# JOURNAL OF FINANCIAL AND QUANTITATIVE ANALYSIS

# November 1978

## PAPERS AND PROCEEDINGS OF THE FOURTEENTH ANNUAL MEETING OF THE WESTERN FINANCE ASSOCIATION

HAWAIIAN ISLANDS JUNE 20-26, 1978

THE UNIVERSITY OF WASHINGTON GRADUATE SCHOOL OF BUSINESS ADMINISTRATION AND THE WESTERN FINANCE ASSOCIATION

#### JOURNAL OF FINANCIAL AND QUANTITATIVE ANALYSIS

A JOINT PUBLICATION

OF THE

### GRADUATE SCHOOL OF BUSINESS ADMINISTRATION UNIVERSITY OF WASHINGTON

AND THE

WESTERN FINANCE ASSOCIATION

#### EDITORIAL STAFF

Charles W. Haley, Managing Editor Lynn Lewicki, Editorial Associate University of Washington

#### ASSOCIATE EDITORS

Richard H. Bernhard, North Carolina State Gerald O. Bierwag, Oregon Michael J. Brennan, UBC Andrew H. Chen, Ohio State Peter A. Frost, Washington Robert S. Hamada, Chicago Frank C. Jen, SUNY, Buffalo George Kaufman, Oregon Michael A. Klein, Indiana Alan Kraus, UBC Cheng-few Lee, Illinois John G. McDonald, Stanford Richard Pettit, Houston George E. Pinches, Kansas Barr Rosenberg, Berkeley Gary G. Schlarbaum, Purdue Clifford W. Smith, Jr., Rochester Bruno H. Solnik, CESA, Jouy-en-Josas, France Bernell K. Stone, Georgia Institute of Technology James Van Horne, Stanford David A. Walker, Federal Deposit Insurance Corporation Richard R. West, Dartmouth G. A. Whitmore, McGill Robert L. Winkler, Indiana

#### WESTERN FINANCE ASSOCIATION

1978-79 Executive Committee

Guilford C. Babcock, President	University of Southern California
Donald E. Farrar, President-elect	University of Utah
Keith Smith, Vice President	University of California, Los Angeles
D. Stuart Bancroft, Secretary-Treasurer	Pacific Lutheran University
David H. Pyle, Past President	University of California, Berkeley
Charles W. Haley, Editor	University of Washington
Thomas E. Stitzel	Boise State University
Peter Rose	Texas A&M University
Seha Tinic	University of Alberta
William F. Sharpe	Stanford University

#### INSTITUTIONAL MEMBERS

University of Calgary Faculty of Business California State College, Bakersfield Center for Business/Economic Research University of California, Berkeley School of Business Administration University of California, Los Angeles Study Center for Finance and Business Economics Loyola Marymount University College of Business Administration University of Southern California Graduate School of Business Administration University of Utah Department of Finance

#### CORPORATE SPONSORS

Security Pacific National Bank	Los Angeles, California
Wells Fargo Bank	San Francisco, California
Transamerica Corporation	San Francisco, California
Bank of America	San Francisco, California
Huntsman Chemical & Oil Corporation	
Mattel, Inc.	Hawthorne, California

Copyright 1978 by the Graduate School of Business Administration, University of Washington.

The Journal of Financial and Quantitative Analysis is published by the Graduate School of Business Administration, University of Washington, Seattle, Washington 98195, in conjunction with the Western Finance Association. Regular issues are published in March, June, September, and December, and a Proceedings Issue is published in November. Second-class postage is paid at Seattle, Washington.

The Proceedings Issue contains selected papers, abstracts of papers, discussants' comments, and the proceedings of the Western Finance Association meetings. From time to time a special issue, devoted to one topic of interest to the membership, is published.

The views and opinions expressed are those of the authors and do not necessarily reflect those of the Graduate School of Business Administration of the University of Washington nor of the Western Finance Association.

For individuals, the annual subscription rate to the *JFQA* is \$15.00 (threeyear rate, \$40); for firms or libraries, the annual rate is \$25.00 (three-year rate, \$70). Annual subscription rates for individuals and libraries outside the United States (except Canada) are \$16.00 for individuals (three-year rate, \$43), and \$26 for libraries and firms (three-year rate, \$73). Single copies are \$5.00. The fiscal year of the *Journal of Financial and Quantitative Analysis* begins on January 1.

Manuscripts and \$25 submission fee per manuscript (\$15 for W.F.A. members) as well as editorial correspondence, should be sent to the Managing Editor. Correspondence relating to advertising, subscriptions, and billing should be addressed: Subscription Manager, *JFQA*, University of Washington, DJ-10, Seattle, WA 98195.

Correspondence pertaining to the Western Finance Association should be sent to D. Stuart Bancroft, Secretary-Treasurer, School of Business Administration, Pacific Lutheran University, Tacoma, WA 98447.

PRO	CEEDINGS OF 13th ANNUAL CONFERENCE OF THE WESTERN FINANCE ASSOCIATION, JUNE 20	-26, 1978
Ι.	PRESIDENTIAL SESSION Chairman: David H. Pyle	
	Financial Intermediation and the Theory of Agency	595
II.	PAUL H. COOTNER MEMORIAL SESSION Chairman: Jack Hirshleifer	
	Capital Asset Pricing in a General Equilibrium Framework	613
	Comments: Capital Asset Pricing in a General Equilibrium Framework	625
III.	DURATION AND PORTFOLIO STRATEGY Chairman: George G. Kaufman	
	Duration Forty Years Later	627
	Discussion: Duration and Portfolio Strategy	651
	Duration and Security Risk	653
	Discussion: Duration and Security Risk	669
	Duration and Bond Portfolio Analysis: An Overview	671
	Comment: Duration and Bond Portfolio Analysis	683
IV.	RESULT OF A STUDY OF RISK AND CAPITAL ADEQUACY IN BANKS Chairman: S. J. Maisel	
	Interest Rate Changes and Commercial Bank Revenues and Costs	687
	Bank Capital Adequacy, Deposit Insurance, and Security Values	701
	Interest Rate Risk	719
	Abstract: The Fundamental Determinants of Risk in Banking Barr Rosenberg and Philip R. Perry	735
v.	DISTINGUISHED SPEAKER	
	OPEC Surpluses and World Financial Stability	737

VI.	TREFFTZS' AWARD	
	The Impact of a Fuel Adjustment Clause on the Regulated Firm's Value and Cost of Capital	745
VII.	FINANCIAL PLANNING Chairman: Blaine Huntsman	
	Financial Planning in a Regulated Environment	759
	Abstract: Corporate Financial Strategies under Uncertainty: Valuation and Policies in Dynamic Disequilibrium	779
	Abstract:  Optimal Financial Policies under Threat    of Bankruptcy	783
	The Geographic Distribution of Papers at the Seven Academic Finance Associations in the United States	785
VIII.	WESTERN FINANCE ASSOCIATION MEETINGS	
	Minutes of the Annual Meeting	796
	Minutes of Executive Committee Meeting	797
	Treasurer's Report	798
	Managing Editor's Report	800
ANN	OUNCEMENT	802

•