International Trade and International Finance

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Preface

International Economics has come in two separate parts that reflect the microeconomics and macroeconomics. 'International Trade' is based on microeconomic reasoning in terms of comparative advantage, economies of scale and product differentiation. 'International Finance' is largely conceptualized in terms of 'open-economy macroeconomics' which set the focus on exchange-rate regimes, stabilization policies and financial capital flows. The history of economics is full of different attempts to bridge the gaps between international trade and international finance.

The aim of "International Trade and International Finance" course is to give students a comprehensive understanding of the relevant economic theory and empirical evidence. The lectures will introduce some key ideas on international trade and finance. I will provide a formal discussion of the Ricardian model of trade, which contains one of the great insights in Economics that what matters for the gains from trade to occur is comparative advantage and not absolute advantage. I will introduce the Heckscher–Ohlin model of trade where endowment differences among countries play a key role in determining the pattern of trade. An important result in this discussion is that international trade can produce winners and losers.

Increasing returns and trade are essential concept of this course. I will focus on the Krugman model or the model of trade based on internal economies of scale in production. It shows how countries can gain from trade even in a world where countries have identical endowments and technologies, provided that production functions exhibit increasing returns to scale and consumers have a love for variety. I will also develop a discussion of the various commercial policy instruments, such as tariffs, quotas and export subsidies, that countries use to intervene in trade. Next, we will study the economics of preferential trading agreements, and the concluding chapter provides a history of multilateral trading agreements under the aegis of GATT

(General Agreement on Tariffs and Trade) and its evolution into the World Trade Organization (WTO).

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- Lecture 1: Basics of International Economics
- Lecture 2: Introduction to International Trade
- Lecture 3: Differences between international trade and international finance
- Lecture 4: International Trade Models

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- Lecture 5: The Instruments of Trade Policy
- Lecture 6: The Political Economy of Trade Policy
- Lecture 7: Trade Policy in Developing Countries
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0.0.0.0.3 * Section 3: Open-Economy Macroeconomics

- Lecture 9: National Income Accounting
- Lecture 10: Exchange Rates and the Foreign Exchange Market
- Lecture 11: Money, Interest Rates, and Exchange Rates
- Lecture 12: Fixed Exchange Rates and Foreign Exchange Intervention

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- Lecture 13: International Monetary Systems
- Lecture 14: Financial Globalization
- Lecture 15: Developing Countries Growth, Crisis, and Reform

Course logistic

Class schedule in third quarter:

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-   Monday
-   Thursday
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Instructor

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1 Basics of International Economics

1.1 What is International economics?

- International Economics is the study of economic interactions between countries.
- The world is rapidly globalizing and this is providing many opportunities and major challenges to the nations and people of the world.
- We will study international economics with a brief overview of the globalization revolution taking place in the world today.

1.2 What is international economics about?

- International economics consists of two main classifications:
  - International trade (Microeconomics)
  - International finance (Macroeconomics)

Comparision	International_Trade	International_Finance
Economics	Microeconomics	Macroeconomics
Employment	Full employment	Under employment
Savings	No savings	Savings
Trade	Balance	Imbalance
Money	Real transaction	Monetary transaction

1.3 Why study international trade?

- Production technologies do not flow easily across borders. There are massive differences in production technologies across countries.
- The use of some technologies is tied to human capital which can not be transferred across countries.
- Government institutions have a huge impact on the effectiveness of different technologies.

1.4 What are the subjects to focus in international trade?

- Seven themes recur throughout the study of international economics:

    a. The gains from trade
    b. The pattern of trade
    c. Protectionism
    d. The balance of payments
    e. Exchange rate determination
    f. International policy coordination
    g. The international capital market

1.5 What is globalization?

- Increase in international transactions in markets for goods, services, and factors
- Growth and expanded scope of international institutions and organizations, for instance, UN, World Bank, IMF, WTO
- How can globalization be measured?
    - Trade flows: exports and imports of goods
    - Trade in services: transportation, healthcare, telecommunications, business services
    - Foreign asset ownership
    - Immigration
    - Price convergence: Possibility of trade may have important effects

Text book: Paul Krugman, Maurice Obstfeld, and Marc Melitz, *International Economics*, 12th edition

2 Introduction to International Trade

2.1 The gains from trade

- Probably the most important single insight in all of international economics is that there are gains from trade that is, when countries sell goods and services to each other, this exchange is almost always to their mutual benefit.
- Although nations generally gain from international trade, it is quite possible that international trade may hurt particular groups within nations—in other words, that international trade will have strong effects on the distribution of income.

  Trade can alter the distribution of income between workers and the owners of capital.

2.2 The pattern of trade

- Some aspects of the pattern of trade are easy to understand. Climate and resources clearly explain why Brazil exports coffee and Saudi Arabia exports oil.
- Why does Japan export automobiles, while the United States exports aircraft?
- There are various different models that try to explain the reason behind the pattern of trade.

  "Who sells what to whom" have been a major question of international economics.

2.3 Determinents of trade

- After World War II the advanced democracies, led by the United States, pursued a broad policy of removing barriers to international trade; this policy reflected the view that free trade was a force not only for prosperity but also for promoting world peace.
- In 2016, Britain shocked the political establishment by voting to leave the European Union, which guarantees free movement of goods and people among its members.

Conflicts of interest within nations are usually more important in determining trade policy than conflicts of interest between nations.

