# **RAJIV D. BANKER**

# ACADEMIC BACKGROUND

*Doctor of Business Administration*, 1980 Graduate School of Business Administration, Harvard University Special Field: Planning, Accounting and Control Systems

G.C.W.A., 1977 Institute of Cost and Works Accountants of India, ranked first at a national examination

*A.C.A.*, 1976 Institute of Chartered Accountants of India, ranked third at a national examination

*B.Sc. (Honors)*, 1973 University of Bombay, India Major Field: Mathematics, ranked first in the university Minor Field: Economics, ranked first in the university

## **EMPLOYMENT**

- 2005–present: Merves Chair in Accounting and Information Technology and Director of the Center for Accounting and Information Technology at the Fox School of Business, Temple University
- 2004–2005: Dean and Anderson Chair in Management, A. Gary Anderson Graduate School of Management, University of California, Riverside
- 1997–2003: Ashbel Smith Chair in Accounting and Information Management, Director of Accounting and Information Management Programs, School of Management, The University of Texas at Dallas. Joint appointments in the Accounting and Information Management Area and the Information Systems and Operations Management Area. Executive Director of the Center for Practice and Research in Software Management, the Accounting Center for Excellence, and the Center for Excellence in Asian Management
- Spring 1996 David T. McLaughlin Visiting Professor of Business Administration, Amos Tuck School of Business Administration, Dartmouth College
- 1989–1998: Arthur Andersen & Co./Duane R. Kullberg Land Grant Chair in Accounting and Information Systems, Carlson School of Management, University of Minnesota. Joint appointments in Accounting, Information Systems and Operations Management Departments

- 1987–1991: Professor of Accounting and Management, Carnegie Mellon University. Joint appointments in the Heinz School of Public Policy and Management and the Graduate School of Industrial Administration
- 1984–1987: Associate Professor of Accounting and Management, Carnegie Mellon University
- 1980–1984: Assistant Professor of Accounting and Management, Carnegie Mellon University
- 1978–1980: Teaching Fellow, Harvard University
- 1976–1977: Management Auditor, Glaxo (India) Ltd., Bombay
- 1973–1976: Chartered Accountant, M/s. C.C. Chokshi & Co. (Deloitte & Touche), Bombay

## AWARDS AND HONORS

# 2017 Lifetime Contribution to Management Accounting Award for sustained contributions to management accounting education, research, practice and service

- 2016 CPA Canada and the Canadian Academic Accountants Association (CAAA) Research Grant, 2016-2019
- 2016 Ranked the most prolific researcher in Management Accounting based on publications in the top accounting journals over 6-year, 12-year and 20-year horizons
- 2016 Temple University Dean's Research Honor Roll and Top 10 "Highly Cited" Faculty Members for 2012 2016 for your citation count according to the *Web of Science*.

## 2015 Notable Contribution to the Accounting Literature Award of the American Accounting Association and the American Institute of Certified Public Accountants

- 2014 Ranked the most prolific researcher in Management Accounting for the fifth consecutive year based on publications in the top accounting research journals over the past 20 years
- 2014: Ranked among the most influential scholars in Business and Economics worldwide based on lifetime of citations compiled by Institution for Scientific Information (ISI)
- 2014 Best Paper in Application of Theory, Northeast Decision Science Institute Conference, with Sudipta Basu, Dmitri Byzalov and Janice Chen
- 2013: Silver Wheaton Best Paper in Finance Award, with Shunlan Fang

2012:	W. W. Cooper Lifetime Achievement Award, International Data Envelopment Analysis Society						
2012:	Named Distinguished Professor by Chinese Ministry of Education						
2012:	Named Froystein Gjesdal Scholar, Norwegian School of Economics						
2011:	Silver Wheaton Best Paper in Finance Award, with Janice Chen						
2010:	Ranked as most prolific researcher in Managerial Accounting based on publications in the top accounting journals over the past 20 years						
2009:	Musser Award for Faculty Research, Fox School of Business, Temple University						
2008:	Best Paper Award, American Accounting Association Annual Meeting Gender Issues Section						
2006:	Best Paper Award, Cornell Quarterly						
2006:	Honored among the 30 most influential papers on the 30 <sup>th</sup> anniversary of the <i>European</i> Journal of Operational Research						
2005:	American Accounting Association 2005 Annual Meeting Outstanding Management Accounting Paper Award						
2005:	Award by the American Accounting Association for the Best Paper in the Journal of Management Accounting Research						
2003:	Ranked 4 <sup>th</sup> most highly cited paper in the 50-year history of Management Science						
2003: Recognized by the Institute for Scientific Information (Web of Science) as one of only 24 most highly cited researchers in economics and business worldwide that have made fundamental contributions to the advancement of science and technology							
2002: Outstanding Contribution in Education Award, Greater Dallas Chamber of Commerce 2002:							
Award for Notable Contribution to the Management Accounting Literature by the American Accounting Association							
2002:	Polykarp Kusch Lectureship, The University of Texas at Dallas						
2002: F	Canked as the Most Prolific Accounting Researcher among his cohort by <i>Advances in Accounting</i> based on publications in the top accounting journals						
1998:	Best Paper Award, International Conference on Contemporary Accounting Issues						
1995:	Best Paper Award, International Conference on Contemporary Accounting Issues						

