

## America's Diverse Family Farms Transcription

Good afternoon everyone and welcome to our webinar America's Diverse Family Farms 2015 Edition. My name is Nancy McNiff and I will be your host. This webinar is being recorded and will be posted on the ERS website next week. At any time during this webinar you may enter a question into the chat feature at the bottom left corner of your screen and we will answer them at the end of the presentation. Our speaker today is Robert Hoppe, Bob is an Economist in the Structure, Technology and Productivity Branch at the Economic Research Service US Department of Agriculture. In addition to authoring the America's Diverse Family Farms Report, Bob's areas of research also include general farm structure, small farms, million dollar farms and women farmers. I think we're ready to start so Bob you can now begin your presentation.

Okay, Nancy mentioned I will be discussing America's Diverse Family Farms 2015 Edition. This is a ERS re, brochure that came out in December of last year. It emphasizes the diversity of, of farms in the United States. This sort of information is interesting and also important in understanding the farm, the farm sector and farmers. One of the main conclusions of the brochure is that farming is still overwhelmingly made up of family businesses but family farms differ in size and other characteristics.

Our main data source is the 2014 Agricultural Resource Management Survey or ARMS. The 2014 version was the most recent ARMS Survey that was available. ARMS is an annual survey of farm businesses and their associated principal operators. The principal operator is the operator most responsible for running the farm. In those cases, where there is more than one operator and when there's only one operator the principal operator is, is the sole operator. The survey uses sample weights to accurately represent farms and production in the continental United States. The survey is conducted by the National Agricultural Statistic Service in cooperation with ERS. Before we get too far we need to define a couple of terms, those terms are farm and farm, family farm. A farm is any place that's sold or normally would have sold at least a thousand of product in a given year. A family farm with a majority of the business is owned by the principal operator and people who are related to the principal operator. The relatives do not necessarily need to live in the same household as the, as the operator. About 99 percent of the, of the 2.1 million farms in the United States are classified as family farms using this definition. Now the 1,000 dollar farm definition ensures that many US farms are counted even though their sale and production are very small. As a result, farms are, are diverse and range from small retirement and residential farms with very low output up to growing business enterprises with sales in the millions of dollars. As a result of this diversity ERS developed its farm typology which brings us to the next slide.

Now the typology classifies farms into more homogenous groups based on whether the farm is a family or non-family farm, a farm size which we measure using gross revenue and we also sort small farms by occupation of the principal operator. The goal here is to classify farms with similar characteristics together. I'd like to mention that our measure of, of gross revenue is the,

is defined as the sum of crop and livestock cash receipts, government payments and other related, farm related income such as custom work and production contract fees. Its gross revenue is measured before subtracting expenses.

This gets us to the ERS Farm Typology in detail. The first thing we're going to do is define small family farms. Those are family farms with gross revenue less than 350 thousand dollars, those retirement farms where the operators report that they, that they are, are retired but they still continue to farm on a small scale. We have off farm occupation farms where operators report a primary occupation other than farming. We also have a farming occupation farms with operators report farming as a principal occupation we divide those further into low sales farms with gross revenues of less than 10, less than 150 thousand dollars and moderate sales farms with, with revenues between 150 and 349 thousand. Brings us to mid-size family farms with gross revenues from 350 thousand to just under a million and the remaining family farms or large scale family farms they have sales over a million dol, over, gross revenue over a million dollars. We divide them between large family farms with gross revenues from one million to five million and very large family farms with gross revenues of, of five million or more. Non-family farms just don't meet the definition of, of family farms. The operator and relatives do not own a majority of the farm. Now that doesn't necessarily mean that they're, they're large farms held by public corporations that could include relatively small farms operated by unrelated business partners or, or a farm operated by a hired manager for a family of absentee owners. About 65 percent of the non-family farms have gross revenues less than 350 thousand dollars.

First thing we're going to use is the typology for is to look at the distribution of, of farms land operated and value of production into four groups, small family farms, mid-size family farms, large scale family farms and non-family farms. Small farms account for approximately 90 percent of all farms, they operate about half of the farm land but they only produce about 22 percent of, of the value of production. The large scale family farms, that's the ones with, with the gross revenues of greater than one million dollars by themselves count for about half of the, the value of production but they're doing that with only three percent of the farms. Family farms of the various types if you add them all up together they account for about 99 percent of farms and 90 percent of production. Non-family farms account for the, the remaining one percent of farms and 10 percent of production.

Now, although small family farms only account for less than a quarter of total production they are more important for specific commodities. What this graph does is show the, show the distribution of production of various commodities by the same groups we had in the, the four, the four groups we had in the previous slides, non-family farms, large scale family farms, mid-size family farms and small family farms. The arrangement of the, of the commodities we're looking at is by the share of, of production that counted for by small farms going from a high percentage to a lower percentage. You'll note that, that over half of hay and poultry is produced by small family farms, poultry is mostly produced under production contracts, the rest of the, of the commodities shown here, the other groups are more important. For instance, on cotton you can see that mid-size and large scale farms account for most of the production, same thing with cash gains and soybeans and also hogs, it's the same two groups. Large scale and non-family farms

dominate the production of specialty crops and, and beef. Large scale family farms by themselves account for about 75 percent, about three quarters of the production of dairy products.