2.4 Balance of payments

- The balance of payments (BOP) tracks international transactions. When funds go into a country, a credit is added to the balance of payments ("BOP"). When funds leave a country, a deduction is made.
- The balance of payments includes both the current account and capital/financial account.
  - The current account (CA) includes a nation's net trade in goods and services, its net earnings on cross-border investments, and its net transfer payments.
  - The capital/financial account (FA) consists of a nation's transactions in financial instruments and central bank reserves.
  - The sum of all transactions recorded in the balance of payments should be zero; however, exchange rate fluctuations and differences in accounting practices may hinder this in practice.

The BOP has become a central issue for the United States because the nation has run huge trade deficits every year since 1982.

2.5 What is trade?

- Buying and selling goods and services from other countries. Trade consist of imports (M) and exports (X). For instance, in the context of Japan:
  - The purchase of goods and services from abroad that leads to an outflow of currency from Japan – Imports (M)
  - The sale of goods and services to buyers from other countries leading to an inflow of currency to Japan – Exports (X)

2.6 Basic reasons behind trade?

- Countries engage in international trade for two basic reasons
  - They are different from each other in terms of climate, land, capital, labor, and technology.
  - They try to achieve scale economies in production.

2.7 The concept of comparative advantage

- On Valentine's Day the U.S. demand for roses is about 10 million roses.
  - Growing roses in the U.S. in the winter is difficult. Heated greenhouses should be used. The costs for energy, capital, and labor are substantial.
  - Resources for the production of roses could be used to produce other goods, say computers.

2.7.1 Opportunity cost

- The opportunity cost of roses in terms of computers is the number of computers that could be produced with the same resources as a given number of roses.

2.7.2 Comparative advantage

- A country has a comparative advantage in producing a good if the opportunity cost of producing that good in terms of other goods is lower in that country than it is in other countries.

2.7.3 Gains from trade due to comparative advantage

- Suppose that in the U.S., 10 million roses can be produced with the same resources as 100,000 computers.
- Suppose also that in Mexico, 10 million roses can be produced with the same resources as 30,000 computers.

	Millon roses	Thousand computers
U.S	-10	+100
Mexico	+10	-30
Total	0	+70

2.8 Globalization and international trade

- Globalization is the process of interaction and integration among people, companies, and governments worldwide.
- Globalization has accelerated since the 18th century due to advances in transportation and communications technology.
- This increase in global interactions has caused a growth in international trade.

2.9 The gravity model

- Let's begin by describing who trades with whom. An empirical relationship known as the gravity model helps to make sense of the value of trade between any pair of countries and sheds light on the impediments that continue to limit international trade even in today's global economy.
- Three of the top 15 U.S. trading partners are European nations: Germany, the United Kingdom, and France. Why does the United States trade more heavily with these three European countries than with others? The answer is that these are the three largest European economies. That is, they have the highest values of gross domestic product (GDP), which measures the total value of all goods and services produced in an economy.

  There is a strong empirical relationship between the size of a country's economy and the volume of both its imports and its exports.

2.10 The increasing returns

- Nobel Prize Lecture, by Paul Krugman
  - Increasing returns and trade
  - Geography ignored

Reference: Chapter 1- Introduction (Paul Krugman, Maurice Obstfeld, and Marc Melitz, *International Economics*, 12th edition)

3 Differences between international trade and international finance

3.0.0.1 International trade

- Microeconomics
- Full employment
- No savings
- Balance trade
- Real transaction

3.0.0.2 International finance

- Macroeconomics
- Under employment
- Savings
- Imbalance trade
- Monetary transaction

4 International Trade Models

4.1 The Ricardian model of international trade

- The Ricardian model of international trade states that the main reason why countries trade is that different countries have different productivities (or technologies) for producing different goods and services.
- It shows how countries can gain from exporting goods that they are relatively better at making and importing goods that they are relatively worse at making.

4.1.1 The Ricardian theory

- The Ricardian theory of comparative advantage is based on the idea that if there are technological differences in the production of goods across countries,
- Countries can gain from trade by exporting goods for which the country has a lower opportunity cost of production and importing goods for which the country's opportunity costs of production are higher.
- The model can be understood using a two-country, two-good and one factor of production example.
- Suppose that the two countries are Home(h) and Foreign(f) and the two goods are Bread (b) and Cloth (c).
- The lone factor of production is labor (L).
- The production of one unit of each good in each country requires a certain amount of labor which is called the unit labor requirement.

Let's denote,

- The unit labor requirement in `Home` by hL_i
- The unit labor requirement in `Foreign` by fL_i
- Here $i = b$, c
  - b denotes `Bread` and c denotes `Cloth`

To fix ideas, let us work with the following numbers:

- $hL_b = 1$, $hL_c = 2$, $fL_b = 4$ and $fL_c = 3$

4.2 Heckscher–Ohlin model of trade

- The Heckscher–Ohlin model of trade states that endowment differences among countries play a key role in determining the pattern of trade.

4.3 The Krugman model of trade

- The Krugman model or the model of trade based on internal economies of scale in production.
- It shows how countries can gain from trade even in a world where countries have identical endowments and technologies, provided that production functions exhibit increasing returns to scale and consumers have a love for variety.

5 The Instruments of Trade Policy

Content creation is in progress...

6 The Political Economy of Trade Policy

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7 Trade Policy in Developing Countries

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References