Chapter 8 (Salvatore)

- Tariff: a tax or duty levied on the traded commodity as it crosses a national boundary.
- Import tariff: a duty on the imported commodity
- Export tariff: a duty on the exported commodity
- Ad valorem tariff: a duty expressed as a fixed percentage of the value of the trade commodity.
- Specific tariff: a duty expressed a s fixed sum per physical unit of the traded commodity.

8.2 Partial Equilibrium Analysis of a Tariff – A Small country case

8.2A. Partial Equilibrium Effects of a Tariff

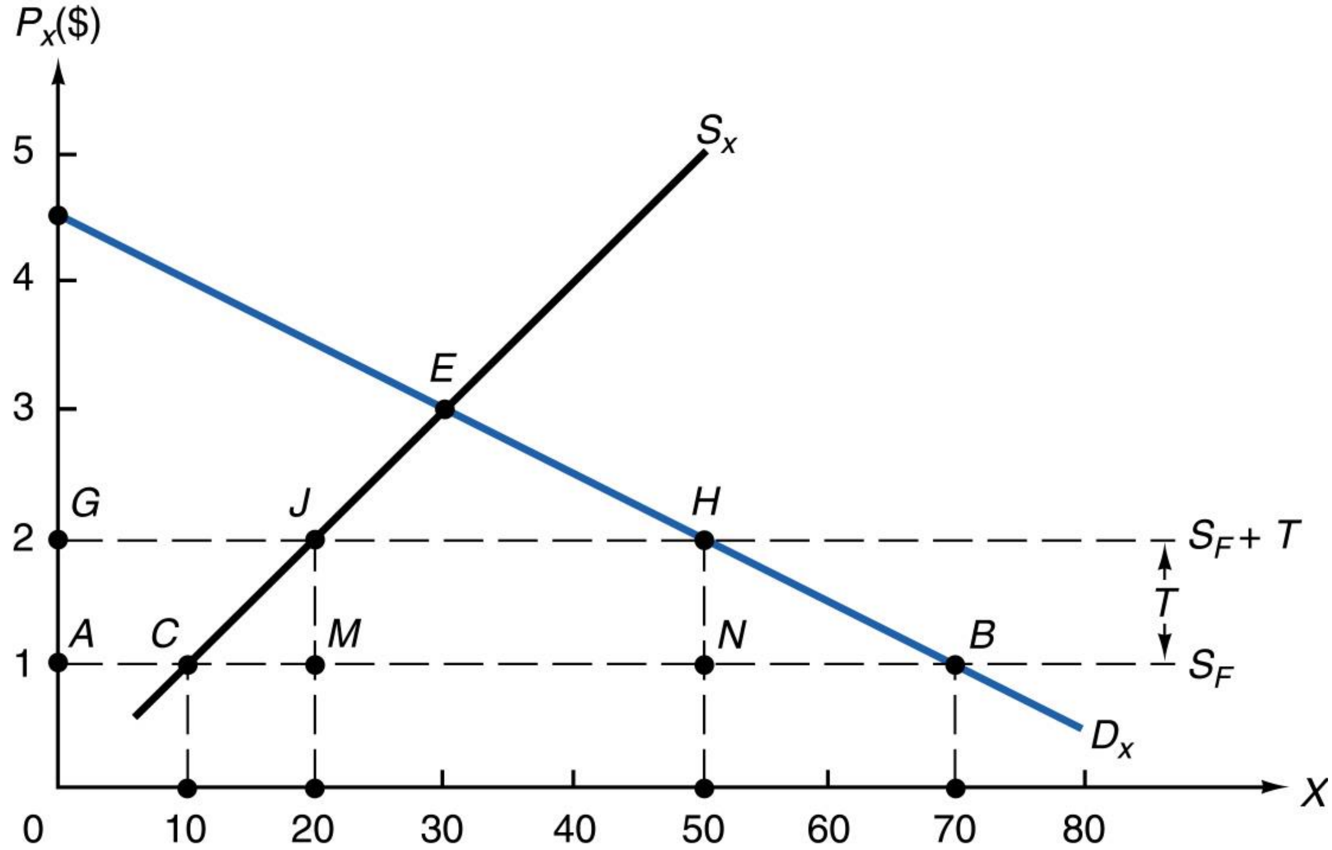


FIGURE 8-1 Partial Equilibrium Effects of a Tariff.

