Joshua D. Rauh Stanford University

Primary Current Positions

2012-Present STANFORD GRADUATE SCHOOL OF BUSINESS, STANFORD UNIVERSITY, STANFORD, CA

Ormond Family Professor of Finance (2015–Present)

Professor of Finance (2012–Present)

2012-Present HOOVER INSTITUTION, STANFORD UNIVERSITY, STANFORD, CA

Senior Fellow (2012–Present)

Lead Researcher, State and Local Research Team (2021–Present)

Director of Research (2018–2019)

2022-Present GLOBAL LIBERTY INSTITUTE, WASHINGTON, DC AND ZUG, SWITZERLAND

Co-Founder and Co-Director

Primary Past Positions

2019–2020	COUNCIL OF ECONOMIC ADVISERS, EXECUTIVE OFFICE OF THE PRESIDENT
71119_711711	TOUNCH OF RECONOMIC ADVISEDS RESECUTIVE OFFICE OF THE POESIDENT
2017-2020	COUNCIL OF ECONOMIC ADVISERS, EXECUTIVE OFFICE OF THE I RESIDENT

Principal Chief Economist (Nov 2019–Mar 2020)

2009–2012 KELLOGG SCHOOL OF MANAGEMENT, NORTHWESTERN UNIVERSITY, EVANSTON, IL

Associate Professor of Finance

2004 –2009 UNIVERSITY OF CHICAGO BOOTH SCHOOL OF BUSINESS, CHICAGO, IL

Associate Professor of Finance (2008–2009) Assistant Professor of Finance (2004–2008)

Other Affiliations

2005-Present NATIONAL BUREAU OF ECONOMIC RESEARCH, CAMBRIDGE, MA

Research Associate in Corporate Financing, Public Economics, and Aging (2009-Present)

Faculty Research Fellow in Public Economics and Aging (2005-2009)

Faculty Research Fellow in Corporate Finance (2007-2009)

2013-Present STANFORD INSTITUTE FOR ECONOMIC POLICY RESEARCH (SIEPR), STANFORD, CA

Senior Fellow

2022–Present UNITED STATES CONGRESSIONAL BUDGET OFFICE

Member, Panel of Economic Advisers

2008-Present NETSPAR, AMSTERDAM, NETHERLANDS

Research Fellow

Education

2000 – 2004 MASSACHUSETTS INSTITUTE OF TECHNOLOGY, CAMBRIDGE, MA

Ph.D., Economics. Dissertation: "Pensions, Corporate Finance and Public Policy." Committee: James Poterba (Chair), Stewart Myers, Jonathan Gruber, Dirk Jenter

1992 – 1996 YALE UNIVERSITY, NEW HAVEN, CT

B.A., Economics, magna cum laude with distinction

Journal Publications

- [1] Rauh, Joshua, 2006, "Investment and Financing Constraints: Evidence from the Funding of Corporate Pension Plans," *Journal of Finance* 61(1), 33-71.
- [2] Bergstresser, Daniel, Mihir Desai, and Joshua Rauh, 2006, "Earnings Manipulation, Pension Assumptions and Managerial Investment Decisions," *Quarterly Journal of Economics* 121(1), 157-195.
- [3] Rauh, Joshua, 2006, "Own Company Stock in Defined Contribution Pension Plans: A Takeover Defense?" *Journal of Financial Economics* 81(2), 379-410.
- [4] Rauh, Joshua, James Poterba, Steven Venti, and David Wise, 2007, "Defined Contribution Plans, Defined Benefit Plans, and the Accumulation of Retirement Wealth," *Journal of Public Economics* 91, 2062-2086.
- [5] Rauh, Joshua, 2009, "Risk Shifting versus Risk Management: Investment Policy in Corporate Pension Plans," *Review of Financial Studies* 22(7), 2687-2734.
- [6] Novy-Marx, Robert, and Joshua Rauh, 2009, "The Liabilities and Risks of State-Sponsored Pension Plans," *Journal of Economic Perspectives* 23(4).
- [7] Kaplan, Steven N., and Joshua Rauh, 2010, "Wall Street and Main Street: What Contributes to the Rise in the Highest Incomes?" *Review of Financial Studies* 23(3), 1004-1050.
- [8] Rauh, Joshua, and Amir Sufi, 2010, "Capital Structure and Debt Structure," *Review of Financial Studies* 23(12), 4242-4280.
- [9] Novy-Marx, Robert, and Joshua Rauh, 2011, "Policy Options for State Pension Systems and Their Impact on Plan Liabilities," *Journal of Pension Economics and Finance* 10(2), 173-194.
- [10] Novy-Marx, Robert, and Joshua Rauh, 2011, "Public Pension Liabilities: How Big Are They and What Are They Worth?" *Journal of Finance* 66(4), 1207-1245.
- [11] Rauh, Joshua and Amir Sufi, 2012, "Explaining Corporate Capital Structure: Product Markets, Leases, and Asset Similarity," *Review of Finance* 16(1), 115-155.
- [12] Novy-Marx, Robert, and Joshua Rauh, 2012, "Fiscal Imbalances and Borrowing Costs: Evidence from State Investment Losses," *American Economic Journal: Economic Policy* 4(2): 182-213.
- [13] Hochberg, Yael, and Joshua Rauh, 2013, "Local Overweighting and Underperformance: Evidence from Limited Partner Private Equity Investments," *Review of Financial Studies* 26(2), 403-451.
- [14] Kaplan, Steven N., and Joshua Rauh, 2013, "Family, Education, and Sources of Wealth Among the Richest Americans, 1982-2012," *American Economic Review P&P* 103(3), 158-162.
- [15] Kaplan, Steven N., and Joshua Rauh, 2013, "It's the Market: The Broad-Based Rise in the Return to Top Talent," *Journal of Economic Perspectives* 27(3), 35-56.
- [16] Novy-Marx, Robert, and Joshua Rauh, 2014, "Revenue Demands of Public Employee Pension Promises," *American Economic Journal: Economic Policy* 6(1), 193-229.
- [17] Novy-Marx, Robert, and Joshua Rauh, 2014, "Linking Benefits to Investment Performance in US Public Pension Systems," *Journal of Public Economics* 116, 47-61.

