



CARAIAINI Petre



CURRENT POSITION: Professor; Coordinator of the Datacamp Ecosystem; Course Coordinator Scientific Research using Machine Learning Tools; Mini-track chair ICBE

AFFILIATION/DEPARTMENT: Department of Business Administration in foreign languages (UNESCO chair)

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PROFILE

Petre Caraiani is a seasoned professor and researcher, with excellent analytical and quantitative skills. With extensive experience in research management, he has successfully led research team in various national and international projects.

As an Associate Professor at the Bucharest University of Economic Studies, Petre merges frontier research and up-to-date teaching methods.

As a Senior Researcher, he has published numerous articles in well-known journals like Journal of Economic Dynamics & Control, Economics Letters, Journal of Macroeconomics, Economic Modelling, Energy Economics, Review of International Economics, Finance Research Letters.



EDUCATION

Habilitation	2024 – Habilitation in Business Administration: "Firm-level heterogeneity and its impact on the macroeconomic performance" 2013 – Habilitation in Economics: "Studies in macroeconomic dynamics in Central and Eastern Europe"
Post-Doc	2012 – National Institute for Economic Research, Romanian Academy
PhD (Doctorate)	2008 – PhD in economics, National Institute for Economic Research, Romanian Academy, Romania. Doctoral Thesis – "Theories and Models of Business Cycles. Applications for Romania"
Master	2006 – MA, Kyung Hee University, Graduate School of Pan-Pacific International Studies
Bachelor	2002 – Bachelor in Economic Statistics, Faculty of Cybernetics, Statistics and Economic Informatics, Bucharest Academy of Economic Studies (ASE), Romania

PROFESSIONAL TRAINING

One-week course on "Macroeconomic Analysis", organized by the Paris School of Economics, Paris, France, June 2018.

One-week course on "Behavioral Economics", organized by Paris School of Economics, Paris, France, June 2019.

Two-week fellowship at JVI, Joint Vienna Institute, course organized by the International Monetary Fund, on "Macroeconomic Diagnosă Macroeconomica", 18–30 January 2010, Vienna, Austria.

Two-week fellowship at JVI, Joint Vienna Institute, course organized by the International Monetary Fund, on "Macroeconomic Forecasting", 1–12 December 2008, Vienna, Austria.

ACADEMIC EXPERIENCE

2012 – Present – Associate Professor (2022 – Present), Lecturer (2019 – 2022), Faculty of Business Administration in Foreign Languages, Bucharest University of Economic Studies, Romania

Courses taught:

- Decision Processes (BBA French and German stream, FABIZ)
- Research Methods (Master in Business Administration, FABIZ)
- Quantitative Methods to support Business Decisions (Master French stream, FABIZ)
- Big Data and Data Mining (Master in Business Intelligence, FABIZ)
- Managerial Economics (Master in Digital Business I, FABIZ)



2002 – Present – Senior Researcher I (2017 – Present), Senior Researcher II (2013 – 2017), Senior Researcher III (2010–2013), Researcher (2008–2010), Research Assistant (2002–2008), Institute for Economic Forecasting, Romanian Academy

2010 – 2016 – Lecturer, Faculty of International Relations, Bucharest University of Economic Studies, Romania

Courses taught:

- Macroeconomic Stability (Master in International Financial, REI)
- Financial Macroeconomics (Master in Business Administration, REI)

RESEARCH PROFILE

My research focuses on macroeconomic modelling and applied econometrics. In the later case, I use econometric models to address research questions related to macroeconomics and finance. Lately, there is a growing interest in using machine learning models and network based approaches to better understand the macroeconomy.

I am particularly interested in AI-driven innovations across sectors such as enterprise/consumer internet and tech startups. My work examines how these technologies redefine business models, optimize decision-making, and unlock new growth opportunities.

LIST OF PUBLICATIONS

List of articles published in peer reviewed journals:

1. DG Anghel, P Caraiani. "Monetary policy shocks and the high-frequency network connectedness of stock markets" International Review of Economics & Finance 96, 103558, 2024. <https://www.sciencedirect.com/science/article/abs/pii/S1059056024005501>
2. Alvaro Silva, Petre Caraiani, Jorge Miranda-Pinto, Juan Olaya-Agudelo. "Commodity Prices and Production Networks in Small Open Economies. Journal of Economic Dynamics and Control, 104968, 2024. <https://www.sciencedirect.com/science/article/abs/pii/S016518892400160X>
3. Petre Caraiani, Adrian Cantemir Călin. "The comovement of bubbles' responses to monetary policy shocks". The North American Journal of Economics and Finance 74, 102244, 2024. <https://www.sciencedirect.com/science/article/abs/pii/S1062940824001694>
4. Afees Salisu, Rangan Gupta, Oguzhan Cepni, Petre Caraiani. "Oil shocks and state-level stock market volatility of the United States: a GARCH-MIDAS approach". Review of Quantitative Finance and Accounting 63, 1473–1510, 2024. <https://link.springer.com/article/10.1007/s11156-024-01295-z>
5. Dan Gabriel Anghel, Petre Caraiani. "The volatility connectedness of US industries: The role of investor



sentiment."

