

BOOK REVIEWS



Mark Kritzman, Senior Editor

A HISTORY OF THE THEORY OF INVESTMENTS

By Mark Rubinstein (Reviewed by Craig W. French)

Mark Rubinstein is a man who likes to think for himself, which is a good thing for the rest of us. Most readers will be familiar with Mark's contributions to financial economics primarily through his co-authorship, with John Cox and Steve Ross, of the binomial options pricing model-no mean feat, that. But his interests and contributions are far more broad. My personal favorite paper of Mark's is his relatively overlooked "The Strong Case for the Generalized Logarithmic Utility Model as the Premier Model of Financial Markets" (GLUM), published in 1977 as the second chapter of Haim Levy and Marshall Sarnatt's Financial Decision Making under Uncertainty (Academic Press, New York, 1977); this is a wonderful model that places restrictions on tastes a la Arrow, Debreu, Hirshleifer, Cass, Stiglitz, Hakansson, Kraus, Grauer, and Litzenberger, rather than placing restrictions on beliefs as in the more conventional models commonly understood to represent "Modern Portfolio Theory," i.e., Markowitz, Sharpe, Treynor, Lintner, Mossin, Fama, Jensen, Black, Scholes, and Merton. In the 1977 GLUM paper, Rubinstein notes that the latter, MPT-type, models are not necessarily superior to the former type and chalks their popularity up to historical happenstance and ideological path dependence: "Men were not lacking in evidence, but inherited habits of thought, which often extended beyond science proper to a worldview, [and] caused them to cling stubbornly to superannuated ideas."

Mark has also published several excellent articles in JOIM regarding the history of ideas in finance. In "A History of the Theory of Investments," Rubinstein assembles and extends this material and achieves two things: first, he presents his own annotated bibliography of nearly 500 of the most important works in theoretical financial economics; second, he presents a much better etiology of these ideas than a reader might find in a textbook presentation, working diligently to correct examples of Robert K. Merton's "Matthew effect": too few papers are given too much credit. Marrying these two objectives, a daunting task for most mere mortals, seems to have been easy for Mark Rubinstein. He notes, "... much of the forgotten truth about the origins of ideas in financial economics is there for all to see, in older books residing on library shelves

or in past journals now often available in electronic form [e.g., [STOR]. Much of the history of investments has only been rewritten by the victors, and can be *corrected* from primary sources." As a student, and later as a professor and even practitioner, Rubinstein spent untold time poring through thousands of documents-primary material-methodically working his way forward and backward through the more and less famous papers and their citations and references in the literature, in order to learn these ideas for himself. Along the way he contributed quite a bit himself. A gift to us all was his willingness to publish his notes on each of what he thinks are among the most important contributions to the field.

Delineating three periods in the literature as "ancient" (pre-1950), "classical" (1950-1980, "modern" (post-1980). and Rubinstein reviews several articles and books in the ancient period, from Leonardo of Pisa's (1202) "Liber Abaci" through Leonard Jimmie Savage's (1954) "Foundations of Statistics," including the works of Pascal, Fermat, Huygens, de Witt, Halley, de Moivre, Bernoulli, Pareto, Arrow, Bachelier, Knight, Keynes, Working, Hicks, Fisher, Cowles, Graham, Williams, Macaulay, von Hayek, von Neumann, Morgenstern, Friedman, and others.

Following the "ancient" literature with the "classical" works, Rubinstein precedes Markowitz' (1952) "Portfolio Selection" with Clendenin's (1951) paper on stock price volatility. More than 100 papers are discussed in this section, including all the usual suspects as well as some unusual ones, including Roy, Arrow, Dreze (who along with others anticipated Harrison & Kreps' work on martingales and continuous states), Kendall, Cootner, Friedman, Tobin, Modigliani & [Merton] Miller (whose work was anticipated by J.B. Williams, in his 1938 work "Law of the Conservation of Investment Value"), Debreu, Osborne, Alexander, Coase, Muth, Lucas, Stiglitz, Sharpe, Samuelson, Lorie, Pratt, Linter, Mossin, Treynor, Fama, Cohen, Pogue, Farrell, King, Rosenberg, Engle, Hakansson, Jensen, Leland, Roll, Mac-Beth, Litzenberger, Cass, Black, Scholes, [Robert C.] Merton, Hirshleifer, Rubinstein, Blume, Friend, Basu, Banz, Latane, LeRoy, Kraus, Cox, Grossman, Figlewski, Ross, Malkiel, Varian, Constantinides, Geske, [Edward] Miller, Levy, Rendleman, Bartter, concluding with Breeden's (1979) ICAPM.

Rubinstein's last section, the "modern" period, which admittedly contains little of the behavioral finance literature, covers about 30 significant papers from the famous Grossman and Stiglitz (1980) critique and Leland's (1980) paper on portfolio insurance to Brunnermeier and Parker's (2005) paper on asset pricing bubbles. Researchers in this section include many of those listed in the classical period, as well as Diamond, Verrecchia, [Ken] French, Schwert, Binder, Merges, Mehra, Prescott, Hong, Stein, Ohlson, Berk, Wang, Carhart, Daniel, Grinblatt, Titman, Wermers, Green, Naik, Sagi, Abreu, and Parker.

