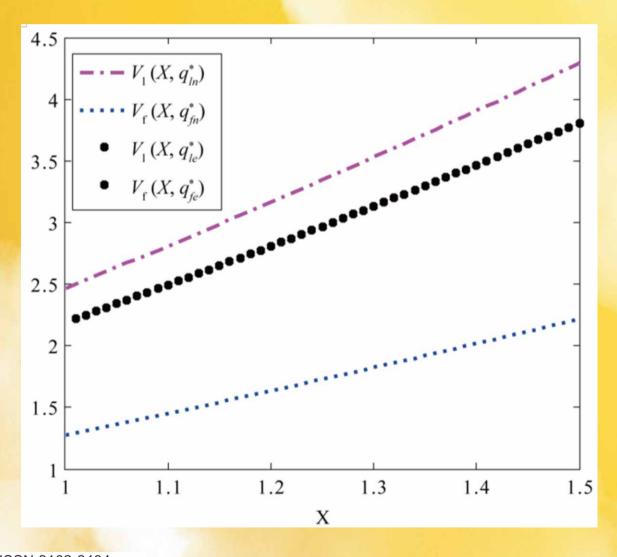


Journal of Mathematical Finance





Journal Editorial Board

ISSN: 2162-2434 (Print), 2162-2442 (Online)

http://www.scirp.org/journal/jmf/

.....

Editor-in-Chief

Prof. Moawia Alghalith University of the West Indies, Trinidad-and-Tobago

Associate Editors-in-Chief

Dr. Fariba HashemiApplied Economics Research, SwitzerlandProf. Cheng HsiaoUniversity of Southern California, USADr. Charles-Albert LehalleCrédit Agricole Cheuvreux, France

Prof. Haim LevyHebrew University, IsraelDr. Stephen Ellwood SatchellSydney University, AustraliaProf. Tony S. WirjantoUniversity of Waterloo, CanadaProf. Wing-Keung WongHong Kong Baptist University, China

Editorial Advisory Board

Dr. Ricardas Zitikis University of Western Ontario, Canada

Honorary Editorial Board

Prof. Frank J. Fabozzi EDHEC Business School, France

Prof. Michael McAleer Erasmus University Rotterdam, Netherlands

Editorial Board

Prof. Christopher John AdcockUniversity of Sheffield, UKProf. Udo BrollTU Dresden, Germany

Prof. Raymond Hon-Fu Chan The Chinese University of Hong Kong, China

Dr. Umberto Cheruabini University of Bologna, Italy

Prof. Martín Egozcue University of Montevideo, Uruguay

Prof. Richard W. GorvettUniversity of Illinois, USADr. Zhengfeng GuoVanderbilt University, USA

Prof. Xue-Zhong (Tony) HeUniversity of Technology, Australia

Prof. Ivan Ganchev Ivanov Sofia University "St. Kl. Ohridski", Bulgaria

Prof. Jau-Lian JengAzusa Pacific University, USADr. George J. JiangUniversity of Arizona, USAProf. Yong H. KimUniversity of Cincinnati, USADr. Ka-Chi LamCity University of Hong Kong, China

Dr. Ka-Chi LamCity University of Hong Kong, ChinaProf. Donald LienUniversity of Texas at San Antonio, USA

Dr. Jia Liu Bloomberg LP, USA

Prof. Alexander MelnikovUniversity of Alberta, CanadaDr. Gareth William PetersUniversity College London, UKDr. Hermann RatsimbanieranaUniversity of Perpignan, FranceProf. Goutte StéphaneUniversity of Paris Diderot, France



Table of Contents

Volume 5 Number 2	May 2015
Explaining the Financial Instability Hypothesis with Endogenous Investment: A Nonlinear Mo Predictive Control Approach	del
T. TL. Chong, R. J. Cebula, F. P. Peng, M. Foley	83
On Two Transform Methods for the Valuation of Contingent Claims	
C. R. Nwozo, S. E. Fadugba	88
On Historical Value at Risk under Distribution Uncertainty	
A. lizuka, Y. Nakano	113
On a New Index Aimed at Comparing Risks	
M. Resta, M. E. Marina	119
On the Study of Reduced-Form Approach and Hybrid Model for the Valuation of Credit Risk	
O. H. Edogbanya, S. E. Fadugba	129
Arbitrage-Free Gaussian Affine Term Structure Model with Observable Factors	
G. Wang	142
Cagan Effect and the Money Demand by Firms in China: A Nonlinear Panel Smooth Transition Approach	า
F. P. Peng, K. Zhan, Y. J. Lian	153
Optimal Investment under Dual Risk Model and Markov Modulated Financial Market	
L. Xu, L. M. Zhang, D. J. Zhu	157
The Stochastic Error Rate Estimation of Prediction Distributions	
H. Faires	172
Prediction of Stock Price Movement Using Continuous Time Models	
M. E. Sonono, H. P. Mashele	178
Duopolistic Competition and Capacity Choice with Jump-Diffusion Process	
D. M. Chen	192
Smart Beta Portfolio Optimization	
S. AlMahdi	202
On Asymptotic Behaviors of Exponential Hedging in the Basis-Risk Model	

