COBANK™

OUTLOOK Economic Data and Commentary

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The U.S. Economy at Mid-Year: Plodding Along

The U.S. economy in the first half of 2015 has looked like many of the previous years we've weathered since the end of the financial crisis: not altogether bad, but certainly not great. Despite a number of bright spots – including an improving job market and lower energy prices – we continue to hear the same refrain about the economy's overall performance: *slow but steady growth.*

Earlier this week, the government released the preliminary numbers for the second quarter, indicating the U.S. Gross Domestic Product expanded at an annualized rate of 2.3 percent. That represents a significant improvement from the first quarter, but it is still disappointing relative to the high expectations many economists and other experts had at the beginning of the year.

For perspective on the economy's performance and what it means for rural America, *OUTLOOK* turned to Joseph Glauber, Senior Research Fellow at the International Food Policy Research Institute in Washington, D.C. From 2008 to 2014, Dr. Glauber was chief economist at the U.S. Department of Agriculture, where he was responsible for agricultural forecasts and projections, and oversaw climate, energy and regulatory issues.

OUTLOOK: Give us your high-level thoughts on the strength of the economy in the first half of 2015. Were there any big surprises?

Joseph Glauber: The biggest surprise was the economy's slower than expected growth in the first quarter. The Commerce Department just revised upwards the estimate for first quarter GDP to 0.6 percent annualized growth from what previous estimates showed was a 0.2 percent decline. But even that 0.6 percent growth compares unfavorably to 5 percent in the third quarter and 2.2 percent in the fourth quarter of 2014. That slower growth was due largely to bad weather – mostly in the Midwest and Northeast – which stalled consumer spending.

This Month's Expert

Joseph Glauber is a Senior Research Fellow at the International Food Policy Research Institute in Washington, D.C., where his areas of interest are price volatility, global grain reserves, crop insurance and trade. Prior to joining IFPRI, Glauber spent over 30 years at the U.S. Department of Agriculture, including serving as the agency's chief economist from 2008 to 2014. As chief economist, he was responsible for the USDA's agricultural forecasts and projections, oversaw climate, energy and regulatory issues, and served as chairman of the board of directors of the Federal Crop Insurance Corporation.

Dr. Glauber received his doctorate in agricultural economics from the University of Wisconsin in 1984 and holds a bachelor's degree in anthropology from the University of Chicago. In 2012, he was elected Fellow of the Agricultural and Applied Economics Association.

The International Food Policy Research Institute provides research-based policy solutions to sustainably reduce poverty and end hunger and malnutrition in developing countries.

The advance estimate for second quarter GDP showed an annual growth rate of 2.3 percent, which was also a little lower than expectations. The overall picture remains the same – slow but steady growth with solid job gains. The GDP numbers would bolster the view that the Fed will likely raise interest rates this fall.

But there are a lot of positive things going on in the economy. The unemployment rate has come down. Inflation remains low, but there is some concern that it's too low. We haven't yet seen the anticipated increases in interest rates that many of us thought would have come a little bit earlier, but presumably those will come at the end of the year.

Unfortunately, the U.S. economy is really the only bright spot in the world right now, or at least among developed countries. I saw a news story that the global equity markets lost $150 trillion in one day as a result of the announcement that Greece was likely to default on its loan obligations. Presumably, there will be a recovery but the Eurozone has been struggling, although the recent debt agreement with Greece is a positive sign.

OUTLOOK: Where do you see inflation going from here? Are we in any danger of deflation?

JG: The Consumer Price Index for June 2015 showed almost no change in year-over-year prices, just a 0.1 percent increase. Any time you have zero inflation, there's always some concern about deflation. But I think it's more likely that we're going to continue to see a very low rate of inflation with some pickup towards the end of the year.

