
	<p>Stavros Stavroyiannis, B.A., M.A., Ph.D. Professor of Applied Informatics</p> <p>Department of Accounting and Finance School of Management University of the Peloponnese Curriculum Vitae (January – 2023)</p>	
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<i>PERSONAL DETAILS</i>	<i>ACADEMIC ORGANIZATIONS</i>
<i>DEGREES</i>	<i>EMPLOYMENT HISTORY</i>
<i>RESEARCH INTERESTS</i>	<i>TEACHING EXPERIENCE</i>
<i>SCIENTIFIC INSTRUMENTS</i>	<i>ACADEMIC SERVICE & ADMINISTRATION</i>
<i>PROGRAMMING LANGUAGES- SOFTWARE</i>	<i>RESEARCH EXPERIENCE & PROJECTS</i>
<i>FOREIGN LANGUAGES</i>	<i>RESEARCH PAPERS</i>
<i>SOCIAL ACTIVITIES</i>	<i>CITATIONS</i>

PERSONAL DETAILS

- Name/Surname: Stavros J.K. Stavroyiannis
- Date & Place of Birth: 10/02/1964 – Kalamata Greece
- Work address: Department of Accounting & Finance, School of Management, University of the Peloponnese, GR-241 00, Antikalamos Greece
- Telephone: +302721045303, Fax:+302721045151
- e-mail: s.stavrogiannis (at) uop (dot) gr



DEGREES

- Ph.D. in the area of Giant MagnetoResistance (GMR) heads engineering, nanotechnology, and modeling, for hard disks reading heads, “Study of the influence of the microstructure in Giant Magnetoresistance in Co/Cu and Co/Au multilayers”.
National Technical University of Athens (NTUA) – General department (School of Applied Mathematical and Physical Science) – Division of Physics, Greece (1999).
<http://hdl.handle.net/10442/hedi/11122>, DOI 10.12681/eadd/11122
- M.A. in Physics, Department of Physics, City College, City University of New York (1992) with emphasis in theoretical physics.
- B.A. in Physics, Department of Physics, University of Patras, Greece (1987).
Diploma thesis via a NATO project in the subject area stochastic processes in quantum mechanics, “Construction and behavior of the stochastic vector field b_+ in the Schrodinger equation of the quantum harmonic oscillator with a nonlinear Duffing potential”.



RESEARCH INTERESTS

- Applied Mathematics and Computation in Physical sciences, Social sciences and Finance.
- Computational mathematics and nonlinear algorithms.
- Chaotic systems, fractals & multifractals dimensions in Physical Sciences and Finance.
- Financial econometrics, mathematical finance, quantitative finance, financial engineering.
- Portfolio theory and market risk management.



SCIENTIFIC INSTRUMENTS

- Magnetron sputtering EDWARDS E360A ATOM-TECH 320 – SE Direct Current, Radio Frequency.
- Magnetron sputtering Cooke U.S.A. Direct Current, Radio Frequency.
- X-Rays XRD, SIEMENS D500.
- Superconducting Quantum Interference Device (SQUID) QUANTUM DESIGN MPMSR2.
- Vibrating Sample Magnetometer - VSM, homogeneous magnetic field ~2 Tesla/ Temperatures 4.5 έως 300 K.
- Atomic Force Microscopy MMAFM-2/383 NANOSCOPE III SPM, DIGITAL INSTRUMENTS.
- Scanning Electron Microscopy (Philips 515 SEM, EDX & EBIC).
- Stylus Method Profilometry DEKTAK IIA.



PROGRAMMING LANGUAGES - SOFTWARE

- Fortran77 – 90, Turbo Pascal, C++, Delphi, Visual Basic, HTML, MatLab, Mathematica, Python.
- R language, Statement of Accomplishment with Distinction (99/100), 31st–Oct–2013, “Computing for Data Analysis”, first semester in Master in Biostatistics, JOHNS HOPKINS BLOOMBERG SCHOOL OF PUBLIC HEALTH.
- Mathematical/Statistical/Econometrics and programming: SPSS, MathCad, Statistica, Minitab, Maple, OxMetrics, Stata, Eviews, Gauss, Rats, Octave, Scilab, Gretl.
- Musical software and sound processing: Cakewalk, Finale, Steinberg Cubasis AV.
- Certified Examiner ECDL 0034.



FOREIGN LANGUAGES

- English: Lower Cambridge- grade A.



SOCIAL ACTIVITIES

- Member of the AHEPANS, Chapter of Brooklyn, New York.
- Member of the American Chess Federation/ Manhattan Chess Club.
- First Trophy in darts with Brooklyn Boardbusters in Brooklyn Regional Tournament (1992).
- Member of the Hellenic Photography Society, Kalamata Chapter.
- Member of the Hellenic Chess Federation, “NESTOR” Chess-Club, ELO rating 1670.
- Member of the ARTEMME shooting club/ Shooting Federation of Greece.



ACADEMIC ORGANIZATIONS

- American Physical Society.
- Hellenic Physical Society.
- Business & Economics Society International.



EMPLOYMENT HISTORY

- **May 2019 – today**
Professor of Applied Informatics – Department of Accounting and Finance, School of Management, University of the Peloponnese (Renamed by the Ministry of Education, Research and Religious Affairs), (Government gazette, Β Α.Φ.1908/Αρίθμ. 2866/28-05-2019).
- **June 2013 – May 2019** (Institute and Department renamed by the Greek Ministry of Education and Religious Affairs)
Professor of Applied Informatics – Department of Accounting & Finance (Renamed by the Ministry of Education, Research and Religious Affairs), School of Management & Economics, Technological Educational Institute of Peloponnese ((Renamed by the Ministry of Education, Research and Religious Affairs), Greece.
- **October 2009 – June 2013**
Professor of Applied Informatics – Department of Finance & Auditing, School of Management & Economics, Technological Educational Institute of Kalamata, Greece (Government gazette, Τεύχος Γ Α.Φ. 839/19-10-2009).
- **September 2007- August 2009**
Visiting Researcher – Department of Computer Science & Technology, Faculty of Science & Technology, University of Peloponnese, Greece.
Collaboration with of professor T.E. Simos – Highly Cited Researcher in Mathematics, Active Member of the European Academy of Sciences and Arts, Corresponding Member of European Academy of Arts, Sciences and Humanities, Fellow of the Royal Society of Chemistry (FRSC).
- **2006-2007**
Invited Teaching/Researcher in Quantitative methods, for the Master-degree program in Historical Demography, Department of History, Ionian University.
- **2004-2009**
Associate Professor of Applied Informatics – Department of Finance & Auditing, School of Management & Economics, Technological Educational Institute of Kalamata, Greece (Government gazette, Τεύχος Νομικών Προσώπων Δημοσίου Δικαίου Α.Φ.300/02-12-2003).
- **1999-2003**
Adjunct Assistant Professor – Technological Educational Institute of Kalamata, Greece.
- **1995-1999**
Researcher – Institute of Materials Science, National Centre for Scientific Research “DEMOKRITOS” (collaboration with Director Dr. D. Niarchos).
- **1993-1994**
Military service – Air Forces (Mandatory).
- **1990-1992**
Adjunct Lecturer, Department of Physics, Faculty of C.C.N.Y, City University of New York. / Researcher, Research Foundation of CUNY.



TEACHING EXPERIENCE (academic semesters)

MASTER PROGRAMMES

1. UNIVERSITY OF THE PELOPONNESE (2020–2021) – Department of Accounting & Finance

- Financial Econometrics, Master of Science degree programme in Accounting and Finance (Fall 2020 – 2021, Fall 2021 – 2022)

2. TECHNOLOGICAL EDUCATIONAL INSTITUTE OF PELOPONNESE (2016-2019) – Department of Accounting & Finance

- Portfolio Theory, Master of Science degree programme in Accounting and Finance (Spring 2018 – 2019)
- Financial Econometrics, Master of Science degree programme in Accounting and Finance (Fall 2018 – 2019)
- Financial Econometrics, Master degree programme in Finance – 3 Semesters (Spring 2015 – 2016, Spring 2016 – 2017, Spring 2017 – 2018)
- Portfolio Theory and Financial Risk Management, Master of Science degree programme in Finance – 3 Semesters (Fall 2016 – 2017, Fall 2017 – 2018, Fall 2018 – 2019)

All the above courses were developed from the beginning by the instructor and in cases needed specialized software was used.

- Supervision of 13 diploma thesis in Master level, Spring semester 2016–2017 (5), Spring semester 2017–2018 (6), Spring semester 2018–2019 (2), in subject areas regarding Financial econometrics, Portfolio management, Econophysics, Fractal and multifractal dimensions in Finance.

