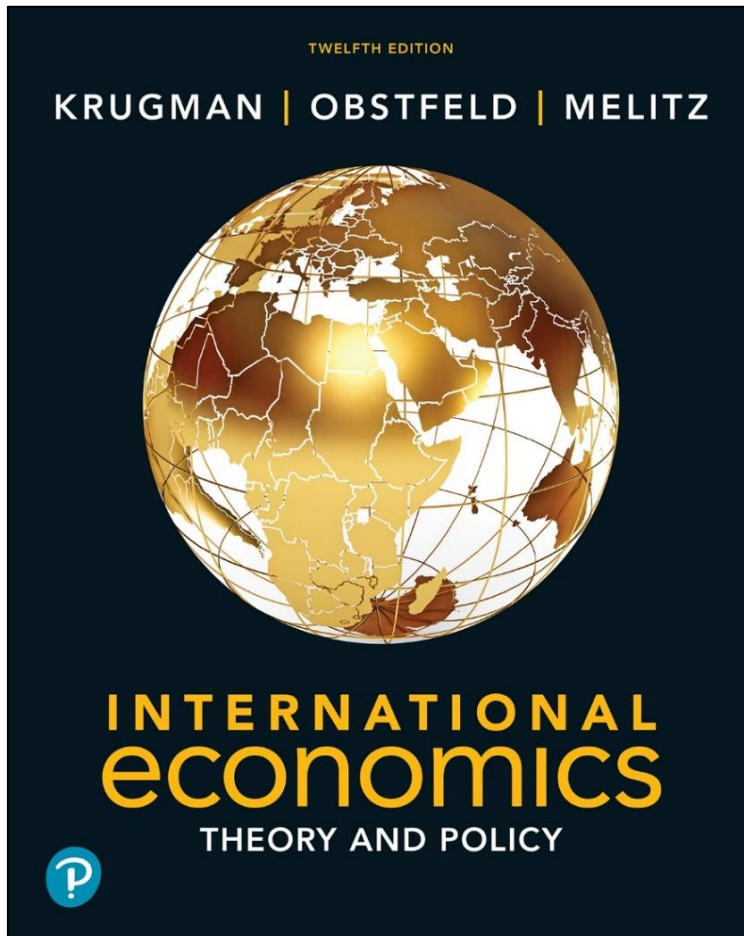


International Economics: Theory and Policy

Twelfth Edition



Chapter 6

The Standard Trade Model

Preview

- Effects of economic growth, import tariffs, and export subsidies on trade patterns and the welfare of trading nations

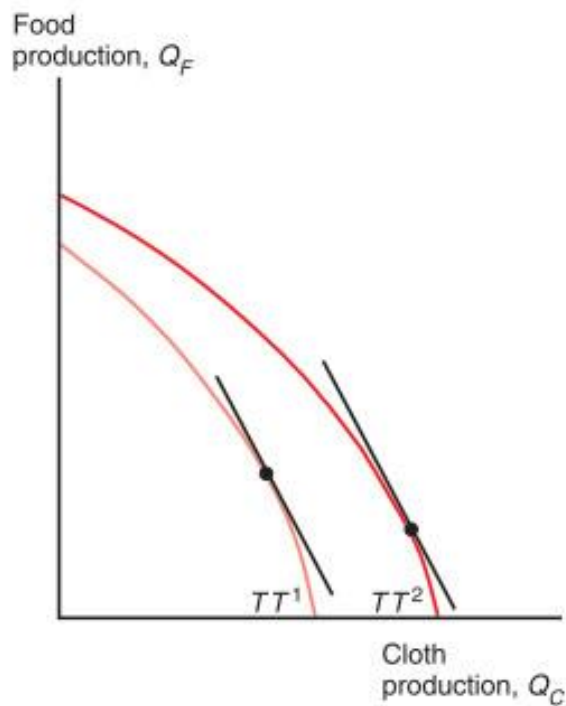
The Effects of Economic Growth (1 of 5)

- Is economic growth in China good for the standard of living in the U.S.?
- How does the standard trade model answer this question?

