

The Demographics of Chattanooga Employment Growth

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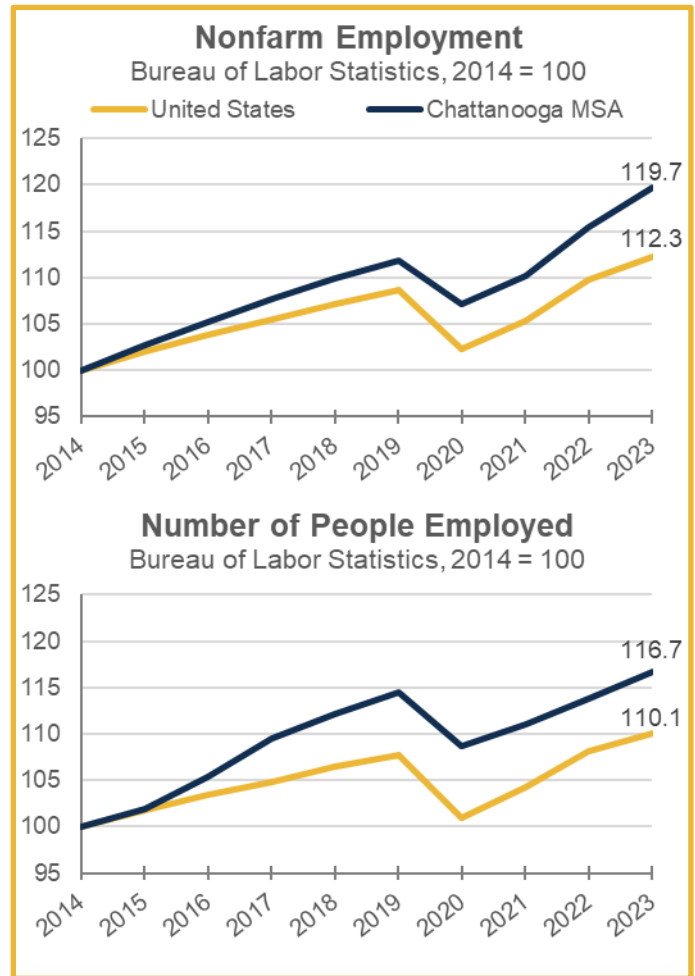
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Summary

The Chattanooga metro economy has experienced higher-than-average employment growth for the past decade. This paper examines how this manufacturing-led boom has meant higher employment to population ratios for every major demographic category, despite the major disruption of the COVID pandemic. It finds that the benefits of Chattanooga's boom have been felt by every age group, race, and education level examined. The biggest gains were experienced by those aged 20 to 44, men, African Americans, and those with a college degree or high school diploma as their highest education. Other notable observations include that, by 2022, blacks and whites in Chattanooga were about as likely to be employed, and the largest employment gap between Chattanooga and the rest of the country is for those with less than a high school diploma.

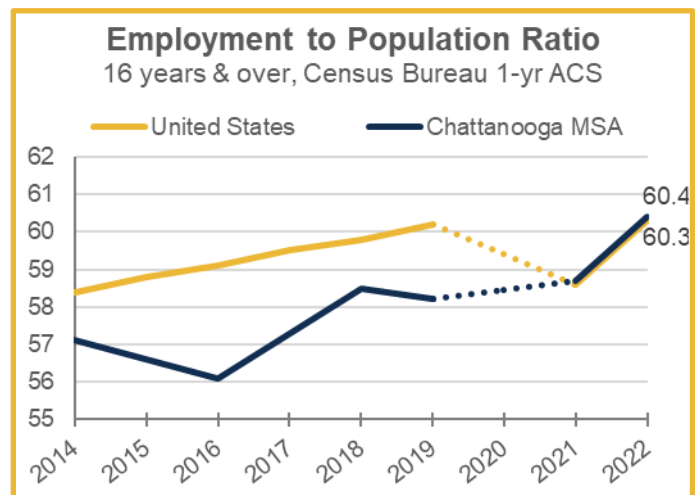
Introduction

For about a decade, the Chattanooga metro economy has been generating employment faster than the U.S. economy. From 2014 to 2023, annual nonfarm employment (jobs) rose by almost 20 percent in the Chattanooga MSA and by just over 12 percent nationally.ⁱ A similar growth gap appears looking at the number of people employed rather than the number of jobs: By 2023, there were almost 17 percent more employed people in the Chattanooga MSA and just over 10 percent more employed people in the United States.ⁱⁱ As documented by a previous CRER white paper, Chattanooga’s employment growth over this period has been fueled by a manufacturing sector that expanded at five times its national rate.ⁱⁱⁱ The purpose of this paper is to look more deeply at the period to see how widely the fruits of this growth have been spread.