Economics Letters 235, III578, 2024.

<https://www.sciencedirect.com/science/article/abs/pii/S0165176524000612>

6. Cristophe André, Petre Caraiani, Rangan Gupta. "Fiscal Policy and Stock Markets at the Effective Lower Bound." Finance Research Letters 58 (104564), 2023.
<https://www.sciencedirect.com/science/article/pii/S15444612323009364>
7. Petre Caraiani. "Oil news shocks, inflation expectations and social connectedness." Energy Economics 127, 107054, 2023.
<https://www.sciencedirect.com/science/article/abs/pii/S0140988323005522>
8. Petre Caraiani. "The Structural Convergence of New Members of the European Union: An Input-Output Perspective." Economies 11 (10), 243, 2023.
<https://www.mdpi.com/2227-7099/11/10/243>
9. D Anghel, P Caraiani, A Rosu, I Rosu. "Asset Pricing with Systematic Skewness: Two Decades Later." Critical Finance Review 12 (1-4), 309-354, 2023.
<https://www.nowpublishers.com/article/Details/CFR-0133>
10. Petre Caraiani. "Monetary Policy Shocks and Input-Output Characteristics of Production Networks." Journal of Risk and Financial Management 16 (3), 168, 2023.
<https://www.mdpi.com/1911-8074/16/3/168>
11. P Caraiani, R Gupta, J Nel, J Nielsen. "Monetary policy and bubbles in G7 economies: evidence from a panel VAR approach." Economic Analysis and Policy, 78, 133-155, 2023.
<https://www.sciencedirect.com/science/article/pii/S0313592623000176>
12. Petre Caraiani. "The impact of oil supply news shocks on corporate investments and the structure of production network." Energy Economics 110, 106011, 2022.
<https://www.sciencedirect.com/science/article/abs/pii/S0140988322001803>
13. Cristophe André, Petre Caraiani, Adrian Cantemir Calin, Rangan Gupta. "Can monetary policy lean against housing bubbles?" Economic Modelling 110, 105801, 2022.
<https://www.sciencedirect.com/science/article/abs/pii/S0264999322000475>
14. Gupta, Chi Keung Marco Lau, Hardik A Marfatia. "Effects of Conventional and Unconventional Monetary Policy Shocks on Housing Prices in the United States: The Role of Sentiment" Journal of Behavioral Finance, 2022.
<https://www.tandfonline.com/doi/abs/10.1080/15427560.2020.1865963>
15. Caraiani, Petre. "Using LASSO-family models to estimate the impact of monetary policy on corporate investments" Economics Letters 210, 110802, 2022.
<https://www.sciencedirect.com/science/article/abs/pii/S0165176521004420>
16. Busu Mihai, Petre Caraiani, Shahrazad Hadad, Cynthia Bianka Incze, Madalina Vanesa Vargas. "The performance of publicly funded startups in Romania." Economic Systems 45(3), 100908, 2021.
<https://www.sciencedirect.com/science/article/abs/pii/S093936252100056X>



