

Double-Lasso Enhancement on "The Effect of Minimum Wage on Low-wage Jobs"

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Abstract and Introduction

- Using Double-Lasso to enhance the DID analysis on The Effect of Minimum Wages on Low-wage Jobs.
- Study articulates exploration of minimum wage using ML for detailed insights.
- Methodological variations clarify discrepancies in youth employment findings.

Literature Review

- Methodology Focus: Double-Lasso by Belloni et al. (2012) for control and treatment variable selection.
- Literature Review Emphasis: Chernozhukov et al. (2018) and Athey and Imbens (2019) on ML in econometrics.
- Research Relevance: ML integration for a nuanced analysis of minimum wage impacts.

ML Methodology

- Utilizes the Double-Lasso technique to refine treatment group selection for DID analysis.
- Applies placebo tests to confirm the robustness and precision of the regression outputs.

Results

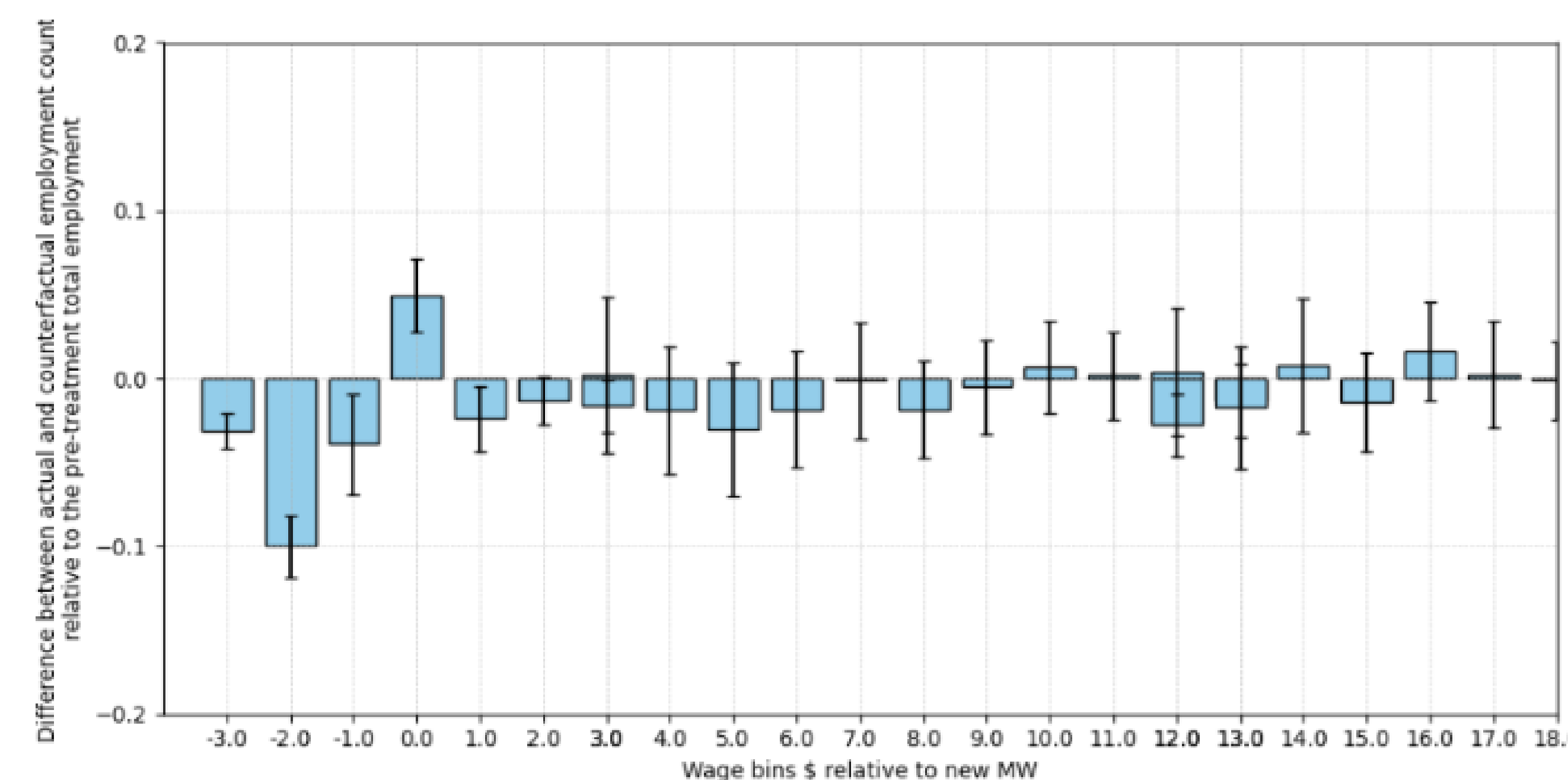


Figure: Impact of Minimum Wages on the Wage Distribution

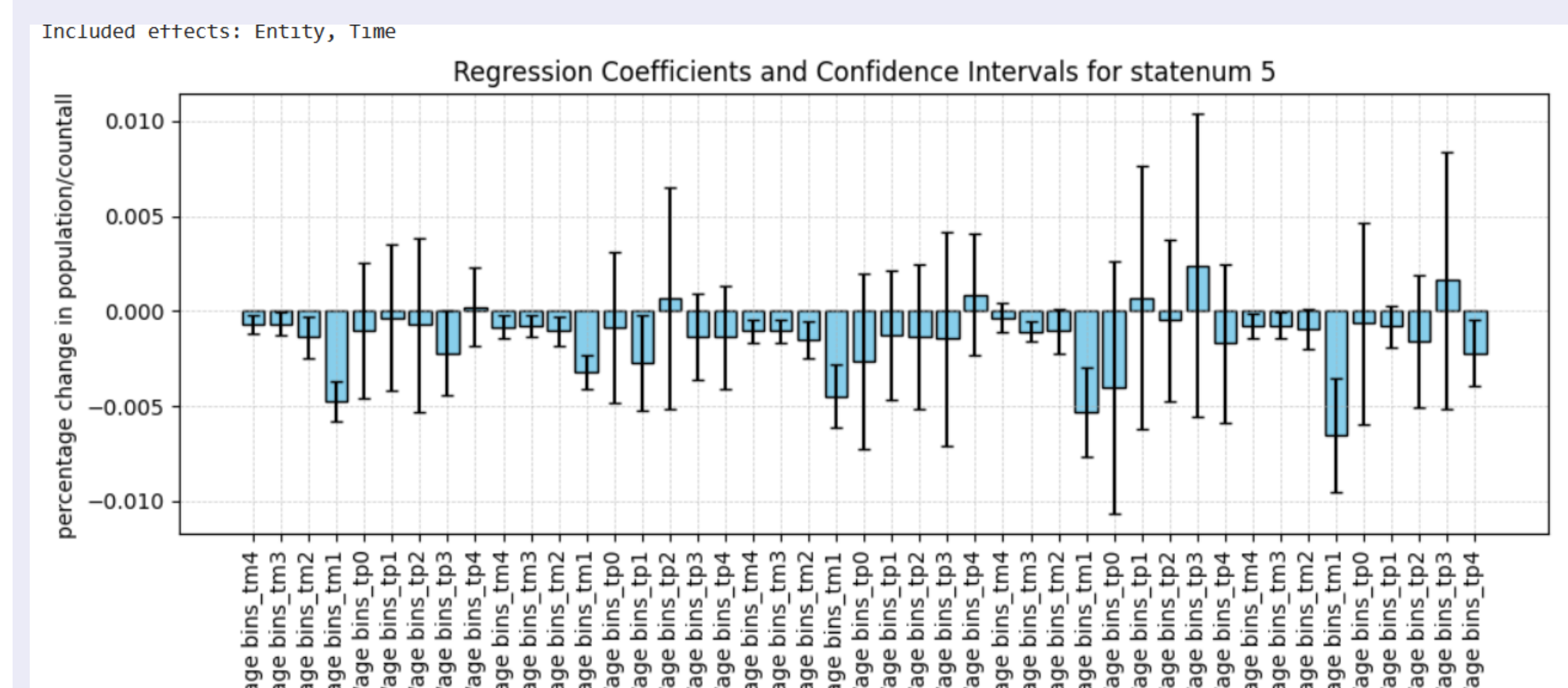


Figure: Double-Lasso Enhancement

- Double Lasso refines model, revealing precise impacts of minimum wage across wage tiers.
- $\delta a = 0.007, \delta b = -0.008$.

