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*Global Economic Issues*

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# 8. International Trade

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# International Trade: Tables & Figures

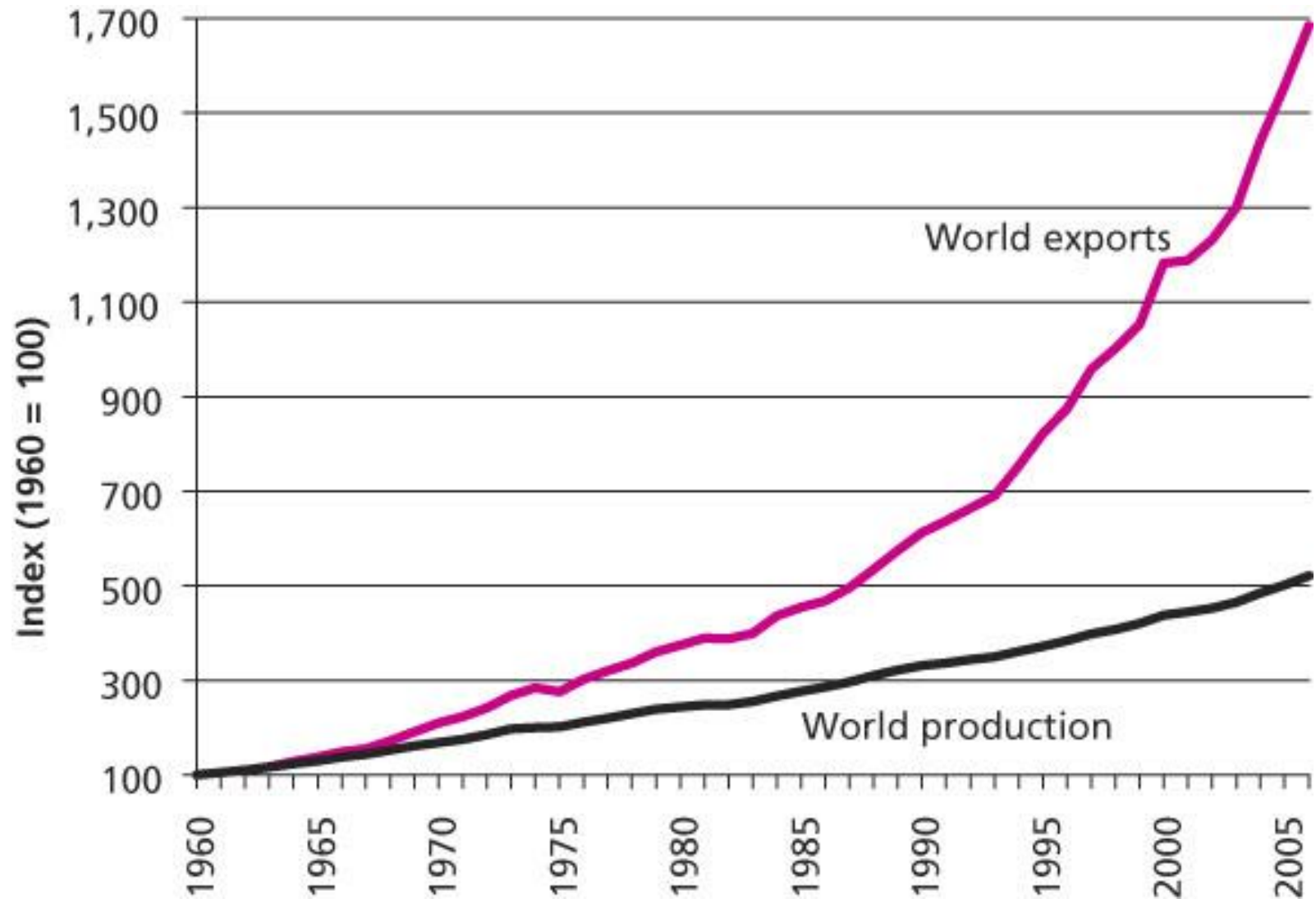
## Exports, 2005 (billions of U.S. dollars)

	World	Industrialized Countries	Developing Countries
Total	12,746	7,990	4,756
Primary products	2,328	1,003	1,325
Agricultural	821	525	296
Fuels	1,359	401	958
Ores	148	77	71
Manufactured products	7,544	4,896	2,648
Chemicals	1,085	845	240
Machinery and transport equipment	3,878	2,548	1,330
Textiles and clothing	499	179	320
Other	2,118	1,324	794
Services	2,495	1,835	660

Note: Sum of primary products, manufactured products, and services does not equal total because of a small amount of unclassified goods.

Source: UNCTAD, *Handbook of Statistics*.