3. IONIAN UNIVERSITY (2006-2007) – Department of History

- Quantitative methods, Master degree programme in Historical Demography – 2 semesters (September 2006 – August 2007)

UNDERGRADUATE PROGRAMMES

1. UNIVERSITY OF THE PELOPONNESE – School of Management – Department of Accounting and Finance

- Introduction to Econometrics – Three (3) semesters (Spring 2020 – 2021, Spring 2021 – 2022, Spring 2022-2023)
- Stochastic processes in Finance – Three (3) semesters (Spring 2020 – 2021, Spring 2021 – 2022, Spring 2022-2023)
- Portfolio Theory and Management – Three (3) semesters (Fall 2020 – 2021, Fall 2021 – 2022, Fall 2022 – 2023)
- Financial Econometrics – Three (3) semesters (Fall 2020 – 2021, Fall 2021 – 2022, Fall 2022 – 2023)

2. TECHNOLOGICAL EDUCATIONAL INSTITUTE OF PELOPONNESE (1999-2019) - Department of Accounting and Finance

- Stochastic processes in Finance – One (1) semester (Spring 2019 – 2020)
- Financial Econometrics – 6 semesters (Spring 2014 – Spring 2018 – Fall 2019)
- Introduction to Econometrics – 3 semester (Fall 2016 – Fall 2017)
- Portfolio Theory & Financial Risk Management – 12 semesters (Fall 2009 – Fall 2019)
The course is bilingual offered in English for the ERASMUS program.
- Quantitative methods in Financial Organizations – 15 semesters (Spring 2002 - Spring 2007, Fall 2009 - Spring 2011)
- Business Statistics (Descriptive, Inferential) – 10 semesters (Fall 2002– Spring 2007)
- Informatics II (Spreadsheets – Databases) – 4 semesters (Fall 2002– Spring 2004)
- Informatics I (Operational systems – programming) – 2 semesters (Fall 2003– Spring 2004)
- Case Studies in Business Statistics – 1 semester (Spring 2002)

3. TECHNOLOGICAL EDUCATIONAL INSTITUTE OF PELOPONNESE (1999-) - Department of Health & Welfare Units Administration

- Quantitative methods in Management – 6 semesters (Fall 2001–Spring 2003)
- Computer Programming II – 5 semesters (Fall 1999–Spring 2000, Spring 2001–Spring 2002)

4. TECHNOLOGICAL EDUCATIONAL INSTITUTE OF PELOPONNESE (1999-) - Department of Local Government

- Business Statistics II (Inferential) – 6 semesters (Fall 1999 – Spring 2002)
- Quantitative methods in Management – 4 semesters (Fall 2001 – Spring 2003)
- Laboratory in Management Information Systems – 4 semesters (Fall 1999 – Spring 2001)
- Laboratory in Business Statistics II – 3 semesters (Fall 1999 – Fall 2001)
- Laboratory in Financial Mathematics – 1 semester (Fall 2000 – Fall 2001)

5. TECHNOLOGICAL EDUCATIONAL INSTITUTE OF KALAMATA (1999-) Department of Organic Greenhouse Corps and Floriculture

- Physics – 2 semesters (Fall 1999- Spring 2000)

6. CITY COLLEGE OF NEW YORK / CUNY (1991-1992) - Department of Physics

- Physics Laboratory – 2 semesters (Fall 1991, Spring 1991)
- Introduction to modern Physics / Quantum Mechanics I – 1 semester (Fall 1992)

COURSE DEVELOPMENT

I have developed all the courses I taught/teach since 1999 and onwards. I continuously assist my Department in new course development and implementation.



ACADEMIC ADMINISTRATION & SERVICE

- Director of the Master in Science degree programme in Accounting and Finance, Department of Accounting and Finance, University of the Peloponnese (October 2022 –).
- Director of the Master in Science degree programme in Executive MBA in Financial Planning, Department of Accounting and Finance, University of the Peloponnese (October 2021 – September 2022).
- Deputy Chair of the Department of Accounting and Finance, School of Management University of the Peloponnese (October 2021 –).
- Member of the Quality Assurance Unit of the University of the Peloponnese (October 2021 – March 2022).
- Deputy member of the Special Account Management Committee, Department of Accounting and Finance, University of the Peloponnese (May 2020 –).
- Member of the Internal Evaluation Team Department of Accounting and Finance, University of the Peloponnese (May 2020 – October 2021).
- Member of the interim Dean's Office – of the School of Management (June 2019 –).
- Member of the Disciplinary Committee of the Technological Institute of Peloponnese (September 2018 – May 2019)
- Member of the Quality Assurance Unit of the Technological Educational Institute of Peloponnese (February 2018 – May 2019)
- Deputy Dean of the Department of Computer Engineering, School of Applied Technologies, Technological Educational Institute of Peloponnese (December 2017 – May -2019).
- Deputy Chair of the Department of Computer Engineering, School of Applied Technologies, Technological Educational Institute of Peloponnese (December 2017 – May 2019).
- Deputy Director of the Master Degree Programme in Accounting, Department of Accounting and Finance, School of Management and Economics (December 2017 – September 2018).
- Member of the Board of the Department of Speech Therapy, School of Health & Welfare Professions (September 2016 – November 2017)
- Departmental Coordinator for ERASMUS program (September 2016 – August 2018).
- Deputy Director of the Master Degree Programme in Finance, Department of Accounting and Finance, School of Management and Economics (January 2016 – August 2017).
- Deputy Chair of the Department of Finance & Auditing (November 2015 – August 2017).
- Director of the Auditing Section of the Department of Finance & Auditing (November 2015 – August 2016).
- Dean of the School of Management & Economics (September 2011– October 2015).
- Departmental Coordinator for ERASMUS program (September 2010 – August 2014).
- Deputy Chair of the Department of Finance & Auditing (September 2009 – August 2011).
- Director of the Auditing Section of the Department of Finance & Auditing (September 2009 – August 2011).
- Deputy Chair of the Department of Technology of Informatics and Telecommunications, Technological Educational Institute of Kalamata (September 2007 – October 2007).
- Deputy Dean of the School of Management & Economics, Technological Educational Institute of Kalamata (September 2004 – August 2005).
- Chair of the Department of Finance & Auditing, Technological Educational Institute of Kalamata (September 2004 – August 2007).
- Quaternary Committee for the new Department of Informatics and Telecommunications of the Technological Institute of Kalamata (2004).

- Quaternary Committee for the new schools and departments in Messinia of the new University of Peloponnese (2000).
- Participation in 40 electoral / judgement committees as Chairman, three-member Electoral Committee, Rapporteur, and Member.
- Participation in numerous administrative committees.



RESEARCH EXPERIENCE & PROJECTS

RESEARCH PROJECTS

- Institute of Materials Science, National Center for Scientific Research “DEMOKRITOS” EKVAN-280 EPET-II GSRT “Giant Magnetoresistance Sensors for Magnetic Field Imaging” (1995 – 1998), (300.000,00 €), (Research Partner)
- Institute of Materials Science, National Center for Scientific Research “DEMOKRITOS” NATO LINKAGE GRANT No: SA, 12-43-02 (HTECH.LG 970571) 636(97) JARC-412 “Study of microstructural changes in the GMR effect of [Co1-XFeX/NM] (NM=Cu, Ag, Au) multilayers” (1997-1999). (50.000,00 €), (Research Partner)
- Institute of Materials Science, National Center for Scientific Research “DEMOKRITOS” EE192 MAGNIFIT “Magnetostrictive thin films for integrated technologies” (1994-1997), (175.000,00 €), (Research Partner)
- Institute of Materials Science, National Center for Scientific Research “DEMOKRITOS” DYNASPIN “High frequency dynamics of mesoscopic magnetic systems” (1997 – 2001), (175.000,00 €), (Research Partner)
- Project EQUAL “Research on the economic and social environment of Aitolokarnania for the development and operation of social enterprises (2002) (600.000,00 €), (Research Partner)
- Technological Education Institute of Kalamata “ARCHIMEDES” “The development of social entrepreneurship in the cultural sector in selected districts (2004), (50.000,00 €), (Research Partner)
- Technological Education institute of Kalamata “Department of Informatics & Telecommunications Technology” (2004-2007), (548.810,00 €) (Partner)

OTHER PROJECTS (below 50000 €)

- 01 Informatics SA “Study of the employment market in Messinia – Employment policies and characteristics of unemployment” (2001). (partner)
- 01 Informatics SA “Initiative for the small business, management and production activities – software development for the marketing and vending for the products of the Association of Agricultural Cooperatives of Messinia” (2000) (project coordinator).
- Quaternary Committee for the new schools and departments in Messinia of the new University of Peloponnese (2000). (partner)
- Project “Networks” Technological Educational Institute of Kalamata (1999-2000). (partner)
- 01 Informatics SA “Operational project for industry, e-commerce” (15/05/00 - 26/06/00). (partner)
- 01 Informatics SA “Operational project, managerial and financial support for the small business” (14/03/00 - 21/07/00). (partner)
- 01 Informatics SA “District operational project, office automation for the staff of the Financial and Management departments in enterprises” (04/07/00 - 05/12/00). (partner)
- 01 Informatics SA “Operational project for industry, information technology for the accounting and auditing of small business” (13/09/00 - 21/12/00). (partner)
- 01 Informatics SA “District operational project, office automation for the support of management departments” (24/07/00 - 21/12/00). (partner)
- 01 Informatics SA “Operational project for industry. New information science technologies” (18/09/00 - 07/12/00). (partner)
- 01 Informatics SA “Operational project, Informatics and graphics” (25/04/00 - 01/06/00). (partner)

- 01 Informatics SA “Operational project, Information technology in the management of small business” (25/04/00 - 28/07/00). (partner)
- 01 Informatics SA “Operational project, software development” (20/06/00 - 15/9/00). (partner)
- 01 Informatics SA “District operational project, New applications of informatics” (14/02/00 - 10/05/00). (project coordinator)
- 01 Informatics SA “District operational project, New operational systems” (31/01/00 - 25/04/00). (partner)
- 01 Informatics SA “Project YOUTHSTART, Statistical analysis for the employment in the Food & Beverage sector in the town of Kalamata” (1999) (project coordinator).
- 01 Informatics SA “Operational project, modern forms of work with the help of new informatics technologies” (05/07/99 - 10/12/99). (partner)



