

Return to Protectionism and Global Reallocations

Penny Koujianou Goldberg
Yale University, NBER, CEPR, and PIIE

NBER Conference on Trade and Trade Policy in the 21st Century
Washington, DC, September 29, 2022

Road Map

A. The Trade War: A Brief History

B. Effects on the US and China

- a. Trade Flows
- b. Prices (i.e., Unit Values)
- c. Employment, Welfare, Political Consequences

C. Effects on Third (“Bystander”) Countries

- a. Trade Flows → Global Reallocations

D. Concluding Thoughts: Implications for the Future of Globalization

Trade Diversion?

Trade Creation/Expansion?

De-globalization?

Based On:

- [*The Return to Protectionism*](#), with Pablo Fajgelbaum, Amit Khandelwal, and Patrick Kennedy. [The Quarterly Journal of Economics](#), Feb. 2020.
- [Update incl. 2019 Tariff Waves](#)
- [*Global Reallocations in the 2018-19 Trade War*](#), with Pablo Fajgelbaum, Amit Khandelwal, Patrick Kennedy, and Daria Taglioni, Dec. 2021.

and many other:

- Amiti M, Redding SJ, Weinstein DE. 2019. The impact of the 2018 tariffs on prices and welfare. *J. Econ.Perspect.* 33(4):187–210
- Blanchard EJ, Bown CP, Chor D. 2019. *Did Trump’s trade war impact the 2018 election?* NBER Work. Pap. 26434
- Bown CP. 2021. The US-China trade war and Phase One agreement. *J. Policy Model.* 43(4):805–43
- Bown CP, Kolb M. 2021. Trump’s trade war timeline: an up-to-date guide. *Peterson Institute for International Economy*, Oct. 21. <https://www.piie.com/blogs/trade-investment-policy-watch/trump-trade-warchina-date-guide>
- Cavallo A, Gopinath G, Neiman B, Tang J. 2021. Tariff pass-through at the border and at the store: evidence from US trade policy. *Am. Econ. Rev. Insights* 3(1):19–34
- Chang PL, Yao K, Zheng F. 2021. *The response of the Chinese economy to the US-China trade war: 2018–19.* Work. Pap. 25-2020, Sch. Econ. Res., Singap.Manag. Univ., Singapore
- Che Y, Lu Y, Pierce JR, Schott PK, Tao Z. 2020. *Did trade liberalization with China influence US elections?* Work. Pap., Board Gov. Fed. Reserve Syst., Washington, DC
- Chor D, Li B. 2021. *Illuminating the effects of the US-China tariff war on China’s economy.* NBER Work. Pap. 29349
- Flaaen A, Pierce JR. 2019. *Disentangling the effects of the 2018–2019 tariffs on a globally connected U.S. manufacturing sector.* Work. Pap., Finance Econ. Discuss. Ser. 2019-086, Board Gov. Fed. Reserve System, Washington, DC

Reviewed in: Fajgelbaum, P. and A. Khandelwal: “The Economic Impacts of the US-China Trade War,” *Annual Review of Economics*, 2022.

A. The Trade War: A Brief History

War unfolded in several waves:

- Feb. 2020: Section 201 investigation → tariffs on washing machines and solar panels
- Shortly thereafter: Section 232 → aluminum and steel
- Five waves of tariff increases vis a vis China starting in July 2018, with China retaliating in each stage
- China cut its MFN tariffs for all countries except the US
- Eventually 450 billion of annual aggregate trade flows affected
- Jan. 2020: Countries agree to halt tariffs → Phase One Agreement
- But tariffs have remained in place as of today.

The Trade War: A Brief History (contd.)

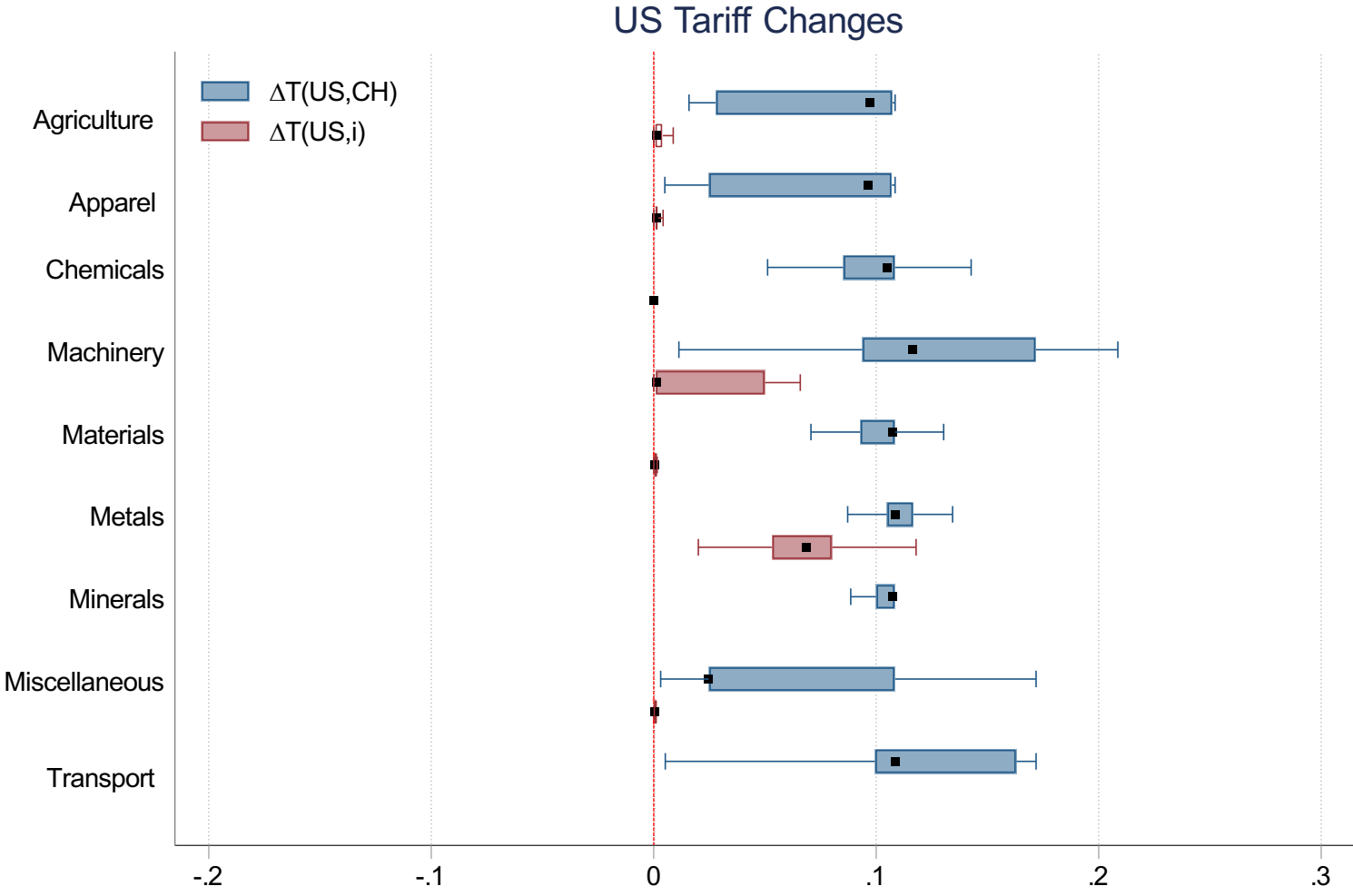
Some notable feature of this trade war:

- Unanticipated
- Initially targeted several countries. Later mainly China
→ US-China Trade War
- Biggest protectionist move since 1930 Smoot-Hawley legislation:

	2018-19 Trade War	1930 Smoot-Hawley
US Imports Targeted (as % of GDP)	2.6%	1.4%
US Exports Targeted (as % of GDP)	1%	0.6% (Canada retaliation)
US Tariff Increases	3.7% → 25.8%	34.6% → 42.5%
# of Products Targeted	75% of 10-digit IM and EX products	27% of dutiable products

