International Business

8e

Chapter 5

International Trade Theory

McGraw-Hill/Irwin

Why Is Free Trade Beneficial?

- **Free trade** - a situation where a government does not attempt to influence through quotas or duties what its citizens can buy from another country or what they can produce and sell to another country
- Trade theory shows why it is beneficial for a country to engage in international trade even for products it is able to produce for itself
- International trade allows a country
  - to specialize in the manufacture and export of products that it can produce efficiently
  - import products that can be produced more efficiently in other countries

Why Do Certain Patterns Of Trade Exist?

- Some patterns of trade are fairly easy to explain
  - it is obvious why Saudi Arabia exports oil, Ghana exports cocoa, and Brazil exports coffee
- But, why does Switzerland export chemicals, pharmaceuticals, watches, and jewelry?
- Why does Japan export automobiles, consumer electronics, and machine tools?

What Role Does Government Have In Trade?

- The mercantilist philosophy makes a crude case for government involvement in promoting exports and limiting imports
- Smith, Ricardo, and Heckscher-Ohlin promote unrestricted free trade
- New trade theory and Porter's theory of national competitive advantage justify limited and selective government intervention to support the development of certain export-oriented industries

What Is Mercantilism?

- **Mercantilism** suggests that it is in a country's best interest to maintain a **trade surplus** -to export more than it imports
  - advocates government intervention to achieve a surplus in the balance of trade
- Mercantilism views trade as a **zero-sum game** - one in which a gain by one country results in a loss by another

What Is Smith's Theory Of Absolute Advantage?

- Adam Smith argued that a country has an **absolute advantage** in the production of a product when it is more efficient than any other country in producing it
  - countries should specialize in the production of goods for which they have an absolute advantage and then trade these goods for the goods produced by other countries

How Does The Theory Of Absolute Advantage Work?

- Assume that two countries, Ghana and South Korea, both have 200 units of resources that could either be used to produce rice or cocoa
- In Ghana, it takes 10 units of resources to produce one ton of cocoa and 20 units of resources to produce one ton of rice
  - Ghana could produce 20 tons of cocoa and no rice, 10 tons of rice and no cocoa, or some combination of rice and cocoa between the two extremes
- In South Korea it takes 40 units of resources to produce one ton of cocoa and 10 resources to produce one ton of rice
  - South Korea could produce 5 tons of cocoa and no rice, 20 tons of rice and no cocoa, or some combination in between

How Does The Theory Of Absolute Advantage Work?

- Without trade
  - Ghana would produce 10 tons of cocoa and 5 tons of rice
  - South Korea would produce 10 tons of rice and 2.5 tons of cocoa
- With specialization and trade
  - Ghana would produce 20 tons of cocoa
  - South Korea would produce 20 tons of rice
  - Ghana could trade 6 tons of cocoa to South Korea for 6 tons of rice
- After trade
  - Ghana would have 14 tons of cocoa left, and 6 tons of rice
  - South Korea would have 14 tons of rice left and 6 tons of cocoa
- If each country specializes in the production of the good in which it has an absolute advantage and trades for the other, both countries gain

How Does The Theory Of Absolute Advantage Work?

Absolute Advantage and the Gains from Trade

Resources Required to Produce 1 Ton of Cocoa and Rice		
	Cocoa	Rice
Ghana	10	20
South Korea	40	10
Production and Consumption without Trade		
	Cocoa	Rice
Ghana	10.0	5.0
South Korea	2.5	10.0
Total production	12.5	15.0
Production with Specialization		
	Cocoa	Rice
Ghana	20.0	0.0
South Korea	0.0	20.0
Total production	20.0	20.0
Consumption After Ghana Trades 6 Tons of Cocoa for 6 Tons of South Korean Rice		
	Cocoa	Rice
Ghana	14.0	6.0
South Korea	6.0	14.0
Increase in Consumption as a Result of Specialization and Trade		
	Cocoa	Rice
Ghana	4.0	1.0
South Korea	3.5	4.0

What Is Ricardo's Theory Of Comparative Advantage?

- David Ricardo asked what might happen when one country has an absolute advantage in the production of all goods
- Ricardo's theory of **comparative advantage** suggests that countries should specialize in the production of those goods they produce most efficiently and buy goods that they produce less efficiently from other countries, even if this means buying goods from other countries that they could produce more efficiently at home

How Does The Theory Of Comparative Advantage Work?

