Microeconomics, Module 9, "Welfare Economics and the Gains from Trade"

Required reading:

(The attached PDF file has better formatting.)

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{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.}

This module covers consumers' surplus and producers' surplus. Chapter 8 of Landsburg's text has other items as well, not all of which are not tested on the final exam. We specify what you must know in this posting.

Read section 8.1 on pages 230-238; skip the subsection "social gains and markets" on pages 238-239. This is covered in the Brealey and Myers text for the corporate finance course, so it is not covered here; no final exam questions relate to this sub-section.

Know the difference between value and surplus; see the definition of value on the side of page 230 and the definition of surplus on the side of page 234.

Landsburg calculates consumers' surplus and producers' surplus from discrete supply and demand *schedules*. The homework assignments and final exam problems also use linear supply and demand *curves*. The areas representing consumers' surplus and producers' surplus are right triangles, whose area is  $\frac{1}{2} \times$  height  $\times$  width. The concepts and overview postings for Modules 11 and 12 show the procedure to calculate the surplus for various scenarios. Both the discrete schedules and the areas of triangles are shown in the practice problems, and the same procedures are used on the final exam.

On pages 232-234, Landsburg shows the value as an area on a graph. Since he avoids calculus, he works out the figures by summing schedules. This topic is simple for actuarial candidates: we integrate under a curve (actually, under a curve and above a straight line). Since Landsburg does not use calculus, the final exam questions use linear demand curves and marginal cost curves and simple geometry to find the area of a right triangle.

Know the definitions of consumers' surplus (side of page 234) and producers' surplus (side of page 236) and the statements in the text:

- The *consumers' surplus* is the area under the demand curve down to the price paid and out to the quantity demanded (page 235).
- The *producers' surplus* is the area above the supply curve up to the price paid and out to the quantity supplied (page 237).

From Section 8.2 ("The efficiency criterion," starting on page 240), skip the first sub-section on pages 240 and 241. Read "consumers' surplus and the efficiency criterion," on pages 241-242 and "the effect of a sales tax" on pages 242-244. The concepts and overview posting shows the core diagram for this section. The final exam tests the effect of a sales tax or an excise tax on consumers' surplus and producers' surplus.

Read the material on dead weight loss: pages 244-247, but skip the sub-section on "other normative criteria" on pages 248-249. Know well exhibit 8.11 on page 250; this summarizes most of what you need for the final exam.

Skip section 8.3 on pages 249-263. We show graphics for price subsidies and price ceilings in the concepts and overview posting on the discussion forum, but the final exam does not test this material and there are no homework assignments from it. Price ceilings were used in the United States during the oil crisis of 1972, but even politicians now acknowledge that they harm the economy.

The material on tariffs (pages 256-258) is worth reading to understand the economic perspective on outsourcing and international trade, but it is not tested on the final exam. The discussion of robbery on pages 258-261 is fascinating, but it is not tested on the final exam. Read the section on the "diamond-water paradox"; this is the only half page required from section 8.3. Skip the "labor theory of value" on pages 262-263; unless you are a Marxist economist, you don't need Landsburg to tell you this perspective is wrong.

Skip section 8.4 on pages 263-273. This is all theoretical; Landsburg says that economists have proved the results, but they too complex to be reviewed here. This section says that capitalism works well; it might be the best economic system around. Western economists believe this, and we also agree.

Western thinkers have often wondered how we can know if we are prejudiced; after all, Marxist economists said that communism was the best economic system around. Max Weber conjectured that scientists and scholars in an open university are relatively free of prejudice. This sounds good, but most academicians have views that are at odds with those of simple economics. We believe in the invisible hand theory, but the final exam doesn't test this section.

Jacob: Communism has collapsed; are there still politicians and intellectuals who don't believe in free markets and the invisible hand theory?

Rachel: Look at the European Union. In the fifteen years since Communism has collapsed, leaders of various European countries (France, Germany, Belgium) has built up a system that is the opposite of Landsburg's textbook. Even now, with the poverty of the European Union compared to the vitality of India, China, Singapore, and other Asian nations, and the continued strength of the U.S., Britain, and Ireland, the present leaders of France and some other European countries continue to espouse its ideas.

Jacob: Are you saying that the goals of the European Union are not good?

Rachel: We say nothing about the goals. The goal of a peaceful continent is wonderful; but the attempt to suppress free markets will cause that continent to sink. The ideal would be free markets along with political freedom and peace.

Pages 266-274 are covered by Barro's macroeconomics textbook. Many candidates are taking both micro and macro on-line courses; we cover this material in macro, where it is more relevant, not in micro. Landsburg and Barro have the same perspective, and we avoid duplicating material in these courses.

*Jacob:* Brealey and Myers, Landsburg, and Barro all have the same perspective. Did they read each others' textbooks, or is this convergence expected?

Rachel: Until twenty five years ago, Western intellectuals argued about the best economic and financial systems. The Communist world seemed stronger and getting ever stronger; the Europeans (France, Germany) and Asians (Japan, South Korea, Singapore, Taiwan, Hong Kong) seemed to be rapidly over-taking the United States. The free market perspective in these three textbooks seemed a poor match for the central planning of Communist countries, the social model of the Europeans, or the directed economies of the Asians. But few argue anymore that free markets out-perform the alternatives. Even those countries who oppose free markets speak of other objectives (justice, equity, equality), not pure economic or financial reasons for alternative systems. Economic and financial theory has converged in many parts of the world; Brealey and Myers, Landsburg, and Barro reflect the current consensus.

Only portions of this change are covered in the on-line course. The summary on page 275 covers the whole chapter; read the parts covered here. Skip the Appendix to Chapter 8 on pages 283-290. We summarize this Appendix in the Concepts and Overview posting if you want to know what it contains, but we don't test this material.