

Data Quality Red Flag Is A Moot Caution On A Terrible US Jobs Report

- Nonfarm job losses hit highest since March 2009...
- ...while the household survey's losses hit all-time record;
- Nonfarm losses were narrowly concentrated in the expected sectors;
- Data collection methods were probably impaired...
- ...but the BLS stands by estimates;
- ISM-services further informed nonfarm signals after the fact;
- Hours worked fall by most since March 2009
- Wage growth temporarily picked up.

Nonfarm payrolls m/m 000s / UR, SA, March:

Actual: -701 / 4.4

Scotia: -200 / 3.9

Consensus: -100 / 3.8

Prior: 273 / 3.5

First, take a moment to reflect on the people behind these numbers. It's a tragic, unfolding blow to putting food on the table, covering daily expenses while waiting for delayed stimulus to arrive, as well as dreams of buying a home, saving for college, and one day retiring. This is truly a shock like no other that will rattle long-term confidence in ways behavioural scientists are better equipped to speculate upon.

Second, though it's a pyrrhic victory, kudos to those who estimated a bigger hit to nonfarm payrolls than I thought likely. You win the golden Dismal Scientist statue for economist of the day. Before you pat yourself on the back too loudly, however, consider the likelihood that data quality is probably shaky.

Data quality issues likely played a role in terms of why the drop in nonfarm payrolls blew through most advance indicators into its reference period (e.g. ADP, initial claims over the first half of March, Challenger job losses) that all indicated deterioration, but not by this magnitude.

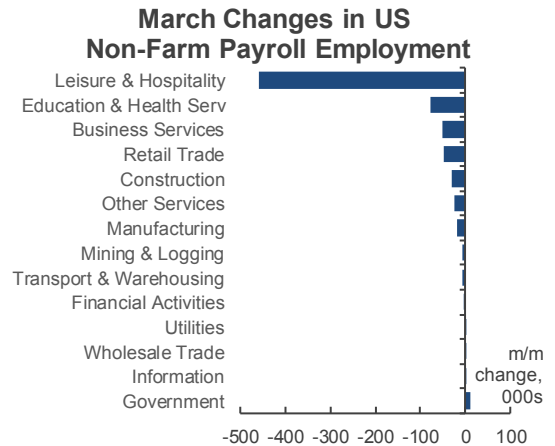
That said, after nonfarm, the ISM-services release squared the circle a little better. ISM-services beat expectations at 52.5 (57.3 prior, 43.0 consensus), but the employment component fell back to 47.0 (55.6 prior) and signalled significant contraction in services employment. That said, most responses to ISM-services arrive at month-end which was more likely to capture the speed of adjustment than, say, nonfarm's mid-month estimation period.

Before explaining the data quality issues, it's somewhat of a moot point in any event as we knew the job market was already going through a major adjustment that April payrolls will showcase to a far greater extent, so this just expedites that a bit. So to a certain extent, what follows is only an explanation of why most folks including me got this one wrong and may appear to be only morbidly fascinating. Skip ahead to the details if you are not interested.

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Sources: Scotiabank Economics, US BLS.

March Breakdown of Job Changes in Leisure & Hospitality Services Sector



Sources: Scotiabank Economics, Bloomberg.

The release from the Bureau of Labor Statistics ([here](#)) included a box at the bottom that explained the impact of the COVID-19 shock on data collection. The BLS notes that all in-person interviews were cancelled for the household survey (in-person interviews are never conducted for the establishment nonfarm report). Since the household survey's reported job loss of 3 million far eclipsed the nonfarm drop of 701,000 and because even the much bigger confidence interval around the household survey falls well short of encompassing random statistical error as an explanation for the differences in the two surveys, it is quite feasible that cancelling in-person interviews impaired data quality for the household survey.

In the nonfarm establishment survey, however, one-fifth of responses are typically gathered through telephone calls that were affected by the closure of each of the four regional data collection centers because of the virus. There is definitely no six-foot spread between those desks! The BLS says "efforts were made to collect data electronically". When I asked for further clarification, I was told that emailed requests were sent to telephone respondents asking them to report for March using the BLS's web collection application that is typically used for about one-fifth of the data collection in any given month. Those who were unable to be reached by email were called by 'limited staff'.

In total fairness to them, the fact the BLS could get out this report under such circumstances is a major kudo to the humans behind such efforts who are grappling with the same issues everyone else is. In added fairness, I found the service to be excellent under the circumstances as my call for clarification was returned in short order as was an emailed request. Well done folks. That said, the natural inclination should still be to fade the data quality in the face of uncertainty under such working circumstances.