Because population also grew during the period, a better measure of the employment growth is the employment to population ratio—the percentage of people 16 years and over who are employed. According to data from the Census Bureau’s American Community Survey (ACS) the employment to population ratio for the United States was about two points higher in 2014 than in 2022, the most recent year for which data is available.^{iv}

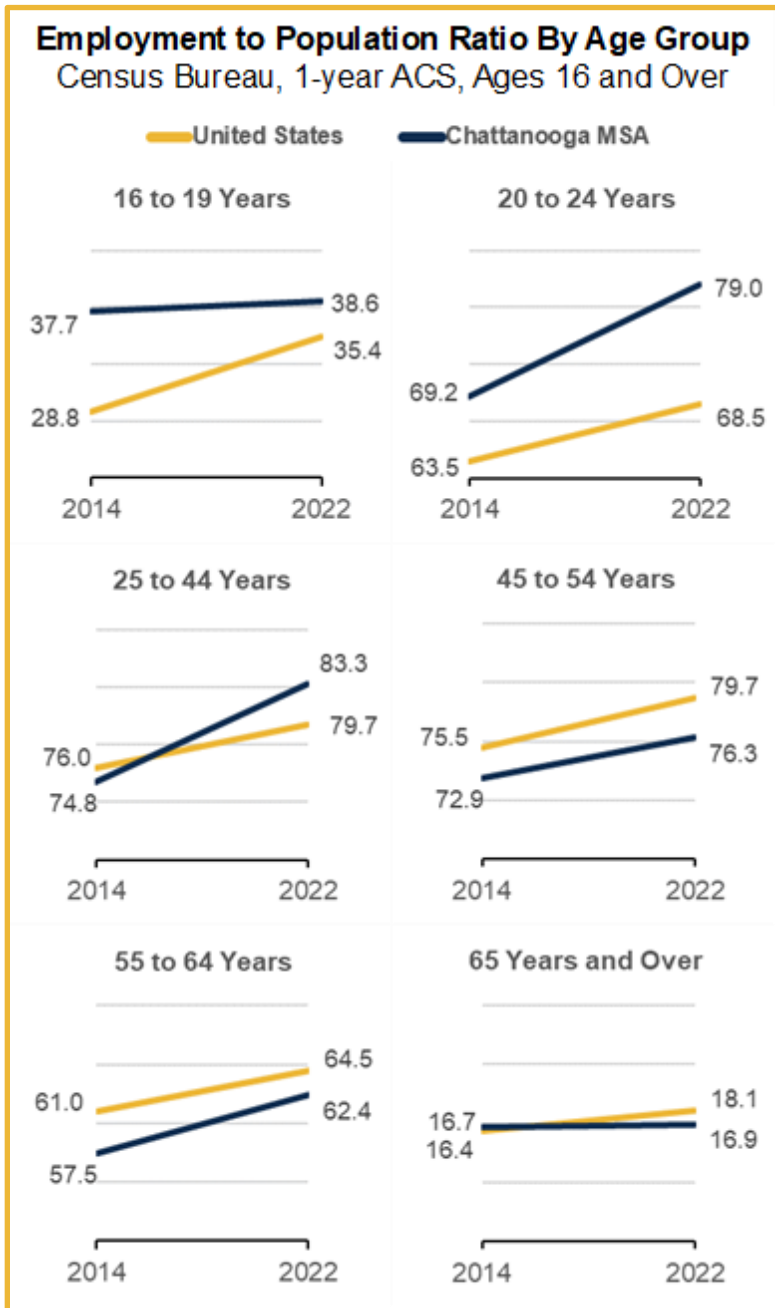
Chattanooga’s employment to population ratio was more than a full point below the country’s in 2014, but by 2022 it was a notch higher than it. In short, the gains in Chattanooga employment have drawn a significant number into employment who



otherwise would have been unemployed or out of the labor force altogether and local gains have outpaced those of the country as a whole.^v This paper examines the effects across demographic groups of this new employment in the Chattanooga MSA, using the changes at the national level as benchmarks. It uses data from the Census Bureau’s 1-year ACS.