- Assume
  - Ghana is more efficient in the production of both cocoa and rice
  - in Ghana, it takes 10 resources to produce one ton of cocoa, and 13 1/3 resources to produce one ton of rice
  - So, Ghana could produce 20 tons of cocoa and no rice, 15 tons of rice and no cocoa, or some combination of the two
  - in South Korea, it takes 40 resources to produce one ton of cocoa and 20 resources to produce one ton of rice
  - so, South Korea could produce 5 tons of cocoa and no rice, 10 tons of rice and no cocoa, or some combination of the two

How Does The Theory Of Comparative Advantage Work?

- With trade
  - Ghana could export 4 tons of cocoa to South Korea in exchange for 4 tons of rice
  - Ghana will still have 11 tons of cocoa, and 4 additional tons of rice
  - South Korea still has 6 tons of rice and 4 tons of cocoa
  - if each country specializes in the production of the good in which it has a comparative advantage and trades for the other, both countries gain
- Comparative advantage theory provides a strong rationale for encouraging free trade

How Does The Theory Of Comparative Advantage Work?

Comparative Advantage and the Gains from Trade

Resources Required to Produce 1 Ton of Cocoa and Rice		
	Cocoa	**Rice**
Ghana	10	13.33
South Korea	40	20
Production and Consumption without Trade		
	Cocoa	**Rice**
Ghana	10.0	7.5
South Korea	2.5	5.0
Total production	12.5	12.5
Production with Specialization		
	Cocoa	**Rice**
Ghana	15.0	3.75
South Korea	0.0	10.0
Total production	15.0	13.75
Consumption After Ghana Trades 6 Tons of Cocoa for 6 Tons of South Korean Rice		
	Cocoa	**Rice**
Ghana	11.0	7.75
South Korea	4.0	6.0
Increase in Consumption as a Result of Specialization and Trade		
	Cocoa	**Rice**
Ghana	1.0	0.25
South Korea	1.5	1.0

Is Unrestricted Free Trade Always Beneficial?

- Unrestricted free trade is beneficial, but the gains may not be as great as the simple model of comparative advantage would suggest
  - immobile resources
  - diminishing returns
  - dynamic effects and economic growth
- Opening a country to trade could increase
  - a country's stock of resources as increased supplies become available from abroad
  - the efficiency of resource utilization and so free up resources for other uses
  - economic growth

Could A Rich Country Be Worse Off With Free Trade?

- Paul Samuelson - the dynamic gains from trade may not always be beneficial
  - free trade may ultimately result in lower wages in the rich country
- The ability to offshore services jobs that were traditionally not internationally mobile may have the effect of a mass inward migration into the United States, where wages would then fall
- But, protectionist measures could create a more harmful situation than free trade

What Is The Heckscher-Ohlin Theory?

- Eli Heckscher and Bertil Ohlin - comparative advantage arises from differences in national **factor endowments** – the extent to which a country is endowed with resources like land, labor, and capital
  - predict that countries will export goods that make intensive use of those factors that are locally abundant, and import goods that make intensive use of factors that are locally scarce

Does The Heckscher-Ohlin Theory Hold?

- Wassily Leontief theorized that since the U.S. was relatively abundant in capital compared to other nations, the U.S. would be an exporter of capital intensive goods and an importer of labor-intensive goods.
- However, he found that U.S. exports were less capital intensive than U.S. imports
- Since this result was at variance with the predictions of trade theory, it became known as the **Leontief Paradox**

What Is The Product Life Cycle Theory?

