Trade and Foreign Aid

EC 390 - Development Economics

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Trade

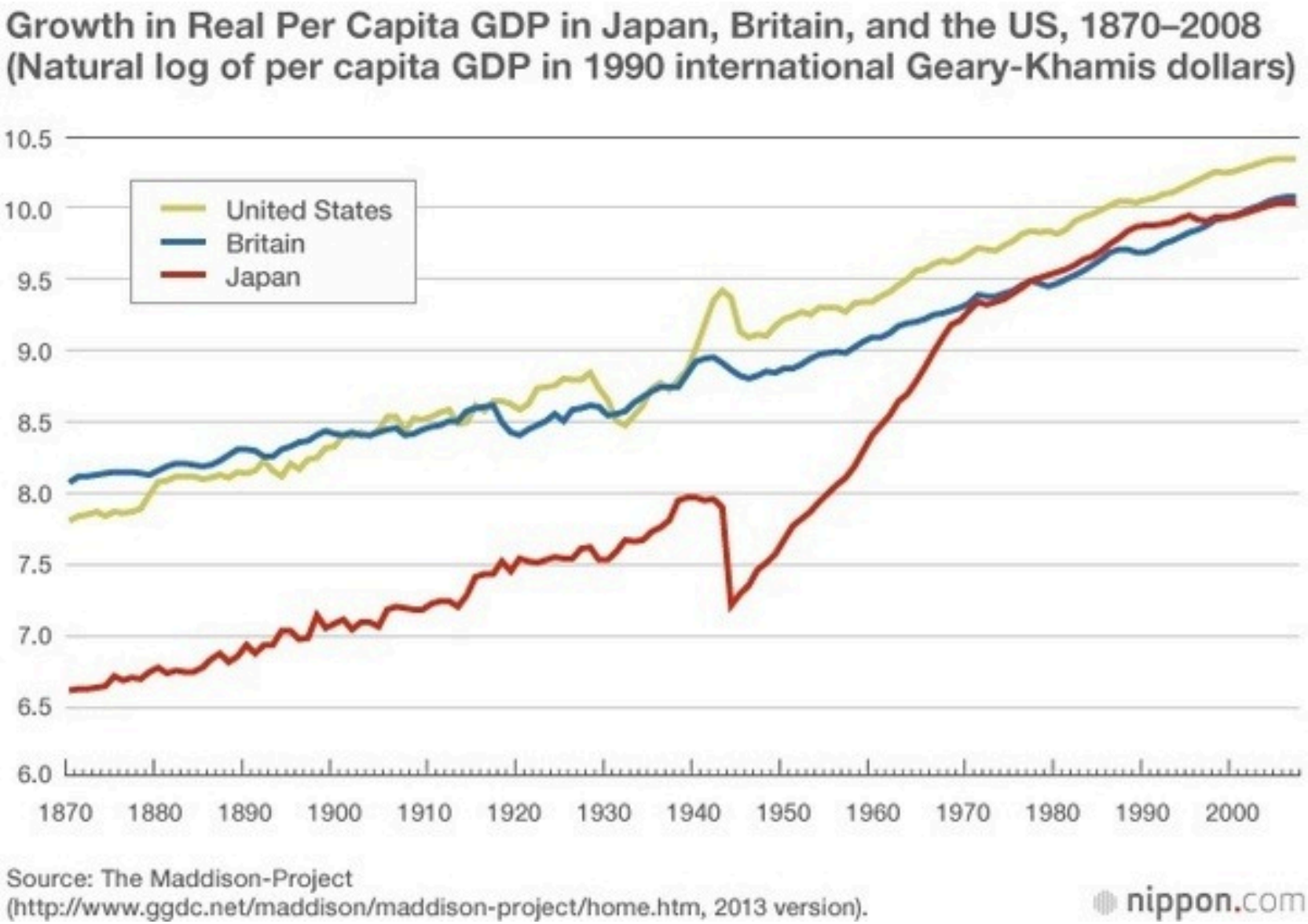
Why is Trade Is Important

Case Study: Japan

Japan's **economic growth after WWII was large**

- Trade played a large role
- First they exported textiles
- Then started exporting more advanced consumer goods: Electronics, vehicles, machines, etc.
- Exports increased from **19 Billion USD in 1970** to **270 Billion USD in 1989**

Case Study: Japan

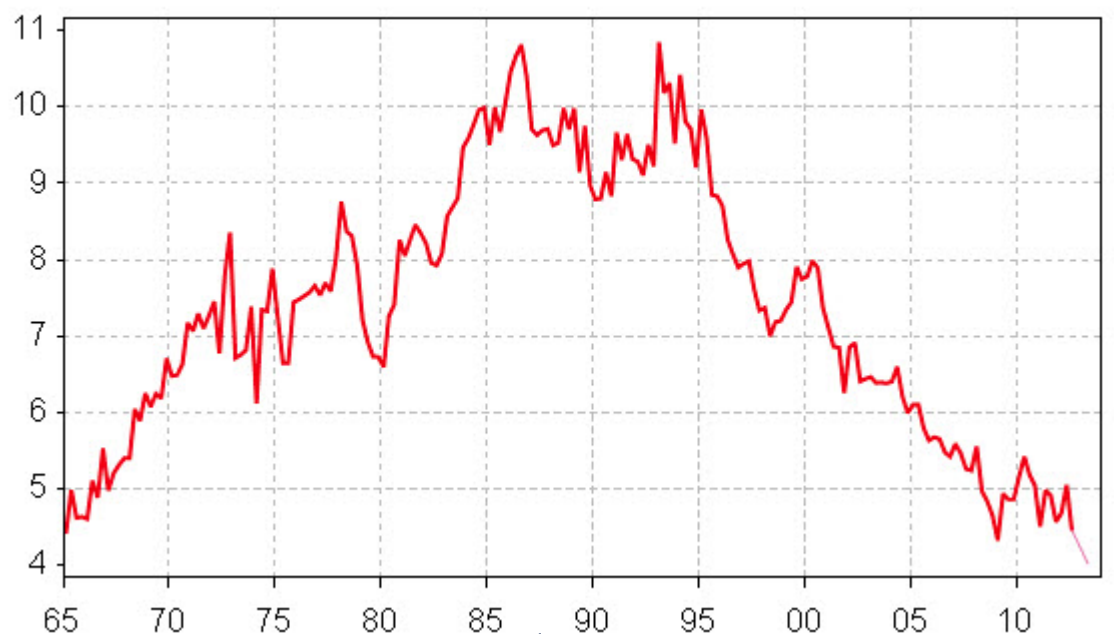


Trade and Growth

- More recently, **China's economy** has grown substantially and many economists point to their emphasis on trade as a main cause

- If we look at Japan's share of global exports over time, the drop coincides with China's entry into the world market

Figure 1: Japan share of global exports



Trade and Growth

- More recently, **China's economy** has grown substantially and many economists point to their emphasis on trade as a main cause
- **Big question:** If we have empirical evidence that **trade can help grow an economy**, why doesn't everyone **"trade their way out of poverty"**?

