

# CURRICULUM VITAE

CHRISTOS E. KOUNTZAKIS

## 1. PERSONAL INFORMATION

- (1) Name: Christos Kountzakis
- (2) Father's Name: Eleftherios
- (3) Date of Birth: 9/7/1977
- (4) Place of Birth: Amaroussion Attikis
- (5) Address of Current Employment: Department of Statistics and Actuarial-Financial Mathematics University of the Aegean- School of Sciences Karlovassi of Samos P.C. 83200 GREECE Building B
- (6) Office Telephone Number: +0030- 22730-82323
- (7) Current Address: 18, Th. Pythagoras Str. Karlovassi of Samos, P.C. 83200 GREECE
- (8) 69, D. Gounari Str. Glyfada, Athens, P.C. 16561 GREECE
- (9) Number of Identity Card: AE 505278
- (10) Military Obligations: Fulfilled due to Equality Issues (June 2009)
- (11) Personal Phone Numbers: +0030-210-9612208 (Glyfada), +0030-6973395881 (mobile)
- (12) E-mail Address: chr\_koun@aegean.gr

### 1.1. Studies.

- (1) Ph.D in Mathematics (Department of Mathematics of National Technical University of Athens) Dissertation Title: 'Applications of the Partially Ordered Linear Spaces in Mathematical Economics' - Supervisor : I. A. Polyakis (Professor) September of 2006.
- (2) M.Sc. in Applied Mathematics (Department of Mathematics of National Technical University of Athens) Grade: 9.46/10 - July 2001.
- (3) B.Sc. in Mathematics (National and Kapodestrian University of Athens) - Grade: 7.73/10, September 1999.

### 1.2. Academic Positions.

- (1) 2018: Assistant Professor (Tenured -Track) of Mathematical Economics at the Department of Mathematics of the University of Aegean.
- (2) 2015: Assistant Professor of Mathematical Economics at the Department of Mathematics of the University of Aegean.
- (3) 2013: Lecturer of Mathematical Economics at the Department of Statistics and Actuarial- Financial Mathematics of the University of Aegean.
- (4) 2014: Research Assistant in the Faculty of Mathematics, Group of Finance of the University of Vienna, Austria 1090, under the Supervision of Professor Walter Schachermayer.

- (5) 2013-2014: Research Collaborator in the Department of Hotel and Tourism Management of the Cyprus University of Technology, Limassol, Cyprus, 30, Archbishop Kyprianou Str. P.C. 3036 Cyprus-Subject: 'Smart Specialization in Cyprus'
- (6) 2012-2013: Research Collaborator in the Department of Hotel and Tourism Management of the Cyprus University of Technology, Limassol, Cyprus, 30, Archbishop Kyprianou Str. P.C. 3036 Cyprus -Subject : 'Social Networks'.
- (7) 2010-2013: Adjunct Lecturer in Finance at the Department of Statistics and Actuarial - Financial Mathematics of the University of Aegean.
- (8) 2007-2010: Adjunct Lecturer in Financial Mathematics at the Department of Statistics and Actuarial - Financial Mathematics of the University of Aegean.

## 2. VERIFIED AND POTENTIAL RESEARCH INTERESTS

**Indicated by AMS Classifications (2020) -Zentralblatt and AMS Profile:** 46A25; 46A35 ; 46A40 ; 46A55; 46B10 ; 46B40 ; 46B42 ; 49J35 ; 49K27 ; 49K35 ; 60G44 ; 60G46 ; 60H05 ; 60J65 ; 90C05 ; 90C34 ; 90C48 ; 91B24 ; 91B42 ; 91B70 ; 91G05 ; 46A03 ; 46A20 ; 46A22 ; 47H07 ; 47H40 ; 60G42 ; 91B50 ; 91B51. Analysis ;Probability Theory ; Mathematical Economics; Risk Management and Insurance

## 3. RESEARCH

### 3.1. Ph.D. Publications.

- (1) C. Kountzakis, I.A.Polyrakis, 'Geometry of cones and an application in the theory of Pareto efficient points', Journal of Mathematical Analysis and Applications 320 (2006), pp. 340-351.
- (2) C. Kountzakis, I.A.Polyrakis, 'The completion of security markets', Decisions in Economics and Finance 29 (2006), pp. 1-21.

### 3.2. Rest Journal Publications.

- (1) C.E. Kountzakis, 'Super -lattice partial order relations in normed linear spaces', International Journal of Mathematical Analysis 29 (2009), pp. 1441-1460.
- (2) C.E. Kountzakis, 'Generalized Coherent Risk measures', Applied Mathematical Sciences 3 (2009), pp. 2437-2451.
- (3) C.E. Kountzakis, 'No -arbitrage pricing of non-marketed claims in multiperiod markets', International Journal of Financial Markets and Derivatives 1 (2010), pp. 125-154.
- (4) C. Kountzakis, I.A. Polyrakis, F. Xanthos, 'Non-replication of options', Mathematical Finance 22 (2012), pp. 569-584.
- (5) C.E. Kountzakis, 'Risk measures on ordered non-reflexive Banach spaces', Journal of Mathematical Analysis and Applications 373 (2011), pp. 548-562.
- (6) D.G. Konstantinides, C.E. Kountzakis, 'Risk measures in ordered normed linear spaces with non-empty cone -interior', Insurance: Mathematics and Economics 48 (2011), pp. 111-122.
- (7) C.E. Kountzakis, 'The completion of real -asset markets by options' , International Journal of Mathematics and Mathematical Sciences (2010) ID 139690
- (8) C.E. Kountzakis, 'On efficient portfolio selection using convex risk measures', Mathematics and Financial Economics 4 (2011), pp. 223-252.

