Americans interpreted Keynes in this direction. In particular, Davis's examples repeatedly show that the Americans held an extremely low opinion of monetary policy.

Without realizing it, then, Davis has illuminated considerably the development of the income-expenditure theory which ultimately became textbook Keynesianism. This does nothing to reduce the value of his study in demonstrating that a lot of American economists in the mid-1930s were recommending government policies far superior to those actually followed. The foregoing remarks do suggest, however, that several more doctoral dissertations would be needed to do justice to the history of economic thought during this fascinating period in our history.

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Modern portfolio and capital market theory under uncertainty began with the classical work by von Neumann and Morgenstern which led to the general acceptance of maximization of the expected value of a concave utility function of outcomes as the “correct” criterion for optimal portfolio selection. However, operational theorems were limited until the seminal works of Markowitz and Tobin introduced the special case of mean-variance analysis. The conceptual simplicity and the theoretical and empirical tractability have kept it the most popular form of analysis ever since. The mean-variance approach gained further importance through the independent discoveries by Sharpe, Lintner, and Mossin that under conditions of homogeneous expectations, investors’ actions could be aggregated to develop a complete microeconomic framework for the capital market. Based on this capital-asset pricing model, a specification for the equilibrium relationship among expected returns was derived which was not directly dependent on individual preferences, and hence was empirically testable. This discovery led to an explosion in the theory of portfolio selection which has produced over one hundred academic papers based on the model, and to considerable interest in applications on the part of non-academics as well.

The theory was somewhat tarnished by a number of authors who demonstrated that mean-variance was consistent with expected utility maximization only in a few special and dubious cases. Hence, many economists studying portfolio theory returned to the general expected utility maximization case and preferred to use the elegant (but empirically intractable) Arrow-Debreu state-preference approach to capital market theory while using mean-variance analysis purely as an illustrative device. As a consequence, many students of monetary and capital market theory receive little exposure to much of the recent research using the mean-variance framework.

However, those economists whose major field is Finance have pressed forward in
the development of the mean-variance model. Their energies were channeled into: (1) refining the theory to weaken the strong assumptions of the original model and to demonstrating more plausible conditions for its (at least approximate) consistency with expected utility maximization; (2) empirical testing of the model to see if the capital market behaves "as if" investors were mean-variance maximizers; (3) applications of the model to a variety of derivative areas such as the theory of financial intermediation, capital budgeting, and the social discount rate.

The nine not-previously published essays collected in *Studies in the Theory of Capital Markets* use the mean-variance model to cover aspects of all three directions of development. The introductory paper by Jensen is an extensive review of the theoretical and empirical research based on the Capital Asset Pricing Model. It provides the reader with an immediate sense of what has been done, and, as importantly, what remains to be done.

In the empirical section, Miller and Scholes critically examine earlier empirical work and provide a step-by-step analysis of a variety of econometric pitfalls one faces in testing the model. In an already widely-cited paper, Black, Jensen, and Scholes develop some novel techniques to avoid these pitfalls and perform a large scale test of the model. Although their results seem to reject the validity of the simple form of the model, they do find that a modified two-factor model fits the data rather well. In later work, a number of theoretical extensions to the original model have been developed that provide a variety of possible explanations for these findings. However, sufficient empirical testing of these propositions has not been completed as of this date.

In the extensions to the theory section, the three papers by Fama, Mayers, and Black, respectively, are competent and well-written. However, they are not these authors' most important contributions to the literature, and do not rank in absolute importance with the empirical papers in the volume. The fourth paper by Long goes beyond the mean-variance model by working with arbitrary utility functions and probability distributions, and presents one of the more general descriptions of capital market equilibrium in the absence of complete markets.

In the last section on applications, Bailey and Jensen examine the issue of public and private risk-taking and enter the controversy over the social discount rate. In another application, Stiglitz makes use of the mean-variance model to study the effect of taxation on risk-taking and investment allocation.

As a group the papers are an important contribution to the literature by some of the best people in the field and anyone interested in research in this area should be aware of their content. However, it is annoying that these papers were presented at a conference in August, 1969 and are just becoming publicly available now. In an area where new developments are taking place very rapidly, such a lag is inexcusable. For example, an updated version of the survey article by Jensen has already appeared in the autumn, 1972 issue of the *Bell Journal of Economics and Management Science*.

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