

Concentration Ratio Lab

1. Find government data for concentration ratios and Herfindahl-Hirschman index for 5 different industries. Two of them can be within the same broad NAICS classification but at different levels.

Suggested Location:

<http://www.census.gov/epcd/www/concentration.html>

The concentration ratio is the percent of the market (sales) controlled by the specified number of top firms. For instance, the four-firm concentration ratio is the amount of the market controlled by the four largest firms. Higher values mean that the small number of firms controls a large portion of the market.

The HHI is defined as the sum of the squares of the market share of the top 50 firms.

$$\sum_i s_i^2$$

If s_i is given in decimal (0-1), then HH ranges from $1/N$ to 1.

If it is given as a percent (0-100), then HH ranges from $1/N$ to 10,000 (100^2).

Squaring the market share gives a higher weighting to larger firms.

2. Assuming the following market shares, compute the 4-firm and 8-firm concentration ratios and compare them to the HHI.

Firm	Industry 1	Industry 2	Industry 3	Industry 4
1	6%	80%	30%	2%
2	6%	5%	30%	2%
3	6%	5%	20%	2%
4	6%	2%	10%	2%
5	6%	2%	5%	1%
6	6%	1%	5%	1%
7	6%	1%		1%
8	6%	1%		1%
9	6%	1%		1%
10	6%	1%		1%
11	6%	1%		0.50%
12	6%			0.50%
13	6%			0.50%
14	6%			0.50%
15	6%			0.50%

Assume the other firms have even less market share.