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# **DEGREES AND SCIENTIFIC EXPERIENCE**

Nov 2021- 2020-	Full Professor in Banking and Finance, University of Brescia. Journal of Risk and Financial Management– Editorial Board.
2018-	Plos ONE – Editorial Board.
2018-	Artificial Intelligence in Finance – Editorial Board.
Feb 2013	National Scientific Qualification – Full Professor in Financial Markets and Institutions.
Dec 2010-	Associate Professor of Financial Markets and Institutions, University of Brescia.
2009	Visiting Scholar (Jul-Aug), University of California-Berkeley, Department of Statistics.
2007-2010	Assistant Professor with tenure of Financial Markets and Institutions (from January
	2007), University of Brescia.
2006	Summer Visiting (Jul-Sep), University of California-Berkeley, Haas School of Business,
	Finance Department.
	Visiting Scholar (Sep-Dec), Boston College, Carroll School of Management, Finance
	Department.
2003-2007	Assistant Professor of Financial Markets and Institutions (starting from January 2004),
	University of Brescia.
2002	Ph. D in Financial Markets and Institutions, University of Udine.
1996	B.A. in Economic graduated with 110/110 Magna cum Laude, University of Brescia.

### FELLOWSHIP AND AWARDS

2017	MIUR National Research Award (FFABR).
2006	Centro Newfin (now CAREFIN) Bocconi - Award for publication in top ranking journals,
	Bocconi University.
2002	Post-Doc Research Fellowship, University of Brescia.
1999	APB (Associazione italiana per la Pianificazione e il Controllo di Gestione in Banca) Best
	B.A. Thesis Award.
1998	Research Fellowship, Ente Universitario Lombardia Orientale, Brescia.

# ACADEMIC EXPERIENCE

2017-	Professor of "Corporate Finance" Ph.D Course in "Analytics for Economics and
	Management" (AEM) – University of Brescia, Italy.
2014-	Professor of "Banking" (undergraduate), University of Brescia.
2013-2017	Professor of "Corporate Finance" Ph.D Course in "Analytics for Economics and Business"
	(AEB) - University of Bergamo and University of Brescia, Italy.
2005-	Professor of "Financial Markets and Institutions" (undergraduate) and "Credit Risk"
	(graduate), University of Brescia.
2000-	Università & Impresa, MBA Instructor of "Corporate Finance", University of Brescia.
2004-2009	"Master in Money and Finance", Instructor of "Asset Management", University of Brescia.
2007	• "Master in Internationalization", Instructor of "Investment Selection and Financing
	Decision", University of Brescia.

- Instructor of "Corporate Finance: Investment Selection and Financing Decision" Summer School, Università Vest Timisoara, Romania.
- 2003-2005 Professor of "Insurance Economics", University of Brescia.
- 1998-2004 Teaching Assistant of "Financial Markets and Institutions", University of Brescia.
- 2001-2004 SDA Bocconi, Instructor of "Global Asset Allocation" and "Introduction in Fixed Income Securities", Bocconi University.

#### **CONFERENCES AND SEMINARS**

#### Organizer/Moderator/Speaker

- 2022: I.S.E.O. Institute's 54nd International Public Conference on "Pandemic, war. Compound risks in uncertain geopolitical scenarios." – panelists: Michael Spence (NYU – Nobel Prize in Economics 2001); Simone Manganelli (ECB) <u>organizer/moderator</u>, University of Brescia, Brescia.
- 2019: I.S.E.O. Institute's 52nd International Public Conference on "Pensions, social care, demographic scenarios: Welfare challenges for the future." panelists: William Sharpe (Stanford University Nobel Prize in Economics 1990); Tito Boeri (Bocconi University) Agar Brugiavini (Ca' Foscari University) organizer, University of Brescia, Brescia.
- 2018: I.S.E.O. Institute's 51st International Public Conference on "1918-2018 Franco Modigliani's Legacy in the World Economy" panelists: Robert Merton (MIT Nobel Prize in Economics 1997); Robert Engle (NYU Nobel Prize in Economics 2001); Macro Pagano (University of Naples Federico II); Gianni Amisano (Federal Reserve Board) organizer/moderator, University of Brescia, Brescia.
- 2017: I.S.E.O. Institute's 50th International Public Conference on "Innovation and intellectual property" panelists: Jean Tirole (Toulouse School of Economics Nobel Prize in Economics 2014); Michele Boldrin (University of Washington in Saint Louis); Jacques Darcy (European Investment Fund) organizer/moderator, University of Brescia, Brescia.
- 2016: I.S.E.O. Institute's 49th International Public Conference on "Health, Growth and Finance"

