

## Microeconomics, Module 8, "Competitive Firm in the Long-Run"

### *Microeconomics module 8: Readings from ninth edition*

(The attached PDF file has better formatting.)

{The Landsburg textbook is excellent. We say to read certain sections and to skip others. This does not mean that certain sections are better; it means that the homework assignments and exam problems are based on the sections that you must read for this course. Some skipped sections are fascinating but are not tested.}

Module 8 covers sections 7.3, 7.4, and 7.7; skip sections 7.5 and 7.6, which are not tested on the final exam and have no homework assignments.

Read section 7.3; know the difference at the bottom of page 187 between economic profits and accounting profits. The same principle is covered in the corporate finance course.

Long-run competitive pricing sets price equal to minimum average total cost, which includes both fixed and variable opportunity costs; examples are

- A market return on the capital used to buy fixed assets.
- The potential labor income if the entrepreneur worked at another job.

For the short run formula of marginal revenue equals marginal cost, we include the short term opportunity costs, such as earnings in a temporary job for the entrepreneur. In most cases, the opportunity costs are long-run, not short run.

Know the section on the algebra of the exit decision on page 184. Know the two differences between the short and long-run on the top of page 182. Know the difference between shut-down and exit in the middle of page 185.

Read section 7.4; this covers the constant-cost case of the competitive industry. It covers the basic theory of competitive industries.

Skip section 7.5; it is not tested on the final exam and there are no homework assignments from this section. To analyze the pricing structure of a firm, the principles in Section 7.5 are essential. Many large high-tech firms are decreasing cost: each additional sale reduces the average cost. In contrast, insurers are increasing cost firms. The first few policies written are the best insureds, with low expected losses; later policies are lower quality risks, with higher expected losses.

Section 7.6 is fascinating: the discussions of rent control, motel room rents, and busboy tips are wonderful applications of economic theory to everyday matters. These applications are *not* tested on the final exam. The *overview and concepts* posting on the discussion forum summarizes the theory for interested candidates.

Read section 7.7, a two page summary of the essential relations in short run and long-run competition. Know how shifts in the supply curve affect competitive prices. Read the summary at the end of this chapter.

Review exercises N1 through N6. These exercises use discrete cost and demand curves. The final exam problems use marginal cost or average cost functions along with linear demand curves and fixed cost dollars. The problems solve for the same output: price, quantity, and (sometimes) number of firms. The final exam problems also solve for consumers' surplus and producers' surplus; the effects of sales taxes and excise taxes; and the dead weight loss from taxes.

Review parts N1(b), N3(d), N4(f), and N5(e). Distinguish between short run and long-run equilibrium, and know whether firms will enter or leave the industry, based on the relation between the two equilibria.

Review exercises N7 and N8. These use the marginal cost and average cost functions and demand curves as on the final exam problems. You are expected to derive the average cost curve from the fixed costs and the marginal costs.

Landsburg is a political economist (as is Barro, the author of the macroeconomic textbook). The policies that best aid the homeless, the unemployed, minorities, and other groups that have trouble in modern societies are hotly debated. Use the economic concepts of supply and demand for homeless shelters to answer this problem. We do not say Landsburg's political perspective is correct, but it is well worth understanding. Many of the problems apply economic theory to political issues.

Problems 18-28 explore the effects of various taxes and government regulations. Review these problems to ensure that you understand the concepts in this chapter.