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Focus on the Farm Economy: Growing Farm Financial Pressure
Before the House Committee on Agriculture
Subcommittee on General Farm Commodities and Risk Management

# **April 14, 2016**

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 factors, such as transportation issues, energy price declines, and drought in the West. This year, while energy prices and drought remain important components of the outlook, the overall picture for agriculture in the United States is being driven more by macroeconomic factors such as economic growth both here and abroad and resulting currency adjustments.

A strong dollar coupled with high-levels of global agricultural production leave U.S. producers facing commodity prices that continue to decline from record levels and a more difficult trading environment than last year. As a result there will be growing financial pressures on some producers this year, as expected revenue may not be sufficient to cover expected costs. Overall, USDA forecasts that net cash income will fall again in 2016.

Because in some cases expected revenues may not be sufficient to cover potential costs, some producers will likely rely on capital reserves (farm incomes were at record highs between 2011 and 2014), increase demand for loans, lower their input use, and rely on farm programs. Overall, the outlook for 2016 is for flat to lower farm income in aggregate, but median farm household income is forecast to increase 4.5 percent to \$81,666, reflecting expected increases in off-farm income.

Today, I will direct my comments toward macroeconomic forces and the impacts on the broader agricultural economy, as I am sure the other two speakers here will discuss farm-level impacts in greater detail.

### **Macroeconomic Outlook**

2015 marked a significant change in the global business cycle. Projections for global growth fell consistently throughout 2015. USDA's 10-year baseline used assumptions that showed world GDP growth rising slowly and to plateau at just over 3 percent A key component of that global slowdown is slowing economic growth in China (see figure 1). Baseline projections also assumed China's GDP growth would slow to 6.1 percent in 2016, 5.7 percent in 2017, and gradually edge down towards 5.0 percent. The latest IMF projections now show Chinese growth improving slightly with growth at 6.5 percent and 6.2 percent in 2016 and 2017, respectively.

While that growth is still relatively high, the slower growth means China's GDP is now forecast to be \$700 billion lower in 2020 (about 5.7 percent lower than forecast at this time in 2015). The implication is that China will be importing raw materials at a slower pace as it embarks on a more consumer- and service-oriented economy compared to one fueled more by housing construction and a buildout of its manufacturing capacity. Countries that were heavily dependent on selling goods and services to China are now facing a reduction in economic growth themselves (Australia, Korea, and Brazil, for example). By comparison, the United States is expected to be the growth leader among developed countries over the next decade. U.S. economic growth is expected to be near 2.5 percent in 2016 and 2017 before gradually moving to a longer term growth rate of 2.3 percent

Driven by the relative strength and safety of the U.S. economy and by relatively expansionary monetary policies in many other countries, the real value of the dollar increased substantially in 2015 relative to competitor and customer currencies, and that growth is expected to continue through 2017 (see figure 2). Clearly, a stronger dollar means it is more difficult to sell products to countries with weaker currencies, such as Egypt and Nigeria (major wheat importers), and it is easier for countries, such as Canada, the EU, Brazil, and Argentina to sell their agricultural products abroad, making for an extremely competitive trade environment.

However, a strong economy also helps U.S. producers in several ways. First, it is easier for U.S. buyers to import goods, such as fertilizer, from countries with weakening currencies, such as Canada, Russia, and Ukraine. Second, a stronger U.S. economy provides improved off-farm income opportunities for a large majority of U.S. farm households. Third, 80 percent of

agricultural products are sold domestically, so a stronger domestic economy likely means more opportunities to sell more U.S. products and provide additional value-added at home.

#### Outlook for trade is down in the near-term

Turning to the outlook for trade, U.S. agricultural exports were most recently forecast at \$125 billion for FY2016 (see figure 3). That is down 10.5 percent from last year, with much of that stemming from lower values, not volume, and with one-third of the decline coming from reduced sales to China. Yet, while strong competition, reduced demand, and lower prices have contributed to falling U.S. export sales, the last five years, and this year if forecasts hold, mark the six top years for value of agricultural exports. On the import side, a stronger dollar means that U.S. consumers have a greater ability to buy foreign goods. This year, agricultural imports are forecast to rise to a record \$118.5 billion. The next USDA trade forecast will be in May.

