

# **CURRICULUM VITAE**

**ANTONIS K. ALEXANDRIDIS**

**Assistant Professor in Financial Derivatives  
Department of Accounting and Finance  
University Of Macedonia**

**JANUARY 2020**

**1. PERSONAL INFORMATION**

NAME: Dr. Antonios Alexandridis  
 WORK ADDRESS: University of Macedonia  
 Department of Accounting and Finance  
 156 Egnatia St, 54636, Thessaloniki,  
 Greece  
 e-mail: [alexandridis@uom.edu.gr](mailto:alexandridis@uom.edu.gr)  
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**2. CURRENT POSITION**

Assistant Professor in Financial Derivatives. Department of Accounting and Finance, University of Macedonia

**3. ACADEMIC QUALIFICATIONS**

- 2014 Postgraduate Certificate in Higher Education, PGCHE, University of Kent.
- 2010 Ph.D. in Finance, University of Macedonia, Greece. “*Modelling and pricing temperature derivatives using wavelet networks and wavelet analysis*”.
- 2004 MSc Financial Mathematics, Heriot-Watt University and University of Edinburgh. Dissertation: “*Power Series Technique VS Implied Volatility*”.
- 2003 Ptychion in Applied Mathematics, University of Crete, Greece.

**4. PROFESSIONAL EXPERIENCE***TEACHING*

- (2020 – ) Assistant Professor in Financial Derivatives. Department of Accounting and Finance, University of Macedonia
- (2019 – 2019) Senior Lecturer in Finance. Kent Business School. University of Kent.
- (2016 – 2019) Lecturer in Finance. Kent Business School. University of Kent.
- (2012 – 2016) Lecturer in Finance. School of Mathematics, Statistics and Actuarial Science. University of Kent.
- (2008 – 2010) Adjunct Lecturer. Department of Financial and Management Engineering. University of the Aegean.

*ADMINISTRATIVE*

- (2017 – 2018) Deputy Director of Studies. MSc Finance and MSc International Accounting and Finance. Kent Business School. University of Kent.

- (2012 – 2016) Programme Review Working Group of all BSc programmes of the School of Mathematics, Statistics and Actuarial Science. University of Kent.
- (2014 – 2016) Director of Studies. BSc Financial Mathematics. School of Mathematics, Statistics and Actuarial Science. University of Kent.
- (2014 – 2016) Learning and Teaching Committee. School of Mathematics, Statistics and Actuarial Science. University of Kent.
- (2013 – 2014) Student Staff Consultative Committee. School of Mathematics, Statistics and Actuarial Science. University of Kent.
- (2012 – 2016) PG-Teaching Allocation Coordinator. School of Mathematics, Statistics and Actuarial Science. University of Kent.
- (2009) Development of e-course "*Effective use of financial derivatives in the stock market*" at the "TELEMATHEIA" platform of asynchronous distance learning at the Library of the University of Macedonia through the program "*Training and research and development of innovative information services*".
- (2007 – 2009) Economic and Administrative Support of the Department of Marketing and Operations Management, University of Macedonia.

## 5. TEACHING EXPERIENCE

### *Postgraduate Programs*

- Financial Data Modelling. MSc in Finance, Kent Business School. Convenor. (2016)
- Applied Financial Econometrics. MSc in Finance, Investment and Risk. Kent Business School and School of Mathematics, Statistics and Actuarial Science. University of Kent. Convenor. (2014 – 2017)
- Fixed Income Analysis. MSc in Finance, Investment and Risk. School of Mathematics, Statistics and Actuarial Science. University of Kent. Convenor. (2013 – 2016)
- Case Studies. MSc in Finance, Investment and Risk. School of Mathematics, Statistics and Actuarial Science. University of Kent. Convenor. (2013 – 2016)
- Fund Management. MSc in Finance, Investment and Risk. School of Mathematics, Statistics and Actuarial Science. University of Kent, supportive teaching. (2012 – 2016).
- Communications in Finance and Investment Writing. MSc in Finance, Investment and Risk. School of Mathematics, Statistics and Actuarial Science. University of Kent, supportive teaching. (2013).

