

Economics 1: Midterm Review

<http://delong.typepad.com/sdj/econ-1-spring-2012/>

<http://tinyurl.com/delong-Econ1Sp12>

February 17, 2012, 11-12

Wheeler Auditorium, U.C. Berkeley

Purposes of the Exam

- An exam can have many purposes
 - A spur to studying
 - A way to generate identifying variance
 - Police-the-reading
 - Instructor reality check
- This midterm is primarily an instructor-reality-check exam

Part I: Police the Reading

- 1. Why does Partha Dasgupta choose to spend so much of his book writing about the (imaginary) Becky and Desta?
- 2. Why did Milton Friedman and Rose Director Friedman feel that freedom was under threat and in retreat at the end of the 1970s?
- 3. How many people need to cooperate to make--efficiently make--a pencil? How do all the people making the pencil for me know that I want one?
- 4. In your estimation, what are the two most important reasons Partha Dasgupta believes are responsible for the fact that Becky's life options are broader than Desta's?

Part II: Concepts 1

- Why did Friedrich von Hayek deserve his Nobel Prize?

Part II: Concepts 2

- Apple Computer and Toyota Motors do not allocate goods and services within their organizations with the market system--they use internal corporate central planning. If central planning is as poisonous to an economy as Professor DeLong has maintained, why are large successful corporations are large islands of command-and-control central planning within the market system that do well?

Part II: Concepts 3

- Describe how a market economy efficiently allocates scarce resources among alternative uses.

Part III: Problem 1

- Suppose that we have an economy with four workers. Paris H. can teach 3 yoga lessons or make 20 lattes a shift. Kim K. can teach 2 yoga lessons or make 8 lattes a shift. Mike S. can teach 1 yoga lesson or make 40 lattes a shift. And Pauly D. can teach 4 yoga lessons or make 4 lattes a shift. Suppose customers are willing to pay \$4 each for lattes and \$15 for yoga lessons. Who should teach yoga? Who should pull lattes? How many lattes will the economy make and how many yoga lessons will it teach?

Part III: Problem 1

- Suppose that we have an economy with four workers. Paris H. can teach 3 yoga lessons or make 20 lattes a shift: $6 \frac{2}{3}$. Kim K. can teach 2 yoga lessons or make 8 lattes a shift: 4. Mike S. can teach 1 yoga lesson or make 40 lattes a shift: 40. And Pauly D. can teach 4 yoga lessons or make 4 lattes a shift: 1. Suppose customers are willing to pay \$4 each for lattes and \$15 for yoga lessons. $3 \frac{3}{4}$ Who should teach yoga? Who should pull lattes? How many lattes will the economy make and how many yoga lessons will it teach?
- Pauly D. 4 yoga
- Paris, Kim, and Mike: 68 lattes

Part III: Problem 2

- Suppose that, on and near the U.C. Sunnydale campus, the weekly supply curve for lattes is given by the equation $Q = \max(1000 P - 2000, 0)$: nobody makes any lattes unless the price is above \$2/latte, and for each \$1 the price is above \$2 an extra 1000 lattes are made. Suppose that customers have \$10,000/week to spend on lattes. Draw the supply curve and the demand curve. What is the equilibrium price of lattes? What is the equilibrium quantity of lattes?

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- $PQ = 10000$
- $Q = 1000P - 2000$
- $10000/P = 1000P - 2000$
- $0 = -10000 - 2000P + 1000P^2$
- $P^2 - 2P - 10 = 0$
- $P = [2 \pm \sqrt{4+40}]/2 = 1 + \sqrt{44}/2$
- $Q = 1000(1 + \sqrt{44}/2) - 2000$
- Also ask for consumer and producer surplus...

Part IV: Combination

- Suppose that it is May 6, the day before the Econ 1 exam. You have a friend who has blown off the course entirely, knows nothing, but must take the exam on the morrow. It is your task to explain to them how it is that markets can fail to be optimal societal mechanisms for guiding production and distribution decisions. Use graphs and make arguments to try to equip your friend to pass the Econ 1 exam--but remember how little your audience knows, and how basic your explanations must be.