## 083016 ERS Farm Forecasts Transcription

Good afternoon everyone and welcome to our webinar Farm Income and Financial Forecasts for 2016. My name is Mary Reardon and I'll be your host. Our speaker today is Jim Williamson. Jim is an Economist with the Farm Economy Branch in ERS's Resource and Rural Economics Division. Jim's background includes serving as a Senior Economist on the Council of Economic Advisors in the Office of the President. He now leads our agency's Farm Income and Wealth Statistics Program. Note that at any time during the presentation you can enter questions into the Chat Box on your left. At the end of the presentation I'll read each question and ask the speaker to respond. The entire webinar will be recorded and we post it on the ERS website in about a week. I think we're ready to start so Jim you can begin the presentation.

Okay, thank you Mary. Welcome to all our participants, again this is the Farm Income and Financial Forecasts for 2016. This is our August forecast. This is the second of three forecasts we do in a calendar year.

I'd like to begin first with a summary. Net cash farm income and net farm income are forecast to decline by 13.3 percent and 11.5 percent respectively relative to 2015. The value of agricultural sector production is forecast to fall for a third straight year and this is on high production and yields growing to near record or record highs for many commodities including corn and soybeans in 2016. This higher production is driving supplies high and as a result prices are falling. As we can see cash crop receipts are expected to decrease 3.7 percent or 7.1 billion dollars in 2016 and led, declines are led by feed crops down 3.2 percent, excuse me, 3.2 billion dollars especially corn is down 2.9 billion. On the animal and animal product side cash receipts are expected to fall by 9.8 percent or 18.7 billion dollars in 2016. Partly offsetting this are government payments, government farm program payments which are expect, projected to rise 24.8 percent to 13.5 billion dollars in 2016. Total production expenses are forecast to decline 2.8 percent and this is the second year in a row that we've had declines. This is led by declines for livestock, poultry expenses as well and manufactured inputs, for example fertilizers and fuels.

So let's talk a little bit about net cash farm income. This chart shows the forecast for 2016 as well as previous years back to 2006. So net cash income as we've broken it down include the receipt, cash receipts and other farm income but also direct government payments. So these all wrap up into net cash farm income. The forecast is for net car, for 2016 for net cash farm income is 94.1 billion dollars. So it's a drop of 13.3 percent. This follows a 17.5 percent drop in 2015. Again this number is inclusive of the government payments which will comprise 14.3 percent of the cash income in 2016.

Net farm income, another measure of profitability is ex, forecast to dip moderately in 2016. Should also note this is lowest since 2009. Net farm income includes cash, cash income but it also adds non-cash income and other non-cash expenses, for example inventory changes and capital consumption which is a proxy for depreciation. Ultimately net farm income is forecast to decline 11.5 percent.

Now to talk a little bit about how we're going to get from the 2015 estimate to the net farm income forecast for 2015, 2016, excuse me. So on the left hand side you'll see our net farm income for 2015. It stands at 80.7 billion dollars. So ultimately we're down, the forecast is down for 2016 by 9.3 billion dollars over 2015 and this includes a decline of, in cash receipts, crop receipts which is down 7.1 billion dollars, livestock receipts are down 18.7 billion dollars. Offsetting this is a reduction in production expenses so that's why we see a positive 10.1 billion dollars. Government payments will add another 2.7 billion dollars to finally arrive at a net farm income forecast for 2016 of 71.5 billion dollars.

This slide is representing cash receipts and the change between the 2015 estimate for cash receipts and the 2016 forecast. So for 2016 the forecasted drop in cash receipts primarily due to price effects partially offset by a production response relative to 2015. So this waterfall chart is an illustrative exercise where we break down the two components, the two primary components, price change and quantity change. So if we hold production, quantity at its 2015 level and only change the price based on the 2016 prices we'd get a price change of 38.1 billion dollars, a negative. If we held prices steady at their 2015 level and only changed the quantity at its 2016 forecast, we'd find an 11.9 billion dollar increase in cash receipts. The net effect is a decline for our forecast in 2016 of 25.7 billion dollars for cash receipts.

