



# A Brighter Picture: Measuring Regional Variation in Labor Utilization

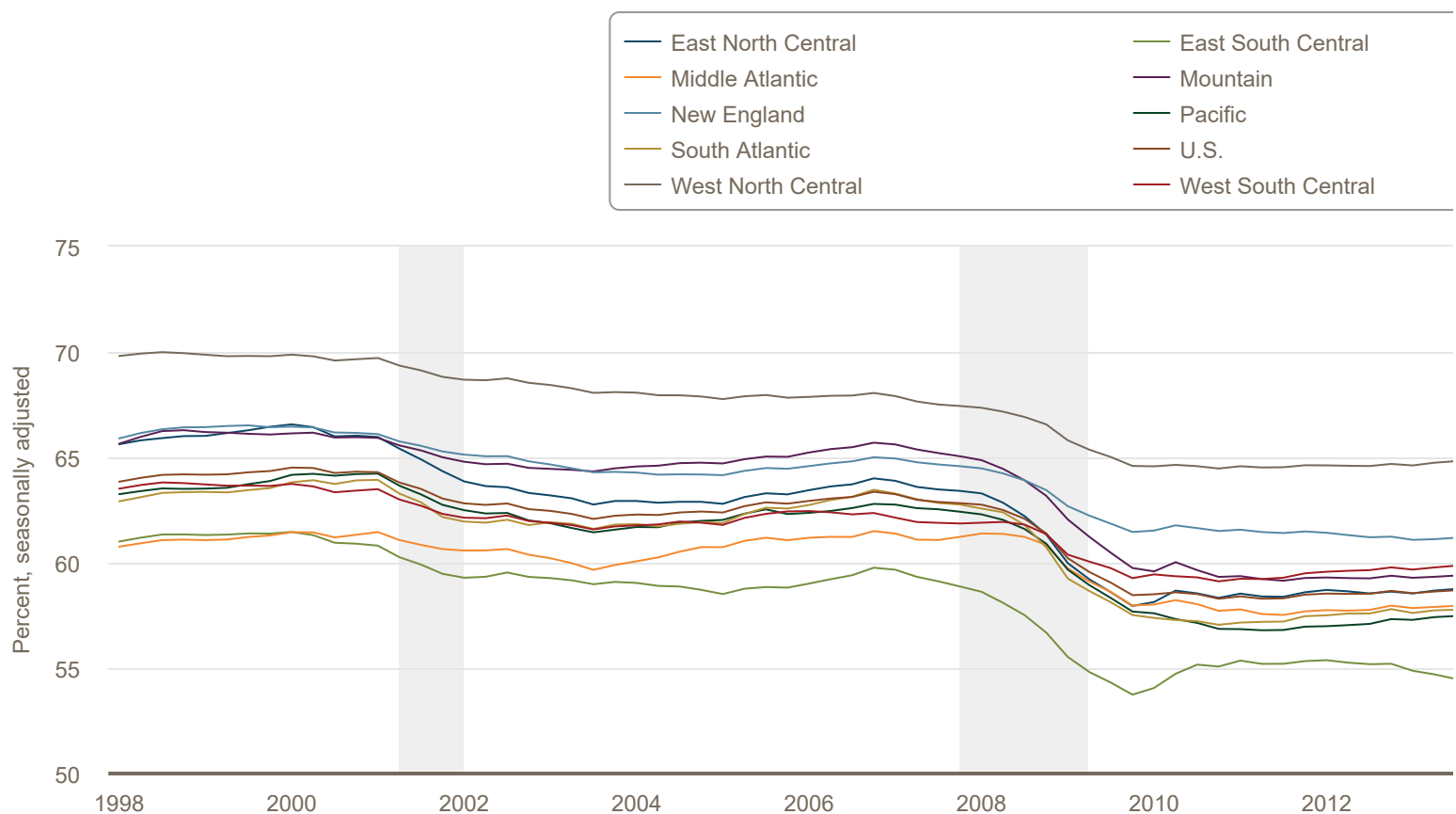
February 23, 2016

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A well-functioning economy fully utilizes its available labor resources. By at least one measure, the use of labor resources in many regions of the country remains stuck at well below the prerecession rate. Chart 1 shows the [employment-to-population \(EPOP\) ratios](#) for the nine U.S. census divisions plus the United States.

