Kline & Katari (2016) examines the effect of Connecticut's Jobs First (JF) welfare reform experiment, which randomized participants between the JF program and the traditional Aid to Families with Dependent Children (AFDC) program. The JF program differed from AFDC program on various policy-relevant dimensions, including strengthening work requirements and structuring the disregard of earnings to incentivize work under the FPL. The authors develop a non-parametric optimization model of labor supply that allows for unrestricted heterogeneity across women, a very permissive model relative to more conventional approaches. The authors are interested in the extensive and intensive margin responses of women's labor supply.

They face the standard challenge of observing only the marginal distributions of the potential outcomes under each treatment, but not the joint distribution. Still, they make progress on set identifying a variety of parameters of interest under their model by 1) considering a reduced state space consisting of the combined information on whether the individual participated in the welfare program, whether they under-reported their income, and a coarsened earnings variable indicating whether earnings were zero, below the FPL, or over the FPL, 2) employing a set of "revealed preference" restrictions founded upon the idea that if a woman's utility under her AFDC choice was not lowered by the JF program, then she will either make the same or a utility-improving choice, and 3) utilizing a set of non-negativity and summation constraints on probabilities and mutual exclusivity of choices.

The authors find that the JF program induced a substantial opt-in effect in which (at least 20% of the feasible) women who would have earned above the FPL without welfare under AFDC chose to earn below the FPL and receive welfare under JF. They also find a small, but significant effect of JF on women choosing to under-report their earnings to receive welfare, as well as a meaningful increase in the share of women earning below the FPL who chose to receive welfare (at least 32% of the relevant group). They also find evidence that (between 14% and 20% of the relevant subset of) women moved from non-work to work under the JF.

A weakness of the paper is that it is limited in what types of conclusions it can draw. For example, it cannot speak to movement within the coarse earnings categories, which is something that is likely important for considering the welfare effect of the policy – probably most significantly, movement in earnings among people under the FPL. The details of the earnings movement from those that earn above the FPL under AFDC but under the FPL under JF are also important and are given some attention in the robustness section. However, this "weakness" is tightly related to one of the key strengths of the paper, which seems to be the credibility derived from minimizing assumptions by employing a permissive non-parametric model and relying on informative partial identification.

When I think through the process of trying to develop a paper like this, I think that I could benefit from a better understanding of: once we've realized that we can group income and restrict the types of movement via revealed preference arguments, what qualities of the problem at this point make us think about re-structuring the state space and constructing it as a linear program to make progress? Once we've narrowed in on the response probabilities, we can see that we're still under-identified due to the number of equalities and unknowns, but do we look at the problem, notice that the parameters of interest are all linear in the constraints, and, at that point, carry out the linear programming exercise and just find out if we've reduced the equalities sufficiently to get informative set identification? Are there classes of problems that it would be helpful for me to have in mind as being possible to tackle with this variety of approach?