17. Caraiani Petre, Alexandru Vasile Lazarec. "Using Entropy to Evaluate the Impact of Monetary Policy Shocks on Financial Networks." *Entropy* 23(11): 1465, 2021.
<https://www.mdpi.com/1099-4300/23/11/1465>
18. Anghel Dan Gabriel, Petre Caraiani. "Stock Prices Still Move Too Much For Dividends But Less So: A Reappraisal of Shiller 1981". *Critical Finance Review* 10(3): 409-418, 2021.
<https://www.nowpublishers.com/article/Details/CFR-0094>
19. Caraiani Petre, Adrian Călin, Rangan Gupta. "Monetary policy and bubbles in US REITs" *International Review of Finance* 21(2), 675-687, 2021.
<https://onlinelibrary.wiley.com/doi/abs/10.1111/irfi.12284>
20. Caraiani, Petre. Cantemir Calin. "The impact of monetary policy shocks on stock market bubbles: International evidence" *Financial Research Letters* 34, 101268, 2020.
<https://www.sciencedirect.com/science/article/abs/pii/S1544612319303484>
21. Caraiani Petre. Dutescu Adriana, Razvan Hoinary, Georgiana Stanila. "Production network structure and the impact of the monetary policy shocks: Evidence from the OECD." *Economics Letters* 193, 109271, 2020.
<https://www.sciencedirect.com/science/article/abs/pii/S016517652030183X>
22. Caraiani Petre, Rangan Gupta. "Is the Response of the Bank of England to Exchange Rate Movements Frequency-Dependent?" *Journal of Macroeconomics* 63, 103187, 2020.
<https://www.sciencedirect.com/science/article/abs/pii/S0164070419302344>
23. Caraiani, Petre. Cantemir Calin. "Housing markets, monetary policy, and the international co-movement of housing bubbles". *Review of International Economics* 28(2): 365-375, 2020.
<https://onlinelibrary.wiley.com/doi/abs/10.1111/roie.12454>
24. Caraiani, Petre. "Forecasting Financial Networks" *Computational Economics* 55, 983-997, 2020.
<https://link.springer.com/article/10.1007/s10614-019-09925>
25. Ri26. Caraiani, Petre. "Oil shocks and production network structure: Evidence from the OECD". *Energy Economics* 84, 104559, 2019.
<https://www.sciencedirect.com/science/article/abs/pii/S0140988319303548>
26. Caraiani, Petre. „Modeling the Comovement of Entropy between Financial Markets." *Entropy* 20 (6): 417, 2018.
<https://www.mdpi.com/1099-4300/20/6/417>
27. Caraiani, Petre și Cantemir Călin.. „The Effects of Monetary Policy on Stock Market Bubble at Zero Lower Bound: Revisiting the Evidence." *Economics Letters* 169: 55-58. 2018.
<https://www.sciencedirect.com/science/article/abs/pii/S0165176518301873>
28. Caraiani, Petre. „A Quantitative Evaluation of the low productivity in South-Eastern European Economies: the role of Misallocations." *Empirica* 45, 707-745, 2018.
<https://link.springer.com/article/10.1007%2Fs10663-017-9387-1>
29. Caraiani Petre. „Evaluating exchange rate forecasts along time and frequency." *International Review of Economics & Finance* 51: 60-81, 2017.
<https://www.sciencedirect.com/science/article/abs/pii/S1059056017303726>



30. Caraiani Petre. „The predictive power of local properties of financial networks.” *Physica A: Statistical Mechanics and Its Applications* 466: 77–90, 2017.
<https://www.sciencedirect.com/science/article/pii/S0378437116305490>

31. Caraiani, Petre. „The causality between money and output: a structural approach” *International Review of Economics & Finance*, 42, 220–236, 2016.
<http://www.sciencedirect.com/science/article/pii/S1059056015002257>

32. Caraiani, Petre. „Business Cycle Accounting for Peripheral European Economies” *Scottish Journal of Political Economy*, 2016.
<http://onlinelibrary.wiley.com/doi/10.1111/sjpe.12119/full>

33. Caraiani, Petre. „The role of money in DSGE models: a forecasting perspective” *Journal of Macroeconomics*, 47 (B), 315–330 , 2016.
<http://www.sciencedirect.com/science/article/pii/S0164070415000269>

34. Caraiani, Petre. „Estimating DSGE models across time and frequency” *Journal of Macroeconomics* 44: 33–49, 2015.
<http://www.sciencedirect.com/science/article/pii/S0164070415000269>

35. Caraiani, Petre, E. Haven „Evidence of multifractality from CEE exchange rates against Euro.” *Physica A: Statistical Mechanics and its Applications* 419: 395–407, 2015.
<http://www.sciencedirect.com/science/article/pii/S0378437114005184>

36. Caraiani, Petre. "What drives the nonlinearity of time series: a frequency perspective", *Economics Letters* 125(1):40–42, 2014.
<http://www.sciencedirect.com/science/article/pii/S0165176514002572>

37. Caraiani, Petre. "Does money help forecasting output in emerging European economies?" *Empirical Economics* 42(2): 743–763, 2014.
<http://link.springer.com/article/10.1007/s00181-013-0686-5>

38. Caraiani, Petre. "The predictive power of singular value decomposition entropy for stock market dynamics" *Physica A: Statistical Mechanics and its Applications* 393: 571–578, 2014.
<http://www.sciencedirect.com/science/article/pii/S0378437113008212>

39. Caraiani, Petre. „Testing for nonlinearity and chaos in economic time series with noise titration” *Economics Letters* 120(2): 12–194, 2013.
<http://www.sciencedirect.com/science/article/pii/S0165176513001912>

40. Caraiani Petre. „Using complex networks to characterize international business cycles.” *Plos One* 8(3), e58109, 2013.
<http://journals.plos.org/plosone/article?id=10.1371/journal.pone.0058109>

41. Caraiani, Petre, E. Haven. „The Role of Recurrence Plots in Characterizing the Output–Unemployment Relationship: An Analysis.” *Plos One* 8(2), e57767, 2013.
<http://journals.plos.org/plosone/article?id=10.1371/journal.pone.0056767>

42. Caraiani, Petre, „Comparing Monetary Policy Rules in CEE economies: A Bayesian Approach” 32, 233–246, 2013.
<http://www.sciencedirect.com/science/article/pii/S0264999313000497>