- (9) D.G. Konstantinides, C.E. Kountzakis, 'The restricted convex risk measures in actuarial solvency', *Decisions in Economics and Finance*, 37 (2014), pp. 287-318.
- (10) C.E. Kountzakis, 'An aspect of restricted coherent risk measures and actuarial solvency', *Advances in Decision Sciences* ID 350765
- (11) C. Kountzakis, I.A. Polyrakis, 'Coherent Risk Measures in General Economic Models and Price Bubbles', *Journal of Mathematical Economics* 49 (2013), pp. 201-209.
- (12) C.E. Kountzakis, 'Notes on the solution of the risk minimization problem under constant investor's endowment', *Applied Mathematical Sciences* 7 (2013), pp. 1675-1688.
- (13) C.E. Kountzakis, 'Deviation measures on Banach spaces and applications', *Journal of Financial Risk Management* 2 (2013), pp. 13-28.
- (14) C.E. Kountzakis, 'Questions on the geometry of finite coherence', *Applied Mathematical Sciences*, 7 (2013), pp.3185-3195.
- (15) C.E. Kountzakis, 'Optimization of expected shortfall on convex sets', *Lithuanian Mathematical Journal* 53 (2013), pp. 412-422.
- (16) C.E. Kountzakis, 'Credit Risk Transformations', *Applied Mathematical Sciences* 8 (2014), pp. 1855-1864.
- (17) C.E. Kountzakis, 'Generalized Likelihood Functions and Random Measures', *Pure Mathematical Sciences* 3 (2014), pp. 87-95.
- (18) C.E.Kountzakis, 'Random Measures do produce Generalized Likelihoods', *Pure Mathematical Sciences* 3 (2014), pp. 97-103.
- (19) C.E. Kountzakis, 'Demand and Equilibrium in Risk Exchange Economies', *Applied Mathematical Sciences* 8 (2014), pp. 5449-5461.
- (20) C.E. Kountzakis, 'Monetary Risk Measures and Generalized Prices relevant to Set-Valued Risk Measures', *Applied Mathematical Sciences* 8 (2014), pp. 5439-5447.
- (21) C.E.Kountzakis, 'Expected Shortfall Spaces', *Applied Mathematical Sciences* 8 (2014), pp. 5463-5467.
- (22) C.E. Kountzakis, 'On the Order Form of the Fundamental Theorems of Asset Pricing', *Journal of Mathematical Finance* 4 (2014), pp. 221-233.
- (23) C.E. Kountzakis, 'The 2-Dimensional Lattice-Subspaces in Finite-State Finance', *Journal of Mathematical Finance* 4 (2014), pp. 249-254.
- (24) C.E. Kountzakis, 'Coherent Risk Measures by Pricing Functionals', *Applied Mathematical Sciences* 8 (2014), pp. 5907-5914.
- (25) C.E. Kountzakis, 'Incomplete Markets Equilibrium relying on 2 -Dimensional Lattice Subspaces', *Applied Mathematical Sciences* 9 (2015), pp. 5495-5506.
- (26) C.E. Kountzakis, 'An Equilibrium Theorem for Excess Demand Correspondences', *Applied Mathematical Sciences* 9 (2015), pp. 5117-5122.
- (27) C.E. Kountzakis, D.G. Konstantinides, 'Rearrangement Invariant, Coherent Risk Measures on  $L^0$ ', *Journal of Financial Risk Management* 4 (2015), pp. 22-25.
- (28) C.E. Kountzakis, 'Equivalence between Semimartingales and Itô processes', *International Journal of Mathematical Analysis* 9 (2015), pp. 787-791.
- (29) C.E. Kountzakis, 'Nash Equilibrium for a Price Agreement Problem in Incomplete Markets', *Applied Mathematical Sciences* 8 (2014), pp. 8079-8083.
- (30) C.E. Kountzakis, G.Vartzis, 'The general TCE-Sigma portfolio optimization model', *Applied Mathematical Sciences* 9 (2015), pp. 5251-5260.

