ECONOMIC UPDATE
REGIONS
September 2017

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Regions Footprint: 2016 Median Household Income And Poverty Rates

Recently released data from the Census Bureau suggest that after several years of being mainly notable for its lack of vigor, the fruits of the current economic expansion are being spread across a wider group of households. According to the Census Bureau, median household income rose by better than three percent in 2016, building on an even stronger gain in 2015. That the benefits of an economic expansion become more broadly based as the expansion endures is not in and of itself unusual; what makes the current cycle stand out is the length of time it took to get to the point where median household income exhibited such sturdy growth. At the same time Census released its estimates of 2016 median household income, they also released data on the incidence of poverty, and the data show the overall poverty rate declined once again in 2016. In what follows we look at trends in median household income and poverty rates for the states in the Regions footprint, and how these trends compare to those for the U.S. as a whole. As we frequently note, while rates of job and income growth for the Regions footprint, taken as a whole, are in line with U.S. averages, there is a considerable degree of divergence when the states are looked at individually. The data on median household income and poverty rates are no different in this regard.

Real Median Household Income

STATE	Level, 2016	2016 % change	Cumulative % change, 2015-16	2016 as % of peak
Alabama	$37,631	2.03	6.42	97.23
Arkansas	$36,075	4.26	5.92	95.85
Florida	$41,376	1.60	5.62	91.91
Georgia	$43,572	3.20	6.97	91.58
Iowa	$45,759	1.46	3.25	100.00
Illinois	$49,593	1.01	4.62	95.68
Indiana	$42,559	2.22	4.30	91.03
Kentucky	$37,958	1.89	7.02	99.52
Louisiana	$36,728	-2.52	-0.01	92.58
Missouri	$42,097	1.70	5.46	95.97
Mississippi	$33,968	1.56	3.74	91.52
North Carolina	$41,152	4.42	7.04	94.79
South Carolina	$40,271	3.47	7.77	92.99
Tennessee	$39,494	1.39	7.84	95.26
Texas	$46,017	0.36	5.17	100.00
U.S.	$46,873	2.00	5.82	98.09

Source: U.S. Census Bureau; Regions Economics Division

Before proceeding we'll take care of a few housekeeping items pertaining to the data. The Census Bureau publishes two different measures of median household income and two different measures of poverty, because, really, why wouldn't you. One set of measures is derived from the Current Population Survey (CPS), which is the same survey from which the unemployment rate is derived. The CPS is used to produce a range of demographic and socioeconomic estimates for the U.S. as a whole and, to a lesser degree, states and metro areas. The second set of measures is drawn from the American Community Survey (ACS), which is used to produce estimates of various social, economic, and housing characteristics on geographies ranging from the county level to the national level. On the national level, Census suggests using the measures produced from the CPS, but on the state level and below the measures produced from the ACS are used. The ACS is the data set from which the measures discussed here were produced, so for the U.S. the level of median household income and the poverty rate will not match those you may have seen in media accounts of the income and poverty data, as those accounts are based on the CPS measures. The two are close and, more significantly, the direction and magnitude of changes between the two surveys are consistent. One drawback of the ACS data is that there is a limited history of data, making it difficult to make meaningful comparisons across time.

It is also worth noting that one of the difficulties in dealing with aggregate measures, such as total personal income, is that they tell us nothing of the distribution of the underlying variable. So, as in the case of total personal income, that the aggregate grows by, say, five percent in a given year doesn't tell us about how widely that growth is distributed or how narrowly it is concentrated. This is one advantage of using median household income as a gauge of the extent to which growth is enjoyed by a wider segment of the population,

