

Department of Financial Stability  
Bank of Greece  
Amerikis 3, Athens, 102 50 Greece  
e-mail: [sapapa@bankofgreece.gr](mailto:sapapa@bankofgreece.gr); [savasp6@gmail.com](mailto:savasp6@gmail.com)  
Cell: 6977343023, phone: 2103205106  
Personal Website: <http://savas-papadopoulos.blogspot.com/2010/01/homepage.html>  
<http://www.ierd.duth.gr/index.php?cid=190&st=1>

Citizenship: Greek  
Birthplace: Thessaloniki, Greece

*Revised in 16/11/18*

# Savas Papadopoulos – Resume

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## Professional Objective and Related Experiences

A research scientific position combining, computing, publications, teaching, consulting and collaboration with applied scientists, e.g. in Industry, or in a University, in a Central Bank, Financial Organization, etc.

**Scientific areas:** Data Science, Statistics, Econometrics, Risk Management, Mathematics, Operations Research, Programming, Banking and Finance.

### **Teaching experience:**

**Graduate:** Predictive Modeling & Machine Learning, Advanced Econometrics, Econometric and Psychometric Models, Multivariate Analysis, Survey Sampling.

**Undergraduate:** Financial Forecasting by Data Science, Econometrics I, Econometrics II, Statistics I & II, Risk Management, Biometrics, Probability and Mathematical Statistics, Math and Quantitative techniques for Business, Statistical Methods, College Algebra, Discrete Mathematics, Contemporary Mathematics and Calculus.

**Research experience:** Forecasting & Predictive Modeling, Early Warning Systems for Banks, Stress Testing, Risk Assessment and Bank Rating, Financial Stability, Machine Learning, Unbalanced Dynamic Panel Data, Structural Equation Modeling, Nonparametric Regression, Statistical Computing, Estimation and Goodness-of-fit.

**Consulting Experience:** Projects in Banking, Finance, Business, Medicine, Agriculture and Social Sciences.

## Education

Aug. '92–Aug. '96 Iowa State University U.S.A.

### **Doctor of Philosophy in Statistics.**

- **Dissertation:** «Structural Equation and Factor Analyses for Several Populations and Longitudinal Data»
- **Major Professor:** Professor Yasuo Amemiya.
- **Course work includes:** Reliability, Time Series, Multivariate Analysis, Experimental Design, Nonlinear Models and Advanced Statistical Theory.
- **GPA:** 3.57 out of 4

Aug. '90–Aug. '92 Iowa State University U.S.A.

**Master of Science in Statistics.**

- Research Paper: «An Imputation Procedure for the National Resources Inventory of U.S.A.».
- Major Professor: Distinguished Professor Wayne A. Fuller.
- Course work includes: Econometrics, Bayesian Decision Theory, Statistical Computing, Linear Models, Statistical Methods and Theory
- GPA: 3.64 out of 4

Sep. '85 – Oct '89 University of Ioannina, Ioannina, Greece

**Bachelor of Science in Mathematics.**

- Minor: Statistics
- Course work includes several several classes in : Computer Sciences, Numerical Analysis, Operations Research, Probability, Statistics, Differential Equations and many advanced theoretical classes.
- GPA: Excellent 9.01 out of 10.

**Professional  
experience**

April. '11 – Present

**Bank of Greece - Department of Financial Stability  
– Section of Financial Risk Monitoring  
Head of Section**

Projects:

1. Early Warning Systems for Financial Crises
2. Stress Testing
3. Capital Buffers
4. Financial stress Index

March '18 – June '18

**University of Athens – Department of Economics**

**Visiting Faculty at Graduate Program**

- Teaching: ***Financial Forecasting by Data Science***:
- Machine Learning, Predictive Modeling, Data Mining

March '17 – June '17

University of Athens – Department of Economics - UADPhilEcon:

**Visiting Faculty at Graduate & Undergraduate Program**

- Teaching: ***Statistics & Econometrics Modeling***: Graduate  
*GARCH Modeling, Bootstrapping, Machine Learning*
- Teaching: ***Statistics for Economists***: Undergraduate  
*Time Series Forecasting, Computational Economics*

March '16 – June '16

University of Athens – Department of Economics - UADPhilEcon:

### **Visiting Faculty**

- Teaching: **Econometrics:** Undergraduate:
- Cross Sectional Regression, Time Series Analysis, Panel Data Modeling, Non-linear regression, Heteroscedasticity

May '08 – October '14

Democritus University of Thrace – Department of International Economics Relations and Development

### **Assistant Professor of University**

- Teaching: Statistics I, Statistics II, Econometrics I, Econometrics II (Cross-Sectional & Time Series Regression, Panel Data Analysis, Measurement Error Models) and Risk Management .
- **Research Coordinator** of the research program Thalís with title “ **Risk Assessment and Stress Testing on European Banks**”.
- Budget: 600,000 €.
- Acceptance rate of research proposals: 12.7%.
- Participation of Distinguished Professors: Tom Sager, Iftekhar Hasan, Etti Baranoff.

Jan. '03 – Mar. 2008

Bank of Greece- Department for the Supervision of Credit Supervision of Credit System and Financial Institutions –Division of Statistics

Projects:.

1. Early Warning Systems for Banks
2. Loan Loss Provisioning and Macroeconomic Variables like GTP and Rates
3. Sampling for Banking Supervision
4. Risk Management – Stress Testing

March '05 – May '08

Democritus University of Thrace – Department of International Economics Relations and Development

### **Visiting Assistant Professor of University**

- Teaching: Statistics I, Statistics II, Econometrics I, Econometrics II .

