

## Richard J. Sullivan

Payment System Research  
Federal Reserve Bank of Kansas City  
1 Memorial Drive  
Kansas City, MO 64198

(816) 881-2372 *office*  
(913) 268-7489 *home*  
Rick.J.Sullivan@kc.frb.org

Web page:

[www.kansascityfed.org/speechbio/sullivan.cfm](http://www.kansascityfed.org/speechbio/sullivan.cfm)

Google scholar:

[scholar.google.com/citations?user=Y2HDLbgAAAAJ&hl=en](https://scholar.google.com/citations?user=Y2HDLbgAAAAJ&hl=en)

### EDUCATION

Ph.D., 1983, University of Illinois-Urbana, Economics.

Major fields: economic history, monetary economics; minor field: econometrics.

M.A., 1978, Northern Illinois University, Economics.

B.S., 1975, Northern Illinois University, Management Science, *Magna Cum Laude*.

### PROFESSIONAL EXPERIENCE

- 2003-present Senior Economist, Payments System Research, Federal Reserve Bank of Kansas City.
- 1997-2003 Economist I, Banking Studies, Federal Reserve Bank of Kansas City.
- 1994-1997 Economist II, Banking Studies, Federal Reserve Bank of Kansas City.
- 1989-1994 Assistant Professor of Economics, College of the Holy Cross.
- 1986-1989 Adjunct/Visiting Assistant Professor of Economics, University of Colorado-Boulder and University of Colorado-Denver.
- Summer 1987 Economics Faculty, Economics Institute, Boulder, CO.
- 1985-1986 Visiting Assistant Professor of Economics, University of Kansas.
- 1984-1985 Visiting Assistant Professor, Graduate School of Industrial Administration, Carnegie-Mellon University.
- 1983-1984 Visiting Assistant Professor of Economics, University of Iowa.
- Summer 1979 Economist, Central Illinois Light Company, Peoria, IL; responsible for development of various forecasting models.

### PUBLICATIONS IN REFEREED JOURNALS

- “Manager Wealth Concentration, Ownership Structure, and Risk in Commercial Banks.” With Kenneth R. Spong. *Journal of Financial Intermediation*, April 2007, pp. 229-48.
- “The Effect of Wealth and Ownership on Firm Performance.” With Kenneth R. Spong. *Journal of Financial Transformation*, December 2005, pp. 39-47.
- “Investment in Internet Banking as a Real Option: Theory and Tests.” With Marsha Courchane and David Nickerson. *The Journal of Multinational Financial Management* 12 (4-5), October-December 2002, pp. 347-63.
- “Who's Minding the Store? Motivating and Monitoring Hired Managers at Small, Closely Held Commercial Banks.” With Robert DeYoung and Kenneth Spong. *Journal of Banking and*

*Finance* 25 (7), July 2001, pp. 1209-1242.

“Patent Counts and Textile Invention: A Comment on Griffiths, Hunt, and O'Brien.” *The Journal of Economic History* 55 (3), (September 1995), pp. 666-70. JSTOR: [www.jstor.org/stable/pdfplus/2123668.pdf](http://www.jstor.org/stable/pdfplus/2123668.pdf).

“Estimates of the Value of Patent Rights in Great Britain and Ireland, 1852-1876.” *Economica* 61, No. 241, (February 1994), pp. 37-58. JSTOR: [www.jstor.org/stable/pdfplus/2555048.pdf](http://www.jstor.org/stable/pdfplus/2555048.pdf).

“The Effect of Immigration Upon Aggregate Unemployment: An Across-City Estimation.” *Journal of Labor Research* 14 (3), (Summer 1993), pp. 299-316. With Julian L. Simon and Stephen Moore.

“The Revolution of Ideas: Widespread Patenting and Invention During the English Industrial Revolution.” *The Journal of Economic History* 50 (2), (June 1990), pp. 349-62. JSTOR: [www.jstor.org/stable/pdfplus/2123277.pdf](http://www.jstor.org/stable/pdfplus/2123277.pdf).

“England's 'Age of Invention:' The Acceleration of Patents and Patentable Invention During the Industrial Revolution.” *Explorations in Economic History* 26 (4), (October 1989), pp. 424-52. Reprinted in John Cantwell, ed., *The Economics of Patents*. (Cheltenham UK and Northampton MA: Edward Elgar, 2006).

