LASSE H. PEDERSEN

Curriculum Vitae, updated 5/20/2011 Danish Citizen, US Permanent Resident, Born Oct. 3, 1972 44 West 4th Street, Suite 9-190, New York, NY 10012-1126

EMAIL: lpederse@stern.nyu.edu/~lpederse/

ACADEMIC APPOINTMENTS

New York University Stern School of Business

John A. Paulson Professor of Finance and Alternative Investments, 2009-present.

Professor of Finance, 2007-2009.

Associate Professor of Finance, with tenure, 2005-2007.

Charles Schaefer Family Fellow, 2003-2006.

Assistant Professor of Finance, 2001-2005.

University of Chicago

Milton Friedman Institute Fellow, Fall 2010.

IGM Visiting Professor, Booth School of Business, Spring 2010.

Columbia Business School

Visiting Professor, Spring 2009.

Federal Reserve Bank of New York

Monetary Policy Panel, 2010-present

Liquidity Working Group, 2009-present.

Academic Consultant, 2004-2007.

American Finance Association

Director, 2011-present.

National Bureau of Economic Research (NBER)

Research Associate, 2006-present.

Faculty Research Fellow, 2004-2006.

Centre for Economic Policy Research (CEPR)

Research Affiliate, 2004-present.

Editorial Boards

Journal of Finance, Associate Editor, 2006-present.

Journal of Economic Theory, Associate Editor, 2005-2011.

The Review of Asset Pricing Studies, Associate Editor, 2010-present.

EDUCATION

Stanford University, Graduate School of Business

Ph.D. in Finance, June 2001.

Advisors: Darrell Duffie and Ken Singleton.

University of Copenhagen

M.S. in Mathematics-Economics (cand.scient.oecon.), August 1997.

B.S. in Mathematics-Economics, July 1995.

AWARDS AND HONORS

American Economic Review, Excellence in Refereeing Award, 2011

Foundation Banque de France, 2011, "International Systemic Risk Rankings" (w/ Rob Engle et al.) Geewax, Terker & Company First Prize, 2006.

Fama/DFA First Prize for best paper in the Journal of Financial Economics, 2005.

Nomination for the Smith-Breeden Prize for best paper in the Journal of Finance, 2005.

CDC Award for best research paper in finance, NYU 2004.

NYSE Award for the best paper on equity trading, Western Finance Association 2003.

Nomination for the Smith-Breeden Prize for best paper in the Journal of Finance, 2003.

Barclays Global Investors Award for best the paper at the European Finance Association, 2003.

Glucksman First-Place Award for best research paper in finance, NYU 2002-2003.

NYSE Award for the best paper on equity trading, Western Finance Association 2002.

Review of Economic Studies Tour, 2001.

Lieberman Award, Stanford University, 2000, awarded biennially to a business school student with a demonstrated potential for a leadership role in the academic community

Jaedicke Merit Award, Stanford University, Graduate School of Business, 1997-98.

Danish Research Academy Scholar 1997-2000.

Fulbright Fellowship Awarded 1997 (declined).

Sasakawa Young Leaders Winner 1997.

Peter and Emma Thomsens Award 1994, 1995, and 1996.

RESEARCH SUMMARY

My research focuses on liquidity risk. It shows that a security's required return is increased by market liquidity risk (as captured by the <u>liquidity-adjusted capital asset pricing model</u>) and funding liquidity risk (as captured by the <u>margin CAPM</u>), and how the interaction of market and funding liquidity can create <u>liquidity spirals</u> and <u>systemic financial crisis</u>. Indeed, <u>when everyone runs for the exit, prices drop-and-rebound, margins increase</u>, and <u>risk management tighten</u>. These liquidity risk models can help explain <u>equity returns</u>, <u>option prices</u>, <u>bond yields</u>, <u>currency crashes</u>, <u>valuation in OTC search markets</u>, <u>the CDS-bond basis and other failures of the Law of One Price</u>, <u>the effect of unconventional monetary policy such as central banks' lending facilities</u>, <u>betting against beta returns</u>, <u>predatory trading</u>, <u>value and momentum</u>, shortselling, <u>optimal dynamic trading</u>, and other benefits of a realistic <u>departure from classic</u> frictionless finance theory.

PUBLISHED PAPERS

- "Margin-Based Asset Pricing and Deviations from the Law of One Price," 2011 (with N.Garleanu) Forthcoming, *The Review of Financial Studies*.
- "Two Monetary Tools: Interest-Rates and Haircuts," 2010 (with Adam Ashcraft and N. Garleanu) *NBER Macroeconomics Annual*, 2010, forthcoming.
- "How Sovereign is Sovereign Credit Risk?" 2011 (with F. Longstaff, J. Pan, and K. Singleton) *American Economic Journal: Macroeconomics*, vol. 3, pp. 75-103.

