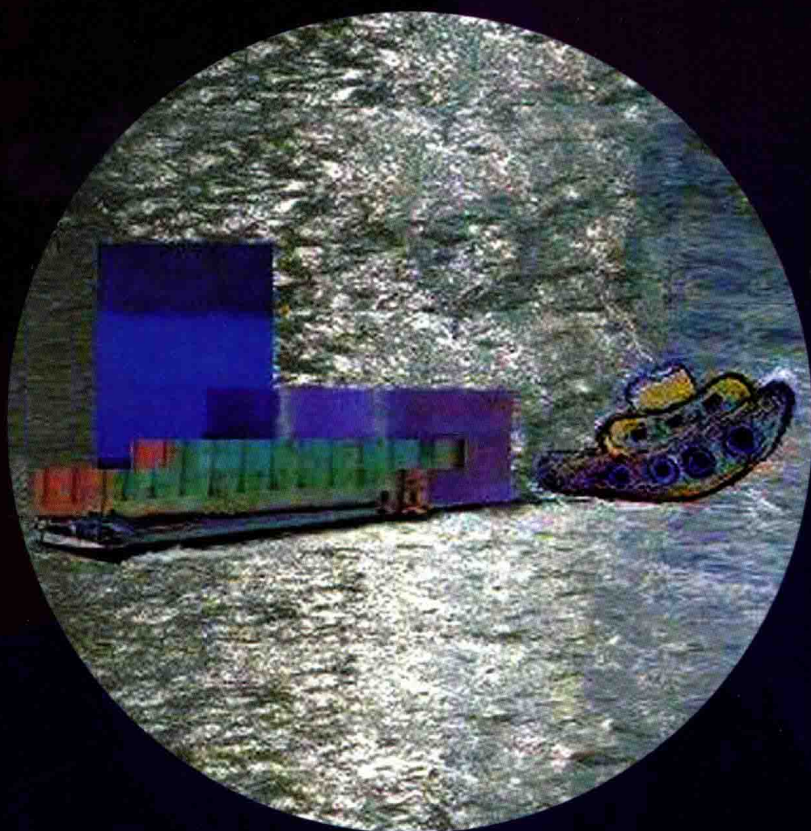


International Economics

Global Markets and Competition

4th Edition



Henry Thompson

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Auburn University, USA

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Global Markets and Competition (4th Edition)

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Preface for Students

International economics has moved center stage as countries become more integrated with trade, foreign investment, and migration. As the world get closer due to better transportation and telecommunication, international economics will affect your private and business lives.

The foreign exchange market is the largest market in the world. Industries expand and collapse in the face of international competition. The World Trade Organization WTO, North American Free Trade Agreement NAFTA, and European Union EU have become fundamental forms of government.

Protection eases the pressures of international competition. Industries seek the protection of tariffs trying to secure profit at national expense. Governments hinder international trade and investment. Central banks interfere with the foreign exchange market. Such maneuvers impede international commerce and lower income.

This text is based on how international markets work. An economy is a collection of markets with links across borders. Comparative advantage is a fundamental concept for predicting international production and trade based on underlying production capacity.

Trade policy redistributes income toward favored industries and groups. Costs of protection outweigh benefits but industry and labor groups lobby for their own protection. Politicians respond to political support by granting favors.

International trade is the arbitrage of products from countries where prices are lower to where they are higher. Arbitrage makes profit and distributes products more economically. The interaction of supply and demand determines international production and trade.

The graphs, examples, applications, and problems are essential. There are hints for even numbered problems in the back of the book. I think you will enjoy reading and working through the text. Visit my website at www.auburn.edu/~thomphl.

Preface for Instructors

International Economics: Global Markets and Competition is a unique textbook:

- a one term text for students with principles background
- microeconomic models stress positive theory
- advocates free trade
- stresses general equilibrium theory
- boxed examples
- problems relate directly to theory in the text

This text applies tools of international microeconomics and macroeconomics. The foreign exchange rate and balance of payments are integrated throughout. Open economy macroeconomic models stress micro foundations.