Oct. '04 – Feb. '05

University of Athens – Department of Economics - UADPhilEcon:

### **Visiting Faculty**

- **Teaching: Advanced Econometrics:** UADPhilEcon: Ec 222: Dynamic Panel Data, Structural Equation Modeling, Simultaneous Equations, Asymptotic Theory of MLE, GLS, GMM, MD estimators, Data Analysis with SAS.

Feb. '02 – July. '04

A) University of Indianapolis at Athens - Greece:

**Lecturer**

- **Teaching:** Statistics for Economics & Business, Linear Algebra, Discrete Mathematics and Calculus.

B) New York College at Thessaloniki - Greece:

**Lecturer**

- **Teaching:** Statistics for Economics & Business, Quantitative Techniques for Business.

Sept. '00 – March. '02 Greek Army

July. '98 – June. '00 Rice University Texas, U.S.A.

**Visiting Assistant Professor**

- **Teaching:** Econometric and Psychometric Models, Probability and Statistics and Introduction to Statistics for Biosciences.
- **Research:** (i) Ανάλυση παραγόντων και δομικών εξισώσεων (Θεωρία και λογισμικό). (ii) Μη παραμετρικές τεχνικές. (iii) Μη γραμμική παλινδρόμηση.
- **Projects:** (i) Statistical Analyses for Cervical Precancer Detection. Classification Methods, Principal Components κλπ. Worked with Dennis Cox. (ii) Multivariate Panel Data for the Life Insurance Industry. Econometric Models, Μοντελοποίηση Δομικών Εξισώσεων. Worked with Tom Sager and Etti Baranoff.

Aug. '96 – June. '98 Texas A&M University-Kingsville U.S.A.

**Visiting Assistant Professor**

- **Teaching:** Multivariate Analysis, Survey Sampling, Advanced and Elementary Biometrics, Statistical Methods, Elementary Statistical and College Algebra.
- **Research:** (i) Πολυδιάστατα Μοντέλα σε Μη-κανονικούς και Συσχετιζόμενους Πληθυσμούς. (ii) Bootstrapping και Jackknife τεχνικές. Σε συνεργασία με μεταπτυχιακούς φοιτητές, κάτω υπό την υποβλέψει μου.
- **Consulting:** Helping graduate students that work with real data. Statistical approaches used: MANOVA, Logistic Regression, Survey Sampling Technique and Standard Statistical Methods.
- **University Service:** Participating in department and university committees.

Aug. '94 – Mai '96 Iowa State University U.S.A.

### Teaching Assistant

- Working as a teaching assistance in following course: Econometrics, Statistical Methods for Research Workers, Probability and Statistics for Engineers, Principles of Statistics, Introduction to Statistics , Advanced Statistical Methods and Statistical Theory for Research Workers.

Summer'94 Educational Testing Service – Princeton, U.S.A.

### Internship Fellow

- Participated in ETS's Summer Program in Research for Graduate Students.
- Worked in a project with Dr. Ming Mei Wang on Test Equating Procedures.

Aug. '90 – Aug, '94 Iowa State University U.S.A.

### Research Assistant

- Work three years in the Survey Section of the Statistical Laboratory of ISU. Main duties: Statistical Analyses, data manipulation and SAS programming.
- Worked with the Distinguished Professor Dr. Wayne A. Fuller on projects for USDA and for the second edition of his book with the title "*Introduction to Statistical Time Series*".
- Worked with the Professor Dr. Jay Breidt on a project involving, statistical analysis, data manipulation and post-stratification sampling techniques

Sep. '89 – Jul. '90 University of Ioannina Ioannina, Greece

### Research Assistant

- Worked on a statistical research project which aimed to examine how efficiently the departments of the Greek Universities worked.

## Publications in Journals

1. Papadopoulos, S. and Amemiya, Y.. (2005) "*Correlated Samples with Fixed and Non-normal Latent Variables*". **Annals of Statistics**. Vol. 33, No. 6., p 2732-2757. 2017 **Impact Factor: 3.023**
2. Baranoff, E., Sager, T. , and Papadopoulos, S. (2007) "*Capital and Risk Revisited: A Structural Equation Modeling Approach for Life Insurers*". **Journal of Risk and Insurance**, Vol. 74, No. 3, 653-681 . **2017 Impact Factor: 1.343**
3. Papadopoulos, S., Stavroulias, P, and Sager T. (2018), "*Systemic Early Warning Systems for EU141 based on the 2008 Crisis: Proposed*

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<sup>1</sup> EU14 stands for the EU15 countries in the European Union prior to the accession of ten candidate countries on 1 May 2004, minus Luxemburg. Luxemburg was excluded due to missing values of variables important for the study

*Estimation and Assessment for Classification*”, Journal of Banking Regulation. 2010 RG journal impact: 0.6

