International Trade

Recommended Books

1. Salvatore, D. (2007). *International Economics*. 9th Edition. John Wiley & Sons.
2. Krugman, P. A. and Obstfeld M. (2005). *International Economics: Theory and Policy*. 7th Edition. Addison Wesley.

Course Assessment

Grading will be done on the following:

▪ Quizzes	10%
▪ Attendance & Class participation	10%
▪ Mid-Term	30%
▪ Final Term	50%

Domestic Trade & International Trade

Domestic Trade: Exchange of goods and services within a country.

International Trade: Exchange of goods and services between countries.

1. Factor Mobility
2. Different Money
3. Transportation Cost
4. Separate Market

The Mercantilists' Views on Trade

- The more gold and silver a nation had, the richer and more powerful it was.
- Thus the way for a nation to become rich is to export more than it imported.
- The resulting export surplus would then be settled by an inflow of bullion or precious metals such as gold and silver.
- Thus the mercantilists advocated restrictions on imports and incentives for exports.
- A nation can gain in international trade only at the expense of other nations.
- i.e., "Trade is a zero-sum game."

Trade Based on Absolute Advantage

- Adam Smith, *The Wealth of Nations*, 1776.

Absolute Advantage

✓ When one nation is more efficient than (or has an absolute advantage over) another in the production of one commodity but is less efficient than (or has an absolute disadvantage with respect to) the other nation in producing a second commodity,

Trade Based on Absolute Advantage

- ✓ then both nations can gain by each specializing in the production of the commodity of its absolute advantage and exchanging part of its output with the other nation for the commodity of its absolute disadvantage.

- Thus, Adam Smith believed that all nations would gain from free trade and strongly advocated a policy of *laissez-faire* and free trade.

Assumptions

1) The labor theory of value
2) Only two nations and two goods
3) Perfect mobility of labor within each nation but immobility between the two nations
4) Labor supply is fixed
5) Labor is homogenous
6) Full employment exist
7) Perfect competition exist
8) Free trade between countries
9) Similar taste in both nations
10) No change in technical knowledge
11) Zero transportation cost
12) Barter trade

Trade Based on Absolute Advantage

- **Illustration**

Table 2.1. The number of units produced by each hour of labor time

	U.S.	U.K.
Wheat(bushels/hour)	6	1
Cloth(yards/hour)	4	5

Suppose International Exchange Ratio

6 W = 6 C

Trade Based on Absolute Advantage

- **Illustration**

Table 2.1. The number of units produced by each hour of labor time

	U.S.	U.K.
Wheat (bushels/hour)	6	1
Cloth (yards/hour)	4	5

Suppose 100 man hours are available to each nation.

Before Trade Production & Consumption

	U.S.	U.K.	Total
Wheat (bushels)	300	50	350
Cloth (yards)	200	250	450

Trade Based on Absolute Advantage

After Trade Production

	U.S.	U.K.	Total
Wheat (bushels)	600	0	600
Cloth (yards)	0	500	500

After Trade Consumption 200 W=200 C

	U.S.	U.K.	Total
Wheat (bushels)	400	200	600
Cloth (yards)	200	300	500

Trade Based on Comparative Advantage

- **Illustration:**

Table 2.2. The number of units produced by each hour of labor time

	U.S.	U.K.
Wheat (bushels/hour)	6	1
Cloth (yards/hour)	4	2

Trade Based on Comparative Advantage

- David Ricardo, *Principles of Political Economy and Taxation*, 1817.

The Law of Comparative Advantage

✓ If one nation has an absolute disadvantage with respect to the other nation in the production of both commodities, the first nation should specialize in the production of and export the commodity in which its absolute disadvantage is small (this is the commodity of its comparative advantage) and import the commodity in which its absolute disadvantage is greater (this is the commodity of its comparative disadvantage).

Trade Based on Comparative Advantage

- **Illustration:**

Table 2.2. The number of units produced by each hour of labor time

	U.S.	U.K.
Wheat(bushels/hour)	6	1
Cloth(yards/hour)	4	2

Suppose International Exchange Ratio

$$6\ W = 6\ C$$

Exception to the Law of Comparative Advantage

- When the absolute disadvantage that one nation has with respect to another nation is the same in both commodities.

- **Illustration:**

Table 2.2. The number of units produced by each hour of labor time

	U.S.	U.K.
Wheat(bushels/hour)	6	3
Cloth(yards/hour)	4	2

Comparative Advantage with Money

Table 2.2. The number of units produced by each hour of labor time

	U.S.	U.K.
Wheat(bushels/hour)	6	1
Cloth(yards/hour)	4	2

Suppose:

Wage rate in US = $6 per man-hour

Wage rate in UK = £1 per man-hour

Price = Wage rate/MP

Comparative Advantage with Money

Dollar Price of Wheat and Cloth in US & UK at £1= $2

	U.S.	U.K.
Price of Wheat per bushels	1	2
Price of Cloth per yard	1.5	1

Comparative Advantage and Opportunity Costs

- **Comparative Advantage and the Labor Theory of Value**

- Labor theory of value: the value or price of a good depends exclusively on the amount of labor going into the production of the good.