- Financial Modelling and Analysis. MSc in Finance, Investment and Risk. School of Mathematics, Statistics and Actuarial Science. University of Kent, supportive teaching. (2012 – 2016).
- Financial Mathematics, MSc Economics and Management for Engineers, Department of Financial and Management Engineering, University of the Aegean, Chios, Greece. Convenor. (2008 – 2009).
- Fixed Income Securities, MSc in Accounting and Finance, Department of Accounting & Finance, University of Macedonia, supportive teaching, (2006, 2008, 2009).
- Advanced Methods for Forecasting Stock Market Methods, MSc in Accounting and Finance, Department of Accounting & Finance, University of Macedonia, supportive teaching, (2008).

#### *Undergraduate Programs*

- Financial Derivatives. BSc Accounting and Finance. Department of Accounting and Finance. University of Macedonia. Convenor. (2020 – )
- Special Subjects in Finance. BSc Accounting and Finance. Department of Accounting and Finance. University of Macedonia, (2020 – )
- Corporate Finance. Erasmus. Department of Accounting and Finance. University of Macedonia. Convenor. (2020 – )
- Futures and Options Markets. BSc Accounting and Finance. Kent Business School. Convenor. (2017 – 2019)
- Fixed Income Markets and Instruments. BSc Accounting and Finance. Kent Business School. Convenor. (2017 – 2019)
- Financial Derivatives, Department of Accounting & Finance, University of Macedonia. Supportive teaching. (2006 – 2009).
- Techniques for Managing and Forecasting Risk, Department of Accounting & Finance, University of Macedonia. Supportive teaching, (2006 – 2007).

## 6. SCIENTIFIC PUBLICATIONS

### **6.1. Books**

- 6.1.1 Alexandridis, A. K., and Zapranis, A. D. (2014). *Wavelet Neural Networks: Methodology and Applications in Financial Engineering, Chaos, and Classification*. John Wiley & Sons, New Jersey, USA
- 6.1.2 Alexandridis, A. K., and Zapranis, A. D. (2013). *Weather Derivatives: Modeling and Pricing Weather-Related Risk*. New York, USA, Springer.

### **6.2. Papers in international scientific journals**

- 6.2.1 Messis, P., Alexandridis, A.K. and Zapranis, A. (2019). “Testing and comparing conditional risk-return relationship with a new approach in the cross-sectional framework”. *International Journal of Finance and Economics*. (accepted, forthcoming) (Impact Factor: 0.636)
- 6.2.2 Alexandridis, A. K. and Hasan, M. (2019). “Global financial crisis and multiscale systematic risk: Evidence from selected European stock markets”.

*International Journal of Finance and Economics*. (accepted, forthcoming)  
(Impact Factor: 0.636)

