

# The equilibrium effects of state-mandated minimum staff-to-child ratios <sup>[1]</sup>

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## AVAILABILITY

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## Abstract

Mandatory minimum staff-to-child ratios are a pervasive childcare market regulation in the US, and yet little is known on their effects on children's skills. This paper builds an equilibrium model of the childcare market and uses it to simulate the distribution of children's skills at preschool entry under various minimum mandatory staff-to-child ratios. The model allows for rich family heterogeneity, an endogenous distribution of childcare quality at each age, and endogenous wages that clear the market for teachers and childcare workers. I prove identification and estimate the model using both individual-level and state-level data. Counterfactual simulations show that increasing the stringency of minimum mandatory staff-to-child ratios increases the wages of childcare workers by up to 4.33% and wages of lead teachers by up to 2.75%. Despite making paid childcare more expensive, more stringent regulations increase skills at kindergarten entry for each percentile of the skill distribution, except for the lowest percentiles. The effects on the skill distribution are more pronounced for children born to Single Mothers than those born to Two-Parent families. Finally, these overall effects on the skill distribution mask large heterogeneity: Increases in ratios' stringency translate into big skill gains for some children and large drops for others, and both family characteristics and the equilibrium adjustment of teacher's wages are key in determining the children who gain and lose.

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