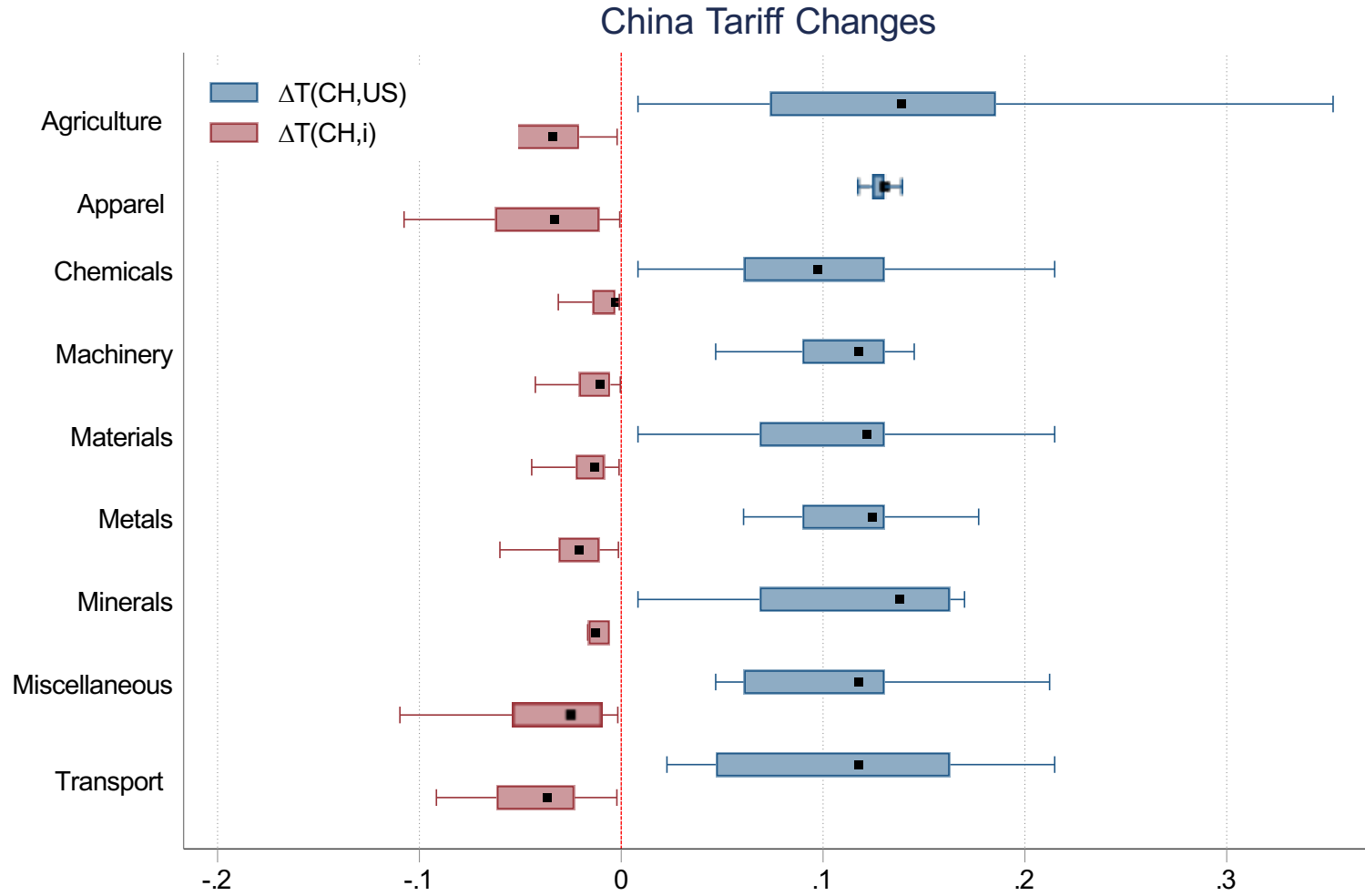
US Tariff Changes

$$\Delta T_{CH}^{US} \text{ \& } \Delta T_i^{US}$$



China Tariff Changes

ΔT_{US}^{CH} & ΔT_i^{CH}



B. Effects on the US and China

a. Trade Flows:

EX from US to CH, and EX from CH to US decline

b. Prices (Unit Values):

Complete pass-through of tariff to US import prices at the variety level

Not necessarily complete pass-through on consumer prices

Overall: Tariff incidence was mainly on the US

Similar results for China

c. Employment, Welfare, Politics:

Employment: No benefit to the US, potential loss in manuf. employment

Welfare: Loss of ca. 0.13% of GDP (relatively small)

BUT: Distributional effects (consumer loss: ca. \$114b or 0.6% of GDP)

Politics: Areas affected by retaliation mainly Republican

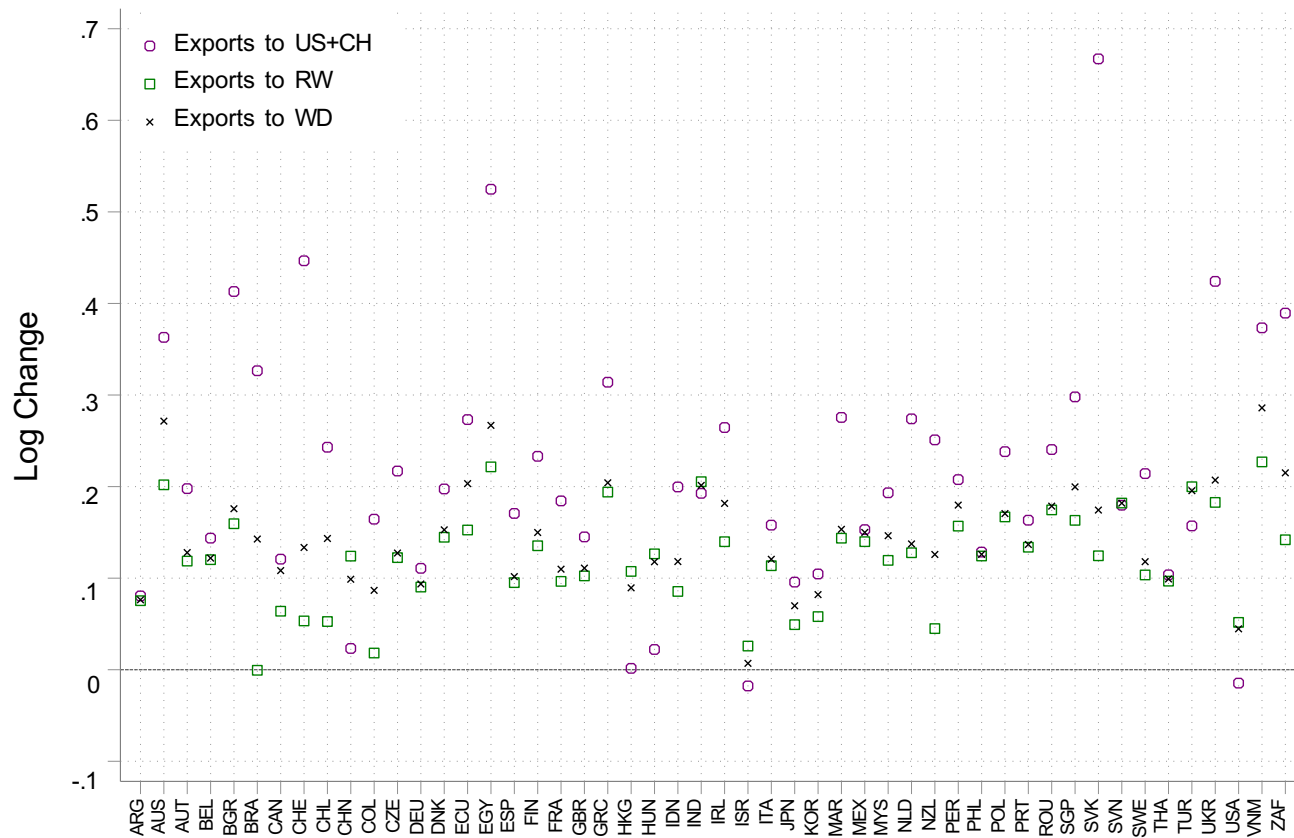
C. Effects on Bystander Countries

- Focus on long-run differences (2017-2019). Stop before COVID onset
- Exploit variation across HS6 products