43. Caraiani, Petre. "Nonlinear Dynamics in CEE Stock Market Indices." *Economics Letters* 114 (3): 329–331, 2012.
<http://www.sciencedirect.com/science/article/pii/S0165176511004617>

44. Caraiani, Petre. "Characterizing Emerging European Stock Markets through Complex Networks: From Local Properties to Self Similar Characteristics" *Physica A* 391 (13): 3629–3637, 2012.
<http://www.sciencedirect.com/science/article/pii/S0378437112001240>

45. Caraiani, Petre. „Money and output: New evidence based on wavelet coherence" *Economics Letters* 116(3): 547–550, 2012.
<http://www.sciencedirect.com/science/article/pii/S0165176512002455>

46. Caraiani, Petre. „Evidence of Multifractality from Emerging European Markets" *Plos One* 7 (7), e40693, 2012.
<http://journals.plos.org/plosone/article?id=10.1371/journal.pone.0040693>

47. Caraiani, Petre. „Stylized Facts of business cycles in a transition economy in time and frequency" *Economic Modelling* 29 (6):2163–2173, 2012.
<http://www.sciencedirect.com/science/article/pii/S0264999312001873>

48. Caraiani, Petre. „Testing For Nonlinearity In Unemployment Rates Via Delay Vector Variance" *Romanian Journal of Economic Forecasting.* 18 (1): 81–92, 2015.
http://www.ipe.ro/rjef/rjef1_15/rjef1_2015p81-92.pdf

49. Caraiani, Petre. „The uncertain unit root in GDP and CPI: a wavelet-based perspective" *Applied Economics Letters* 20 (3): 297–299, 2013.
<http://www.tandfonline.com/doi/abs/10.1080/13504851.2012.697114>

50. Caraiani, Petre. „Asymmetry in the Okun Coefficient in Romanian economy" *E&M Economics and Management* 4: 49–55, 2012.
<http://search.proquest.com/openview/d88ca9909e38de884e595aa1618d63d0/1?pq-origsite=gscholar&cbl=39163>

51. Caraiani, Petre. „Is the Romanian Business Cycle Characterized by Chaos?" *Romanian Journal of Economic Forecasting* 15 (3): 142–151, 2012.
http://www.ipe.ro/rjef/rjef3_12/rjef3_2012p142-151.pdf

52. Caraiani, Petre. „Monetary and Fiscal Policies Interactions in an Estimated New Keynesian Model for Romania" *Economic Computations and Economic Cybernetics Studies and Research* 46 (1): 145–158, 2012.
http://www.ecocyb.ase.ro/2012pdf/Caraiani%20Petre%20_T_.pdf

53. Caraiani, Petre. "Fiscal Policy in CEE Countries. Evidence from Czech Republic and Romania," *Journal of Economics (Ekonicky Casopis)* 59 (1): 79–104, 2011.
<https://www.ceeol.com/search/article-detail?id=120905>

54. Caraiani, Petre. "Comparing Monetary Policy Rules in the Romanian Economy: A New Keynesian Approach" *Romanian Journal of Economic Forecasting*, 14 (4): 30–46, 2011.
http://rjef.ro/rjef/rjef4_11/rjef4_2011p30-46.pdf

55. Acatrinei Marius, Caraiani Petre. "Modeling and Forecasting the Dynamics in Romanian Stock Market



Using Threshold Models" Romanian Journal of Economic Forecasting, 14 (2): 42–54, 2011.
http://rjef.ro/rjef/rjef2_11/rjef2_2011p42-54.pdf

56. Caraiani, Petre. "Forecasting Romanian GDP Using a BVAR Model," Romanian Journal of Economic Forecasting 13 (4): 76–87 2010.
http://rjef.ro/rjef/rjef4_10/rjef4_10_6.pdf

57. Caraiani, Petre. "The role of financial frictions in the dynamics of Romanian economy," Economic Computation and Economic Cybernetics Studies and Research, 44 (3): 147–158, 2010.
https://www.researchgate.net/publication/286464497_The_role_of_financial_frictions_in_the_dynamics_of_Romanian_economy

58. Caraiani, Petre. "Modelling business cycles in the Romanian economy using the Markov Switching Approach," Romanian Journal of Economic Forecasting 13 (1): 130–136, 2010.
http://www.ipe.ro/rjef/rjef1_10/rjef1_10_10.pdf

59. Caraiani, Petre. "Bayesian Estimation of the Okun Coefficient for Romania." Acta Oeconomica 60 (1): 79–92, 2010. <http://www.akademiai.com/doi/abs/10.1556/AOecon.60.2010.1.5>

60. Caraiani, Petre. "The Impact of Monetary Policy Shocks in a Small Open Economy," Journal of Economics (Economicky Casopis)56 (6): 537 – 550, 2008.
<http://ekonom.sav.sk/en/casopis/rocnik/6-2008>

