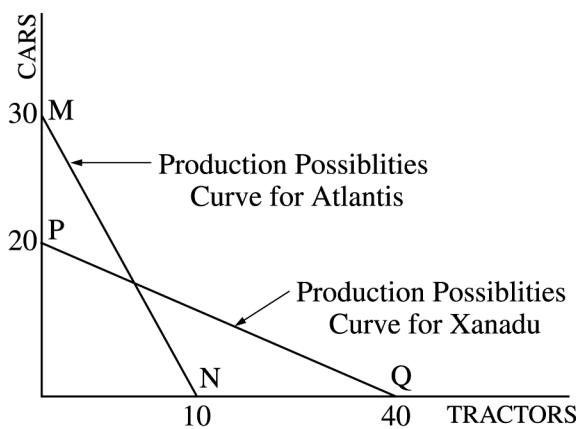


2003 AP® MACROECONOMICS FREE-RESPONSE QUESTIONS

2. Country Y is experiencing severe and unanticipated inflation.
- (a) Explain the effect of this inflation on each of the following.
- (i) A family with savings in a fixed-interest-rate time deposit account
- (ii) A business repaying a long-term, fixed-interest-rate loan
- (b) Identify one fiscal policy action that could be implemented to reduce inflation.
- (c) Identify an open-market operation that could be implemented to reduce inflation.
- (d) Suppose that Country Y continues to experience high inflation in the long run. Indicate the effect of this inflation on the nominal interest rate in Country Y.
- (e) If Country Y's inflation is high relative to that of other countries, explain the effect of this inflation on the international value of Country Y's currency.
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3. Assume that two countries, Atlantis and Xanadu, have equal amounts of resources. Atlantis can produce 30 cars or 10 tractors or any combination, as shown by the line MN in the figure above. Xanadu can produce 20 cars or 40 tractors or any combination, as shown by the line PQ in the figure above.
- (a) Which country has an absolute advantage in the production of tractors? Explain how you determined your answer.
- (b) Which country has a comparative advantage in the production of cars? Using the concept of opportunity cost, explain how you determined your answer.
- (c) If the two countries specialize and trade with each other, which country will import cars? Explain why.
- (d) If the terms of trade are such that one car can be exchanged for one tractor, explain how Atlantis will benefit from such trade.

END OF EXAMINATION

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Question 3

Correct Answers:

Part a: Xanadu has the absolute advantage in producing tractors as it can produce a maximum of 40 tractors, while Atlantis can only produce a maximum of 10 tractors.

Part b: Atlantis has a lower opportunity cost for producing cars ($\frac{1}{3}$ tractor compared to 2 tractors for Xanadu). Thus, Atlantis has comparative advantage in producing cars.

Part c: Since Xanadu has comparative advantage in producing tractors, it will import cars. Xanadu will be able to acquire a car through trade more cheaply than producing a car domestically.

Part d: With trade Atlantis will be able to consume beyond its production possibilities boundary. Atlantis will be able to acquire one tractor for one car with international trade. In contrast, without trade and only domestic production, Atlantis would give up three cars for one tractor.

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Question 3 (cont'd)

Grading Rubric:

Point allocations: (7 points: 2+ 2 + 2 +1)

- a) **2 points:** (1 for identification and 1 for explanation.)

1 point - Xanadu has an absolute advantage in tractors.

1 point - Xanadu can produce more (40) tractors than Atlantis (10).

- b) **2 points:** (1 for identification and 1 for explanation.)

1 point - Atlantis has a comparative advantage in the production of cars.

1 point - Atlantis produces cars at lower opportunity cost than Xanadu. It cost Atlantis 1/3 tractor for each car, but it costs Xanadu 2 tractors for each car.

- c) **2 points:** (1 for identification and 1 for explanation.)

1 point - Xanadu will import cars.

1 point - Because Xanadu has higher opportunity cost of producing cars.

- Atlantis has lower opportunity cost in cars.
- Cheaper for Xanadu to import cars than to produce domestically.
- Cheaper for Xanadu to import cars than to produce cars.
- Xanadu has a comparative advantage in tractors.
- Atlantis has comparative advantage in cars.

- d) **1 point -** Any quantity traded on one-for-one basis will permit Atlantis to consume beyond its PPF. Or, it becomes cheaper for Atlantis to import trucks than to produce them domestically, or a correct discussion of gains from trade using numbers.