   panelists: Roberto Savona; Angus Deaton (Princeton University Nobel Prize in Economics 2015); Roger Stein (MIT); Guido Rasi (European Medicines Agency) organizer/moderator/speaker, University of Brescia, Brescia.
- 2016: Final International Conference on "Systemic Risk Tomography (SYRTO): Signals, Measurements, and Transmission Channels" – <u>organizer/speaker</u>, Université Paris1 Panthéon-Sorbonne, Parigi.
- 2015: International Conference on "Data Exploration in Scientific Life" organizer/moderator/speaker, University of Brescia, Brescia.
- 2015: European Financial Management Association (EFMA) Annual Meeting, Special Session on "Systemic Risk Tomography (SYRTO): Signals, Measurements, and Transmission Channels" – organizer/moderator/speaker, Nyenrode Business University, Amsterdam.
- 2014: Consortium for Systemic Risk Analytics (CSRA) Semi-Annual Meeting 2014, Massachusetts Institute of Technology (MIT) – <u>organizer/speaker</u>, Boston (MA).
- SYRTO Code Workshop on Systemic Risk Policy Issues for SYRTO (Bundesbank-ECB-ESRB),
   Head Office of Deustche Bundesbank, Guest House <u>organizer/moderator</u>, Frankfurt.
- 2013: 7th International Conference on Computational and Financial Econometrics (CFE 2013),
   Organized Session on "Systemic Risk Tomography" organizer, University of London, London.
- 2013: 9th scientific meeting of the Classification and Data Analysis Group (CLADAG) of the Italian Statistical Society, Specialized Session on "Systemic Risk Tomography – SYRTO" – organizer/moderator/speaker, Università degli Studi di Modena e Reggio Emilia, Modena.
- 2013: First International Conference SYRTO Project panelists: Roberto Savona; Robert Engle (NYU Nobel Prize in Economics 2003); Ignazio Angeloni (ECB); Giovanni Dell'Ariccia (IMF); Monica Billio (Università Cà Foscari Venezia); Andrea Beltratti (Università Bocconi) organizer/moderator/speaker, University of Brescia, Brescia.
- 2012: European Financial Management Association (EFMA) Annual Meeting, Special Session on "Banking and Sovereign Crisis" – penelists: Roberto Savona; Giovanni Dell'Ariccia (IMF); Gianni

- De Nicolò (IMF); Carsten Detken (ECB); Gikas A. Hardouvelis (University of Piraeus) <a href="mailto:organizer/moderator/speaker">organizer/moderator/speaker</a>, University of Barcelona, Barcelona.
- 2005: Euro Working Group of Financial Modeling (EWGFM), <u>organizer/speaker/discussant</u>, University of Brescia, Brescia.

#### **Invited Speaker**

- 2020: 3rd Annual European Quantitative and Macro Investment Conference, WOLFE Research, virtual conference.
- 2019: Invited lecture on "Recent Results of Research on Financial Stability", 6th Central Bank Executive Summit 2019 SAP, Frankfurt.
- 2019: Invited seminar on "Anatomy of a Sovereign Debt Crisis: CDS Spreads and Real-Time Macroeconomic Data", EC-JRC, Ispra (Italy).
- 2016: The Economist Intelligence Unit Expert Roundtable on Innovations in Funding the Elimination of Hepatitis C, The Economist Group, London.
- 2015: SAP Design Thinking Workshop on Systemic Risk Platform approach, SAP, Potsdam.
- 2012: Università Cà Foscari Venezia, Dipartimento di Economia, Venice.
- 2012: University of Vienna, Department of Finance, Vienna.
- 2012: Intesa Sanpaolo, Milan.
- 2011: European Central Bank (ECB), Frankfurt.
- 2009: European Financial Management Association (EFMA) Annual Meeting, Bocconi University, Milan, invited speaker on the Special Session "Operational Risk and Due Diligence in Funds Management" Organizer: Stephen Brown (NYU Stern School of Business).