“More on Immigrants' Earnings Over Time.” *Genus* 44 (1-2), (January-July 1989), pp. 157-175. With Julian L. Simon. JSTOR: [www.jstor.org/stable/29788943](http://www.jstor.org/stable/29788943).

“Population Size, Knowledge Stock, and Other Determinants of Agricultural Publication and Patenting: England, 1541-1850.” *Explorations in Economic History* 26 (1), (January 1989), pp. 21-45. With Julian L. Simon. Reprinted in J.L. Simon, ed., *Population and Development in Poor Countries*. (Princeton: Princeton University Press, 1992), pp. 334-59.

“The Timing and Pattern of Technological Development in English Agriculture, 1611-1850.” *The Journal of Economic History* 45 (2), (June 1985), pp. 305-314. JSTOR: <http://www.jstor.org/stable/pdfplus/2121699.pdf>.

“Measurement of English Farming Technological Change, 1523-1900.” *Explorations in Economic History* 21 (3), (July 1984), pp. 270-289.

#### FEDERAL RESERVE RESEARCH PUBLICATIONS

“[Controlling Security Risk and Fraud in Payment Systems.](#)” *Economic Review* 99(3), Federal Reserve Bank of Kansas City (Third Quarter 2014).

“[The U.S. Adoption of Computer-Chip Payment Cards: Implications for Payment Fraud.](#)” *Economic Review* 98(1), Federal Reserve Bank of Kansas City (First Quarter 2013), pp. 59-87.

“[The Federal Reserve's Reduced Role in Retail Payments: Implications for Efficiency and Risk.](#)” *Economic Review* 97(3), Federal Reserve Bank of Kansas City (Third Quarter 2012), pp. 79-106.

“[The Changing Nature of U.S. Card Payment Fraud: Industry and Public Policy Options.](#)” *Economic Review* 95(2), Federal Reserve Bank of Kansas City (Second Quarter 2010), pp. 101-133.

[“Can Smart Cards Reduce Payments Fraud and Identity Theft?”](#) *Economic Review* 93(3), Federal Reserve Bank of Kansas City (Third Quarter 2008), pp. 35-62. Reprinted in *Boletín* 55(1), Centro de Estudios Monetarios Latinos Americanos (Enero-Marzo de 2009).

[“Understanding Risk Management in Emerging Retail Payments.”](#) With Michele Braun, Jamie McAndrews, and William Roberds. *Economic Policy Review* 14(2), Federal Reserve Bank of New York (September 2008), pp. 137-159. Reprinted in *Boletín* 54(1), Centro de Estudios Monetarios Latinos Americanos (Enero-Marzo de 2008).

[“Nonbanks in the Payments System: Innovation, Competition, and Risk—A Conference Summary.”](#) In *Nonbanks in the Payments System: Innovation, Competition, and Risk, Conference Volume* published online by the Federal Reserve Bank of Kansas City, 2005. With Zhu Wang. Reprinted in the *Economic Review* 92(3), Federal Reserve Bank of Kansas City (Third Quarter 2007), pp. 83-106.

[“Nonbanks in the Payments System: European and U.S. Perspectives.”](#) With staff of European Central Bank and Federal Reserve Bank of Kansas City. In *Nonbanks in the Payments System: Innovation, Competition, and Risk*, Proceedings of Federal Reserve Bank of Kansas City International Payments Conference, Santa Fe, New Mexico, May 2007.

[“Risk Management and Nonbank Participation in the U.S. Retail Payments System.”](#) *Economic Review* 92(2), Federal Reserve Bank of Kansas City (Second Quarter 2007), pp. 5-40.

[“Interchange Fees in Credit and Debit Card Markets: What Role for Public Authorities? A Summary.”](#) In *Interchange Fees in Credit and Debit Card Industries: What Role for Public Authorities, Conference Volume* published by the Federal Reserve Bank of Kansas City, 2005, pp. xix-xxxix. With Barbara Pacheco. Reprinted in the *Economic Review* 91(1), Federal Reserve Bank of Kansas City (First Quarter 2006), pp. 87-113.

[“Performance and Operation of Commercial Bank Web Sites.”](#) *Financial Industry Perspectives*, Federal Reserve Bank of Kansas City (December 2001), pp. 23-33.

[“The 2001 Survey of Commercial Banks in the Tenth Federal Reserve District: Changes and Challenges.”](#) *Financial Industry Perspectives*, Federal Reserve Bank of Kansas City (December 2001), pp. 1-12. With Forest Myers.