RESEARCH PAPERS

REFEREED PUBLICATIONS

- P1. **Do birds of a feather flock together? Evidence from time-varying herding behaviour of bitcoin and foreign exchange majors during Covid-19**
Azhar Mohamad, Stavros Stavroyiannis
Journal of International Financial Markets, Institutions & Money, 80, 2022, 101646
- P2. **The performance of Italian and French listed companies during the financial crisis period 2008-2017**
Panagiotis Charalampakis, Antonios Georgopoulos, Ilias Makris, George Mavridoglou, Stavros Stavroyiannis
International Journal of Economics and Business Research (accepted for publication)
- P3. **Identifying the Factors Affecting Firm Performance and Growth: The Case of Italian Publicly Listed Companies**
Panagiotis Charalampakis, Antonios Georgopoulos, Ilias Makris, Stavros Stavroyiannis
International Journal of Economics and Business Research, vol. 24, no. 1-2, 257-270 (2022)
Special Issue on: Contemporary Marketing Practices for Business Sustainability, (Guest Editors: Dr. Vikas Arya and Dr. Ahmet Arif Eren)
- P4. **Healthcare Innovation in Greece: The Views of Private Health Entrepreneurs on Implementing Innovative Plans**
Apostolopoulos, S, Makris, I, Stavroyiannis, S
Journal of Open Innovation: Technology, Market, and Complexity, 2022, 8, 78
- P5. **A dropout weight-constrained recurrent neural network model for forecasting the price of major cryptocurrencies and CCI30 index**
Ioannis E. Livieris, Stavros Stavroyiannis, Emmanuel Pintelas, Theodore Kotsilieris, and Panagiotis Pintelas
Evolving Systems 13 (1), 85–100 (2022)
- P6. **Rural healthcare enterprises in the vortex of COVID-19: The impact of public policies in the internal and external environment**
Nikolaos Apostolopoulos, Sotiris Apostolopoulos, Ilias Makris, Stavros Stavroyiannis
Administrative Sciences, Special Issue "Public Administration and Policies to Foster Sustainable Economic Development during the COVID-19 Crisis", 2021, 11(3), 82;
<https://doi.org/10.3390/admsci11030082> (registering DOI)
- P7. **Smoothing and stationarity enforcement framework for deep learning time-series forecasting**
Ioannis E. Livieris, Stavros Stavroyiannis, Lazaros Iliadis and Panagiotis Pintelas
Neural Computing and Applications, Special issue on Advances of Neural Computing phasing challenges in the era of 4th industrial revolution, <https://doi.org/10.1007/s00521-021-06043-1>, (2021)
- P8. **An advanced CNN-LSTM model for cryptocurrency forecasting**
Ioannis Livieris, Niki Kiriakidou, Stavros Stavroyiannis, Panagiotis Pintelas
Electronics, 10(3), 287, *Artificial Intelligence, Special issue on "Regularization Techniques for Machine Learning and Their Applications"* (2021)
- P9. **Analysing factors that affect profitability and growth in French publicly listed firms**
P. Charalabakis, I. Makris, and S. Stavroyiannis
International Journal of Economics and Business Research, vol. 21, no. 3, 343-359 (2021)
- P10. **Forecasting stock price index movement using a constrained deep neural network training algorithm**
I.E. Livieris, T. Kotsilieris, S. Stavroyiannis and P. Pintelas
Intelligent Decision Technologies, vol. 14, no. 3, pp. 313-323, 2020

- P11. **Sustaining rural areas, rural tourism enterprises and EU development policies: A multi-layer conceptualisation of the obstacles**
Nikolaos Apostolopoulos, Panagiotis Liargovas, Stavros Stavroyiannis, Ilias Makris, Sotiris Apostolopoulos, Dimitrios Petropoulos, Eleni Anastasopoulou
Sustainability 2020, 12(18), 7687; <https://doi.org/10.3390/su12187687>
- P12. **Pension funds and stock market development in OECD countries: Novel evidence from a panel VAR**
Vassilios Babalos and Stavros Stavroyiannis
Finance Research Letters 34 (2020) 101247
- P13. **A novel validation framework to enhance deep learning models in time-series forecasting**
Ioannis Livieris, Stavros Stavroyiannis, Emmanuel G. Pintelas, and P. Pintelas
Neural Computing and Applications, 32 (23), 17149 - 17167 (2020)
Special Issue on "Emerging applications of Deep Learning and Spiking ANN"
- P14. **Ensemble deep learning models for forecasting cryptocurrency time-series**
Ioannis E. Livieris, Emmanuel Pintelas, Stavros Stavroyannis, Panagiotis Pintelas
Algorithms, 13(5), 121, 2020, *Special Issue: Ensemble Algorithms and Their Applications*
- P15. **Rural health enterprises in the EU context: A systematic literature review and research agenda**
Nikolaos Apostolopoulos, Vanessa Ratten, Stavros Stavroyiannis, Ilias Makris, Sotiris Apostolopoulos, and Panagiotis Liargovas
Journal of Enterprising Communities: People and Places in the Global Economy (2020)
Vol. 14 No. 4, pp. 563-582. <https://doi.org/10.1108/JEC-04-2020-0070>
- P16. **Time varying herding behavior within the Eurozone stock markets during crisis periods: Novel evidence from a TVP model**
Stavros Stavroyiannis, Vassilios Babalos
Review of Behavioral Finance, Vol. 12 No. 2, (2019) pp. 83-96
<https://doi.org/10.1108/RBF-07-2018-0069>
- P17. **Short and long-run linear and nonlinear causality between FDI and GDP for the US**
Ilias A. Makris, Stavros Stavroyiannis
International Journal of Economics and Business Research, Vol. 18, No. 4, (2019) 466-479
- P18. **Can Bitcoin diversify significantly a portfolio?**
S. Stavroyiannis
International Journal of Economics and Business Research, Vol. 18, No. 4, (2019) 399-411
- P19. **Weight-constrained neural networks in forecasting tourist volumes: a case study**
I.E. Livieris, E. Pintelas, T. Kotsilieris, S. Stavroyiannis and P. Pintelas
Electronics, 8(9) doi: 10.3390/electronics8091005 (2019) 1005
- P20. **Herding Behavior in Cryptocurrencies Revisited: Novel evidence from a TVP model**
Stavros Stavroyiannis, Vassilios Babalos
Journal of Behavioral and Experimental Finance, Volume 22, pp. 57-63, June (2019)
- P21. **The high frequency multifractal properties of Bitcoin**
Stavros Stavroyiannis, Vassilios Babalos, Stelios Bekiros, Salim Lahmiri, Gazi Uddin
Physica A, 520, pp. 62–71, (2019)
- P22. **Is Anti-herding Behavior Spurious?**
Stavros Stavroyiannis, Vassilios Babalos, Stelios Bekiros, Salim Lahmiri
Finance Research Letters, 29, pp.373-383, (2019)
- P23. **Modelling volatility persistence under stochasticity assumptions: evidence from common and alternative investments**
Salim Lahmiri, Stelios Bekiros, Stavros Stavroyiannis, Vassilios Babalos
Chaos, Solitons and Fractals 114, pp. 158–163, (2018)
- P24. **Value-at-Risk and related measures for the Bitcoin**

- S. Stavroyiannis
Journal of Risk Finance, Vol 19, Issue 2, pp. 127-135 special section "Digital currencies", guest edited by Paolo Tasca, (2018)
- P25. **A note on the Nelson Cao inequality constraints in the GJR-GARCH model: Is there a leverage effect?**
 S. Stavroyiannis
International Journal of Economics and Business Research, Vol. 16, No. 4, pp. 442-452 (2018)
- P26. **Dynamic conditional correlations of the MINTs with the BRICs and the major markets: a first look to a globally diversified portfolio**
 S. Stavroyiannis, V. Babalos
Global Business and Economics Review, Vol. 19, No. 6, pp. 671-686, (2017)
- P27. **Herding, Faith-based Investments and the Global Financial Crisis: Empirical evidence from static and dynamic models**
 S. Stavroyiannis and V. Babalos
Journal of Behavioral Finance, Vol. 18, Issue 4, pp. 478-489, (2017)
 DOI: 10.1080/15427560.2017.1365366
- P28. **Modeling correlation dynamics of EMU sovereign debt markets during the recent turmoil**
 Vassilios Babalos, Stavros Stavroyiannis
Research in International Business and Finance, 42, (2017), 1021-1029
- P29. **Is the Feldstein-Horioka puzzle still with us? National saving-investment dynamics and international capital mobility: A panel data analysis across EU member countries**
 Anastassios A. Drakos, Georgios P. Kouretas, Stavros Stavroyiannis, and Leonidas Zarangas
Journal of International Financial Markets, Institutions & Money, 47 (2017) pp. 76–88
- P30. **Is the BRICS decoupling effect reversing? Evidence from dynamic models**
 S. Stavroyiannis
International Journal of Economics and Business Research, Vol. 13, No. 3 (2017) pp. 303-315
- P31. **Economic Growth and Exporting Activity: An Empirical Analysis on Greek Industry**
 Ilias A. Makris, Vasilis Nikolaidis, Stavros Stavroyiannis
International Journal of Economics and Business Administration, Vol. IV, Iss. 2 (2016) pp. 41-52
- P32. **BRIC dynamic conditional correlations, portfolio diversification and rebalancing after the global financial crisis of 2008-2009**
 M.Z. Papanikolaou Mostafa, S. Stavroyiannis
Global Business & Economic Review, Special Issue on Business Practice and Economic Theories in a Post-Great Recession World, Vol. 18, No 1. (2016), pp. 28-40.
- P33. **Expected Shortfall and Tail Conditional Expectation with the Pearson type IV distribution**
 S. Stavroyiannis
Global Business & Economic Review, Special Issue on Business Practice and Economic Theories in a Post-Great Recession World, Vol. 18, No. 1, (2016), pp. 41-53.
- P34. **Herding, anti-herding behavior in metal commodities futures: A novel portfolio-based approach**
 Vassilios Babalos and Stavros Stavroyiannis
Applied Economics, Vol. 47, No. 46, (2015), pp. 4952–4966
<http://dx.doi.org/10.1080/00036846.2015.1039702>
- P35. **On the Time Varying nature of Herding Behavior: Evidence from major European Indices**
 S. Stavroyiannis, V. Babalos