Breaking down cash receipts a little further by commodity specialization let's start and talk a little bit about crop receipts. Corn, soybeans, fruits and nuts, vegetables, melons and wheat are down relative to their 2015 number. Overall crop cash receipts forecast down 3.7 percent. Corn is noted, cash receipts are down 37.7 percent relative to their high in 2012. So overall higher levels of production are failing to offset lower prices and this is driving our cash receipts forecast in 2016.

On the livestock side cattle and calves, dairy, chicken eggs forecast to decline in 2016. All animal products together forecast down 9.8 percent in 2016, again relative to 2015. We should note that chicken egg, chicken prices, egg prices are expected to decline leading to a 51.7 percent drop in cash receipts. So this is coming off 2015 where prices were up due to the HPAI outbreak. Since then productions recovered and the price of eggs have, are reflecting that.

Government payments for 2016 are forecast to increase 24.8 percent to 13.5 billion dollars. So this chart will give you the forecast plus what we wanted to show you a little bit about the change over time since 2006. So you'll note in green, the bars in green represent the price in revenue related program payments. The blue, as you'll see, it's phasing out in 2014, represent the old fixed payments and in red we have conservation payments which generally, it's, the percentage holds steady. In purple are all our other payments for example, forage and life, and disaster payments.

On the cost side, as I mentioned total production expenses are forecasted to fall 2.8 percent overall. This is the second year of decline in production expenses, it's also the fourth year since 2000 that expenses have gone down. And so we present a time series going back to 1970 to provide a little bit more perspective on where expenses are and while they're going down for the past two years I'd like to note that in real terms total production expenses are actually high. And

in the last, 2010 to 2014 represented a period of significant growth annually so about 8 percent annual growth in nominal terms.

Breaking down total expenditures a little further we break it out by farm origin and manufactured input expenses so we have a feed and livestock purchases, fuels and oils, fertilizer, pesticides, nearly across the board total expenditures are down except for pesticides and labor.

On the balance sheet side in inflation adjusted terms the value of farm assets was forecast to decline by 3.3 percent relative to 2015 and this includes real estate which we forecast down to 2.7 percent. Also inventories are down and financial assets are forecast down. And in inflation adjusted terms the value of farm real estate debt is up .8 percent while the non-real estate debt is forecast down 5.7 percent. So again this chart is a time series of the debt and equity. I hope it provides a little bit more perspective on where we are relative to where we've been in the past. So again these are inflation adjusted numbers. So farm secur, equi, farm sector equity, while it's declining is still, it's still high in relative terms and in nominal terms.

Another, from another perspective we have the farm sector's financial health and we're presenting the debt to asset and debt to equity ratios. They are both expected to rise slightly for 2016. So these two ratios are solvency ratios and they basically measure the, the likelihood of default and the ability of a farm to weather financially adverse events. For the fourth straight year both farm sector debt to asset and debt to equity ratios are forecast to rise but they remain low by historical standards.

What I've previously presented were sector level forecasts, now I'd like to move to farm businesses. Our farm business, as we've categorized it, are operations with greater than 350,000 in gross cash farm income plus those operations whose principal operator reports that farming is their primary or full time occupation. There are approximately 820,000 of these farm businesses. In blue, in this chart we have our residence farms which do not fall under the farm business. They represent a majority of the farms but as you can see the intermediate and commercial farms which are farm businesses represent the majority of the value of production they also hold the majority of assets and the majority of debt in the sector.

Here is a regional perspective on the net cash farm income for farm businesses throughout the nation here. And again this, these are the forecasts for 2016 regionally. These forecast represent or are indicative of the commodity specializations that you might find around the nation in these production regions. For example, in the northern crescent we're forecasting net cash farm income to be down eight percent and this is largely reflected in the decline in dairy cash receipts. The basin and range which would find specialization in livestock is down 9.9 percent, on the other hand the Mississippi Portal for example is up 1.9 percent and this is on the strength in rice and cotton receipts.

A little bit more about the financial health of the farm businesses we're going to present debt to asset ratios that are actually, that are higher than normal. So we can talk about the highly leveraged crop farm business forecast. Highly leveraged crop farms are farms that have a debt to asset ratio of .41 to .71. We would consider a crop farm to be extremely leveraged if it has a debt to asset ratio of .71 or more and again these are farm businesses, these are farms with at

least \$350,000 in gross cash farm income or where their operator reports that they are the prime, that farming is their primary occupation. So we forecast 5.9 percent of crop farms to have a debt to asset ratio that would categorize them as a highly leveraged farm. We forecast 4.3 percent to be an extremely leveraged crop farm business. These have been steady for the last three years but we'd note that they have been increasing since 2011 approximately.

