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Examining the Farm Economy: Perspectives on Rural America
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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.

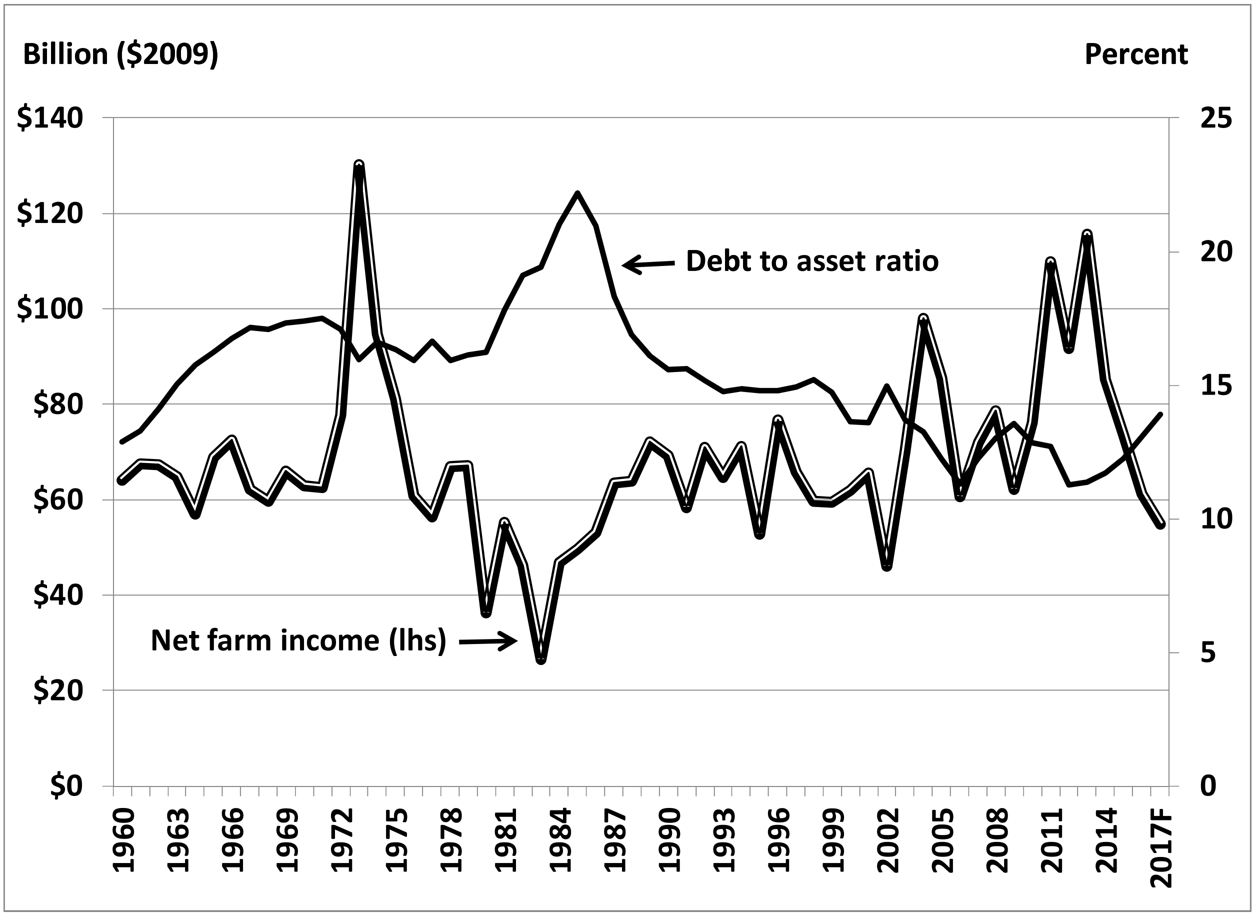
Returns to farming are expected to remain flat over the coming decade having already declined sharply from recent highs. The net effect over time is difficult to forecast, but certainly we might expect consolidation in some farm sectors in certain regions and movement of the most leveraged operators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