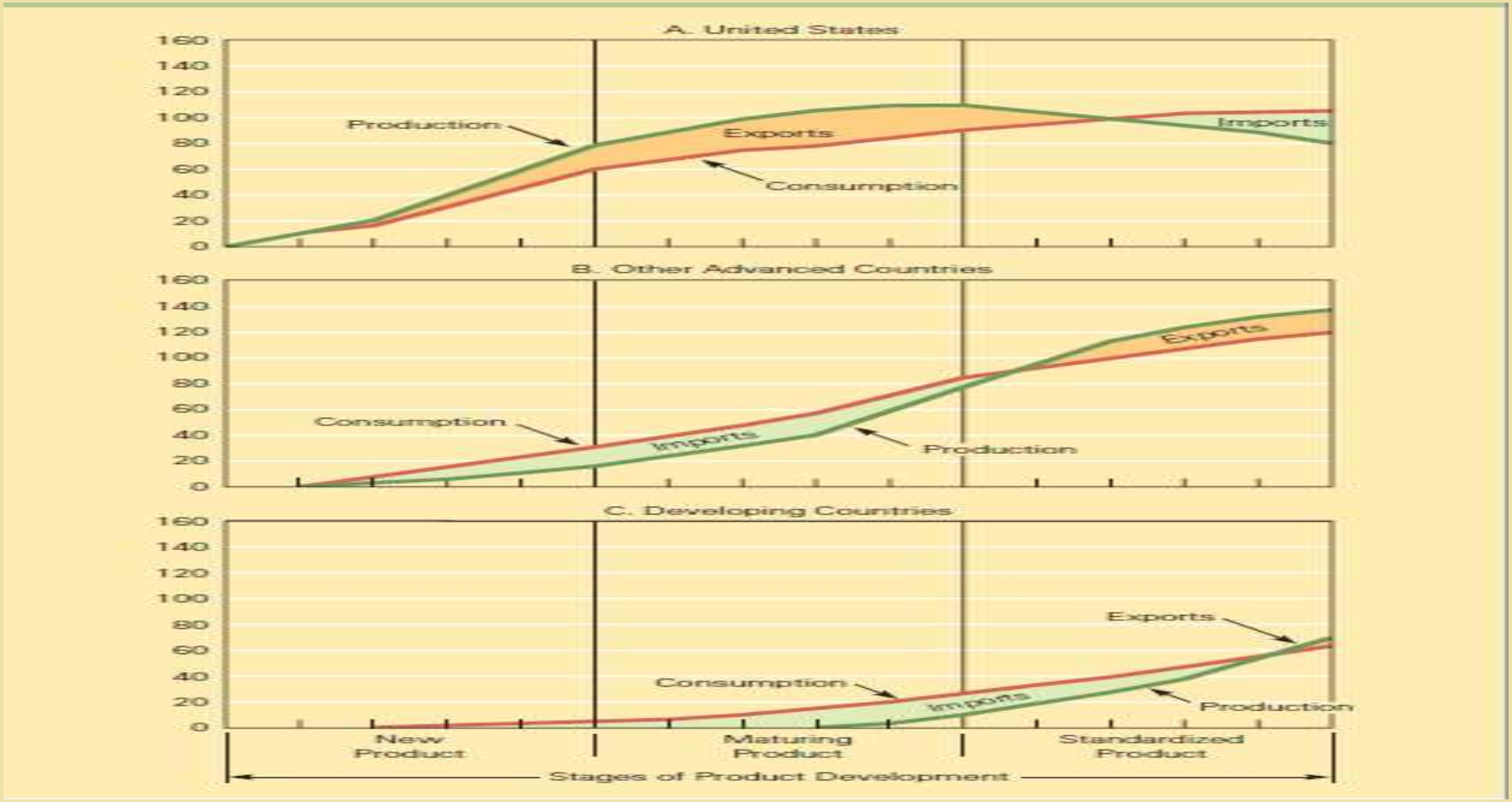
- The **product life-cycle theory** - (Raymond Vernon) - as products mature both the location of sales and the optimal production location will change affecting the flow and direction of trade
  - the size and wealth of the U.S. market gave U.S. firms a strong incentive to develop new products
  - initially, the product would be produced and sold in the U.S.
  - as demand grew in other developed countries, U.S. firms would begin to export
  - demand for the new product would grow in other advanced countries over time making it worthwhile for foreign producers to begin producing for their home markets

What Is The Product Life Cycle Theory?

- U.S. firms might set up production facilities in advanced countries with growing demand, limiting exports from the U.S.
- As the market in the U.S. and other advanced nations matured, the product would become more standardized, and price the main competitive weapon
- Producers based in advanced countries where labor costs were lower than the United States might now be able to export to the United States
- If cost pressures were intense, developing countries would acquire a production advantage over advanced countries
- Production became concentrated in lower-cost foreign locations, and the United States became an importer of the product

What Is The Product Life Cycle Theory?

The Product Life Cycle Theory



Does The Product Life Cycle Theory Hold?

- The product life cycle theory accurately explains what has happened for products like photocopiers and a number of other high technology products developed in the United States in the 1960s and 1970s
- But, the globalization and integration of the world economy has made this theory less valid today
  - the theory is ethnocentric
  - production today is dispersed globally
  - products today are introduced in multiple markets simultaneously

What Is New Trade Theory?

- **New trade theory** suggests that the ability of firms to gain **economies of scale** (unit cost reductions associated with a large scale of output) can have important implications for international trade

1. Through its impact on economies of scale, trade can increase the variety of goods available to consumers and decrease the average cost of those goods
   - without trade, nations might not be able to produce those products where economies of scale are important
   - with trade, markets are large enough to support the production necessary to achieve economies of scale
   - so, trade is mutually beneficial because it allows for the specialization of production, the realization of scale economies, and the production of a greater variety of products at lower prices

What Is New Trade Theory?