The FY2016 forecast for grain and feed exports is down \$4.4 billion from FY 2015 to \$27.2 billion, due to lower volumes of corn and feeds and fodders, lower prices, and increased competition from other suppliers. Oilseed and product exports are forecast at \$25.4 billion, down in both value and volume. Soybean exports are projected at 46 million metric tons in FY2016, which would be the second highest level ever, if realized, after last year's 50.4 million metric tons. Cotton exports are forecast \$900 million below last year, at \$3.2 billion on reduced supplies and shrinking global demand. Rice exports are forecast at \$1.8 billion, \$300 million below last year, mostly on declines in volume. Livestock products are down \$2 billion from last year, to \$16 billion, due to lower prices, while dairy has dropped \$700 million due to lower prices and strong competition from the EU. However, sales of horticultural products driven by tree nut exports and processed fruit and vegetables are up by almost \$600 million.

Changing market conditions explain the export projections. For example, over the past 10 years, agricultural export volumes to China have increased by more than 125 percent. We expect China imports of corn to be limited and imports of sorghum and barley to slow in the near future, but to continue to grow over the next decade (see figure 4). Conversely, for Brazil, we expect its producers to respond to relatively high prices for corn and soybeans (given Brazil's currency depreciation) and to increase production over the next 10 years. That will translate into

increased Brazilian exports and greater competition for the United States (see figure 5).

Overall, global trade of grains and oilseeds is expected to increase over the next decade to meet rising global demand. Global trade for wheat is projected to increase by 17 percent, for coarse grains by 15 percent (25 percent for corn), and for soybeans and products by 24 percent (25 percent for soybeans). Based on projected yield growth, the world will need to allocate about 50 million more acres to corn, wheat and soybeans, at U.S. productivity growth levels, to meet the increase in trade demand.

### **Prices continue to soften**

U.S. prices have moderated with weaker demand for U.S. products and greater foreign competition. Stock levels have increased, and record global crops, largely a result of relatively high prices for much of the last decade, have expanded supplies. Since December, the dollar has continued to strengthen relative to the Brazilian *real* and Argentine *peso*; Argentina has taken actions to be more competitive in world commodity markets; oil prices and fertilizer prices have weakened; China's demand for sorghum has slowed; and the U.S. rice market has tightened.

In February, we released our expectations for the new crop. At that time, we expected further price reductions for the 2016/17 crop year for corn, soybeans, wheat, rice and cotton as compared to our long-run baseline forecast from December of last year. Wheat prices for 2016/17 were estimated at \$4.20 per bushel, a decline of 16 percent from the current year. There are signs of weak exports, and we have already seen winter wheat area come in below trade expectations suggesting producers adjusted their plantings. Corn prices were projected to fall to \$3.45 per bushel for 2016/17. Soybeans prices were forecast at \$8.50 per bushel in 2016/17. The all-rice price was forecast at \$12.90 per hundredweight for 2016/17. Cotton prices were projected at 58 cents per pound (see figure 6).

Lower commodity prices are expected to idle some land that had been brought into production as commodity prices rose in the late 2000s. With the continued pressure on margins, based on farmers' intended plantings, the total area allocated to major crops in 2016 is expected to fall by 2 million acres compared to last year, even as area enrolled in the Conservation Reserve Program continues to decline, and would be down nearly 6.5 million acres from the recent peak in 2014

(see figure 7).

USDA's *Prospective Plantings* report released on March 31 reported that farmers intend to plant 93.6 million acres of corn in 2016, a surprising 3.6 million acres higher than average trade expectations and the level we had projected back in February. At that level, under normal growing conditions and coupled with already high stock levels, domestic corn supplies would be a record and corn prices could fall to levels not seen in a decade. Markets quickly reacted to the *Prospective Plantings* report, pushing the Dec 2016 corn futures to a life of contract low. In contrast to corn, planting intentions of 82.2 million acres of soybeans were toward the low end of trade expectations. Actual winter wheat planted area and spring wheat intended plantings were down a combined 5.1 million acres from last year. At 49.6 million acres, all wheat planted area would be the lowest total since 1970.