- [18] Andonov, Aleksandar, Yael Hochberg, and Joshua Rauh, 2018, "Political Representation and Governance: Evidence from the Investment Decisions of Public Pension Funds," *Journal of Finance* 73(5), 2041-2086.
- [19] Giroud, Xavier, and Joshua Rauh, 2019, "State Taxation and the Reallocation of Business Activity: Evidence from Establishment-Level Data," *Journal of Political Economy* 127(3), 1262-1316.
- [20] Rauh, Joshua, Irina Stefanescu, and Stephen Zeldes, 2020, "Cost Shifting and the Freezing of Corporate Pension Plans", *Journal of Public Economics* 188.
- [21] Andonov, Aleksandar, Roman Kräussl, and Joshua Rauh, 2021, "Institutional Investors and Infrastructure Investing," *Review of Financial Studies* 34(8), 3880-3934.
- [22] Rauh, Joshua, 2021, "Discussion of 'The Sustainability of State and Local Government Pensions: A Public Finance Approach, by Lenney, Lutz, Scheule and Sheiner," *Brookings Papers on Economic Activity*, Spring 2021: 57-64
- [23] Andonov, Aleksandar and Joshua Rauh, 2022, "The Return Expectations of Public Pension Funds," *Review of Financial Studies*, Volume 35, Issue 8, August 2022, Pages 3777–3822.
- [24] Rauh, Joshua, and Ryan Shyu, 2022, "Behavioral Responses to State Income Taxation of High Earners: Evidence from California," American Economic Journal: Economic Policy, Conditionally Accepted
- [25] Giesecke, Oliver, and Joshua Rauh, 2023, "Trends in State and Local Pension Funds," *Annual Review of Financial Economics* 15, forthcoming.

Current Working Papers

Andonov, Aleksandar and Joshua Rauh. 2022. "The Shifting Finance of Electricity Generation"

Giesecke, Oliver, and Joshua Rauh. 2022. "How Do Public Employees Value Defined Benefit Versus Defined Contribution Retirement Benefits?"

Rauh, Joshua, 2022, "Taxes and Net Migration in California"

Honors and Awards

2018	International Centre for Pension Management (ICPM) Research Award for "The Return
	Expectations of Institutional Investors" (with Aleks Andonov)
2016	Thule Foundation Research Award on Long-Term Savings
2016	International Centre for Pension Management (ICPM) Research Award for "Pension
	Fund Board Composition and Investment Performance: Evidence from Private Equity"
	(with Aleks Andonov and Yael Hochberg)
2013 - 2015	Institutional Investor Pension 40 list of most influential people in U.S. pensions
2013 - 2014	Stanford GSB Dhirubhai Ambani Faculty Fellow in Entrepreneurship
2011	Smith Breeden Prize, First Prize for "Public Pension Promises: How Big Are They and
	What Are They Worth" (with Robert Novy-Marx), awarded January 2012
2011	Crain's Chicago 40 Under 40
2009 - 2012	Zell Center for Risk Research at Kellogg, Faculty Fellow
2008 - 2009	Charles M. Harper Faculty Fellow, Chicago Booth
2008 - 2009	Initiative on Global Markets at Chicago Booth, research support
2008	GARP Risk Management Research Program for "The Intergenerational Transfer of
	Public Pension Promises" (with Robert Novy-Marx)
2007 - 2008	International Centre for Pension Management (ICPM) grant (with Irina Stefanescu)
2006	Brattle Prize, First Prize for "Investment and Financing Constraints: Evidence from the
	Funding of Corporate Pension Plans," awarded January 2007

2004	National Tax Association Dissertation Award (Co-Winner)
2004	Barclays Global Investor Best Symposium Paper, European Finance Association (for "Managerial Opportunism and Earnings Manipulation: Evidence from Defined Benefit
	Plans," with Daniel Bergstresser and Mihir Desai)
2004	Western Finance Association Award for the Best Paper in Corporate Finance (for
	"Investment and Financing Constraints: Evidence from the Funding of Corporate Pension
	Plans")
2003 - 2004	NBER Pre-Doctoral Fellowship
2002 - 2003	Center for Retirement Research Dissertation Fellow
1996	Phi Beta Kappa