# International Trade: Tables & Figures



# International Trade: Tables & Figures

<b>Exports Plus Imports as a Percentage of GDP</b>		
	<b>1970</b>	<b>2006</b>
United States	11.1	28.0
Canada	42.0	70.4
Japan	9.6	15.0
France	31.1	55.1
United Kingdom	43.7	60.6
Australia	26.4	42.9
Denmark	57.3	100.9
China	5.3	69.7
India	8.0	48.8
Korea	37.7	85.3
Brazil	14.9	26.4

Source: International Monetary Fund, *International Financial Statistics*.

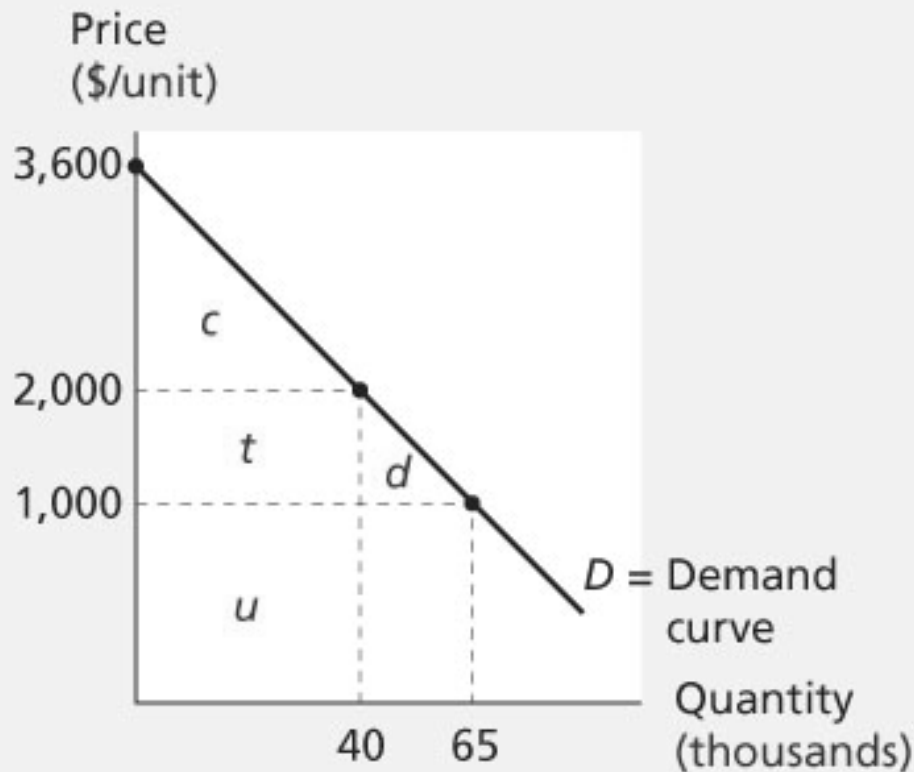
# International Trade Policy Outline

- Global Trade Governance
- Tariffs
- Non-Tariff Barriers
  - Import Quotas
  - Export Subsidies
- Trade Blocks
- Trade Embargos