Along with weather, changes in anticipated harvest time prices and input costs between now and planting time will determine final acreage. Farmers will adjust their early planting intentions as new information becomes available as the planting season unfolds. For example, China recently announced that the temporary corn reserve purchase policy in northeastern provinces and Inner Mongolia would be replaced by a new mechanism of "market acquisition" and "subsidy," intended to reduce government-held stocks. How that policy will be implemented is unclear but it is controversial and contentious in China as it will likely affect farm income. The United States has not been exporting very much corn to China since 2014. China's main corn supplier has been Ukraine, following an agreement between the two countries signed in 2013. Nevertheless, this is likely to be another bearish factor on feed grain markets. The United States has exported a significant share of sorghum and distillers dried grains with solubles (DDGS) production to China in the last couple of years, although this trade has slowed and could be impacted by the policy change in China.

Turning to the livestock, dairy and poultry sectors, we project that total meat and poultry production will be at a record high of 97 billion pounds in 2016, as production of beef, pork, broilers (chicken bred for meat production), and turkeys all increase. Milk production is also projected to be at a record 212 billion pounds in 2016. U.S. meat exports are expected to increase in 2016 following declines in beef and broiler exports and relatively slow growth in

pork exports in 2015 (see figure 8). Exports in 2016 are expected to be up from the last year as larger supplies and lower prices increase the attractiveness of U.S. products to foreign consumers. Broilers were affected in 2015 by the closure of markets to U.S. poultry as a result of the discovery of Highly Pathogenic Avian Influenza (HPAI), although many of those markets have reopened. However, a relatively strong dollar paired with Russia's continued ban on imports of U.S. meat and relatively slow economic growth in a number of markets may also constrain export growth for meats. Until last year, dairy exports were growing fairly steadily; however, the confluence of a strong dollar, large competitor supplies, and lower imports in key markets resulted in lower exports in 2015. Many of those conditions have carried into 2016, and dairy product exports are expected to fall slightly.

In 2016, prices for cattle, hogs, broilers, and dairy products are projected to fall from last year's levels. Fed steer prices are forecast to decline to \$137 per cwt, down 7 percent as increased cattle supplies move through feedlots. Hog prices are expected to fall to \$48 per hundredweight, down 5 percent from last year. Broiler prices are expected to average 86 cents per pound, down 5 percent from 2015. Although domestic demand for milk and milk products provides some support for product prices, supplies remain large and export demand for certain dairy products has weakened, pressuring prices. Milk prices are expected to average \$15.25 per cwt in 2016, 10.7 percent lower than in 2015. Milk prices are expected to decline to an average of \$14.55 per cwt this quarter, before rebounding in the second half of the year to average \$15.90 per cwt in the fourth quarter.

## Farm income is expected down

USDA's farm income forecast from February shows farm budgets tightening with lower prices. USDA-ERS projects that net cash income and net farm income are both expected to fall slightly compared to 2015, but by much less than last year. A crop budget calculator from University of Illinois has been updated to show expected prices for corn and soybeans in 2016 (see figure 9). Revenue to cover such things as rent and salary after accounting for other costs is lower than the average cash rent value. This illustrates some places where producers could seek to tighten budgets: chemical inputs, seed purchases, crop insurance, machinery costs, etc.

Given the situation and outlook for commodity prices and farm income, USDA's Farm Service Agency (FSA) is experiencing strong demand in FY 2016 in both direct and guaranteed loan programs. FSA loan volumes were up more than 40 percent between 2013 and 2015 and as of the end of February, the use of FY 2016 funds compared to levels from a year ago were up by 16 percent for direct operating loans, 25 percent for guaranteed operating loans, and 8 and 25 percent for the direct and guaranteed farm ownership programs respectively. That situation is indicative of the financial sector as a whole. According to the Kansas City Federal Reserve Bank, which collects information about farm banking and credit, debt has been increasing at agricultural banks since 2011. In late 2015, farm debt at commercial banks was running about 8 percent higher than in late 2014. However, the Kansas City Federal Reserve Bank also notes that interest expenses have remained low as a percentage of operating costs.