**Chart 1**  
**Employment-to-Population Ratio**



Note: Gray bars represent recession.  
Source: Bureau of Labor Statistics, author's calculations

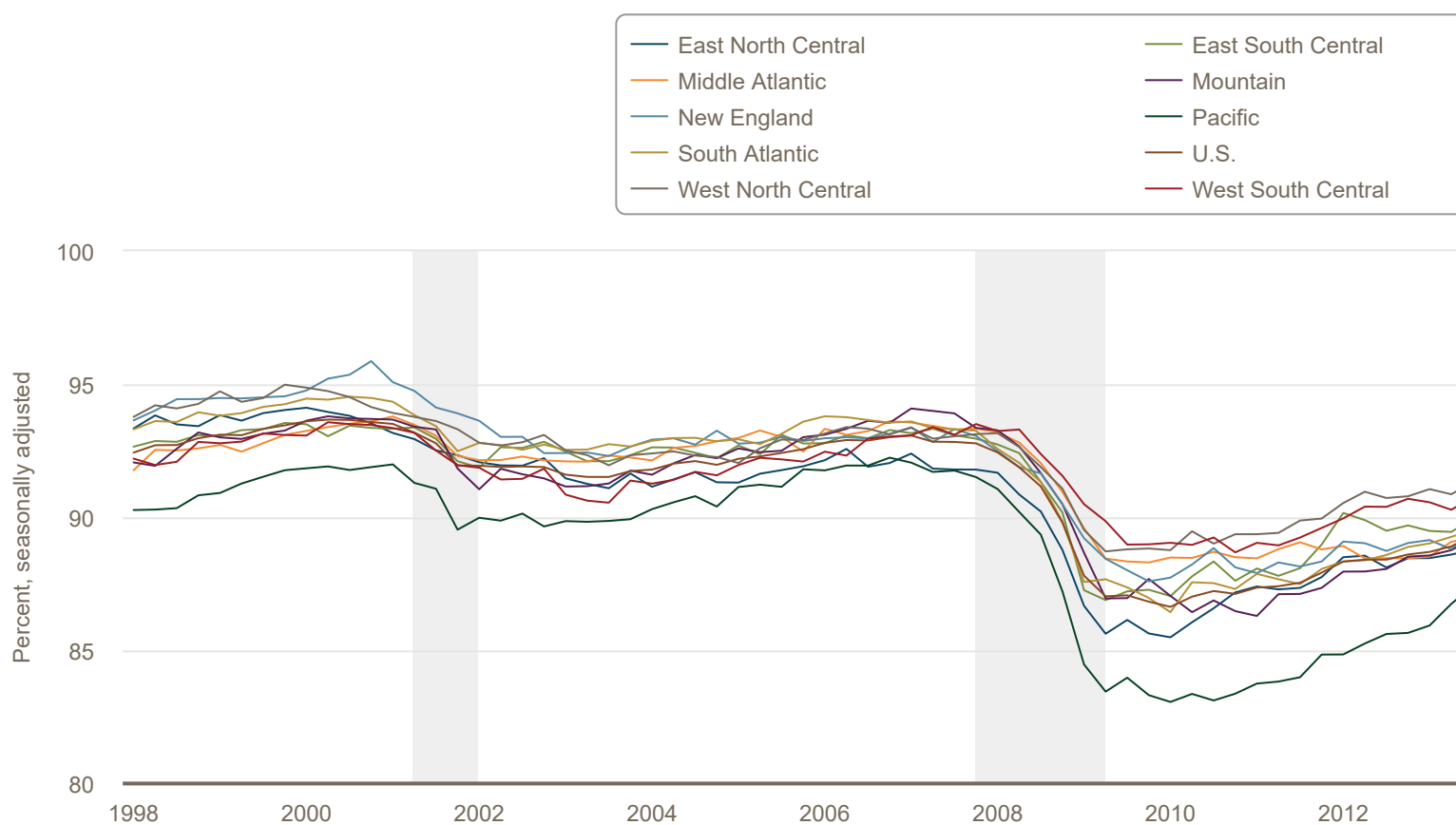
But the EPOP may not show a completely accurate picture and, in fact, may show one that is unnecessarily gloomy. In a [macroblog post](#) last fall, my Atlanta Fed colleagues John Robertson and Ellyn Terry recognized that the EPOP does not capture trends in demographic behavior (like the baby boomers hitting retirement age or increasing school enrollment rates among the young) that could distort the EPOP ratio as a measure of labor utilization. Their proposed solution adjusted the EPOP ratio by counting those who are not in the labor force and who do not currently want a job as fully utilized. The resulting utilization-to-population ratio, or ZPOP, narrows the definition of utilization somewhat in a way that makes it less affected by labor supply trends—especially the fact that an increasing share of the population does not currently want a job for one reason or another.

