Notes on: Comparative Advantage

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Specialization, Comparative Advantage, and Trade

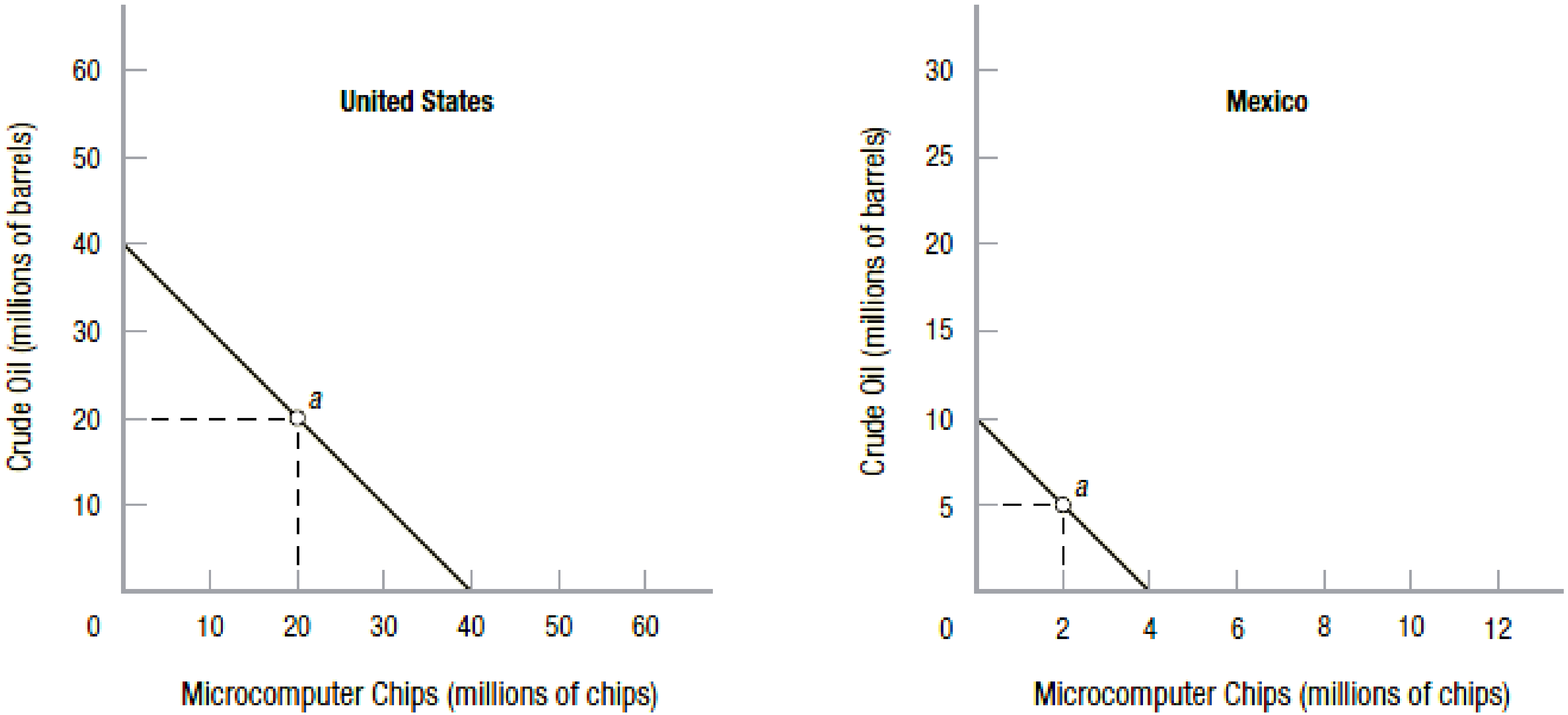
- **Specialization and trade increase production.**
  - **Between people within a nation**
  - **Between nations**
- **Trade happens when someone has a "comparative advantage."**

The Reason for Trade

- ***Absolute advantage:*** **when one country can produce more of a good than another country.**
- ***Comparative advantage:*** **when one country can produce a good at a lower opportunity cost.**
- **Both countries can gain from trade if they follow comparative advantage.**