4. Papadopoulos, S., Stavroulias, P., Sager, T., & Baranoff, E. (2018). A Three-State Early Warning System for the European Union. Journal of Risk. 5-year Impact Factor: 0.627
5. Bampatsou, C., Papadopoulos, S., & Zervas, E. (2013). “*Technical efficiency of economic systems of EU-15 countries based on energy consumption*”. Energy Policy, 55, 426-434. 5-year Impact Factor: 4.599
6. Papadopoulos, Savas, et al. "A ternary-state early warning system for the European Union." (2017).
7. Papadopoulos, S., Stavroulias, P, and Sager T. (2016), “*Systemic Early Warning Systems for EU15 based on the 2008 Crisis*” Bank of Greece. Working Paper.
8. Papadopoulos, G., Papadopoulos, S, and Sager T. (2016), “*Credit risk stress testing for EU15 banks: A model combination approach*” Bank of Greece. Working Paper.
9. Papadopoulos, S. (2013) ” *Confirmatory factor analyses on non-normal panel data: an application to banking*”. International Journal of Computational Economics and Econometrics. Scopus Journal.
10. Papadopoulos, S. (2012). “*Application on Banking Supervision for Central Banks*”. International Journal of Economics.
11. Papadopoulos, S. (2012) “*Asymptotic Robustness for Longitudinal Factor Analysis*”. International Journal of Computational Economics and Econometrics. Scopus Journal.
12. Papadopoulos, S. (2011). “*Inference for Structural Equation Modeling on Dependent Populations*”. International Journal of Computational Economics and Econometrics. Scopus Journal.
13. Papadopoulos, S. (2010).”*Multivariate Models with Latent Variables on Banking and Insurance Panel Data*”. International Journal of Business Policy and Economics. Vol. 3, No. 1, 65-75.
14. Papadopoulos, S. (2010). “*Theory and Methodology for Panel Data: Tested by Simulations Based on Financial Data*”. International Journal of Computational Economics and Econometrics. Scopus Journal.
15. Papadopoulos, S. (2010). “*Hierarchical Grouping Versus Nearest Neighbor on Imputation Applied to Agricultural Data*”. International Journal of Economics.
16. Trimmis, N. and Papadopoulos, S. (2009) “*Monaural performance intensity functions of average esophageal speech*”. The International Journal of Medicine. pp. 299-302.

## **Working Papers**

17. Papadopoulos, S. “A Formula for Predicting Loan Loss Reserves under Adverse GDP Scenarios for EU15 Banks”. To be submitted for publication soon. Working paper.
18. Papadopoulos, S. “A New Method for Dynamic Panel Data Models”. To be submitted for publication soon. Working paper.

## **Selected Citations**

### **Citations for Annals of Statistics (2005).**

- LL Lo, PCM Molenaar, M Rovine, (2017) Determining the number of factors in P-technique factor analysis, **Applied Developmental Science**, Taylor & Francis
- Jin, Shaobo, Fan Yang-Wallentin, and Anders Christoffersson. (2015) "Asymptotic efficiency of the pseudo-maximum likelihood estimator in multi-group factor models with pooled data." **British Journal of Mathematical and Statistical Psychology** (2015).
- Gunzler, D., Tang, W., Lu, N., Wu, P., & Tu, X. M. (2014). A class of distribution-free models for longitudinal mediation analysis. **Psychometrika**, 79(4), 543-568.
- Perdomo, B. L., Jones-Farmer, L. A., Edwards, B. D., & Svyantek, D. (2014). The Robustness of ME/I Evaluations to Among-Group Dependence. **Structural Equation Modeling: A Multidisciplinary Journal**, 21(1), 40-53.
- LA Jones-Farmer (2010). The effect of among-group dependence on the invariance likelihood ratio test. **Structural Equation Modeling**.
- Song X.Y., Lee S.Y., and Hser Y.I. (2008) A two-level structural equation model approach for analyzing multivariate longitudinal responses. **Statistics in medicine**, 27, 3017-3041.
- L. Allison Jones-Farmer (2010) The Effect of Among-Group Dependence on the Invariance Likelihood Ratio Test. **Structural Equation Modeling: A Multidisciplinary Journal**, 1532-8007, Volume 17, Issue 3, 2010, Pages 464 – 480.
- Perdomo, B.L. (2011) The Effect of Between Group Dependence on Measurement Equivalence/Invariance Tests, etd.auburn.edu, Thesis.
- Saarani, A. N., & Shahadan, F. (2012). Analyzing the validity of working capital determinant factors of enterprise 50 (E50) firms in Malaysia using partial least square-structural equation modeling.
- Bou, J. C., & Satorra, A. (2014). Univariate versus multivariate modeling of panel data.
- Scholtus, S., Bakker, B. F., & van Delden, A. Modelling Measurement Error to Estimate Bias in Administrative and Survey Variables.
- Jin, S. (2015). Essays on Estimation Methods for Factor Models and Structural Equation Models.
- A Cois, (2017). - Understanding blood pressure dynamics in the South African population: a latent variables approach to the analysis and comparison of data from multiple surveys, open.uct.ac.za
- YL Choong, (2016). The interaction effects of working capital management on the relationship between key determinants of working capital and firm performance, etd.uum.edu.my
- S Jin, (2015). Essays on Estimation Methods for Factor Models and Structural Equation Models, diva-portal.org
- JC Bou, A Satorra (2014). Univariate versus multivariate modeling of panel data, repositori.upf.edu

### **Citations for Journal of Risk and Insurance (2007).**

- Mankaï, Selim, and Aymen Belgacem. "INTERACTIONS BETWEEN RISK TAKING, CAPITAL, AND REINSURANCE FOR PROPERTY-LIABILITY INSURANCE FIRMS." **Journal of Risk and Insurance** (2015).
- Shim, J. (2015). AN INVESTIGATION OF MARKET CONCENTRATION AND FINANCIAL STABILITY IN PROPERTY-

LIABILITY INSURANCE INDUSTRY. *Journal of Risk and Insurance*.

