

## Understanding the Rise in Rural Child Poverty Webinar - Transcription

Good afternoon everyone and welcome to our webinar, Understanding the Rise in the Rural Child Poverty 2003-2014. My name is Nancy McNiff and I'll be your host today. Our speaker is Thomas Hertz. Tom has served as an economist in the Farm and Rural Household Well-being Branch at the Economic Research Service since 2009. Prior to coming to ERS he taught at the American University and the International University College in Turin, Italy and was also a visiting scholar at the Food and Agriculture Organization in Rome. I think we're now ready to start so Tom you can begin your presentation.

Thank you very much Nancy and good afternoon and thank you all for your interest in this work. What I will be doing today is presenting findings from an economic research report with my co-author Tracey Farrigan. The title of the report is the same as the title of this seminar and we're interested in the rise in rural child poverty between 2003 and 2014.

And what really motivated this research with our observation that in 2012, world child poverty reached its highest level since at least 1968. And it was higher in 2012 than it had been in 2010 in the depths of the great recession. That presented a bit of a puzzle and as we were studying this we noticed that by 2014 poverty had come down somewhat and the average rural family with children had seen their income almost completely recover from the effects of the great recession in real-terms after adjusting for inflation. Yet rural child poverty remained significantly above its pre-recessional level. So by 2014 average rural family income had recovered, but poverty remained elevated. And those two facts taken together imply that incomes had not recovered for lower income families. So that the bottom of the income distribution had not recovered from the great recession to the same extent that the average household had or the average family with children. And another way to put that is that income inequality has risen. Now there are many different measures of income inequality many of which have been discussed in the media quite a bit and implicitly what we're talking about here is inequality between the bottom of the distribution and the middle or between the bottom and the top not just between say the middle and the top one percent.

So what we try to do in this report is to quantify the relative importance of changes in that average income figure verses changes in the distribution of income, changes in income inequality around the average, how those two factors combine to explain the changes in rural child poverty between 2003 and 2014. So you can think about the average income as being a sort of a growth effect and the changes in income inequality we call the inequality effect and again what we're trying to explain is how those two factors determine rural child poverty.

Along the way we will also seek to quantify the share of the inequality effect that is driven by changing world demographics. So we will look at changing family sizes and the composition, marital status and then the characteristics of the head of household including their education,

their race and ethnicity, their age and their country of birth to see if any of those changes might explain the changes in rural income inequality which in turn we will show correspond to the changes in child poverty.

So this slide here reports the official Census Bureau child poverty rates between 2001 and 2014 by metro status. And what I mean by that is metropolitan counties shown in red here are urban counties and when we say rural we're referring to non-metropolitan counties which is the blue line. So this is the child poverty rate in percentages and you can see that it was rising during this period here even though this was a period of economic growth. 2003 to 2007 was a period of National economic growth and yet rural child poverty was rising. Then we had the recession during this period here when you would expect rural child poverty to rise and indeed it did, going from about 22 to about 24 per cent. And then this puzzling period here after the formal end of the recession from, say the middle of 2009 through 2012, the National economy had begun to grow again, the metropolitan child poverty rate was falling, but the rural child poverty rate continued to rise, and indeed it peaked in 2012 as mentioned at 26.7 percent, so more than one quarter of rural children living in poverty. And at this point it's well to mention what poverty means according to the Census Bureau. These figures are the official Census Bureau measures of poverty and that means that the family's total money income falls below the poverty threshold which is based on their family size. And as an example, the 2014 poverty line for a family of two adults and two children was 24,000 dollars a year. Nancy we seem to have a network connection error here.

Can you see the slides?

I got a network connection error.

Okay, hang on.

The connection's been reestablished. It looks like we are back online. So I am back online. I apologize, people, for that glitch. I hope everybody is still with us. On this next slide I'd like to talk about how we define and measure child poverty. So we do follow the Census Bureau in considering money income only. So what that means is that we do not consider the welfare enhancing effects of programs like the Earned Income Tax Credit or SNAP, Supplemental Nutrition Assistance Program otherwise known as Food Stamps. And these programs are considerable and their importance grew during the recession. Now the effects of these programs on poverty have been studied and they're accounted for in the Supplemental Poverty Measure otherwise known as the SPM. And if you follow the SPM over time you show... you see very little net change in child poverty over this period even as the official measure is increasing. So what that means is that these anti-poverty programs, EITC, SNAP and others are having their desired effect, but what we do is look at money income poverty, similar to the Census Bureau and that can be seen as the measure of the need for anti-poverty programs. So it's still worth studying in its own right.