- (31) C.E. Kountzakis, 'The Fundamental Theorem of Asset -Pricing in  $L^1$  Valued spaces of Stochastic Integrals', *Applied Mathematical Sciences* 9 (2015), pp. 5979-5986.
- (32) C.E. Kountzakis, M.P. Koutsouraki, 'On Quantum Risk Modelling', *Journal of Mathematical Finance* 6 (2016), pp. 43-47.
- (33) C.E. Kountzakis, 'Sensitivity of Risk Measures defined on  $L^1$  -Spaces', *Applied Mathematical Sciences*, Vol. 13, (2019), no. 9, pp. 449 - 453.
- (34) C.E. Kountzakis, 'Valuation of Derivatives on the Cost Variables of the Shipping Market', *Journal of Mathematical Finance* 7 (2017), pp. 514-518.
- (35) C.E. Kountzakis, 'Subjective Probability Theory on Ordered Normed Linear Spaces', *International Journal of Mathematical Analysis*, 10 (2016), pp. 739-748.
- (36) D.G. Konstantininides, C.E. Kountzakis, 'Distributions with Heavy Tails in Orlicz Spaces', *Journal of Theoretical Probability*, 30 (2017) pp. 1726-1762.
- (37) C.E. Kountzakis, L. Tibiletti, S. Farinelli, 'Generalized performance ratios and risk optimization', *Applied Mathematical Sciences* 10 (2016), 2709-2726.
- (38) P.Xidonas, C.E. Kountzakis, C.Hassapis, C. Staikouras, 'RAROC in Portfolio Optimization', *International Journal of Financial Engineering*, Vol. 3 (2016) doi.org/10.1142/S2424786316500225
- (39) P.Xidonas, C.E. Kountzakis, C.Hassapis, C. Staikouras, 'A use of Black-Scholes model in Market Risk', *International Journal of Financial Engineering and Risk Management* 2 (2016), DOI: 10.1504/IJFERM.2016.082983
- (40) P. Giannouli, C.E. Kountzakis, 'Towards an improved Credit Scoring System: the Greek case', *International Journal of Financial Engineering and Risk Management* 3 (2018) pp. 19-31.
- (41) C.E. Kountzakis, 'Conditional Risk Measures Relying On International Accounting Standards', *Applied Mathematical Sciences*, 13 (2019), pp. 455-462.
- (42) C.E. Kountzakis, 'Results on Infinite-Dimensional Demand Theory', *Applied Mathematical Sciences*, 13 (2019), pp. 163-171.
- (43) C.E. Kountzakis, P.G. Michaelides, 'Duality in infinite-dimensional production economies', *Applied Mathematical Sciences*, 13 (2019), pp. 173 -181.
- (44) C.E. Kountzakis, D. Rosello, 'Acceptability Indices of Performance for Bounded Càdlàg Processes', *Stochastics* 92 (2020) pp. 1043-1063.
- (45) Christos E. Kountzakis, Luisa Tibiletti and Mariacristina Uberti, 'The benefit-cost rate spread for Adjustable-Rate Mortgage with embedded options', *Applied Mathematical Sciences* 14 (2020) pp. 361-370.
- (46) Riza Demirer, Konstantinos Gkillas, Christos Kountzakis, and Amaryllis Mavragani 'Risk appetite and correlation jumps in financial markets', *MDPI Mathematics* 2020, 8(12), 2255; <https://doi.org/10.3390/math8122255>
- (47) Christos E. Kountzakis, 'Equilibrium in Options' Incomplete Markets', *Journal of Financial Markets and Derivatives* (2020) 7, pp. 414-423.
- (48) Vasileia Tsachouridou- Papadatou, Christos E. Kountzakis, 'Equilibrium in Incomplete Markets Revisited', *Afrika Matematika* (2021) 32, pp. 1193—1200.
- (49) C.E. Kountzakis, D. Rossello, 'Monetary risk measures for stochastic processes via Orlicz duality', *Decisions in Economics and Finance* (2022) 45, pp.35-56.
- (50) K. Ntotsis, A. Karagrigoriou, Christos Kountzakis, Panagiota Giannouli, 'Multiple Dimension Reduction for Credit Scoring Modelling and Prediction: Evidence from

- the Greek Banking System', *Communications in Statistics – Case Studies and Data Analysis* (2021) 7 (4), pp. 545–560.
- (51) C. Floros, K. Gkillas, C. Kountzakis, 'Generalized Johnson Distributions and Risk Functionals', (Waiver of APC due to the paper's quality) *MDPI Mathematics* 2022, 10 (17), 3200; <https://doi.org/10.3390/math10173200>
  - (52) C. Kountzakis, D. Rossello, 'Pareto Efficiency without Topology', *Optimization Letters* (Publication Funded by Greek National Institute of Research -HEAL as an Open Access paper) 17 (2023), pp. 1633–1641
  - (53) C. Kountzakis, V. Tsachouridou -Papadatou, 'Non-Parametric Regression and Riesz Estimators' (Waiver of APC due to the paper's quality) *MDPI Axioms*, Vol. 12, Iss. 4, (2023): 375. DOI:10.3390/axioms12040375
  - (54) C. Floros, C. Kountzakis, M. Alghalith, 'CAPM in Real World: Risk-Friendly Investments', *Annals of Financial Economics*, Vol. 19, Issue No. 02, Article No. 2450008, Year 2024.
  - (55) C. Kountzakis, D. Rossello, 'Risk Measures' Duality on Ordered Linear Spaces', (Waiver of APC due to the paper's quality) *MDPI Mathematics* 2024, 12(8), 1165; <https://doi.org/10.3390/math12081165>  
Promoted by MDPI Mathematics Social Media
  - (56) C. Floros, K. Gkillas, C. Kountzakis, 'Generalized Stochastic Integration and Financial Modelling', *Annals of Financial Economics*  
<https://doi.org/10.1142/S2010495224500143>
  - (57) C. Kountzakis, 'A note on Pareto Optimality in Incomplete Markets' in *Int. Journal of Financial Markets and Derivatives* (2025)
  - (58) C. Kountzakis, V. Tsachouridou -Papadatou, 'Pareto Efficiency in Euclidean Spaces and Its Applications in Economics' (Waiver of APC due to the paper's quality) *MDPI Computation* 13 (4), DOI: 10.3390/computation13040097,
  - (59) C. Kountzakis, C. Floros, 'A New Approach on Country Risk Monitoring', *MDPI Risks* 13 (5), DOI: 10.3390/risks13050080.
  - (60) C. Kountzakis, V. Tsachouridou -Papadatou, 'Linear Programming and Finite-Dimensional Sublattices', to appear in *Computational Mathematics and its Applications of "Peertechz Publications Pvt Ltd"*

#### 4. CHAPTERS IN COLLECTIVE VOLUMES

- (1) C.Kountzakis, S.Z. Xanthopoulos, A.N. Yannacopoulos (2011), 'Minimum regret pricing of contingent claims in incomplete markets', *Games, Dynamics and Science I* (Springer), Chapter 32, pp.503-528.
- (2) D.G. Konstantinides, C.E. Kountzakis (2014), 'Coherent risk measures under dominated variation'- *Modern Problems in Insurance Mathematics* (Springer) -Chapter 8, pp.113-138.
- (3) D.G. Konstantinides, C.E. Kountzakis (2014), 'Monetary risk functionals on Orlicz spaces produced by set-valued risk maps and random measures' - *Mathematical and Statistical Methods for Actuarial Sciences and Finance* (Springer), pp.125-128.
- (4) Giannouli, P. and Kountzakis, C. (2019). 'Examining credit scoring methodologies with alternative data' in *Data Analysis and Applications: Computational, Classification, Financial, Statistical and Stochastical Methods*, Makrides et al. eds., iSTE Wiley

