Seven Questions About Tariffs that Everyone Should Know the Answer to

MIT IAP January 2026

Arnaud Costinot (MIT), based on 2025 CEPR e-book chapter with Andres Rodriguez-Clare (UC Berkeley)

US Tariffs

Two centuries of US trade policy (Irwin, ARE 2020)

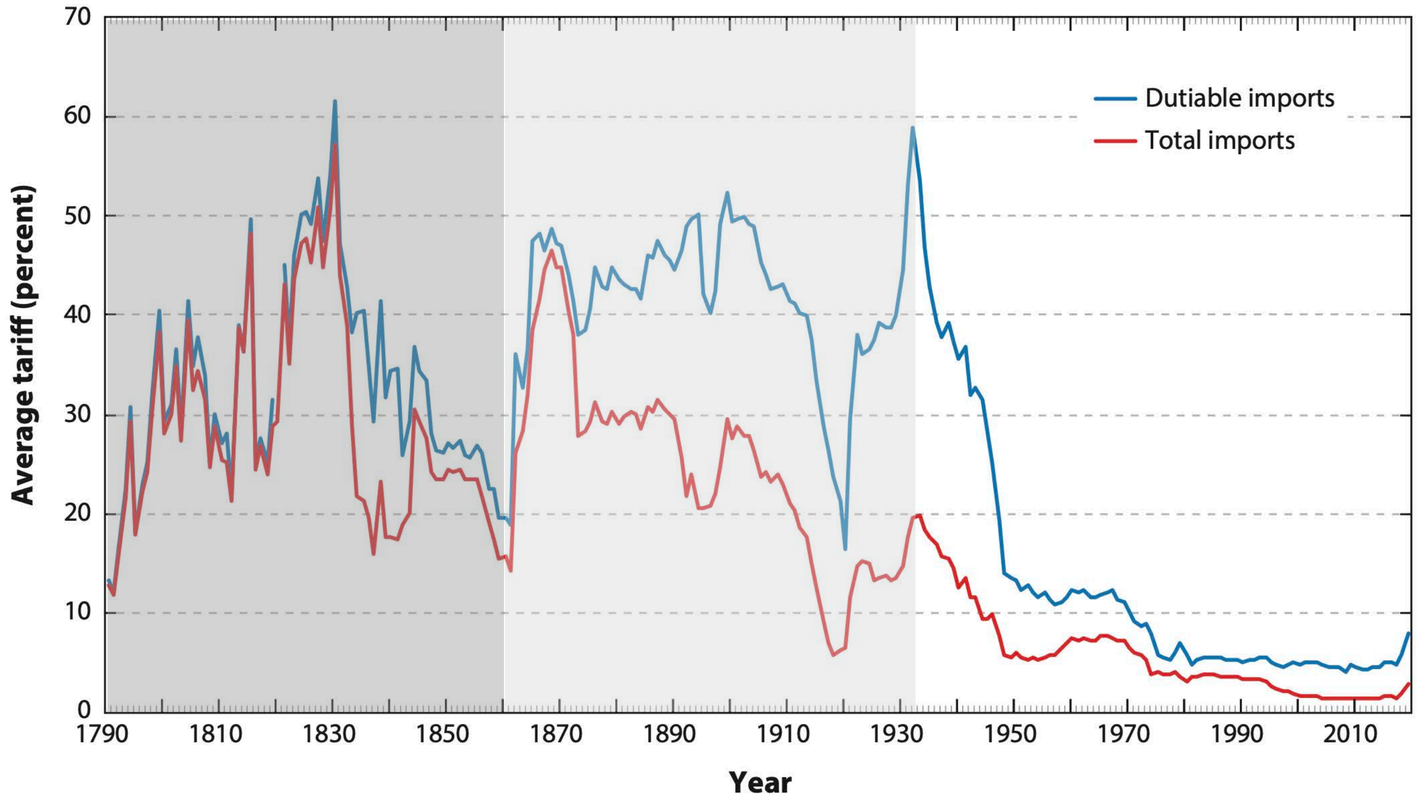


Figure 1

Average tariff on dutiable and total imports, 1790–2019. Figure adapted with permission from Irwin (2017, p. 6), updated with data from the US International Trade Commission (**http://www.usitc.gov/dataweb**).

US Tariffs

The 2018-2019 trade war (Amiti Redding Weinstein, AER P&P 2020)

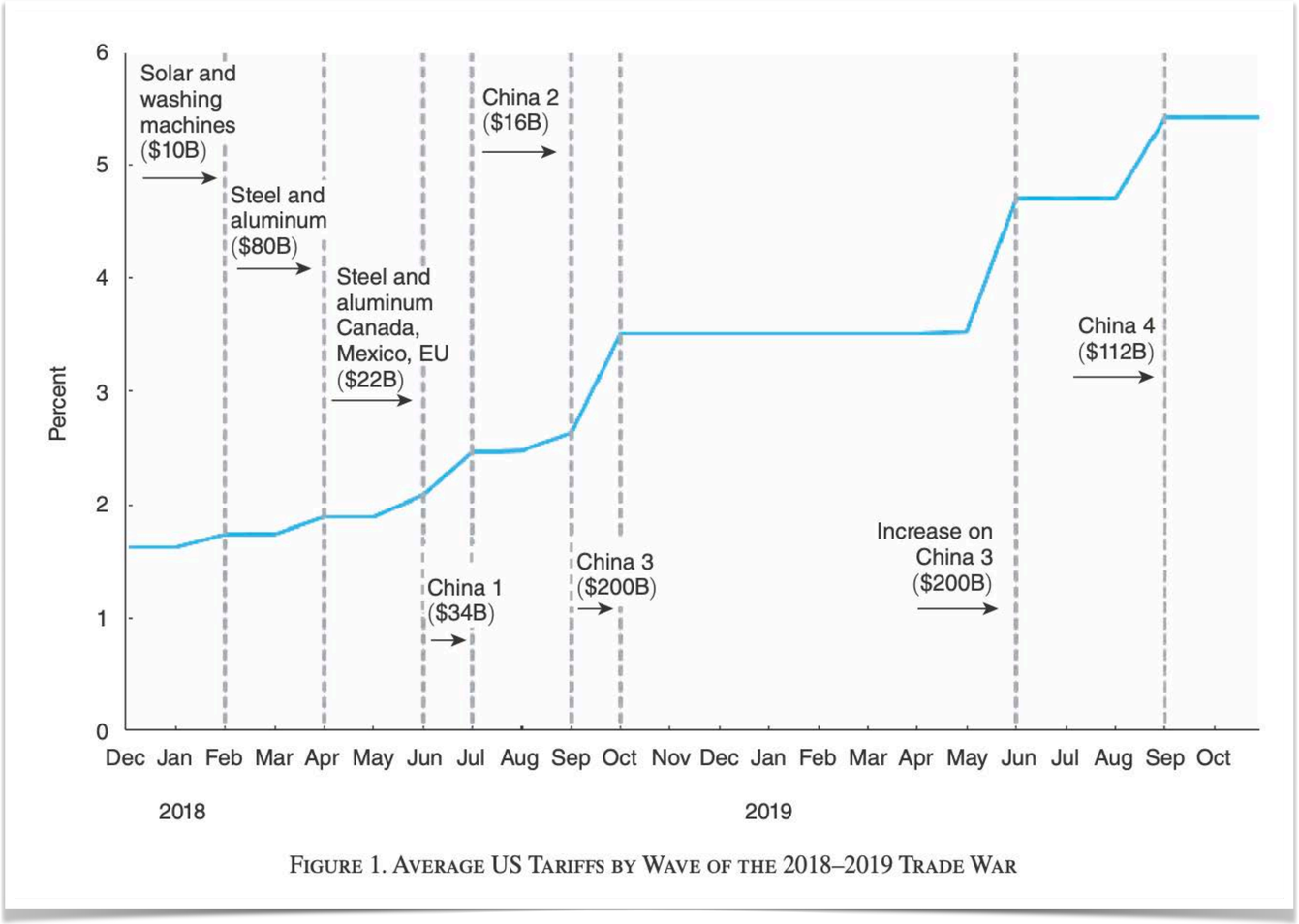
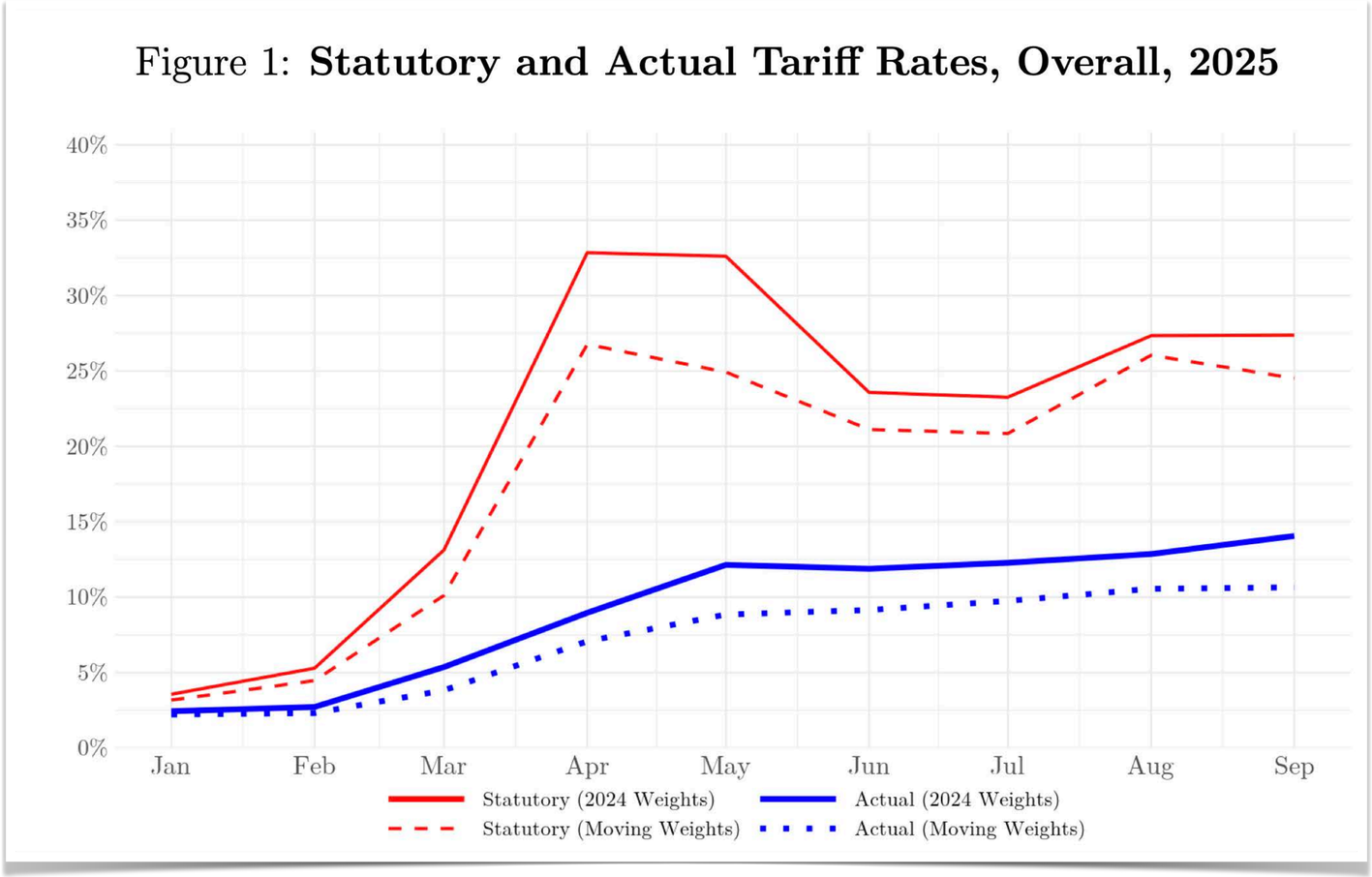


FIGURE 1. AVERAGE US TARIFFS BY WAVE OF THE 2018–2019 TRADE WAR

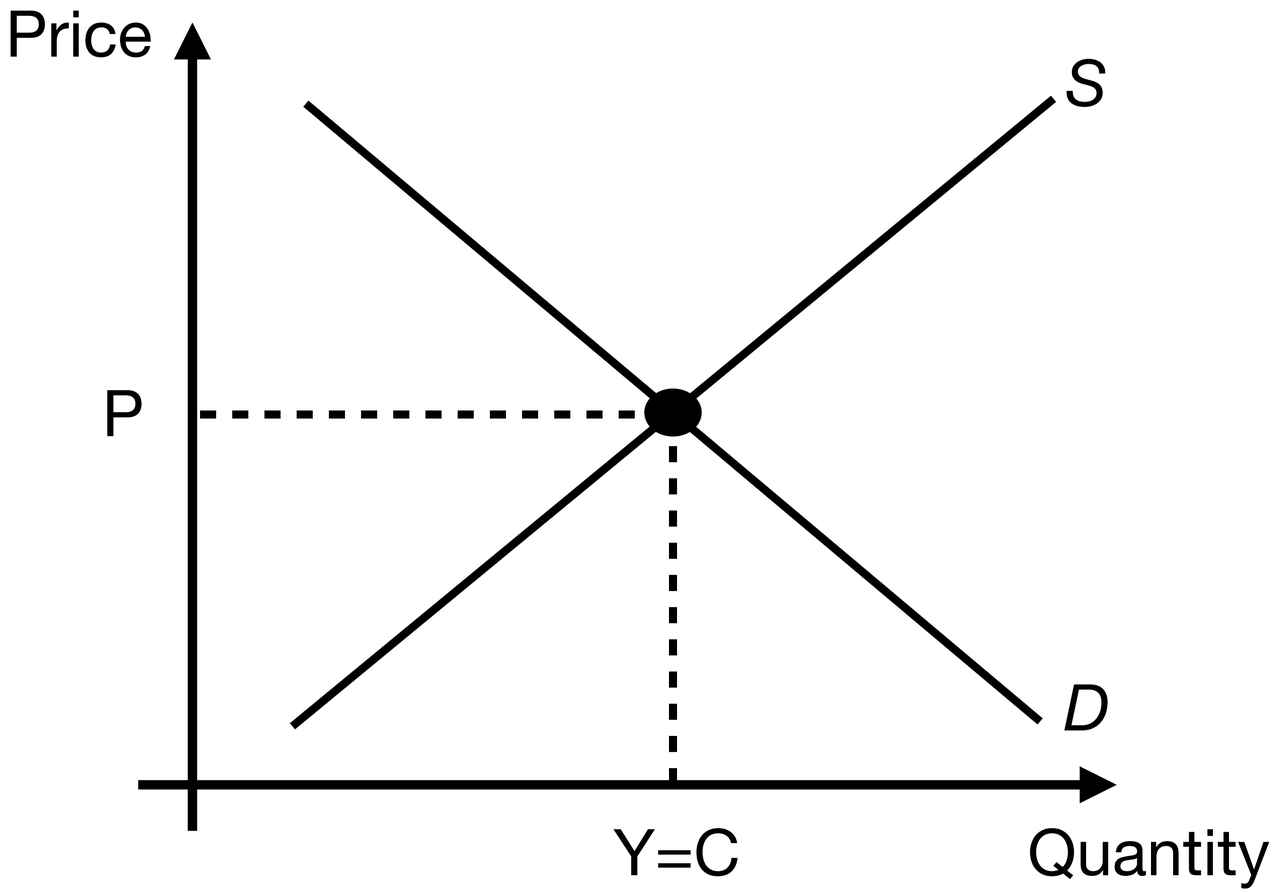
US Tariffs

2025: Liberation Day tariffs, etc. (Gopinath Neiman, NBER WP 2025)



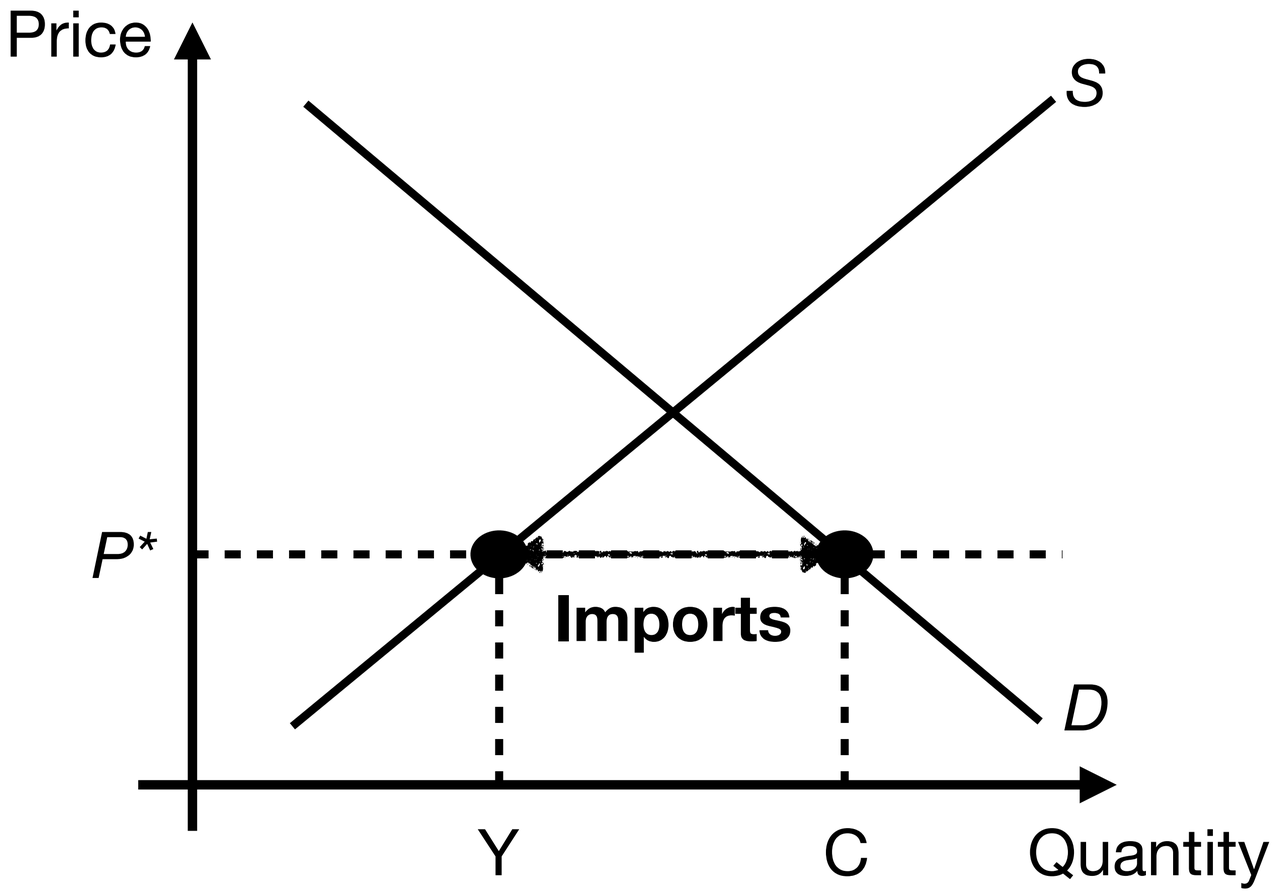
Question #1:
What Is (Always) Bad About Tariffs?

