, ag is now a high-tech industry. Agencies like the USDA's Rural Utility Service has been critically important for improving and expanding telecommunications infrastructure in rural areas. I will tell you that some of the most sophisticated technologists in Montana are now farmers and ranchers. Never, ever underestimate how savvy they are with technology. It is very impressive.

You indicate that access to broadband is an essential building block for rural communities. Could you expand upon that, and what policies would you recommend to improve access to help these rural economies grow?

Mr. WEBER. Senator, I have also seen that in Oregon, that some of the most sophisticated use of technology is in the farm sector, and it is really quite amazing what can be done.

What would I suggest in terms of increasing access to broadband? I think both access and adoption are important in terms of making the investments in infrastructure effective, and some research has been done by economists at Oklahoma State

University, suggesting it is not just the access, which is important, and there is a gap in both access and use, but in addition to providing access to assisting the people in adopting and using it is also important.

I think the risks that exist for keeping that gap large are serious and the farm bill ought to make sure that, to the extent possible, this gap between access in rural and urban areas is reduced.

Senator DAINES. Thank you, Dr. Weber. Thank you, Mr. Chairman.

Chairman ROBERTS. Senator Brown.

Senator BROWN. Thank you, Mr. Chairman. Dr. Johansson—thanks to the whole panel. Dr. Johansson, I wanted to ask—talk to you a bit about—you had mentioned the success of ARC, and I would like to explore that more, is designed ARC, which Senator Thune and I worked on in the last farm bill, adjust with lower prices but provide short-term assistance to farmers to help against the initial shock of a price drop. Talk through, if you would, how ARC has helped farmers manage the financial stress of these depressed prices, and much of this hearing has been devoted to low farm prices. It is on the minds of everybody, obviously. Talk about how ARC has helped them manage that stress.

Mr. JOHANSSON. Well, certainly for—obviously, depending on which commodity group we are talking about, some commodities participated more heavily in ARC relative to PLC. But for corn and soybean producers, by and large, I think about 90 percent or so enrolled in the ARC program.

So as we have seen, corn and soybean prices, and obviously, for the other commodities too, like wheat—we have about 50/50 in terms of wheat producers being in the ARC versus PLC—as those prices have come down from the highs we saw——

Senator BROWN. Could I interrupt for a second? Does corn have higher participation, because the price drop has been a greater percent, or that is not really the reason?

Mr. JOHANSSON. I think—no, in terms of participation, we have seen corn producers, I think, when they had to make their decision going into the 2014 planning year, had to decide what their expected support would be under the two different programs, and at the time I think the idea, or the notion was that it was clear that corn prices were coming down and that the ARC program would probably provide the most assistance in the short term.

Obviously, looking out five years is a little bit more difficult. Some producers opted for the PLC program in higher levels. As I mentioned earlier, obviously peanut farmers, for the most part, chose to participate in the PLC program.

But as you mentioned, the design of the program was on an Olympic average, so that means that, as you know, from a five-year perspective you drop the highest and lowest years. So when we had those high years in there, high revenue years of ’12, ’13, and ’14, relatively high revenue years. That gave a fairly high guarantee for program payments, relative to a falling revenue outlook.

So as prices have come down, revenues have come down. That means that the ARC program has been paying support to producers that enrolled in that program. But now we are starting to lose—as that five-year average moves forward in time, we are just going to start losing some of those higher year revenues that we had back in ’12, ’13, and ’14, and that means that the ARC revenue guarantee is going to be much lower going forward into the next farm bill. That is why, when you look at CBO scores or our expectation for the next 10-year outlay period, that we expect a lot of producers to move out of the ARC program into more of a PLC type of program going forward.

So it has been effective, at least from the 2014 to 2018 period. I would say, by and large, it has provided producers with support as prices have come down. Of course, now that we are in a much lower price environment going forward, we expect those ARC program payments to also fall and remain low going forward, without a change in the program.

Senator BROWN. Thank you. Dr. Weber, one question for you. Rural areas so often are anchored by institutions that drive the local economy, perhaps a university, perhaps a medium-sized or larger manufacturer. The Trump Administration’s budget proposes reduced funding for ag research and other rural economic development programs. Understanding all this hearsay; it is dead on arrival in both parties. But we also know the priorities are set by this administration.

If rural areas were to lose some of these federal resources and institutions like ag research centers, would they be able to adapt, or do their economic prospects take a long-term hit?

Mr. WEBER. Well, I think there would be two negative impacts of these kinds of institutions going away. I know in Oregon they are located all over the state and they are important in many of these rural places. I mean, the first would be the short-term impact of the loss of jobs and the multiplier effects in the economies.

But in the longer term, these research centers also support the particular agriculture in those particular areas, which they know better than the people than are not in those places, and they work with local farmers to create the innovations that allow increases in agricultural productivity.

So I think in both the short term and the long term, there would be negative effects of reducing that agricultural research infrastructure.

Senator BROWN. Thank you so much. Thank you, Mr. Chairman.

Chairman ROBERTS. Well, Coop.

Senator THUNE. It is high noon, Mr. Chairman.

Chairman ROBERTS. It is about nine minutes to high noon.

Senator THUNE. Well, I will get a little——

Chairman ROBERTS. You think you can get down there and meet the train and still meet Grace with a buckboard?

Senator THUNE. I will do what I can, Mr. Chairman.

Chairman ROBERTS. All right.

Senator THUNE. I am down here at the tall end of the table, by the way.

Thank you, Mr. Chairman, for having this hearing. You know, obviously, this is a critically important issue. We have got an ag economy that is in a very tough spot. A few weeks—a few months ago, I should say, the Wall Street Journal wrote of the next American farm bust. I would like to point out, too, just the role that biofuels has played in many of the states represented on this Committee, a role that is even more important in today's ag economy.

Secretary Perdue has spoken, in the last several weeks, regarding the importance of the RFS to the country and the administration's ongoing support of the policy, and we appreciate that support. In the coming months, there is going to be a clear opportunity for the administration to demonstrate that support with a strong proposed renewable volume obligation, RVO, that is going to set blending targets for 2018. The 2017 RVO got the RFS back on track, after years of challenges, so it is imperative that we maintain that progress.

I appreciate the great group of witnesses that we have here today. I would like to just start with perhaps a general question, if you could answer it. Based on what you know about today's ag challenges, if you were a farmer that was growing a few commodity crops, with a reasonable amount of debt, what would your strategy be to survive and sustain your operation for the next few years, assuming that the ag economy stays flat? Dr. Johansson.

Mr. JOHANSSON. Well, we have seen producers that have looked at expected prices and adjusted their planting accordingly, so I would imagine that producers are going to continue to do that. For example, we have seen a lot of wheat acres go out of production, and that is being replaced by corn and soybean acres in a lot of the states like your own, but also in some of the other Plains states. I would imagine that, going forward, as long as we have the wheat surplus we do right now in the world market, that trend might continue.

Certainly a strong, robust insurance portfolio is one that I think all producers would take advantage of. I think if your producers are looking at continuing to tighten their belts, one area they may do that is through new renegotiation of cash rent contracts. Another area might be to look at their insurance portfolio to see if they might be able to save some money by moving to an area coverage versus an individual coverage. That is obviously going to be less expensive.

We have not seen producers backing off on their ability to buy high-quality seed, so I imagine that they are going to continue to chase those yields going forward, and so I do not imagine that you will see a significant change. Of course, Mr. Sheffer may be able to talk a little bit more about that.

I would imagine that securing farm loans, while credit has been tightening, will still remain an important aspect of production going forward. Certainly as you mentioned, we have seen a tightening situation. Land values have started to decline but producers are still able to get loans at relatively low interest rates. So I imagine we will continue to see levels probably increasing in the short term, but at low interest rates, or relatively low interest rates.

Senator THUNE. Would you agree that one of the quickest and most effective ways to counter low commodity prices for crops and livestock is to increase exports?

Mr. JOHANSSON. I would agree with that.

Senator THUNE. Assuming—right now we are talking about, potentially, with Mexico and Canada, having a renegotiation of NAFTA. But if you add Mexico, China, and Canada, they are the most significant trading partners, accounting for about 46 percent of U.S. agricultural exports.

The question, I guess, is, is there room to grow that, do you think, with these three countries, or should the U.S. be looking for export opportunities in other countries, and, if so, which countries?

Mr. JOHANSSON. That is a great question. I think, though, there is still room for improving our access to NAFTA countries, in terms of dairy, poultry, and eggs. Also, obviously, a robust—you mentioned biofuels—a robust E10 market in Mexico would be very beneficial to the ethanol sector. China is obviously our biggest trading partner and there are still plenty of opportunities to improve our sales to China, in terms of grains, feed grains, for example. I know that Japan is a very attractive market for our meat sector, so we are going to be actively pursuing agreements with Japan.

Then, looking forward, we certainly know that, in the medium term, India is going to be a major market for ag commodities going forward. They are going to have a tripling of the number of households in the medium income class over the next 10 years, so I would imagine that we will be putting some effort into trying to open up that market as well.

Senator THUNE. I am out of time but very quickly, do any others see any other countries, or with respect to the whole dynamic as it relates to exports and trade, where there might be market opportunities or additional headroom to grow with those we already have trading relationships?

[No response.]

Senator THUNE. No?

Dr. Weber.

Mr. WEBER. But I would say that in addition to the kinds of things that you have mentioned, if I were a farmer, which I am not, I would want not just the kinds of programs you have talked about but also the kinds of investments in the rural community which would allow my family to get off-farm jobs, just to help me support our family during these rough times, and also allow us to live at a higher quality of life while we are there.

Senator THUNE. All right. Thank you, Mr. Chairman.

Chairman ROBERTS. Thank you.

Senator Bennet.

Senator BENNET. Thank you, Mr. Chairman, and as always, thank you for holding such a thoughtful hearing and having such a great panel. I consider it an enormous privilege to be on this Committee, and I think this Committee functions so much better than so many committees in the Senate, partly because of your leadership, partly because of our membership. I am hopeful that we are going to come together and figure out a better way through on this budget and what has been presented from the administration.

You add up the cuts to the farm bill with the cuts to the Department of Agriculture, we are well over 20 percent of the Department of Agriculture, and I view that as an attack on rural Colorado and on rural America. When you talk about almost a fifth of the workforce in places like—Sherrod Brown mentioned it, but the Akron Research Station on the Eastern Plains of Colorado that has been so critical to developing innovations with respect to wheat over decades and decades and decades. To think about that going away is just a vital part of who we are as Colorado.

So I am glad to be on this Committee and I know this is a place where we are going to be able to resist.

I wanted to ask Dr. Johansson a question about immigration, which I think has not yet come up today in this hearing. On top of the already horrific economic conditions in farm country, our producers in Colorado counties continue to lack a stable and qualified workforce. Just last week I heard from a friend of mine who said that he had to disc up his cabbage because he has nobody to harvest it. He does not have the workforce that he needs.

We addressed farm labor four years ago in the Senate, through a compromise bill. I was part of the Gang of Eight that wrote the immigration bill here in the Senate, which got 68 votes. Both growers all across the country and the farm workers supported it as the first ag jobs bill where that has been true. But the House never took it up.

But I wonder if you could talk a little bit about how our inability to actually tackle immigration reform is affecting the rural economy and our agricultural workforce.

Mr. JOHANSSON. Well, it is certainly an issue that producers bring up frequently, in addition to trade, as being an important component of what producers are hoping can get expanded in the new administration. They also are looking to see improvements in the stability of the ag labor workforce, and as you mentioned, for commodities like specialty crops, vegetable, fruit, and nuts, out West, as well as in your state, labor is a much larger percentage of the cost of production as compared to row crop farming in the Midwest—not to say that labor is not an issue there as well.

But certainly a lot of ag production that we are seeing coming out in this specialty crop area has been improving. It is almost a third of our export sales right now. It is a very important part of the ag economy, and labor is crucially important to that sector.

So I know that the Secretary is committed to looking at this issue and he has hired some expertise to help shepherd some proposals when they come around, so he is going to be looking at it.

Senator BENNET. Great. I hope he will take a look at the work we did in the Gang of Eight bill. I think there would be some useful things for him to consider there.

My other question, actually, was about trade, and I know you have touched on that also today. One way to support farming and ranching communities in Colorado, in this difficult economy, is to make sure we have markets for our products, and this means creating new opportunities in Cuba and China, and other places as well. We also need to protect access to the critical Canadian and Mexican markets. We hear about this all the time. I hear about it in Colorado all the time, from wheat growers on the Eastern Plains, potato producers in the San Luis Valley, cattlemen on the Western Slope.

I wonder, in light of the administration's recent notice of its intent to renegotiate NAFTA, what advice you would give to the U.S. trade representative and members of this Committee about how we should proceed? I would be happy to have anybody answer that question.

Mr. JOHANSSON. I will just say a couple of words and then let other folks chime in, but certainly we know that trade with our NAFTA partners is very important. They are the number two and number three, respectively, destination markets for U.S. ag producers. Certainly there is room for improvement and I think that is what the administration is committed to trying to find, not only on agriculture but for other sectors as well.

I think our job at the Department, and certainly—well, your jobs, obviously, as representatives of your states, is to just highlight the importance that trade has for agriculture, and I think that is what we are focused on doing, just to point out, while some sectors may not have the same retrospective return on trade, but agriculture has, hands down, benefitted from improved trade access.

Senator BENNET. Right.

Mr. WEBER. Could I add to that, that not only is trade demand important but also the capacity to deliver the product to the markets. I would reinforce the notion that we need a strong infrastructure in rural communities to actually deliver on the trade.

Senator BENNET. Thank you, Mr. Chairman.

Chairman ROBERTS. Thank you. That will conclude our hearing today. I again want to thank all of our witnesses for taking time to share your views on the state of the ag economy. It is certainly clear from your testimony and the questions by my colleagues who serve on this Committee that our farm economy is in a rough patch.

This understanding will be valuable as the Committee continues to hear, first-hand, from farmers, ranches, other stakeholders, and it will be vital as we continue discussions on the next farm bill.

To my fellow members, we would ask that any additional questions you may have for the record be submitted to the Committee Clerk five business days from today, or by 5:00 p.m. next Thursday, as of June the 1st.

The Committee now stands adjourned.

[Whereupon, at 12:03 p.m., the Committee was adjourned.]

A P P E N D I X

MAY 25, 2017

Statement by
Robert Johansson
Chief Economist, USDA
Examining the Farm Economy: Perspectives on Rural America
Before the Senate Committee on Agriculture

May 25, 2017

Mr. Chairman and Members of the Committee, I am pleased to have this opportunity to discuss the state of agriculture and the rural economy in the United States.

