

Summary: Impact of Wal-Mart Growth on Earnings throughout the Retail Sector in Urban and Rural Counties

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Introduction and Main Findings

Wal-Mart's compensation practices have been criticized for pushing down wages and benefits. However, to date, there have been few studies documenting what actually happens to compensation when Wal-Mart comes to town. Using a new research design, this study fills a gap in existing research on Wal-Mart in testing for a causal relationship between Wal-Mart store openings and county-level retail earnings.

We found that a Wal-Mart store reduced the average earnings per retail worker in urban and suburban counties (counties that are part of Metropolitan Statistical Areas) for sectors it affects most—general merchandising and grocery. Accounting for job losses or gains only strengthened the finding, as total take-home pay fell even more than average earnings with Wal-Mart entry. In rural counties, the story was more nuanced, as Wal-Mart affected wages for workers in grocery and general merchandise differently. But after accounting for any impact on job gains or losses, total take-home pay remained stable. Since most retail workers (85%) and a majority of Wal-Mart store are in counties that are part of Metropolitan Statistical Areas, the net effect on overall pay was negative. Our research shows that Wal-Mart reduced take-home pay of retail workers by \$4.7 billion dollars annually.

Research Methodology

Our study covers the period of 1990's economic expansion. Our two sources of data include a database of Wal-Mart store openings over this period, and the county-level Quarterly Census of Employment and Wages. The QCEW is produced by the Census Bureau and is based on the earnings of all workers covered by the Unemployment Insurance program—the vast majority of the national workforce.

A potential problem with studying store openings to estimate the impact on wages is that Wal-Mart does not choose randomly where to expand. If Wal-Mart's expansion into local markets were random throughout the United States across the ten-year period of study, then we could simply look at what happened to wages in counties after Wal-Mart entry as compared to before. But Wal-Mart may have taken into account several factors for expanding into certain markets and not others, including the cost of labor in those areas at that time. Economists call this problem "selection bias." In other words, Wal-Mart's own criteria for expansion into certain markets may interfere with our ability to test for a causal relationship between Wal-Mart entry and a change in local wages.

In this paper, we devise a novel way to resolve this problem. We take the fact that Wal-Mart store openings spread out over time starting from Arkansas and moved outward to the coasts, much like a ripple from a drop of water. In other words, the farther a county

was from Arkansas—ground zero for Wal-Mart—the later it experienced the Wal-Mart growth spurt. This was an actual pattern of expansion, one that made sense for the company as it focused on utilizing its distribution networks most effectively and lowering overall costs of expansion. By following this ripple of store openings across the country and over time, we are able to test whether retail wages follow a similar ripple pattern. Looking at store openings based on both how far the county is from Wal-Mart’s “ground zero” and the year in question, our estimates are not subject to the selection bias that is often a problem for similar studies.

In addition to tracking the interaction of place and time of Wal-Mart entry as it relates to changes in local wage patterns, we have controlled for a variety of other potentially confounding factors. We have also tested our estimates against other research methodologies and have seen that our findings hold up.

Results and Implications

We find strong evidence that in urban and suburban counties (counties that are part of a Metropolitan Statistical Area), a Wal-Mart store opening led to a 0.5% to 0.8% reduction in average earnings per workers in the general merchandising sector. This finding is consistent with Wal-Mart jobs paying about 10% lower wages than the jobs they displaced. A Wal-Mart store also reduced average earnings per grocery worker in that county by 0.8% to 0.9%. Taking both wage and possible employment effects into account, we found that a single Wal-Mart store reduced the total earnings of general merchandise and grocery workers in that county by about 1.3%.

In rural counties, the pattern was different. A Wal-Mart store opening there was associated with an increase in the average earnings per general merchandise worker and a decrease in the average earnings per grocery worker. However, combining wage and employment effects, the impact on the total take-home pay of the affected retail workforce was a wash.

We interpret the evidence as suggesting that Wal-Mart displaced better-paying general merchandising jobs in urban/suburban areas, where wage standards are higher, but not in rural areas where there were fewer high-wage firms to displace. However, Wal-Mart's presence put pressure on competitors (especially in the grocery sector) to reduce wages in both rural and urban areas. And given the fact that 85% of retail workers and a majority of Wal-Mart stores are in Metropolitan counties, the overall earnings effect of Wal-Mart was strongly negative, both in terms of average earnings per worker and total take-home pay of the workforce. As a result, we estimate that in 2000, total earnings of retail workers nationwide were reduced by \$4.7 billion due to Wal-Mart’s presence.

Since writing the paper, we became aware of a similar effort by David Neumark et al. that was also made public in October 2005. Their work uses a similar strategy to estimate the effect of Wal-Mart on labor market outcomes using the time and distance interaction, and the work was done concurrently to our own (between 2004 and 2005). There are some differences in methods and data used in the two studies. However, a common finding in both studies is that Wal-Mart reduces overall earnings in the retail sector.