The figure on the front cover is from the article published in Journal of Mathematical Finance, 2015, Vol. 5, No. 2, pp. 192-201 by Danmei Chen.

Journal of Mathematical Finance (JMF)

Journal Information

SUBSCRIPTIONS

The *Journal of Mathematical Finance (JMF)* (Online at Scientific Research Publishing, www.SciRP.org) is published quarterly by Scientific Research Publishing, Inc., USA.

Subscription rates:

Print: \$79 per issue.

To subscribe, please contact Journals Subscriptions Department, E-mail: sub@scirp.org

SERVICES

Advertisements

Advertisement Sales Department, E-mail: service@scirp.org

Reprints (minimum quantity 100 copies)

Reprints Co-ordinator, Scientific Research Publishing, Inc., USA.

E-mail: sub@scirp.org

COPYRIGHT

COPYRIGHT AND REUSE RIGHTS FOR THE FRONT MATTER OF THE JOURNAL:

Copyright © 2015 by Scientific Research Publishing Inc.

This work is licensed under the Creative Commons Attribution International License (CC BY). http://creativecommons.org/licenses/by/4.0/

COPYRIGHT FOR INDIVIDUAL PAPERS OF THE JOURNAL:

Copyright © 2015 by author(s) and Scientific Research Publishing Inc.

REUSE RIGHTS FOR INDIVIDUAL PAPERS:

Note: At SCIRP authors can choose between CC BY and CC BY-NC. Please consult each paper for its reuse rights.

DISCLAIMER OF LIABILITY

Statements and opinions expressed in the articles and communications are those of the individual contributors and not the statements and opinion of Scientific Research Publishing, Inc. We assume no responsibility or liability for any damage or injury to persons or property arising out of the use of any materials, instructions, methods or ideas contained herein. We expressly disclaim any implied warranties of merchantability or fitness for a particular purpose. If expert assistance is required, the services of a competent professional person should be sought.

PRODUCTION INFORMATION

For manuscripts that have been accepted for publication, please contact:

E-mail: jmf@scirp.org



Call for Papers

Journal of Mathematical Finance (JMF)

ISSN 2162-2434 (Print) ISSN 2162-2442 (Online) http://www.scirp.org/journal/jmf/

Journal of Mathematical Finance (JMF) aims at presenting the latest development on pure and applied financial mathematics. It considers important theoretical, empirical and review papers.

Editor-in-Chief

Prof. Moawia Alghalith

University of the West Indies, Trinidad-and-Tobago

Editorial Board

Prof. Christopher John Adcock

Prof. Udo Broll

Prof. Raymond Hon-Fu Chan

Dr. Umberto Cheruabini

Prof. Martín Egozcue

Prof. Richard W. Gorvett

Dr. Zhengfeng Guo

Prof. Xue-Zhong (Tony) He

Prof. Ivan Ganchev Ivanov

Prof. Jau-Lian Jeng

Dr. George J. Jiang

Prof. Yong H. Kim Dr. Ka-Chi Lam

Prof. Donald Lien

Dr. Jia Liu

Prof. Alexander Melnikov

Dr. Gareth William Peters

Dr. Hermann Ratsimbanierana

Prof. Goutte Stéphane

Subject Coverage

The journal publishes original papers including but not limited to the following fields:

- Financial engineering
- Financial statistics
- Pricing theory of securities and portfolio
- Quantitative economics

- Solutions to PDEs
- Stochastic optimization and control
- Stochastic processes

We are also interested in: 1) Short Reports—2-5 page papers where an author can either present an idea with theoretical background but has not yet completed the research needed for a complete paper or preliminary data; 2) Book Reviews—Comments and critiques.

Notes for Intending Authors

Submitted papers should not have been previously published nor be currently under consideration for publication elsewhere. Paper submission will be handled electronically through the website. All papers are refereed through a peer review process. For more details about the submissions, please access the website.

Website and E-Mail

Http://www.scirp.org/journal/jmf

E-mail: jmf@scirp.org