International Trade and Monetary Systems

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- News stories on international trade often praise exports and depict imports as a problem. Do the HO and neoclassical supply and demand models of trade provide any reasons why imports are harmful to an economy?
- Explain the main results from the happiness studies. What do these $ndings mean for the Heckscher-Ohlin model and its conclusions about international trade?
- Who should get taxed for greenhouse gas emissions? Why?

Summarizing the General Equilibrium Model

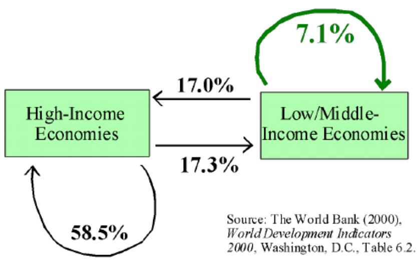
- The general equilibrium model, in which each industry operates under increasing costs, shows that each country exports the product for which it has the lower opportunity cost.
- Comparative advantage is determined by the shapes of the PPF and the indiderence curves.
- That is, comparative advantage depends on resource endowments, technology, and consumer preferences.

The General Equilibrium Model Does Not Explain All Trade

- The two-country general equilibrium model predicts that countries trade more if their PPFs and opportunity costs dider a lot.
- Thus, dissimilar countries should trade more than countries that have similar productive capacities and tastes.
- This is not what we observe in the world, however!

Most Trade is Between Highly-Developed Economies

Percent of World Merchandise Trade, 1998

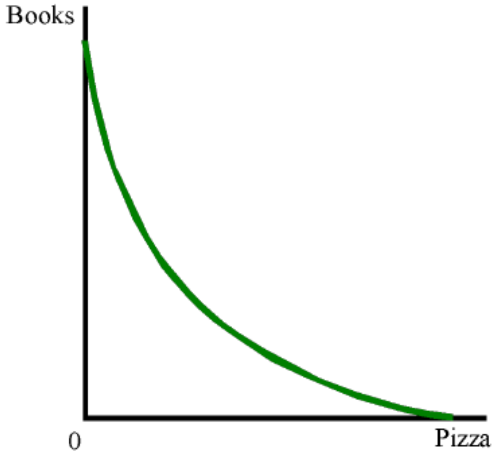


- Most trade occurs among similar high-income economies.
- Only about one-third of the world's trade occurs between economies with very diderent productive capacities.
- Of course, countries with similar income levels are not identical, but their relative opportunity costs are no doubt more similar than for pairs of countries at very diderent levels of development.

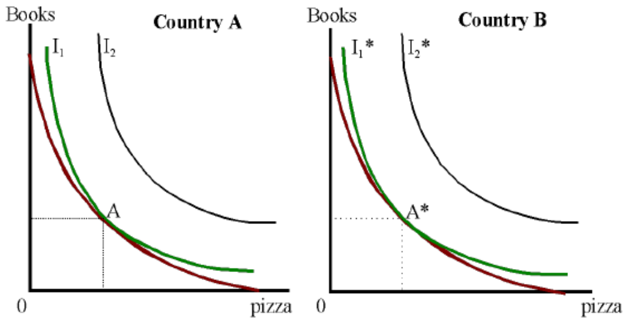
Alternative Models of Trade

- Economists have developed alternative models to explain trade that does not seem to be driven purely by diderences in economic capacity and consumer preferences.
- One of the most useful is the model that assumes production is subject to decreasing costs rather than increasing costs, as the two-country general equilibrium model assumed.
- In this case, the PPF is bowed inward rather than outward; that is, opportunity costs decrease the higher the level of production in an industry.

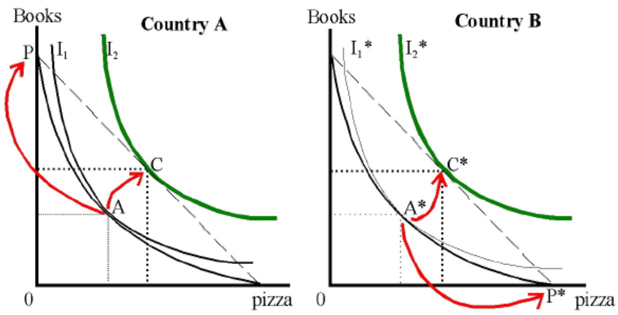
The PPF with Increasing Returns



A Two-Country Model of Trade with Increasing Returns: The Case of No Trade



A Two-Country Model of Trade with Increasing Returns: Specialization with Increasing Returns



