

All papers should be typed double or triple spaced and be *five to seven* pages in length, as necessary. Bibliographical information should appear at the end of the paper for all materials referred to in writing the paper. Remember that the purpose of the paper is to integrate and apply the mathematical tools and concepts developed during the semester. Grades will be based upon the originality and quality of the economic analysis conducted in the paper. Style counts--in so far as good reasoning is best revealed by clear well-organized prose.

Some possible topics include:

1. Comparative Statics

Analyze the dynamics of some market's response to a natural catastrophe, new regulatory policy or tax in some detail. Contrast the response of a competitive firm with that of a monopolist. (Effect of California blackouts on the demand for solar cells, generators etc.)

Consider the policy implications of your analysis. For example a subsidy tends to cause entry in a competitive market, but not in a naturally monopolistic market. Does this make subsidies to a monopolist easier to end than subsidies to a competitive firm or not? Why?

2. Market Failure

Consider some area in which independently adjusting markets yield less than optimal results: monopoly, pollution, winner's curse, short run losses, and so forth. Demonstrate that there is a problem in the area of interest, and evaluate alternative solutions

Consider the political implications of your analysis. Are there groups that have strong incentives to lobby the legislature for policies that eliminate market failures. Why or why not?

3. Entrepreneurship

The neoclassical model of the firm lacks a natural place for innovation. Joseph Schumpeter and Israel Kirzner are well known for their models of Entrepreneurship. Show how one can analyze entrepreneurship as investment in information or research and development. Consider the effects of expected returns, varying skills at creativity, detection, learning, and luck in one's return from such "entrepreneurial" efforts.

4. The Nature of Goods

Kevin Lancaster developed an extension of the theory of demand in which he argued that what we normally called "goods" like automobiles are really clusters of attributes (reliable transportation, confort, economical, horsepower, aesthetic character, ...). These attributes may be varied by manufactures to produce new goods. In fact, a lot of product innovation is simply a variation on existing products with a "new" cluster of already well known attributes.

Develop a monopoly model of the production of a two attribute good where the monopolist faces a downward sloping demand curve for each of the two attributes. [That is a demand function of the sort, $Q_d(P, A_1, A_2, Y)$, where A_1 and A_2 are the two attributes that can be varied.]

To show how variation in tastes would affect the goods produced in such markets, suppose that there are two or three kinds of consumers who place value on the two attributes (in their utility functions). Show how the firm's profit maximizing bundle of these characteristics has to "weight" the preferences of its consumers. Discuss the factors (numbers of each type of consumer, substitutability, income etc.) which influence the characteristics of the good that the firm actually produces?

5. Law and Economics

Several years ago a hotel was constructed next to the Fontainebleau in Miami Beach, Florida. The new hotel cast an afternoon shadow

which shaded the Fountainbleau's private beach. The Fountainebleau sued the new hotel and won damages of \$D. What effect did the ruling have on: (i) room prices in the two hotels? (ii) the stock market value of the two firms owning the hotels? (iii) further beach development? (iv) the tourist trade in Miami Beach? (v) Given your analysis of these effects, what damage award would have been appropriate? Explain your reasoning carefully.

6. Advertising

One of the cornerstones of many "principles" level treatments of costs is that "sunk costs are sunk," which means that costs borne in the past are irrelevant to current decision making. However, it is possible that such past costs matter because they have directly or indirectly altered current tastes or circumstances.

Develop a two period intertemporal choice model to examine a monopolist's advertising expenditures in a setting where current advertising affects demand both now and in the future. Discuss how advertising and reputation affects can serve as a barrier to entry that allows firms to garner economic rents--at least in the short run.

7. Market Structure

Monopolistically competitive markets are a useful intermediate model of market structure. Compare and contrast this model with models of perfect competition and monopoly. Does your analysis have any implications for anti-trust policies?

Analytically one of the principle differences between monopolistic competition and perfect competition is the existence or not of firms selling goods that are perfect substitutes for each other. Are their markets where this is a reasonable assumption? Why is it important?

8. The Economics of Spring.

A good many production processes rely upon weather as an input, or at least as a complement in production. Analyze how the coming of Spring affects the market for goods with a seasonal pattern of

demand or production: agricultural equipment, snow shovels, sun screen, swim suits, boats, maple syrup etc.

Analyze production and pricing decisions for goods with either a seasonal demand or production cycle. How are prices affected by other characteristics of a seasonal output or demand such as how storable the good is?

9. Microeconomics of Non-Market Decision Making.

Nearly any social phenomena can be represented using microeconomic tools by rethinking the objective functions and constraints faced by persons in the setting of interest. For example public choice applies rational choice models to politics, social economics applies rational choice models to sociological problems. Develop a rational choice model of a budget maximizing bureaucrat, a risk averse criminal, decisions to marry, or to participate in a status seeking contest.

10. Microeconomics of Imperfect and/or Asymmetric Information

Analyze a setting where the extent of the information and/or the extent of the information is likely to affect some form of market (or non market) behavior. For example, analyze the sales tactics of firms who sell products that consumers have relatively little experience with or for which information is difficult (costly) to acquire.

Alternatively, consider the firm owner's management problem in a setting where he has less than complete information about the skills and work habits of his employees. Discuss how various kinds of incentive contracts can address problems of asymmetric information (For example analyze a setting where one of the following problems is present: averse selection, moral hazard, signaling contest, hidden action.)