They're trying, but its not that easy


Election 2016: Your money, your vote

U.S. has lost 5 million manufacturing jobs since 2000

by Heather Long @byHeatherLong

March 29, 2016: 3:47 PM ET

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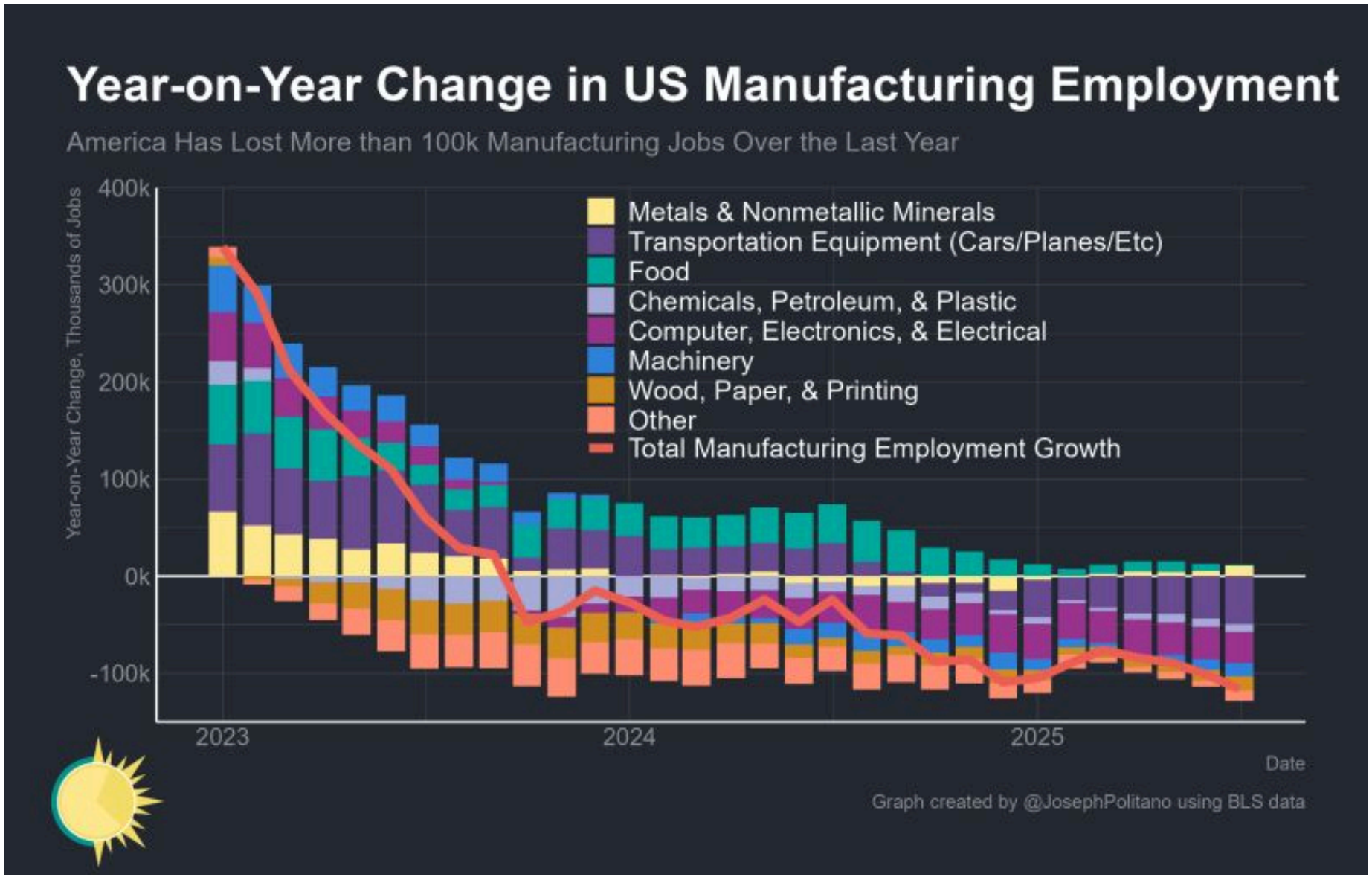
Trade and Growth

Trade and Growth



Winners and Losers

- Economists like to argue that **trade results in the most efficient allocation of production**
  - Goods are produced where costs are lower
- In general, this results in lower prices for consumers and increased welfare
- However, benefits are not distributed equally across the population
- If the US imports cars from Japan, what happens to US auto workers?
- **In theory**, those that **"lose"** from trade could be compensated by those that **"win"**
- **In practice**, that does not happen

Backlash From Trade

- Recently (over the past few years) there has been a great deal of push back in **developed countries** against **free trade and globalization**
  - **Globalization:** The increasing integration of national economies into expanding international markets
- This resistance to globalization comes from **both political sides**
- The rise of **populism** across the globe has been partly attributed to this **anti-globalization/anti-trade sentiment**

Globalization

As with everything, there are **Benefits** and **Costs**

Benefits

- Efficiency gains from trade
- More rapid transfers of technology
- Reduced probability of international wars
- Increased demand for a countries products (exports)

Costs

- Emphasizes **inequalities** across and within countries
- Accelerates environmental degradation
- International dominance of riches nations

Globalization and Trade

- **Trade liberalization** has been key to the encouragement of globalization
- **Trade liberalization** refers to the reduction of global **tariffs**
  - **Tariff: A fixed-percentage tax on the value of an imported commodity levied at the point of entry into the importing country**
- Trade liberalization has occured through international agreements to lower the costs of trade between countries
  - It came into fashion after WWII, when European countries (and the US) signed the General Agreement on Tariffs and Trade (GATT)
- European countries realized that by integrating their economies they could reduce the likelihood of another large-scale war on the continent

Free Trade and Growth

- **Free trade:** The importation and exportation of goods without any barriers in the form of tariffs, quotas, or other restrictions
- Much like **free markets**, free trade has many desirable properties
  - Also like free markets, **free trade exists more in theory than in practice**
- Nevertheless, **free trade** is what we use as a basis for international trade in economics
- Let's set up a **basic model of trade**

Model of Trade

Motivation: Developed economies are better at producing most goods. Then wehy do we see countries trading?

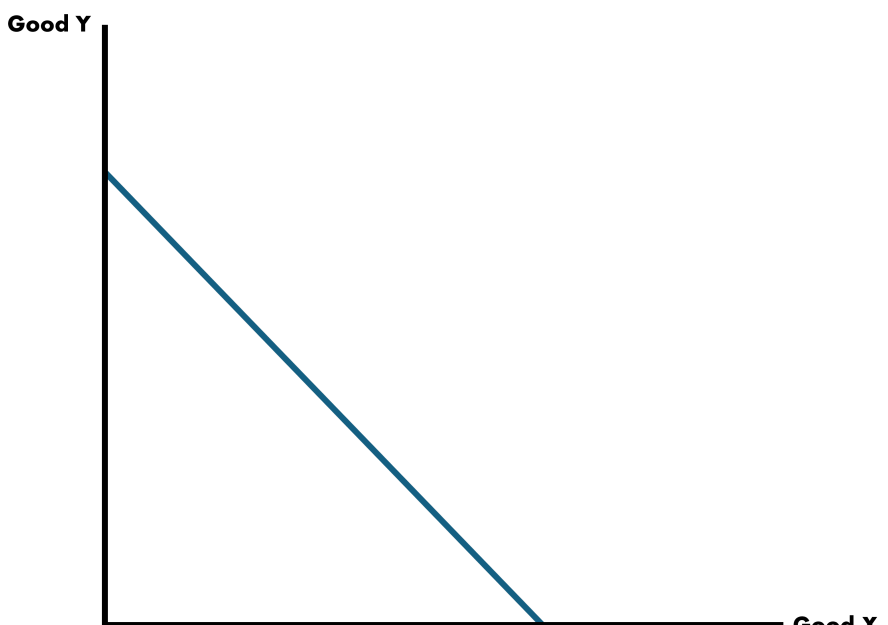
Let's use some **simple assumptions**:

- Two countries
- Two goods
- One factor of production → only require labor to produce any good
- No transport costs

- Our factor of production assumption implies that if we observe trade between two countries, it **must** be driven by differences in labor productivities across borders

Model of Trade

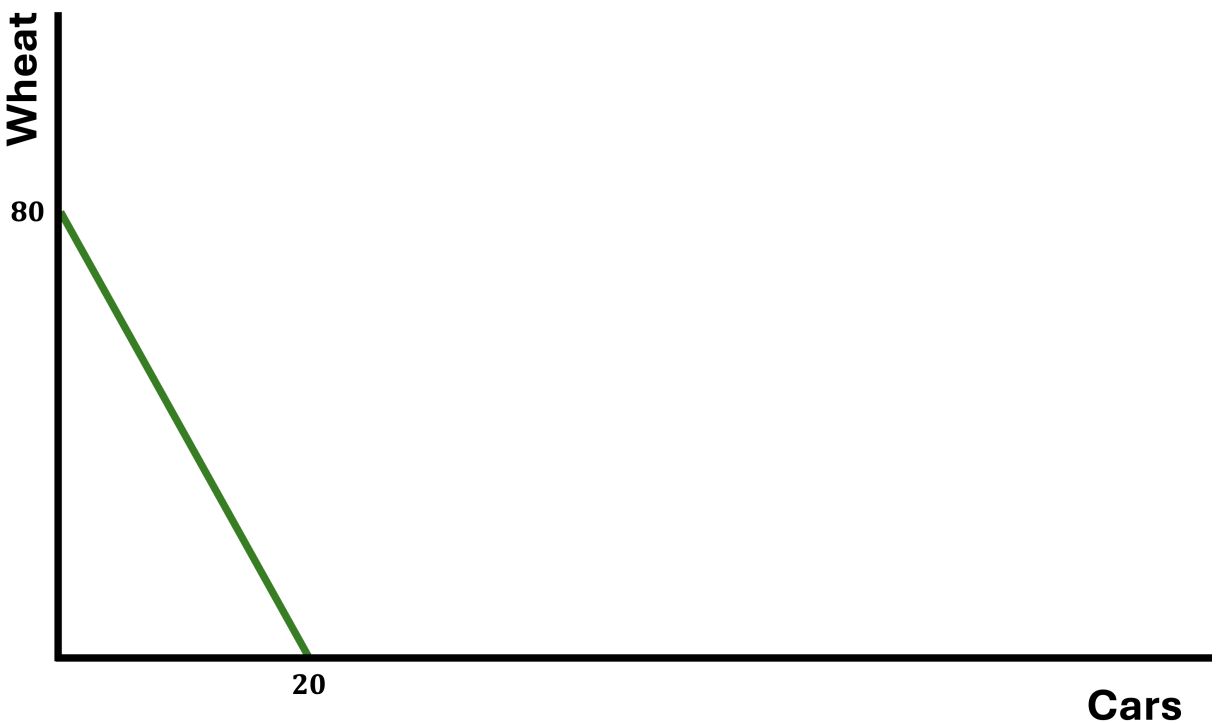
- Let's start with a single country for now and let's assume there are two goods: **Good Y and Good X**
- Production Possibility Frontiers (PPFs) show all the possible combinations (bundles) of goods that a country can produce
  - A country's **budget line**



Model of Trade

Let's put numbers to the model

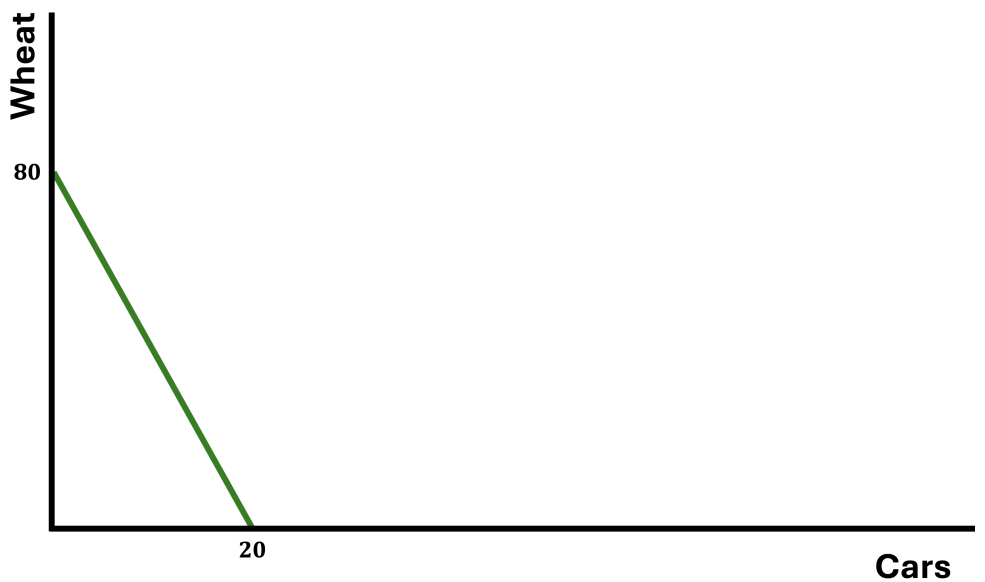
- If the country only produces cars, they can produce 20 cars
- If the country only produces wheat, they can produce 80 units



Model of Trade

The **slope of the PPF** tells us the **opportunity cost of producing them**

- In order to produce 80 wheat, the country must give up 20 cars
- This means that the opportunity cost of producing 1 car is 4 units of wheat