Invited Presentations, Lectures, Roundtables, and Panels

University of Luxembourg Alternative Investments Conference, on "Institutional Investments in Infrastructure" and "Panel: Financing Energy – the Role of Alternative Investments," November 2022

Goethe University Frankfurt & ICIR Digital Insurance Forum on "Pension Finance and Long-Run Productivity", November 2022

SIEPR Tax Policy Forum, October 2022

John R. Raben/Sullivan & Cromwell Fellowship Lecture, Yale Law School, "Regulating Investment Management and Retirement Plans in the Age of ESG," September 2022

Friedberg Economics Institute, Jerusalem, Israel, September 2022, on "The Role of Government and the Free Market Economy," and "Shareholder vs Stakeholder Capitalism"

Congressional Testimony before the United States Congressional Joint Economic Committee, "Why We Should Preserve Shareholder Capitalism," March 2022

Hoover Institution, Fall Retreat, October 2021

Hoover Institution Economic Policy Working Group, May 2021

Brookings Institution BPEA Spring 2021 Conference, March 2021

State and Local Public Finance in the Wake of the Pandemic, Griswold Center for Economic Policy Studies, Princeton University, March 2021

London Business School AQR Insight Summit, November 2020

NBER Asset Pricing Meeting, Panel Discussion on "The Future of Pensions," November 2020

University of Chicago Policy Forum, "The Pension Crisis: State and Local Challenges," November 2019 Hoover Institution Dallas Breakfast, February 2019

Congressional Testimony, July 2018, before the Joint Select Committee on Solvency of Multiemployer Pension Plans, United States Senate & United States House of Representatives

American Finance Association Panel: Business and Capital Taxation, Chair, January 2018

Schnatter Institute for the Study of Free Enterprise, University of Kentucky, "Pensions in Kentucky: Hidden Debt, Hidden Deficits," 2017

California State Association of County Retirement Systems, Presentations on GASB 67 and Infrastructure, UC Berkeley, July 2017

OECD INPARR Seminar, Paris, "The Future of (Partially) Funded Pension Systems," June 2017 Texas A&M Kirby Visiting Fellow Lecture, April 2017

Public Pension Funds Panel Session, American Finance Association meetings, January 2017

California State Association of County Retirement Systems, Presentations on Pension Accounting, UC Berkeley, July 2016

Lecture on The Public Pension Crisis, George Mason University Judicial Education Program: April 2014, September 2014, October 2015, March 2016

Lecture on The Public Pension Crisis, George Mason University Attorney General Education Program:
October 2015

Hoover Institution, Fall Retreat, October 2015, "State Taxation and the Reallocation of Business Activity" University of Oregon, April 2015, "The Retirement Crisis"

Kauffman Fellows Program, January 2015

Penn Institute for Urban Research, "Urban Fiscal Stability and Public Pensions,", November 2014

Hoover Institution, Conference on Inequality in Memory of Gary Becker, September 2014

Public Employee Retirement Discussion, University of Florida, April 2014

The Public Pension Crisis: Causes and Consequences, University of California at Irvine, April 2014

North Carolina State University Sustainability in Research, April 2014

Top 1000 Funds Investment Think Tank, January 2014

SIFR Institute for Financial Research Workshop on Pensions and Insurance, December 2013

Hoover Institution, Fall Retreat, October 2013

Hoover Institution, Spring Retreat, April 2013

Hoover Institution, Southern California Conference, January 2013

Netspar International Pension Workshop, Keynote Lectures, January 2013

The Pension Crisis: Public and Private, American Finance Association meetings, January 2013

Hoover Institution, Economic Policy Lunch, November 2012

Hoover Institution, Fall Retreat, October 2012

Anton Lippitt Conference on Urban Affairs, Taubman Center, Brown University, October 2012

Paul A. Grosch Lecture Series, Loyola Marymount University, October 2012,

Yale Law School, March 2012, Weil, Gotshal & Manges Roundtable at the Yale Law School Center for the Study of Corporate Law

Federal Reserve Bank of Atlanta, October 2011, Public Affairs Forum Speaker

Searle Center Conference on Government Unions in the United States, Northwestern University School of Law, October 2011, Presenter

Manhattan Institute, September 2011, Panelist for "A New Social Contract: Reforming the Terms of Public Employment in America"

Stanford University, June 2011, Participant, "State and Municipal Fiscal Default Workshop"

Yale Law School, June 2011, Corporate Law Alumni Breakfast, New York City

Congressional Testimony, February 2011, House Subcommittee on Courts, Commercial, and Administrative Law, hearing on "The Role of Public Employee Pensions in Contributing to State Insolvency and the Possibility of a State Bankruptcy Chapter"

The Public Employee Pension Crisis in California, 2010, presentation at a roundtable hosted by Governor Arnold Schwarzenegger.

The Public Employee Pension Crisis in South Carolina, 2010, presentation at a roundtable hosted by Governor Mark Sanford.