We expect farm bill programs to help farmers adjust to lower farm income. The largest program, Agricultural Risk Coverage (ARC) payments in CY 2015 totaled approximately \$4.2 billion. Payments for ARC in CY 2016 are forecast to be approximately \$7.2 billion. Another new farm bill program, Price Loss Coverage (PLC), also provide payments of approximately \$0.7 billion in CY 2015 and are forecast to provide nearly \$2 billion in CY 2016. In addition, many producers have the ability to choose crop insurance to manage risk for their 2016 crop, to help offset any unforeseen losses. Overall government payments, which are more tied to economic conditions than before, are expected to rise from about \$10.6 billion in CY 2015 to about \$13.9 billion in CY 2016, which also includes conservation payments of approximately \$3.6 billion in Cy 2015 and CY 2016

The new farm bill also provided producers with more options for Federal crop insurance, including new policies like peanut revenue insurance and the Stacked Income Protection Plan (STAX) for upland cotton. While STAX uptake has been higher in some states than others, reaching over 50 percent of planted cotton area in Alabama, generally it has been well below purchase of traditional crop insurance revenue protection policies. Revenue protection policies cover over 80 percent of total cotton planted area in the United States, and reached 94 percent in Texas. Coverage levels average around 70 percent. In 2015 STAX covered about 29 percent of insured cotton acres.

### **Conclusions**

Global crop production for grains and oilseeds have recently exceeded global demand and have contributed to stock building and price declines over the past year, and those trends are expected to level off in 2016. In addition, the U.S. dollar has remained relatively strong compared to our competitors and customers for agricultural products. As a result the U.S. faces a very competitive trading environment in 2016.

Lower prices for crops imply a slightly lower forecast for overall farm incomes. The new farm programs will benefit many producers, while falling energy prices will continue to lower input costs, and new crop insurance products will cover more products at higher coverage rates than in previous years. While farm cash rents remain high relative to expected returns, we are starting to see some declines in cropland values and cash rent levels. Domestically, lower commodity prices will likely lead to reduced planted acres overall.

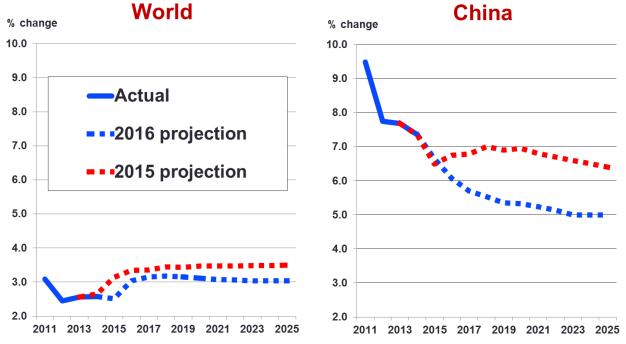
However, record high net farm income levels from several years ago helped U.S. producers to strengthen their financial base and that is still reflected in the financial outlook. Heading into spring planting this year, USDA projects that producers' debts relative to their assets will remain near historic lows. A slightly higher debt (mostly from operating loans) and lower assets (from some erosion in land values) will result in a slight increase in the debt-to-asset level in 2016. While borrowing is up, the level of bankruptcies and farm loan forfeitures remain at historically low levels.

In addition, despite slightly lower expected net farm income in 2016, we still project that a majority of farm households will see increases in household income in 2016, a sign of a strong economy, new farm bill programs, and falling expenses. Taking a look at the median household is often more informative than looking at the average household, since the average will be significantly skewed towards the much larger farms, even though they represent a minority of households. Median farm household income is expected to reach \$81,666 in 2016, a record. Median U.S. household income and median farm household income were nearly the same in 2008. Since that time, farm household income has grown more rapidly. In 2014 median farm income was \$80,600 and median U.S. household income was \$53,657 (median U.S. household

income is not yet available for 2015 or 2016).