### **Speaker and Discussant**

- 2021: GRETA Credit Conference 2021, Venice speaker.
- 2018: 1st Annual CoPFIR Conference EC JRC, Brussels, Berlaymont speaker.
- 2018: GRETA Credit Conference 2018, Venice discussant.
- 2017: GRETA Credit Conference 2017, Venice discussant.
- 2013: GRETA Credit Conference 2013, Venice discussant.
- 2012: GRETA Credit Conference 2012, Venice discussant.
- 2012: 5th Financial Risks International Forum, Institut Louis Bachelier (ILB), the Europalace Institute of Finance (EIF) and the Fondation du Risque, Paris speaker.
- 2011: 3rd Annual Conference on Hedge Funds, CREST-CEPR-Hec Paris, Paris discussant.
- 2011: European Financial Management Association (EFMA) Symposium on "Alternative Investments", University of Toronto, Toronto <a href="mailto:speaker/discussant">speaker/discussant</a>.
- 2011: Society for Financial Econometrics (SoFiE) Annual Conference, University of Chicago, Chicago – speaker.
- 2009: Society for Financial Econometrics (SoFiE) First European Conference, Ginevra <u>poster presenter</u>.
- 2009: Financial Management Association (FMA) European Conference, Turin speaker/discussant.
- 2009: Seventh scientific meeting of the Classification and Data Analysis Group (CLADAG) of the Italian Statistical Society, Università degli Studi di Catania, Catania <a href="mailto:speaker">speaker</a>.
- 2008: Financial Management Association (FMA) European Conference, Praha speaker/discussant.
- 2008: ADEIMF Annual Meeting, Capri speaker.
- 2008: The Royal of Statistical Society, Nottingham poster presenter.
- 2008: GRETA Credit Conference 2008, Venezia <u>poster presenter</u>.
- 2006: "Struttura Finanziaria di Impresa, Innovazione Finanziaria e Merito Creditizio", University of Brescia – speaker.
- 2005: Financial Management Association (FMA) European Conference, University of Siena, Siena
   speaker/discussant.
- 2004: European Financial Management Association (EFMA) Annual Meeting, Basle speaker/discussant.

# Principal Investigator/Coordinator

- European Project "SYRTO SYstemic Risk TOmography: Signals, Measurements, Transmission Channels, and Policy Interventions Project ID: 320270", funded by the European Commission under the FP7 program "Cooperation Socio-Economic Sciences and Humanities call ID FP7-SSH-2012-2". Budget EUR 2.473.064. Role: Primary and Scientific Coordinator. Final Technical Review Report Evaluation (European Commission): Excellent/Excellent and success/case story.
- 2006-2008 CAREFIN Bocconi University grant for project "Imperfect Predictability and Mutual Funds Dynamics: How Managers Use Predictors in Changing Systematic Risk" with Gianni Amisano, 2008. Budget EUR 3.000. Role: Coordinator.

# **Participant**

- 2012-2015 PRIN Modelli Statistici multivariati per la valutazione dei rischi. Coordinator Prof. Paolo Giudici. Role: Participant (Cà Foscari University of Venezia).
- NEWFIN Università Bocconi grant for project "Gli investimenti alternativi: asset allocation, strategie di gestione, valutazione delle performance". Coordinator Prof. Ignazio Basile (University of Brescia).
- 2000-2001 NEWFIN Università Bocconi grant for project "Efficienza dei benchmark obbligazionari e politiche di gestione e misurazione delle performance degli investitori istituzionali". Coordinator Prof. Ignazio Basile (University of Brescia).
- 1999-2000 NEWFIN Università Bocconi grant for project "Efficienza dei benchmark azionari e politiche di gestione e misurazione delle performance degli investitori istituzionali". Coordinator Prof. Ignazio Basile (University of Brescia).