- **Implications**

1) Either labor is the only factor of production or labor is used in the same fixed proportion in the production of all goods.
2) Labor is homogeneous (i.e., of only one type).

Comparative Advantage and Opportunity Costs

- Neither of these implications is true, and hence we cannot base the explanation of comparative advantage on the labor theory of value.

$\Rightarrow$ Use the opportunity cost theory to explain the comparative advantage.

- **The Opportunity Cost Theory**

- G. Haberler, *The Theory of International Trade*, 1936.

- **The opportunity cost theory:** the cost of a good is the amount of a second good that must be given up to release just enough resources to produce one additional unit of the first good.

Comparative Advantage and Opportunity Costs

The Production Possibility Frontier under Constant Costs

- The production possibility frontier (or transformation curve) is a curve that shows the alternative combinations of the two goods that a nation can produce by fully utilizing all of its resources with the best technology available to it.

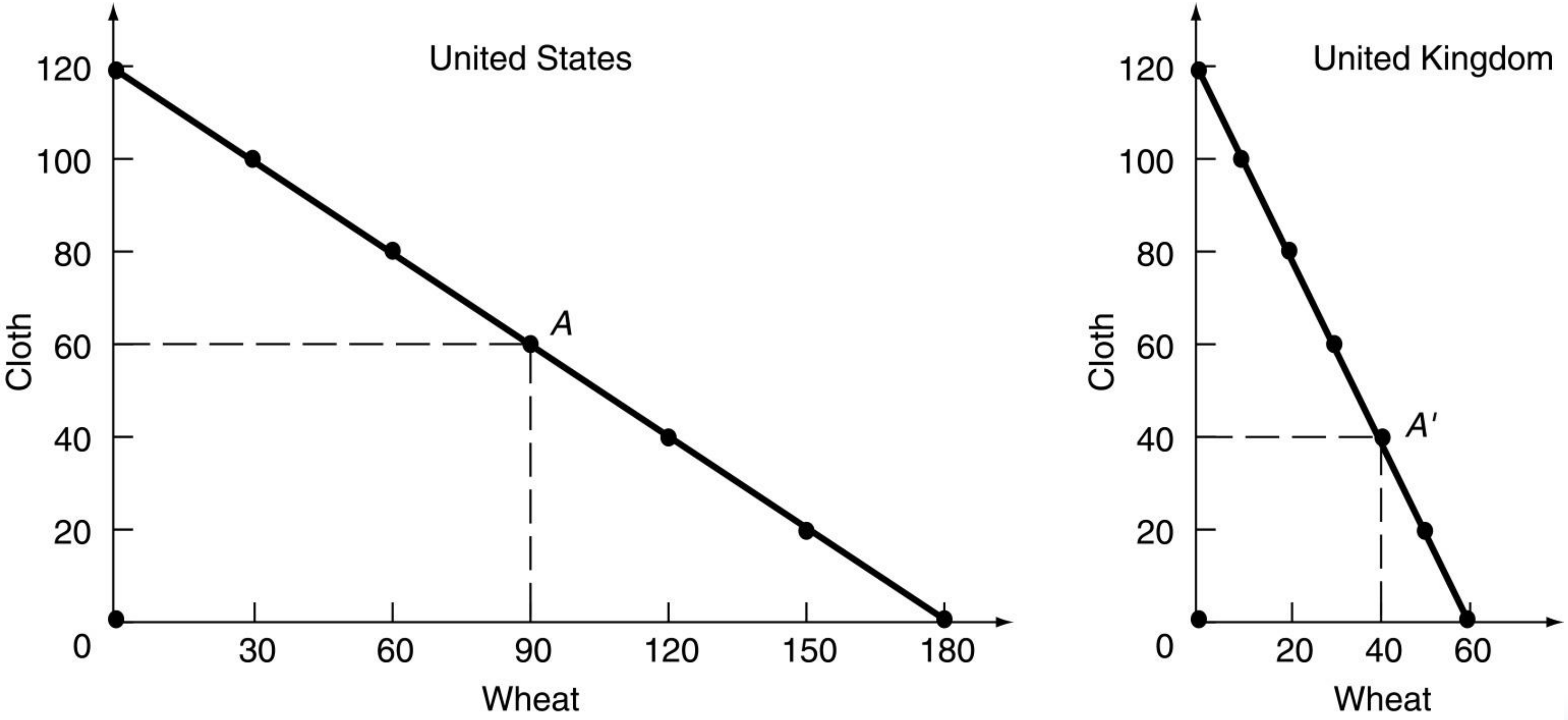
Comparative Advantage and Opportunity Costs