- 6.2.3 Sultan, J., Alexandridis, A. K., Hasan, M. & Guo, X. (2019). "Hedging Performance of Multiscale Hedge Ratios". *Journal of Futures Markets*. 39(12), 1613-1632. doi:10.1002/fut.22047 (Impact Factor: 1.449).
- 6.2.4 Cramer, S., Kampouridis, M., Freitas, A. A., & Alexandridis, A. (2019). "Stochastic model genetic programming: Deriving pricing equations for rainfall weather derivatives". *Swarm and Evolutionary Computation*, 46, 184-200. doi:https://doi.org/10.1016/j.swevo.2019.01.008 (Impact Factor: 3.818)
- 6.2.5 Alexandridis, A.K., Karlis, D., Papastamos, D., Andritsos, D. (2018). "Real Estate valuation and forecasting in non-homogeneous markets: A case study in Greece during the financial crisis". *Journal of the Operational Research Society*. 1-15. doi:10.1080/01605682.2018.1468864 (Impact Factor: 1.077).
- 6.2.6 Cramer, S., Kampouridis, M., Freitas, A., Alexandridis, A. K. (2017). "An extensive evaluation of seven machine learning methods for rainfall prediction in weather derivatives." *Expert Systems with Applications*. 85, 169-181. (Impact Factor: 3.928)
- 6.2.7 Alexandridis, A. K., Kampouridis, M., Cramer, S. (2017). "A Comparison between Wavelet Networks and Genetic Programming in the Context of Temperature Derivatives". *International Journal of Forecasting*, 33(1), 21-47 (Impact Factor: 2.642)
- 6.2.8 Androvitsaneas, V. P., Alexandridis, A. K., Gonos, I. F., Dounias, G. D., and Stathopoulos, I. A. (2016). "Wavelet neural network methodology for ground resistance forecasting". *Electric Power Systems Research*, 140, 288-295. (Impact Factor: 2.688)
- 6.2.9 Alexandridis, A. K., and Zapranis, A. D. (2013). "Wavelet neural networks: A practical guide." *Neural Networks*, 42, 1-27. (Impact Factor: 5.287)
- 6.2.10 Alexandridis, A. K., and Zapranis, A. D. (2013). "Wind Derivatives: Modeling and Pricing". *Computational Economics*, 41(3), 299-326. (Impact Factor: 1.053).
- 6.2.11 Zapranis, A. D., and Alexandridis, A. K. (2011). "Modeling and forecasting cumulative average temperature and heating degree day indices for weather derivative pricing". *Neural Computing & Applications*, 20(6), 787-801.) (Impact Factor: 2.505).
- 6.2.12 Zapranis, A. D., and Alexandridis, A. K. (2009). "Weather Derivatives Pricing: Modelling the Seasonal Residuals Variance of an Ornstein-Uhlenbeck Temperature Process with Neural Networks". *Neurocomputing*, 73, 37-48. (Impact Factor: 3.317).

- 6.2.13 Zapranis, A. D., and Alexandridis, A. K. (2008). “Modelling Temperature Time Dependent Speed of Mean Reversion in the Context of Weather Derivative Pricing”. *Applied Mathematical Finance*, 15(4), 355 - 386. (Impact Factor: 1.033).

### **6.3. Chapters in books**

- 6.3.1 Zapranis, A. D., and Alexandridis, A. K. (2009). “Model Identification in Wavelet Neural Networks Framework”. *Artificial Intelligence Applications and Innovations III*, L. Iliadis, I. Vlahavas, and M. Bramer, eds., Springer, New York, USA, 267-277.

### **6.4. Papers in international conferences (with referees and published proceedings)**

- 6.4.1 Alexandridis, A., Karlis, D. and Papastamos, D. (2019) “Automatic Mass Valuation for Non-Homogeneous Housing Markets”. 39th International Symposium on Forecasters, Thessaloniki, Grece, 16-19 June 2019.
- 6.4.2 Alexandridis A. and Panopoulou, E. (2019) “Denoising the Equity Premium” 39th International Symposium on Forecasters, Thessaloniki, Grece, 16-19 June 2019.
- 6.4.3 Alexandridis, A. and Ladas, A. (2019) "Multiscale Network Analysis for Financial Contagion". Financial Engineering and Banking Society, Prague, Czech Republic, 30 May – 1 June 2019.
- 6.4.4 Radi, S., Pappas, V. and Alexandridis, A. (2019) “Islamic vs. conventional bond ratings: Determinants and forecastability”. Financial Engineering and Banking Society, Prague, Czech Republic, 30 May – 1 June 2019.
- 6.4.5 Alexandridis, A.K., Gzyl, H. ter Horst, E., Molina, G. (2017). “Extracting risk neutral densities for weather derivatives pricing using the maximum entropy method.” In: 11<sup>th</sup> International Conference on Computational and Financial Econometrics. London, UK, 16<sup>th</sup> – 18<sup>th</sup> December, 2017.
- 6.4.6 Alexandridis, A.K., Karlis, D., Papastamos, D., (2017). "Real Estate valuation and forecasting in non-homogeneous markets: A case study in Greece during the financial crisis." In: 7<sup>th</sup> International Conference of the Financial Engineering and Banking Society. Glasgow, Scotland, 1<sup>st</sup> -3<sup>rd</sup> June, 2017.
- 6.4.7 Hassan, M. S., Sultan, J., Alexandridis, A. K., (2017). “An Econometric Investigation of Hedging Performance of Multi-Scale Hedge Ratios.” In: World Finance Conference. Sardinia, Italy, 26<sup>th</sup> – 28<sup>th</sup> July 2017.
- 6.4.8 Cramer, S., Kampouridis, M., Freitas, A. A., and Alexandridis, A. (2017). “Pricing Rainfall Based Futures Using Genetic Programming.” In: EvoBafin, EvoStar. Amsterdam, Holland, 19 – 21 April 2017.