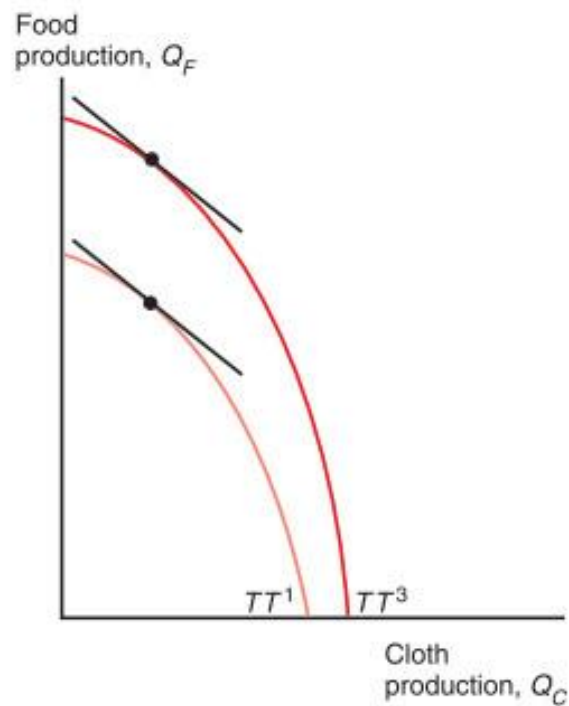
The Effects of Economic Growth (2 of 5)

- Growth is usually **biased**: it occurs in one sector more than others, causing relative supply to change.
 - **Example:**
U.S. computer industries vs. textile industries
 - In the Ricardian model, what causes biased growth???
 - In the Heckscher-Ohlin model, what causes biased growth???

Biased Growth (1 of 2)

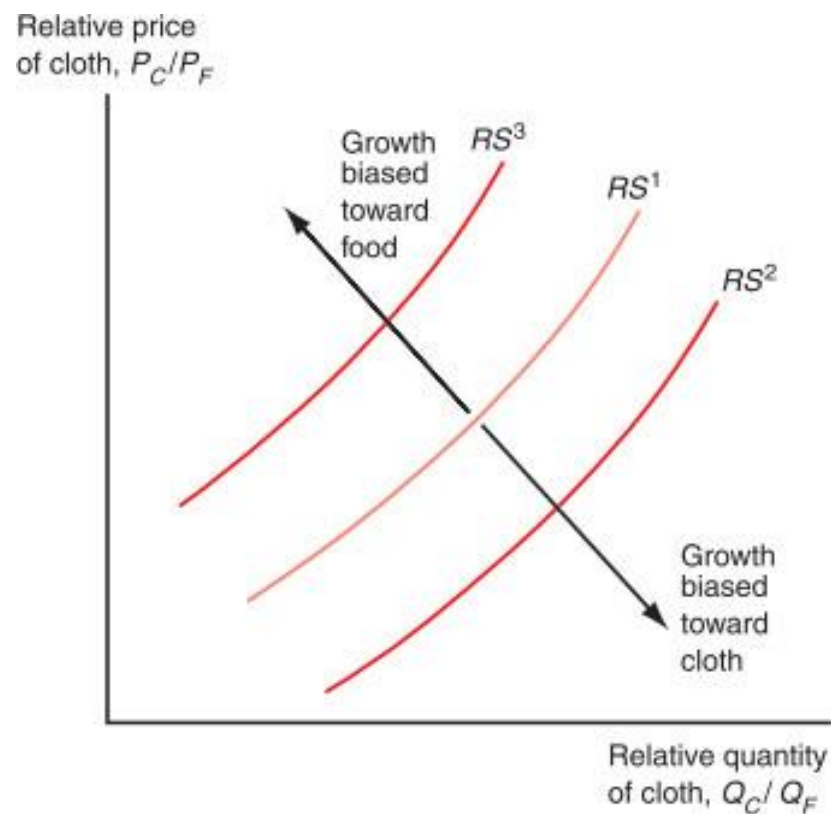


(a) Growth biased toward cloth



(b) Growth biased toward food

Biased Growth (2 of 2)

