Trade Effects of US Tariffs under Trump 2.0

Until September 2025

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Introduction

❑ **The inauguration of Donald Trump's second administration on January 20, 2025**

➢ Rising tariffs and economic uncertainty

➢ Different tariff policy from Trump 1.0

✓ US tariffs have been increased against all countries worldwide, not only for China or Russia.

✓ Virtually all products are subject to tariff rises.

❑ **Gradual increases in terms of magnitude and product scope**

➢ On April 5, the 10% additional tariffs against nearly all countries

➢ High country-specific tariffs (i.e., so-called reciprocal tariffs) on April 9, which were paused for 90 days

➢ On August 7, revised "reciprocal tariffs" started

❑ **What We Do: The First Ex-post Study**

➢ Empirically investigating how the US additional tariffs changed exports from 31 countries to the US from January 2023 to September 2025

Contributions

☐ **The literature on Trump tariffs**
- ➤ The trade effect of tariffs in Trump 1.0
  - ✓ On US imports (e.g., Amiti et al., 2019; Amiti et al., 2020; Fajgelbaum et al., 2020; Cavallo et al., 2021; Handley et al., 2025; Jiang et al., 2023), on China's imports (e.g., Ma et al., 2021), and on third economies (e.g., Fajgelbaum et al., 2024; Hayakawa et al., 2024; Utar et al., 2023; Yang and Hayakawa, 2023).
- ➤ Ex-ante simulation analyses or theoretical analyses on Trump 2.0
  - ✓ Antonova et al., 2025; Ignatenko et al., 2025; Rodríguez-Clare et al., 2025; Itskhoki and Mukhin, 2025
- ➤ The effects of Trump's 2024 election or Trump's tariff announcement on stock markets
  - ✓ Ahmed et al., 2025; Cosma et al., 2025; Ferriani et al., 2025; Piserà et al., 2025.

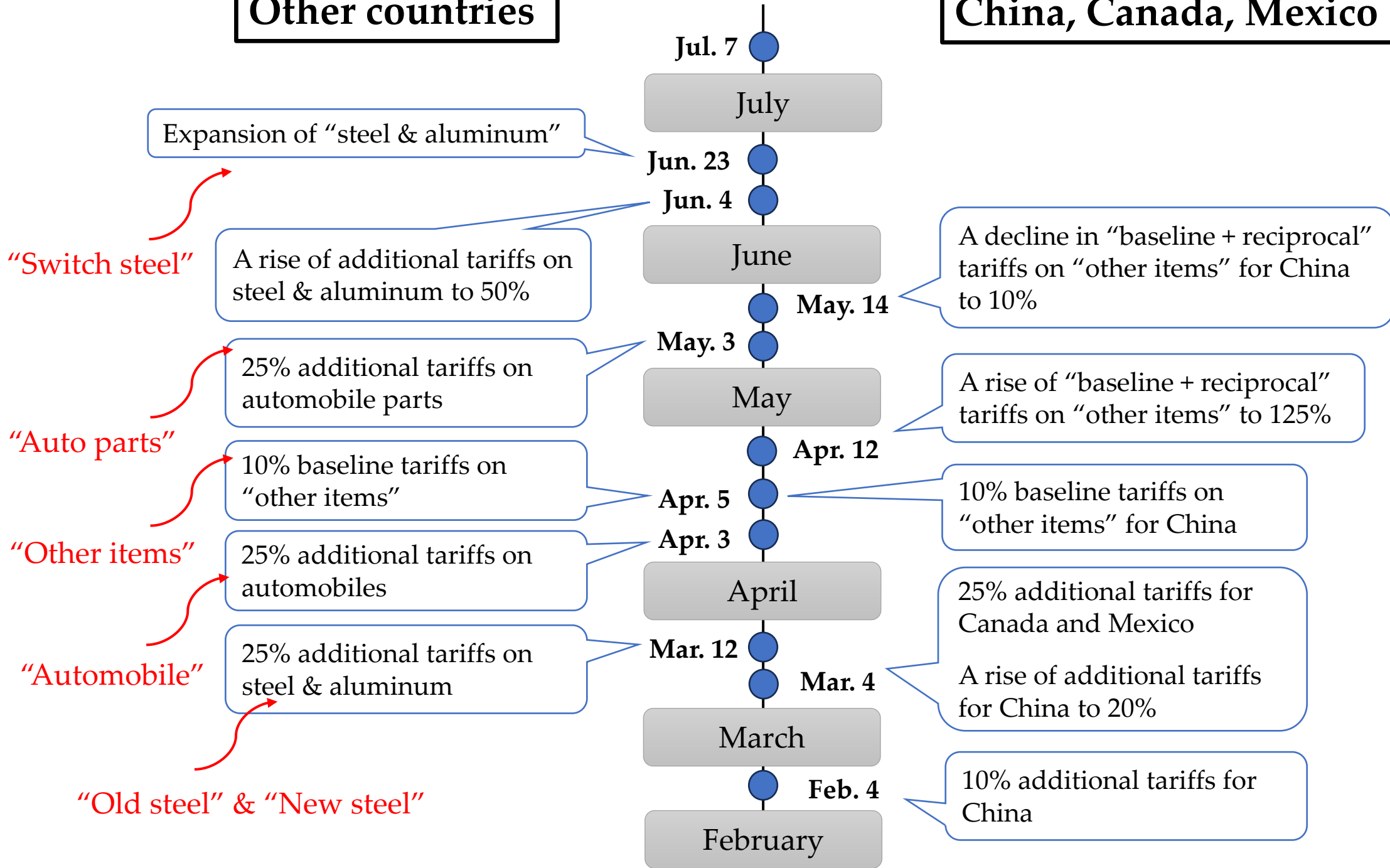☐ **The literature on the anticipation effects of trade policy on trade**
- ➤ Metiu (2021): US announcements of trade remedy measures
- ➤ Khan and Khederlarian (2021): Staging structure of tariff cuts in NAFTA

