

Book Review

Financial Markets and Corporate Finance: Selected Papers of Michael J. Brennan. Michael J. Brennan (ed.). Published in the *Financial Economists of the Twentieth Century* series. Northampton, MA: Edward Elgar Publishing Inc, 1999. Xx + 471 pp., Hard-cover only. ISBN 1-84064-023-5.

Financial Markets and Corporate Finance presents a selection of articles by Michael Brennan, Professor of Money and Banking at UCLA and Professor of Finance at London Business School. The volume forms part of a book series, *Financial Economists of the Twentieth Century*, each of which presents an anthology of the research of a contemporary scholar who has made an important and distinctive contribution to financial economics. Michael Brennan ranks high among distinguished financial economists, with the rare honors of having been President of the American Finance Association, the Society for Financial Studies, and the Western Finance Association; and of having been editor of both the *Journal of Finance* and this review. Brennan's papers are presented as facsimile reproductions, inclusive of the footnotes and pagination of the original publications. The author and editor of this volume selected and sequenced the articles himself, and also contributes an introduction. *Financial Markets and Corporate Finance* is therefore a record of what Michael Brennan feels is his distinctive contribution to financial economics and financial management. His selection is a mix of his classics—many familiar to us—and some newer, personal favourites.

Brennan's book is divided into three parts, focusing on corporate finance, option pricing and derivatives markets, and information and price formation in financial markets. Each part follows a strand of Brennan's research, beginning with some of his earliest work and recording some of his main contributions within each field. The collection opens with Brennan's PhD dissertation (1970), extending the CAPM to allow for differential tax rates. Published only three years after Brennan entered MIT's doctoral program, this important article joined a cohort of papers (several by Brennan himself) that extended and demonstrated the general robustness of the CAPM.

Turning to the rest of Part I, the second paper (1973) in the collection characterizes this theme by linking the valuation of corporate income streams to the asset pricing theory that had attracted Brennan's attention. Part I also includes work with Alan Kraus (1987) on the impact of adverse-selection problems on company financing strategies, and with Vojislav Maksimovic and Josef Zechner (1988) on vendor financing. These papers are accompanied by several articles coauthored with Eduardo Schwartz, including papers on capital structure (1978), regulation (1982), and the valuation of natural resource investments. The latter—Brennan and Schwartz's (1985) application

of option pricing theory to real investment projects—is perhaps the author's most influential contribution to the literature. It gave rise to the burgeoning field of real option theory, as well as providing the platform for many other papers on the valuation of financial instruments. This is a theme to which Brennan returns in his presidential speech to the American Finance Association (1990) on latent assets, in which he attributes to brokerage house analysts the role of revealing the value of corporate assets if they are switched from their current to an alternative use.

The second part of the collection draws on Brennan's contributions in option pricing and derivatives markets. One of the more well-known papers is the sole-authored exposition of risk-neutral valuation relationships in discrete-time models (1979). Most of the selection in Part II is, however, the product of Brennan's long collaboration with Eduardo Schwartz. Included are their widely cited article on methods for valuing American put options (1977) and bonds (1979) and papers on portfolio insurance (1988, 1989), as well as their early survey of finite difference methods for pricing contingent claims (1978). There are also papers in this section on portfolio insurance (with R. Solanki, 1981) and on multiperiod markets with asymmetric information (with Henry Cao, 1996). The latter shows that, unless they are well informed, investors should prefer securities with convex payoffs relative to the underlying asset.

Part III reflects Brennan's more recent interests in information and price formation. The papers included here all date from the 1990s. They include work on international investment flows applying the ideas developed with Henry Cao; and on stock prices and their signaling function, with a number of colleagues. The paper with Cao (1997) uses a framework reminiscent of portfolio insurance to explain why one might expect foreign investors to be trend followers, buying into individual markets that are rising and selling out of declining markets. In the most widely cited paper in Part III, Michael Brennan and Pat Hughes (1991) seek to explain why and which firms engage in stock splits. Their answer revolves around the initially nonintuitive benefits to companies of higher share commissions, since the latter are associated with an increase in analyst following. In related work, included as the last three chapters in the book, Brennan shows that enhanced analyst attention improves the timeliness of stock prices (with Narasimhan Jegadeesh and Bhaskaran Swaminathan, 1993); that it reduces the adverse-selection component of the bid-ask spread (with Avanidhar Subramanyam, 1995); and that stock price illiquidity has an impact on security returns (with Tarun Chordia and Avanidhar Subramanyam, 1998).