### **OTHER SCIENTIFIC APPOINTMENTS**

- 2018- Local Coordinator of the Community of Practice in Financial Research (CoPFiR) Consortium-European Commission JRC.
- 2017- Member of the PhD Program in "Analytics for Economics and Management" (AEM) University of Brescia, Italy.
- 2016- Member of the University of Brescia Research Team, University of Brescia.
- 2016- LABEX ReFi European Laboratory on Financial Regulation Conservatoire National des Arts et Métiers-Ecole Nationale d'Administration- Panthéon-Sorbonne University- ESCP Europe, Member.
- 2016- Systemic Risk Hub, Global Risk Institute in Financial Services, Member.
- 2013-2017 Member of the PhD Program in "Analytics for Economics and Business" (AEB) University of Bergamo and University of Brescia, Italy.
- 2012-2014 Macro-prudential Research Network (MaRs) European Central Bank Work Stream 2 (WS2) "Early Warning Systems and Systemic Risk Indicators", Steering Committee Member.
- 2012-2016 Member of the Research Quality Commission (PAQ Ricerca), Department of Economics and Management, University of Brescia.
- 2011 (Feb-Jul) Charter of the University of Brescia, Member of the Charter Commission.
- 2009-2013 ABI Country Risk Forum (Osservatorio promosso dall'Associazione Bancaria Italiana per l'analisi dei rischi economico finanziari dei Paesi emergenti), Scientific Partner.
- 2006-2009 "Master in Money and Finance", Managing Board, University of Brescia.
- 2005- Università & Impresa MBA, Supervisor in "Corporate Finance", Brescia.
- 1999-2004 Newfin Bocconi (now CAREFIN), Scientific Partner, Bocconi University.

# **CONFERENCE COMMITTEES**

2021	"The 2nd EU Conference on Modelling for Policy support", Scientific Committee,
	European Commission – Competence Centre on Modelling, Brussels.
2019	"The 1st EU Conference on Modelling for Policy support", Scientific Committee, European
	Commission – Competence Centre on Modelling, Brussels.
2005	"Euro Working Group of Financial Modelling", Organizing Committee, University of
	Brescia.

#### REFEREE ACTIVITY

#### **Journals**

American Journal of Industrial Medicine; Applied Soft Computing; Banca, Impresa e Società; Bancaria; Economic Modelling; Economic Notes; Economies; European Journal of Finance; European Journal of Operational Research; Financial Innovation; Fiscal Studies; Frontiers in Artificial Intelligence; Intelligent Systems in Accounting Finance and Management; International Journal of Forecasting; International Transactions in Operational Research; Journal of Artificial Societies and Social Simulation; Journal of Asset Management; Journal of International Money and Finance; Journal of Risk and Financial Management; Journal of Risk Finance.

Publons identifier: <a href="https://publons.com/a/622512/">https://publons.com/a/622512/</a>

# Other referee activities

Other referee activities		
2021	VQR Reviewer for the Italian VQR 2015-2019 program – settore 13/B4 "Economia degli	
	Intermediari Finanziari e Finanza Aziendale", Ministry of Education, University and	
	Scientific Research (MIUR).	
2016	VQR Reviewer for the Italian VQR 2011-2014 program – settore 13/B4 "Economia degli	
	Intermediari Finanziari e Finanza Aziendale", Ministry of Education, University and	
	Scientific Research (MIUR).	
2011-	PRIN Reviewer, Ministry of Education, University and Scientific Research (MIUR).	
2010-2013	European Financial Management Association (EFMA), Board of Directors.	
2010-	Cineca Peer Reviewer, University of Padova.	
2008/09/14	Referee, Financial Management Association (FMA) – European conference.	
2007	Phd Dissertation external referee, University of Zaragoza (Spain).	

# **RESEARCH INTERESTS**

- Asset management
- Asset pricing models
- Banking
- Corporate finance
- Credit risk
- Hedge funds and mutual funds
- Risk management
- Systemic Risk and Early Warning System

#### **PUBLICATIONS**

#### **Articles**

- "Anatomy of a Sovereign Debt Crisis: Machine Learning, Real-Time Macro Fundamentals, and CDS Spreads", Journal of Financial Econometrics, 2022.
- "Bank business models, negative policy rates, and prudential regulation", *Annals of Finance*, 2021.