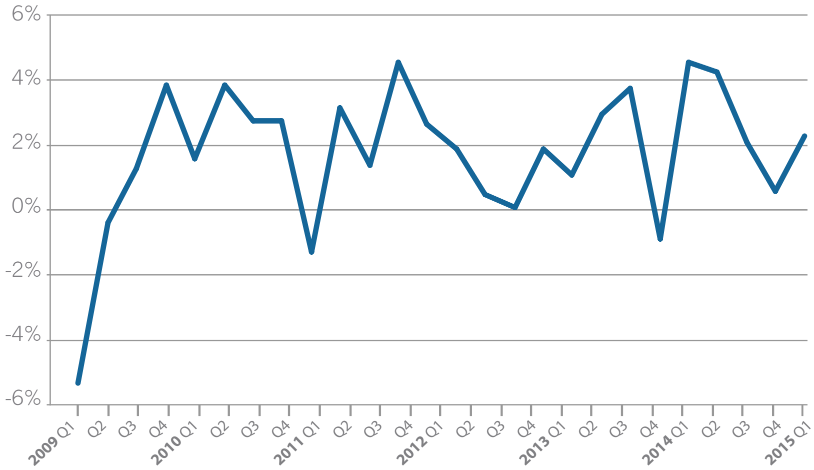
Economists are concerned about long-term deflation because it can drive down wages or, if it doesn't, rising real wages can adversely affect employment. In the short run, lower prices can be a benefit, particularly if it means lower input costs and lower consumer costs.

OUTLOOK: Food prices are an important driver of inflation. What is happening in that area?

JG: Food prices have changed very little, certainly, with the exception of meat. Prices for various meat products have remained high for various reasons: the lingering effects of the drought in the southern plains, which delayed expansion in the beef sector; a virus that reduced pork supplies; and the recent problem with eggs because of the bout of high-path avian influenza. Generally, though, food prices have been quite low and falling. June 2015 food-at-home prices – or prices of food purchased in grocery stores – were only 1.0 percent higher than June 2014 prices, well below the more typical 2 to 2.5 percent inflation that we have seen in recent history.

QUARTERLY GDP PERCENT CHANGE

2009–Present



Source: U.S. Bureau of Economic Analysis

OUTLOOK: Why has beef been an outlier in terms of commodity prices? Do you expect those prices to continue to rise?

JG: Originally, it was driven by high feed costs, when prices for corn, soybeans and other grains all hit records in 2007, 2010 and 2012. That put a lot of strain on the animal industries, resulting in tight margins for hogs, poultry and dairy.

Then, cattle were directly hit by bad weather. The southern plains had four years of back-to-back droughts with very poor pasture conditions. Texas, Oklahoma, and Kansas lost as many as 1 million head of cattle over a two- or three-year period. But that has started to change. We've seen a lot of rains return to Texas and the southern plains, and the drought picture looks much improved.

On the beef side, people are retaining more cattle. It looks like they're trying to build herds. What that means, of course, is that fewer cattle are coming to market, and we've seen these record high prices for beef as a result. The anticipation is that we'll turn around, that we will see more production and more supplies coming onto the market. I would expect that beef prices will come down over time.

Unlike other species, cattle just take a long time. It's like moving an aircraft carrier. We've been in a long-term decline in terms of overall cattle inventory, but I'm expecting that to turn around.

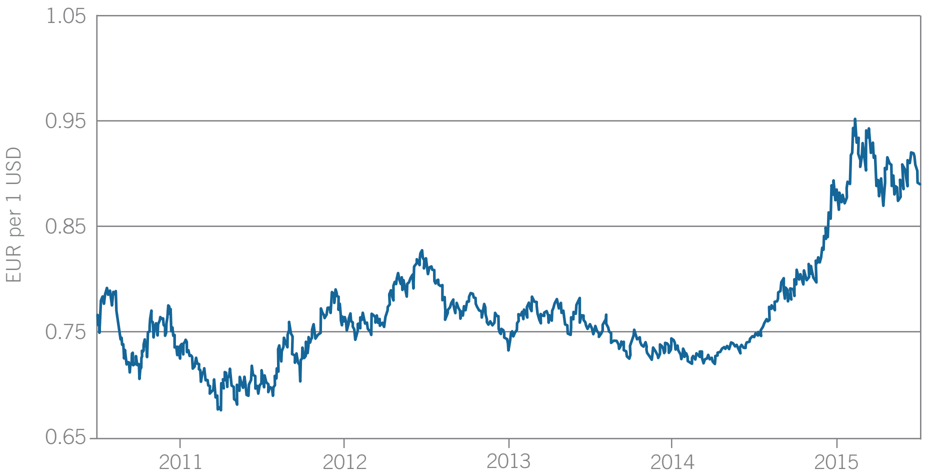
OUTLOOK: How has falling unemployment impacted consumer demand for food and underlying demand for agricultural commodities?