Academic Seminars and Conference Presentations

- University of Chicago Graduate School of Business, University of Pennsylvania (Wharton),
 Princeton, Kennedy School of Government, Harvard Business School, Stanford Graduate School of Business, Harvard (economics department), Columbia Business School, NYU (Stern),
 Dartmouth (Tuck), Michigan (Ross), Boston College (Carroll), Northwestern (Kellogg), Duke (Fuqua), Stockholm School of Economics, Ohio State University (Fisher), London Business School, Population Association of America meetings (Boston), Securities and Exchange Commission, Western Finance Association meetings (Vancouver)
- American Finance Association meetings (Philadelphia), Taxing Corporate Income in the 21st Century (Conference at the Ross School of Business at the University of Michigan, Co-sponsored by the Office of Tax Policy Research and the Burch Center), NBER Conference on the Economics of Aging (Boulders, Arizona), European Central Bank (Joint Lunchtime Seminar Series of the ECB, CFS and Deutsche Bundesbank), NBER Summer Institute Public Finance Meetings, Michigan State University (Broad), University of Illinois (College of Business), National Tax Association meetings (Miami)
- 2006 Washington University Corporate Finance Conference, MIT Sloan Batterymarch Finance Seminar, Trans-Atlantic Public Economics Seminar / TAPES (Stockholm), Retirement Research Consortium / RRC Conference (Washington, DC), NBER Summer Institute Corporate Finance Meetings, Harvard University Financial Economics Seminar, London School of Economics Finance Lunch Workshop, LSE / UBS Pensions Research Programme Conference (London)
- 2007 University of Southern California (Marshall), Arizona State University, Swedish Institute for Financial Research, Stockholm School of Economics, NBER Summer Institute Corporate Finance Meetings, Chicago GSB Finance Workshop, European Central Bank Conference on Monetary Policy Transmission, Tilburg University, Maastricht University
- 2008 Columbia GSB, NYU/Penn Conference on Law and Finance, University of Maryland (Smith), European Finance Association (Athens), Purdue (Krannert), Wharton Risk and Insurance, NTA Meeting on State and Local Fiscal Sustainability, Norwegian School of Economics and Business

- Administration, University of Illinois, Georgetown (McDonough), University of Minnesota (Carlson)
- 2009 Netspar Pension Conference (Amsterdam), MIT Bradley Public Economics Workshop, Society of Actuaries Public Pension Plan Finance Symposium, ICPM Discussion Forum, Kellogg School of Management, University of Texas at Austin (McCombs), Stanford Graduate School of Business, University of California Berkeley (Haas), HEC Lausanne, Toronto (Rotman)
- 2010 Netspar Pension Conference (Amsterdam), New York University (Stern), Netspar (Zurich), Trans-Atlantic Public Economics Seminar / TAPES (Varenna), NBER Corporate Finance Summer Institute, NBER Conference on State and Local Pensions (Jackson Hole, WY), Yale Law School, Brookings-Nomura-Wharton Conference (Washington DC), London School of Economics, London Business School, University of Georgia
- American Finance Association meetings (Denver), University of Florida (Warrington Finance), University of British Columbia (Sauder Finance), Harvard University (Public Finance Seminar), HEC Paris, Oxford (Saïd Finance), University of Lugano, Yale University (Finance), London Business School Private Equity Symposium, European Finance Association (Stockholm), Chicago Fed, MIT Sloan (Finance), Wharton Business and Public Policy
- 2012 Netspar Pension Conference (Amsterdam), Stanford GSB Finance, University of Oregon, Universidad Carlos III (Madrid), European Financial Management Association (Barcelona), NBER Conference on State and Local Pensions (Jackson Hole, WY), Nova Finance Center 2012 Conference on Pensions and Retirement (Lisbon), ESMT-Humboldt University Berlin, University of Vienna
- American Finance Association meetings (San Diego), Netspar Pension Conference (Amsterdam), Journal of Investment Management Private Equity Conference at Stanford, Carnegie-Mellon University (Tepper), Stanford Finance Group Lunch, Deutsche Institut für Wirtschaftsforschung (Berlin), Conference on State and Local Health Plans Conference (Jackson Hole, WY), Tax Policy and the Economy (Washington DC), SIEPR Working Longer and Retirement Conference, SIFR Institute for Financial Research Conference on Pensions and Insurance
- University of California at Irvine, University of Florida, University of Maastricht, Stanford Finance Group Research Lunch
- 2015 Stanford Finance Group Research Lunch, NYU Stern, National Tax Association Meetings (Boston), NBER Public Finance Fall Meetings (Stanford)
- American Economics Association Meetings (San Francisco), Hoover Economic Policy Lunch, Harvard Business School, Arizona State University, Berkeley-Stanford Joint Finance Seminar, Stockholm School of Economics, Federal Reserve Board, Luxembourg School of Finance
- Tilburg University, Erasmus University Rotterdam, Texas A&M, University of Kentucky Finance/Economics Joint, Harvard Kennedy School Conference on The Risks of State Pension Underfunding, Luxembourg 6th Asset Management Conference, Stanford Finance Group Research Lunch, 19th Annual NBER-ICRIER-NCAER Neemrana Conference (India)
- Yale University (SOM Finance), Bundesbank-Riksbank-DNB Annual Macroprudential Conference (Stockholm), Stanford GSB Finance Research Lunch, London School of Economics, Bank of England, 9th Annual Miami Behavioral Finance Conference
- NBER Long-Term Asset Management, North Carolina Private Equity Research Conference (PERC), Swiss Finance Institute Finance Meets Insurance Conference (Zurich), New York University (Stern), University of Chicago Stigler Center Political Economy of Finance Conference, Luxembourg 8th Asset Management Summit, NBER Public Economics Meeting (Chicago)
- Stanford Finance Group Research Lunch (3x), University of Pennsylvania (Wharton Finance/Micro)
- 2022 INSEAD Finance, University of Amsterdam Finance [Scheduled]

Opinions and Other Short Pieces - Externally Published

Joshua Rauh and Kevin Warsh, "The Inflation Mess and a Financial Refuge," Wall Street Journal, February 21, 2022.