8.2 Partial Equilibrium Analysis of a Tariff – A Small country case

8.2A. Partial Equilibrium Effects of a Tariff

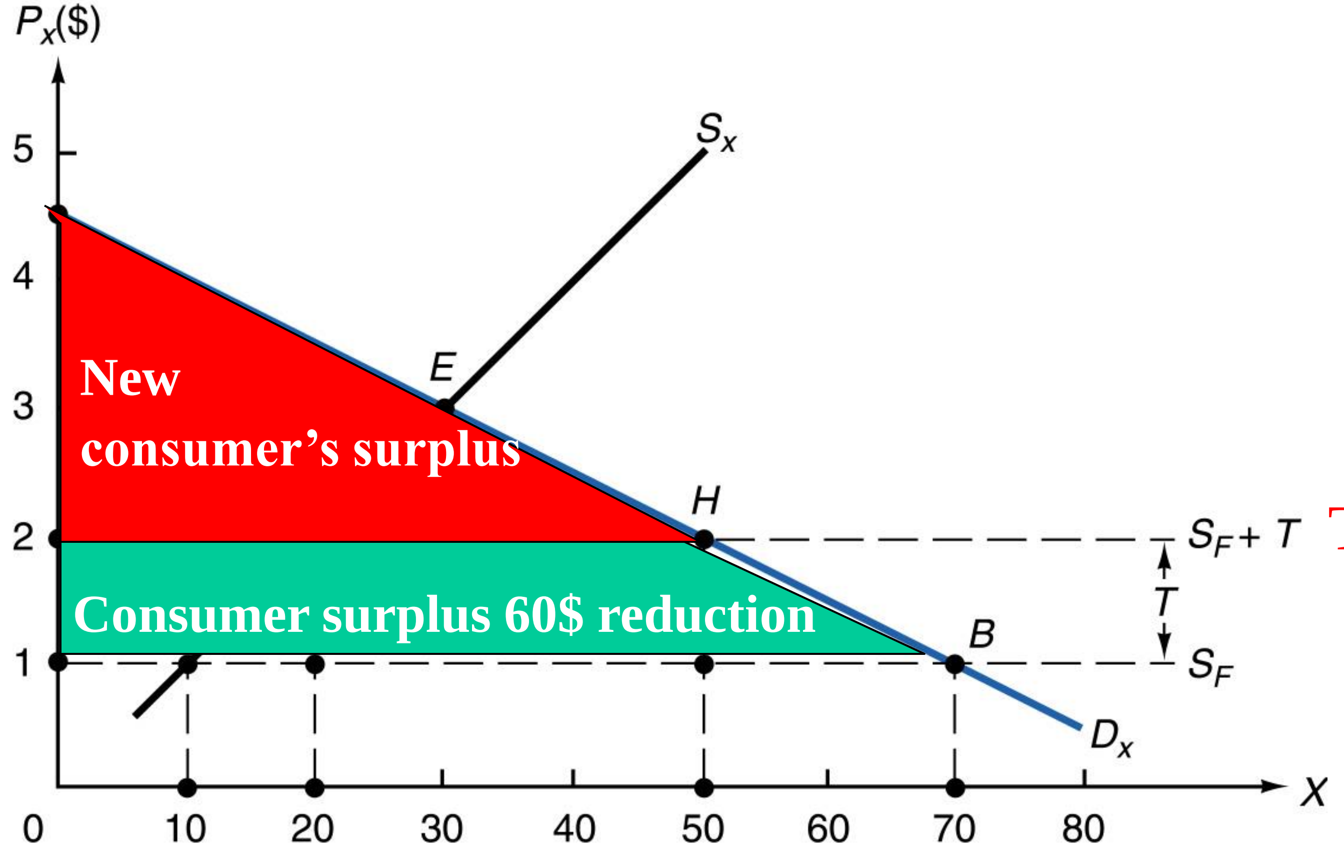


FIGURE 8-1 Partial Equilibrium Effects of a Tariff.