Understanding the Gains from Trade



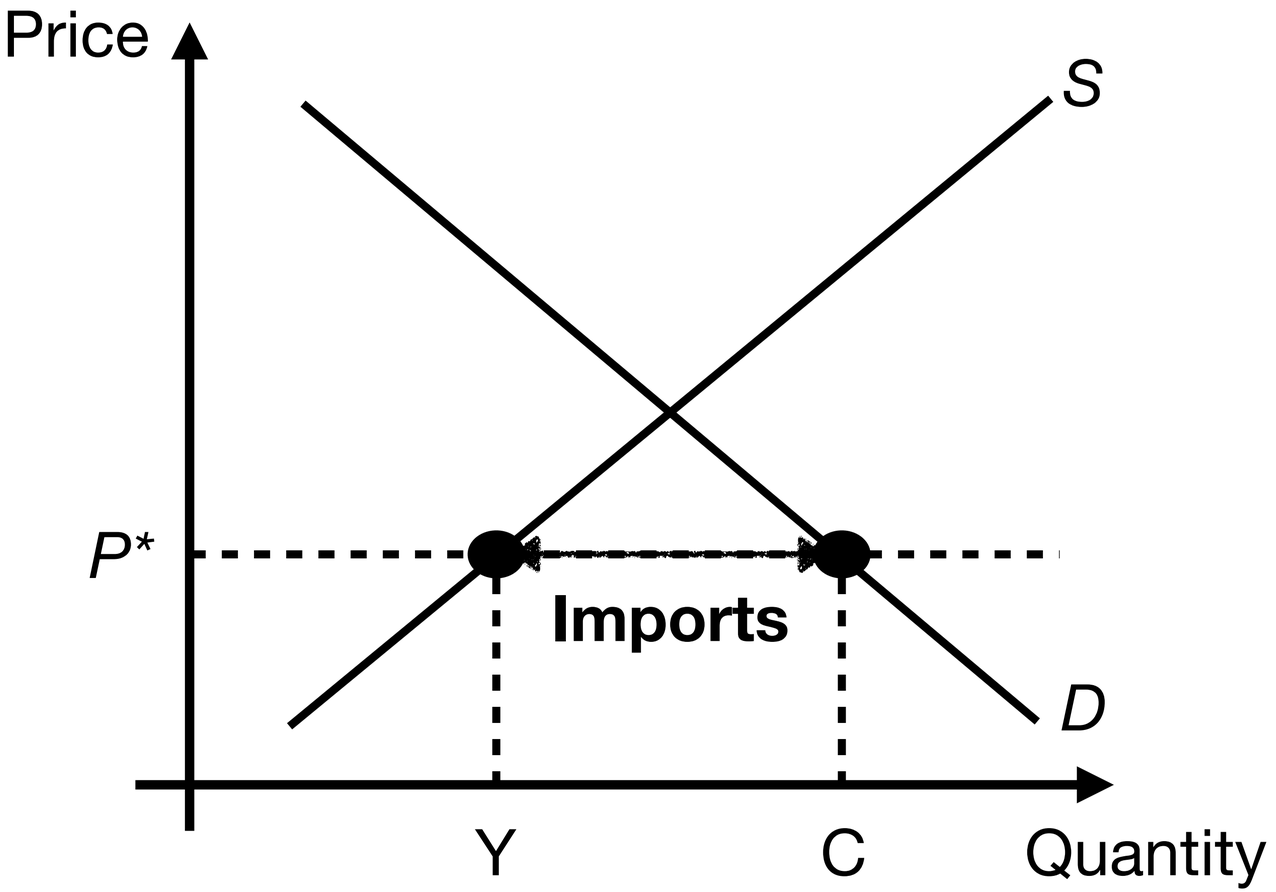
Autarky Equilibrium

Understanding the Gains from Trade



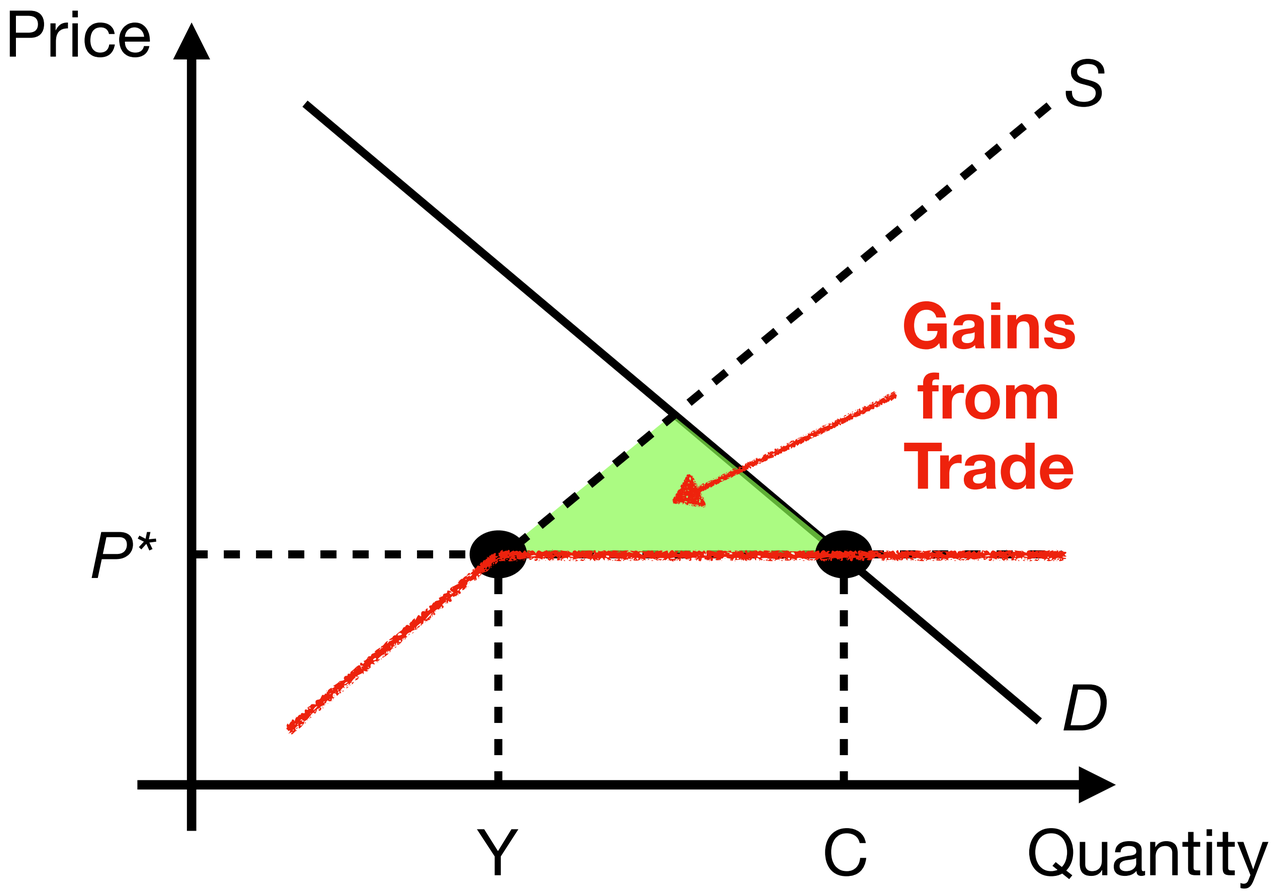
Free Trade Equilibrium

Understanding the Gains from Trade



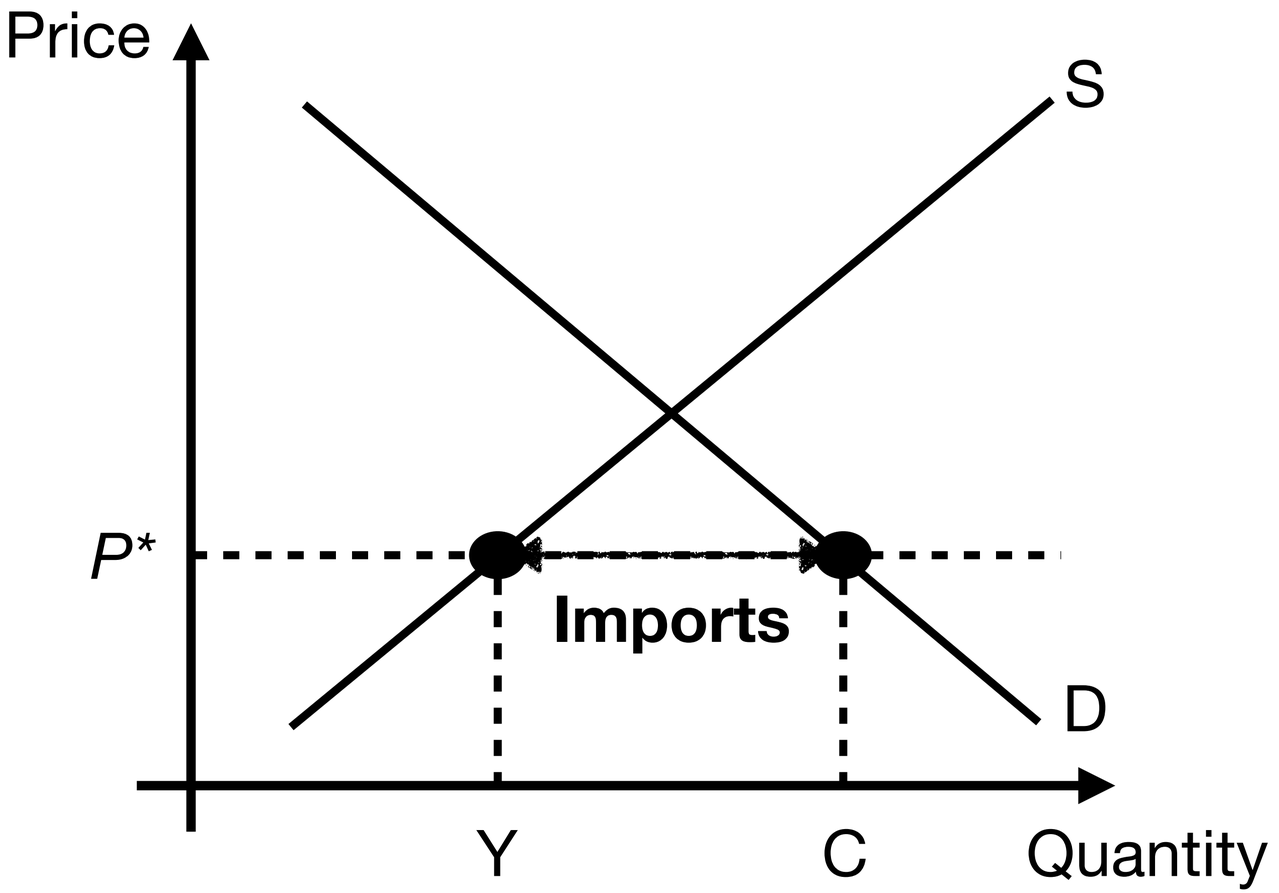
Free Trade Equilibrium

Understanding the Gains from Trade



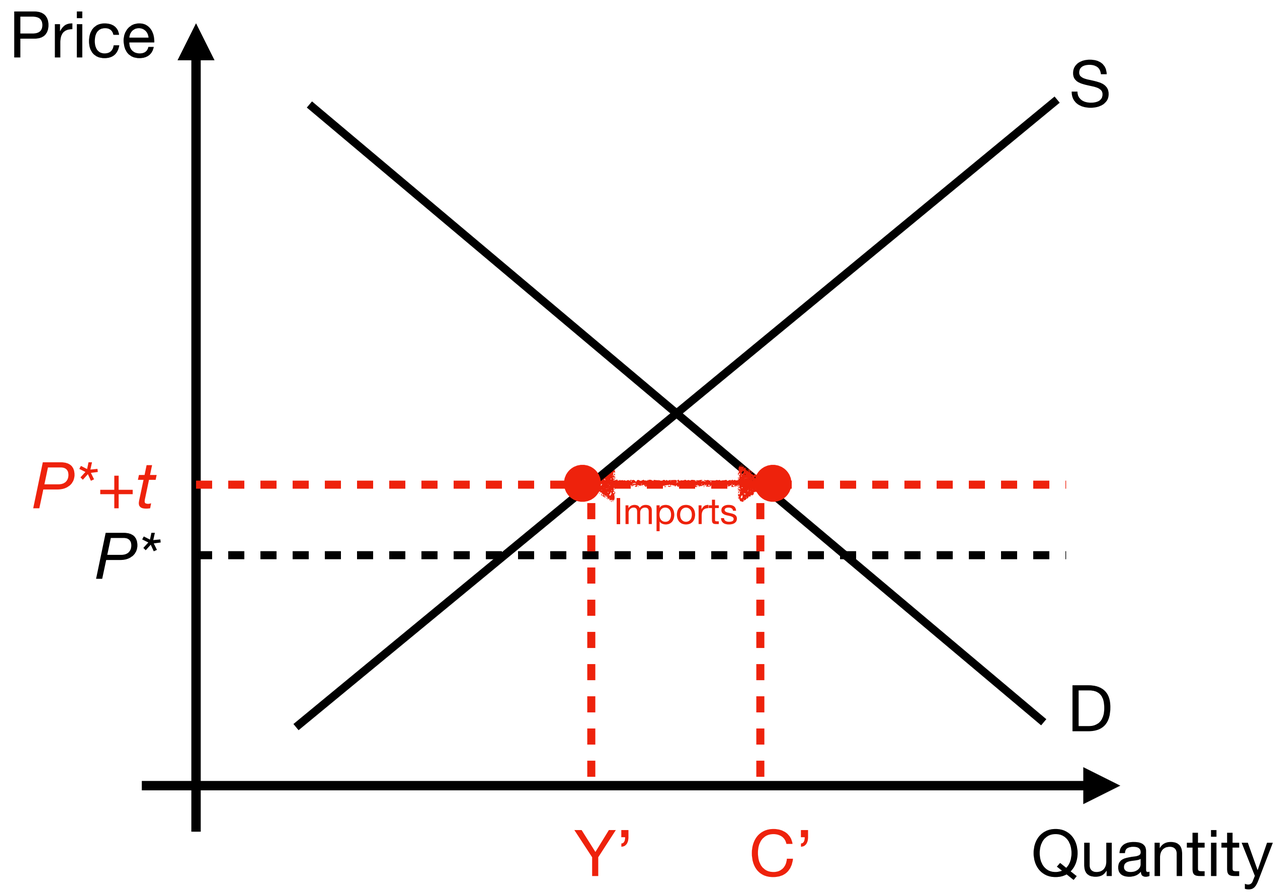
Trade = Technological Progress! (Samuelson CJE 1939)

Understanding the Cost of Trade Protection



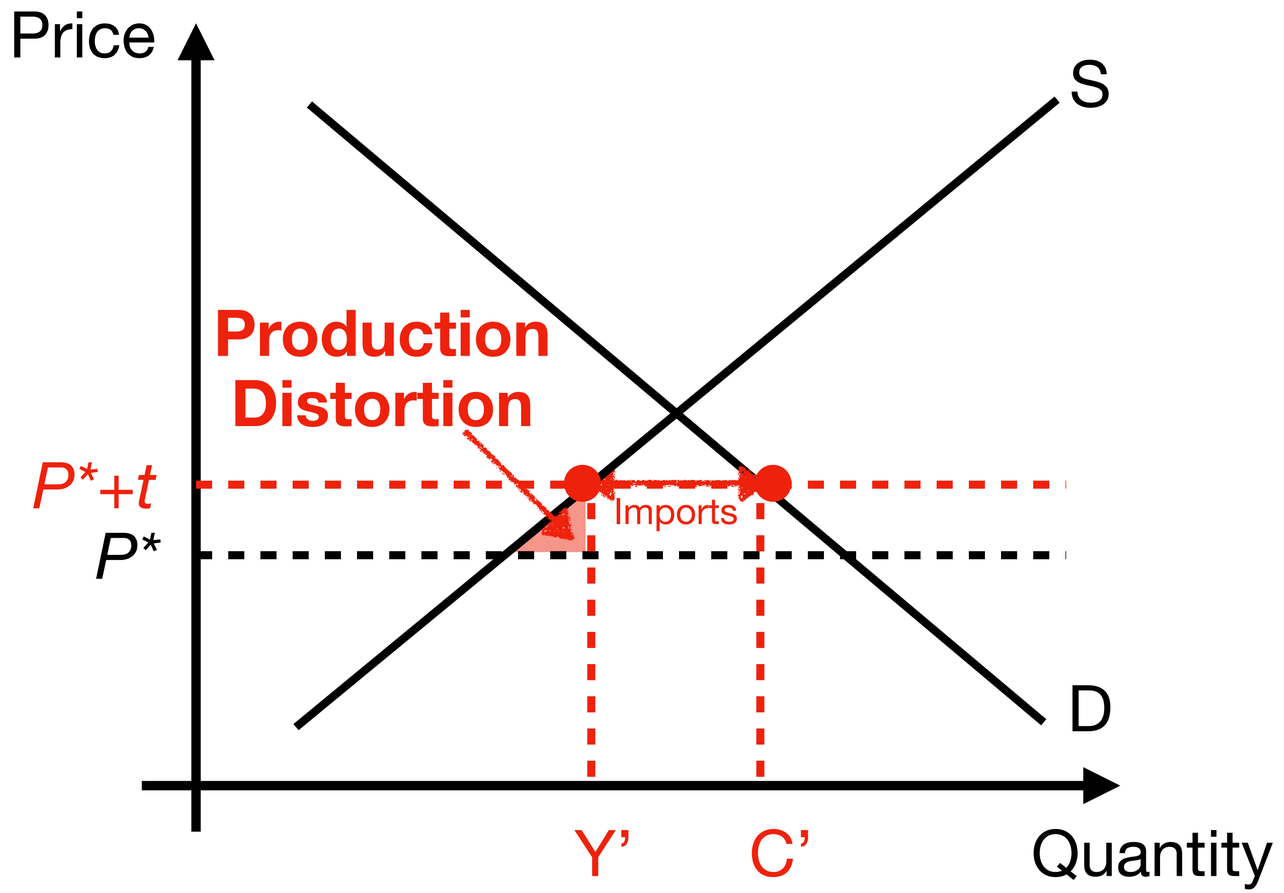
Free Trade Equilibrium

Understanding the Cost of Trade Protection



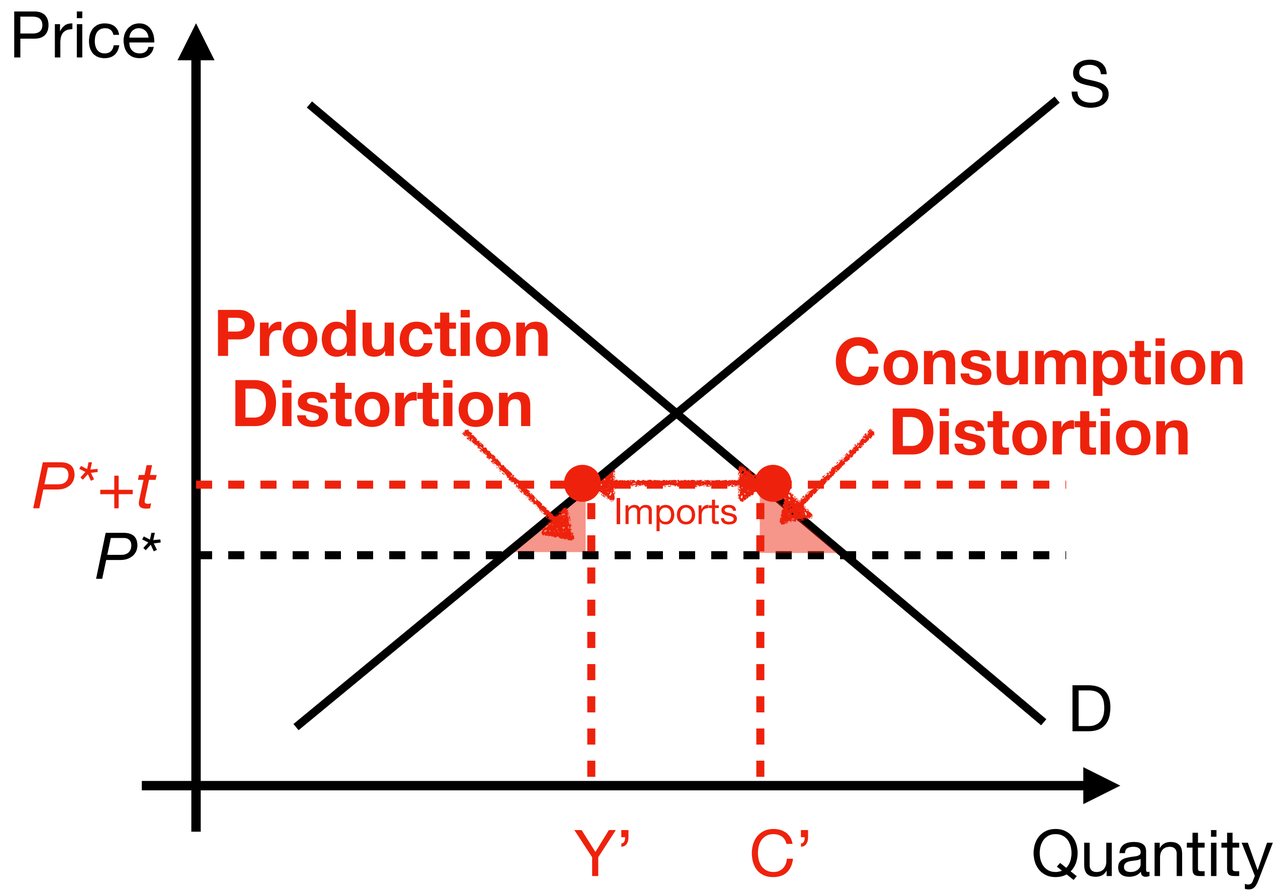
Equilibrium with Tariff *t*

Understanding the Cost of Trade Protection



Equilibrium with Tariff *t*

Understanding the Cost of Trade Protection



Equilibrium with Tariff *t*

Question #2:
What Is (Potentially) Good About Tariffs?

Tariffs as a Tool for Efficiency

If distortions exist, tariffs can help correct them

Tariffs as a Tool for Efficiency

If distortions exist, tariffs can help correct them

Sources of distortions:

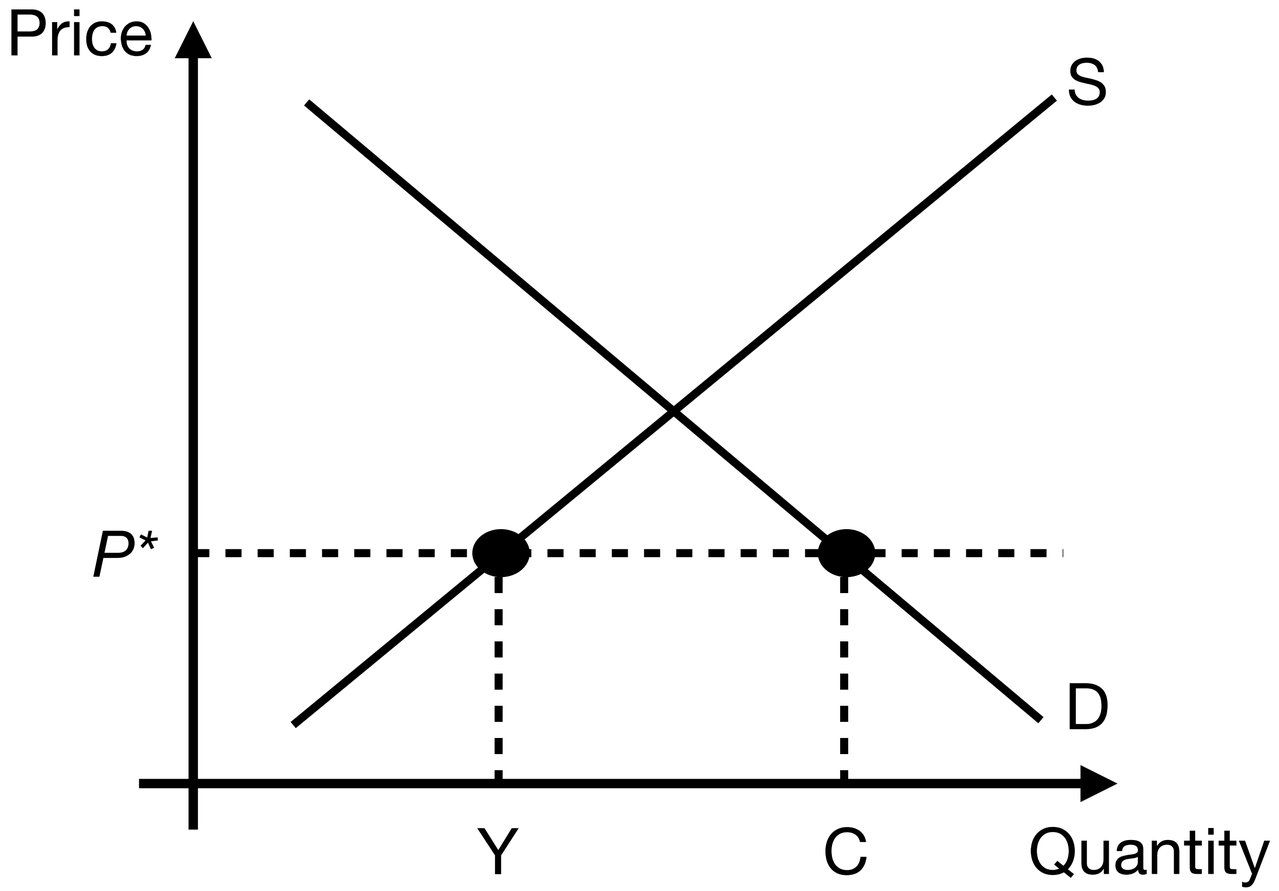
- Knowledge spillovers
- Imperfect competition
- Unemployment
- Geopolitical risk
- Carbon emissions etc.

