

Corporate Financial Constraints, Minimum Wage Policies, and Employment

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Summary

- Estimate the effect of the minimum wage (MW) on employment at the establishment and firm-level, focusing on the role of corporate financial characteristics in generating heterogeneity
- Data: 1990-2020 National Establishment Time Series (NETS) database for establishment locations and employment + match with public firms in Compustat for balance sheet characteristics
- Empirical Strategy: Border discontinuity design + federal minimum wage increase in 2007-2008 financial crisis and ex-ante heterogeneity in firms' long-term debt maturity structure ("shift-share approach")
- Main specification: Regress establishment log employment on state MW + firm-year & establishment fixed effects
 - Coefficient of interest: Linear interaction term between minimum wages and financial constraint measures
 - Measures: firm size, WW index from six components, size-age index
- Other specifications: County-level and firm-level analysis, states bound by federal MW + interaction with share of long-term debt due in one year in 2007

- Very rich analysis with many robustness checks and additional results
- Highlights
 - Samples with all counties versus counties on state borders
 - Heterogeneity across sectors by industry exposure to MW
 - Impact on establishment performance
 - “Shift-share approach” as natural experiment

- Add financial constraints to a standard model with perfect competition which predicts negative employment
 - Employment could be unaffected if firm productivity or output prices increase sufficiently
- Would it be possible to combine more recent models that generate non-negative employment effects with financial constraints and show how empirical results are consistent?
 - Labor market frictions, labor market power etc.
 - Authors now estimate a positive effect on employment by unconstrained firms and use this to test various theories in their latest version
 - What about the predictions for the sign of the interaction coefficient across all these models?

- NETS employment data known for measurement errors
 - Authors show results are robust to removing establishments with fewer than five employees or excluding establishments with round numbers of employees
- Are differential rates of measurement error across firm sizes and age a concern given that this paper focuses especially on heterogeneity across size and age as measures of financial constraints?
 - Crane and Decker (2017) show imputation remains high for firms in size class 5-9, 10-19, and 1000+ and that employment dynamics of young firms are especially poorly captured
 - Should this upward or downward bias estimates?
- Directly use imputation flags in the data if possible and focus on non-imputed data?
- Show employment trends at region-industry level align with other data sources?

- Parallel pre-trends for aggregate employment effects using both standard fixed effects and latest estimation methods that account for heterogeneous treatment effects (null effects throughout)
- Any event study graphs with parallel pre-trends and divergence after MW shock for the group with the largest effects: MW-exposed industries + most financially constrained?
- Latest econometric approaches to estimate heterogeneous effects could help pin down which components of financial constraint measures drive heterogeneity
 - Sorted effects (Chernozhukov et al. 2018): Learn the characteristics of winners and losers from a treatment
 - Causal machine learning for moderation effects (Bearth and Lechner 2025): Understand how much a variable drives the differences in treatment effects between two groups

“Shift-share Approach”

- Parallel pre-trends encouraging, but financial crisis might generate diverging trends?
- Exogenous shares versus exogenous shifts (Borusyak et al. 2025) and use their checklist?
 - “Shares”: Ex-ante heterogeneity in long-term debt maturity structure
 - “Shifts”: States bound by the federal MW
- Exogenous “shares”
 - Balance tests for “shares”: Uncorrelated with observables, pre-trends?
 - Authors now focus on this in their latest version
- Exogenous “shifts”
 - Descriptive statistics for “shares”: Sufficient variation in debt maturity structure?
 - Balance tests for “shifts”: Uncorrelated with observables, pre-trends?
Can build on other papers that also use federal MW changes as variation