

The Economics of Trade

DIALOGUE
WITH
THE FED

Beyond Today's Financial Headlines

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CENTRAL TO AMERICA'S ECONOMY®

- Confederate troops capture Fort Sumter:
April 13, 1861
- Lincoln's first civil-war decision, April 15, 1861: “... *hereby do call forth, the militia of the several States of the Union, to the aggregate number of seventy-five thousand ...*”
- What was Lincoln's next major decision?

- *Naval blockade of the Southern ports: April 19, 1861*
- What's trade got to do with it?
- C O T T O N !
- The blockade erected export barriers.

Trade among nations

- David Ricardo, 1817: Principle of *Comparative Advantage*
- Paul Samuelson (Nobel Laureate, 1970) was once asked by mathematician Stanislaw Ulam “Name me one proposition in the social sciences which is both true and non-trivial.”
- Samuelson’s answer (decades later): *The Ricardian theory of comparative advantage.*

- Samuelson: *“That it is logically true need not be argued before a mathematician; that it is not trivial is attested by the thousands of important and intelligent men who have never been able to grasp the doctrine for themselves or to believe it after it was explained to them.”*

OUTLINE

- Comparative Advantage
- Gains from trade
- Trade and Jobs

COMPARATIVE ADVANTAGE

- Imagine two countries engaged in the production of two goods: wine and t-shirts.
- In one day, a worker in Country 1 can produce a maximum of 50 t-shirts OR a maximum of 10 bottles of wine.
- A worker in Country 2 can produce a maximum of 400 t-shirts OR a maximum of 20 bottles of wine.

	T-SHIRT	WINE
Country 1	50	10
Country 2	400	20

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- A worker in Country 2 can produce a maximum of 400 t-shirts or a maximum of 20 bottles of wine.

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- A worker in Country 2 can produce a 20 maximum of 400 t-shirts or a maximum of bottles of wine.

- Country 2 has the *absolute advantage*: Country 2 is better at producing both goods.
- How can there be mutually beneficial trade between the two countries?
- David Ricardo's insight: Gains from trade are due to **comparative advantage**.

- How costly is a bottle of wine in Country 1?
- How costly is it in Country 2?

	T-SHIRT	WINE
Country 1	50	10
Country 2	400	20

- If Country 1 produces 10 fewer bottles of wine, it frees up an entire day's worth of labor, which can be used to produce 50 t-shirts.
- So, one bottle of wine costs 5 t-shirts in Country 1.

	T-SHIRT	WINE
Country 1	50	10
Country 2	400	20

- If Country 2 produces 20 fewer bottles of wine, it frees up an entire day's worth of labor, which can be used to produce 400 t-shirts.
- So, one bottle of wine costs 20 t-shirts in Country 2.

- Wine costs more in Country 2 than in Country 1.
- Country 1 has a *comparative advantage* in the production of wine.
- This forms the basis of trade among nations.
- Is there a mutually beneficial pattern of production and exchange?

- Specialization: Country 1 produces wine and Country 2 produces t-shirts.

	T-SHIRT	WINE
Country 1	50	10
Country 2	400	20

- International Trade: Imagine a market price--- 10 t-shirts for each bottle of wine.
- Would Country 1 prefer trade or close its borders? *Trade.*