- Hu, J. L., & Yu, H. E. (2015). Risk, Capital, and Operating Efficiency: Evidence from Taiwan's Life Insurance Market. *Emerging Markets Finance and Trade*, 51(sup1), S121-S132.
- Mohammadi, Mohammad Alipour Mir Farhad Seddigh, and Hojjatollah Derakhshan. "International Journal of Law and Management." *Management* 57.1 (2015): 53-83.
- Hendrych, R., & Cipra, T. (2015). Econometric Model of the Czech Life Insurance Market. *Prague Economic Papers*, 2015(2), 173-191.
- Eling, M., & Marek, S. D. (2014). Corporate governance and risk taking: Evidence from the UK and German insurance markets. *Journal of Risk and Insurance*, 81(3), 653-682.
- Lin, W. C., Lai, Y. H., & Powers, M. R. (2014). The relationship between regulatory pressure and insurer risk taking. *Journal of Risk and Insurance*, 81(2), 271-301.
- Hu, J. L., & Yu, H. E. (2014). Risk management in life insurance companies: Evidence from Taiwan. *The North American Journal of Economics and Finance*, 29, 185-199.
- Hock Ng, T., Lee Chong, L., & Ismail, H. (2013). Firm size and risk taking in Malaysia's insurance industry. *The Journal of Risk Finance*, 14(4), 378-391.
- Eling, M., & Marek, S. D. (2012). Internal and external drivers for risk taking in UK and German insurance markets. *International Journal of Banking, Accounting and Finance*, 4(1), 48-76.
- Cheng, J. Elyasiani, E. (2011). Institutional Ownership Stability and Risk Taking: Evidence From the Life–Health Insurance Industry, *Journal of Risk and Insurance*.
- Bin Lu; Xin-Yuan Song; Xin-Dan Li (2010) Bayesian analysis of multi-group nonlinear structural equation models with application to behavioral finance. *Quantitative Finance*, 1469-7696. Reference in Journal of Risk and Insurance, 2007.
- Sabiwalsky, R. (2010). Nonlinear modelling of target leverage with latent determinant variables—new evidence on the trade-off theory. *Review of financial economics*, 19(4), 137-150.
- Born, B., Lin, H.J., Wen, M.M. and Yang C.C. (2009). The Dynamic Interactions between Risk Management, Capital Management, and Financial Management in the U.S. Property/Liability Insurance Industry", *Asia-Pacific Journal of Risk and Insurance*.
- Eling, M. and Marek, S. D..(2012). "Die Risikoübernahme von Versicherungsunternehmen: Eine empirische Analyse für Deutschland und Großbritannien" Springer, Zeitschrift für die gesamte Versicherungswissenschaft. Volume 99, Number 5, 711-724, DOI: 10.1007/s12297-010-0125-z.
- Eling, M. (2012). Internal and external drivers for risk taking in UK and German insurance markets, *International Journal of Banking, Accounting and ...*.

Citations for Energy Policy (2013).

- Montoya, Francisco G., Maria J. Aguilera, and Francisco Manzano-Agugliaro. "Renewable energy production in Spain: A review. *Renewable and Sustainable Energy Reviews*" 33 (2014): 509-531.
- Gaigalis, Vygasdas, and Romualdas Skema. "Sustainable economy development and transition of fuel and energy in Lithuania after



integration into the European Union." **Renewable and Sustainable Energy Reviews** 29 (2014): 719-733.

- Khalili-Damghani, Kaveh, Madjid Tavana, and Elham Haji-Saami. "A data envelopment analysis model with interval data and undesirable output for combined cycle power plant performance assessment." **Expert Systems with Applications** 42.2 (2015): 760-773.
- Makridou, Georgia, et al. "Measuring the efficiency of energy-intensive industries across European countries." **Energy Policy** 88 (2016): 573-583.
- García-Alcaraz, J. L., et al. "Recent DEA Applications to Industry: A Literature Review From 2010 To 2014."
- Makridou, Georgia, et al. "A two-stage approach for energy efficiency analysis in European Union countries." **Energy Journal** 36.2 (2015). A comprehensive review of data envelopment analysis (DEA) approach in energy efficiency
- A Mardani, EK Zavadskas, D Streimikiene... - A comprehensive review of data envelopment analysis (DEA) approach in energy efficiency Energy ..., 2017 – Elsevier
- Measuring the efficiency of energy-intensive industries across European countries. G Makridou, K Andriosopoulos, M Doumpos... - Energy Policy, 2016 – Elsevier
- A data envelopment analysis model with interval data and undesirable output for combined cycle power plant performance assessment, K Khalili-Damghani, M Tavana, E Haji-Saami - Expert Systems with ..., 2015 – Elsevier
- A literature study for DEA applied to energy and environment, T Sueyoshi, Y Yuan, M Goto - Energy Economics, 2017 – Elsevier, A survey and analysis of the first 40 years of scholarly literature in DEA: 1978–2016
- A Emrouznejad, G Yang - Socio-Economic Planning Sciences, 2018 – Elsevier, Marginal Rate of Transformation and Rate of Substitution measured by DEA environmental assessment: Comparison among European and North American nations, T Sueyoshi, Y Yuan - Energy Economics, 2016 – Elsevier
- A Two-stage Approach for Energy Efficiency Analysis in European Union Countries. G Makridou, K Andriosopoulos, M Doumpos... - Energy ..., 2015 - search.ebscohost.com
- Sustainable economy development and transition of fuel and energy in Lithuania after integration into the European Union, V Gaigalis, R Skema - Renewable and Sustainable Energy Reviews, 2014 – Elsevier
- The analysis of energy efficiency of the Mediterranean countries: A two-stage double bootstrap DEA approach, E Jebali, H Essid, N Khraief - Energy, 2017 - Elsevier

