

NYC Employment Alert

August 2012

Why Is New York City's Unemployment Rate Increasing When Job Growth Is So Strong?

New York City's economy is thriving: since the depth of the last recession, New York City has added 205,000 jobs. Who is getting these added jobs? Well, in short, no one. The unemployment rate in New York City has climbed to 10.0% as of July, and the *number of New York City residents employed is lower than it was at that recession nadir*. So, one would conclude, these jobs went to commuters? The data suggests otherwise.

The problem with New York City's continuously contradictory statistics lies deep within the working models used by the Bureau of Labor Statistics (BLS) to calculate the unemployment rate. While much of their model is too arcane to elaborate on here, we have researched this issue thoroughly and hope to clarify the issues to convey our lack of faith in New York City's unemployment statistics.

The general findings show that:

- The sample size for the unemployment statistics is too small to use as a credible indicator of New York City's unemployment rate
- The model used by the BLS does not help to explain how *none* of the 205,000 jobs added since September 2009 went to New York City residents
- The most recent annual revisions to both the employer survey and the household survey contradict each other.
- Changes in the employment and unemployment statistics in the metropolitan area do not account for any jump in "commuters" to New York City.
- It is highly likely that the revisions made to the residential employment numbers based on the City's lower population growth as per the 2010 Census may have had an impact on the model and are skewing the results.

The Sample Size For The Employment Growth Numbers Is Considerably Larger Than For The Unemployment Statistics

Every month, the BLS surveys 486,000 individual worksites that employ anywhere from 1 to 10,000 or more workers. The statistics from these employer-based surveys are referred to as the Current Employment Statistics or CES, also called the "payroll survey," and they measure employment "by place of work." The City's employment statistics are derived from this national survey.

In a separate survey, the BLS collects data on the labor force (those who are either employed or unemployed but looking for work). For this data, they survey 60,000 U.S. households which represent 0.02% of the household population. This monthly survey, also referred to as the household survey, measures employment by "place of residency."

It does not take a statistician to decipher that a sample of 486,000 worksites (where one phone

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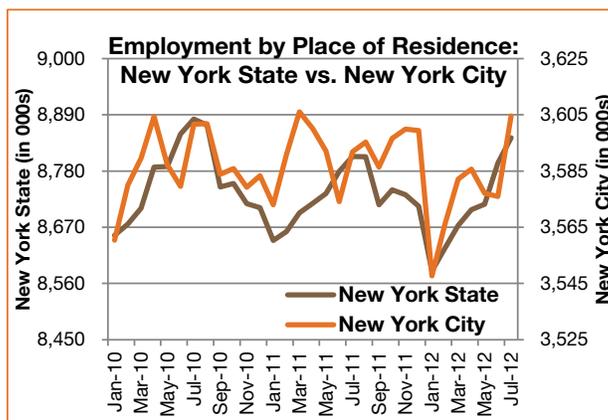
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call can fetch statistics on thousands of employees) covers a broader section of the economy than 60,000 households. In fact, the BLS warns on its website: since the household survey covers “a very small fraction of total employed persons, over-the-month changes in the household survey employment are subject to larger sampling error, about four times that of the payroll survey.”

Unemployment Statistics For New York City And Most States Are Not Based On The National Survey Results

For New York City, 0.02% covers 1,600 residents -- about the population of a single City block. However, New York City’s unemployment statistics are not derived from this survey. The BLS acknowledges that this sample size is too small. They therefore have created and refined an elaborate econometric model¹ for this estimation. Their model for estimating New York City’s residential *employment* was developed using the City’s payroll employment (CES) as the “primary source,” but the BLS points out that the CES inputs are not used each month in the estimation process. This sounds confusing because it is: the payroll employment estimates are used to *develop* the model but they are not used on a monthly basis to estimate the residential employment levels. So what is? The BLS methodological explanations do not specify.

The BLS points out that the residential employment estimates are ultimately “controlled to the State and Census division totals.” If this is the case then perhaps New York City’s residential employment has simply tracked New York State’s residential employment? It has not: the City’s residential employment level declined in May and June while the State’s increased in those months.



Data is not seasonally adjusted. Source: New York State Department of Labor and Bureau of Labor Statistics

So how are the monthly estimates derived? Separately, the BLS states that they adjust their place-of-work employment estimates to a place-of-residency basis. This adjustment is the critical piece of New York City’s disparate economic reports. Understanding how the BLS makes this adjustment might help us to determine why the statistics are telling opposite stories. As per the BLS website, “the estimated adjustment factors have been developed using employment relationships which existed at the time of the most recent decennial census.”