Now as I mentioned we follow the official measure to an extent, but we modify it following a suggestion by the National Academy of Sciences. And what we do, at their suggestion, is to count the unmarried partners in a household and their children as members of the primary family rather than a separate family. So when the Census Bureau encounters an unmarried couple, they treat them as separate families and they separate their incomes and that tends to increase poverty whereas if you put them together it reduces measured poverty because it combines the income of both adults and then you can see, ah-ha, we have two adult incomes supporting however many children there are and that tends to lead to lower poverty rates. Now that's just a measurement issue. It's not really affecting people's experiences of poverty, but it's important to measure poverty properly. So this effect can be large in rural areas and has been growing over time due to the high and rising share of couples who are not married as we'll see. So basically we're using, similar to the official poverty measure, but with this one important adjustment for unmarried co-habiting partners.

And here's a slide that explains the difference in results between the official measure and our measure. This... our modified rural child poverty rate varies less than the official rate. So between '03 and 2012 the official rural child poverty rate rose by 6.6 percentage points, but our modified measure rose by only 4.9 percentage points. Then between 2012 and 2014 both measures improved. The official measure fell by quite a bit, by 3.0 percentage points. Our modified measure fell by 1.5 percentage points. So if you then look at the full period, from 2003 to 2014 including those last two years when poverty was improving somewhat, the official measure shows a net increase over the period of 3.6 percentage points and our modified measure is somewhat similar at 3.4 percentage points. So those two numbers in red, the 4.9 and the 3.4, those are the numbers that we're going to analyze further by trying to figure out the importance of income growth and the importance of income inequality in creating those increases in, in child poverty.

So the first thing to do is to look at income. And as I pointed out, by 2014 average real income in rural areas had almost completely rebounded, but income at the 25th percentile had not. So as many of you may know the 25th percentile is the income threshold above which 75 percent of rural families are found and below which 25 percent of rural families are found. So we've tracked where that threshold fell in each of the years of our study and what you can see, compared to the average... let's look at the average first... the average was relatively unchanged from '03 to 2007. This again is in real inflation adjusted terms at 2014 values, prices, and we're looking at only rural families with children. So during the recession the average fell by about three percent and it continued to fall in rural areas by another three percent from 2010 to 2012. So that right there explains part of the reason that poverty continued to rise. And overall from 2003 to 2012 we have a 6.5 percent loss in the average family income for rural households with children. Then in 2014 we had strong income growth over 2012, regained about six percent so as a result over the full period the average has fallen by just about one percent. So based on that alone you would not expect poverty to be that much higher in 2014 than it was in 2003 because

income at the average was only one percent lower. But income at the 25th percentile was still 10 percent lower and that's really where the poverty is coming from. So not only did it fall farther during the period 2003 to 2012, it then rebounded significantly but not anywhere near enough to offset the decline and we ended up with a 10 percent decline in the 25th percentile in real terms for rural households with children.

So as promised, what we then do is break down the percentage point increase in poverty into the share that can be explained by changes in average income and the share that can be explained by changes in income inequality. And the headline of the slide says the bottom-line of this report which is that more of the rise in rural child poverty over either of the periods that we look at can be explained by rising inequality than by falling average income. So the inequality effect dominates the growth effect. And in this first cluster of bars which looks at the period when poverty was steadily rising from 2003 to 2012 we can assign of the 4.9 percentage point increase that I spoke of 1.7 of those percentage points are due to that loss of income, that 6 percent loss of average income. Then the remaining two, the orange and the red, the orange is changes in income inequality that we can explain through changing demographics of the demographic factors that I mentioned before, family composition, education and forth, and the remaining 2.0 percentage points are additional changes in income inequality that don't appear to have anything to do with demographic change and are thus happening within demographic categories not just across different demographic groups. So that's the period '03 to 2012. Growth explains some of it, or I should say income losses explained some of the rise in poverty, but inequality explains more. Then by the time we come to 2014, as I said, average income had pretty much recovered to where it was. So the income effect or the growth effect was only this little square here, the two-tenths of a percentage point that we can pin on the change in average rural family income. And everything else, the 1.9 and the 1.2, those are the total effect of rising income inequality. And again, we can explain about 1.2 percentage points by looking at changes in demographics of rural households and the other roughly two percentage points we cannot explain that way.

