

## Microeconomics, Module 13, "Market Power"

*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.}

From Section 11.1, read pages 371-373 on horizontal mergers; skip the "Great American Merger Wave" on pages 373-374 and the Anti-trust Policies on page 374. Actuaries should know the anti-trust laws relating to insurance pricing, but this course does not cover this subject. 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 at times even 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 Exhibit 11.1, which shows the benefits and costs of mergers. 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.

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

*Rachel:* Most of those mergers have social welfare benefits. The insurance industry is overcapitalized, with too many firms. There are only 2½ 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.

Read page 376 on vertical mergers and pages 377-378 on 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 small group of 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 fascinating paper that gives an economic interpretation of insurance industry underwriting cycles, similar to the economic reasoning in Landsburg's text ("Underwriting Cycles and Business Strategies" published in the *Proceedings of the CAS*, 2001). After reading Landsburg's discussion, you can read this paper to see how the theory is applied to insurance.

Skip the two examples on page 378 and the section on the Robinson-Patman Act on page 379.

Read the section on "Resale Price Maintenance" on pages 380-384. This is an important topic that applies to the insurance industry.

The example of "Barnes and Noble vs Amazon" on pages 383-384 is fascinating and you may want to read it, but it is not tested on the final exam.