61. Caraiani Petre. „An Estimation of Output Gap in Romanian Economy using the DSGE Approach." Prague Economic Papers 4: 366–379, 2009.
<https://www.vse.cz/pep/cislo.php?cislo=4&rocnik=2009&lang=en>

62. Caraiani, Petre. "Sticky Prices versus Sticky Information. An Application for Romania." Argumenta Oeconomica 22 (1): 125–141, 2009.
<http://argumentaoeconomica.pl/>

63. Caraiani, Petre. "Inflation Persistence and DSGE Models. An Application on Romanian Economy," Journal of Economic Computation and Economic Cybernetics Studies and Research, 43 (3): 179–188, 2009.
<http://www.ecocyb.ase.ro/articles%203.2009/P.%20Caraiani.pdf>

64. Purica, Ionuț and Caraiani Petre. „Second order dynamics of economic cycles," Romanian Journal of Economic Forecasting 10(1):37–48, 2009.
http://www.ipe.ro/rjef/rjef1_09/rjef1_09_3.pdf

65. Caraiani, Petre. 2009. "Forecasting the Romanian GDP in the Long Run Using a Monetary DSGE," Journal for Economic Forecasting, 6(3), pages 75–84, 2009.
http://rjef.ro/rjef/rjef3_09/rjef3_09_6.pdf

66. Caraiani, Petre. „An Analysis of Domestic and External Shocks on Romanian Economy Using a DSGE Model," Romanian Journal of Economic Forecasting 9(3): 100–114, 2008.
http://rjef.ro/rjef/rjef3_08/rjef3_08_6.pdf

67. Caraiani, Petre. „An Estimated New Keynesian Model for Romania," Romanian Journal of Economic Forecasting, 8(4): 114–123, 2007.
http://rjef.ro/rjef/rjef4_07/rjef4_07_9.pdf



68. Caraiani, Petre. „An Analysis of Economic Fluctuations in Romania Using the Real Business Cycles Approach,” Romanian Journal of Economic Forecasting 7(2):76-86, 2007.
http://rjef.ro/rjef/rjef2_07/rjef2_07_7.pdf
69. Caraiani, Petre. „Modeling the Economic Growth in Romania with the Solow Model,” Romanian Journal of Economic Forecasting 7(1): 77-88, 2007.
http://rjef.ro/rjef/rjef1_07/rjef1_07_6.pdf
70. Caraiani Petre. „A Multisectoral DSGE Model for Romania,” Metalurgia International 13 (11):77-85, 2008.
71. Caraiani Petre. „An Analysis of Economic Policies in Romania Using a Multi-Sectoral DSGE Model,” Metalurgia International 14 Special Issue no. 4: 63-68, 2009.

List of papers published in conference proceedings:

1. Caraiani, Petre și Visan, Cristina. "Do monetary and financial variables cause real economic activity? Empirical evidence from multiscale decomposed series from Romanian economy." in Proceedings of the 13th International Conference on Finance and Banking, editori D. Stavarek and P. Vodova, Karvina: Silesian University, Cehia, 2012, pp. 21-32, ISBN 978-80-7248-753.
2. Pelinescu, Elena și P. Caraiani. "The Credit Policy and Its Impact on the Romanian Economy." Proceedings of the 1st International Workshop on Modelling and Economic Forecast "New Trends in Modelling and Economic Forecast", Nicolae Titulescu University, 9-10 December 2011, Mustang Publishing House, București, 2012, ISBN 978-606-8058-74-0.
3. Caraiani Petre. "An Analysis of unemployment dynamics in Romania economy using a New Keynesian model" in International Proceedings of Economics Development and Research, Business and Economics Research, IACCSIT Press, vol. 16, 2011, ISBN 978-981-08-9925-7. pp. 18-22, p. 155.
4. Pelinescu Elena și Petre Caraiani. „Econometric Analysis of the Relationship between the Two Deficits in Romania” Hyperion International Journal of Econophysics & New Economy, 3(1) :75-88, ISSN: 2069-3508, 2009-2010. (Proceedings of the ENEC 2010 Conference)
5. Caraiani Petre. "Inflation Persistence and DSGE Models: An Application on Romanian Economy," in "Contemporary Issues of Economic Financial Integration: A Collection of Empirical Work" edited by Panagiotis Andrikopoulos, Athens Institute for Education and Research, Atena, Grecia, 2009, ISBN 978-960-6672-57-6.
6. Pelinescu Elena și Petre Caraiani. „The financial crisis and the transmission mechanism in Romania” Hyperion International Journal of Econophysics & New Economy, 2(1):57 -66, ISSN: 2069-3508, 2009. (Proceedings of the ENEC 2009 Conference)
7. Caraiani Petre. „A Comparison Between Calibration and Bayesian Approach on a Real Business Cycles Model,” Proceedings of the International Conference „Romania in the European Union, The Quality of Integration. Growth. Competence. Employment” vol. II, Supplement of Theoretical and Applied Economics, ISSN 1841-8678, 2008.
8. Caraiani Petre. „An Analysis of Monetary Policy in Romania Using an Estimated New Keynesian Model with Sticky Prices”. The International Conference “Integrative Relations Between the European Union



Institutions and the Member States", Sibiu, ISBN 978-973-739-594-8, 2008.

