Leanne J. Ussher

Assistant Professor in the Department of Economics
Queens College, The City University of New York
300-O Powdermaker Hall,
Flushing NY 11367

Email: leanne.ussher@qc.cuny.edu
Tel: (718) 997 5412
Fax: (718) 997 5466

Short Bio:

Leanne Ussher is Assistant Professor of Economics at Queens College, City University of New York. Her research is in money, banking, and the macro-microstructure of financial market architecture. Emphasis in her research is on economic situations where bounded rationality, multiple equilibria, generalized increasing returns, and complexity create a need for rules and institutions to help coordinate economic behavior. Multi-agent system techniques offer new ways to investigate optimal market design: computer simulations can resolve aggregate behavior by growing markets from the bottom up to aid understanding of their generative process and how trading rules impact price outcomes and the distribution of wealth. Dr Ussher applies this methodology to understand the interaction between financial traders, banks, non-bank financial institutions and central banks.

Professional Positions Positions:

- Assistant Professor in Economics, Queens College, City University of New York (9/04 - now)
- Research Scientist, in the Multi-Agent System Lagrange Laboratory, ISI Foundation, Turin, Italy (4/08 – 8/08)
- Securities Analyst, Reserve Bank of Australia, Sydney (1/1992 – 6/1994)

Education:

- Doctor of Economics. New School for Social Research, New York, 2005. Thesis title *An Agent-based Model of a Speculative Futures Market*
- Master of Economics New School for Social Research, New York, 1998
- Graduate Diploma in Applied Finance and Investment. Securities Institute of Australia, Sydney, 1994.
- Bachelor of Economics (Honors). Macquarie University, Sydney, 1991. Double major in Economics and Asian Studies.

Undergraduate Classes Taught at Queens College:

- Price Theory ECON 205
- Financial Markets BUS 351
- Options and Futures BUS 353
- Supervision of a Science Honors student with research in an *Agent-based Financial Market Model*

Published Articles, Articles Under Review, and Current Manuscripts

Publications

- "A Speculative Futures Market with Zero-Intelligence" *Eastern Economics Journal*, pp.518-549 34(4) Fall 2008.
- "Symposium Introduction: Agent-Based Computational Economics," *Eastern Economics Journal*, pp.421-422, 34(4) Fall 2008. Coauthored with Jason M Barr, Troy Tassier.
- "The Future of Agent-Based Research in Economics: A Panel Discussion," Coauthored with Jason M Barr, Troy Tassier, Blake LeBaron, Shu-Heng Chen and Shyam Sunder *Eastern Economics Journal*, pp.550-565, 34(4) Fall 2008.
- "Margins and Transaction Taxes in a Continuous Double Auction Futures Market" pp315-342, in *Proceedings of the Agent 2005 Conference on Generative Social Processes, Models, and Mechanisms*, ANL/DIS-06-5, ISBN 0-9679168-6-0, C.M. Macal, M.J. North, and D. Sallach (editors) co-sponsored by Argonne National Laboratory and The University of Chicago, October 13−15, 2005.

Working Papers

- "A 'New Bretton Woods': Kaldor, and the Antipodean Quest for Global Full Employment" co-authored with S. Turnell
- "International Price Stability, Full Employment and Global Balances: The Case for A Commodity Reserve Currency"
- "Allocative Efficiency of a Speculative Futures Market with Hedgers."
- "Leverage and Settlement in a Speculative Futures Market."

Edited Books in progress

- Collected papers honoring Benjamin Graham's macro policy. Includes a paper on "Commodity Backed Currency" by the editor.
- Collected papers on the *Recent Developments in Macroeconomics* Co Editor Per Berglund. Introduction and papers by the editors.

Popular Press:

- "America is Cruising Towards an American Federal Deficit Shipwreck: Comment" http://blogs.ft.com/wolfforum/2007/07/america-is-crui.html
- "Grain buffer stocks could be used in case of emergencies," letter to the *Financial Times*, September 6, 2005.
- "URPE at ASSA," URPE Newsletter Winter 2006.

Research Grants:

- Research Scientist, in the Multi-Agent System Lagrange Laboratory, ISI Foundation, Turin, Italy (4/08 – 8/08)
- PSC-CUNY Research Grant for (June 07 - December 08). Funding for the investigation into zero-intelligent traders in a futures market.
- Research Grant from the Centre for Financial Market Integrity, Chartered Financial Analyst Institute. For a book of collected papers on Benjamin Graham.
- PSC-CUNY Research Grant for (Fall 05 - Fall 06). Funding is for the investigation into the distribution of wealth among futures traders.