Opportunity Cost

$$80W = 20C \rightarrow \frac{80}{20}W = C$$

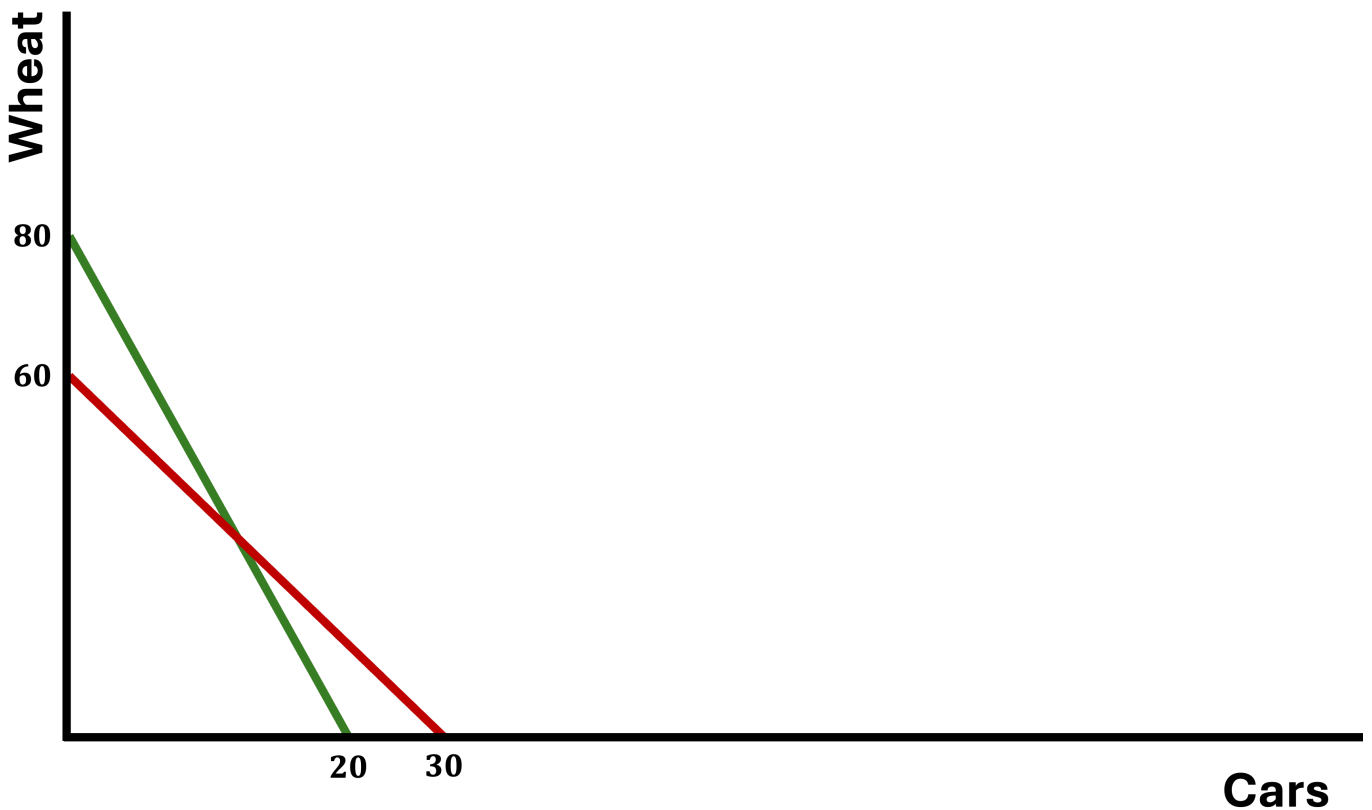
$$4W = 1C$$

Two Countries, Two Goods

Let's add a second country

- They each can produce goods at the following rates (if they specialize):

	A	B
Wheat	80	60
Cars	20	30



Two Countries, Two Goods

Let's add a second country

- They each can produce goods at the following rates (if they specialize):

	A	B
Wheat	80	60
Cars	20	30

Opportunity Costs

- Opportunity cost of producing 1 car in **country A** is 4 units of wheat
- Opportunity cost of producing 1 car in **country B** is 2 units of wheat

- It is "cheaper" to produce cars in **country B**
- Lower opportunity cost = **comparative advantage**
- Trade is based on **comparative advantages**

Specialization

Our model then predicts that **country B** will specialize in producing cars and **country A** will specialize in producing wheat

- **A** and **B** will then trade with each other so they can both consume cars and wheat
- Specialization in the good for which you have a **comparatie advantage**, then trading with another country should **increase welfare for both trading partners**

- Since both countries specialize in the good that they produce relatively cheaper, the "international market price" will fall somewhere between the price in both countries
  - The international price will be **higher than the exporting country's price** and **lower than the importing country's price**

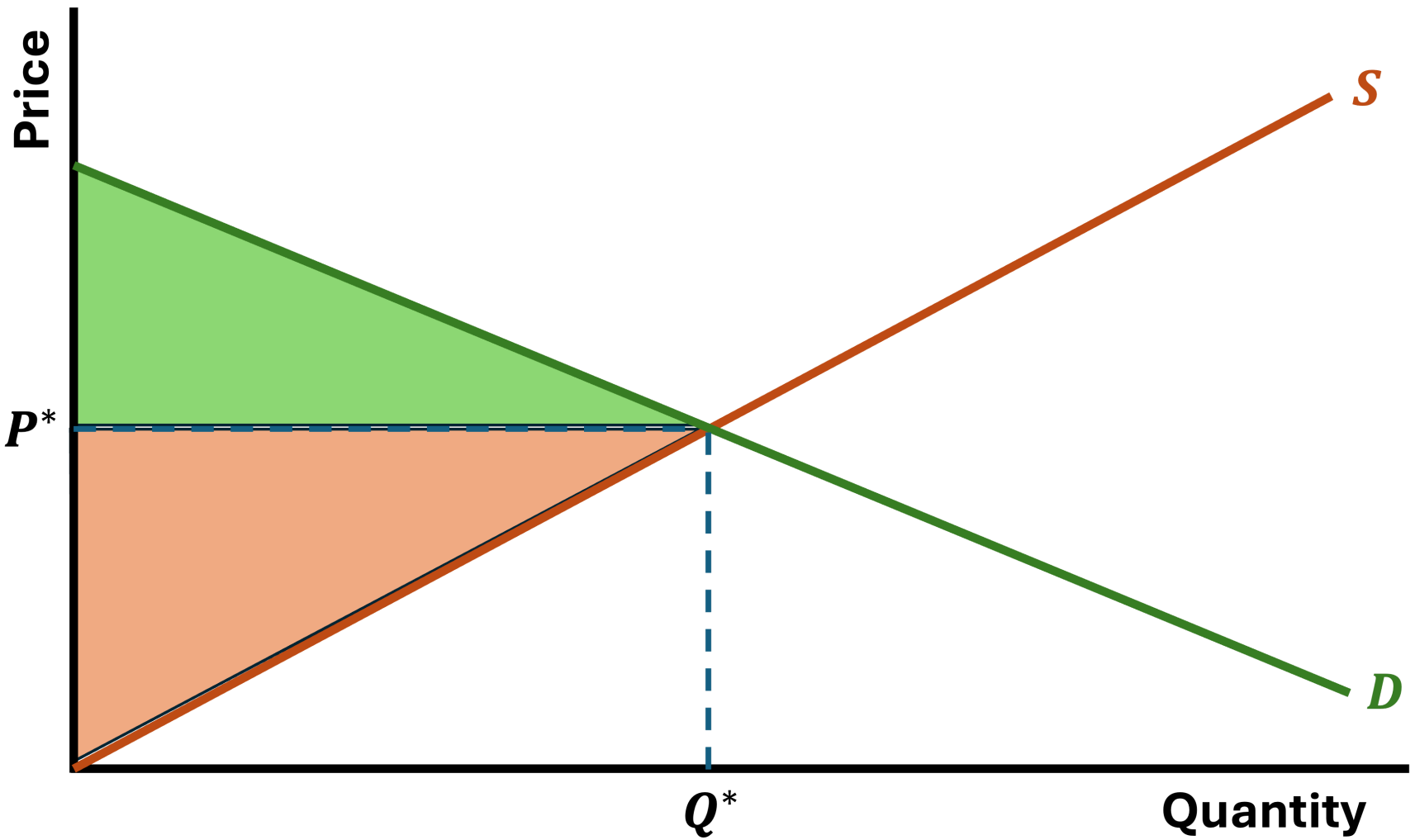
World Trade (Local Perspective)

How does this look like in terms of demand and supply in one country?