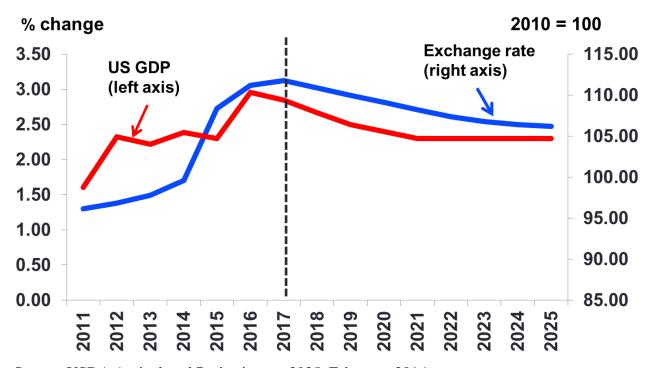
Of course, it is difficult to know what the median farm household in the United States looks like. Roughly 60 percent of farm households are small, with sales of less than \$350,000 and without a full-time farm operator. Another 31 percent of farm households are considered intermediate and have sales of less than \$350,000, but do have a full-time farm operator in the family. Lastly, there are roughly 9 percent of U.S. farm households that would be considered commercial-level operations with more than \$350,000 in sales. Our initial projections show that both on–and-off-farm income for all three groups are expected to rise slightly in 2016 compared to 2015. In general, this means that the majority of farm households are in a relatively stable position going into the year.

FIGURE 1. World GDP growth slows, most notably in China



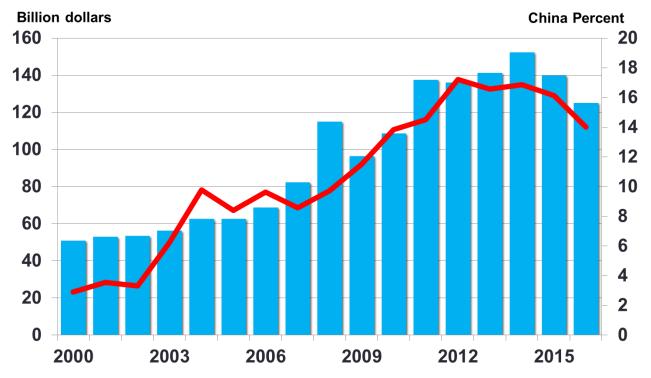
Source: USDA Agricultural Projections to 2025, February, 2016

FIGURE 2. U.S. GDP growth and real agriculture trade-weighted exchange rate



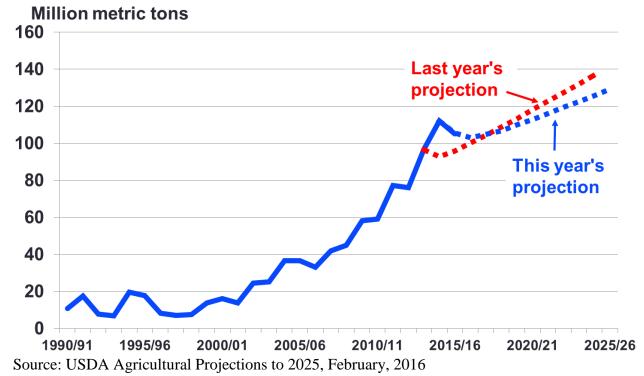
Source: USDA Agricultural Projections to 2025, February, 2016

FIGURE 3. U.S. agricultural exports

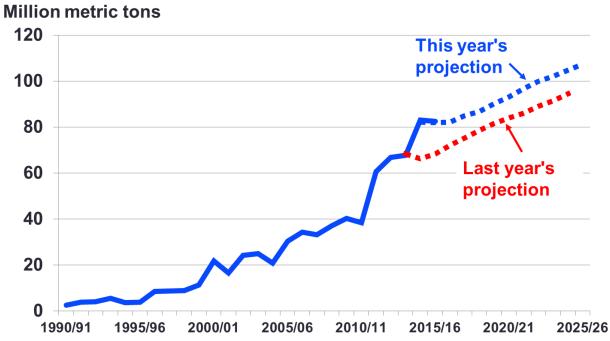


Source: Outlook for U.S. Agricultural Trade, February 2016, Data are fiscal year.