- (5) C. Floros, K. Gkillas, C. Kountzakis, 'Monetary Utility Functions and Risk Functionals' (2023) DOI: 10.1007/978-3-031-29050-3<sub>2</sub>, in "Essays on Financial Analytics", (Springer). pp.27–35.
- (6) C. Floros, K. Gkillas, C. Kountzakis, 'Stochastic Differential Equations in  $L^p$  Spaces' (2023) DOI: 10.1007/978-3-031-31241-0<sub>1</sub> in "Operational Research Methods in Business, Finance and Economics", (Springer), pp. 1–6.
- (7) Karagrigoriou, A., Kountzakis, C. E and Ntotsis, K. (2024). A Rotated Principal Component Analysis for an Advanced Dimension Reduction Approach, In "Quantitative Methods and Data Analysis in Applied Demography - Volume 2: Models, Risk and Surveys", Ch. H. Skiadas and Ch. Skiadas eds. (Springer)

#### 5. SUBMITTED TO SOCIAL SCIENSE RESEARCH NETWORK JOURNAL

- 1) Floros, C., Gkillas, K., Kountzakis, C., 'An Application of the Arrhenius Equation in Portfolio Modelling', <http://dx.doi.org/10.2139/ssrn.3806118>
- 2) Gkillas, K., Kountzakis, C., 'Fitting Negatively Valued Functions in Econometric Modeling. A Simple Solution', <http://dx.doi.org/10.2139/ssrn.4336654>

#### 6. UNDER REVIEW

- 1) K. Gkillas, C. Kountzakis, 'Fitting Negatively Valued Functions in Econometric Modeling. A Simple Solution'.
- 2) S. G. Arcidiacono, C. Kountzakis, D. Rossello, 'Expectile Order and Asset Allocation'
- 3) A. Almohaimeed, C. Kountzakis, 'Vector Lattice Linear Regression Analysis : Fitting and Model Uncertainty'

#### 7. CITATIONS AND INTEREST METRICS

- (1) Google-Scholar provides 149 citations.
- (2) Research-gate provides 140 citations
- (3) Research-gate provides 9,321 Reads
- (4) Scopus citations : 44
- (5) Web of Science citations : 13
- (6) AMS reviewed papers : 23
- (7) AMS citations : 16
- (8) Academia.edu : 101 citations

#### 8. UNDERGRADUATE MODULES' TEACHING

- (1) Introduction in Financial Mathematics:  
Interest Rates, Annuities, Bonds  
Also taught in English to Erasmus Students.
- (2) Financial Mathematics I:  
Binomial Model- Risk Aversion- Expected Utility
- (3) Financial Mathematics II:  
Multi-date Security Markets  
Also taught in English to Erasmus Students.

- (4) Financial Mathematics III:  
Continuous -time Finance, Stochastic Differential Equations.
- (5) Microeconomic Theory I:  
General Equilibrium Theory
- (6) Mathematical Economics:  
Complete and Incomplete Markets
- (7) Macroeconomic Theory I:  
IS-LM, AD- AS Models
- (8) Applied Analysis:  
Sequences of Functions' Convergence -Elementary Measure Theory
- (9) Reinsurance:  
Reinsurance Contracts and Risk Functionals
- (10) Introductory Mathematical Analysis-Calculus II:  
Integration of Real-Valued Functions-The Riemann Integral- Series of Real Numbers-  
Sequences of Real -Valued Functins -Power Series and Taylor Expansions - Applica-  
tions.
- (11) Stochastic Modelling:  
Signed Measures-Probability Measures- Integration with respect to probability measures-  
Product Measures- Stochastic Processes- Semimartingales.
- (12) Life Insurance Mathematics I :  
Life Insurance Contracts- Premium Calculation- Survival Functions and Survival  
Modelling.
- (13) Elements of Measure Theory:  
algebras and  $\sigma$  -algebras of sets, measurable functions, integral of some measurable  
function,  $L^p$  spaces, convergence ways for sequences of measurable functions, mea-  
sures on topological spaces.

## 9. POSTGRADUATE MODULES' TEACHING

- (1) Financial Mathematics:  
General Equilibrium Theory
- (2) Financial Modelling:  
Data Analysis in Finance
- (3) Risk Management:  
Risk Measures and Quantitative Issues
- (4) Portfolio Optimization:  
Finite-time portfolio optimization
- (5) Derivatives:  
Options and their Valuation
- (6) Special Topics in Microeconomics  
Topics of Game Theory.
- (7) Principles of Finance (Module of NTUA Postgraduate Programme), as a Research  
Assistant.  
Multi-date Security Markets.

## 10. SUPERVISION OF B.Sc. THESES

- (1) 'Convex risk measures in asset markets' (Tsoukias Stylianos)
- (2) 'Asymptotic results in probability theory and applications' (Athena Varfi)
- (3) 'Risk measures and families of distributions' (Paschalia Liougka)
- (4) 'Software application for the calculation of VaR' (Sotirios Zisis)
- (5) 'Software application for the calculation of CVaR' (Vasil Bankov)
- (6) 'The TCE-sigma model of portfolio optimization' (Georgios Vartzis)
- (7) 'Martingales in Partial Ordered Vector Spaces' (Konstantina Founta)
- (8) 'Risk Measures in Spaces of Measurable Functions' (Stella Kavoura)
- (9) 'Equilibrium under Performance Measures' (Konstantinos Papadakis -Tsaktsiras)
- (10) 'Comparison of Portfolio Optimization Methods' (Antonios Nikolakakis)
- (11) 'Study of Performance Measures' (Krystallia Koulizaki)
- (12) 'Optimization Problems in Re-insurance' (Eleni Polymenea)
- (13) 'Optimization Problems and Robustness in Insurance' (Vasileios Moraitis)
- (14) 'Country Risk Modelling Robustness' (Spyridon Fragkoulakis)
- (15) 'Risk and Uncertainty in Economics and Finance (Michael Dedes)- in progress.

