

# Principles of Macroeconomics

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## ECON 2002.01 - Chapter 32 Comparative Advantage and the Open Economy

### Introduction

In 2001, the U.S. government slashed *tariffs*, which are taxes on items imported from other countries. For the following 10 years, the dollar value of cut flowers imported to the U.S. from Colombia quadrupled. Californian flower growers responded by lobbying Congress to restore the original higher tariffs.

To understand how tariffs affect product price, you need to learn about international trade, which is the subject of this chapter.

### Learning Objectives

- Discuss the worldwide importance of international trade
- Explain why nations can gain from specializing in production and engaging in international trade
- Understand common arguments against free trade
- Describe ways that nations restrict foreign trade
- Identify key international agreements and organizations that adjudicate trade disputes among nations

### Chapter Outline

- The Worldwide Importance of International Trade
- Why We Trade: Comparative Advantage and Mutual Gains from Exchange
- The Relationship Between Imports and Exports
- International Competitiveness
- Arguments Against Free Trade
- Ways to Restrict Foreign Trade
- International Trade Organizations

### The Worldwide Importance of International Trade

- World GDP today is nearly nine times greater than it was at the end of World War II
- World trade has increased to more than 28 times what it was in 1950
- The United States has figured prominently in this expansion of world trade

### Why We Trade: Comparative Advantage and Mutual Gains from Exchange

- We have learned about the concept of specialization and the mutual gains from trade
- We can understand gains from trade among nations by understanding output gains from specialization between individuals
- **Comparative Advantage**
  - The ability to produce a good or service at a lower opportunity cost compared with producers
- **Specialization among nations**

- To demonstrate the concept of comparative advantage, consider a simple two-country, two-good world
- **Production and consumption capabilities in a two-country, two-good world**
  - We show maximum feasible quantities of software and PCs
  - Using all resources-land, labor capital and entrepreneurship
- U.S. residents can utilize all their resources to produce 90 units of software or 225 PC per hour
- Residents of India are able to utilize all their resources to produce either 100 units of software or 50 PCs per hour
- **Comparative advantage**
  - The opportunity cost of producing a tablet is lower in the United States than in India
    - a) Cost of producing 1 tablet = 0.4 apps
    - b) Cost of producing 1 app = 2.5 tablets
  - The opportunity cost of producing an app is lower in India than the United States
    - a) Cost of producing 1 tablet = 2 apps
    - b) Cost of producing 1 app = 0.5 tablets
- The United States and India will specialize in activities with which they experience a lower opportunity cost
- In other words, they will specialize in the activity in which they have a comparative advantage
- **Specialization in production**
  - United State will specialize; produce 225 tablet devices and no apps
  - India will specialize; produce 100 apps and no tablet devices
- **Consumption *with* specialization and trade**
  - The United States is willing to buy 1 digital app as long as they provide in exchange no more than 2.5 tablet devices
  - This is the United State's opportunity cost of producing 1 digital app at home
  - India buys a tablet device from the United States in exchange for no more than 2 digital apps
  - This is India's opportunity cost of producing a tablet device at home
- **By specializing and engaging in trade:**
  - The United States consumes 75 digital apps imported from India and consumes 150 tablet devices produced at home
  - Indian residents consume 25 digital apps produced at home and import 75 tablet devices form the United States
- **Gains from trade**
  - The United States gain form specialization and trade is 45 digital apps
  - India can consume 37.5 more tablet devices
  - These are net gains
- **Specialization is the key**
  - Specializing in producing goods for which a nation has a comparative advantage allows for greater efficiency
  - Production capabilities increase, making possible greater worldwide consumption through international trade
- **Observations on specialization and trade**
  - Not everyone gains from trade
  - Cannot "run out of exports"
  - Every country will always have a comparative advantage in something
- **Other benefits form international trade: the transmission of ideas**
  - New goods, services spread
  - New processes transmitted
  - Intellectual property introduced

## The Relationship Between Exports and Imports

- In the long run, imports are paid for by exports
- Any restrictions on imports ultimately reduce exports
- When a country engages in trade, it is not competing against the other countries
- All nations stand to benefit from trade

## International Competitiveness

- **Questions**
  - Is the United States falling behind?
  - Do we need to stay competitive internationally?
  - What does global competitiveness really mean?
- **Answer**
  - The United States leads in overall productive efficiency, according to the Institute for Management Development in Lausanne Switzerland
- **Reasons for this ranking:**
  - Widespread entrepreneurship
  - Economic restructuring
  - Investment in information-technology
  - Sophisticated financial system
  - Large investments in scientific research

## Arguments Against Free Trade

- **Infant Industry Argument**
  - The contention that tariffs should be imposed to protect from import competition an industry that is trying to get started
  - Presumably, after the industry become technologically efficient, the tariff can be lifted
- **Dumping**
  - Selling a good or a service abroad below the price charged in the home market or at a price below its cost of production
- **Protecting domestic jobs**
  - Do imports reduce jobs?
    - a) Gould/Woodbridge/Ruffin study – no causal link between the rate of imports and unemployment
    - b) In half of the cases studied, when imports rose, unemployment fell
- **The cost of protecting U.S. jobs**
  - Restrictions on textiles and apparel goods cost U.S. consumers \$9 billion a year
    - a) Cost \$50,000 a year for each \$20,000 job saved
  - Restrictions on imports of Japanese cars
    - a) Cost \$160,000 per year for each job saved in the auto industry
  - Glass industry restrictions
    - a) Cost \$200,000 per year per job saved
  - Steel industry restrictions
    - a) Cost \$750,000 per year per job saved
- **Emerging arguments against free trade**
  - Environmental concerns
  - Genetic engineering
  - New diseases
- **National defense**
  - Exports of new technology