Volume Title: Expectations and the Structure of Share Prices

Volume Author/Editor: John G. Cragg and Burton G. Malkiel

Volume Publisher: University of Chicago Press

Volume ISBN: 0-226-11668-9

Volume URL: http://www.nber.org/books/crag82-1

Publication Date: 1982

Chapter Title: Front matter, table of contents, preface

Chapter Author: John G. Cragg, Burton G. Malkiel

Chapter URL: http://www.nber.org/chapters/c11287

Chapter pages in book: (p. -11 - 0)

John G. Cragg and Burton G. Malkiel

Expectations and the Structure of Share Prices

National Bureau of Economic Research

Chicago

Expectations and the Structure of Share Prices

John G. Cragg
and Burton G. Malkiel

National
Bureau of
Economic
Research

ISBN 0-226-11668-9

Expectations and the Structure of Share Prices

John G. Cragg and Burton G. Malkiel

John G. Cragg and Burton G. Malkiel collected detailed forecasts of professional investors concerning the growth of 175 companies and use this information to examine the impact of such forecasts on the market evaluations of the companies and to test and extend traditional models of how stock market values are determined.

While the authors find that the forecasts—made by large professional investment organizations—lack consensus and are of poor quality, they rate them as superior to simple extrapolation of previous trends in earnings growth. Also, they are unable to reject the proposition of rational expectations that all available information is included in the forecasts. They conclude that there is no information that is not reflected in market prices of securities—no inefficiencies in the pricing of securities that would allow one to make extraordinary profits by utilizing these professional predictions.

The authors go on to develop a more general version of the capital asset pricing model that incorporates the information they have collected. This new model can express dimensions of risk—changes in the national income, in the inflation rate, and in interest rates—hitherto not taken into account and has extremely important implications for those who use modern portfolio theory in practice.

Expectations and the Structure of Share Prices serves to increase considerably our knowledge of the workings of the stock market. It not only provides interesting and practical results, but also includes a set of data that should prove useful to

(Continued on back flap)

Expectations and the Structure of Share Prices

A National Bureau
of Economic Research
Monograph

Expectations and the Structure of Share Prices

John G. Cragg and
Burton G. Malkiel

The University of Chicago Press

Chicago and London

JOHN G. CRAGG is professor of economics and head of the Department of Economics at the University of British Columbia. BURTON G. MALKIEL is dean of the Yale School of Organization and Management and the William S. Beinecke Professor of Management Studies and professor of economics at Yale University.

The University of Chicago Press, Chicago 60637
The University of Chicago Press, Ltd., London

Printed in the United States of America
89 88 87 86 85 84 83 82 5 4 3 2 1

Library of Congress Cataloging in Publication Data

Cragg, J. G.
Expectations and the structure of share prices.

(A National Bureau of Economic Research monograph)
Bibliography: p.
Includes index.
1. Stock—Prices—Mathematical models. 2. Corporate profits—Forecasting—Mathematical models. 3. Capital assets pricing model. I. Malkiel, Burton Gordon. II. Title. III. Series.
HG4636.C7 1982 332.63'222'0724 82-8388
ISBN 0-226-11668-9 AACR2

Relation of the Directors to the Work and Publications of the National Bureau of Economic Research

1. The object of the National Bureau of Economic Research is to ascertain and to present to the public important economic facts and their interpretation in a scientific and impartial manner. The Board of Directors is charged with the reponsibility of ensuring that the work of the National Bureau is carried on in strict conformity with this object.

2. The President of the National Bureau shall submit to the Board of Directors, or to its Executive Committee, for their formal adoption all specific proposals for research to be instituted.

3. No research report shall be published by the National Bureau until the President has sent each member of the Board a notice that a manuscript is recommended for publication and that in the President's opinion it is suitable for publication in accordance with the principles of the National Bureau. Such notification will include an abstract or summary of the manuscript's content and a response form for use by those Directors who desire a copy of the manuscript for review. Each manuscript shall contain a summary drawing attention to the nature and treatment of the problem studied, the character of the data and their utilization in the report, and the main conclusions reached.

4. For each manuscript so submitted, a special committee of the Directors (including Directors Emeriti) shall be appointed by majority agreement of the President and Vice Presidents (or by the Executive Committee in case of inability to decide on the part of the President and Vice Presidents), consisting of three Directors selected as nearly as may be one from each general division of the Board. The names of the special manuscript committee shall be stated to each Director when notice of the proposed publication is submitted to him. It shall be the duty of each member of the special manuscript committee to read the manuscript. If each member of the manuscript committee signifies his approval within thirty days of the transmittal of the manuscript, the report may be published. If at the end of that period any member of the manuscript committee withholds his approval, the President shall then notify each member of the Board, requesting approval or disapproval of publication, and thirty days additional shall be granted for this purpose. The manuscript shall then not be published unless at least a majority of the entire Board who shall have voted on the proposal within the time fixed for the receipt of votes shall have approved.