¹ Monthly labor force estimates for New York City and other large areas are “developed using bivariate signal-plus-noise models... that are based on the classical decomposition of a time series into trend, seasonal, and irregular components.” The area models are univariate in design in that only the historical relationship of the inputs is considered—UI claims and CES inputs are not used each month in the estimation process. (New York City) and balance of State models are controlled directly to the State totals, which are themselves controlled to the national CPS via the Census division models. (Source BLS)

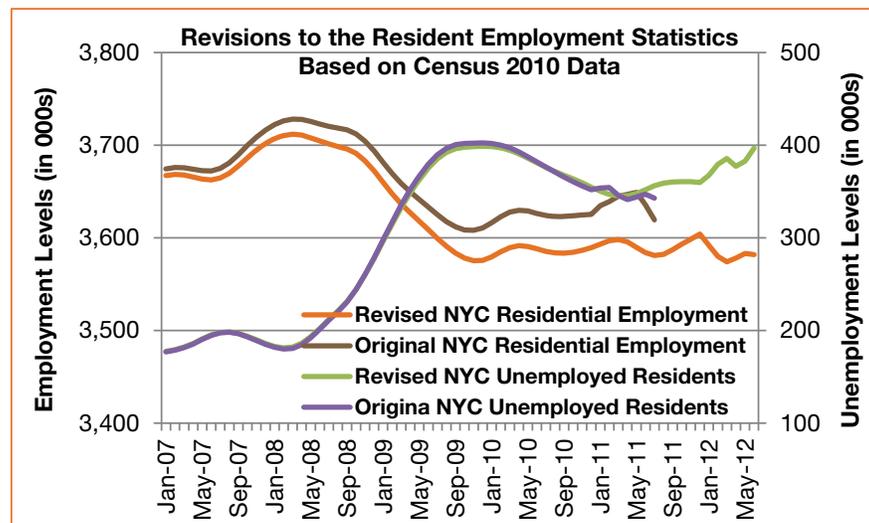
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That would be the 2010 Census which showed that population growth for New York City was much lower (166,800 or 2.1%) than had been originally estimated by the Census Bureau in its annual estimates (376,500 or 4.7%). It is quite feasible that the lower population growth has severely skewed BLS's models.

Annual Revisions Show That The Effective Number Of Commuters To New York City Doubled In 2011

In fact, once a decade the BLS adjusts labor force and unemployment data for prior years to adjust for "population controls" among other things. In short, the labor force statistics are tied to the population and because New York City's labor force estimates had to be revised to show this lower population growth, nearly all of the revisions were made to residential employment levels only. In fact, in some months in late 2010 and early 2011, the number of unemployed residents was revised *upwards*.

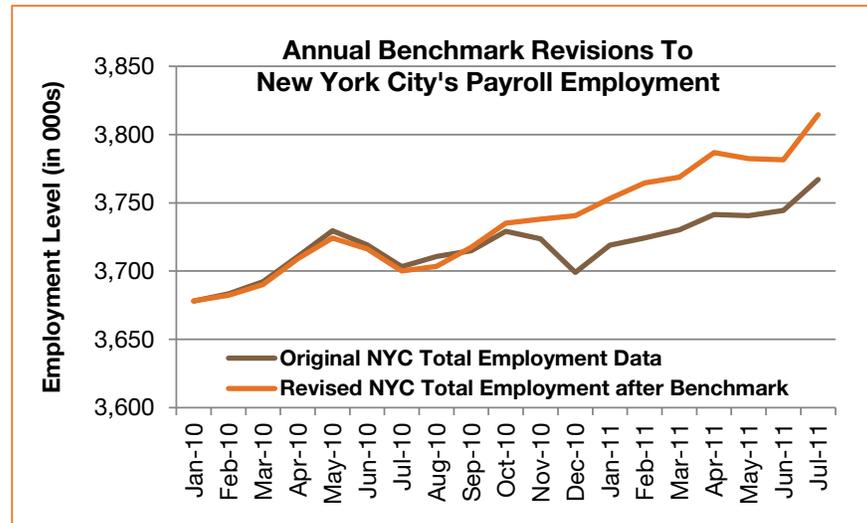


Source: Bureau of Labor Statistics and New York State Department of Labor

Separately, the BLS revises local payroll employment data based on all employers' filing of workforce numbers via the State Unemployment Insurance (UI) Division. This annual benchmark revision approximates the true state of the job base for a given region. As per the January 2012 revision, New York City's payroll employment estimates for 2011 were revised *upwards*.