"'Net Zero' Will Make Wall Street Richer At Main Street's Expense," Wall Street Journal, 11 November 2021

- "The Biden Administration's Global Tax Imperialism" with Aharon Friedman, *National Review*, 28 June 2021
- "Biden's Confiscatory Tax Plans Unleash Class Warfare" with Aharon Friedman, The Hill, 9 June 2021
- "Municipal bond investors have to share the burden in state bailouts," The Hill, 17 September 2020
- "California's Tax the Rich Folly," Orange County Register, 1 August 2020
- "Muni bond investors could lose out as pension crisis cripples many U.S. cities" with Robert Pozen, Marketwatch, 8 June 2020
- "How to pay for stimulus checks" with Andrew Biggs, *The Hill*, 27 April 2020
- "Don't use coronavirus as excuse to bail out state, local governments that have mismanaged finances for decades," *Fox Business*, 13 April 2020
- "Congress should let airlines go to bankruptcy court," Chicago Tribune, 28 March 2020
- "The Burden of Public Pension Promises on State and Local Budgets," with Daniel Bergstresser, December 2018, published on EconoFact.org
- "Unfunded Pension Debts of U.S. States Still Exceed \$3 Trillion," 2015, Forbes / Investing PRC Blog
- "Relief for Cities' Budget-Busting Health-Care Costs," Wall Street Journal, 26 July 2015
- "The Pension Black Hole," Providence Journal, 10 January 2013
- "Our Expensive Pension Crisis," Washington Post, 21 October 2012
- "Start Paying or Stop Promising," New York Times Room for Debate, 27 February 2011
- "New York City, Living in Fantasy Land," New York Times Room for Debate, 7 February 2011
- "Can the Illinois Pension Catastrophe Be Stopped?" with Robert Novy-Marx, Chicago Tribune
- "Pension Security Bonds: A New Plan to Address the Pension Crisis," with Robert Novy-Marx, *The Economists' Voice* 7(3), 2010
- "A Bankruptcy to Save GM" with Luigi Zingales
 - Short version published in the Chicago Tribune, 23 November 2008
 - Full version posted on *Vox* and as
 - "Bankruptcy is Best to Save GM," The Economists' Voice 6(4), 2009.

Other Publications

- Joshua Rauh and Jillian Ludwig, "Homelessness in California: Practical Solutions for a Complex Problem", 2022, Hoover Institution Report.
- Rauh, Joshua, Natalie Millar, and Gregory Kearney, 2021, "The Role of Alabama Universities in Fostering Innovation and Growth," Chapter 1, *Innovative Alabama A Report by the Hoover Institution*
- Rauh, Joshua, and Gregory Kearney, 2021, "Tax Policy, Subsidies, and Innovative Business Investment in Alabama: Past and Prospect" Chapter 4, *Innovative Alabama A Report by the Hoover Institution*
- Kearney, Gregory, and Joshua Rauh, 2021, "Taxation, Individual Actions, and Economic Prosperity: A Review," *Hoover Institution Human Prosperity Project*
- Rauh, Joshua, 2020, "Transitioning from Defined Benefit to Defined Contribution Pensions in the Public Sector," in *Gathering Storm: The Risks of State Pension Underfunding*, Roger Porter and Tom Healey, eds, Cambridge University Press.
- Rauh, Joshua, 2018, Testimony before the Joint Select Committee on the Solvency of Multiemployer Pension Plans, on www.pensions.senate.gov
- Rauh, Joshua, 2017, "Hidden Debt, Hidden Deficits: 2017 Edition" Hoover Institution Essay.
- Pozen, Robert, and Joshua Rauh, 2016, "A Tale of Six Cities: Underfunded Retiree Health Care," Hoover Institution Essay
- Rauh, Joshua, 2016, "Hidden Debt, Hidden Deficits: How Pension Promises are Consuming State and Local Budgets," Hoover Institution Essay.