## **Computer Skills**

- 25 years experience with: SAS Language (Base SAS Procedures, SAS/IML, SAS/GRAPH, SAS/ETS, SAS/INSIGHT, SAS Macro.
- Python for Data Science (Pandas, NumPy, XGBoost, Keras, Scikit, Tensorflow, etc.), R (R-Studio, RExcel), MATLAB, WEKA, STATA, SAS-JMP Pro, SPSS Statistics Premium, SPSS Modeler, PSPP, Gretl, E-VIEWS, EQS, MINITAB, EXCEL.
- Operating Systems: Linux, UNIX, OSX (Macintosh), Windows 10, & 7 and Android.

- Latex (TexMaker & Emacs), Equation Editor, Word, Power Point, Open Office, Online Office and Statistics, Adobe Professional and Mathematica.
- Databases: Datastream, Bankscope, Worldbank, IMF, Eurostat, Elstat.

**Presentations  
in Conferences,  
Universities,  
Institutions,  
etc.**

1. 21/12/2018, FEBS. Credit Card Fraud Detection on Missing and Big Data, Savas Papadopoulos. University of Athens.
2. 19/12/2017, FEBS. *Forecasting Deep Stock Market Drops for EU15 Indices*, Savas Papadopoulos. University of Athens.
3. 7/7/2017. International Conference of Panel Data. *Systemic Early Warning Systems for EU14 based on the 2008 Crisis*. Savas Papadopoulos. University of Macedonia. Thessaloniki.
4. 21/12/2015. Bank of Greece, Research Department. *Econometric Modeling for Systemic and Credit Risk*, Savas Papadopoulos
5. 03/07/2015. Bank of Greece Department of Financial Stability. Macroprudential Predictive Modeling, Papadopoulos, S. Stavroulias, P. Sager, T..
6. 07/12/2014. The 8th International Conference on Computational and Financial Econometrics (ERCIM-CFE 2014) Pisa, Italy. *A formula for predicting loan loss reserves under adverse GDP scenarios for EU15 banks*. Savas Papadopoulos.
7. 24/08/2014. The 21st International Conference on Computational Statistics, Geneva 2014, *Early warning systems and stress testing for macroprudential policy*, Savas Papadopoulos.
8. 23-26/4/2014. " 270 Panhellenic Conference of Statistics, Thessaloniki, Stress tests of EU15 bank Sector: Model evaluation and capital adequacy, Papadopoulos S.,
9. 15/12/2013. The 6th International Conference of the ERCIM WG on Computational and Methodological Statistics (ERCIM 2013), University of London, UK, 14-16 December 2013. S. Papadopoulos, G. Papadopoulos. *Estimation and goodness-of-fit tests on stress test models for banks*.
10. 23/07/2013. 29th European Meeting of Statisticians in Budapest (EMS 2013). A New Method for Dynamic Panel Models: Applied to Stress Testing. Savas Papadopoulos
11. 8-11/5/2013. 260 Panhellenic Conference of Statistics, Pireas. Causality and modeling among Greek CDS, bonds and stock. Papadopoulos S.,
12. 8-11/5/2013. " 260 Panhellenic Conference of Statistics, Pireas. Testing capital needs, profit and credit of European banks under stress. Papadopoulos S.,
13. 2-4/12/11. Capital Buffers of European Banks: Determinants and Cyclicity, 20 National Conference of the Financial Engineering and Banking Society FEBS., Athens, Greece.
14. 3-4/12/10. Stress Testing for Credit Risk on US & Greek Banks by Dynamic Panel Data Models: New Results and a Novel Method. 10 National Conference of the Financial Engineering and Banking Society FEBS., Athens, Greece.
15. 17-22/08/2010, "Dynamic Panel Data Models with Random Effects by Restricted Regressions". 28th European Meeting of Statisticians (EMS2010), Peireas, Greece.
16. 2-4/07/10 "A New Method for Dynamic Panel Data Models with Random Effects". International Conference on "Global Trends in the Efficiency and Risk Management of Financial Services". EURO Working Group on Efficiency & Productivity Analysis. Chania, Greece.
17. 08/04/10 "Innovations on Dynamic Panel Data Models with Random Effects " 23<sup>0</sup> Panhellenic Conference of Statistics, Veroia.

