

Dr. Dr. Benteng ZOU

Associate-Professor in Economics, Department of Economics and Management

University of Luxembourg

EDUCATIONAL BACKGROUND

- May 2005 - Feb. 2007: Post-doctoral fellow (from German Science Foundation), IMW (Institute of Mathematical Economics), Bielefeld University, Germany.
- Sep. 2001 - June 2005: Ph.D. in Economics, Catholic University of Louvain, Belgium. (Supervisor: Prof. Raouf Boucekkine).
- Jan. 2000 - Dec. 2000: Post-doctoral fellowship (Education Ministry of France), Mathematics Department, Nantes University, France.
- Sep. 1996 - July 1999: Ph.D in Mathematics, Mathematics Department, Peking University, China. (Supervisor: Prof. Guochun Wen)
- Sep. 1994 - July 1996: Graduate student (Equivalent to Master Degree), Mathematics Department, Peking University, China.
- Sep. 1990 - July 1994: Bachelor Degree, Mathematics Department, Yantai University, China.

TEACHING EXPERIENCE

Teaching at the University of Luxembourg:

Postgraduate: Advanced Mathematics; Economic Dynamics; Recursive Methods in Economic Dynamics; Stochastic Calculus in Finance.

Undergraduate: Macroeconomics; Mathematics II-Linear Algebra; Mathematics III-Optimization Theory and Applications; Economic Dynamics.

Teaching in other universities:

2005 – 2013 Visiting Maître de Conférences at the University of Strasbourg, two months per year: Stochastic Calculus in Finance (for Master 2).

Jan. 2001 - July 2001 Visiting assistant professor, University of Iowa, Iowa, USA. Calculus for Engineers.

Sep. 1999 - Dec. 1999 Assistant professor, Yantai University, China. Linear algebra.

44. B. Zou, S. Poncin and L. Bertinelli (2022). *The U.S.–China Supply Competition for Rare Earth Elements: A Dynamic Game View*. *Environmental Modeling and Assessment*, 27, 883-900.
43. R. Boucekkine, F. Prieur, W. Ruan and B. Zou (2022). *Uncertainty-driven symmetry-breaking and stochastic stability in a generic differential game of lobbying*. **Economic Theory**, 1-45.
42. P. Pieretti, N. Paulus and B. Zou (2021). *Is a dynamic approach to tax games relevant?* **Annals of Economics and Statistics**, Dec. 144, 113-138.
41. R. Boucekkine, F. Prieur, Ch. Vasilakis and B. Zou (2021). *Stochastic petropolitics: the dynamics of institutions in resource-dependent economies*. **European Economic Review**, 131, 103610.
40. S. Zanaj, P. Pieetti and B. Zou (2020). *On the long run sustainability of small jurisdictions*. **Journal of Industrial and Business Economics**, 02, April.
39. Y. Chen, V. Fromentin and B. Zou (2019). *To migrate with or without ones' children in China– that is the question*. **Annals of Economics and Statistics**, 135, 69-88.
38. R. Boucekkine and B. Zou (2019). *A pedagogical note on risk sharing versus instability in international financial integration: When Obstfeld meets Stiglitz*. **Open Economic Review**, 30(1), 179-190.
37. F. Prieur and B. Zou (2018). *On the impact of indirect competition for political influence on environmental policy*. **Mathematical Social Sciences**. 96, 63-72.
36. R. Boucekkine, P. Pintus and B. Zou (2018). *Mean growth and stochastic stability in endogenous growth models*, **Economics Letters**, 166, 18-24.
35. Y. Han, P. Pieretti and B. Zou (2018). *Does tax competition increase disparity among jurisdictions?* **Review of International Economics**, 26, 20-36.
34. L. Bertinelli, L. Marchiori, A. Tabakovic and B. Zou (2018). *The Impact of Unilateral commitment on Transboundary Pollution*. **Environmental Modeling and Assessment**. 23(1), 25- 37.
33. L. Marchiori, P. Pieretti and B. Zou (2018). *Immigration, occupational choice and public employment*, **Annals of Economics and Statistics**. 131, 83-116.
32. Y. Chen and B. Zou (2017). *To migrate with or without the children – a theoretical note*, **Economics Bulletin**, 37(2), 686-696.
31. H. Dawid and B. Zou (2017) *Foreign direct investment with endogenous technology choice*, **Pacific Economic Review**. 22(1), 3 - 22.
30. Y. Han, P. Pieretti and B. Zou (2017). *On the desirability of tax coordination when countries compete in taxes and infrastructure*, **Economic Inquiry**, 55(2), pages 682-694.
29. V. Fromentin, O. Damette and B. Zou (2017). *The global economic crisis and the effect of immigration on the employment of native-born workers in Europe*. **The World Economy**. 40(6), 1068-1088, June.
28. B. Zou (2016). *Differential game with (a)symmetric players and heterogeneous strategies*. **Journal of Reviews on Global Economics**, Vol 5, 171—179.

