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

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Texas A&M University, ECMT680: Financial Econometrics, Mohammand J. Alam, Spring 2024
May 3, 2024

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

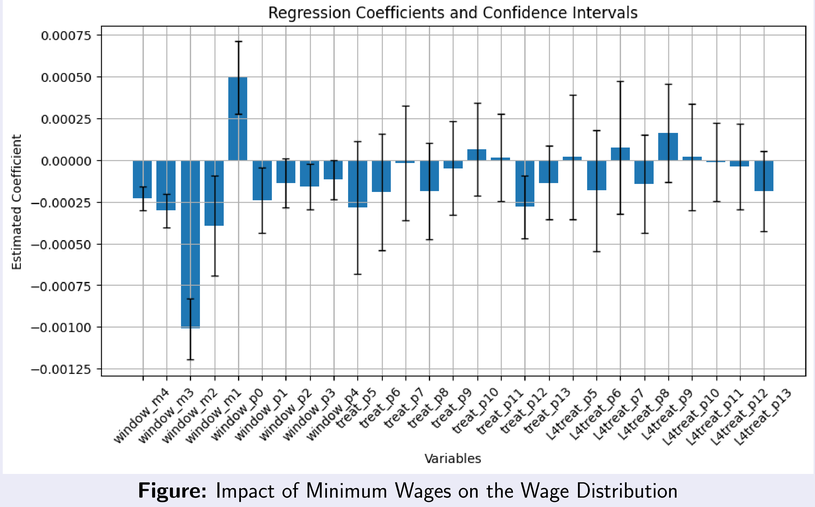

Figure: Impact of Minimum Wages on the Wage Distribution

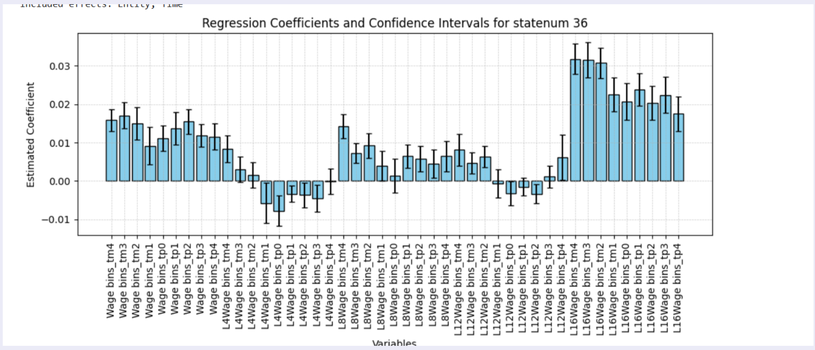

Figure: Double-Lasso Enhancement

-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