So now let's look in a little more detail at the different components of this inequality effect. So I can explain, using demographic and educational factors, some of the changes in rural income inequality which are driving this change in rural child poverty. And among the factors that tended to increase rural inequality and hence rural child poverty were the share of children living in families with unmarried heads of household. That rose from 29 percent in 2003 to 34 percent in 2014, and that contributed to higher rural child poverty. There was also a slight increase in the number of children per adult of prime working age. So what you might call the dependency ratio increased slightly and that tends to raise poverty. On the other side of the ledger, the main factor that worked to decrease rural inequality and hence to decrease rural child poverty was the fact that the share of children living in households headed by a person with a college degree rose from 16 percent of kids in '03 to 20 percent in 2014. So we do see a strong effect of education on reducing poverty as you might expect and the changes in over the decade in the share of heads of household or heads of family with a college degree are quite noticeable, four percentage

points, and that works to reduce poverty above what we... excuse me... below what it would have been if we hadn't seen those educational gains. But as I said, about two-thirds of this inequality driven rise in rural child poverty looking at the full period between 2003 and 2014 cannot be explained by demographic change and it therefore reflects rising inequality within demographic categories and that primarily in turn reflects rising inequality of earnings, labor market earnings of course being the primary source of income for families.

So that's the punchline and to, to summarize let me just reiterate the ta, the takeaway message here which is that rural child poverty grew as we measure it by 4.9 percentage points, peaking in 2012 and thereafter, in the following two years average rural incomes rebounded sufficiently to nearly reach their pre-recession levels, yet income inequality was still higher in 2014 than 2003 and as a result, rural child poverty remained 3.4 percentage points above its 2003 value. It did not come back to the 2003 value even though average income had come back to the 2003 value. Just two percentage points... excuse me... two-tenths of a percentage point of that growth or 7 percent of the total were due to the slight difference in average income between 2014 and 2003. And the remaining 3.2 percentage points of additional poverty out of 3.4, so that's 93 percent of the increase in rural child poverty between 2003 and 2014 can be pinned on rising income inequality. And again the demographic effect allows us to explain about 1.2 percentage points of the 3.2, but... and, and among those demographic changes, the most important were an increase in rural children living in families with unmarried heads and also a slight increase in the number of children per adult. And both of those factors worked to raise child poverty.

And on the other side there was an increase in rural educational attainment which worked to reduce child poverty. So that's it for the formal presentation and I'm happy to entertain your questions now.

So if anybody has a question you can enter it in, on the left, bottom corner of your screen in the Chat feature. We have first question. How has the change in rural child poverty compared to the change in overall rural poverty?

Ah-ha. Okay. On the ERS website we have a page on rural poverty and we do the numbers for children and for adults and what you'll see is that the child poverty rates typically run six or seven percentage points higher than the overall all persons poverty rate. And that's because families with children are younger than average so the adults are not yet in their highest earning years and moreover, having children sometimes makes it difficult to fully participate in the labor market because of the time demands of raising children. So, but in terms of their trends, recent trends in child poverty are similar to the trends in all ages poverty measures. Both have been rising since the early 2000's with a more rapid increase during the recession and gradual declines in the last few years.

Okay, here's another question. On slide number eight, you mentioned on the last bullet... actually we need to go over to that page for you, on the last bullet... you mentioned that two-

thirds of the rise in rural child poverty cannot be explained by demographic change, what other kinds of changes might account for so many increasing income inequalities?

Okay, well I can't answer that definitively, but I do have some preliminary results from research we're working on now. So again, we're trying to understand this rise in inequality which translates into a rise in poverty. And it looks like the main factor is labor income is becoming more unequal. And that shouldn't be surprising that labor income is the most important component of income for the poor and near poor. And it looks like it's inequality in the hours of work that's the main culprit here. So that means that part of the rise in child poverty reflects the decline in the prevalence of full-time, full-year employment. And there's also appears to have been a change in the mix of occupations towards lower paid occupations and there have been slight declines in real hourly wages which are also contributing to the problem. So those are all factors which are tending to increase inequality both in urban and rural areas, and hence having an effect on child poverty.

Okay, we have another question. Do you have this information broken down by region?

Basic poverty data can be broken down by region, but we haven't done the analysis separately for the different regions. That's actually a good idea the datasets that we use are large enough that you could do a regional analysis, you couldn't, you couldn't go as low as the state level because the sample sizes are not large enough. But if you are interested in basic regional comparisons of poverty on the ERS website, there are several maps showing deep poverty, persistent poverty, child poverty at the county levels so you can see a finely graded regional segregation of where poverty is, but you won't see this analysis of the growth effect and the inequality effect at the regional level, at least not yet.