Honors & Awards:

- General Integration of the Applications of Complexity in Science (GIACS), supporting female advancement in complexity application areas, for invited guest speaker to 5th *European Conference on Complex Systems*, Jerusalem. Travel award $500. (September 14-19, 2008).
- *Second Workshop in Analytical Political Economy* at Queen Mary, University of London, (May 16-17, 2008).
- *Tech Fee Grant* for financial trader software "Rotman Interactive Trader." The grant pays $9000 of software (May 2007 – May 2010).
- Graduate Workshop in Computational Social Science Modeling and Complexity, Santa Fe Institute, (11-24 July, 2004)
- Center for Economic Policy Analysis, New School University. Research Fellow (1/02 - 6/03)
- Cambridge Seminar, Queens College and New School University. Janeway Bursary Travel Award (March 1998)
- Technology Initiative Fund, New School University. Grant for Economics Web Site and Faculty Home Pages (Spring 1998)
- Michael Gellert Fellow, New School University (1996 -1997)

Academic Conference Presentations:

- "Marked to Market and Leveraged Trading in a Speculative Market: A Simulation with Zero-Intelligent Agents," *Agent-based modeling for banking and finance,"* Turin, Italy (February 9-11, 2009). Turin University Economics Department and the Central Bank of Italy.
- "Marked to Market Leverage with Zero-Intelligent Agents," *European Conference on Complex Systems*, Jerusalem, (September 14-19, 2008).
- "A Speculative Futures Market with Zero-Intelligent Agents," presented at a workshop on *Propagation Mechanisms in Markets***,** ISI Foundation, Turin, Italy. (July 10-11, 2008).
- "A Global Macro 2 Sector Growth Model along Kaldorian Lines" presented workshop *Propagation Mechanisms in Markets*, ISI Foundation, Turin, Italy. (July 10-11, 2008).
- "Liquidity and Leverag: Margin Trading with Real Time Settlement," presented at the *2008 International Conference on Economic Science with Heterogeneous Interacting Agents (ESHIA)* Conference Warsaw, Poland. (June 18-22, 2008).
- "Liquidity and Leverage: Margin Trading with Real Time Settlement in a Zero Intelligent Agent-Based Mode.l" Paper presented at the 14th *International Conference on Computing in Economics and Finance*, Paris, France. (June 26-28, 2008).
- "Kaldor's Intersectoral Growth and Trade Model," Invited speaker and participant, *Second Workshop in Analytical Political Economy* at Queen Mary, University of London, (May 16-17, 2008).
- "Zero-Intelligent Agents with Wealth: An Example of Real Time Settlement and Leveraged Trading in a Speculative Futures Market," Seminar in the Multi-Agent Systems Lagrange Laboratory, ISI Foundation, Turin, Italy. (April 6, 2008).
- "Settlement and Leveraged Trading in a Speculative Market" Paper presented at the 34th Annual Conference of the Eastern Economic Association, Boston, US. (March 6-9, 2008).
- "Settlement and Leveraged Trading in a Speculative Futures Market" Invited guest speaker, workshop on *Agent-Based Approaches in Economics,* (January 24, 2008)

Erasmus University, Rotterdam, Netherlands. Talks were in honor of the Ph.D. defense of Katalin Boer-Sorban.