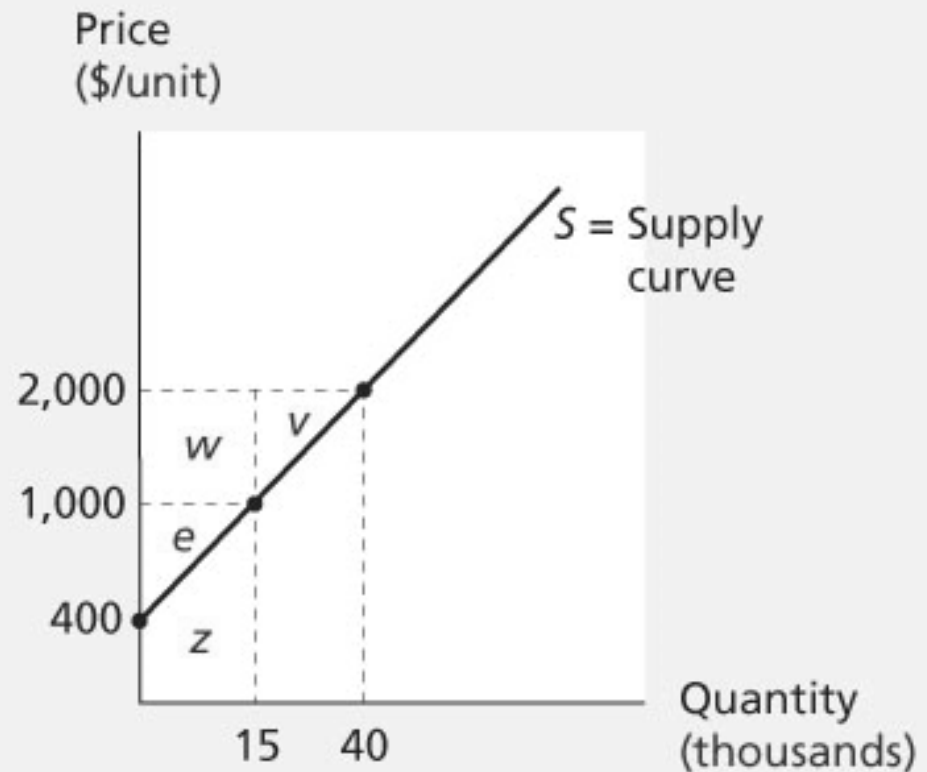
# S&D of Motorbikes – Autarky

- Autarky = no trade

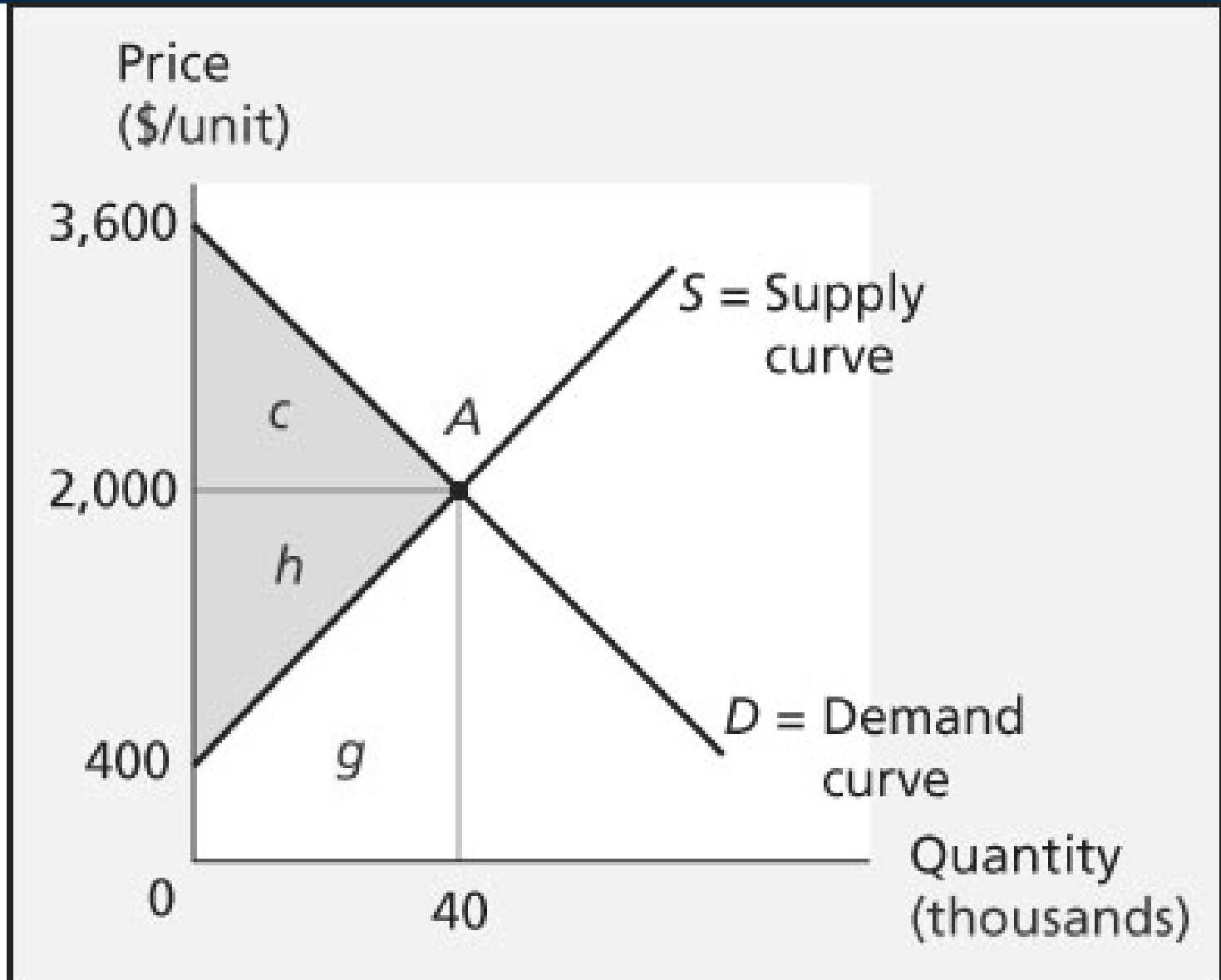
A. Demand



B. Supply



# S&D of Motorbikes – Autarky



# S&D of Motorbikes – Autarky

- **Consumer Surplus** – increase in the economic well-being of consumers who are able to buy a product at a market price lower than the highest price they would be willing to pay.
- **Producer Surplus** – increase in the economic well-being of producers who are able to sell a product at a market price higher than the lowest price that would have drawn out their supply.
- **Arbitrage** – buying something in one market and reselling the same thing in another market to profit from a price difference.