JG: Consumer demand for food in the U.S. is much less tied to income growth than it is in other less-developed economies. The U.S. is a mature market, so there is less variability. Poor families certainly spend more of their income on food than wealthy families, but people tend to spend that first dollar on food purchases regardless of income.

Where income growth really matters is in emerging markets. For very poor households, increases to income will be spent largely on food. As per capita income increases, diets shift towards meats, dairy products, eggs, vegetable oil and fresh fruits and vegetables. Countries like China have seen sharp increases in per capita consumption of these commodities. That shows up less for exports in our meat or dairy products to them, although they do have some impact, but more so in feed components, because China imports a lot of feed.

THE DOLLAR VS. THE EURO

Over the past five years



Source: www.XE.com

For example, 65 to 70 percent of world trade in soybeans goes to to China, which has seen its imports grow by more than 10 percent per year. We anticipate that growth to slow a bit over the next 10 years, but they're still going to be a huge driver in markets.

Not only are the Chinese increasing their consumption of meat, poultry and dairy, but they are improving their animal production processes. They're moving out of backyard operations to more confined operations, especially for poultry and pork. With that comes more demand for protein to feed animals. Over the long run, that will mean more caloric imports as well.

OUTLOOK: Do you think the dollar is going to stay at its current level relative to other currencies?

JG: I think it will, at least for a while until the problems in Europe begin to settle down. If there is an interest rate hike later in the year like most are anticipating, that too will lend a little bit of strength to the dollar.

But over the longer run, it depends on the overall strength of the U.S. economy. Some people still feel that we have a lot of structural weakness and I would expect the dollar to come down a little bit because it has been a "safe-haven" currency for investors. But over the next 6 to 12 months, we should still see a fairly strong dollar.

OUTLOOK: How is the strength of the dollar affecting agricultural exports?

JG: No question, it has had an adverse impact on exports. The USDA is projecting exports for fiscal year 2015 (which began in October 2014) at about $140.5 billion, compared to $152.5 billion last year. While a $12 billion decrease is nothing to sneeze at, it's coming off a record year. Exports of $140.5 billion would still place 2015 among the five best years we've ever had.

A lot of that decline, frankly, is due to price and less so to volume. We're still selling a lot of grain and oilseeds, but price levels have fallen because we've seen such large global crops.

"There's no question that with the strength of the dollar, we are having to compete harder now.

But there's no question that with the strength of the dollar, we are having to compete harder now. U.S. agriculture enjoyed a weak dollar for the 10 years prior to the recent run-up, which began in June 2014. All of the Fed's quantitative easing contributed to the decline. A weaker dollar certainly contributed to the explosion in agricultural exports since 2005.

Looking outward, all that began to change with the weakness in the global economy, particularly in Europe, where the dollar began to appreciate versus the euro. And, the dollar has appreciated against currencies of some of our competitors like Brazil and Australia.

OUTLOOK: How have lower oil prices affected the agricultural economy?

JG: First, on the input side, agriculture is a big user of energy. Typically, around 15 percent of agricultural expenses go to fuel and oil, and also fertilizer and other components that are very energy-intensive industries.

Farm income projections for 2015 show that fuel expenses will likely decrease by about $4.5 billion and fertilizer expenses will be down by about $1 billion, largely due to lower oil and natural gas prices. That's a very big positive for the agricultural economy.

At the same time, ethanol competes with oil and gas as a fuel. With falling oil and gas prices, ethanol margins have fallen. Under the current renewable fuel standard, ethanol accounts for roughly 10 percent of U.S. fuel supply. On the other hand, lower energy costs should result in an increase in gasoline consumption, which will help overall ethanol sales.

Another factor affecting ethanol production is how much ethanol is exported. The U.S. has become a fairly significant exporter of ethanol. Just a few years ago, we exported almost a billion gallons of ethanol. Now with lower energy prices, it's a much more competitive market. Still, short of a collapse in the global economy, some rebound in energy prices over the next year or so will help ethanol.

"People lament the poor infrastructure and collapsing bridges and roads in urban areas, but rural America is just as bad off as its urban counterparts.

OUTLOOK: How has the low interest rate environment affected U.S. agriculture? Has there been an increase in investment?

JG: There's no question that low interest rates have been very beneficial to the overall farm economy, all else held constant. We've seen big machinery purchases, and land values have increased substantially over the last several years. Interest rates have been a big part of that picture.