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- 1994: Runner-up Award, Best Paper, International Conference on Information Systems
- 1993: Carlson School of Management's Outstanding Teacher Award, University of Minnesota
- 1992: Best Paper Award, American Accounting Association, Midwest Region
- 1991: Award for Notable Contribution to the Governmental and Nonprofit Accounting Literature by the American Accounting Association
- 1991: Best Paper Award, Computer Aided Software Engineering Track, Hawaii International Conference on System Sciences
- 1988: Voted Best Teacher by the Class of 1989, SUPA, Carnegie Mellon University
- 1984: Emil B. Limbach Award of Carnegie Mellon University for excellence in teaching
- 1979: American Accounting Association Doctoral Consortium representative, Harvard University
- 1978: Elected President, Harvard University South Asian Student Association
- 1978: Graduate School of Business Administration, Harvard University, Doctoral Program Fellowship
- 1977: Institute of Cost and Works Accountants of India General Proficiency Silver Medal, for standing first at the examination
- 1977: J.N. Bose Gold Medal of the Institute of Cost and Works Accountants of India
- 1975: K. Vaidyanathan Aiyar Memorial Scholarship of the Institute of Chartered Accountants of India
- 1974: Certificate of Merit of the Institute of Chartered Accountants of India
- 1973: Selected for the National Science Talent Scholarship by the Government of India for higher studies in Mathematics; declined, decided to pursue studies in Accounting
- 1973: Aluisio Colaco Science Prize of the University of Bombay, for standing first at the Bachelor of Science examination
- 1973: Junior Ghia Mathematics Prize of the University of Bombay, for obtaining the highest marks in Mathematics
- 1973: The Hadi C. Tyabjee Memorial Scholarship of St. Xavier's College for obtaining the highest marks at the B.Sc. Degree Examination

- 1973: The Burjor Kaikobad Doctor Medal of St. Xavier's College for obtaining the highest marks in the Mathematics major field at the B.Sc. Degree examination
- 1972: Secured the highest marks in the Economics minor field examination for the B.Sc. Degree of the University of Bombay
- 1971: The Hormusjee N. Mehta Scholarship of St. Xavier's College for obtaining the highest marks at the Intermediate Science Examination
- 1971: Selected for B.S. Kalelkar Scholarship of St. Xavier's College for obtaining the highest marks in Mathematics at the Intermediate Science Examination; declined, in order to accept the H.N. Mehta Scholarship
- 1970: The Jamsetji Ardeshir Wadia Scholarship of St. Xavier's College for obtaining second highest marks at the First Year Science Examination
- 1969: Maharashtra State Board of Secondary Education Prize in English
- 1969: New Era High School's award for obtaining the highest marks at the S.S.C. Board Examination
- 1969: Matric Magazine awards for securing the highest marks in English and Mathematics at the S.S.C. Board Examination

# PUBLICATIONS

## A. ACCOUNTING

## **Published Papers/Accepted for Publication:**

"Anomalous Financial Performance Ratios During Economic Slowdowns" with M. Mehta. *Journal of Management Accounting Research* (2019).

"Operating Asymmetries and Non-Linear Spline Correction in Discretionary Accrual Models" with D. Byzalov and B. Jin. *Review of Quantitative Finance and Accounting*, 1-48 (2019).

"Efficiency Gains in Croatia's Electricity Distribution Centers Following Industry Structure Changes" with M. Zaja, D.Hunjet, L.Neralic and R.E. Wendell, *Data Envelopment Analysis Journal*: Vol. 3: No. 1–2, 119-150.