Last year, the outlook for the agricultural sector was driven by macroeconomic factors, such as economic growth both here and abroad and resulting currency adjustments. Those factors continue to be important in 2017, as global economic growth continues to be slow, and the dollar remains relatively strong. In addition, another year of record or near record crop production has maintained large global stocks for many commodities, but has also been supported by growing global demand. While we expect global demand to continue to grow, stocks relative to use are likely to remain relatively high compared to recent history, keeping pressure on commodity prices. As a result, financial pressures on some producers will continue to grow this year as input costs including land costs have not fallen as far or as quickly as commodity prices.

But there are some bright spots heading into 2017 as well. Some commodities have seen improving returns in some parts of the country providing opportunities for forward contracting. Interest rates and energy prices remain historically low. For U.S. agriculture as a whole, the U.S. Department of Agriculture (USDA) forecasts that net cash income will rise slightly in 2017 and that median farm household income is likely to rise. Trade volume and value are expected to grow in 2017 --- exports are projected up 4.8 percent in value, with volumes of some bulk commodities more than offsetting declines in their unit prices.

However, many producers face pressure from continued low commodity prices. Some may be able to rely on capital reserves, but for many, particularly those new to farming, capital reserves may not be available. Overall, capital reserves have fallen by 70 percent since 2012. Relatedly, USDA Farm Service Agency (FSA) loan demand increased markedly last year, reaching record high obligations of $6.3 billion, including record assistance to beginning and historically underserved farmers and ranchers. Demand for USDA loans continues to be close to last year's pace. However, as credit availability tightens and producers cut back on costs, the number of new operating loans originating from commercial banks has begun to level off and even decline, although debt continues to increase in the first quarter of 2017 due to a slower rate of repayment. At the same time interest rates are beginning to increase.

Through this, farm programs have continued to operate as designed. While combined payments under Agriculture Risk Coverage (ARC) and Price Loss Coverage (PLC) are expected to increase in 2017, not all producers have experienced the same level of support. Nonetheless, total direct farm program payments are projected to decline by 4 percent in 2017 as payments under other Federal farm programs are forecast to decline. While forecasts for farm income remain flat, median farm household income is expected to continue rising for a third year. Since 2015, median farm household income has risen 4 percent, recovering most of the decline from its peak in 2014. Increasing median farm household income is driven by rising off-farm income, expected to be 4 percent higher than a year ago and 8 percent above 2015.

Today, I will direct my comments toward the current farm income situation, the outlook for prices and production for the coming crop year, and the competitive trading environment that faces U.S. producers.

Farm income remains flat, while credit tightens.

The USDA's Economic Research Service (ERS) released its first farm income forecast for 2017 in February with the next update scheduled for August. In a reversal of the last two years, we expect to see net cash income increase slightly from 2016. Net farm income, a broader measure that includes the value and costs of items like home consumption of farm goods, unsold inventory, depreciation, and rent and expenses related to a farmer's dwelling, is forecast to fall, but the change is modest and is far less than the 25 percent decline of three years ago.

The aggregate debt-to-asset ratio continues to rise, up from 12 percent in 2015 to 13 percent in 2016 and an expected 14 percent in 2017 (see figure 1), but those levels remain low by historical standards and well below the 1985 peak of 22 percent. The continuing strength of farmland values underpins that low debt-to-asset ratio. Assets buoyed by strong land values would have to drop by almost 50 percent to boost debt-to-asset ratios to levels seen in the 1980s. That said, we have seen land values and cash rents decline begin to decline, and evidence suggests that they will continue to fall in 2017 with some regions seeing double digit declines in value. The Federal Reserve 10th district saw a 3-percent decline for non-irrigated land, but values have fallen by as much as 24 percent in the western portion of the district over the last two years. Some regions still show some strength in land values, as values remained steady in the 7th district, and the value of quality farmland rose 10-percent in the 8th district. Cash rental rates fell in all three districts.

Credit conditions continue to tighten across all three districts. Loan demand remains high and loan repayment rates continue to weaken, although there are some regional variations. Debt-to-asset ratios vary among farm businesses by commodity specialization, with close to 20 percent or more of farm businesses specializing in wheat, cotton, poultry, and hogs showing debt-to-asset ratios above 40 percent (see figure 2). Those producers will be most vulnerable to a further downturn.

Looking at USDA's own loan portfolio, through April 30, 2017, demand for Farm Service Agency farm loans in fiscal year (FY) 2017 has seen only a small decline of 6 percent from last year's record levels. FSA portfolio performance has deteriorated very modestly over the past 12 months. With interest rates still low and farmland values declining relatively slowly, at this time, farm debt presents a lower risk to the sector than in the 1980s. Data indicates interest payments on current debt relative to net farm income is about 20 percent, whereas in 1985 the ratio exceeded 60 percent (see figure 3).

Farm budgets continue to tighten, however, with commodity prices expected to remain flat going into 2017 and beyond. We expect farm bill programs to continue to help farmers facing relatively low farm income. As of May 10, the largest program, ARC, had made payments to date of $5.9 billion for crop year 2015, with the largest shares going to corn, soybeans, and wheat base. PLC payments have totaled to date $1.9 billion for crop year 2015, with the largest shares going to rice, peanuts, and wheat base. Recent ERS and Congressional Budget Office (CBO) projections indicate payments for crop year 2016, which will begin to be made in October of this year, will be around $5 billion for ARC and $3.5 billion for PLC. CBO projects steady declines in ARC and PLC program payments for the final two years of the 2014 Farm Bill as commodity prices remain fairly stable for many commodities reducing ARC guarantees.

Dairy producers largely enrolled their production at the minimum catastrophic coverage level of $4 per hundredweight under the new Margin Protection Program (MPP) for dairy. While producers received $11 million in payments to date for crop year 2016, premiums totaled over $20 million. Estimates for 2017 are for minimal or no payments given expected margins in the sector with moderating feed costs and improved milk and dairy product prices.

Cotton producers have had the option of purchasing supplemental crop insurance coverage through the Stacked Income Protection Plan (STAX), but producers have largely chosen not to participate. Only 29 percent of cotton acres insured in 2015 and 27 percent of cotton acres insured in 2016 carried STAX policies. Cotton producers received just under $330 million to date for crop year 2016 through the one-time only Cotton Ginning Cost Share program. Those with former cotton base, now classified as generic base, retain the opportunity for additional support, as they are eligible to receive ARC or PLC payments on that generic base if they plant covered commodities. For crop year 2015, ARC and PLC payments to date on generic base totaled $444 million.

In addition, many producers have the option to purchase crop insurance to manage risk for their crop, to help offset any unforeseen losses. Based on historical averages, ERS estimates that producers will receive $3.5 billion in net insurance indemnities in 2017. Overall government payments, including conservation payments of about $3.3 billion, are expected to fall slightly in 2017, to $12.5 billion from $13 billion in 2016.

Outlook for prices remain mostly flat, with mixed production response.

The backdrop to the 2017 outlook is similar to the last year with general softer commodity prices, tighter producer margins, and a flat farm income picture. The current outlook follows the rapid increases in agricultural commodity prices from 2008 to 2013 that boosted farm incomes, reaching the highest level in real terms since 1973. Producers in the United States and other countries responded to those price signals by increasing plantings and production. Roughly a decade later, stock levels for many commodities have risen as a result of four years of record or near record global production. Stocks measured by days of use have expanded for wheat in particular and remain high for corn, soybeans, and cotton, but demand has also expanded.

Given favorable global harvests and ample stocks, we expect crop prices to remain mostly flat to lower into 2017/18 (see figure 4). Historically, changes in prices have provided a signal of where crop area is likely to head in the coming year. Last year's planting time price rally, combined with open planting weather that reduced prevent planted area, boosted the 8-crop area planted. For 2017, with an assumption of a more normal prevent planted area, producers have signaled an intention to reduce overall crop area along with a change in crop mix. We have already observed a decline in winter wheat seedings to the lowest level in more than a century, which raises the question of how producers will allocate their crop land, and how may this spring's planting weather influenced their decisions?

We would expect to see some response to the tepid price signals. Based on NASS's survey of farmer intentions in March of this year, U.S. planted area for the 8 major crops is expected to decline in 2017, falling to 251.4 million as narrowing crop production margins push some acres out of production but also reflecting a return to a more normal prevented planting acreage after last year's low number. Even as total acres fall, prospects for better relative returns in some crops, notably cotton and soybeans, are expected to cause reallocation of acres to these crops and their area is expected to increase year-over-year.

For 2017/18, total corn supply in the United States is projected to be the second largest on record at 16.4 billion bushels supported by large carry stocks. Those stocks, the largest corn beginning stocks since 1988/89 will dampen the production impact of a decline in corn planted area in 2017, as farmers signaled an intention to plant 4 million fewer acres of corn. As a result, corn prices in 2017/18 are expected to be flat at $3.40 per bushel

Low wheat prices as a result of large domestic supplies and large crops among our competitors in the global market resulted in record low winter wheat seedings this year. Those declines in corn and wheat area are offset by a sharp increase in soybean area, driven by more favorable *relative* returns.

One place this can be easily observed is Kansas. The Kansas State Extension crop budgets, released in the fall of 2016, illustrate what farmers are facing. Looking at the budgets for Northeast Kansas, soybeans offered the best opportunity for a positive return, while wheat returns were negative (figure 5). While every producer's cost structure is different, the budgets offer insight into producer options and those budgets would indicate, we saw Kansas farmers plant a million fewer winter wheat acres than last year, offset by intentions to plant nearly a million more acres of soybeans and 100,000 more acres of corn. Elsewhere, relatively more favorable cotton prices, buoyed by a strong pace of export sales this year, are expected to result in a sharp increase in U.S. cotton area, topping 12 million acres, the highest planted area since 2006.

Of course, with the corn planting window closing and soybean planting well underway, weather may make the final decision on some acres.

Coming off a year where we had record corn, soybean and wheat yields--the last time we had record yields in all three was the 1970s--we assume a return to normal weather-adjusted trend yields. For corn, this would mean a yield of 170.7 bushels an acre and for soybeans we assume 48.0 bushels an acre, down more than 4 bushels from last year's record-shattering level.

For corn, we expect domestic use to be relatively flat. Small gains in corn used for ethanol, driven by domestic blending and exports, are offset by declines in other uses. With the sharp drop in supplies from the decline in acres, stocks are expected to decline but remain above 2 billion bushels, the highest level since the 2004/05 crop, before the rapid growth in the domestic ethanol industry.

For soybeans, large beginning stocks more than offset a modest production decline in 2017/18. An expected return to normal yields will bring production down, despite the sharp increase in soybean area to a record 89.5 million acres. As a result, soybean supplies are expected to grow by just under 200 million bushels. With a return to more normal yields in South America after this year's large crop and continued demand growth in China, we expect U.S. soybean exports to grow in 2017/18, moderating the increase in carry-out stocks. Still, with the larger supplies and carry-out stocks, prices for soybeans are expected to fall $0.25 to $9.30 for 2017/18.

While wheat prices are expected to increase in 2017/18, driven by sharply lower area and production, this is a bounce from current quite low wheat prices. In addition, global stocks remain record large, with larger crops among some of our global competitors, which will challenge our exports and constrain gains in prices.

A sharp decline in rice area in 2017/18 is expected to narrow U.S. ending stocks and support a modest price increase to $11.20 per hundredweight. Foreign supplies will offset much of the U.S. production decline with global production down fractionally in 2017/18.

With the sharp increase in U.S. cotton area, production is expected to rise by 2 million bales in 2017/18. However, the same signal U.S. producers are seeing is also motivating producers around the world and broad global growth in output is expected. This will provide us with additional export competition and thus much of our expanded production will end up in stocks and push prices down a nickel to $0.64 a pound.

Lower feed costs provide economic incentives for expansion in the livestock sector.

Turning to the livestock, dairy, and poultry sectors, we project that total meat and poultry production will again be record high at 103.1 billion pounds in 2018, as production of beef, pork, and broilers all increase. With those increases in production in all categories, prices are expected to soften into 2018, but solid domestic demand and export growth are expected to moderate the price declines (see figure 6). Fed steer prices are forecast to decline to $118.00 per hundredweight, down $4.49 from the prior year, as increased cattle supplies move through feedlots, but price declines will be limited by strong demand. Recent strong near-term demand has supported cattle prices and drawn supplies forward as we have seen sales weights decline. However, increased supplies of cattle and expected growth in cattle weights will pressure prices later this year and into next year. Hog prices are expected to fall to $43.75 per hundredweight, down $1.43 from 2017, but remain supported by solid packer demand as slaughter capacity expands. Broiler prices are expected to average 88.3 cents per pound, down fractionally from 2017 as broiler production expands and competition across large supplies of protein intensify.

Milk production is also projected to set a new record at 222.0 billion pounds in 2018 with growth in both cow numbers and milk per cow. Export prospects in 2018 should expand along with global demand and improved U.S. competitiveness. Although prices for milk will remain below the record highs in 2014, they are expected to increase from current levels in 2017 and into 2018, despite increased production, as domestic and international demand provide support. Cheese and NDM prices gains should more than offset expected declines in butter, where price declines are modest. As a result, the all milk price is expected increase in 2018 to just over $18 per cwt, with margins under MPP exceeding the $8 trigger throughout. Coupled with feed prices that are little changed from last year, producer's returns should provide support for continued expansion in 2018.

The global economy and prospects for trade

More broadly, the outlook for the U.S. and global economy is positive for U.S. agriculture, which points to an improved trading outlook for U.S. producers. Prospects for the world economy have stabilized in the last 1½ years – growth in China has steadied, commodity prices have stopped falling, and economic policies are promoting growth. For the world, the IMF has raised its growth forecasts for 2017 to 3.5 percent and 3.6 percent in 2018, with flattened growth into 2020 at around 3.7 percent. For emerging and developing countries as a whole, however, growth rates continue to rise through 2020, but more slowly than previously. Much of that downward shift is due to slowing world trade and slowing investment in emerging and developing countries. For the advanced economies, growth is expected to pick up slightly in 2017, but remain sluggish. The Eurozone will be held back by uncertainty over elections in 2017 and Brexit. Japan's economy is expected to struggle as fiscal stimulus is cut back. As a general rule, growth prospects are significantly better in Asia than elsewhere, led by China, and increasingly, by India.