[“How Has the Adoption of Internet Banking Affected Performance and Risk in Banks? A Look at Internet Banking in the Tenth Federal Reserve District.”](#) *Financial Industry Perspectives*, Federal Reserve Bank of Kansas City (December 2000), pp. 1-16.

[“The Outlook for the U.S. Banking Industry: What Does the Experience of the 1980s and the 1990s Tell Us?”](#) *Economic Review* 84(4), Federal Reserve Bank of Kansas City (Fourth Quarter 1999), pp. 65-83; With Kenneth R. Spong.

[“How Does Ownership Structure and Manager Wealth Influence Risk? A Look at Ownership Structure, Manager Wealth, and Risk in Commercial Banks.”](#) *Financial Industry Perspectives*, Federal Reserve Bank of Kansas City (December 1998), pp. 15-40; With Kenneth R. Spong.

[“Small Business Lending by Commercial Banks in Colorado, 1994-1996.”](#) *Financial Industry*

*Perspectives*, Federal Reserve Bank of Kansas City (May 1998), pp. 17-33. With Richard D. Johnson, Ronnie J. Phillips, and Kenneth R. Spong.

“[What Makes a Bank Efficient?--A Look at Financial Characteristics and Bank Management and Ownership Structure.](#)” *Financial Industry Perspectives*, Federal Reserve Bank of Kansas City (December 1995), pp. 1-19. With Kenneth R. Spong and Robert DeYoung.

“[Successful Strategies in Interstate Bank Acquisitions.](#)” *Financial Industry Perspectives*, Federal Reserve Bank of Kansas City (December 1995), pp. 21-37.

#### BOOKS

[A Guide to the ATM and Debit Card Industry: 2006 Update.](#) With Fumiko Hayashi and Stuart Weiner. Kansas City: Federal Reserve Bank of Kansas City, 2006.

[A Guide to the ATM and Debit Card Industry.](#) With Fumiko Hayashi and Stuart Weiner. Kansas City: Federal Reserve Bank of Kansas City, 2003.

#### BOOK CHAPTERS

“Bank Ownership and Risk Taking: Improving Corporate Governance in Banking after the Crisis.” With Kenneth R. Spong. Chapter 7 in James R. Barth, Chen Lin, and Clas Wihlborg, eds., *Research Handbook on International Banking and Governance*. (Edward Elgar Publishing, 2012), pp. 163-178. [WORKING PAPER.](#)

“Regulatory Changes and the Development of the U.S. Banking Market, 1870-1914: A Study of Profit Rates and Risk in National Banks.” In Larry Neal and Jeremy Atack, eds., *The Origin and Development of Financial Institutions and Markets*. (Cambridge, Cambridge University Press, 2009). [WORKING PAPER.](#)

“Nonbanks and Risk in Retail Payments: EU and U.S.” With Terri Bradford, Fumiko Hayashi, Christian Hung, Simonetta Rosati, Zhu Wang, and Stuart E. Weiner. In *Managing Information Risk and the Economics of Security*. Eric M. Johnson, ed. New York: Springer Publishing, 2009. [WORKING PAPER.](#)

“Corporate Governance and Bank Performance.” In Benton E. Gup, ed., *Corporate Governance in Banking: An International Perspective*. (Cheltenham, UK and Brookfield, US: Edward Elgar, 2007), pp. 40-61. [WORKING PAPER.](#)

“Patents.” In Joel Mokyr, ed., *The Oxford Encyclopedia of Economic History*. (Oxford: Oxford University Press, 2003).

“Trends in the Agricultural Labor Force.” In Julian L. Simon, ed., *The State of Humanity*. (Cambridge, MA: Basil Blackwell, 1995).