Tariffs as a Tool for Efficiency

If distortions exist, tariffs can help correct them

Sources of distortions:

- Knowledge spillovers
- Imperfect competition
- Unemployment
- Geopolitical risk
- Carbon emissions etc.

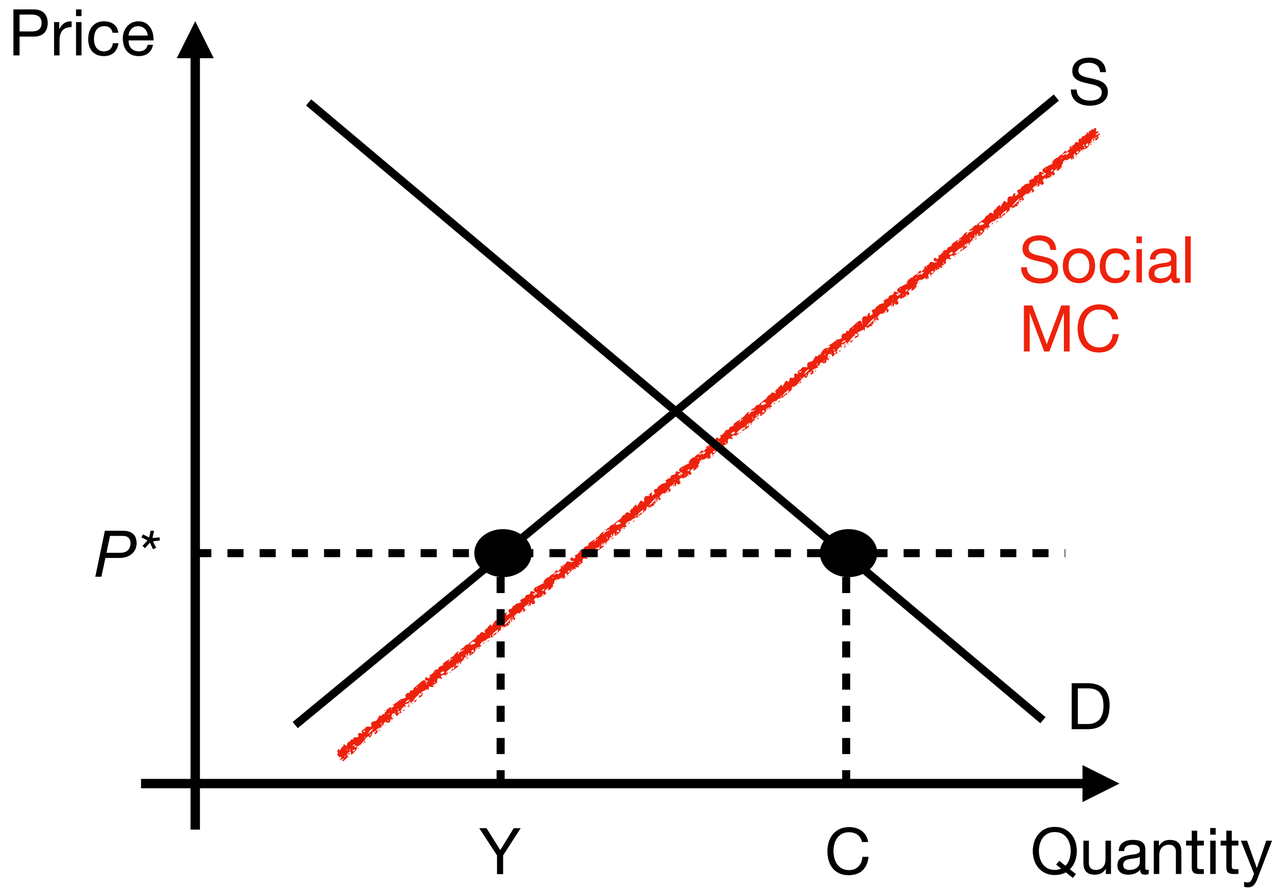


Tariffs as a Tool for Efficiency

If distortions exist, tariffs can help correct them

Sources of distortions:

- Knowledge spillovers
- Imperfect competition
- Unemployment
- Geopolitical risk
- Carbon emissions etc.

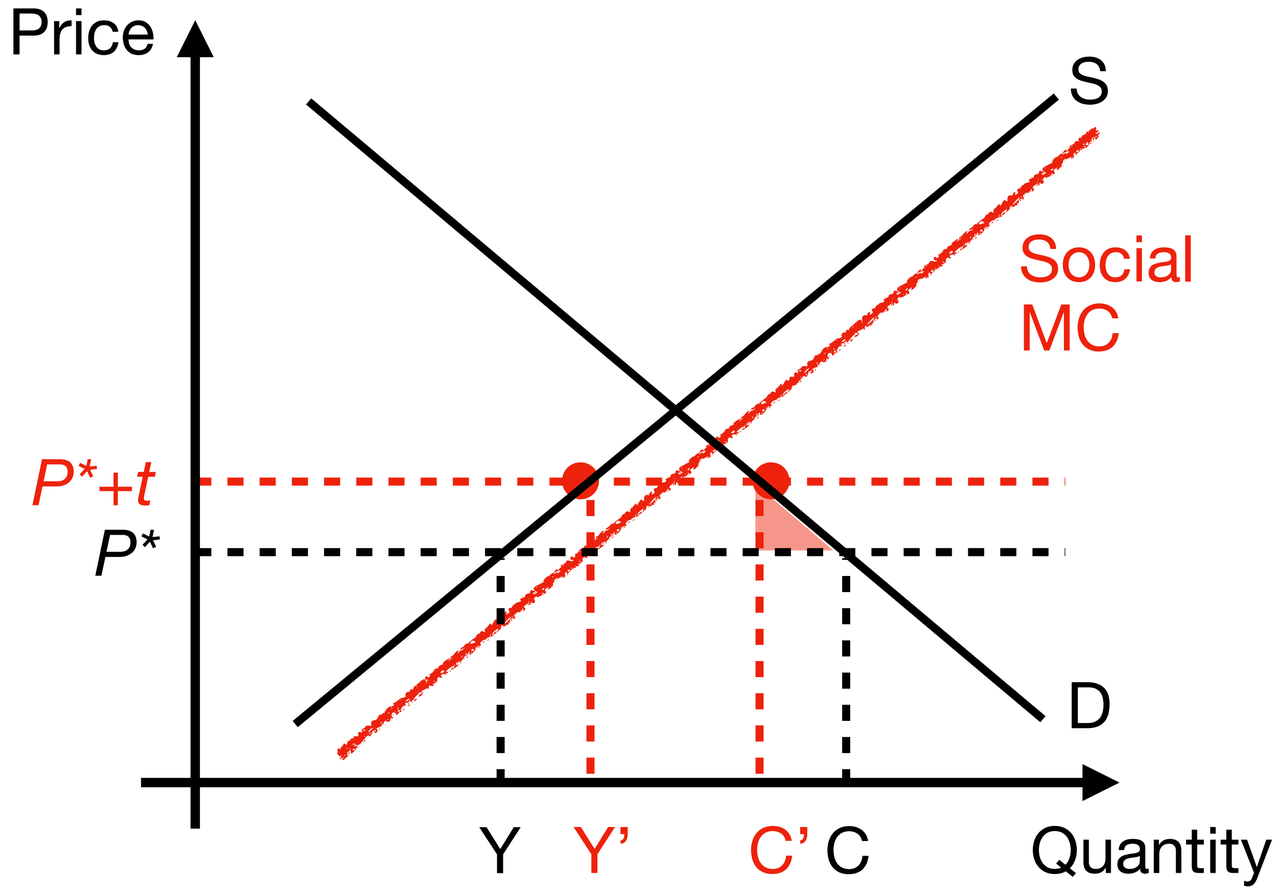


Tariffs as a Tool for Efficiency

If distortions exist, tariffs can help correct them

Sources of distortions:

- Knowledge spillovers
- Imperfect competition
- Unemployment
- Geopolitical risk
- Carbon emissions etc.

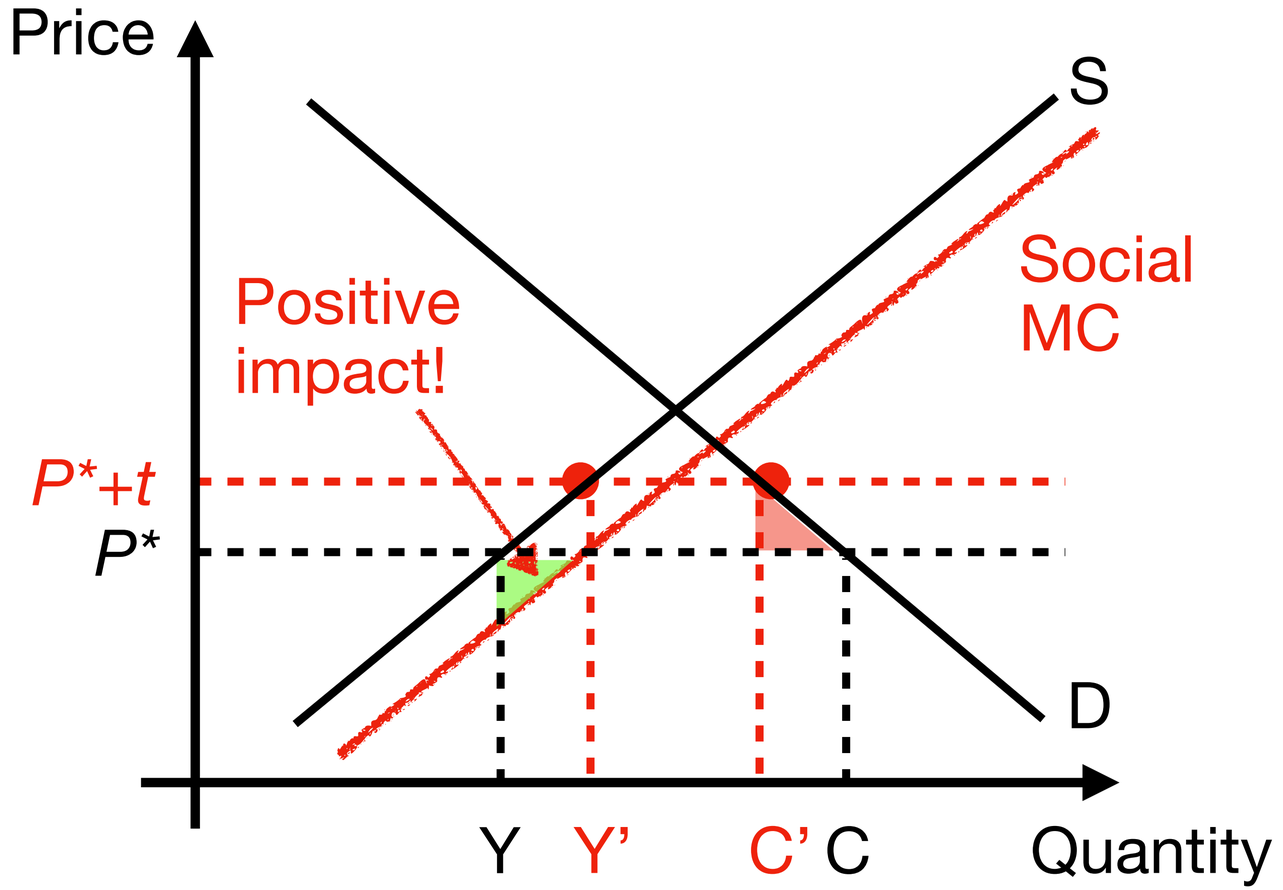


Tariffs as a Tool for Efficiency

If distortions exist, tariffs can help correct them

Sources of distortions:

- Knowledge spillovers
- Imperfect competition
- Unemployment
- Geopolitical risk
- Carbon emissions etc.



Tariffs as a Tool for Redistribution

Domestic redistribution

Tariffs as a Tool for Redistribution

Domestic redistribution

A bigger slice of the pie for some domestic constituents:

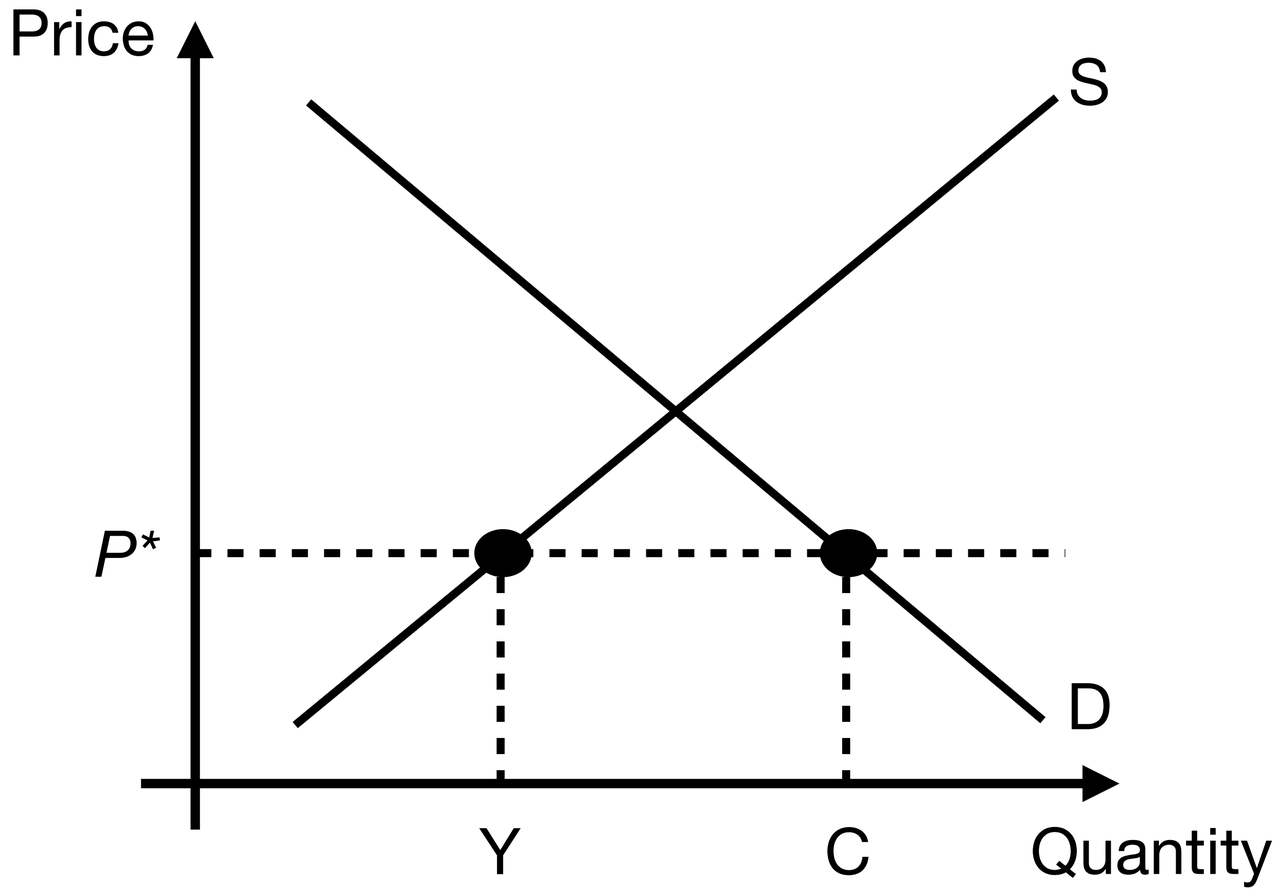
- Producers vs. consumers
- High-school vs. college grad
- Manufacturing vs. other etc.

Tariffs as a Tool for Redistribution

Domestic redistribution

A bigger slice of the pie for some domestic constituents:

- Producers vs. consumers
- High-school vs. college grad
- Manufacturing vs. other etc.

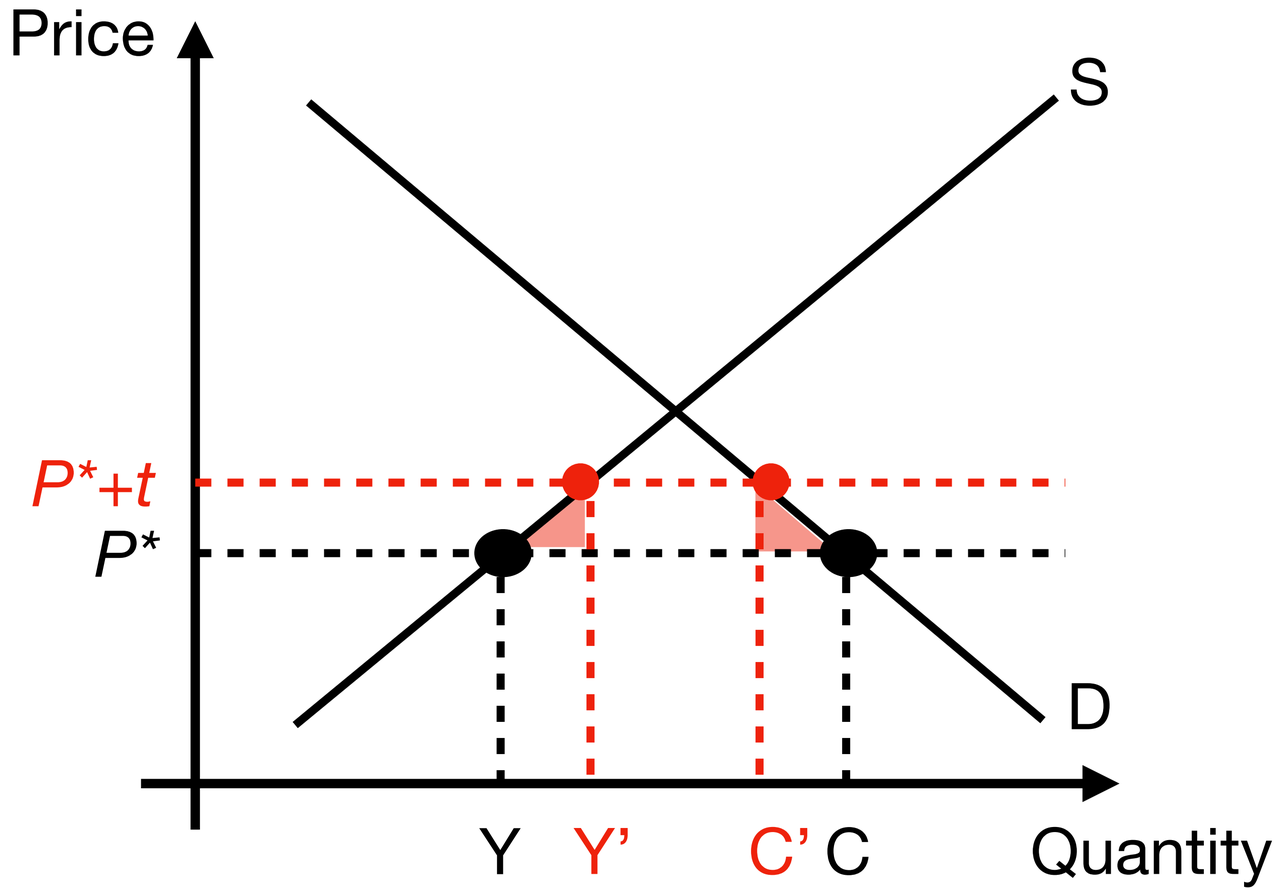


Tariffs as a Tool for Redistribution

Domestic redistribution

A bigger slice of the pie for some domestic constituents:

- Producers vs. consumers
- High-school vs. college grad
- Manufacturing vs. other etc.

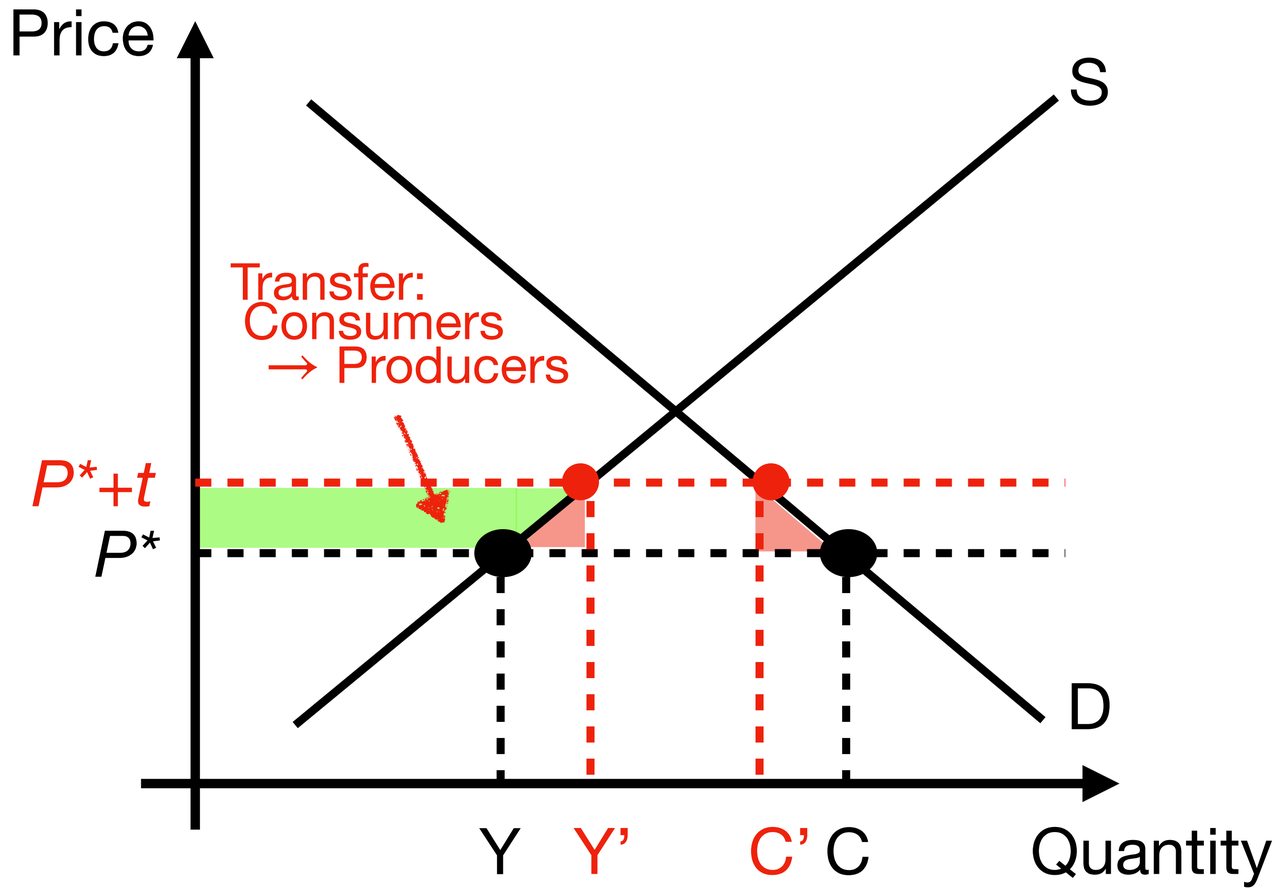


Tariffs as a Tool for Redistribution

Domestic redistribution

A bigger slice of the pie for some domestic constituents:

- Producers vs. consumers
- High-school vs. college grad
- Manufacturing vs. other etc.

