Disentangling the Jobs Report

The Bureau of Labor Statistics' (BLS's) monthly Employment Situation Summary—more commonly known as the jobs report—can from time to time report seemingly contradictory figures. For example, the jobs report for April 2019 reports that the unemployment rate decreased from 3.8% to 3.6%, while the employment level fell by 103,000 people. The April jobs report also includes an alternative measure of employment in which employment rose by 263,000 individuals. How can these seemingly contradictory figures be reported side by side? The explanation lies in two quirks in the jobs report: (1) the use of two different surveys in the same report, and (2) the definitions and construction of the unemployment rate. This Insight discusses both issues below.

A Combination of Two Surveys

First, the statistics included in the jobs report are actually the product of two different surveys: the household survey and the establishment survey. There are numerous conceptual and methodological differences between these surveys, which can produce the seemingly contradictory result of rising and falling employment in the same month. The household survey, as the name suggests, is a survey of households reflecting the entire noninstitutional population of the United States, and provides information about the labor force, employment, and unemployment. The household survey is conducted by the Census Bureau as part of its Current Population Survey. The establishment survey is a survey of private nonfarm businesses (such as factories, stores, and offices) and provides information about employment, hours worked, and employee earnings. The establishment survey is conducted by BLS as part of its Current Employment Statistics survey.

Because the establishment survey surveys only nonfarm businesses, it does not include various types of workers (such as agricultural workers and unincorporated self-employed workers) that are included in the household survey. Additionally, the differences in how each survey defines employment results in individuals on unpaid leave being counted as employed in the household survey, but not in the establishment survey. Another difference in coverage between the two surveys is related to age; the household survey is limited to workers 16 and up, while the establishment survey has no limits on age. Further, due to the design of the establishment survey, individuals may be double counted if they have multiple jobs, while there is no duplication of individuals under the household survey.

These differences, alongside typical sampling and nonsampling errors, explain how the household survey reported that employment fell by 103,000 in April, while the establishment survey reported an increase in employment by 263,000 in the same month. While the advantage of the household survey is that it uses a broader definition of employment, more emphasis is usually placed on the establishment survey because it is a larger sample and is based on official payroll
How to Measure Unemployment?

The other curiosity in the April jobs report was that the unemployment rate (which is derived from the household survey exclusively) declined despite a decrease in the employment level. Intuitively, a decrease in employment should result in an increase in the unemployment rate; however, this is not always true, due to how the unemployment rate is defined and calculated.

Figure 1. Unemployment Rate

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\text{Unemployment Rate} = \frac{\text{Unemployed}}{\text{Labor Force (Employed + Unemployed)}}
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Source: BLS.

BLS calculates the unemployment rate as the number of unemployed individuals divided by the labor force, as shown in Figure 1. The labor force includes all people who are either employed or unemployed. BLS considers individuals employed if they do any work at all for pay or profit. BLS considers individuals unemployed if they meet certain criteria. Specifically, BLS considers as unemployed only individuals who do not have a job, have actively looked for work in the past four weeks, and are currently available for work. BLS considers individuals who do not meet all of these criteria to be outside of the labor force. Because of this definition of unemployment, individuals may exit unemployment either by becoming employed or by exiting the labor force because they no longer meet the definition of unemployed. For example, if an individual hasn't looked for work in the past four weeks, BLS no longer considers her unemployed; rather; BLS simply does not include her in the labor force.

The unemployment rate in April fell because a group of individuals moved from unemployed to outside of the labor force, rather than from unemployed to employed. As shown in Table A-1, the number of unemployed individuals decreased by 387,000 in April. However, the decline in unemployment wasn't associated with an increase in employment; rather, most of those individuals likely left the labor force. Employment actually decreased by 103,000, as measured by the household survey, and the number of people outside the labor force increased by 646,000. These various changes in the level of unemployment, employment, and the labor force resulted in a decrease in the unemployment rate, despite declining employment levels.

The jobs report provides a beneficial snapshot of the condition of the labor market each month. However, care should be used when interpreting the headline numbers reported out of the jobs report, as there will always be some information lost when trying to condense the entire labor market to a couple of figures. As this example illustrates, monthly jobs data can be volatile due to the nature of sampling, and may yield greater insights when considered in context.