# Global Trade Governance

- **GATT – General Agreement on Tariffs and Trade**
  - Was the key institution governing international trade issues from 1947 through the early 1990's.
- **WTO – World Trade Organization**
  - Created in January 1995, is the organization that oversees the global rules of government policies toward international trade
  - Provides the forum for negotiating global agreements to improve these rules

# Analysis of a Tariff

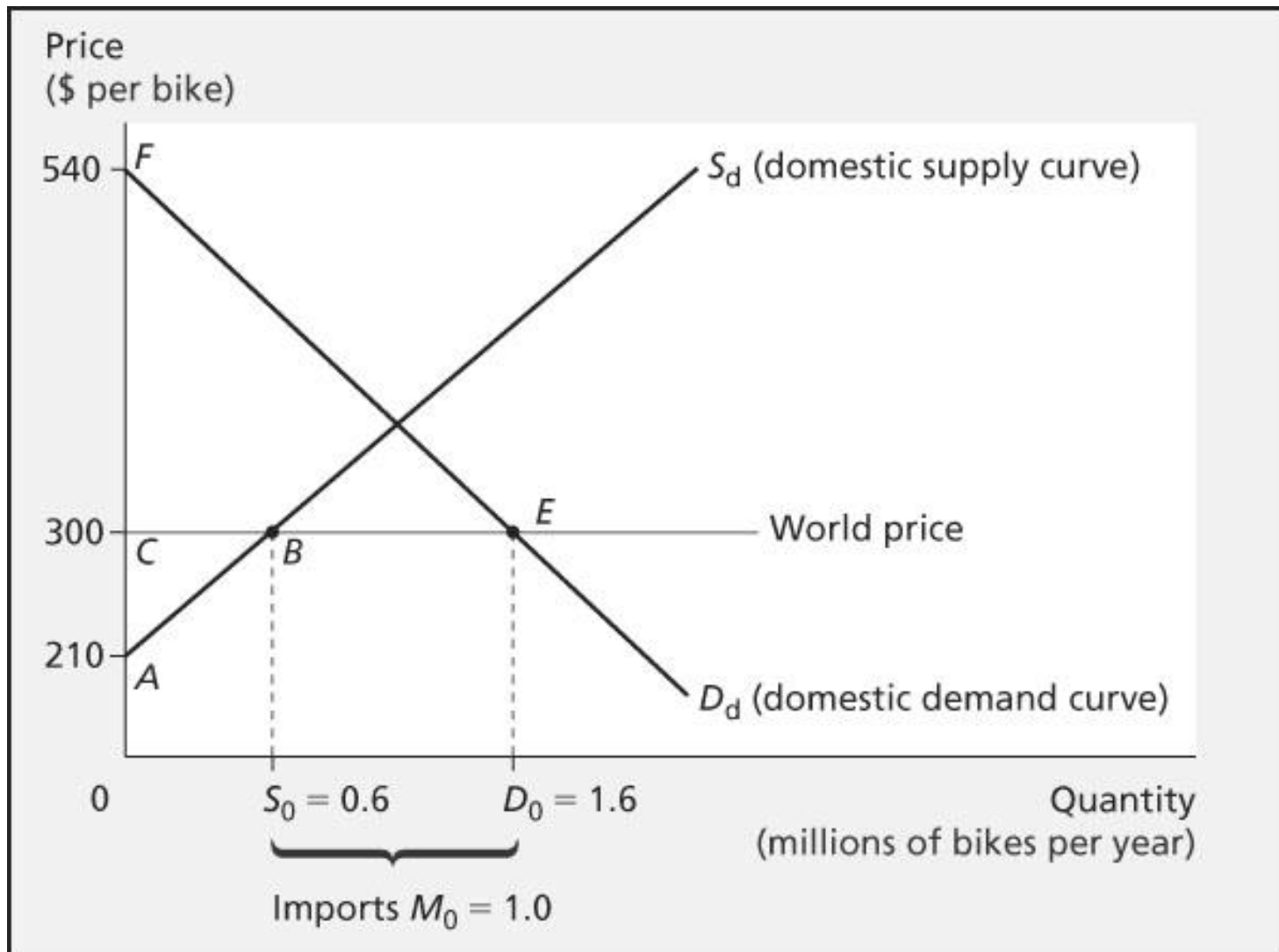
- A *tariff* is a tax on importing a good or service into a country, usually collected by customs officials at the place of entry.
  - A *specific tariff* is stipulated as a money amount per unit of import (e.g., \$30/motorbike).
  - An *ad valorem tariff* (on the value) is a percentage of the estimated market value of the goods when they reach the importing country.