Let's start under **autarky (no trade)**

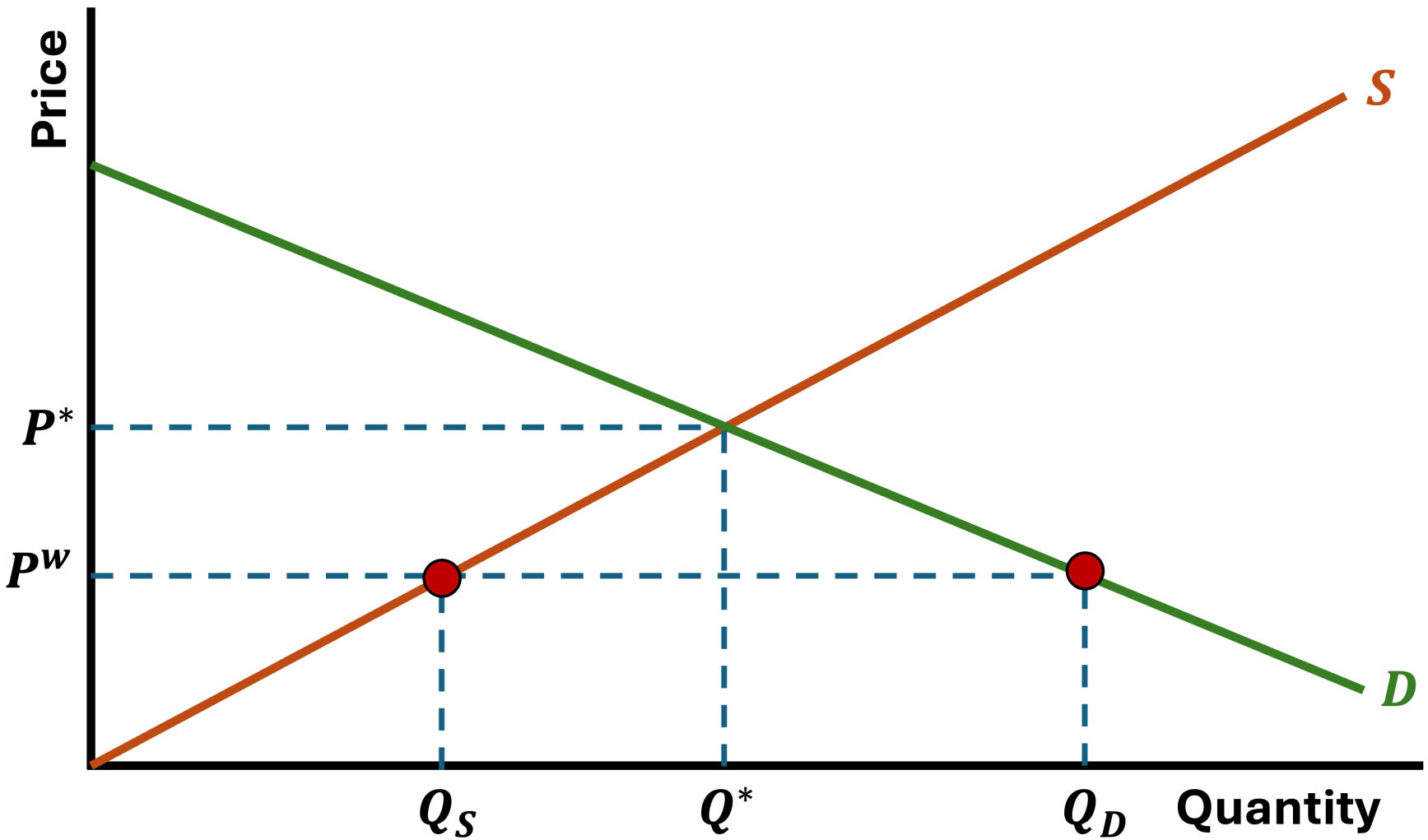
World Trade (Local Perspective)

There's **Consumer** and **Producer** Surplus



World Trade (Local Perspective)

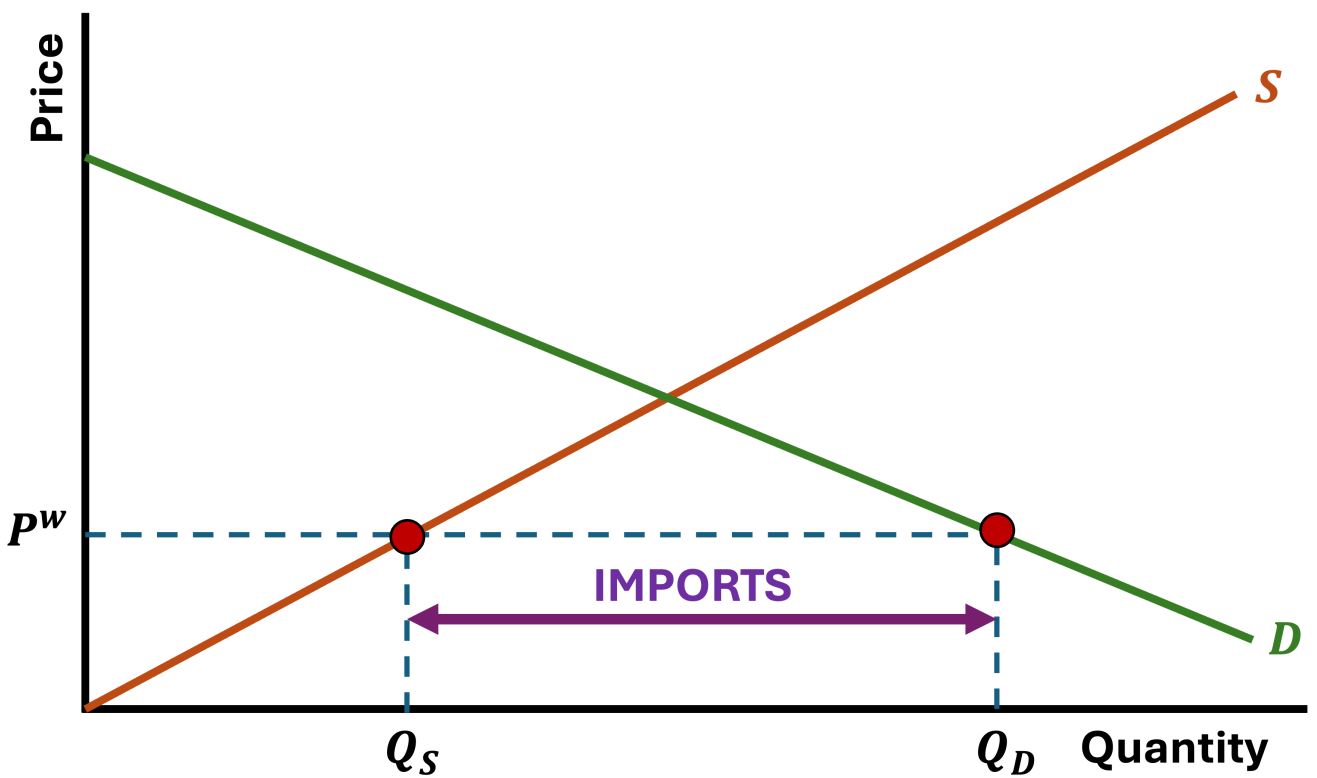
Now we introduce trade, which comes with a **World Price**