9. Caraiani Petre, Pelinescu Elena. "How Well Does Romania Satisfy the Convergence Criteria," în Romania within the EU: Opportunities, requirements and perspectives, vol. II, Sibiu, mai 2007, Lucian Blaga, University Publishing House, Sibiu, ISBN 978-973-739-428-6, 2007.

List of books & book chapters:

1. 238, 2018, ISBN 9780128122198.
<https://www.elsevier.com/books/introduction-to-quantitative-macroeconomics-using-julia/caraiani/978-0-12-812219-8>
2. Petre Caraiani (editor), „Financial and Macroeconomic Dynamics in Central and Eastern Europe: A Bayesian Approach" Nova Publishing, New York, SUA, ISBN 978-1-62081-245-7, 2012, p. 179.
https://www.novapublishers.com/catalog/product_info.php?products_id=32578
3. Lucian Liviu Albu și Petre Caraiani (editors) „Non-Linear Modeling of the Impact of the Crisis on the Interactions among Financial Markets and Macroeconomic Variables in CEE Countries", Nova Publishing, New York, SUA, ISBN 978-1-63484-932-6,
2016.https://www.novapublishers.com/catalog/product_info.php?products_id=58055&osCsid=02f84bd86252250cc78d9293d753be8b
4. Caraiani Petre. „Introducere în modelarea Bayesiana", Editura Universitară, 2010, București, România, 978-973-749-825-0.
<https://www.editurauniversitara.ro/stiinte-exacte-35/introducere-%C3%AEn-modelarea-bayesian%C4%83.html>
5. Caraiani Petre. Radu Despa, Ovidiu Solomon, Marinela Din (coauthors) „Econometrie", Editura Universitară, București, 2010, ISBN 978-973-749-869-4.
<https://www.editurauniversitara.ro/stiinte-economice-3/econometrie.html>
6. Caraiani Petre, „Modele de politica monetara. Aplicații pe cazul României", Editura Wolters Kluwer România, 2009, ISBN 978-973-191-140-3.
<http://wolterskluwer.ro/economica/wolters-kluwer/modele-de-politica-monetara-aplicatii-pe-cazul-romaniei>
7. Caraiani Petre, Ovidiu Solomon, Radu Despa (coautori) „Econometrie Aplicată," Editura Universitară, București, 2008, ISBN 978-973-749-584-6.
http://www.editurauniversitara.ro/carte/caraiani%20petre/econometrie_aplicata/561
8. Ca8. Caraiani Petre. „Teorii și modele ale ciclurilor economice. Aplicații pe cazul României," Editura Universitară, București, 2008, ISBN 978-973-749-352-1.
http://www.editurauniversitara.ro/carte/caraiani%20petre/teorii_si_modele_ale_ciclurilor_economice_aplicatii_pe_cazul_romaniei/1107

Chapter in books:

1. Caraiani, Petre – „Modern and Interdisciplinary Problems in Network Science", capitolul „Predicting



Macroeconomic Variables Using Financial Networks Properties". CRC Press, Boca Raton, Florida, pp. 12/p. 290, 2018, ISBN 9780815376583
<https://www.crcpress.com/Modern-and-Interdisciplinary-Problems-in-Network-Science-A-Translational/Chen-Dehmer-Emmert-Streib-Shi/p/book/9780815376583>

2. Petre Caraiani – „The Dynamic Relationship Between the Equity Premium and Uncertainty”, în Lucian Liviu Albu și Petre Caraiani (editors), „Non-Linear Modeling of the Impact of the Crisis on the Interactions among Financial Markets and Macroeconomic Variables in CEE Countries”, Nova Publishing, New York, SUA, p.18/p.130 ISBN 978-1-63484-932-6, 2016. (https://www.novapublishers.com/catalog/product_info.php?products_id=58055&osCsid=02f84bd86252250cc78d9293d753be8b

3. Caraiani Petre, „Fiscal Policy in CEE Economies. Evidence from an Estimated DSGE model” în Caraiani Petre (editor) – Financial and Macroeconomic Dynamics in Central and Eastern Europe: A Bayesian Approach. Nova Publishing, New York, SUA, pp. 97-146, p. 172, ISBN 978-1-62081-245-7, 2012. http://www.novapublishers.org/catalog/product_info.php?products_id=32578

