Curriculum Vitae

STEFAN J. REICHELSTEIN

CONTACT Graduate School of Business

Stanford University Stanford, CA 94305 Tel: (+1)650-736-1129

Email: reichelstein@stanford.edu

Mannheim Institue for Sustainable Energy Studies

University of Mannheim 68161 Mannheim, Germany Tel: (+49) 621-181-1700

EDUCATION

Ph.D. in Managerial Economics

Kellogg School of Management, Northwestern University, 1984

M.S. in Managerial Economics

Kellogg School of Management Northwestern University, 1980

Pre-Diploma in Economics, University of Bonn, Germany, 1977

ACADEMIC POSITIONS

2018 - present	Professor of Business Administration University of Mannheim
	William R. Timken Professor Emeritus Graduate School of Business, Stanford University
2002 - 2018	William R. Timken Professor Graduate School of Business, Stanford University
1996 - 2001	Michael N. Chetkovich Professor of Accounting, Haas School of Business, University of California at Berkeley
1994 - 1996	Professor, Institut für Betriebswirtschaftslehre, University of Vienna
1993 - 1996	Professor, Haas School of Business, University of California at Berkeley
1990 - 1993	Associate Professor, Haas School of Business, University of California at Berkeley
1986 - 1990	Assistant /Associate Professor, Graduate School of Business, Stanford University

PROFESSIONAL AFFILIATIONS

Director, Mannheim Institute for Sustainable Energy Studies (2018-present).

Senior Fellow, Precourt Institute for Energy, Stanford University (2018 - present)

Research Associate, Zentrum fuer Europaische Wirtschaftsforschung, Mannheim (2019-present)

Faculty Research Director, Steyer-Taylor Center for Energy Policy and Finance, Stanford University (2012 - present)

Faculty Lead, Energy Business Innovations, Stanford GSB (2018- present).

Faculty Director, Sustainable Energy Initiative, Stanford GSB (2015 - 2018)

Senior Fellow, Woods Institute for the Environment, Stanford University (2011 - 2014 and 2015- 2018)

Distinguished Affiliate Professor, European School of Management and Technology, Berlin, (2010 - 2013)

Affiliate Faculty, Emmett Interdisciplinary Program in Environment and Resources, Stanford University (2010 - Present)

Research Fellow, CESifo Institute, Munich, Germany (2000 – present).

HONORS, AWARDS and PRIZES

Distinguished Affiliate Professor, Technical University of Munich, July 2017

Yuji Ijiri Distinguished Lecturer in Accounting, Carnegie Mellon University, August 2013

Member, Accounting Research Committee, Verein fuer Socialpolitik, since May 2013

Member, Berlin Academy of Sciences (Berlin-Brandenburgische Akademie der Wissenschaften), since 2012.

Honorary Doctorate, Faculty of Business Administration, University of Mannheim, Germany, November, 2011.

Bob and Marylin Jaedicke *Faculty Fellow*, Graduate School of Business, Stanford University, 2011-2012.

Honorary Doctorate, Faculty of Economic and Social Sciences, University of Fribourg, Switzerland, November, 2008.

Honorary Professor, Faculty of Business Administration, University of Vienna, since July 2007.

Best Paper Award for: "Conservatism, Growth and Return on Investment", <u>Review of Accounting</u> Studies Conference, INSEAD, September 2006.

Best Paper Award for: "Conservatism, Growth and Return on Investment", <u>Journal of Accounting</u>, <u>Auditing and Finance Conference</u>, New York, September 2006.

Best Paper Award for: "Controlling Investment Decisions: Depreciation- and Capital Charges", Review of Accounting Studies Conference, Cornell University, September 2001.

Best Paper Award for: "Integrating Managerial- and Tax Objectives in Transfer Pricing", Chazen Institute for International Business, New York, April 2004.

Distinguished Visiting Lecturer, Graduate School of Industrial Organization, Carnegie Mellon University, December 2003- January 2004.

Best Paper Award for: "Asset Valuation and Performance Measurement in a Dynamic Agency Setting", <u>Review of Accounting Studies Conference</u>, Stanford University, June 1999.