- **Table 2.4. Production Possibility Schedules for Wheat and Cloth in the U.S. and the U.K.**

U.S.		U.K.	
Wheat	Cloth	Wheat	Cloth
180	0	60	0
150	20	50	20
120	40	40	40
90	60	30	60
60	80	20	80
30	100	10	100
0	120	0	120

Comparative Advantage and Opportunity Costs

- **Figure 2.1. the Production Possibility Frontiers of the U.S. and the U.K.**



Comparative Advantage and Opportunity Costs

Opportunity Costs and Relative Commodity Prices

- The opportunity cost is given by the (absolute) slope of the production possibility frontier.
- This is also called as the marginal rate of transformation.

- Explain:

  $(Pw/Pc)_{US} = 4/6 = 2/3$

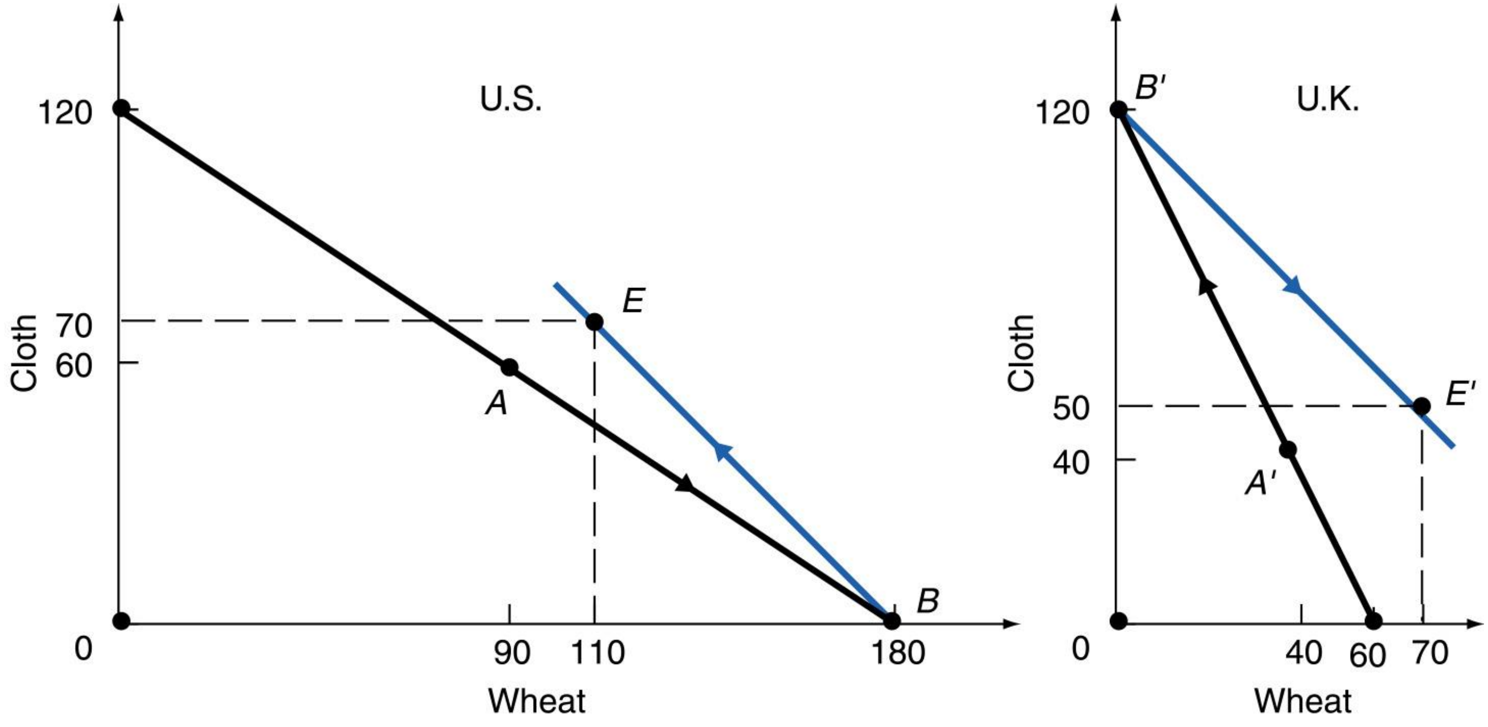
  $(Pw/Pc)_{UK} = 2/1 = 2$

- Note that under constant costs, Pw/Pc is determined exclusively by production considerations in each nation.

The Basis for and the Gains from Trade Under Constant Costs

Illustration of the Gains from Trade: 70W = 70 C

Figure 2.2. The Gains from Trade



- Complete specialization

THANK YOU