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Hello, thank you for joining us online today, my name is Michael Illenberg and I will be moderating today's webinar. I'd like to introduce you to Jeff Hopkins, Jeff is a Branch Chief and Economist in the Farm Economy Branch of ERS's Rural Economics Division. Jeff recently re-joined ERS after working for the House Budget Committee and then in private Industry, welcome Jeff.

Thank you Michael and welcome to everyone else and thank you for joining our webinar today. Today is the release of our Farm Financial Forecast for 2015. We update the Farm Forecast, the incoming Financial Forecast three times a year, in February, in August and in November so this is the, the final one for 2015 and it gives an outlook through the end of the current calendar year. I guess just in setting the overall tone or maybe the highlights of, of the forecast I think that it is apparent that what is happening in, in global food prices and the global economy is beginning to filter through into the US Farm Sector. We're providing what we're generating our farm sector estimates will also provide some estimates of what it means for different types of farm businesses, different specializations and for farm households. So what I mean by global impacts is that over the past three years we've seen a decrease in the index of food and fiber prices, the OECD and also FAO have a nice series on food prices that have been showing, trending a decline for the past couple of years and those prices are beginning to impact US farms and what I'm going to do now is put up a slide of summary points that I'm going to be going through throughout the presentation and what we want to do during the time we have today is to go through our constructed income statement and balance sheet for the farm sector. First we'll talk about the different sources of income and the different sources of expenses and end up in Net Farm Income as our measure then we'll do the same for the balance sheet, we'll look at assets in the Farm Sector in Debt and then we'll turn to Farm Businesses and Farm Businesses are those that have in our definition over \$350,000 in sales and have a farm operator whose full time occupation is farming even if they had less than \$350,000 worth of sales, that's about 850,000 of the two million US farms so we'll go through the sector as a whole then we'll talk about this special class of Farm Businesses and then we'll turn to Farm Households and talk about their income levels for 2015.

So moving on from the Summary Page we'll hit all these points throughout the presentation. The first chart is a chart of Net Cash Income. This Net Cash Income earned on the farm from sale of all commodities and taking into account all cash expenses it's a fairly narrow view of wellbeing for the farm sector and what you end up with at the end is a measure of wellbeing, a measure of Cash Farm Income which could be used to pay down debt and cover living expenses for the farm household and we indicate for 2015 that there will be approximately a 28 percent decline in Net Cash Farm Income from 2014 to 93 billion, this chart is in nominal terms and it's the lowest Net Cash Farm Income recorded since 2009, in real terms it's lowest since 2002. I'm going to show, the next chart is going to be Net Farm Income. This is Net Farm Income from 2000 to 2015, the Net Farm Income includes non-cash costs and also non-cash income in a broader measure of wellbeing for the farm sector, the 2015 level is 55.9 billion dollars in nominal terms that's down 38 percent from 2014 and the 38 percent decline is the biggest one year drop since 1983 and the level of farm income 55.9 billion dollars is the lowest income in both real and nominal terms since

2002. The Net Farm Income measure as opposed to Net Cash Farm Income is, it tends to be a bit more volatile from year to year, in most cases there are ways to smooth out your cash income and the farm income measure accounts for those and credits or debits those strategies to come up with an overall level of Net Farm Income so if you decrease your capital expenditures, your cash flow or manage your liquidity it may show up as amassed, it, you may not see it in Net Cash Income but we will pick that up in Net Farm Income.