## 11. SUPERVISION OF M.Sc. THESES

- (1) 'Martingales without Probability' (Anastasia Katsiouri)
- (2) 'Financial Modelling with Jumps' (Dimitrios Kalavris)
- (3) 'International Accounting Standards and Risk Measures' (Eleni Benekou)
- (4) 'The Economic Frame of Basel III and Expected Shortfall' (Eftichia Choleva)
- (5) 'Lévy Processes and Financial Applications' (Christos Gialias)
- (6) 'Studies in Subjects of Probability Theory' (Apostolos Tsiouplis)
- (7) 'Risk Theory in Pharmacokinetics' (Vasileia Tsachouridou-Papadatou)
- (8) 'RAROC and AUGMECON in Portfolio Optimization' (Theodoros Pappas)
- (9) 'Partially Ordered Vector Spaces and Convex Risk Measures' (Lazaros Ntassis)
- (10) 'The use of Principal Components' Analysis in Credit Scoring Modeling' (Marilena Zacharaki)
- (11) 'Models of Country Risk' (Zoi Zographou)
- (12) 'Credit Risk Forecasting of the Euro zone Countries by Multivariate and Non - Parametric Methods' (Georgia Vidali)
- (13) 'Development of Stress-Testing Methods under Time-Series' (Eleftherios Tziallas)
- (14) 'Coherent Risk Measures' (Georgios Kolovos)
- (15) 'Partially Ordered Vector Spaces and Risk Measures' (Athanassios Pantazis)
- (16) 'Linear Regression Models in Vector Lattices' (Konstantinos Panagiotopoulos)
- (17) 'Stochastic Analysis in Partially Ordered Linear Spaces' (Chara Katzioti)
- (18) 'Tobit Models and Applications' (Athena Mamata).

## 12. SUPERVISION OF Ph.D. THESES

- (1) 'Applications of Mathematical Analysis in Economic Science' (Vassileia Tsachouridou-Papadatou)- completed.

### 13. COMMITTEES OF SUPERVISION OF M.Sc. THESES IN OTHER M.Sc. PROGRAMMES OF THE UNIV. OF THE AEGEAN

- (1) Commitment in the supervision of M.Sc. Thesis 'Product Documentation of Mutual Funds' (Pan. Ladas)- Supervisor: Pan. Xidonas ( Prof. of Finance in ESSCA Business School, Paris), in the frame of M.Sc. Programme 'BA for Engineers'
- (2) Commitment in the supervision of M.Sc. Thesis 'Quantitative Documentation of Mutual Funds' (M. Lefakis)- Supervisor: Pan. Xidonas (Prof. of Finance in ESSCA Business School, Paris), in the frame of M.Sc. Programme 'BA for Engineers'

### 14. COMMITMENT IN RESEARCH PROGRAM AS A VERIFIED RESEARCHER

- (1) 2013: Approval of the model for the Smart Specialization, by the Ministry of Finance of Cyprus as a joint Research Program together with the Department of Hotel and Tourism Management of the Cyprus University of Technology as a Research Collaborator (Scientific Responsibility undertaken by Assistant Professor Antonis Theocharous) funded by I.P.E. -see

*<http://www.cut.ac.cy/news/article/?contentId=11731>*

The main part of Smart Specialization Methodology was presented in 7.10.2013, at the Ministry of Finance of the Cyprus Republic before the European Commission step. The Program is now completed -see also

*[http://www.structuralfunds.org.cy/pp2014\\_2020\\_s3CY\\_pcoct2013](http://www.structuralfunds.org.cy/pp2014_2020_s3CY_pcoct2013)*

- (2) 2012-2013: Participation in the Completed Research Program on 'Social Network Analysis' funded by I.P.E (No. 0609/08) in the Department of Hotel and Tourism Management of the Cyprus University of Technology as a Research Collaborator (Scientific Responsibility undertaken by Associate Professor Antonis Theocharous).
- (3) 2003-2006: Participation in the Program of Research Scholarships 'HERAKLEITOS I' of the European Union and the Hellenic Ministry of Education. The publications (1) and (2) were supported by this Program.

### 15. LABORATORY COMMITMENTS -WITHOUT FUNDING

- (1) Hellenic Mediterranean University's Research Lab, Department of Accounting and Finance. Head: C.Floros (2020-2025)
- (2) Commitment in Lab of Finance of the Department of Business Administration of Turin University, jointly with A.Migliavacca, L.Tibiletti, M. Uberti (2016-2025)

### 16. COMMITMENTS IN RESEARCH PROJECTS

- (1) (2014) Research Project 'Sigma Research' Topics: Mathematical Finance Members: Christos E. Kountzakis, Vasileios Bankov, S.Zissis. Products: (i) 'VaR and ES Analysis Platform' (ii) 'Coherent ES [Inui-Kijima] Plat-form', E-Link for the Products:

*<http://54.229.164.76>*

- (2) Participation in the IKYDA Program 54718970: Stochastic Analysis in Finance and Physics. Coordinator: Prof. Ant. Papapantoleon, Technical University of Berlin. Under this Program I visited TU during 1-6.12.2013, gave a lecture under the title

'Credit Vector Risk Measures' and prepared the draft of a paper under the title 'Duality of Multivalued Risk Measures in Dedekind Complete Riesz Spaces'.

