

Minimum Wage and Job Loss: One Alarming Seattle Study Is Not the Last Word

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Arindrajit
Dube

20/07/2017



New construction in downtown Seattle seems to be a constant, and wages are rising. Ruth Fremson/The New York Times

Seattle was the first city in the United States to raise the minimum wage substantially, so a University of Washington [study](#) released last month showing big job losses has received a lot of [attention](#), and prompted

many an [I-told-you-so](#).

The job losses in the study were far greater than in a control group of similar areas in Washington State (where the minimum wage was not raised). Because the study found that low-wage workers lost income as a result of the increase, it was a much more dire assessment of the effects of a minimum-wage increase than even the more pessimistic studies to date.

The authors speculate that this is probably because of the big rise of Seattle's minimum wage, and because they are looking at the impact on all low-wage jobs, not just specific sectors like restaurants. This point is relevant because a recent [study](#) from the University of California, Berkeley, found little impact on restaurant employment in Seattle compared with other similar metro areas.

But it is also possible that the University of Washington results reflect the limitations of studying a single experiment. Seattle, with its tech boom and rapidly rising wages, differs from the rest of Washington in ways that may make such a comparison misleading. I was a co-author of a [study](#) this year that also looked at the impact on all low-wage jobs using a similar methodology, but based on more than 100 state-level increases in the minimum wage since 1979. We found quite different results.

The basic idea in both studies is that if the minimum wage rises to \$13 an hour, for example, the effect on jobs can be inferred by looking at changes in employment below a cutoff like \$18 or \$19. Of course, jobs are added and lost — and wages change — for lots of reasons that don't involve the minimum wage, so some sort of control group is needed.

Here's what the University of Washington study, commissioned by Seattle officials, found:

What Research in Seattle Showed

Estimates of the change in full-time equivalent employment between 2014 and 2016, as a share of total employment in 2014

\$13 to \$14

\$18 to \$19

\$23 to \$24

\$30 to \$40

0

-0.5

-1.0

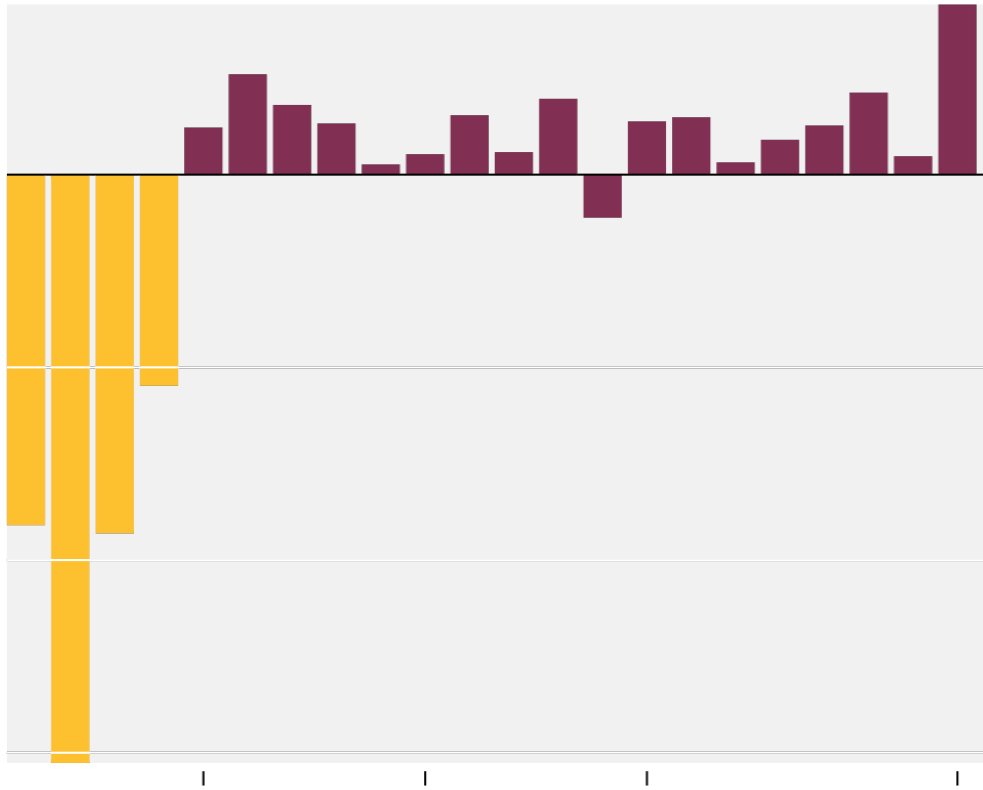
-1.5

More hours at a variety of wages above the new minimum

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Many fewer hours below the new minimum wage

NEW MIN.



Source: Minimum Wage Increases, Wages, and Low-Wage Employment: Evidence from Seattle

The minimum wage went from \$11 to \$13 for large employers in January 2016. There was a large reduction in employment (total hours of work) among those who had been earning below \$13, and an increase in employment between \$13 and \$19, though the “spike” at the new minimum wage was rather small. Comparing the losses (in yellow) with the gains up to \$19 (in maroon) suggests that four of five full-time equivalent minimum-wage jobs were lost. For workers under \$19 an hour, researchers found a 9 percent decline in full-time-equivalent jobs, compared with only a 3 percent increase in wages.