The text does not assume background in intermediate theory. Numerous boxed examples introduce tools and concepts from scratch.

Technical points are made with examples and graphs avoiding “formulas” and algebraic symbols. Classroom presentations can be based on diagrams and algebra.

Problems were developed in the classroom. Hints for even numbered problems are in the Appendix. Calling on students to work problems at the board will improve their performance.

You will be surprised at how well your students learn with this accessible text. See my webpage at www.auburn.edu/~thomphl and contact me at henry.thompson@auburn.edu.

Thanks

Students and colleagues too numerous to mention have provided suggestions and comments. The staff at World Scientific are excellent.

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TRADE AND PROTECTIONISM

Markets and International Trade

Preview

This first chapter introduces some fundamental concepts of international economics:

- Supply and demand in export and import markets
- Excess supply and demand in international markets
- The trade balance as net receipts from international trade
- Comparative advantage as the foundation of trade

INTRODUCTION

The most important tool of economics is the model of supply and demand. Goods and services are traded in markets that determine prices. Markets include grocery stores, the stock market, the foreign exchange market, the international market for cars, and so on. In market transactions, money changes hands between buyers and sellers at agreed prices.

An international transaction occurs when the buyer and seller are in different countries. The exchange rate is involved in international transactions with the buyer's currency traded for the seller's.

In international economics, governments can tax imports with tariffs or limit transactions with quotas or nontariff barriers. Governments can also subsidize exports. International economics is characterized by the lack of labor mobility across national borders. Capital and investment also find movement more difficult than within a country.

The balance of trade is a country's export revenue minus import spending. Trade deficits occur when import spending is greater than export revenue. Trade surpluses occur when export revenue is greater. The trade balance is a major topic in international economics, regularly making headlines.

Comparative advantage is relative production efficiency. When a country produces a good, it pays the opportunity cost of a lost alternative. Efficient use of limited resources based on comparative advantage leads to higher income.

A. INTERNATIONAL MARKETS

Everyone is involved in international markets every day. Everything we buy has some foreign component. Every job contributes to exports and uses imports, either directly or indirectly. Markets are the basis of international economics.

Domestic Demand

The law of demand states the price and quantity demanded of a good move in opposite directions. Car dealers, stores, and oil refineries offer discounts when their inventories are too high.

Figure 1.1 shows domestic demand D for manufactures. This demand curve represents the quantity demanded at various prices by domestic consumers. At \$15 the quantity demanded is 100 units per month.

Demand curves slope downward for two reasons:

- substitution effect a higher price induces consumers to look for substitutes
- income effect higher price lowers real income

Some goods have readily available substitutes. If the price of beef rises with a quota on imported beef, consumers switch to chicken. If the price of Japanese cars rises with a voluntary export restraint, consumers switch to European cars. If the price of Dutch cheese rises with a tariff, consumers switch to Wisconsin cheese.

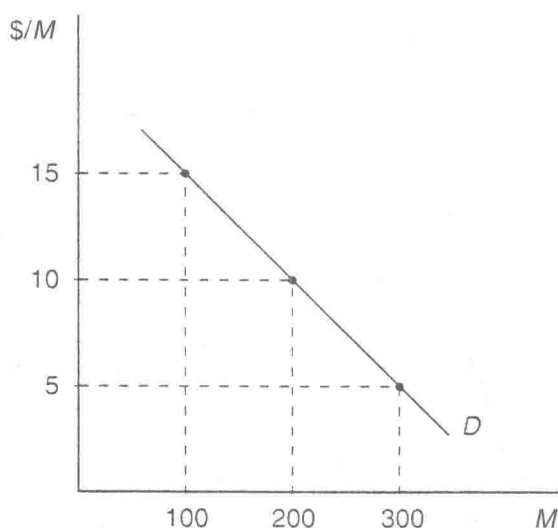


Figure 1.1
The Domestic Demand for Manufactures
Quantity demanded is inversely related to price.