Featured in Economic Times.

"When Everyone Runs for the Exit,"

The International Journal of Central Banking, 2009, vol. 5, 177-199. (Solicited commentary.) **Featured in The Economist, New York Times, and Forbes.**

"Market Liquidity and Funding Liquidity" (with Markus Brunnermeier).

The Review of Financial Studies, 2009, vol. 22, pp. 2201-2238.

Featured in The Economist and Barron's.

"Demand-Based Option Pricing" (with Nicolae Garleanu and Allen Poteshman).

The Review of Financial Studies, 2009, vol. 22, pp. 4259-4299.

Geewax, Terker & Company First Prize, 2006.

"Carry Trades and Currency Crashes" (with Markus Brunnermeier and Stefan Nagel) *NBER Macroeconomics Annual*, 2008, vol. 23, pp. 313-348.

Featured in Forbes.

- "Slow Moving Capital" (with Mark Mitchell and Todd Pulvino) *American Economic Review, P&P,* 2007, vol. 97, no. 2, pp. 215-220.
- "Liquidity and Risk Management" (with Nicolae Garleanu)

 American Economic Review, P&P, 2007, vol. 97, no. 2, pp. 193-197.
- "Valuation in Over-the-Counter Markets" (with Darrell Duffie and Nicolae Garleanu). *The Review of Financial Studies*, 2007, vol. 20, no. 5, pp. 1865-1900.
- "Liquidity and Asset Prices" (with Yakov Amihud and Haim Mendelson) *Foundations and Trends in Finance*, 2005, vol.1, no. 4, pp. 269-364.
- "Asset Pricing with Liquidity Risk" (with Viral Acharya)

Journal of Financial Economics, 2005, vol. 77, pp. 375-410.

Fama/DFA First Prize for best paper on capital markets and asset pricing in the *JFE* 2005 **NYSE Award** for the best paper on equity trading, Western Finance Association 2003. **Glucksman First-Place Award** for best research paper in finance, NYU 2002-2003.

"Predatory Trading" (with Markus Brunnermeier)

The Journal of Finance, 2005, vol. 60, no. 4, pp. 1825-1863.

Nominated for the Smith-Breeden Prize for the best paper in the Journal of Finance. **Barclays Global Investors Award** for best paper at the European Finance Association, 2003.

"Over-the-Counter Markets" (with Darrell Duffie and Nicolae Garleanu)

Econometrica, 2005, vol. 73, no. 6, pp. 1815-1847.

Referenced by Nobel Prize Committee's Scientific Background, 2010.

- "Adverse Selection and the Required Return" (with Nicolae Garleanu) *The Review of Financial Studies*, 2004, vol. 17, no. 3, pp. 643-665.
- "Modeling Sovereign Yield Spreads: A Case Study of Russian Debt" (with Duffie and Singleton) *The Journal of Finance*, 2003, vol. 58, no. 1, pp. 119-159.

Nominated for the Smith-Breeden Prize for the best paper in the Journal of Finance.

"Securities Lending, Shorting, and Pricing" (with Darrell Duffie and Nicolae Garleanu) *Journal of Financial Economics*, 2002, vol. 66, pp. 307-339.

NYSE Award for the best paper on equity trading, Western Finance Association 2002.

WORKING PAPERS

- "Dynamic Trading with Predictable Returns and Transaction Costs," 2008 (with Nicolae Garleanu) Revise and Resubmit, *The Journal of Finance*.
- "Value and Momentum Everywhere," 2008 (with Cliff Asness and Tobias Moskowitz). Revise and Resubmit, *The Journal of Finance*.

Featured in New York Times and Marketwatch.

- "Betting Against Beta," 2010 (with Andrea Frazzini)
 Revise and Resubmit, *Journal of Financial Economics*.
- "Time Series Momentum," 2010 (with Tobias Moskowitz and Yao Hua Ooi) Revise and Resubmit, *Journal of Financial Economics*.
- "Measuring Systemic Risk," 2010 (with Viral Acharya, Thomas Philippon, and Matt Richardson) Associated systemic risk rankings published in real time on the web.
- "Corporate Bond Specialness," 2007 (with Amrut Nashikkar)
- "Auctions with Endogenous Selling," 2000 (with Nicolae Garleanu).
- "Density-Based Inference in Affine Jump-Diffusions," 2000 (with Jun Liu and Jun Pan).