- 6.4.9 Alexandridis, A. K., and Hasan, M. (2016). "Global Financial Crisis and Multiscale Systematic Risk: Evidence from Selected European Markets". In: Financial Econometrics and Empirical Asset Pricing Conference, Lancaster, UK, 30 June – 1st July, 2016.
- 6.4.10 Cramer, S., Kampouridis, M., Freitas, A. A., and Alexandridis, A. (2015). "Predicting Rainfall in the Context of Rainfall Derivatives Using Genetic Programming." IEEE Computational Intelligence for Financial Engineering & Economics, Symposium Series on Computational Intelligence, Cape Town, South Africa, 7 – 10 December, 2015.
- 6.4.11 Alexandridis, A., and Hasan, M. S. (2015). "Analysing the Multiscale Systematic Risk During the Global Financial Crisis: Evidence from Selected European Stock Markets." 14th Hellenic Finance and Accounting Association, Athens, Greece, 18-19 December, 2015.
- 6.4.12 Messis, P., Alexandridis, A., and Zapranis, A. (2015). "Cross-sectional conditional risk return analysis in the sorted beta framework: A novel Two Factor Model." 14th Hellenic Finance and Accounting Association, Athens, Greece, 18-19 December, 2015.
- 6.4.13 Tsinaslanidis, P., Alexandridis, A., Zapranis, A., and Livanis, E. (2014). "Dynamic Time Warping as a Similarity Measure: Applications in Finance." 13th Hellenic Finance and Accounting Association Conference, Volos, Greece, 12-13 December, 2014.
- 6.4.14 Messis, P., Alexandridis, A. K., and Zapranis, A. D. (2014). "Testing and Comparing Conditional CAPM with A New Approach in the Cross-Sectional Framework." International work-conference on Time Series-ITISE 2014, Granada, Spain, 25-27 June, 2014.
- 6.4.15 Androvitsaneas, V. P., Gonos, I. F., Alexandridis, A. K., and Dounias, G. (2014). "Wavelet neural networks for ground resistance estimation." International Conference on High Voltage Engineering and Application, Poznan, Poland, 8-11 September, 2014.
- 6.4.16 Alexandridis, A. K., Zapranis, A., Livanis, E., and Tsinaslanidis, P. (2013). "Business failure prediction using neural networks and wavelet neural networks." 12th Hellenic Finance and Accounting Association Conference, Thessaloniki, Greece, 13-14 December, 2013.
- 6.4.17 Alexandridis, A. K., and Kampouridis, M. (2013). "Temperature Forecasting in the Concept of Weather Derivatives: A Comparison between Wavelet Networks and Genetic Programming." 13th EANN Halkidiki, Greece, 13-16 September, 2013.
- 6.4.18 Alexandridis, A. K., and Hasan, M. (2013). "Global Financial Crisis and Multiscale Systematic Risk: Evidence from Selected European Markets." The impact of Global Financial Crisis: on Banks, Financial Markets and Institutions in Europe, University of Southampton, UK, 25-26 April, 2013.

