

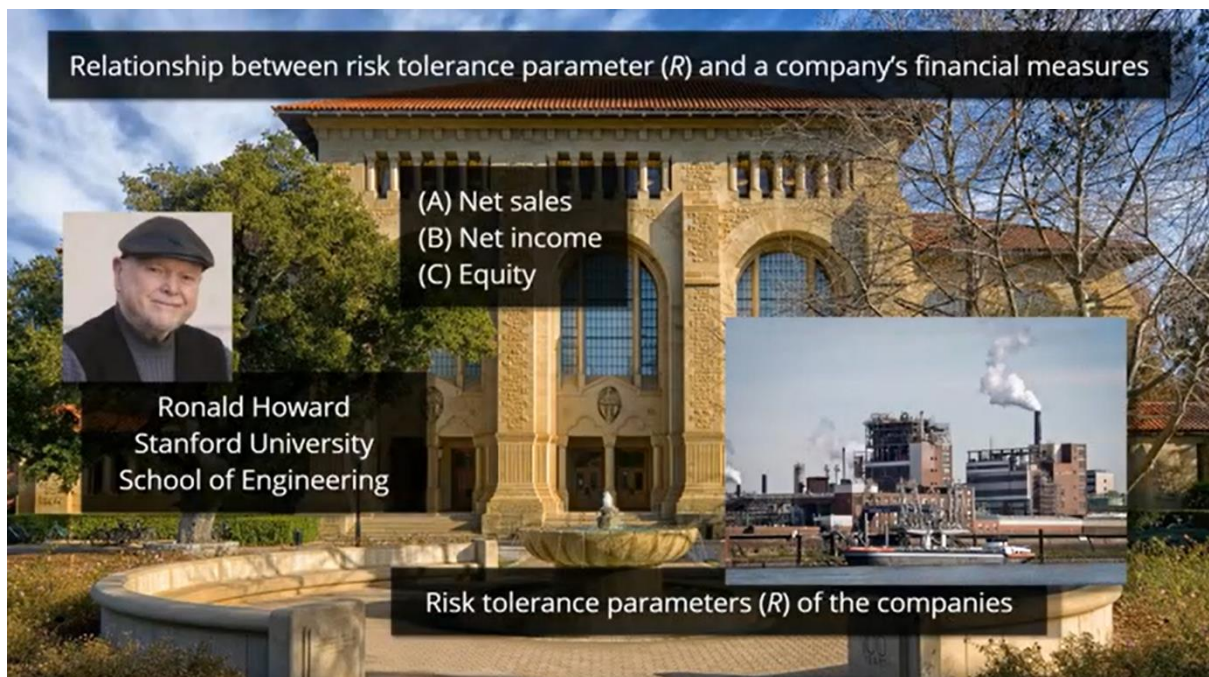
M4L19. Risk Tolerance Parameter and Financial Measures

Slide #1



In this topic, we will discuss the relationship between the risk tolerance parameter, R , and the financial measures of the company.

Slide #2



Relationship between the risk tolerance parameter and a company's financial measures.

Ronald Howard of Stanford University worked for three companies in general oil and the chemistry industry to assist them in making decisions about their ventures, because in this study, they needed to get the risk tolerance parameters of those companies.

They assessed their risk tolerance by interviewing top executives in each company and estimated the risk tolerance parameter for the company.

They also reviewed the annual reports of those companies to obtain net sales, net income, and equity of the three firms.

Slide #3



Company	A	B	C	Average	Percentage
R / Sales	0.0652	0.0625	0.0645	0.064	6.45%
R / Net income	1.25	1.43	1.05	1.24	124%
R / Equity	0.150	0.154	0.167	0.157	15.7%

Correlation between R and financial measures.
Small number of examples, just 3 companies.
Not rigorously reliable.
For more accurate approximation of R
use survey study.

This information is assembled in the table where the companies are called A, B, and C. So you can see that they are dealing with some sizable companies.

There appeared to be a correlation between the corporate risk tolerance parameter and their financial measures. The relationship is clear in this table. It shows a ratio of risk tolerance parameter, R , to each of the other quantities.

The ratio of risk tolerance parameter to sales is very close to about 6% for all the three companies. Risk tolerance to net incomes showed more variation, but it is about 1 to 1, and 1 to 1.5. The average is about 1.24. Finally, the risk tolerance parameter to equity is once more very consistent and the risk tolerance being about one sixth of the equity. I need to point out that the rule of thumb is based on a very small number of examples.

Just three companies in the energy and chemical industry. They are not rigorously reliable. They just provide a good starting point. If you need a more accurate approximation of the decision tolerance parameters, you can use the survey study that we discussed in a previous slide to assess your manager's risk tolerance parameters.