# Tariffs – An Overview

- We'll show that:
  - A tariff almost always lowers world well-being.
  - A tariff usually lowers the well-being of each nation, including the nations imposing the tariff.
  - A tariff absolutely helps those groups tied closely to the production of import substitutes, even when the tariff is bad for the nation as a whole.
  - Because tariffs adversely affect a country's trade partners, levying new tariffs frequently set off what we refer to as "trade wars" – where countries retaliate against each other by raising tariffs, tit-for-tat, as a political statement.

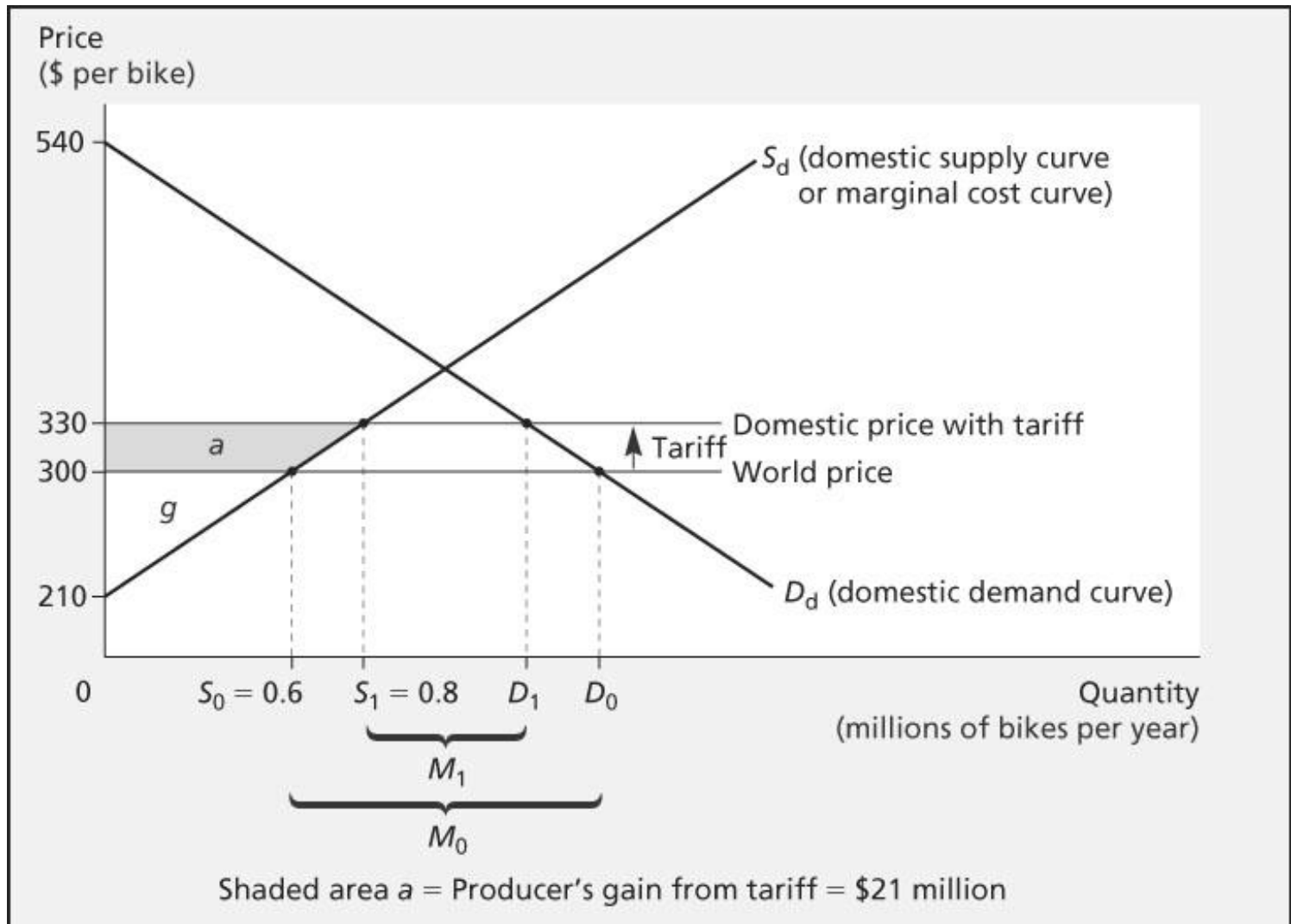
# The Effect of a Tariff on Domestic Producers

Free Trade Situation (consider producer surplus):