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Source: Bureau of Labor Statistics and New York State Department of Labor

In short, this shows that ***the City's employers created more jobs than were originally estimated in 2011, yet fewer New York City residents were employed as per the labor force adjustments.*** How can this be?

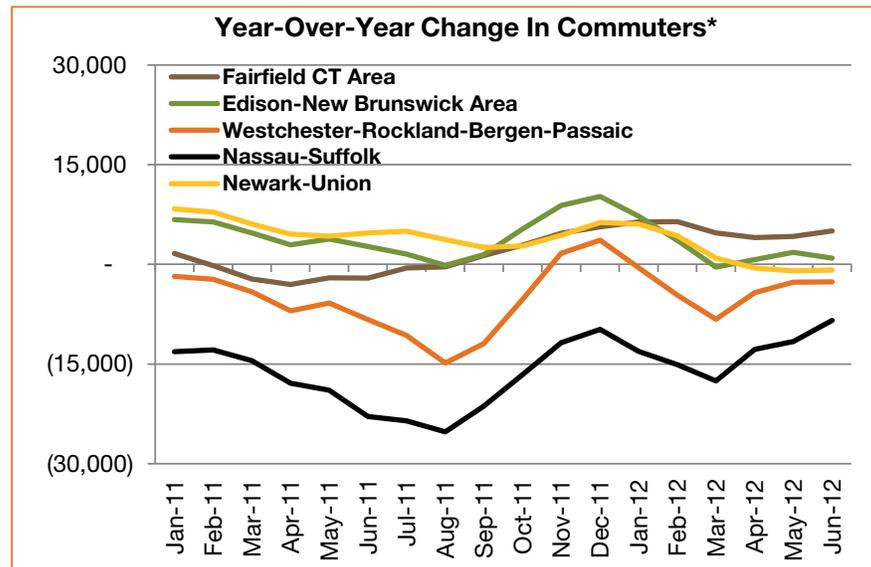
The average downward revision to the 2011 residential employment data was (-) 47,000 per month. The average upward revision to the 2011 payroll employment numbers was (+) 40,000 per month. If one were to net the difference between the number of New York City jobs as per the employer survey and the number of residents employed as per the household survey and attribute the net difference to "commuters;" in effect, this is equivalent to saying the number of "commuters" doubled from approximately 95,000 per month as per the original series to 190,000 per month after the revisions. Are we really expected to believe this?

The Lack Of Growth In New York City Residential Employment Is Not Offset By A Growth In "Commuters"

In fact, a look at the metropolitan area's statistics shows that there is no area within the metropolitan region that shows the opposite of what New York City is showing; that is, a jump in residential employment with no increase in jobs. A simple "commuter" calculation -- employment by place of residency less payroll employment -- shows that there was little to no growth in "commuters" over the last 18 months.

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*Calculated as the change in local employment (by place of residency) less the change in payroll employment (by place of work).

Source: Eastern Consolidated and Bureau of Labor Statistics

Conclusion

Based on everything available on the BLS website that explains their methodology, there is no basis for why New York City's residential employment has been flat for two years while job growth has been robust.

In trying to uncover as much information as we could to explain why this is happening, we can only say that it is inexplicable. We submit that there are other underlying factors to the BLS model that may be creating too much "noise," but these other factors are not clear enough to the educated reader to determine if they are at fault. It appears that the model is skewed because the recent 2010 Census showed such a severe downward adjustment to the population data that the residential employment estimates produced by the model were likely overly adjusted downward.

Whatever the issue is, too many people in the media are focusing on the City's 10.0% unemployment rate and too few are recognizing the City's strong job growth – New York City is far outpacing the nation on creating jobs yet our unemployment rate is higher?

The public deserves more accuracy and better information from the BLS and/or Census Bureau. Interestingly, the recent 2011 Census estimate showed that New York City's population grew by 58,500 in one year – more than one-third of the total growth from 2000–2010. While I contend that the 2010 Census population for New York City was woefully undercounted, I remain optimistic that the labor force estimates for New York City will get re-adjusted to reflect the population growth in 2011 and that this conundrum of a higher unemployment rate and high job growth will dissipate. Until then, we can only keep asking the BLS for further explanation.