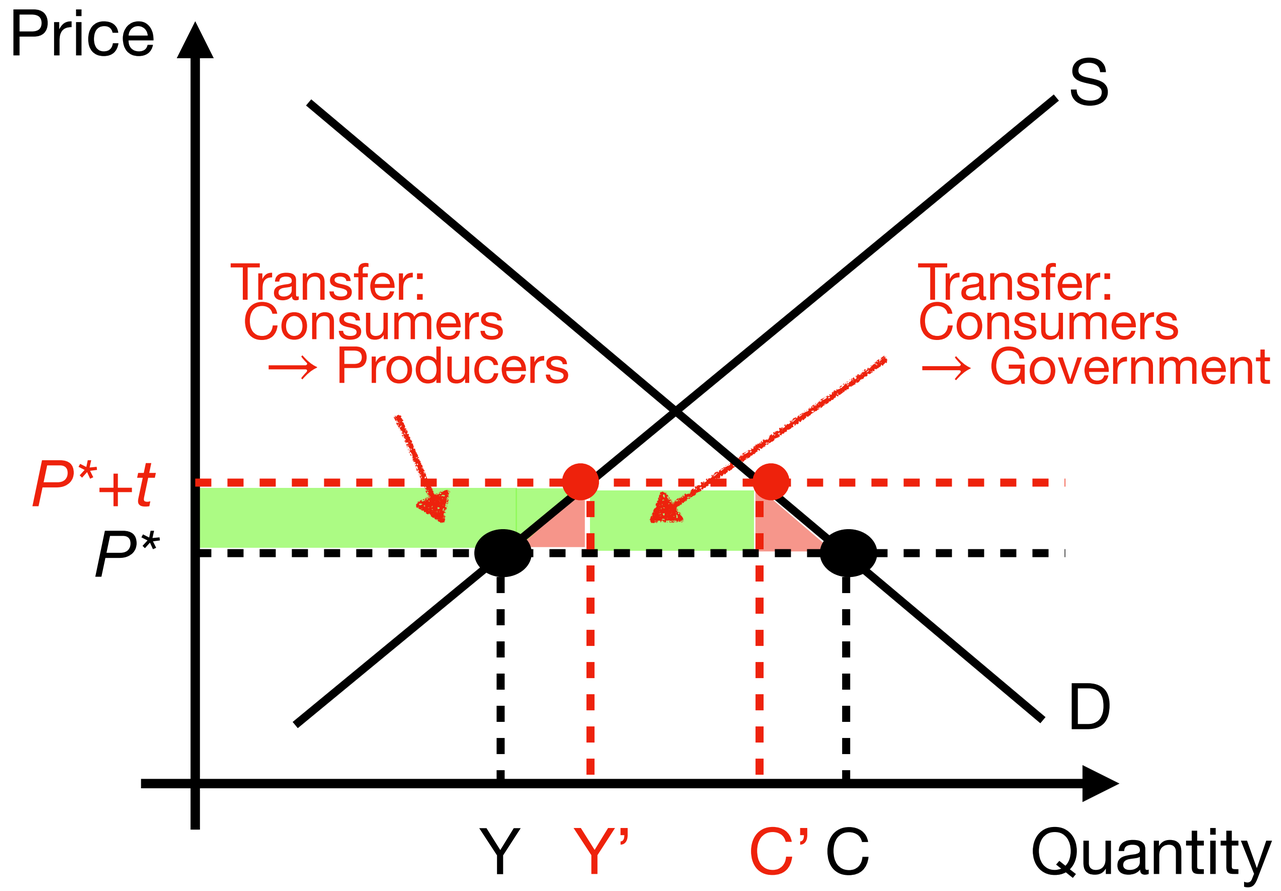


Tariffs as a Tool for Redistribution

Domestic redistribution

A bigger slice of the pie for some domestic constituents:

- Producers vs. consumers
- High-school vs. college grad
- Manufacturing vs. other etc.



Tariffs as a Tool for Redistribution

International redistribution

Tariffs as a Tool for Redistribution

International redistribution

A smaller slice of the global pie for the rest of the world:

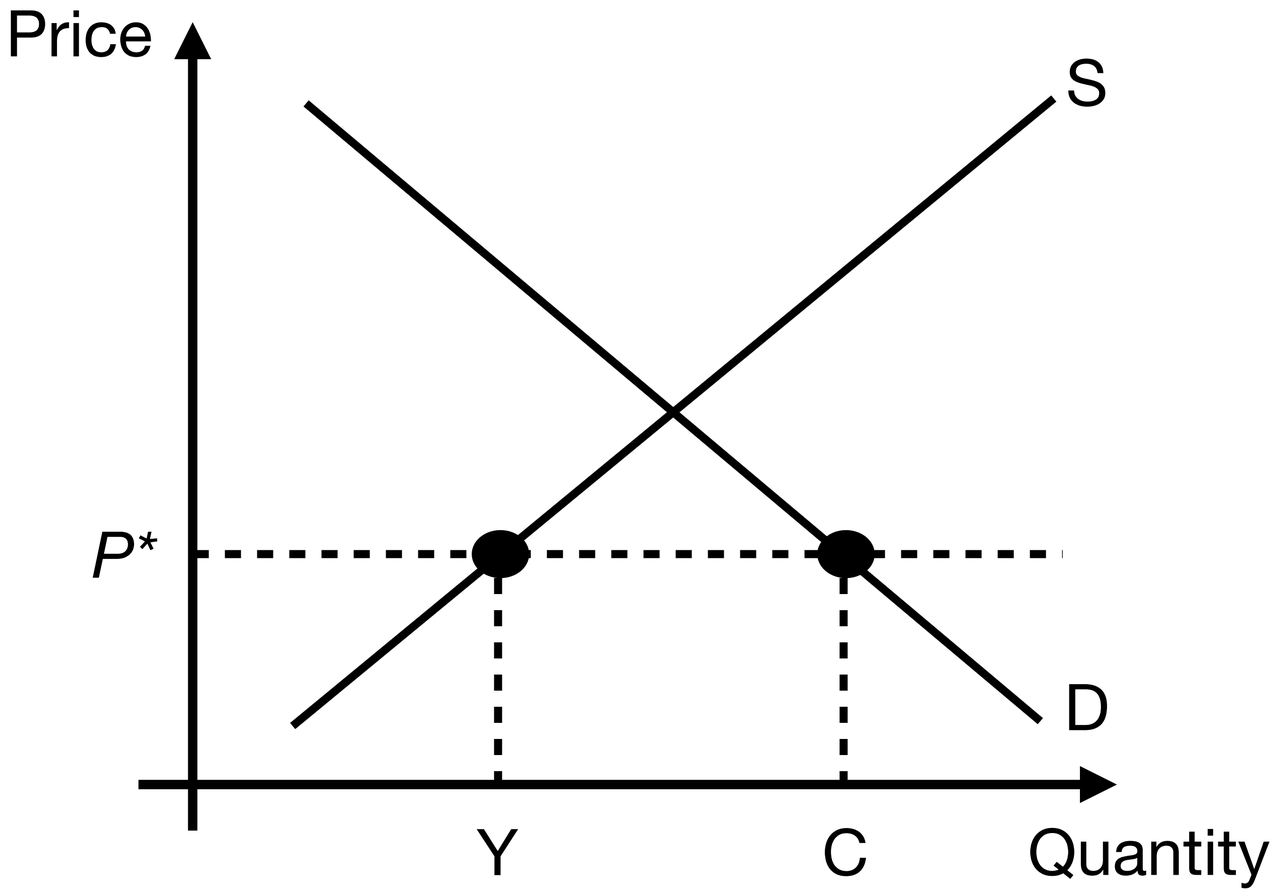
- Lower domestic demand for imports → lower (untaxed) price P^* received by foreigners → Foreigners pay for the tariff!
- **Classical optimal tariff argument** (Mill 1844, Edgeworth 1894)

Tariffs as a Tool for Redistribution

International redistribution

A smaller slice of the global pie for the rest of the world:

- Lower domestic demand for imports → lower (untaxed) price P^* received by foreigners → Foreigners pay for the tariff!
- **Classical optimal tariff argument** (Mill 1844, Edgeworth 1894)

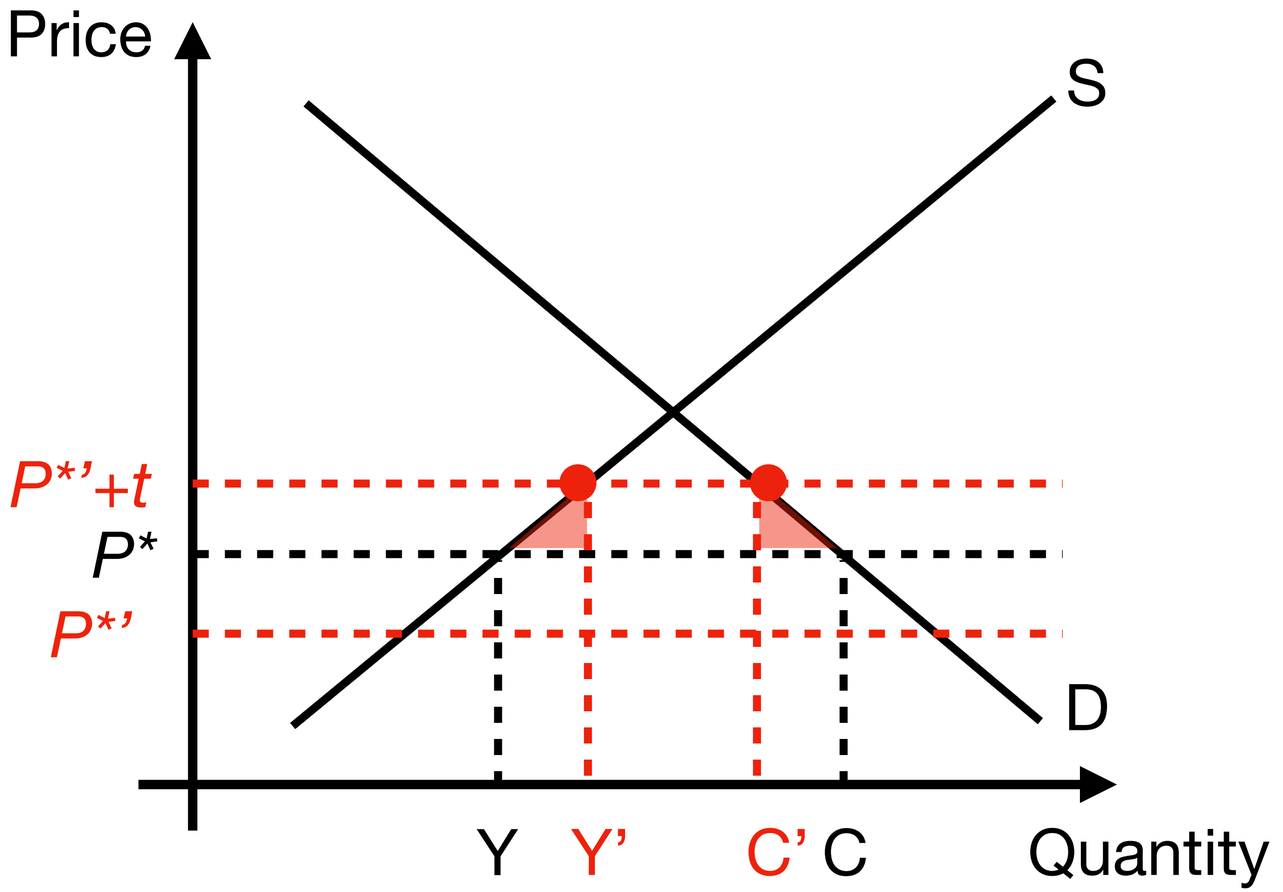


Tariffs as a Tool for Redistribution

International redistribution

A smaller slice of the global pie for the rest of the world:

- Lower domestic demand for imports → lower (untaxed) price P^* received by foreigners → Foreigners pay for the tariff!
- **Classical optimal tariff argument** (Mill 1844, Edgeworth 1894)

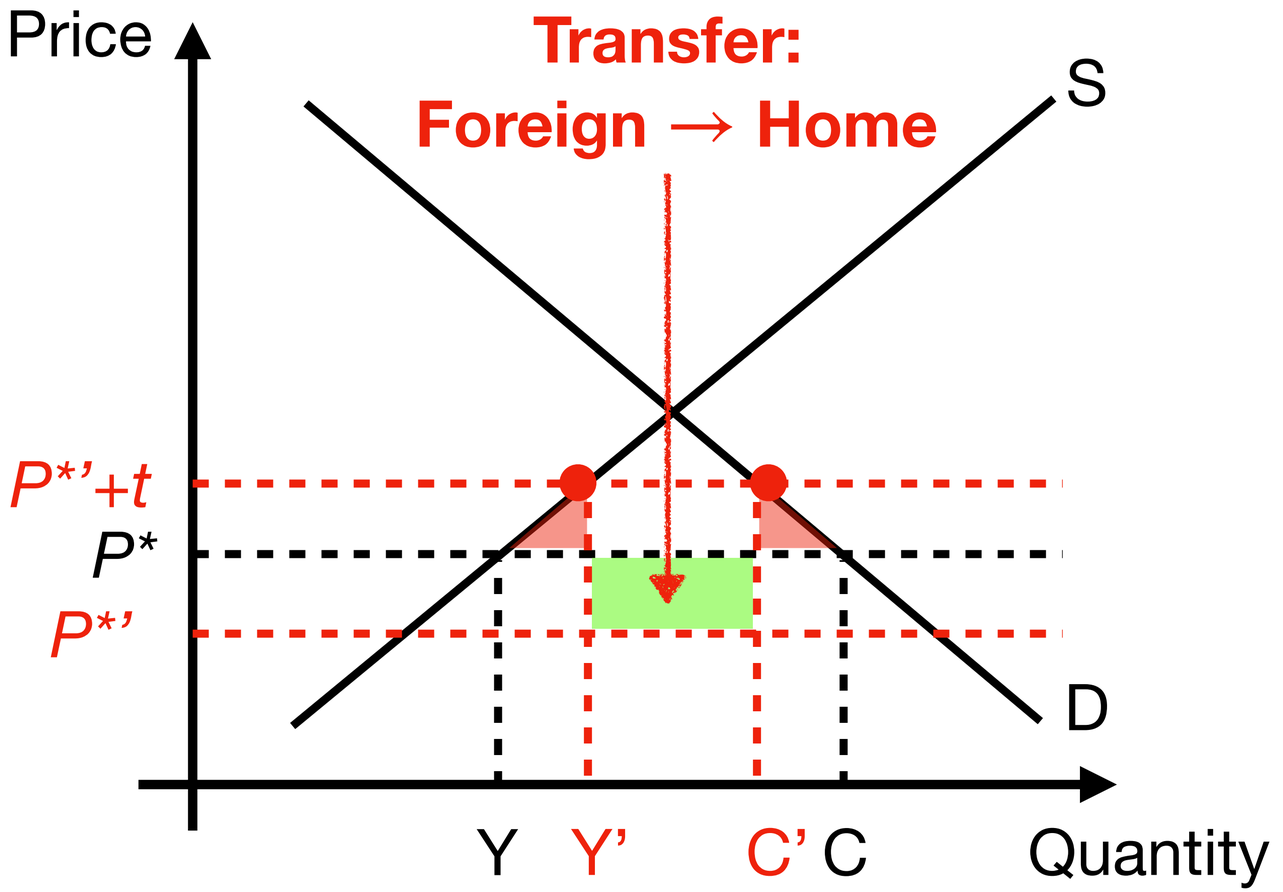


Tariffs as a Tool for Redistribution

International redistribution

A smaller slice of the global pie for the rest of the world:

- Lower domestic demand for imports → lower (untaxed) price P^* received by foreigners → Foreigners pay for the tariff!
- **Classical optimal tariff argument** (Mill 1844, Edgeworth 1894)



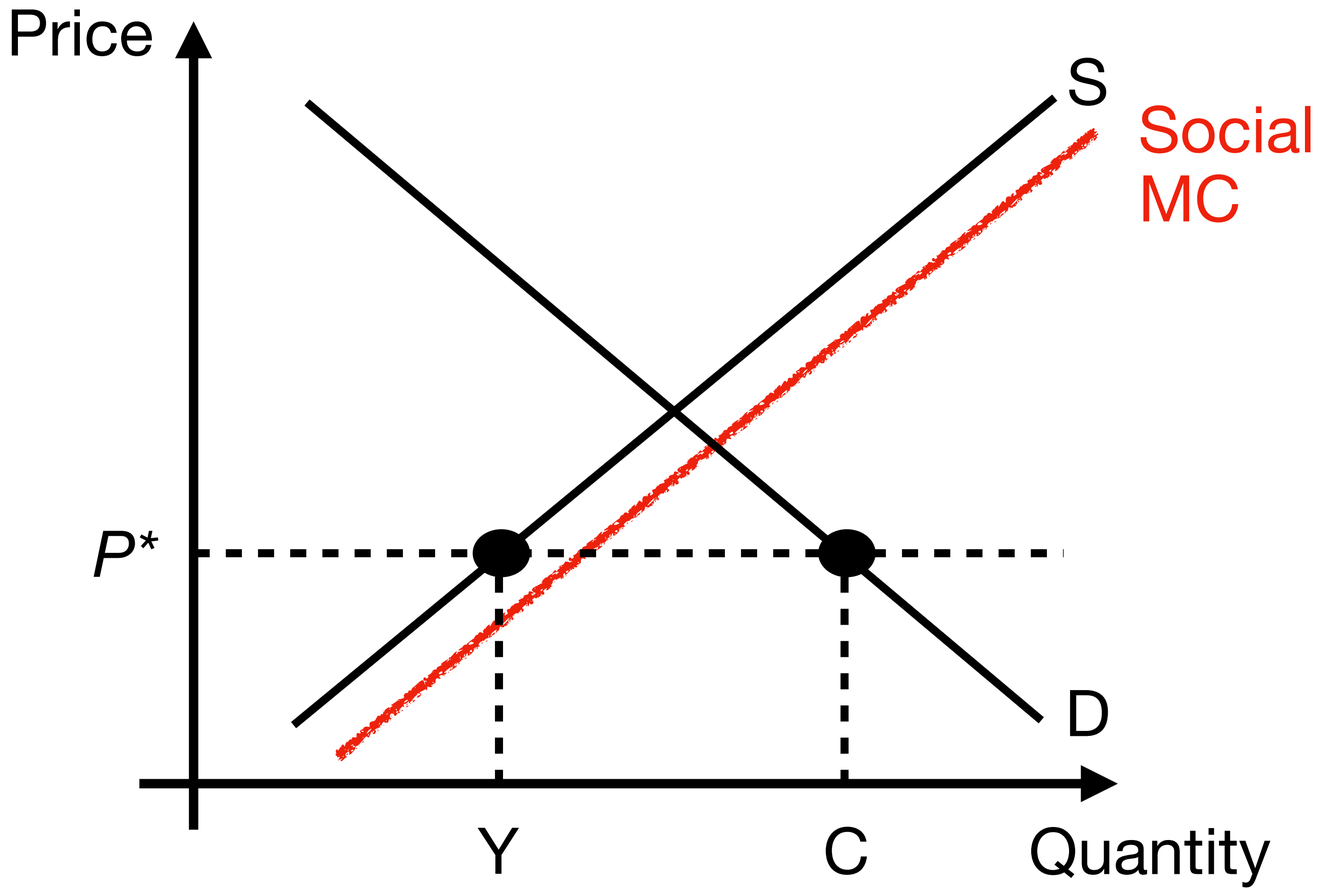
Question #3:
Should A Country (Sometimes) Use Tariffs?