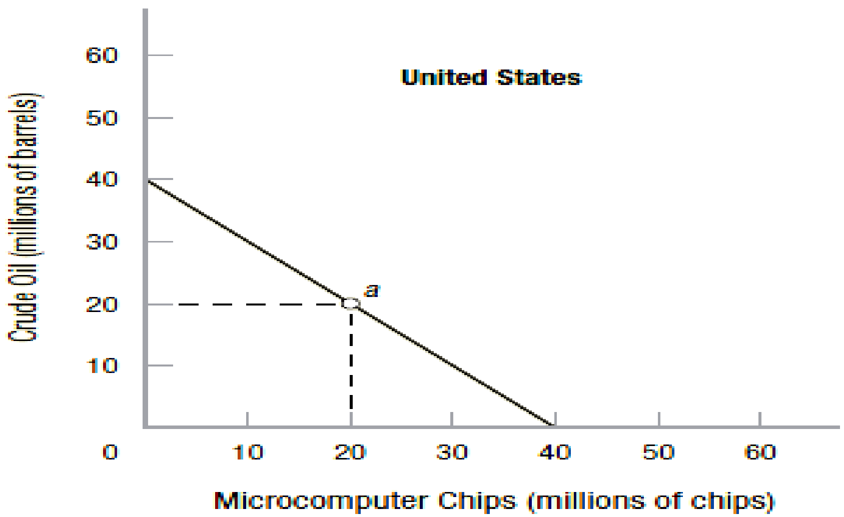
Comparative Advantage

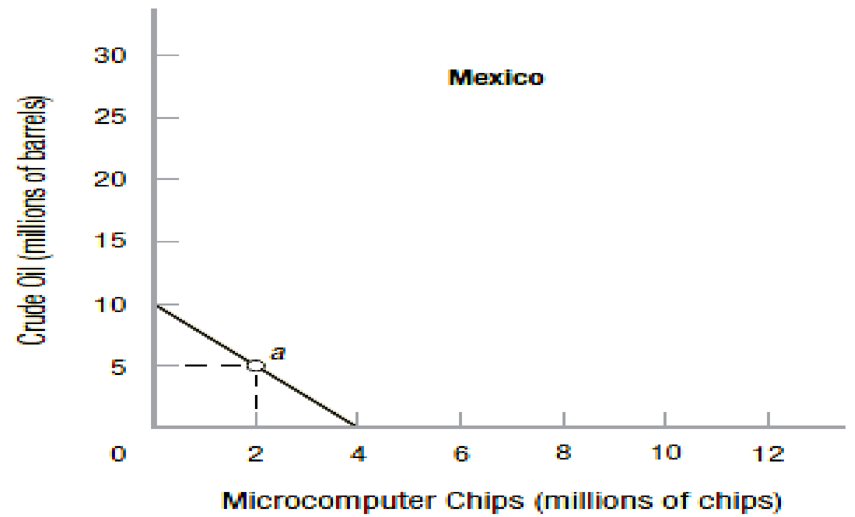
Should there be trade?
Who should produce what?



Calculate Opp. Cost

Opportunity Cost of a certain good
= Give Up / Gets





USAoil = 20mc/20oil = Opportunity Cost = 1.00mc
MEXoil = 4mc/10oil = Opportunity Cost = 0.40mc
USAmc = 20oil/20mc = Opportunity Cost = 1.00oil
MEXmc = 10oil/4mc = Opportunity Cost = 2.50 oil

Comparative vs. Absolute Advantage

- Don't confuse absolute and comparative advantage…
  - Just because the U.S. can produce more of both goods doesn't mean we're better off without trade.
- Pay attention to opportunity costs:
  - If it's cheaper for Mexico to produce crude oil than it is for the U.S., the U.S. will want to import oil from Mexico.

Comparative Advantage

- To decide who should produce what, compare the opportunity costs between nations
  - What does it "cost" each nation to produce a million barrels of crude oil?
    - The U.S.: could produce 40m chips OR 40m barrels of crude oil…
      - So,1m barrels of oil cost the U.S. 1m chips
    - Mexico: could produce 4m chips OR 10m barrels of oil…
      - So, each 1m barrels of oil costs chips costs Mexico .4m chips

Comparative Advantage

It's cheaper for Mexico to produce oil than for the U.S. …
Mexico has the "comparative advantage in oil production."

The Gains from Trade

- **More is produced when specialization and trade occurs…**
  - **Both sides benefit…**

Before Trade

Total output rises with specialization

TABLE 1 Initial Consumption-Production Pattern

	United States	Mexico	Total
Oil	20	5	25
Chips	20	2	22

TABLE 2 Production after Mexico Specializes in Producing Crude Oil

	United States	Mexico	Total
Oil	15	10	25
Chips	25	0	25

If Mexico and the U.S. simply split the additional production they both consume beyond their own PPFs…

TABLE 3 Final Consumption Patterns after Trade

	United States	Mexico	Total
Oil	20	5	25
Chips	21.5	3.5	25

Limitations on Trade and Globalization

- **There are costs to trade: transportation, communication, etc.**
  - **However, these costs have been declining for decades.**
- **Diminishing returns**
  - **The more a nation specializes, the smaller the additional gains.**
- **Governments often limit trade (despite its benefits)**
  - **To help certain industries.**
  - **In response to a recession or other problem.**