Since his 1970 paper in the *National Tax Journal (NTJ)*, Michael Brennan had produced 64 articles (the book lists only those that appeared up to 1998). He has consistently published in the scholarly press, and for more than a quarter of a century Brennan has had at least one major paper appearing each year (with the exception of 1992). Of his papers, 17 appeared in *Journal of Finance (JF)*, 9 in *Journal of Financial and Quantitative Analysis (JFQA)*,

8 in *Journal of Financial Economics (JFE)*, 6 in *Journal of Business (JB)*, and 2 in this review (*RFS*). A further 13 appeared in other scholarly journals, such as *Bell Journal of Economics (BJE)*. Brennan has not ignored outlets that target a practitioner audience: five articles were written for *Journal of Applied Corporate Finance*, and he has also published in other applied journals such as *Financial Management (FM)* and *Financial Analysts Journal (FAJ)*. Brennan seeks exposure in the broader economics journals relatively rarely. He perceives his audience as one that comprises finance professionals, and most of his articles have appeared in journals that would be on the core reading list for business-school finance professors. As can be seen in Table 1, Brennan's most famous articles have been cited more than a hundred times; and apart from recent and practitioner articles, most of the papers in this book have received a score or more citations.

Not only does he eschew the broader economics audience, but Brennan demonstrates a lifelong interest in the applied focus of finance. In a fascinating but disappointingly brief personal introduction to the collection, Brennan records his sentiments after completing bachelors and masters degrees in economics at Oxford University. He recalls the disillusion he felt about the limited relevance of the undergraduate economics he had learned, and the excitement of being introduced to finance during his MBA at Pittsburgh and later at MIT. Brennan also chronicles the accidents of personal history that can contribute to individual and institutional development. He recounts his switch as a PhD student at MIT from marketing to finance, in the light of a persuasive discussion with just one professor; his move to the University of British Columbia in response to U.S. student visa restrictions; the collaboration with Eduardo Schwartz arising from the turmoil in Schwartz's native Chile; and his choice of research topic to facilitate taking a visiting professorship in England. Brennan's professional development was strongly influenced by happenstance.

A persistent theme, however, is Brennan's search for practical applications of finance theory. He explains, as his motivation for exploring interest rate contingent claims, the opportunity to guide the Canadian government on the "humble savings bond"; he tells how his work on bond pricing (1979) led to several "Wall Street opportunities"; he says his work on regulatory policy (1982) was stimulated by consulting assignments; and he hints at how other real-world issues have guided his research. In fact, for over three decades Brennan's work has been characterized by an emphasis on issues that offer potential for practical implementation. Given his interest in the process of scientific discovery—exemplified in his speech to the Financial Management Association (1995) in Part I of the book—it is a pity Brennan does not reflect more about what influences him as an individual, and how his research agenda responds to external stimuli. Perhaps this is symbolic of Brennan's reticence to emphasize his own importance within the field of finance.