- "Taking the Right Course Navigating the ERC Universe" (with Cesare Orsini), *Journal of Asset Management*, 2019, 20, 157–174.
- "Sovereign Risk Zones in Europe During and After the Debt Crisis" (with Veni Arakelian, Petros Dellaportas and Marika Vezzoli), *Quantitative Finance*, 2019, 19(6), 961–980.
- "Mutual Funds Dynamics and Economic Predictors" (with Gianni Amisano), *Journal of Financial Econometrics*, 2017, 15 (2), 302-330.
- "Danger Zones for Banking Crises in Emerging Markets" (with Paolo Manasse and Marika Vezzoli),
   International Journal of Finance & Economics, 2016, 21(4), 360-381.
- "Sovereign and Hedge Fund Systemic Risks" (with Enrico Ciavolino), *Journal of Alternative Investments*, 2016, Spring 2016, Vol. 18, No 4, pp. 98-108.
- "Corporate Default Prediction Model Averaging: A Normative Linear Pooling Approach" (with Silvia Figini and Marika Vezzoli), *Intelligent Systems in Accounting, Finance and Management*, 2016, Vol. 23, Issue 1-2, 6-20.
- "Financial Symmetry and Moods in the Market" (with Maxence Soumare and Jorgen Vitting Andersen), *PLoS ONE* 10(4): e0118224, 2015, 1-21.
- "Fitting and Forecasting Sovereign Defaults Using Multiple Risk Signals" (with Marika Vezzoli),
   Oxford Bulletin of Economics and Statistics, 77 (1), 2015, 66-92.
- "Detecting Early Warnings for Hedge Fund Contagion", Bankers, Markets and Investors, Number 129, March-April 2014, 60-73.
- "Hedge Fund Systemic Risk Signals", European Journal of Operational Research, 2014, 236, 282-291.
- "Risk and Beta Anatomy in the Hedge Fund Industry", European Journal of Finance, 2014, 20 (1), 1-32.
- "Multidimensional Distance to Collapse Point and Sovereign Default Prediction" (with Marika Vezzoli), *Intelligent Systems in Accounting, Finance and Management*, 2012, Volume 19, number 4, 205-228.
- "Tax-induced Dissimilarities Between Domestic and Foreign Mutual Funds in Italy", *Economic Notes*, 35 (2) 2006, 173-202.
- "Do Mutual funds Styles Reflect a Country-Specific Investment Philosophy? The Italian Case", *Applied Financial Economics*, 16 (4) 2006, 303-318.

# Books

- Dynamical Capital Structure and the Value of the Firm (with Umberto Sagliaschi), Springer –
   Contributions to Finance and Accounting, 2021.
- Systemic Risk Tomography Signals, Measurement and Transmission Channels (edited book with Monica Billio and Loriana Pelizzon), **ISTE-Elsevier**, 2017.
- Banking Book Misurazione e gestione dei rischi finanziari (with Mattia Raudaschl), LUISS University Press, Roma, 2015.
- *Gli hedge fund Rendimento, rischio e valutazione della performance* (with Ignazio Basile), **Bancaria Editrice**, Roma, 2007.

#### **Book Chapters**

- "Machine learning for financial stability" (with Lucia Alessi), in (eds.) Sergio Consoli, Diego Reforgiato Recupero, Michaela Saisana, Data Science for Economics and Finance – Methodologies and Applications, Springer, 2021.
- "Systemic Risk: Measures and Warnings" (with Monica Billio and Loriana Pelizzon), in (eds.) Billio M., L. Pelizzon, R. Savona. Systemic Risk Tomography Signals, Measurement and Transmission Channels, ISTE-Elsevier, 2017.
- "Danger Zones For The Financial System" (with Paolo Manasse and Marika Vezzoli), in (eds.)
   Billio M., L. Pelizzon, R. Savona. Systemic Risk Tomography Signals, Measurement and Transmission Channels, ISTE-Elsevier, 2017, 169-190.
- "Hedge Fund Performance", in (eds.) Ignazio Basile and Pierpaolo Ferrari, *Asset Management and Institutional Investor*, **Springer**, 2016, 355-371.