Employment to Population Ratios for Demographic Groups

Despite the interruption of the COVID pandemic, job growth since 2014 has meant higher employment to population ratios for every major demographic category. Strong growth in 2021-22 meant that pandemic-

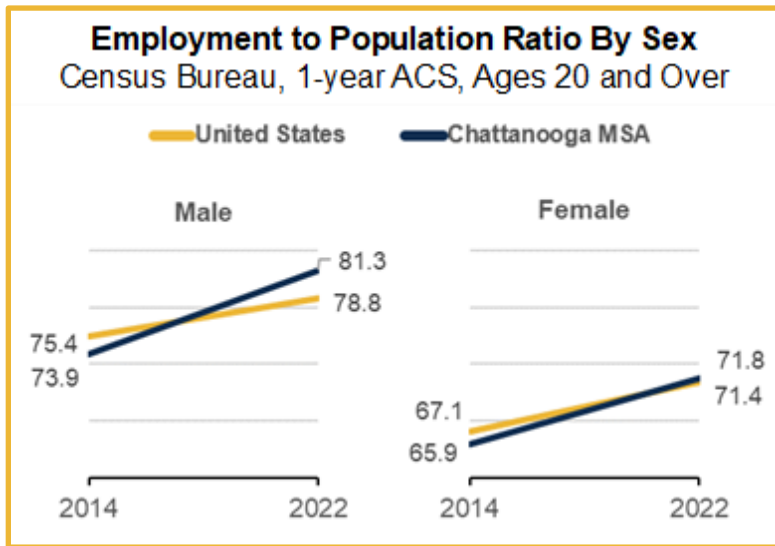


related job losses were recovered relatively quickly. By December 2021, the Chattanooga MSA had recovered all of its recessionary job losses and by late 2022 Chattanooga’s nonfarm employment had returned to where it would have been if the recession had never occurred. Our present interest is in how various demographic groups have fared after this combination of boom and turmoil, so the analysis below looks at differences in employment to population ratios between 2014 and 2022, the most recent year available. The categories examined are, in order, age, sex, race, and educational attainment.

AGE: The figure to the left provides the 2014 and 2022 employment to population ratios for six age groups for the Chattanooga MSA and the United States. The charts are drawn to the same scale (each horizontal line indicates 5 percentage points) so that the differences and changes over time are visually apparent. As illustrated in the introduction, the overall

employment to population ratio for the United States went from 58.4 in 2014 to 60.3 in 2022, and for the Chattanooga MSA it went from 57.1 to 60.4. Because of the aging population, these solid gains actually understate the increased strength of the labor market. In short, more of the baby boom generation entered retirement years, thereby decreasing the share of the population in prime working years. This composition effect alone would reduce the overall employment to population ratio, so it is necessary to break things down by age to understand what happened.

