

THE NEW PALGRAVE: FINANCE
A Book Review

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The New Palgrave: Finance (W.W. Norton, New York, 1989) reprints a selection of entries from the *The New Palgrave, A Dictionary of Economics*, edited by John Eatwell, Murray Milgate, and Peter Newman. This is one of several such volumes serving readers in different areas of economics. For this volume, the editors have chosen 30 essays and added a general preface for the series as well as a special preface. Combined with brief biographies of the contributors, the volume takes up about 280 pages of interesting reading. I will make some generally negative comments about the representativeness of the entries and add a few disconnected remarks on points that I found noteworthy or amusing.

Without reading the general preface, researchers in the field of finance might be puzzled by the selection of entries. There is a tremendous amount of overlap and little in the way of empirical information. For example, the Capital Asset Pricing Model of Sharpe (1964), Lintner (1965), and Mossin (1965) is derived in no less than five entries, with no specific econometric results beyond references to the empirical literature. There are four reasonably complete discussions of backwardation in futures markets (again, no test results), and numerous summaries of the Modigliani–Miller (1958, 1961) propositions on the irrelevance, under suitable conditions, of corporate financial policy. The Black–Scholes (1973) option pricing formula is also a favorite. At least the repetition centers mainly on important results.

The volume's unusual orientation turns out to be by design. As the editors point out, *The New Palgrave* is concerned chiefly with theory. As far as the degree of overlap, they state (p. viii): 'For a controversial topic, a set of more or less synonymous headwords, matched by a broad diversity of contributors, was designed to produce enough diversity of opinion to help form the reader's own synthesis...' In other words, the intention was to provide diversity through the selection of contributors rather than topics. Personally, I did not find the topics in this volume particularly controversial, and the editors' apparent goal of generating some interesting differences of opinion

did not come off that well here. For someone interested in obtaining a sense of financial economic theory from a collection of readings, I would recommend instead the excellent two-volume combination of reprinted articles with new discussions recently edited by Bhattacharya and Constantinides (1989).

On the other hand, many of *The New Palgrave* entries, taken alone, are superb. For example, Stephen Ross' lead essay, 'Finance', is a brilliant advertisement for the field. In 30 pages it gives a much better feeling for what finance comprises than the entire remainder of the volume. Only Ross has played a role in so many and such diverse significant advances in financial economics. Understandably, he conveys a great deal of the excitement of working in an area of economics that combines the mystique of Wall Street, gigabytes of data, and elegant mathematical modeling. The topics he covers include the efficient markets hypothesis (theoretical formulations and empirical tests), risk and return (the CAPM, intertemporal models, his own Arbitrage Pricing Theory, and empirical tests), option pricing (the binomial model, the Black-Scholes formula, general theory, and empirical testing), as well as corporate finance (Modigliani-Miller analysis, spanning, signalling, taxes, agency, and empirical evidence). There are some bold statements: '...when judged by its ability to explain the empirical data, option pricing theory is the most successful theory, not only in finance, but in all of economics.' Ross' summary of the shortcomings of our current understanding of rational expectations equilibrium models with informational asymmetries is right on the mark, in my opinion. He summarizes: 'The traditional theory that prices reflect the available information is well understood with a representative individual. The theory with asymmetric information is not well understood at all. In short, the exact mechanism by which prices incorporate information is still a mystery and an attendant theory of volume is simply missing.' All in all, this essay is the best short introduction to finance that I have seen, and ideal reading for anyone outside of the field who is interested about the inside.

There are some unusual entries. For example, there is a brief entertaining biography by Benoit-Mandelbrot of Louis Bachelier, whose (1900) work is cited again and again in this volume. Strangely, there is an entry on 'Organization Theory' by Thomas Marschak. I can't imagine how Marschak's excellent essay got into a volume on finance, except perhaps as a printing error. (Maybe my own perspective of the field is too limited.) Copeland and Weston were charged with an entry on 'Asset Pricing', but they seem to have taken a narrow view of the topic, apparently viewing the central model as the static CAPM, with extensions as embellishments. For example, even Merton's (1973) important contribution is included in work that 'established that the main principles of the CAPM held up with successive relaxation of the above [usual] assumptions'. My own reading of Merton is that he points to the failure of the market-portfolio-based CAPM in a multi-period setting, in that

it does not capture the impact of dynamic hedging of state risk on asset prices, with minor exceptions. Copeland and Weston do not mention the subsequent work of Rubinstein (1976), Breeden (1979), or Cox, Ingersoll, and Ross (1985).

The selection of contributors seems to indicate that finance is predominantly an American field. Aside from one entry by Masahiro Kawai of the University of Tokyo, the only authors located outside the U.S. are British. Of the few British entries, only David Newbery's does not strike one as being a bit out of the modern mainstream. For example, the chapter on 'Takeovers and the Stock Market' by Hughes and Singh places emphasis on the importance (or lack thereof) of profitability as a direct explanatory variable for corporate survival, with a couple of references to Karl Marx. Their point of view is reasoned and informative, but not at all what one would find in, say, the *Journal of Financial Economics*.

The editors' desire to find multiple perspectives on the same topic worked quite well in one instance. The two treatments of interest rates by Malkiel and Ingersoll, respectively, show a dramatic boundary between traditional and 'new' methods. What Malkiel calls the expectations theory turns out not to involve expectations in the sense of uncertainty, but rather merely the absence of arbitrage in a deterministic setting. When he begins to speak of uncertainty, Malkiel does not give a precise description of the expectations theory, but he pays a strong compliment to what he calls the 'electric' model of Cox, Ingersoll, and Ross (1981, 1985), which in fact refutes an interpretation of the Fisherian expectations hypothesis under uncertainty on the grounds that it admits arbitrage. Ingersoll's treatment, on the other hand, is decidedly 'hi-tech' and grounded in the continuous-time methodology of modern asset-pricing theory, to which he himself has contributed a great deal. The editors have done well in obtaining contributions from most of the highly recognized researchers in continuous-time asset-pricing theory: Breeden, Dybvig, Huang, Ingersoll, Merton, and Ross.

Much in this volume, however, is out of date; it appears that the entries were prepared no later than 1986. Finance is such a fast moving research area that the contributors might have been asked to revise their submissions to *The New Palgrave* in light of recent advances. Even since the publication of this volume, Barone-Adesi and Elliott (1989) and Carr, Jarrow, and Myneni (1989) have made obsolete Ingersoll's description of progress on pricing the American put.

There is perhaps relatively undue weight in this volume on asset-pricing theory at the expense of theories dealing with incomplete and asymmetric information. Bhattacharya (1989) surveys several important developments in the so-called 'information theory' of finance that are largely overlooked in this volume. Despite several entries covering the Modigliani-Miller theory, for example, the exposition of agency models of corporate finance is ex-

tremely superficial. Smith gives a good three-page verbal summary of 'Agency Costs' and I fully enjoyed the essay by Brickley and McConnell on 'Dividend Policy', but these two entires do not really make up for the volume's lack of a single principal-agent model formulation. Although Tobin's entry, 'Financial Intermediaries', is a fine review of the general institutional aspects of the banking system, one might be surprised by the lack of specific informational models of intermediation elsewhere in this volume, given the editors' theoretical aims.

In sum, I cannot claim that *The New Palgrave: Finance* is a good representative sample of the theory of finance. It does, however, offer top names, entertaining reading, and several good descriptions of certain topics in finance. Best is Ross' essay: 'Finance'.

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