RESEARCH GRANTS

Research Grant by the Deutsche Forschungsgemeinschaft (TRR 266) for a study of "Accounting for Operating Assets," July 2019 - June 2023.

Research Grant by the Stanford Institute for Innovation in Developing Economies for a study of "Incentives for Distributed Energy Resources in Rural India," June 2015 - May 2016.

Research Grant by the Stanford Institute for Innovation in Developing Economies for a study of "Removing Barriers to the Deployment of Solar Photovoltaic Electricity Generation Systems in Developing Economies: An Entrepreneurial Perspective," September 2014 - August 2015.

Research Grant by the Precourt Institute for Energy at Stanford University for a study of "Economic Assessment of Polygeneration Energy Systems: Role of Renewable Energy," September 2014 - August 2016.

Research Grant by the U.S. Department of Energy for a study of "The Federal Investment Tax Credit for Solar Energy: Assessing and Addressing the Impacts of the 2017 Step-Down", October 2013 - November 2014.

Research Grant by the Precourt Institute for Energy at Stanford University for a study of "Market-Based Valuation of Ecosystem Services for Competitive Large-Scale Solar Power Generation" (with M. Lepech, D. Freyberg and J. Weyant), September 2011- August 2013.

Research Grants by the Committee on Research, U.C. Berkeley, July 1996 - June 1997 and July 1997 - June 1998.

Research Grant by the Austrian Ministry of Science for a study of "*The European Semiconductor Industry*", July 1994 - December 1995.

NSF grant for a study of "Authority, Responsibility and Incentives in Hierarchies" (with D. Mookherjee), August 1992 - December 1995.

Sloan Foundation grant for a study of "Competitive Semiconductor Manufacturing" (faculty co-investigator), June 1991 - September 1994.

NSF grant for a study of "Network Mechanisms and Informationally Efficient Hierarchies" (with T. Marschak), August 1987 - February 1990.

NSF grant for a study of "Incentive and Information Issues in Iterative Allocation Procedures" (with T. Marschak), November 1983 - April 1986.

PUBLISHED RESEARCH PAPERS

"Capacity Rights and Full Cost Transfer Pricing" (with S. Dutta), <u>Management Science</u>, forthcoming

"Operational Volatility and the Synergistic Value of Vertically Integrated Energy Systems," (with G. Glenk), <u>Production and Operations Management</u>, forthcoming

"The Emergence of Cost Effective Battery Storage" (with S. Comello), <u>Nature Communications</u>, May 2019

"Economics of Converting Renewable Power to Hydrogen" (with G. Glenk), Nature Energy, March 2019

"The Road Ahead for Solar PV", (with S. Comello and A. Sahoo), Renewable and Sustainable Energy Reviews, Fall 2018

"Relating Product Prices to Long-Run Marginal Cost: Evidence from Solar PV Modules," (with A. Sahoo), Contemporary Accounting Research, Fall 2018

"Carbon Capture and Utilization in the Industrial Sector," (with P. Psarras, P. Bains, S. Comello, P. Charoensawadpong and J. Wilcox), Environmental Science & Technology, 2017

"Cost Competitiveness of Residential Solar PV: The Impact of Net Metering Restrictions", (with S. Comello), Renewable and Sustainable Energy Reviews, 2017

"Enabling Micro-Grid Development in Rural India," (with S. Comello, A. Sahoo and T. Schmidt), World Development, 2017

"Structural Properties of the Price-to-Earnings and the Price-to-Book Ratios," (with A. Nezlobin and M. Rajan), Review of Accounting Studies, March 2016

"Economic Value of Flexible Hydrogen-Based Polygeneration Energy Systems", (with K. Farhat), Applied Energy, February 2016

"The U.S. Investment Tax Credit for Solar Energy: Alternatives to the Anticipated 2017 Step-Down", (with S. Comello), Renewable and Sustainable Energy Reviews, February 2016.