Embargoes of the Organization of Petroleum Exporting Countries OPEC during the 1970s tripled the price of crude oil. Consumers began to substitute away from gasoline. Real incomes fell as the higher relative price of gas lowered purchasing power of income.

Demand curves slope downward due to substitution and income effects.

Various market influences shift demand curves:

- consumer tastes
- number of consumers
- price expectations
- income
- prices of related products

If tastes for a product increase, the demand curve shifts right. Consumers demand more at any price. A few decades ago, US consumers had little taste for foreign cars or imported beer. Tastes have changed.

As nations grow, there is increased demand for goods and services. When a country enters international trade, the number of consumers for its products increase. The North American Free Trade Area (NAFTA) increases demand for products in Canada, Mexico, and the US. If the US outlaws trade with Cuba, consumers lose. If Europe opens its protected agricultural industry to trade, the demand for US agricultural products will increase.

Expected higher prices induce consumers to buy now to avoid higher prices later, increasing current demand. With news that the Ukrainian wheat harvest will be poor, buyers of wheat increase demand right away.

Higher income raises demand for normal goods and lowers demand for inferior goods. As incomes rise in newly industrialized countries, demand for US exports of luxury goods like steaks rises while demand for inferior goods such as red beans falls.

Many goods are related in consumption. Demand for a good is positively related to the price of its substitutes. Coffee and tea are substitutes. The price of coffee rose in the early 1970s when the international coffee cartel restricted output, raising the demand for tea. Cars and gas are complements. Higher gas prices reduce the demand for cars.

Demand curves increase to the right or decrease to the left due to nonprice influences.

EXAMPLE 1.1 *International Trade Growth*

Since World War II international trade has steadily increased. Output has grown but not as fast as world trade. Business firms are becoming more involved in trade. Consumers enjoy products from around the world.

Domestic Supply

Supply curves are the marginal cost of production, the cost of producing more output. Marginal cost slopes upward for two reasons:

- Diminishing marginal productivity of inputs
- Increasing output bids up prices of inputs

Diminishing marginal productivity implies the additional output per unit of input declines as the input increases. The marginal product of additional workers declines after some point.

Output increases when price rises. There is a positive relationship between price and quantity supplied. Figure 1.2 shows the upward sloping domestic supply of manufactures such as cars, apparel, or computers. Supply curves differ across countries. Differences in the supply curve are due to

- technology
- the number of firms
- prices of inputs
- price expectations

Improved technology allows firms to produce more output with the same inputs. More efficient jet engines lower the cost of international air travel shifting supply to the right.

An increase in the number of firms increases supply. The original personal computers were made by a few companies that enjoyed high prices. Other firms entered the industry, foreign firms or domestic firms buying foreign components, increasing supply.

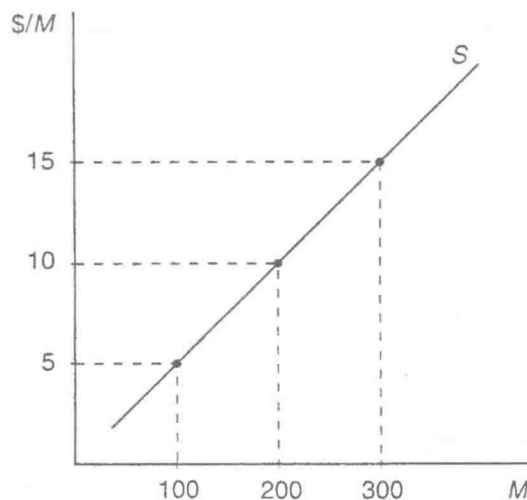


Figure 1.2
The Domestic Supply of Manufactures

The quantity supplied is positively associated with price.

Lower input prices increase supply. Immigration lowers wages, increasing the supply of agricultural goods and construction.

Price expectations shift supply. If firms expect lower prices, they sell inventories right away before price falls. If an OPEC meeting ends in agreement to restrict output, dealers expect higher oil prices. Oil in storage will be worth more in the future, decreasing supply immediately.