	T-SHIRT	WINE
Country 1	50	10

- How about Country 2? *Trade.*

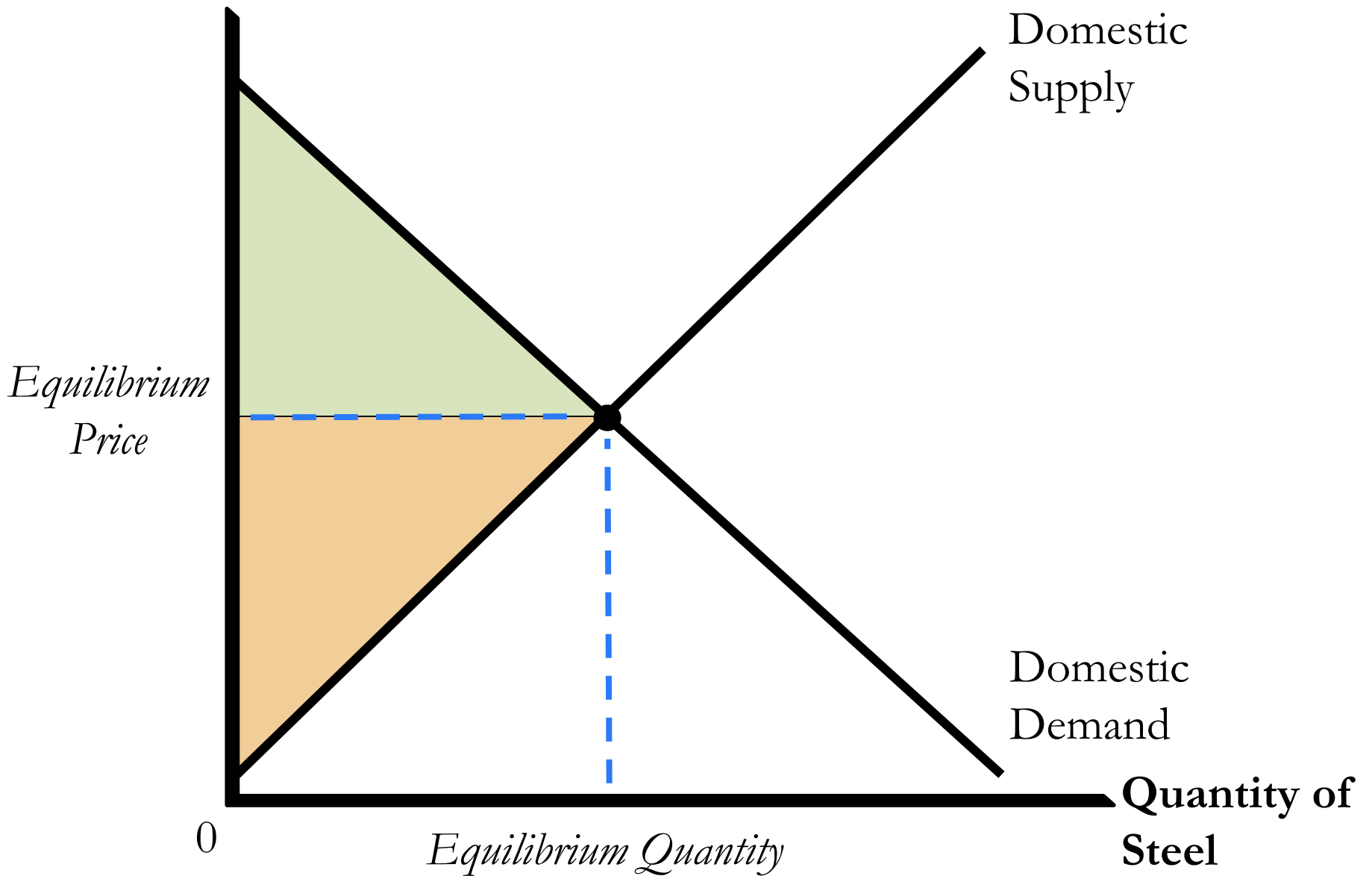
	T-SHIRT	WINE
Country 2	400	20

- Both countries find it mutually beneficial to trade.
- Trade makes both countries better off.