Targeting Principle

How to fix domestic distortions

Targeting Principle

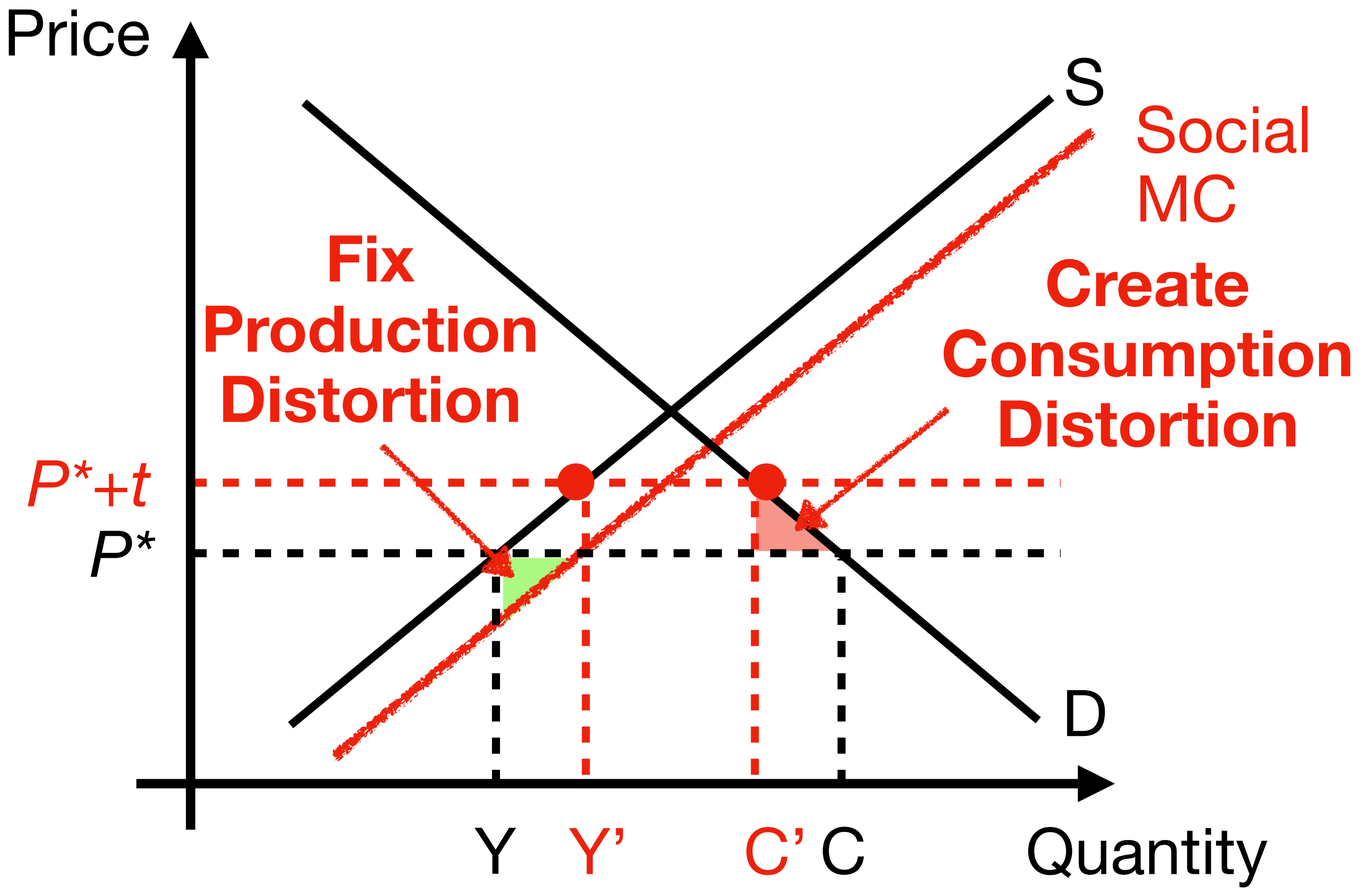
How to fix domestic distortions



Fixing a production distortion with a tariff t

Targeting Principle

How to fix domestic distortions

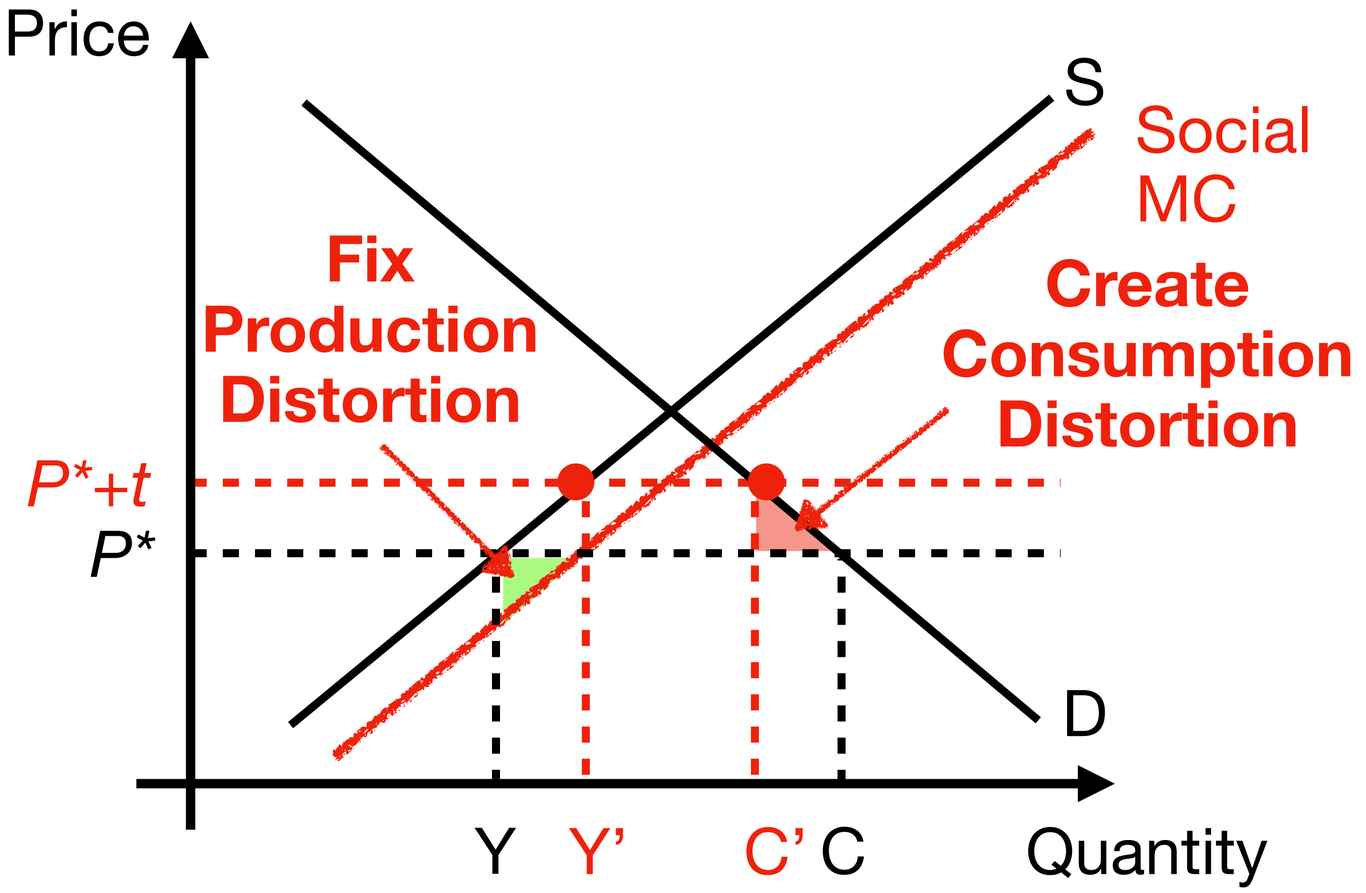


Fixing a production distortion with a tariff t

Targeting Principle

How to fix domestic distortions

Trade Protection = Acupuncture with a Fork!

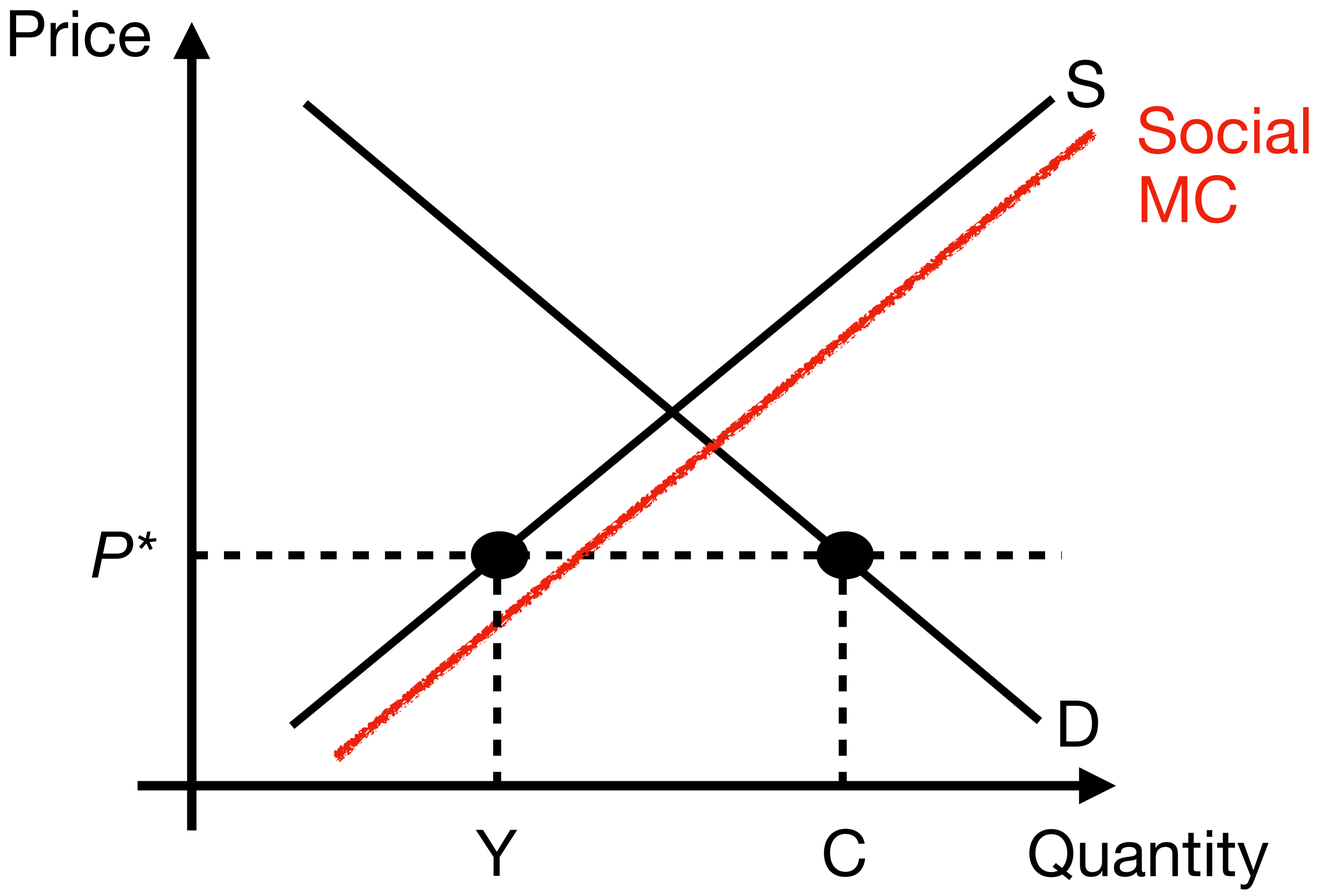


Fixing a production distortion with a tariff t

Targeting Principle

How to fix domestic distortions

Trade Protection = Acupuncture with a Fork!

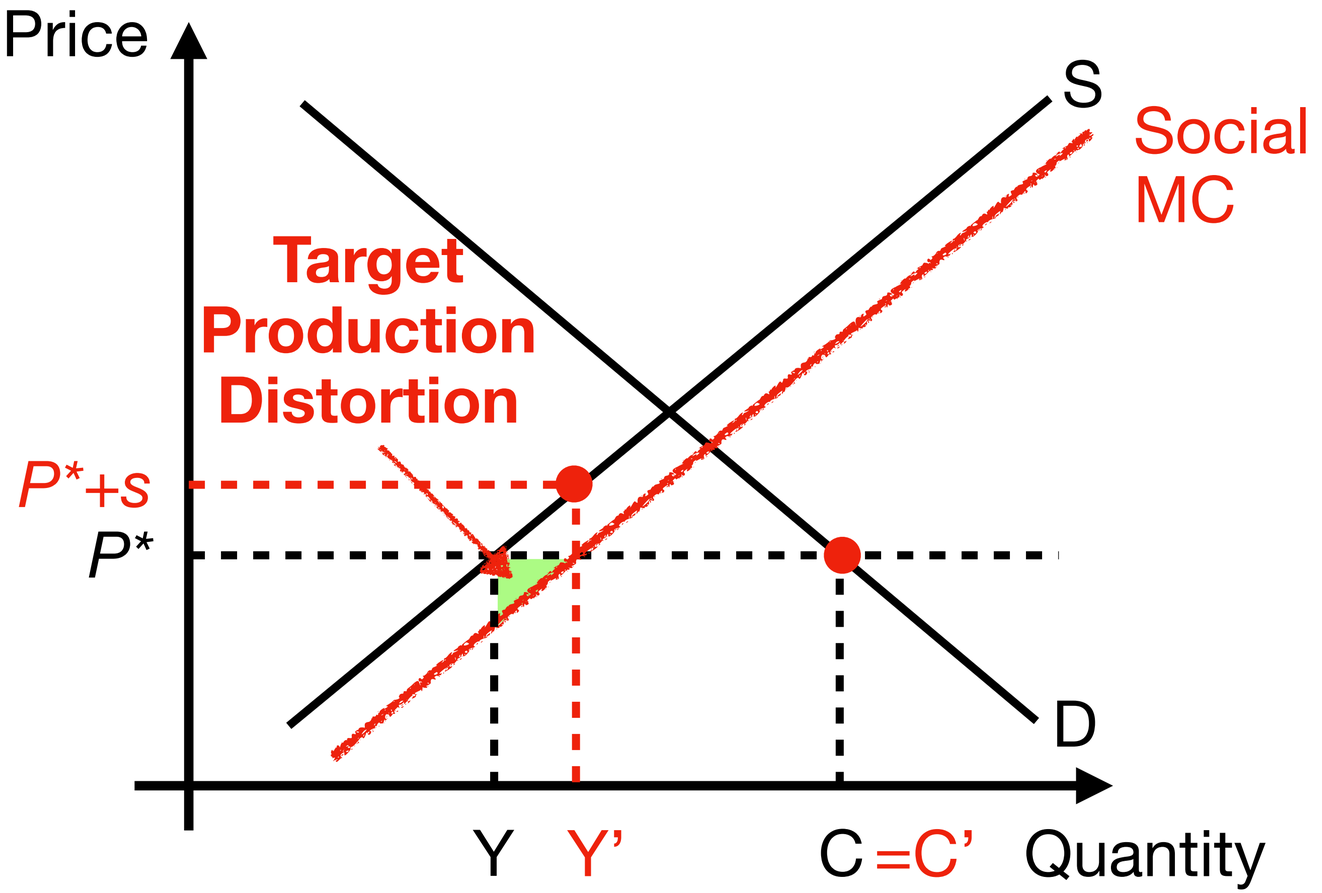


Fixing a production distortion with a production subsidy s

Targeting Principle

How to fix domestic distortions

Trade Protection = Acupuncture with a Fork!



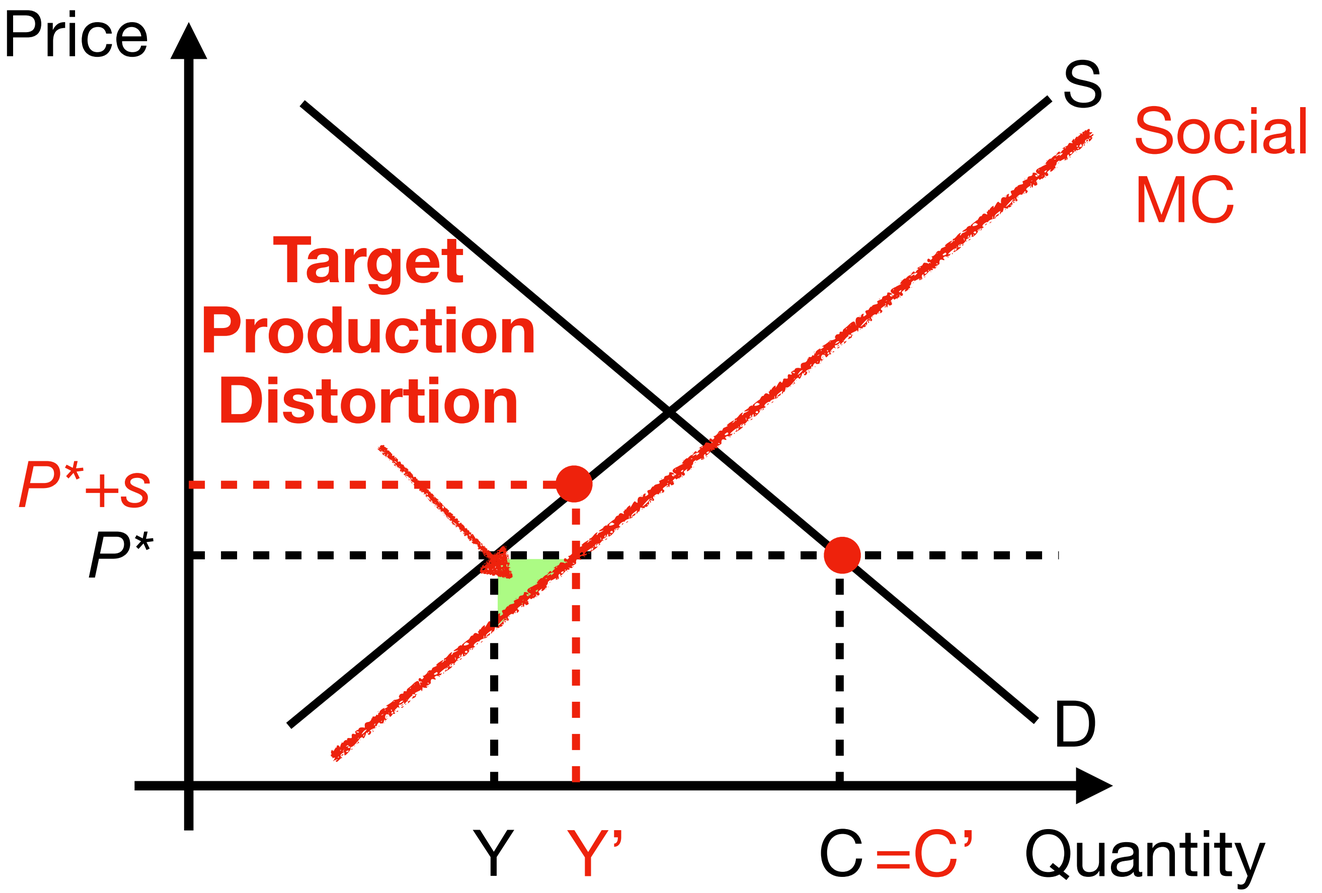
Fixing a production distortion with a production subsidy s

Targeting Principle

How to fix domestic distortions

Trade Protection = Acupuncture with a Fork!

Targeting Principle = Use Needles Instead!



Fixing a production distortion with a production subsidy s

Targeting Principle

How to redistribute

Targeting Principle

How to redistribute

- **Targeting principle** applies to redistribution. Instead of tariffs, better to use:
  - Lump-sum transfers [**Second Welfare Theorem**]
  - Full set of linear taxes [**Diamond Mirrlees' Production Efficiency Theorem**]

Targeting Principle

How to redistribute

- **Targeting principle** applies to redistribution. Instead of tariffs, better to use:
  - Lump-sum transfers [**Second Welfare Theorem**]
  - Full set of linear taxes [**Diamond Mirrlees' Production Efficiency Theorem**]

- **Limits to targeting principle (Costinot Werning RES 2023):**
  - If **only income taxation** available, **tariffs** can be used as **predistribution**
    - Key = estimated impact of imports on earnings across income distribution
    - For **China shock**, estimates in Chetverikov Larsen Palmer (ECTA 2016) + tariff formula in Costinot Werning (RES 2023) → **optimal tariff = 0.07%**

Trade Wars

Revisiting the classical optimal tariff argument

Trade Wars

Revisiting the classical optimal tariff argument

Terms of trade depend on both domestic and foreign tariffs:

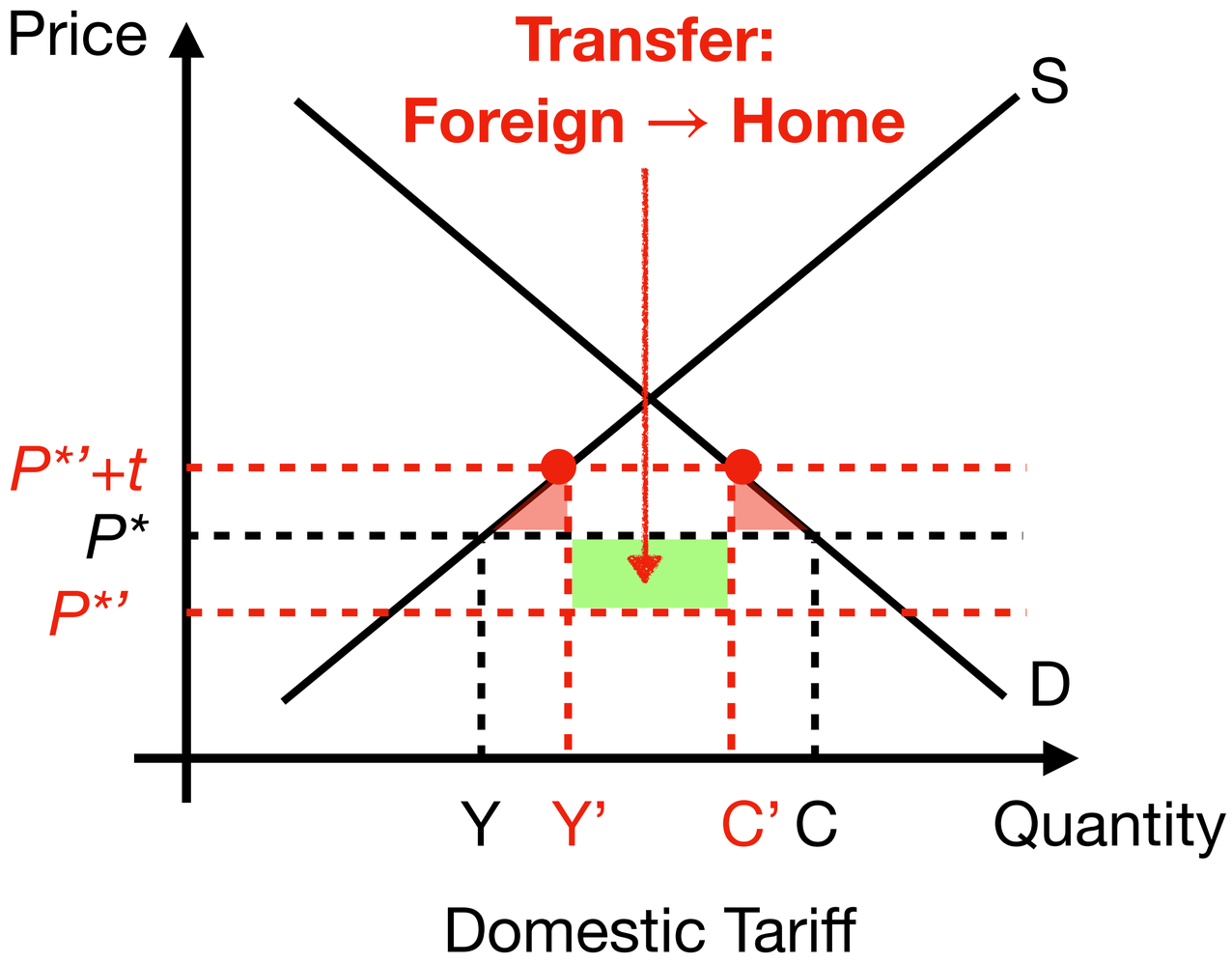
- Domestic tariff (+)
- Foreign tariff (-)

Trade Wars

Revisiting the classical optimal tariff argument

Terms of trade depend on both domestic and foreign tariffs:

- Domestic tariff (+)
- Foreign tariff (-)