In contrast, our study (pooling 137 cases) found little change in employment in the five years after a minimum-wage increase. The job losses below the minimum were balanced by job gains up to \$5 above the new minimum, including a sharp bunching of jobs paying at the new minimum (such bunching has been common in past [studies](#)). Low-wage workers saw a wage gain of 7 percent, but little change in employment.

We found that when an increase in the minimum wage raises bottom wages by 3 percent (as in Seattle), it is unlikely to reduce employment by more than 1.5 percent — let alone the 9 percent found in the Washington study. And even when we separately analyzed some of the bigger past increases, this conclusion held.

What Research Showed Across the United States

Estimates of the change in jobs five years after a change in the minimum wage, as a share of total employment before the increase

- \$0 to \$1
- \$5 to \$6
- \$10 to \$11
- \$17+ more
- +1.5
- +1.0
- +0.5
- 0
- 0.5

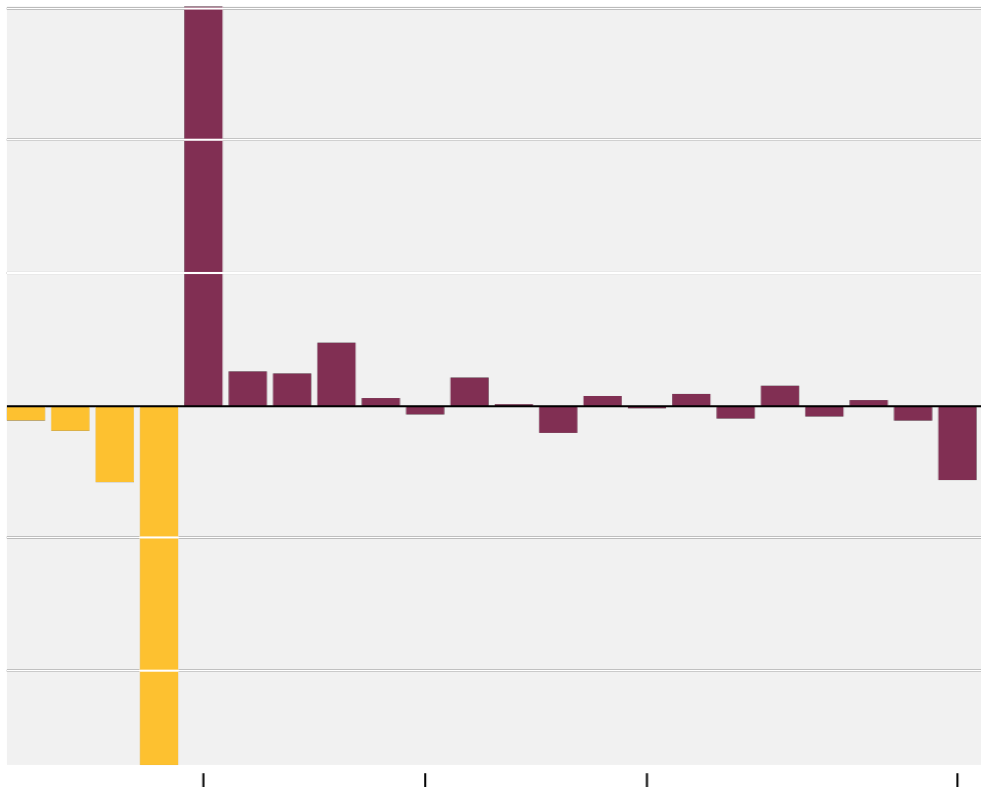
-1.0

More jobs at or just above the new minimum wage



Fewer jobs below the new minimum wage

Wages relative to the new minimum



Based on 137 state-level minimum wage increases between 1979 and 2016

Source: “The Effect of Minimum Wages on the Total Number of Jobs: Evidence from the United States Using a Bunching Estimator”

Reassuringly, as the figure shows, we also found virtually no change in employment higher up in the wage distribution even up to the highest wage level. This last point is important. When you don't see this picture, it should give you pause because it suggests that wage and job dynamics may be quite different in the control group.

The University of Washington findings show pervasive gains in employment between \$20 and \$39, so the cumulative job loss gets smaller at higher thresholds. For every two jobs lost under \$19, one new job was created between \$20 and \$39. Had the authors looked at wages above \$39, it's possible that this pattern would have continued, further diminishing the lost job count. This affects how we evaluate the policy's overall impact. For example, if you look only under \$19, it suggests low-wage workers' total quarterly earnings slipped by \$39 million. But adding up changes up to \$39 an hour suggests earnings rose by \$17 million.