- “International Price Stability, Full Employment and Global Balances: The Case for A Commodity Reserve Currency.” Paper presented at the American Economic Association, Allied Social Sciences Association Conference, New Orleans, (January 3-6, 2008).
- Invited guest speaker, “Allocative Efficiency of a Speculative Future Market with Zero-Patience” Second European PhD Complexity school: Stochastic Effects in Differential Nonlinear Models - From Neutrality in Evolution to Efficiency in Markets. ISI Foundation, Turin, Italy. (November 22-27, 2007).
- “Allocative Efficiency and Liquidity in a Speculative Futures Market” Paper to be presented at the 2007 ESHIA International Conference on Economic Science with Heterogeneous Interacting Agents (formerly the Workshop on Economies of Heterogeneous Interacting Agents) Conference Washington D.C. (June 17 - 19, 2007).
- “Allocative Efficiency of a Speculative Futures Market with Zero-Patience” Paper to be presented at the 13th International Conference on Computing in Economics and Finance, Montreal (June 14-16, 2007).
- “Allocative Efficiency of a Speculative Futures Market with Zero-Patience” Paper presented at the 33rd Annual Conference of the Eastern Economic Association, Philadelphia. (February 23-25, 2007).
- “Trading Amazonian Sinks.” Paper presented at the 32nd Annual Conference of the Eastern Economic Association, Philadelphia (February 24-26, 2006).
- “Trading Amazonian Sinks.” Paper presented at the NYC Computational Economics Workshop, New York City (February 16, 2006).
- Simulating land use and its environmental impacts: limits and possibilities of Land Use and Land Cover Change models, with Sergio Rivero (UNIR). 1st Simulating Sustainable Development Workshop, Belem, Brazil (December 16 –17, 2005).
- “Price Volatility and Liquidity in a Continuous Double Auction.” Paper presented at Southern Economics Association Annual Meeting 2005, Washington, D.C. (November 18-20, 2005). Session organizer.
- “Margins and Transaction Taxes in a Continuous Double Auction Futures Market.” Paper included in the conference proceedings of the Agent 2005 Conference on *Generative Social Processes, Models, and Mechanisms*. Argonne National Laboratory, The University of Chicago, Chicago, (October 13-15, 2005).
- "Margin and Transaction Taxes in an Intraday Continuous Double Auction Futures Market" Paper presented at the NYC Computational Economics Workshop, New York City (October 7, 2005).
- “Margins and Transaction Taxes in an Artificial Speculative Futures Market.” Paper presented at the 11th Annual Conference on Computing in Economics and Finance (CEF), Washington, D.C. (June 23-25, 2005).
- “Margins and Transaction Taxes in a Walrasian Market.” Paper presented at 31st Annual Conference of the Eastern Economic Association, New York (March 4, 2005).
- Conference organizer, with Per Berglund, “Recent Developments in Macroeconomics” 31st Annual Conference of the Eastern Economic Association, New York (March 4, 2005). Proposed book of collected papers from this conference will be edited and published in late 2006 by Routledge.
- “Margins and Transaction Taxes in a Walrasian Futures Market.” Paper presented at Santa Fe Institute, New Mexico (July 2004).
- “An Agent-Based Model of Futures Speculation with Margin Borrowing and Transaction Taxes.” Paper presented at New School–Amherst workshop, Amherst (March 2003);

Eastern Economics Association, Boston, (January 2002); & the Seventh Annual Post Keynesian Workshop, University of Missouri, Kansas City, (July 2002).

- "How Iraq can pay for its Reconstruction," Paper presented at the Union for Radical Political Economics Workshop, Bantam, Connecticut (August 2003).
- "An Agent-Based Model of Futures Speculation with Margin Borrowing and Transaction Taxes." Paper presented at New School–Amherst workshop, Amherst (March 2003); Eastern Economics Association, Boston, (January 2002); & the Seventh Annual Post Keynesian Workshop, University of Missouri, Kansas City, (July 2002).
- "Microfoundations and the Marginalist Revolution," with Gonçalo L. Fonseca. Paper presented at the History of Economic Society Conference, University of California, Davis (July 2002).

- "International Price Stability and Full Employment: The Case for a Commodity Reserve Currency." Paper presented at the American Economic Association, Allied Social Sciences Association Conference, Boston (January 1999).
- "Do Budget Deficits Matter? Mr. Lerner and the Neo -Keynesians." Paper presented at the Eastern Economic Association Conference, New York (February 1998).
- "Supply and Demand for Bank Reserves and Treasury-Central Bank Relations." Presentation to the Transformational Growth and Full Employment Project (March 1998).
- "Do Budget Deficits Raise Interest Rates: A Survey of the Empirical Literature," Working Paper, no.3. Transformational Growth and Full Employment Project (April 1998).

Invited participant to roundtable discussions on international monetary reform:

- *Building an International Monetary and Financial System for the 21st Century: Agenda for Reform* November 24-25, 2008. Sponsored by the CFA Institute and the Reinventing Bretton Woods Committee.
- *Euro 50 Group*, breakfast session, DC, October 12, 2008. Sponsored by the Reinventing Bretton Woods Committee.
- Robert Mundell's *Roundtable Conference on Global Money*, Villa Santa Columba, Siena, Italy.
- *Global Markets Disruptions: Will Global Imbalances Unwind?* Sponsored by the Austrian Central Bank and the Reinventing Bretton Woods Committee, Salzburg, Austria. June 12-15, 2008.
- *Bretton Woods II Under Stress*, sponsored by the Central Bank of Spain and the Reinventing Bretton Woods Committee, Madrid, Spain. April 17-18, 2008.

