

Derenoncourt, E. (2019). Can you move to opportunity? Evidence from the Great Migration.

The author aims to investigate the causal link between the Great Migration (1940-1970) and social mobility in the United States. The main novelty that this paper advertises is the way it identifies this causal effect. An interaction between predicted southern outflow migration and pre 1940 migration location choices is used as an instrument for increases in the share of Black people in the North of the US. Using this identification strategy, the author shows that these racial composition shocks in the North reduced the upward social mobility in those regions.

One of the main assumptions underlying this identification strategy is that the instrument constructed is exogenous and not affected by confounding with respect to the target variable of interest (social upward mobility). The author defends this assumption by making the argument that migrants' origin locations are unrelated to shocks in their destinations, since Black migrants tended to move their livelihood to regions where their families and community members had migrated to. In instrumenting for the increase in the share of Black people in the North, the author uses a shift-share approach, constructing the instrument from both the pre 1940 migration patterns and the predicted outflow of migrants from the south. In order to identify causal effects, the pre 1940 migration patterns should be exogenous. This is a very strong assumption in my opinion and generally untestable. The author does perform multiple robustness checks strengthening the confidence for exogeneity, making a strong case for the strategy. However, in recognizing that industrialization could be a potential confounder (which is correctly controlled for), it suggests that there might be a plethora of other confounders not taken into account (see for example the World Bank blog in the references, where these identification assumptions are critically evaluated).

Moreover, in the construction of the instrument, an important input is the predicted out migration from counties in the South. The author introduces a new ML method to perform this prediction and contributes an innovation to the field with this. The novelty lies in using LASSO to perform variable selection as a pre-processing step, after which OLS is used to predict out-migration. Since these predictions are used in the construction of the instrument and not in the 2SLS estimation of the causal effects, there is still room for improvement in predictive performance (both in predictive performance as well as philosophy). In terms of predictive performance, a Random Forest or other tree based methods (like gradient boosting) could be considered to create better predictions. On the philosophy front, the LASSO makes much sense when the ground truth is sparse and we only expect few variables to be important for prediction. In the case of predicting out migration, many factors might play a role, which we might not all want to shrink to zero effects. Tree based methods still provide the flexibility to work in high dimensions (more variables than observations), while not imposing this sparsity restriction.

Lastly, in terms of delivery of the main conclusions, there could be some more attention to the fact that many findings relate to the 25<sup>th</sup> and 75<sup>th</sup> percentile of the upward mobility distribution. A broader analysis cannot be provided at times because of the availability of data, but in terms of presenting the conclusions, it might make more specific reference to these numbers and place the conclusion into context by doing this.

Overall, though, the paper gives a very strong and convincing methodology and yields extremely interesting insights, while at the same time introducing some novelties to the field.

References:

Derenoncourt, E. (2022). Can you move to opportunity? Evidence from the Great Migration. *American Economic Review*, 112(2), 369-408.

<https://blogs.worldbank.org/impactevaluations/rethinking-identification-under-bartik-shift-share-instrument>