27. I. Schumacher and B. Zou (2015). *Threshold preferences and the environment*, **Journal of Mathematical Economics**, Vol 60, 17—27.
26. L. Bertinelli, C. Camacho and B. Zou (2014). *Carbon Capture and Storage and Transboundary Pollution: A Differential Game Approach*, **European Journal of Operational Research**, Vol 237(2): 721–728.
25. Y. Han, P. Pieretti, S. Zanjaj and B. Zou (2014). *Asymmetric Competition among Nation States: A Differential Game Approach*, **Journal of Public Economics**, Vol 119, 71-79.
24. Y. Han, P. Pieretti and B. Zou (2014). *Does size asymmetry exacerbate the inefficiency of tax competition?* **Economics Letters** (2014), Vol 122, 16-18.
23. S. Goutte and B. Zou (2013). *Foreign exchange rates under Markov Regime switching model*. **Mathematical Finance Letters**, 2013:8.
22. Y. Han, P. Pieretti and B. Zou (2013). *The Dynamics of Firms Location-- A Revisit of Home Attachment under Tax Competition*. **Economics Letters** (2013), Vol 121, 208-510.
21. L. Bertinelli, E. Strobl and B. Zou (2012). *Sustainable economic development and the environment: Theory and evidence*, **Energy Economics**, Vol 34(4): 1105-1114.
20. L. Bertinelli, E. Strobl and B. Zou (2010). *Polluting Technologies and Sustainable Economic Development*, **International Journal of Global Environmental Issues**, 10(1/2): 63-83.
19. P. Piretetti, L. Marchiori and B. Zou (2010). *Migration and human capital in an endogenous fertility model*, **Annales d'Economies et Statistiques**, Vol 97/98, 187-205.
18. A. Bourgain, P. Piretetti, and B. Zou (2010). *The Shortage of Medical Workers in Sub-Saharan Africa and Substitution Policy*, **Revue Economique**, Vol 61(6), 1011-1022.
17. H. Dawid, A. Greiner and B. Zou (2010). *Optimal foreign investment dynamics in the presence of technological spillovers*, **Journal of Economic Dynamics and Control**, Vol. 34(3), 296--313.
16. P. Piretetti, and B. Zou (2009). *Brain drain and factor complementarity*, **Economic Modelling**, Vol 26, 404-413.
15. R. Boucekine, C. Camacho and B. Zou (2009). *Bridging the gap between growth theory and the new economic geography: The spatial Ramsey model*, **Macroeconomic Dynamics**, Vol 13 (1), 20-45.
14. L. Bertinelli and B. Zou (2008). *Does Urbanization Always Foster Human Capital Accumulation*, **Journal of Developing Areas**, Vol 41(2): 171-184.
13. L. Bertinelli, E. Strobl and B. Zou (2008). *Economic Development and Environmental Quality: A Reassessment in Light of Nature's Self-Regeneration Capacity*, **Ecological Economics**, Vol 66, 371-378.
12. I. Schumacher and B. Zou (2008). *Habit in pollution: An inquiry into intergenerational equity*, **Journal of Environmental Economics and Management**, Vol 55, 296-309.
11. C. Camacho, B. Zou and M. Briani (2008). *On the dynamics of capital accumulation across space*, **European Journal of Operational Research**, Vol 186(2), 451-465.
10. P. Pieretti, L. Marchiori and B. Zou (2008). *Brain drain, remittances, and fertility*, **International Economics**, Vol 3, 9-42.