## 17. OTHER RESEARCH ACTIVITIES:

Reviewer Activity:

- (1) Journal of Mathematical Analysis and Applications (2 papers rev.)
- (2) Insurance: Mathematics and Economics (3 papers rev.)
- (3) Springer Open Journals in Finance (2 papers rev.)
- (4) Applied Mathematical Sciences (2 papers rev.)
- (5) Journal of Mathematical Finance (1 paper rev.)
- (6) International Journal of Financial Engineering and Risk Management (1 paper rev.)
- (7) Dependence Modeling (1 paper rev.)
- (8) Statistics and Probability Letters (1 paper rev.)
- (9) International Journal of Portfolio Analysis and Management (1 paper rev.)
- (10) Journal of Risk Finance (2 paper rev.)
- (11) MDPI Mathematics (27 paper rev.)
- (12) Proceedings of the Royal Academic Society (British) (1 paper rev.)
- (13) International Journal of Financial Markets and Derivatives (9 papers rev.)
- (14) SN -Operations Research Forum (1 paper rev.)
- (15) MDPI -Mathematics-Guest Editor of the S.I. 'Financial Modeling' jointly with Prof. C. Floros and Dr. Konstantinos Gkillas (2021)
- (16) MDPI -Mathematics-Guest Editor of the S.I. 'Advances in Topological and Functional Data Analysis' jointly with Prof. C. Floros and Dr. Konstantinos Gkillas (2023)
- (17) Journal of Statistical Theory and Practice (1 paper rev.)
- (18) Financial Research Letters (1 paper rev.)
- (19) Contemporary Mathematics (4 paper rev.)
- (20) International Journal of Financial Studies (1 paper rev.)

Also:

- (1) Reviewer in Mathematical Reviews of AMS (currently : 25 Reviews Submitted).
- (2) Reviewer in Zentralblatt of EMS (67 Reviews submitted).
- (3) MR Erdős Number = 5
- (4) (2025) Membership in the Editorial Board for the Journal: "Computational Mathematics and its Applications"
- (5) (2025) Membership of the Editorial Board: 'Journal of Advances in Applied and Computational Mathematics'

## 18. CONFERENCES

- (1) 2021 : Participation in Applied Stochastic Models and Data Analysis Congress by the contribution: C.Floros, K.Gkillias, C.Kountzakis,'Tail Properties and Applications in Actuarial Science and Finance'
- (2) 2021 : Participation in 2021 Applied Stochastic Models and Data Analysis Congress by the contribution: C.Floros, K.Gkillias, C.Kountzakis,'An Application of the Arrhenius Equation in Portfolio Modeling'

- (3) 2020: Participation in 19th Annual Hellenic Finance and Accounting Association Congress by the contribution: C.Floros, K.Gkillias, C.Kountzakis, 'An Application of the Arrhenius Equation in Portfolio Modeling'
- (4) 2019: Participation in the Workshop on Quantitative Finance that was held at ETH in Zürich in the end of January 2019. Contribution's title: C.E. Kountzakis, D. Rosello, 'Acceptability Indices of Performance for Bounded Càdlàg Processes'
- (5) 2018 : Participation in 5th Stochastic Modeling Techniques and Data Analysis International Conference with Demographics Workshop, Contribution's title: Giannouli, P., Kountzakis, C.E. 'Examining credit scoring methodologies with alternative data' Chania, Crete, Greece: 12-15 June, 2018
- (6) 2017: Participation in the 11th Seminar on Probability and Stochastic Processes, organized by the Department of Statistics Imam Khomeini International University, Ghazvin, Iran. Contribution's title: D.G. Konstantinides, C.E. Kountzakis, 'Questions on Arbitrage'.
- (7) 2016: Participation and lecture in 9th Conference in Actuarial Science and Finance on Samos: -Contribution's title: C.E. Kountzakis, 'Equilibrium under Performance Ratios'.
- (8) 2015: Participation and lecture in 28th Pan. Statistics Conference: -Contribution's title: C.E. Kountzakis, 'On Strong Sensitivity of Risk Measures on  $L^1$ -spaces'.
- (9) 2015: Participation in 28th Pan. Statistics Conference: -Contribution's title: D.G. Konstantinides, C.E. Kountzakis, 'Regular Variation in Orlicz Spaces'.
- (10) 2015: Participation in the poster session of 28th Panhellenic Statistics Conference: -Contribution's title: C.E. Kountzakis, M.P. Koutsouraki 'On Quantum Risk Modelling'.
- (11) 2014: Participation in 8th Bachelier Finance Society World Congress by poster presentation. Contribution's title: D.G.Konstantinides, C.E.Kountzakis, 'Monetary Risk Measures on Orlicz Spaces produced by Set-Valued Risk Measures and Random Measures'
- (12) 2014: Participation in 8th Bachelier Finance Society World Congress by poster presentation. Contribution's title: V.Bankov, C.E.Kountzakis, S.Zisis, 'A Computational Application for Portfolio Fitting and Inui-Kijima ES Estimation'
- (13) 2013: Participation in the 4th CEQURA Conference on Advances in Financial and Insurance Risk Management -Contribution's title: D.G. Konstantinides, C.E. Kountzakis, 'Canonical modelling for coherent risk measures in dominated variation of tails'.
- (14) 2013: Participation and lecture in the Workshop 'Stochastic Methods in Finance and Physics' held by ACMAC: -Contribution's title: D.G. Konstantinides, C.E. Kountzakis, 'Canonical modelling for coherent risk measures in dominated variation of tails'.
- (15) 2013: Participation in the International Cramér Symposium on Insurance Mathematics : -Contribution's title: D.G. Konstantinides, C.E. Kountzakis, 'Risk-measure theory under heavy-tails and conic assumptions'.
- (16) 2013: Participation and lecture in 26th Pan. Statistics Conference: -Contribution's title: C.E. Kountzakis, 'Deviation Measures on Banach Spaces and Applications'.
- (17) 2013: Participation in 26th Pan. Statistics Conference: -Contribution's title: D.G. Konstantinides, C.E. Kountzakis, 'Elements of risk-measures' theory under heavy-tail and conic assumptions'.

