Curriculum Vitae, November 2021

Consumer Finance Institute Federal Reserve Bank of Philadelphia Ten Independence Mall

Philadelphia, PA 19106 E-mail: bob.hunt (followed by @phil.frb.org)

Employment

Position Senior Vice President

Associate Director of the Consumer Finance Institute, 2017–present

Phone: 215-574-3806

Cell: 267-294-1384

Previous Director of the Payment Cards Center, 2009–2018

Senior Economist, Research Department, 1998–2008

Prior employment U.S. Congressional Budget Office, 1995–1998

Bank One, Indianapolis, NA, 1987-1989

Education Ph.D. University of Pennsylvania, 1996

B.A. Butler University, 1986

Primary interests Consumer payments, consumer finance, economic geography,

innovation, and intellectual property

Teaching

Microeconomics (undergraduate), University of Pennsylvania, Winter 2004 Law & Economics (undergraduate), University of Pennsylvania, Spring and Summer 1992

Publications in Refereed Journals

"Localized Knowledge Spillovers: Evidence from the Spatial Clustering of R&D Labs and Patent Citations," *Regional Science and Urban Economics*, Vol 81 (2020).

"The Agglomeration of American R&D Labs," with Kristy Buzard, Gerald A. Carlino, Jake K. Carr, and Tony E. Smith, *Journal of Urban Economics*, Vol. 101 (2017), pp. 14–26.

"Getting Rid of Paper: Savings from Implementing Check 21," with David B. Humphrey, *Journal of Money, Credit and Banking*, Vol. 45 (2013), pp. 1415–1430.

"What 'Triggers' Mortgage Default?" with Ronel Elul, Nicholas S. Souleles, Souphala Chomsisengphet, and Dennis Glennon, *American Economic Review, Papers & Proceedings*, Vol. 100 (2010), pp. 490–494.

"Business Method Patents and U.S. Financial Services," *Contemporary Economic Policy*, Vol. 28 (2010), pp. 322–352.

"What Explains the Quantity and Quality of Local Inventive Activity?" with Gerald Carlino, *Brookings-Wharton Papers on Urban Affairs* (2009), pp. 65–124.

"Urban Density and the Rate of Invention," with Gerald Carlino and Satyajit Chatterjee, *Journal of Urban Economics*, Vol. 61 (2007), pp. 389–419.

"An Empirical Look at Software Patents," with James Bessen, *Journal of Economics and Management Strategy*, Vol. 16 (2007), pp. 157–189.

"When Do More Patents Reduce R&D?" *American Economic Review, Papers & Proceedings*, Vol. 96 (2006), pp. 87–91.

"Patentability, Industry Structure, and Innovation," *Journal of Industrial Economics*, Vol. 52 (2004), pp. 401–425.

"An Introduction to the Economics of Payment Card Networks," *Review of Network Economics*, Vol. 2 (2003), pp. 80–96.

Other External Publications

"Intellectual Property Rights and Standard Setting in Financial Services: The Case of the Single Euro Payments Area," with Samuli Simojoki and Tuomas Takalo in L. Anderloni, D.T. Llewellyn, R. Schmidt, eds., *Financial Innovation in Retail and Corporate Banking*, Edward Elgar, 2009.

"Re-examining the Patent System," with Brian Kahin, *Issues in Science and Technology*, Fall 2008.

"Economics and the Design of Patent Systems," *Michigan Telecommunications and Technology Law Review*, Vol. 13 (2007), pp. 457–470.

"Whither Consumer Credit Counseling," in Sumit Agarwal and Brent Ambrose, eds., *Household Credit Usage: Personal Debt and Mortgages*. New York: Palgrave-Macmillan, 2007.

"The Development and Regulation of Consumer Credit Reporting in America," in Giuseppe Bertola and Charles Grant, eds., *The Economics of Consumer Credit: European Experience and Lessons from the US*, Boston: MIT Press, 2006.

"The Software Patent Experiment," with James Bessen, in *Patents, Innovation and Economic Performance, Conference Proceedings*. Paris: Organisation for Economic Co-operation and Development, 2004.

Regulatory Takings and Proposals for Change, with Timothy VandenBerg, Washington, D.C.: Congressional Budget Office, 1998.

Federal Reserve Bank of Philadelphia Working Papers and PCC Discussion Papers (select)

"Financial Consequences of Severe Identity Theft in the U.S." by Nathan Blascak, Julia S. Cheney, Robert M. Hunt, Slava Mikhed, Dubravka Ritter, and Michael VoganWorking Paper 21-41, December 2021.

"Dynamic Pricing of Credit Cards and the Effects of Regulation," with Suting Hong and Konstantinos Serfes, Working Paper 21-38, November 2021.

"Localized Knowledge Spillovers: Evidence from the Spatial Clustering of R&D Labs and Patent Citations" with Kristy Buzard, Gerald A. Carlino, Jake K. Carr, and Tony E. Smith, Working Paper 19-42/R, October 2019.

