

Microeconomics, Module 13, "Market Power"

*Micro module 13: Readings for 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.}

Read the introduction and Section 11.1 on pages 353-354; skip the "Great American Merger Wave" and the Anti-trust Policies sub-sections, but read from *Vertical Integration* on page 357 until the *Robinson-Patman Act* on page 361. Skip the section on the Robinson-Patman Act. Know the difference between horizontal and vertical mergers; the textbook has both definitions (side of page 354) and full sub-sections.

Actuaries should know the anti-trust laws relating to insurance pricing, but this course does not cover this subject. If you deal with anti-trust issues, you must know the laws, but this course does not cover legal items. If you want a career in business (even if not as an actuary), you should learn anti-trust law; if you deal with rating bureaus, you must learn anti-trust law; but this course is not the place to learn this subject.

*Jacob:* How important is it for actuaries to know anti-trust law?

*Rachel:* This is essential for actuaries who deal with rating bureaus and industry pricing. In June 1992, the U.S. Supreme Court rules against ISO and several large U.S. insurers and reinsurers in an anti-trust case. Anti-trust issues come up repeatedly in rating bureau discussions and in discussions at the SOA and CAS.

The insurance industry has been consolidating over the past several decades, with both large and small companies being acquired by more profitable peers. Each year, the CAS takes a poll of the more important news items (for actuaries) over the past year; "mergers and acquisitions" always gets many votes.

But the insurance industry is highly competitive, and the horizontal mergers have rationales besides market power and synergies, which Landsburg discusses. Brealey and Myers discuss also the principal-agent problem: managers want to control large enterprises, even if the merger is not in the best interest of shareholders, and the tax incentives for mergers (since returning money to shareholders as stockholder dividends creates a tax liability).

Focus on Exhibits 11.1 and 11.2 for horizontal mergers, which shows the benefits and costs. Know also Exhibit 11.3 for vertical integration. Landsburg does not claim that marginal cost drops so much in most mergers; he just points out that mergers can have social benefits. If two firms each have a small fraction of the market, the monopoly power aspect of a merger is small, but the marginal cost aspect of a merger may be large. The final exam may give a demand curve and marginal cost curves before and after a merger and ask you to compute the social welfare benefits and costs.

*Jacob:* Do the mergers in the insurance industry have social welfare benefits or costs?

*Rachel:* Most of those mergers have net social welfare benefits. The insurance industry is overcapitalized, with too many firms. There are only three domestic auto manufacturers, but several hundred domestic auto insurance companies. These mergers reduce costs by eliminating duplicate offices, agents, underwriters, and other industry personnel. They rarely affect the market power of the merged companies.

Know the material on horizontal mergers, vertical integration, and predatory pricing. Vertical mergers are less common in the insurance industry, since there are few inputs to an insurance policy that the insurer has to purchase from other firms. An auto manufacturer buys about 50 parts from suppliers (tires, radios, etc.); an insurer doesn't buy much from suppliers. Some insurers seek to become direct writers, acquiring their agents;

some agencies have formed insurance companies that write the policies that the agents sell; but vertical mergers are less common in the insurance industry than in other industries.

The underwriting cycles in the property-casualty industry seem like predatory pricing, but the differences are important. Predatory pricing is by one monopolist (or a few oligopolists) to drive out rivals; underwriting cycles are more complex, since they are a cyclical phenomenon of all insurers in the industry. The CAS web site has a paper that gives an economic interpretation of insurance industry underwriting cycles, similar to the reasoning in Landsburg's text ("Underwriting Cycles and Business Strategies" published in the *Proceedings of the CAS*, 2001). After reading Landsburg's discussion, read this paper to see how the theory applies to insurance.

The examples of the Standard Oil Company, Walmart, and Amazon help you understand the concepts. The final exam does not test the details, but it gives scenarios like those in the text.

Read the section on "Resale Price Maintenance" on pages 362-365. This topic that applies to the insurance industry: insurers often forbid agents from selling their policies below a specified price, even if the agent accepts a lower commission.

Review questions R1, R2, and R3 on page 389; they test if you recall the text.

Review question R4 on page 389. Landsburg is perhaps stretching to find a consumer welfare benefit from resale price maintenance. Many economists do not agree with his analysis.

Review Exercises N1 and N2 on page 390. These are examples of potential benefits and costs from vertical integration. The final exam has similar problems.

Review Exercise N3 on pages 390-391. This is Landsburg's interpretation of the consumer welfare benefits from resale price maintenance.

Look at problem 5 on page 392. This is common in the insurance industry, and Landsburg has a possible interpretation (though not the only one). This is too vague to ask on the final exam, but it is worth reviewing.