☐ **The literature on the trade effects of geopolitical risks**
- ➤ Blanga-Gubbay and Rubínová, 2023; Jakubik and Ruta, 2023; Gopinath et al., 2025

Other countries

China, Canada, Mexico

Jul. 7

July

Expansion of "steel & aluminum"

Jun. 23

Jun. 4

June

A decline in "baseline + reciprocal" tariffs on "other items" for China to 10%

"Switch steel"

A rise of additional tariffs on steel & aluminum to 50%

May. 14

May. 3

25% additional tariffs on automobile parts

May

A rise of "baseline + reciprocal" tariffs on "other items" to 125%

"Auto parts"

Apr. 12

10% baseline tariffs on "other items"

Apr. 5

10% baseline tariffs on "other items" for China

"Other items"

Apr. 3

25% additional tariffs on automobiles

April

25% additional tariffs for Canada and Mexico

A rise of additional tariffs for China to 20%

"Automobile"

Mar. 12

25% additional tariffs on steel & aluminum

Mar. 4

March

"Old steel" & "New steel"

Feb. 4

10% additional tariffs for China

February

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Figure 2. Year-on-Year Changes in Monthly Exports to the US in 2025
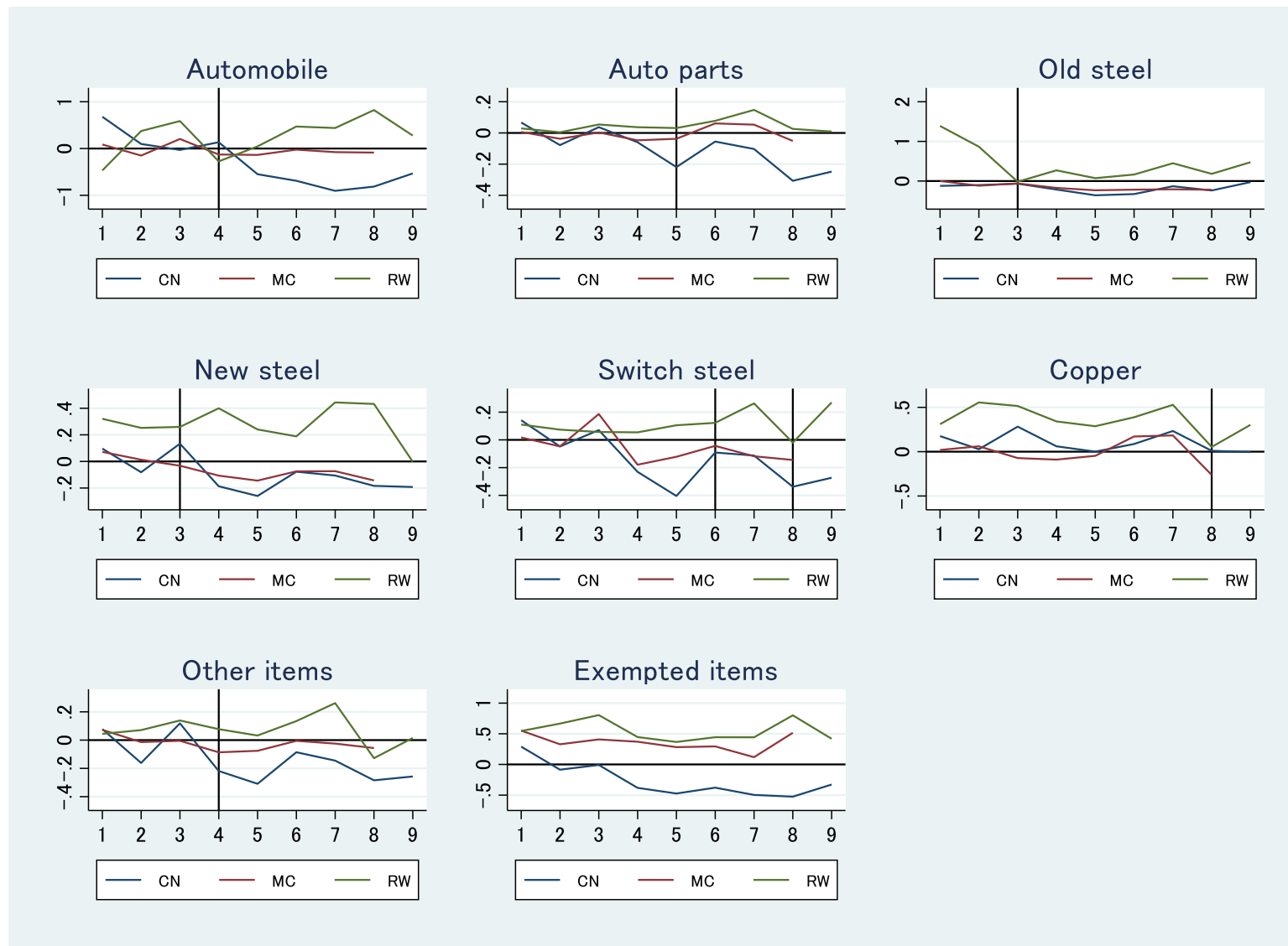
Conceptual Framework

☐ Examining the effect of US additional tariffs on exports from third countries (excl. CHN, HKG, CAN, MEX) to the US

Baseline Tariffs for "Other items" or Product-specific Tariffs

Reciprocal Tariffs for "Other items"

Last-minute Exports

- A standard **negative** effect of tariffs (price elasticity)
- A **positive** trade diversion effect from China (20 ppt higher)
- A **positive** anticipation effect, especially for "Other items"

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Empirical Framework (Cont.)

☐ **The major challenges in the empirical identification**

➢ A product dimension

✓ Comparing exports of steel products with those of automobiles

✓ Additional tariffs on steel products in March and on automobiles in April, just one month difference, which is not enough

✓ May observe last-minute exports of automobiles in March

✓ Comparison with exports of "Exempted items"

✓ Expecting the future tariff rise, creating last-minute exports

➢ An exporter dimension

✓ Comparing exports of "Other items" from ASEAN with those from CAN/MEX

✓ CAN/MEX attempts to benefit from trade diversion in the US market

➢ An importer dimension

✓ Comparing exports to the US with those to other countries

✓ The diversification of export destination is becoming a major and urgent strategy.

Empirical Framework (Cont.)