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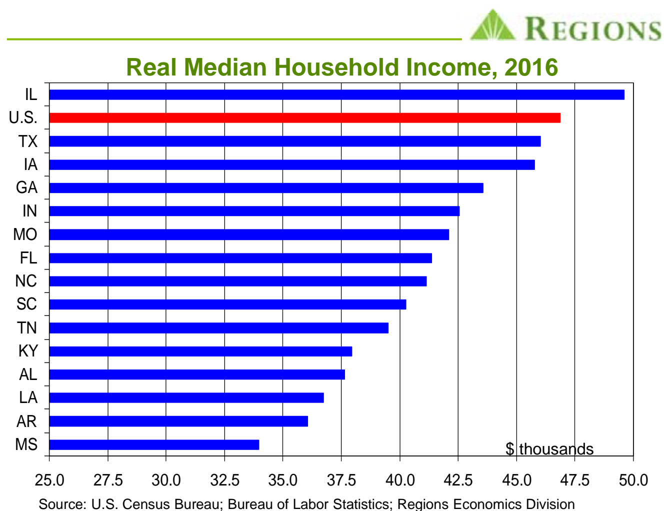
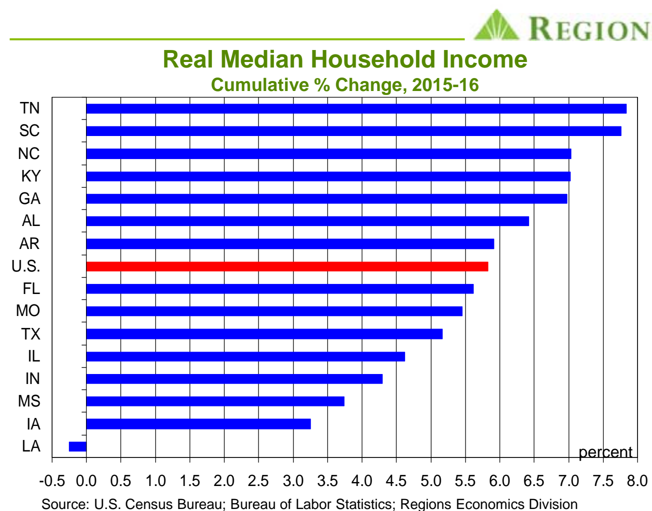
though it is certainly not a perfect measure. Median household income considers money income, such as labor earnings, financial transfer payments, interest income, and dividend income, but does not include noncash payments such as food stamps, housing subsidies, or Medicaid, nor does it include capital gains. Finally, in most of what follows our basis for discussion is real, i.e., inflation adjusted, median household income. This is, after all, the more relevant measurement as it accounts for not only growth in nominal income but also the purchasing power of that income.





As has been the case nationally, growth in median household income in the Regions footprint has been painfully slow over much of the current expansion, but has picked up markedly over the past two years, at least in most of the states in the footprint. As seen in the chart above, Illinois is the only state in the Regions footprint in which the level of real median household income is above the U.S. median, while the level of real median household income in Mississippi is 72.5 percent of the national level. North Carolina posted the fastest growth in real median household income in 2016, followed closely by Arkansas, while Louisiana saw a decline in real median household income in 2016. Indeed, when taking 2015 and 2016 together, Louisiana saw a slight decline for the two-year period, which to a large degree reflects the extent to which the downturn in the energy sector impacted the state economy. This was also the case in Texas, though given the higher degree of industrial diversity in Texas relative to Louisiana the drag from the energy sector was not nearly as severe in Texas. Tennessee and South Carolina saw the fastest cumulative growth for the 2015-2016 period, with seven in-footprint states posting growth faster than that of the U.S. as a whole.

There are a number of factors that determine the level and rate of growth of median household income. One relevant factor in the Regions footprint is the population split between those living within and outside of metropolitan statistical areas. Median household incomes for those living within a metropolitan statistical area (MSA) are significantly higher than for those not living within an MSA, and many states in our footprint have high concentrations of populations who reside outside of MSAs. More generally, of the four broad Census regions, households with the highest median household incomes are in the Northeast and West regions, with households in the Midwest and South having the third and fourth, respectively, highest. Aside from these geographical factors, the industrial make-up and the rate of job growth within a specific geographic area are key factors in the level of and growth of median household income. So, in those states with high percentages of population residing outside of an MSA, with little industrial diversity, or with heavy exposure to an industry in either a cyclical downturn or a structural decline, one would expect to see lower levels of median household income and slower growth over time.