Main Insights

- US-China trade declines (as shown in earlier work)
- Many countries increase exports to the US (substitute for China)
- But they also increase their exports to the rest of the world
- As a result, global trade INCREASES!
 - not just trade diversion, but trade creation
- Effects heterogeneous across countries
- Pre-existing specialization patterns explain only a small part of the response
- Winners: countries with deep trade agreements and FDI stock
 - countries already well integrated in the trade system

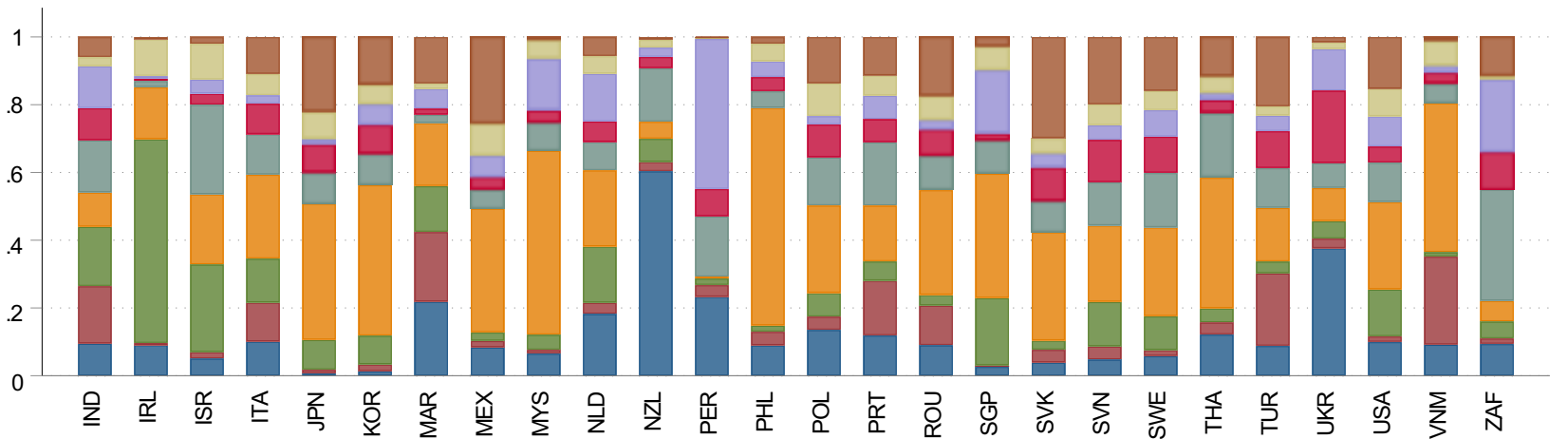
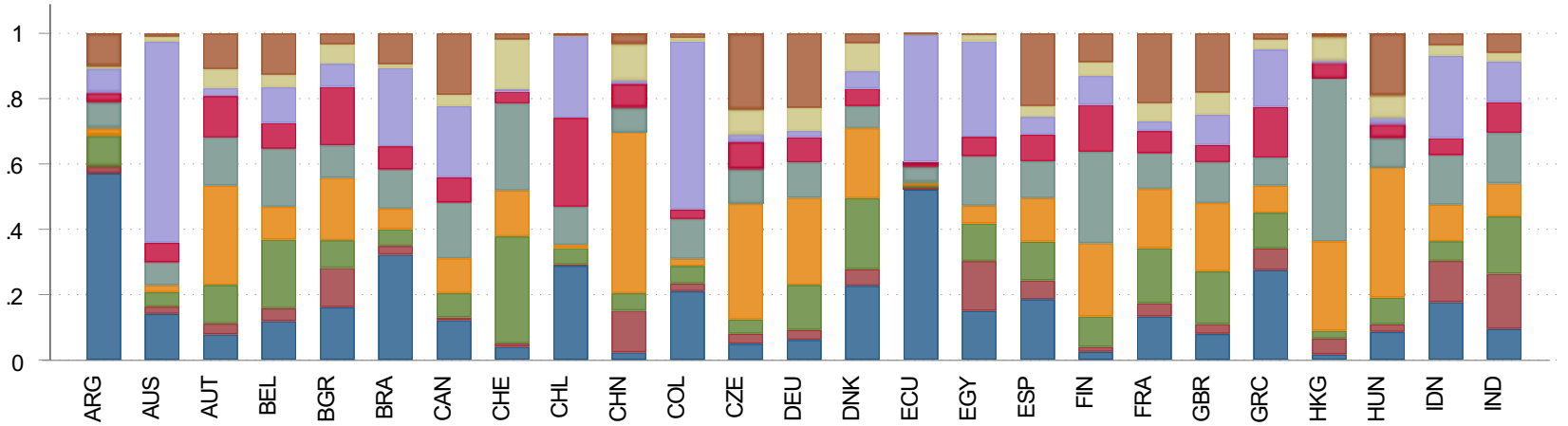
Heterogeneous Export Growth, 2016/17 vs. 2018/19



- Part of this variation could be due to trade war. Possible drivers?
 - ▶ Specialization in products targeted by the trade war?
 - ▶ Substitution patterns with US/China?
 - ▶ Supply elasticities?

Countries' Pre-War Export Baskets

■ Agriculture
 ■ Apparel
 ■ Chemicals
 ■ Machinery
 ■ Materials
 ■ Metals
 ■ Minerals
 ■ Miscellaneous
 ■ Transport