Of course, that has been supported by the overall strength of the agricultural economy – the fact that we had high prices and strong revenue years. Farmers had more money and they were able to make machinery purchases and other investments.

Interest expenses were about 5 percent of total expenses this past year. They were a little bit higher than that five or six years ago. As market prices have come down, the demand for debt looks to be increasing somewhat because farmers need to borrow more rather than paying with cash. If interest rates were to rise a bit – as most people, including me, expect – that would mean interest expenditures increasing as well.

Is that something to be concerned about? The aggregate debt-to-asset ratio has been at historically low levels – between 10 and 11 percent – so the farm economy is in pretty good shape to sustain a potential downturn, at least in the short run.

OUTLOOK: Has there been a sufficient level of infrastructure spending in rural America over the past few years – water, power, telecom?

JG: We have seen improvements in some areas – such as telecommunications – but the rural sector is still lagging compared to urban and more suburban and areas for broadband. Still, a lot of progress has been made there over the past 10 years.

But going into physical infrastructure – things like roads and bridges and rail – it is very mixed. People lament the poor infrastructure and collapsing bridges and roads in urban areas, but rural America is just as bad off as its urban counterparts. They're suffering the same way.

“In the broad economy, I see continued slow recovery.

The food sector uses almost one-third of total freight transport in the US. That’s why reauthorization and funding of the Highway Trust Fund is so important. It’s why maintaining sufficient balances in the Inland Waterway Trust Fund, which funds almost half of the capital costs of the inland waterway, is so important. Increased transportation costs due to poor infrastructure mean lower prices for producers and higher prices for consumers.

On the trade side, there are the problems with the locks and dams on the Mississippi. We’re going to see a new Panama Canal that will allow much larger ships to come in, but that will be mitigated by many of the ports on the Gulf Coast that they won’t be able to access because they’re just not deep enough. These are long-term issues that affect our competitiveness and will need to be addressed.

There are some bright spots. We have some improvement in addressing the rail problems we had in the upper Midwest two years ago due the competition for rail capacity between energy and ag products. Additional track has relieved some of the bottlenecks and improved those conditions. That’s a small piece of good news.

OUTLOOK: What economic issues do you think will be important to the U.S. agricultural community as we begin to approach the 2016 Presidential election?

JG: The two most significant issues are likely to be ethanol and trade. Iowa is an early caucus state and ethanol always seems to come up. The recent set of regulations put out by the EPA was seen by many as controversial, so I think that will be in the debate.

But I think the other thing is trade. We’ve seen this over the last month with the trade promotion authority going through Congress. The U.S. is close to concluding the Trans-Pacific Partnership negotiations, and really beginning to step up the negotiations on the Transatlantic talks with the European Union. Both of these trade agreements potentially offer significant benefits to U.S. agriculture, but they face opposition by labor groups and others.

I believe trade is very important for U.S. agriculture, so hopefully we'll see agreements successfully concluded. I think it's very encouraging that fast-track authority was granted, but we're a long way from seeing the agreements brought to Congress for approval, and I expect trade to be a topic in the Presidential debate.

OUTLOOK: What is your high-level outlook for the remainder of 2015 and then 2016?

JG: In the broad economy, I see continued slow recovery. If most of the macro forecasts are right, we're going to continue to see annual economic growth in the 2 to 2.5 percent range. But we are seeing positive signs of improvement for the U.S. economy. That's all good.

Hopefully, we'll continue to see recovery globally as well. The current setbacks – like the debt crisis in Greece – are always a concern. There's also some concern over the emerging markets, which have been such important for drivers in the global economy. If their growth were to falter significantly, that would be a real problem.

I think on the agricultural economy, we will continue to be challenged by low commodity prices. The good news is that farmers are coming off of some very good years, so the degree to which they've built reserves will certainly help. Also, some of the new farm programs will offset some revenue losses. I think we'll begin to see some improvement in farm income come 2016. With lower prices, we will begin to see less production of crops worldwide, which will help moderate prices over the longer run. There will be some improvement, but modest.

The real question is, what are the uncertainties? Will energy prices rebound? Will we see another year of record global crops? Unfortunately, most of us are usually a lot better at telling you why something happened yesterday than what will happen tomorrow.