World Trade (Local Perspective)

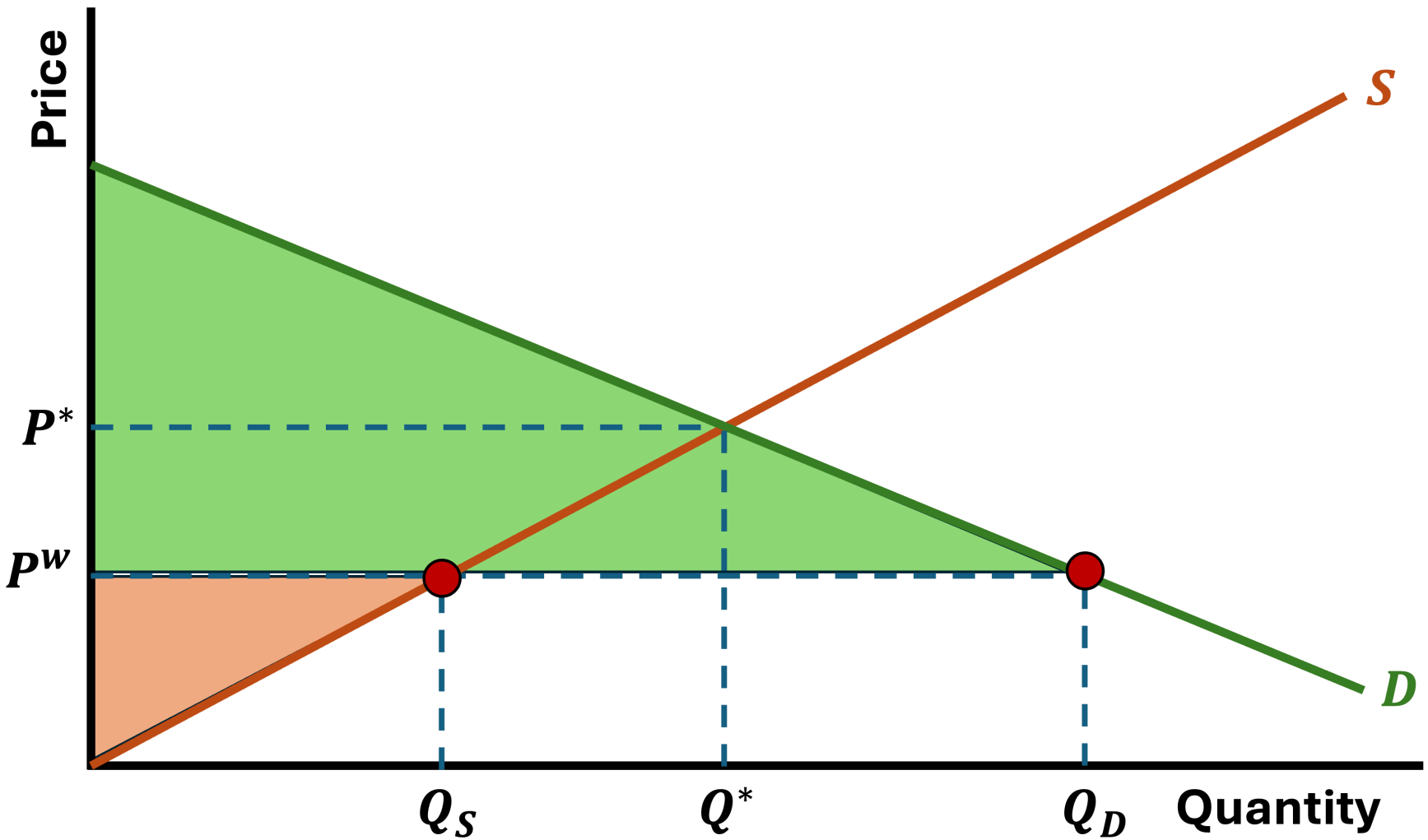
Because **consumers demand** **more than** **local producers make**, demand must be met somehow

- **The country imports the difference**



World Trade (Local Perspective)

This new price shifts **Consumer** and **Producer** Surplus



World Trade (Government Intervention)

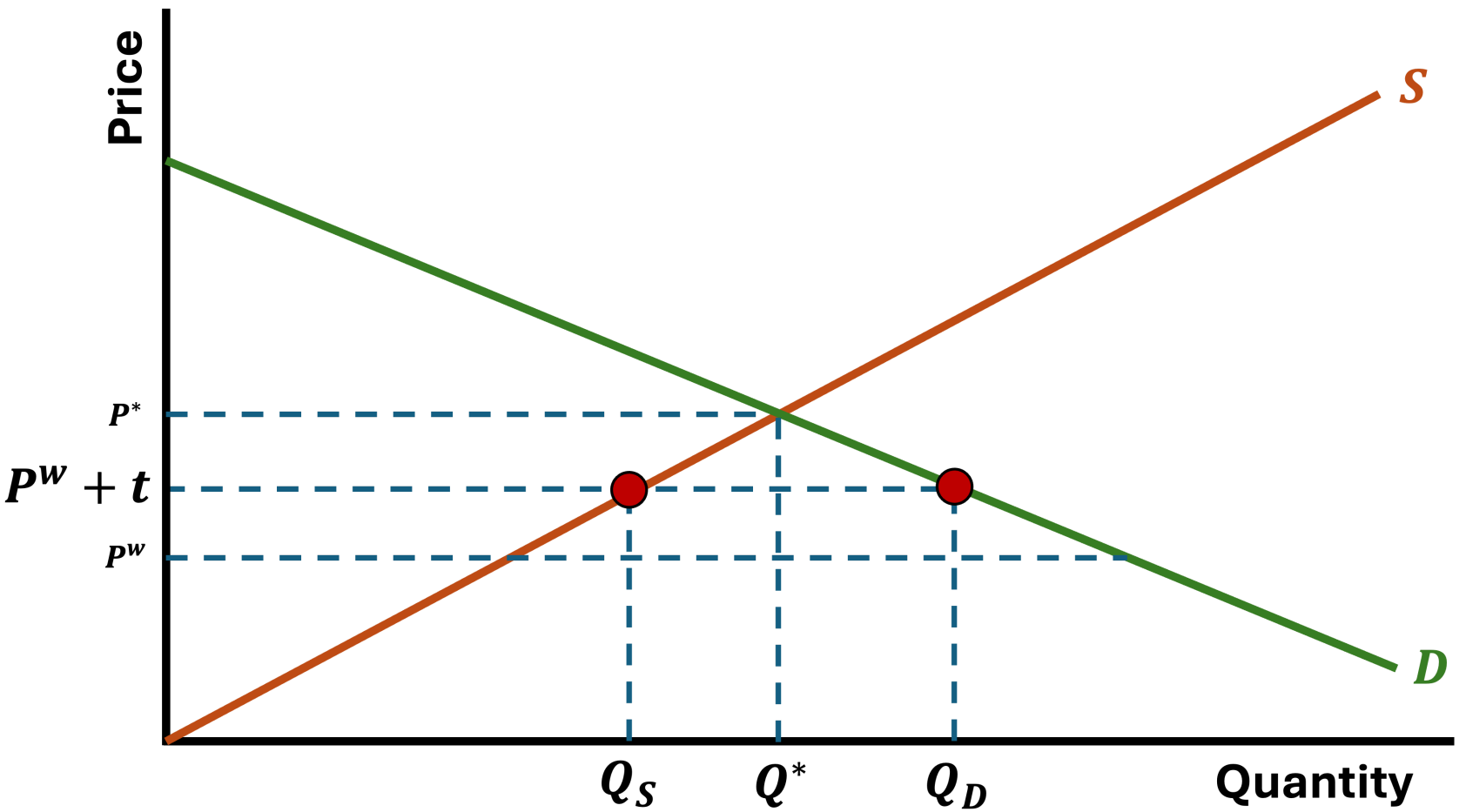
Let's imagine that the government notices this loss in **Producer Surplus** and they decide they would like to **protect their domestic industry** somewhat

