Economics 1: Spring 2012: Problem Set 4

J. Bradford DeLong
U.C. Berkeley

Due at first section after March 5, 2012 lecture

1. Suppose that we consider the daily market for ice-cream sandwiches in the neighborhoods surrounding Crony Capitalism Junior University in the town of Old Stick...

Supply: Q = 500(P - 2)

Demand: Q = 11000 - 1000 P

What is the equilibrium price? What is the equilibrium quantity? What is the equilibrium producer surplus? Consumer surplus?

Pricey ice-cream sandwiches, aren't they?

2. Suppose that Production Distribution Coordination—PDC—puts a quota ceiling of 2000 on the number of ice-cream sandwiches that can be sold in Old Stick each day on the grounds that it does not like people eating too many frozen desserts. What is the equilibrium price? What is the equilibrium quantity? What is the equilibrium producer surplus? Consumer surplus? Deadweight loss relative to the free-market equilibrium?

3. Why might the standard analysis of the costs of a quota underestimate how much value the quota would destroy?

4. Can you make an argument that the quota is nevertheless a good thing? What is the argument? How convincing do you find it?

5. Return to the daily market for ice-cream sandwiches in the neighborhoods surrounding Crony Capitalism Junior University in the town of Old Stick...

Supply: $Q = 500(P - 2)$

Demand: $Q = 11000 - 1000 P$

And now let us say that PDC imposes a price ceiling of $4 on ice-cream sandwiches—on the grounds that nobody should ever have to pay more than $4 for an ice-cream sandwich. What is the equilibrium price? What is the equilibrium quantity? What is the equilibrium producer surplus? Consumer surplus? Deadweight loss relative to the free-market equilibrium?

6. Return to the daily market for ice-cream sandwiches in the neighborhoods surrounding Crony Capitalism Junior University in the town of Old Stick...

Supply: $Q = 500(P - 2)$

Demand: $Q = 11000 - 1000 P$

And now let us say that PDC imposes a price floor of $10 on ice-cream sandwiches—on the grounds that underpaid sandwich makers deserve more money. What is the equilibrium price? What is the equilibrium quantity? What is the equilibrium producer surplus? Consumer surplus? Deadweight loss relative to the free-market equilibrium?

7. Suppose that you have been chosen to give a three-minute—300 word—presentation to PDC arguing to them that the price floor of $10/ice-cream sandwich they imposed in (6) is doing more harm than good. What do you say?

8. When, broadly, is it a good thing for a government to impose per-unit taxes on production? For it to offer per-unit subsidies? For it to impose quotas? Price ceilings? Price floors?