5. No manuscript may be published, though approved by each member of the special manuscript committee, until forty-five days have elapsed from the transmittal of the report in manuscript form. The interval is allowed for the receipt of any memorandum of dissent or reservation, together with a brief statement of his reasons, that any member may wish to express; and such memorandum of dissent or reservation shall be published with the manuscript if he so desires. Publication does not, however, imply that each member of the Board has read the manuscript, or that either members of the Board in general or the special committee have passed on its validity in every detail.

6. Publications of the National Bureau issued for informational purposes concerning the work of the Bureau and its staff, or issued to inform the public of activities of Bureau staff, and volumes issued as a result of various conferences involving the National Bureau shall contain a specific disclaimer noting that such publication has not passed through the normal review procedures required in this resolution. The Executive Committee of the Board is charged with review of all such publications from time to time to ensure that they do not take on the character of formal research reports of the National Bureau, requiring formal Board approval.

7. Unless otherwise determined by the Board or exempted by the terms of paragraph 6, a copy of this resolution shall be printed in each National Bureau publication.

(Resolution adopted October 25, 1926, as revised through September 30, 1974)

Contents

Preface

This monograph investigates a number of interrelated questions about the formation of expectations and the pricing of capital assets. Central to the empirical work is a unique body of expectations data collected over the decade of the 1960s. The book first describes the data and then examines a number of questions regarding the consensus, accuracy, and completeness of the forecasts as well as the underlying process that appears to generate the forecasts. The book then turns to the development of a restatement of financial-asset valuation theory and goes on to use the expectations data we have collected to test the model. We find that our data permit far more satisfactory tests of valuation models than have been possible before and that they help provide important insights into the structure of security prices. Because we believe that these data will be helpful to other researchers, we have published the data themselves in as much detail as our respondents would permit.

More than a decade has passed since the data were originally collected, and so they may not represent the most up-to-date practices. There are, however, important advantages to our having waited a considerable period before publishing our results. First, one of the questions we ask concerns the accuracy of the forecast data and it is necessary to wait a considerable period in order to compare realizations with long-run forecasts. Indeed, in a preliminary article dealing with just the first two years of our data, we were not able to provide proper tests of accuracy because the forecast period had not yet elapsed (see Cragg and Malkiel 1968).

There is a second advantage in a delay, in that the data were collected during a period when the capital-asset pricing model and other, more recent valuation models were not generally known in the financial community. Hence the data were clearly not influenced by now popular notions concerning how assets are actually valued in the market. In this sense, the data can be considered uncontaminated and should provide fair tests of alternative valuation models.

A major data-gathering effort such as the one reflected in this study requires considerable financial support, and we have been enormously aided by several institutions. A vital contribution was made by the Institute for Quantitative Research in Finance. That institute was the original sponsor of this study and not only provided important financial help but also aided in the recruitment of a large number of the institutional investors which cooperated in the study. Princeton University's Financial Research Center—which in turn has been generously aided by the Merrill Foundation, the John Weinberg Foundation, and the Princeton University Class of 1950—provided invaluable support during the course of the study. Finally, the book was supported in part by the Debt-Equity Project, which is sponsored by a grant to the National Bureau of Economic Research by the American Council of Life Insurance. The National Bureau of Economic Research not only provided funds during the final stages of the study but also, through its seminars and meetings and through the dissemination of its working papers, provided important assistance to us in completing the manuscript.

It would simply be impossible to thank individually all of the people who offered suggestions and help during the course of this study. We should, however, make special note of the individuals who read the final manuscript and offered extremely valuable comments. We record our deepest debt of gratitude to G. C. Archibald, Philip Dybvig, Benjamin Friedman, Stewart Myers, and Richard Quandt. They all made important substantive contributions but are, of course, blameless for any errors that may remain.

A study such as this which involves considerable computer work could not have been done without the help of many research assistants. We would like to thank Tom Chung, Deborah Holman, Darryl Pressley, James Rauch, William Silbey, and especially Stephen Williams for invaluable support.

Particular thanks are due to Elvira Krespach, our principal computer programmer over the course of the study. We also were helped by several people in producing the final manuscript. We are grateful to Constance Dixon, Phyllis Durepos, Maryse Ellis, Murriel Hawley, Louise Olson, Helen Talar, and especially Barbara Hickey, who oversaw the production work and typed much of the final draft.

John G. Cragg
Burton G. Malkiel