"The Economics of Debt Collection: Enforcement of Consumer Credit Contracts," with Viktar Fedaseyeu, Working Paper 18-04, October 2018.

"The Agglomeration of American Research and Development Labs" with Kristy Buzard, Gerald A. Carlino, Jake K. Carr, and Tony E. Smith, Working Paper 17-18, July 2017.

"Consumer Use of Fraud Alerts and Credit Freezes: An Empirical Analysis," with Julia Cheney, Vyacheslav Mikhed, Dubravka Ritter, and Michael Vogan, Discussion Paper 14-04, September 2014.

"Residential Migration, Entry, and Exit as Seen Through the Lens of Credit Bureau Data," with Keith Wardrip, Discussion Paper 13-04, December 2013.

"The Efficiency and Integrity of Payment Card Systems: Industry Views on the Risks Posed by Data Breaches," with Julia Cheney, Katy Jacob, Richard Porter, and Bruce Summers, Discussion

Paper 12-04, October 2012.

- "Consumers' Use of Prepaid Cards: A Transaction-Based Analysis," with Stephanie Wilshusen, James van Opstal, and Rachel Schneider, Discussion Paper 12-02, August 2012.
- "Innovation Across U.S. Industries: The Effects of Local Economic Characteristics," with Gerald Carlino, Working Paper 07-28, October 2007.
- "Matching Externalities and Inventive Productivity," Working Paper 07-7, March 2007.
- "An Empirical Look at Software Patents," with James Bessen, Working Paper 03-17/R, March 2004.
- "Nonobviousness and the Incentive to Innovate: An Economic Analysis of Intellectual Property Reform," Working Paper 99-3, March 1999.
- "Discouraging Federal Actions That Reduce the Value of Private Property: Evaluating Procedural and Financial Approaches," Working Paper 98-24, December 1998.

Works in Progress

- "Incidence of Interchange Fees with Endogenous Retail Prices."
- "The Democratization of U.S. Research and Development after 1980," with Leonard Nakamura.

Federal Reserve Publications

- "Ten Years After: What Are the Effects of Business Method Patents for Financial Services?" Federal Reserve Bank of Philadelphia *Business Review*, Third Quarter, 2008.
- "Collecting Consumer Debt in America," Federal Reserve Bank of Philadelphia *Business Review*, Second Quarter, 2007.
- "Whither Consumer Credit Counseling?" Federal Reserve Bank of Philadelphia *Business Review*, Fourth Quarter, 2005.
- "The Software Patent Experiment" with James Bessen, Federal Reserve Bank of Philadelphia *Business Review*, Third Quarter, 2004.
- "Antitrust Issues in Payment Card Networks: Can They Do That? Should We Let Them?" Federal Reserve Bank of Philadelphia *Business Review*, Second Quarter, 2003.
- "What's in the File? The Economics and Law of Consumer Credit Bureaus," Federal Reserve Bank of Philadelphia *Business Review*, Second Quarter, 2002.
- "You Can Patent That? Are Patents on Computer Programs and Business Methods Good for the New Economy?" Federal Reserve Bank of Philadelphia *Business Review*, First Quarter, 2001.
- "Patent Reform: A Mixed Blessing for the U.S. Economy?" Federal Reserve Bank of Philadelphia *Business Review*, November/December, 1999.

Other Unpublished Papers

- "An Economic Theory of Criminal Deterrence," mimeo, Federal Reserve Bank of Philadelphia, 2007.
- "The Value of R&D in the U.S. Semiconductor Industry: What Happened in the 1980s?" mimeo, Congressional Budget Office and Department of Economics, University of Pennsylvania, 1996.
- "Persistent Mis-coordination in Evolutionary Games," with Alberto Trejos, Northwestern University, mimeo, Department of Economics, University of Pennsylvania, 1993.

"Laboratory Industry Technology, Productivity Changes and Medicare Payments in Different Provider Settings," with B. Kinosian, G. Wedig et al., mimeo, Leonard Davis Institute of Health Care Economics, University of Pennsylvania, 1992.

Referee

American Economic Review; Economic Journal; International Economic Review; International Journal of Central Banking, International Journal of Industrial Organization; Journal of Banking and Finance; Journal of Economic Geography; Journal of Economics Management and Strategy; Journal of Financial Services Research; Journal of Industrial Economics; Journal of International Economics; Journal of Money, Credit, and Banking; Journal of Public Economics; Journal of Urban Economics; Management Science; Quarterly Journal of Economics, Rand Journal of Economics; Research Policy; Review of Economic Studies; Scandinavian Journal of Economics; Science; and Southern Economic Journal.

External Reviewer (select)

Brookings Institution, National Science Foundation, Oxford University Press, Princeton University Press, Financial Market Research Programme, and World Bank.

