

TEST 7 VERSION A

"Antitrust Policy on Horizontal Mergers"

INSTRUCTIONS: This exam is closed-book, closed-notes. Simple calculators are permitted, but graphing calculators or calculators with alphabetical keyboards are NOT permitted. Mobile phones or other wireless devices are NOT permitted. Points will be subtracted for illegible writing or incorrect rounding. Point values for each question are noted in brackets.

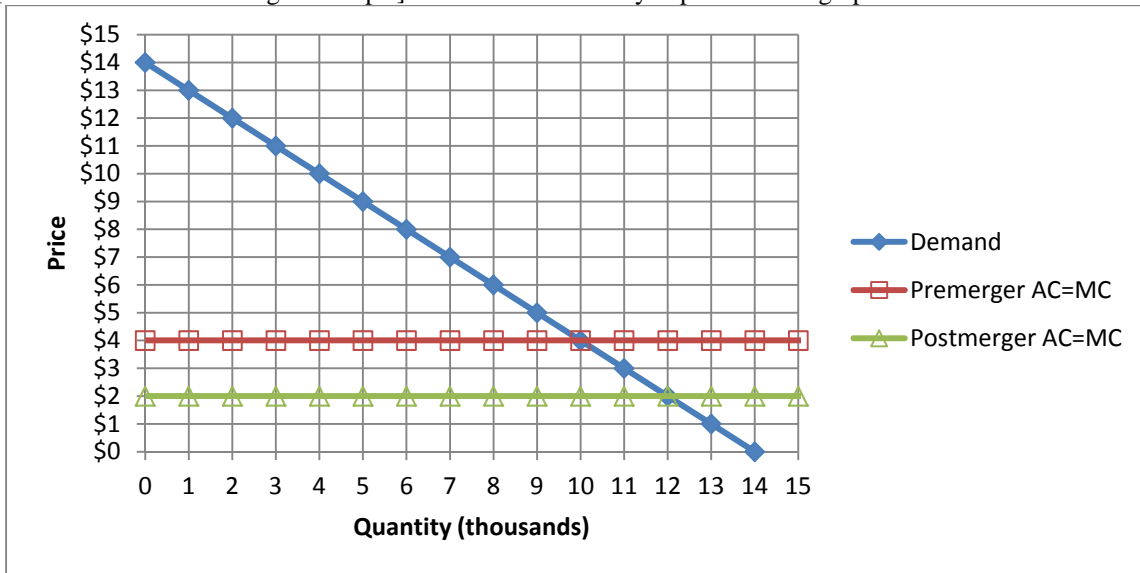
I. Problems: Insert your answer to each question below in the box provided. Feel free to use the margins for scratch work—only the answers in the boxes will be graded. Work carefully—partial credit is not normally given for questions in this section.

(1) [Types of mergers: 8 pts] Suppose Des Moines Coffee Company produces coffee, which it distributes through supermarkets in Iowa and Nebraska. Below are listed several possible mergers. For each one, write the type of merger, choosing from the following list.

- *Horizontal merger.*
- *Vertical merger.*
- *Conglomerate merger for product extension.*
- *Conglomerate merger for market extension.*
- *Pure conglomerate merger.*

- a. The company merges with Winnipeg Coffee Company, which distributes coffee in Canada.
- b. The company merges with Omaha Coffee Company, which distributes coffee in Nebraska.
- c. The company merges with Cedar Rapids Tea Company, which distributes tea through supermarkets throughout the Midwest.
- d. The company merges with Midwest Markets, a supermarket chain.

(2) [Welfare tradeoffs of mergers: 36 pts] Consider the industry depicted in the graph below.



Assume this industry is currently competitive and that all firms have the same average cost (AC) and marginal cost (MC) shown above as the “premerger” value.

a. What is the competitive equilibrium price?

\$
thousand

b. What is the competitive equilibrium quantity?