I wish Rubinstein's excellent History had been available back when I was a student roaming the stacks in the Lippincott library at Penn, poking into old dusty tomes and spending what little money I had Xeroxing all of those old wonderful papers, learning "ancient" and "classical" ideas the hard way. From the APT to the Zero-beta CAPM, Mark Rubinstein has covered about 300 individual ideas in this unparalleled bibliography, with informed discussion of nearly 500 worthy papers. Any serious financial economist should read, and re-read, this exquisite book.

THE NOBEL MEMO-RIAL LAUREATES IN ECONOMICS: AN INTRO-DUCTION TO THEIR CAREERS AND MAIN PUB-LISHED WORKS, 2005

By Howard R. Vane and Chris Mulhearn (Reviewed by Frank Jones)

I periodically question the year of a specific Noble Award in Economics, the background of a specific Nobel Laureate, or a specific Nobel Prize citation and find these questions time-consuming to answer. When this book was published, I purchased it as a reference book, to be looked at on demand in small sections for such purposes. For this book review, however, I read the book from cover-to-cover. After completing the book, my conclusion is that while this book is invaluable as a reference book, reading the book entirely is much more fruitful.

For each Nobel Laureate, the book provides the personal, educational, and professional backgrounds; a summary of their research with insightful comments; and the Nobel Prize citation. This "name, rank and serial number" approach satisfied my purpose for buying the book. But this approach just skims the surface of book's value.

The discussion of each Nobel Laureate's research was concise and thorough. In some cases, there were succinct evaluations of the Laureates' careers:

Paul Samuelson: "Samuelson is widely acknowledged as being one of the greatest economic theorists of the twentieth century. His contribution to the discipline span, quite remarkably, nearly every branch within economics, ..." (p. 35).

Milton Friedman: "However, above all, his formidable output of technical books and learned journal articles, which has helped shape both modern macroeconomic theory and policy making, has made Friedman one of the most influential and outstanding economists in the history of the discipline." (p. 87).

Gerald Debreu: Despite the relative paucity of his published works Debreu's influence on the form and direction that economic theory has taken since the mid-1950s, most notably the mathematisation of economic theory, has been profound." (p. 136).

Harry M. Markowitz: "As Professor Assar Lindbeck noted in his Nobel Presentation speech on behalf of the Royal Swedish Academy, before Markowitz's pioneering contribution, 'there was hardly any theory whatsoever in financial markets.' " (p. 179). *Robert Lucas*, Jr: "Lucas is one of the most influential economic theorists of modern times, whose pioneering work, most notably in the 1970's, has transformed macroeconomics." (p. 241).

My personal favorite aspect of the book was its exposition of the evolution of thought in some of the broad fields of study within economics, that is the consideration of the work of some Nobel Laureates that was subsequently used as building blocks for later Nobel Prize winners. As cited in the preface, "as Mark Blaug, who has kindly written a forward to the book, notes 'economic knowledge is path dependent. What we now know about the economic system is not something we have just discovered, but it is the sum of all discoveries, insights and false starts in the past" (p. viii).

The book explores this theme particularly well in macroeconomics for which the work of Kydland and Prescott (Nobel Prizes in 2004) was related to that of Lucas (1995) and Friedman (1976). This evolution was also explored in microeconomics and econometrics.

The relationship between Arrow (1972) and Sen (1998) on welfare economics was also powerful and interesting: Sen's interest in welfare economics was hugely stimulated by his reading Kenneth Arrow's 'path-breaking study of social choice,' ... The book introduced Sen to Arrow's 'stunning "impossibility theorem" ' the implication of which is that, in Sen's words, 'no nondictatorial social choice mechanism may yield consistent social decisions' (Nobel Foundation, 2004). (pp. 268– 269)

... indeed Arrow has characterized Sen as the 'outstanding contributor' to the voluminous literature that has arisen from his own paradigmatic contribution (Arrow, 1999). (p. 269)

The book also does a masterful job of linking the work of Nobel Laureates in Economics to other disciplines, such as:

- Buchanan (1986) with political science;
- Coase (1991) with law;
- Becker (1992) with sociology;
- North (1993) with history;

- Kahneman (2002) with psychology; and
- Smith (2002) with laboratory experiments.

In addition to the individual sections on each Nobel Laureate, the introduction of the book discusses several interesting and related topics. Table 1 provides a useful 12 page summary of factual information on each Nobel Laureate, including the authors' categorization of the Laureate's "broad field of study" and the Nobel Foundation Prize citation for each award. Also included are several other interesting discussions, including indicators of potential Nobel Memorial status. For example, 39% of the winners of the John Bates Clark Medal have gone on to win the Nobel Memorial Award with an average time lag of 22 years.

Upon completion, I had several responses to the book. First was a sense of deja vu, revisiting the economists and their works I had first encountered in graduate school many years ago. Second was a sense of excitement. Their books provided a rich exposition of a broad, deep, and fascinating discipline whether it is "hard" or "soft" (see p. 9).

The book should be kept in every library of economics as a reference book, but more proactively read from cover-to-cover to review not only the individual Nobel Awards but also the evolution of and the relationships among central ideas in the discipline of economics.

While the book has a 2005 publication date, I look forward to the updates of this book.