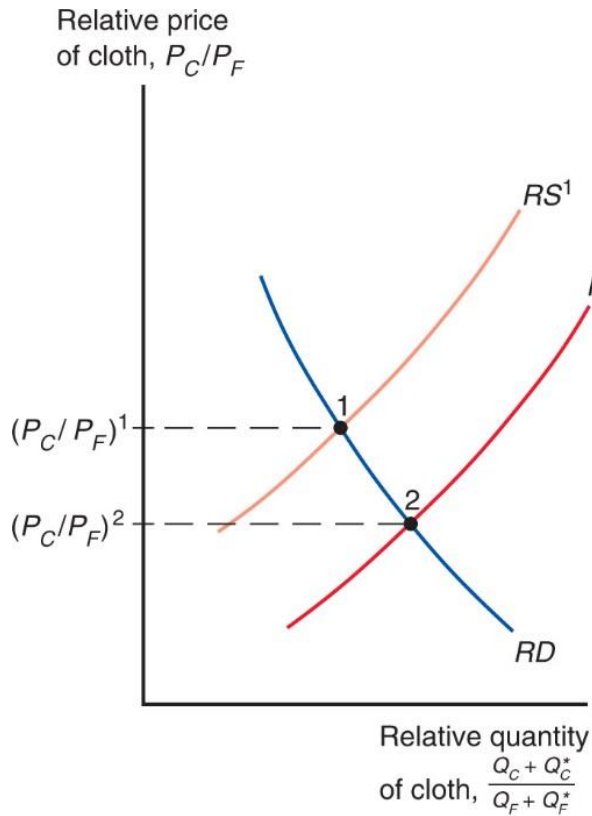


(c) Effects of biased growth on relative supply

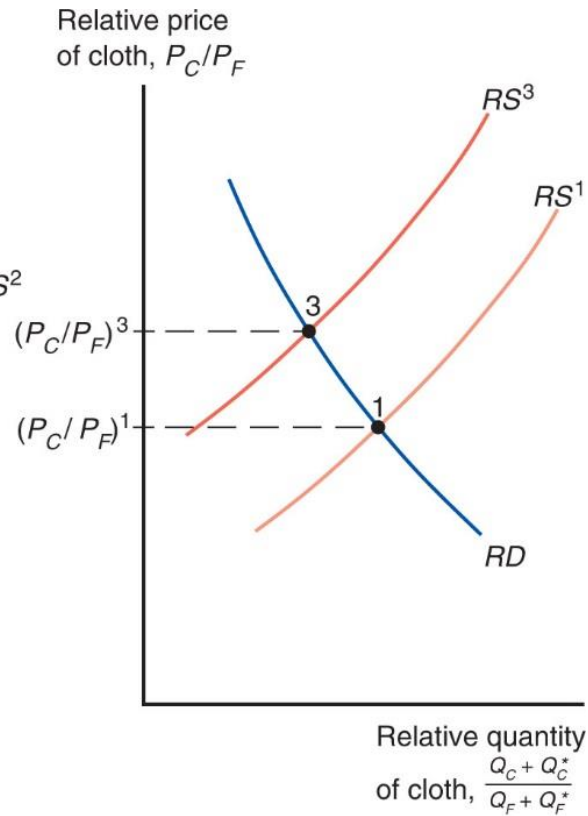
The Effects of Economic Growth (3 of 5)

- **Biased growth** and the resulting change in **relative supply** causes a change in the **terms of trade**.
 - How does biased growth change the terms of trade in the home and foreign country???

Growth and World Relative Supply



(a) Cloth-biased growth



(b) Food-biased growth

Example

Consider computer industries vs. textile industries

- How does it affect the U.S. terms of trade assuming we are exporting computer products to Mexico???