☐ **Exploiting an importer dimension while controlling for the mechanism of export diversification using observables**

➢ Monthly exports of each product group from 31 countries to 174 countries from January 2023 to September 2025

☐ **Specification for each product group**

$$Y_{ijt}$$
$$= \exp\left\{\sum_k \beta_k \cdot US_j \cdot D2025(m = k)_t + \sum_k \delta_k \cdot (1 - US_j) \cdot US\ Treat(t \geq 0) \cdot X_{ij} + \gamma_1 \ln GDP_{j,y-1} + \gamma_2 Monthly\ RTA_{ijt}\right.$$
$$\left. + \gamma_3 \ln Exchange\ rate_{ijt} + FE_{it} + FE_{ij} + FE_{jm}\right\} \epsilon_{ijt}$$

➢ Impacts on exports to the US

✓ US_j: 1 if importer j is the US

✓ $D2025(m = k)_t$: 1 if month m is $k \in \{Jan, Feb, Mar, Apr, May, Jun, Jul, Aug, Sep\}$

➢ Impacts on exports to other countries

✓ $US\ Treat_p(t \geq 0)$: 1 if time t is treated; Always 1 for "Old steel" and 0 for "Exempted items"

✓ X: $\ln Dist, UNGA$ (voting dissimilarity in 2023), RTA (RTA dummy as of January 2023), $\ln GDP$ (in 2023), $\ln Capita$ (GDP per capita in 2023)

Empirical Framework (Cont.)

☐ **Estimate for each product group by the PPML method**

$$Y_{ijt}$$
$$= \exp\left\{ \sum_k \beta_k \cdot US_j \cdot D2025(m=k)_t + \sum_k \delta_k \cdot (1-US_j) \cdot US\,Treat(t \geq 0) \cdot X_{ij} + \gamma_1 \ln GDP_{j,y-1}\right.$$
$$\left. + \gamma_2 Monthly\,RTA_{ijt} + \gamma_3 \ln Exchange\,rate_{ijt} + FE_{it} + FE_{ij} + FE_{jm} \right\} \epsilon_{ijt}$$

  ➢ Standard control: Importers' one-year lagged GDP, monthly RTA dummy, and monthly bilateral exchange rates
 ➢ A set of fixed effects: Exporter-time FE, Country-pair FE, and Importer-month FE

☐ **Weakness**
  ➢ Cannot control for importer-year FE (FE_{jy}), which absorbs all the special aspects of US imports in 2025

☐ **Data sources**
  ➢ Y: Global Trade Atlas (Exporter-side data)
  ➢ $UNGA$: Bailey et al. (2017)
  ➢ RTA and $Monthly\,RTA$: Egger and Larch (2008) and the WTO
  ➢ $Dist$: CEPII database
  ➢ GDP and $GDP\,per\,capita$: WDI by the World Bank and the World Economic Outlook by the IMF
  ➢ $Exchange\,rates$: International Financial Statistics by the IMF