Now, traditionally we think of farms as having just one operator but many farms have multiple operators and, and some multiple operators have more than one generation involved. The presence of younger operators on, in multiple operator, operator, who are multiple generation farms can affect expansion and contraction decisions as well as succession. Multiple generation farms are shown in the yellow here and a multiple generation farm has a difference of at least 20 years between the oldest and the youngest operator. The other portion of the bar, the blue, is, is, are, the remaining multiple operator farms that are not multiple generation. Now multiple generation farms are most common and account for about 20 percent of farms in the large, very large and non-family farms groups. Now the operators on multiple generation farms are not necessarily related and that's probably more relevant for the larger non-family farms.

We mentioned succession on the previous slide and that's important to farming given the age of, of, of principal operators of, of US farms. This graph shows the, the share of operators in each group that's at least 65 years old. Overall about 33 percent of US farmers are at least 65 years old. If you compare that with nonagricultural self-employed workers only 12 percent of them are that old. That line across here allows you to see how each group compares to the, to the share for the nonagricultural self-employed. The older operators are most common among retirement farms is approximately two thirds of retirement farms have an operator that over, over 65 which isn't, you kind of expect that, also about 41 percent of low sales farms have a large share of operators that old as do moderate sales farms. The rest of the farms are, you know, run around 20 percent. The advanced age of farm operators not, not surprising, it's understandable given that the farm is the home for most operators and they can phase out of, out of farming over, over a period of years.

The next graph we're going to look at how profitability of farms differs by size. The profitability measure we're using here is the operating profit margin. The operating profit margin measures the funds available to finance the farms business capital given as a, as a percentage of gross income. The funds that we're using in the new, in the new rate are basically the net income adjusted for unpaid labor. There's three groups we need to look at here. The red zone down here, these are farms with operating profit margins less than 10 percent, they have a high risk of, of running into financial difficulties. At the other extreme we have farms with an operating profit margin greater than 25 percent, these farms have, are, and low risk for financial difficulties and there's a middle, intermediate group the, the yellow zone that comes between these two. Small farms are more likely to have an operating profit margin in the, in the red zone, that's the four, first four bars here. The share of small farms in the red zone ranges from between 53 and 76 percent, on the other hand there's also a number that have, that are in fairly good shape with an operating profit margin of at least 25 percent but you'll note that the mid-size, large and very large family farms have a much higher share in the, in the green zone and also the share in the red zone none of these groups have a, have the majority of their farms in the, in the red zone.

Now despite the low profitability of, of most small farms farm households can fair favorably with an income of all US households. Each of these bars shows the, the median household income of a particular farm type. The line close to the axis down here gives you for comparison purposes a median household, median income of all US households approximately 53,700 dollars. All of the groups, all the typology groups have a, a median operator household income greater than the average, the median US household income. Overall about 30, only 32 percent of farm households had income below the median for all US households. The, they share of, of farms with income that low is highest for retirement farms, approximately 42 percent had, had income below the US median and for low sales farms 46 percent had a, an income below the median. Now for many small farm households most income comes from off farm sources.

Now we're looking at average household income by the typology and we're breaking it up into two, two components of farm income in yellow and farm income in, in blue. Note that the off farm income, the yellow portion accounts for virtually all income for retirement off farm occupation and all sales farms, also accounts for fairly large share of the income of moderate sales households approximately 73 percent and even 38 percent of the household income of, of those households on median, on mid-size family farms. About half of US farms report negative farm income are the share of, reporting a loss or highest for households operating off farm occupation farms about 68 percent of them report that they're, they're farm income is, is negative.

The level of income is important to farmers' wellbeing but so is their wealth. Wealth defined here is the, as the assets of the farm household divided, or subtract, minus the liabilities of the farm household and we're accounting both the farm and non-farm assets and liability here. This chart is laid out very much similar to the, the one on the median household income. You have the median wealth for each group shown in the red bar, we have the median wealth of US households of 82,500 and that's shown on, with a dotted line here. You'll note that each of the, each of the typology groups has a, has a median wealth much greater than that of all US households. Virtually all farm households, about 97 percent have wealth greater than the median for US households. Farmland makes up most of the wealth of farm households.

Okay, this chart is a little bit different from the previous ones. All the bars have been given color add up to 100 percent and we're looking at the distribution of, of different types of program payments across the typology so in the case of the darker blue here the land retirement program payments for such things as CRP if you add up all the, all the numbers for the blue, darker blue bars here you end up with 100 percent and the same thing for the others. We're going to start with commodity program payments. They basically reflect the acreage in crops that historically have been eligible for support. About 70, about 69 percent of the payments from these programs went to moderate sales and its mid-size family farms and large family farms, we're focusing on the red bars at this point. About 60, if you look at the light blue bar about 61 percent of working land conservation payments went to, went to mid-size and large family farms. These programs target environmental problems on, on farm land that's in production. Finally, we get to the land retirement conservation program payments, about 74 percent of these payments went to retirement off farm occupation and wholesales farms. It's good to remember though that about

three fourths of all farms in 2014 received no government payments so the effect of government payments on, on most farms is, is, isn't direct it's indirect.