- (18) 2013: Participation in 26th Panhellenic Statistics Conference: -Contribution's title: C.E. Kountzakis, S.D.Tsaros, 'Generalized likelihood functions via Random Measures'.
- (19) 2012: Participation in ASSET 2012 Conference: Contribution's title : C.E. Kountzakis, I.A. Polyrakis, 'Coherent Risk Measures in General Economic Models and Price Bubbles'.
- (20) 2012: Participation in CRETE 2012 Conference: Contribution's title : C.E. Kountzakis, I.A. Polyrakis, 'Coherent Risk Measures in General Economic Models and Price Bubbles'.
- (21) 2012: Participation and lecture in 7th Conference in Actuarial Science and Finance on Samos -Contribution's title : C.E. Kountzakis 'Optimization of Expected Shortfall on Convex Sets'.
- (22) 2011: Participation and lecture in the International Conference 'Ordered Spaces and Applications' - Contribution's title : 'Risk Measures on Ordered Banach Spaces'.
- (23) 2011: Participation in 24th Pan. Statistics Conference -Contribution's title : D.G. Konstantinides, C.E. Kountzakis, 'The convex risk measures in premium calculation'.
- (24) 2010: Participation and lecture in 6th Conference in Actuarial Science and Finance on Samos - Contribution's title : D.G. Konstantinides, C.E. Kountzakis, 'Risk measures in ordered normed linear spaces with non-empty cone-interior' .
- (25) 2010: Participation in 6th Bachelier Finance World Congress poster session Contribution's title : D.G. Konstantinides, C.E. Kountzakis, 'Risk measures in ordered normed linear spaces with nonempty cone- interior' .
- (26) 2008: Participation and lecture in 5th Summer School on Stochastic Finance. Contribution's title : C.E. Kountzakis, 'Convex risk measures in partially ordered normed linear spaces'.
- (27) 2008: Participation in 7th Conference of Research in Ec. Theory and Econometrics- Contribution's title : C. Kountzakis, I.A. Polyrakis, F.Xanthos, 'Non-replication of options'.
- (28) 2008: Participation and lecture in 5th International Conference on Applied Financial Economics-Contribution's title : C. Kountzakis, I.A. Polyrakis, F.Xanthos, 'Non-replication of options'.
- (29) 2008: Participation and lecture in 12th Panhellenic Conference of Mathematical Analysis- Contribution's title : C. Kountzakis, S.Z. Xanthopoulos, A.N. Yannacopoulos, 'Pricing contingent claims in incomplete markets with a general state space: the update-of-beliefs approach'.
- (30) 2008: Participation and lecture in 21th Panhellenic Conference of Statistics- Contribution's title: C. Kountzakis, 'Perfect hedging and arbitrage-pricing of contingent claims in finite event-tree financial markets'.
- (31) 2006: Participation in C.R.E.T.E. of that year via the joint contribution with I.A. Polyrakis under the title: 'Portfolio Insurance in  $\mathbb{R}^\Omega$  and Induced Options'.
- (32) 2005: Participation in 7th SAET Conference 'Current Trends in Economics' and also in the poster session of the Conference on Research in Economic Theory and Econometrics (C.R.E.T.E) -Contribution's title: C. Kountzakis, I.A. Polyrakis, 'The completion of security markets'.

- (33) 2004: Participation and lecture in 10 th Panhellenic Conference of Mathematical Analysis- Contribution's title : C. Kountzakis, I.A. Polyrakis, 'The completion of security markets'.
- (34) 2003: Participation in 6th SAET Conference 'Current Trends in Economics' and also in 12th European Workshop on General Equilibrium Theory Contribution's title : C. Kountzakis, I.A. Polyrakis, 'Existence of Pareto Efficient Points'.
- (35) 2002: Participation and lecture in 9th Panhellenic Conference of Mathematical Analysis- Contribution's title : C. Kountzakis 'Lattice properties, arbitrage and equilibrium in the event-tree model of financial markets with infinite states' (unfinished work).