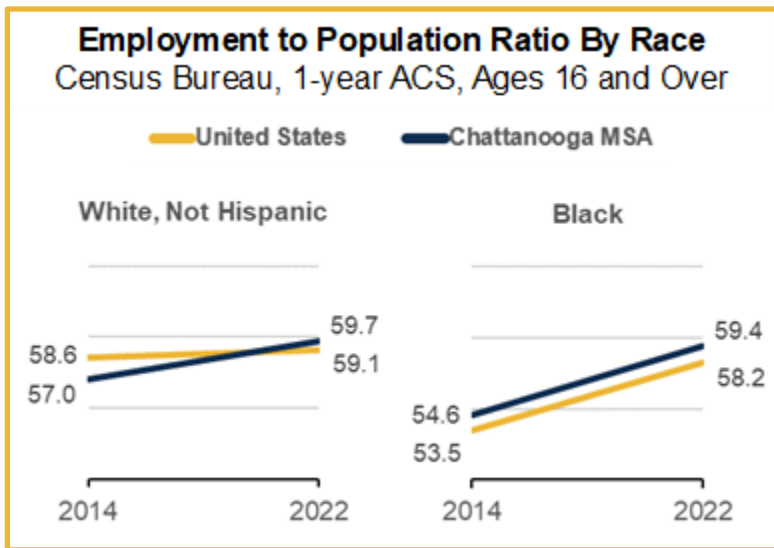
Locally and nationally, higher proportions of all age groups were employed in 2022 than in 2014. Nationally, the largest gains were for the two groups between 16 and 24 years of age. In Chattanooga, these groups were already employed at much higher rates than in the rest of the country, and the nearly 10 percentage point gain among those 20 to 24 years old was the largest for any group. The next largest increase was for 25- to 44-year-olds, which ended the period employed at a much higher rate than their counterparts in the rest of the country. It was a different story for the three oldest age groups, which had lower employment to population ratios in Chattanooga than they had nationally.



SEX: The employment to population ratios illustrated in the figure below share a vertical axis and scale. In 2014, smaller proportions of men and women were employed in Chattanooga than in the United States. This was reversed by 2022, most drastically for men: The male employment to population ratio rose more than twice as much in Chattanooga. Job growth in Chattanooga was led by the

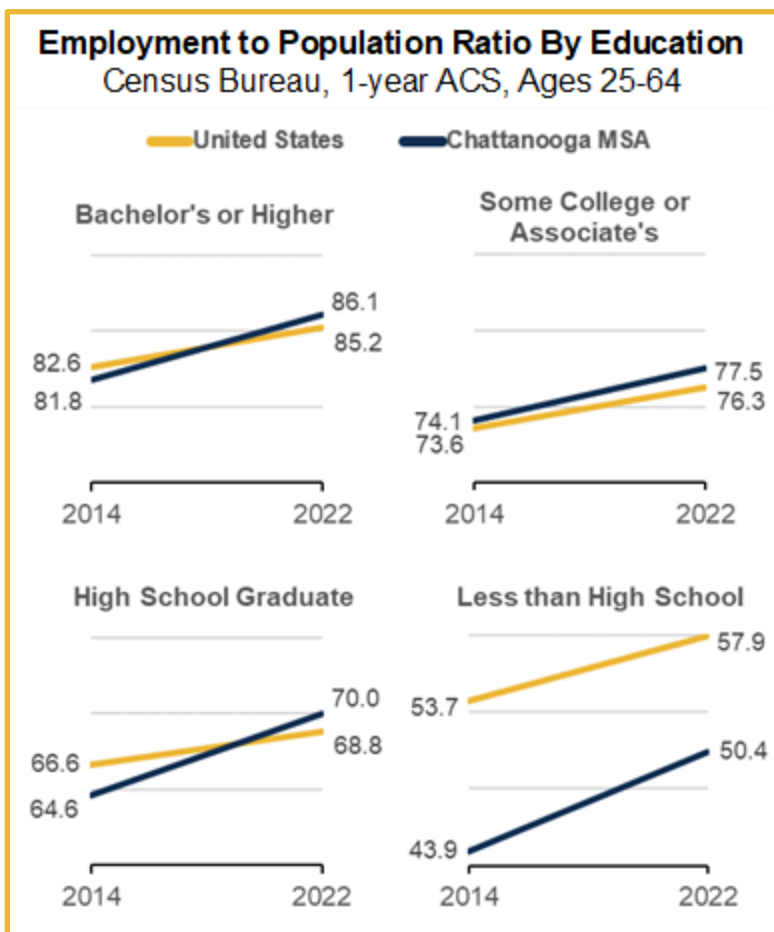
manufacturing sector, so the growth was biased toward male employment.^{vi} Nevertheless, the growth was sufficiently general to result in significant employment gains for women, also.

