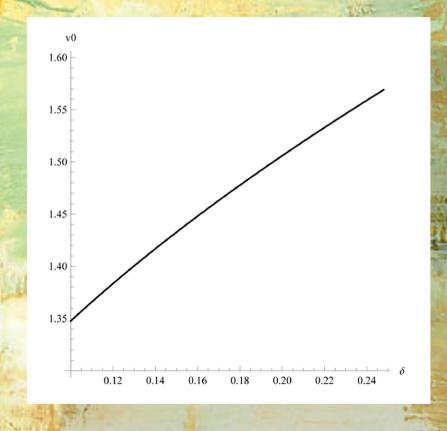


Journal of Mathematical Finance

Special Issue on Option Pricing Research





www.scirp.org/journal/jmf

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, USAProf. Charles-Albert LehalleCrédit Agricole Cheuvreux, France

Prof. Haim LevyHebrew University, IsraelProf. Rosario Nunzio MantegnaPalermo University, ItalyDr. 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 Adcock University of Sheffield, UK

Prof. Udo Broll TU 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) He University of Technology, Australia

Dr. George J. JiangUniversity of Arizona, USAProf. Yong H. KimUniversity of Cincinnati, USA

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

Prof. Alexander Melnikov University of Alberta, Canada

Prof. Gareth William Peters University of New South Wales, Australia

Dr. Hermann RatsimbanieranaUniversity of Perpignan, FranceDr. Goutte StéphaneUniversity of Paris Diderot, France



TABLE OF CONTENTS

Volume 4	Number 1	January 2014
Evaluation of	f Geometric Asian Power Options under Fractiona	l Brownian Motion
Z. J. Mao, Z.	A. Liang	1
Pricing Credi	it Default Swap under Fractional Vasicek Interest	Rate Model
R. L. Hao, Y.	H. Liu, S. B. Wang.	10
Catastrophe 1	Risk Derivatives: A New Approach	
M. B. Abdess	alem, M. Ohnishi	21
Applying the	Barycentric Jacobi Spectral Method to Price Opti	ons with Transaction Costs in a
Fractional Bl	ack-Scholes Framework	
B. F. Nteuma	gné, E. Pindza, E. Maré	35
Game Russia	n Options for Double Exponential Jump Diffusion	Processes
A Suzulci V	7 Sawaki	17

The figure on the front cover is from the article published in Journal of Mathematical Finance, 2014, Vol. 4, No. 1, pp. 47-54 by Atsuo Suzuki and Katsushige Sawaki.

OPEN ACCESS JMF

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©2014 Scientific Research Publishing, Inc.

All Rights Reserved. No part of this publication may be reproduced, stored in a retrieval system, or transmitted, in any form or by any means, electronic, mechanical, photocopying, recording, scanning or otherwise, except as described below, without the permission in writing of the Publisher.

Copying of articles is not permitted except for personal and internal use, to the extent permitted by national copyright law, or under the terms of a license issued by the national Reproduction Rights Organization.

Requests for permission for other kinds of copying, such as copying for general distribution, for advertising or promotional purposes, for creating new collective works or for resale, and other enquiries should be addressed to the Publisher.

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 assumes 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: <u>jmf@scirp.org</u>





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

Dr. George J. Jiang

Prof. Yong H. Kim

Dr. Ka-Chi Lam

Prof. Donald Lien

Prof. Alexander Melnikov Prof. Gareth William Peters Dr. Hermann Ratsimbanierana

Dr. 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