A compilation of research on the behavior of

Commodity Markets

and

Futures Prices

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CME FELLOWSHIPS IN FUTURES SUBCOMMITTEE

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INTRODUCTION

In 1970 the Chicago Mercantile Exchange (CME) instituted a Fellowships in Futures program designed to provide opportunities for members of the academic community to study commodity futures markets. There are five categories in the program— the Graduate Student Research Fellowships, the Ph.D. Dissertation Fellowships, the Faculty Research Fellowships, the Visiting Professor Fellowships, and the Graduate Student Summer Intern Fellowships. More than $100,000 have now been disbursed through this program, allowing many scholars to conduct empirical commodity futures-market research.

This volume contains selected reports, not previously readily available, from the Faculty Research Fellowships category of the program. It is important that these papers be drawn to the attention of scholars and analysts as futures-market research tends to build upon itself. Most of the papers state and empirically test basic hypotheses relating to commodity futures markets. The empirical tests are conducted on those commodities traded on the Chicago Mercantile Exchange, either livestock or foreign currencies.

The studies vary widely in sophistication, technique, theoretical modeling, quality, and results, ranging from rewritten dissertation chapters to extension-type material for firm managers or traders. Most of these papers and fellowship requirements were completed prior to the task of organizing them into this volume, so they are printed here with only minor editing for consistency. No attempt was made to return manuscripts to authors for revision and many of the papers have never been subjected to peer review. However, the quality of these papers is similar to much of the research on futures markets currently being conducted and published.

There is a common element among all of the empirical tests and that is prices—price relationships, price behavior, and price performance. Since the Chicago Mercantile Exchange selects fellowship recipients from applicants, no attempt is made to cover all research areas. These fellowships are often short-run in nature, such as a summer research project, and with price data readily available, the tendency is to conduct a quick price-analysis study. Two of the papers do not directly involve the futures market, yet their contribution to understanding price behavior and
analyzing market performance will be realized by the imaginative reader. Each paper serves as a complete study and many undertake novel ideas or approaches. As a group, they contribute to our overall knowledge and empirical understanding of the futures market.

This book is in four sections. Section 1 contains papers dealing with commodity-price behavior. Studies in Section 2 test the forward-pricing ability of futures markets, dealing mostly with the efficiency of exchange-rate markets. Section 3 contains one paper that illustrates the financial implications of a hedging program. Papers in Section 4 are concerned with price relationships, with one paper each on pricing over time, space, or form.

Comments at the beginning of each section provide a brief summary and attempt to link the papers in that section with other investigations. As will become apparent in Section 2, economists and financial analysts have developed a body of literature about the economic performance of forward-exchange and financial-instrument markets, quite parallel to some of the commodity futures-market literature. Unfortunately, these two bodies of literature have not been fully linked, and this volume will help in that endeavor.

For the student who is just beginning to study the futures market and desires some theoretical background and empirical understanding beyond the references cited within each paper included in this volume, the following works may be helpful. Holbrook Working is credited for much of the original theoretical and empirical contributions to the economics of futures markets, and selections from his writings appear in Selected Writings of Holbrook Working (1977). Further and more recent theoretical and empirical contributions to our base of understanding by others in the field appear in Selected Writings on Futures Markets (1977). For a review within one paper of the historical development of the economics of futures markets, see Gray and Rutledge (1971). One of the most popular textbooks describing the mechanics of futures trading and how commercial firms use the markets is by Hieronymus (1977). Another text with a substantial bibliography is by Teweles, Harlow, and Stone (1974). Library searches will uncover numerous additional works.

The Fellowships in Futures program of the Chicago Mercantile Exchange is a continuing event. At this writing, 12 Fellowships in Futures grants are being awarded for 1978. Topics for research include price analysis of both financial-instrument and livestock-futures contracts. For more information, contact the Chicago Mercantile Exchange.¹

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¹For a listing of all past fellowships since 1970, see Bibliography and Informational Source List (1978).
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