Supply curves slope upward, reflecting higher marginal cost associated with higher output. Supply curves shift due to nonprice influences.

Shifts in supply or demand are different from movements along the curves. A change in price causes a change in the quantity supplied or demanded along the curve. A change in a nonprice influence shifts the curve.

EXAMPLE 1.2 *A Relatively Closed Giant*

Relative to other countries, the US economy is a closed giant. The US produces about one sixth of world output. The US leads all countries in share of world trade but trade is a small share of US output. The ratio of export revenue plus import spending to output has grown to about 30% for the US. The ratio is similar for Japan but over 50% for the EU. For many countries $(X + M)/GDP$ is much higher.

Markets and Market Clearing

The domestic market for manufactures is shown in Figure 1.3. The domestic price is \$10 determined where the quantity domestic buyers are willing to consume equals the quantity domestic suppliers are willing to produce, 200.

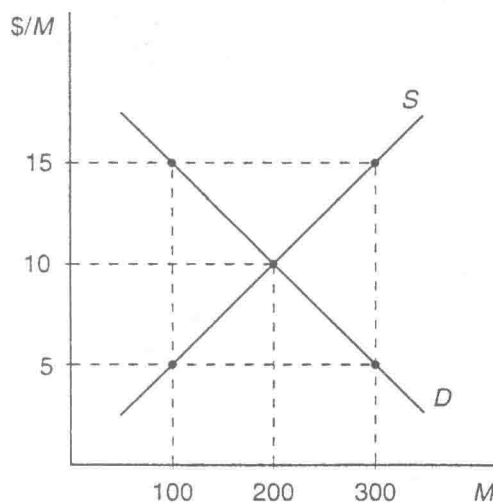


Figure 1.3
The Domestic Market for Manufactures M

Domestic supply S and demand D interact to determine the domestic equilibrium price \$10 and the domestic equilibrium quantity 200. The equilibrium price equates quantity supplied with quantity demanded.

At any other price the quantities supplied and demanded are not equal. At \$15, production is 300 and consumption 100. Suppliers would lower price to keep their inventories from accumulating. At \$5 consumption at 300 is greater than production at 100 and the price is bid up.

Market clearing explains why government policymakers cannot set prices. Suppose a politician thinks a \$5 price would be popular and sets a price ceiling. Buyers want 300 units but suppliers produce only 100.

At the other extreme, a \$15 floor price would benefit the industry. Firms respond with higher output but consumers purchase only 100. The government may buy the surplus as happens with some agricultural products.

Markets clear at equilibrium prices that equate the quantity demanded with the quantity supplied.

EXAMPLE 1.3 Ports for US Merchandise Exports

Ports in California, Texas, and New York account for one third of US exports. California and Washington are located on the Pacific Rim and trade heavily with Asia. Texas trades heavily with Latin America. New York is on the Atlantic and trades with the EU. Michigan and Illinois have ports on the Great Lakes and trade with Canada.

International Markets

Producers and customers in different countries are involved in international markets. Figure 1.4 shows home and foreign markets for manufactures M. Asterisks indicate the foreign country. The equilibrium price in the home market is \$10 and in the foreign market 250 yen.

When comparing prices, traders convert currencies. The exchange rate is the dollar price of the yen or \$/yen. In Figure 1.4, the exchange rate is \$/yen=0.01 with each yen worth one cent.

This international market offers an opportunity for *arbitrage*. Traders buy the good in the foreign country at 250 yen or $\$2.50 = 250 \times 0.01$, less than the \$10 domestic price. Arbitrage is the foundation of international trade.

A price of \$5 clears this international market. The home country imports $200 = 300 - 100$ units at a price of \$5. Domestic production falls from 200 to 100. Domestic consumers enjoy the lower price and increase the quantity demand from 200 to 300. On the foreign side, production rises from 200 to 300 with the increase in price from 250 yen to 500 yen. Foreign consumers suffer higher prices, cutting their level of consumption from 200 to 100.

International trade seeks the price where excess demand from one country equals excess supply from the other.