8.2 Partial Equilibrium Analysis of a Tariff – A Small country case

8.2A. Partial Equilibrium Effects of a Tariff

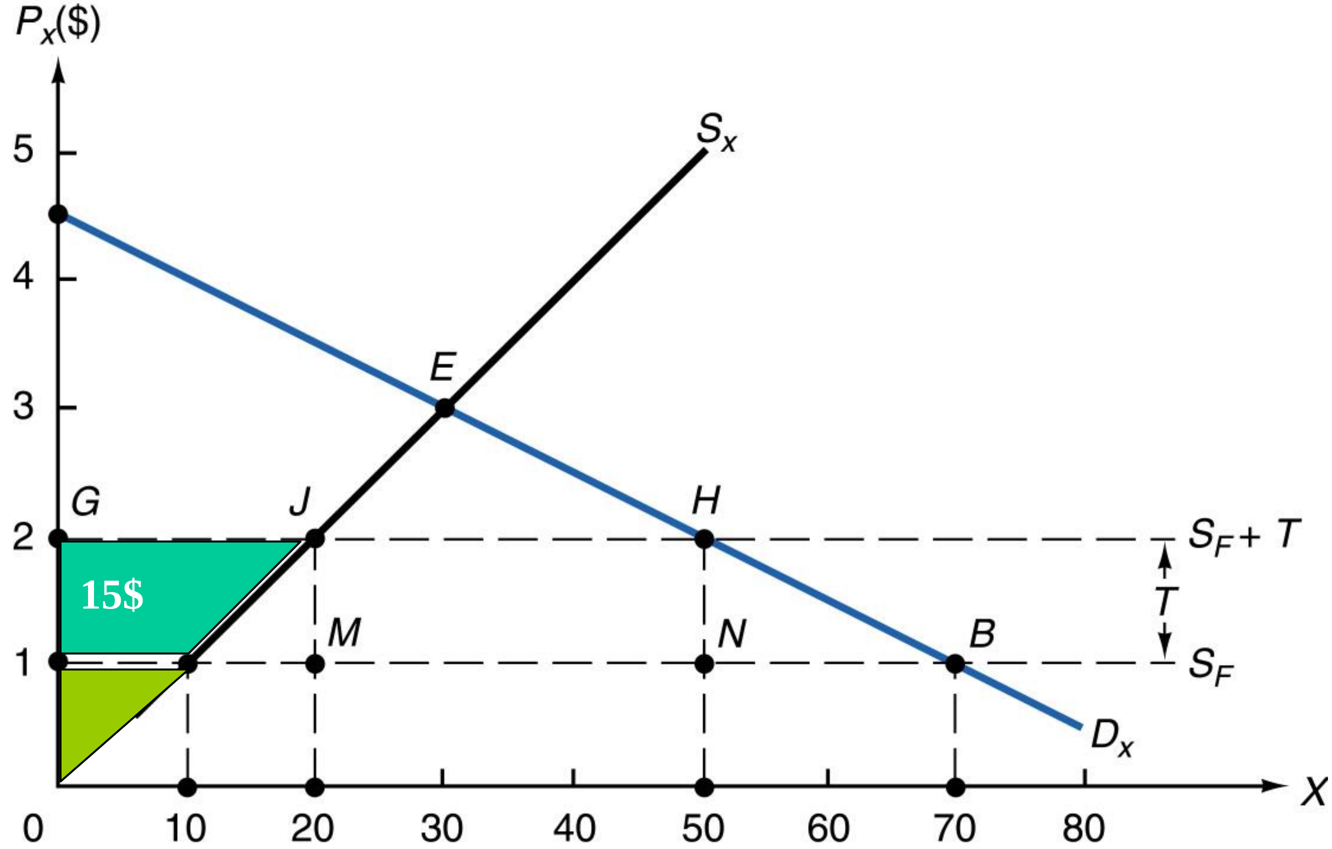


FIGURE 8-1 Partial Equilibrium Effects of a Tariff.