The next chart is called a Bridge Chart or a Waterfall Chart that is useful for looking and understanding what is driving the change in Net Farm Incomes from 2014 to 2015. So we've broken out some of the major categories and it's basically meant to educate on how we got from 90.4 billion in 2014 to 55.9 billion in 2015 and the red bars indicate affects that decreased Net Farm Income 2015 relative to 2014 and the green bars are showing things that actually made Net Farm Income higher than it otherwise would have been in 2015. So the biggest red bars in the chart are showing the impact on receipts so both crop and livestock receipts were down relative to 2014, crop receipts were down 7.8 percent for 18.2 billion dollars relative to 2014, livestock receipts were down 12 percent relative to 2014 and came in at 25.4 billion dollars less than what they were in 2014. Small overall changes in inventories, the big impact are to production expenses so lower production expenses came in, in 2015 in relative, relative to 2014, 7.7 billion dollars less that helped the bottom line of, for Net Farm Income in 2015 so that 7.7 billion dollars which is two percent less spending on production for the farm sector increased Net Farm Income relative to what it would have been. We had a billion dollars more in government payments in 2015 relative to 2014 and all the other miscellaneous changes are in the final bar but a reduction relative to 2014. So this chart is showing that the biggest movers were on the receipt side so receipts are price of commodity times the quantity of the commodity. The next chart is going to decompose the change in cash receipts from 2014 to 2015 into price affects and quantity affects. Our forecast is built from a bottom up level meaning that we were forecasting both prices and quantities for nearly all of our commodities that we, that we forecast. There are a few commodities where we're not forecasting price and quantity separately we're just forecasting revenue or receipts or the combination of price and quantity. So those we cannot decompose but really for most of them we're able to have a different price affect and a different quantity affect and this chart is showing that the reduction in the 10 percent drop in overall cash receipts from 421 to 378 is mostly due to price affects so this is not meant to be anything more than a way to think about the change in receipts and whether it is due to a change in prices relative to 2014 or due to changes in quantities. There was a slight reduction in total quantities relative to 2014 but the overall driver was due to lower prices. The next chart is, up to now we've just looked at mostly crops together and what this does is show five years of crop, of cash receipts for six of the major commodity groups, corn, soybeans, cotton, fruits and nuts, vegetables, melons and wheat and we're comparing 2011 all the way through to 2015 and you can see here that some of the affects have been rather persistent for the past several years, corn after reaching a high in 2012 has been reducing every year since then, in 2015 corn cash receipts were down 8.6 billion which is 12 percent relative to 2014, soybeans were down 14 percent or 5.7 billion dollars and wheat was down 21 percent or 2.7 billion dollars in terms of cash receipts. Fruits and nuts, vegetables and melons all stayed pretty constant relative to the past three years and that, that shows up in these charts. Now turning to livestock this is a very similar chart in that it's showing the past five

years worth of receipts and dairy is the biggest mover, It is the second group of bars down 13.8 billion from 2014, 49.3 billion level which was very high over the, relative to previous years, dairy cash receipts were down 28.2 percent in 2015. Hogs were also a big mover they were down 6.6 billion dollars relative to 2014 a drop of about 25 percent but the point to be made on this slide is that the declines are, are, are really widespread, not just dairy and hogs which they've been for most of the year but also cattle and calves that was new we showed a slight increase in our August forecast and now we're showing a decrease for 2015 for cattle and calves.

Alright, the next slide is showing government payments which we forecast to increase by 10 percent to 10.8 billion dollars in 2015, increase of 10 percent relative to 2014, the bars show the composition of government payments and one of the things that's apparent by looking at this chart is that the composition of government payments has changed over time, the blue components of these bars over time are fixed payments that were done away with under the 2014 Farm Bill and replaced with more price related payments and in 2015 the major source of price related payments were for the Agricultural Risk Coverage, ARC Program which had 4.2 billion dollars of changes of payments, about 80 percent of those payments were on corn based acres. Another program that had about 700 million dollars worth of payments go out in 2015 was the Price Loss Coverage Program which gave payments for long grain rice, peanuts and canola under 2015. Okay so that is all for the top part of the income statement, we'll turn to expenses now and expenses are forecast to showing the, the dark green bars are the 2014 estimates and the light green bars are 2015. We show a two percent overall drop in total production expenses and fuel expenses were the main driver of that reduction. 28 percent less fuel expenditures than in 2014. Another big drive downward was for feed with eight and a half percent lower expenditures on feed in 2015 compared to 2014, fertilizer and pesticides were also down, interest payments and labor were both up, labor was up about four percent relative to 2014. That was just 2014 to 2015 comparison, this chart is showing nominal and real or inflation adjusted production expenses for the sector as a whole all the way from 1970 to 2015, you can see that it is more likely for production expenditures to be increasing year on year rather than decreasing but we've had three years since 2000 when production expenses decreased, the two percent decline is significant but only the fourth time since 1970 that production expenses have, have gone down.