## The utilization-to-population ratio (ZPOP)

The ZPOP ratio is an estimate of the share of the civilian population 16 years of age and above who are getting the hours of work they say they currently want. Someone who says they want to work more hours per week than they are currently working is underutilized on a ZPOP basis. In contrast to the ZPOP ratio, the employment-to-population ratio counts everyone who is not working as underutilized, regardless of whether or not they want some hours of work.

To better understand regional variation in labor utilization, I calculated the ZPOP ratio from Current Population Survey data on a quarterly basis for the nine census divisions, plus the United States. As chart 2 shows, the trends among all nine regions run similar to the national trend but with less variance across regions than for the EPOP ratio. The ZPOP ratio among all regions began to show improvement shortly after the Great Recession, and we see that as of the fourth quarter of 2015, the regions are all close to their prerecession rate. The ZPOP ratios tell us that a much more significant recovery in the utilization of available hours is occurring in every region of the country than the modest improvement EPOP shows.

**Chart 2**  
**ZPOP Ratio**

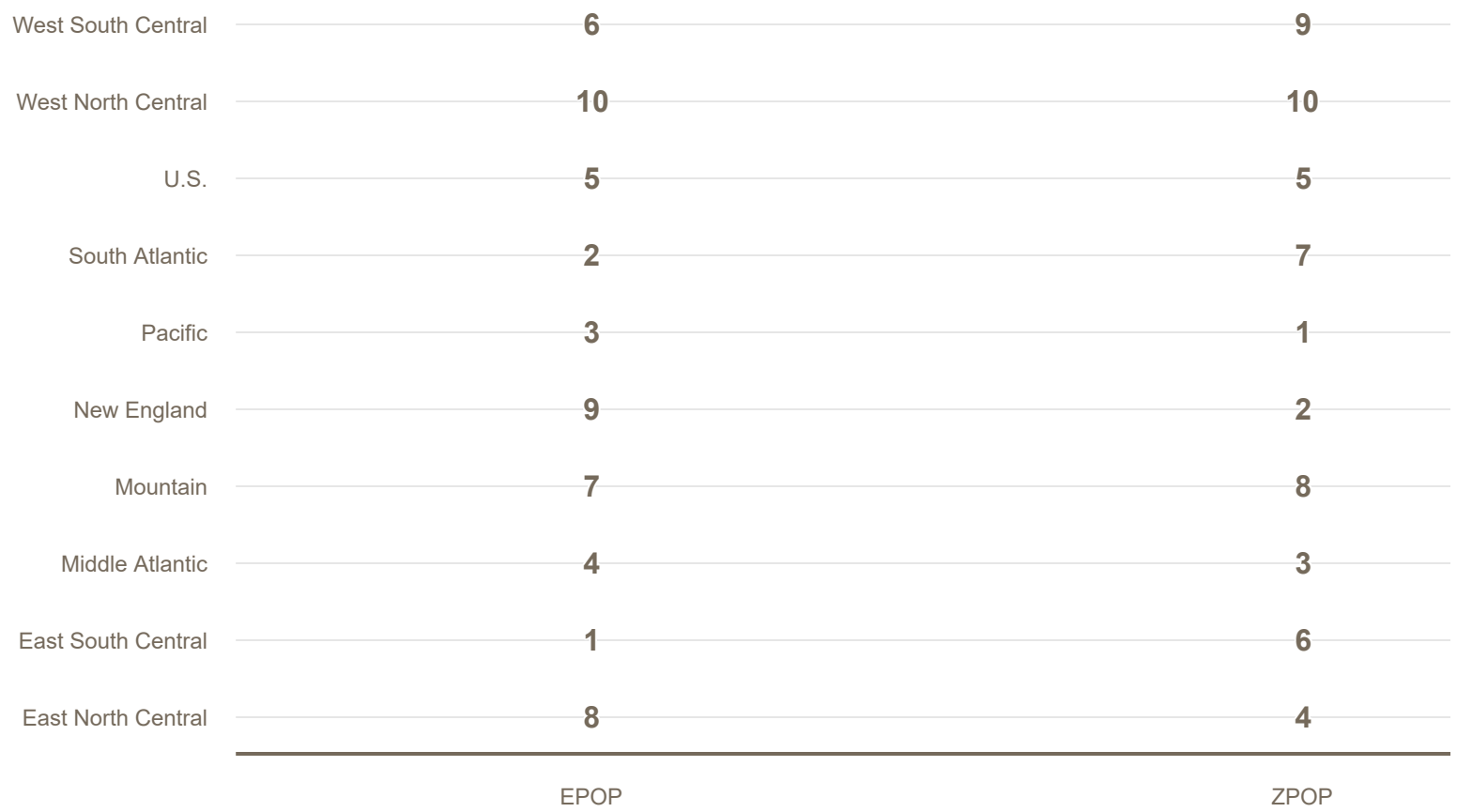


Note: Gray bars represent recession.  
Source: Bureau of Labor Statistics, Current Population Survey, author's calculations

Nationally, the ZPOP ratio in the fourth quarter of 2015 is 0.90 percentage points below its level in the fourth quarter of 2007, at the beginning of the Great Recession. In all but one region, the ZPOP ratio is also a bit below the corresponding prerecession level. In the East North Central area of the