So they enact a **tariff** on the imported good

- This will **raise the price of the imported good**
- It will generate **government revenue**
- It will reduce **consumer surplus**
- It will increase **domestic producer surplus**
- And it will induce some market inefficiencies **(Deadweight Loss)**

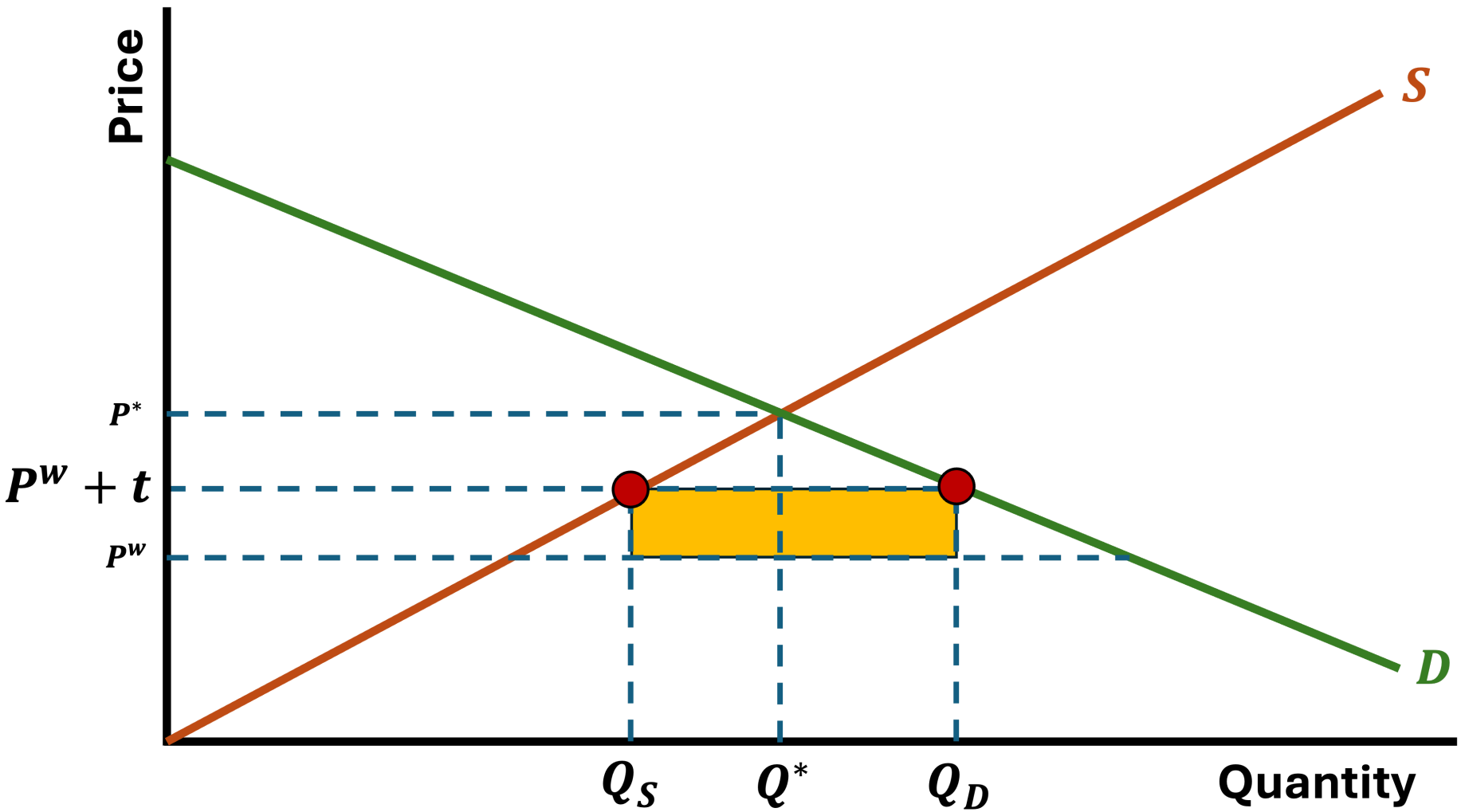
World Trade (Government Intervention)

Prices go up to $P^W + t$ which produces new quantity demanded and supplied locally