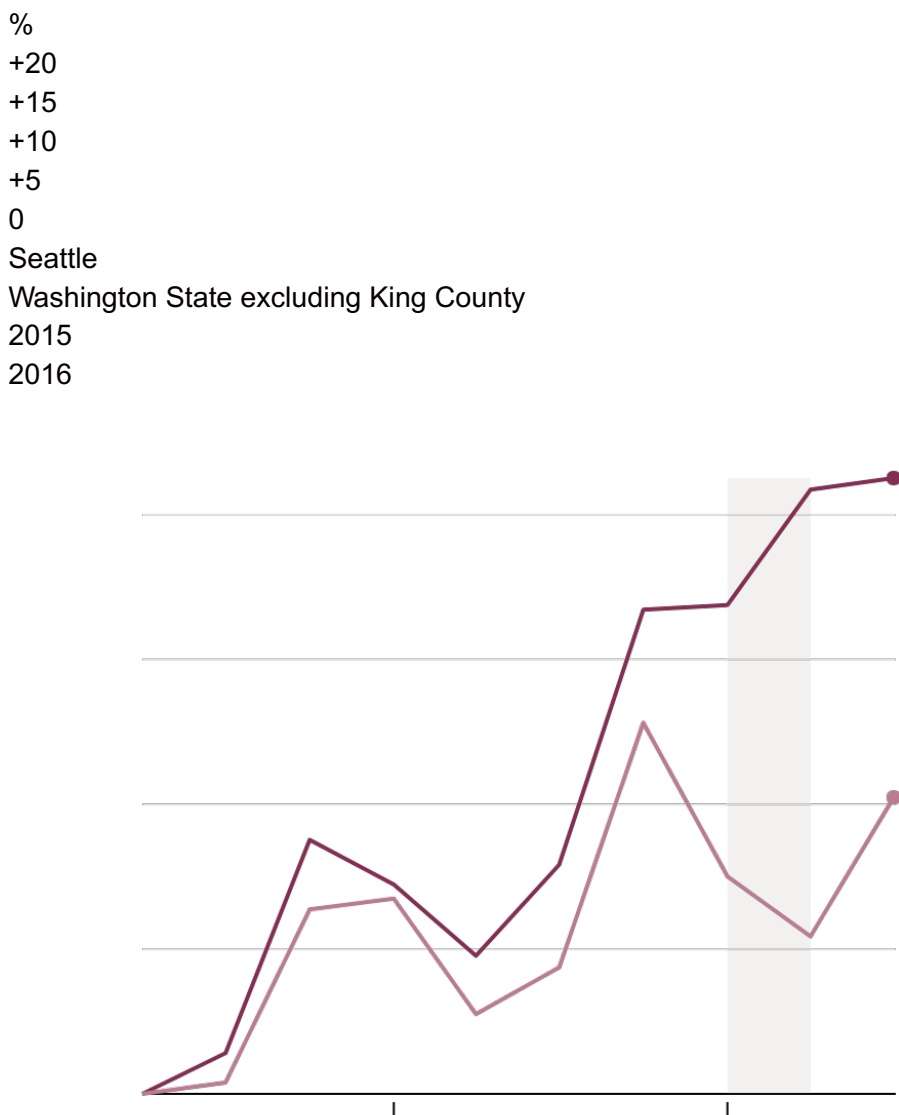
This upper-wage job growth raises concerns about the reliability of the control group because (as the authors themselves argue) minimum wages cannot plausibly affect jobs in this range. An alternative explanation for the study's findings is that underlying fast wage growth in Seattle — and not the minimum wage itself — explains both the reduction in low-wage jobs and the gains in higher-wage jobs.

When I asked the Washington study's authors whether this alternative hypothesis could explain the pattern of their findings, they noted a key element of timing: “We see very distinct job losses occurring exactly at the beginning of 2016,” when the minimum wage rose from \$11 to \$13. (The authors found job losses were much smaller at the \$11 minimum wage.)

But a quick look at the data suggests something else may be going on. Between the second quarters of 2014 and 2016, earnings in Seattle grew by an incredible 21 percent, as opposed to 6 percent in parts of Washington outside the Seattle area. And the first quarter of 2016 was exactly when the very large gap in overall wage growth between Seattle and rest of the state (where the control group comes from) really opened up, coinciding with the timing of the job loss found by the University of Washington team. At this point we don't know enough, but clearly there are some missing pieces to this puzzle.

A Booming Seattle

Change in quarterly earnings per worker since the second quarter of 2014.



Sources: Q.C.E.W. (Washington State, King County); U.W. study (Seattle)

It may be that some recent minimum-wage increases have resulted in job loss, and that Seattle's big increase — with plans to reach \$15 for all employers by 2021 — may yet turn out to be too high. However, it's too soon to draw definite conclusions. Even more important, we should remember that the Washington analysis is a single study of a single minimum-wage increase. Fortunately, there is no need to rely on a single case study when we have many other cities as well as states (like Oregon, California and New York) that are in the process of raising the minimum wage substantially.

Putting all of those together, along with our evidence from past increases, will give a much more complete picture of how high the minimum wage should go to improve the lives of people at the bottom of the wage scale without throwing lots of people out of work.

Correction: July 20, 2017

An earlier version of this article misstated in one instance the year of the minimum wage increase in Seattle. It was 2016, not 2006.