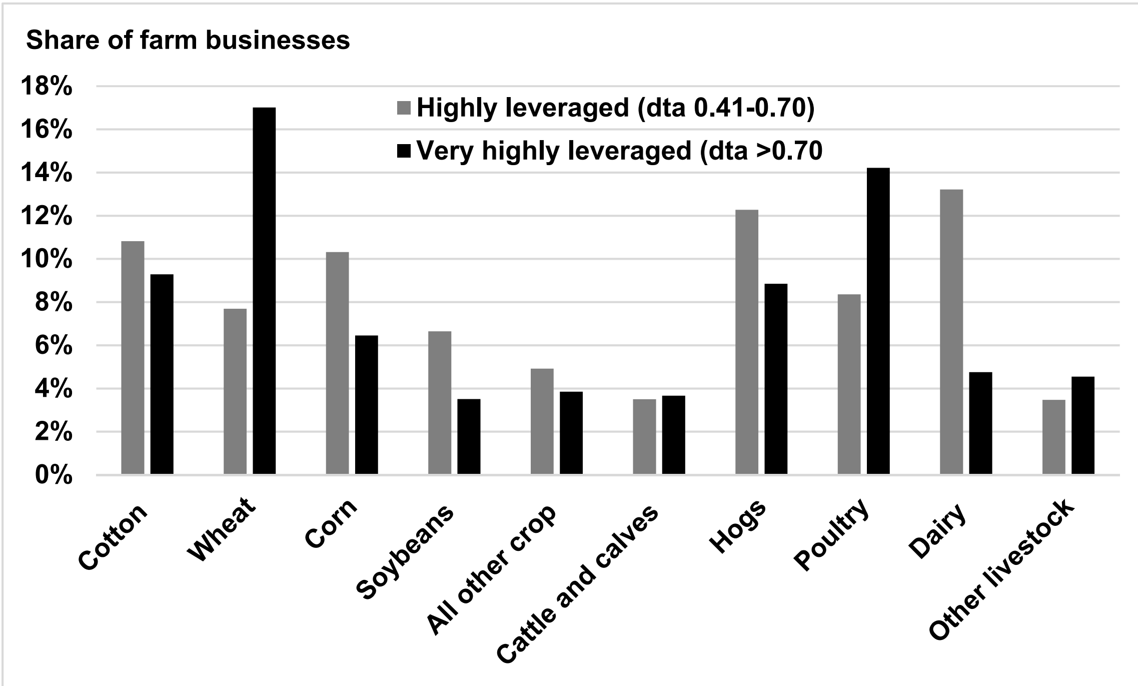
Mr. Chairman, that concludes my opening statement and I am happy to answer any follow up questions you might have now or later for the record.

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



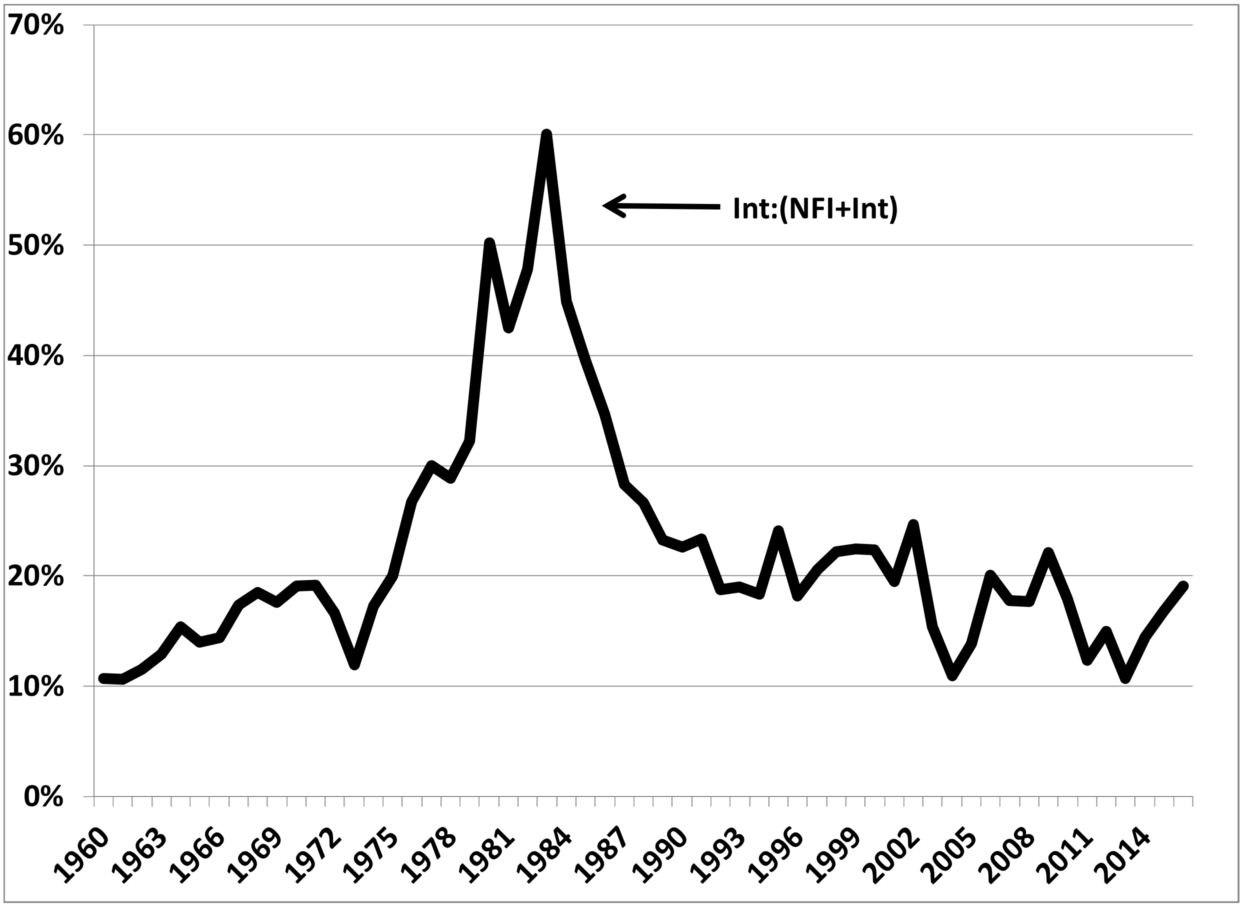
Data: USDA-ERS.

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