2. In those industries when output required to attain economies of scale represents a significant proportion of total world demand, the global market may only be able to support a small number of enterprises
   - **first mover advantages** - the economic and strategic advantages that accrue to early entrants into an industry
   - economies of scale
   - first movers can gain a scale based cost advantage that later entrants find difficult to match

What Are The Implications Of New Trade Theory For Nations?

- Nations may benefit from trade even when they do not differ in resource endowments or technology
  - a country may dominate in the export of a good simply because it was lucky enough to have one or more firms among the first to produce that good
- Governments should consider strategic trade policies that nurture and protect firms and industries where first mover advantages and economies of scale are important

What Is Porter's Diamond Of Competitive Advantage?

- Michael Porter tried to explain why a nation achieves international success in a particular industry and identified four attributes that promote or impede the creation of competitive advantage

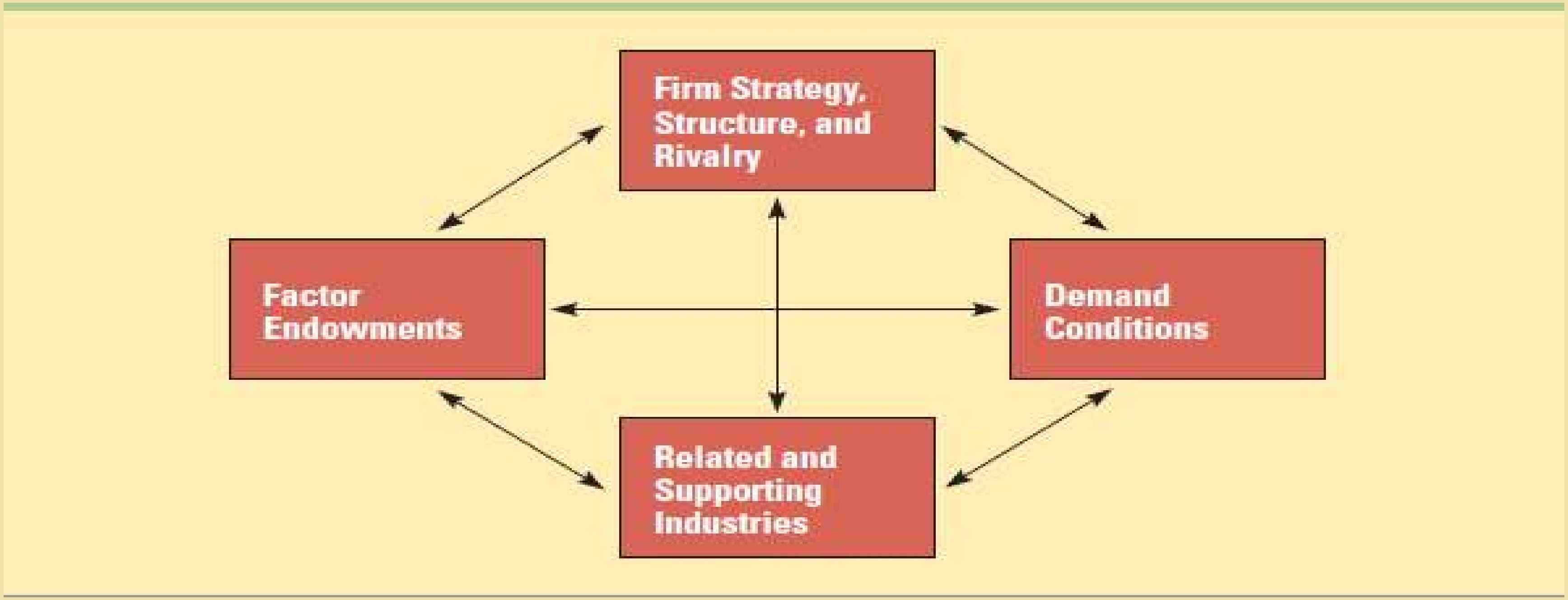
1. **Factor endowments** - a nation's position in factors of production necessary to compete in a given industry
   - can lead to competitive advantage
   - can be either basic (natural resources, climate, location) or advanced (skilled labor, infrastructure, technological know-how)
2. **Demand conditions** - the nature of home demand for the industry's product or service
   - influences the development of capabilities
   - sophisticated and demanding customers pressure firms to be competitive

What Is Porter's Diamond Of Competitive Advantage?