WORK IN PROGRESS

- "Global Market and Funding Liquidity Risk Across Asset Classes," 2010 (with Tobias Moskowitz)
- "Crowded Trades and Liquidity Risk," 2008 (with Tobias Moskowitz)
- "Embedded Leverage," 2011 (with Andrea Frazzini)
- "Too Big to Report," 2010 (with Andrea Frazzini)
- "Monitoring Leverage," 2010 (with John Geanakoplos)

BOOKS

"Liquidity" (with Yakov Amihud and Haim Mendelson) Oxford University Press, forthcoming.

COMMENTARY AND MEDIA

Policy Papers:

"A Tax on Systemic Risk" (with Acharya, Philippon, and Richardson) in *Quantifying Systemic Risk*, *NBER*, ed. by Joseph Haubrich and Andrew Lo, 2010.

"Taxing Systemic Risk," (with Acharya, Philippon, and Richardson) in *Regulating Wall Street: The Dodd-Frank Act and the New Architecture of Global Finance*, ed. by Acharya et al., Wiley, 2010, chap. 5.

"Regulating Systemic Risk" (with Acharya, Philippon, and Richardson) in *Restoring Financial Stability: How to Repair a Failed System*, ed. by Acharya and Richardson, Wiley, 2009, chap. 13, 283-304.

"Hedge Funds in the Aftermath of the Financial Crisis" (with Brown, Kacperczyk, Ljungqvist, Lynch, and Richardson) in *Restoring Financial Stability: How to Repair a Failed System*, ed. by Acharya and Richardson, Wiley, 2009, chap. 6, 157-178.

Op-Ed Newspaper Articles:

"Saving free markets from market failure: institutions and liquidity are crucial" *Forbes*, 9/29/2009. Chinese version, *Sina*, 9/30/2009: 佩德森:避免自由市口失灵.

"A proposal to prevent wholesale financial failure" (with Nouriel Roubini) *Financial Times*, 1/30/2009.

Blog Entries:

Liquidity risk and the current crisis: VoxEU, Stern on Finance

Selected Media Mention:

Handelsblatt (5/9/2011), Institutional Investor (2/2011), Berlingske Magasin (9/24/2010), Wall Street Journal (9/4/2010), The Economist (2/11/2010), Barron's (12/28/2009), Wall Street Journal (11/3/2009), The Huffington Post (9/18/2009), Forbes (9/9/2009), New York Times (8/8/2009), Marketwatch (7/21/2009), Forbes (5/28/2009), JyskebankTV (3/25/2009), New York Times (12/29/2008), BBC World News (11/24/2008), Handelsblatt (11/4/2008), TV2 News (10/30/2008), American Banker (10/9/2008), New York Times (9/13/2008), IMF Global Financial Stability Report (4/1/2008), Economic Times/Indiatimes (1/28/2008), Dagens Naeringsliv (12/1/2007), The Economist (8/7/2007), Djoefbladet (2005)

PROFESSIONAL ACTIVITIES

Editorships:

Journal of Finance, Associate Editor, 2006-present.

Journal of Economic Theory, Associate Editor, 2005-2011.

The Review of Asset Pricing Studies, Associate Editor, 2010-present.

Referee, Journals:

American Economic Journal: Macroeconomics, American Economic Review, B.E. Journals in Theoretical Economics, Econometrica, Economic Letters, Finance and Stochastics, IMF Economic Review, Journal of Business, Journal of Derivatives, Journal of Economic Theory, Journal of Empirical Finance, Journal of Finance, Journal of Financial Economics, Journal of Financial Intermediation, Journal of Financial and Quantitative Analysis, Journal of International Money and Finance, Journal of Monetary Economics, Journal of Political Economy, Management Science, Review of Finance, The RAND Journal of Economics, The Review of Economic Studies, The Review of Financial Studies, The Quarterly Journal of Economics.

Referee, Research Councils:

National Science Foundation, European Research Council, The Research Council of Norway

Conference Organizer and Professional Committees:

NBER Asset Pricing Meeting, Organizer, Fall 2010

American Finance Association Conference, Program Committee, 2008, 2010, 2011, 2012 Econometric Society Meetings, Program Committee, 2011

Western Finance Association Conference, Program Committee, 2006, 2007, 2008, 2009, 2010, 2011

American Finance Association, Nominating Committee for Vice President, Fellows, and Directors, 2007

FMA Paper Award Committee, 2008

Moody's KMV and Salomon Center Credit Risk Conference, Program Committee 2010

INVITED SPEAKER AT UNIVERSITIES

2010: The University of Chicago, Money and Banking Workshop; The University of Chicago Booth School of Business, Finance Workshop; Harvard University, Department of Economics; Emory University, Goizueta Business School; Northwestern University, Kellogg School of Management; Lausanne, EPFL and UNIL; George Washington University.