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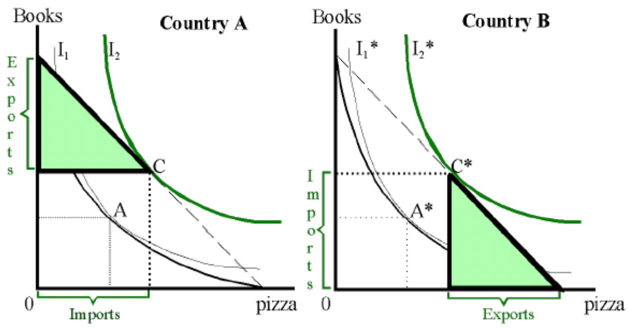

Increasing Returns to Scale and Trade

- Increasing returns to scale imply that prices will be lower when industries produce large quantities of similar products.
- Consumers do like variety, as suggested by the bowed-in indiderence curves.
- Consumers can gain better trade-od between costs and variety if countries trade freely.
- In the case of increasing returns, trade raises human welfare in each country even though both countries are identical.

- The general equilibrium model of international trade suggests that countries gain from trade by specializing and trading with other economies that have diderent factor endowments, technologies, and consumer demands.
- The increasing returns to scale model of trade suggests another source of gain from international trade, namely the greater exploitation of economies of scale.
- There is some debate about which of these two models is more important for explaining the world's trade.
- Each explains diderent sources of comparative advantage.

- The overall gains from trade are most likely derived from both specialization driven by countries' unique factor endowments and the exploitation of increasing returns to scale.
- The general equilibrium Heckscher-Ohlin model of trade attributes comparative advantage to factor endowments, technology, and tastes.
- Increasing returns lets an industry create its own comparative advantage through rapid expansion ahead of competitors in other countries.
- There is some debate over the exact proportions, but clearly both sources of comparative advantage are at work in the world.
- More of the trade between high-income countries is driven by increasing returns to scale.
- More of the trade between countries at diderent levels of development is driven by comparative advantage based on factor endowments and technology levels.

The Multinational Or Transnational Corporation

Categories of $rms with respect to their internationalization

- domestic (no international presence);
- international (which imports and exports);
- multinational (operates in a wide range of countries but with strong links to its home country);
- global (operates as a truly global corporation, but decision-making is still retained by the parent company in the home country);
- transnational (variant of global, but which provides considerable autonomy to local managers in decision-making).

RISE OF THE INTERNATIONAL COMPANY

What are the 3 main reasons for international expansion of $rms?

RISE OF THE INTERNATIONAL COMPANY

The MNC's evolution

Reasons to go global:

1. More raw materials.
2. New markets.
3. Minimize costs of production.

RAW MATERIAL SEEKERS

- Exploit markets in other countries.
- Historically $rst to appear.
- Modern-day counterparts:
  - British Petroleum.
  - Rio-Tinto.

MARKET SEEKERS

- Produce and sell in foreign markets.
- Have heavy foreign direct investors.
- Represented today by $rms such as:
  - IBM.
  - Louis Vuitton.
  - Nestl .
  - Dior.

COST MINIMIZERS

- Seek lower-cost production abroad.
- Their motive: to remain cost competitive.
- Represented today by $rms such as:
  - Texas Instruments.
  - Intel.
  - Volkswagen.

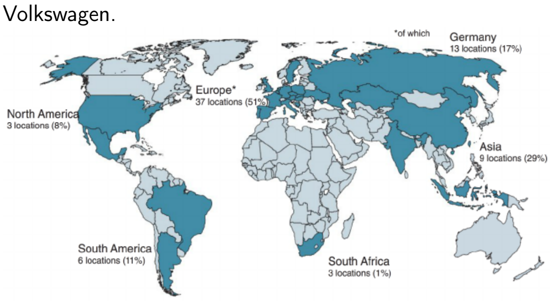

FIGURE 1.3 Location of Volkswagen's Main Production Facilities

Foreign Direct Investment

International Financial Flows: The World, 2000
Changes in amounts outstanding, in US$ billions)

Bonds, equity, and other securities	1,246.0
Foreign direct investment	1,270.8
Bank lending	296.9
Foreign Aid	56.0

FDI => TNCs

- Foreign direct investment (FDI) consists of the acquisition of a controlling interest in or the direct establishment of business operations and facilities in a foreign country.
- By acquiring a controlling interest in a foreign business operation, a $rm edectively becomes a transnational corporation (TNC).

