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Daniel L. Greenwald

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Academic Positions

July 2016 - Assistant Professor of Finance, MIT Sloan School of Management

Education

2016 Ph.D. in Economics, New York University
Thesis committee: Sydney Ludvigson (chair), Stijn Van Nieuwerburgh, Gianluca Violante

2008 A.B. in Economics, *cum laude*, Harvard University

Research Areas

Macroeconomics, Asset Pricing, Housing and Mortgage Markets, Macroeconometrics.

Working Papers

1. "The Mortgage Credit Channel of Macroeconomic Transmission" (Revise and Resubmit, *Journal of Political Economy*)

   Abstract: I investigate how the structure of the mortgage market influences macroeconomic dynamics, using a general equilibrium framework with prepayable debt and a limit on the ratio of mortgage payments to income. This realistic environment amplifies transmission from interest rates into debt, house prices, and economic activity. Monetary policy can more easily stabilize inflation due to this amplification, but contributes to larger fluctuations in credit growth. A relaxation of payment-to-income standards appears essential to the recent boom. A cap on payment-to-income ratios, not loan-to-value ratios, is the more effective macroprudential policy for limiting boom-bust cycles.

2. "Financial Fragility with SAM?" with Tim Landvoigt and Stijn Van Nieuwerburgh

   Abstract: Shared Appreciation Mortgages (SAMs) feature mortgage payments that adjust with house prices. These mortgage contracts are designed to stave off home owner default by providing payment relief in the wake of a large house price shock. SAMs have been hailed as an innovative solution that could prevent the next foreclosure crisis, act as a work-out tool during a crisis, and alleviate fiscal pressure during a downturn. They have inspired Fintech companies to offer home equity contracts. However, the home owner's gains are the mortgage lender's losses. A general equilibrium model with financial intermediaries who channel savings from saver households to borrower households shows that indexation of mortgage payments to aggregate house prices increases financial fragility, reduces risk sharing, and leads to expensive financial sector bailouts. In contrast, indexation to local house prices reduces financial fragility and improves risk-sharing. The two types of indexation have opposite implications for wealth inequality.

3. "Origins of Stock Market Fluctuations" with Martin Lettau and Sydney Ludvigson

Abstract: Three mutually uncorrelated economic disturbances that we measure empirically explain 85% of the quarterly variation in real stock market wealth since 1952. A model is employed to interpret these disturbances in terms of three latent primitive shocks. In the short run, shocks that affect the willingness to bear risk independently of macroeconomic fundamentals explain most of the variation in the market. In the long run, the market is profoundly affected by shocks that reallocate the rewards of a given level of production between workers and shareholders. Productivity shocks play a small role in historical stock market fluctuations at all horizons.

Publications

4. "Rare Shocks, Great Recessions" with Vasco Cúrdia and Marco Del Negro. *Journal of Applied Econometrics*, Vol. 29(7), pp. 1031-1052, November/December 2014.

Winner, Richard Stone Prize in Applied Econometrics for the best paper with substantive econometric application in the 2014 and 2015 volumes of the *Journal of Applied Econometrics*.

Abstract: We estimate a DSGE model where rare large shocks can occur, by replacing the commonly used Gaussian assumption with a Student's t distribution. Results from the Smets and Wouters (2007) model estimated on the usual set of macroeconomic time series over the 1964-2011 period indicate that 1) the Student's t specification is strongly favored by the data even when we allow for low-frequency variation in the volatility of the shocks, and 2) the estimated degrees of freedom are quite low for several shocks that drive U.S. business cycles, implying an important role for rare large shocks. This result holds even if we exclude the Great Recession period from the sample. We also show that inference about low-frequency changes in volatility – and in particular, inference about the magnitude of Great Moderation – is different once we allow for fat tails.