And sort of a similar question which I'm guessing has the same type of answer. Do you know which states have seen the biggest increase in rural child poverty, or is that something we just don't have in this particular report?

No that's not in this particular report. I believe KARS Foundation recently put out something that I think does a state by state comparison and those data are easy to find, but I'm sorry I don't have them at my fingertips.

Could you explain how increased income inequality contributes to increased child poverty?

Well it's, it's less complicated than it sounds, and many people have asked a version of this question when I presented this in the past, and here's, here's how to think about it. What we do is we say okay, take everybody in 2003 and let's look at what happens to the average family income between say 2003 and 2014, and let's suppose that everybody had experienced that average growth rate. So if income fell by one percent from 2003 to 2014, let's lower everybody's income in the dataset in 2003 by one percent and calculate the poverty rate. So that's how much ex, extra poverty we see because the average changed. Anything above and beyond that, if we

see addition poverty above and beyond that, it must be because not the average is changing, but that things are going particularly badly down at the bottom of the income distribution. And in that first slide which I showed you and I will return to here, this is making that same point that although the average only fell by one percent, income at the bottom fell by 10 percent. So I think you can see that if income around the bottom quarter of people is falling by 10 percent that is going to cause poverty. And we're calling that an inequality effect to differentiate it from the effect of changes in average income. So I hope that answers your question and makes our method a little more clear.

Okay, the next question is about population gains or losses. Do you have a sense, or is it in this report at all, for what the role of rural population gains or losses have on the poverty rate?

Aah. That's a good question. So as many of you probably know, the last few years are the first years on record that the rural population actually declined although those declines were very, very small and it appears to have basically stabilized according to the 2015 estimates. But there has been this noteworthy decline in rural population where, over time, birth rates have been falling steadily, but those were usually offset by in-migration. And then after the recession people stopped moving to rural areas and stopped... and started leaving them in more numbers leading to a net decrease in the rural population. I don't think that has much of a causal effect on poverty. Right, I mean presumably various things are at work, poor households, on the one hand, that may be more inclined to leave the communities that they're in, on the other hand they may be less able to leave the communities that they are in, but I don't think that changes in population trends should be understood as explaining poverty. I think you need to look more at changes in employment and labor earnings, and then those probably explain both what's going on with poverty and why people are leaving rural areas.

Okay. There was a slide, I believe, that talked about... I think it was slide number three that this is referring to where it shows that in urban areas or the metro areas that rur... child poverty got essentially better or it went down after the recession verses in rural areas and this may be a reflec... or a question related to that. Is there... do you know if there's less assistance or is there any evidence that rural... there's 1, there's less assistance available for rural child poverty than in urban areas? Like, you know, like is, is there less available for rural areas then urban areas?

Uh-huh. Well, that's tricky. So I'm not an expert on anti-poverty programs and I'm sure there're many rural advocates who point out holes in the safety net that are particularly problematic in rural areas in terms of service delivery and remote locations and this kind of thing. What and, what I what I do know is that these numbers don't reflect the effect of any anti-poverty programs because they're only looking at money income earnings, it does include social security because that's money income, but it doesn't include things like Food Stamps and EITC even, so if there was a rise in rural child poverty in non-metro and there was... while it was falling in metro, it's not right to say that, that is the result of different successes of anti-poverty measures. I think what that reflects instead is different outcomes in the labor market.

Okay, great. So we have another question. What is the likely percentage of single parents as head of household in rural areas, do you think? Or do you have that information?

I can look that up. Yeah, that's in the report. So, give me one second. So as of 2014 in rural areas looking at the number of children we had 66 percent of children living in married couple families, nine percent of children living in single male headed families and 25 percent of children living in single female headed families. So the category single female was up about 4 percentage points over 2003 from 21 percent to 25 percent and the category single male was up by about a percentage point as well which means that the married couple number had fallen from about 72 to about 66 over a decade from 2003 to 2014. So that's counting the percentages of kids that live in each of those types of families.

Okay...

And by the way, the...

...I'm just going to follow up on that thought. The, the decline in the share of children living in married couple families is a long standing, nationwide trend, but over that same period it was less marked in urban areas. It fell from 71 percent to 69 percent. So it was a two percentage point decline in urban areas though at a slightly higher level, 69 percent compared to 66 percent in rural areas, so declining a little more slowly in urban areas and at a somewhat higher level in urban areas as well than in rural.