The share of highly leveraged and extremely leveraged livestock farm businesses is slightly rising in 2016 and again the pattern is similar for that of the crop farms, farm businesses. The highly leveraged livestock farms and extremely leveraged livestock farms have both increased since around 2011.

Now we'd like to talk a little bit about farm household income. So the wellbeing of a farm operator's household is not equivalent to the financial performance of the sector. Farm households receive income from off farm earnings as well as farm earning in off farm businesses and together they make up the farm household's total household income.

This chart gives us an idea of what median farm household income is and is expected to be in 2015, 2016, excuse me. So we forecast total household income for the median farm to be \$76,000, \$76,282, and as you can see most households, farm households continue to get a majority of their off, off farm, excuse me, their total income from off farm sources. And the off farm sources are in fact predicted to be up 2.5 percent and help stabilize the household income.

But some farms, some farm households rely more on farm income and so I think it's important to point out that, well the majority of farms, for example, the residential farms do not receive a large percentage of their income from off, from farm sources. Commercial farms, farm households do so they're more susceptible to volatility of the sector. Overall we're predicting a 3.3 percent decline for median household income for commercial farmers in 2016 and this follows the decline that we're seeing in farm, median farm income.

I'd like to leave you with some key reference data. This is a summary of major farm sector and household forecast indicators. So for 2015 we set our estimate today and for 2016 the forecast, the August forecast numbers are up. So net farm income is forecast again for 2016 to be 71.5 billion dollars. That's a change over the 80.7 billion dollars that we estimate for 2015. Net cash income is estimated to be 108.5 billion dollars for 2015 and we forecast 2016 net cash income to be 94.1 billion dollars.

That concludes the Farm Income Forecast for 2016 and now it would be a pleasure to take some questions.

Thank you Jim, first question asks if we can get previous years' forecasts as well as this year's forecast for each state? In other words, how much we've revised our forecast for each state?

Okay, we don't produce state forecasts. We only produce a national forecast, state level farm income numbers are estimates and the latest are for 2015 and they've just been set today. If you're looking for the previous estimates they are also available online through our website.

Next question is what are some of the remaining uncertainties that could affect farm sector income this year?

Okay, there are a few variables that can introduce uncertainty to the farm sector forecast for the remainder of the year. I'd like to point out that we're still gathering information on crop marketing patterns so the part of the crop for the marketing year that the farmer chooses to sell and what he would choose to withhold for this calendar year. Prices are also changing over time and so our latest prices include the WASDE prices for August.

Our next question is the 2016 forecast driven primarily by prices or by production?

Both price and production have changed since the last forecast but prices are the primary driver of the forecast in August.

Okay, why has the forecast for production expenditures gone down since the last forecast in February of this year?

Okay, we've, since February on our forecast has changed for production expenses because we've received new information based on the 2015 ARMS Survey. This gives us a better... we also received information on production earlier in the, midyear we know more about planting and production and these go into, to our estimate for total production expenditures.

And someone is just confirming that they have this correct. The 2015 estimate for net cash income was raised 16.4 percent from your 2015 forecast from February?

Okay, I don't have the forecast in front of me so for the February 2015 forecast in front of me so I don't, I can't confirm the percentage change.

But that will be on the website, right?

Yeah, we can, yeah.

Now, someone asks if these charts are going to be available somewhere else today and I can answer that one. The charts, all of these charts in the entire webinar will be recorded and posted on our website in about a week.

We have a question from Mack. Can you explain the drivers behind the 16.71 billion dollar increase in 2016 net farm income from the February estimate?

Okay, so some of the drivers that are driving the difference between this forecast and the last forecast include updated information on crop marketing patterns, new information on prices as well as plantings and productions so our last forecast was in February and this, of course, was before the Spring and so now, now in August we have better information on those components. We also have better information on historical cost, production cost information and this is based on a 2015 survey. So those all go into updating the forecast.

Here is a question about the waterfall graph, I think we had two of those. Can we obtain or reproduce that graph for each state?

But you don't, you wouldn't have that by state, is that right?