Figure 5. The PPML Estimation Results: Exports from Third Countries to the US
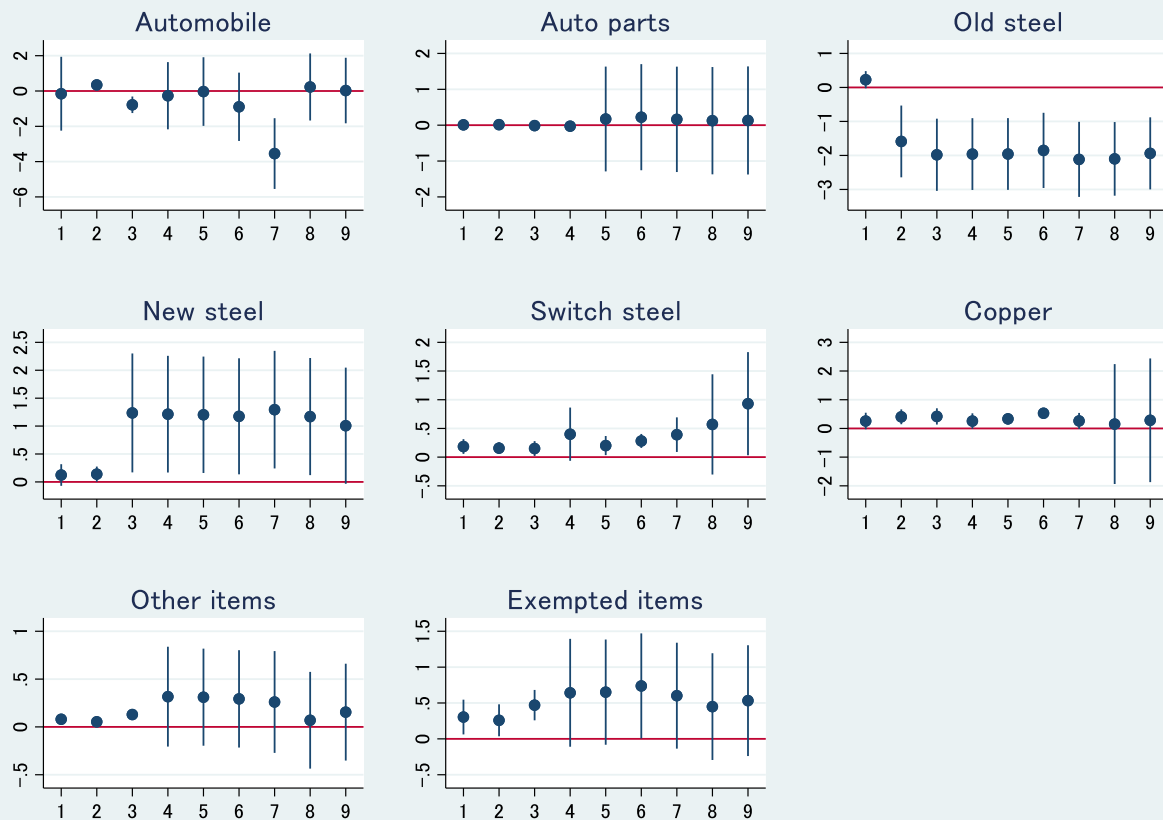