Driven by the strength and safety of the U.S. economy and by expansionary monetary policies in many other countries, the real value of the dollar increased substantially in 2015 and 2016 relative to competitor and customer currencies. Clearly, a stronger dollar meant it was more difficult to sell products to countries with weaker currencies, such as Egypt and Nigeria (major wheat importers), and it was easier for countries, such as Canada, the EU, Brazil, and Argentina to sell their agricultural products abroad, making for an extremely competitive trade environment.

The global nature of economic recovery suggests that, although the U.S. dollar will still appreciate in 2017 and 2018, it will see nowhere near the sharp increases in 2015, and should even decline relative to some currencies. For example, in 2017, the Brazilian real has already gained about 10 percent against the U.S. dollar, compared to all of 2016. The Russian ruble has picked up 13 percent, thanks in part to higher crude oil prices.

As a result, U.S. agriculture faces a friendlier macroeconomic environment than in the previous two years. The dollar will be less of a headwind, and growing economies, especially in emerging markets, will demand more and better quality food and feed. U.S. producers have demonstrated their competiveness by continuing to export at high levels despite the difficult economic environments in 2015 and 2016.

The United States is projected to remain competitive in global agricultural markets and to grow export values over the next 10 years. U.S. agricultural exports were most recently forecast at $136 billion for FY2017. That is up nearly 5 percent from last year, pushed up by larger volumes even as unit value declines for some bulk commodities. The top three customers of U.S. agricultural products remain China, Canada, and Mexico, which account for 46 percent of U.S. agricultural exports (see figure 7).

The FY 2017 forecast for grain and feed exports is $28.6 billion, down slightly from FY 2016, with greater volumes, on larger supplies, offsetting a decline in unit values in aggregate. Livestock products are up $1.4 billion from last year, to $17.8 billion, in part due to rising beef demand in Asia and strong Mexican demand for U.S. pork. Dairy products increase nearly $1 billion to $5.5 billion on stronger global prices. Sales of horticultural products, driven by tree nut exports, are up by $1.0 billion.

Expanding export opportunities for U.S. farm products is critical for the agricultural economy.

U.S. agricultural exports account for about 20 percent of the value of U.S. agricultural production, nearly doubling since 1990. For some commodities, exports account for a significant share of production – around 50 percent for soybeans, wheat, and rice; 75 percent for cotton, and nearly 90 percent for almonds. Trade is not only important to U.S. farm incomes, but to the broader U.S. economy. USDA estimates that each dollar of U.S. farm exports produces an additional $1.27 in economic activity, and every billion dollars in agricultural sales overseas supports about 8,000 American jobs.

Summary

Our long-run expectations for global agriculture reflect an assumption of steady world economic growth and continued global demand for biofuel feedstocks, factors that combine to support longer run increases in consumption, trade, and prices of agricultural products. However, over the next several years, the agricultural sector will continue to adjust to lower prices for most farm commodities both in the U.S. and abroad. We have seen that in the U.S. most recently in the decline in winter wheat area of 3.8 million acres, the lowest since 1908.

In addition, many of the producer's cost-saving farm strategies we have observed over the past few years will likely continue, such as reduced purchases of machinery and more aggressive restructuring of debt and rental agreements. We would still expect to see demand for operating loans to rise accompanied by tightening availability, which will continue to put upward pressure on interest rates. Currently, interest rates on loans remain low, so that new debt is still not expected to result in a significant increase in operating costs for most producers.

However, we have seen from recent data from the Federal Reserve Banks that interest rates have been increasing on agricultural loans. Also, we expect land value and cash rent levels to continue to realign to the lower price environment. Farm bill program payments are expected to start to taper off, largely due to the effects of flattening commodity prices on Olympic-averaging in the ARC-CO program, which has been responsible for the largest share of payments. The MPP dairy program is not expected to provide significant outlays in 2017 or 2018 due to rising dairy prices and low feed costs. Crop insurance net indemnities were low in 2016, but would be expected to increase in 2017 with more normal weather patterns.

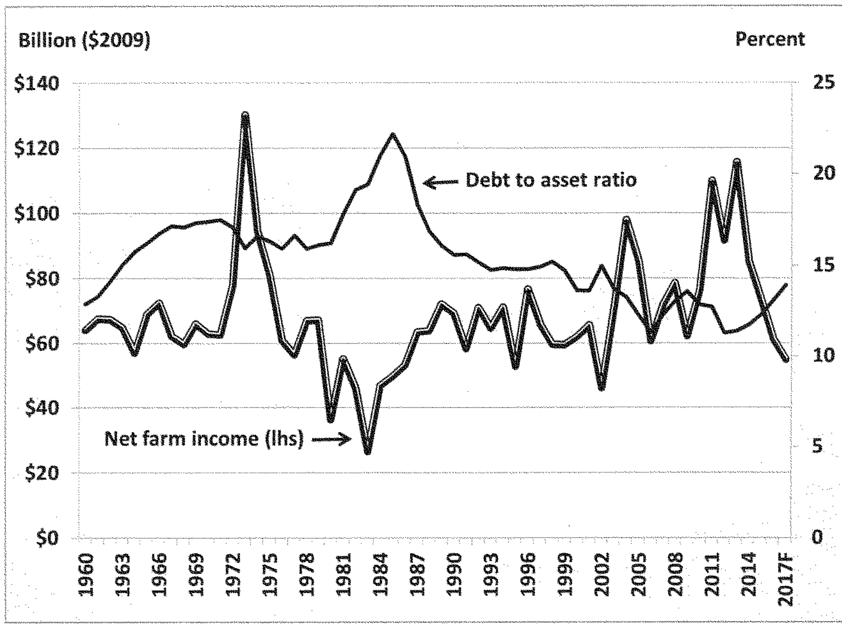
Returns to farming are expected to remain flat over the coming decade having already declined sharply from recent highs. The net effect over time is difficult to forecast, but certainly we might expect consolidation in some farm sectors in certain regions and movement of the most leveraged operators out of farming.

A key component of measuring changes in the agricultural sector will be the upcoming USDA Agricultural Census, which will be put into the field this December. The National Agricultural Statistics Service (NASS) has been planning for the census for the past few years and will be implementing the 2017 survey. That survey costs USDA approximately $264 million over a 5-year period to implement and provides crucial information for a broad range of activities. We expect results to be available at the Agricultural Outlook Forum in February 2019.

The strength of the agricultural economy has implications for rural America, but also for the larger U.S. economy. We know that agriculture, food and related industries contributed $992 billion to the U.S. gross domestic product in 2015. That translated into about 21 million jobs, or about 11 percent of total U.S. employment. Food expenditures comprised about 12.5 percent of household expenditures. Food manufacturing accounts for about 15 percent of all U.S. manufacturing employees.

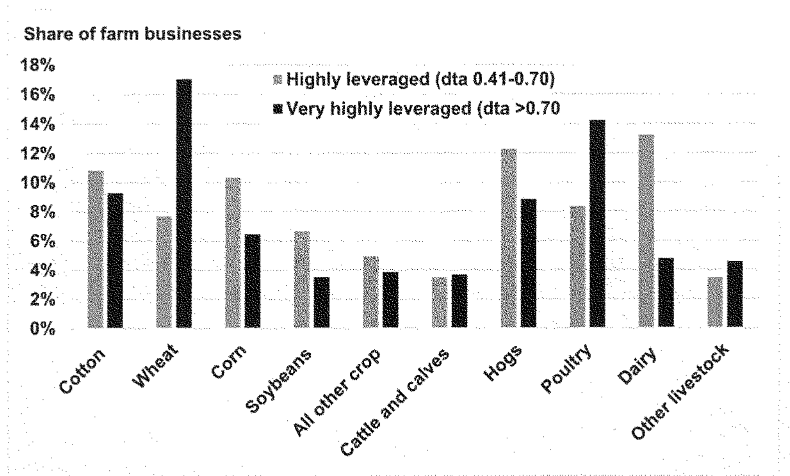
Mr. Chairman, that concludes my opening statement and I am happy to answer any follow up questions you might have now or later for the record.

FIGURE 1. Debt-to-asset ratio rising as net farm income falls, but remains historically low



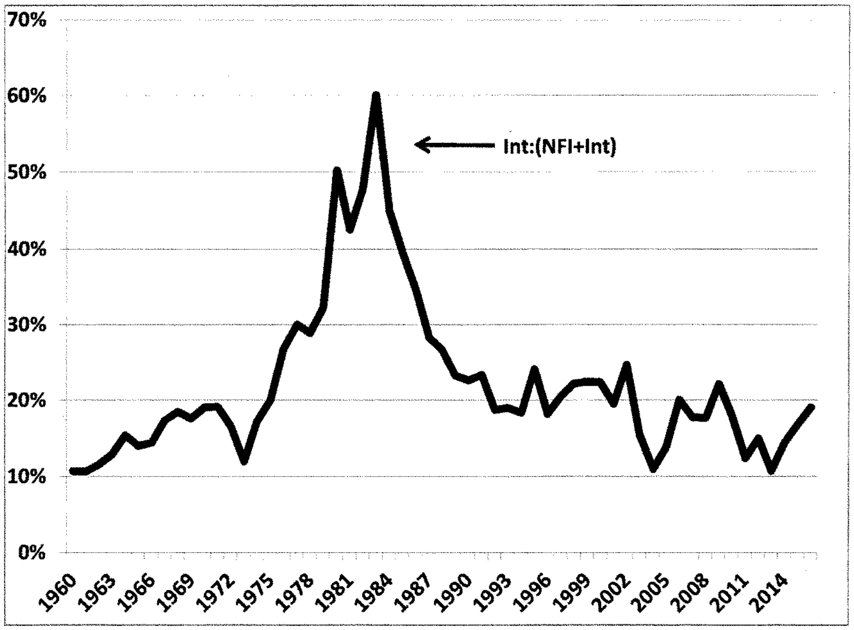
Data: USDA-ERS.

FIGURE 2. Financial stress varies by commodity specialization



Data: USDA-ERS (February 2017).

FIGURE 3. Interest payments remain modest relative to income



Data: USDA-ERS.

FIGURE 4. Corn, cotton, and soybean prices soften, but wheat and rice to turn up

	2012	2013	2014	2015	2016	2017	%Δ
Wheat ($/bu)	7.77*	6.87	5.99	4.89	3.90	4.25	9.0
Corn ($/bu)	6.89*	4.46	3.70	3.61	3.40	3.40	0.0
Soybeans ($/bu)	14.40*	13.00	10.10	8.95	9.55	9.30	-2.6
Cotton (cents/lbs)	72.50	77.90	61.30	61.20	69.00	64.00	-7.2
All Rice ($/cwt)	15.10	16.30	13.40	12.20	10.40	11.20	7.7

Source: USDA-OCE World Agricultural Supply and Demand Estimates, May 9, 2017
* denotes record high

FIGURE 5. Kansas State University Extension, Northeast Kansas Crop Budgets, 2017

	Wheat (rotation)	Corn	Soybeans	Sorghum
Price	$ 4.02	$ 3.60	$ 9.00	$ 3.44
Yield	56.0	137.0	47.0	90.0
Sales Receipts	$ 225.34	$ 492.75	$ 423.00	$ 309.53
COSTS				
Fertilizers	$ 50.59	$ 66.41	$ 28.17	$ 46.62
Herbicides	$ 10.68	$ 34.15	$ 33.07	$ 42.02
Seed	$ 27.00	$ 82.89	$ 56.00	$ 11.68
Crop Insurance	$ 11.08	$ 17.77	$ 11.13	$ 13.06
Custom Field Operations	$ 87.58	$ 125.60	$ 82.44	$ 118.64
Other	$ 59.05	$ 49.45	$ 45.98	$ 46.61
Total Direct Expenses	$ 245.98	$ 376.27	$ 256.79	$ 278.63
Cash Rent	$ 101.00	$ 101.00	$ 101.00	$ 101.00
Returns on specified expenses	$ (121.64)	$ 15.48	$ 65.21	$ (70.10)

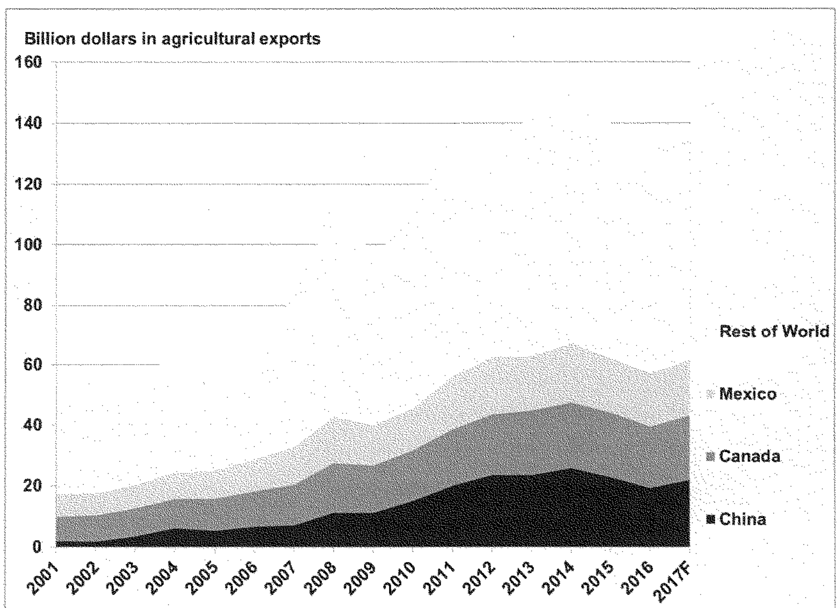
Source: Kansas State University Extension

FIGURE 6. Cattle, hog, and broiler prices to come down in 2018

	2013	2014	2015	2016	2017	2018	%Δ
				dollars per cwt.			
Steers	125.89	154.56*	148.12	120.86	122.49	118.00	-3.7
Hogs	64.05	76.03*	50.23	46.16	45.18	43.75	-3.2
Broilers	99.70	104.9*	90.50	84.30	89.10	88.30	-0.9
Milk	20.05	23.97*	173.12	16.24	17.60	18.05	2.6

Source: USDA-OCE World Agricultural Supply and Demand Estimates, May 9, 2017
* denotes record high

FIGURE 7. U.S. agricultural exports dominated by China, Canada, and Mexico



Statement of

Nathan S. Kauffman

Assistant Vice President, Economist, and Omaha Branch Executive

Federal Reserve Bank of Kansas City

Before the

U.S. Senate Committee on Agriculture, Nutrition, & Forestry

May 25, 2017

Chairman Roberts, Ranking Member Stabenow, and members of the committee, thank you for the opportunity to testify today. My name is Nathan Kauffman, and I am an economist and Omaha Branch Executive with the Federal Reserve Bank of Kansas City, a regional Reserve Bank that has long devoted significant attention to U.S. agriculture. In my role, I lead several Federal Reserve System efforts to track the agricultural economy, with a focus on farm finances and agricultural credit conditions. Our Bank is committed to including perspectives from rural America in discussions on the national economy, and I am here to share recent developments in the U.S. farm sector. Before I begin, let me emphasize that my statement represents my views only and is not necessarily that of the Federal Reserve System or any of its representatives.

