within specific industries. Although some of our analyses involved the stock market investor and how he might view risk in relation to profitability, our major concern and emphasis was on the individual company, its management, and the risk and return to assets invested in specific economic activities. In order to test the concept that the pharmaceutical "industry" or any other "industry" might have a characteristic and identifiable risk environment, we grouped companies by "industry" and conducted most of our analyses on such industrial units.

The data for these studies have been obtained from Standard and Poor's Compustat Tape. The basic time period covered was 1950 through 1965. The Compustate tape is essentially composed of audited and published financial information analyzed and adjusted by Standard and Poor's to insure comparability. Appendix B presents the rates of return definitions in terms of the Compustat tape, while Appendix C lists the industries and number of companies used in the analyses.

### B. CONCLUSIONS

1. The theoretical measure of risk developed for this study correlates significantly with various well recognized measures of profitability for the approximately 780 companies grouped into 59 industry's sectors which have been examined. Exhibits I and II illustrate in graphic form the statistical results obtained (each dot representing one industry sector).
2. The risk measure we developed appears to be a valid measure of the uncertainty that corporate managements face in deciding on the rates of return their investments must achieve, i.e. the profitability levels necessary for the enterprise to survive and grow within the risk environment these managements perceive.
3. The general pattern of risk/return relationship shown in Exhibits 1 and 2 conforms with the expectations of broad economic theory.
4. Individual industries, as grouped in this study, can be evaluated for their relative performance with respect to risk versus return, and can be judged on their conformity to the overall pattern of American industry.
5. The pharmaceutical industry fits well within the overall pattern of risk/return relationships for American industry. While displaying a high level of profitability, the pharmaceutical industry also shows a high level of risk expectations over the period 1950–1965.

### C. REPORT ORGANIZATION

The report is organized along the following lines:

In Section II we explain why questions of consumer price must be ultimately related to rates of return, and further why questions of adequacy and excessiveness of rates of return must be answered within the context of a risk environment analysis. Section III together with Appendix A develops in words and mathematics a basic theory of risk and return. It also describes the types of statistical problems one is likely to encounter when attempting to validate such a theory.