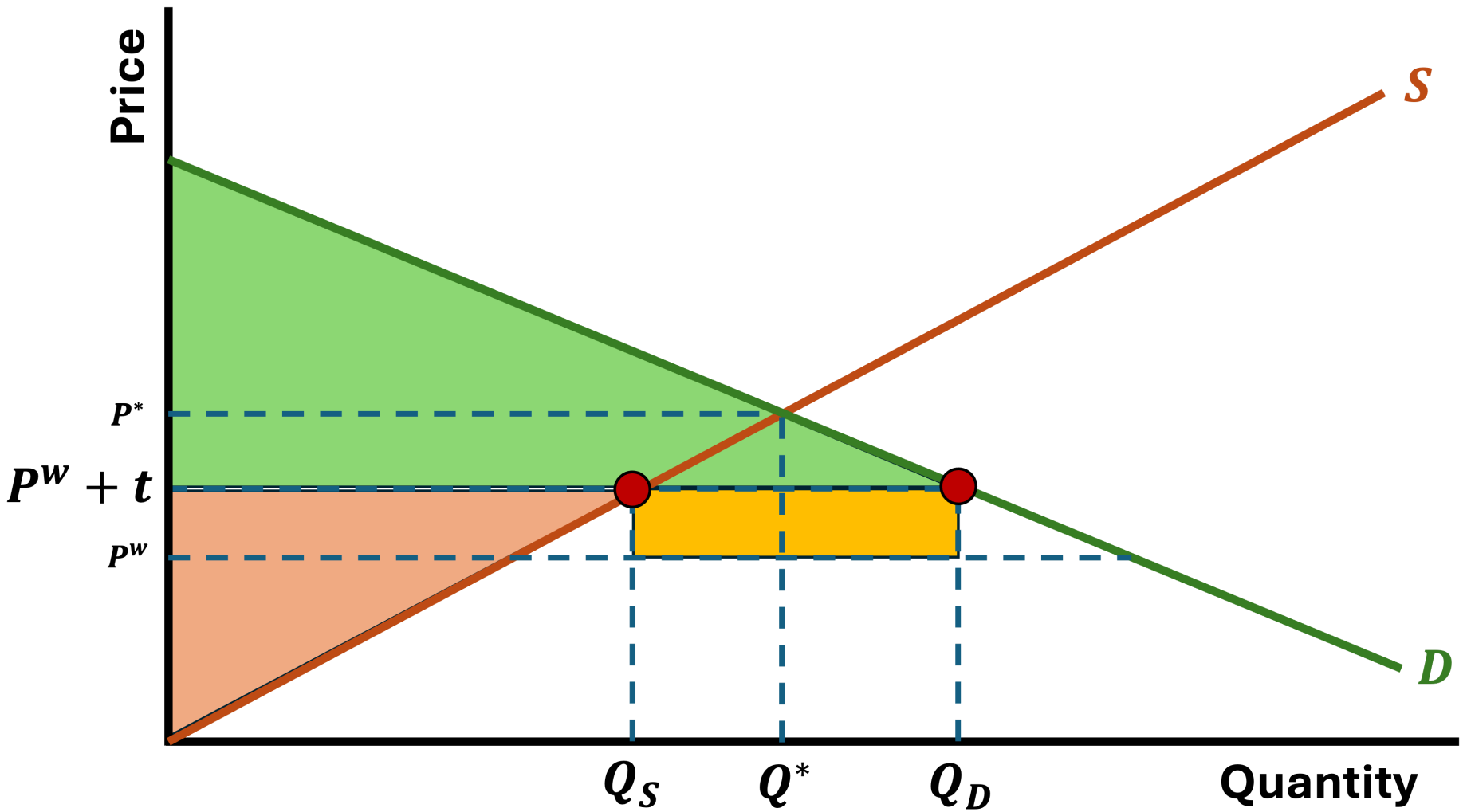
World Trade (Government Intervention)

The **Government collects tariff revenues** = Imports × tariff



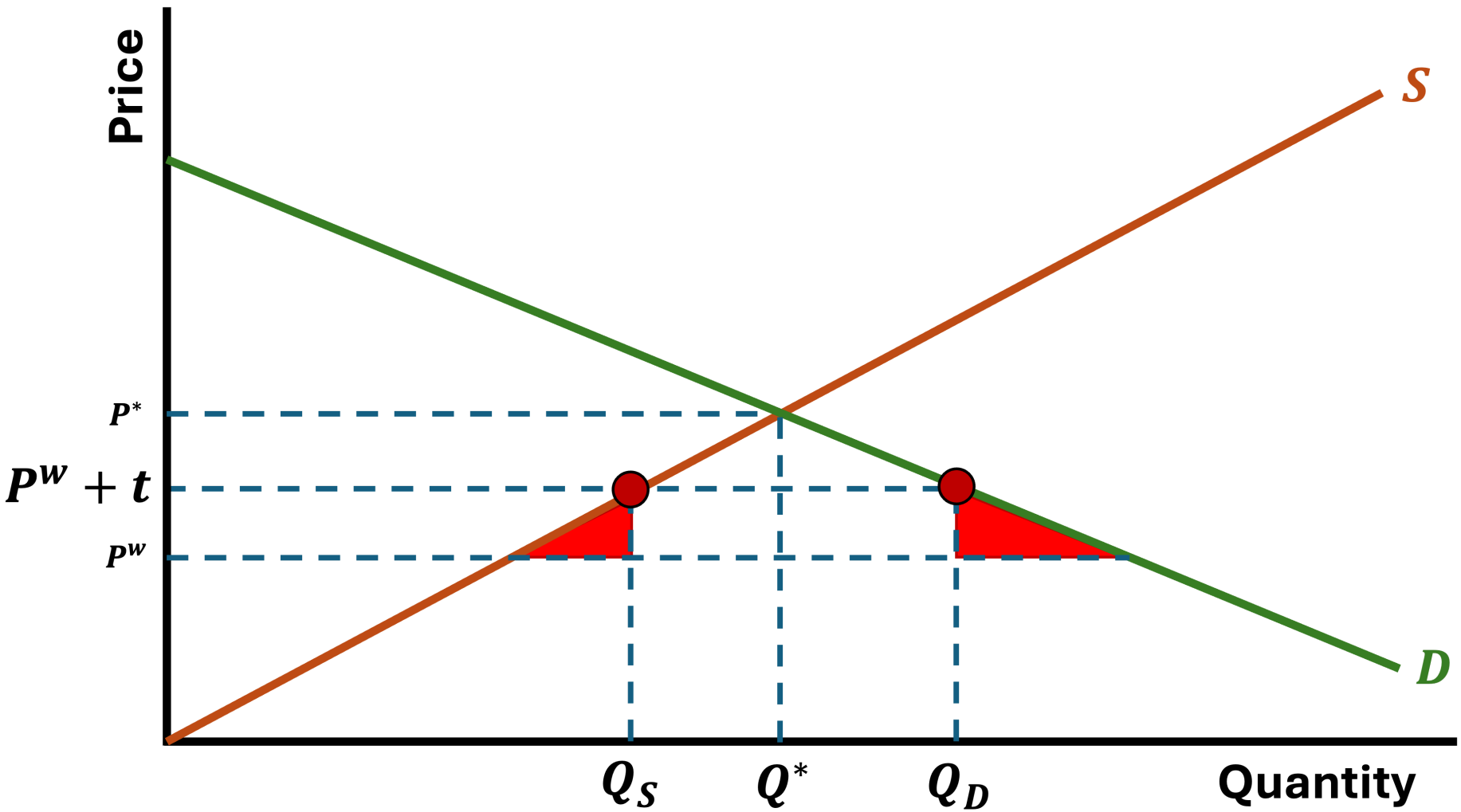
World Trade (Government Intervention)

Consumer Surplus shrinks slightly and **Producer Surplus** grows



World Trade (Government Intervention)

The tariff (tax) creates inefficiencies **(Deadweight Loss)**



Developing Nations and Trade

There are two main strategies that developing countries have taken when faced with increased globalization

Import Substitution Industrialization

- Development strategy to promote **domestic production** of imported goods through protectionism and state intervention
- High tariffs
- Subsidies for Domestic Industry
- Goal is to break dependency on foreign commodities
- Create domestic industrial capacity
- Inefficient
- Small domestic markets limited scale economies

Export Promotion

- A strategy centered on **integrating domestic firms into global markets**, incentivizing production for export, and fostering competitiveness
- Low or moderate tariffs toward gradual liberalization
- Incentives for foreign direct investment
- Learning-by-Exporting
- Requires strong state capacity and credible institutions
- Can create enclave sectors dominated by MNCs