"Levelized Product Cost: Concept and Decision Relevance," (with A. Rohlfing-Bastian), <u>The Accounting Review</u>, July 2015

"Time of Use Pricing and the Levelized Cost of Intermittent Power Generation", (with A. Sahoo), Energy Economics, April, 2015

"Managerial Performance Evaluation for Capacity Investments," (with A. Nezlobin and Y. Wang), Review of Accounting Studies, March 2015

"Incentives for Early Deployment of Carbon Capture Technology," (with S. Comello), <u>Energy Policy</u>, December 2014

"Conservatism Correction for the Market-to-Book Ratio and Tobin's q," (with M. McNichols and M. Rajan), Review of Accounting Studies, December 2014

"The Prospects for Cost Competitive Solar PV Power", (with M. Yorston), <u>Energy Policy</u>, April 2013

"The Dual Role of Transfer Prices in Multinational Firms: Divisional Performance Measurement and Tax Optimization", The European Financial Review, October, 2012

(This article is an abridged version of "Transfer Pricing in Multinational Firms: An Integrated Management- and Tax Perspective," listed below).

"Dynamics of Rate of Return Regulation," (with A. Nezlobin and M. Rajan), <u>Management</u> Science, May, 2012

"Transfer Pricing in Multinational Firms: An Integrated Management- and Tax Perspective," (with M. Hiemann), <u>Fundamentals of International Transfer Pricing in Law and Economics</u>, edited by K. Konrad and W. Schoen, Springer Publishers, February 2012

"Discretion in Managerial Bonus Pools," (with M. Ederhof and M. Rajan), <u>Foundations and Trends in Accounting</u>, July 2011

"Carbon Capture by Fossil Fuel Power Plants: An Economic Analysis" (with O. Islegen), Management Science, January 2011

"Decentralized Capacity Management and Internal Pricing," (with S. Dutta), Review of Accounting Studies, September 2010

"The Economics of Carbon Capture" (with O. Islegen), The Economists' Voice, December, 2009

"Depreciation Rules and the Relation between Marginal- and Historical Cost" (with M. Rajan), Journal of Accounting Research, June, 2009

"Objective versus Subjective Indicators of Managerial Performance" (with M. Rajan), The Accounting Review, January 2009

"Conservatism, Growth and Return on Investment" (with M. Rajan and M. Soliman), Review of Accounting Studies, September 2007

"Capital Budgeting: The Role of Cost Allocations," (with I. Gow), in <u>Operations Research</u> Proceedings 2006, March 2007.

"Cost Allocation for Capital Budgeting Decisions", (with T. Baldenius and S. Dutta), The Accounting Review, July 2007

"Managerial Accounting," (with T. Baldenius), <u>Handwoerterbuch der Betriebswirtschaft</u>, edited by H. Koehler et al., June 2007

"Subjective Performance Indicators and Discretionary Bonus Pools" (with M. Rajan), Journal of Accounting Research, June 2006.

"External and Internal Pricing in Multidivisional Firms" (with T. Baldenius), Journal of Accounting Research, March 2006

"Accrual Accounting for Performance Evaluation," (with S. Dutta), Review of Accounting Studies, December 2005

"Stock Price, Earnings and Book Values in Managerial Performance Measures" (with S. Dutta), The Accounting Review, October 2005

"Incentives for Efficient Inventory Management: The Role of Historical Cost" (with T. Baldenius), Management Science, July 2005.

"Market-based Transfer Pricing: A Synthesis of Recent Studies" (with T. Baldenius and N. Bastian), in Internationalisierung des Controlling, edited by J. Weber, DUV, 2005.

"A Perspective on "Asymmetric Information, Incentives and Intrafirm Resource Allocation" " (with M. Rajan), Management Science, December 2004.

"Integrating Managerial-and Tax Objectives in Transfer Pricing", (with T. Baldenius and N. Melumad), The Accounting Review, July 2004.

"Leading Indicator Variables, Performance Measurement and Long-Term versus Short-Term Contracts" (with S. Dutta), Journal of Accounting Research, December 2003.

"Controlling Investment Decisions: Depreciation-and Capital Charges" (with S. Dutta), Review of Accounting Studies, September 2002.

"Responsibility Accounting" <u>Handwoerterbuch fuer Controlling</u>, Poeschel Verlag, H.-U. Kuepper and A. Wagenhofer (eds.), 2002.

