Midterm Exam

You have until 4:50pm to complete the exam, be certain to use your time wisely. You may answer questions directly on the exam or submit typed responses. Answer all questions completely but concisely. Including additional incorrect information in an otherwise correct answer may result in the loss of points. The exam is open notes and open book. You may use your notes, the textbook and any of the materials posted on our course Blackboard site. Other materials are not permitted. Remember to put your name or exam code on the exam. Good luck!

Name or Exam Code:

1. (15 points) Recall the method used to choose the lead counsel in the Sotheby's and Christie's civil suit as described in Ashenfelter and Graddy (2005):

"The law firms were asked to name a dollar amount that was the minimum sum they expected they could win for the plaintiffs, excluding fees or expenses. The law firm with the highest bid would then win the position of lead counsel and would receive 25% of any settlement in excess of that dollar amount. The remaining 75% of the excess would go to the class members."

- (a) Explain why this method of choosing a firm may have led to more efficient outcomes than traditional methods of choosing a firm.
- (b) Explain why this method of choosing a firm may have led to a more equitable outcome than traditional methods of choosing a firm.
- (c) Can you think of any ways to change the bidding process to create an even more efficient or equitable outcome?

In answering both questions, be certain to be clear about which groups are gaining or losing surplus as a result of the bidding process.

- 2. (25 points) One area of regulation we have not touched on in class is foreign trade policy. Policies toward international trade tend to be far different than policies governing domestic trade. One area in which policies can differ substantially is in terms of regulating competition. Politicians and lobbyists occasionally push for regulations protecting domestic firms from foreign competition. One such way of protecting domestic firms is to impose tariffs on imported goods. If there is a tariff of the amount T placed on a particular good that sells for the price p in the domestic market, a domestic firm will get to keep the full amount p on each unit sold while the foreign firm will keep the amount p T, with the amount T going to government revenues.
 - (a) How would you expect the principles underlying the regulation of competition in domestic trade to differ from the principles underlying the regulation of competition in international trade? In other words, how would the objectives of the regulator differ in the two different areas of trade? You can assume the regulator is a federal agency.
 - (b) Suppose that officials are worried about the American auto industry and decide to impose a tariff on foreign cars. Would you expect the tariff to increase or decrease total surplus in the world market for cars (which includes domestic firms and consumers)? Explain your answer.
 - (c) Would you expect the tariff to increase or decrease total surplus in the domestic market for cars (excluding foreign firms and consumers)? Explain your answer.
 - (d) A politician defends the tariff on the following grounds: There are economies of scale in the car manufacturing industry. We need to protect fledgling domestic car manufacturers from competition until they are large enough to achieve similar levels of productivity as foreign firms at which point they can provide healthy competitive pressure on car prices. Discuss the merits of the politician's claim.

3. (20 points) Consider the second point in Larry Summers' memo on policies regarding the international trade of pollution:

"The costs of pollution are likely to be non-linear as the initial increments of pollution probably have very low cost. I've always thought that under-populated countries in Africa are vastly under-polluted, their air quality is probably vastly inefficiently low compared to Los Angeles or Mexico City."

- (a) Use a graph of the marginal costs of pollution to demonstrate Summers' point about inefficiency in the market for pollution assuming that pollution is tradeable and that it is essentially costless to ship pollution from one county to another. On your graph, show the following items: the current level of pollution in Africa, the current level of pollution in Los Angeles, and the deadweight loss associated with that current allocation of pollution.
- (b) Describe a transaction that could lead to increases in surplus for both residents of Los Angeles and residents of Africa, being as specific as possible. Use your graph to show the gains in surplus for both groups from this transaction.
- (c) Discuss the equity implications of the transaction you described in part (b).
- (d) What flaws may there be in Summers' argument about the efficiency of trading pollution?

- 4. (25 points) The graph below shows the demand curve for Tex-Mex food (p(T)) in Williamsburg and the marginal cost (MC(T)) and average cost (AC(T)) curves for a single Tex-Mex restaurant.
 - (a) Explain why the average cost curve is first downward sloping and then upward sloping. Your answer should be tailored to the industry under focus, a Tex-Mex restaurant.
 - (b) On the graph show the quantity of tacos the restaurant will sell and the price it will charge if it has a monopoly on the Tex-Mex market in Williamsburg.
 - (c) Suppose that a second Tex-Mex restaurant opens up but the two restaurants collude to keep prices at the level you found in part (b). Use the graph to determine the effects of this second restaurant's entry on total surplus. Include a written explanation of how surplus has changed for the consumers and for each restaurant.
 - (d) Explain why the efficient quantity of tacos in this market is *not* where the marginal cost curve intersects the demand curve.



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- 5. (15 points) Consider the competition between the Trellis and the Fat Canary. Both are high end Williamsburg restaurants that cater to the same customers and are located directly across Merchant Square from one another.
 - (a) Explain why their current locations are an equilibrium outcome. In other words, why would you expect Fat Canary and Trellis to retain their current spaces rather than moving their businesses elsewhere in Williamsburg?
 - (b) What are two different ways that Fat Canary and Trellis may try to collude? For each, explain why collusion would tend to increase the restaurants' profits.
 - (c) Aside from it being illegal, why might you expect the types of collusion identified in part (b) to fail?