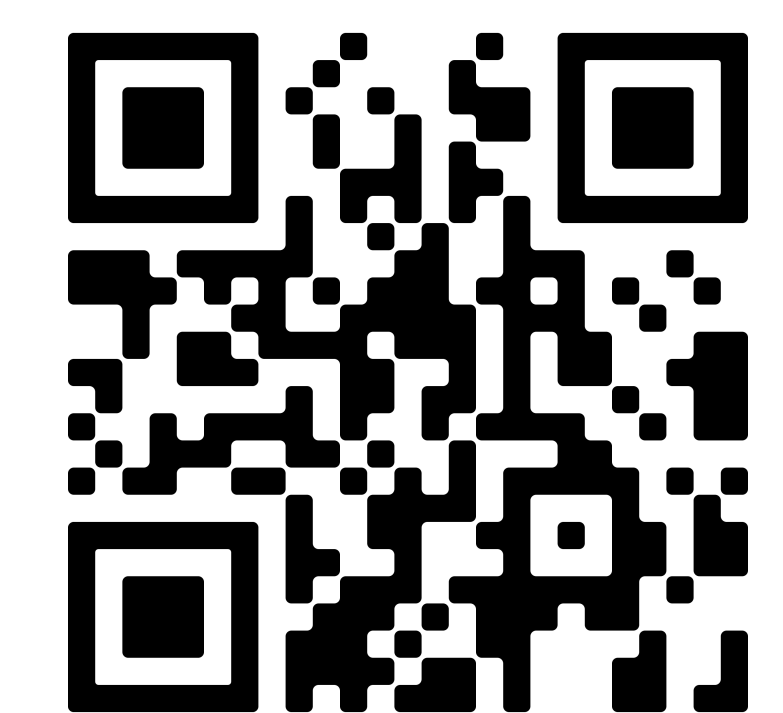
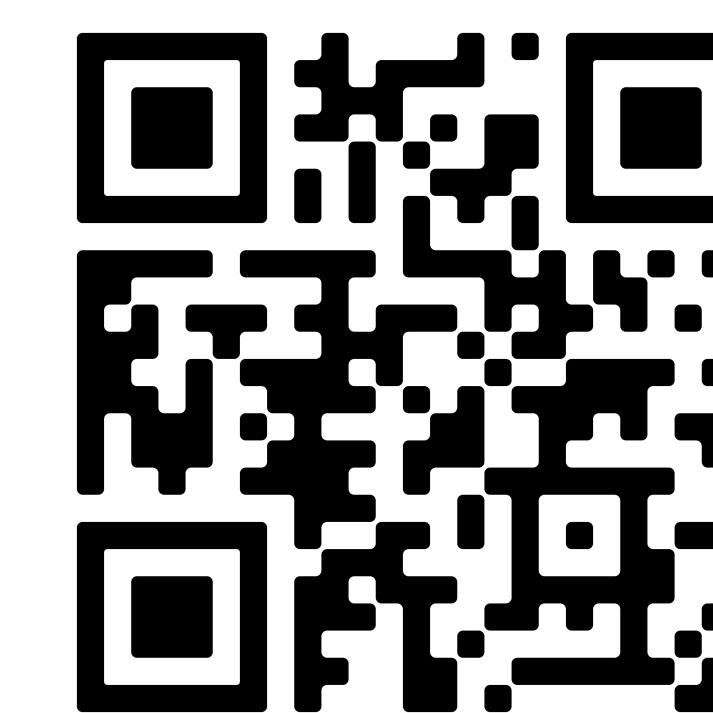
Conclusions

- Research enhances traditional analysis with ML, offering new insights.
- Clearly states how ML methodologies advance understanding of labor market responses to policy changes.

Discussion

- ML analysis identifies detailed patterns, confirming robustness via placebo tests.
- Results link back, offering a deeper understanding of wage policy effects.

QR Code and Other Contents



Cited paper and ML literature review

Citation: Doruk Cengiz, Arindrajit Dube, Attila Lindner, Ben Zipperer, The Effect of Minimum Wages on Low-Wage Jobs, The Quarterly Journal of Economics, Volume 134, Issue 3, August 2019, Pages 1405–1454, <https://doi.org/10.1093/qje/qjz014>