Transnational Corporations (TNCs)

- TNCs are involved in over three-fourths of all international trade.
- TNCs account for a major portion of international investment.
- There is evidence that FDI is related to international technology transfers and the extension of U.S. business practices overseas.

TNCs and International Technology Transfers

- TNCs use FDI to establish their methods and proprietary techniques in foreign countries.
- TNCs also transfer people, designs, business philosophies, and management techniques across borders.
- The evidence suggests that the technological leaders in each industry are also the more active foreign investors.
- There is also evidence that TNCs transfer technology very selectively, in line with their own business interests, not those of their home or destination countries.

Vertical and Horizontal FDI

- Foreign direct investment undertaken by TNC is classi$ed as either vertical and horizontal.
- Vertical FDI implies that a TNC owns facilities that $t into diderent stages of the supply chain.
- Horizontal FDI, on the other hand, consists of TNC investments that duplicate facilities and operations in several countries.

M&A Activity vs. Greenceld Investments

- Foreign direct investment undertaken by TNCs is also classi$ed as (1) Mergers & Acquisitions (M&A) or (2) Green$eld Investment.
- International M&A activity consists of the sale and purchase of existing $rms by foreign $rms.
- International green$eld investment involves the building of new facilities in another country.

Mergers and Acquisitions

- Much of the recent surge in FDI consists of M&A activity.
- The dynamic competition that we observe in the world consists not only of creative destruction, but also of strategic alliances and acquisitions.
- Firms not only grow and disappear, they merge into larger $rms through M&A.

Greenceld Investments

- Green$eld investment is the actual building and organization of foreign businesses.
- Evidence suggests that green$eld investment is more likely to transfer technology than M&As, but there are likely to be substantial technology transfers in both cases.
- The motivations for green$eld investment are somewhat diderent from M&A activity.
- Future characteristics of FDI will depend on the strategic goals of TNCs, economic conditions, the business environment, and the peculiarities of diderent businesses.

The Growth of TNCs

- Some forms of multinational enterprises came into being centuries ago.
- The Dutch East India Corporation owned and operated commercial enterprises in Holland's overseas colonies back in the 1600s.
- The $rst multinational manufacturing $rm was the US-based Singer
- Sewing Machine Company, which built a sewing machine factory in Scotland in the 1860s.
- TNCs did not become prominent until the end of the nineteenth century and in the early twentieth century.

The Growth of TNCs

- Mutually bene$cial market transactions cannot always be completed.
- There are many information asymmetries.
- International trade requires trust, familiarity, and detailed product information.
- Long-term business relationships also require trust and compatible long-term visions.
- International investment clearly suders from informational asymmetries. Transacting in-house is often easier than at Sarm's length,Tas in the case of markets.

The Growth of TNCs

- There are, in fact, many reasons why transactions within a single business organization may be preferable to arm's length market transactions.
- Any one or more of these reasons serves to push international trade and investment into multinational enterprises rather than into arm's length international market transactions.
- Of course, as the global economy evolves, information asymmetries shift, and as corporate management structures change, the mix of within-$rm interactions and arm's length market transactions will shift.

Why Transnational Corporations dominate the economic sphere...

1. Economies of Scale

- All business activities have both $xed and variable costs.
- To the extent that $xed costs can be spread across a greater volume of sales, average costs are reduced.
- By extending the business organization across borders, sales are increased and, provided the globalization of the organization does not add too many new $xed costs, average costs may be reduced for the $rm.

2. Nontransferable Knowledge

- Sometimes it is possible to pro$tably transfer knowledge to other $rms in other countries.
- Licensing agreements, patents, and copyrights serve to make sales and purchases of knowledge possible.
- However, not all knowledge lends itself to being marketed.
- Some knowledge is acquired through experience and continued interaction with other people.
- Such knowledge is best transferred within $rms rather than between $rms.