At a high level, the U.S. farm economy has weakened notably over the past several years. The primary cause of the downturn that began in 2013 was a sharp drop in agricultural commodity prices, and this remains a top concern in the agricultural community. In a recent survey of agricultural banks conducted by the Kansas City Fed, about 85 percent of lenders in our region in the central United States identified the current environment of low commodity prices as a leading concern. In addition, while agricultural commodity prices have dropped sharply and remain low today, farm sector input costs have declined only gradually, and profit margins generally have remained weak.

Reduced profitability has gradually intensified the level of financial stress among farm borrowers. Nationally, debt-to-asset ratios and farm loan delinquency rates have edged higher over the past year, but only slightly. Federal Reserve data also show that the rate at which farm loans are being repaid has fallen steadily in each of the past four years alongside persistent increases in borrowers' financing needs.

The degree of financial stress in the farm sector, however, has varied regionally. In the first quarter of this year, nearly 60 percent of agricultural bankers surveyed in Colorado and the western portions of Nebraska, Kansas, and Oklahoma reported that loan repayment rates had fallen from the previous year. This is a region that is highly concentrated in cattle and wheat production. In contrast, only 25 percent of respondents in the eastern portion of our District, a region that is more concentrated in corn and soybean production, reported lower repayment rates.

Other measures of agricultural credit conditions in our region tell a similar story and are consistent with other parts of the country. This is to say, financial stress in the farm sector has increased more significantly in regions where cropland is generally less productive and in regions concentrated in markets that have been particularly weak, such as cattle and wheat. In other areas, strong crop yields last fall resulted in cash flows that were better than expected, and financial conditions have been more stable recently in those regions.

In a similar vein, farm real estate values have also declined the past few years, but only at a modest pace, and regional disparity has also been notable. Federal Reserve surveys show that the average value of high quality cropland has fallen by about 10 to 20 percent since 2013 in states with a high concentration of crop production. Since the beginning of 2015, however, farmland values have decreased more significantly in regions where the land is considered to be less productive or where the local farm economy has weakened more dramatically.

Despite regional variation, the relative strength in farm real estate markets has likely shielded the farm economy from potentially more severe financial stress, since farmland accounts for more than 80 percent of the value of farm sector assets and is an important source of collateral for other farm loans. The strength in land values has given agricultural lenders some opportunities to work with borrowers by restructuring loans and requesting additional collateral in response to heightened risk in their loan portfolios.

To briefly summarize, the U.S. farm economy is in the midst of a prolonged downturn, and financial stress in the farm sector has risen gradually over the past few years. Despite recent signs of stabilization in some areas, farm income has continued to decline overall due to persistently low agricultural commodity prices and elevated production costs. Alongside the reductions in farm income the past four years, agricultural credit conditions have weakened steadily and farm real estate values have trended lower. In general, I expect these downward trends to continue in the near term as global supplies are likely to continue to weigh on agricultural commodity prices and profit margins. Although a farm crisis does not appear imminent, some regions appear to be notably weaker than others, and there are still risks that could lead to more widespread challenges in the coming years.

Federal Reserve Bank of Kansas City: Survey of Ag Credit Conditions (May 2017)

"Regional Farm Sector Stress Intensifies"

By Nathan Kauffman, Assistant Vice President and Omaha Branch Executive and Matt Clark, Assistant Economist

Summary

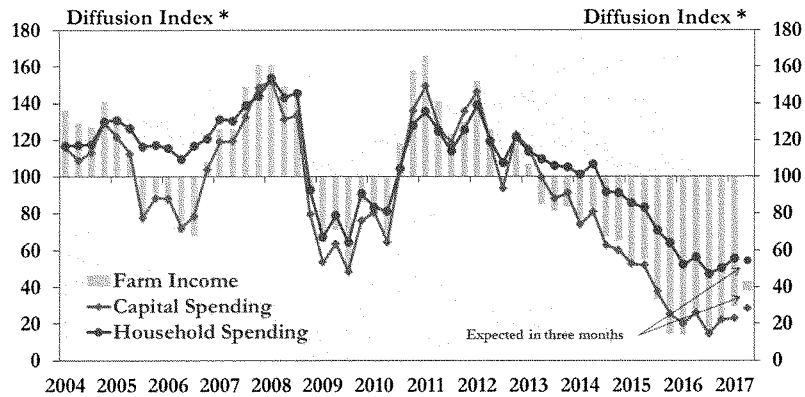
The farm economy in the Tenth District weakened in the first quarter of 2017, but conditions varied from east to west. Farm income, loan repayment rates and the value of most types of farmland all trended lower in each of the District's seven states. However, the deterioration in the western portion of the District was more severe than the moderate weakness in the eastern portion. Although agricultural credit conditions were weaker throughout the region, much of the recent weakness has been driven by intensifying challenges in the western portion of the District.

Farm Income

Farm income in the Tenth District continued to decline in the first quarter, but at a slightly slower pace than in recent quarters. According to the survey, 73 percent of bankers reported farm income was lower than the year before. The decline in the first quarter marked the fourth consecutive year that District bankers reported farm income was lower than a year earlier (Chart 1). Despite the persistent decline, the pace of softening appeared to slow in the first quarter. For example, 24 percent of bankers indicated farm income remained unchanged from the previous year, the largest share since the third quarter of 2015. Bankers expected farm income to decline further in the coming months, but also at a slower pace than in recent quarters.

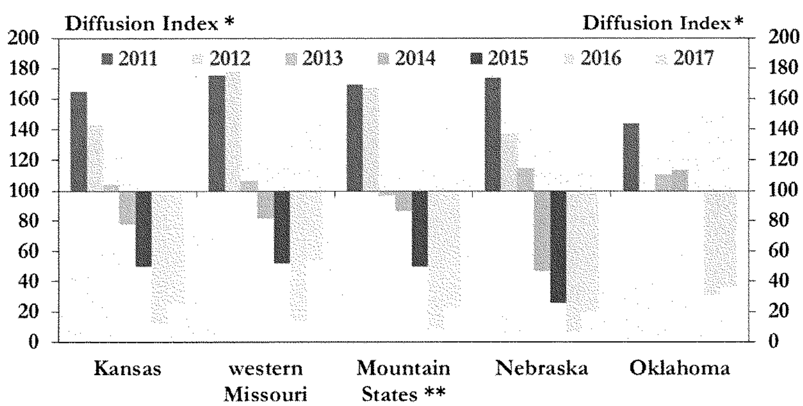
Similar to a year ago, bankers indicated that farm income had declined in each state in the Tenth District. Despite a recent rebound in cattle prices, a prolonged downturn in cattle and wheat markets caused bankers in regions with a strong concentration in those markets to express concerns about the local farm economy. In particular, farm income remained subdued in Kansas and the Mountain States, regions with relatively more cattle and wheat production (Chart 2). Although farm income continued to decline in western Missouri, bankers were slightly more optimistic in their assessment for farm income in that region, where crop yields were particularly strong last fall.

Chart 1: Tenth District Farm Income and Spending



*Bankers responded to each item by indicating whether conditions during the current quarter were higher than, lower than or the same as in the year-earlier period. The index numbers are computed by subtracting the percentage of bankers who responded "lower" from the percentage who responded "higher" and adding 100.

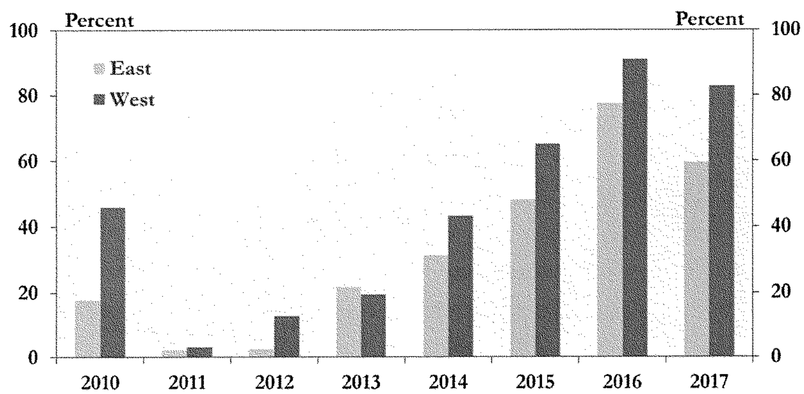
Chart 2: Tenth District Farm Income, First Quarter



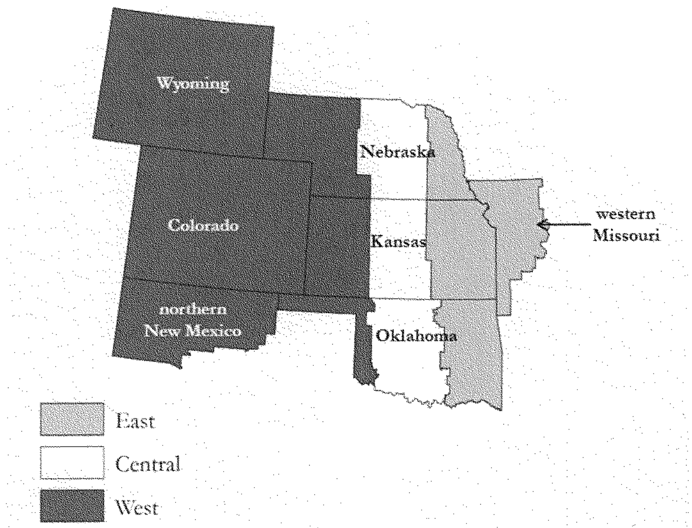
*Bankers responded to each item by indicating whether conditions during the current quarter were higher than, lower than or the same as in the year-earlier period. The index numbers are computed by subtracting the percentage of bankers who responded "lower" from the percentage who responded "higher" and adding 100.
** Mountain States include Colorado, northern New Mexico and Wyoming, which are grouped because of limited survey responses from each state.

More generally, farm income has declined at a stronger pace in the western part of the District. Since 2014, following a drop in the prices of major row crops, farm income has fallen more sharply in the Mountain States and the western portions of Nebraska, Kansas and Oklahoma (Chart 3 and Map). According to the survey, the gap in the performance of the farm sector between the District's eastern and western portions widened in the first quarter. Alongside persistent weakness in cattle and wheat markets, more than 80 percent of bankers indicated farm income was lower than a year ago in the western part of the District versus about 60 percent in the eastern part.

Chart 3: Tenth District Farm Income, First Quarter
Share of Bankers Reporting Lower Farm Income



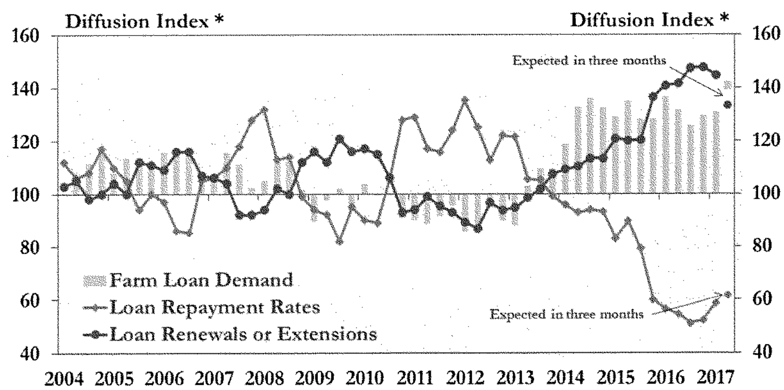
Map: Tenth Federal Reserve District



Credit Conditions and Lending

A prolonged downturn in the farm economy continued to weigh on agricultural credit conditions in the District, but also at a softer pace than in recent quarters. Loan demand remained high in the first quarter and was expected to continue to rise in the coming months (Chart 4). Bankers also reported farm loan repayment rates continued to weaken, but not as sharply as in 2016. In fact, similar to farm income, 49 percent of bankers indicated loan repayment rates were unchanged from a year ago, a larger share than the previous two quarters.

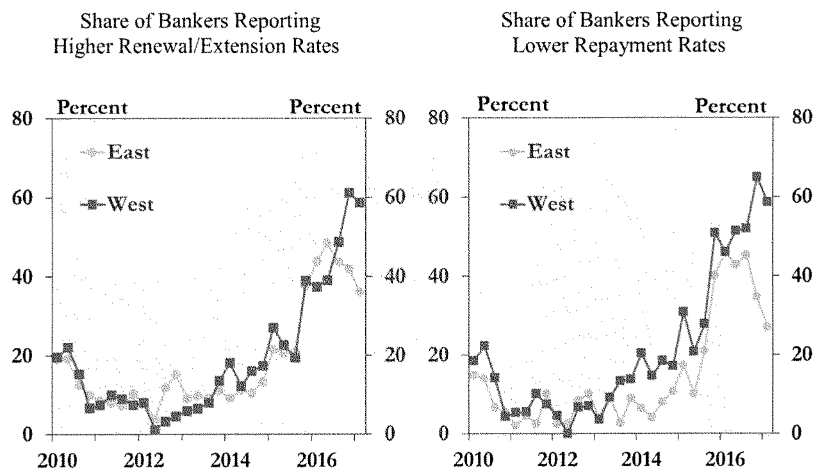
Chart 4: Tenth District Credit Conditions



*Bankers responded to each item by indicating whether conditions during the current quarter were higher than, lower than or the same as in the year-earlier period. The index numbers are computed by subtracting the percentage of bankers who responded "lower" from the percentage who responded "higher" and adding 100.

Despite some signs of optimism in the eastern portion of the District, agricultural credit conditions worsened more significantly in the west. Over the past several years, the share of bankers reporting higher rates of loan renewals and lower repayment rates had been similar throughout the Tenth District (Chart 5). Since mid-2016, however, the rate of deterioration in these two metrics has increased in the west, but generally has softened in the east, reflecting an emerging regional divide in agricultural finance conditions. Whereas bankers throughout the District have expressed ongoing concerns about the state of the farm economy, concerns from bankers further west have been elevated and were reflected in the recent survey data.