FIGURE 4. Projections up for China's imports of grains, soybeans, and cotton



 $\label{figure 5.} \textbf{Figure 5. Projections up for Brazil's exports of corn and soybeans } \\$ 



Source: USDA Agricultural Projections to 2025, February, 2016

FIGURE 6. Corn, wheat, and soybean prices soften, but still above 2000-2003 average

Crop	Ave 2000-03	2011	2012	2013	2014	2015F	2016F
Wheat	3.09	7.24	7.77	6.87	5.99	4.95	4.20
Corn	2.14	6.22	6.89	4.46	3.70	3.55	3.45
Soybeans	5.45	12.50	14.40	13.00	10.10	8.75	8.50
Upland Cotton	46.47	88.3	72.5	77.9	61.3	58.5	58.0
All Rice	5.61	14.5	15.1	16.3	13.4	12.5	12.9

Red denotes record high.

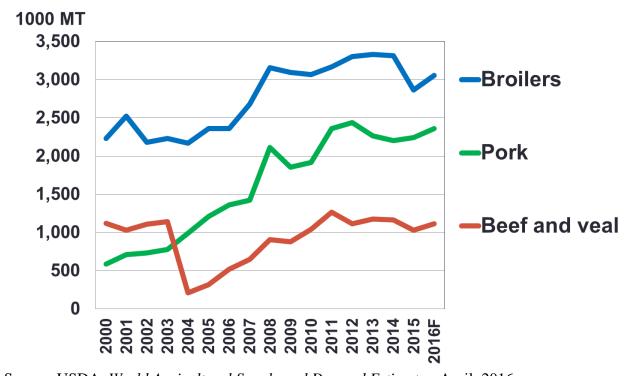
Source: USDA-NASS (History), OCE (April 2016 *WASDE* for 2015 and Agricultural Outlook Forum for 2016). Wheat, corn, and soybeans are in dollars per bushel; cotton is in cents per pound, and rice is in dollars per hundredweight.

FIGURE 7. Planting intentions down from last year

Crop (mil. acres)	2011	2012	2013	2014	2015	2016F	% change
Corn	91.9	97.3	95.4	90.6	88.0	93.9	6.4%
Soybeans	75.0	77.2	76.8	83.3	82.7	82.2	-0.5%
Wheat	54.3	55.3	56.2	56.8	54.6	49.6	-9.3%
All cotton	14.7	12.3	10.4	11.0	8.6	9.6	11.4%
M. feedgrains	10.4	12.6	14.6	12.9	15.1	13.1	-13.2%
Rice	2.7	2.7	2.5	3.0	2.6	3.0	17.2%
Total 8 crops	249.0	257.4	255.9	257.6	251.6	251.1	-0.2%
CRP	31.1	29.5	26.8	25.5	24.2	23.7	-2.1%
8 crops + CRP	280.2	286.9	282.8	283.2	275.8	274.8	-0.3%

Source: USDA-OCE. The 2016 forecasts are from *Prospective Plantings*, NASS.

FIGURE 8. U.S. meat exports expected to increase



Source: USDA, World Agricultural Supply and Demand Estimates, April, 2016.

FIGURE 9. Illinois case shows crop budgets tightening

	Corn After	Soybeans
	Soybeans	After Corn
Fertilizers and pesticides	\$185.00	\$73.00
Seed	\$122.00	\$76.00
Crop insurance and other direct costs	\$52.00	\$23.00
Machinery and power	\$125.00	\$117.00
Total non-land costs	\$552.00	\$351.00
Yield	201.00	58.00
Price	\$3.45	\$8.50
ARC-CO	\$30.00	\$30.00
Crop Revenue	\$723.45	\$523.00
Revenue to cover rent and salary	\$171.45	\$172.00
Cash Rent for Illinois	\$228	\$228

Source: USDA-OCE; University of Illinois 2016 Crop Budgets, Central Illinois – High Productivity Farmland.