Implications of Export Responses to US Tariffs on China

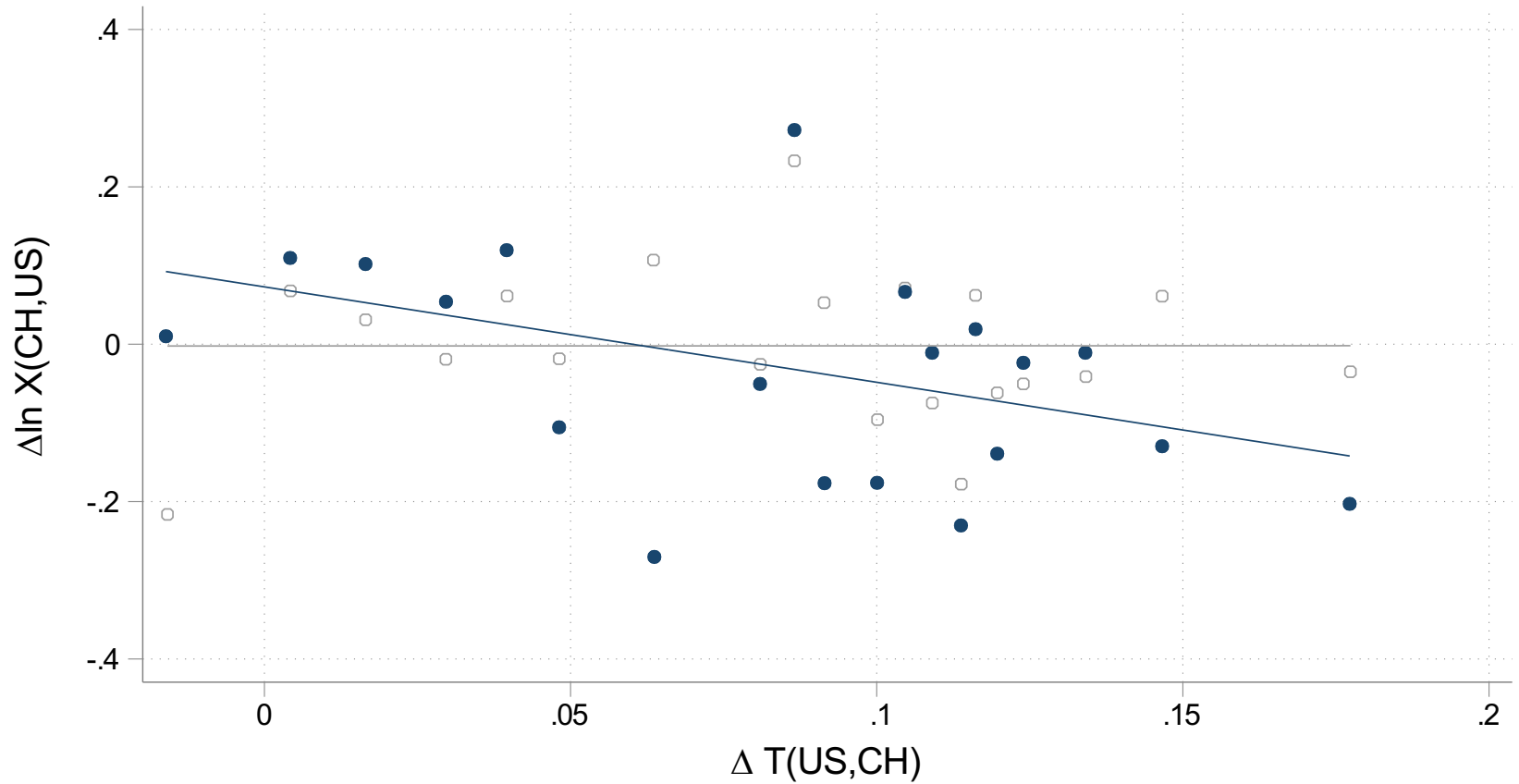
	Exports:	
	Decrease to US	Increase to US
Increase to RW	China Complement (+) sloping supply	China Substitute (-) sloping supply
Decrease to RW	China Complement (-) sloping supply	China Substitute (+) sloping supply

- Same logic applies to Chinese tariffs on US

Data Plots

China's Exports to US

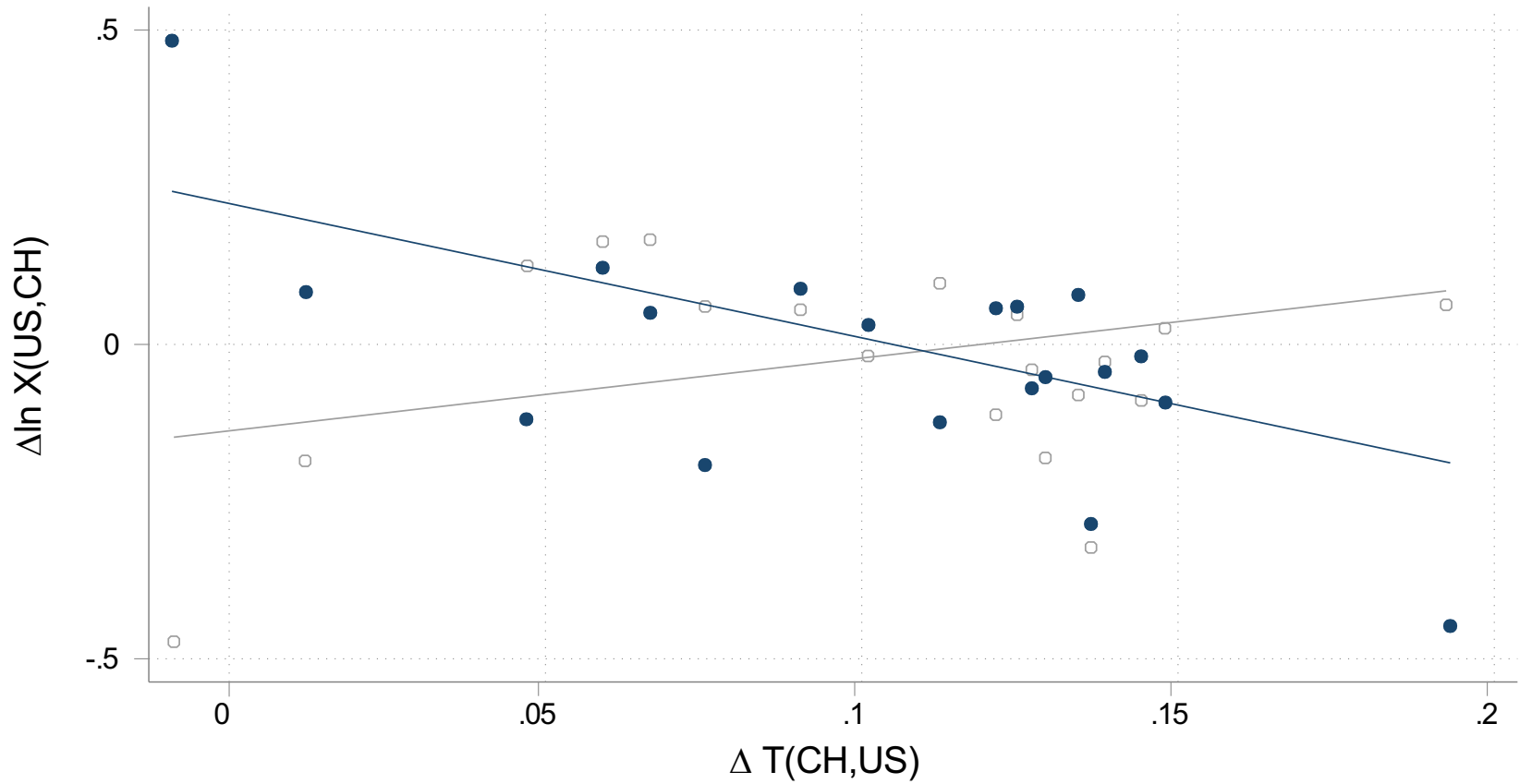
○ 2015-17 ● 2017-19



Pre-period: $\beta = -0.00$ (0.29). Post-period: $\beta = -1.22$ (0.27).