Clearly, the sheer brutality of the 2007-09 recession took a heavy toll on median household income across the entire nation. That total nonfarm employment continued to decline until January 2010 and then increased at a highly uneven pace, across geographies and across industry groups, prolonged the drag on median household income in the early phases of the recovery. That wage growth has been notably sluggish over the life of the current expansion has been another drag on growth in median household income. As such, it will likely come as little surprise that on an inflation adjusted basis, median household income has yet to return to pre-recession levels in many states, including most of the states in the Regions footprint, and in the U.S. as a whole. What will almost surely come as a surprise, however, is the extent to which real median household income has yet to recover from the 2001 recession which, you may recall, despite being relatively brief and shallow nonetheless fostered the original "jobless recovery." In other words, while the 2001 recession began in March 2001 and ended in November 2001, total nonfarm employment continued to decline through August 2003. Moreover, as economic

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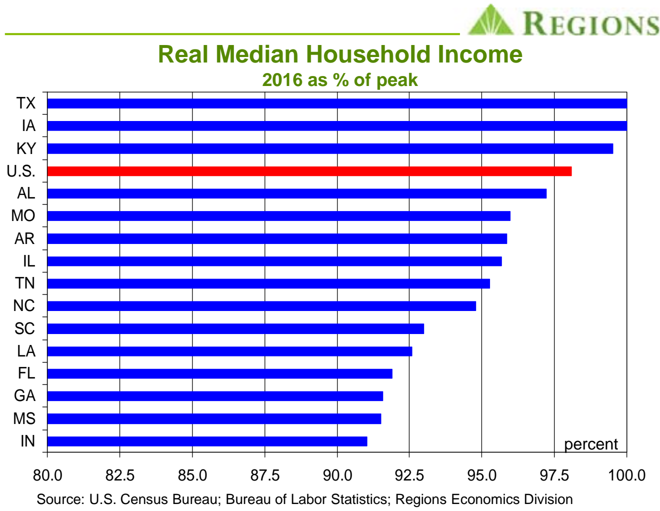
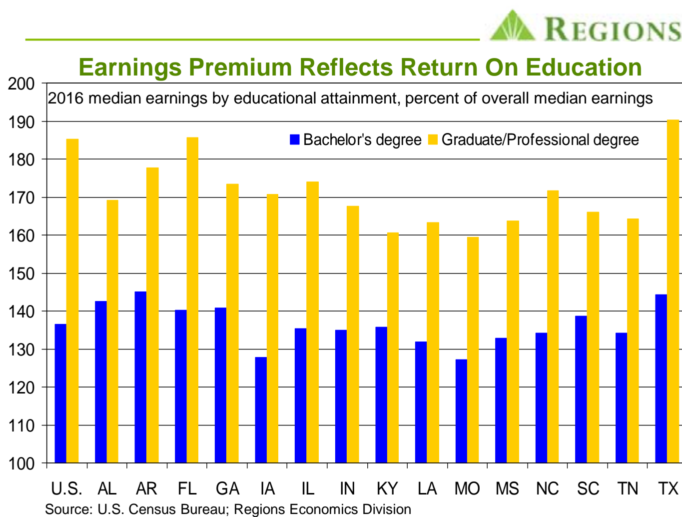
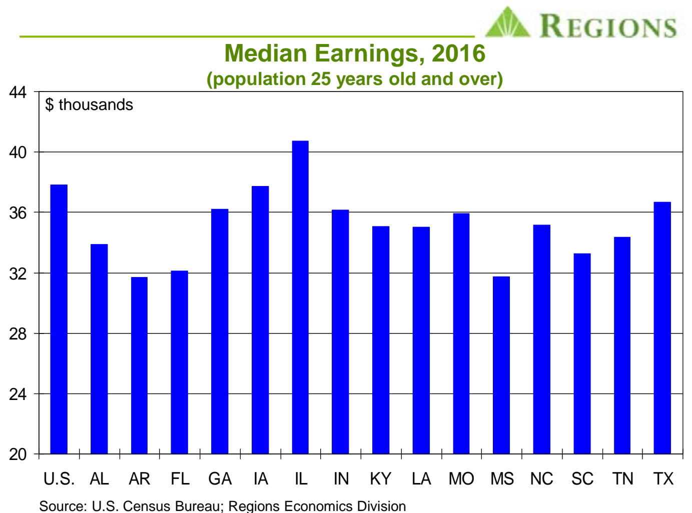
growth in the years leading up to the 2007-09 recession was heavily concentrated in housing and housing related industries, income growth remained notably weak relative to past expansions and highly uneven across individual states and metro areas.



