The Minimum Wage and Worker Productivity: A Case Study of California Strawberry Pickers

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Comments by Karen Ortiz-Becerra

Summary:

The goal of this article is to study the short-term impact of a minimum wage increase on workers' productivity using a unique database with daily timestamp and payroll information from strawberry pickers. Since the policy intervention was such that there is no a *pure* control group in the sample, Hill draws on a theoretical exercise to obtain a group of workers unaffected by the policy. To do so, she develops a principal-agent model in which the response to a minimum wage increase is heterogeneous along the pre-existent productivity distribution. The model predicts that changes in minimum wage affect workers with low and medium productivity type but do not affect the workers with high productivity type. Thus, motivated by these predictions and some stylized facts that seem to suggest that this is the case in her sample, Hill answers her research question following a difference in difference approach that compares changes in productivity before and after the policy among workers of different types.

The preliminary results suggest that after the minimum wage increase the productivity of low-type workers decreased in comparison to that of high-type workers.

Major comments/suggestions:

- My understanding from the introduction of this study is that the final results are intended to guide public policy concerning regulations in the agricultural labor market in California. To that end, it would be helpful to have more information on how important the strawberry industry is in California, and the representativeness of the sample from which you are drawing inference on.
- I think you should provide more intuition behind the different productivity types in the theoretical section. How should we think of these types? Are they related to innate ability or effort? Do they change over-time? What is the ideal measure to classify workers in types? The empirical section, on the other hand, should provide more information on how the workers were classified and the distribution by types in the sample.
- The identification strategy in this empirical exercise relies on the assumption that productivity trends were parallel across types before the policy change. You provide us with some evidence on this regard in Figure 7, but I recommend you further discuss the identification assumptions for two reasons. First, it seems that the productivity of high types evolved differently right before the policy took place. Second, Figure 7 also suggests that the productivity of the high types was affected by the policy intervention.

- I also recommend you give further thought to the *potential* dynamic nature of your econometric model since the definition of productivity types depends on the past realizations of the outcome variable. This issue is important to the extent that failure to account for this dynamic nature could bias your estimates. A good source to start exploring this topic is Arellano and Bond (1991).
- Another way to try to answer this research question with the data on hand would be to use a pre-post approach within a worker's fixed effects framework. This approach could be a reasonable alternative in the absence of a valid control group if there are no strong reasons to believe that another structural change occurred on the day that the policy took place.
- Finally, given that the data is available up to three years after the policy change, it would be interesting to extend the analysis to verify if the short-term results persist over time. I understand doing so is challenging since it requires you to observe the same worker across years, but it would be helpful at least to have a discussion on this regard.