In September 1993, the Office for Futures and Options Research of the University of Illinois at Urbana-Champaign held a symposium (at the Chicago Board of Trade) in recognition of Thomas A. Hieronymus. My assigned topic was “The Role of Futures Markets and Opportunities for OFOR.” I had something of a feeling of being Tom Sawyer at his own funeral and that what I said would be subtitled “The Voice from the Tomb.”

The symposium provided one (probably) last opportunity to call the attention of my academic colleagues to the basics about futures trading and suggest that some of them move away from standard inquiring deeper into the same things and into currently topical problems and serious study of the nature of speculation.

My comments were politely received, indicating once again, that there is deference to antiquity. It remains to be seen whether there is also attention.
THE ROLE OF FUTURES MARKETS AND OPPORTUNITIES FOR OFOR

BASIC CHARACTERISTICS OF FUTURES MARKETS

Futures markets are a microcosm of the way that a competitive, price-driven economic system should function. As such, they can and should serve as a model for changes in economic systems that will increase their productivity.

First, futures markets come remarkably close to meeting the conditions of pure competition. There are a large number of participants in active futures markets, and margin requirements are held at low enough levels to permit ease of entry. The rules requiring that all trading occur in one pit or ring assures the maximization of the number trading in a given market, preventing fragmentation into separate monopolistic markets. The face-to-face trading, open entry, specified hours of trading, and equal access to all bids and offers contribute to the prevention of significant individual influence. There is full information about prices, trading, and the commodities traded. Independence and impersonality of operations is forced on the participants by the organization and regulation of markets.

Second, futures markets provide a mechanism for shifting commodity ownership risks from firms and individuals who acquire price risks incidental to their business operations to others better qualified and financed to assume them. Futures trading rests on needs to shift risks.

Third, futures markets are equity financing institutions. Through speculative processes, they provide capital needed for the development of production, storage, processing, and distribution facilities for commodities. This is risk capital that can be had at minimal interest rates because risk of price changes are assumed by speculative interests.

Fourth, futures markets are institutions for the establishment of speculative prices. Prices have essential functions to perform in a competitive economic system. Lists of functions generally include (1) the allocation of productive measures, (2) determination of the amount and kind of product, (3) direction of inventory accumulation and liquidation, (4) distribution of products among people and places, (5) distribution of the rewards for production among productive resources. Individual prices combine into a set of price relationships that determine production and distribution. There is a major element of futurity in prices. Investments made today affect production tomorrow and throughout the life of the investment. Inventories are accumulated or liquidated today in anticipation of tomor-
row's requirements. The implementation of expectations results in the establishment of prices that apply not only to the present but to the future as well. Today's prices are a function of expectations about the future as well as today's spot market situation. Forward prices are established on the basis of these expectations about the situation and prices that will exist in the future. The future is unknown and uncertain. To speculate is to contemplate the future, reach conclusions about the shape of things to come, and to act on the basis of these expectations. By the processes of shifting risks through forward pricing in futures, speculators become entrepreneurs guiding and directing the production and distribution processes. To a substantial extent, the quality of planning of the production and distribution of commodities depends on the quality of speculation in futures markets.

Fifth, futures markets arise as there is a need for speculative, forward prices and risk shifting, and they fail and go out of existence as the need is no longer present. The grain markets decreased and nearly failed as government price programs dominated markets in the 1950s. The New Orleans Cotton Exchange ceased to function as the government dominated prices. Currency markets developed when the Bretton Woods agreement ended. Gold futures trading started when private ownership of gold was legalized. Financial futures developed when the government allowed interest rates to respond to market forces. Futures markets expand and prosper as the economy is freed from government influence and fail as the government usurps the role of markets.

Opportunities for OFOR

The Office for Futures and Options Research (OFOR) is in an excellent position to be of service to the futures industry. It is a collection of scholars who have expertise in both futures and options themselves and the economics of the underlying commodities and financial instruments that are traded. They know the context out of which futures and options trading evolves. They are thus able to evaluate questions concerning futures and options with full knowledge of the relationship of cash and futures trading and with awareness that futures and options are an extension of cash commodity and financial operations.

The office is a part of a major teaching, research, and public service institution. There is opportunity for independence of research and public service that does not depend on financing, inspiration, or guidance from political interests, exchanges, or regulatory bodies. Thus, the work of OFOR can be directed with a broad view of current and potential problems and potential development of futures and options trading. Results of work have added credibility because of independence of stature.

The existence of opportunities for research and teaching are obvious. The importance of public service should be recognized. The growth and development of
futures markets has been closely associated with the amount of knowledge about them. As firms in an assortment of industries have learned more about markets, the commercial use of markets has increased. Perceptions of markets by politicians have changed as public perceptions have changed. Regulatory legislation has changed as knowledge about markets has grown. Regulation of markets changes as knowledge develops. Exchanges make changes as knowledge about relationships between commerce and futures markets increases. Much is unknown about futures markets, but much more is known than has been taught to commercial interests, exchanges, regulatory agencies, the public, and politicians. More needs to be taught. Much of teaching is general in nature, but much of the most effective teaching has been in the context of specific problem solving. There is an opportunity for OFOR to develop research results having to do with specific aspects of such things as delivery terms, margin requirements, commission house performance, dual trading, trade tracing, impact of commodity funds, position limits, impacts of trading on price volatility, risk management methods, etc. And there is the opportunity to push the results through to application by commercial interests, the public, exchanges, and regulatory bodies. Public service is a major role for OFOR.

This emphasis on public service does not preclude inquiry into some more general and obscure aspects of futures markets. Three things come to mind:

1. Flow of Funds

There have been studies of results of speculation by commission house customers, the cost of hedging, etc. But there are no comprehensive studies of the redistribution of money that flows into the clearinghouses of exchange by kinds of clearing members or the redistribution of money that flows into the clearing members as margin deposits. Such a study would go far in answering questions about the costs of market operation and who pays the costs. The large markets are large business operations. They require and consume a lot of facilities and equipment. A lot of people are employed or otherwise gain a livelihood from markets. The productive services of providing price establishment, risk management, and entrepreneurial capital is not without substantial cost. It would be interesting, indeed, to know what those costs are and who pays them.

2. Influence of Commodity Funds

It is widely thought that commodity funds have largely taken the place of individual members of the speculating public. It is also thought that most of the funds are directed by various computer-driven price behavior models. Questions are raised about the influence of funds on price volatility and adjustment of changing market conditions. It would be interesting to know how the funds make out vis-a-vis put and take to the clearinghouses. It would also be interesting to know the
extent fund trading methods are based on past price behavior and how much on changing market forces. Answers would make an evaluation of the usefulness of funds possible.

3. QUALITY OF SPECULATION

The speculative pricing mission of markets is to discount existing and forthcoming events affecting current and subsequent prices into current prices; that is, optimally markets would be omniscient and discount their omniscience into current prices. But markets are less than perfect; nor should we expect perfection. Many events such as droughts, floods, hurricanes, revolutions, and the fickle behavior of consumers and politicians are random and not forecastable. But markets should react quickly, adjust to the appropriate level, and stabilize until the next unforeseeable random event occurs. The greater the accuracy with which markets discount future events into current prices, the greater their contribution to economic productivity. The question raised is: How well do futures markets perform as devices for planning economic processes? The problem is to establish a reasonable standard of optimum performance and measure actual market performance against the standard. This sounds unreasonable and impractical, but quality speculation is what futures markets are really about.