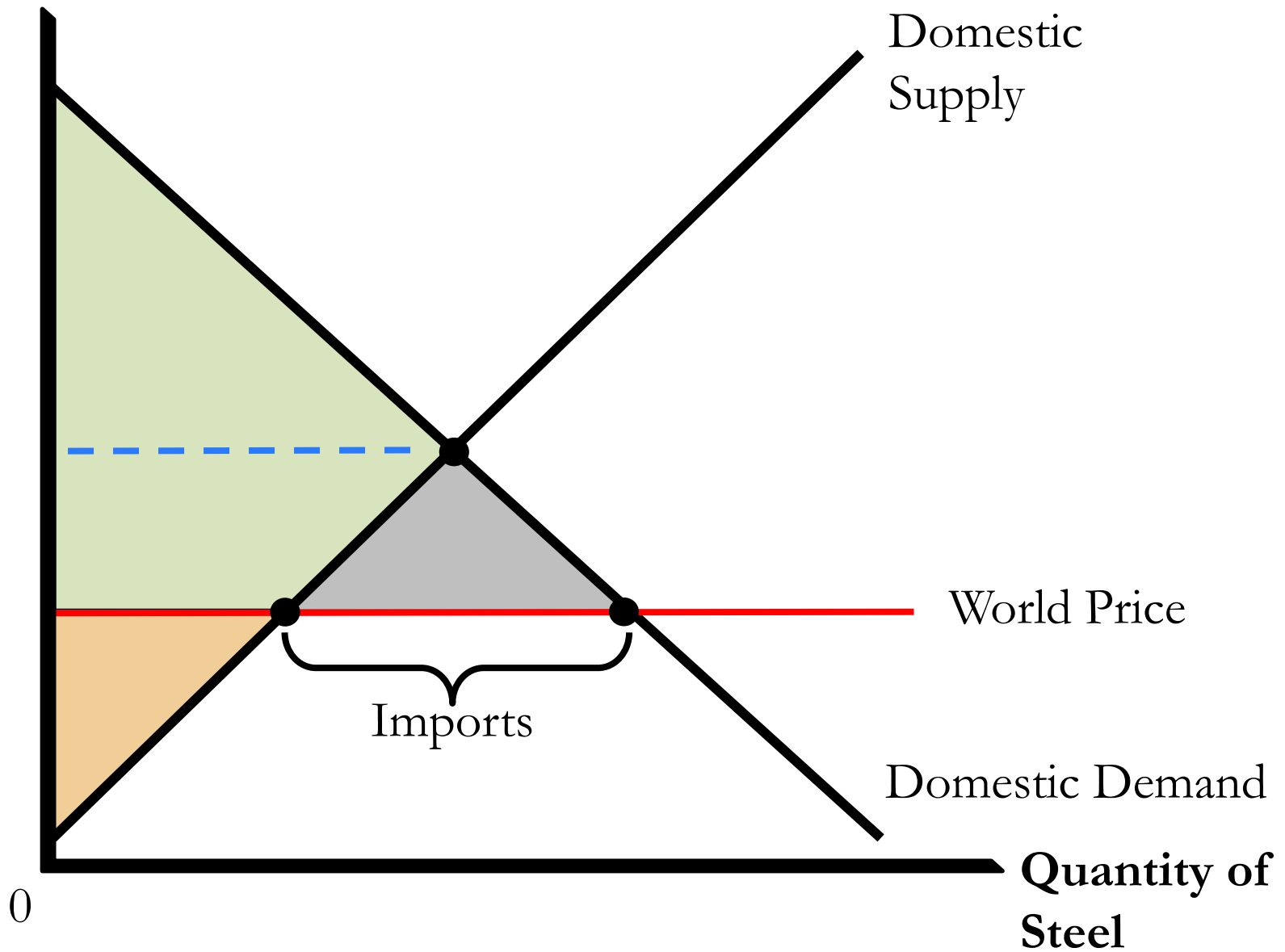
- Each country, as a whole, is better off with trade.
- But are there winners and losers in each country?