Table 1
SSRN citation count for papers included in *Financial Markets and Corporate Finance*

Chapter	Title of paper	Year	Journal	Citations	
				Total	Yearly
Part I: Corporate finance					
1	Taxes, market valuation and corporate financial policy	1970	<i>NTJ</i> ***	117	4.0
2	An approach to the valuation of uncertain income streams	1973	<i>JF</i>	11	0.4
3	Corporate income taxes, valuation and the problem of optimal capital structure*	1978	<i>JB</i>	55	2.6
4	Consistent regulatory policy under uncertainty*	1982	<i>BJE</i>	19	1.1
5	Evaluating natural resource investments*	1985	<i>JB</i>	152	10.9
6	Efficient financing under asymmetric information**	1987	<i>JF</i>	43	3.6
7	Vendor financing**	1988	<i>JF</i>	12	1.1
8	Latent assets	1990	<i>JF</i>	36	4.0
9	Corporate finance over the past 25 years	1995	<i>FM</i>	2	0.5
Part II: Option pricing and derivatives markets					
10	The valuation of American put options*	1977	<i>JF</i>	56	2.6
11	Finite difference methods and . . . the pricing of contingent claims: a synthesis*	1978	<i>JFQA</i>	52	2.5
12	A continuous time approach to the pricing of bonds*	1979	<i>JBFB</i>	117	5.9
13	The pricing of contingent claims in discrete time models	1979	<i>JF</i>	97	4.9
14	Optimal portfolio insurance**	1981	<i>JFQA</i>	27	1.5
15	Time-invariant portfolio insurance strategies*	1988	<i>JF</i>	5	0.5
16	Portfolio insurance and financial market equilibrium*	1989	<i>JB</i>	19	1.9
17	Information, trade, and derivative securities**	1996	<i>RFS</i>	5	1.7
18	Stripping the S&P 500 index	1998	<i>FAJ</i>	0	0.0
Part III: Information and price formation in financial markets					
19	International portfolio investment flows**	1997	<i>JF</i>	10	5.0
20	Stock prices and the supply of information**	1991	<i>JF</i>	31	3.9
21	Investment and the adjustment of stock prices to common information**	1993	<i>RFS</i>	13	2.2
22	Investment analysis and price formation in securities markets**	1995	<i>JFE</i>	7	1.8
23	Alternative factor specifications, security characteristics, and the cross-section of expected stock returns**	1998	<i>JFE</i>	6	6.1

*With Eduardo Schwartz; **with others (see text); *** journal abbreviations are defined in the text.

Brennan's earlier 46-chapter compilation of *The Theory of Corporate Finance* (1996) modestly incorporates only three personal contributions: the papers with Schwartz (1985) and Kraus (1987), and his AFA presidential speech (1990). This collection redresses the gaps. It is interesting to note that of the 23 papers in *Financial Markets and Corporate Finance*, 17 are co-authored, and all of these were written with former doctoral students and/or colleagues. Brennan clearly enjoys collaborative research, and responded positively to the opportunity to work closely with colleagues at UBC and UCLA. As noted earlier, a gap in the book is the limited space allocated in the introduction to Brennan's personal recollections and to his approach to research—we can all learn from exemplars, and it is a pity Brennan does not share more

of his experience with us. Perhaps the time has not yet arrived for him to recount fully how he does his research. When Brennan is ready to explain how he identifies a promising issue, the process he follows to arrive at a solution, and the way he interacts most effectively with colleagues, his insights will be of additional interest to many.

So who should wish to own this book? It is not a textbook, it is not a re-edited compilation of an accumulated body of research, nor is it an organized collection of readings [Brennan (1996) meets this need]. *Financial Markets and Corporate Finance* is simply a selection of papers that Brennan considers important, supplemented by some less well-known contributions that the author wishes to spotlight—articles that may have been overlooked, or recent research that Brennan hopes will come to be recognized as significant. Unlike volumes that include old articles that are difficult to acquire, most of this selection is readily accessed from journal collections or from electronic retrieval systems. The real reason for buying the book is to celebrate the corpus of research that Brennan has contributed to the profession, to browse, to become engrossed in a paper that attracts attention, and to appreciate the unswerving clarity of Brennan's exposition. The publishers presumably hope that the Michael Brennan fan club, to which I belong, has many members, and that they will enjoy this volume as much as I have.

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Reference

Brennan, Michael J. (ed.), 1996, *The Theory of Corporate Finance* volumes I and II. Brookfield, VT: Edward Elgar Publishing Company.