"The Value of Precontract Information About an Agent's Ability in the Presence of Moral Hazard and Adverse Selection" with Masako Darrough, Shaopeng Li, and Lucas Threinen Journal of Accounting Research 57, no. 5 (2019): 1201-1245.

"The Impact of Information Security Breach Incidents on CIO Turnover" with Cecilia (Qian) Feng, Journal of Information Systems, Fall 2019, Vol. 33, No. 3, pp. 309-329 (2019).

"Market Valuation of Intangible Asset: Evidence on SG&A Expenditure" with Rong Huang, Ramachandran Natarajan, and Sha Zhao. *The Accounting Review* (2019).

"Anomalous Operating Performance During Economic Slowdowns" with Shunlan Fang and Mihir Mehta, *Journal of Management Accounting Research*, (2019).

"Operating Asymmetries and Non-Linear Spline Correction in Discretionary Accrual Models" with Dmitri Byzalov, Shunlan Fang and Byunghoon Jin. *Review of Quantitative Finance and Accounting*, (2019), pp. 1-48.

"Cost Management Research" with Dmitri Byzalov, Shunlan Fang, and Yi Liang. *Journal of Management Accounting Research* 30(3), (2017), pp. 187-209.

"Editorial: Recent developments on the use of DEA in the Public Sector" with Ali Emrouznejad, Mohsen Afsharian, Heinz Ahn, Ali Emrouznejad. *Socio-Economic Planning Sciences* 61, (March 2018), pp. 1-3.

"Novel Theory and Methodology Developments in Data Envelopment Analysis Dedicated to the 100th Birthday of William W. Cooper, co-founder of DEA" with Victor V. Podinovski. *Annals of Operations Research*. 250: 1, (March 2017).

"Efficiency Gains in Croatia's Electricity Distribution Centers Following Industry Structure Changes", with M. Mihelja Žaja, S. Fang, D. Hunjet, L. Neralić and R. E. Wendell (2017), *Data Envelopment Analysis Journal*, (November 2017).

"Use of Data Envelopment Analysis for Incentive Regulation of Electric Distribution Firms", with Finn R. Førsund and Daqun Zhang *Data Envelopment Analysis Journal*, (November 2017).

"Pay Gap and Performance in China," with D. Bu and M. Mehta, Abacus, (September 2017).

"Implications of Impairment Decisions and Assets' Cash-Flow Horizons for Conservatism Research," with S. Basu and D. Byzalov, *The Accounting Review*, (March 2017).

"A Trade-Level DEA Model to Evaluate Relative Performance of Investment Fund Managers," with Janice Chen and Paul Klumpes, forthcoming in *European Journal of Operational Research*, (December 2016).

"The Confounding Effect of Cost Stickiness in Conservatism Research," with S. Basu, D. Byzalov, and J. Chen, *Journal of Accounting and Economics*, 61, 1, (February 2016).

"Editorial" with Vincent Charles. Journal of Centrum Cathedra, 9:2 (2016), pp.90-91.

"Asymmetric Cost Behavior" with D. Byzalov, *Journal of Management Accounting Research*, 26, 2, (Fall 2014), pp. 43-79.

"The Moderating Effect of Prior Sales Changes on Asymmetric Cost Behavior" with D. Byzalov, M. Ciftci and R. Mashruwala, *Journal of Management Accounting Research*, 26, 2, (Fall 2014), pp. 221-242.

"Implications of Asymmetric Cost Behavior for Analyzing Financial Reports of Chinese Companies" with D. Bu and C. Wen, *Chinese Journal of Accounting Studies*, 3, 3, (2015), pp. 181208.

"Does a Differentiation Strategy Lead to More Sustainable Financial Performance than a Cost Leadership Strategy?" with R. Mashruwala and A. Tripathy, *Management Decision*, 52, 5, (2014), pp. 872-896.

"William W. Cooper: Innovator, Fighter and Scholar," with R. Kaplan, *Accounting Horizons*, 28, 1, (March 2014), pp. 193-203.

"Demand Uncertainty and Cost Behavior" with D. Byzalov and J. Plehn-Dujowich, *The Accounting Review*, 89, 3, (May 2014), pp. 839-865, winner of the Notable Contribution to Accounting Literature Award in 2015.