- 6.4.19 Alexandridis, A. K., and Zapranis, A. D. (2012). "Modeling and Pricing the European Temperature in the Context of Weather Derivative Pricing." 4<sup>th</sup> ICAF, Corfu, Greece, 30-31 August, 2012.
- 6.4.20 Alexandridis, A. K., and Zapranis, A. D. (2011). "Wind Derivatives: Modeling and Pricing." Financial Engineering and Banking Society (F.E.B.S.), Chania, Greece, 10-12 June, 2011.
- 6.4.21 Zapranis, A. D., and Alexandridis, A. K. (2009). "Modeling and Forecasting CAT and HDD Indices for Weather Derivative Pricing." EANN 2009, London, UK, 27-29 August, 2009.
- 6.4.22 Zapranis, A. D., and Alexandridis, A. K. (2009). "Model Identification in Wavelet Neural Networks Framework. 5<sup>th</sup> IFIP AIAI, Thessaloniki, Greece, 23-25 April, 2009.
- 6.4.23 Alexandridis, A. K., Zapranis, A. D., and Livanis, S. (2008). "Analyzing Crude Oil Prices and Returns Using Wavelet Analysis and Wavelet Networks." 7<sup>th</sup> HFAA, Chania, Greece, 12-14 December, 2008.
- 6.4.24 Zapranis, A. D., and Alexandridis, A. K. (accepted, to appear). "Forecasting Cash Money Withdrawals Using Wavelet Analysis and Wavelet Neural Networks." 5<sup>th</sup> AFE, Samos, Greece, 3-5 July, 2008.
- 6.4.25 Alexandridis, A. K., and Livanis, S. (2008). "Forecasting Crude Oil Prices Using Wavelet Neural Networks." 5<sup>th</sup> ΦΣΔΕΤ, Athens, Greece, 8 May, 2008.
- 6.4.26 Zapranis, A. D., and Alexandridis, A. K. (2007). "Wavelet Neural Networks for Weather Derivatives Pricing." 6<sup>th</sup> HFAA, Patra, Greece, 14-15 December, 2007.
- 6.4.27 Zapranis, A. D., and Alexandridis, A. K. (2008). "Modelling Temperature Time Dependent Speed of Mean Reversion in the Context of Weather Derivative Pricing. HERCMA, Athens, Greece, September, 2007.
- 6.4.28 Zapranis, A. D., and Alexandridis, A. K. (2007). "Weather Derivatives Pricing: Modelling the Seasonal Residuals Variance of an Ornstein-Uhlenbeck Temperature Process with Neural Networks." EANN 2007, Thessaloniki, Greece, 29-31 August, 2007.
- 6.4.29 Zapranis, A. D., and Alexandridis, A. K. (2006). "Wavelet analysis and weather derivatives pricing." 5<sup>th</sup> Hellenic Finance and Accounting Association (HFAA), Thessaloniki, Greece, 15-16 December, 2006.

<b>7. CITATIONS</b>
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- Total Citations: 686
- h-index: 12



- i10-index: 13

## 8. CONSULTANCY

- South East Water (2019) Sink Holes and the risk they pose to Water Infrastructure in the South East of England.
- Eurobank and Eurobank Property Services (2018) Spatial and Self-Organising Information in the Context of Real Estate Value Prediction.
- Eurobank and Eurobank Property Services (2017) Property Valuation in Romania, Serbia and Bulgaria and VaR Estimation Using Machine Learning.
- Eurobank and Eurobank Property Services (2017) Developing Machine Learning Algorithms in R for Property Valuation.
- Eurobank and Eurobank Property Services (2016) An Automatic Property Valuation Model Using Neural Networks.