8.2 Partial Equilibrium Analysis of a Tariff – A Small country case

8.2A. Partial Equilibrium Effects of a Tariff

Production surplus =a= 15$
Production = 10X↑
Consumer surplus = a+b+c+d= -60$
Consumption = 20X↓

Protection cost
Deadweight cost
=b+d= 15$

Tariff revenue = c =30$

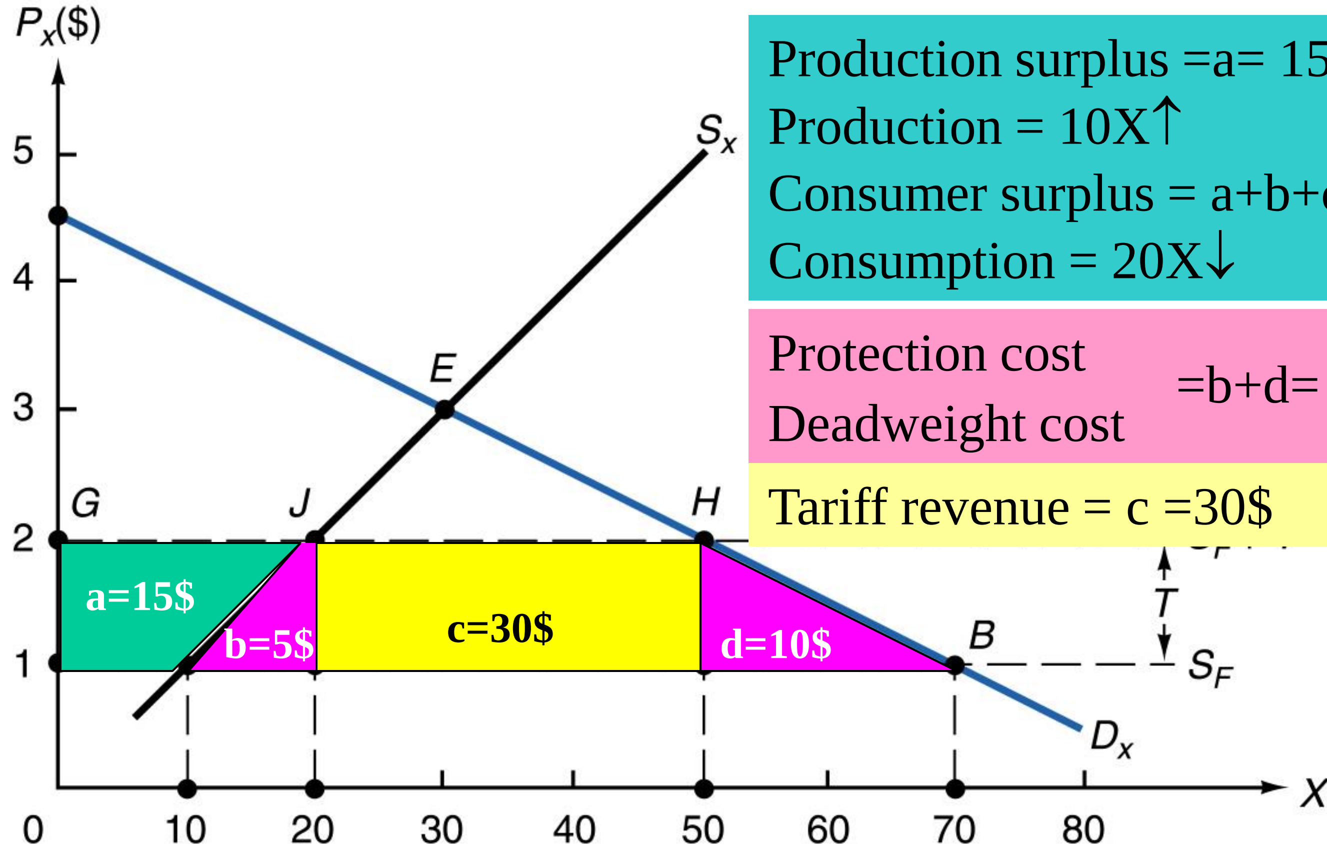


FIGURE 8-1 Partial Equilibrium Effects of a Tariff.