Suppose a proposed merger would have two effects. First, it would change the industry to a monopoly. Second, it would reduce AC and MC to the “postmerger” value shown above—perhaps due to economies of scale and rationalization of production.

c. Using a straightedge, draw the marginal revenue curve of the monopoly and label it.

d. What price would the monopoly charge?

e. What quantity would the monopoly produce?

f. Compute the monopoly's Lerner index (or price-cost margin).

g. Compute the loss of consumer surplus as the price rises from the premerger competitive value to the postmerger monopoly value.

h. How much of this loss is a transfer to the monopoly producer?

i. Compute the deadweight loss as a result of monopoly pricing (without considering cost savings).

j. Compute the cost savings in producing the monopoly level of output as a result of the merger.

k. Does net social welfare *increase* or *decrease* as a result of the merger?

l. By how much?

\$	
	thousand
\$	thousand
\$	thousand
\$	thousand
\$	thousand
\$	thousand

(3) [Statutes: 10 pts] Consider the following six statutes:

- *Celler-Kefauver Act*
- *Clayton Act, Section 7*
- *Federal Trade Commission Act*
- *Hart-Scott-Rodino Act*
- *Sherman Act, Section 1*
- *Sherman Act, Section 2.*

For each description or quote below, write the appropriate statute.

- a. Requires prior notification of mergers to the Federal Trade Commission and the Antitrust Division of the Department of Justice.
- b. "Every contract, combination in the form of trust or otherwise, or conspiracy, in restraint of trade or commerce among the several States, or with foreign nations, is declared to be illegal."
- c. "Every person who shall monopolize, or attempt to monopolize, or combine or conspire with any other person or persons, to monopolize any part of the trade or commerce among the several States, or with foreign nations, shall be deemed guilty of a felony..."
- d. Prohibits merger by acquiring the *stock* of a rival corporation, where the effect is to lessen competition.
- e. Prohibits merger by acquiring the *assets* of a rival corporation, where the effect is to lessen competition.

(4) [HHI and merger guidelines: 18 pts] Suppose the market shares in an industry are as follows.

Firm	#1	#2	#3	#4	#5	#6	#7
Market share	30%	20%	20%	10%	10%	5%	5%

a. Compute the current value of the Hirschman-Herfindahl index.

b. Under the 2010 DOJ-FTC *Horizontal Merger Guidelines*, would this industry be classified as “unconcentrated,” “moderately concentrated,” or “highly concentrated”?

Now suppose Firm #1 were to merge with Firm #7.

c. Compute the postmerger value of the Hirschman-Herfindahl index.

d. Under the 2010 *Guidelines*, would this industry now be classified as “unconcentrated,” “moderately concentrated,” or “highly concentrated”?

e. On the basis of these HHI calculations alone, would the government conclude that this merger
(i) is “presumed to be likely to enhance market power,” or
(ii) “raises significant competitive concerns,” or
(iii) is “unlikely to have adverse competitive effects,” according to the 2010 *Guidelines*?

f. Why or why not?

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(5) [Conglomerate mergers: 18 pts] Suppose Acme Furniture makes tables and chairs. Its total cost depends on output levels according to the following table.

Total cost	Zero chairs	100 chairs	200 chairs
Zero tables	\$0	\$5,000	\$9,000
50 tables	\$5,000	\$9,000	\$12,000
100 tables	\$12,000	\$16,000	\$20,000

a. Suppose Acme produces only tables. Does it enjoy *economies of scale* in producing tables? (Answer YES or NO.)

b. Why or why not?

c. Suppose Acme produces only chairs. Does it enjoy *economies of scale* in producing chairs? (Answer YES or NO.)

d. Why or why not?

e. Suppose Acme produces both tables and chairs. Does it enjoy *economies of scope*? (Answer YES or NO.)

f. Why or why not?

II. Critical thinking [10 pts]

Office Depot recently proposed (again) to buy Staples. Both are office-supply superstores. The merger has not yet been approved by the government.

- a. If you were a government attorney opposing this merger, what definition of the market would you propose? Why would your market definition help your case?

- b. If you were an attorney for Office Depot defending this merger, what definition of the market would you propose? Why would your market definition help your case?

[end of quiz]