Microeconomics, Module 5: The Behavior of Firms

Micro module 5 reading from eighth edition: Landsburg, Chapter 5

(The attached PDF file has better formatting.)

Updated: October 15, 2010

Module 5 deals with the economic decision making of a firm.

- Section 5.1 shows how the equimarginal principle compares benefits and costs.
- Section 5.2 applies the principle to production and pricing scenarios.

Focus on the following topics:

Section 5.1: Marginal benefit is the additional benefit from the last unit of an economic activity; marginal cost is the additional cost for the last unit of that activity.

Equimarginal principle: An activity should be done up to the point where marginal cost equals marginal benefit, if marginal benefit is decreasing and marginal cost is increasing. We could generalize the definition as "if marginal cost is increasing faster or decreasing slower than marginal benefit."

Section 5.2: To maximize profit, a firm produces where marginal cost equals marginal revenue. Changes in marginal cost or in demand change the price and quantity. Changes in fixed cost do not affect price or quantity unless they cause the firm to shut down.

Review questions R1 on page 131 and R2 on page 132. Final exam problems may give either numbers or formulas and ask the optimal quantity and price.

Review problems 3 and 4 on page 133. Review problem 5 on page 133, which compares services which are competitive vs services offered by a single (monopolistic) provider. The textbook wants a simple explanation of why an additional cost to competitive suppliers raises the price but an additional cost to a monopolistic supplier does not raise the price. In real life, prices are more complex. A monopolistic supplier such as the only eye doctor in town may set the price of a visit to maximize revenue from consumers but not too high that other eye doctors will move into town, hoping to partake of the high prices. Suppose the cost of visit in a competitive market is $100, the annual license raises the cost $20 a visit, the monopolistic price is $200 a visit, but any price above $150 a visit would attract competitors. With the new annual license, the eye doctor can charge up to $170 a visit without attracting competitors. A later module discusses game theoretic pricing, the subject of this paragraph.

Review question 8 on page 134, which discusses similar concepts.

Review question 9 on page 134, which is also covered in the corporate finance course. This topic is particularly relevant to actuarial candidates. Every time you fail an exam, you must consider: should I go on with the exams? The time you have spent in the past studying is not relevant. You must consider expected future study time and expected future benefits.

Review question 11 on page 134 and question 12 on page 135. Landsburg uses discrete production schedules because most first year college students can't do calculus. The final exam problems for this course use continuous production schedules.