country, the ZPOP ratio is slightly ahead of the prerecession rate. The progress in this region is noteworthy because during the recession, it was among the regions that experienced the deepest decline. By contrast, the Middle Atlantic area, which had the smallest decline during the recession, remains the furthest from its prerecession rate, at 1.50 percentage points below.

Not surprisingly, the EPOP and ZPOP ratios can produce quite different rankings of labor utilization across regions. For example, during the fourth quarter of 2015, the East South Central and South Atlantic geographic divisions were below the U.S. rate on an EPOP basis, but the ZPOP ratios for those areas were above the U.S. rate. (Notably, these areas have the highest share of the population who responded to the Current Population Survey that they "do not want a job" because they are retired, in school or training, taking care of house or family, disabled, or other.) At the same time, the EPOP ratios for the New England and East North Central divisions were above the U.S. rate, but their ZPOP ratios were below the U.S. rate.

**Chart 3**  
**Labor Utilization Rankings**



Source: Bureau of Labor Statistics, Current Population Survey, author's calculations

The ZPOP ratio is a tool for gauging labor utilization on a desired-hours basis. It differs from the more traditional EPOP ratio, which can be significantly influenced by shifts in the composition of the population toward groups with low labor-force attachment. The ZPOP ratio—a potentially useful alternative way to gauge the utilization of the available labor resources in the economy—paints a brighter picture than does the EPOP ratio.

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