სამეცნიერო კვლევები ბიზნესის ადმინისტრირების დარგში

გამოქვეყნებული სტატიების სია:

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1. M. Mania, R. Tevzadze, An Exponential Martingale Equation, Electronic Communications in Probability, 11, (2006), 206–216
2. M. Mania, R. Tevzadze, An exponential martingale equation, From Stochastic Calculus to Mathematical Finance, The Shiryaev Festschrift, Springer, (2006), pp.507-516
3. Z. Tsigroshvili, On infinitely divisible integer-valued random variables, Georgian Mathematical Journal, (2006).

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9. N. Lazrieva, T. Toronjadze, Optimal Robust Mean-Variance Hedging in Incomplete Financial Markets, Journal of Mathematical Sciences, Vol. 153, No. 3, 2008, 262-290, 2008
10. N. Lazrieva, T. Toronjadze, Semimartingale stochastic approximation procedure and recursive estimation, J. Math. Sci. 153 (2008), No.3, 211-259.
11. R. Tevzadze, Solvability of Backward Stochastic Differential Equation with Quadratic Growth, Stochastic Processes and their Applications, vol. 118, №3, (2008), 503-515.

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13. Tsigroshvili Z.P. (2009). Modeling Dependent Counting Variables with Applications to Credit and Operational Risks. (submitted in Georgian Mathematical Journal).
14. M. Mania, M. Santacroce, Exponential hedging under partial information, accepted in “Finance and Stochastics” (DOI:10.100780-009-0114-z), 2009
15. M. Mania, R. Tevzadze, T. Toronjadze, L2-approximating pricing under restricted information, published in “Applied Mathematics and Optimization” (2009). DOI:10.1007/s00245-009-9067-z, 2009
16. N. Lazrieva, T. Toronjadze, “The Robbins–Monro Type Stochastic Differential Equation III.Polyak’sAveraging”, “Stochastics An International Journal of Probability and Stochastic Processes”, Rep. 105 (2009), No. 4, 115-135
17. Tsigroshvili, Z., Toronjadze, T. Chincharauli, Z. Makharadze, G. (2009). Generalized Panjer’s Type Recursion, published in Georgian Mathematical Journal

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19. N. Lazrieva and T. Toronjadze, “The Robbins–Monro Type Stochastic Differential Equation III. Polyak’s Averaging”, Stochastics: An International Journal of Probability and Stochastic Processes,v.82,issue 2,p.165-188 2010.
20. N. Lazrieva and T. Toronjadze, Recursive Parameter Estimation in the Trend Coefficient of a Diffusion Process, Georgian Math. Journal, Vol. 17, N 4, 2010, pp. 683-705.
21. M. Mania and R. Tevzadze, Backward stochastic PDEs related to utility maximization problem, Georgian Math. J. Vol., Georgian Math. Journal, Vol. 17, N 4, (2010) , pp. 705- 741.
22. M. Mania and M. Santacroce, Exponential hedging under partial information, “Finance and Stochastics”, Vol. 14, N. 3, (2010), pp. 419-448.
23. M. Mania, R. Tevzadze and T. Toronjadze , Mean-Variance Hedging Under Partial Information, Stochastic Control, Chris Myers (Ed.), Publisher: Sciyo, (2010), Chapter 28, pp. 581-609.
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27. R. Tevzadze, T. Uzunashvili, Robust mean-variance hedging and pricing of contingent claims in a one period model, International Journal of Theoretical and Applied Finance, 15, 3, (2012), 9p.
28. R. Tevzadze, Robust mean variance hedging in the single period model, Reports of the seminar of I.Vekua Institute of Applied Mathematics, v.25. (2012), 4p.
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32. T. Tsabadze, Solution of Some Management Problems by Means of Fuzzy Sets Theory, 7th WSEAS International Conference Business Administration (ICBA’13), Milan, Italy, 2013.
33. T. Tsabadze, An Approach for Aggregation of Experts’ Qualitative Evaluations by Means of Fuzzy Sets, 2013 IFSA World Congress NAFIPS Annual Meeting, Edmonton, Canada, 2013.
34. M. Mania and B. Chikvinidze, New proofs of some results on BMO martingales using BSDEs, to appear in Journal of Theoretical Probability, DOI: 10.1007/s10959-013-0524-x, 2013.
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42. G. Pertaia, S. Ghudushauri and N. Toronjadze, FX Portfolio Risk Management, Economics and Banking, NBG, Vol. 2, N1, 2014, pp 41-50.

