

Having defined our general measures of risk, Section IV defines the specific "book" and "market" value measures of return that we investigated. In this section we develop the concept of "Total Investable Funds." This concept facilitates our making balance sheet item comparisons among the diverse industries encompassed in our study. The results of testing of our basic models are summarized in Section V. A more detailed and technical description of the statistical analyses appears in Appendix D.

II. MOTIVATION

Economic theory has long maintained that a going concern must reward its investors with a return commensurate with the risks inherent in the particular business undertaking. Although many elaborate and technical definitions have been offered for the term "risk," the underlying meaning is generally accepted to be "lack of predictability." While ruling in the *Hope Natural Gas Case*, 1944, the U.S. Supreme Court stated this fact of economic life as follows:

"From the investor or company point of view it is important that there be enough revenue not only for operating expenses but also for capital costs of the business. These include service on the debt and dividends on the stock. By that standard the rate to the equity owner should be commensurate with the returns on investment in other enterprises having corresponding risk. That return, moreover, should be sufficient to assure confidence of the financial integrity of the enterprise, so as to maintain its credit to attract capital."

In short, if an enterprise is to attract capital it must offer prospective investor, especially equity investors, an expected return high enough to compensate for any risks (lack of predictability) that might accompany this expectation.

Until recently there have been two distinct forms of corporate endeavor. The first and most common type is the private corporation whose product prices are set in more or less competitive markets. The second type is the natural, regulated monopoly who is given by government fiat exclusive geographical jurisdiction, and whose product prices (or rates) are set by a regulatory body (agency). Examples of such organizations are telephone companies, light and power utilities, gas pipe lines, etc.

A critical *similarity* between these two types of industrial organizations is that both raise investment capital from the general public in the national capital markets. The question is, by what mechanism does each type of organization balance return and risk for its investors.

The forces of supply and demand in the capital market allocate to each private enterprise an amount of capital that balances at the margin prospective risks and returns from the particular economic activity. It is the consumers' market place that determines the quantities and prices of the firm's products.

In the case of regulated monopolies the regulatory agencies seek to establish a rate schedule that over time will guarantee a return on invested assets of some specified, say 6%, rate of return. In setting the price schedules for regulated industries the various agencies are required to consider the effect of these rates on the total return of the corporation.

"A public utility is entitled to such rates as will permit it to earn a return on the value of the property which it employs for the convenience of the public equal to that generally being made at the same time and in the same general part of the country on investments in other business undertakings which are attended by corresponding risks and uncertainties; but it has no constitutional right to profits such as are realized or anticipated in highly profitable enterprises or speculative ventures."¹

However, today various government bodies are attempting a unique form of regulation. This regulation stems from the desire to control the final consumer prices of various goods and services.² Therefore, like the regulatory agency, the government desires to set the market price of the product. However, unlike the regulatory agency, the total effect of a change in price on the earning abilities of the corporations is usually *not* considered. Changes in price or rate schedules have immediate effects on the total revenue stream available to the corporation, and both short and long term effects on the corporation's ability to service its debt and pay dividends to its stockholders. It would be

¹ U.S. Supreme Court, *Bluefield Waterworks Case* (1923).

² Some have called this type of regulation "Consumerism."