4. Caraiani Petre, „Forecasting CEE Macroeconomic Dynamics Using a BVAR Model” în Caraiani Petre (editor) - Financial and Macroeconomic Dynamics in Central and Eastern Europe: A Bayesian Approach. Nova Publishing, New York, SUA, pp. 147-166, p.172, ISBN 978-1-62081-245-7, 2012. http://www.novapublishers.org/catalog/product_info.php?products_id=32578

5. D5. Caraiani Petre. „Asymmetry in the Okun coefficient in Romanian economy.” în Nonlinear Views on the Economic Crisis, editor Mircea Malita, Expert Publishing House, București, 2011, pp. 11/p. 181, ISBN 978-973-618-288-4.
<http://www.ince.ro/expert.htm>

6. D6. Caraiani, Petre. „The relationship between production and unemployment in an estimated New Keynesian model for Romania”, în In Honorem Lucian Liviu Albu, Editura Transversal, 2011, pp.14/p. 220, ISBN 978-606-605-004-3.

7. D7. Caraiani Petre, „Asymmetric Effects of Monetary Policy in Romanian Economy” în Non-linear Modelling in Economics – Beyond Standard Economics, editor Lucian Liviu Albu, Editura Expert, București, 2011, pp. 12/p. 308 ISBN 978-973-618-260-0.
<http://www.ince.ro/expert.htm>

8. D8. Caraiani Petre, „O analiza a efectelor politicii fiscale în Romania folosind un model neokeynesian”, și Caraiani Petre, Pelinescu Elena „, în Evaluarea rolului politicii fiscale în combaterea crizei economico-financiare și în asigurarea condițiilor impuse de integrarea în zona Euro, Editor Elena Pelinescu și Cristian Stănică, Editura PIM, Iași 2011, pp. 14+56 / p. 195 ISBN 978-606-130-192-8.

9. Caraiani Petre, „Forecasting the Romanian GDP in the Long Run Using a Monetary DSGE,” în Nonlinear Approaches to Economic Processes, editor Ionuț Purica, Editura Expert, București, 2009, pp. 12/ p. 262, ISBN 978-973-618-178-8.
<http://www.ince.ro/expert.htm>

10. Albu, Lucian-Liviu și Caraiani Petre, „Schită unui model al creșterii economice pe termen lung și foarte lung. Indicatorii componenției și combinarea lor,” în Determinanți ai creșterii economice, ocupării și



competitivității. Metode și tehnici de măsurare. Analize comparative, Editura Academiei Române, București, 2008, pp. 47 / p. 406, ISBN 978-973-27-1675-5.

SCIENTIFIC COMMITTEES OF ACADEMIC JOURNALS / CONFERENCES, REVIEW

Reviewer for international journals: Journal of Economic Dynamics & Control, Energy Economics, Macroeconomic Dynamics, Journal of Macroeconomics, Economic Inquiry, Regional Science and Urban Economics, Studies in Nonlinear Dynamics & Econometrics, Empirical Economics, Economic Modelling, Plos One, Physica A, Applied Economics, Acta Oeconomica, Eastern European Economics, Economic Systems, Emerging Markets Review, Emerging Markets Finance & Trade, Empirical Economics, Journal of Empirical Finance, New Zealand Economic Papers, Papers in Regional Science, Review of Financial Economics, Risks.

PROJECTS

Project Director:

PCE research project, PNIII-P4, CNCS-UEFISCDI 2020 competition, entitled "The transmission of shocks in network economies: mechanisms and implications for economic policies", project director Caraiani Petre Caraiani, 2021-2023.

ASE-DMCI institutional research grant organized and funded by ASE-DMCI with the title "Diversification and modernization of existing business support structures in the Romanian economy", project director Caraiani Petre 2019-2020.

GDN-SEE international research grant organized by WiW Austria, and funded by the National Bank of Austria with the title "A quantitative explanation of the low productivity in South-Eastern European economies: the role of misallocations", 2014-2015.

International research grant funded and organized by CERGE-EI GDN, Czech Republic, with the title "From miracle to crisis: Analyzing output dynamics in PIGS economies", Regional Research Competition RRC-XIII, 2013-2014.

Research project to stimulate the establishment of young independent research teams - type TE, **CNCSIS competition 2009-2010**, "Bayesian modeling of macroeconomic and financial structural relationships in Romania: Implications for asset valuation", 2010-2013.

British Academy research grant, "Modeling macroeconomic dynamics in CEE economies using nonlinear techniques", 2010.

International research grant funded and organized by CERGE-EI GDN, Czech Republic, "The Impact of Fiscal Shocks on Romania and CEE Countries" Regional Research Competition RRC-IX, 2009-2010.

Research grant of the Romanian Academy, "Inflation and cost of living. Statistical and econometric approaches", 2007-2008.



Participant-co-author:

PNRR 8 - "The Institute for Digital Assets", Academy of Economic Studies, project director Prof. Wolfgang Hardle, 2024-2026.