- Global Business & Economic Review, Special Issue on Empirical Finance, Economic Policy and Business Performance, Vol. 17, No. 3, (2015), pp. 298-309.*
- P36. **On the devolitized Returns and Dynamic Conditional Correlations GARCH modeling in selected European indices**
S. Stavroyiannis, L. Zarangas
Global Business & Economic Review, Special Issue on Empirical Finance, Economic Policy and Business Performance, Vol. 17, No. 3, (2015), pp. 256-267.
- P37. **Do commodity investors herd? Evidence from a time-varying stochastic volatility model**
Vassilios Babalos, Stavros Stavroyiannis, Rangan Gupta
Resources Policy 46 (2015) pp. 281-287
- P38. **On the generalized Pearson distribution for application in financial time series modeling**
S. Stavroyiannis
Global Business and Economic Review, Special Issue on Time Series Applications, Macroeconomics/Trade Issues and Ethics, Vol. 16, No. 1, 2014, pp. 1-14
- P39. **On a GJR-GARCH model with the Pearson type-IV distribution**
Stavros Stavroyiannis
Global Business & Economics Anthology, Vol. I March, (2014) pp. 73-85 (ed. D. Kantarelis Business & Economics Society International).
- P40. **ANS - Based Preprocessing Of Company Performance Indicators**
V. Nikolaidis, I. A. Makris, S. Stavroyiannis
Global Business and Economics Review, Special Issue on: "Economic Performance and New Quantitative Tools", Vol. 15, No. 1, (2013) pp. 49-58
- P41. **Identifying stocks characteristics before market crashes: The case of the Athens stock exchange**
I. A. Makris, V. Nikolaidis, S. Stavroyiannis
Global Business and Economics Review, Special Issue on: "Economic Performance and New Quantitative Tools" Vol. 15, No. 1, pp. 76-87, (2013)
- P42. **Value-At-Risk For The Long And Short Trading Position With The Pearson Type-IV Distribution**
S. Stavroyiannis, I. Makris, V. Nikolaidis, L. Zarangas
Global Business and Economics Review, Special Issue on: "Economic Performance and New Quantitative Tools" Vol. 15, No. 1, pp. 14-27, (2013)
- P43. **Out of Sample Value-at-Risk and backtesting with the standardized Pearson type-IV skewed Distribution**
S. Stavroyiannis, L. Zarangas
Panoeconomicus, Vol. 2, Special Issue, pp. 231-247, (2013)
- P44. **Econometric modeling and value-at-risk using the Pearson type-IV distribution**
S. Stavroyiannis, I. Makris, V. Nikolaidis, L. Zarangas
International Review of Financial Analysis 22, pp. 10–17, (2012)
- P45. **Identifying factors affecting firm performance: The role of exporting activity on Greek industry**
I. A. Makris, V. Nikolaidis, S. Stavroyiannis
International Journal of Business and Globalisation, Vol. 9, No. 1, pp. 59-69, (2012)
- P46. **On the multifractal properties and the local multifractality sensitivity index of euro to Japanese yen foreign currency exchange rates**
S. Stavroyiannis, V. Nikolaidis and I. A. Makris
Global Business and Economics Review, Special Issue on Global Economic Trends, Vol. 13, No. 1, pp. 93-103, (2011)

- P47. **Non-extensive properties, multifractality, and inefficiency degree of the Athens Stock Exchange General Index**
S. Stavroyiannis, I. Makris, V. Nikolaidis
International Review of Financial Analysis 19 (2010) 19-24 doi: 10.1016/j.irfa.2009.11.005
- P48. **A nonlinear explicit two-step fourth algebraic order method of order infinity for linear periodic initial value problems**
S. Stavroyiannis and T.E. Simos
Computer Physics Communications 181 (2010) 1362-1368
doi:10.1016/j.cpc.2010.04.002
- P49. **Prediction on exporting ability using company characteristic data**
V. Nikolaidis, I. Makris, S. Stavroyiannis
Journal of European Economy 9 (2010) 123-136
- P50. **A Discussion about Indicators and Predictors of Firm Performance: The Case of Food Products and Beverages Industry in Current Economic Crisis**
Ilias A. Makris, Stavros Stavroyiannis & Vasilis Nikolaidis
Global Business & Economics Anthology, Vol. II, Iss. 1, pp. 212-220 (2010)
(Ed. D. Kantarelis, Business & Economics Society International).
- P51. **Associating Firm Performance with Past Financial Data Using Supervised Classifiers**
Vasilis Nikolaidis, Ilias A. Makris & Stavros Stavroyiannis
Global Business & Economics Anthology Vol. II, Iss. 1, pp. 230-241 (2010)
(Ed. D. Kantarelis, Business & Economics Society International).
- P52. **On the closed form solutions for non-extensive Value at Risk**
S. Stavroyiannis, I. Makris, and V. Nikolaidis
Physica A, 388 (17) 3536-3542 (2009), doi:10.1016/j.physa.2009.05.002
- P53. **Optimization as a function of the phase-lag order of nonlinear explicit two-step P-stable method for linear periodic IVPs**
S. Stavroyiannis and T.E. Simos
Applied Numerical Mathematics 59 (10) 2467-2474 (2009)
- P54. **The Impact of Innovative Activity in Economic Performance: An Empirical Analysis on Pharmaceutical Sector**
Ilias A. Makris and Stavros J. Stavroyiannis
Journal of European Economy Vol. 7 Special-Issue 264-278 (2008)
- P55. **The Antikythera Mechanism (A computational approach to the Metonic ratio)**
S. Stavroyiannis
Horological Journal, British Horological Institute, January 2004, pp. 16-21 (2004)
- P56. **Planar Hall effect and magnetoresistance in Ni₈₁Fe₁₉ and Co square shaped thin films**
S. Stavroyiannis
Solid State Communications 125 333 (2003)
- P57. **Annealing time dependence of structural and magnetotransport properties of Ni₈₁Fe₁₉(2 nm)/Ag(4 nm) multilayers**
S. Stavroyiannis
Materials Science and Engineering B: Solid state materials for advanced technology B90 180 (2002)
- P58. **Structural properties of magnetron sputtered fcc-Co/Au(111) multilayers as a function of Au layer thickness**
S. Stavroyiannis
Materials Science and Engineering B: Solid state materials for advanced technology B95 195 (2002)
- P59. **Structural and Elastic Properties of Magnetron-Sputtered fcc-Co/Au(111) Multilayers Exhibiting Oscillatory Giant Magnetoresistive Effect**
S. Stavroyiannis

- Physica Scripta, the Royal Swedish Academy of Sciences* 64 (6) 605 (2001)
- P60. **Growth of fcc Co in sputter-deposited Co/Au multilayers with (111) texture**
Th. Kehagias, Ph. Komninou, C. Christides, G. Nouet, S. Stavroyiannis, Th. Karakostas
Journal of Crystal Growth 208, 401 (2000)
- P61. **Granular CoPt/C films for high density recording media**
I. Panagiotopoulos, S. Stavroyiannis, D. Niarchos, J.A. Christodoulides, Y. Zhang and G.C. Hadjipanayis
Journal of Applied Physics 87 (9) 4358 (2000)
- P62. **New CoPt/Ag granular films for High Density Recording Media**
S. Stavroyiannis, I. Panagiotopoulos, D. Niarchos, C. Christodoulides and G. C. Hadjipanayis.
Journal of Applied Physics 85 (8) 4304 (1999)
- P63. **Investigation of CoPt/M (M=Ag, C) Films for High Density Recording Media**
S. Stavroyiannis, I. Panagiotopoulos, D. Niarchos, C. Christodoulides and G. C. Hadjipanayis.
Journal of Magnetism and Magnetic Materials 193, 181 (1999)
- P64. **Giant magnetoresistance Co/Cu multilayer sensors for use in magnetic field mapping**
C. Christides, S. Stavroyiannis, G. Kallias, A. G. Nassiopoulou and D. Niarchos
Sensors and Actuators: A Physical 76, 167 (1999)
- P65. **Significant modification of ⁵⁹Co hyperfine fields assigned to specific structural changes in sputtered Co/Au and Co/Cu multilayers**
C. Christides, S. Stavroyiannis, D. Niarchos, M. Wojcik, S. Nadolski and E. Jedryka
Physical Review B 59 (13) 8812 (1999)
- P66. **Effect of Au thickness on magnetoresistance and MO polar Kerr spectra in sputtered Co/Au multilayers**
C. Christides, R. Lopusník, J. Mistrík, S. Stavroyiannis and Š. Višňovský
Journal of Magnetism and Magnetic Materials 198 36 (1999)
- P67. **Dependence of the dielectric function and electronic properties on the Co layer thickness in giant magnetoresistance Co/Au multilayers**
C. Christides, S. Stavroyiannis, D. Niarchos, M. Gioti and S. Logothetidis
Physical Review B 60 (17) 12239 (1999)
- P68. **Microstructure modification in Co/Cu giant-magnetoresistance multilayers**
C. Christides, S. Stavroyiannis, N. Boukos, A. Travlos and D. Niarchos
Journal of Applied Physics 83 (7) 3724 (1998)
- P69. **Structural, magnetotransport and optical properties of sputtered Co/Cu multilayers examined as a function of Co layer thickness at the second antiferromagnetic maximum**
C. Christides, S. Logothetidis, M. Gioti, S. Stergioudis, S. Stavroyiannis and D. Niarchos
Journal of Applied Physics 83 (12) 7757 (1998)
- P70. **Low-field giant magnetoresistance in (111)-textured Co/Au multilayers prepared with magnetron sputtering**
S. Stavroyiannis, C. Christides, D. Niarchos, Th. Kehagias, Ph. Komninou and Th. Karakostas
Journal of Applied Physics 84 (11) 6221, (1998)
- P71. **CoPt/Ag nanocomposites for high density recording media**
S. Stavroyiannis, I. Panagiotopoulos, D. Niarchos, C. Christodoulides, Y. Zhang and G. C. Hadjipanayis.
Applied Physics Letters 73 (23) 3453 (1998)
- P72. **Enhanced planar-Hall voltage changes measured in Co/Cu multilayers and Co films with square shapes**
C. Christides, S. Stavroyiannis and D. Niarchos