"Employment Protection Legislation, Adjustment Costs and Cross-Country Differences in Cost Behavior," with D. Byzalov and T. Chen, *Journal of Accounting and Economics*, 55, 1, (February 2013), pp. 111-127.

"The Relation between CEO Compensation and Past Performance," with M. Darrough, R. Huang, and J. Plehn-Dujowich, *The Accounting Review*, 88, 1, (January 2013), pp. 1-30.

"Line Item Budgeting and Production Efficiency," with H. Chang and E. Feroz, *Journal of Theoretical Accounting Research*, 7, 1, (Fall 2011), pp. 108-126.

"Equity Incentives and Long-Term Value Created by SG&A Expenditure," with R. Huang and R. Natarajan, *Contemporary Accounting Research*, 28, 3, (Fall 2011), pp. 794-830.

"Sticky cost behavior: theory and evidence," with D Byzalov, JM Plehn-Dujowich *Journal of Management Accounting Research* (2010)

"Simultaneity in the Relationship between Sales Performance and Components of Customer Satisfaction," with R. Mashruwala, *Journal of Consumer Satisfaction, Dissatisfaction and Complaining Behavior*, 22, (April 2009), pp. 88-109.

"Incentive Contracting and Value Relevance of Earnings and Cash Flows," with R. Huang, R. Natarajan, *Journal of Accounting Research*, 47, 3, (June 2009), 99. 647-678.

"Importance of Measures of Past Performance: Empirical Evidence on Quality of E-Service Providers," with I. Hwang, *Contemporary Accounting Research*, (2008), 25, 2, (Summer 2008), pp. 307-337.

"The Role of Manufacturing Practices in Mediating the Impact of Activity-based Costing on Plant Performance," with I.R. Bardhan and T. Chen, *Accounting, Organizations and Society*, 33, 1, (January 2008), pp.1-19.

"Performance Measurement in Not-for-Profit Governance: An Empirical Study of the Minnesota Independent School Districts," with Hsihui Chang and Ehsan H. Feroz. *Annals of Operation Research*, January 22, 2011 (online).

"The Moderating Role of Competition in the Relationship Between Nonfinancial Measures and

Future Financial Performance," with R. Mashruwala, *Contemporary Accounting Research*, 24, 3, (Fall 2007), pp.763-793.

"Cost Behavior and Fundamental Analysis of SG&A Costs," with M. Anderson, R. Huang and S. Janakiraman, *Journal of Accounting Auditing and Finance*, 22, 1, (Winter 2007), pp. 1-28.

"Eficiencia relativa como indicador del rendimiento futuro," with C. A. Navarro and R. Mashruwala, *Revista Iberoamericana de Contabilidad de Gestion*, 4, 8, (July-December 2006), pp.177-201.

"Predicting Earnings Using a Model Based on Cost Variability and Cost Stickiness," with L. Chen, 81, 2, *The Accounting Review*, (March 2006), pp.285-307.

"Productivity Change, Technical Progress and Relative Efficiency Change in Public Accounting Industry," with H. Chang and R. Natarajan, *Management Science*, 51, 2, (February 2005), pp. 291-304.

"Association of Nonfinancial Performance Measures with the Financial Performance of a Lodging Chain," with G. Potter and D. Srinivasan, *Cornell Quarterly*, 46, 4, (February 2005), pp.394-412.

"The Balanced Scorecard: Judgmental Effects of Performance Measures Linked to Strategy," with H. Chang and M. Pizzini, *The Accounting Review*, 79, 1, (January 2004), pp. 1-23.

"The Public Accounting Industry Production Function," with H. Chang and R. Cunningham, *Journal of Accounting and Economics*, 35, 2, (June 2003), pp. 255-281.

"Are Selling, General, and Administrative Costs "Sticky"?" with M. Anderson and S. Janakiraman, *Journal of Accounting Research*, 41, 1, (March 2003), pp. 47-63.

"The Adequacy of Full Cost Based Pricing Heuristics," with S. Hansen, *Journal of Management Accounting Research*, 14, (2002), pp. 33-58.

"Product Costing and Pricing Under Long Term Capacity Commitment," with I. Hwang and B. Mishra, *Journal of Management Accounting Research*, 14, (2002), pp. 79-97.

"Impact of Information Technology on Public Accounting Firm Productivity," with H. Chang and Y. Kao, *Journal of Information Systems*, 16, 2, (Fall 2002), pp. 209-222.