## BOOK REVIEWS

- Peter Lewin , ed., *The Economics of QWERTY: History, Theory, and Policy—Essays by Stan J. Lebowitz and Stephen E. Margolis*. Economic History Services, March 28, 2003 ([link](#)).
- Robert E. Wright, *Origins of Commercial Banking in America, 1750-1800*. *The Journal of Economic History*, June 2002, pp. 615-616. JSTOR: [www.jstor.org/stable/pdfplus/2698221.pdf](http://www.jstor.org/stable/pdfplus/2698221.pdf).
- David Jack Cowen, *The Origins and Economic Impact of the First Bank of the United States, 1791-1797*. *The Journal of Economic History*, December 2001, pp. 1149-50. JSTOR: [www.jstor.org/stable/pdfplus/2697953.pdf](http://www.jstor.org/stable/pdfplus/2697953.pdf).
- Christine Macleod, *Inventing the Industrial Revolution: The English Patent System, 1660-1800*. *The Journal of Economic History*, XLIX(4), December 1989, pp. 1009-11. JSTOR: [www.jstor.org/stable/pdfplus/2122756.pdf](http://www.jstor.org/stable/pdfplus/2122756.pdf).

## NEWSLETTERS AND MAGAZINES

- “The Growing Challenge of Fraud in Card Payments,” *AFP Exchange*, March 2011, pp. 40-43.
- ["The Benefits of Collecting and Reporting Payment Fraud Statistics for the United States,"](#) *Payment System Research Briefing*, Federal Reserve Bank of Kansas City, October 2009.
- “Private Ownership and its Influence on Bank Performance.” With Ken Spong. *The Chinese Banker*, April 2007.
- [“Payment Services and the Evolution of Internet Banking.”](#) *Payment System Research Briefing*, Federal Reserve Bank of Kansas City, August 2004.

## WORKING PAPERS

- “Internet Banking: An Exploration in Technology Diffusion and Impact.” Presented at the NBER Summer Institute, Cambridge MA, July 2006. With Zhu Wang. [Revised version](#).
- [“Nonbanks and Risk in Retail Payments.”](#) With Stuart E. Weiner, Terri Bradford, Fumiko Hayashi, Zhu Wang, and Simonetta Rosati. *Payment System Research Working Paper WP07-02*, December 2007.
- [“The Supervisory Framework Surrounding Nonbank Participation in the U.S. Retail Payments System: An Overview.”](#) *Payment System Research Working paper 04-03*.
- [“Financial Innovation, Strategic Real Options and Endogenous Competition: Theory and an Application to Internet Banking.”](#) *Payment System Research Working paper 03-01*. With David Nickerson.
- “Patented Invention in Exporting Industries: England, 1770-1851.”
- “Asset Accumulation of Immigrants Compared to Natives: A Cross-Sectional Analysis.”
- “The Cointegration of Patents and Productivity in Three English Industries of the Early 19th Century.”
- “Machine Invention During the English Industrial Revolution: Evidence from the Patent Rolls,

1711-1850.”

#### **RESEARCH GRANTS**

Batchelor-Ford Faculty Fellowship, “Machine Invention During the English Industrial Revolution,” College of the Holy Cross, Summer 1992.

Research Grant, “Immigrant Wealth Compared to Native Wealth,” Alfred P. Sloan Foundation, 1990.

#### **AWARDS, FELLOWSHIPS, HONORS**

Hewlett-Mellon Grant for Curricular and Course Development, College of the Holy Cross, June 1992.

Participant, Teacher Training Workshop, Sponsored by the Joint Council on Economic Education (of the American Economic Association), Harvard University, May 1992.

Travel Grant, American Council of Learned Societies, 1985.

Attained 5.0 (out of 5.0) GPA in doctoral program and ranked first of graduating doctoral students in economics, 1983.

University Dissertation Fellowship, University of Illinois, 1981.

Phi Eta Sigma Honor Society, University of Illinois, 1973.

#### **PROFESSIONAL ACTIVITIES**

Paper presentations at professional meetings:

- Workshop on the Economics of Information Security, Cambridge, MA, June 2010
- Workshop on the Economics of Information Security, Hanover, NH, June 2008
- NBER Summer Institute, Cambridge MA, July 2006.
- Western Economics Association, San Diego CA, July 2006.
- Conference on “The Origins and Development of Financial Markets and Institutions,” held at the University of Illinois-Urbana, April 2006.
- Conference on “Managing Risk in Financial Institutions: From Theory to Practice,” held at Hofstra University, Hempstead NY, April 2006.
- Midwest Finance Association, Chicago, March 2006.
- Missouri Valley Economic Association, Kansas City, October 2005.
- Western Economic Association, Vancouver BC, July 2004.
- Seventh Annual Conference on Real Options, Washington DC, July 2003.
- Conference on “Innovation in Financial Services & Payments,” held at the Federal Reserve Bank of Philadelphia, May 2002.
- Financial Management Association, Toronto, October 2001.
- Western Economic Association, San Diego CA, July 1999.
- Financial Management Association, Orlando FL, October 1999.
- Federal Reserve System Committee on Financial Structure and Regulation, Saint Louis MO, September 1999.