Journal of Physics: Condensed Matter 9 7281 (1997)

- P73. **Structural, magnetic and magnetotransport properties of NiFe/Ag as deposited multilayers for variable NiFe and Ag layer thickness**

C. Christides, S. Stavroyiannis and D. Niarchos

Journal of Applied Physics 80 (8) 4512 (1996)

REFEREED PUBLICATIONS IN BOOK SERIES

- B1. **Investment and saving in the Eurozone and the European Union: Another look at Feldstein-Horioka**

Anastassios A. Drakos, Georgios P. Kouretas, Stavros Stavroyiannis, and Leonidas Zarangas

In (eds.) Cheng Few Lee, Alice Lee, John Lee, Handbook of Investment Analysis, Portfolio Management, and Financial Derivatives, World Scientific, Chapter 6, (2023)

- B2. **The Financing of the Health Sector Through the European Structural and Investment Funds: The Case of Greece**

Ilias Makris, Stavros Stavroyiannis, and Sotiris Apostolopoulos

The Impact of EU Structural and Investment Funds on Greece (1981-2019) - Successes, Failures, Lessons learned and Comparisons with other EU members, Apostolopoulos, N., Papazoglou, M., (eds.) jncegovernance, Jean Monnet Centre of Excellence, University of the Peloponnese, Papazisis Editions (2020) ISBN: 978-960-02-3694-1.

- B3. **Investigating the problem of cryptocurrency price prediction: A deep learning approach**

Emmanuel Pintelas, Ioannis E. Livieris, Stavros Stavroyiannis, Theodore Kotsilieris, and Panagiotis Pintelas

International Federation for Information Processing -IFIP Advances in Information and Communication Technology, In: Maglogiannis I., Iliadis L., Pimenidis E. (eds.) Artificial Intelligence Applications and Innovations. AIAI 2020, Springer Nature Switzerland AG, Cham, vol. 584, pp 99-110. ISBN 978-3-030-49185-7.

- B4. **An advanced deep learning model for short-term forecasting U.S. natural gas price and movement**

Ioannis E. Livieris, Emmanuel Pintelas, Niki Kiriakidou, and Stavros Stavroyiannis

International Federation for Information Processing -IFIP Advances in Information and Communication Technology, In: Maglogiannis I., Iliadis L., Pimenidis E. (eds.) Artificial Intelligence Applications and Innovations. AFIP AICT WG12.5, MHDW and 5G-PINE 2020, Springer Nature Switzerland AG, Cham, vol. 585, pp 165-176. ISBN 978-3-030-49189-5

- B5. **The Impact of Innovative Activity in Economic Performance: An Empirical Analysis on Pharmaceutical Sector**

Ilias A. Makris and Stavros J. Stavroyiannis

Proceedings of International Conference of Applied Economics (2008), pp. 595-601, ISBN 978-960-89054-2-9

- B6. **Giant magnetoresistance Co/Cu multilayers sensors for use in magnetic field mapping**

C. Christides, S. Stavroyiannis, G. Kallias, A. G. Nassiopoulou, D. Niarchos

Euroensors XII, Sensors Series, Vol.2, 983-986 (1998), ed. N.M. White, ISBN 0-7503-0596-7, Institute of Physics (IOP) Publ.

- B7. **Variations of coercivity (H_c) and remanence magnetization (M_r) as a function of layer thickness in NiFe/Ag ultrathin multilayers**

C. Christides, S. Stavroyiannis and D. Niarchos

NATO Advanced Study Institute, NATO Science Series E: Applied sciences, Kluwer Academic Publishers, ISBN 978-94-010-6304-3, vol. 338, (1997), 523-528.

REFEREED PUBLICATIONS IN HELLENIC JOURNALS

- HP1. **From social welfare to social entrepreneurship. The local enterprises as a dynamic development factor of the local economy. Case study of Nafpaktia (in Greek).**
E. Bitsani, A. Triantafyllopoulou, D. Stavroulakis, S. Stavroyiannis, and P. Kalomenidis
Social Cohesion and Development Biannual Scientific Review Spring 2010 vol. 5 Issue 1, 61-80
- HP2. **Inflow and Outflow for the districts of Peloponnese, Epirus, and Crete, for the years 1995, 1998, 2003 (in Greek)**
Th. Papailias, V. Panagou, S. Stavroyiannis, and A. Alexopoulos
Archive of Economic History, Vol II, Special edition, 285-304 2007
- HP3. **On the superstatistics with non-linear forces and various distributions**
S. Stavroyiannis and D. Stavroulakis
Review of Economic Sciences, 12, 21-34, 2007
- HP4. **Salary gap between working women and men in Greece (in Greek)**
D. Stavroulakis and S. Stavroyiannis
Review of Economic Sciences, 9, 185-208, 2006

REFEREED INTERNATIONAL CONFERENCES

- IC1. **Development of Panel Data in grouped samples of companies of 5 countries of the European South, with the use of PCA**
Panagiotis Charalampakis, Antonios Georgopoulos, Ilias Makris, George Mavridoglou, Stavros Stavroyiannis
5th International Conference of Development and Economy Kalamata Greece 21-23 October 2022
- IC2. **Performance of Health Care System and Health Units using DEA techniques: a systematic review**
Kargadouris Antonis, Mavridoglou George, Zyga Sophia, Stavros Stavroyiannis
5th International Conference of Development and Economy Kalamata Greece 21-23 October 2022
- IC3. **Development of time series in grouped samples of companies of 5 countries of the European South, with the use of PCA**
Panagiotis Charalampakis, Antonios Georgopoulos, Ilias Makris, George Mavridoglou, Stavros Stavroyiannis
39th Business & Economics Society International (B&ESI) Conference July 6-9, Rome, 2022
- IC4. **Health digitalisation and innovative entrepreneurship. A qualitative exploration and synthesis.**
Sotiris Apostolopoulos, Ilias Makris and Stavros Stavroyiannis
17th European Conference on Innovation and Entrepreneurship, 15-16 September 2022, Pafos, Cyprus
- IC5. **The performance of Italian and French listed companies during the financial crisis period 2008-2017**
Panagiotis Charalampakis, Dr. Ilias Makris, George Mavridoglou, Dr. Stavros Stavroyiannis
37th Business & Economics Society International (B&ESI) Conference (virtual / pre-recorded) June 7-9, 2021
- IC6. **Tracing key aspects of health enterprises in the European rural areas**
Nikolaos Apostolopoulos, Sotiris Apostolopoulos, Stavros Stavroyiannis, Ilias Makris
4th International Conference of Development & Economy (I.CO.D.ECON) (2020) Kalamata, Greece

- IC7. Identifying the Factors Affecting Firm Performance and Growth: The Case of Italian Publicly Listed Firms**
Dr. Ilias Makris, Dr. Stavros Stavroyiannis and Panagiotis Charalampakis
36th Business and Economics Society International (2020), July, Rome, Italy
- IC8. An advanced deep learning model for short-term forecasting U.S. natural gas price and movement**
Ioannis E. Livieris, Emmanuel Pintelas, Niki Kiriakidou, and Stavros Stavroyiannis
9th Mining Humanistic Data Workshop, MHDW 2020, Halkidiki, Greece
- IC9. Investigating the problem of cryptocurrency price prediction: A deep learning approach**
Emmanuel Pintelas, Ioannis E. Livieris, Stavros Stavroyiannis, Theodore Kotsilieris, and Panagiotis Pintelas
16th International Conference on Artificial Intelligence Applications and Innovations, AIAI 2020, Halkidiki, Greece
- IC10. Cointegration and ARDL specification between the Dubai crude oil and the US natural gas market**
Stavros Stavroyiannis
35th Business and Economics Society International (2019), July, Vienna, Austria
- IC11. Identifying the factors affecting firms' growth: The case of French Listed firms**
P. Charalabakis, I. Makris, and S. Stavroyiannis
35th Business and Economics Society International (2019), July, Vienna, Austria
- IC12. Can Bitcoin diversify significantly a portfolio?**
Stavros Stavroyiannis
33rd Business and Economics Society International (2018), July, Lugano, Switzerland
- IC13. Short and long-run linear and nonlinear causality between FDI and GDP for the US**
Ilias Makris and Stavros Stavroyiannis
33rd Business and Economics Society International (2018), July, Lugano, Switzerland
- IC14. On the spuriousness of anti-herding behavior: Evidence from Monte Carlo models**
Stavros Stavroyiannis and Vassilios Babalos
33rd Business and Economics Society International (2018), July, Lugano, Switzerland
- IC15. A note on the Nelson Cao inequality constraints in the GJR-GARCH model: Is there a leverage effect?**
S. Stavroyiannis
31st Business and Economics Society International (2017), Chania, Greece
- IC16. Dynamic Conditional Correlations of the BRICS: Coupling and Decoupling Effects**
S. Stavroyiannis and V. Babalos
7th National Conference of the Financial Engineering and Banking Society, December 19-20, 2016, Athens.
- IC17. Is the BRICS decoupling effect reversing? Evidence from dynamic models**
S. Stavroyiannis
29th Business and Economics Society International (2016), Ljubljana, Slovenia
- IC18. Dynamic conditional correlations of the MINT with the BRIC and the major markets: A first look to a globally diversified portfolio**
S. Stavroyiannis and V. Babalos
26th Business and Economics Society International (2015), Albufeira, Portugal
- IC19. Financial integration and international capital mobility in the EU member countries: Evidence from panel cointegration tests**
Anastassios A. Drakos, Georgios P. Kouretas, S. Stavroyiannis
15th Finance, Risk and Accounting Perspectives (FRAP) (2015), Steyr, Austria
- IC20. Expected Shortfall and Tail Conditional Expectation with the Pearson type IV distribution**
S. Stavroyiannis