We offer the above discussion as a means of putting the chart to the side in proper context. The chart shows 2016 real median household income as a percentage of the prior peak for the 2000-2016 period (as noted above, the ACS data come with limited history which rules out going further back in time). Both Iowa and Texas saw real median household income hit a new high for the 2000-16 period in 2016, but in each of the remaining 13 states and for the U.S. as a whole the prior peak has yet to be revisited. Again, though, much of the hit to real median household income dates back to the 2001 recession – the peak in the 2000-16 period came in either 2000 or 2001 in Arkansas, Georgia, Illinois, Indiana, Mississippi, Missouri, North Carolina, South Carolina, and Tennessee, and income had not yet recovered by time the 2007-09 recession started. In Alabama, Florida, Kentucky, Louisiana, and the U.S. as a whole, the peak in the 2001-16 period came prior to the 2007-09 recession.

This is a good, even if somewhat discomforting, illustration of the extent to which structural shifts in the economy have powerful and long-lasting impacts for those on the wrong side of these shifts. For instance, increased globalization and the increased use of technology that significantly boosted productivity growth within the manufacturing sector have led to a long-running decline in manufacturing employment – the recent string of modest gains in manufacturing employment have eased, not reversed, this trend. Moreover, one of the attractions to manufacturing entities, particularly those involved in motor vehicle production, who have located plants in the Southern states over the past decade or two has been a largely non-unionized labor force, which has held wages below where they would have been in other parts of the U.S.





More broadly, the "tech revolution" of the 1990s and early 2000s has increased the premium attached to skilled and more highly educated labor, so generally lower concentrations of adults with Bachelor's degrees or higher also help account for patterns in median household income within parts of the Regions footprint. As can be seen in the first chart above, there is a significant earnings premium associated with a Bachelor's degree, and an even larger premium associated with a graduate or professional degree. For instance, in Florida in 2016 median earnings of those with a Bachelor's degree were 40.29 percent above the overall median level of earnings, while median earnings for those with a graduate or professional degree were 85.59 percent above the overall median. As seen in the chart, the premiums vary from state to state, as does the share of the 25-and-over population possessing either type of degree, with most of the states in the footprint lagging the national average in this metric. This disparity in earnings amongst those with differing levels of educational attainment is one of the primary reasons that the degree of income inequality has widened over the past several years.