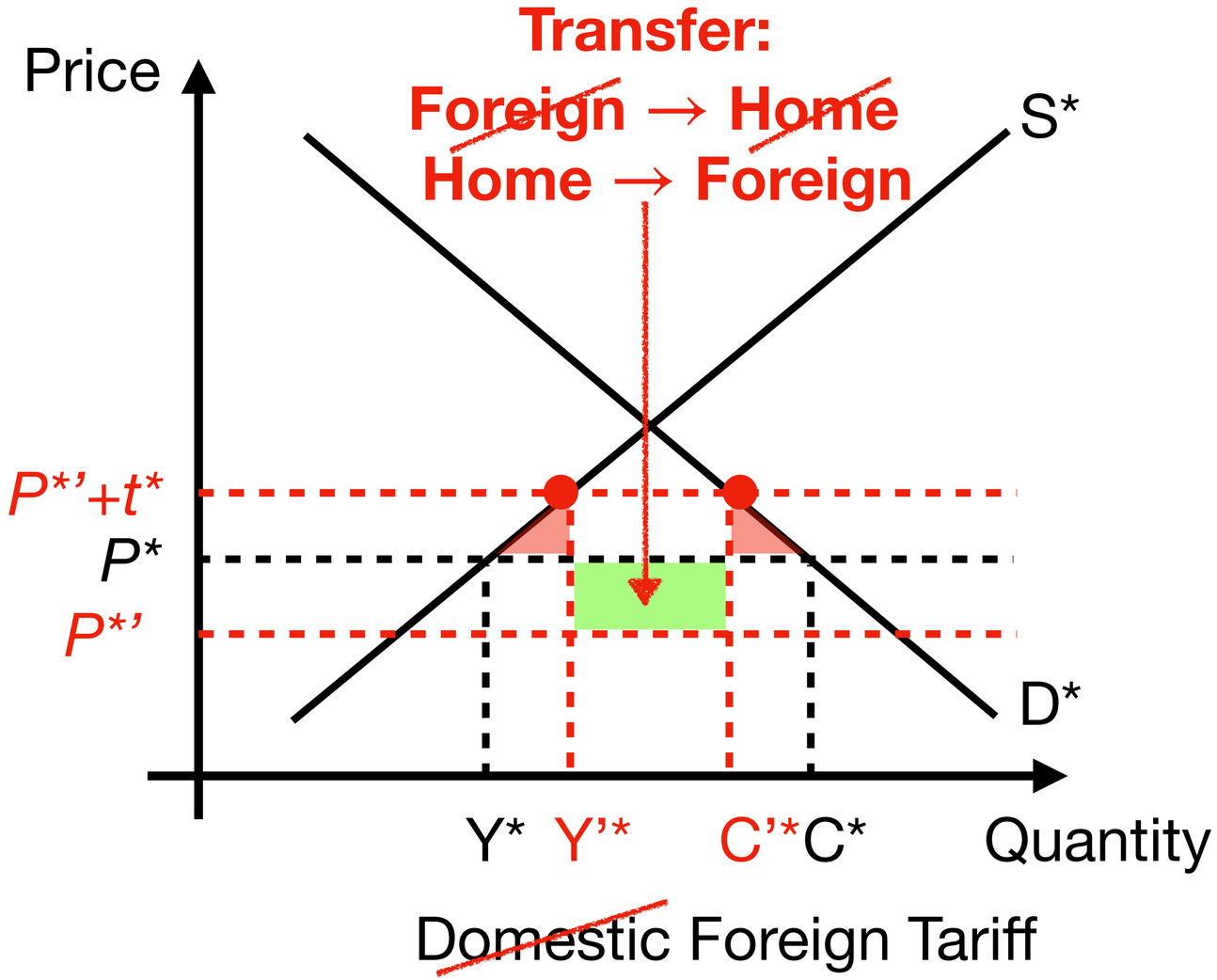


Trade Wars

Revisiting the classical optimal tariff argument

Terms of trade depend on both domestic and foreign tariffs:

- Domestic tariff (+)
- Foreign tariff (-)



Trade Wars

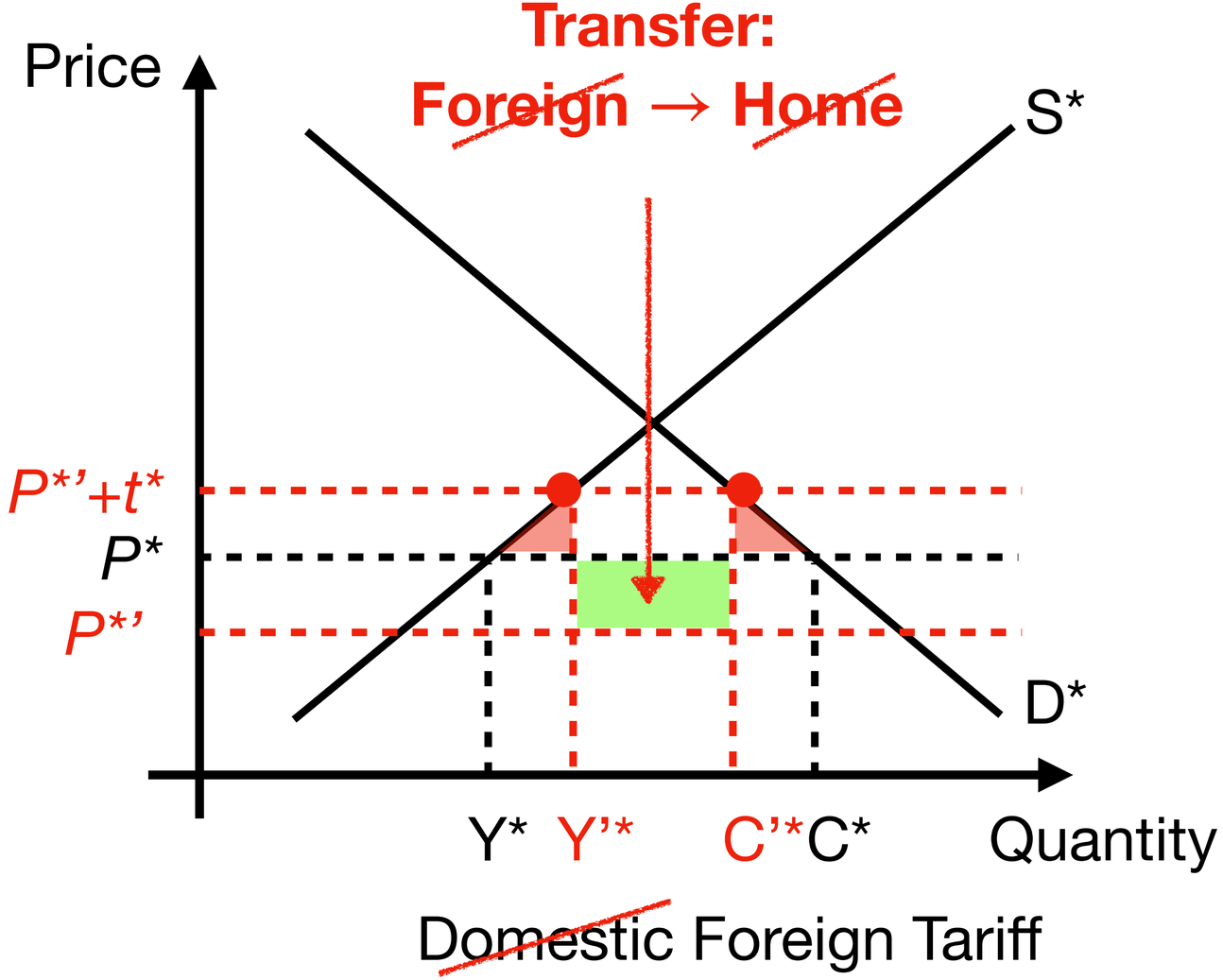
Revisiting the classical optimal tariff argument

Terms of trade depend on both domestic and foreign tariffs:

- Domestic tariff (+)
- Foreign tariff (-)

Trade war → All countries potentially worse off

- Transfers cancelled out, but distortions remain
- WTO rules to escape prisoner's dilemma (Bagwell Staiger AER 1999)



Question #4:
How Do We Know Whether (a Particular Set of) Tariffs Are Good or Bad?

Welfare-Improving Tariffs

Smoking guns for success?

Welfare-Improving Tariffs

Smoking guns for success?

Efficiency motive (Hard)

- Production externalities: How big? How far should we go in promoting certain sectors?
- Geopolitical considerations: How do we assess success of US trade policy in affecting behavior of another hegemon?

Welfare-Improving Tariffs

Smoking guns for success?

Efficiency motive (Hard)

- Production externalities: How big? How far should we go in promoting certain sectors?
- Geopolitical considerations: How do we assess success of US trade policy in affecting behavior of another hegemon?

Redistribution motive (Easier)

- Domestic motive: Do prices faced by US consumers and firms respond to tariff, i.e. do we observe $\neq P^* + t$?
- International motive: Do prices received by foreigners change, i.e. do we observe $\neq P^*$?

Question #5:
What Was the Impact of the 2018-2019 Trade War?

Little Evidence that Foreigners Paid for US Tariffs

Amiti Redding Weinstein (AER P&P 2020)

Little Evidence that Foreigners Paid for US Tariffs

Amiti Redding Weinstein (AER P&P 2020)

$$\frac{d(P^* + t)}{dt} = 1 \leftrightarrow \frac{dP^*}{dt} = 0$$

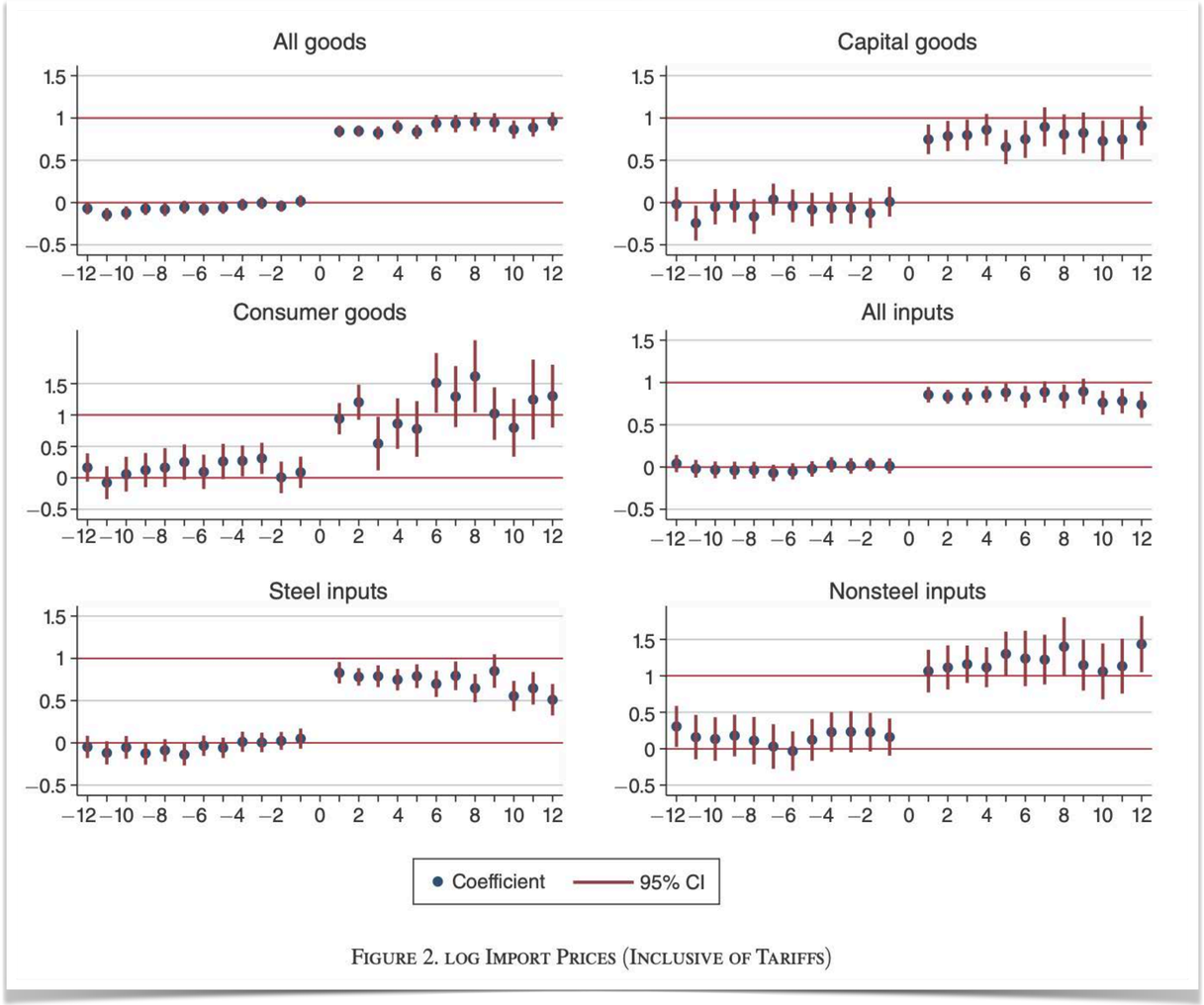


FIGURE 2. LOG IMPORT PRICES (INCLUSIVE OF TARIFFS)

Little Evidence that Foreigners Paid for US Tariffs

Amiti Redding Weinstein (AER P&P 2020)

- Complete pass-through suggests foreigners didn't pay for US tariffs
- **Caveat:** Relative prices relevant for US welfare = "US Imports/US Exports" ≠ "Some US Imports/Other US Imports"

$$\frac{d(P^* + t)}{dt} = 1 \leftrightarrow \frac{dP^*}{dt} = 0$$

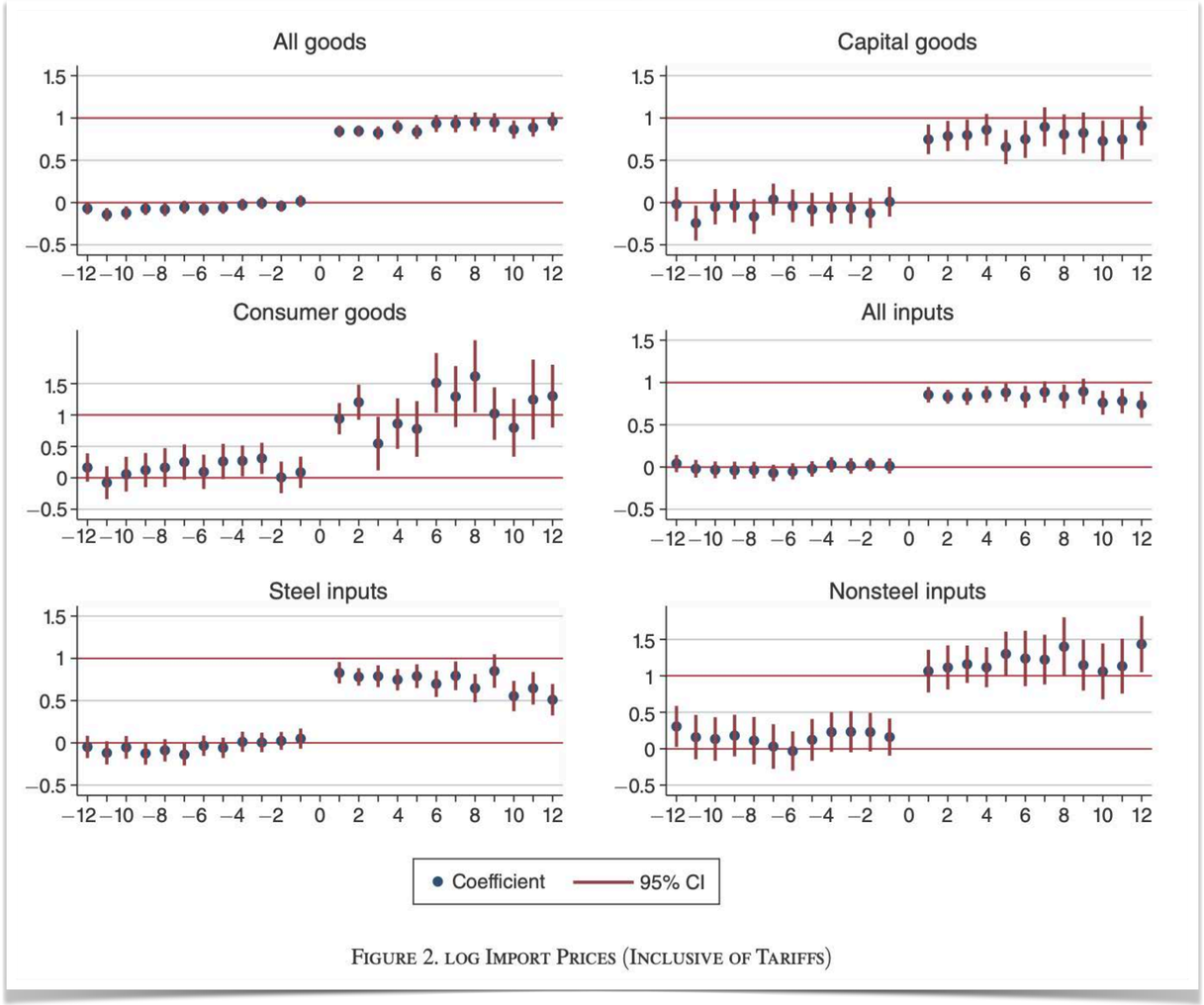


FIGURE 2. LOG IMPORT PRICES (INCLUSIVE OF TARIFFS)

Little Evidence that US Consumers Paid for US Tariffs

Cavallo Gopinath Neiman Tang (AER Insight 2021)

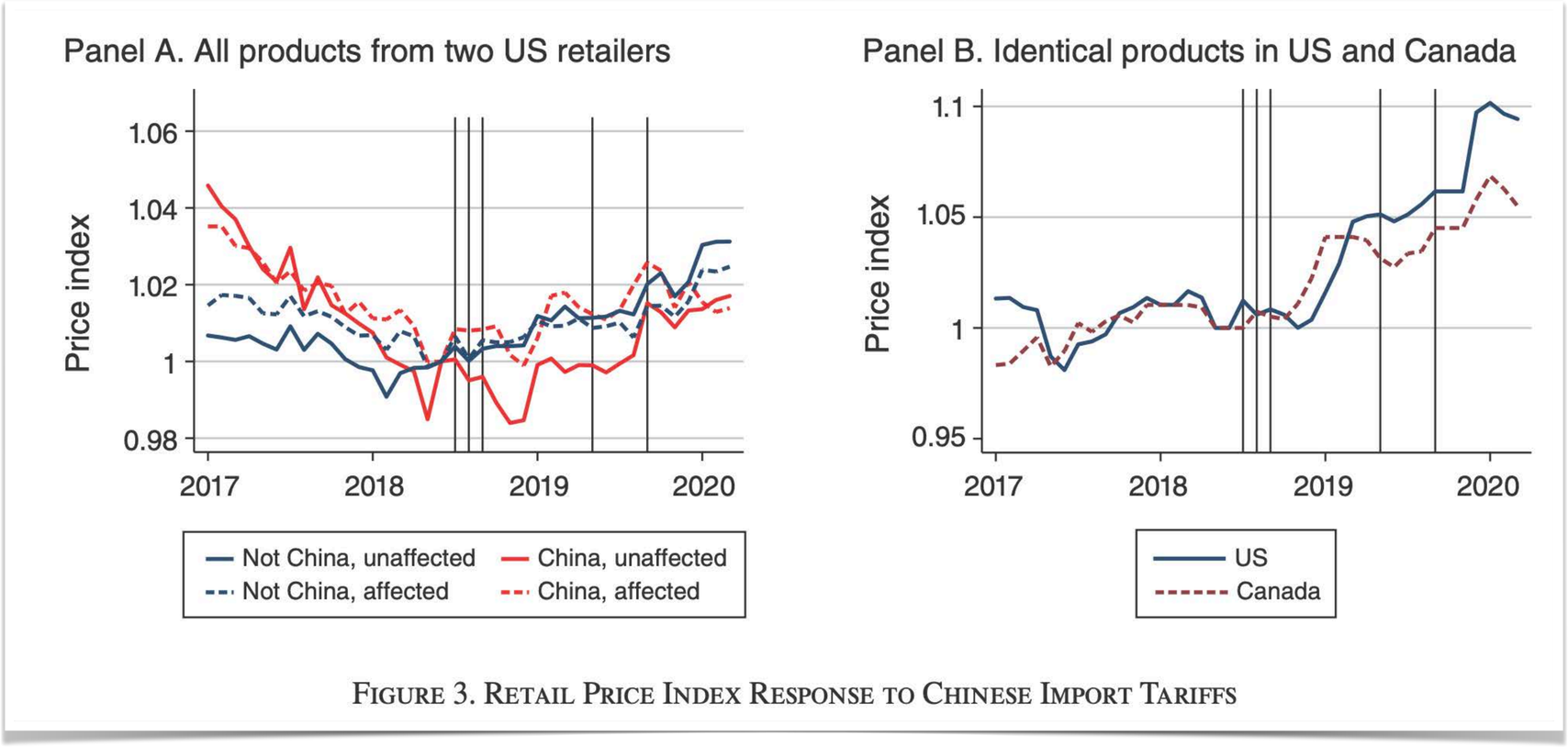


FIGURE 3. RETAIL PRICE INDEX RESPONSE TO CHINESE IMPORT TARIFFS

Little Evidence that US Consumers Paid for US Tariffs

Cavallo Gopinath Neiman Tang (AER Insight 2021)

- After-tax border prices move one-for-one with tariff
- Retail prices remain stable