The Effects of Economic Growth (4 of 5)

- **Export-biased growth** is growth that expands a country's production possibilities disproportionately in that country's export sector.
 - What is the export-biased growth for Mexico?
- **Import-biased growth** is growth that expands a country's production possibilities disproportionately in that country's import sector.
 - What is the import-biased growth for Mexico?

The Effects of Economic Growth (5 of 5)

- Export-biased growth reduces a country's terms of trade, reducing its welfare and increasing the welfare of *foreign countries*.
- Import-biased growth increases a country's terms of trade, increasing its welfare and decreasing the welfare of *foreign countries*.

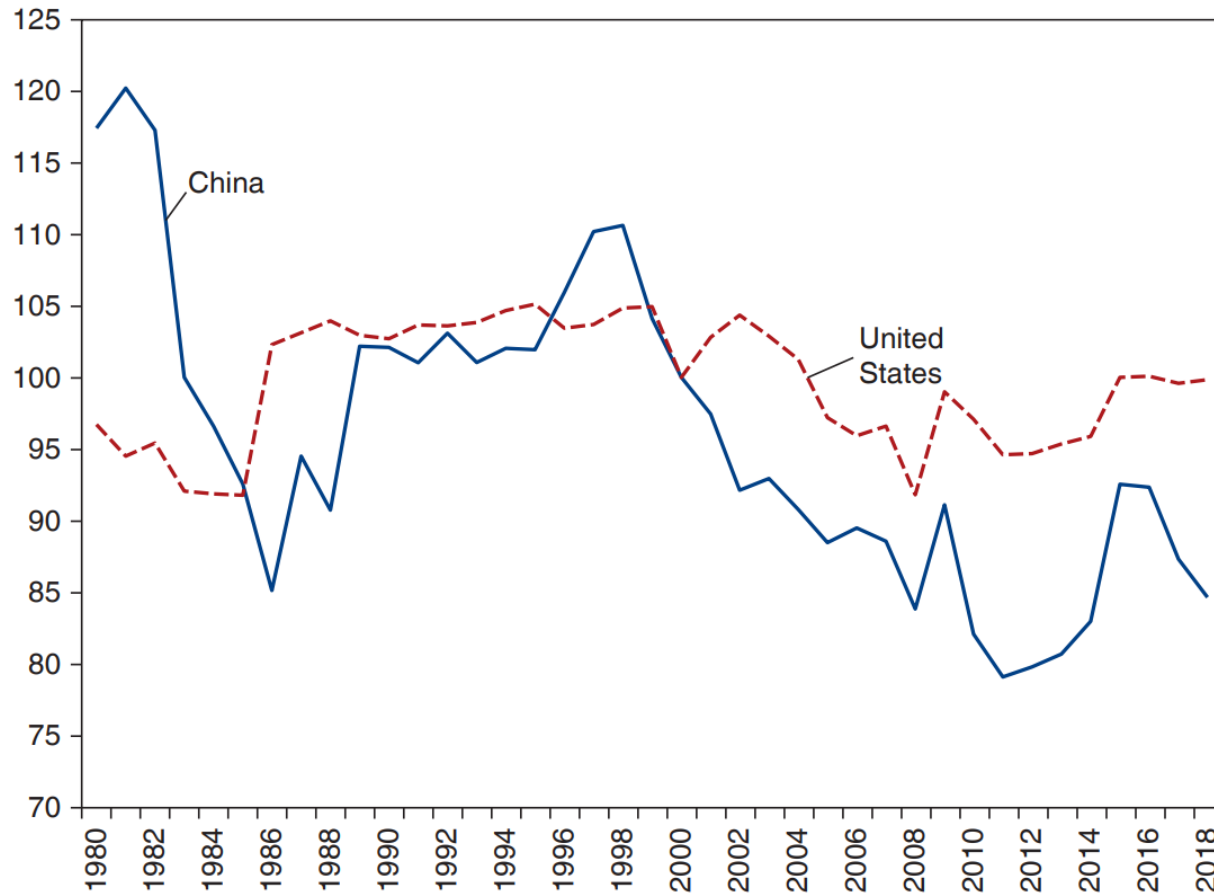
Has the Growth of Newly Industrializing Economies Hurt Advanced Nations? (1 of 3)