"Performance Impact of Elimination of Separate Direct Labor Reporting: A Field Study," with S. Devaraj, R. Schroeder and K.K. Sinha, *Journal of Accounting Research*, 40, 4, (September 2002), pp. 1013-1036.

"Strategic Management Accounting," with H. H. Johnston, in *Handwörterbuch Unternehmensrechnung und Controlling*, ed. A. Wagenhofer, Schaeffer-Poeschel Publisher, Stuttgart, 2002.

"Y2K Spending by Entrepreneurship Firms," with M. Anderson, R. Natarajan and S. Ravindran, *Journal of Accounting and Public Policy*, 20, 4-5, (Winter 2001), pp. 323-347.

"An Empirical Analysis of Continuing Improvements Following the Implementation of a

Performance-based Compensation Plan," with S.Y. Lee, G. Potter and D. Srinivasan, *Journal of Accounting and Economics*, 30, 3, (2001), pp. 315-350.

"An Empirical Investigation of an Incentive Plan that Includes Nonfinancial Performance Measures," with G. Potter and D. Srinivasan, *The Accounting Review*, 75, 1, (January 2000), pp. 65-92.

"Standard Estimation, Standard Tightness, and Benchmarking: A Method with an Application to Nursing Services," with H. Chang, S. Das, *Journal of Management Accounting Research*, 10, (1998), pp.133-152.

"Accounting Earnings and Effort Allocation," with A. Thevaranjan, *Managerial Finance*, 23, 5, (1997), pp. 56-70.

Comment on "Involuntary Benchmarking and Quality Improvement: The Effect of Mandated Public Disclosure on Hospitals," *Journal of Accounting, Auditing and Finance,* 12, 3, (Summer 1997), pp. 347-352.

"Shareholder Wealth Effects of Legislative Events: The Case of Airline Deregulation," with S. Das and C. Ou, *Public Choice*, 91, (1997), pp.301-331.

"A Framework for Analyzing Changes in Strategic Performance," with H. Chang and S. Majumdar, *Strategic Management Journal*, 17, 9, (November 1996), pp. 693-712.

"Contextual analysis of performance impacts of outcome-based incentive compensation," with S.Y. Lee, G. Potter and D. Srinivasan, *Academy of Management Journal*, 39, 4, (August 1996), pp. 920-948.

"Impact of Work Teams on Manufacturing Performance: A Longitudinal Field Study," with J. Field, R. Schroeder and K.K. Sinha, *Academy of Management Journal*, 39, 4, (August 1996), pp. 867-890, published also in the *Academy of Management Executive*.

"A Field Study of the Impact of a Performance-Based Incentive Plan," with S.Y. Lee and G. Potter, *Journal of Accounting and Economics*, 21, 3, (April 1996), pp. 195-226.

"Profitability, Productivity and Cost Recovery Patterns in the U.S. Telecommunications Industry," with H. Chang and S. Majumdar, *Review of Industrial Organization*, 11, 1, (February 1996), pp. 1-17.

"The Consequences of Evolving Competition on the Components of Profitability in U.S. Telecommunications," with H. Chang and S. Majumdar, *Information Economics and Policy*, 7, 1, (April 1995), pp. 37-56.

"An empirical analysis of manufacturing overhead cost drivers," with G. Potter and R. Schroeder, *Journal of Accounting and Economics*, 19, 1, (January/February 1995), pp. 115-138.

"Costs of Yield Variability," with S. Haribhakti and P. Sinha, Chinese Accounting Review, (1995).

"Prior Financial Ratio Information and Differential Market Response to Regulatory Changes," with S. Das and C. Ou, *Journal of Accounting, Auditing and Finance*, (1995), pp. 699-718.

"Flexibility of Activity Resources and Behavior of Activity Costs," with H. Chang, *Chinese Accounting Review*, (September 1994), pp. 23-50.

"Product Costing and Pricing," with J. Hughes, *The Accounting Review*, 69, 3, (July 1994), pp. 479-494.

"Reporting Manufacturing Performance Measures to Workers: An Empirical Study," with G. Potter and R. Schroeder, *Journal of Management Accounting Research*, 5, (Fall 1993), pp. 33-55.

"Economic Implications of Single Cost Driver Systems," with G. Potter, *Journal of Management Accounting Research*, (Fall 1993), pp. 15-32.