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45. M. Mania and R. Tevzadze, On regularity of dynamic value function related to the utility maximi-zation problem, Proceedings of A. Razmadze Mathematical Institute V. 168, (2015), pp. 63–77

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1. T. Toronjadze, Forecasting the GEL/USD exchange rates to create forward contracts for both speculative and hedging purposes. (The research program for *** local bank),2006.
2. T. Toronjadze, Valuation of embedded option in bank interest rate sensitivity analysis. (The research program for *** local bank), 2007.
3. T. Toronjadze, Z. Tsigroshvili, Multiple regression analysis and its application to measure bank's financial risk (The research program for *** local bank), 2007.
4. T. Toronjadze, Z. Tsigroshvili, Creation of models for credit risk management. (The research program for *** local bank), 2008.
5. Z. Tsigroshvili, Management of a pension fund under mortality and financial risks using Copula analysis, 2008.
6. Z. Tsigroshvili, Operational Risk Management, (The research program for *** local bank), 2008
7. Z. Tsigroshvili, Risk Management, (The research program for *** local insurance company), 2009

8. K.Kvedelidze, T.Toronjadze, Z.Tsigroshvili (Central Bank problems. Copula Analysis). 2010
9. L.Verdzeuli, Z.Tsigroshvili (Credit Risk Modeling), 2010
10. N. Gozalishvili, L. Pertakhia, Z.Tsigroshvili (Analysis of Insurance Portfolio and Optimal Reinsurance.), 2010
11. I.Chelidze, L.Gachechiladze, T.Toronjadze, T.Uzunashvili (Real Option Analysis and Games Theory Application in Hospitality Business), 2010
12. M.Menabde, Z.Tsigroshvili (Actuarial Methods for Financial Analysis), 2011
13. N. Geguchadze, T.Toronjadze, Z.Tsigroshvili (Applications for Copula Functions for Analysis and Management of Commercial Banks Risks), 2011
14. B.Sulaberidze, Z.Tsigroshvili (Applications of Modern Statistical Methods for Selection of Front-office Workers of Service-type Companies.

საერთაშორისო ურთიერთობები:
სამეცნიერო ვიზიტები (საზღვარგარეთ):
1. Conference on Stochastic Analysis, Amsterdam, Netherlands, January 12-15, 2007; M. Mania Title of the talk: Hedging derivatives under partial information
2. Workshop on Stochastic equations and related topics, Jena, Germany, July 23-29, 2006; M. Mania Title of the talk: Backward stochastic PDEs related to utility maximization problem
3. Conference on Backward Equations, Paris, September 21-22, 2005; R. Tevzadze, Title of the talk: Minimization of a hedging error and related BSDEs.
4. Working visit - T. Toronjadze – Kogod Business School, American University. November 2006.
5. N. Lazrieva - Invitation to be the member of PhD committee (reading/opposition) ShotaGugushvili February, 29, Amsterdam
6. M.Mania - The talk on the seminar in EVRY University: Utility maximization and hedging under partial Information, The talk on the seminar in EcolPolitechnique: An exponential martingale equation. September – October, 2009, Paris (France)
7. M. Mania - The talk on the seminar in ETH University: Mean-Variance Hedging with a quasi-continuous Process and Related BSDEs, 2009, September 7-14, Zurich (Swiss)
8. M. Mania - 5th Colloquium on Backward Stochastic Differential Equations, Finance and Applications. The title of the talk: Mean-Variance Hedging under Partial information and Related BSDEs, http://www.unilemans.fr/7Eapopier/colloque/index.html, 2008, June 18 - 20, Le Mans(France)
9. M. Mania - Convegno PRIN, METODI STOCASTICI IN FINANZA,Title of the talk: L2 Approximate pricing under restricted information, http://calvino.polito.it/~probstat/PRIN/programma.html, 2008, July 3-5, Torino (Italy)
10. T. Toronjadze, N. Lazrieva - 2008 Barcelona Conference on Asymptotic Statistics September 1 to 5, 2008, "The Robbins-Monro Type Stochastic Differential Equations", 2008, Barcelona
11. M.Mania - Humboldt State University, Berlin, 2010, invited professor, "Backward stochastic PDEs related to utility maximization and hedging".
12. T.Toronjadze, T.Uzunashvili – College of Ozarks, MO, USA, 2011, invited professors, "Copula Analysis", "Real Options".
13. D. Aslamazishvili, E. Nadareishvili – College of Ozarks, MO, USA, 2012, invited professors, Some Problems of Management and Marketing.
14. T. Tsabadze – 3rd International Conference of Applied Informatics and Computing Theory (AICT'12), One Way of Aggregation Experts' Fuzzy Estimations under Group Decision Making, Barcelona, Spain, 2012.
15. M. Mania - University of Warwick, England, 16-20 July, EPSRC Workshop – Optimal stopping, optimal control and finance. The title of the talk: Semimartingale Backward Equations and an Optimal Equivalent Change of Measure, 2012.
16. M. Mania, September 7- 12, Yerevan, Conference on Stochastic and PDE Methods in Financial Mathematics, The title of the talk: Utility Maximization and Hedging in Incomplete Markets and related Backward Stochastic PDEs, 2012