Next chart is showing equity and debt levels from 1970 to 2015, the equity is the lower area, the darker brown area and the debt is the upper area and assets would be the sum of the two, assets minus debt will equal equity so you take them both together and you have farm assets. The asset levels for this sector as a whole as well as the equity are forecast to decline for the first time since 2009, assets were down, let me say assets overall were down by 2.8 percent relative to 2014 farm land both land and buildings are down 1.6 percent so across the decline combining both the farm land decrease as well as the other assets that, that farms hold including machinery, including financial assets across all of them assets were down 2.8 percent, the equity levels were down 4.8 percent year on year and that's a combination of impacts on assets as well as debt, debt was increased by 6.3 percent we saw increases in both debt that's secured by real estate as well as debt that is not secured by real estate, the non-real estate secured debt was rising at a bit faster pace but overall debt levels were up about three, 6.3 percent, the debt to asset ratio that we calculated is 12.84 in 2015 and that is an increase

relative to 2014 and the debt to asset ratio has been increasing every year since 2012, the measure is still low relative to historical standards but it's right around average or even a little bit below average over the past 15 years. So it still appears the sector is insulated from default risks which is what the debt to asset ratio is measuring. So that is the extent of our coverage of the agricultural sector as a whole now we're going to talk about Farm Businesses and we define the Farm Business as a farm operation that has over \$350,000 worth of business as well as has a full time farm operator even if they don't have \$350,000. Farm Businesses that are about 850,000 there's about two million farms altogether so we're just taking a pretty big wedge in terms of the total number of farms it's about 41 percent of farms but if you look at the share of agricultural production and the share of assets and the share of debt when you talk about Farm Businesses you're really talking about really big shares of the overall sector. The first view of the Farm Businesses that we're showing is a decomposition of Net Cash Farm Income impacts to the different regions of the US, people call these the ERS regions and there are nine and one thing that I need to point out and make sure people are aware of is that none of the regions are showing a positive 2015 Net Cash Income result relative to 2014 they're all showing decreases, the lighter colored regions are showing less of a decrease than the darker colored regions so Eastern Uplands basing their range those are the lowest decreases in Net Cash Farm Income the greatest decreases in Net Cash Farm Income or the biggest losses are in Northern Crescent and in Heartland and those impacts distributed regionally are reflective of the agricultural production concentration which as all people are aware there is quite a bit throughout the US so that's what this is reflecting.

We are able to take our Farm Business data so look at the slice of, of, of Farm Businesses and calculate among them what is the most important product on the Farm Business and call that a Specialization. So we define Specializations as had more than 50 percent of the total value of farm production associated with that, so specialty crops are those Farm Businesses that specialized in, had at least 51 percent associated with specialty crops, in 2015 specialty crops the average Net Cash Income was \$238,000 which was an increase over 2014 the rest of the crop specialized farms decreased relative to 2014 and overall average Net Cash Income was down by 25 percent. Corn specialized farms were \$143,000 compared to 2014 that was nearly \$200,000 on average, 2013 over \$250,000 on average, cotton and rice farms were \$105,000 on average. I'll move to the livestock specializations and this shows again lower average Net Cash Income in 2015 relative to 2014 across dairy, poultry and hogs, all types of farm specializations on average those farms were about \$100,000 in 2015 and cattle and calves were also down after several years of increases. The next slide is just highlighting that our focus going to shift now to the distributional impacts on farm households. We include in this analysis all farm households so about two million farms have a house, have an operator and we collect data on the household associated with that operator and what we do is present various measures of wellbeing, we'll be focusing just on household income and this is another bar chart comparing 2013, 2014 and 2015 income, these measures are Median Income Measures and because all farms have a different share of farm income to off farm income it's the case that you can't simply add median farm income to median off farm income and come up with total household income. The median of the distribution of off farm income is quite a bit different than the median of the distribution of farm income so they are not averages. If we were presenting averages then you could add them but these are median so, so they don't add, 2013 to 2014 just speaking about

the farm income slide median value is slightly negative in 2013, 14 and 15, we saw an increase in 2013 to 2014 and then a decrease in farm income in 2015 at the, at the household level. Switching to off farm income, median off farm income increased by 3.6 percent in 2015 to \$72,494 and total household income increased from 2013 to 2014 by 12 percent that's from the blue bar to the red bar, from the red bar to the green bar the 2014 to 2015 change we had a decrease of 2.9 percent a decrease in total household income is a reversal from over five years of steady increases throughout that period of time. The off farm income between 2014 and 2015 did increase by 3.6 percent so we had a slightly lower farm income, slightly higher off farm income but overall the median total household income was down in 2015 relative to 2014. So that is all of the slides I have for today I would be delighted to take questions.

Thank you very much Jeff this is Mike Illenberg again. I'll be moderating, if you want to submit your questions in the chat feature please go ahead and do so I will read them out to Jeff and he will respond accordingly. We do have a couple of questions, the first question is from Marsha, Marsha asks what made you revise farm incomes lower than in August? How did the surprise bumper yields offset price declines in corn and soybeans for example?