#### 18.1. Other Lectures.

- (1) 2023 : 17.1. Lecture at the Seminar of Statistics and Actuarial-Financial Mathematics under the title 'Pareto Optimality in Incomplete Markets'
- (2) 2022: 16.5. Lecture at Seminar of Statistics and Actuarial-Financial Mathematics under the title 'Results on Proper Efficiency' by V. Tsachouridou -Papadatou -joint work.
- (3) 2022: 14.5 Lecture at the Postgraduate Seminar of Statistics and Actuarial-Financial Mathematics under the title 'Stochastic Integration in  $L^p$  -spaces'
- (4) 2020: 5.5. Lecture at the Postgraduate Seminar of Statistics and Actuarial-Financial Mathematics under the title 'Solving Linear Programming Problems without Simplex Method' by V. Tsachouridou -Papadatou-joint work.
- (5) 2020: 3.3. Lecture at the Postgraduate Seminar of Statistics and Actuarial-Financial Mathematics under the title 'Equilibrium in Incomplete and CAPM Markets' (joint work with V. Tsachouridou -Papadatou)
- (6) 2016: 25.11. Lecture at the Seminar of the Department of Mathematics of National Technical University of Athens, under the title 'Questions of Arbitrage'.
- (7) 2015: 4.11. Lecture at the Seminar of Statistics and Actuarial-Financial Mathematics (Dept. of Mathematics -Univ. of the Aegean) under the title 'The Fundamental Theorem of Asset Pricing in Ordered Linear Spaces'.
- (8) 2015: Lecture under the title 'Ruin Probability under Regular Variation in Orlicz Spaces' at the Seminar of Actuarial Science and Finance of Mathematics' Department (Univ. of the Aegean) (28.5.2015)
- (9) 2014: Lecture under the title 'Rearrangement Invariant, Coherent Risk Measures on  $L^0$ ' at the University of Vienna (25.9.2014)
- (10) 2014: Lecture under the title 'On the Order Form of the Fundamental Theorems of Asset Pricing' at the University of Vienna (22.5.2014)
- (11) 2013: Lecture under the title 'Credit Vector Risk Measures' at the Berlin Mathematical School. (2/12/2013)
- (12) 2013: Lecture under the title 'Credit Vector Risk Measures' in the Seminar of Actuarial Science and Finance of Mathematics' Department (Univ. of the Aegean) (27/11/2013)
- (13) 2011: Lecture under the title 'Risk measures in ordered Banach spaces and implications of non-reflexivity in model-space selection' in the Seminar of the Department of Mathematics of National Technical University of Athens (5/6/2011).
- (14) 2010: Lecture under the title 'Characterizations of reflexive Banach spaces through coherent risk measures and their relation with bubbles in finance' in the Seminar of

the Department of Statistics and Actuarial -Financial Mathematics of the University of the Aegean (2/3/2010)

- (15) 2009: Lecture under the title 'Generalized Coherent Risk Measures' in the Seminar of the Department of Mathematics of the University of the Aegean (19/3/2009).

## 19. ADMINISTRATION

- (1) Member of the Committee for the Internal Evaluation of the Department of Statistics and Actuarial -Financial Mathematics of the University of the Aegean (Dec.2021)
- (2) Member of the Committee for gaining work experience programme of the Department of Statistics and Actuarial -Financial Mathematics of the University of the Aegean (2019-2022)
- (3) Member of the Committee for the reformulation and the responsibility of the undergraduate Programme of the (Nov.2014- Dec.2016).
- (4) Member of the Committee for the Placement in the undergraduate Programme of the Department of Statistics and Actuarial -Financial Mathematics of the University of the Aegean- 2015-2017 and 2020-2022.
- (5) Member of the Committee for the determination of the examination modules for the admission in the Doctoral Program of the Department of Mathematics (Feb.2014 till the end of the Com. Responsibility)
- (6) Member of the Committee for the time-table of the undergraduate program of the Department of Statistics and Actuarial -Financial Mathematics of the University of the Aegean (2008-2010).
- (7) During the period between December 2008- June 2010, member of the Local Organizing Committee of the 6th Conference in Actuarial Science and Finance on Samos, held on Samos island. This Conference is established on the scientific cooperation of the University of the Aegean with both of the Katholieke Universiteit Leuven and the Université Catholique de Louvain (Belgium) and the University of Copenhagen (Denmark). The President of the Local Organizing Committee is the Professor D.G. Konstantinides.
- (8) Member of the Local Organizing Committee of the 7th Conference in Actuarial Science and Finance on Samos, which was held on Samos island in June of 2012.
- (9) Member of the Local Organizing Committee of the Conference 'Ordered Spaces and Applications' which was held by the Department of Mathematics of the National Technical University of Athens (25-27.11.2011).
- (10) Member of the Local Organizing Committee of the 8th Conference in Actuarial Science and Finance on Samos, which was held on Samos island in June of 2014.
- (11) Member of the Local Organizing Committee of the 9th Conference in Actuarial Science and Finance on Samos, which was held on Samos island during May-June 2016.
- (12) Member of the Local Organizing Committee of the 10th Conference in Actuarial Science and Finance on Samos, which was held on Samos island during May-June 2018.

## 20. AWARDS -SCHOLARSHIPS

- (1) 2025 : "Best Researcher Award" under the Math Scientist Awards 2025, in recognition of my significant contributions to Mathematical Economics.
- (2) 2003-2006: Participation in the Program of Research Scholarships HERAKLEITOS I of the European Union and the Hellenic Ministry of Education. The publications (1) and (2) were supported by this Program.
- (3) 2005: Thomaideion Prize from the National Technical University of Athens for the paper 'The completion of security markets'.

- (4) 2001-2003: Funding of the doctoral research in the Department of Mathematics in the National Technical University of Athens by the 'PROPONDIS' Foundation.
- (5) 1999: Prize of attainment of the National Scholarship Foundation at the end of the undergraduate studies at the Mathematics' Department of the University of Athens.
- (6) 1995-1999: Scholarship of attainment of the National Scholarship Foundation for the first, the second and the third year of undergraduate studies at the Mathematics' Department in the University of Athens.
- (7) 1995-1999: Scholarship by A. Papadakis Endowment (Administrator: Department of Endowments and Scholarships of the University of Athens) during the undergraduate studies at the Department of Mathematics in the University of Athens.

## 21. OTHER INFORMATION

- (1) Languages: Greek (native speaker), English (fluently), German (elementary)
- (2) Mathematical Programming: Mathematica
- (3) Statistical Programming: SPSS, Minitab, Statgraphics.
- (4) Social Network Programming: UCINET.
- (5) Comp. Programming : Pascal, Turbo Pascal.