Let me put it up so everyone can see again the question. So this is the waterfall chart for net farm income. We do not produce these by, for each state. Again we don't have forecasts for states we only have the estimates but we don't, we don't ourselves produce these for states, again.

Okay, Dennis asks how does the August income forecast differ from the 2016 forecast from earlier this year?

Okay, again the major components that differ are that we have more, new and updated information, again based on price, we have better prices, we know better about the 2016 marketing year. We also know about plantings, we have new production data and again we have new production expenditure data.

Okay, can you compare or contrast current farm solvency now with what it was in the really difficult economic times in the 70s and 80s?

Yeah, let me put up the chart here. So this slide shows debt to asset and debt to equity ratios going back to 1970. So as you can see there, in 1980 we entered into a hard period, we had higher debt to asset and debt to equity ratios than we do know. So although we've been trending up in the last few years we are still below the highs. So by historical standards we're still fairly low. As you can see it looks, it appears the debt to equity ratio around 1985 reaches the high 20, 20 percent so that would tell us that for every, for every dollar of equity they had nearly 30 cents in debt.

A question from Paul, does ERS or USDA have historical and forecast of total government farm support payments by commodity? If so, where can we obtain this?

We do not produce that data at ERS. We have this historical information but for a number of programs but not broken out by commodity.

Here is a question about the California drought impact. How has the drought affected that state's income and cash receipts? If you can answer that.

Well certainly the drought has had an effect on production. We've also, well I think what we've also found out is that there are labor cost issues in California that have also been playing into the figure, in the cash figure.

And we have another weather related question. Do you expect weather issues in the southern US to improve the outlook for farm income by affecting production?

That's something I can't speak to right now. I don't have the information.

Okay, and someone asks, where can they get the historical data that goes into the charts?

Okay, our, the data we use for these charts is available through the ERS website so the farm income data product will be able to find historical information, historical data.

And here is a question about government payments. What are the main drivers for the increase in government payments this year?

Okay, let me go to that slide. So of course the major component to the 20, 2016 forecast for government payments, program payments are the new price and revenue related government program payments. So for example the price loss coverage payments are forecast to go for peanuts, wheat, long grain rice, corn, grain sorghum, base acres.

A question about the highly leveraged farms, is there any explanation for why they didn't increase more, more of them?

Okay, so I put up this slide for the highly leveraged crop farm businesses. I think the answer to the question is these, these include all crop farms and there is a lot of variation in those that are highly leveraged and extremely leveraged by commodity type. So I think in the future we'd like to break this out a little bit more but I can tell you that this represents all crop farms and so you will find crop farms that have, that are even, a larger percentage of them are even high, have highly leveraged or extremely leveraged debt to asset ratios based on commodity production, of certain commodities.

And we just got a question, another question about California. Did California farm income and cash receipts fall or rise last year, last year?

I'm sorry, could you...

Did California's farm income and cash receipts fall or rise last year?

I don't have that information in front of me for California specifically, I'm sorry, I can't answer that... But we do have that information up by state on our website specifically.

What were the main drivers in the increased cotton receipts of slide 7?

Okay... Okay so I, the price, I think price was over, was dial, a leading cause.

Question from Randy, can you discuss the timing of government payments? For example, what if the PLC and ARC payments associated with the 2016 crop occur in FY 2017?

Yes, so, our, what we're producing here is a calendar year forecast. So this includes payments, this includes payments partly that were made in 2015 and also in 2016 so, for the marketing year so we understand there is a difference. So this represents a calendar year forecast.

Question from Rod, can you compare the February forecast number, I'm sorry, were you finished with that Jim?

Yes, yeah.

...that answer? Can you compare the February forecast numbers with the revised farm income forecast numbers released today? Now that's, I think we had a similar question.

I'm sorry, could you repeat that please?

The participant asked if we can compare the February forecast numbers with the revised farm income forecast numbers released today?

Okay, so yeah, I'd like to talk a little bit about why they are different. We, since February we have, we've gained new information. So for example, the planting and production for 2016, that information is new to us. We have information on historic crop marketing patterns that also go into our derivation of cash receipts. We also have new information on production expenditures, this was gained through our 20, 2015 ARMS Survey.

Okay, and that is the end of our questions and we thank you all for joining us. Have a good day.