

Trade Policy, Captive Finance, and Consumer Credit: Evidence from the 2018 Metal Tariffs

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Discussion for CHM 2022

April 1, 2022

Steel & Aluminum Tariffs Important Role in Russian Sanctions.

What are the Effects?

- March 15, 2022: EU banned Russian steel products,
UK raised steel tariffs (**Strauss Hauer & Feld**)
- March 22, 2022: US lifted tariffs on UK steel and aluminum (**ABC News**)
- This paper: Do auto-companies change both price of cars & financing?

This Paper

- Aluminum and Steel tariffs causes cost of cars \uparrow
- Do auto-companies w/ captive lenders \uparrow price of cars & financing?
- Literature suggests price of financing less salient than price of cars (Gabaix and Laibson 2006; Grunewald et al. 2020)
 - How are these aluminum/steel tariffs are passed on to consumers?
 - Through car prices alone, or also through the price of a financial product?
 - For example, if we embargo/tariff Russia steel, or gasoline prices increase, how will the largest sellers of cars respond?
 - Will they only change the prices of cars or will they also change interest rates?
 - If they change interest rates, what are the knock on effects of this?
 - How do they affect people? Distributional effects? Do we see more defaults, persistently high interest rates?
 - Does high interest rates cause borrowers to default on other credit products?

Summary of Results

Treatment date = Quarter 1, 2018

- Jan. 2018 - Trump administration instructed Dept. of Commerce to investigate amount of metal imports
- Feb. 16, 2018 - report made public
- Mar. 1, 2018 - announced 25% tariff on steel imports
 - Trump administration surprised mkts

Reg AB II data

- Issuers of public auto asset-backed securities (ABS) report loan-level information to the SEC
- Contains loan, vehicle, borrower characteristics, and originator name

Run a DID regression → post tariffs, captive auto-lenders raise interest rates

- In in-elastic areas lenders raise rates by more
- Borrowers w/ low income receive even higher rate increases

Highlights of Paper

Captive lenders raised interest rates by 24 basis points relative to non-captive lenders

- 6.3 percent increase from the mean
- Effect occurs 1 quarter from tariff passage and does not dissipate

Reg AB II data - issuers of public auto asset-backed securities (ABS) report loan level info to the SEC monthly (Sweet 2015)

Empirical Approach Summary

For loan i , in quarter t , from lender l

$$y_{i,t} = \alpha + \sum_{\tau=-4}^4 \Gamma_{\tau} Treated_l D_{t=\tau} + \delta_l + \delta_{m,n,t} + \delta_{s,t} + \delta_{w,t} + \delta_{c,t} + \epsilon_{i,t}$$

$y_{i,t}$ = Auto loan interest rate

$Treated_l$ = Indicator for captive lender

$D_{t=\tau}$ = Indicator for qtr

δ_l = Lender fixed effect

$\delta_{m,n,t}$ = make-model-condition-qtr fixed effect

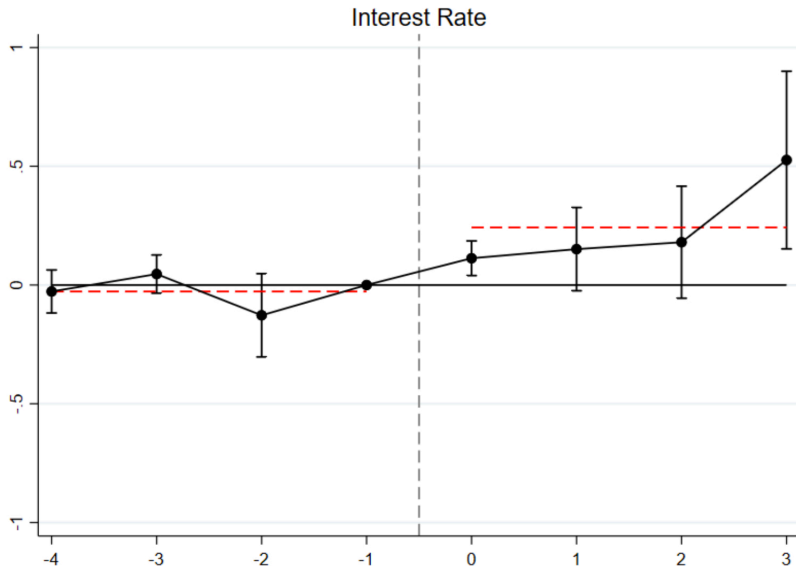
$\delta_{s,t}$ = state qtr fixed effect

$\delta_{w,t}$ = income qtr fixed effect

$\delta_{c,t}$ = credit score qtr fixed effect

$\epsilon_{i,t}$ = error term

Summary of Paper Contributions



Main Comment - Decrease in Credit Supply?

Non-captive lenders funded differently than captives

- Captive lenders need to sell loans for funding
 - Captive cost of capital ↑ because of the tariffs?
 - Maybe ABS buyer demand ↓ because they anticipate prices for the autos increasing due to the tariffs

Non-Captive Lender

- ALLY - BHC, online banking, mtg loans, online brokerage
- CarMax - used auto retailer/financier
- Fifth Third - BHC, online banking, mtg loans
- Santander - GSIB, online banking, deposit taking, 4th largest bank in Europe, 16th largest in world
- USAA - online banking, life insurance, annuities, homeowner insurance
- WorldOmni - Is this a captive lender? **WorldOmni**- "established as the first captive finance company in America for an import car manufacturer."

Captive Lender

- AmeriCredit
- BMW
- Ford Credit
- GM Financial
- Honda
- Mercedes-Benz
- Toyota
- Volkswagen

Main Comment - Decrease in Credit Supply? (Cont'd)

- Would like to see comparison of lender characteristics
 - tradelines
 - countries operated in
 - fraction of funding comprised of auto-loan warehouse lines of credit (may be reported in 10Ks)
- Restrict control group to only CarMax and World Omni

Other Comments

- Did car companies without captive lenders (no financial product margin) raise car prices by more?
 - Consistent with car companies with a captive lender offsetting prices by changing financing terms
- Do car companies w/ captive lenders have larger profits?
 - If car manufactures are constrained by inability to raise car prices beyond threshold w/o losing demand \Rightarrow co. w/ captive lender's change in profits should be higher
 - All of these pieces of evidence together would point to the mechanism that the authors suggest
- Differentiate btw types of shocks that will generate intensive vs. extensive margin result in (Benneton, Mayordomo, Paravisini 2021) vs. a contraction in lending to intensive margin

Thank You

Appendix

Minor Comments

WorldOmni - Is this a captive lender?

<https://www.worldomni.com/about.html> - "established as the first captive finance company in America for an import car manufacturer."