"Incentives and Coordination in Hierarchies", (with D. Mookherjee), Advances in Economic Theory, The B.E. Press, May 2001.

"Providing Managerial Incentives: Cash Flows versus Accrual Accounting", Journal of Accounting Research, Autumn 2000.

"Comparative Statics of Monopoly Pricing", (with T. Baldenius), Economic Theory, 2000.

"Asset Valuation and Performance Measurement in a Dynamic Agency Setting", (with S. Dutta), Review of Accounting Studies, December 1999.

"Performance Measurement in a Multiperiod Agency Setting" (with S. Dutta), <u>Journal of Theoretical and Institutional Economics</u>, March 1999.

"Return to EVA" (with T. Baldenius and G. Fuhrmann), in German: "Zurueck zu EVA" Betriebswirtschaftliche Forschung and Praxis, January 1999.

"Negotiated versus Cost-Based Transfer Pricing" (with T. Baldenius and S. Sahay), Review of Accounting Studies, June 1999.

"Alternative Methods for Determining Transfer Prices" (with T. Baldenius), in German: "Alternative Verfahren zur Bestimmung von Verrechnungspreisen", Zeitschrift fuer Betriebswirtschaftliche Forschung, March 1998.

"Network Mechanisms, Informational Efficiency and Hierarchies" (with T. Marschak), Journal of Economic Theory, March 1998.

"Budgeting and Hierarchical Control", (with D. Mookherjee), <u>Journal of Accounting Research</u>, Fall 1997.

"Contract Complexity, Incentives and the Value of Delegation" (with N. Melumad and D. Mookherjee), <u>Journal of Economics and Management Strategy</u>, Summer 1997.

"Investment Decisions and Managerial Performance Evaluation", <u>Review of Accounting Studies</u>, Vol. 2 (2) 1997.

"Holdups, Standard Breach Remedies and Specific Investment," (with A. Edlin), <u>American Economic Review</u>, June 1996 (reprinted in <u>The Economic Theory of Incentives</u>, D. Martimort (editor), Edward Elgar Publishing, 2017).

"Hierarchical Decentralization of Incentive Contracts" (with N. Melumad and D. Mookherjee), RAND Journal of Economics, December 1995 (reprinted in The Economic Theory of Incentives, D. Martimort (editor), Edward Elgar Publishing, 2017).

"Specific Investment under Negotiated Transfer Pricing: An Efficiency Result" (with A. Edlin), The Accounting Review, April 1995.

"The Communication Requirements for Individual Agents in Networks and Hierarchies" (with T. Marschak), <u>The Economics of Informational Decentralization: Complexity. Efficiency and Stability</u>, J. Ledyard (ed.), Kluwer Press, June 1995.

"The Revelation Approach to Nash Implementation" (with D. Mookherjee), <u>Economics Letters</u>, October 1992.

"Constructing Incentive Schemes for Government Contracts: An Application of Agency Theory," <u>The Accounting Review</u>, October 1992, (reprinted in <u>Essays in the Economics of Procurement</u>, A. Bower and J. Dertouzos, eds., Rand, 1994)

"A Theory of Responsibility Centers" (with N. Melumad and D. Mookherjee), Journal of Accounting and Economics, November 1992.

"Agency," <u>The New Palgrave Dictionary of Money and Finance</u>, Mac-Millan Press, London, November 1992.

"Dominant Strategy Implementation of Bayesian Incentive Compatible Allocation Rules" (with D. Mookherjee), <u>Journal of Economic Theory</u>, April 1992 (reprinted in <u>The Economic Theory of Incentives</u>, D. Martimort (editor), Edward Elgar Publishing, 2017).

"Participation, Slack and Budget Based Performance Evaluation" (with A. Kirby, P.K. Sen and Tae-Young Paik), <u>Journal of Accounting Research</u>, Spring 1991.

"Implementation via Augmented Revelation Mechanisms" (with D. Mookherjee), Review of Economic Studies, July 1990 (reprinted in The Economic Theory of Incentives, D. Martimort (editor), Edward Elgar Publishing, 2017).

"Value of Communication in Agencies" (with N. Melumad), Journal of Economic Theory, April 1989.