8.2 Partial Equilibrium Analysis of a Tariff – A Small country case

8.2A. Partial Equilibrium Effects of a Tariff

(1) consumption effect

(2) production effect

(3) trade effect

(4) revenue effect

(5) effect on consumer surplus (8.2B)

(6) effect on producer surplus (8.2B)

(7) deadweight loss (8.2C)

The Theory of Tariff Structure

- The Rate of Effective Protection

Rate of effective protection

Domestic Value Added

Importing-competing Industries

Rate of Effective Protection

$$g = \frac{t - a_i t_i}{1 - a_i}$$

where g = the rate of effective protection to producers of the final commodity

t = the nominal tariff rate on consumers of the final commodity

a_i = the ratio of the cost of the imported input to the price of the final commodity in the absence of tariffs

t_i = the nominal tariff rate on the imported input

The Welfare Effect of Liberalizing Trade on Some U.S. Products

Economic Effect of U.S. Import Tariffs on Selected Products

Product	Tariff (%)	Consumer Cost (million $)	Tariff Revenue (million $)	Producer Gain (million $)	Dead-weight Cost (million $)	Consumer Costs per Job (thousand $)
Ceramic tiles	19.0	139	92	45	2	401
Costume jewelry	9.0	103	51	46	5	97
Frozen concentrated orange juice	30.0	281	145	101	35	57
Glassware	11.0	266	95	162	9	180
Luggage	16.5	211	169	16	26	934
Rubber footwear	20.0	208	141	55	12	122
Women's footwear	10.0	376	295	70	11	102
Women's handbags	13.5	148	119	16	13	191

Source: G. C. Hufbauer and K. A. Elliott, *Measuring the Cost of Protection in the United States* (Washington, D.C.: Institute for International Economics, 1994), pp. 8–13.

The Welfare Effect of Liberalizing Trade on Some EU Products

Economic Effect of EU Protection on Selected Products

Product	Tariff Equivalent (%)	Consumer Cost (million €)	Tariff Revenue (million €)	Producer Gain (million €)	Dead-weight Cost (million €)	Consumer Costs per Job (thousand €)
Chemical fibers	22.9	580	362	139	79	526
Videocassettes	30.2	313	165	82	67	420
Integrated circuits	47.6	2,187	548	139	564	366
Photocopiers	33.7	314	242	5	66	3,483
Steel	21.9	1,626	229	397	333	316
Passenger cars	17.1	2,101	979	278	276	569
Textiles	21.4	7,096	1,742	2,678	668	180
Clothing	31.3	7,103	1,696	1,712	1,079	214

Source: P. A. Messerlin, *Measuring the Cost of Protection in Europe* (Washington, D.C.: Institute for International Economics, 2001), pp. 46–47, 54–55.

8.4 General Equilibrium Analysis of a Tariff in a Small Country

8.4C The Stolper-Samuelson Theorem

- An increase in the relative price of a commodity (for example, as a result of a tariff) raises the return or earnings of the factor used intensively in the production of the commodity.
- Thus the real return to the nation's scare factor of production will rise with the imposition of a tariff.
- Recall: Factor Price Equalization Theorem.

