

and .10 levels, respectively. Moreover, the signs of these coefficients agree with the theoretical model. Thus, these results lend support to the hypothesis that rates of return should be larger for firms with greater risk exposure.

TABLE 1.—*Relationship between risk and rate of return*

Regression	Intercept, r_0	Standard deviation, b_1	Skewness, b_2	R^2	F
(1).....	0.0923	1.0452 (.3319)	-----	0.1141	9.914 (1,77)
(2).....	.1488	-----	-.0159 (.0095)	.0350	2.794 (1,77)
(3).....	.0969	1.0181 (.3264)	-.0193 (.0099)	.1560	7.024 (2,76)

The value of the intercept, r_0 , implies an expected rate of return of 9.7 percent for firms with no risk. This is not a "risk-free" rate of return, however, at least not in the sense that yields on government bonds sometimes are so interpreted. The intercept, r_0 , is the result of extrapolating the risk-profit relationship to the axis, and so it is the repository for all influences on profits not encompassed by the standard deviation and skewness coefficients. These implicit influences may contain elements that might be regarded as risk factors. Moreover, since no firm in the sample was without some degree of standard deviation and skewness, a risk-free rate of return cannot be directly observed. For these reasons, r_0 will be referred to as the "risk-adjusted" rate of return; it is the expected profit rate after allowing for the influence of earnings variability.

The low R^2 values indicate that, although there is some relationship between average rates of return and the measures of risk exposure, other factors account for the major part of the observed differences in rates of return. Differences in market structure, technology, managerial ability, capital structure and similar broad industry effects could produce substantial industry earnings differentials.

To account for differences in industry characteristics, dummy variables are introduced into the regression to capture the influence of industry-specific factors. We assume that the relationship between rate of return and the risk variables is not influenced by group membership; therefore, the risk coefficients remain the same for all firms. Thus, the premium for risk exposure does not reflect other industry characteristics. The relationship becomes

$$\bar{r}_{ij} = C_j + b_1 \sigma_{ij} + b_2 S_{ij}, \quad (4)$$

where C_j is the intercept for firms in industry j , and all other variables are as previously defined except for the addition of a subscript designating industry membership.

Estimates for b_1 , b_2 , and C_j appear in Table 2. The estimates for the risk coefficients, b_1 and b_2 are significant at the .01 and .05 levels, respectively, and their signs again agree with expectations. The estimates for C_j are all significant at the .05 level. The inclusion of industry variables considerably improves the explanatory power of the model; nearly half of the variation in observed rates of return is explained by the independent variables.

TABLE 2.—*Risk-rate of return relationship with industry effects*

Standard deviation, b_1	Skewness, b_2	R^2	Industry effects	
			C_j	Industry
1.0043 (.3648)	-.0153 (.0071)	0.4936	0.1664	Drugs.
			.1335	Aerospace.
			.1131	Chemicals.
			.1026	Petroleum.
			.1021	Rubber.
			.0915	Food.
			.0857	Electrical machines.
			.0754	Automotive.
			.0724	Office machines.
			.0703	Steel.
			.0594	Textiles.