US Exports to China

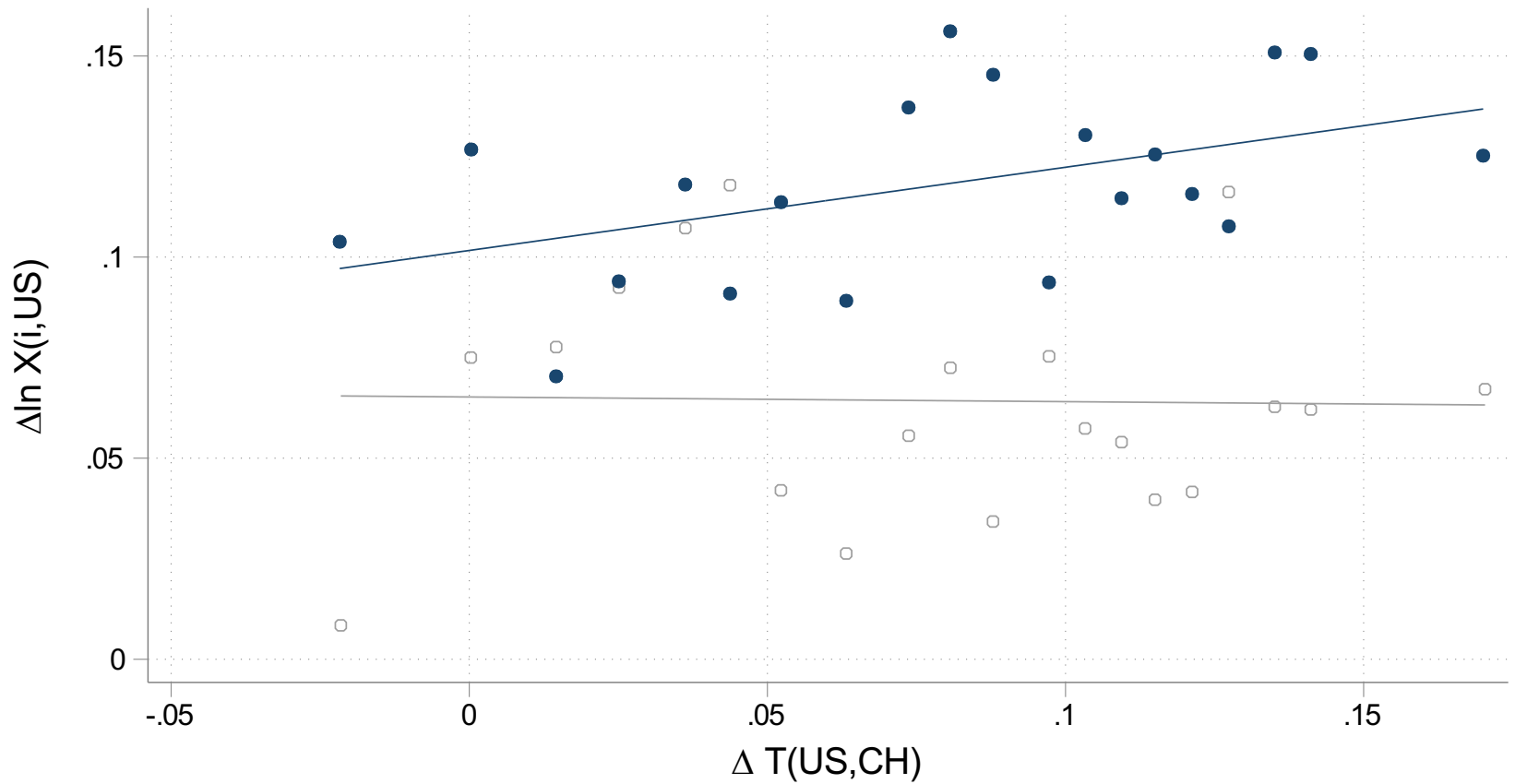
○ 2015-17 ● 2017-19



Pre-period: $\beta=1.15$ (0.41). Post-period: $\beta=-2.14$ (0.37).

Bystanders' Exports to US

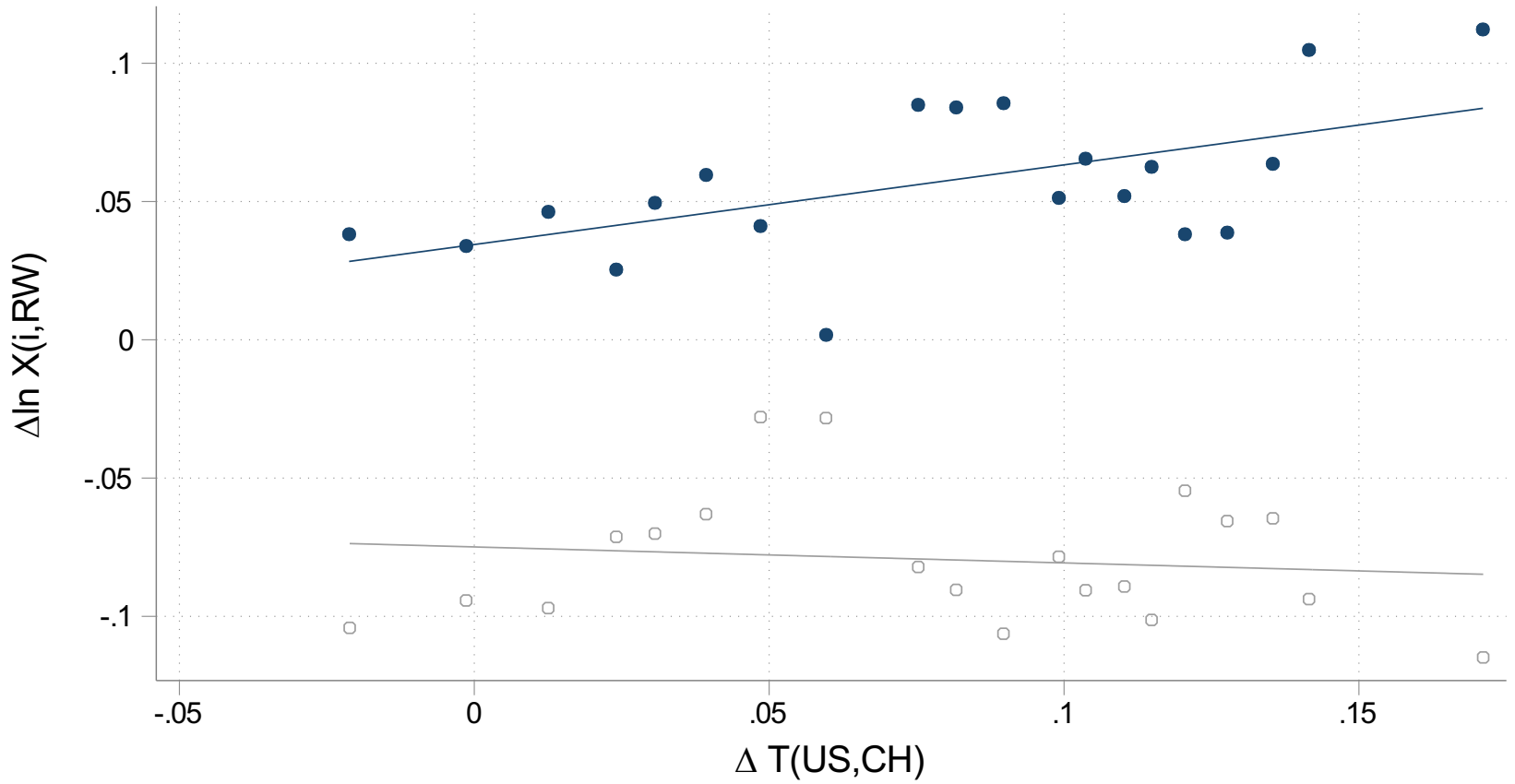
○ 2015-17 ● 2017-19



Pre-period: $\beta = -0.01$ (0.11). Post-period: $\beta = 0.21$ (0.09).