18. 30/10/09. "Estimating Dynamic Panel Data Models with Autocorrelation by Restricted Regressions". 3rd International Conference on Computational and Financial Econometrics (CFE'09) 29-31 October 2009, Grand Resort Hotel, Limassol, Cyprus.
19. 8/6/06 "Fitting structural dynamic models on non-normal-panel data as models on normal-cross-sectional data: applied to banking" 13<sup>th</sup> International Conference on Panel Data, Cambridge, UK.
20. 18/5/06 "Structural Equation Modeling on Non-Normal-Panel Data: Applied to Finance and Banking" Statistics and Operations Research Seminar – Department of Economics – University Pompeu Fabra, Barcelona, Spain.
21. 5/5/05 "A Fundamental Theorem on the Robustness of Cross-Sectional Methods to Panel Data: An Application to Banking" 18<sup>o</sup> Panhellenic Conference of Statistics, Phodes.
22. 23/12/04 "*The Effect of Macroeconomic Variables to the Non-Performing Loans of Greek Banks*" Bank of Greece, Athens.
23. 23/12/04 "*Early Warning Systems for the Greek Banking Sector*" Bank of Greece, Athens.
24. 16/4/04 "*Panel Data and Structural Equation Modeling: Theory and Applications to Banking*" 17<sup>o</sup> Panhellenic Conference of Statistics, Lefkada.
25. 2/5/03 "*Asymptotic Robustness of Multivariate Models with Latent Variables for Unbalanced Panel Data*" 16<sup>o</sup> Panhellenic Conference of Statistics, Kavala.
26. 18/6/02 «*Statistical Equation Modeling for the Impact of Regulated versus Managerial Asset Risk to the Capital Structure of Life Insurance Companies in USA*» Aristotel University of Thessaloniki, Department of Economics, Thessaloniki.
28. 11/5/02 "*Finance Models with Structural Equations for the Capital Structure of Life Insurance Companies*" 15<sup>o</sup> Panhellenic Conference of Statistics, Ioannina.
29. 02/14/99 "*Structural Equation Modeling for Correlated Samples*", George Washington University, Department of Statistics, Washington, DC.
30. 3/23/99 "*Latent Variable Modeling and its Applications*" West Chester University of Pennsylvania, Department of Mathematics, West Chester, Pennsylvania.
31. 8/12/98 "*Factor Analysis for Repeated Measures with Equal Error Variances over Measures*" 1998 Joint Statistical Meeting of ASA. Dallas, Texas.
32. 3/4/98 "*Statistical Software (EQS) for Path Diagrams and Structural Equation Modeling*", Texas A&M University-Kingsville, Mathematics Seminar, Kingsville, Texas.
33. 1/26/98 "*Latent Variable Models for Non-normal and Dependent Samples*", Rice University, Department of Statistics, Colloquium, Houston Texas.
34. 10/22/97 "*Relationships Among Distributions*", Texas A&M University-Kingsville, Mathematics Seminar, Kingsville, Texas.
35. 4/30/97 "*Longitudinal Models with Latent Variables*", Texas A&M University-Kingsville, Mathematics Seminar, Kingsville, Texas.
36. 11/21/96. "*Latent Variable Models under General Conditions*", Texas A&M University, Department of Statistics, Statistics Colloquium, College Station, Texas.

37. 10/25/96. "Longitudinal Models with Latent Variables". Joint Seminar of the Mathematics Facilities, Texas A&M University-Corpus Christi, Delmar College, and Texas A&M University-Kingsville. Kingsville, Texas.
38. 07/15/96 "Models with Latent Variables", Texas A&M University-Kingsville, Invited talk, Kingsville, Texas.
39. 05/06/96 "Structural Equation Modeling in Correlated Samples", Virginia Commonwealth University, Department of Mathematics, Richmond, Virginia.
40. 04/08/96 "The Applications of Structural Statistical Modeling in Medicine", Washington University, Medical Center, Saint Louis, Missouri.
41. 03/22/96 "Correlation Coefficient", Pittsburg State University, Department of Mathematics, Pittsburg, Kansas.
42. 11/18/95. "Factor Analysis for Unbalanced Repeated Measures". Conference in Honor of Herbert A. David's 70th Birthday. Ames, Iowa.
43. 10/19/95. "Multivariate Linear Models in Repeated Measures", University of Texas MD Anderson Cancer Center, Department of Mathematical Sciences, and Department of Behavioral Sciences, Houston, Texas.
44. 08/12/95. "On Factor Analysis of Longitudinal Data". 1995 Joint Statistical Meeting of ASA. Orlando, Florida.
45. 07/23/95. "Structural Equation and Factor Analyses for Several Populations and Panel Data". Educational Testing Service. Princeton, NJ.
46. 05/14/95. "On the Use of Structural Equation Modeling for Non-normal Data". 1995 Annual Conference of the Greek Statistical Institute, Delfi, Greece.
47. 01/07/95. "Structural Equation Analysis of Non-normal Multivariate Panel Data". 1995 ASA Winter Conference, Raleigh, North Carolina.
48. 08/12/94. "Asymptotic Robustness for the Structural Equation Analysis of Several Populations". 1994 Joint Statistical Meeting of ASA., Toronto, Canada.

## **Participation in Conferences and Workshops**

1. 19/12/17. 2o National Conference of the Financial Engineering and Banking Society FEBS., Athens, Greece.
2. 7/7/17. The 2017 International Panel Data Conference. *Systemic Early Warning Systems for EU14 based on the 2008 Crisis*, Savas Papadopoulos. Thessaloniki. Greece.
3. 2-4/12/11. 2o National Conference of the Financial Engineering and Banking Society FEBS., Athens, Greece.
4. 3-4/12/10. 1o National Conference of the Financial Engineering and Banking Society FEBS., Athens, Greece.
5. 17-23/08/2010, 28th European Meeting of Statisticians (EMS2010), Peireas, Greece.
6. 2-4/07/10 EURO Working Group on Efficiency & Productivity Analysis. Chania, Greece.
7. 08/04/10 "Innovations on Dynamic Panel Data Models with Random Effects" 23<sup>o</sup> Panhellenic Conference of Statistics, Beria.
8. 30/10/09. 3rd International Conference on Computational and Financial Econometrics (CFE'09) 29-31 October 2009, Grand Resort Hotel, Limassol, Cyprus.