Fellowships and Awards

2016	AREUEA Homer Hoyt Doctoral Dissertation Award (1st Prize)
2015-16	Dean's Dissertation Fellowship, New York University
2015	Macro Financial Modeling Fellowship, Becker Friedman Institute
2010-15	McCracken Fellowship, New York University
2014	TACC-BP Parallel Programming Contest (1st Place)

Courses Taught

Spring 2017-18	Undergraduate, Managerial Finance (MIT Course 15.401)
Fall 2016-17	Ph.D., Advanced Financial Economics I (MIT Course 15.472, Formerly 15.442)

Seminar Presentations

2018	*Scheduled:* Kellogg, Stanford GSB
2017	Federal Reserve Bank of Dallas, European Central Bank, Boston College, Princeton.
2016	Bank of Canada, Brown, MIT Sloan, Harvard Business School, UC San Diego, UC Berkeley Haas, Baruch, Federal Reserve Bank of New York, UT Austin McCombs, Penn State, Congressional Budget Office, University of Minnesota, UPenn Wharton, Federal Reserve Board of Governors, Northwestern, MIT (Macro), University of Connecticut, Boston University, Federal Reserve Bank of Cleveland.
2015	Federal Reserve Bank of New York, NYU Stern, Federal Reserve Bank of Philadelphia.

Conference Presentations

2018	*Scheduled:* BI-SHoF Conference
2017	Macro Financial Modeling Winter Conference, Philadelpha Workshop on Macroeconomics and Economic Policy, Boston Fed GBUREES, SED Annual Meeting (Edinburgh), CEF (New York), CEPR European Summer Symposium in Financial Markets, Norges Bank Workshop on Housing and Household Finance, Bank of Canada Annual Conference, FRB Atlanta/Georgia State University Real Estate Finance Conference, UC Davis GSM Symposium on Inequality.
2016	Macroeconomics and Business CYCLE Conference, Midwest Macro, IAAE (Milan), SED Annual Meeting (Toulouse), CEPR European Summer Symposium in Financial Markets, MIT GCFP Annual Conference, Macro Finance Society (Chicago).
2015	Federal Reserve Bank of Chicago Rookie Conference.
2014	SED Annual Meeting (Toronto).

Conference Discussions

1. "The Equity Premium and the One Percent" by A.A. Toda and K. Walsh. *AFA Meetings*, Chicago, January 2017.
2. "Household Debt and Monetary Policy: Revealing the Cash Flow Channel" by M. Flodén, M. Kilström, J. Sigurdsson, and R. Vestman. *Econometric Society Winter Meetings*, Chicago, January 2017.
3. "Regional Heterogeneity and Monetary Policy" by M. Beraja, A. Fuster, E. Hurst and J. Vavra. *Econometric Society Winter Meetings*, Chicago, January 2017.
4. "Regulating Household Leverage" by Anthony DeFusco, Stephanie Johnson, and John Mondragon. *Housing: Micro Data, Macro Problems*, Bank of England, June 2017.
5. "An Equilibrium Model of Housing and Mortgage Markets with State-Contingent Lending Contracts" by Tomasz Piskorski and Alexei Tchistyi. *10th Macro Finance Society Workshop*, Boston, November 2017.
6. "Color and Credit: Race, Regulation, and the Quality of Financial Services" by Taylor Begley and Amiyatosh Purnanandam. *UNC Junior Faculty Roundtable*, December 2017.

Professional Activities

Referee: American Economic Journal: Macroeconomics, American Economic Review, Econometrica, International Journal of Central Banking, Journal of Applied Econometrics, Journal of Economic Dynamics and Control, Journal of the European Economic Association, Journal of Empirical Finance, Journal of Monetary Economics, Journal of Political Economy, Macroeconomic Dynamics, Review of Economic Dynamics, Review of Financial Studies.

Conference Program Committee: Society for Computational Economics Annual Conference (2017), WFA Annual Meeting (2017-18), EFA Annual Meeting (2018).

Personal Information

Born: August 3, 1986. Citizenship: USA.

Languages: English (native), French (intermediate), Russian (intermediate), Spanish (beginner).