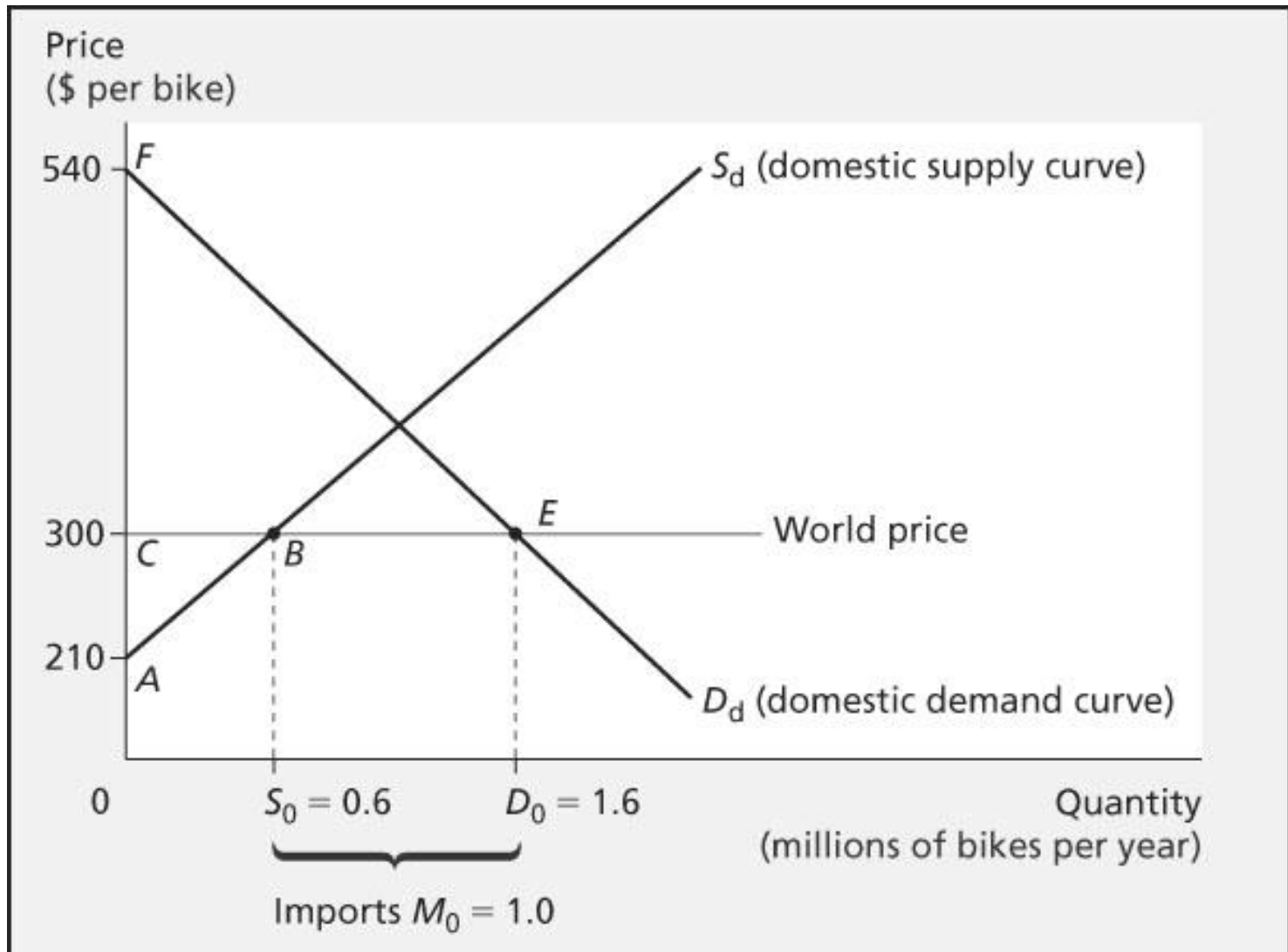
# The Effect of a Tariff on Domestic Producers

Now consider producer surplus after a 10% (or \$30) tariff:



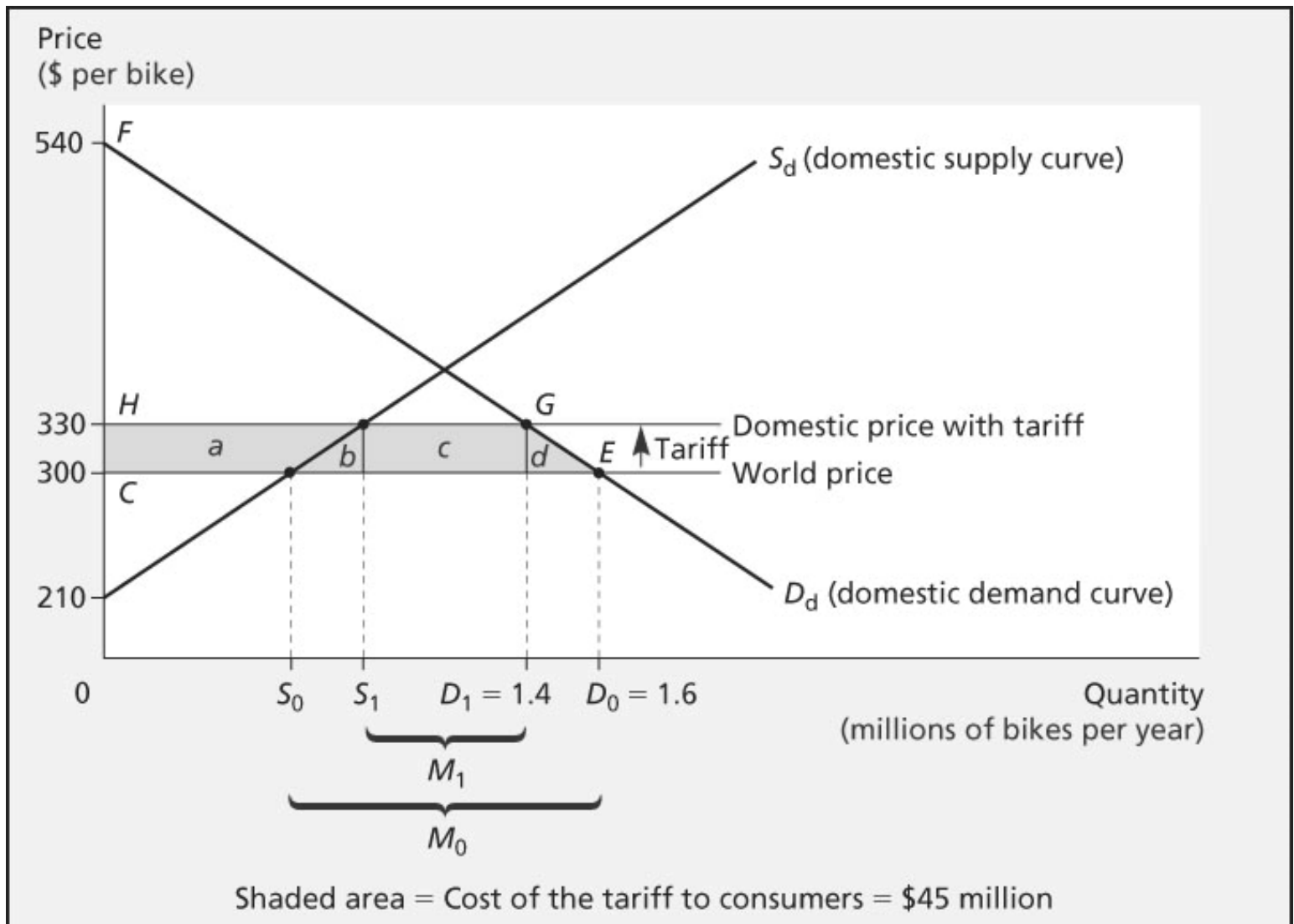
# The Effect of a Tariff on Domestic Consumers

Free Trade Situation (consider consumer surplus):



# The Effect of a Tariff on Domestic Consumers

Now consider consumer surplus after a 10% (or \$30) tariff:



# Government Revenue from Tariffs

- If the tariff isn't prohibitive (set so high that it prohibits imports completely), the government will earn revenue from the tariff.
  - Revenue = tariff \* volume of imports
  - Revenue = \$30 \* 0.6 million = \$ 18 million
- Tariff revenue can be spent any way the government sees fit, however it's "counted" as part of a country's total surplus (welfare).
  - Total surplus = producer surplus + consumer surplus + government revenue



# The Effect of Tariffs on Total Surplus

- Domestic producer's gain from tariff = \$21 million (area a)
- Domestic consumer's *loss* from tariff = \$45 million (area a + b + c + d)
- Government revenue from tariff = \$18 million (area c)
- Net loss to total surplus of (b + d) = \$ 6 million
  - -\$ 6 million = \$ 21 million - \$45 million + \$18 million

# The Effect of Tariffs on Total Surplus

- What is the intuition for the economic loss to total surplus?
  - **Consumption Effect** – the loss to the consumers in the importing nation based on the reduction in their total consumption of bicycles (area *d*).
  - **Production Effect** – the extra cost of shifting to more expensive home production. The domestic resource cost of producing these bicycles is more than the \$300 price at which the bicycles are available from foreign suppliers (area *b*).

# Trade Wars

- Trump's recently announced a 25% import tariff on steel and 10% tariff on aluminum.
  - World leaders responded with criticism and warnings of an impending trade war.
  - After negotiations, the following countries were exempt from the tariff: Canada, Mexico, European Union, Argentina, Australia, Brazil and South Korea.
- In March 2018 Trump added approximately \$60 Billion of tariffs against Chinese imports in aeronautics, tech and energy industries.

# Trade Wars

- In May, 2018, China responded with its own set of tariffs on meats and other agricultural products which will be a direct hit on U.S. farmers.
- Neither Trump nor China appear to be backing down from threats of escalation.
- Most recently, Canada has joined the trade war conversation by responding to Trump's steel tariffs with its own set of retaliatory tariffs against U.S. steel.