Okay. We have a question about, I think it's about slide number six, but I'm not sure if this person was here for this part. The question is did the 70, 75th percentile, meaning I guess the upper... the other two-thirds... see a net decrease as well in the 2003-2014 period?

Let's see. I know the median, the 50th percentile fell slightly. I think by the time you get around the 75th, 80th, 90th percentile you see fairly flat and then when you look at the top 10 percent you see all the growth. So I'm not exactly sure where sort of the break even percentile was, but it's somewhere above the median. And by the time you're at the 90th percentile you see gains.

Okay. Do we have any way of knowing whether regions that are experiencing I guess large immigrant populations coming into them have higher poverty in the 25th percentile?

Ahh...

As a demographic change, I guess.

Right. Mmm, well nationwide it appears that changing immigration status or country of birth explains very little of what's going on with rural child poverty and likewise explains very little of what's going on with urban child poverty. So there may be pockets of poverty that are associated with high immigrant shares in some communities, but it doesn't make a... it's not a large part of the story when you look at the nation as a whole.



Okay. When you calculate average income or average family income is that the mean the median, and what would be the implications if the other statistics was used, used in the analysis? So whatever you did use, what's the difference?

Okay so average mean, is the mean and you are correct and it does matter whether you consider means versus medians. So what we're... the reason that we look at the average is because when you think about economic growth, you know, is GDP rising, are jobs being created, those are all statements about the whole economy, the total economy and the total and the average are basically the same thing unless the population size is changing so fundamentally the average and the total are conceptually moved together. And that's what I was trying to get at. It was like okay the economy is growing on average or in total, but is it growing at all parts of distribution the same way. So the average is going to reflect, as you know, a fair amount of the experience of the top one, five or ten percent. They are the ones who are really pulling up the average and the 25th percentile is going to be able to fall even when the average is rising precisely because of, of that. So you could look at the median versus the 25th percentile and you would see a similar story, though the gap in, in the sort of shares of poverty explained by those two pieces would be a little bit different, but I wanted to focus on the average because I wanted to be able to talk about... okay look, we're in a period when averages are rising, the economy is growing, how come we still have rising poverty?

Okay. We have another question. Could you provide some information on the different sizes of non-metro areas in relation to the location to metro areas and income inequality? Is there a relationship between the sizes of the non-metro areas and income inequality?

Aah. That's a good question, too. I... you know... I'm just going to have to punt on that. I haven't really thought about whether income inequality or even rural child poverty is systematically related to size of the metro area. Now on the ERS website there the rural child poverty numbers are broken down in various ways and they may be broken down by various county typology systems where they talk about whether you're adjacent to a metro and how big the largest population area is in your county, but I, I don't have a good answer for you for how that relates to rural inequality or rural child poverty. I apologize for that.

Okay. Do you know what dispi... instead of... well besides farming, do you know what is the major rural labor market or what, what are the major employers in rural areas?

Oh, well that's a good question. It's important to clarify that farming is more common in rural than urban areas, obviously, but it is by no means the largest employer in rural areas. When you look at non-metro counties in general, they look a lot like metro counties in terms of their mix of industries. They have a lot of services, they have a fair amount of manufacturing, although not as much as they used to, they have a lot in health care and education, the, the mix in industries is not that different from metro counties. There is a somewhat higher share of natural resource which includes both farming and mining, there's also a somewhat higher share in manufacturing,

surprisingly, but apart from that there are not huge differences in the industry mix of rural America as a whole compared to urban America. Oh and there's much lower shares of finance, insurance and real estate, the things that you think of as big city jobs.

Okay. And somebody has a question on slide number six which is already up. He just... she just wanted clarification on is the average percent at the top part, the top 75 percent of households or is it all households?

That's the average for everybody. That's all, all households. Yeah.

Do you know if there's any difference between minority groups in rural areas as far as poverty rate?

Absolutely. Poverty historically has been higher among black and Latino families than among white families and that's true in rural as in urban America. There's some numbers on poverty by race and ethnicity for rural and urban on the ERS website.

Okay. That's all the questions we have. I wanted to let everyone know that this per, presentation has been recorded and it will be posted on our website at [www.ers.usda.gov/multimedia](http://www.ers.usda.gov/multimedia) in about a week. We have to get it closed captioned before we can put it up there. And that's about it. Thank you all for joining us and have a wonderful day.

Thank you.