Public and Academic Outreach:

- Organized a workshop on *Propagation Mechanisms in Markets*, ISI Foundation, Turin, Italy. (July 10-11, 2008).
- Consultant to CFA Institute in support of talks on international monetary reform. Working with Irving Kahn of Kahn Brothers New York and Kurt Schacht CFA Centre for Financial Market Integrity.
- Co-founder of the NYC Computational Economics Workshop, in NYC. Assistant organizer of monthly seminars, annual EEA session organizer, and co-editor of an Agent-based Symposium in *Eastern Economics Journal* Winter 2009.

- Attended a *Teaching Economics: Pedagogy Workshop*, hosted by URPE at the ASSA, Boston, January 2006
- 1st Simulating Sustainable Development Workshop. Agent-based modeling of economy-environment nexus in the Brazilian Amazon. GEDA Grupo Economia e Desenvolvimento Amazônico (Belem December 16 –17, 2005)
- Attended a *Repast (Recursive Porous Agent Simulation Toolkit) Training Course*, Chicago, October 10-12, 2005
- Attended a *Teaching Innovations Program* (TIP) which aims to promote interactive teaching methods in the classroom, Summer 2005. The program has three phases: a workshop, completion of two modules, and supporting the scholarship of teaching. TIP is sponsored by the Committee on Economic Education of the American Economic Association and funded by the National Science Foundation.
- Seminar presentation "Allocative Efficiency of Speculative Futures Market with Zero-Patience" at the: NYC Computational Economics Workshop, New York City (September 26, 2006).
- Seminar presentation to faculty: "Allocative Efficiency of Speculative Futures Market with Zero-Intelligence" Paper presented at Economics Department, Macquarie University, Australia (May 29, 2007).

- EEA session organizer and chair "Benjamin Graham's International Commodity Reserve Currency" at the Eastern Economics Conference in February 2007.
- EEA session co-organizer for 3 Agent-based sessions at the Eastern Economics Conference in February 2007.
- *Union for Radical Political Economy:* steering committee member. Presentation to graduate students at New School for Social Research April 2007.

Recent Teaching Summary

BUS351 Financial Markets,
BUS353 Options and Futures,
ECON205 Price Theory
HMNS3913 Science Honors, independent study on an agent-based simulation of a financial market.

In teaching ECON205, BUS351 and BUS353 I emphasize research and experiential learning both outside and inside the classroom. In addition to mid and final exams, both classes contain numerous quizzes throughout the semester to encourage students to read the text and keep up-to-date with the lecture material. In the BUS classes students are required to familiarize themselves with the Bloomberg Terminal, and download and analyze data from Bloomberg to complete homework assignments. In BUS351 I require students to read the Financial Times and keep current with weekly events on Wall Street. In this class I set two major writing assignments, the first is on the US Treasury yield curve and the second is on the stock market using experimental data from class. These assignments force students to apply analytical tools to real data, and to interpret results using both historical and current events.

Trading competitions are carried out in all classes, in and outside the classroom, using Rotman Interactive Trader software and in 2009 I will use Second Life. These experiments increase student enthusiasm and competition. They prove extremely useful in student conceptualization of otherwise esoteric mathematical theorems: it allows nuanced economic concepts such as rational expectations, market efficiency, risk and liquidity to be understood through active experiential learning.

In Fall 2006 I used a classroom experiment as fulfillment for a Teaching Innovations Program (TIP) module on Teaching with Experiments in Fall 06 sponsored by the Committee on Economic Education of the American Economic Association (http://www.vanderbilt.edu/AEA/AEACEE/TIP.htm).

Journal Referee:

- *Computational Economics*
- *Metroeconomica: International Review of Economics*
- *Review of Political Economy*
- *Journal of Economic Dynamics and Control*

Department Admin:

- Economics Department Night Chair (Fall 2007)
- Acquired funding for a Bloomberg Terminal through funding from the Office of the President, Queens College, and arranged training sessions for faculty (Spring 2007).
- Organizer of bi-weekly seminars, QC Economics Department (Fall 2004 – Spring 2007).
- Advising economics and BBA majors, registration and preregistration of majors
- Member of the BBA Curriculum Committee (2005).

Affiliations:

- Member of the American Economic Association
- Member of the Eastern Economic Association
- Steering Committee Member for the Union for Radical Political Economics
- Founding member of the NYC Computational Economic Workshop
- Research Scientist for ISI Foundation
- Consultant for CFA Institute (2007, 2008)

External Referees:

- Duncan Foley, New School for Social Research
  Head supervisor on my PHD committee, defended August 2004
  Email: FoleyD@newschool.edu
- Rob Axtell, Center for Social Complexity, George Mason University,
  Supervisor on my PHD committee, defended August 2004
  Email: RobAx@cox.net