# Nontariff Barriers to Imports

- Nontariff Barrier (NTB) to imports is any policy used by the government to reduce imports, other than a simple tariff on imports.
  - Quotas
  - Export Subsidies
  - Discriminatory product standards
  - Buy-at-home rules for government purchases
  - Administrative red tape to harass importers of foreign products

# Import Quotas

- A *quota* is a limit on the total quantity of imports of a product allowed into the country during a period of time.
- The government gives out a limited number of licenses to import the quota quantity legally and prohibits importing without a license.
- A quota will impact the market if the quota quantity is less than the quantity that people would want to import without the quota.

# Export Subsidies

- *Export subsidies* are usually bad for the world as a whole.
- Often export subsidies are bad for the countries that use them and benefit the countries that complain about them.

# Export Subsidies

- Governments subsidize exports in many ways, often in deliberately subtle ways to escape detection.
  - Sometimes they use low-interest loans to exporters (or their foreign customers).
  - Or governments will charge low prices on imports such as raw materials or transport services that go into production of exported goods.
  - Income tax rules might give special tax relief based on the value of goods or services each firm exports.



# Export Subsidies

- In a competitive industry:
  - An export subsidy expands exports and production of the subsidized product.
    - Can switch the product from being imported to being exported
  - An export subsidy lowers the price paid by foreign buyers, relative to the price that local consumers pay for the product.
    - For the export subsidy to work as intended, something must prevent local buyers from importing the product at the lower foreign price.
  - The export subsidy reduces the net national well-being of the exporting country.

# Export Subsidies—Who Benefits?

- Boeing has been helped by with export subsidies through low interest credit.
- Subsidies on production of agriculture, particularly in developed countries.

# Trade Blocs & Embargoes

- Previously we've been studying "equal-opportunity" import barriers—ones that tax or restrict all imports regardless of country of origin.
- Some import barriers are meant to discriminate; they tax goods/services from some countries more than those from other countries.

# Trade Blocs & Embargoes

- *Trade Blocs*
  - Each member country can import from other member countries freely, or at least cheaply, while imposing barriers against imports from outside countries (e.g., NAFTA, the European Union).
- *Trade Embargoes*
  - Some countries discriminate against certain other countries, usually because of a policy dispute.
  - They deny the outflow of goods, services, or assets to a particular country while allowing exports to other countries, or discriminate against imports from the targeted country, or block both exports to and import from the target (e.g., U.S. embargo against Cuba).

# Trade Blocs

- **Free Trade Area**
  - Member countries remove trade barriers among themselves but keep their separate national barriers against trade with the outside world.
  - Most trade blocs operating today are free trade areas.
  - North American Free Trade Area (NAFTA)
- **Customs Union**
  - Member countries remove barriers to trade among themselves and also adopt a common set of external barriers
  - European Economic Community (EEC, 1957-1992) and the Southern Common Market (MERCOSUR) formed between Argentina, Brazil, Paraguay, and Uruguay in 1991 are customs unions.

# Trade Blocs

- **Common Market**
  - Members allow full freedom of factor flows (migration of labor and capital) among themselves in addition to having a customs union.
  - The E.U. became a common market at the end of 1992.
- **Full Economic Union**
  - Member countries unify all their economic policies, including monetary, fiscal and welfare policies as well as policies toward trade and factor migration.
  - Most nations are economic unions; Belgium and Luxembourg have had such a union since 1921.

# Trade Blocs

Type of Bloc	Features of Bloc			
	Free Trade Among the Members	Common External Tariffs	Free Movement of Factors of Production	Harmonization* of All Economic Policies (Fiscal, Monetary, Etc.)
Free-trade area	✓			
Customs union	✓	✓		
Common market	✓	✓	✓	
Economic union	✓	✓	✓	✓

\*If the policies are not just harmonized by separate governments, but actually decided by a unified government with binding commitments on all members, then the bloc amounts to full economic nationhood. Some authors call this *full economic integration*.

# Trade Embargoes

- A *trade embargo* is an economic sanction which refers to discriminatory restrictions or bans on economic exchange.
- Currently the US has embargoes in place against Burma, Cuba, Iran, North Korea, Sudan and Syria.



# Political Failure of an Embargo

- Example: Saddam Hussein's refusal to retreat from Kuwait (or, after Iraq was driven from Kuwait, to step down from power).
- Hussein didn't care that the sanction cost his country upwards of \$15 billion per year (nearly half Iraq's national income).
- A counter-example would be UN sanctions on South Africa which succeeded in hastening the end of apartheid and the minority-rule police state.

# Economic Failure of Embargoes

- The embargo inflicts little damage on the target country but possibly even great damage on the imposing country.