Bystanders' Exports to RW

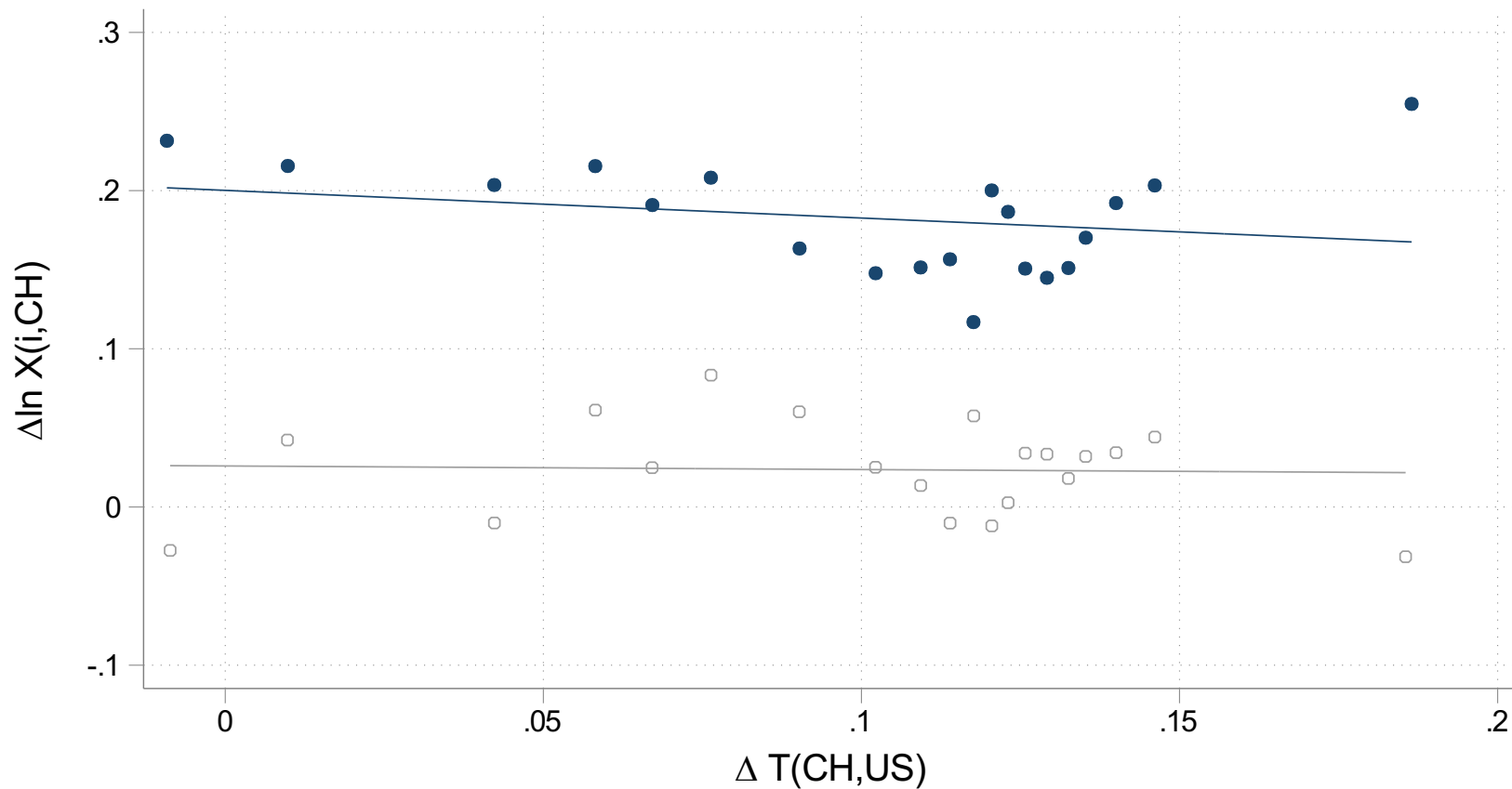
○ 2015-17 ● 2017-19



Pre-period: $\beta = -0.06$ (0.07). Post-period: $\beta = 0.29$ (0.07).

Bystanders' Exports to China

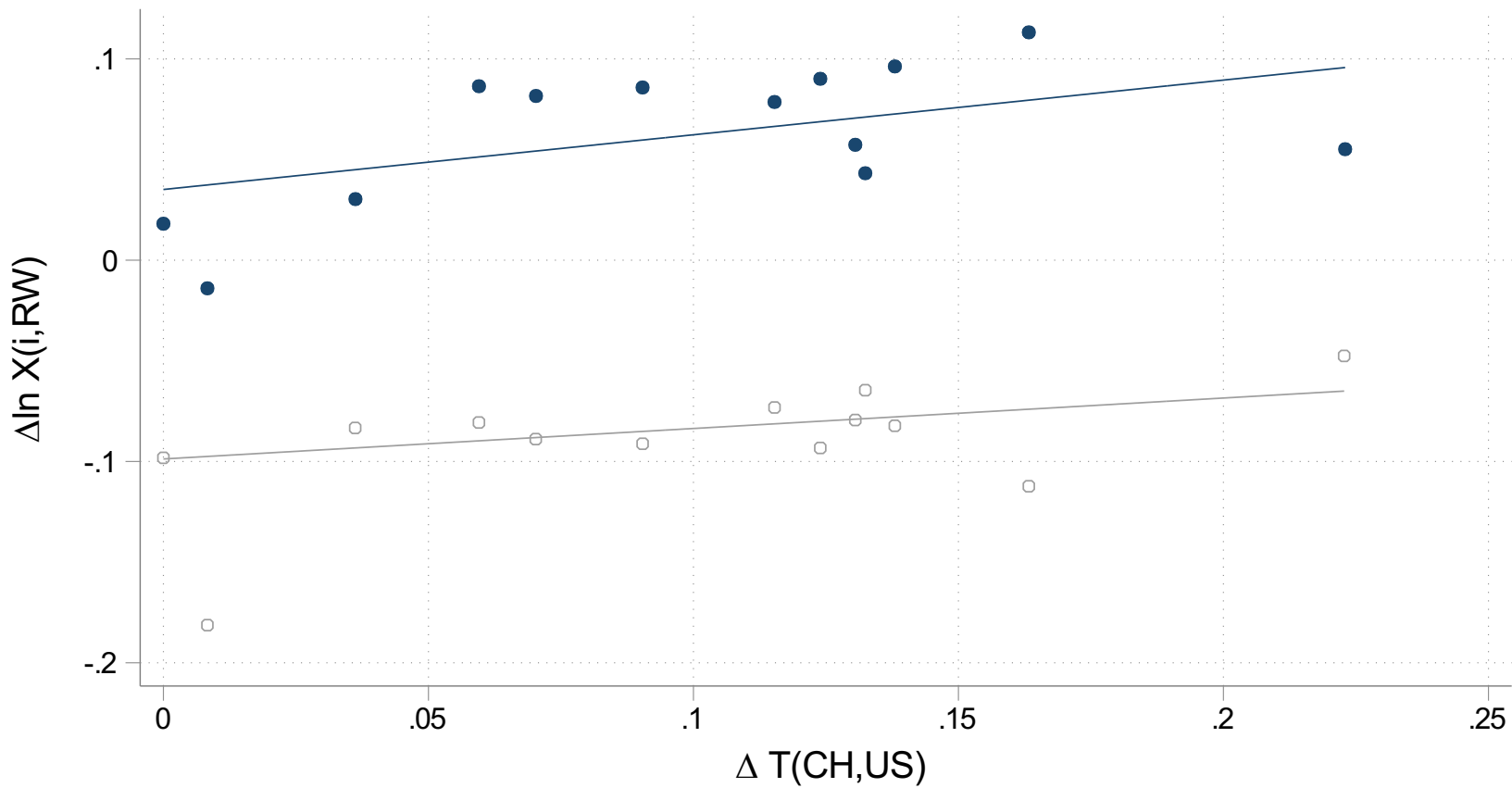
○ 2015-17 ● 2017-19



Pre-period: $\beta = -0.03$ (0.16). Post-period: $\beta = -0.19$ (0.17).