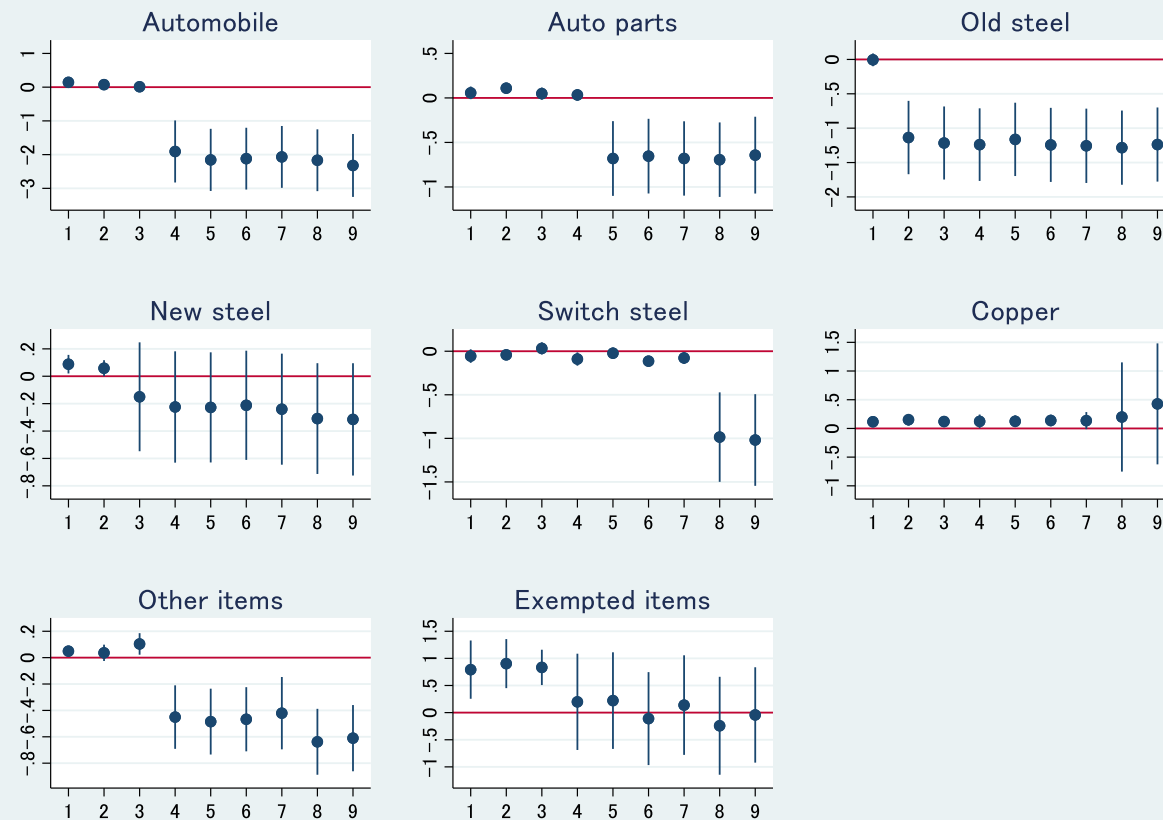# Figure 5. The PPML Estimation Results: Exports from China to the US