8.5 General Equilibrium Analysis of a Tariff in a Large Country

- When a nation imposes a tariff, its offer curve shifts toward the axis measuring its importable commodity by the amount of the import tariff.
- Why? For any amount of the export commodity, imports now want sufficiently more of the import commodity to also cover the tariff.
- Effects:

  (1) Reduces the volume of trade $\Rightarrow$ reduces the nation's welfare

  (2) Improves the nation's terms of trade $\Rightarrow$ increases the nation's welfare

8.5 General Equilibrium Analysis of a Tariff in a Large Country

8.5B. Illustration of the Effects of a Tariff in a Large Country

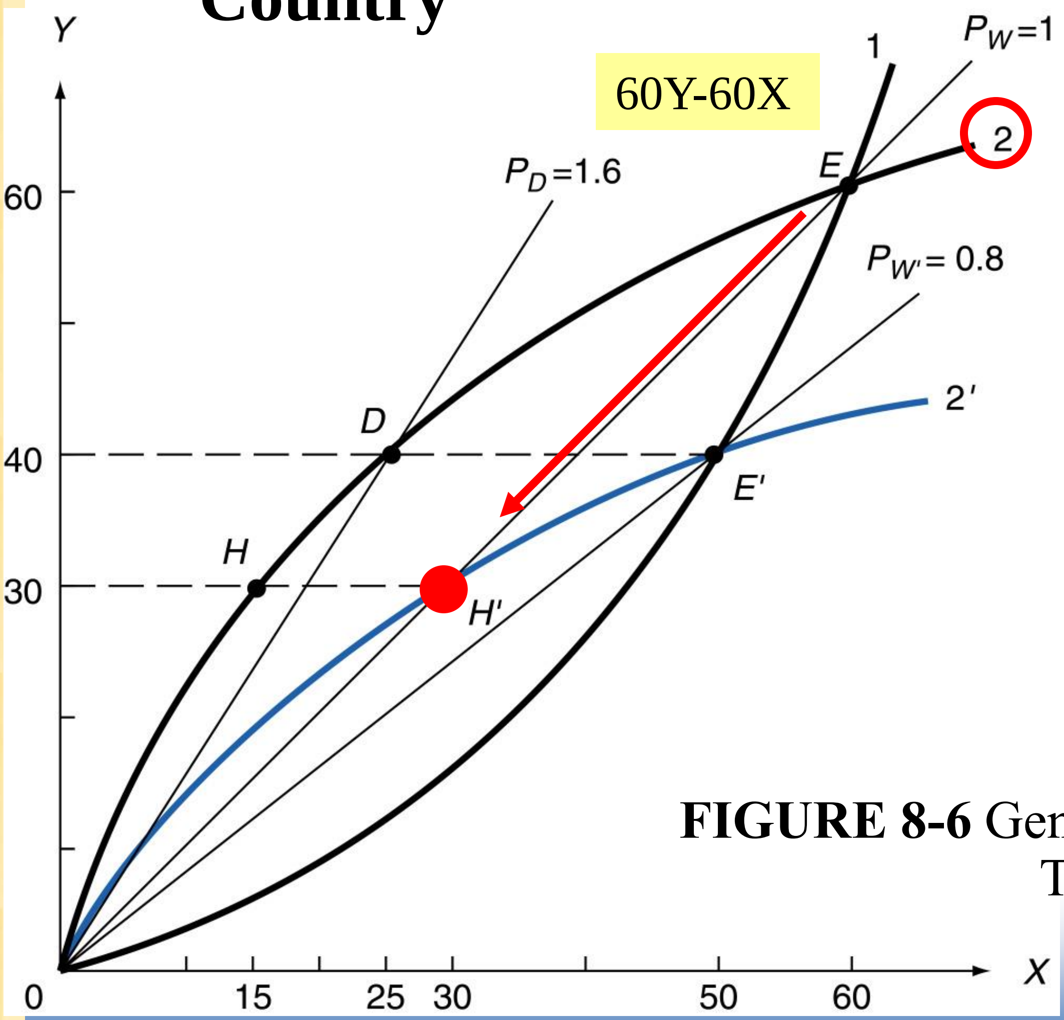


FIGURE 8-6 General Equilibrium Effects of a Tariff in a Large Country

8.5 General Equilibrium Analysis of a Tariff in a Large Country

8.5B. Illustration of the Effects of a Tariff in a Large Country

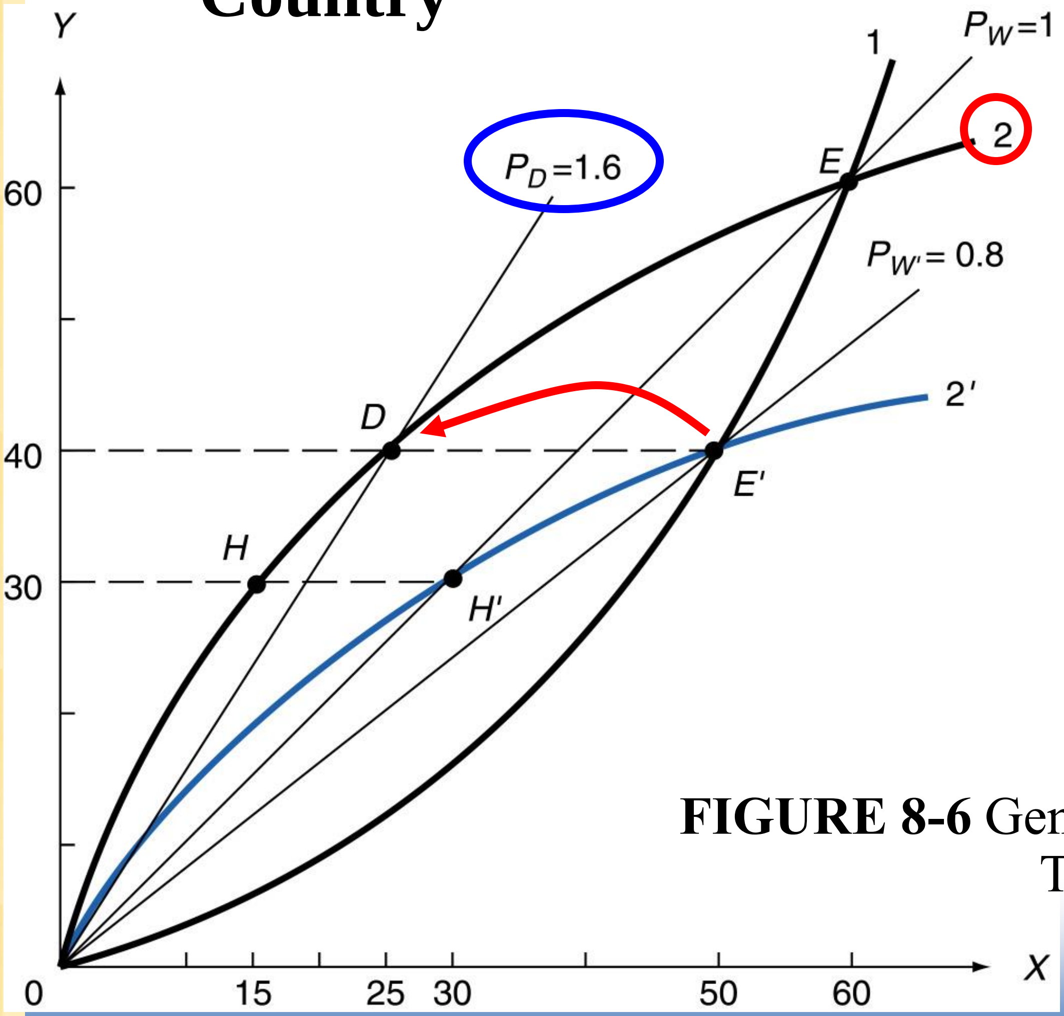


FIGURE 8-6 General Equilibrium Effects of a Tariff in a Large Country

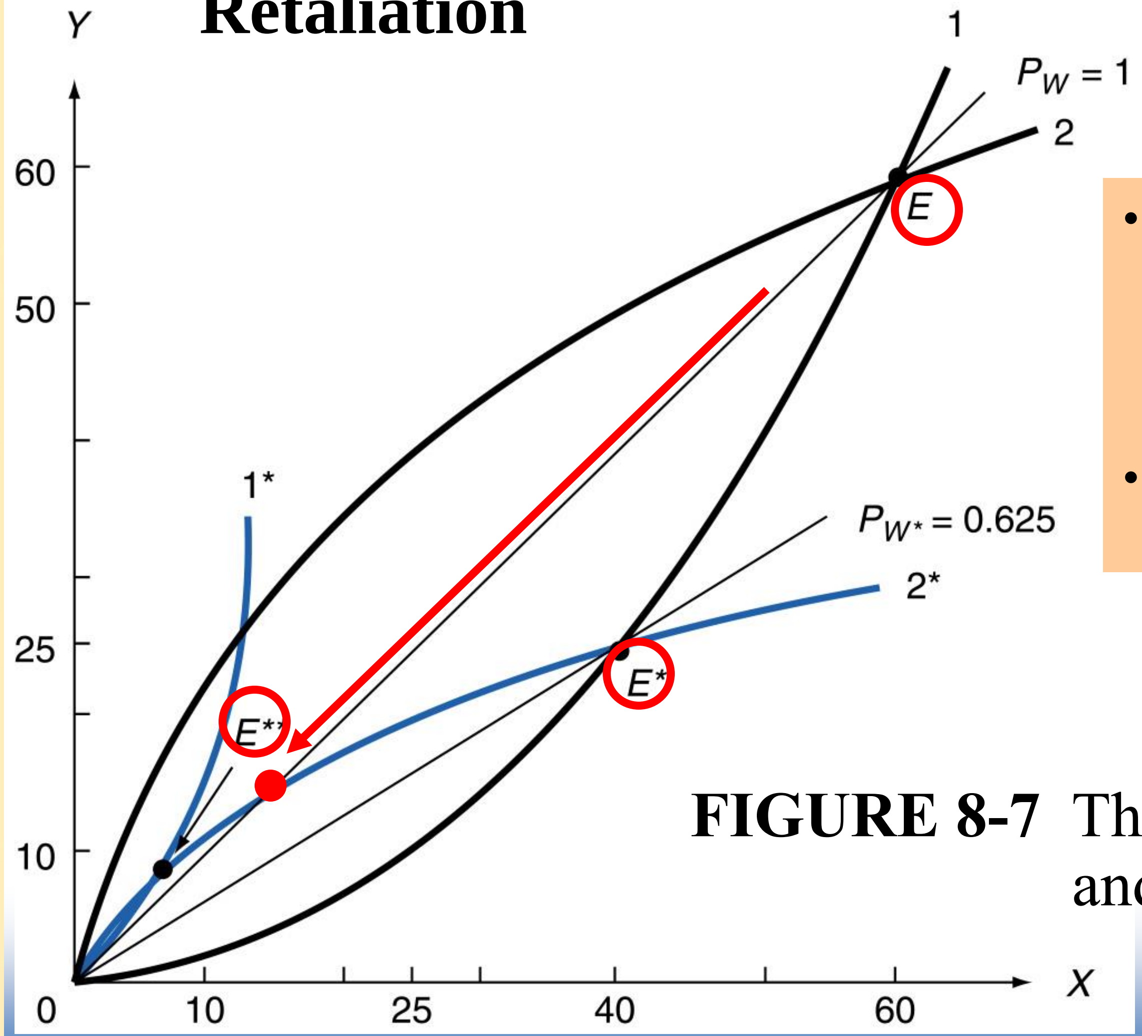
8.6 The Optimum Tariff

8.6A. The Meaning of the Concept of Optimum Tariff and Retaliation

- Optimum tariff: the rate tariff that maximizes the net benefit resulting from the improvement in the nation's terms of trade against the negative effect resulting from reduction in the volume of trade.
- What if the trade partner retaliates?

8.6 The Optimum Tariff

8.6B. Illustration of the Optimum Tariff and Retaliation



- Eventually, both nations are likely to lose all or most of the benefits from trade
- Free trade maximizes world welfare

FIGURE 8-7 The Optimum Tariff and Retaliation.