17. T. Tsabadze - 7th WSEAS International Conference Business Administration (ICBA'13), Solution of Some Management Problems by Means of Fuzzy Sets Theory, Milan, Italy, 2013.
18. T. Tsabadze – journal AIS: Advances in Information Sciences co-editor, 2013.
19. M. Mania and R. Tevzadze, March 13- 27 , 2014 , ETH Zurich , Switzerland , Seminar in Financial and Insurance Mathematics, The title of the talk: On the properties of the dynamic value functions in the problem of optimal investing in incomplete markets.
20. T. Tsabadze, April 2-4, 2014, Prague, Czech Republic, AMCME 2014, The 2014 International Conference on Applied Mathematics and Computational Methods in Engineering
21. M. Mania, The Workshop: Stochastic Analysis, Control Dynamical Systems and Applications. Jena, Germany, March 9-13, 2015. The title of the talk: On the properities of dynamic value functions in the problem of optimal investment in incomplete markets (based on common works with R. Tevzadze),
22. M. Mania, International conference on probability theory and statistics, September 7-12, 2015,Tbilisi, Georgia. The title of the talk: On regularity of dynamic value function related to the utility maximization problem (based on common works with R. Tevzadze)
23. T. Tsabadze, N. Geguchadze, One approach to decision-making in management under uncertainty. Proceedings of the 16th International Conference on Mathematics and Computers in Business and Economics (MCBE' 15), pp 53-61,Turkey, 2015, May.
24. T. Tsabadze, One approach for Aggregation of Experts' Fuzzy Opinions. Proceedings of the 16th International Conference on Fuzzy Systems (FS' 15), pp 40-47, Rome, Italy. 2015, November

სამეცნიერო ვიზიტები GAU–ში:
1. Marina Santacroce, Politechnico de Tourina. Exponential hedging in incomplete markets. November, 2007.
2. Enzo Orsingher, University of Rome "La Sapienza". On the Solutions of Linear Odd-Order Heat-Type Equations with Random Initial Conditions, September, 2007.
3. Volf Frishling, - Australian National Bank: Quantitative Analysis of Financial Markets, November, 2007
4. Estate Khmaladze–Wellington University, New Zealand. Applied Statistics and Stochastic Geometry, October – November 2007.
5. Irakli Zakariadze – College of Ozarks, MO, USA, International Management, 2011
6. Irakli Zakariadze – College of Ozarks, MO, USA, International Management, 2012
7. Gary Hiebsch – College of Ozarks, MO, USA, Professor of Communication Arts (1995) and Chairman, Business and Communication Division, Business Communications, 2012.
8. Scientific Conference, part of Tbilisi Scientific Fest. Business Computer Modeling. Speakers: I. Chelidze, N. Balavadze, N. Geguchadze, L. Gachechiladze, B. Gogichashvili, L. Borchkhadze, T. Kutalia, D. Shiolashvili, L. Verdzeuli, November, 2015
9. International Conference, Economic challenges of South and Eastern European Countries, Guide for Georgia, Chief of organizing committee: Prof. T. Toronjadze, Speakers: Bruno S. Sergi, Prof. D.sc. (Econ.) Krastyo Petkov, Levan Borchkhadze (GAU Business School), David Shiolashvili and Rati Anjaparidze (GAU Business School) November 30 – December 2, 2015

სამეცნიერო გრანტები:
1. Director: T. Toronjadze – GNSF (Georgia National Science Foundation),Martingale methods of optimal control and statistics in mathematical finance, 2008-2009.
2. Director M. Mania – ICER(International Centre for Economic Research), Optimization Problems on Incomplete Financial Markets. Martingale Approach, 2007-2008.
3. Director: M. Mania – GNSF (Georgia National Science Foundation), Optimal investing and hedging under restricted information and model uncertainty, 2010-2012.
4. Director: M. Mania – GNSF (Georgia National Science Foundation), Optimal investing and hedging under restricted information and model uncertainty, 2013-2014.

შემუშავებული სახელმძღვანელოები:

1. Essentials Of Business Administration, 2014
2. Computational Business Administration, 2014
3. Essentials Of Quantitative Finance, 2014