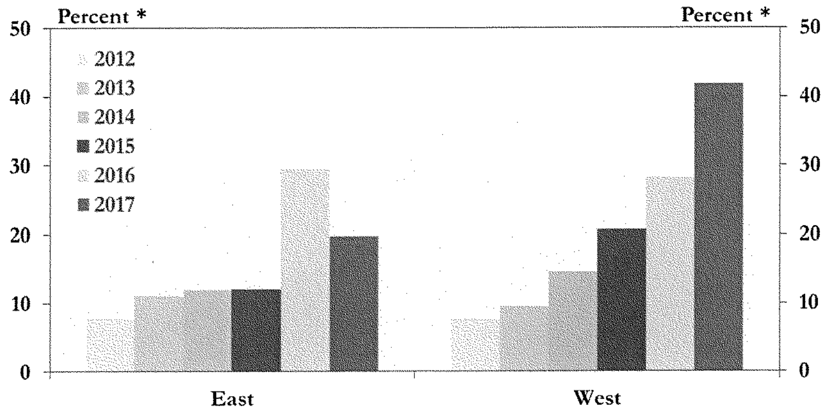
Chart 5: Tenth District Credit Conditions



The pace of carry-over debt also quickened in the western portion of the District, but declined in the east. In 2016, about 29 percent of farm borrowers carried over more debt from the previous year (Chart 6). In the first quarter of 2017, however, more than 40 percent of bankers in the west noted that carry-over debt increased, while less than 20 percent in the east reported an increase in borrowers with carry-over debt. In addition, the share of agricultural loans that involved debt restructuring in response to persistent shortages in cash flow increased again in the west, but generally remained stable in the east (Chart 7).

Alongside ongoing difficulties in the District farm economy, bankers continued to raise collateral requirements and interest rates for farm borrowers at a modest pace. In the first quarter, nearly 40 percent of bankers noted that collateral requirements increased from the year before, reflecting a steady increase from recent years (Chart 8). Interest rates remained historically low, but increased 24 basis points, on average, for variable rate operating loans and 15 basis points for fixed rate operating loans from a year ago (Chart 9).

Chart 6: Borrowers with an Increase in Carryover Debt, First Quarter



* Average response of banks in each region shown

Chart 7: Share of Agricultural Loans Originated Involving Debt Restructuring

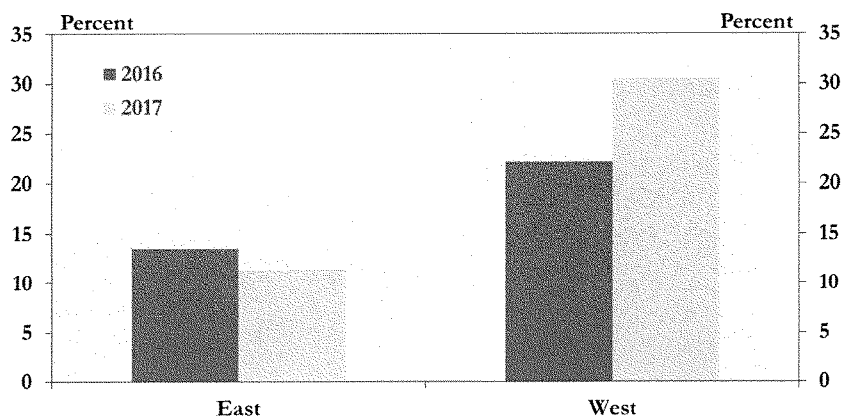


Chart 8: Collateral Requirement Changes Relative to One Year Ago

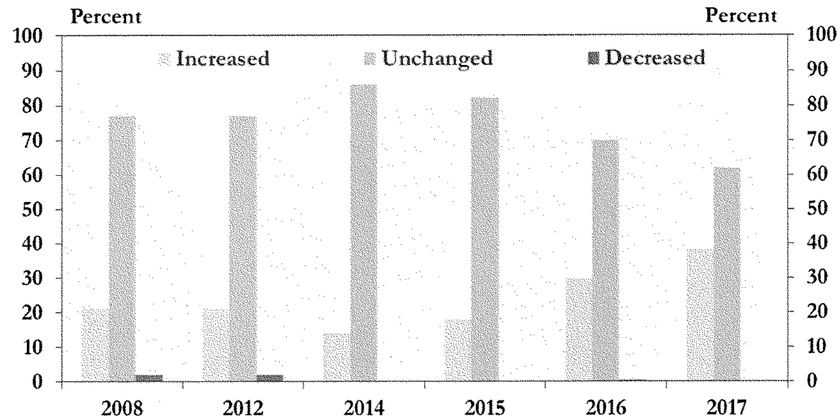
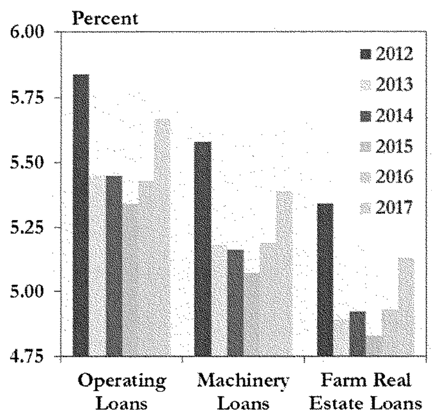
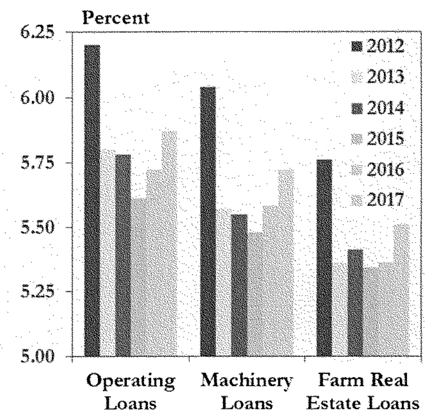


Chart 9: Tenth District Average Interest Rates, First Quarter

Variable Interest Rates



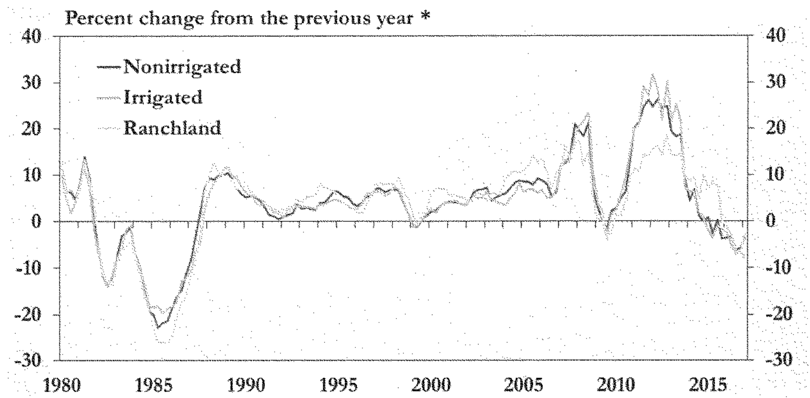
Fixed Interest Rates



Farmland Values

As expected, based on recent surveys, District farmland values trended lower in response to conditions in the regional farm economy. The value of nonirrigated cropland declined 3 percent in the first quarter, following similar declines in 2016 (Chart 10). The value of irrigated cropland and ranchland also decreased in the first quarter. Although farmland values continued to trend lower alongside ongoing weakness in the farm economy, the declines have remained relatively modest in comparison to the crisis of the 1980s.

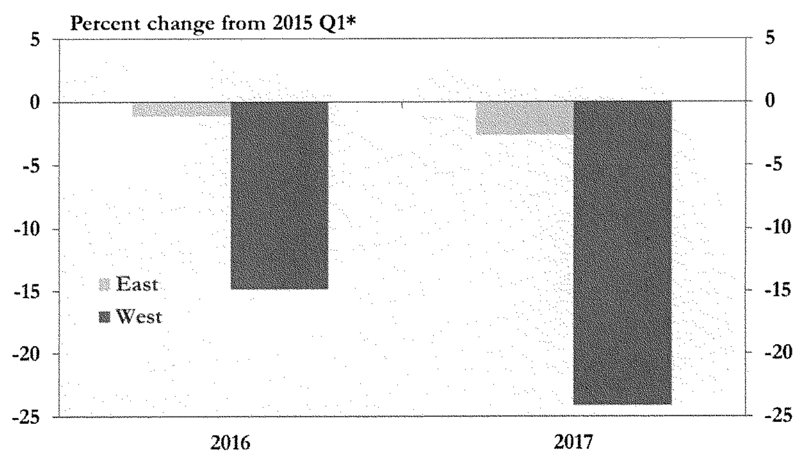
Chart 10: Tenth District Farmland Values



* Percent changes are calculated using responses only from those banks reporting in both the past and the current quarters.

The recent declines in farmland values in the Tenth District, however, also have been sharper in the west. The value of nonirrigated cropland began to soften in 2013 throughout the District, but recent declines have been more substantial in the west (Chart 11). In fact, according to the survey, nonirrigated cropland values have fallen only 3 percent in the east since the first quarter of 2015, but have dropped 24 percent in the western portion of the District.

Chart 11: Tenth District Nonirrigated Farmland Values



* Percent changes are calculated using responses only from those banks reporting in both the past and the current quarters.

Conclusion

In the first quarter, bankers throughout the Tenth District indicated that profit margins and cash flow remained tight. However, financial stress among agricultural producers and concerns among lenders have become more regional as economic conditions have worsened more significantly in the western portion of the District than in the east. As the farm economy remains under pressure, it is possible that challenges may intensify in some regions even as conditions may begin to stabilize in other areas.

Statement of

Alec Sheffer

Director of Retail Sales

Agri-AFC

Before the Senate Committee on Agriculture, Nutrition, and Forestry

Hearing on:

Examining the Farm Economy: Perspectives on Rural America

May 25, 2017

Introduction

Good Morning Chairman Roberts, Ranking Member Stabenow, and distinguished members of the Senate Committee on Agriculture, Nutrition, & Forestry. Thank you for allowing me to testify in regards to America's farm economy today.

My name is Alec Sheffer and I serve as Director of Retail Sales for Agri-AFC headquartered in Decatur, Alabama. At Agri-AFC, our roots have been firmly planted in the Southeast since 2003. With offices in Georgia, Mississippi, Florida, and Alabama, we have made a name supporting crops of all varieties. From cultivation to harvest, our goal is to provide an abundance of information and resources, to help guide farmers. We take pride in equipping our clients and communities with the knowledge and resources required for a successful harvest.

I also appear before you today on behalf of the Agricultural Retailers Association (ARA). ARA is a trade association based here in Washington, DC. ARA advocates, influences, educates and provides services to support its members in their quest to maintain a profitable business environment.

America's retail farm suppliers have been hit hard by the downturn in the agricultural economy over the past decade. There are a growing number of factors that have led to this decline including a steep drop in farm commodity prices, increased regulatory burdens, and market uncertainty. As an agricultural retailer, we have seen this firsthand with our customers spending and declining revenues.

However, we are confident these winds are beginning to shift. We believe Congress will make changes in the upcoming farm bill to help strengthen the safety net provided by crop insurance programs and assist in improving conservation efforts. Secretary of Agriculture Sonny Perdue, testified before the House Agriculture Committee last week and I was heartened to hear that, despite the steep drop in commodity prices and market uncertainty, he was hopeful rural America will strengthen in the coming years as the United States Department of Agriculture looks to improve existing safety nets for farmers and ranchers.

Farm Income Outlook

A recent forecast from USDA's Economic Research Service reported a dim outlook for farm profits.

"Relative to 2016 levels, farm sector profitability measures forecast for 2017 range from nearly flat to declining. Net cash farm income, one measure of profitability, is forecast at $93.5 billion ($82.2 billion after adjusting for inflation) for 2017, up 1.8 percent compared to the 2016 forecast. Net farm income, a broader measure of profitability because it includes noncash values such as inventory flows and economic depreciation, is forecast at $62.3 billion ($54.8 billion after adjusting for inflation) for 2017, down 8.7 percent compared to 2016. The calendar year 2016 net cash farm income and net farm income forecasts are $91.9 billion and $68.3

billion, down 12.2 percent and 15.6 percent from their respective 2015 levels." (United States Department of Agriculture Economic Research Service, 2017).

Other indicators of a weakening farm economy include a decline in farm credit access while the demand for loans remains strong. As noted in Secretary Perdue's testimony last week, "since 2009, USDA has provided approximately 243,000 loans totaling over $35.2 billion to farmers and ranchers. The recent increase in demand led to full utilization of the program level for farm operating loans for fiscal year (FY) 2016, with record loan levels at $6.3 billion." (Perdue, 2017) A decrease in loans while demand is high creates a strong uncertainty level among America's farmers.

In addition to declining revenues USDA ERS predicts a decline in crop cash receipts. In this kind of economic uncertainty for farmers and the retailers supplying them, safety nets through USDA are crucial in making sure their industry is supported by the government. I fully expect your committee will work swiftly to ensure these gaps are filled when crafting the upcoming farm bill authorization. I strongly urge the committee to review this forecast as it informs a broader outlook than allowed in my testimony this morning.

We also feel it is necessary to push for comprehensive tax reform to help agricultural retailers and their farmer customers. In addition to a full repeal of the estate tax, we believe it is equally important for Congress to preserve policies which help keep farm businesses in-tact and families in agriculture.

U.S. farmers and ranchers understand and appreciate the role of taxes in maintaining and improving our nation's infrastructure but believe the most effective tax code is a fair one. For this reason, we respectfully request that any tax reform legislation considered in Congress will strengthen the business climate for farm and ranch families while ensuring agricultural businesses can be passed to future generations.

The ag community also understands the need for infrastructure improvement, especially in rural America. Roads, bridges, ports, and lock and dam systems all play crucial roles in our delivery of important farm inputs like seed, fertilizer, and equipment. Additionally, expansion of broadband infrastructure throughout rural America is sorely needed. From precision agriculture technology to rural healthcare needs, a greater and more robust broadband network will mean more effective, efficient, and safer farm communities.

Regulatory Burdens

First, I would like to address several regulatory burdens affecting our industry. The legislative, regulatory and judicial landscape is vastly different from what the agricultural retail industry experienced decades ago. In the past eight years, federal regulators completed hundreds of major rules that impacted many sectors, including agriculture.

Our industry would like to prevent excessive expansion of federal regulations such as EPA's Risk Management Program (RMP), the current Waters of the U.S. (WOTUS) rule, remove duplicative permit requirements, delay and amend the new Worker Protection Rule (WPS), pull back and reform the new Certification & Training Applicator rules, and resetting the process, science, transparency and predictability to the registration and review of pesticides.