- 24th *Business and Economics Society International (2014), Florence, Italy, p. 78*
- IC21. **BRIC dynamic conditional correlations and portfolio diversification after the global financial crisis of 2008-2009**
 Maria Zakia Papanikolaou Mostafa and Stavros Stavroyiannis
 24th *Business and Economics Society International (2014), Florence, Italy, p74*
- IC22. **On a GJR-GARCH model with the Pearson type-IV distribution**
 S. Stavroyiannis
 23rd *Business and Economics Society International (2014), Abu Dhabi, UAE, p. 52*
 (Under the Patronage of His Excellency Sheikh Nahayan Mubarak Al Nahayan Minister of Culture, Youth, and Development, UAE)
- IC23. **Time varying herding behavior and dynamic conditional correlations in European stock markets**
 V. Babalos and S. Stavroyiannis
The Ioannina meeting of Applied Economics and Finance, IMAEF (2014), Corfu, Greece
- IC24. **Is the Feldstein-Horioka Puzzle still with us? National Saving-investment Dynamics and International Capital Mobility: A Panel Data Analysis across EU Member Countries**
 Anastassios A. Drakos, Georgios P. Kouretas, S. Stavroyiannis and Leonidas Zarangas
 18th *Annual International Conference on Macroeconomic Analysis and International Finance, (2014), Crete, Greece*
- IC25. **On the time varying nature of herding behavior: Evidence from major European indices**
 S. Stavroyiannis and V. Babalos
 22nd *Business and Economics Society International (2013), Monte Carlo, Monaco, p. 49*
- IC26. **On the devolitized returns and Dynamic Conditional Correlations GARCH modelling in selected European indices**
 S. Stavroyiannis and L. Zarangas
 22nd *Business and Economics Society International (2013), Monte Carlo, Monaco, p. 53*
- IC27. **A Note on the Generalized Pearson Distribution for Application in Financial Time Series Modeling**
 S. Stavroyiannis
 20th *Business and Economics Society International (2012), Salzburg, Austria, p. 67*
- IC28. **In Sample and Out of Sample Value-at-Risk with the Pearson type-IV Distribution**
 S. Stavroyiannis and L. Zarangas
 16th *International Conference on Macroeconomic Analysis and International Finance (2012), Rethymno, Greece, p. 32*
- IC29. **In sample Value at Risk and Backtesting using the Pearson type-IV distribution**
 Stavros Stavroyiannis, Ilias Makris, Vasilis Nikolaidis, and Leonidas Zarangas
 18th *Business and Economics Society International (2011), Split, Croatia, p. 39*
- IC30. **Identifying Stocks' Characteristics before Market Crashes: The case of the Athens Stock Exchange**
 Ilias Makris, Vasilis Nikolaidis, and Stavros Stavroyiannis
 18th *Business and Economics Society International (2011), Split, Croatia, p. 35*
- IC31. **ANS based pre-processing of Company Performance Indicators**
 Vasilis N. Nikolaidis, Ilias Makris, and Stavros Stavroyiannis
 18th *Business and Economics Society International (2011), Split, Croatia, p. 75*
- IC32. **Financial Performance During Economic Distress: The Case of Food Products and Beverages Industry**
 Ilias A. Makris, Stavros Stavroyiannis and Vasilis Nikolaidis
 16th *Business and Economics Society International (2010), Athens Greece, p. 30*
- IC33. **High Frequency Dynamics and Local Multifractality of Euro to Japanese Yen Foreign Currency Exchange Rates**

- Stavros Stavroyiannis, Vasilis Nikolaidis and Ilias A. Makris
16th Business and Economics Society International (2010), Athens Greece, p. 27
- IC34. **Associating Firm Performance with Financial Data using Supervised Classifiers**
 Vasilis Nikolaidis, Ilias A. Makris and Stavros Stavroyiannis
16th Business and Economics Society International (2010), Athens Greece, p. 33
- IC35. **Prediction of exporting ability using company characteristic data**
 Vasilios N. Nikolaidis, Ilias A. Makris, and Stavros I. Stavroyiannis
Proceedings of International Conference on Applied Economics (2009), Kastoria Greece, p. 469-476
- IC36. **Economic growth and exporting activity: An empirical analysis on Greek Industry**
 Ilias A. Makris, Vasilios N. Nikolaidis, and Stavros I. Stavroyiannis
International Conference on Applied Business and Economics (2009), Kavala Greece, p. 128
- IC37. **Firm Size and Economic Behavior: The Case of Food Products Sector**
 Ilias A. Makris, Vasilios N. Nikolaidis and Stavros Stavroyiannis
International Conference on Applied Business and Economics (2008), Thessaloniki Greece, p. 63
- IC38. **Theoretical evaluation of header compression schemes for IP based wireless access systems**
 A. Yiannakoulis, T. Kotsilieris and S. Stavroyiannis
12th European wireless conference, "Enabling technologies for wireless multimedia communications", Athens, Greece, 2-5 April (2006) Print ISBN: 978-3-8007-2961-6
- IC39. **Granular CoPt and FePt Films for High Density Recording (Invited talk)**
 J. Christodoulides, Y. Zhang, G. C. Hadjipanayis, S. Stavroyiannis, I. Panagiotopoulos and D. Niarchos
American Physical Society Centennial Meeting, March (1999), Atlanta, GA
- IC40. **Dependence of the dielectric function and electronic properties on the Co layer thickness in giant-magnetoresistance Co/Au multilayers**
 C. Christides, S. Stavroyiannis, D. Niarchos, M. Gioti, and S. Logothetidis.
Mesomagnetism, Spin-Dynamics and Spin-Electronics, Rhodes, Greece, 11-17 September (1999)
- IC41. **Effect of Au thickness on magnetoresistance and MO Polar Kerr spectra in Co/Au multilayers**
 C. Christides, R. Lopusnik, J. Mistrik, S. Stavroyiannis and S. Visnovsky.
Joint 3rd International Symposium on Metallic Multilayers (MML '98) and EMRS Symposium on Magnetic Ultrathin Film and Ultrathin Film Nanostructures (1998)
- IC42. **Investigation of CoPt/M (M=Ag, C) Films for High Density Recording Media (Invited talk)**
 S. Stavroyiannis, I. Panagiotopoulos, D. Niarchos, C. Christodoulides and G. C. Hadjipanayis
Magnetic Recording Media MRM '98 Maastricht, Netherlands (1998)
- IC43. **Microstructure and magnetic properties of annealed CoPt/C films prepared by Laser Ablation**
 I. Panagiotopoulos, S. Stavroyiannis, D. Niarchos, C. Christodoulides and G. C. Hadjipanayis
Materials Research Society, MRS (1998) Fall Meeting, Boston
- IC44. **New CoPt/Ag granular films for High Density Recording Media**
Fourth International Conference on Nanostructural Materials Nano98, Stockholm (1998)
 S. Stavroyiannis, I. Panagiotopoulos, D. Niarchos, C. Christodoulides and G. C. Hadjipanayis
- IC45. **New CoPt/Ag films for High Density Recording Media**

