Jacob Joseph has identified five different companies in which he is interested in investing, based upon their products and prospects. However, Jacob is concerned about a general economic downturn and desires to invest in companies with the lowest debt exposure. Following is a list of the data for the five potential investments. Jacob has compiled the data and has ranked the companies based upon total debt. He has requested your help in evaluating the risk profiles for each company.

To complete your evaluation, you need to know that each company faces an income tax rate that is equivalent to 30% of income before taxes (which also means that net income is 70% of income before taxes). In addition, assume that each company incurs an average interest cost that is 8% of total debt.

	Total Assets	Total Liabilities	Net Income
A	$10,000,000	$ 1,000,000	$ 200,000
B	20,000,000	3,000,000	1,000,000
C	6,000,000	4,000,000	250,000
D	15,000,000	6,000,000	1,600,000
E	30,000,000	22,000,000	4,000,000

(a) Calculate the debt to total asset ratio, and reorder the list from least risky to most risky, based upon that ratio.

(b) Calculate the debt to equity ratio, and reorder the list from least risky to most risky, based upon that ratio.

(c) Calculate the times interest earned ratio, and reorder the list from least risky to most risky, based upon that ratio.

(d) Do the ratios suggest that risk is a function of total debt, or other factors? Do all the ratios produce the same signals?