"An Empirical Study of Cost Drivers in the U.S. Airline Industry," with H. Johnston, *The Accounting Review*, 68, 3, (July 1993), pp. 576-606.

"Complementarity of Prior Accounting Information: The Case of Stock Dividend Announcements," with S. Das and S. Datar, *The Accounting Review*, 68, 1, (January 1993), pp. 28-47.

"Analyzing the Underlying Dimensions of Firm Profitability," with H. Chang and S. Majumdar, *Managerial and Decision Economics*, 14, 1, (January-February 1993), pp. 25-36.

"Accounting for Productivity Gains," Chapter 2 in *Creative and Innovative Approaches to the Science of Management*, Y. Ijiri (Ed.), Quorum Books, New York, NY, (1993), pp. 27-42.

"A Perspective on Research in Governmental Accounting," with W.W. Cooper and G. Potter, *The Accounting Review*, 67, 3, (July 1992), pp. 496-510.

"Selection of Efficiency Evaluation Models," *Contemporary Accounting Research*, 9, 1, (Fall 1992), pp. 343-355.

"Optimal Transfer Pricing Under Postcontract Information," with S. Datar, *Contemporary* Accounting Research, 8, 2, (Spring 1992), pp. 329-352.

"Testing the Optimality of a Performance Evaluation Measure for a Gainsharing Contract," with S. Datar and M. Mazur, *Contemporary Accounting Research*, (Spring 1990), pp. 809-824.

"Economic Sufficiency and Statistical Sufficiency in the Aggregation of Accounting Signals," with A. Amershi and S. Datar, *The Accounting Review*, 65, 1, (January 1990), pp. 113-130.

"Productivity Measurement and Management Accounting," with S. Datar and R. Kaplan, *Journal of Accounting, Auditing and Finance*, 4, 4, (Fall 1989), pp. 528-554.

"Sensitivity, precision, and linear aggregation of signals for performance evaluation," with S. Datar, *Journal of Accounting Research*, 27, 1, (Spring 1989), pp. 21-39.

"Analysis of Cost Variances for Management Control in Hospitals," with S. Das and S. Datar, *Research in Governmental and Nonprofit Accounting*, (1989), pp. 269-292.

"An Introduction to Data Envelopment Analysis with Some of its Models and Their Uses," with A. Charnes, W.W. Cooper, J. Swarts and D. Thomas, *Research in Governmental and Nonprofit Accounting*, (1989), pp. 125-164.

"Costs of Product and Process Complexity," with S. Datar, S. Kekre and T. Mukhopadhyay, Chapter 9 in *Measuring Manufacturing Performance*, R. Kaplan (Ed.), Harvard Business School Press, Boston, MA, (1989), pp. 269-290.

"Incorporating Value Judgments in Efficiency Analysis," with R.C. Morey, *Research in Governmental and Nonprofit Accounting*, (1989), pp. 245-268.

"Econometric Estimation and Data Envelopment Analysis," *Research in Governmental and Nonprofit Accounting*, (1989), pp. 231-244.

"Determinants of School District Financial Reporting Practices," with B. Bunch and R. P. Strauss, *Research in Governmental and Nonprofit Accounting*, (1989), pp. 27-56.

"Relevant Costs, Congestion and Stochasticity in Production Environments," with S. Datar and S. Kekre, *Journal of Accounting and Economics*, 10, 3, (Fall 1988), pp. 171-198.

"Unobservable Outcomes and Multiattribute Preferences in the Evaluation of Managerial Performance," with S. Datar and A. Maindiratta, *Contemporary Accounting Research*, 5,1, (Fall 1988), pp. 96-124.

"Measurement of Productivity Improvements: An Empirical Analysis," with S. Datar and M. Rajan, *Journal of Accounting, Auditing, and Finance*, (Fall 1987), pp. 319-354.

"Accounting for Labor Productivity in Manufacturing: An Application," with S. Datar, Chapter 7 in *Accounting and Management: Field Study Perspectives*, W. Bruns and R. Kaplan (Eds.), Harvard Business School Press, Boston, MA, (1987), pp. 169-203.

"Analytical Agency Theory and Municipal Accounting: An Introduction and an Application," with J. Patton, *Research in Governmental and Nonprofit Accounting*, (1987), pp. 29-50.

"Productivity Measurement and Management Control," *The Management of Productivity and Technology in Manufacturing*, P. Kleindorfer (Ed.), Plenum, New York, NY, (1985), pp. 239-257.