Presentations for Policymakers (select)

Presentation for the Consumer Financial Protection Bureau: "The Economics of Debt Collection: Enforcement of Consumer Credit Contracts" (2016).

Presentation for the U.S. Treasury Interagency Payments Study Group: "Prepaid Cards: Industrial Organization and Economics" (2014).

Presentation for the Federal Financial Institutions Examination Council Payment Systems Risk Conference: "Small Dollar Payments in the U.S." (2013).

Presentation for the Federal Trade Commission—Consumer Financial Protection Bureau Roundtable on "Data Integrity in Debt Collection" (2013).

Invited Panelist, Federal Trade Commission Workshop on "Debt Collection 2.0: Protecting Consumers as Technologies Change" (2011).

Lecturer for Federal Trade Commission Division of Financial Practices Academy on Debt Collection and the Debt Industry: "The Collections & Counseling Industries" (2008).

Invited Panelist, Federal Trade Commission Public Forum on "Debt Relief Amendments to the Telemarketing Sales Rule" (2009).

Invited Panelist, Federal Trade Commission Hearing on "The Evolving IP Marketplace" (2009).

Invited Panelist, Federal Trade Commission Workshop on "Collecting Consumer Debts: The Challenges of Change" (2007).

Invited Panelist, Federal Reserve Bank of Chicago/Northwestern University, Kellogg School of Business, "Roundtable on Intellectual Property and Competition Issues Relating to Financial Markets" (2007).

Invited Panelist, Federal Trade Commission Hearing on "Methodologies That Assess Accuracy and Completeness of Credit Reports" (2004).

Invited Panelist, National Academies, Board on Science Technology and Policy Workshop on Intellectual Property Rights (2000).

Academic Paper Presentations and Roundtables (select)

Allied Social Sciences Association Meetings (1999, 2003, 2005–7, 2015)

Applied Econometrics Association, Ninth Conference on Patents and Innovation (2008)

Association of Public Policy Analysis and Management Meetings (1995, 1998, 2002, 2003)

Bank of Canada (2012)

Bank of Finland (2007, 2008)

Bocconi University (2013)

Brandeis University (2005)

Brookings Institution (2008)

Board of Governors of the Federal Reserve System (2016, 2018)

Butler University (2000, 2003, 2007)

Christian-Albrechts-Universität zu Kiel (2006)

Congressional Budget Office (1995)

Consumer Financial Protection Bureau (2012, 2016, 2018)

Drexel University (2006)

Duke University School of Law (2007)

Econometric Society, European Meetings (2003)

Econometric Society, North American Meetings (2005)

Econometric Society, World Congress (2005)

European Association for Research in Industrial Organization (2003)

European University Institute (2003)

Federal Deposit Insurance Corporation (2014)

Federal Reserve Bank of Cleveland (2013, 2015)

Federal Reserve Bank of Kansas City (2005)

Federal Reserve Bank of Philadelphia (1995, 1997)

Federal Reserve Bank of San Francisco (2003)

Federal Reserve System Research Committee on Applied Economics (2001–2003, 2005, 2018)

Federal Trade Commission (2011)

Fordham University Law School, Roundtable on Credit Counseling (2007)

George Mason University (2016)

Helsinki University, Center of Economics Research (2007)

Indiana University (2000)

International Industrial Organization Society Meetings (2003, 2004)

International J. A. Schumpeter Society (2006)

International Tor Vergata Conference on Money, Banking, and Finance (2009)

Iowa State University (2005)

Kiel Workshop on Spatial Econometrics (2005)

National Academy of Science, Board on Science Technology and Policy (2001)

National Bureau of Economic Research (2005, 2009, 2010, 2014)

National Institute for Science and Technology (1995)

North American Regional Science Association Annual Meeting (2003)

Organisation for Economic Co-operation and Development (2003, 2005, 2007)

Resources for the Future (1999)

RIETI Workshop on Economic Insights into Patent System Design (2008)

Society for Economic Dynamics (2006)

Southern Economics Association Annual Meeting (1999, 2007)

Southern Finance Association Annual Meeting (2003)

Stanford University Law School (2001, 2005)

Stony Brook Center for Game Theory Workshop on Innovations, Patents and Licensing (2014)

Sveriges Riksbank (2002, 2008)

Technology Transfer Society Annual Conference (2009)

Temple University Law School (2005)

University of California, Berkeley, Haas School of Business (2003)

University of Colorado at Boulder (2013)

University of Connecticut Law School (2008)

University of Georgia (1996)

University of Georgia Law School (2008)

University of Michigan Law School Conference on Patents and Diversity (2006)

University of Pennsylvania (1994, 1995)

University of Wisconsin, School of Business (INSITE) (2007)

Wharton Applied Microeconomics Seminar (2003)

Workshop on the Economics of Information Security (2016)