Additionally, the Environmental Protection Agency (EPA) has targeted several important crop protection products over the years attempting to remove these important compounds from the marketplace. This creates a great amount of uncertainty for farmers struggling to determine which products will be made unavailable to them in the coming growing seasons. Our industry asks that the new administration and EPA reset the process by which crop protection products are assessed and help preserve risk-based regulation of pesticides based on sound science and a predictable registration and regulatory review process. Agricultural retailers employ commercial pesticide applicators that receive extensive education and training to apply pesticide products in accordance with the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) laws and regulations. Ground pesticide applicators treat about 80% of all U.S. commercial cropland while aerial applicators treat just under 20%. Certified commercial pesticide applicators participate in EPA financially supported state training programs that cover Best Management Practices (BMPs) for safe pesticide use as well as environmental issues such as endangered species, human health, and water quality protection.

Another regulatory burden for ag retailers has been the EPA's assessment of National Pollutant Discharge Elimination System (NPDES) pesticide general permits under the Clean Water Act (CWA). In 2009, the U.S. 6th Circuit Court of Appeals drastically expanded the enforcement reach of the Clean Water Act into pesticide policy. The court ruling invalidated decades of precedent and an EPA regulation that had exempted pesticide applications made into, over or near water from the numerous requirements of CWA's NPDES permits.

Numerous aerial applicators nationwide have shut down their mosquito and invasive species control efforts due to the paperwork cost and threat of lawsuits associated with the NPDES PGP requirements. EPA estimated the paperwork costs alone to be $50 million per year. State and local officials advised EPA that the costs would far exceed that estimate. Currently, mosquito control programs are vulnerable to lawsuits for simple paperwork violations of the CWA where fines may be up to $35,000 per day for activities that do not involve harm to the environment. In order to attempt to comply with this potential liability, these governmental agencies must divert scarce resources to CWA monitoring. In some cases, smaller applicators have simply chosen not to engage in vector control activities. Requiring NPDES permits for the discharges of mosquito control and other pesticide products provides no additional environmental protections beyond those already listed on the pesticide label, yet the regulatory burdens are potentially depriving the general public of the economic and health benefits from the use of important pest control products.

The court ruled that such applications require compliance with NPDES discharge permits whenever they occur "into, over or near" one of the many types of "waters of the U.S.," though the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) already regulates pesticide use. FIFRA requires demonstration that registered pesticides can be safely applied per product labels in a manner that poses no unreasonable risk to humans or the environment. Therefore, this duplicative regulatory requirement has put an undue burden on American farmers and pesticide applicators.

Additionally, we support the administration's plan to review and restructure the Waters of the U.S. (WOTUS) rule promulgated under the last administration. Farmers continue to be America's best stewards of land conservation and work diligently to follow best management practices when applying pesticides and fertilizer ensuring the quality of land and water is uninhibited allowing improving farm production.

Earlier this year, the U.S. House of Representatives passed a regulatory reform bill. It is now time for the U.S. Senate to take action. S. 951, the Regulatory Accountability Act of 2017 (RAA), introduced by Senators Rob Portman (R-OH) and Heidi Heitkamp (D-ND), is bipartisan legislation that would modernize the rule-making process so that agencies would have to implement laws as Congress intended and requires the agencies to get the rules right.

I would also like to address the commercial driver shortage in our industry. Commercial truck traffic is a vital component to our nation's economic prosperity. Virtually every industry segment depends on truckers and commercial drivers to deliver billions of tons of commodities used and consumed annually in the United States. The nation is experiencing a shortage of truck drivers that is worsening each year. The American Trucking Associations (ATA) estimates that the current shortage of drivers is roughly 35,000 to 40,000, but because of retirements and individuals leaving the industry, trucking companies will need to recruit nearly 100,000 new drivers a year over the next decade to keep pace with the country's freight needs.

Many of ARA's agricultural retail members operate near state lines with their farm and ranch customers located within 150 air mile radius of the facility. Their drivers spend significant time on the job during the peak seasons primarily in the fields applying product, not driving on public roads, and typically return to their own home to sleep at night. Only allowing employees over the age of 21 with a CDL to deliver product to certain customers, due to current federal regulations, places undue restrictions on employees under the age of 21 and limits their work opportunities.

Historically, young workers (ages 16 to 24) face considerably higher unemployment rates than prime age workers (ages 25 to 54). The youth unemployment Rate in the United States increased to 12.30 percent in March of 2015 from 11.90 percent in February of 2015. According to the U.S. Bureau of Labor Statistics, youth unemployment rate reached an all-time high of 19.50 percent in April 2010. Unemployment early in a young person's career can have a lasting negative effect on their earnings, productivity, and employment opportunities. It is important to provide our nation's youth with the skills necessary to obtain an important job in the labor market.

ARA believes it is time for this outdated federal age requirement regulation to be reformed due to the growing driver shortage and high young adult unemployment rate. Without truck drivers, America's economy and major industries like the agricultural sector will be adversely impacted. We have seen what minor and major disruptions to the trucking industry have caused due to natural disasters such as Hurricane Katrina and Sandy, from food and fuel shortages to medical supply shortages. The current federal regulations will cause a man-made disaster unless Congress and the Administration take steps to modernize outdated CDL federal age restrictions.

Another regulatory burden plaguing our industry is the lack of a North American Industry Classification System (NAICS) code that truly represents our businesses. The NAICS system was developed as the standard for use by Federal statistical agencies in classifying business establishments for the collection, analysis, and publication of statistical data related to the business economy of the U.S. NAICS was developed under the auspices of the Office of Management and Budget (OMB), and adopted in 1997 to replace the old Standard Industrial Classification (SIC) system. There is no central government agency with the role of assigning, monitoring, or approving NAICS codes for establishments. Individual establishments are assigned NAICS codes by various agencies for various purposes using a variety of methods. The U.S. Census Bureau has no formal role as an arbitrator of NAICS classification.

The NAICS categories and definitions were not developed to meet the needs of regulatory applications. However, certain federal agencies such as OSHA and EPA are using the NAICS code to try to capture certain types of agri-businesses such as agricultural retailers (i.e. farm supply retailers) under regulations designed for manufacturers even though it does not fit the original intent of these regulations established by Congress. Farm Supply Retailers do not manufacture fertilizer at their facilities. Farm Supply Retailers are primarily engaged in the retail distribution of farm supplies, such as animal feeds, fertilizers (including custom blended products), agricultural chemicals, pesticides, plant seeds, and plant bulbs to agricultural producers (i.e. farmers and ranchers). However, because there was not a good definition under the NAICS code for farm supply retailers, most facilities / businesses have been using the code 424910: Farm Supplies Merchant Wholesalers as it was the closest to describe the products they sold to farmers. There is not a code classification under 44-45 Retail Trade that adequately covers the sale of farm supplies. The NAICS code needs to be immediately fixed to prevent OSHA, EPA and other federal agencies from attempting to treat farm supply retailers as manufacturers or it will have far reaching, adverse financial ramifications for the agricultural industry.

Creating a new NAICS code for Farm Supply Retailers would be a great way to resolve this issue. This industry comprises establishments primarily engaged in the retail distribution of farm supplies, such as animal feeds, fertilizers (includes custom blended products), agricultural chemicals, pesticides, plant seeds, and plant bulbs to agricultural producers (e.g. farmers, ranchers) and other end users.

Conclusion

While my testimony this morning highlights some of the negative effects the rural economy has had on the agriculture community recently, I am encouraged by the new administration's goals and priorities for the coming years. I am keenly aware of the terrific job Secretary Perdue and his staff have already done at the helm of USDA. Likewise, I know the honorable members of both the House and Senate Agriculture Committees and their staffs will work tirelessly to promote and protect America's farmers.

These men and women are some of the most resilient people on the planet and they should be commended for their hard work and dedication to feeding a growing world population. As a farm supply retailer, I am confident that improvements to safety nets in the upcoming farm bill, free and fair trade amongst agriculture producers and customers, and changes to the regulatory landscape hindering farm production will all contribute to a once again burgeoning farm economy.

Thank you for your continued commitment to supporting America's agriculture industry and I look forward to your questions.

RURAL POLICY RESEARCH INSTITUTE

Written Statement for the Record

Dr. Bruce Weber
Professor Emeritus, Oregon State University
and
Senior Economist, Rural Policy Research Institute

Before the

United States Senate
Committee on Agriculture, Nutrition, and Forestry

Washington, D.C.

May 25, 2017

The Rural Policy Research Institute provides objective analysis and facilitates public dialogue concerning the impacts of public policy on rural people and places.

University of Iowa College of Public Health
145 North Riverside Drive • Iowa City, IA 52242
www.rupri.org

Good morning, Chairman Roberts, Ranking Member Stabenow and other Committee members. My name is Bruce Weber. I am professor emeritus of applied economics at Oregon State University and a senior economist at the Rural Policy Research Institute. I am here today to provide an economic perspective on rural America, informed by recent research.

Rural economics literature offers two important conclusions:

(1) Healthy rural communities are important for both rural and urban people in this nation, and the well-being of farm households is directly affected by the infrastructure and jobs available in their rural communities.

(2) Federal rural development investments of the kind made through the Farm Bill (in utilities, broadband, small businesses, for example) have enhanced employment and reduced poverty in rural communities.

Below are four empirically-based realities which support these conclusions. I hope these provide useful background for this Committee as you develop the Farm Bill. In this discussion, I use the federal metropolitan/ nonmetropolitan classification to define rural counties.

Farm prosperity, rural community vitality and urban prosperity have become tightly linked, as farm households have become more dependent on off-farm income and as rural and urban areas have become more interdependent.

Farm household well-being is very dependent on rural community prosperity. Most farm households earn the majority of their income off the farm. For the 85 percent of U.S. farms that are small family farms, with less than $350,000 in sales, the Economic Research Service/USDA estimates that "Virtually all of these farms' income comes from off-farm wage/salary jobs and unearned income (dividends, interest, rent, Social Security, other public programs, private pensions, etc.) rather than farm or off-farm self-employment."[1] Even the largest farms have substantial off-farm income. Overall, "wages from off-farm jobs accounted for more than half of off-farm income across all farm households. "[2]

Economic and social shocks over the past century have blurred the boundaries and increased the links between urban and rural areas. Lichter and Brown identify technological change, globalization and governmental devolution as drivers of the increased linkages between urban and rural places, and articulate the key role of technology: "Technological advances have brought most aspects of rural life into the

[1] Economic Research Service, *America's Diverse Family Farms 2016 Edition* EIB-164 December 2016. This 85 percent could include some farms that reported gross cash farm income of more than $350,000 whose operators report being retired or report a major occupation other than farming.
[2] USDA ERS website, Farm Household Income and Characteristics page, updated February 07, 2017; accessed May 19.2017

urban fold and linked rural people and communities directly to the global economy. "[3] Irwin et al., based on their reading of recent research, conclude that "ongoing economic restructuring, caused by falling transportation costs, new communications technologies, and increased global competition, has simultaneously strengthened urbanization and spurred urban decentralization" and that "urban growth has penalized more remote rural areas in terms of lower job and population growth. The exceptions are amenity-rich rural areas, particularly those in the United States that have grown rapidly as a result of rising real incomes and changes in transportation and technology."[4] (p. 453)

Connections between rural and urban places have been strengthened as a result of new technologies that have reduced the cost of moving goods and people and that have allowed new forms of communication that have enhanced connectivity. However, while rural regions are better connected to urban regions than in the past, it is not clear that improved connectivity will lead to better economic outcomes for rural regions.

Rural growth or decline also affects urban communities. Most studies of rural-urban interdependence focus on how changes in the fortunes of urban centers spread out to surrounding rural communities.[5] This literature finds that the effect of urban growth extends far into the hinterland, through trade in goods and services, and through commuting of workers.[6] But other studies have examined the reverse relationship: how rural growth affects urban centers. One study of the region centered on Portland Oregon, for example, found that in 2006 the effect of an increase in rural exports on the urban economy was three times as large as the effect of core region exports on the surrounding rural economy. [7] This same study also found that the share of the Portland economy's output based on the exports of the surrounding rural region was larger than the share of the surrounding region's economy that was based on Portland exports. The health of the regional economy around Portland was more important to the urban economy than vice versa.

[3] Lichter, Daniel T. and David W. Brown. 2011. Rural America in an Urban Society: Changing Spatial and Social Boundaries. *Annual Review of Sociology*. 37:565-592. p. 567-8.
[4] Irwin, Elena G., Kathleen P. Bell, Nancy E. Bockstael, David A. Newburn, Mark D. Partridge, and JunJie Wu. (2009). "The Economics of Urban-Rural Space." *Annual Review of Resource Economics*. (1): 435-462.
[5] For a recent review of this literature, see Bruce A. Weber and David Freshwater. The Death of Distance? Networks, The Costs of Distance and Urban-Rural Interdependence. Chapter 13 in *International Handbook of Rural Studies*. Mark Shucksmith and David L. Brown, co-editors. New York: Taylor and Francis. 2016.
[6] See Joanna P. Ganning, Kathy Baylis, and Bumsoo Lee. 2013. Spread and Backwash Effects for Nonmetropolitan Communities in the U.S. *Journal of Regional Science*. 53 (3): 464-480. See also Mark D. Partridge, Ray Bollman, M. Rose Olfert, and Alessandro Alasia. 2007. "Riding the Wave of Urban Growth in the Countryside: Spread, Backwash, or Stagnation," *Land Economics*, 83(2):128–152.
[7] Lewin, Paul, David Holland and Bruce Weber. 2013. "Core-periphery dynamics in the Portland Oregon Region: 1982-2006." *Annals of Regional Science*. DOI 10.1007/s00168-013-0552-6.. See also Edward C. Waters, David W. Holland, and Bruce A. Weber. 1994. Interregional Effects of Reduced Timber Harvests: The Impact of the Northern Spotted Owl Listing in Rural and Urban Oregon. *Journal of Agricultural and Resource Economics*. 19(1): 141-160.

America's rural economy is now very diverse and, while agriculture remains important, it is no longer predominant.

