

Homework Set 11

1. (5%) In a non-competitive market managers can lead a quieter life by earning profits but not necessarily maximizing profits. What conditions must exist for this statement to be true?
2. (5%) The court system in Russia does not protect investors as extensively as does the court system in the United States. What does this imply about the financing of firms in the new Russian Republic?
3. (5%) The current profits of a partnership with two equal-share owner-managers equal π . Suppose one owner-manager decides to buy out the other. Would you expect the profits of the firm to change after the other partner leaves the firm? Explain.
4. (5%) Assume a private firm is not regulated. However the firm believes it profits would be regulated if they become too high. Would you expect this firm to produce each rate of output at a lower total cost?
5. (5%) If a CEO engages in expense preference, he or she must pay for it. Explain what this statement means. Under what conditions is it true and when is it not true?
6. (5%) A recent study found that domestic firms in an industry that also sold their products in global markets had lower long run average cost functions than the firms that only sold in the domestic market. The study concluded that the discipline of international competition is required to make firms produce more efficiently. Explain why you agree or disagree with this conclusion.
7. (5%) At a recent meeting of the association of Manufacturing Plants of Ohio (MOP), a survey of small plants revealed that the small plants owned and operated by the managers had generally installed big screen television sets in the manager's offices. Such frills were missing from similar plants operated for large corporations. This provides some, albeit limited, proof that corporate governance does work and that corporations are not installing wasteful fringes. Explain whether you agree or disagree with this statement
8. (5%) From time to time, a new edition of The 100 Best Corporations in America to Work For appears. Some securities analysts routinely look the book over to see which of the firms are good take-over targets. Explain the logic that would lead them to this step.

9. (5%) You have just retired from your dry cleaning business, and hired a bright young MBA to manage the business for you. You are concerned about the problems of supervision given your plan to spend most of the time scuba-diving in the Cayman Islands. Since you intend to own the stock, the idea of giving the new manager stock options will now work. Suggest a plan to compensate your new manager to reduce principal-agent problems
10. (5%). Ace Development has just purchased a 100-acre site around Lake Restful. With its clear waters, quite location, and beautiful woodlands, the site calls out for development as luxury home sites. A team of eminent econometricians has determined that the demand for home sites is

$$Q = 110 - P,$$

where P is the price in thousands of dollars per lot and Q is the number of lots to be developed. Zoning requires one-acre lots. An environmental group, Friends of Lake Restful (FLR), is petitioning that the land or at least a large part of it be set aside for a nature resort. Show that what you have learned in this class helps you to deal with FLR.

11. (10%) Victoria's Secret and Borders Bookstore both moved into an upscale shopping area. Unlike other stores, both of these stores have erected large signs, and Victoria's Secret lingerie displays in its windows have upset the other tenants in the shopping area. Tenants complain that the commercial signs are too "tacky" and that Victoria's Secret displays are too "pink". One nearby offended tenant is FAO Schwarz, a seller of children's toys. Some tenants want Victoria's Secret and Borders to reduce the size of their signs and Victoria's Secret to tone down its displays.

One analyst of the retail scene suggests that the opposition of the other tenants is just dour grapes. "The opposition by the other tenants is unjustified. If the signs harmed the sale of other stores more than they benefited Victoria's Secret and Borders, the other stores would have outbid both companies and bought up the leases and prevented both stores from opening stores. Consequently the market solution is pro-consumer and efficient."

- Does the fact that Victoria's Secret and Borders Bookstore outbid the other stores indicate that the harm to the sales of their stores is less than the benefit of the location to Victoria's Secret and Borders? Explain.
- Suppose the property rights were assigned to the other stores and transaction costs were negligible so that Victoria's Secret and Borders have to pay the other stores for any harm these stores suffer from the

tacky signs. Explain why the size of the signs and the displays would or would not be different if the other stores owned the property rights.

12. (10%) The demand curve for national defense by three consumers are shown in the table below:

- Derive the aggregate willingness-to-pay schedule for airplane squadrons
- What is the optimal quantity of national defense?

Number of Airplane Squadrons	Consumer 1	Consumer 2	Consumer 3	Marginal Cost of a Squadron
1	\$100	\$400	\$250	\$250
2	\$90	\$300	\$200	\$350
3	\$80	\$200	\$150	\$430
4	\$70	\$150	\$100	\$600
5	\$60	\$100	\$50	\$800

13. (10%) Popeye and Wimpy trade only with each other. Popeye has 8 hamburgers and 2 cans of spinach; Wimpy has 2 hamburgers and 8 cans of spinach. Their indifference curves somewhat unusually, are all straight lines, Popeye's being much steeper than Wimpy's. (Recall that Wimpy has strong preferences for hamburgers; Popeye strong preferences for spinach).

In an Edgeworth Box, show the initial endowment and the core. Explain why you cannot draw the contract curve.

14. (10%) Robinson Crusoe lives alone on an island, producing nuts and berries and trading with people on other islands. If his production possibility curve is a straight line, what can you conclude about the quantities of nuts and berries he will produce?

15. (10%) The air belongs-- or at least should belong -- to the people. Therefore no pollution should be allowed. Explain whether you agree or disagree with these statements.