2009: Stanford Graduate School of Business; University of California at Berkeley, Haas School of Business; Columbia Business School; McGill University; Bank of Canada; Stern Quantitative

Financial Econometrics Seminar; Kenan-Flagler Business School, University of North Carolina; Yale School of Management; Princeton University; Stockholm School of Economics; Institute for Financial Research (SIFR); University of Southern California; University of Amsterdam.

- **2008:** University of Chicago, Graduate School of Business; The Federal Reserve Board, Washington DC; International Monetary Fund (IMF).
- **2007:** Fisher College of Business, Ohio State University; Department of Finance and Management Science at the Norwegian School of Economics and Business Administration, Bergen; Department of Financial Economics, BI Norwegian School of Management, Oslo.
- **2006:** Stanford GSB; MIT Sloan; Owen Graduate School of Management, Vanderbilt University; University of Virginia, McIntire School of Commerce; Tuck School of Business at Dartmouth; UCLA Anderson School of Management; Columbia University, Department of Industrial Engineering and Operations Research; Cornell University, The Johnson School.
- 2005: Harvard University, Department of Economics; University of Chicago Graduate School of Business; Courant Institute of Mathematical Sciences, NYU; University of California at Berkeley, Haas School of Business; Texas A&M University; Copenhagen Business School; New York University; Stockholm Institute for Financial Research, Stockholm University; HEC Lausanne.
- **2004:** Baruch College, The City University of New York; University of Michigan, Ross School of Business; New York Stock Exchange.
- **2003:** University of Copenhagen; University of Chicago; London School of Economics, Financial Markets Group; London School of Economics, Capital Markets Workshop; University of Amsterdam; Tilburg University; Kellogg Graduate School of Management; The Wharton School; Harvard University, Department of Economics.
- **2002:** Simon Graduate School of Business Administration, University of Rochester; and Fisher College of Business, Ohio State University.
- 2001: Princeton University; Yale University; New York University, Stern; Harvard University, HBS; Duke University; Massachusetts Institute of Technology; The Wharton School; London Business School; INSEAD; University of Chicago; Kellogg Graduate School of Management; University of California, Berkeley; Carnegie Mellon University GSIA; and Copenhagen Business School.

ACADEMIC CONFERENCE PRESENTATIONS

Annual Meeting of the American Economic Association, January 2011 Annual Meeting of the American Finance Association, January 2011 Econometric Society Winter Meeting, January 2011 Keynote Speaker, Advances in the Analysis of Hedge Fund Strategies Conference, December 2010

Annual Chicago Fed International Financial Markets Conference, September 2010

Society of Economic Dynamics (SED) Annual Meeting, July 2010

Cowles Foundation Conference in General Equilibrium and its Applications, April 2010

NBER Macroannual, April 2010

Conference on Financial Frictions and Macroeconomic Modeling, Columbia University, Feb. 2010

Annual Meeting of the American Economic Association, January 2010

Annual Meeting of the American Finance Association, January 2010

Econometric Society Winter Meeting, January 2010

Inaugural Financial Stability Conference, International Journal of Central Banking, 2009

Liquidity Working Group, New York Federal Reserve Bank, 2009

Quantifying Systemic Risk, NBER and Federal Reserve Bank of Cleveland, 2009

NBER Behavioral Economics, 2009

Liquidity Risk Conference, Tilburg Center of Finance, 2009

Derivatives: Looking Towards the Future, NASDAQ OMX Derivatives Research Project, 2009

Central Bank Liquidity Tools, New York Federal Reserve Bank, 2009

Journal of Investment Management Spring Conference, 2009

Nykredit Symposium, Copenhagen Business School, October 2008

NBER Macroannual, April 2008

Conference on Derivative Securities and Risk Management, Columbia University, November 2007

Annual Meeting of the American Economic Association, January 2007

Annual Meeting of the American Finance Association, January 2006

NBER Risks of Financial Institutions Conference, November 2005

NBER Universities Research Conference, Asset Pricing with Imperfect Trading, May, 2005

NBER Market Microstructure, May, 2005

Salomon Center Conference, The Transformation of Options Trading, May 2005

CEPR Summer Symposium in Financial Markets, focus session on Liquidity, July 2004.

Texas Finance Festival, April 2004.