"Equity Considerations in Traditional Full Cost Allocation Practices: An Axiomatic Perspective," *Joint Cost Allocations*, Shane Moriarty (Ed.), Center for Economics and Management Research, OK, (1981), pp. 110-130.

## **Books and Edited Volumes:**

*Management Accounting*, with A. Atkinson, R. Kaplan and M. Young, Prentice-Hall, Inc., Englewood Cliffs, NJ, (first edition 1995, second edition 1997, third edition 2001).

*Balanced Scorecard: Linking Strategy to Performance,* with S. Janakiraman and C. Konstans, Financial Executives Research Foundation, Morris Town, NJ (2001).

## Working Papers / Research in Progress:

"Linking Innovation to Financial Performance," with Mark Anderson, Dmitri Byzalov, Soonchul Hyun, under review at *The Accounting Review*.

"Executive Compensation and R&D Intensity," with D. Byzalov and C. Xian, under review at *Review of Accounting Studies*.

"Technical Debt and Firm Performance," with Y. Liang and N. Ramasubbu, under review at *Management Science*.

"Are Monitoring and Monetary Incentives Substitutes in a Retail Store?" with S. Fang and S. Lee, under review at *The Accounting Review*.

"Anomalous Financial Performance Ratios during Economic Slowdowns," with S. Fang and M. Mehta, under review at *The Accounting Review*.

"Operating Asymmetries and Propensity Score Matching in Discretionary Accrual Models" with D. Byzalov, S. Fang and B. Jin, under review at *The Accounting Review*.

"Market Reaction to Intangible Asset Value: Evidence on SG&A Expenditure," with R. Huang, R. Natarajan, and S. Zhao, under review at *The Accounting Review*.

"Short-Term Bonus for CEOs and Cost Stickiness," with B. Jin and M. Mehta, under review at *Contemporary Accounting Research*.

"Innovation and Performance in Manufacturing: The Moderating Role of Strategic Positioning," with S. Hyun and M. Anderson.

"The Gender Pay Gap among Top Executives," with Mark Anderson, Rong Huang, Jiangxia Liu

"Implications of Accounting Practice for Conservatism Research," with Sudipta Basu and Dmitri Byzalov),

"Asymmetry in Compensation Coefficients on Earnings by Direction of Sales Change," with Hsihui Chang and Iny Hwang

"Impact of Banking Service Infrastructure Strategy on Performance," with P. Chen, F. Liu, and C. Ou

"Do Accounting Standards Matter For Firm Productivity? Evidence From Mandatory IFRS Adoption," with Rong Huang and Yinghua Li

"The Value of Information about Agent's Ability in the Presence of Adverse Selection," with Shaopeng Li and Lucas Threinen

"An Empirical Study of Chief Audit Executive Turnover," with F. Liu, and C. Ou

"Impact of Workforce Capital on the Performance of Information Technology Firms," with F. Liu,

C. Ou, and S. Wattal

"Tale of Two Professions: The Impact of Sarbanes-Oxley Act on Revenue Generation by Pubic Accounting and Law Firms," with Keval Amin, and Eunyoung Whang

"Audit Pricing," with Keval Amin and Seokyoung Lee

"Strategic Group Analysis in the Public Accounting Industry," with Keval Amin and Seokyoung Lee

"Asymmetric Cost Behavior and DEA Efficiency Scores," with Hilal Atasoy

"Asymmetries in Cost-Volume-Profit Relation: Cost Stickiness and Conditional Conservatism," with Sudipta Basu, and Dmitri Byzalov

"Country-Level Factors and International Differences in Cost Behavior," with Dmitri Byzalov and Lucas Threinen

"Lagged Impact of Information Technology," with Hsihui Chang and Yiching Kao

"Audit Costing and Pricing," with Hsihui Chang and Yiching Kao

"Job Costing and Pricing," with Hsihui Chang, Chin Ou, and Anne Wu

"Separability and Substitutability Tests Using DEA," with Hsihui Chang

"Cost Behavior Models Analysts and Investors Use," with Janice Chen and Han-Up Park

"Real Cost Management and Loan Financing," with Shunlan Fang

"Why Do Information Technology Firms Hold Large Cash Balances?" with Shunlan Fang and Daqun Zhang

"CIO Turnover and Data Breach," with Cecilia (Qian) Feng

"CIO Compensation Following Sarbanes-Oxley Act," with Cecilia (Qian) Feng and Paul Pavlou