→ Main effect of US tariffs = **smaller margins for retailers**

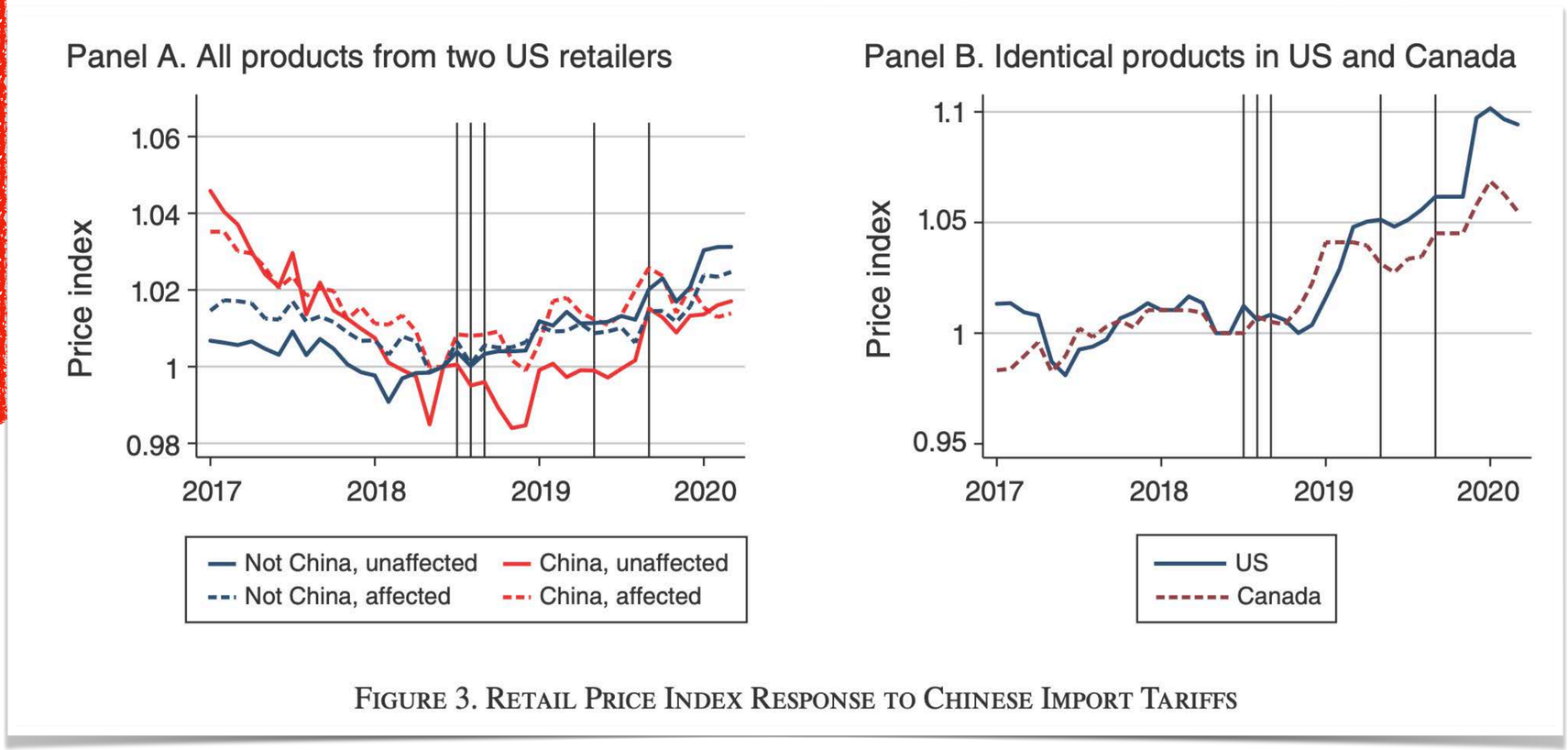


FIGURE 3. RETAIL PRICE INDEX RESPONSE TO CHINESE IMPORT TARIFFS

Little Evidence that US Consumers Paid for US Tariffs

Cavallo Gopinath Neiman Tang (AER Insight 2021)

- After-tax border prices move one-for-one with tariff
- Retail prices remain stable

→ Main effect of US tariffs = **smaller margins for retailers**

For 2025 US tariffs, estimate of retail price change = +0.7% (Cavallo Llamas Vazquez 2025)

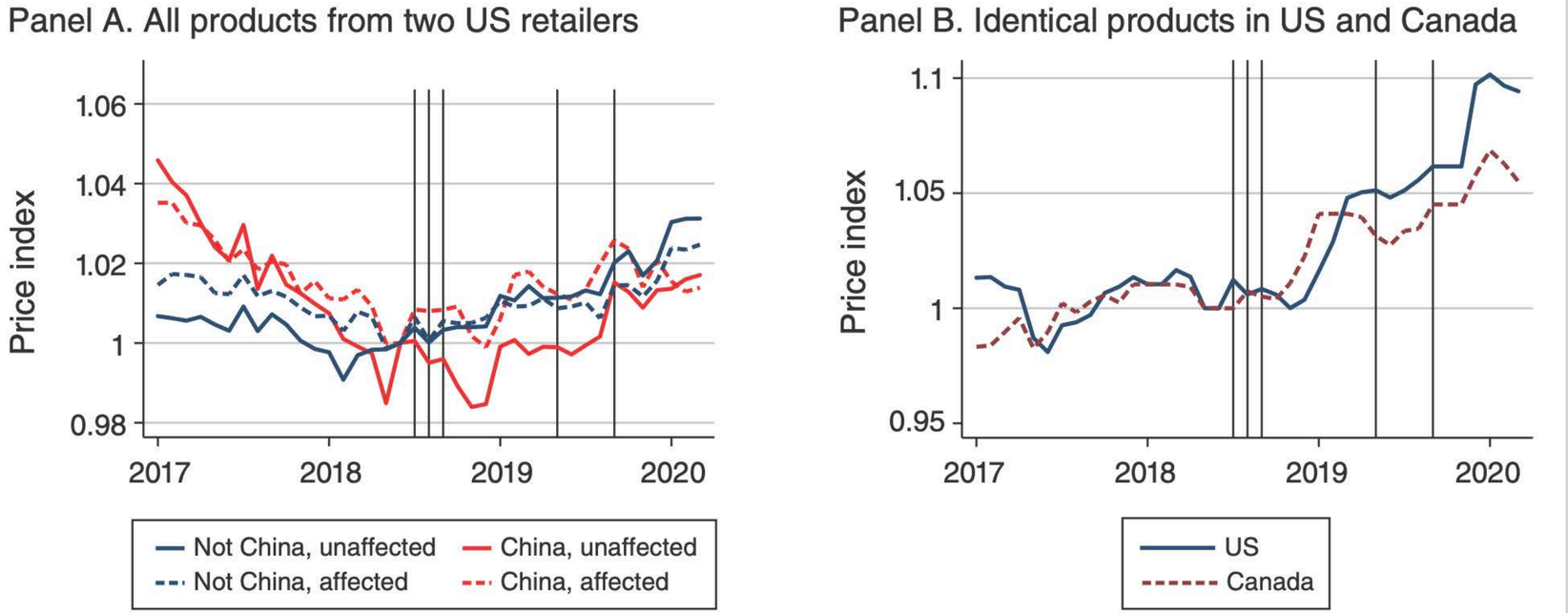


FIGURE 3. RETAIL PRICE INDEX RESPONSE TO CHINESE IMPORT TARIFFS

Little Evidence that US Manufacturing Benefited

Autor Beck Dorn Hanson (NBER WP 2024)

Table 2: Impact of Tariff Exposure on CZ Employment by Sector

	all	primary sector		manufacturing		other sectors			
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
	total effect	crop prod	other	metal prod, machines, cars	other	constr-uction	transport, ware-housing	business services	all other
import tariff exposure	1.682	0.207	0.144	-0.560	-0.139	0.201	0.164	0.970	0.695
	(1.334)	(0.122)	(0.268)	(0.376)	(0.394)	(0.243)	(0.200)	(0.535)	(0.856)
retaliatory tariff exposure	-4.811	-1.038	-0.500	0.166	0.014	-0.348	-1.024	-1.177	-0.903
	(1.731)	(0.504)	(0.727)	(0.318)	(0.590)	(0.360)	(0.234)	(0.304)	(0.693)
farm subsidies per capita	0.284	0.038	0.011	0.024	0.087	-0.059	-0.029	0.022	0.192
	(0.117)	(0.014)	(0.029)	(0.023)	(0.046)	(0.014)	(0.022)	(0.027)	(0.084)
t * (monthly Δ emp/pop in 2017)	0.528	0.002	0.102	0.032	0.016	0.053	0.025	0.083	0.215
	(0.040)	(0.002)	(0.039)	(0.007)	(0.010)	(0.011)	(0.012)	(0.017)	(0.056)
year-month FE	(✓)	(✓)	(✓)	(✓)	(✓)	(✓)	(✓)	(✓)	(✓)
sector*year-month FE	✓	✓	✓	✓	✓	✓	✓	✓	✓
Census division*year-month FE	✓	✓	✓	✓	✓	✓	✓	✓	✓
employment share in 2017	1.000	0.004	0.009	0.030	0.059	0.048	0.034	0.136	0.680

Notes: N=34,656 (722 commuting zones x 48 months: Jan 2016 – Dec 2019). The dependent variable for all regression models is the seasonally-adjusted employment-to-population ratio in the indicated subsector, which is indexed to 0 in 2018m1 in each commuting zone. Farm subsidies are denoted in 1,000s of 2018 dollars per working age population. All regressions include a control for the monthly change in CZ employment-to-population from 2017m1 to 2018m1, interacted with a linear time trend (the count of months since 2018m1). All regressions include time fixed effects interacted with a commuting zone's sectoral employment shares (agriculture and mining, manufacturing, non-goods sector) in 2012, and with indicators for the 9 geographic Census divisions. Regressions are weighted by commuting zone employment in 2012, and standard errors are clustered by state.

Little Evidence that US Manufacturing Benefited

Autor Beck Dorn Hanson (NBER WP 2024)

Table 2: Impact of Tariff Exposure on CZ Employment by Sector

	all	primary sector		manufacturing		other sectors			
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
	total effect	crop prod	other	metal prod, machines, cars	other	constr-uction	transport, ware-housing	business services	all other
import tariff exposure	1.682	0.207	0.144	-0.560	-0.139	0.201	0.164	0.970	0.695
	(1.334)	(0.122)	(0.268)	(0.376)	(0.394)	(0.243)	(0.200)	(0.535)	(0.856)
retaliatory tariff exposure	-4.811	-1.038	-0.500	0.166	0.014	-0.348	-1.024	-1.177	-0.903
	(1.731)	(0.504)	(0.727)	(0.318)	(0.590)	(0.360)	(0.234)	(0.304)	(0.693)
farm subsidies per capita	0.284	0.038	0.011	0.024	0.087	-0.059	-0.029	0.022	0.192
	(0.117)	(0.014)	(0.029)	(0.023)	(0.046)	(0.014)	(0.022)	(0.027)	(0.084)
t * (monthly Δ emp/pop in 2017)	0.528	0.002	0.102	0.032	0.016	0.053	0.025	0.083	0.215
	(0.040)	(0.002)	(0.039)	(0.007)	(0.010)	(0.011)	(0.012)	(0.017)	(0.056)
year-month FE	(✓)	(✓)	(✓)	(✓)	(✓)	(✓)	(✓)	(✓)	(✓)
sector*year-month FE	✓	✓	✓	✓	✓	✓	✓	✓	✓
Census division*year-month FE	✓	✓	✓	✓	✓	✓	✓	✓	✓
employment share in 2017	1.000	0.004	0.009	0.030	0.059	0.048	0.034	0.136	0.680

Notes: N=34,656 (722 commuting zones x 48 months: Jan 2016 – Dec 2019). The dependent variable for all regression models is the seasonally-adjusted employment-to-population ratio in the indicated subsector, which is indexed to 0 in 2018m1 in each commuting zone. Farm subsidies are denoted in 1,000s of 2018 dollars per working age population. All regressions include a control for the monthly change in CZ employment-to-population from 2017m1 to 2018m1, interacted with a linear time trend (the count of months since 2018m1). All regressions include time fixed effects interacted with a commuting zone's sectoral employment shares (agriculture and mining, manufacturing, non-goods sector) in 2012, and with indicators for the 9 geographic Census divisions. Regressions are weighted by commuting zone employment in 2012, and standard errors are clustered by state.

Question #6:
Are global tariffs unfair to the United States?

A Rigged Trading System?

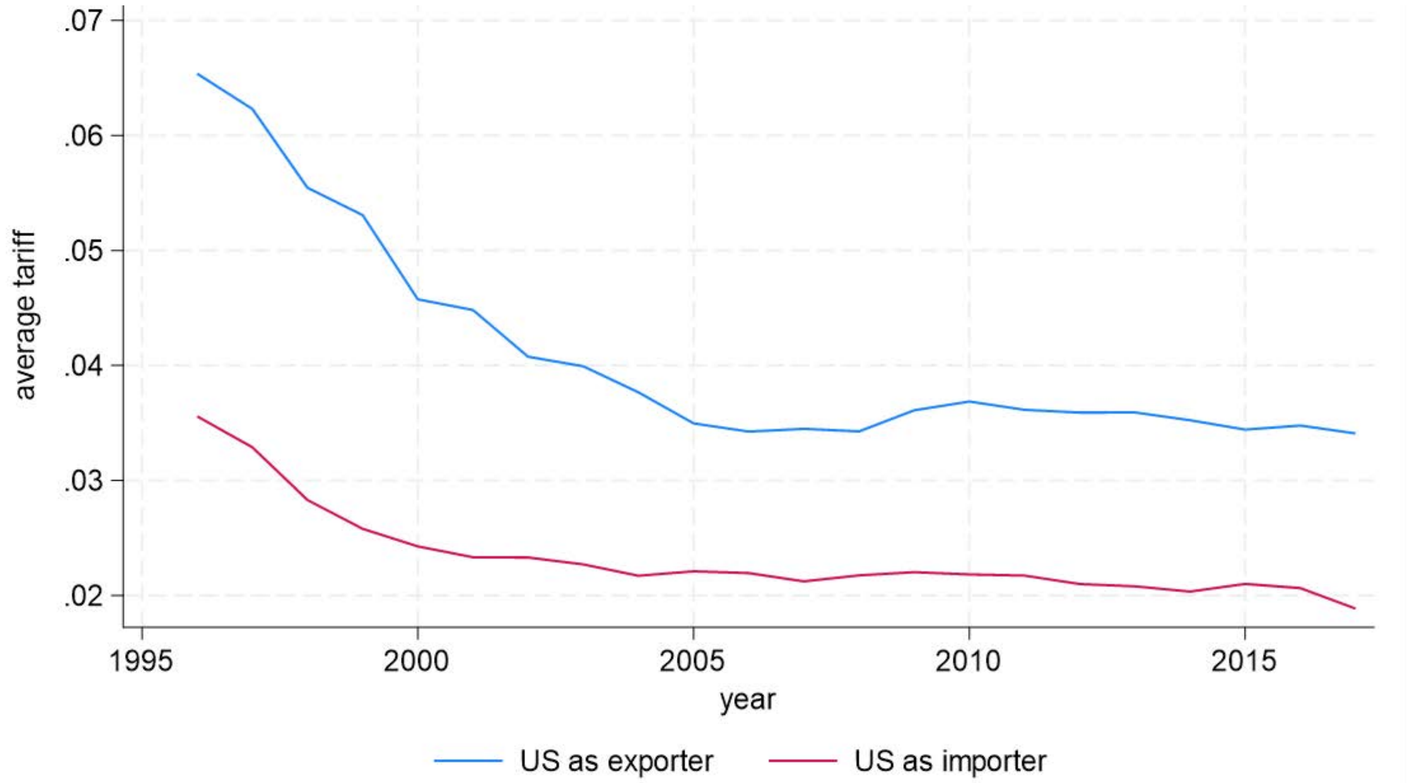
A Rigged Trading System?

"The international trade system is broken — and Donald Trump's reciprocal tariff doctrine will fix it. This long-overdue restructuring will make both the US and global economies more resilient and prosperous by restoring fairness and balance to a system rigged against America"

Peter Navarro, *Financial Times*, May 23 2025

The Asymmetry Between US and Foreign Tariffs

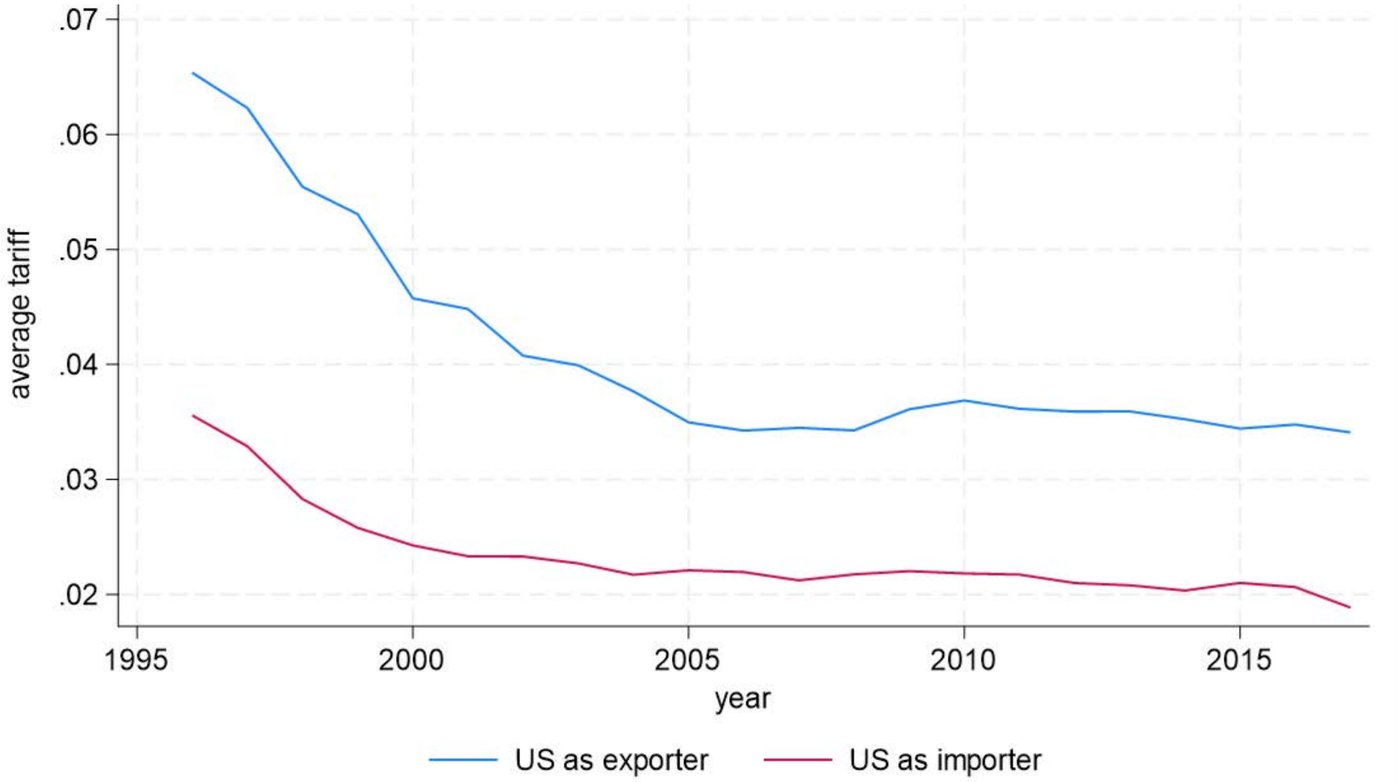
The Asymmetry Between US and Foreign Tariffs



Source: Average tariffs imposed by US as importer and faced by US as exporter computed using the same data and weights as in Adao, Becko, Costinot, and Donaldson (2026)

The Asymmetry Between US and Foreign Tariffs

- Before 2018, US tariffs are lower than foreign tariffs
- But small differences in a world of small tariffs



Source: Average tariffs imposed by US as importer and faced by US as exporter computed using the same data and weights as in Adao, Becko, Costinot, and Donaldson (2026)

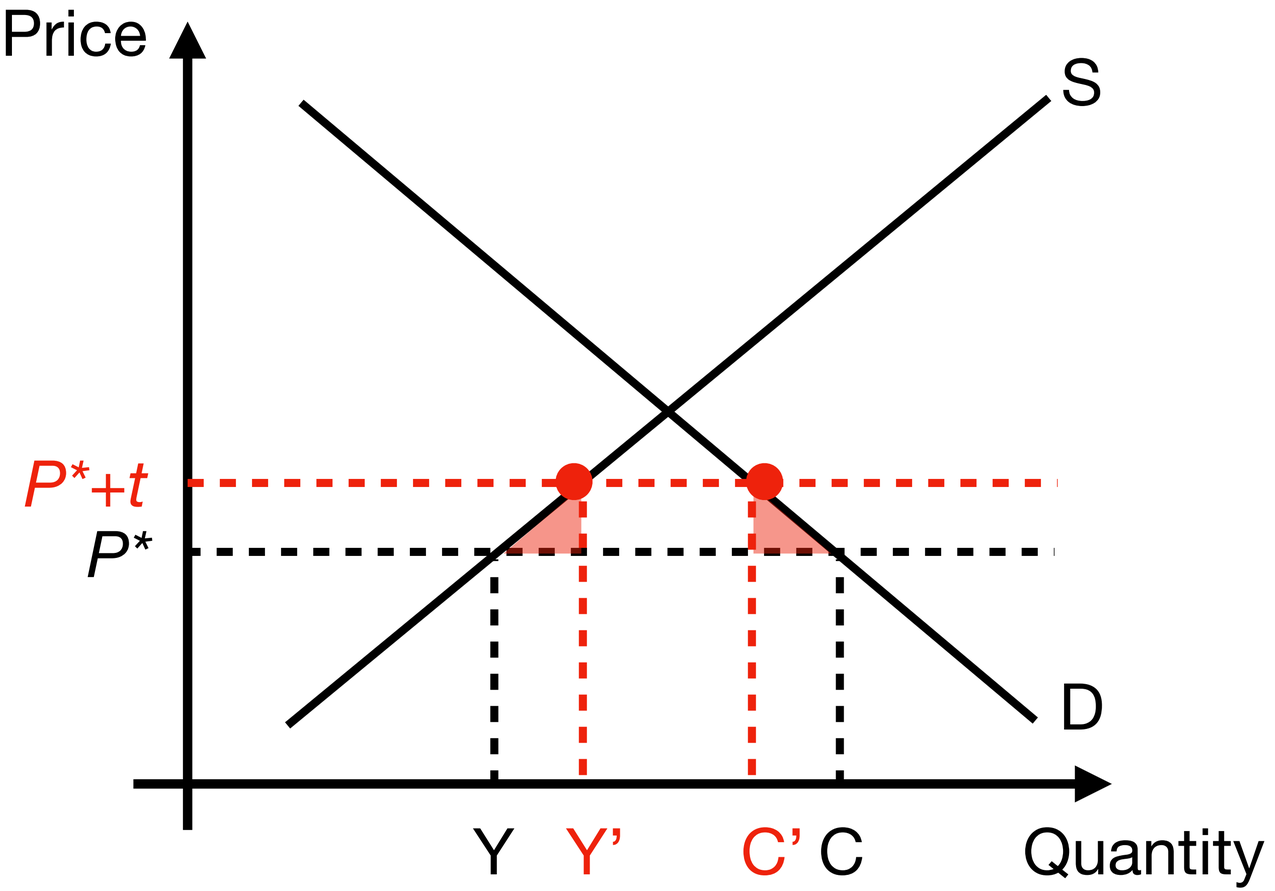
Question #7:
What Is (Really) Bad About Trade Wars?

