The Relationship between Poverty and Self Sufficiency

The recent release of the 2010-2014 American Community Survey (ACS) five-year estimate is an opportunity to look at Oregon in new ways. The ACS publishes information on demographics, income, housing costs, and many other issues of interest to researchers trying to understand how Oregonians live and work. Although the ACS publishes updates annually, those updates focus on the state as a whole, or on specific metropolitan areas. The five year estimates are key to understanding all of the different regions of the state, including its most rural areas.

A subject of particular interest is the measurement of poverty and the use of self-sufficiency services like SNAP and TANF. We know that the use of self-sufficiency services rose drastically during the Great Recession, and only recently have begun to recede. We also know that poverty has increased in the state, and these increases were not uniform. Although often used interchangeably, the level of poverty and utilization of public assistance programs are not the same. “Poverty” is generally understood to describe people living at or below the federal poverty level (FPL). However, SNAP is available to most people with income up to 30 percent over the FPL, and in some cases up to 85 percent over the FPL. TANF enrollment is limited to Oregonians with children who have an income at or below 42 percent of the FPL - that is, less than half the income that would still be considered "in poverty."

Using the new ACS data, I charted the relationship between percent of residents in poverty and participation in public assistance. One graph shows participation in SNAP, the other in “cash assistance,” which is primarily TANF, but can also include some smaller programs. The results show wide differences in poverty across the state as well as differences in how poverty rates translate into participation in self-sufficiency programs.

Figure 1 shows the percentage of households in poverty (the vertical axis) compared to the percentage of households participating in SNAP (the horizontal axis). The graph is centered at the overall Oregon percentages – 15 percent of Oregonians reported in the ACS that they were in poverty, and 19 percent reported receiving SNAP. Counties with SNAP participation that exceeds the statewide level are to the right of the vertical blue line. Counties with a higher percentage of households in poverty than the state overall will be above the horizontal blue line.
Figure 1: Households with SNAP by Households in Poverty

Hypothetical "fit" between SNAP and Poverty

Households in Poverty

Households with SNAP

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The most obvious pattern in the data is that most counties report greater poverty than the statewide value – only 11 of 36 counties fall below the horizontal line. This is due to the fact that the population of the state is concentrated in a handful of counties – Clackamas and Washington counties for example have a large population and a small percentage in poverty. This pulls down the statewide poverty percentage substantially. The middle-sized counties of Deschutes and Yamhill also help to lower the statewide poverty rate. The state’s most populous county, Multnomah, has a poverty and SNAP participation rate somewhat higher than the state overall. Although Multnomah, Washington and Clackamas share a single metropolitan area, they do not share the same rates of poverty and SNAP enrollment.

The orange line represents a hypothetical “fit” between SNAP participation and poverty – if the two were perfectly matched, all counties would fall somewhere on that line – 11 percent in poverty would translate into 11 percent on SNAP and so on. Instead, most counties are below the orange line, meaning that SNAP participation exceeds the rate of poverty. That’s not surprising, given that SNAP is available to people up to 185 percent of the federal poverty level in some cases – although the majority of SNAP recipients are at or below 130 percent of FPL. But it does beg the question: why are any counties above the orange line? Those counties have SNAP participation below the percentage of households in poverty.

First, we must address the puzzle that is Benton County. In many economic measures such as per-capita income and unemployment rate, Benton appears to be a county with a thriving economy. But income survey data consistently shows the county to be high in poverty. This is almost certainly due to the presence of Oregon State University. The large student population appears – based on the methodology of the American Community Survey – to have little or no income (and therefore be in poverty) although help from parents, university supports, and student loans make that definition inaccurate. The inclusion of Benton as a high-poverty county should therefore be considered a type of measurement error.

This leaves Wheeler, Sherman, and Harney counties. All three of these counties are rural, which may play a part in their under-utilization of SNAP. Rural residents may have many reasons not to participate, from the high cost of travel to a DHS field office (in both time and fuel) to the potential sense of stigma that accompanies receipt of government assistance. Still, the poverty level exceeds the SNAP participation rate for only a few rural counties, so the simple designation “rural” is not sufficient to explain local patterns of SNAP participation.
Figure 2: Households with Cash Assistance by Households in Poverty
Figure 2 shows the percentage of households receiving cash assistance (primarily TANF) by households in poverty. The graph is centered on the statewide value for Oregon. In the 2010-2014 American Community Survey Five-Year Estimate, four percent of respondents reported their household received cash assistance, while 15 percent reported being in poverty. Counties above the horizontal blue line reported greater poverty than the state overall, while counties to the right of the vertical blue line reported greater use of cash assistance.

Unlike Figure 1, this graph looks rather random. The SNAP by poverty data showed a general trend – the higher the percentage of households in poverty, the higher the utilization of SNAP. The cash assistance data does not. There are similarities between the two graphs – Washington, Clackamas and Gilliam counties show low poverty and low utilization of both SNAP and cash assistance. At the other end of the spectrum, Malheur County is something of an outlier, with high poverty and use of both SNAP and cash assistance. In addition, Harney County stands out on both charts as having relatively high poverty, but low utilization of the services designed to mitigate it. Among the counties there seems to be a weaker relationship between poverty and cash assistance than between poverty and SNAP participation.

The very fact that the relationship between poverty and cash assistance appears to be random is interesting. Columbia County has relatively low rates of household poverty, but the same rates of cash assistance as places with higher poverty, like Lincoln and Lane counties. Crook, Union and Hood River counties have very similar rates of poverty, but very different ratios of population receiving cash assistance. All three of these counties have about the same population size. The general idea that there is a rural-urban split in use of cash assistance does not hold up, either. Although the urban counties of Clackamas, Washington and Deschutes have a similar pattern of low use of cash assistance and low relative household poverty, Multnomah and Marion do not.

Age is another variable that could be used to explain the prevalence of cash public assistance. Since people over the age of 65 have access to social security, the relative youth of the county population could influence use. Again, no pattern emerges – although Hood River and Harney counties both have a similar age demographic, their use of cash assistance is very different. Among urban counties, Clackamas and Marion are also similar in age demographic, and different in cash assistance usage.

The only variable that appears to be strongly related to the use of cash assistance is the prevalence of single parenthood. As was pointed out in the Spring 2015 Regional Forecast document, no other demographic variable works as well to predict the use of cash assistance.

As a professional researcher, I’m usually hesitant to share ‘null findings’ – that is, the lack of relationship between variables. In this case, I’ve made an exception, and I think for a good reason. People often use poverty and self-sufficiency service interchangeably, as if they were one and the same. However, the lack of relationship discussed in this section should serve as a reminder that poverty rates should not be assumed to explain everything. Rather, it should be seen as one factor among many.

For more information on the data presented here, contact:

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