3. The Hold-Up Problem

- It is di8 cult to deal with outside suppliers a due to the hold-up problem.
- Outside suppliers are reluctant to invest in specialized facilities because they know once they are committed, they can be exploited.
- If it is better to bring production in-house, comparative advantage and free trade implies that the various stages of production should be located in diderent economies.

4. Exploiting Core Competencies

- Core competencies are those activities that provide the $rm with its highest markups and pro$t margins.
- Modern management theory suggests that $rms should engage only in activities that $t their core competencies.
- Everything else should be outsourced.
- To maximize gains from core competencies, business should be extended to foreign markets.

5. Exploiting and Protecting Reputations

- Reputations are very valuable business assets.
- Reputations cannot easily be purchased or sold, especially across borders.
- Licensing brands can help to transfer product reputation, but the danger is that the foreign user of the brand may undermine the brand's reputation.
- The best way to transfer a reputation or brand, and to protect a reputation or a brand, is to control the business across borders.

6. Jumping Trade Barriers

- A $rm with certain competitive advantages in foreign markets has the choice of exporting to those markets or setting up production in those markets.
- Trade restrictions will adect that decision.
- If $rms in a foreign market are protected by tarids, for example, a $rm may have to move production behind that tarid wall in order to remain competitive.
- The mere threat of protection or disruption to trade eows can trigger foreign direct investment.

7. Avoiding Taxes and Regulations

- Because business regulation and taxation varies across countries, $rms' decision as to where to produce may be ineuenced by these diderences.
- Pro$ts will be higher, all other things equal, in countries with lower overall taxes.
- Similarly, production costs will be lower in countries with less costly regulations.
- The ineuence of diderences in taxation and regulation on FDI is not entirely obvious, however.

8. Diversiccation

- Since business conditions are unlikely to vary perfectly in tandem across all countries, the overall variation in a $rm's cash eow, income, and after-tax pro$t can be reduced by diversifying across markets.
- Similarly, by spreading business across countries with diderent currencies, some of the risk associated with exchange rate variations can be diversi$ed away.
- The reduced risks as well as the inherent diversi$cation for investors in the stock and bonds of TNCs means that $nancing costs for TNCs may be lower than for national $rms.

9. Access to Financing

- Financial markets are not equally well developed in all countries, which makes investment more di8 cult in some countries compared to others.
- A TNC, which has access to international $nancial markets, may have an advantage over national $rms in those economies here local $nancing is not readily available.
- Given potentially pro$table investments overseas, FDI may enable such investment to be carried out despite institutional failures.
- TNCs may have access to $nancing that national $rms do not.

10. Reducing Competition

- When TNCs move overseas, they do not always expand international competition.
- A well-known secret, however, is that a lot of FDI consists of buying out the competition!
- TNCs gain market power by extending their operations across borders, and they gain market power in individual national markets through M&As.

11. Enhancing Innovative Success

- Innovation is characterized by (1) Economies of scale and (2) Access to new ideas and technologies.
- Economies of scale suggest larger is better.
- Access to new ideas suggests $rms should have a presence in various countries and have access to other cultures.
- Innovation also requires diverse productive inputs.

12. Weaken Labor Unions

- TNCs can more easily shift production and employment between countries, which gives them power in labor markets.
- The growth in international trade over the past several decades has led to SdeindistrializationTin high income countries.
- The loss of manufacturing employment has led to the decline in unions in industry, which has also caused wages to fall in industry.
- Firms openly threaten to shift employment overseas unless unions agree to wage cuts.

The Reasons for TNCs

- In summary, there are many reasons why TNCs are so prominent in the global economy.
- In every case, some combination of these reasons serves to induce national $rms to extend their business organization across the border.
- In each case, the combination of reasons is somewhat did erent.

The Consequences for International Trade

- In summary, there are many reasons why TNCs are so prominent in the global economy.
- The consequences of TNC control of international trade are still not fully understood.
- International trade does not occur in perfectly competitive markets. In fact, TNCs may serve to reduce competition in the integrated global economy.
- Trade is closely linked to corporate business strategies, which focus almost exclusively on corporate pro$ts.
- Will nations lose their importance?