Back to the Gains from Trade

… and the cost of trade protection

Cost of US-China trade war:

- 0.04% of US GDP
  (Fajgelbaum Goldberg Khandelwal Kennedy QJE 2020)
- 0.1% of US GDP
  (Caliendo Parro Handbook International Economics 2022)

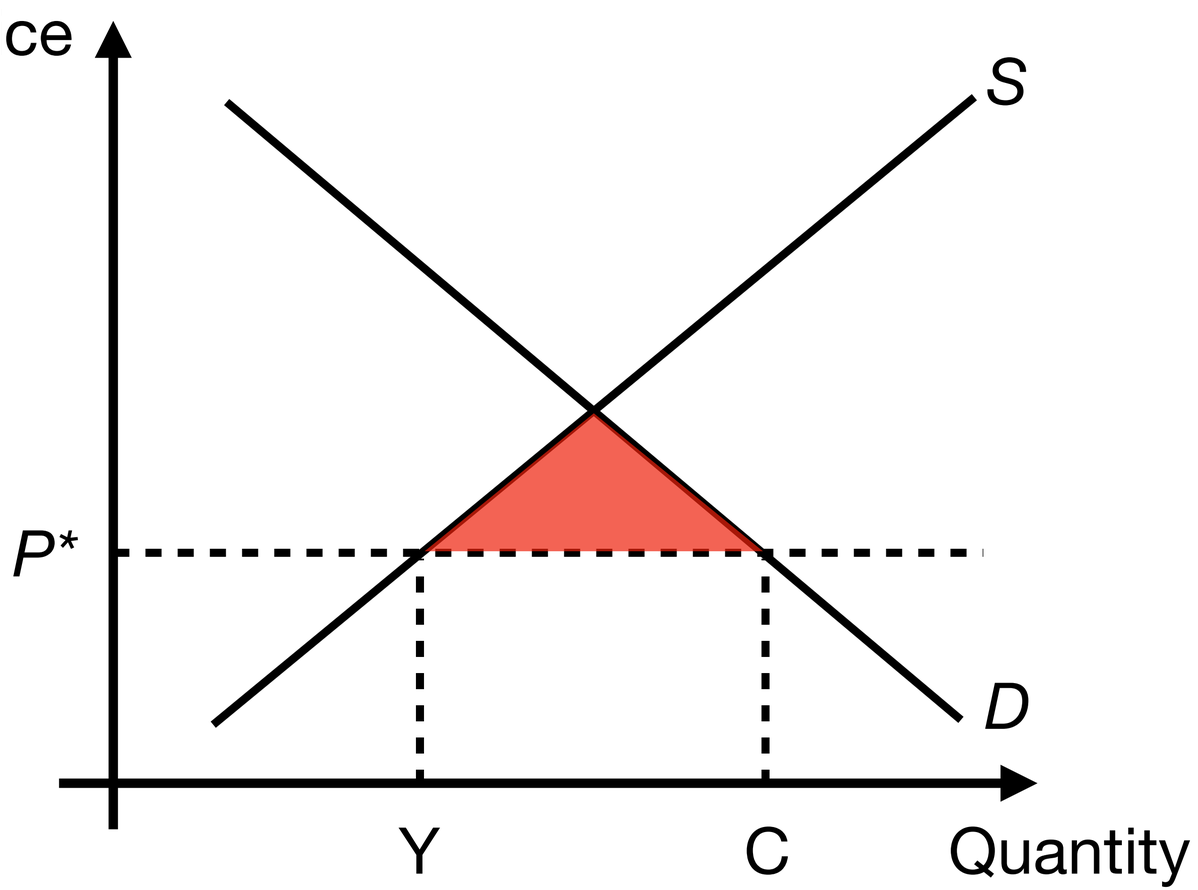


Back to the Gains from Trade

… and the cost of trade protection

Cost of US autarky:

- 2 to 8% of US GDP
  (Costinot Rodriguez Clare JEP 2018)



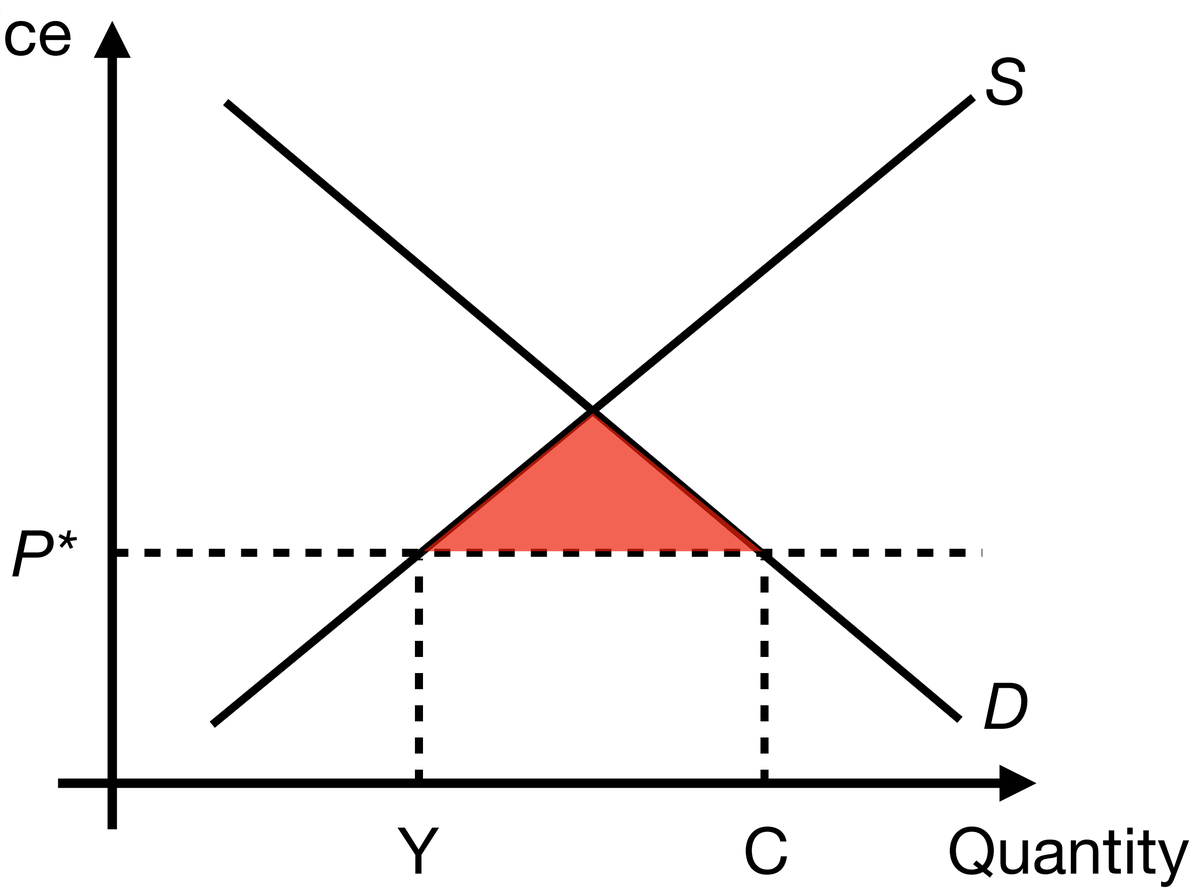
Back to the Gains from Trade

… and the cost of trade protection

Cost of US autarky:

- 2 to 8% of US GDP
  (Costinot Rodriguez Clare JEP 2018)

Why not larger?



Back to the Gains from Trade

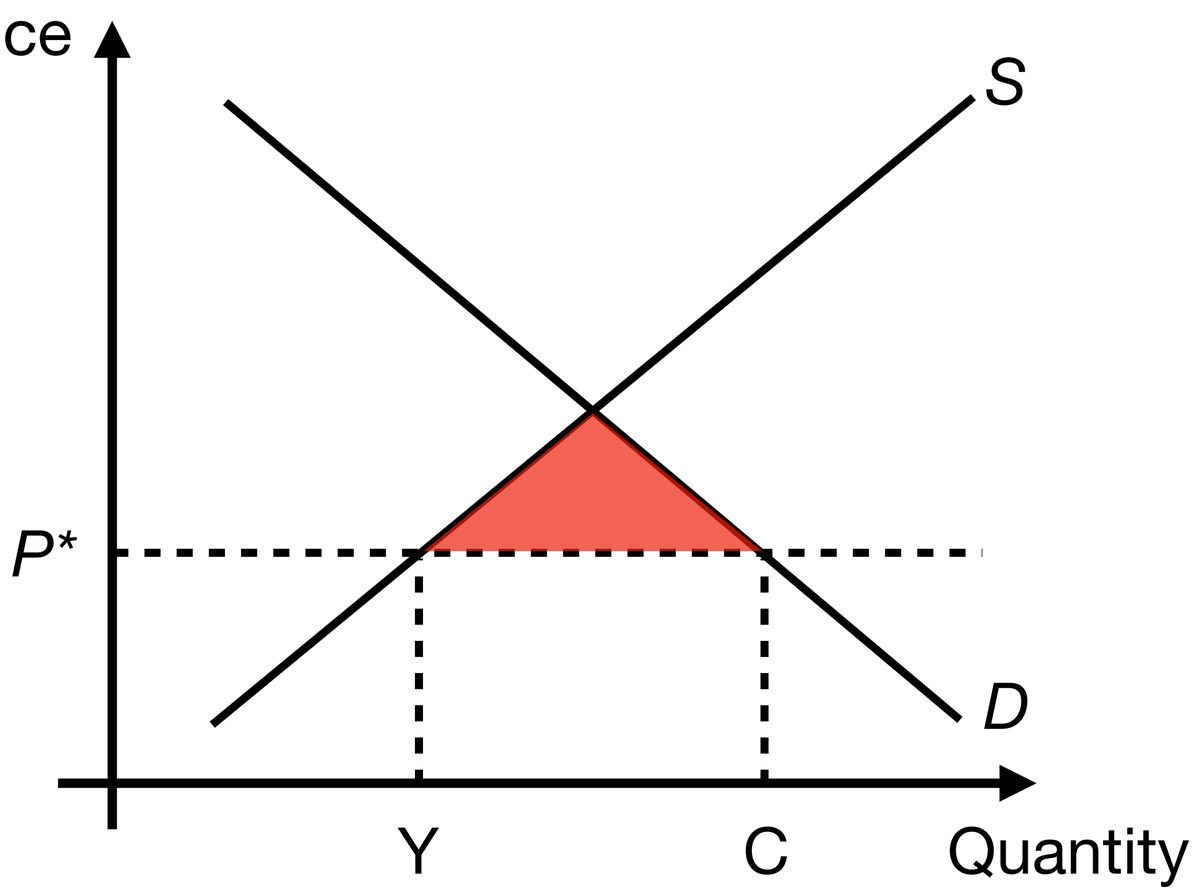
… and the cost of trade protection

Cost of US autarky:

- 2 to 8% of US GDP
  (Costinot Rodriguez Clare JEP 2018)

Why not larger?

- US Imports/US GDP ≈ 15%
  (red triangle has small base)



Back to the Gains from Trade

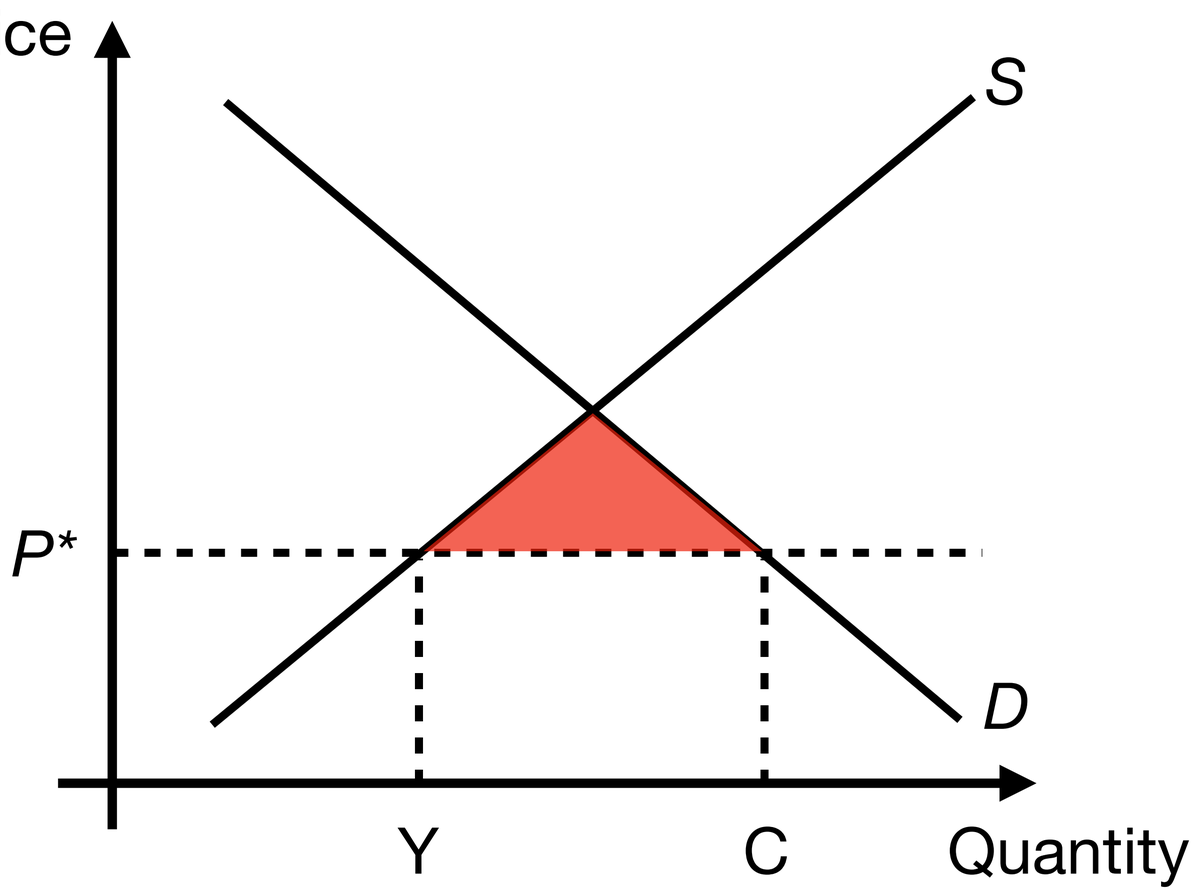
… and the cost of trade protection

Cost of US autarky:

- 2 to 8% of US GDP
  (Costinot Rodriguez Clare JEP 2018)

Why not larger?

- US Imports/US GDP ≈ 15%
  (red triangle has small base)
- US Import demand fairly elastic
  (red triangle has small height)
  - Considerable uncertainty about elasticity!
  - Maybe lower elasticity as US closer to autarky… especially in the short-run (e.g. rare earth elements)



Back to the Gains from Trade

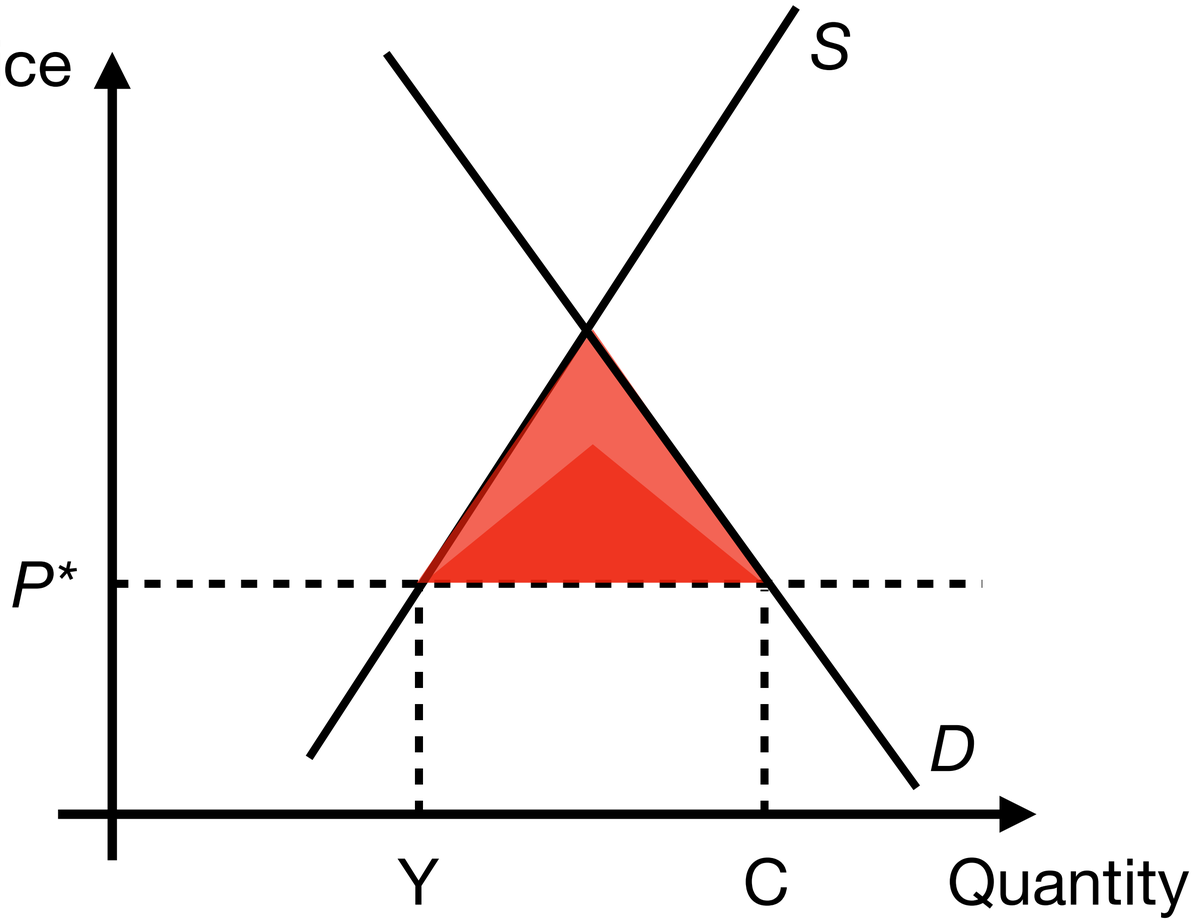
… and the cost of trade protection

Cost of US autarky:

- 2 to 8% of US GDP
  (Costinot Rodriguez Clare JEP 2018)

Why not larger?

- US Imports/US GDP ≈ 15%
  (red triangle has small base)
- US Import demand fairly elastic
  (red triangle has small height)
  - Considerable uncertainty about elasticity!
  - Maybe lower elasticity as US closer to autarky… especially in the short-run (e.g. rare earth elements)



Beyond Economic Gains from Trade

Make trade not war (Martin Mayer Thoenig RES 2008)

Beyond Economic Gains from Trade

Make trade not war (Martin Mayer Thoenig RES 2008)

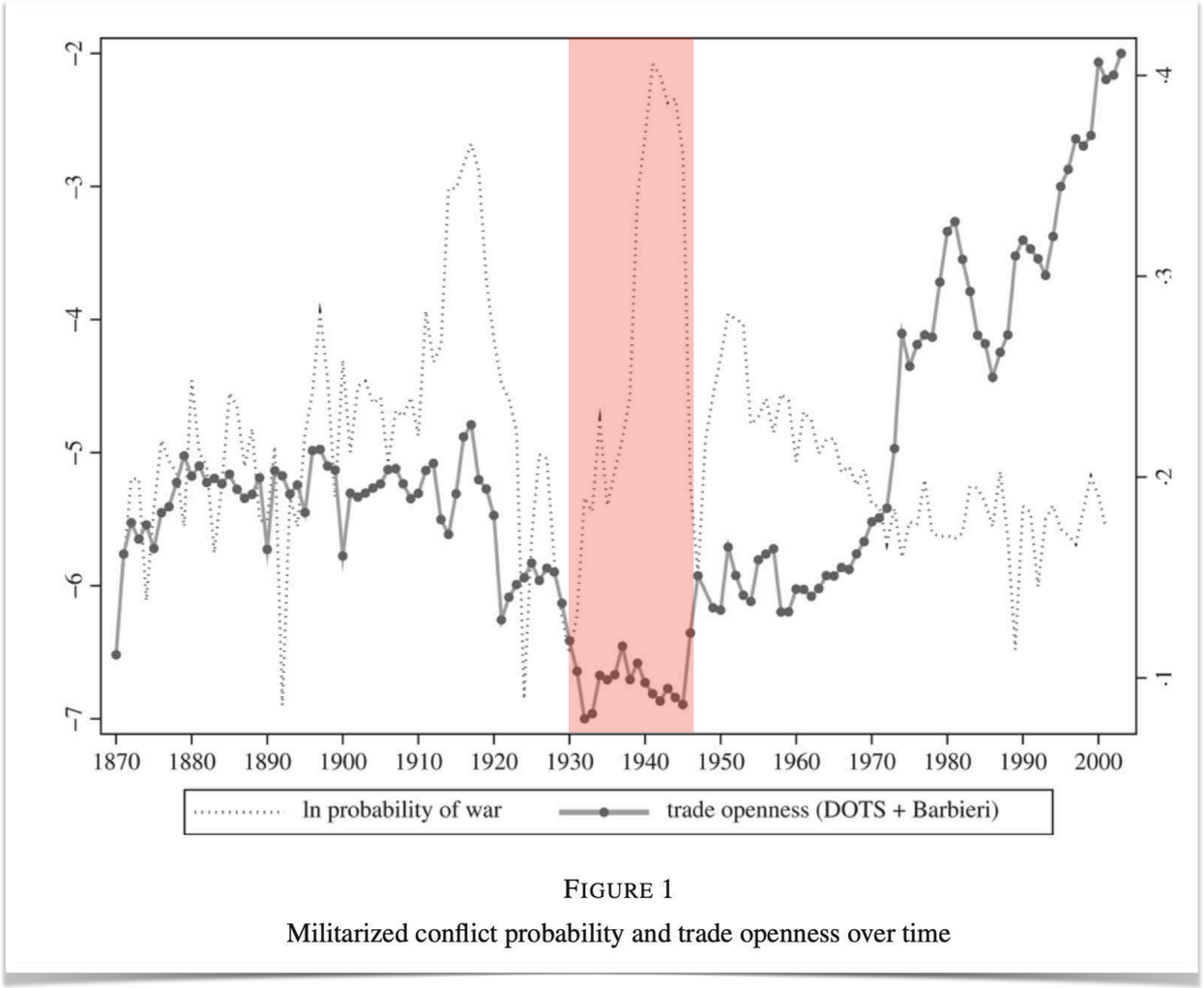


FIGURE 1

Militarized conflict probability and trade openness over time

RES.14-004 Seven Questions About Tariffs That Everyone Should Know The Answer To
IAP 2026