

The C_j estimates are especially interesting. C_j is the j th industry's average rate of return after allowing for the influence of risk on the earnings of each of the firms in that group. In short, C_j is the average risk-adjusted rates of return. Interpreting it in this fashion permits computation of a set of average-risk premiums. This computation is the difference between the observed average rate of return for each group and its risk-adjusted rate. See Table 3 for the estimates.

Average risk premiums vary substantially, suggesting important differences in risk exposure among industries. The risk premium accounts for a sizeable part of the observed rate of return in some groups. For example, the average risk premium for the automotive and office machine groups is 7.2 and 6.8 percent, respectively. In contrast, the average risk premium is only 1.2 percent for steel firms and .75 percent in the rubber group, indicating that average risk exposure for firms in these two industries is nominal.

Table 3 also illustrates that adjustment of average industry earnings to reflect differences in firms' risk exposure narrows interindustry earnings differentials. Nonetheless, significant differences in average risk-adjusted rates of return remain. The risk-adjusted rates for the drug, aerospace, and chemical groups, for example, are noticeably larger than for the remaining groups.

TABLE 3.—Observed and adjusted industry rates of return and average industry risk premiums

Industry group	Average observed rate of return	Rank	Risk-adjusted rate of return	Rank	Average risk premium
Drugs.....	0.1832	1	0.1664	1	0.0168
Aerospace.....	.1570	2	.1335	2	.0245
Chemicals.....	.1409	4	.1131	3	.0278
Petroleum.....	.1147	7	.1026	4	.0121
Rubber.....	.1096	8	.1021	5	.0075
Food.....	.1072	9	.0915	6	.0157
Electrical machines.....	.1196	6	.0857	7	.0039
Automotive.....	.1477	3	.0754	8	.0723
Office machines.....	.1408	5	.0724	9	.0684
Steel.....	.0825	10	.0703	10	.0122
Textiles.....	.0789	11	.0594	11	.0195

When interpreting these results, it is important to remember that the model yields risk-comparable rates of return rather than estimates of "adequate" or "required" profits.¹¹ The accounting profits reported on corporate income statements include a variety of functional returns and nonfunctional rents, and a study of profit-adequacy should adjust for all such elements. This study has abstracted one element of accounting profits—the risk premium—and has adjusted the firm rates of return to make them comparable in this dimension. Normative judgments on the basis of risk-adjusted profit rates are therefore hazardous.

IV. AN ALTERNATIVE MEASURE OF RISK

Another measure of risk—the standard deviation of firms' average rates of return on an industry-wide average—was suggested by Cootner and Holland in their investigation of risks and profits (Ref. 4). The authors' economic rationale for this approach is quoted below:

"If we assume that an entrepreneur entering an industry is purchasing a proportionate share of the experience of every firm in the industry, then it would seem that the dispersion of company rates of return around the average rate of return for the industry in which they belong is an indication of the riskiness of an investment in that industry. Since the standard deviation of such rates of return indicates to an investor the likelihood that he would fare differently from the industry average, we would expect that if executives were risk-averse, large standard deviations would require high average rates of return to attract investment."¹²

¹¹ See Ref. 4 for a concept of risk-comparable profits. References 15, 16, and 19, which consider the appropriateness of the aerospace rate of return, define profit "adequacy."

¹² See Ref. 4, p. 4.