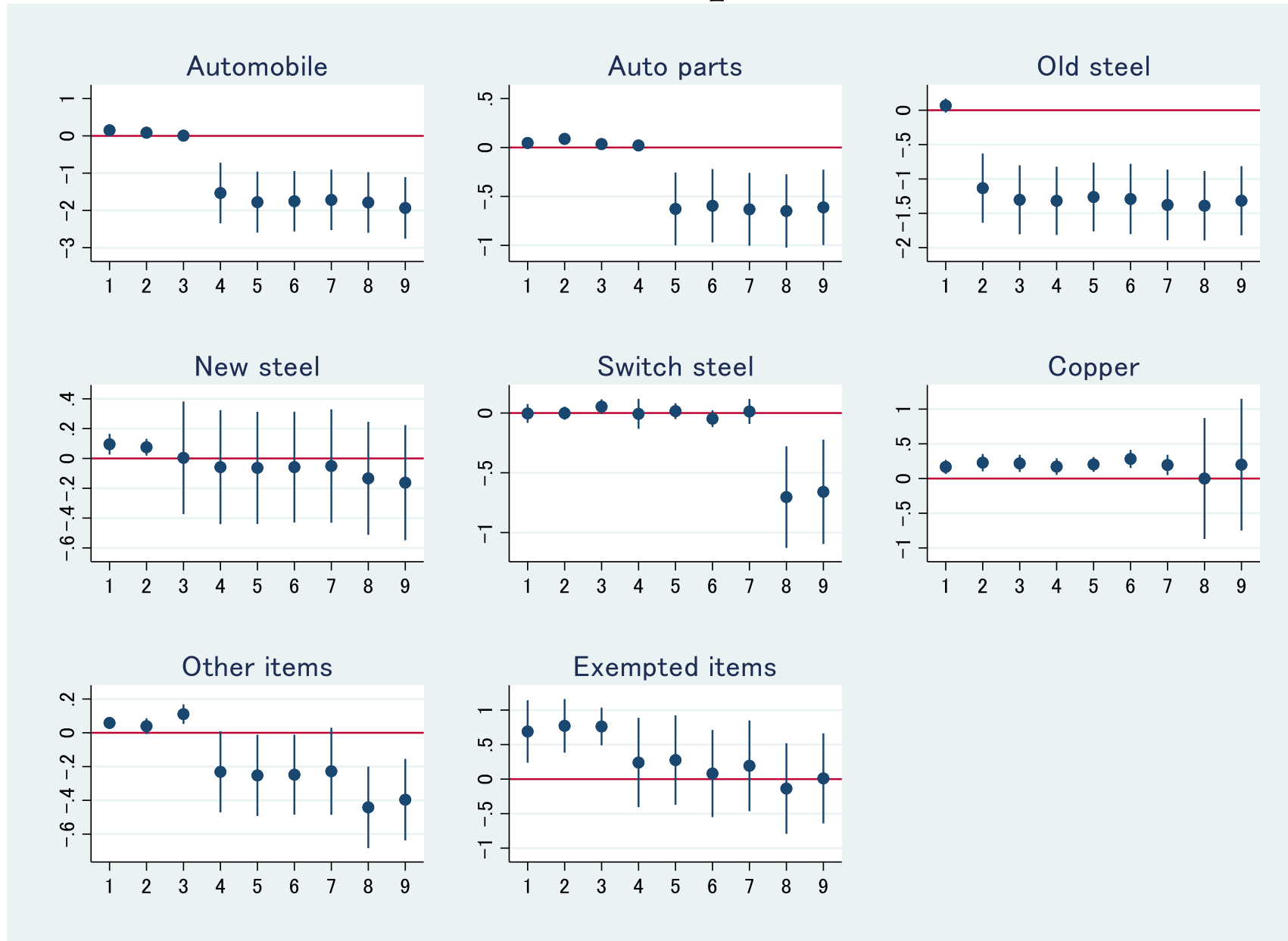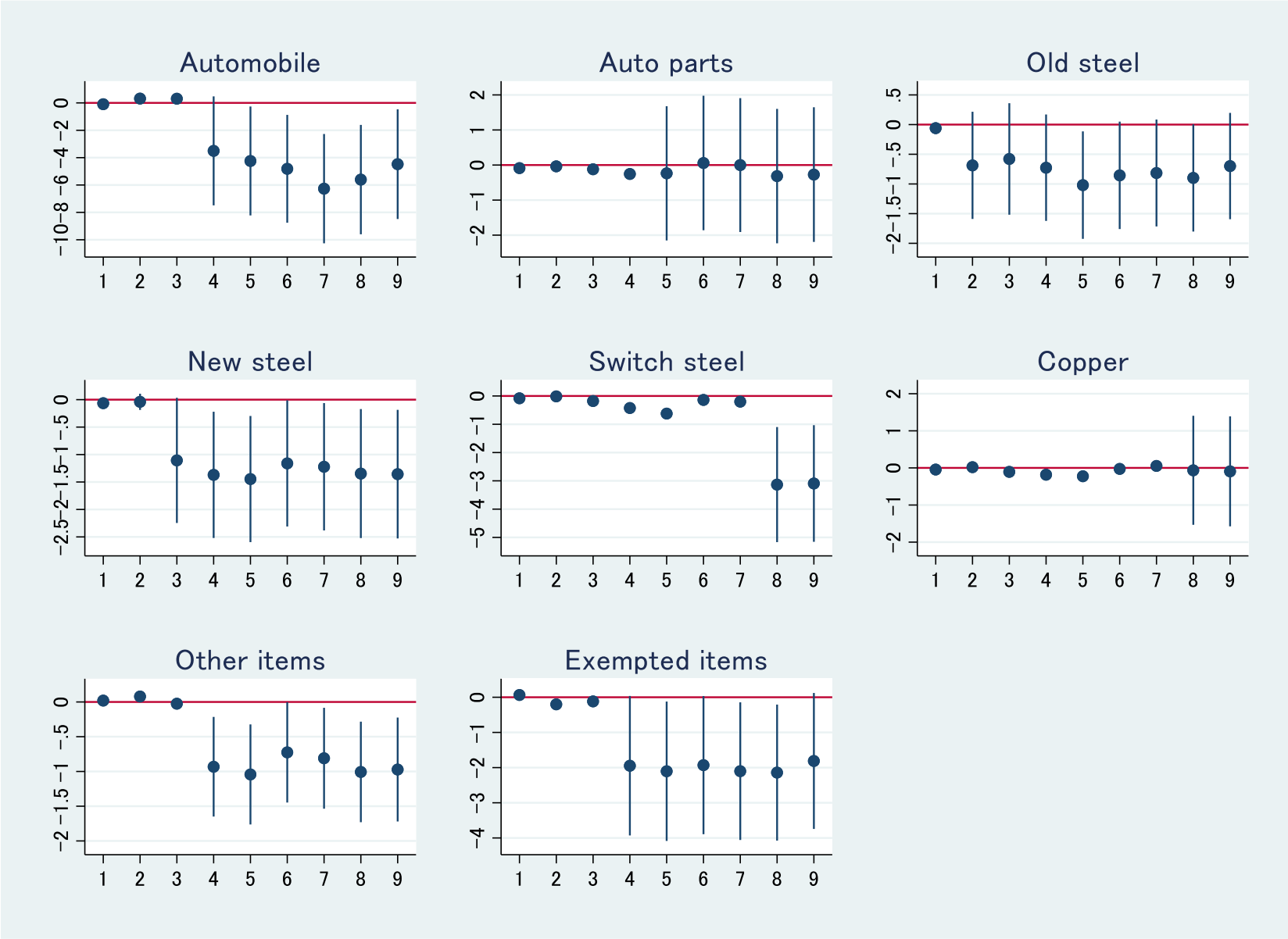
Source: Author's estimation.