9. P. Pieretti, and B. Zou (2007). *An Extended Solow Growth Model with Emigration: Transitional dynamics and skills complementarity*, **Economic Bulletin**, Vol 6(35).
8. A. Barahona and B. Zou (2006). *A comparative study of energy saving technical progress in vintage capital model*, **Resource and Energy Economics**, Vol 28(2), 181-191.
7. B. Zou (2006). *Vintage capital, optimal investment and technology adoption*, **Economic Modelling**, Vol 23, 515-533.
6. C. Camacho and B. Zou (2004). *The spatial Solow model*, **Economics Bulletin**, Vol 18(2), 1- 11.

PUBLICATIONS IN REFEREED MATHEMATICS JOURNALS

5. B. Zou (2001). *Oblique derivative problems for quasilinear parabolic equations with VMO coefficients*, **Advanced in Mathematics**, 30, 367-376.
4. B. Zou (2001). *Some initial-oblique derivative boundary value problems for quasilinear parabolic equations with unbounded coefficients*, **Journal of System Science and Complexity**, 204-210.
3. G. Wen and B. Zou (2000). *Initial-irregular oblique derivative problems for nonlinear parabolic complex equations of second order with measurable coefficients*, **Nonlinear Analysis, Theory, Method and Application**, 39, 937-953.
2. G. Wen and B. Zou (1999). *Initial-irregular oblique derivative problems for nonlinear parabolic complex equations of second order with measurable coefficients*, **Recent Developments in Complex Analysis and Computer Algebra**, 345-372.
1. G. Wen and B. Zou (1998). *Estimates of Initial-irregular oblique derivative problems for nonlinear parabolic equations of second order with measurable coefficients*, **Science in China (Series A)**, 41(11), 1163-1175.

CONTRIBUTIONS TO EDITED VOLUMES

5. R. Boucekkine, C. Camacho and B. Zou (2020). *Optimal switching from competition to cooperation: a preliminary exploration*, Chapter 9 in: **“Dynamic Economic Problems with Regime Switches”**, edited by Vladimir M. Veliov, Josef L. Haunschmied , Raimund Kovacevic and Willi Semmler, Springer.
4. H. Dawid and B. Zou (2014). *Strategies of Foreign Direct Investment in the Presence of Technological Spillovers*, In: **“Dynamic Games in Economics”**, edited by J. Haunschmied, V. M. Veliov and S. Wrzaczek, Springer, 115-133.
3. P. Pieretti, L. Machiori and B. Zou (2011). *The impact of migration on origin countries: a numerical analysis*, In: **“Computational Methods in Economic Dynamics”** edited by Herbert Dawid and Willi Semmler, Springer, 183-195.
2. L. Bertinelli and B. Zou (2010). *Transboundary Pollution and Abatement*, In: **“Advances in Nonlinear Economic Dynamics”**, Täonu Puu and Anastasiia Panchuk (Eds.), Nova Science Publishers Inc., N.Y.
1. B. Zou (2000). *Estimates of solutions for linear parabolic equations with VMO coefficients*, In: **“Boundary Value Problems, Integral Equations and Related Problems”**, Edited by Jianke Lu and Guochun Wen, World Scientific, Singapore, 204-210.

8. Y. Chen, I. Salagean and B. Zou. *Private educational expenditure inequality between migrant and urban households in China's cities*. DEM DP 2020-03.
7. R. Boucekkine, C. Camacho and B. Zou, *Optimal switching from competition to cooperation: a preliminary exploration*. DEM DP 2020-02.
6. X. Wan and B. Zou, *Airport competition in two-sided markets*. DEM DP 2020-01.
5. L. Bertinelli, S. Poncin and B. Zou. *The war of rare earth elements- a dynamic game approach*. CREA DP 2019-11.
4. N. Paulis, P. Pietretti and B. Zou, *Is a dynamic approach of tax game relevant*. CREA 2019-09.
3. M. Beine, L. Bertinelli, R. Comertpay, A. Litina, J-F. Maystadt and B. Zou, *Refugee Mobility: Evidence from Phone Data in Turkey*, CREA 2019-01.
2. N. Paulis, P. Pietretti and B. Zou, *Tax competition - An intertemporal perspective*. CREA 2018-10.
1. R. Boucekkine, F. Prieur and B. Zou. *Symmetric vs asymmetric equilibria and stochastic stability in a dynamics game of legislative lobbying*. CREA DP 2018-03.