3. **Relating and supporting industries** - the presence or absence of supplier industries and related industries that are internationally competitive
   - can spill over and contribute to other industries
   - successful industries tend to be grouped in clusters in countries
4. **Firm strategy, structure, and rivalry** - the conditions governing how companies are created, organized, and managed, and the nature of domestic rivalry
   - different management ideologies affect the development of national competitive advantage
   - vigorous domestic rivalry creates pressures to innovate, to improve quality, to reduce costs, and to invest in upgrading advanced features

What Is Porter's Diamond Of Competitive Advantage?

Determinants of National Competitive Advantage: Porter's Diamond



Does Porter's Theory Hold?

- Government policy can
  - affect demand through product standards
  - influence rivalry through regulation and antitrust laws
  - impact the availability of highly educated workers and advanced transportation infrastructure.
- The four attributes, government policy, and chance work as a reinforcing system, complementing each other and in combination creating the conditions appropriate for competitive advantage
- So far, Porter's theory has not been sufficiently tested to know how well it holds up

What Are The Implications Of Trade Theory For Managers?

1. **Location implications** - a firm should disperse its various productive activities to those countries where they can be performed most efficiently
   - ❖ firms that do not, may be at a competitive disadvantage
2. **First-mover implications** - a first-mover advantage can help a firm dominate global trade in that product
3. **Policy implications** - firms should work to encourage governmental policies that support free trade
   - ❖ firms should lobby the government to adopt policies that have a favorable impact on each component of the diamond

What Is The Balance Of Payments?

- A country's **balance of payments accounts** keep track of the payments to and receipts from other countries for a particular time period
- Balance of payments accounting uses double entry bookkeeping
  - so, the sum of the current account balance, the capital account and the financial account should always add up to zero
- There are three main accounts

1. The **current account** records transactions that pertain to goods, services, and income, receipts and payments
   - **current account deficit** - a country imports more than it exports
   - **current account surplus** – a country exports more than it imports
2. The **capital account** records one time changes in the stock of assets
3. The **financial account** records transactions that involve the purchase or sale of assets
   - net change in U.S. assets owned abroad
   - foreign owned assets in the United States

What Is The Balance Of Payments?

United States Balance of Payments Accounts, 2007

Current Account	$ Millions
Exports of Goods, Services and Income Receipts	2,463,505
Goods	1,148,481
Services	497,245
Income Receipts	817,779
Imports of Goods, Services and Income Payments	−3,082,014
Goods	−1,967,853
Services	−378,130
Income Payments	−736,030
Unilateral current transfers (net)	−112,705
Current Account Balance	−731,215
CAPITAL ACCOUNT	
Capital Account Transactions (net)	−1,843
FINANCIAL ACCOUNT	
U.S. Owned Assets Abroad, net	−1,289,854
U.S. Official Reserve Assets	122
U.S. Government Assets	22,273
U.S. Private Assets	−1,267,459
Foreign Owned Assets in the United States	2,057,703
Foreign Official Assets in the United States	411,058
Other Foreign Assets in the United States	1,646,645
Statistical Discrepancy	−41,287

Is A Current Account Deficit Bad?

- Does current account deficit in the United States matter?
- a current account deficit implies a net debtor
  - so, a persistent deficit could limit future economic growth
- But, even though capital is flowing out of the United States as payments to foreigners, much of it flows back in as investments in assets
- Yet, suppose foreigners stop buying U.S. assets and sell their dollars for another currency
- A dollar crisis could occur

Review Question

All of the following theories advocated free trade except

a) Mercantilism
b) Comparative Advantage
c) Absolute Advantage
d) Heckscher-Ohlin

Review Question

Which theory suggested that comparative advantage arises from differences in national factor endowments?

a) mercantilism

b) absolute advantage

c) Heckscher-Ohlin

d) comparative advantage

Review Question

Which theory suggests that as products mature the optimal production location will change?

a) Mercantilism
b) Comparative Advantage
c) Absolute Advantage
d) Product life-cycle

Review Question

Economies of scale and first mover advantages are important to which trade theory?

a) Mercantilism
b) Product life cycle
c) New trade theory
d) Comparative advantage

Review Question

Porter's diamond of competitive advantage includes all of the following except

a) Factor endowments
b) Demand conditions
c) First-mover advantages
d) Firm strategy, structure, and rivalry

Review Question

________ refer to the nature of home demand for the industry's product or service.

a) Demand conditions
b) Factor endowments
c) Firm strategy, structure, and rivalry
d) Related and supporting industries