- S. Stavroyiannis, I. Panagiotopoulos, D. Niarchos, C. Christodoulides and G. C. Hadjipanayis
43rd Annual Conference on Magnetism and Magnetic Materials, Miami, Florida, (1998)
- IC46. **Dielectric function changes observed in sputtered Co/Au multilayers by spectroscopic ellipsometry**
 C. Christides, S. Stavroyiannis, M. Gioti and S. Logothetidis
Proceedings of the 43rd Annual Conference on Magnetism and Magnetic Materials, Miami, Florida, Nov. 9-12, p. 244-245, (1998).
- IC47. **Giant magnetoresistance Co/Cu multilayer sensors for use in magnetic field mapping**
 Christides C, Stavroyiannis S, Kallias G, et al.
12th European Conference on Solid-State Transducers - 9th UK Conference on Sensors and Their Applications, SEP 13-16, (1998)
- IC48. **Novel Information Storage Engineering and Nanotechnology (~100 Gbits/in²) (Invited talk)**
 S. Stavroyiannis
Information Storage Technology Symposium, Kalamata GREECE August (1998)
- IC49. **Modulation of non-magnetic spacer thickness in Co/Cu multilayers studied by NMR**
 M. Wojcik, S. Nadolski, E. Jedryka, S. Stavroyiannis and C. Christides
International Conference on Magnetism ICM (1997)
- IC50. **Microstructure of Co/Cu multilayers and Co films with extraordinary magnetoresistance effect**
 C. Christides, S. Stavroyiannis, N. Boukos, A. Travlos, and D. Niarchos.
International Conference on Magnetism, (1997), Cairns, Australia, E2-60
- IC51. **Giant Magnetoresistance in Ag-Co multilayers by e-beam evaporation, for magnetoresistive sensors**
 M. Angelakeris, P. Pouloupoulos, N.K. Flevaris, S. Stavroyiannis, O. Kalogirou, D. Niarchos and A. Nassiopoulou
16th Greek-Bulgarian Symposium on Semiconductor Physics, Thessaloniki, (1996)
- IC52. **Variations of coercivity (H_c) and remanence magnetization (M_r) as a function of layer thickness in NiFe/Ag ultrathin multilayers**
 C. Christides, S. Stavroyiannis and D. Niarchos
NATO Advanced School Institute, on Magnetic Hysteresis in Novel Magnetic Materials JUL 01-12 Mykonos Greece (1996)

REFEREED INTERNATIONAL CONFERENCES POSTER SESSIONS

- ICPS.1 **Do the EAGLES markets herd? Evidence from static and dynamic models**
 Antonis Kargadouris and Stavros Stavroyiannis
35th Business and Economics Society International (2019), Vienna, Austria, p.71
- ICPS.2 **Is still Gold a safe haven? Evidence from dynamic models**
 Lampros Chronopoulos and Stavros Stavroyiannis
31st Business and Economics Society International (2017), Crete, Greece, p.64
- ICPS.3 **Dynamic conditional correlations of the EAGLES with the Brent crude oil**
 Dimitrios Kontos and Stavros Stavroyiannis
31st Business and Economics Society International (2017), Crete, Greece, p.65
- ICPS.4 **Bitcoin: Currency or asset?**
 Maria Karterolioti and Stavros Stavroyiannis
31st Business and Economics Society International (2017), Crete, Greece, p.66
- ICPS.5 **Classification Analyses of Byzantine Glass Tesserae**
 V. Nikolaidis, N. Zacharias, S. Stavroyiannis, and A. Oikonomou
International Symposium on Archaeometry (ISA), 15 – 21 May 2016, Kalamata, Greece

ICPS.6 Can commodity futures as an asset class improve significantly the risk-return characteristics of a portfolio with major markets?

Maria Zakia Papanikolaou Mostafa and Stavros Stavroyiannis

24th Business and Economics Society International (2014), Florence, Italy, p. 73

ICPS.7 Dynamic properties of the minimum risk portfolio

S. Stavroyiannis

20th Business and Economics Society International (2012), Salzburg, Austria

REFEREED HELLENIC WORKSHOPS

HC1. Inflow and Outflow for the districts of Peloponnese, Epirus, and Crete, for the years 1995, 1998, 2003 (in Greek)

Th. Papailias, V. Panagou, S. Stavroyiannis, and A. Alexopoulos

8th Hellenic Workshop of the Greek Economic History Association, 2006, Kalamata, Greece

HC2. Characterization of Co/Au multilayers with transmission electron microscopy (in Greek).

Th. Kehagias, Ph. Comninou, Th. Karakostas, S. Stavroyiannis, C. Christides, and D. Niarchos

XIV Hellenic Workshop in Solid State Physics 1998, Ioannina, Greece

HC3. Study of the magnetic properties of Co/Cu multilayers with polarized neutron reflectivity (in Greek).

A. Athanasouli, S. Stavroyiannis, C. Christides, S. Mesoloras, and D. Niarchos

XIV Hellenic Workshop in Solid State Physics 1998, Ioannina, Greece

HC4. On the Giant Magnetoresistance effect in Co/Au (111) multilayers prepared with Magnetron Sputtering (in Greek).

S. Stavroyiannis, C. Christides, and D. Niarchos

XIII Hellenic Workshop in Solid State Physics 1997, Thessaloniki, Greece

HC5. Giant magnetoresistance sensors for magnetic field imaging (in Greek).

C. Christides, S. Stavroyiannis, and D. Niarchos

XII Hellenic Workshop in Solid State Physics 1996, Heracleon Crete, Greece.

MONOGRAPHS / BOOKS

M1. The development of social entrepreneurship in the cultural sector in District. Case study of the district of highland Nafpaktia of Aitolokarnania (in Greek).

E. Bitsani, A. Triantafyllopoulou, S. Stavroyiannis, and D. Stavroulakis.

Dionikos publications, 2008, ISBN 978-960-0619-37-3

M2. The Testimony of love: the charitable and welfare activity of the Church of Greece (in Greek)

F. Droumbalis, P. Stathopoulos, K. Mavreas, S. Stavroyiannis et al.

Church of Greece Communication and Publications Branch, 2001, Athens, ISBN 960-86870-3-9

M3. Research on the economic and social environment of Aitolokarnania for the development and operation of social enterprises (in Greek).

K. Platykostas, E. Bitsani, V. Sapriki, S. Stavroyiannis, and O. Apostolopoulou

Department of Accounting, Technological Educational Institute of Mesologgi, 2001 (project Equal).

TECHNICAL REPORTS

TR1. A novel validation framework to enhance deep learning models in time-series forecasting

I.E. Livieris, S. Stavroyiannis, E. Pintelas, P. Pintelas
University of Patras, Department of Mathematics, GR-265 00, Greece
https://thalis.math.upatras.gr/~esdlab/newEsdlab/images/stories/pdf/LSPP20_NCA.pdf NO. TR20-02

TR2. Fundamental Research Questions and Proposals on Predicting Cryptocurrency Prices using DNNs

E. Pintelas, I.E. Livieris, S. Stavroyiannis, T. Kotsilieris, P. Pintelas
University of Patras, Department of Mathematics, GR-265 00, Greece, Nemertes nemertes.lis.upatras.gr, NO. TR20-01 <http://hdl.handle.net/10889/13296>

WORKING PAPERS

**arXiv.org (Cornell University Library) / SSRN
 (58 references in Scholar)**

WP1. Cointegration and ARDL specification between the Dubai crude oil and the US natural gas market

S. Stavroyiannis
https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3656214 (2020)
<https://doi.org/10.48550/arXiv.2206.03278> in econ.EM

WP2. Volatility Modeling and Risk Assessment of the Major Digital Currencies

S. Stavroyiannis (**6 reference in Scholar**)
<https://ssrn.com/abstract=3092173> (2017)

WP3. Value-at-Risk and Expected Shortfall for the major digital currencies

S. Stavroyiannis (**14 references in Scholar**)
 1708.9343 -fin.RM <https://arxiv.org/abs/1708.09343> (2017)
<https://ssrn.com/abstract=3028625>

WP4. Dynamic Properties of the Bitcoin and the US Market

S. Stavroyiannis and Vassilios Babalos (**37 references in Scholar**)
<https://ssrn.com/abstract=2966998> (2017)

WP5. Value-at-Risk and backtesting with the APARCH model and the standardized Pearson type IV distribution

S. Stavroyiannis (**1 references in Scholar**)
 1602.05749 in q-fin.RM <https://arxiv.org/abs/1602.05749> (2016)
<http://ssrn.com/abstract=2734058>

WP6. A note on the cumulative distribution function of the Pearson type IV distribution for financial applications

S Stavroyiannis
<https://ssrn.com/abstract=2406973> (2014)

WP7. Variance risk measures with the standardized Pearson type IV distribution

S. Stavroyiannis
<http://ssrn.com/abstract=2476549> (2014)

ACHIEVEMENTS-AWARDS

- Feature paper, Editor Choice 30/12/2021
An advanced CNN-LSTM model for cryptocurrency forecasting
 IE Livieris, N Kiriakidou, S Stavroyiannis, P Pintelas
 Electronics 10 (3), 287
- Highlighted paper on the main page of Algorithms / 2020

top highly cited paper in /Algorithms/ 2020–2021

Ensemble deep learning models for forecasting cryptocurrency time-series

Ioannis E. Livieris, Emmanuel Pintelas, Stavros Stavroyannis, Panagiotis Pintelas
Algorithms, 13(5), 121, 2020, *Special Issue: Ensemble Algorithms and Their Applications*

- Highly Commended Paper / 2019 Emerald Literati Awards.

Value-at-Risk and related measures for the Bitcoin

S. Stavroyiannis

Journal of Risk Finance, Vol 19, Issue 2, pp. 127-135 special section “Digital currencies”, guest edited by Paolo Tasca, (2018)

- Outstanding Conference Award / Best Paper Award. Business and Economics Society International Conference, Salzburg, Austria, 6-9 July, 2012.

Value-At-Risk for the Long and Short Trading Position with the Pearson Type-IV Distribution

S. Stavroyiannis, I. Makris, V. Nikolaidis, L. Zarangas

Global Business and Economics Review, Special Issue on: "Economic Performance and New Quantitative Tools" Vol. 15, No. 1, pp. 14-27, (2013)

CENTER OF EXCELLENCE

- **“NANOSTRUCTURED MATERIALS”**, Institute of Material Science, National Center for Scientific Research NCSR Demokritos (Funded by the European Union), 2002.