SUPERVISION OF RESEARCH STUDENTS

Supervision of Ph.D / Post-doctoral researchers:

8. *Stanislav Gubenko*, Ph.D, 2020-2024, with Matthew Happold.
7. *Can Mavi*, Post-doctor 2020-2022.
6. *Stephane Poncin*, Ph.D, 2017-2020, with Luisito Bertinelli.
5. *Nora Paulus*, Ph.D, 2017-2020, with Patrice Pieretti.
4. *Yiwen Chen*, Ph.D, 2015-2018.
3. *Vincent Fromentin*, Post-doctor Sep. 2011- Feb. 2012.
2. *Luca Marchiori*, Post-doctor 2009-2011.
1. *Bity Diene*, Post-doctor 2008-2010.

Ph.D jury/committee member of the following students:

Xi Wan (CREA, University of Luxembourg), submitted in February 2015.

Yutao Han (CREA, University of Luxembourg), submitted in July 2014.

Rusly Ridwan (CREA, University of Luxembourg), submitted in April 2013.

ADMINISTRATIVE AND OTHER ACTIVITIES

Director of Studies Master in Economics and Finance, University of Luxembourg, since Sep. 2014.

Director of Studies EMOS (European Master in Official Statistics), cooperation with STATEC and EUROSTAT, since 2016.

Referee for the following journals: International Economic Review, Journal of Economic Dynamics and Control, Mathematical Social Science, Journal of Public Economics, European Journal of Operational Research, Journal of Public Economic Theory, Optimal Control Application and Methods, Public Finance Review, Economic Theory, Journal of Economic Behavior and Organization, Economic Modelling.

Associate Editor of Economic Bulletin and Journal of Mathematical Economics.

Co-organizer of the EU-SILC (European Union Statistics on Income and Living Conditions) workshop, Luxembourg, Dec. 2016, with Guillaume Osier (STATEC) and Didier Dupré (Eurostat).

Co-organizer of the PET (Public Economic Theory)-15 Conference, Luxembourg, July 2015 (with Skerdilajda Zanaj).

Organizer of the 4th CREA Public Conference, CREA, University of Luxembourg, 28 May, 2014.

RESEARCH GRANTS AWARDED

9. Participated in the project: *Materials scarcity and recycling for the energy transition (AAPG2021 SCARCYCLET)*, funded (719,411euro) by ANR, France, 2022-2025.
8. Project *Reconciling the Uneasy Relationship between Economics and Personal Data Privacy*, with Peter Ryan, funded by the University of Luxembourg, 2015-2018.
7. Project *Occupation choice and international migration*, with Patrice Pieretti, funded by the University of Luxembourg, 2013-2015.
6. Participated in the project: *The EU in the new complex geography of economic system: models, tools and policy evaluation*, funded by COST: European Cooperation in the field of Scientific and Technical Research, 2012-2016.
5. Project: *The economics of Carbon Capture and Storage*, with Luisito Bertinelli, funded by the University of Luxembourg, 2011-2013.
4. Project: *Economic implications of international migration*, funded by the University of Luxembourg, 2009-2011.
3. Project: *Economics development and the environment*, with Luisito Bertinelli, funded by the University of Luxembourg, 2008-2010.
2. Project: *Brain drain and its economic impact*, with Patrice Pieretti, funded by the University of Luxembourg, 2008-2009.
1. Project: *Age-specific mortality, health and economic growth: an endogenized life expectancy*, funded by the AXA Research Fund, 2008.

TEACHING AWARDS

Best professor award of Faculty of Law, Economics and Finance, 2015.