9. March '07 «Financial Analysis& Modeling with Matlab software», Athens, Greece.
10. Oct. '06 «Working group on Stress Testing in Banking», Paris, France
11. Jul. '06 «13<sup>th</sup> International Conference on Panel Data», Cambridge, UK.
12. Mai '06 «Using Matlab to Develop and Deploy Financial Models», Athens, Greece.
13. Apr. '06 «Working group on Stress Testing in Banking», London, U.K.
14. March. '06 «Working group on Stress Testing in Banking», London, U.K.
15. Feb. '06 «Working group on Stress Testing in Banking», London, U.K.
16. Jan' 06. Seminar in «Millennium BCP Basel II Project», Bank of Greece.
17. Nov. '05 «Working group on Stress Testing in Banking», London, U.K.
18. Oct. '05 «Working group on Stress Testing in Banking», Paris, France
19. Aug. '05 «Seminar in Applied Risk Management», Beatenberg, Switzerland
20. Iun. '05 «Seminar in Datastream Database ».Athens.
21. Mai. '05 «Working group on Stress Testing in Banking», Paris, France
22. Mai '05. " 18<sup>o</sup> Panhellenic Conference of Statistics, Phodes.
23. Jan' 05. «Internal Rating Based Systems», Three-Day seminar from Standard & Poor's. Bank of Greece.
24. Dec. '04 «Applied Risk Management and Supervision», Basel, Switzerland
25. Dec. '04 «3<sup>o</sup> Annual Conference of the Greek Association in Finance and Accounting». Athens.
26. Dec. '04 «Seminar fot Bankscope Database – World Banking Information Source». Athens.
27. Dec. '04 «Σεμινάριο για Δεξιότητες Σύγχρονης Σταδιοδρομίας». Athens.
28. April '04. «17<sup>o</sup> Panhellenic Conference of Statistics», Lefkada.
29. Feb '04. «Advanced Seminar on Forecasting Financial Volatility and Correlation». Athens.
30. Dec. '03 «Seminar on Banking Topics». Athens.
31. Oct '03. «Seminar on Financial Derivatives». Athens.
32. Oct '03. «Advanced Seminars on Quantitative Methods of Credit Risk». Αθήνα.
33. Sep. '03. «Seminar on Financial Derivatives». Athens.
34. Mai '03. «16<sup>o</sup> Panhellenic Conference of Statistics», Kavala.
35. March '03 «Analyzing Bank Credit Risk» Αθήνα.
36. Mai '02. «15<sup>o</sup> Panhellenic Conference of Statistics », Ioannina.
37. Aug. '98. «1998 Joint Statistical Meeting of the ASA». Dallas, Texas.
38. Oct. '97 «Workshop on Logistic Regression Modeling», San Antonio, Texas,
39. Apr. '97. «Conference of Texas Statisticians». Rice University, Department of Statistics, Houston, Texas
40. Feb. '97 «South Texas Mathematics Consortium», Laredo, Texas.
41. Aug. '96. «1996 Joint Statistical Meeting of the ASA». Chicago, Illinois.
42. Nov. '95. «Conference in Honor of Herbert A. David's 70<sup>th</sup> Birthday». Iowa State University, Department of Statistics, Ames, Iowa.
43. Aug. '95. «1995 Joint Statistical Meeting of the ASA». Orlando, Florida.
44. May '95. «1995 Annual Conference of the Greek Statistical Institute». Delfi, Greece.

45. Jan. '95. "1995 ASA Winter Conference". Raleigh, North Carolina.
46. Aug. '94. "1994 Joint Statistical Meeting of the ASA". Toronto, Canada.
47. Mar. '94. "Conference on Causality and Latent Variables". UCLA. Los Angeles, California.
48. Jan. '94. "1994 ASA Winter Conference". Participated and won first place in the 1994 *Statistical College Bowl*, Atlanta, Georgia.

## **Other Activities**

- **ELECTED** Member of the "International Statistical Institute".
- Reviewer in Journal of Risk Model Validation June 2018.
- Reviewer in **Computational Statistics & Data Analysis**, July 2015.
- Reviewer in **Psychometrika**, August 2014.
- Reviewer in British Journal of Mathematical and Statistical Psychology, July 2013.
- Reviewer in **Psychometrika**, June 2013.
- Reviewer in **Computational Statistics & Data Analysis**, October 2012.
- Reviewer in **Psychometrika**, August 2012.
- Reviewer in British Journal of Mathematical and Statistical Psychology, July 2012.
- Reviewer in **Psychometrika**, June 2012.
- Reviewer in **Psychometrika**, May 2012.
- Reviewer in **IJCEE**, May 2012.
- Reviewer in the **Geneva Papers on Risk and Insurance**, 2012.
- Reviewer in the **Annals of Operation Research**, March 2012.
- Reviewer in British Journal of Mathematical and Statistical Psychology, March 2012.
- Reviewer in British Journal of Mathematical and Statistical Psychology, June 2011.
- Reviewer in British Journal of Mathematical and Statistical Psychology, May 2011.
- Reviewer in **Psychometrika**, April 2011.
- Reviewer in **Psychometrika**, April 2010.
- Reviewer in British Journal of Mathematical and Statistical Psychology, March 2010.
- Reviewer in **Psychometrika**, January 2010.
- Reviewer in **Psychometrika**, December 2009.
- Reviewer in Energy Economics, May 2009.
- Reviewer in British Journal of Mathematical and Statistical Psychology, February 2009.
- Reviewer in **Psychometrika**, January 2009.
- Reviewer in **Psychometrika**, November 2008.
- Reviewer in British Journal of Mathematical and Statistical Psychology, October 2008.
- Reviewer in Energy Economics, October 2008.
- Reviewer in **Psychometrika**, July 2008.
- Reviewer in **Psychometrika**, June 2008.
- Reviewer in British Journal of Mathematical and Statistical Psychology, February 2008.
- Reviewer in **Psychometrika**, January 2007.
- Reviewer in **Psychometrika**, July 2006.
- Reviewer in **Psychometrika**, June 2006.