"Game Forms with Minimal Message Spaces" (with S. Reiter), <u>Econometrica</u>, May 1988 (reprinted in 35 Years of MEDS and Management Theory, Kellogg School of Management, 2003).

"Centralization versus Delegation and the Value of Communication" (with N. Melumad), <u>Journal</u> of Accounting Research, 1987.

"Performance Incentives in Government Contracts", (with H.E. Reichelstein), in German: "Leistungsanreize bei öffentlichen Aufträgen" Wehrtechnik, March 1987.

"A Note on Feasible Implementations," Economics Letters, 25, 1987.

"Information-Eliciting Compensation Schemes" (with K. Osband), <u>Journal of Public Economics</u>, August 1985.

"Smooth versus Discontinuous Mechanisms," Economics Letters, Fall 1984.

"Incentives in Government Contracts" (with K. Osband), Journal of Public Economics, July 1984.

"Incentive Compatibility and Informational Requirements," <u>Journal of Economic Theory</u>, October 1984.

"A Note on Allocations Attainable through Nash-Equilibria," Journal of Economic Theory, April 1984.

OTHER PUBLICATIONS

"Economics of the Clean Energy Transition", online course module available at: https://scpd.stanford.edu, September 2018.

"RWE's Carve-Out of innogy" (with D. Bebb and S. Comello), Stanford GSB, Case Number SM-278, November 2017.

"Levelized Cost of Electricity Calculator: A User Guide," http://www.stanford.edu/dept/gsb_circle/cgi-bin/.../GSB_LCOE_User% 20Guide_0517.pdf

"Relevant Costs for Investment Decisions" (with A. Rohlfing-Bastian), paper written in German: "Relevante Kosten für Investitionsentscheidungen", Controlling and Management Review, 2017.

"Sustainable Investing at Generation Investment Management" (with D. Bebb), Stanford GSB, Case Number SM-257, August 2016.

"ENGIE: Strategic Transformation of an Energy Conglomerate" (with D. Schiffrin), Stanford GSB, Case Number SM-256, September 2016.

"Are the Recent Declines in Solar PV Module Prices Sustainable?", (with A. Sahoo), <u>Stanford</u> Energy Journal, May 2015.

"SolarCity: Rapid Innovation", (with D. Drabkin and D. Wood), Stanford GSB, Case Number SM-232, March 2015.

"A Better Way to Cut Power Plant Emissions (with S. Comello), <u>Bloomberg View</u>, June 2014 <u>http://www.bloombergview.com/articles/2014-04-21/a-better-way-to-cut-power-plant-emissions</u>

"A Case Study in Internal Carbon Pricing: Royal Dutch Shell," (with S. Comello) in <u>Corporate Use of Carbon Prices</u>, The Carbon Disclosure Project, June 2014.

"Global Carbon Emissions: An Interactive Illustration," (with C. Makridis), Stanford GSB, Case Number SM-234, September 2014.

"Economics of Competing Energy Sources", online course module available at: http://energyinnovation.stanford.edu/individual/courses/economics-of-competing.php, September 2013.

"KiOR: The Quest for Cellulosic Biofuels", (with S. Rosenthal and A. Sahoo), Stanford GSB, Case Number E-427, October 2013.

"REI's Solar Energy Program," (with D. Hoyt), Stanford GSB, Case Number BE-17, October 2011.

"Sustainability at REI," (with D. Hoyt), Stanford GSB, Case Number BE-196, October 2011.

"Transfer Pricing at Timken", (with N.Bastian), Stanford, Graduate School of Business, Case Number A-190, March 2005.

"Measuring Managerial Performance" (in German), <u>Neue Zuercher Zeitung</u>, June 2003 (reprinted in <u>NZZ Fokus</u>, Zurich, March, 2004).

"Sub-Micron Devices" (with T. Baldenius), Stanford, Graduate School of Business, Case Number A-170, Fall 2001.

Book Review of "An Introduction to the Economics of Information" Journal of Economics, 1997.