EDITORIAL BOARDS

- Section Editor in “Quantitative Finance” for the Global Business and Economics Review (GBER), Inderscience Publishers. ISSN online: 1745-1329, ISSN print: 1097-4954 (11-November-2015 – December 2020)

EDITOR IN SPECIAL ISSUES

SI1. Computation, Validation and Optimization in Machine Learning for Time Series Forecasting

Special Issue (Eds. Stavros Stavroyiannis, Panagiotis Pintelas, Ioannis Livieris)
Mathematics, MDPI (2021)

https://www.mdpi.com/journal/mathematics/special_issues/Computation_Validation_Optimization_Machine_Learning_Time_Series_Forecasting

PARTICIPATION IN ROUND TABLES

- **Net Dependency, Competitiveness and Freedom**, on the book “*Economic Interdependence and War*” by Dale C. Copeland, Business and Economics Society International, Albufeira, Portugal, Conference 6-9 July, 2015
- **Piketty’s Approach to Capitalism and his General Laws**, Business and Economics Society International, Albufeira, Portugal, Conference 6-9 July, 2015

PARTICIPATION IN INTERNATIONAL SYMPOSIA / PANELS

- **The Global Energy Industry, Markets, Shares & Prospects**, 35th Business and Economics Society International (2019), 6-9 July, Vienna, Austria (**Panel of the Symposium, invited**)

PARTICIPATION IN ADVANCED SCHOOLS

- 3rd EPS SOUTHERN EUROPEAN SCHOOL OF PHYSICS: Science and Technology of Magnetic Films and Nanostructures, PORTO, PORTUGAL, 30 June - 11 July 1997.

SABBATICAL UNDER MY SUPERVISION

- Professor Leonidas Zarangas, Department of Finance and Auditing, Technological Educational Institute of Epirus, collaborated with my research team during his sabbatical (September 2010 - August 2011) under my supervision on “Asymmetric Distribution Functions in Financial Econometrics”.

PHD SUPERVISION / THREE-MEMBER COMMITTEES

- Supervisor of Mr. Kargadouris Antonios (A.M. 8083202199003), Department of Accounting and Finance, School of Management, University of Peloponnese (),
- Three member committee for the supervision of Mr. Moutsios Dimitrios (A.M.), Department of Accounting and Finance, School of Management, University of Peloponnese (),
- Three member committee for the supervision of Mr. Panagiotis Charalambakis (A.M. 1058356), Department of Business Administration, School of Business Administration, University of Patras (11/08-02-2017), **“Analyzing the factors of successful economic performance and growth of European firms”**. (Finished) 20-10-2022 86608/11-11-2022.
- Three member committee for the supervision of Mr. Sotirios Apostolopoulos (A.M. D2019002), Department of Accounting and Finance, School of Management, University of the Peloponnese (3/20-02-2020), **“Entrepreneurship, European Policies and Development: The Case of Health and Quality of Life in Greek Rural Areas”**
- Three member committee for the supervision of Mr. Panos Remoundos (A.M. ***), Department of Accounting and Finance, School of Management, University of the Peloponnese (717/31-10-2019), **“Managerial Preferences and Firm Performance in the Financial Industry”**.

CONFERENCES & WORKSHOPS SCIENTIFIC COMMITTEES

- Chairman, Discussant and Referee for the Business and Economics Society International (B&ESI) Conferences (2010 – today).
- Chairman, Discussant and Referee for the International Conference of Development and Economy (ICODECON) Conferences (2015 – today).
- 2nd International Conference on Applied Innovation, «Technological, economic and social perspectives of innovative entrepreneurship in Greece within the international environment», The “Innovation and Entrepreneurship Unit” and the “Innovation Office” of EPIRUS T.E.I., 16-17/10/2015.
- 1st International Conference of Development and Economy, ICODECON Kalamata, Greece, 2 - 4 October 2015.
- VI Latin American Workshop on Magnetism, Magnetic Materials and their Applications (VI LAW3M), on behalf of the Organizing Committee for the special issue of the Journal of Alloys and Compounds edited by Elsevier Science, 7-11 April 2003, Chihuahua, Mexico.

REFEREE/REVIEWER

- Global Business and Economics Anthology, ISSN: 1553-1392.
- Applied Mathematics and Computation, edited by Elsevier Science, ISSN: 0096-3003.

- Tbilisi Mathematical Journal, edited by Tbilisi Centre for Mathematical Sciences and College Publications, University of London (ISSN 1875-158X), E-ISSN: 1512-0139.
- International Review of Financial Analysis, edited by Elsevier Science, ISSN: 1057-5219.
- Journal of Applied Economics, UCEMA, Universidad del Sema / Elsevier ISSN: 1514-0326.
- International Journal of Applied Decision Sciences, Inderscience Publishers, ISSN online: 1755-8085, ISSN print: 1755-8077.
- Applied Economics, incorporating Applied Financial Economics, edited by Taylor & Francis, ISSN: 0003-6846 (Print), 1466-4283 (Online)
- Panoeconomicus, ISSN 2217-2386.
- Physica A: Statistical Mechanics and its Applications, Elsevier, ISSN: 0378-4371.
- International Journal of Economics and Business Research (IJEER), Inderscience ISSN online: 1756-9869, ISSN-print: 1756-9850.
- Global Business and Economics Review (GBER), Inderscience Publishers. ISSN online: 1745-1329, ISSN-print: 1097-4954.
- Journal of Risk Finance, Emerald, ISSN: 1526-5943
- Review of Behavioral Finance, Emerald, ISSN: 1940-5979
- Communications in Statistics – Theory and Methods, Taylor & Francis, ISSN: 0361-0926

ALGORITHM DEVELOPMENT - OPTIMIZATION & FINANCIAL SERVICES

- A1. **In sample value at risk and backtesting** (18 Feb 2011 – 31 Dec 2017)
<http://www.mathworks.com/matlabcentral/fileexchange/30462-in-sample-value-at-risk-and-backtesting>. Copyright (c) 2011.
- A2. **In sample Value at Risk and backtesting with the Pearson type-IV distribution** (08 Mar 2011 – 31 Dec 2017)
<http://www.mathworks.com/matlabcentral/fileexchange/30680-in-sample-value-at-risk-and-backtesting-with-the-pearson-type-iv-distribution>. Copyright (c) 2011.

COURSE NOTES

- CN1. Quantitative Methods in Management and Financial Organizations.
- CN2. Portfolio Theory and Financial Risk Management.
- CN3. Portfolio Theory and Financial Risk Management case studies with Microsoft Excel.
- CN4. Financial Econometrics.
- CN5. Financial Econometrics case studies with GRET.

MISCELLANEOUS

- MISC1. Eleftherotypia newspaper Tuesday 28 March 2000 issue 57, InfoTech magazine & Financial Times insert page 3, tribute entitled “Hard disks become denser: Memories for the 21st century”.



CITATIONS

Web of Science Core Collection/Publons:

<https://www.webofscience.com/wos/author/record/637839>
<https://publons.com/researcher/2967298/stavros-stavroyiannis/>
 Web of Science ResearcherID[®] Q-7148-2019

Scopus/Orcid:

<http://www.scopus.com/authid/detail.url?authorId=6602930530>
<http://orcid.org/0000-0001-8444-9371>

Google Scholar

<http://scholar.google.gr/citations?user=cLPsmO8AAAAJ&hl=el&oi=ao>

Exaly: <https://exaly.com/author/1650616/stavros-stavroyiannis/rankings>

SSRN: top 5% of Authors on SSRN by all-time downloads with 15 scholarly papers.
 Stavros Stavroyiannis (Author ID: 2077925).

CITATIONS IN RESEARCH CENTERS PATENTS

- PAT1. Maghemite nanoparticles and method for preparing thereof Authors of Document Russo, Umberto; Nodari, Luca; Vianello, Fabio(...) (Universita' Degli Studi di Padova (...)) Year the Document was Published 2015 Source of the Document United States Patent and Trademark Office Granted Patent number US8980218.
- PAT2. MAGHEMITE NANOPARTICLES AND METHOD FOR PREPARING THEREOF Authors of Document Russo, Umberto; Nodari, Luca; Vianello, Fabio(...) (Vianello, Fabio (...)) Year the Document was Published 2013 Source of the Document United States Patent and Trademark Office Pre-Granted Publication Patent number US20130122303.
- PAT3. MAGHEMITE NANOPARTICLES AND METHOD FOR PREPARING THEREOF | [NANOPARTICULES DE MAGHÉMITE ET LEUR PROCÉDÉ DE PRÉPARATION] Authors of Document VIANELLO, Fabio; MAGRO, Massimiliano; VALLE, Giorgio(...) (UNIVERSITA' DEGLI STUDI DI PADOVA (...)) Year the Document was Published 2012 Source of the Document Patent Cooperation Treaty Application Patent number WO2012010200.
- PAT4. Magnetic recording medium Authors of Document Suzuki, Toshio; Honda, Naoki; Ouchi, Kazuhiro (Governor of Akita Prefecture) Year the Document was Published 2003 Source of the Document United States Patent and Trademark Office Granted Patent number US6599646.
- PAT5. MAGNETIC RECORDING MEDIUM | [磁気記録媒体] Authors of Document SUZUKI YOSHIO; HONDA NAOKI; OUCHI KAZUHIRO (AKITA PREFECTURE) Year the Document was Published 2002 Source of the Document Patent Abstracts of Japan Patent number JP200212392.
- PAT6. Magnetic recording medium Authors of Document Suzuki, Toshio; Honda, Naoki; Ouchi, Kazuhiro (Governor of Akita Prefecture) Year the Document was Published 2002 Source of the Document United States Patent and Trademark Office Pre-Granted Publication Patent number US20020041980.