Interest Rates and Economic Indicators

The interest rate and economic data on this page were updated as of 6/31/15. They are intended to provide rate or cost indications only and are for notional amounts in excess of $5 million except for forward fixed rates.

KEY ECONOMIC INDICATORS

Gross Domestic Product (GDP) measures the change in total output of the U.S. economy. The Consumer Price Index (CPI) is a measure of consumer inflation. The federal funds rate is the rate charged by banks to one another on overnight funds. The target federal funds rate is set by the Federal Reserve as one of the tools of monetary policy. The interest rate on the 10-year U.S. Treasury Note is considered a reflection of the market's view of longer-term macroeconomic performance; the 2-year projection provides a view of more near-term economic performance.

ECONOMIC AND INTEREST RATE PROJECTIONS

Source: Insight Economics, LLC and Blue Chip Economic Indicators

				US Treasury Securities	
2015	**GDP**	**CPI**	**Funds**	**2-year**	**10-year**
Q3	3.20%	2.20%	0.16%	0.97%	2.47%
Q4	3.00%	2.00%	0.29%	1.19%	2.54%
2016	**GDP**	**CPI**	**Funds**	**2-year**	**10-year**
Q1	2.70%	2.00%	0.45%	1.46%	2.71%
Q2	2.70%	2.30%	0.62%	1.71%	2.87%
Q3	2.70%	2.40%	0.80%	2.01%	3.09%

PROJECTIONS OF FUTURE INTEREST RATES

The table below reflects current market expectations about interest rates at given points in the future. Implied forward rates are the most commonly used measure of the outlook for interest rates. The forward rates listed are derived from the current interest rate curve using a mathematical formula to project future interest rate levels.

IMPLIED FORWARD SWAP RATES

Years Forward	3-month LIBOR	1-year Swap	3-year Swap	5-year Swap	7-year Swap	10-year Swap
Today	0.29%	0.51%	1.26%	1.79%	2.16%	2.49%
0.25	0.40%	0.67%	1.41%	1.91%	2.25%	2.53%
0.50	0.58%	0.86%	1.60%	2.04%	2.35%	2.61%
0.75	0.77%	1.09%	1.75%	2.18%	2.47%	2.73%
1.00	0.98%	1.27%	1.89%	2.28%	2.54%	2.76%
1.50	1.40%	1.69%	2.17%	2.52%	2.73%	2.92%
2.00	1.72%	1.96%	2.39%	2.67%	2.85%	3.00%
2.50	1.99%	2.19%	2.57%	2.81%	2.96%	3.08%
3.00	2.26%	2.43%	2.75%	2.95%	3.06%	3.16%
4.00	2.65%	2.79%	3.02%	3.14%	3.20%	3.27%
5.00	2.94%	3.05%	3.19%	3.29%	3.31%	3.37%

HEDGING THE COST OF FUTURE LOANS

A forward fixed rate is a fixed loan rate on a specified balance that can be drawn on or before a predetermined future date. The table below lists the additional cost incurred today to fix a loan at a future date.

FORWARD FIXED RATES

Cost of Forward Funds

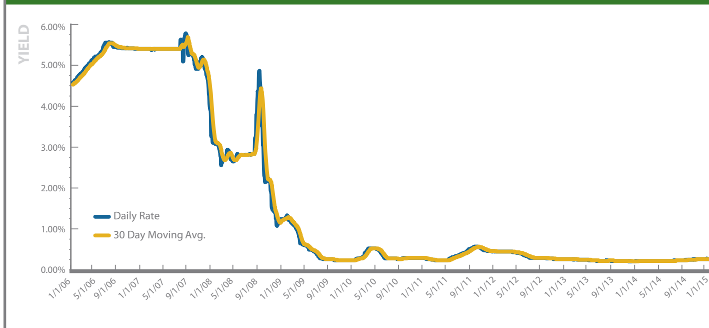
Forward Period (Days)	Average Life of Loan			
	2-yr	3-yr	5-yr	10-yr
30	8	9	7	6
90	19	22	17	13
180	33	40	30	23
365	75	83	63	46

Costs are stated in basis points per year.

SHORT-TERM INTEREST RATES

This graph depicts the recent history of the cost to fund floating rate loans. Three-month LIBOR is the most commonly used index for short-term financing.

