

THE 2009 US TIRE TARIFF AND ITS INTERMEDIATE PENALTIES TO THE AUTO INDUSTRY

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QUESTION REVIEW

Question: How did the 2009 Obama Administration Chinese tire tariffs affect US Vehicle Manufacturing?

- How did the tariffing of this intermediate good change the employment and overall market space?
- can we find a difference in Employment among US sectors at the time of implementation?
- Can the study of industry during their intermediate goods being tariffed tell us about effects on that industry

POSITIONING

(Joonhyung 2010)

- Short Run analysis of data on international effects
- Research uses a similar Methodology but different data

(Brown 2020)

- analyzes the effect of the Anti-Dumping agenda against China, not a safeguard measure
- Anti-dumping especially on Chinese goods is a well-researched trend

(Lake 2022)

- Long term analysis of the 2002 Bush Steel tariff
- Safe Guard measure which received backlash in the long term
- Diff-in-Diff using Commuting zones to differentiate the local impact of Tariff

METHODOLOGY REVIEW

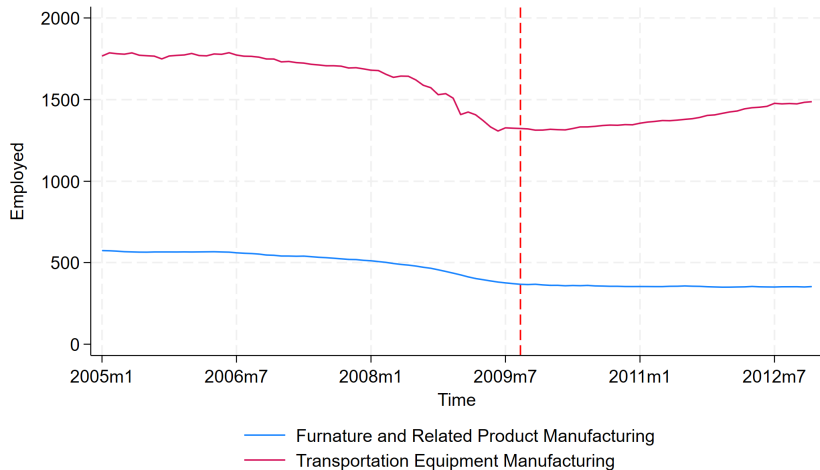
Difference-In-Difference:

- $Y = A \cdot \text{Post} + B \cdot \text{Treatment} + C \cdot (\text{Post} \cdot \text{Treatment}) + U$
- Final Treatment Group: Transportation Equipment Manufacturing (BLS 2024)
- Final Control Group: Furniture and Related Goods Manufacturing (BLS 2024)

Respective Differences:

- Time of initiated tariff
- Industry

TIME SERIES



INCONSISTENCY IN RESULTS

Following my early results presentation, one inconsistency in my results became a major hurdle

- A negative level value paired with a positive natural log value
- AI Chatbots and online discussion board posts brought no help
- With the help of TA's Ananyo Hyunjin Yun, I was able to address the transition between the two versions of my outcome
- With an $\ln(\text{dependent variable})$, this causes a concave transformation and makes the dependent variable non-linear. This causes a shift of data that makes the regression present itself as positive in this case.
- findings correspond to stats.stackexchange.com postings

REGRESSION TABLE

VARIABLES	Employment in thousands	Natural log Employed
treatment	1,152*** (20.76)	1.180*** (0.0210)
post-tariff	-158.2*** (8.153)	-0.361*** (0.0172)
Diff-In-Diff	-122.1*** (22.69)	0.180*** (0.0221)
Constant	513.2*** (8.119)	6.233*** (0.0171)
Observations	192	192
R-squared	0.977	0.982

Robust standard errors in parentheses

*** p<0.01, ** p<0.05, * p<0.1

CONCLUSION

Hurdle:

- In levels, employment decreased in thousands
- In log, the nature of the diff-in-diff inputs caused a sign change(log-level model)

Next Steps

- Begin transferring figures from Stata to final paper outline
- Begin Bibliography & Appendix
- Begin writing paper