

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

### *Required reading:*

(The attached PDF file has better formatting.)

Updated: June 12, 2005

{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 of the skipped sections are fascinating, but they 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. We mention what these sections cover, since they are tested in the CAS transition exam, but they are not tested in this course.

Read section 7.3; know especially the concept on page 196 that economic profits differ from accounting profits because they consider the foregone opportunities. The same material 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.

You can skip the *details* in the example about Floyd the Barber on pages 197-198, but know the formula at the bottom of page 198:  $\text{profit} = P - AC$ . Know the relation for cost minimization on page 199: “the competitive firm is selling at the lowest possible average cost.”

Read section 7.4 on pages 201-205; this covers the constant-cost case of the competitive industry. You can skip the increasing-cost and decreasing cost cases in section 7.5. You can skip the “Application” on pages 206-207. The CAS transition exam covers the increasing-cost and decreasing cost cases, and there have been multiple choice questions on these topics on past Course 2 exams. In practice, most industries are constant cost, and most of the theory in Landsburg’s textbook relates to this scenario.

Skip section 7.5; it is not tested on the final exam and there are no homework assignments from this section. 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. But these applications are *not* tested on the final exam, though they are on the CAS transition exam

syllabus and they have been tested on page Course 2 exams. The *overview and concepts* posting on the discussion forum summarizes the applications.

Read section 7.7 on pages 217-219, a two page summary of the essential relations in short run and long-run competition. Read also the summary on pages 219-220, which is a less technical summary.

*Jacob:* Several topics are not covered in the on-line course but are covered on the CAS transition exam syllabus. Which of the two exams – the final exam for the on-line course or the CAS transition exam – covers more material?

*Rachel:* The two syllabi are about the same size. The on-line course covers all chapters of the textbook; the CAS transition exam covers about two thirds of the chapters. Starting in module 8, the on-line course syllabus selects the basic theory and excludes the details; the CAS transition exam covers the entire chapter.

Most illustrative test questions and practice problems on the discussion boards apply to the CAS transition exam as well. Some of these questions and problems are adapted from past Course 2 exams and CAS 5A exams. Many of the explanations on the discussion boards are equally helpful to candidates taking the CAS transition exam. We do not want to mislead any candidates into studying more or less than they have to, so we identify items that differ between the two exams.

*Jacob:* The posting often say that certain items will be emphasized more or less on the final exam. Do you make the same comments for the CAS transition exam?

*Rachel:* The first administration of the CAS transition exam is in August 2005. We don't know how closely this exam will follow the pattern of past Course 2 exams, so we don't comment on the likely topics.