North American Winter Meeting of the Econometric Society, January 2004.

European Finance Association Conference, August 2003.

Stanford Institute for Theoretical Economics, July 2003.

National Bureau of Economic Research (NBER) Asset Pricing Workshop, July 2002.

North American Winter Meeting of the Econometric Society, January 2002.

Annual Meeting of the European Finance Association, August 2001.

CEPR Summer Symposium in Financial Markets, July 2001.

Review of Economic Studies Tour, May 2001: University College London, Universite Libre de

Bruxelles, Tel Aviv University, and Universitat Autonoma de Barcelona.

North American Winter Meeting of the Econometric Society, January 2001.

Annual Meeting of the European Finance Association, August 2000.

Stanford Institute for Theoretical Economics, July 2000.

National Bureau of Economic Research (NBER) University Research Conference, May 2000.

Finance Workshop, Department of Mathematics, Stanford University, April 2000.

Liquidity Conference, Anderson School, UCLA, April 2000.

PROFESSIONAL CONFERENCES AND PRESENTATIONS

Federal Reserve Board of Governors, 2010

Federal Reserve Bank of Minneapolis, 2010

European Central Bank, 2010

New York Federal Reserve, Money and Payments Group, 2010

San Francisco Federal Reserve Bank, 2009

Society of Quantitative Analysts, 2009

Federal Reserve Board of Governors, 2008

International Monetary Fund (IMF), 2008

Asset Allocation Summit, 2007

Norges Bank, Norway, 2007

Formuesforvaltning, Norway, 2007

AQR Capital Management, 2006

Goldman Sachs Asset Management, 2006

Federal Reserve Board of Governors, 2006

Philadelphia Federal Reserve Bank, 2006

International Association of Financial Engineers (IAFE), Liquidity Risk Symposium, 2005

The Professional Risk Managers' International Association (PRMIA), 2005

Workshop on Securities Lending, Danmarks Nationalbank, November 2005

Citigroup, 2005

Federal Reserve Bank of New York, 2004

New York Stock Exchange, 2004

TEACHING EXPERIENCE

Hedge Fund Strategies, 2007-present

M.B.A. elective analyzing investment strategies, back testing, liquidity, short selling, margins

Topics in Hedge Fund Strategies, 2007- present

M.B.A. elective analyzing selected investment strategies and timely topics

Faculty Research and Writing a Dissertation, 2011

Ph.D. seminar class organizer

Foundations of Financial Markets, 2002 - 2006

Core class on portfolio selection, CAPM, fixed-income securities, and option pricing

Liquidity and Asset Pricing, 2005

Ph.D. class on the theory and evidence on liquidity and asset pricing

Advanced Topics in Asset Pricing, 2002

Ph.D. class on incomplete markets, information, differences of opinions, shorting, participation

PROFESSIONAL EXPERIENCE

AQR Capital Management, LLC

Principal, research, 2009-present.

Vice President, 2007-2008.

Consultant, 2006-2007.

FTSE

Advisory Board, 2009-present.

NASDAQ OMX

Economic Advisory Board, 2008-present.

State Street Bank, State Street Global Markets

Consultant, 2005-2007.

Benchmark Metrics

Advisory Board, 2006-2008.

UNIVERSITY SERVICE

Chair of NYU Stern Finance Department Junior Recruiting Committee, 2010/2011

NYU Stern Finance Department Senior Recruiting Committee, 2010/2011

Strategic Review of NYU Stern Centers, 2010/2011

NYU Stern Book Project on Restoring Financial Stability, participant, 2008/2009

NYU Stern Finance Department Ph.D. Student Review Committee, 2004-present

Chair of the NYU Stern Finance Department Recruiting Committee, 2006/2007, 2010/2011

Strategic Review of the NYU Stern Finance Department Panel, 2007

Co-Founded reading group on finance and economics, NYU 2004 (w/ Sargent and Schneider)

Organizer of the NYU Stern Finance Department's Seminar Series, 2004/2005

Ph.D. committees at NYU (Esben Hedegaard, Jaewon Choi, Amrut Nashikkar, Prachi Deuskar,

Sinan Tan, Antonios Sangvinatsos, Zheng Sun, Paolo Pasquariello)

Honors thesis advisor, 2004/2005, 2006/2007, 2007/2008, 2009/2010

NYU New Faculty Orientation, September 2005

NYU New Faculty Teaching Orientation, September 2004

NYU Stern Finance Department Recruiting Committee, 2003/2004

NYU Stern Ph.D. Orientation, 2002, 2003, 2004

NYU Stern Volunteer, 9/2001