Farm income and employment is a primary driver in many rural counties in the U.S. One-fifth (391) of the 1976 nonmetropolitan counties have been identified by ERS as farming-dependent. But farm earnings and employment account for only 4.4 and 5.7 percent, respectively, of all nonmetropolitan earnings and employment[8] and most rural counties in the U.S. are driven primarily by nonfarm sectors. Half of the rural counties in the U.S. are specialized in something other than farming: there are 351 rural counties specialized in manufacturing, 238 whose major employment or income is in federal and state government, 228 specialized in recreation, and 183 mining-dependent. And the remaining 30 percent (585) of the rural counties have a quite diversified economic base (the "nonspecialized" counties in the ERS classification).

Not surprisingly, there are strong regional concentrations of different economic bases. As can be seen in the map below, "farming-dependent counties are concentrated in the Great Plains, the manufacturing-dependent counties are found more often in the Rust Belt and Southern Piedmont, while Federal-State Government-dependent counties are clustered in the West."[9]

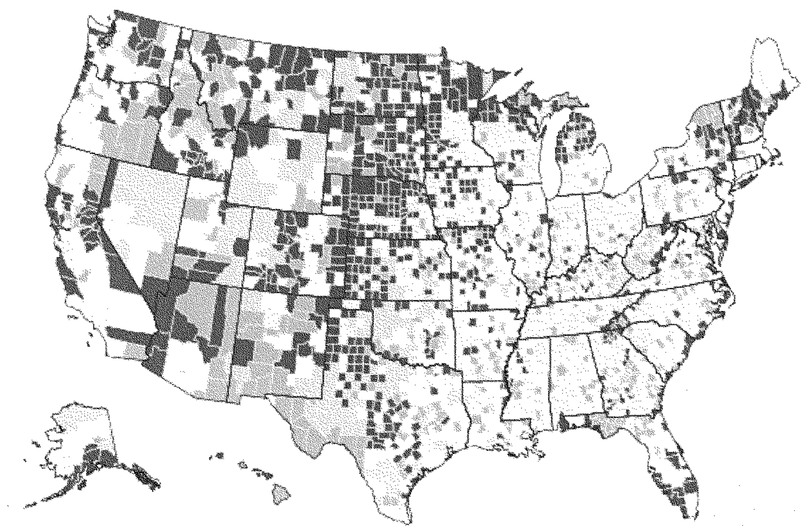
Again, these are groupings by primary income and employment, and most rural counties are further diversifying, over time. For example, one innovation worth noting is the growing interest and investment in bio-based manufacturing.

---

[8] Estimate provided by USDA Economic Research Service based on 2015 data released in 2016 from the US Department of Commerce Bureau of Economic Analysis website.

[9] Timothy Parker. 2015. Updated ERS County Economic Types Show a Changing Rural Landscape. *Amber Waves* Issue 11. https://www.ers.usda.gov/.../updated-ers-county-economic-types-show-a-changing-rural...

Twenty percent of all nonmetropolitan counties are farming-dependent over 2010-12*



Nonspecialized (1,236 counties) Mining-dependent (219 counties) Federal-State Government-dependent (405 counties) Farming-dependent (444 counties)
Manufacturing-dependent (506 counties) Recreation (332 counties)

*Based on a 3-year weighted average of farm income and employment between 2010 and 2012.
Source: USDA, Economic Research Service.

Rural Communities face unique challenges related to small populations, low-density settlement patterns and remoteness from urban centers

The challenges facing rural areas due to small populations, low-densities and distances to urban centers are well understood. Small and sparsely settled places can't take advantage of economies of scale in production and marketing, leading to higher production costs and smaller retail markets, with fewer choices and higher prices. Nor do they support agglomeration and the resulting innovative, cost-reducing technologies and processes. Remoteness from urban centers increases transportation and communication costs, and the provision of, and access to, government services.

Research on the challenges of small population size suggests that smaller communities are more at risk of population decline than larger ones, with communities with less than 1,250 being most at risk. Other things equal, geographic isolation from large cities and low wage rates provide some protection from net out-migration for the smallest communities, but even for the smallest places, a larger population base lowers the risk of net out-migration.[10]

[10]Yong Chen, Lena Etuk and Bruce Weber. "Are small communities at risk of population loss?" *Annals of Regional Science*. DOI 10.1007/s00168-012-0541-1 Published online: 17 October 2012.

Research on urban agglomerations has found that employment concentrations do appear to increase productivity, and that these effects attenuate sharply with distance, suggesting that distance to urban centers is a barrier. Partridge, Rickman, Ali, and Olfert have focused on the cumulative effect of distance for successive tiers in the urban hierarchy. They investigated the relationship between distance from the closest urban center in six successive tiers and county job growth using U.S. county data and found that job growth in a county is positively related to proximity to urban centers and that this relationship has become stronger over time.[11]

All this research establishes that smaller populations, sparser settlements and the relative remoteness of some rural places create economic disadvantage.

Place-based Federal investments in rural development enable rural communities to overcome some of these inherent challenges, enhance employment, encourage growth, and reduce poverty in rural areas.

Investments in rural communities create inherent public and private wealth in these communities. This strengthens the farm economy and links rural areas to urban communities. Improvements in transportation infrastructure and the rapid adoption of information and communications technology by businesses have greatly expanded the linkages between urban and rural regions.

However, proximity remains important and remote rural regions remain at a disadvantage. But distance is also not destiny. Public policies can enhance the links between urban and rural places, support the development of remote rural communities and support the evolution of local institutions, drawing on the unique strengths of individual places.

There is clear evidence that place-based public investments can encourage employment growth and reduce poverty in urban and rural areas.

Compelling evidence favoring policies designed to encourage employment growth in targeted "enterprise zones" has recently been provided. (Ham, et al.[12],and Busso, et al. [13]). Incentives that carefully reward firms that hire additional employees from among locals who have been residing in the targeted area do appear to raise local wages, as well as local employment rates. Partridge and Rickman (2008) provide evidence that "Higher rural poverty does not appear to be a simple result of the poor self-selecting to live in remote areas. The results suggest that place-based anti-poverty policies may be

[11] Mark D. Partridge, Dan S. Rickman, Kamar Ali and M. Rose Olfert. 2008. "Employment Growth in the American Urban Hierarchy: Long Live Distance." *Berkeley Journal of Macroeconomics—Contributions*. 8 (2008, Issue 1)

[12]John Ham, Charles Swenson, Ayse Imrohoroglu and Heonjae Song. Government programs can improve local labor markets: Evidence from State Enterprise Zones, Federal Empowerment Zones and Federal Enterprise Community" *Journal of Public Economics*, 2011, vol. 95, issue 7, pages 779-797

[13] Busso, M., Gregory, J., and Kline, P. (2013) "Assessing the Incidence and Efficiency of a Prominent Place Based Policy" *American Economic Review*, 103(2):897-947.

beneficial." (p. 131)][14] And Pender and Reeder (2011), in their analysis of the impact of rural development projects funded by the Delta Regional Authority (DRA) in distressed Mississippi Delta counties, found that "Per capita income, net earnings, and transfer payments grew more rapidly in DRA counties than in similar non-DRA counties, and those impacts were stronger in counties in which DRA spending was higher.." (p. i)"[15]

Similarly, I am currently collaborating in ongoing research which offers preliminary evidence that the USDA Rural Development grants and loans for business and economic development may have reduced poverty rates in counties in which these investments were made. Over the past four decades, the business and economic development programs of USDA have generated more than $30 billion (in 2009 dollars) in investments in rural communities. In this research, Kathleen Miller and I analyze the relationship between USDA Rural Development business and economic development grants and loans in the early 2000s and 2009 county poverty rates. We find that counties that received more in USDA RD business and economic development loans during 2000-2009 had lower poverty rates in 2009, controlling for initial poverty rates and other economic and demographic factors that affect poverty. Research currently underway with colleagues Stephan Goetz and Meri Daviasheridze also shows a positive effect of the RD program spending on employment growth over time.

In closing, I would suggest four guideposts should frame your considerations, in crafting the Rural Development Title of the next Farm Bill. [16]

(1) Remote rural places may benefit from the protection from competition that distance provides, and remote places may find that place-based policies can create jobs for local unemployed workers and reduce poverty. In many of these regions natural resources are likely to be the main source of economic growth, but must be utilized in new ways that increase local value-added by identifying new uses, new customers and new marketing approaches. The bio-based manufacturing sector is but one example.

(2) Good broadband connections are now essential for rural economic development. The internet provides a way to reduce the costs of distance, allowing rural firms to have a presence in urban markets, either as purchasers or sellers. Policies that support improvements in productivity, marketing and procurement for rural firms can also help them take advantage of niche markets.

---

[14] These two studies are reviewed in Bruce Weber and Maureen Kilkenny, "Rural Policy in the United States" Chapter 3 in William Meyers and Thomas Johnson, editors,, Volume I: Policies for Agricultural Markets and Rural Economic Activity in the *International Handbook of Agricultural and Rural Policy.* (forthcoming)

[15] Pender, John, and Richard Reeder. Impacts of Regional Approaches to Rural Development: Initial Evidence on the Delta Regional Authority, ERR-119, U.S. Department of Agriculture, Economic Research Service, June 2011.

[16] These guideposts draw heavily on Bruce A. Weber and David Freshwater. The Death of Distance? Networks, The Costs of Distance and Urban-Rural Interdependence. Chapter 13 in *International Handbook of Rural Studies.* Mark Shucksmith and David L. Brown, co-editors. New York: Taylor and Francis. 2016.

(3) It is useful to think about rural communities as belonging to networks. Individual places are linked to other places through physical connections – roads, rail lines, the Internet and the power grid. Firms in rural regions are linked through supply chains that have a local component but also have external connections. People and firms are linked through a variety of strong and weak ties that provide contacts, information and context for decisions. Policies that target individual firms or individual places without recognizing the interrelated nature of this development process are likely to be less effective than policies that encourage these linkages.

(4) In summary, Federal rural development investments are critical in overcoming the challenges many rural regions face. The Farm Bill Rural Development Title offers some of the most important of these place-based investments, which provide a foundation for rural regional innovation. And access to affordable, high speed, broadband is an essential building block in this foundation.

Thank you Chairman Roberts, Ranking Member Stabenow, and members of this Committee, for the opportunity to testify before you today. I would be pleased to answer any questions you may have.

QUESTIONS AND ANSWERS

MAY 25, 2017

Senate Committee on Agriculture, Nutrition & Forestry
Examining the Farm Economy: Perspectives on Rural America
May 25, 2017
Questions for the Record
Dr. Robert Johansson

Senator John Boozman

1) Dr. Johansson, the agricultural economy is struggling. Market prices are down for most commodities, and net farm income is projected at half the level of just a few years earlier. Cotton is a commodity that is unique in the current economic situation simply because cotton producers currently do not have access to the same farm bill programs as most other crops. Has USDA conducted any analysis to compare the net returns (market revenue plus government payments) to the total costs of production across the various crops that have access to the ARC/PLC programs relative to cotton? If so, will you please share with us what the comparison shows? If you have not done this analysis, then I would ask that you please conduct this analysis and provide it to this committee.

Response: Analyzing returns to production for crops eligible for ARC/PLC programs is not straightforward. Because ARC/PLC payments are paid on historical base acres rather than planted acres, farms receiving ARC/PLC payments may not be producing the same crops as their historical base.

To compare the contribution of government payments to farm income associated with production of ARC/PLC covered commodities and cotton, we have used two data series from USDA's Economic Research Service (ERS). These two series together allow for comparison of net market returns across commodities and an estimate of the value of government payments going to operations specializing in those commodities.

First, we show average returns per acre for corn, soybeans, wheat, and cotton from the ERS Costs and Returns data series, comparing value of production (price times yield) with total costs of production, including operating costs, opportunity cost of land, and allocated overhead (except for value of unpaid labor).

These are national average returns; actual costs and returns per acre will vary by individual producer, based on management decisions and on agronomic characteristics and weather in different regions. In some regions costs of production are higher and in others, lower; which would drive expected returns down or up, respectively. In addition, the total costs of production provided here include some overhead costs that are not immediate cash costs, such as depreciation of machinery and equipment, building and equipment maintenance, and opportunity cost of land. Removing just the opportunity cost of land brings average returns per acre for most of these commodities out of the negative in both years; removing additional overhead costs will make average returns per acre for all commodities positive in both years.

Producers can continue to operate in the short term without accounting for these longer term costs, and can even continue when returns to annual operating costs are negative, depending on savings and assets accumulated during higher price years to meet expenses or secure credit. However, over the longer term, these strategies will be less viable. For example, in the current farm economy we have seen debt levels begin to increase, rising 5 percent between 2015 and 2016, with an additional 5 percent forecast in the next year. Debt-to-equity and debt-to-asset ratios are also increasing and working capital has fallen by around 70 percent (between 2012 and 2017). The rate of return on farm equity has been negative since 2015 and rate of return on farm assets turned negative in 2016 and is expected to remain negative in 2017.

Second, we show government payments per acre for farm businesses specializing in those same commodities. The data in those calculations come from the ERS Agricultural Resources Management Survey (ARMS) and are for the calendar year. Farm businesses are defined as having greater than $350,000 in gross cash farm income or having a full-time operator. They account for about 40 percent of U.S. farms and more than 90 percent of U.S. value of production. A farm business's production specialization is classified by the commodity that accounts for 50 percent or more of the farm's value of production.

Net market returns and government payments per acre for selected ARC/PLC commodities and cotton

	2015	2014
Corn market returns per acre	-$37	-$62
Corn farm gov't pymts per acre	$32	$9
Soybean market returns per acre	-$48	$39
Soybean farm gov't pymts per acre	$19	$15
Wheat market returns per acre	-$77	-$51
Wheat farm gov't pymnts per acre	$13	$11
Cotton market returns per acre	-$57	-$239
Cotton farm gov't pymnts per acre	$12	$20

Government payments for calendar year 2015 included crop year 2014 ARC and PLC payments, marketing loan program benefits (marketing loan gains and loan deficiency payments), some carry-over payments under the ACRE program and the 2014 Cotton Transition Assistance Payment (CTAP) program, conservation programs, the Biomass Crop Assistance Program (BCAP), and disaster assistance.

These results should be considered illustrative, since payments and income vary substantially with the prices, weather, and other conditions in any given year. These two years will not reflect the range of what could be expected under a given set of program provisions in other years.

In addition, both 2014 and 2015 were transition years during which 2008 Farm Bill programs were closing out and 2014 Farm Bill programs were not yet implemented, except in the case of cotton transition payments. Thus, farms with commodity specializations likely to have ARC/PLC eligible base would have received little if any payments from commodity programs in calendar year 2014, sharpening the increase in payments between 2014 and 2015. Conversely, cotton farm businesses likely received CTAP payments in calendar year 2014, amplifying the decline in payments in 2015.