We're also going to look at mid-sizes and large family farms receive 70 percent of crop insurance indemnities, again this is similar to the previous chart. All the, all the bars of a given color add up to 100 percent. And the two thirds of, of, of these, of the indemnities going to mid-size family farms and large family farms it pretty much reflects the distribution of crop land. These groups also participate heavily in the program, about two thirds of mid-size farms and three quarters of large family farms participate in federal crop insurance overall the, the overall percentage is, is only about one, one sixth of US farms. Federal crop insurance has grown recent, recently or in recent decades. The amount of land insured nearly tripled from about 102 million acres in 1989 to about 300 million acres in 2014. Indemnities exceeded government payments for the first time in 2011 through 2013. They fell down below government payments in 2014 due to, due to better weather.

And this brings us to...

For conclusions and implications farming still is largely made up of family businesses. There's nearly 2.1 million family farms and there's fewer than 25,000 non-family farms. About 99 percent of family, of farms are family farms and they account for 90 percent of production. Small farms account for 90 percent of farms and only 22 percent of production. Nearly half of the production in the United States occurs on large scale farm, large scale family farms which make up only three percent of US farms. The non-farm economy is critical, critical to small farm operators and their households this is largely due to the, the, the share of, of small farms receive most of their income from small farm sources because of this general economic policy such as tax or macro-economic policy can be as important as traditional farm programs to them.

About a third of US farm operators, at least 65 years old, there are some replacement operators working on multiple generation farms. There are substantial numbers that enter farming but they're not necessarily young people. Growing productivity plus the competitive nature of the market for farm products will mean that there'll probably be fewer but larger farms prevailing in the future. Federal, different farm programs effect different sets of farmers, commodity related programs largely go to moderate sales, mid-size and large family farms, working land payments go mostly to large and mid-size family farms and land retirement payments go to retirement, off farm occupational and wholesales farms. Finally, federal crop insurance has grown in importance in recent decades. The acres insured has nearly tripled since, since 1989, indemnities for succeeding government payments from 2011 to 2013.

We have some contact and reference information, you can reach me and my co-author Jim MacDonald at our email address is our ERS website has a copy of the America's Diverse Family Farm Report that you can download. We also have a farm structure and organization topic page that has information of the same nature that I presented here and finally we have an ERS web tool on our website, this allows you to create your own tables using the ARMS data with the farm typology codes, you can also download using different classification variables that ERS has developed over the years, any questions?

Okay, if anybody has a question you can enter it into the chat feature on the lower left hand corner of your screen. We have a couple of questions. So you showed that the number of small family farms is about 90 percent of all farms and you hear a lot about farms increasing in size, is that still true?

Yes, the, the production shifting to the, to the larger farms that's, we, we recently re, re-did the, revised the farm typology. In the past we topped off at 500 thousand dollars in sales. Let's call that large farms with no differentiation above that group, above that level and production was shifting up there enough that we, we had to in this version of the typology we had to add more classifications at the top. But overall the number of farms is fairly stable but that's due to the fact that the farms with revenues less than 10,000 dollars basically are, they rely pretty heavily on off farm income so they're not, they don't go out of business because of things in the farm sector. There is a shift if farms are more in the middle like the larger small farms have continually over, over the years between censuses you can trace a decline in their numbers but overall the numbers are, are, are stable but the, that's kind of masked by stable or growing numbers of farms under 10,000 dollars in, in revenue and that's why it's good to look at, at a range of, of sizes.

Okay, another question, is operating profit margins seem to be very low for all farms but especially the small one, how do they stay in business, do they?

Well some of them, a lot of them are relying on off farm income in the, in the farming part of the operation is strictly a farm sideline. If you're relying on, relying on farm income you couldn't have margins that low year after year but if you take somebody that's, you know, wants a like, wants to live on a farm and has a few horses, you know, that classifies as a farm even though they have no intention of, of selling the horses.

Okay, with small family farms relying so heavily on off farm income and with such a narrow profit margin what's the debt to equity ratio for this group, do you know?

Actually the debt to equity group ratio for...

For the small family farm.

Yeah, for, for like the retirement farms, the, the off farm occupation farms and the, I believe even the, even the low sales farms is pretty good. A lot of them are, you know, they have substantial assets and they, you know, if they're older in particular they've paid down their debt so the, the ones that have the higher debt asset, debt asset ratios are, are the ones that are, are leveraging to go or to, you know, or, or to the larger operations basically. That doesn't mean if there's somebody that's, that's trying to, you know, trying to make a living on a farm with a gross revenue of 100,000 doesn't have any debt, you know, a debt asset ratio issues but, but all, all in all the, you know, you got to remember like, you know, it's almost half of the farms are, are, are, off farm occupation farms and, you know, they've basically got land and very little income from farming, you know, their debt asset ratio may, is probably quite good.

Okay, it looks like that's all the questions we have. So thank you all very much for joining us this afternoon and have a wonderful day and thank you Bob for your presentation.

Thank you.