- **Book Reviewer**, July 2000. For Addison Wesley Longman publishing company.
- **Paper Reviewer**, Fifteenth Annual ACM Symposium on Computational Geometry, 1999. (June 13-16) Miami Beach, Florida.
- **Reviewer in FEBS** 1st National Conference of the Financial Engineering and Banking Society. January 2011.
- **Reviewer in E.Σ.I. Proceedings** (in 2007 and in 2002)
- **Listed at:** <http://www.encyclopedia.com>
- **Acknowledged** in the “**Technometrics**” by David W. Scott, Rice University, “*Parametric Statistical Modeling by Minimum Integrated Square Error*”, Aug. 2001; 43, p 274-285.
- **Acknowledged** twice in the introduction in the book by Wayne A. Fuller “*Introduction to Statistical Time Series*”, 2<sup>nd</sup> ed, 1996, Jon **Wiley** and Sons, New York.
- **Student Supervision** for two undergraduate students on a research program from the Department of Mathematics at Texas A&M University-Kingsville.
- **Consulting to three graduate students** for their Master Theses from the Department of Psychology at Texas A&M University-Kingsville.
- **Visiting Scholar** at the University of Texas at Austin (10/99-06/00).
- **Session Chair** in the session “*Factor Analysis-Methods and Applications*” in the conference, 1998 Joint Statistical Meeting of ASA. Dallas, Texas.
- **Faculty Advisor** for the “*Aegean Group*” (1998-1999) Rice University.
- **ELECTED Member** of the “*International Statistical Institute*”.

## Scholarships

1. **ELECTED Member** of the “*International Statistical Institute*”.
2. Scholarship from Iowa State University for 6 years ('90-'96).
3. Scholarship from National Bank of Greece (1989).
4. Scholarship from IKY for 3 years ('85-'88)
5. Member of Mu Sigma Rho Society, Ames, Iowa 1992.
6. Listed in the list 2006 of “International WHO'S WHO Historical Society”.

## References

**Dr. Yasuo Amemiya**  
Manager, Statistical Analysis &  
Forecasting,  
IBM Thomas J. Watson Research Center  
Room 33-222,  
1101 Kitchawan Road, Route 134,  
Yorktown Heights, NY 10598  
Voice: (914) 945-1281  
Tieline: 862-1281  
FAX: (914) 945-3434  
e-mail: [yasuo@us.ibm.com](mailto:yasuo@us.ibm.com)

**Dr. Etti Baranoff,**  
Ass. Prof. of Finance and Insurance  
School of Business  
Virginia Commonwealth University  
Campus Box 172, 849000  
Richmond, VA 23284-4000  
Phone: (804) 828-3187  
e-mail: [ettib@attglobal.net](mailto:ettib@attglobal.net)

**Dr. Wayne A. Fuller,**  
Distinguished Professor  
Department of Statistics  
Iowa State University  
219 Snedecor Hall  
Ames, Iowa 50011  
Phone: (515) 294-5242  
e-mail: [waf@iastate.edu](mailto:waf@iastate.edu)

**Dr. Catherine Carroll,**  
Chairman and Associate Professor of  
Mathematics  
Texas A&M University-Kingsville  
Campus Box 172  
Kingsville, TX 78363-8201  
Phone: (512) 593-3191  
e-mail: [ccarroll@falcon.tamucc.edu](mailto:ccarroll@falcon.tamucc.edu)

**Dr. Tom Sager,**  
Professor of Statistics  
Department of Management Science  
and Information Systems  
University of Texas, B 6500  
Austin, Texas 78712  
Phone: (512) 471-5232  
e-mail: [tomsager@mail.utexas.edu](mailto:tomsager@mail.utexas.edu)

**Dr. David Scott,**  
Distinguished Professor of Statistics  
Department of Statistics  
Rice University  
2095 Duncan Hall  
Houston, Texas 77005-1892  
Phone: (713) 664-9208  
e-mail: [scottdw@rice.edu](mailto:scottdw@rice.edu)

**Dr. Dennis Cox,**  
Professor of Statistics  
Department of Statistics  
Rice University  
MS-138  
Houston, Texas 77005-1892  
Phone: (713) 527-6007  
e-mail: [dcox@stat.rice.edu](mailto:dcox@stat.rice.edu)

**Dr. Simos Meintanis**  
Professor  
Department of Economics  
University of Athens,  
Sofokleous 1, ZC 10559  
Athens, Greece  
Phone: +30 210 368-9488  
e-mail: [simosmei@econ.uoa.gr](mailto:simosmei@econ.uoa.gr)