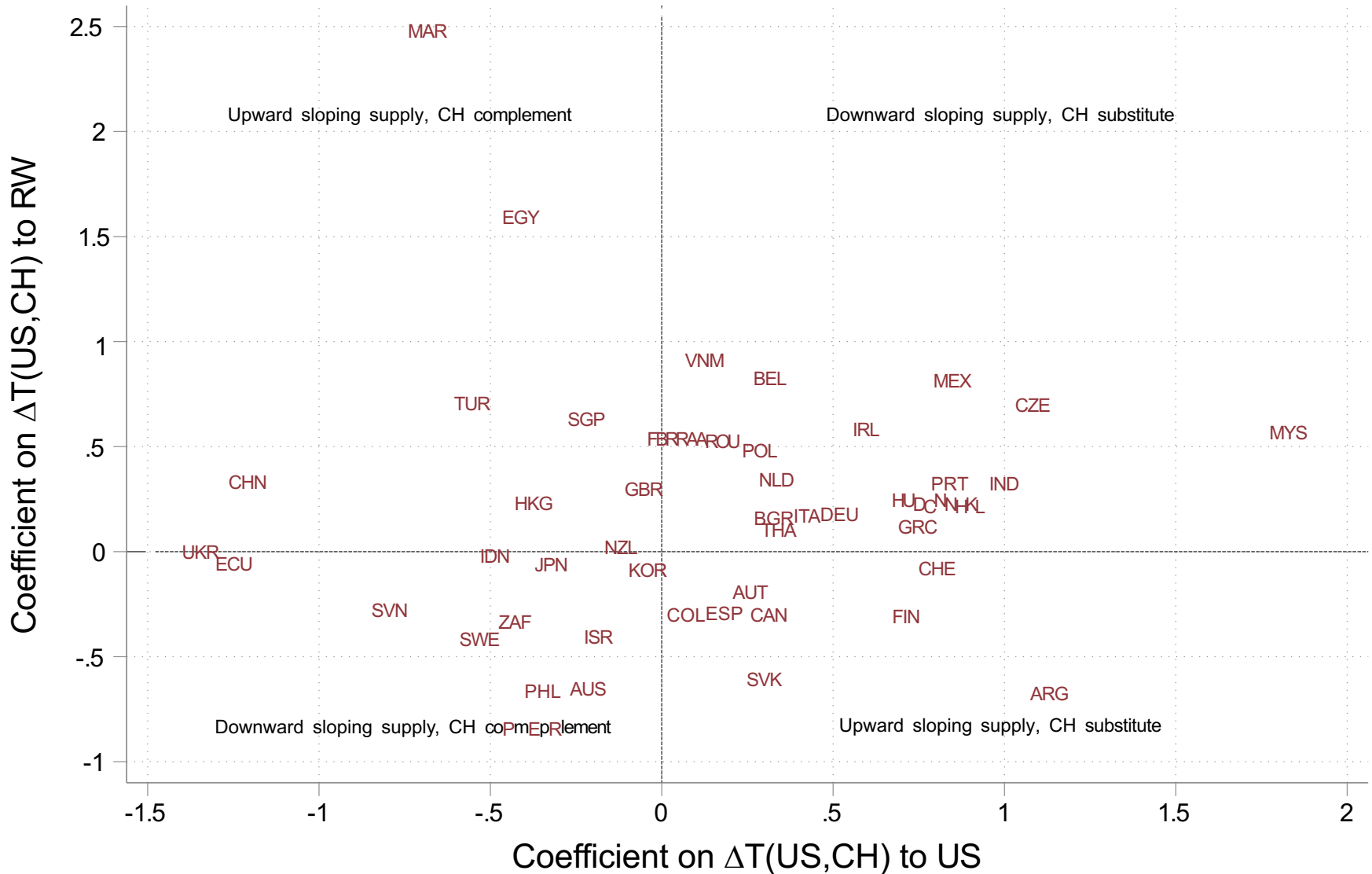
Bystanders' Exports to RW

○ 2015-17 ● 2017-19

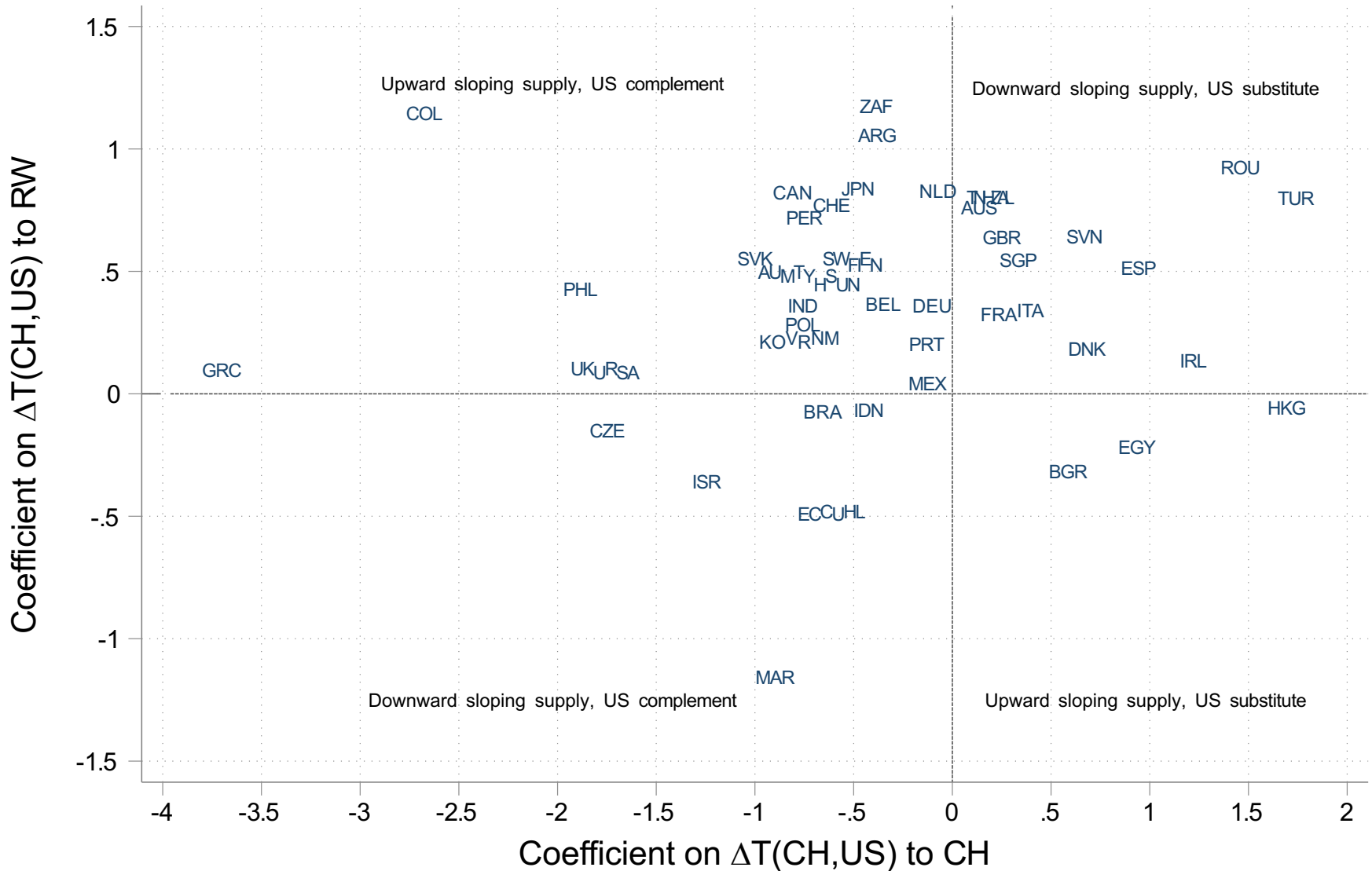


Pre-period: $\beta=0.14$ (0.06). Post-period: $\beta=0.30$ (0.07).