PNRR 8 - "JobKG - A Knowledge Graph of the Romanian Job Market based on Natural Language Processing", Academy of Economic Studies, project director prof. Radu Prodan, 2024-2026, responsible on behalf of the Academy of Economic Studies.

SIPOMA 5 - "Increasing the administrative capacity of the Ministry for Business Environment, Trade and Entrepreneurship to develop and implement evidence-based public policy system". Beneficiary: Ministry of Business Environment, Trade and Entrepreneurship, Partner: the Romanian Academy, 2018.

SIPOMA 3 - "Developing the capacity of the Ministry of National Education to monitor and forecast the evolution of higher education in relation to the labor market". Beneficiary: Ministry of National Education, Partner: Romanian Academy, 2017.

SIPOMA 30 - "Disaster risk assessment at national level (RO - RISK)", Beneficiary - General Inspectorate for Emergency Situations (IGSU) as applicant under POCA 2014-2020, Partner - Institute for Economic Forecasting, 2016.

IDEI Project 2008 - Exploratory research projects, "Nonlinear models for forecasting economic development", competia 2008, director Dr. Ionuț Purica, Institute of Economic Forecasting, 2009-2011.

IDEI Project 2012 - Exploratory research projects "Non-linear modeling of the impact of the crisis on the interactions among financial markets and macroeconomic variables in CEE Countries", competition 2012, director Academician Lucian Liviu Albu, Institute of Economic Forecasting, 2013-2016.

Project PNCDI - II: "Knowledge-based analysis of macroeconomic factors and dynamics using econometric and information processing techniques" - Contractor ASE, Contracting authority CNMP, subcontractor IPE - project manager Prof.univ.dr. Lucian Liviu Albu, 2009-2011.

Project PNCDI - II, "Mechanisms to promote the policy of flexibility and security ("flexicurity") and to reduce labor market segmentation", Contractor: National Institute for Scientific Research in the Field of Labor and Social Protection (INCSMPS), Subcontractor: Institute of Economic Forecasting IPE, 2007-2010.

CEEX Project - "Economic growth, employment and competitiveness in the knowledge-based economy", Contracting Authority IFA, Contractor Institutul de Prognoză Economică, Project Director Dr. Lucian Liviu Albu, 2005-2008.

CEEX Project - "Romania's Sustainable Development in the European and Global Context", Contracting Authority IFA, Contractor INCE, Subcontractor IPE, Project Director IPE, Dr. Lucian Liviu Albu, 2005-2008.

CEEX Excellence Program "Linking macroeconomic policies with those in the field of R&D, innovation in order to accelerate the process of convergence towards European structures", Subcontractor IPE, Project Director Dr. Mărioara Iordan, 2005-2008.

CERES C4 Project "Exchange courses and competitiveness in the perspective of accession to the European Union", coordinator Dr. Elena Pelinăescu, Contracting Authority IFA Măgurele, Contractor CEIS, Subcontractor IPE, 2004-2006.



PROFESSIONAL ASSOCIATIONS AND MEMBERSHIPS

2018 – present – Member European Economic Association

2018 – present – Member Econometric Society

2018 – present – Member American Economic Association

GRANTS AND HONORS

Best Researcher Award, Academy of Economic Studies, 2024.

Prize of the General Association of Romanian Economists AGER for the paper "Perspectives of the Romanian labor market in the context of the Europe 2020 Strategy" published by Editura Economică in 2012, prize received together with Lucian Liviu Albu and Mioara Iordan for 2012.

Multiple UEFISCDI and ASE awards for publications in top journals

INTERNATIONAL EXPERIENCE / ACADEMIC ENGAGEMENT

Germania, Humboldt University in Berlin, November 2022, January 2023, June 2023 (3x 1 week)

Czechia, CERGE-EI, May (1 week), 2018.

Israel, Bank of Israel, July–August (1 week), 2016.

Great Britain, University of Leicester, School of Management, februarie, 2012 (1 lună).

Great Britain, University of Leicester, School of Management, iulie–august, 2011 (2 luni).

Marea Britanie, University of Leicester, School of Management, July September (3 months; British Academy research grant), 2010.

Cehia, CERGE, Prague (1 week), 2009.

Great Britain, University of Leicester and London School of Economics, (3 weeks), 2009.

Finland, Bank of Finland (1 week), 2007.

LANGUAGES

English – Advanced

French – Intermediate

German – Intermediate

SKILLS

Quantitative Skills: being able to develop and work with macroeconomic models

Analytical skills: able to write analyses relevant for both research and policy makers

Management skills: able to direct complex research teams

Social Adaptability: Gained from international experience, including a longer research visit at University of Leicester, UK

Programming Skills: Being able to work in different programming languages including Python, Julia,



BUCHAREST UNIVERSITY OF ECONOMIC STUDIES
FACULTY OF BUSINESS ADMINISTRATION IN FOREIGN LANGUAGES

Matlab, R, Stata