Ranking Member Debbie Stabenow

(1) Since Congress wrote the 2014 Farm Bill, prices for many commodities have fallen significantly, especially in late 2014 and 2015. While some commodities like wheat have remained low and continue to see farmers reduce the acres planted, other crops have seen a recovery in prices and increased plantings. Please provide an analysis of price trends for all major commodities since the passage of the 2014 Farm Bill. Which commodities have experienced price declines or recovery, and how have prices impacted farmers' prospective plantings for this year?

Response: All major crops saw record highs in crop years 2011 or 2012, but prices have fallen steadily since then under pressure from large global supplies and increasing export competition. All major field crops constituting the majority of acres in the United States have seen prices decline substantially from 2012/2013, and expectations are for those prices to remain mostly flat in the coming year. Despite largely flat price changes overall, some crops are expected to see improved prices as a result of lower acres and production while other crops are expected to see prices decline as area expands.

Wheat prices in particular have fallen sharply and only recently begun a modest rebound, the result in part of producers shifting significant acres out of wheat this year, generating expectations that smaller planted acreage will reduce future supplies. While the shift of acreage out of wheat in the United States is part of a larger trend, this year's decline pushed winter wheat area to its lowest level in over 100 years. Other crops have seen acreage expand, including corn, soybeans, and cotton. For instance, based on 2017 planting intentions, combined corn and soybean area is expected to reach a record at 179.5 million acres. However, the primary driver is that ***relative*** returns for those crops are more favorable, not that there are substantially improved prospects for corn and soybean prices for the coming year.

(2) Similarly, have any other factors other than price such as the requirement to plant a covered commodity on generic base led to increased plantings of some commodities? If so, which ones and why?

Response: Weather at planting can always lead to increased plantings of some commodities due to growing season concerns, and relative cost of production can also affect planting choices in the face of low price expectations across crops. Generic acre provisions appear also to have been a factor in increased plantings of some commodities by providing an incentive based on expected government payments, although some shifts in plantings on generic acres may be the result of other factors. The prospect of becoming eligible for ARC/PLC payments by attributing plantings of covered commodities to generic base more closely ties the ARC/PLC payment to the planting decision for those acres. As a result, expected program payment rates that look attractive relative to current market prices can lead to additional plantings of eligible crops and potentially to less cotton planting.

For example, with falling commodity prices, some commodities might be expected to generate PLC payments, increasing their attractiveness. A recent University of Illinois and Ohio State University analysis of Farm Service Agency program data (http://farmdocdaily.illinois.edu/2017/04/beneath-the-label-a-look-at-generic-base-acres.html) showed that about 60 percent of generic base acres were attributed to covered commodities in the first 3 years of the 2014 Farm Bill. Accounting for some variations from year to year, in roughly descending order, the generic base acres were planted to soybeans, corn, wheat, sorghum, peanuts, and other crops. Additional analysis by the same team (http://farmdocdaily.illinois.edu/2017/05/generic-bases-impact-on-planted-us-acres.html) found that changes in generic acre plantings can be explained largely by the increase in net cash returns provided by program payments. Because cotton is not an eligible commodity under the ARC/PLC program, planting decisions on generic acres may encourage less cotton planting--only about 7 million acres out of approximately 17 million acres of generic base have not been attributed to plantings of covered commodities.

(3) There is a desire to cover cotton either as a fiber like it was covered previously or as an oilseed under the ARC/PLC safety-net in the next farm bill. Can you discuss the price and yield data that is available for cotton fiber and cottonseed with respect to which is a more robust data set (e.g. number, frequency and reliability of data availability over time) and less likely to exhibit excess variability?

Response: Price data for cotton lint are much more extensive than price data for cottonseed. Cotton lint price data are available from domestic and foreign futures markets for various delivery months and years, there is an established "world" (Far East) price published daily, the National Agricultural Statistics Service (NASS) produces a national average U.S. price each month and for the crop year, and AMS reports spot prices for 7 cotton producing regions on a daily basis. Readily accessible price data from NASS for cottonseed are only available on an annual basis and monthly from August to February each marketing year. The Agricultural

Marketing Service (AMS) also has weekly spot prices for whole cottonseed for several regions, but it is unclear how robust the data are in any given week.

The National Agricultural Statistics Service (NASS) tracks production of both the lint fiber and the cottonseed. NASS provide estimates of production for both lint and seed periodically in its monthly Crop Production report. It is further able to refine both series as it also collects data on the ginning of lint as well as the crushing of cottonseed, where it can use such disappearance to evaluate its initial production estimates. In the case of lint, NASS collects field measurements (area and yield) as well as a backup measurement at the gins, thus providing crosschecks on production estimates.

NASS estimates cotton planted and harvested area and estimates lint yield directly; cottonseed yields can also be calculated. However, the production of lint and seed is not in fixed proportion and can vary from year to year based on agronomic factors.

Senate Committee on Agriculture, Nutrition & Forestry
Examining the Farm Economy: Perspectives on Rural America
May 25, 2017
Questions for the Record
Dr. Nathan Kauffman

Chairman Pat Roberts

1. I understand there are a number of economic factors today different from the 1980s, such as low interest rates, low debt-to-asset ratios, and higher land values that are playing an important role in helping farmers weather the current economic conditions. In your discussions with bankers, are there specific Farm Bill programs, like crop insurance, that bankers rely on to determine whether they are able to issue loans to farmers, particularly new and beginning farmers?

There are many factors that may affect a bank's decision to extend credit to a potential borrower, but the primary factor is an assessment of the borrower's ability to repay the loan. Increased profitability, gains in wealth, income earned away from the farm, or any form of support that improves a borrower's ability to repay their debt can affect banks' lending decisions. Within the Farm Bill, crop insurance is a significant form of support because it increases the likelihood that farmers, particularly those with limited equity in their operations, will be able to continue to meet their loan obligations even if revenue from crop sales declines substantially during the year. However, there are many components of the Farm Bill that may also support farm producers, directly or indirectly, by enhancing revenue in other ways, improving education and access to information, or providing other opportunities for investment and growth.

Senate Committee on Agriculture, Nutrition & Forestry
Examining the Farm Economy: Perspectives on Rural America
May 25, 2017
Questions for the Record
Mr. Alec Sheffer

Chairman Pat Roberts

1. From the retail perspective, what trends have you seen regarding input costs? Are there any notable trends or continuation of trends on the cost side of the ledger to your customers?
   Yes, there are notable trends and they are:
   1) Operating cost are volatile
   2) Product availability
   3) Lack of availability of CDL drivers
   4) Continued increase in Precision Ag

2. In your testimony, you highlighted some of the oftentimes unseen costs that impact our rural businesses and communities – regulatory costs. Could you provide the costs associated with some of these regulations that you mentioned from your written testimony? Additionally, how do you manage the costs your cooperatives incur complying with any regulations relevant to your business?
   Rising regulatory cost concerns determine what line of products my company stock and sell. The uncertainty created by the volatility of markets and regulatory costs eliminate options for our producers.

3. You discuss several regulatory challenges facing your business and rural America. Specifically you mention challenges associated with EPA, the Clean Water Act, pesticide reviews and registrations, and other issues. The Administration has taken some steps through executive order to scale back some burdensome and costly regulations, most notably the WOTUS final rule. However, not all regulatory challenges will be able to be fully solved through agency rulemaking alone. Would you be supportive of Congress addressing any of the challenges you mention through legislation?
   Yes, I would be supportive of this.
   1) Comprehensive Tax Reform – Repeal Estate Tax
   2) Regulatory – WOTUS, NPDES Permits, CDL driver expansion
   3) EPA Regulatory Reset
      a. Sound science
      b. Transparency
      c. Stakeholder engagement
      d. Predictable registration process
   4) Infrastructure overhaul
   5) Establish reliable, legal workforce for the ag sector

RURAL POLICY RESEARCH INSTITUTE

Questions for the Record

Dr. Bruce Weber
Senior Economist
Rural Policy Research Institute

In Response to Testimony Delivered Before the United States Senate Committee on Agriculture, Nutrition, and Forestry

The Rural Policy Research Institute provides objective analysis and facilitates public dialogue concerning the impacts of public policy on rural people and places.

145 North Riverside Drive• Iowa City, IA 52242
www.rupri.org

Senate Committee on Agriculture, Nutrition & Forestry
Examining the Farm Economy: Perspectives on Rural America
May 25, 2017
Questions for the Record
Dr. Bruce Weber

Chairman Pat Roberts

1. In your testimony, you cite the successes of "enterprise zones" as a model for encouraging private sector investments in rural areas. Given the current budget conditions that we face, what ideas have communities undertaken to encourage rural economic development?

   Chairman Roberts, federal programs that encourage leveraging and regional planning and investment address the four structural realities I mention in my testimony, which challenge the future of all rural communities. These dynamics have driven RUPRI's long time commitment to regional rural innovation approaches, which enhance the critical links between urban and rural places that foster innovation and strengthen value chains across rural and urban areas.

   The "enterprise zones" study I referenced examines one such set of programs. But for this Committee's purposes, the Delta Regional Authority study, and the ongoing research I am pursuing regarding the impacts of USDA RD investments, have greater rural relevance. (Both are discussed in my written testimony).

   Over the past decade, mayors, county commissioners, economic development organizations, and regional and community foundations have all begun the journey to far greater collaboration in shared investment approaches for rural economic and community development. This is a critical dynamic, which your Committee would be wise to continue to support. Broad regional investment collaboration is the goal of a number of programs that were passed in the 2014 Farm Bill. Section 6025 – Strategic Economic and Community Development, is one example. As you may recall, this provision enables USDA to prioritize projects that support the implementation of regional economic development plans, through four major RD program areas. All of those areas are important, but the rural business development grants program offers the greatest flexibility in furthering these ends. Unfortunately, this program is over subscribed and under funded in its current form.

   I would mention one challenge with Strategic Economic and Community Development as executed by RD. This program must be solely carried out in a rural area. This is a challenge, as it is also designed to support multi-jurisdictional strategic economic and community development plans. Often these cross rural and urban geographies.

In any case, the movement toward greater regional and leveraging dynamics via RD programs should continue to be encouraged. These will achieve better outcomes if state directors and senior career staff enhance their interaction with local mayors and county commissioners to further deal flow and investment leveraging. This should also be strongly encouraged.

Ranking Member Debbie Stabenow

1. Dr. Weber, this Committee is aware that RUPRI has worked closely with USDA Rural Development leadership and career staff over several administrations, to address the 4 structural realities outlined in your testimony. As you know, President Trump's budget proposal will severely reduce or eliminate many of the programs and agencies with which RUPRI has worked to build more regionally innovative, place-based rural approaches. Some argue these investments are either no longer necessary, or duplicative of other, more effective federal programs. Would you please expand, in detail why you disagree?

   Ranking member Stabenow, as I discuss in my written testimony, this Committee must address four fundamental structural realities that drive the future of rural people and places as well as the farm economy, which is prevalent in many rural areas but far from economically significant to many others.

   Because this great rural diversity is not well understood in Congress, many argue the mostly urban-based one size fits all approach, nearly universally evident in most federal policies and programs, also works well in rural America. It does not. In fact, the regionally innovative, place-based rural approaches that RUPRI has sought to encourage over many years are finally taking hold across the face of rural America, and they matter greatly to the success of rural communities.

   USDA RD programs under this Committee's authority provide three unique advantages that must be sustained. First, they are culturally appropriate and sensitive to the unique characteristics of our very diverse states, specifically their rural communities. This reflects the wisdom of those in prior service who created the USDA RD State Director appointees. These presidential appointees, as well as senior career staff, are the federal government's outreach and marketing corps to rural mayors, county commissioners and economic and community development professionals. In these intersections rural deal flow, investment leveraging and regional collaboration begins. If this face-to-face, rural federal outreach goes away, those rural communities with the greatest capacity, population and grant writing acumen will probably not be harmed. But the majority of rural communities definitely will be.

Secondly, the USDA Undersecretary for Rural Development serves as an ambassador/advocate for rural policy and programing across the federal establishment. Regardless of the current structural dynamic concerning the senior political leadership for this portfolio, it is absolutely critical that this leadership is not lost. Over the past three administrations, multiple innovations in rural development policy emerged from the Office of the Undersecretary for Rural Development.

Finally, the programs and agencies currently targeted by the Trump Administration for either reduction or elimination currently provide some of the most innovative, rural regional collaboration within the federal infrastructure of community and economic development. Should these programs be eliminated, their return is questionable, given rural America's declining political power. This committee has long recognized the federal mandate to assure equity to smaller population centers, with lower density and more remoteness. The remarkable USDA RD programing portfolio reflects a continuing commitment, regardless of party or geography to sustain our rural populations, in the places they choose to call home. Your wisdom in doing so has significantly enhanced our nation's cultural assets, natural resource stewardship and economic and community vitality. Your continued commitment is critical to our nation's rural communities.

2. Dr. Weber, in your written testimony you emphasize the critical importance of broader rural economic prosperity to the success of farm households, and the evidence that USDA RD programs are effective in sustaining these rural communities. The role of off-farm income is critical to most producers, as you state. What should this Committee specifically do to broaden this structural appreciation and what specific decisions should we take, in light of your testimony, to assure we continue to support these critical ag and rural development linkages?

Ranking member Stabenow, it has never been more clear that America's farm households are dependent upon the incomes they derive off the farm. These resources sustain the family farming enterprise in our country today. It was refreshing in this hearing that even the staunchest advocates for the agricultural sector among your colleagues have come to acknowledge this reality.

There are several reasons for this growing recognition I believe. The bio-based opportunities emerging, the renewable energy possibilities before us – many agriculturally-based, and the sheer overpowering strength of these three-decade trend lines, all converge to force this acknowledgement. Also, it appears farm organizations have finally decided it will not be viewed as a lack of support for the agricultural sector if a senator acknowledges his or her *support for broader rural economic development. This has definitely not always been the case.*

Given all this, your Committee has a unique opportunity, given this current budget challenge, to reach out and seek the support of your long-time agricultural advocates for broader rural development support. Truthfully, many will also receive significant benefit to their producer members. Enhanced rural investment in broadband, affordable healthcare, broader infrastructure – including roads and bridges -- and ongoing economic and community development all accrue to the significant benefit of rural producers.

In this current moment, with a common adversary in the Trump budget proposal, this committee could significantly enhance the potential for these connections to be clearly stated and supported. If our nation's agricultural organizations chose to significantly advocate for the major rural policy and programming outcomes most rural development advocates seek, they would be achieved.

○