- Western Economic Association, Seattle WA, July 1997.
- Financial Management Association, New Orleans LA, October 1996.
- Social Science History Association, Baltimore MD, November 1993.
- Cliometric Society, Northwestern University, May 1993.
- Allied Social Sciences Association, Anaheim CA, January 1993.
- Economic History Association, Washington DC, September 1989.
- Social Science History Association, St. Louis MO, October 1986.
- Economic History Association, Hartford CT, September 1986.
- Population Association of America, San Francisco CA, April 1986.
- American Association for the Advancement of Science, Los Angeles CA, May 1985.
- Economic History Association, Chicago IL, September 1984.

Discussant in sessions at professional meetings:

- American Economic Association, Atlanta, GA, January 2010.
- Federal Reserve System Applied Microeconomics Conference, Kansas City, MO, May 2009.
- Economic History Association, Nashville TN, September 2003.
- Federal Reserve System Committee on Financial Structure and Regulation, Atlanta GA, September 2002.
- Federal Reserve System Committee on Financial Structure and Regulation, San Francisco CA, November 2001.
- Economic History Association, Baltimore MD, October 1999.
- Economic History Association, Boulder CO, September 1991.

Conference organization:

- Program Committee, Workshop on the Economics of Information Security, 2010, 2011, 2012, 2013.

Presentations at industry conferences and forums:

- “Retail Payments Evolution.” Session moderator. BITS Strategic Payments Forum, July 13, 2012.
- “Security Issues in Mobile Payments.” Bankers Institute, Kansas City, January 12, 2012.
- “Payment Fraud Statistics.” Conference on the Role of Government in Payments Risk and Fraud, Federal Reserve Bank of Atlanta, November 17, 2011.
- “Fraud on Online and Card-not-Present Transactions.” Symposium on Improving Security for Online and Card-not-Present Transactions, Federal Reserve Bank of Chicago, September 26, 2011.
- “Chip Technology,” Session moderator. Conference on Achieving Sustainable Improvements in the Security of Retail Payments: Technologies, Standard-Setting, and Coordination, Federal Reserve Bank of Philadelphia, February 17, 2010.
- “Can Smart Cards Reduce Payments Fraud and Identity Theft.” Payment Council Summit,

Smart Card Forum, Salt Lake City, October 8, 2009.

“Volume Crime: The next challenge for risk management in retail payments.” U.S Treasury Financial Management Service, Kansas City Financial Center Customer Advisory Board, Federal Reserve Bank of Kansas City, June 11, 2009.

“A Corporate Perspective on Nonbanks and Risk in Payments.” Presenter, session organizer and moderator. AFP Annual Conference, Los Angeles, CA, October 20, 2008.

“Nonbanks in the Payments System.” Strategic Payments Forum, The Clearinghouse, Charlotte NC, April 23, 2008.

“The ATM and Debit Card Industry: A View from the Fed.” ATM, Debit and Prepaid Forum, Las Vegas NV, October 4, 2006.

“The Supervisory Framework Surrounding Nonbank Participation in the U.S. Retail Payments System.” Conference on Risk and Related Policy Issues in New and Emerging Payment Methods, Federal Reserve Bank of Philadelphia, December 13, 2005.

“Payments in E-Commerce.” Conference on Entrepreneurship and E-Commerce, Oklahoma City OK, May 18, 2005.

Invited participant at meetings of the Cliometric Society:

-Lawrence KS, May 1997.

-Iowa City, IA, May 1983.

-Santander, Spain, June 1989.

Member:

-American Economic Association

-Cliometric Society

-Economic History Association

Referee:

-*Journal of Banking and Finance*

-*Explorations in Economic History*

-*Journal of Economics and Business*

-*Economic History Review*

-*International Economic Review*

-*Journal of Economic History*

-*Agricultural History*

-*Quarterly Review of Economics and Finance*

-National Science Foundation

-French National Research Agency

-*Handbook of Computer Networks*

-*Journal of Financial Services Research*

-*Journal of Risk and Insurance*

-*Financial History Review*

-*Rand Journal of Economics*

-*Information Systems Research*