## 9. FUNDING

- Sink Holes and the risk they pose to Water Infrastructure in the South East of England – South East Water – CO-I – 11/2018 – £24,725.50 – (with Dr. Tzanopoulos, School of Anthropology and Conservation, University of Kent).
- Sink Holes and the risk they pose to Water Infrastructure in the South East of England – Kent Innovation and Enterprise Industrial Strategy Fund – CO-I – 12/2018 – £24,725.50 – (with Dr. Tzanopoulos, School of Anthropology and Conservation, University of Kent).
- Research Impact Funding Report – University of Kent – PI – 2017/18 – £2,950
- REF Outputs Funding 2019 – University of Kent – £2,200 – 20/3/2019
- Spatial and Self-Organising Information in the Context of Real Estate Value Prediction – Eurobank Property Services – PI – 01/08/2018 to 31/12/2018 – €10,000.
- Property Valuation in Romania, Serbia and Bulgaria and VaR Estimation Using Machine Learning – Eurobank Property Services – PI – 01/10/2017 to 31/12/2017 – €10,000.
- Understanding the Cost of Weather Risk – University of Kent – Faculty Research Fund – PI – January 2017 - £4,650. (with J. Oberoi, KBS, University of Kent and Doshi, H., University of Houston).
- Developing Machine Learning Algorithms in R for Property Valuation – Eurobank Property Services – PI – 01/11/2016 to 30/01/2017 - €5,000.
- An Artificial Neural Network Automatic Valuation Model for Real Estate Pricing – Eurobank Property Services – PI – 15/07/2016 to 30/12/2016 - €9,000
- Extracting Market Expectations from Weather Derivatives – University of Kent – Faculty Funds Tranche 3 – PI – May 2016 – £1,300.
- Parallel Wavelet Networks with Applications in Finance – University of Kent – Faculty Funds Tranche 1 – PI – November 2014 – £800.

## 10. EDITOR AND REVIEWER IN SCIENTIFIC JOURNALS

### 11.1 Associate Editor

- International Journal of Neural Networks

### **11.2 Reviewer**

- Journal of Financial Stability
- Journal of American Statistical Association
- Social Sciences and Humanities Research Council of Canada – Insight Grants – Sep 2013
- Annals of Operational Research
- International Journal of Forecasting
- North American Actuarial Journal
- Empirical Economics
- International Journal of Financial Studies
- Wind Energy
- Computational Economics
- Computational Intelligence and Neuroscience

### **11.3 Advisory Teams**

- 1<sup>st</sup> Asia Pacific Conference on Advanced Research. August 2015. Adelaide, Australia.

## **11. DOCTORAL SUPERVISION**

### ***Current Supervisees***

- **Zakarneh M.** The Impact of Technology-Enabled Value Co-Creation on Innovation Performance in Business Networks (in progress)
- **Radi, S.,** Sukuk Credit Rating: A comparative approach, PhD Candidate, Second supervisor, (in progress)

### ***Past Supervisees***

- **Souropanis, I.,** Essays on Exchange Rate Forecasting, PhD Candidate, Second supervisor, (completed)

## **12. DEVELOPMENT OF NEW PROGRAMMES AND MODULES**

- Development and Review of Programmes
  - BSc Financial Mathematics (2015). School of Mathematics, Statistics and Actuarial Science.
  - BSc Mathematics (2015). School of Mathematics, Statistics and Actuarial Science.
  - BSc Mathematics and Statistics (2015). School of Mathematics, Statistics and Actuarial Science.
  - BSc Mathematics, Accounting and Finance (2015). School of Mathematics, Statistics and Actuarial Science.
- Development and Review of New Modules
  - BSc Financial Mathematics. School of Mathematics, Statistics and Actuarial Science, University of Kent.
    - Introduction to Finance
    - Microeconomics
    - Macroeconomics
    - Optimisation

- Derivative Markets
- Economics 2
- Finance 2
- MSc Finance Investment and Risk, School of Mathematics, Statistics and Actuarial Science, University of Kent.
  - Fixed Income Analysis
  - Applied Financial Econometrics
- BSc Finance and Investment, Kent Business School, University of Kent.
  - Fixed Income Securities
  - Financial Modelling
- BA Accounting and Finance, Kent Business School, University of Kent.
  - Finance with Excel
  - Fixed Income Markets

### **13. MEMBER OF SCIENTIFIC AND PROFESSIONAL ORGANIZATIONS**

- International Institute of Forecasters
- Financial Engineering and Banking Society
- Hellenic Finance and Accounting Association
- Economic Chamber of Greece
- International Federation for Information Processing

### **14. EDUCATIONAL MATERIAL AND UNIVERSITY NOTES**

"The effective use of financial derivatives in the stock market", Educational material and university notes, Asynchronous Distance Learning "TELEMATHEIA", University of Macedonia, 2009.