- Evans, Scott, Teresa Ghilarducci, David Laibson, Olivia Mitchell, Alicia Munnell, Joshua Rauh, Susan Scheer, and Stephen Zeldes, 2016. "An Analysis of Options to Increase Retirement Security for New York City Private Sector Workers." Report commissioned by New York City Comptroller Scott M. Stringer.
- Rauh, Joshua, 2016, "Why City Pension Problems Have Not Improved, and a Roadmap Forward," 2016, in *Public Pensions and City Solvency*, ed. Susan Wachter, Philadelphia: University of Pennsylvania Press.
- Rauh, Joshua, 2015, "The Broad-Based Rise in the Returns to Top Talent," *Inequality and Economic Policy: Essays in Memory of Gary Becker*, Hoover Press.
- van Binsbergen, Jules, Robert Novy-Marx, and Joshua Rauh, 2013, "Financial Valuation of PBGC Insurance with Market-Implied Default Probabilities," forthcoming in *Tax Policy and the Economy*.
- Novy-Marx, Robert, and Joshua Rauh, 2011, "The Crisis in Local Government Pensions in the United States," in *Growing Old: Paying for Retirement and Institutional Money Management after the Financial Crisis*, Robert Litan and Richard Herring, eds., Brookings Institution, Washington DC.
- Rauh, Joshua, 2011, "The Pension Bomb," Milken Institute Review 13(1), 26-37.
- Rauh, Joshua, 2010, "Are State Public Pensions Sustainable? Why the Federal Government Should Worry About State Pension Liabilities" *National Tax Journal (Forum)* 63(10).
- Rauh, Joshua, James Poterba, Steven Venti, and David Wise, 2009, "Lifecycle Asset Allocation Strategies and the Distribution of 401(k) Retirement Wealth," in *Developments in the Economics of Aging*, David A. Wise (ed), University of Chicago Press.
- Rauh, Joshua and Irina Stefanescu, 2009, "Why are Firms in the United States Abandoning Defined Benefit Pension Plans?" *Rotman Journal of Pension Management* 2(2), 18-25.
- Gruber, Jonathan, and Joshua Rauh "How Elastic is the Corporate Income Tax Base," in *Taxing Corporate Income in the 21st Century*, Cambridge University Press, Alan Auerbach, James R. Hines, and Joel Slemrod (eds.), 2007.
- Rauh, Joshua, James Poterba, Steven Venti, and David Wise, 2005, "Utility Evaluation of Risk in Retirement Savings Accounts," in *Analyses in the Economics of Aging*, David A. Wise (ed), University of Chicago Press, 2005.

Older Working Papers

- Rauh, Joshua, 2018, "Fiscal Implications of Pension Underfunding"
- Rauh, Joshua, 2016, "Pension Promises and Solvency: The Effects of Low Interest Rates"
- Rauh, Joshua, and Robert Novy-Marx, 2014, "Funding Soft Liabilities"
- Rauh, Joshua, 2013, "The Causes and Consequences of the Rising Costs of Public Employee Pensions"
- Novy-Marx, Robert, and Joshua Rauh, 2008, "The Intergenerational Transfer of Public Pension Promises," NBER Working Paper w14343

Rauh, Joshua, 2007, "The Effects of Financial Condition on Capital Investment and Financing: Evidence from Variation in Pension Fund Asset Performance"

Case Studies

Rauh, Joshua, 2015, "Discounting Liabilities: The Case of the Illinois Teachers Retirement System"Amporful, Kwabena, Corinne Augustine, and Joshua Rauh, 2015, "Eden Tree: A Case Study," Stanford GSB Case Study IDE-10.

Morgan, Jessica, and Joshua Rauh, 2015, "Marin Software," Stanford GSB Case Study E-541 Morgan, Jessica, and Joshua Rauh, 2015, "Astro Gaming," Stanford GSB Case Study E-542 Luther, Jason, Jonathan Levay, and Joshua Rauh, 2014, "Eventbrite," Stanford GSB Case Study E-510

Opinions and Other Short Pieces – Internal Publications

- "Private Investigations: Can Institutional Investors Fill the Infrastructure Gap?" with Aleksandar Andonov and Mels de Zeeuw, October 2021, SIEPR Policy Brief
- "Pension Reform," 2018, in Economic Policy Challenges Facing California's Next Governor, Hoover Institution
- "Can California Save Itself From A Pension Disaster?" *Eureka* 1801, January 2018 Reprinted as "California Saving" in *Hoover Digest* 2018(2), 132-136
- "The Public Pension Crisis," Defining Ideas, Hoover Institution, 12 April 2016
- "A Few Trillion Short," *Hoover Digest*, Hoover Institution, 27 January 2016
- "Funding Retiree Healthcare Plans," with Robert Pozen, *Defining Ideas*, Hoover Institution, 19 August 2015
- "Averting the Public Pension Crisis without a National Insurance Agency," *Advancing a Free Society*, Hoover Institution, 6 August 2013
- "Public Sector Pensions Are a National Issue," Advancing a Free Society, Hoover Institution, 22 July 2013
- "Real Pension Reform," Advancing a Free Society, Hoover Institution, 23 August 2012
- "Termination vs Ongoing Approach for Pension Solvency Dates," Everything Finance, 23 March 2012
- "Pensions in MuniLand," Everything Finance, 29 February 2012
- "Government Unions and Public Sector Compensation," Everything Finance, 16 October 2011
- "Shortfall for State and Local Pension Systems: Over \$4 Trillion," Everything Finance, 6 October 2011
- "Are State Pension Problems a 'Big Deal?" Everything Finance, 2 September 2011
- "Revenue Demands of Public Employee Pension Promises" Everything Finance, 21 June 2011
- "Each Chicago Household In Fact Owes Over \$80,000" Everything Finance, 21 June 2011
- "Return Assumptions: It's All Just Borrowing In Disguise," Everything Finance, 20 September 2010
- "Unfunded Pension Liabilities and GDP," Everything Finance, 25 February 2011
- "Wipe Away Your Debts with State Government Accounting," Everything Finance, 1 November 2010
- "Return Assumptions: It's All Just Borrowing In Disguise," Everything Finance, 20 September 2010
- "Illinois' Irrelevant Pension Reform," Everything Finance, 15 April 2010
- "The Day of Reckoning for State Pension Plans," Everything Finance, 22 March 2010