- "Mutual Fund Risk" (with Oreste Auleta and Filippo Stefanini), in (eds.) H. Kent Baker, Greg Filbeck, Halil Kiymaz. Mutual Funds and Exchange-Traded Funds Building Blocks to Wealth, Oxford University Press, 2016, 380-398.
- "Debt Crisis Indicators of Emerging Markets versus Eurozone Economies" (with Marika Vezzoli and Enrico Ciavolino), in (eds.) Sam Wilkin. Country and Political Risk (2nd edition). London: Risk Books, 2015.
- "Measuring Systemic Risk From Country Fundamentals: A Data Mining Approach" (with Marika Vezzoli), in eds. When, C., Hoppe, C., Gregoriou, G. N. Rethinking Valuation and Pricing Models: Lessons Learned from the Crisis and Future Challenges, Elsevier, 2012, 223-240.
- "Hedge Fund Cloning Through State Space Models", in (eds.) Gregoriou, G.N. and M. Kooli. *Hedge Fund Replication*, **Palgrave-MacMillan** December, 2011, 106-118.
- "Asset-Based Style Factors", in (eds.) Greg N. Gregoriou. Encyclopedia of Alternative Investments, Chapman Hall-CRC/Taylor Francis Group, 2008, 29-30.
- "Performance Idiosyncrasy in the Italian Mutual Fund Industry", in (eds.) Greg N. Gregoriou. Performance of Mutual Funds: An International Perspective, Palgrave Macmillan, 2007, 63-84.
- "On the Supposed Foreign Superiority: the Italian Tax Puzzle", in (eds.) Greg N. Gregoriou. Diversification and Portfolio Management of Mutual Funds, Palgrave Macmillan, 2007, 312-333.
- "Outsourcing Strategies in Asset Management Industry", (with Ignazio Basile), in (eds.) De Laurentis, G. Performances measurements frontiers in financial services industry, Egea, Milan, 2004, 15-43.

#### Journals & Book Chapters in Italian

- "La misurazione e la valutazione della performance degli hedge fund", in (eds.) Ignazio Basile, Maria Debora Braga, and Pierpaolo Ferrari, Asset Management e Investitori Istituzionali, Pearson Italia, 2019, 317-332.
- "Le politiche di gestione delle diverse categorie di investitori istituzionali" (with Ignazio Basile and Pierpaolo Ferrari), in (eds.) Ignazio Basile, Maria Debora Braga, and Pierpaolo Ferrari, Asset Management e Investitori Istituzionali, Pearson Italia, 2019, 415-464.
- "La valutazione della performance degli hedge fund", in (eds.) Ignazio Basile and Pierpaolo Ferrari, *Asset Management e Investitori Istituzionali*, **Pearson Italia**, 2013, 285-300.
- "Le politiche di gestione delle diverse categorie di investitori istituzionali" (with Ignazio Basile and Pierpaolo Ferrari), in (eds.) Ignazio Basile and Pierpaolo Ferrari, *Asset Management e Investitori Istituzionali*, **Pearson Italia**, 2013, 379-427.
- "Strategie, rischio e rendimento degli hedge fund" (with Ignazio Basile), *Bancaria*, 9, 2007, 85-
- "Gli hedge fund e le strategie di gestione di portafoglio" (with Ignazio Basile), *Bancaria*, 11, 2007, 68-72.
- "Fusioni e acquisizioni bancarie in Italia, 1989-1997: analisi empirica sulla reattività dei prezzi azionari", *Bancaria*, 1, 2002, 31-52.
- "Le strategie competitive delle banche italiane di dimensioni medio/piccole nell'attività di asset management" (with Ignazio Basile), *Banche e Banchieri*, 1, 2002, 43-57. Also in *Risparmio*, 1, 2002, 179-209.
- "Un'analisi dell'efficienza dei benchmark del mercato azionario italiano", in (eds.) Ignazio Basile, Benchmark e performance dei portafogli azionari e obbligazionari, Bancaria Editrice, 2002, 41-70.
- "L'impiego dei benchmark nella gestione e nella valutazione dei portafogli azionari", in (eds.) Ignazio Basile, *Benchmark e performance dei portafogli azionari e obbligazionari*, **Bancaria Editrice**, 2002, 71-115.