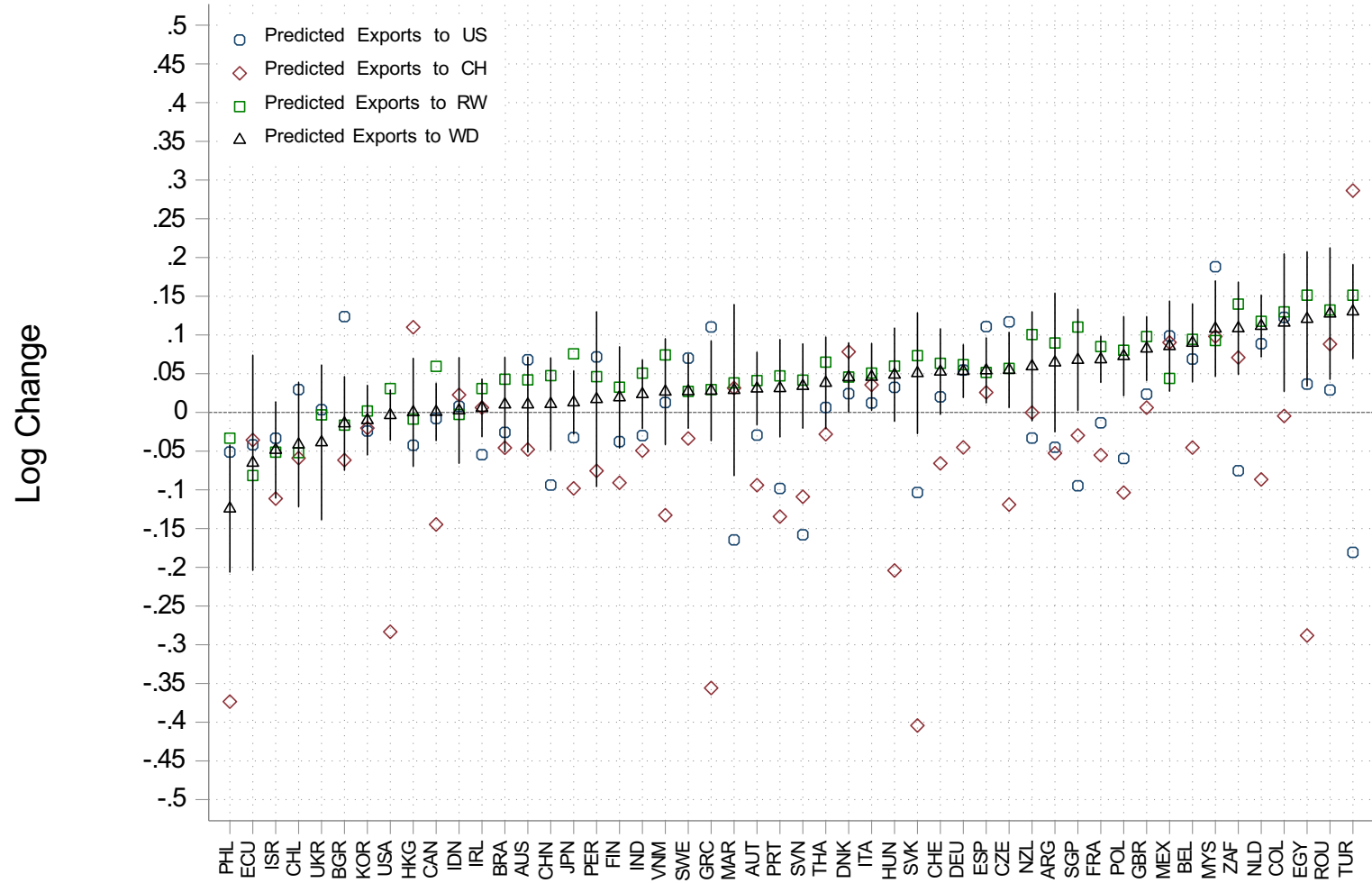
CH Substitutability and Supply Slope



US Substitutability and Supply Slope

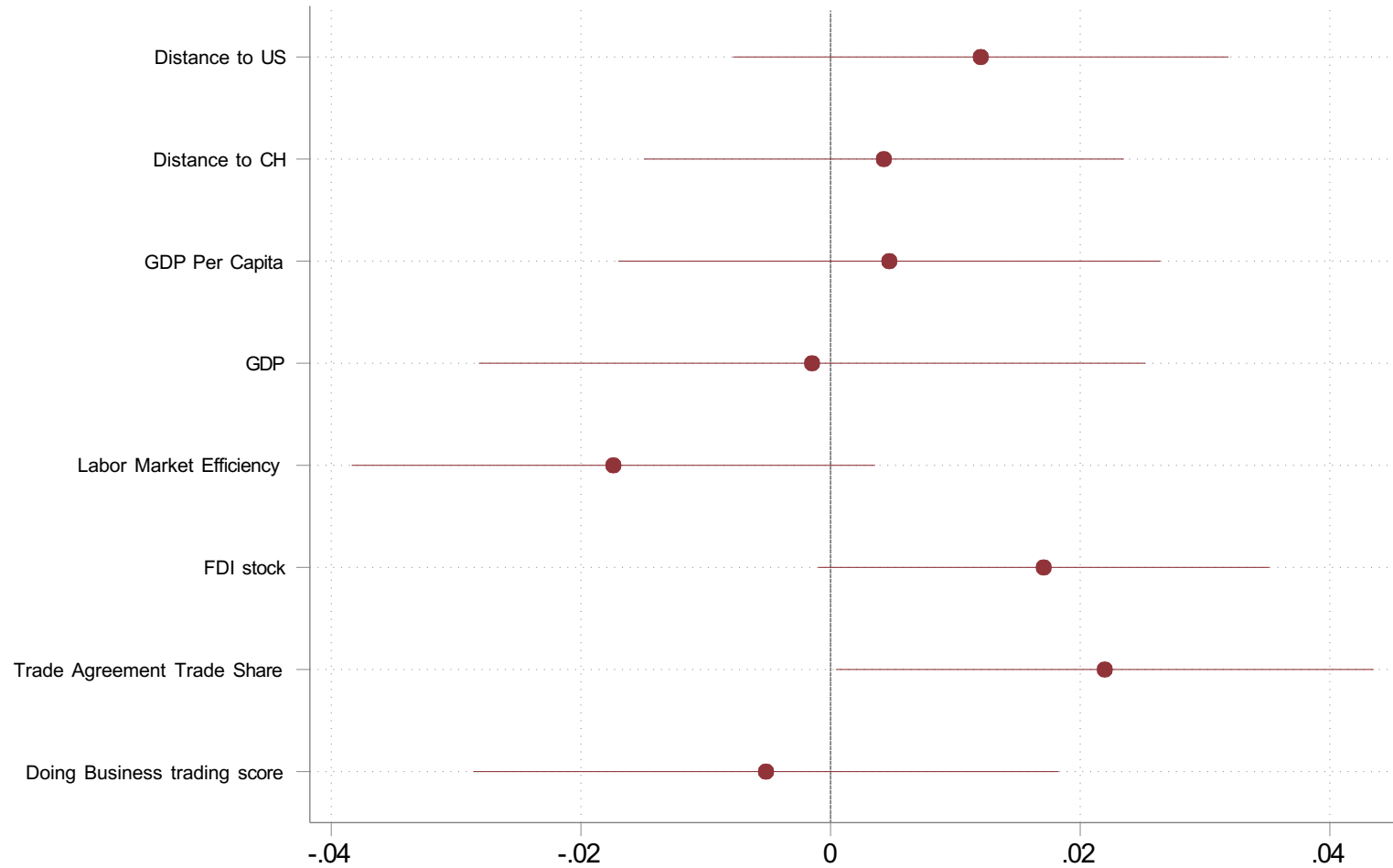


Predicted "Winners"



Correlates

Correlating “winners” to various country characteristics



N = 48, 10/90 error bars

Net Global Trade

Aggregating Responses

from ↓/to →	US	CH	RW	World
US		-28.3% (4.2%)	3.1% (2.2%)	-0.4% (2.0%)
CH	-9.4% (3.0%)		4.8% (4.8%)	1.1% (3.6%)
RW	2.2% (1.3%)	-4.6% (1.6%)	6.5% (0.7%)	4.6% (0.6%)
World	-0.6% (1.1%)	-7.5% (1.5%)	5.8% (0.8%)	3.5% (0.6%)

D. Concluding Thoughts

Implications for the Future of Globalization

- Counterintuitive results on trade war effects on bystander countries
- Trade war → Increase in global trade
- Possible explanation: Countries/Firms willing to pay the fixed costs of major supply chain reallocation to take advantage of opportunities
- No evidence of de-globalization. But shift of trade flows towards other countries → relocation
- HOWEVER: Analysis predates COVID and Ukraine.
- Global environment very different today. Future highly uncertain.
- Open question: Did the trade war create the political conditions that enable the Ukrainian evasion?

THANK YOU!