

Ch 8 (Market Structure) Review Questions: 1, 2, 4, 7, 9

Problem 1

- a) Define industry concentration
- b) Describe how a concentration curve can be used to describe industry concentration
- c) Can a concentration curve be strictly convex?

Answer:

- a) Industry concentration is a measure of the number + size of firms in a market.
 - b) Concentration curves show the cumulative market share of the firms from largest to smallest. (pg 190 ex)
 - c) No.
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Problem 2

- Index of concentration: a) Describe ideals of an index of industry concentration
b) Do the three indices meet these ideals chars?
c) How is HHI related to CR_4 and n ?

Answer:

- a) should take into account size distribution of firms.
Greater concentration when number of firms declines + larger firm gains market share from smaller firm

- b) n - No, does not show size distribution
 CR_4 - No, does not show market share of the rest of the firms
HHI - Yes

$$c) HHI = n\sigma^2 + \frac{1}{n}$$

Problem 4

- a) Describe what is meant by aggregate concentration.
- b) How has aggregate concentration in the US changed in the last half century?
- c) Interpret value from table
- d) Why might high aggregate concentration be a social concern?

Answer:

- a) Aggregate concentration shows concentration in different markets in the US. It is measured by the % of sales going to firms from highest to lowest.
 - b) Info from table 8.4, pg 187. They only have data going until 1997 though.
Top 50: 17% cumulative share to 24%
Top 100: 23% cumulative share to 32%
Top 200: 30% cumulative share to 40%
 - c) Mean of CR_{50} from 1947 to 1997 = 23.5
This means that, on average over this time period, the top 50 companies received 23.5% of sales in the manufacturing sector.
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Problem 7

Explain how **strategic** barriers to entry are different than **natural** barriers to entry.
Provide an example of each.

Answer:

Strategic barriers are endogenous to the firm, natural barriers are exogenous to the firm.

Strategic = predatory pricing

Natural = economies of scale

Problem 9

σ = exogenous sunk costs

$$\text{Profit} = \frac{TR}{n^2} - \sigma$$

Explain the impact of

- a) TR
- b) n
- c) σ
- d) What will be the equib number of firms?

Answer:

- a) Increase in TR = increase in profit
- b) Increase in n = decrease in profit
- c) Increase in σ = decrease in profit

$$\Pi = \frac{TR}{n^2} - \sigma$$

$$\sigma + \Pi = \frac{TR}{n^2}$$

$$n^2(\sigma + \Pi) = TR$$

$$n^2 = \frac{TR}{\sigma + \Pi}$$

$$n = \sqrt{\frac{TR}{\sigma + \Pi}}$$