Figure 6. The PPML Estimation Results: Exports from Third Countries to the US

(i) Exports from Low-income Countries

(ii) Exports from High-income Countries

Note: Average price elasticity of demand: 13.7 in Exempt, 10.9 in Auto, 10.9 in Copper, 9.6 in Old steel, 7.4 in Switch steel, 7.2 in Others, 5.2 in Parts, and 5.1 in New steel.

Table 2. The PPML Estimation Results: Adding Interaction Terms with Specific Countries and Reciprocal Tariffs

	Auto	Parts	Old steel	New steel	Switch steel	Copper	Others	Exempt
US * D(Jan)	0.150**	0.046*	0.068	0.095***	-0.004	0.168***	0.059***	0.690***
US * D(Feb)	0.084*	0.088***	-1.131***	0.075***	-0.001	0.229**	0.039*	0.772***
US * D(Mar)	0.006	0.035	-1.301***	0.004	0.053*	0.218**	0.111***	0.762***
US * D(Apr)	-1.535***	0.021	-1.315***	-0.058	-0.007	0.172**	-0.229*	0.245
US * D(May)	-1.793***	-0.626***	-1.261***	-0.064	0.026	0.200**	-0.248**	0.287
US * D(Jun)	-1.767***	-0.594***	-1.290***	-0.059	-0.037	0.280**	-0.244**	0.092
US * D(Jul)	-1.735***	-0.630***	-1.376***	-0.052	0.024	0.193**	-0.224*	0.204
US * D(Aug)	-1.739***	-0.693***	-1.375***	-0.185	-0.692***	0.369	-0.209	-0.109
US * D(Sep)	-1.898***	-0.644***	-1.296***	-0.199	-0.635**	0.503	-0.162	0.04
US * GBR(>=May)	0.188***	-0.003	0.046	0.016	-0.225***	0.092	-0.031	-0.197**
US * BRA(>=Aug)	-0.022	-0.058	-0.219	-0.44	-0.032	-0.775***	-0.347***	-0.155
US * IND(>=Sep)	.	.	.	.	.	.	.	.
US * EU/JP(>=Aug)	-0.089	0.077**	0.032	0.09	0.033	-0.528***	-0.229	-0.025
US * Non-EU/JP * ln (1 + Reciprocal)							-1.139*	
Number of observations	101,449	151,620	133,550	154,247	263,730	137,701	163,888	155,895
Pseudo R-squared	0.986	0.993	0.977	0.988	0.782	0.984	0.992	0.978

Notes: Estimation results were obtained using the PPML method. ***, **, and * denote statistical significance at the 1%, 5%, and 10% levels, respectively. Robust standard errors clustered by country pair are shown in brackets. In all specifications, we control for exporter-product-time FE, exporter-importer-product FE, exporter-importer-month FE, and importer-product-month FE. [14]

Conclusion

☐ **Examining exports from third countries to the US until September**

**Baseline Tariffs for "Other items"
or Product-specific Tariffs**

Reciprocal Tariffs for "Other items"

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☐ **Key issues in the next revision**

➢ Additional tariffs for "Lumber products" from October 14

➢ Expansion of "Automobile" from November 1

➢ A decline in additional tariffs for China from 20% to 10% on November 10

☐ **Next directions**

➢ Decomposing into quantity and unit prices

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