GAINS FROM TRADE

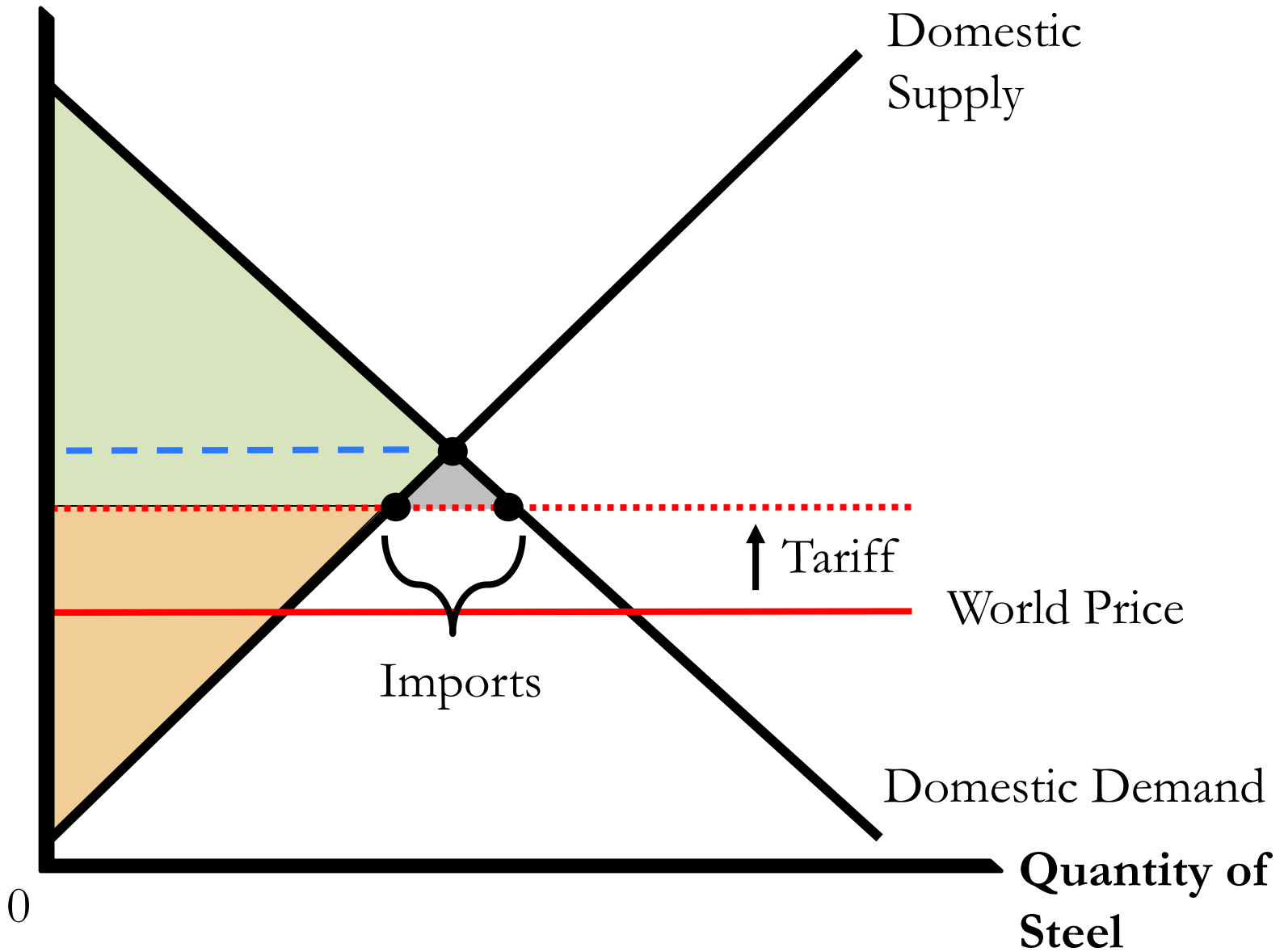
Price of Steel



Price of Steel



Price of Steel



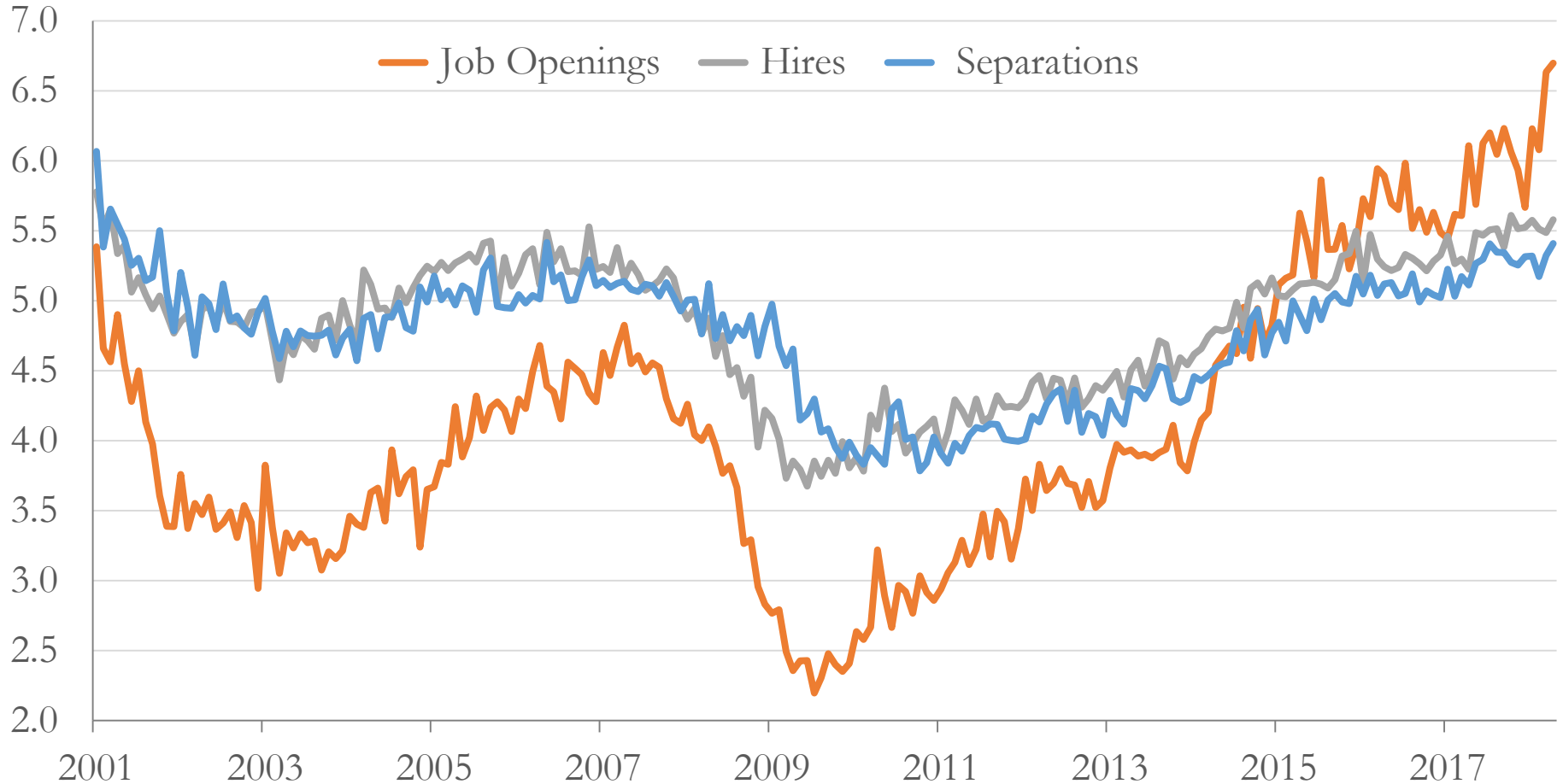
TRADE AND JOBS

- Recent study by Autor, Dorn, and Hanson estimate the loss of employment in manufacturing due to imports from China over a 12-year period.
- Their estimate: 2.4 million workers.
- Or, on average, 200,000 workers per year.