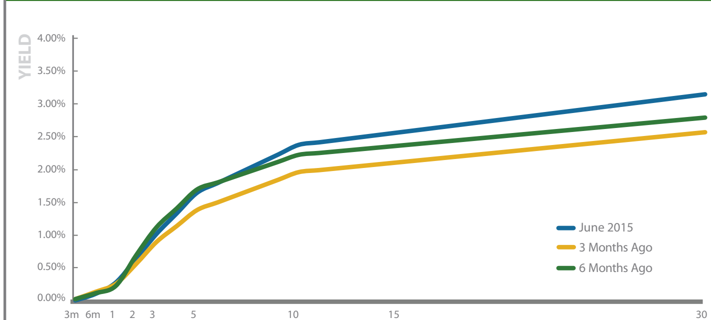
3-MONTH LIBOR



RELATION OF INTEREST RATE TO MATURITY

The yield curve is the relation between the cost of borrowing and the time to maturity of debt for a given borrower in a given currency. Typically, interest rates on long-term securities are higher than rates on short-term securities. Long-term securities generally require a risk premium for inflation uncertainty, for liquidity, and for potential default risk.

TREASURY YIELD CURVE



A New Way to Invest in Rural Communities

By Chris Shaffner

Chris Shaffner

While we know that a strong U.S. economy is driven by a strong rural economy, traditional investment strategies have long failed to recognize the opportunities in rural America. Investment capital has been slow to challenge the common, if unsubstantiated, assumption that performance outcomes in rural areas rarely beat urban investment returns. But that's beginning to change.

In April 2014, eight Farm Credit institutions joined forces in providing $150 million to create the Advantage Capital Agribusiness Fund, a Rural Business and Investment Company (RBIC), an important public-private partnership with the U.S. Department of Agriculture. Spurring equity investment in rural companies has long been a high priority for U.S. Secretary of Agriculture Tom Vilsack.

"This new fund will allow innovative small businesses throughout rural America to access the capital they need to grow and create jobs," Vilsack said when announcing the fund. "This new partnership will allow us to facilitate private investment in businesses working in bio-manufacturing, advanced energy production, local and regional food systems, improved farming technologies and other cutting-edge fields."

An RBIC operates like a private equity fund: A fund manager raises money from a group of investors, then invests that money in a variety of private businesses. Under the RBIC structure, the fund is licensed by USDA, but no taxpayer funds are utilized.

The Advantage Capital Agribusiness Fund holds true to Farm Credit's mission of supporting rural communities and agriculture by making equity investments in later-stage small businesses that are involved in agriculture, processing and marketing of agricultural products, farm supply, input suppliers, and rural communications. The first investment made by the Farm Credit-supported fund was in February of this year, to Iowa Cage-Free, LLC, enabling the company to transition six traditional egg-laying facilities into cage-free operations.

The fund also made an investment in North American Natural Resources, Inc. (d/b/a American Botanicals), a manufacturer and supplier of bulk herbs and botanical products in Missouri. In June, the fund invested in Hortau Corp., a California-based provider of precision irrigation management systems working to provide innovative tools designed to help agricultural producers manage water shortages in periods of drought. Through investments like these, the

Advantage Capital Agribusiness Fund is already providing investment dollars to exciting, agriculture-related businesses that are vital to rural communities' ongoing economic strength.

The Advantage Capital Agribusiness Fund isn't the only such initiative. CoBank, one of the eight Farm Credit organizations that provided funding for the fund, has also partnered with Central Iowa Power Cooperative to form Midwest Growth Partners, a $41 million private equity fund that will invest in growth-oriented companies located in the upper Midwest. Managed by Midwest Growth Advisors, with CoBank participating as a limited partner, the fund aims to strengthen the economic fabric of Midwestern communities. The fund is projected to have nearly 50 percent of the commitment invested by the close of 2015.

Both Farm Credit and the public sector understand that equity-backed companies are job creators and economic catalysts in their respective communities. We also see the positive, tangential impact that these companies can have on local supply chains, civic infrastructure, and workforce capabilities. Farm Credit's commitment to strengthening rural communities through the provision of equity capital hints at exciting things to come.

With these new investment efforts underway, Farm Credit reinforces its support for rural communities and agriculture, with the added hope to inspire new investors to see what Farm Credit has known all along—the long-term viability of our rural economies depends on providing rural entrepreneurs with innovative and responsive financing opportunities.

Chris Shaffner is the vice president of Public-Private Partnerships for CoBank.