Thanks Marsha I would say that one of the biggest changes relative to 2015 well relative to the 2015 forecast that we made in August had to do not with crops but with livestock. We did see, at the beginning of the year in February we did know that, that commodity price, crop commodity prices were going to be low, they started out low the forecast, we used the, (Inaudible) forecast, were low and continued to, to be in that area the livestock forecast for what decreased for 2015 as the, the year went on so we saw big changes for example in beef relative to in August those were now showing a decreased price so it was more on the livestock side than on the crop side. With respect to your question about bumper harvests really the 2015 forecast is going to be more influenced by the marketing of the 2014, 15 crop than by the 2015, 16 so that's what we just have heard about with bumper harvests and new crop but we really were only marketing, we were only showing the impact of the most recently harvested crop in the end of our 2015 calendar year.

Thank you, we have another question from Spencer, Spencer would like to know what these estimates will mean for 2016 if you have any preliminary work?

We will come out with our first 2016 forecast in February so I would have to, we don't have a 2016 forecast now.

Thank you very much, we have another question, somebody had a question about what's causing the decrease in assets that you referred to in one of your earlier slides, I believe it was slide 12? Is it related to property values?

Property values are in there, the June AG Survey values are a big driver of our asset values, farm, farm land values are about 80 percent of the total, we did, so that's a big part of it. The other thing that I would just mention is that we do gather data in the ARMS Survey on other assets being held at the farm level and we're using that information to forecast change in assets as well so there's a number of things that are, that are at work there as well including financial assets held by the farm business.

Does the ARMS battle also contain any more information in the concentration of debt in the farm sector and is that, is there information available on that?

Yeah, we do have lots of information in calculation of financial ratios including these solvency sort of ratios like debt to asset, and debt to equity but we also have other liquidity based ratios and efficiency based ratios and I would just invite you all to check out our website and look for information for 2015 associated with this forecast and, and there's lots of information on that, I don't believe that we used the ratio analysis that it is a component of our farm business analysis which would allow us to break and have a little bit more.

And just for everyone's purposes I'll go ahead and I'll put the link up to this, this information in the chat feature in a few moments but first we have another question from Julie and Julie wants to know if you expect a continued slowdown in farm equipment purchases?

And that has to be one of the resiliency strategies of farm operators, what are ways they can maintain liquidity and by doing that they're, I expect that we will see them doing things that farmers always do which was to, to manage cash flow in such a way to avoid unnecessary expenses, they'll be paying a lot of attention to where the money goes so yes I do think that farm equipment purchases are going to be reflected in fewer farm equipment purchases.

Thank you, we have one more question, how much has corn income fallen on a percentage basis since its peak if we have that number and is the steepest adjustment for a commod, is it the steepest adjustment for a commodity?

I would say at least in this, with this forecast dairy is the biggest adjustment relative to 2014, relative to the peak and I'm, it would have to be close, it would have to be close, there are three years of continuous declines for corn if we just use the business level so that's about 40 percent maybe a little bit more than 40 percent reduction in Net Cash Income for corn.

Thank you, and I think you kind of touched on this but maybe you didn't, in the presentation somebody says that do we have any forecasts on the composition of debt going forward and I, we only forecast so far out but you can, I'll let you expand upon that.

Yeah, so the only forecast that we do in aggregate is debt that secured by real estate and debt that isn't secured by real estate, we had 6.3 percent increase in debt relative to 2014 slightly higher rate of increase for non-real estate secured debt so it's collat, collateralized with something other than, than real estate so slightly higher increase in debt relative to debt real estate collateralized debt...

Is that a big difference 6.5 to 6.1 growth rate relative to 2014?

Great thank you, and we're switching topics again and Spencer would like to know are you seeing a drop in the number of farmers as a result of lower incomes and is that ARMS data readily available of is that data already available?

Yeah, so, we are the biggest, I guess the most direct measure of, of farm

numbers is from the Census which is every five years so we're basically using 2012 as the, as the number of farms so I wouldn't expect us to have a new view on that for a couple more years. We do collect information annually through the ARMS Survey and we'll be able to look at, you know, perhaps the composition of farm households over time.

Thank you very much, so far that's all the questions we have I'll give it just a moment, in the meantime I have put up the ERS website link, to the highlights from the Farm 2015 Farm Income Forecast otherwise links directly to the forecast in that webpage so feel free to click on that. It looks like we don't have any further questions, I just want to take a moment to thank Jeff very much for presenting this for us and thank everybody for joining us I hope you all have a great day.

Thank you.