The BLS published [this](#) helpful FAQ on the release that explores this and other issues further. The guidance was that "we cannot precisely quantify the effects of the pandemic on the job market in March" in part due to the fact that most business and school closures occurred after the reference period. That part is to be expected. On data collection quality, the BLS notes "collection was adversely impacted due to the inability to reach some respondents" and that collection rates were lower than normal but that the "BLS was still able to obtain estimates that met our standards for accuracy and reliability." I guess it's natural for them to say that and to a point we have to take them at their word, but it would be imprudent to do so without big caveats.

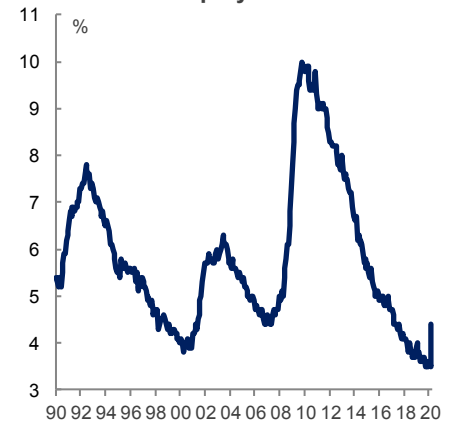
The BLS noted that **6.4 million Americans said in the companion household survey that they were employed but not at work which is +/- 1 million more than is normal for a month of March in recent years (vacations etc are among other more normal reasons)**. The inference I'm making is that these people may well have been waiting for the other shoe to drop.

UNDERLYING DETAILS

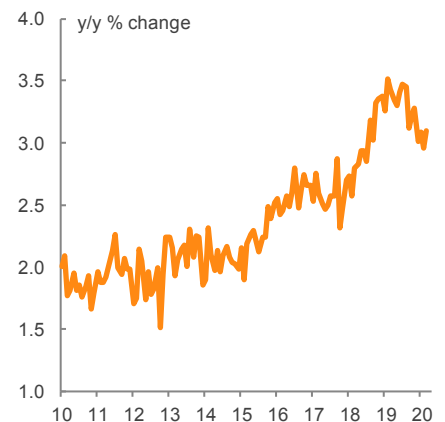
- Apart from the 701,000 drop in payrolls, **revisions were also negative**. The prior month was revised up 2k but the month before that was revised down by 59k. Revisions are likely to be a bigger factor in the next report a month from now.
- **Private sector jobs fell by 713k with government up 12k** entirely due to the Federal government (+18k) as state/local government employment fell 6k which is likely just the tip of the iceberg as their revenues dry up and the muni bond market remains broken.
- **The goods sector lost 54k jobs but services plummeted by 659k** which further emphasizes this is more of a services recession given a) the sheer dominant size of the service sector today, and b) that more services are delivered in person with more touch points to the end consumer that are being shut down.
- Chart 1 depicts the concentration of the job losses. **65% and 88% of job losses were traced to one and four sectors respectively and you can probably guess several of them**. The biggest decline by a country mile was in the leisure and hospitality sector (-459k) that accounted for two-thirds of the drop in overall jobs. Think bars and restaurants for example in the day and age when bellying up to the bar to rub elbows is likely to start a classic bar fight. Chart 2 breaks down the leisure/hospitality sector to show that the decline was widespread but dominated by the eating/drinking category.
- There is a huge distance between that hit and the second one on the list as health care and social assistance fell 61k. **How did health/social sector drop jobs in a pandemic you ask?** The breakdown shows that of the 61k, 17k was due to dental offices shutting down, 12k was due to physicians' offices boarding up, and 18.6k was due to losses at child care facilities with

the rest sprinkled elsewhere. That all confirms reports and anecdotes I've observed. That said, hospital employment was flat and nursing/care facilities were also very little changed (-2k).

- After that, temp help fell 50k, retail lost 46k, and other much small losses were sprinkled across the remaining categories.
- **The unemployment rate increased to 4.4%** (3.5% prior) and is derived from the household survey that registered a nearly 3 million drop in employment alongside 1.6 million departures from the labor force (chart 3). In the absence of such exits from the workforce, the unemployment rate would have gone up by considerably more.
- **Hours worked fell by 1.1% m/m for the biggest single-month decline since March 2009** (-1.3%).
- **Wage growth picked up a tick to 3.1% y/y** (chart 4). A little more time will sadly fix that as wage-driven cost-push inflation is likely to disappear.

US Unemployment Rate


Sources: Scotiabank Economics, BLS.

US Average Hourly Earnings Growth


Sources: Scotiabank Economics, BLS.

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