RACE: Labor market data for the Chattanooga MSA does not provide much detail by racial and ethnic groups. The 1-year ACS has a breakdown only by white and black because there are not enough respondents in other categories to provide accurate estimates as more.^{vii} Nevertheless, the experience of these two categories, which are more than 90 percent of 16+ aged Chattanooga residents, illustrates the strength and reach of the local employment boom.^{viii} Specifically, the employment to population ratio for whites in Chattanooga rose by 2.7 points from 2014 to 2022, more than five times the increase for the country as a



whole. The increase for black Chattanooga was in line with what happened at the national level, but by 2022 black Chattanooga were roughly as likely to be employed as white Chattanooga. Although this comparison does not control for differences in age and education composition, it is a notable achievement for the local economy and shows the effect that sustained strength in the labor market can have.^{ix}

EDUCATION: As shown in the figure below, there were significant gains for all levels of educational attainment between 2014 and 2022. Note that the age span for this data is 25 to 64, so these numbers do not have as large of an age composition effect as do other categories. By 2022, the employment to



population ratios for the three most-educated groups were all higher in Chattanooga than in the country as a whole. Gains were much stronger than the national average for those with bachelor's degrees or higher and those with a high school diploma as their highest degree. It is notable, however, that the Chattanooga economy has not been as successful in generating employment for those who are not high school graduates. The gap between Chattanooga and the rest of the country for this group narrowed over time but was still 7.5 percentage points in 2022. This is, by far, the largest negative gap for Chattanooga of any category examined in this paper.

Conclusions

This quick summary of employment to population ratios reveals that the employment boom that started in Chattanooga in 2014 has generated gains across a variety of demographic categories. In fact, across the categories examined, gains (meaning higher employment to population ratios) were universal and some long-standing demographic gaps were narrowed or even closed:

- Every age group saw gains and those aged 20 to 44 gained the most. The employment to population ratios for Chattanooga’s older age groups remained below the national rates despite these gains.
- Male and female employment saw significant gains, although they were much bigger for male employment because local job growth was led by the manufacturing sector. By 2022, male and female employment to population rates were higher in Chattanooga than in the country as a whole.
- Chattanooga’s black and white populations both gained more than their groups did at the national level. By 2022, blacks and whites in Chattanooga were equally likely to be employed.
- Larger than average gains occurred for all education levels in Chattanooga. Those with less than a high school diploma, however, remained much less likely to be employed in Chattanooga.

Endnotes

ⁱ The Chattanooga MSA includes six counties, three in Tennessee (Hamilton, Marion, and Sequatchie) and three in Georgia (Catoosa, Dade, and Walker).

ⁱⁱ Nonfarm employment is produced by the BLS from a survey of employers. It counts the number of nonfarm jobs from the payrolls of establishments. It is sometimes called the payroll or the establishment survey. The number of people employed is from a BLS survey of households that asks about the employment status of household members. This survey, often called the household survey, is the basis for estimating unemployment rates. The household survey includes farm employment and the self-employed, so it is more comprehensive than the payroll survey. The two measures of employment tend to move together over time.

ⁱⁱⁱ [“Chattanooga Metro Employment, 1990-2023: Decline, Recovery, and Transformation,”](#) CRER White Paper Number 1, January 2024.

^{iv} The chart has a dotted line for 2020 because the Census Bureau was unable to collect enough data that year to create reliable estimates. They did not release 2020 data for the 1-year ACS at all.

^v The ACS’s definition of employment is the same as that of the BLS’s household survey, but the questions and survey methods differ, meaning that the two measures differ. Note that the BLS provides an employment to population ratio at the national and state levels, but not for MSAs.

^{vi} In 2022, more than 70 percent of employees in the manufacturing sector were male.

^{vii} It also provides data for people who are of two or more races, but these numbers are unreliable because many people changed their racial identification from white or black to this category over time. The categories in the chart are for those who identify themselves as only white or only black or African American

^{viii} According to the 5-year ACS covering 2018-2022, the share of Chattanooga’s 16 and over population that was white only (not Hispanic) was 79 percent and the share that was black or African American only was 12.2 percent. The respective shares for the United States were 61.4 percent and 12.2 percent.

^{ix} Unfortunately, the data are broken down by only one demographic category at a time. For example, we don’t know the employment status for black males, or those with a bachelor’s degree who are white, etc.