- Has the United States suffered from a deterioration in its terms of trade as some of its main trading partners (such as China) experienced rapid growth?
 - This would represent an aggregate income loss for the United States.
- The standard trade model predicts that if the growth in China mainly **import-biased**, the growth in sectors that compete with U.S. exports would reduce the U.S. terms of trade.

Has the Growth of Newly Industrializing Economies Hurt Advanced Nations? (2 of 3)

- But **data** indicates that changes in the U.S. terms of trade have been small with no clear trend over last few decades.
 - The U.S. terms of trade in **2014** was essentially at the same level as it was in **1980**.
- The terms of trade for China have deteriorated over the past decade, suggesting their recent growth may have been export-biased.

Evolution of the Terms of Trade for the United States and China



Source: World Development Indicators, World Bank.

Has the Growth of Newly Industrializing Economies Hurt Advanced Nations? (3 of 3)

- Like the United States, most **developed countries** tend to experience mild swings in their terms of trade, around 1 percent or less a year (on average).
- Some **developing countries'** exports are heavily concentrated in mineral and agricultural sectors.
 - The prices of those goods on world markets are very volatile, leading to large swings in the terms of trade.
 - These swings in turn translate into substantial changes in welfare.

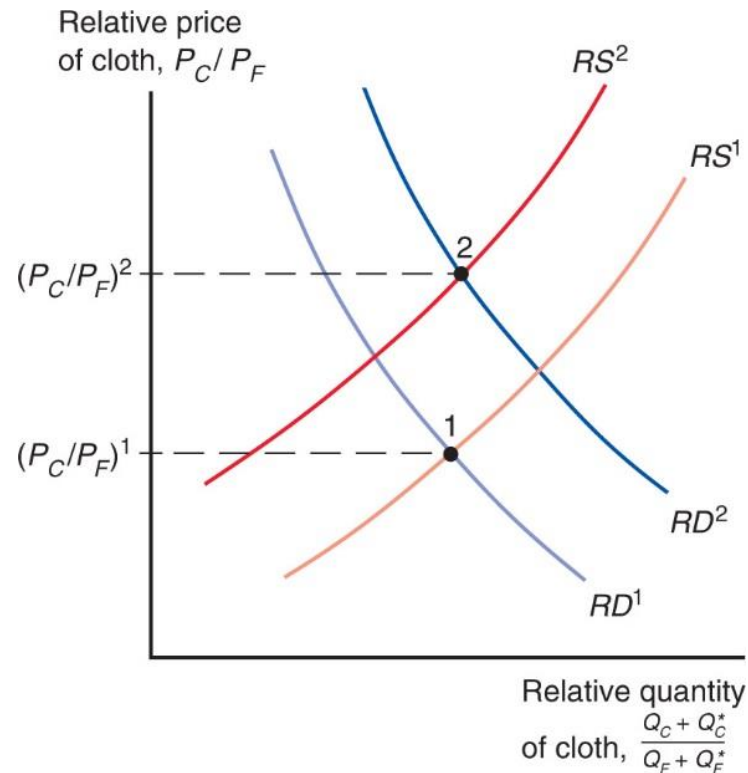
Import Tariffs and Export Subsidies: Simultaneous Shifts in RS and RD

- **Import tariffs** are taxes levied on imports.
- **Export subsidies** are payments given to domestic producers that export.
- Both policies influence the terms of trade and therefore national welfare.