Podcasts

Joshua Rauh on Public Pensions, EconTalk Podcast, Library of Economics and Liberty, 2012

Editorial Roles

Associate Editor, *Journal of Finance*, 2011-2019, 2020-present Senior Editor, *Journal of Pension Economics and Finance*, 2021-present Board of Editors, *American Economic Journal: Economic Policy*, 2016-2019 Editor, *Review of Corporate Finance Studies*, 2011-2013 Editor, *Journal of Pension Economics and Finance*, 2010-2016

Teaching Experience

MBA Stanford, ALP 307, Public Policy Lab: Financial Challenges Facing Cities (2023, Sched)

Stanford, ALP 307, Public Policy Lab: Homelessness in California (2022) Stanford, GSBGEN 587, Policy Practicum: Alabama Innovation (2021)

Stanford, FIN 207, Corporations, Finance, Governance in the Global Economy (2021)

Stanford, FIN 201, Finance (2020)

Stanford, FIN 207, Corporations, Finance, Governance in the Global Economy (2019) Stanford, FIN 207, Corporations, Finance, Governance in the Global Economy (2018)

Stanford, FIN 205, Accelerated Managerial Finance Lab-Based Pilot (2017)

Stanford, STRAMGT 315, Launch to Liquidity (2014-2016)

Stanford, FIN 336, The Finance of Retirement and Pensions (Fall 2013, cross-listed) Kellogg, FINC 445 Private Equity and Venture Capital (Winter 2011, Spring 2012)

Booth, Business 35200, Corporation Finance (2005-2009)

Undergraduate Stanford, Econ 184, Institutional Investment Management (Fall 2017)

Stanford, Econ 161, The Finance of Retirement and Pensions (Fall 2013, cross-listed) Harvard Summer, Econ S-1452, Money, Financial Institutions and Markets (2002-2003)

PhD Stanford, FIN 633, Advanced Empirical Corporate Finance (2013, 2014, 2016, 2017)

Kellogg FINC 520, Topics in Finance (Spring 2012)

Booth, Business 35902, Theory of Financial Decisions II (Winter 2008, 2009) Booth, Business 35903, Theory of Financial Decisions III (Winter 2008, 2009)

Online Stanford Mini Investments Course: Stocks and Bonds (Winter 2016)

Stanford (on OpenEdX), Stocks and Bonds: Risks and Returns (Fall 2014) Stanford (on NovoEd), The Finance of Retirement and Pensions (Fall 2013)

Other Hoover Institution Summer Policy Boot Camp (Summer 2017-2022)

Stanford GSB Exec Ed, Finance for Investment Professionals (Summer 2013-2022) Hoover Institution Congressional Fellowship Program (2018, 2019, 2022 (2x)) LEC Workshop on the Economics of Pension Reform (Fall 2015, Winter 2016)

Stanford GSB Exec Ed, Endeavor Innovation and Growth Program (Summer 2015-2016)

Stanford GSB Exec Ed, Stanford Executive Program (Summer 2015) Stanford GSB Exec Ed, EPGC Program (Summer 2016-2018)

UC Berkeley EMBA Program, Corporate Finance (Summer 2015-2017)

Stanford SEED, Ghana, Finance Sessions (March 2014, December 2014, March 2015)

Stanford SEED, Kenya, Finance Sessions (October 2016)

Stanford GSB Exec Ed, Challenges Facing Family Firms (Fall 2018)

Kellogg, Management for Scientists and Engineers, Finance Unit, (Summer 2010-2012)

Kellogg, Various sessions on pensions (2011)

TA MIT Sloan, 15.402, Corporate Finance II, Professor Kevin Rock

Other Research Experience

2002 – 2004 Research Assistant, Professor James Poterba 2001 – 2002 Research Assistant, Professor Jonathan Gruber

Non-Academic Experience

2021-2022	Analysis Group, Consulting Project
2014-2015	Brattle Group, Consulting Project
2012	Cornerstone Research, Consulting Project
1998 - 2000	Goldman Sachs International, London, UK

Associate Economist (1999–2000), Research Assistant (1998–1999)

Summer 1997 Deutsche Bank, Frankfurt, Germany

Research Intern (Corporate and Institutional Banking)

Émigré Memorial German Internship Program, Bonn, Germany Summer 1996 Internship at the German Bundestag