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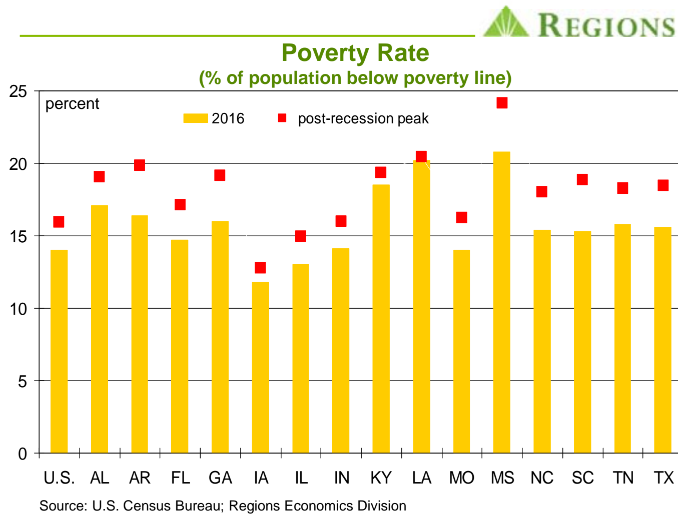
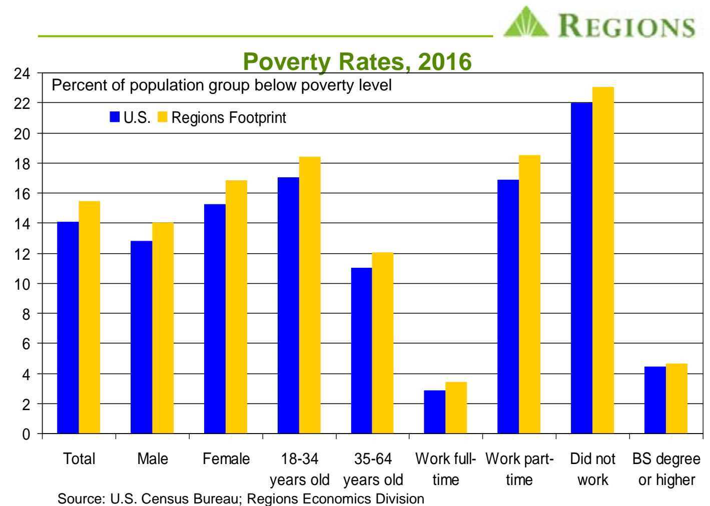
This of course does not mean that those with lower levels of educational attainment do not share in the benefits of an ongoing expansion, and as we have noted the past two years have seen those benefits spread over a wider segment of the population. This took much longer in the current expansion, however, given the slow pace of growth seen over the course of this expansion and the degree of labor market slack present at the beginning of the expansion. What is striking, however, is the extent to which many states have yet to fully recapture the losses associated with the 2001 recession. Even so, as income growth has picked up pace, the poverty rate has been pushed lower. As of 2016, per the ACS data, 14.0 percent of the U.S. population was living below the poverty line. Though poverty rates decreased across all broad demographic cuts in 2016, the geographical patterns evident in the data on median household income are also present, as would be expected, in the poverty data. In other words, the South has a higher poverty rate than any of the other three broad Census regions, and the incidence of poverty is higher amongst those living outside of an MSA than amongst those living within an MSA.





The first chart above shows the 2016 poverty rate (represented by the gold bars) for each state in the Regions footprint relative to the peak associated with the 2007-09 recession (represented by the red squares). It is worth noting that while the recession ended in June 2009, poverty rates generally did not peak until 2011 or 2012, which corresponds with the troughs in real median household income in the individual states. Louisiana's poverty rate increased in 2016, and at 20.20 percent is only marginally below the post-recession peak of 20.43 percent. As noted above, this is a reflection of the extent to which weakness in the energy sector filtered through much of the state economy. The second chart above shows poverty rates, for the U.S. as a whole and the Regions footprint as a whole, amongst different segments of the population. The relative rates across groups are not surprising, i.e., those working full time and those with higher levels of educational attainment have poverty rates significantly below the overall average, but we nonetheless thought it would be interesting to show the comparison across these various segments.

The state-level data on poverty from the ACS do not go back long enough to draw any meaningful conclusions as to how much further we might expect poverty rates to fall should we continue to see healthy growth in median household incomes, but it does follow that poverty rates should fall further should the expansion endure. The key will be further tightening in labor market conditions, in terms of both adding more jobs and wages rising at a faster pace. To the extent more of those either only marginally attached to the labor force or not currently participating in the labor force are drawn into full-time employment, that will be reflected in faster growth in household incomes and further declines in poverty rates across all broad demographic groups.

It took a frustratingly long time, but solid gains in median household incomes over the past two years show the benefits of the ongoing economic expansion have worked their way to an increasingly broad based group of households, which is the case nationally and within the Regions footprint. We expect the 2017 data to show further improvement, but given the current expansion is now in its ninth year, it is natural to wonder how much longer the expansion, and in turn the improvement in median household incomes, will endure. While another recession is inevitable at some point, it is highly unlikely that recession will approach the severity of the 2007-09 recession. But, as we discussed above, even a seemingly mild recession, such as the 2001 recession, can do considerable, and long-lasting, damage to living standards when it comes amidst significant structural changes in the economy. As we have learned over the course of the current expansion and that which followed the 2001 recessions, recapturing the ground lost during the next recession will depend on how broad based and how robust the subsequent expansion is. Here's hoping the next expansion does better than the last two, on both counts.

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