

Personal information

First name(s) / Surname(s) **Sebastian M. Poledna**
Address(es) International Institute for Applied Systems Analysis (IIASA),
Schlossplatz 1, A-2361 Laxenburg, Austria
Telephone(s) ++43 1 40160-36253
Fax(es) ++43 1 40160- 936250
E-mail poledna@iiasa.ac.at
Nationality Austrian
Date of birth February 1980



Experience

since 2015 **Research Scholar**, International Institute for Applied Systems Analysis (IIASA), Austria
2014 **Guest researcher**, Dirección General de Estabilidad Financiera, Banco de México, Mexico
2013 **Guest researcher**, Oxford Martin School, University of Oxford, United Kingdom
2011-2014 **Research associate**, Section for Science of Complex Systems, Medical University of Vienna, Austria

Experience non scientific

2007-2015 **Risk manager**, Department of Operational risk, UniCredit Bank Austria AG, Austria

Education

2011-2016 PhD in natural science in the field of physics, University of Vienna, Austria
Advisor: Stefan Thurner
2015 Complex Systems Summer School, Santa Fe Institute, USA
2005-2011 Diploma programme in the field of physics, University of Vienna, Austria
2001 Erasmus Programme, Provinciale Hogeschool Limburg, Belgium
1999-2003 Diploma programme in the field of European Economy and Business Management, University of Applied Sciences bfi Vienna, Austria

Publications

8. S. Poledna, O. Bochmann and S. Thurner, The effects of Basel III regulation policy on systemic risk, 2015, working paper
7. S. Gurciullo, M. Smallegan, M. Pereda, F. Battiston, A. Patania, S. Poledna, D. Hedblom, B.T. Oztan, A. Herzog, P. John, and S. Mikhaylov, Complex Politics: A Quantitative Semantic and Topological Analysis of UK House of Commons Debates, 2015, working paper
6. S. Poledna, J.L. Molina-Borboa, S. Martínez-Jaramillo, M. van der Leij and S. Thurner, The multiplex network nature of financial systemic risk and its implications, *Journal of Financial Stability* **20**, 70-81, 2015
5. P. Klimek, S. Poledna, J.D. Farmer, and S. Thurner, To bail-out or to bail-in? Answers from an agent-based model, *Journal of Economic Dynamics and Control*, **50**:144–154, 2015

4. S. Poledna and S. Thurner, Elimination of systemic risk in financial networks by means of a systemic risk transaction tax, 2014, in review
3. S. Thurner and S. Poledna, DebtRank-transparency: Controlling systemic risk in financial networks, *Scientific Reports* **3**, 1888, 2013
2. S. Poledna, S. Thurner, J.D. Farmer, and J. Geanakoplos, Leverage-induced systemic risk under Basle II and other credit risk policies, *Journal of Banking & Finance* **42**, 2014
1. S. Poledna, Agent-based models in econophysics: applications to financial regulation, Diploma thesis, 2011

Talks

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|------|--|
| 2015 | OECD Workshop on Complexity of the Economy: Research and Policy Implications, OECD Headquarters, Paris, France, Elimination of systemic risk in financial networks by means of a systemic risk transaction tax |
| 2015 | 1st Vienna Conference on Pluralism in Economics, Vienna University of Economics and Business, Austria, Elimination of systemic risk in financial networks by means of a systemic risk transaction tax |
| 2014 | CRISIS Final Workshop: A Complexity view of Crisis, Milan, Italy, Central banking and regulation of systemic risk |
| 2014 | European Conference on Complex Systems (ECCS) 2014, Satellite: Multiplex Networks 2014, Lucca, Italy, Multiplex structure of systemic risk in financial networks |
| 2014 | NetSci 2014, Berkeley, USA, Elimination of systemic risk in financial networks by means of a systemic risk transaction tax |
| 2014 | Computing in Economics and Finance (CEF) 2014, Oslo, Norway, Elimination of systemic risk in financial networks by means of a systemic risk transaction tax |
| 2014 | Deutsche Physikalische Gesellschaft (DPG), Frühjahrstagung: Sektion Kondensierte Materie 2014, Dresden, Germany, DebtRank-transparency: controlling systemic risk in financial networks |
| 2013 | European Conference on Complex Systems (ECCS) 2013, Barcelona, Spain, DebtRank-transparency: controlling systemic risk in financial networks |
| 2013 | International conference on statistical physics of the International Union of Pure and Applied Physics 2013 (STATPHYS 25), Satellite: Financial Networks and Systemic Risk, Kyoto, Japan, DebtRank-transparency: controlling systemic risk in financial networks |
| 2013 | Econophysics Colloquium 2013, Pohang, Korea, Leverage-induced systemic risk under Basle II and other credit risk policies |
| 2013 | NetSci 2013, Copenhagen, Denmark, Systemic risk in financial networks: DebtRank transparency |
| 2011 | European Conference on Complex Systems (ECCS) 2011, Econophysics Colloquium 2011, Vienna, Austria, The role of leverage in a world of perfect hedging |

Media coverage (selection)

2015 May	Wiener Zeitung: future, Risikosteuer für Spekulanten
2014 November	Süddeutsche Zeitung, Mehr Stabilität für Finanzmärkte - Die bessere Steuer
2014 March	APA OTS, AK zu Bankenstudie: Ergebnis wäre stabiles Bankensystem
2014 March	foonds.com, Mögliche Revolution am Finanzsektor: Steuer könnte systemisches Risiko minimieren
2014 March	science.apa.at - politik und wirtschaft, Risikoabhängige Transaktionssteuer würde Banken stabilisieren
2014 March	Deutsche Wirtschafts Nachrichten, Banken-Krise: Höhere Steuern für riskante Banken
2014 March	science.orf.at, Steuer könnte systemisches Risiko minimieren
2014 February	BusinessDay, How a tax could make the financial system safer
2014 February	Bloomberg Opinion, Make Banks Safer: Tax Them
2013 February	Bloomberg, Fix Finance by Shedding Light on Its Complexities