Major Conference Presentations by Co-Authors of Co-Authored Papers

2020	Yale University Real and Private Value Assets Conference [Andonov]
2017	American Finance Association Meetings [Hochberg]
2016	NBER Entrepreneurship Fall Meetings [Andonov]
	European Finance Association Meetings [Andonov]
	UNC Private Equity Conference [Hochberg]
	NBER Corporate Finance Fall Meetings [Hochberg]
2015	NBER Corporate Finance Fall Meetings [Giroud]
	London Business School Causality Conference [Giroud]
2013	American Economics Association Meetings [Kaplan]
	NBER Personal Retirement Challenges and Financial Solutions Conference [Novy-Marx]
2012	American Finance Association Meetings [Hochberg], Econometric Society Meetings [Hochberg]
2011	NBER Summer Corporate Finance Meetings [Hochberg]
2009	American Finance Association Meetings [Sufi], NBER Spring Corporate Finance Meetings [Sufi],
	Western Finance Association Meetings [Novy-Marx]
2004	European Finance Association [Bergstresser], NBER Spring Corporate Finance Meetings [Desai]
2008	American Finance Association Meetings [Kaplan]
Invited	d Discussions
2021	NBER Inequality, Discrimination, and the Financial System

2021	NBER Inequality, Discrimination, and the Financial System
2018	American Finance Association Meetings (Philadelphia)
2017	NBER Corporate Finance Summer Institute (Boston), NBER Corporate Finance Fall Meetings
	(Stanford)
2016	American Finance Association Meetings, Caltech/USC PE Conference, NBER Corporate Finance
	Spring Meeting (Chicago)
2015	American Economic Association Meetings
2014	Netspar Pension Conference (Venice)
2014	NBER Corporate Finance Spring Meeting (Chicago),
2014	Netspar Pension Conference (Amsterdam)
2013	Netspar Pension Conference (Frankfurt)
2012	American Economics Association Meetings, American Finance Association Meetings
2011	American Economics Association Meetings, American Finance Association Meetings
2010	NBER Entrepreneurship Meeting
2009	American Finance Association Meetings
2008	American Economics Association Meetings, American Finance Association Meetings
2007	NBER Behavioral Economics Working Group, Spring Meeting (Chicago)
	Western Finance Association Meetings (Big Sky)
2006	Western Finance Association Meetings (Keystone)
	Trans-Atlantic Public Economics Seminar / TAPES (Stockholm)
2005	American Finance Association Meetings (Philadelphia)
	NBER Summer Institute Corporate Finance Meeting
	Swedish Institute for Financial Research Conference on Corporate Governance

Media Coverage

Select video and a complete list of my quotes or citations in the Economist, Wall Street Journal, New York Times, and Financial Times may be found at www.stanford.edu/~rauh/media.htm. My research has been covered extensively by global media outlets.

NBER Summer Institute Corporate Finance Meeting

Service

2022	Co-Organizer, NBER Business Taxation Meeting (October)
	Co-Organizer, Hoover Institution Summer Policy Boot Camp (August)
2021	Co-Organizer, NBER Fall Corporate Finance Meetings (November)
	Co-Organizer, NBER Conference on Taxation of Business Income (November)
	Co-Organizer, Hoover Institution Summer Policy Boot Camp (August)
2020	Co-Organizer, NBER Conference on Taxation of Business Income (October)
	Co-Organizer, Hoover Institution Summer Policy Boot Camp (Virtual - August)
2019	Chair, Search Committee for Hoover Institution Director (through October 2019)
	Co-Organizer, NBER Conference on Taxation of Business Income (October)
	Co-Organizer, Hoover Institution Summer Policy Boot Camp (August)
	Co-Organizer, Hoover Institution Infrastructure Conference (May)
2018	Co-Organizer, NBER Conference on Taxation of Business Income, PI on NBER funding
	from Smith-Richardson Foundation
	Co-Organizer, Hoover Institution Summer Policy Boot Camp
	Stanford GSB Advisory Board Presentation
	Session Moderator at SIEPR Forum "What's Next For California?"
2017	Co-Organizer, NBER Conference on State Business Taxation
	Co-Organizer, Hoover Institution Summer Policy Boot Camp (Inaugural Year)
	American Finance Association Nominating Committee
2016	Co-Organizer, NBER Universities Research Conference on State Business Taxation, PI
	on NBER funding from Smith-Richardson Foundation
2015-2016	Hoover Institution Master Plan Committee (Phase 2 – Renovation of LHH and HHMB)
2015-2016	New York City Retirement Security Study Group (Comptroller Scott M. Stringer)
2015	Reviewer of MIT-Sloan PhD Program
2015	Stanford Finance Group Recruiting Co-Coordinator
2015	Stanford Economics Department, Dissertation Defense Chair (Luke Stein, Stephen Sun)
2014	Stanford University Committee on Social Change at Scale
2013	Co-organizer, Hoover Institution's California Public Pension Solutions Conference
2013	Co-organizer, Fall NBER Corporate Finance Meetings at Stanford
2012-2015	Stanford GSB Dean's Advisory Group
2012-present	Stanford GSB Faculty Advisory Board
2012	Junior Recruiting Coordinator for the Kellogg Finance Department
2011	Junior Recruiting Coordinator for the Kellogg Finance Department
	Innovation Strategy Research Group at Kellogg School of Management
2010	Committee to Evaluate the Kellogg EMP Program
	Junior Recruiting Co-Coordinator for the Kellogg Finance Department