Relative Price and Supply Effects of a Tariff (1 of 2)

- If the U.S. imposes a tariff on textile imports from Mexico, the price of textile relative to the price of computer products rises for domestic consumers.
 - What happens to the price of computer products relative to the price of textile for domestic consumers???
 - Domestic relative supply of computer products???
 - Domestic relative demand for computer products???

Effects of a Food Tariff on the Terms of Trade



Relative Price and Supply Effects of a Tariff

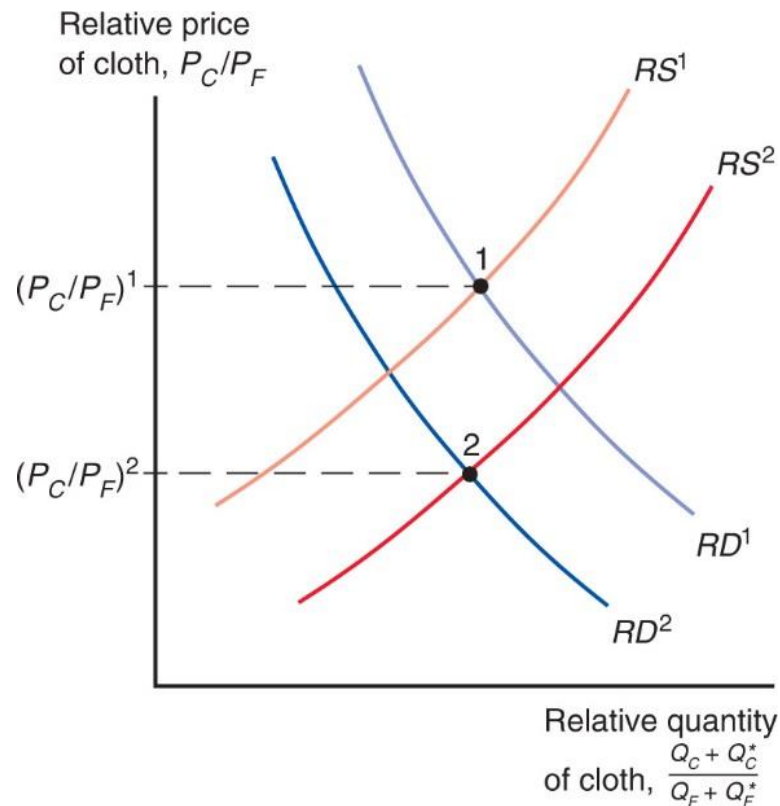
(2 of 2)

- When the home country imposes an import tariff, the terms of trade increase and the welfare of the country may increase.
- The magnitude of this effect depends on the **size** of the home country relative to the world economy.
 - For large countries, a tariff may maximize national welfare at the expense of foreign countries.

Effects of an Export Subsidy (1 of 2)

- If the U.S. imposes a subsidy on computer exports, the price of computer relative to the price of textile rises for domestic consumers.
 - Domestic relative supply of computer products???
 - Domestic relative demand for computer products???

Effects of a Cloth Subsidy on the Terms of Trade



Effects of an Export Subsidy (2 of 2)

- When the home country imposes an export subsidy, the terms of trade decrease and the welfare of the country decreases to the benefit of the foreign country.

Implications of Terms of Trade Effects: Who Gains and Who Loses?

- Additional effects of tariffs and subsidies that can occur in a world with many countries and many goods:
 - A foreign country may subsidize the export of a good that the U.S. also exports, which will reduce the price for the U.S. in world markets and decrease its terms of trade.
 - *The EU subsidizes agricultural exports, which reduce the price that American farmers receive for their goods in world markets.*

Implications of Terms of Trade Effects: Who Gains and Who Loses?

- Export subsidies by foreign countries on goods that
 - the U.S. also exports ??? the terms of trade for the U.S.
 - the U.S. imports ??? the terms of trade for the U.S.
- Import tariffs by foreign countries on goods that
 - the U.S. also imports ??? the terms of trade for the U.S.
 - the U.S. exports ??? the terms of trade for the U.S.