How to Avoid Being Misled by the Jobs Report
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How to Avoid Being Misled by the Jobs Report

By NEIL IRWIN
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We obsess far too much on the Labor Department's monthly jobs report.

Think about it this way: It's the first Friday of the month, and the Labor Department has bad news. The economy added a mere 64,000 jobs last month, a steep slowdown from 220,000 the month before. From Wall Street to Twitter, the reaction is swift and negative.

The price of oil falls, as do the prices of blue-chip stocks like General Electric. The Federal Reserve faces calls to push interest rates lower. The lead headlines in the next day's papers talk of faltering job growth.

But what if all the worries were based on nothing more than random statistical noise? What if the apparent decline in job growth came from the inherent volatility of surveys that rely on samples, like the survey that produces the Labor Department's monthly employment estimate?

We generated those numbers with a computer, after giving it a simple set of directions: Assume that the economy is adding exactly 150,000 jobs every month, and that the monthly estimates of job growth come with exactly as much statistical noise as the Labor Department says its estimates have.

The result of one of the computer simulations, shown in the

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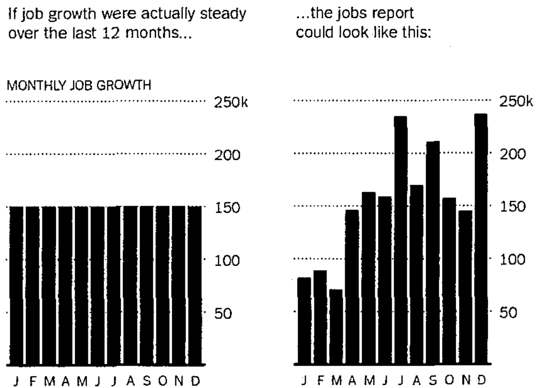


Did you infer a pattern from the chart on the right? **If you did, you were reading too much into the jobs numbers.** That chart should be a straight line, but we've added the same amount of sampling error that the jobs report has.

THE NEW YORK TIMES

How Not to Be Misled By the Jobs Report

From First Business Page

accompanying charts, was a year's worth of fluctuating job growth. Two months, June and September, showed job creation below 100,000; two others, May and August, showed job growth of more than 200,000. Only three months out of our hypothetical year, January, April and July, were particularly close to the "true" level of job creation, 150,000 jobs.

When traders put too much weight on data that can mislead, the stock market can soar or swoon for no good reason. Business executives may make decisions based on economic trends that don't exist. And journalists risk giving their readers or viewers a misleading view of where things stand in the American economy.

Human beings, unfortunately, are bad at perceiving randomness. If you go to a baseball game and watch a commanding performance by your team, it tells you very nearly nothing about how the team will perform over the course of a season. Similarly, one month of jobs numbers doesn't tell you much of anything about how the economy is actually doing.

None of this is meant to cast aspersions on the Bureau of Labor Statistics, the arm of the Labor Department that faces the unenviable task of trying to discern how many jobs there are in the United States each month. The bureau does so by conducting an enormous survey of 144,000 employers who together employ about a third of all nonagricultural workers. It is one of the most important economic data releases, in no small part because it comes out quickly; results from a survey the bureau took in the middle of last month, for example, will be released on Friday, before almost any other data about the April economy is available.

Even with all those survey participants, there is sampling error; the employers responding to the survey might be different from the nation's employers as a whole. And the Labor Department's initial release, coming as it does so soon after the survey, is released before all the data is in, with researchers filling in the gaps with statistical estimates that might prove wrong. Only in later weeks and months is all the data available, and the bureau then revises its initial numbers.

The sampling error becomes magnified because those of us following the jobs report don't focus on the total number of jobs in the economy (more than 130 million). We focus on the relatively small change in the number of these jobs from month to month (typically a few hundred thousand, at most).

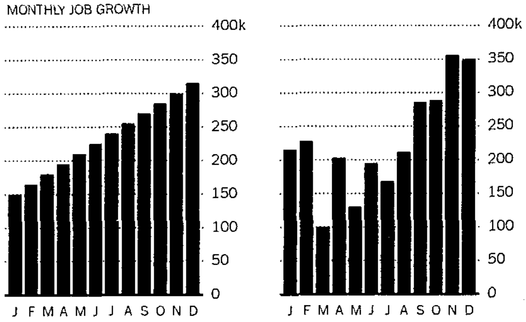
Whether we're snide newspaper journalists on Twitter or hedge fund managers trying to trade currencies, we obsess over these reports because we have little choice but to care about how the economy is doing. Its condition affects whether our employers should expand, when we should buy a house or retire and thousands of other decisions. But it's worth remembering that no one report can neatly summarize the health of a $17 trillion economy of 300 million people, certainly not in something close to real time.

At 8:30 a.m. on the first Friday of any given month, we all actually know a lot less than you might think. The closest thing to an accurate description of the economy's condition is a description that comes with a lot of humility.

Even Accelerating Growth Can Be Hard to Recognize

If job growth were accelerating over the last 12 months...

...the jobs report could look like this:



If you squint, you can see evidence of the upward trend, with stronger growth apparent in the second half of the year. But month by month, you wouldn't have any way of knowing if it was a true acceleration or just a false signal generated by sampling error.

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