Source: The China Shock: Learning from Labor Market Adjustment to Large Changes in Trade (2016)

Job Openings, Hires, Separations

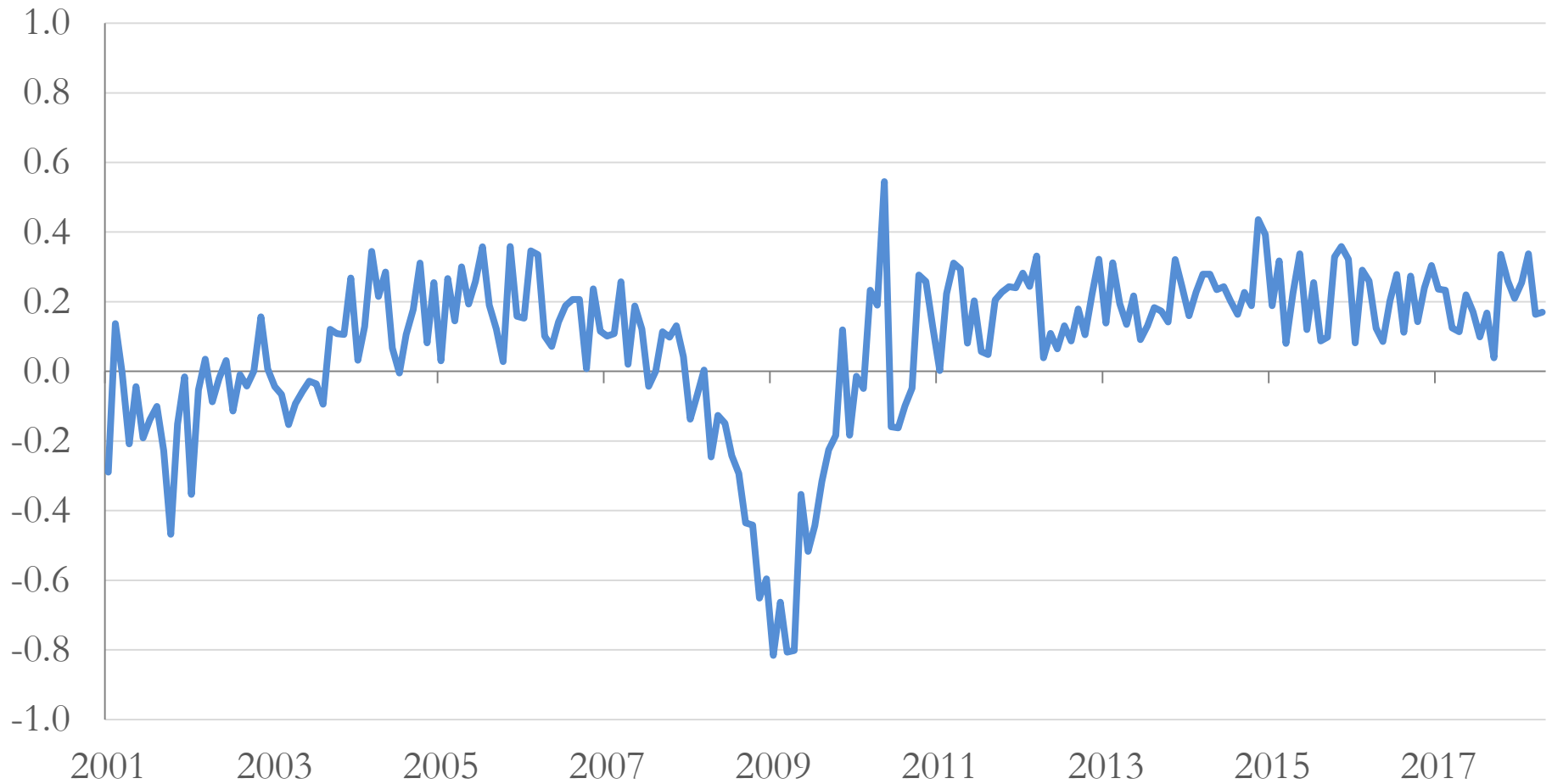
Millions



Source: BLS, Haver Analytics, authors' calculation

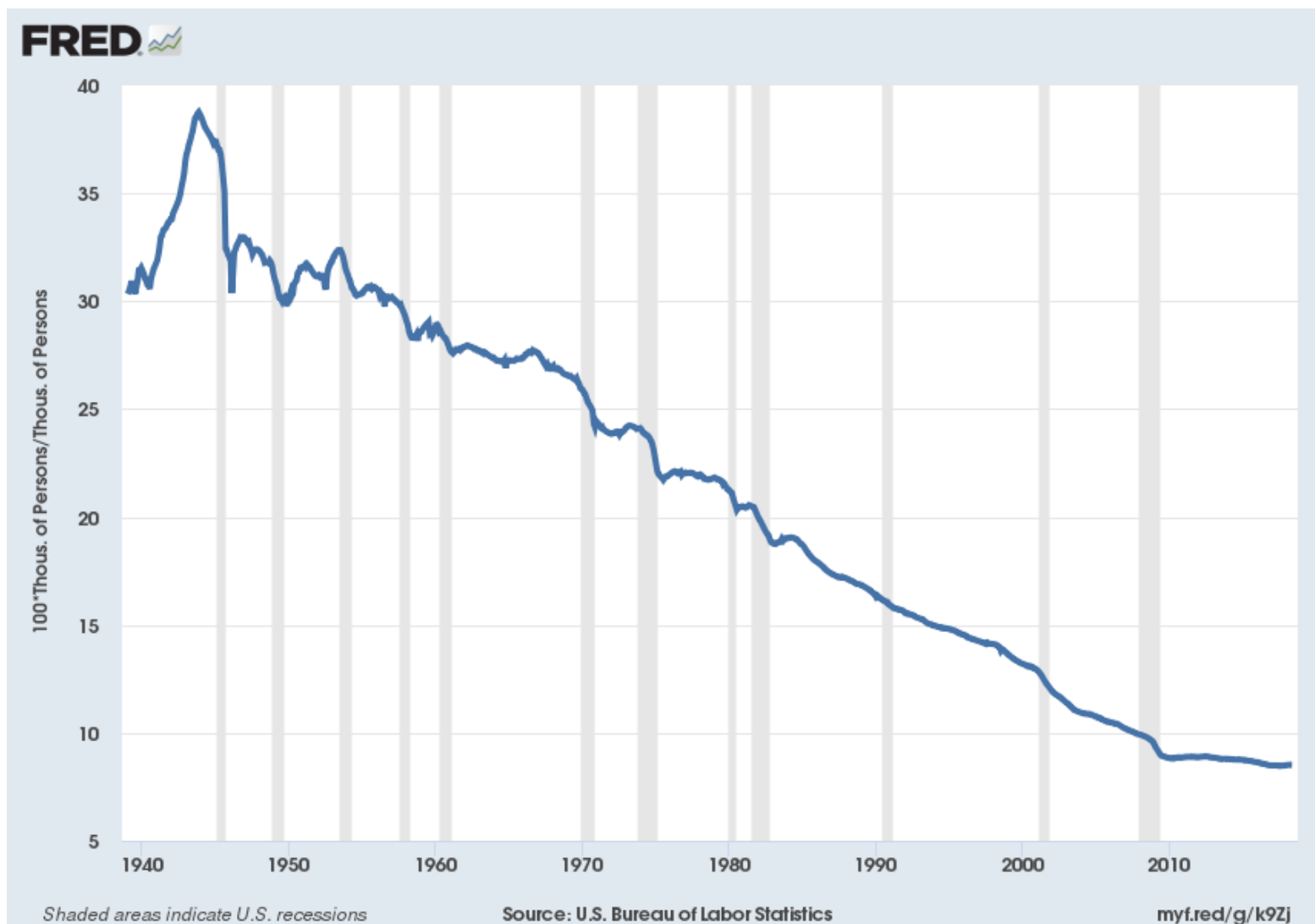
Hires minus Separations

Millions



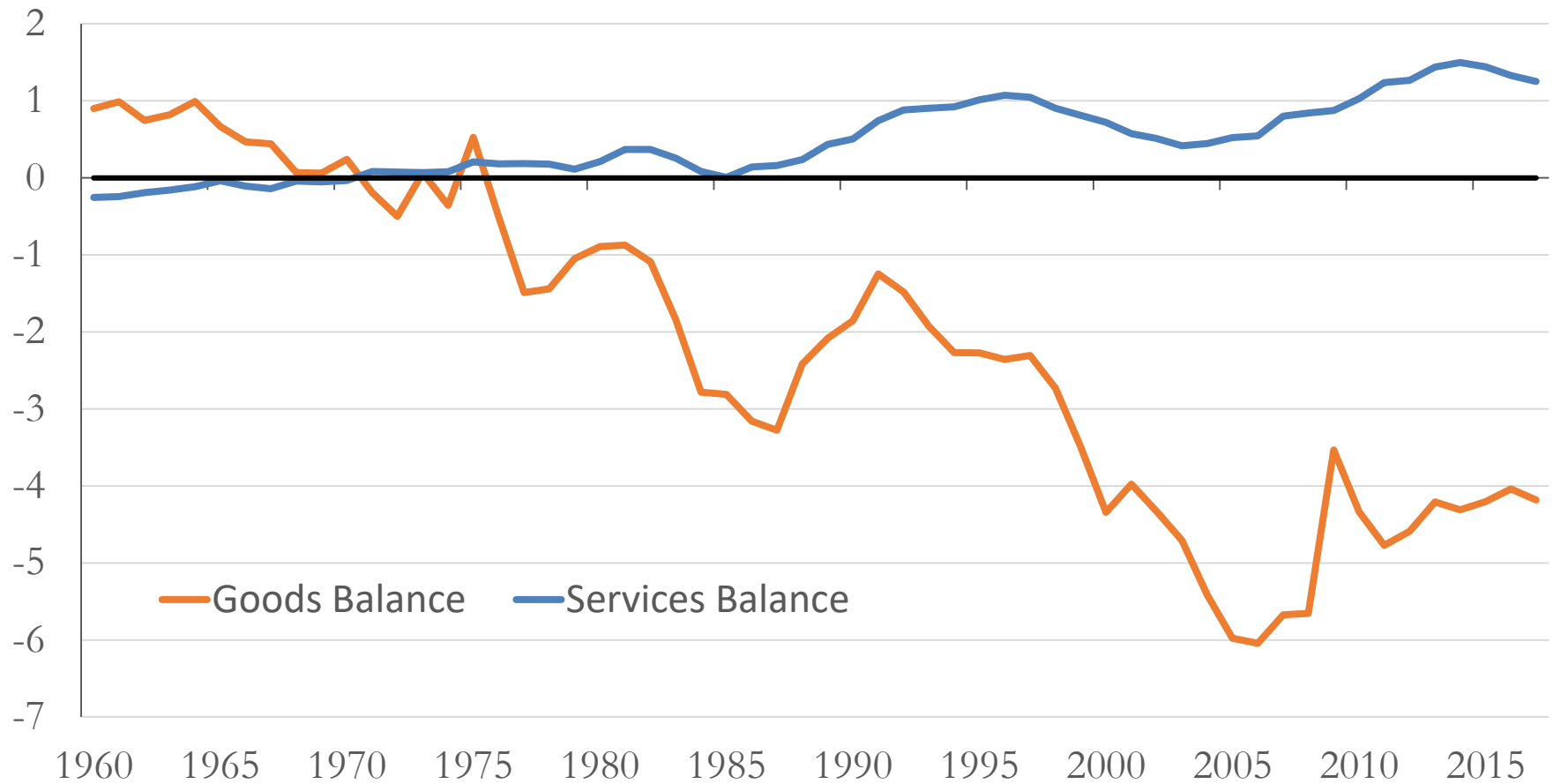
Source: BLS, Haver Analytics, authors' calculation

Manufacturing Share of U.S. Employment



U.S. Trade Balance

Percent of GDP



Source: BEA, Haver Analytics

SUMMARY

- Country as a whole gains from trade, but there might be winners and losers.
- Typically, the losses are concentrated while the gains are spread more widely.
- Redistribution of the gains might be necessary to make *everyone* better off.

- Estimates of job losses in the U.S. seem small relative to regular job turnover in the U.S.
- Employment in manufacturing has been declining for almost 70 years.
- U.S. has a trade surplus in services.

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