

MATHEMATICAL ECONOMICS

7(14)



**The Publishing House
of Wrocław University of Economics
Wrocław 2011**

Referee

*Jacek Cukrowski, Igor N. Dubina, Alessandro de Gregorio, Marian Matłoka,
Angiola Pollastri, Giuseppe Porro, Achille Vernizzi, Jan Zawadzki*

Copy-editing

Elżbieta Macauley, Tim Macauley, Marcin Orszulak

Proof reading

Barbara Łopusiewicz

Typesetting

Elżbieta Szlachcic

Cover design

Robert Mazurczyk

Front cover painting: Paris – Petit Pont
(private collection)

This publication is available at: www.journal.ue.wroc.pl and www.ibuk.pl.

Abstracts of published papers are available in the international database

The Central European Journal of Social Sciences and Humanities
<http://cejsh.icm.edu.pl>

Information of submitting and reviewing paper is available on
the Publishing House's website www.wydawnictwo.ue.wroc.pl

© Copyright by Wrocław University of Economics
Wrocław 2011

ISSN 1733-9707

The original version: printed

Printing: Printing House TOTEM
Print run: 200 copies

TABLE OF CONTENTS

Marek Biernacki: <i>The effectiveness of education and economic growth.....</i>	5
Marta Borda, Wanda Ronka-Chmielowiec: <i>The insurance market in Poland – an analysis of the current situation and development prospects.....</i>	19
Katarzyna Cegielka: <i>Degressive proportionality in the European Parliament ..</i>	31
Piotr Dniestrzański: <i>Degressive proportionality – source, findings and discussion of the Cambridge Compromise.....</i>	39
Wiktor Ejsmont: <i>Varying effectiveness of teaching versus class size</i>	51
Jan Florek: <i>On some extremal problem in discrete geometry</i>	65
Maria Forlicz: <i>A comparison of the behaviour of market option prices in relation to option prices resulting from the Black-Scholes model during periods of a bull and bear market</i>	71
Wojciech Gamrot: <i>On some modification of the sum-quota sampling scheme ..</i>	83
Albert Gardoń: <i>The normality of financial data after an extraction of jumps in the jump-diffusion model</i>	93
Stanisław Heilpern: <i>Aggregate dependent risks – risk measure calculation.....</i>	107
Joanna Krupowicz: <i>Extraction of cyclical fluctuations – two methods illustrated by the example of a demographic variable</i>	123
Andrzej Misztal: <i>Adjustment function as a tool for distribution of seats in the European Parliament</i>	137
Anna Nikodem-Słowikowska: <i>The effect of common risk on group insurance ..</i>	155
Wojciech Rybicki: <i>Arbitrage in economics and elsewhere – facts well known and less known (three papers on arbitrage ideas, modeling and pricing – yesterday, today and tomorrow) – introduction to the series</i>	169
Wojciech Rybicki: <i>The primer on arbitrage conceptions in economics: their logics, roots and some formal models (historical and bibliographical notes)</i>	173
Paweł Siarka: <i>The issue of PD estimation – a practical approach.....</i>	199
Paweł Siarka: <i>Vintage analysis as a basic tool for monitoring credit risk</i>	213
Agnieszka Stanimir: <i>Analysis of nominal data – multi-way contingency table ..</i>	229
Andrzej Wilkowski: <i>Notes on line dependent coefficient and multiaverage</i>	241