- "I benchmark obbligazionari: caratteristiche fondamentali e profili di efficienza", in (eds.) Ignazio Basile, Benchmark e performance dei portafogli azionari e obbligazionari, Bancaria Editrice, 2002, 139-162.
- "L'utilizzo dei benchmark nella gestione dei portafogli obbligazionari", in (eds.) Ignazio Basile, *Benchmark e performance dei portafogli azionari e obbligazionari*, **Bancaria Editrice**, 2002, 163-189.
- "I volatility swap", in NEWFIN, *Nuove frontiere dei mercati finanziari e delle securities industry Osservatorio sull'innovazione finanziaria 2001*, **Bancaria Editrice**, Roma, 2001, 239-254.
- "Portafogli di strumenti derivati e gestione del rischio di interesse: gli interest rate swap", *Apb* news, 3, 2000, 33-48.

### **Working Papers**

- "Learning about Unprecedented Events: Agent-Based Modelling and the Stock Market Impact of Covid-19", with Davide Bazzana, Michele Colturato, 2021.
- Risk Dynamics in the Eurozone: A New Factor Model for Sovereign CDS and Equity Returns (with Petros Dellaportas, Loukia Meligkotsidoub, and Ioannis D. Vrontos), SYRTO Working Paper n. 23/2015, 1-38.
- Credit Expected Shortfall with Time Varying Recovery Risk (with Mattia Raudaschl), 2015, 1-28.
- Oil Price Shocks, Financial Frictions and TFP Dynamics (with Marcella Lucchetta and Antonio Paradiso), **SYRTO Working Paper** n. 19/2015, 1-22.

### **Permanent Working Papers**

- Anatomy of a Sovereign Debt Crisis: CDS Spreads and Real-Time Macroeconomic Data (with Lucia alessi and Pierluigi Balduzzi), European Commission, JRC Working Papers in Economics and Finance 2019/3.
- "Imperfect Predictability and Mutual Fund Dynamics: How Managers Use Predictors in Changing Systematic Risk" (with Gianni Amisano), European Central Bank, Working Paper No. 881, March 2008, 1-53. Also in CAREFIN – Università Bocconi, Working Paper no 2/2008.
- "Dissimilarities between domestic and foreign money management at home: evidence from Italy", Newfin Working Paper n. 4/04, 2004, 1-44.
- "Management Styles of Italian Equity Mutual Funds" (with Ignazio Basile and Nicola Doninelli), Dipartimento di Economia Aziendale, Università degli Studi di Brescia, Working Paper n. 14, 2001.

# **Conference Proceedings**

- "The Forecasting side of Sovereign Risk: a Generalized Cross Entropy Approach" (with Enrico Ciavolino), in CLADAG 2013 9th scientific meeting of the Classification and Data Analysis Group of the Italian Statistical Society Book of Abstract, CLEUP, pp. 105-108, 2013.
- "Assessing Model Accuracy Using a Two-Dimensional Loss Function" (with Marika Vezzoli), in Book of Abstract GfKI - CLADAG 2010, pp. 267-268, Joint meeting of German Classification Society (GfKl) and Classification and Data Analysis Group (CLADAG), Università di Firenze, Polo delle Scienze Sociali, 8-10 Settembre 2010.
- "Taming Financial Inaccessibility with Bayesian State Space Models" (with Gianni Amisano), in Book of Short Papers CLADAG 2009, CLEUP, pp. 405-408. Seventh scientific meeting of the Classification and Data Analysis Group (CLADAG) of the Italian Statistical Society, Università degli Studi di Catania 09-11 Settembre 2009.

### Other Publications - Italian

- "Prevenzione, gestione e risoluzione delle crisi sistemiche", *Brescia & Futuro*, 2, 2015, 55-58.
- "Struttura finanziaria, innovazione finanziaria e merito creditizio", *Brescia & Futuro*, 1, 2006, 63-69.

 "Il benchmarking nelle politiche di gestione di portafoglio", *PhD Dissertation*, University of Udine, 2001.

# **WORKS IN PROGRESS**

- "Can Financial Engineering Vaccinate the World? Extending the megafund/RBO model to finance low-return high-impact drugs" with Roger Stein (MIT) and Iacopo Baussano (International Agency for Research on Cancer).
- "Systemic Risk Mapping and Dimensional Data Reduction", with Ignazio Basile, Monica Billio, Massimiliano Granieri, Marco Sandri.

# OTHER PROFESSIONAL EXPERIENCE

2019- University spin-off SYRTO S.r.l. (www.syrto.eu), Founder and CEO.