Caring for the Caregivers: Estimating the causal impact of allowing home-based child care workers to form labor unions on the cost, type and availability of subsidized child care in Illinois

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Project Description: The purpose of this project is to evaluate the impact of home-based child care provider (HBCP) unionization on the cost, type, and availability of subsidized child care in Illinois. In 2005, Illinois became the first U.S. state to grant home-based child care providers the rights to form a union and bargain collectively with the state government. This policy inspired similar efforts across the country and represents a potentially important trend in child care policy.

In other industries, labor unions have helped workers negotiate higher wages and develop a stronger voice in determining workplace practices. Among public-sector workers, unions have also been responsible for expanding the size of the unionized portion of the public-sector labor force. This project will use a recently developed quasi-experimental method to evaluate whether unionization had similar effects on child care in Illinois.

Research Questions

- Did Illinois HBCP unionization increase the dollar amount of per subsidy-receiving child payments to HBCPs, within three years of implementation? To what extent do any increases reflect an increase in payments made by the state and payments made by parents?

- Did Illinois HBCP unionization increase the percentage of hours Illinois subsidy-receiving infants and toddlers were cared for in licensed, rather than unlicensed, child care programs, within three years of implementation?

- Did Illinois HBCP unionization increase the percentage of all Illinois infants and toddlers who received child care subsidies, within three years of implementation?

Sample: This project draws on two primary sources of data. First, we use publically available Administration for Children and Families (ACF) administrative records of state reports of subsidy-receiving families, collected through Form 801, for the years 2002-2008. These data are reported monthly on representative samples of families who received CCDF child care subsidies. These data do not contain any descriptive information by which individual subsidy-recipient families might be identified. We therefore aggregate these child & family-level data to the state level for analysis.

Our second data sources are the monthly administrations of the Current Population Survey (CPS) from the years 2002-2008. The CPS collects monthly state-level data on the social, economic, demographic and housing characteristics of a representative sample of households in each US state and the District of Columbia. We aggregate these CPS data to the state–level and combine them with the ACF data to form a single dataset for analysis.

We limit this sample in two ways prior to generating the state-level aggregate indicators. First, we use only data that refer to children age birth to three years in the generation of child- and family-level indicators. Second, we exclude from the analysis data from the thirteen states that enacted similar child care unionization laws during the evaluation period. Because these states allowed for some form of unionization they cannot be considered legitimate "non-union" contributors to the synthetic control group (described below).

Method: We apply a recently developed strategy for conducting comparative case studies by comparing Illinois to a "synthetic" control group generated using data on states that did not implement child-care unionization (Abadie, Diamond, & Hainmueller,

2010). This synthetic control group is formed by using information on outcome indicators and selected covariates to generate a weighted combination of multiple comparison states that, when combined, best approximates the outcome data observed in Illinois, prior to treatment.[1] These weights are then applied to data on post-intervention outcomes from the untreated states.

Our choice of covariates to include in the generation of the synthetic control group is guided by the "accommodation framework" of child care decision-making described by Chaudry, Henly and Myers (2010). This framework conceives of parents' decisions about child care not as choices but accommodations to a dynamic confluence of employment, family, and market factors that constrain families' abilities to select and make use of optimal care for their young children. As extant data do not permit us to model all of these potential determinants of decision-making for the many different types of families included in our analysis, we attempt to, as much as possible, generate state-level indicators that theory or prior research suggest might, in the aggregate, constrain the child care choices of sampled families. We then explore the sensitivity of these covariates to serve as synthetic control weights and retain only those covariates that improve the ability of the synthetic control unit to approximate the outcomes observed in Illinois prior to treatment. Improvement, in this context, is measured by the average squared discrepancy on the specified outcome variable in Illinois and the synthetic control unit during the pre-intervention period.

We then compare data on our outcomes of interest in Illinois to the synthetic control group state using the following difference in means equation: $\alpha_{it} = \bar{Y}_{it}^{I} - \bar{Y}_{it}^{N}$ Where subscript *i* represents Illinois, subscript *t* represents time (*t*=1, …t_0, …t, such that t_0 represents January 2006, the date HBCPs ratified their first collective bargaining agreement. $\bar{Y}_{it}^{I}$ then represents the observed average outcome Illinois during time *t*. $\bar{Y}_{it}^{N}$ represents the average outcome that would have been observed if Illinois had not experienced unionization (obtained from the synthetic control group).

Progress Update: We have merged the 2002-2008 ACF and CPS data and created monthly state-level indicators for our dependent variables and potential covariates. We have conducted preliminary analyses that suggest marked differences between the actual Illinois and synthetic Illinois following unionization on two of our dependent variables. We are currently testing the robustness of these findings to a range of model specifications.

Implications for Policy/Practice: Currently, approximately 1 out of every 7 US HBCPs is represented by a labor union. As low-wage workers whose labor cannot easily be automated or relocated to countries with more favorable business environments, home-based child care represents an attractive area of growth for unions. What remains unclear is how, if it all, this phenomenon will impact the care available to young children from low-income families. Although available data do not currently permit an estimation of the impact of labor unions on children directly, this study will provide strong quasi-experimental information on changes in the cost and type of child care used by these families. As state policy makers consider how to improve systems of early care and education, it is important for them to have information on the implications of child care worker unionization.

Implications for Research: The synthetic control method has been used to evaluate the impact of state-level taxation, health and public safety policies. To our knowledge, this study represents the first attempt to apply this method to changes in child care policy. We believe this approach represents a potentially powerful quasi-experimental means to leverage extant administrative and census data to evaluate changes on a range of state-level policies related to young children and their families.

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[1] Treatment for this purposes of this study begins in January 2006 – the date when the first contract between Illinois HBCPs and the state was ratified