WORKING PAPERS and WORK IN PROGRESS

"The Potential of Hydrogen for a Decarbonized Energy Economy," (with G. Glenk), solicited by Management and Business Review, November 2019

"Life-Cycle Cost of Transportation Services," (with S. Comello and G. Glenk), October 2019

"Investing in Behind-the-Meter Battery Storage: Demand Charges and Price Arbitrage" (with S. Comello), April 2019

"Inferring Economic Profitability from Financial Statements," (with A. Nezlobin), June 2018.

EDITORIAL SERVICE

Managing Editor: Review of Accounting Studies (1998-2002)

Foundations and Trends in Accounting (2006- present)

Editor: German Economic Review (1999 - 2005)

Review of Accounting Studies (1995- present)

Department Editor: Management Science (2003-2010)

EDITORIAL and ADVISORY BOARDS

Editorial Board: The Accounting Review (1993-1996)

German Economic Review (2006- Present)

Management Accounting Research (1996-2006)

Journal für Betriebswirtschaft (2004- present)

Review of Managerial Science (2006- present)

Die Unternehmung (2006- present)

Die Betriebswirtschaft (2007- present)

Business Research (2008- Present)

Advisory Board: Academic Advisory Board, University of Cologne (2017-Present)

Graduate School of Economic and Social Sciences,

University of Mannheim (2007-2012)

European School of Management and Technology,

Berlin (2007- 2011 and 2012-2015)

Max Planck Society, Scientific Advisory Board - Rapporteur,

(2017-Present)

European Research Council,

Panel for Humanities and Social Sciences (2008-2012)

REVIEWER (2012-2019)

International Economic Review, Energy Economics, Energy Policy, Journal of Public Economics, Econometrica, Contemporary Accounting Research, The Accounting Review, Management Science, Journal of Accounting Research, Journal of Accounting and Economics, The Energy Journal, Social Sciences and Humanities Research Council in Canada, Review of Mechanism Design, Review of Managerial Science, Review of Network Economics, Journal of Solar Energy, European Journal of Operational Research, Renewable Energy.

INVITED SEMINAR PRESENTATIONS (2012-2019)

Northwestern University, University of Munich, University of Vienna, Freie Universität Berlin, WHU Koblenz, European School of Management and Technology (Berlin), University of California

at Berkeley, Harvard University, Carnegie Mellon University, Universität Mannheim, Southern Methodist University, Humboldt Universität, Bocconi University, Stanford University (School of Engineering), Berlin Academy of Sciences (BBAW), Monterey Institute for International Studies, U.S. Department of Justice (Antitrust Division), London Business School, Universität Heidelberg, University of Waterloo, Technische Universität Muenchen, IESE Barcelona.

INVITED CONFERENCE PRESENTATIONS (2015-2019)

Speaker, MIT Center for Energy Economics Policy Research, Cambridge, Massachusetts, November 2019

Keynote Speaker, PwC Global Energy, Utilities and Resources Conference, Muenchen, November, 2019

Panelist, German Economic Association of Business Administration, Vallendar, September 2019 Plenary Speaker, Production and Operations Management Society, Washington DC, May, 2019

Panelist, Climate-Related Financial Reorting, Cambridge University, Cambridge, April 2019

Plenary Speaker, Schmalenbach-Gesellschaft, Duesseldorf, September, 2018

Delegate, Jefferson Innovation Workshop, Washington DC, February 2018

Speaker, UCLA Accounting Workshop, UCLA, March, 2018

Speaker, Burton Workshop, Columbia University, November, 2017

Lecturer, Summer School "Capacity Investments: Planning and Control", Institute for Management Studies, University of Vienna, June 2017

Speaker, Theory of the Firm Committee, Verein fuer Social politik, Frankfurt, May 2017.

Plenary Speaker, 6.th Mannheim Energy Conference, ZEW, May 2017

Presenter, Contemporary Accounting Research Conference, University of Waterloo, October 2016.

Speaker, Doctoral Consortium of the Canadian Accounting Association, University of Waterloo, October 2016

Speaker, Energy@Stanford Conference, Stanford University, September 2015

Speaker, NYU Summer Camp, New York University, May 2015

Speaker, Energy 3.0, Stanford University, May 2015.

Panelist, Energy and Climate Change, Washington DC, January 2015

11\2019