"CIO Educational Background, Strategic Positioning, and Investor Reaction," with Cecilia (Qian) Feng and Paul Pavlou

"Strategic Positioning and Asymmetric Cost Behavior," with Renee Flasher and Daqun Zhang

"Manufacturing Capacity Utilization and SG&A Costs Behavior," with Iny Hwang and Hyunjin Oh

"Signaling Mechanisms and Survival of Service Providers in an Electronic Market," with I. Hwang and S. Wattal

"Mutual Monitoring and Peer Pressure in Teamwork," with Seok-Young Lee

"An Empirical Examination of the Impacts from Termination of a Performance-Based Incentive Plan," with Seok-Young Lee, Gordon S. Potter, and Dhinu Srinivasan

"Principal-Agent Model of Organization Control Theory," with Shaopeng Li and Lucas Threinen

"A Field Study of Cost Stickiness at Activity Level," with F. Liu

"Impact of R&D Investment and Workforce Education on the Performance of Information Technology Firms," with F. Liu, C. Ou, and S. Wattal

"A Framework for a Governmental Scorecard," with Mihir Mehta and Kikyung Song

"Differences in Cost Behavior in Upstream and Downstream Manufacturing Firms," with Hyunjin Oh

"Valuing Information Technology Projects using Real Options – Revisiting the Black Scholes Model," with J. M. Plehn-Dujowich, O. Rytchkov, and S. Wattal

"Employment and Well-being: The Role of Race and Gender," with Kikyung Song

"Performance Scorecard for U.S. States," with Kikyung Song

"Profitability Ratio Analysis for Professional Service Firms," with Eunbin Whang and Eunyoung Whang

"The Organizational Structure and Profitability of Professional Service Firms," with Eunbin Whang and Eunyoung Whang

"Organizational Complexity and Executive Compensation: Evidence on the Compensation of University Presidents," with Chunwei Xian

"Pay-Performance Sensitivity and Investment Opportunities," with Chunwei Xian

"Bootstrapped DEA: Caveat Emptor," with Ram Natarajan and Daqun Zhang

"The Returns to Scale Assumption in Incentive Rate Regulation," with Daqun Zhang

"Cost Reduction Programs," with Mark Anderson and Vickie Ma

"Plans, Expectations and Cost Behavior," with Hilal Atasoy and Julia Nasev

"Target Setting and Performance," with Hilal Atasoy

"OLS versus LAD in Earnings Forecast Models," with Sudipta Basu and Dmitri Byzalov

"Competition in the Audit Market," with Keval Amin, Seok-Young Lee and Yi Liang

"A Textual Measure of Generic Business Strategy," with Y. Liang and X. Ma.

"Disruption of the Earnings Generation Process," with Y. Liang.

"Transformation Indicators and Future Curtailment Decisions," with Y. Liang and X. Ma.

"The Impact of Recapitalization on Bank Performance in Mexico," with Shunlan Fang and Francisco Vargas

"Differential Response to Downward Shocks in Demand: Moderating Role of Organizational Efficiency," with Erica Harris

"Productivity of Public Accounting Firms," with Rong Huang and Lucas Threinen

"Differences in Effective Tax Rate for Firms Experiencing a Sales Decline," with Josh Khavis and Pam Kuperstein

"The Sources and Covariates of Accounting Conservatism" (with Eunbin Whang, Sudipta Basu, and Keval Amin)

"Partnership Structure and Strategic Positioning of Legal Service Firms" (with Eunbin Whang and Eunyoung Whang)

"Perceptions of Organizational Justice and Performance of Audit Staff," with Seok-Young Lee, S. Ryu and Eunbin Whang

"The Impact of Perceived Fairness on Job Attitude: Evidence from Audit Professionals in South Korea" (with Eunbin Whang, Seok-Young Lee, and Sang-Lyul Ryu)

"Fairness in Cost Allocations: Equity Versus Equality" (with Sachin Banker, Eunbin Whang, and Angelika Dimoka)

"Conscientiousness of Audit Professionals in the Workplace: Evidence from Audit Professionals in South Korea" (with Eunbin Whang, Seok-Young Lee, and Sang-Lyul Ryu)

"Contrasting Perceptions of Audit Supervisors and Audit Staff," with Seok-Young Lee, S. Ryu and Eunbin Whang

"Public versus Private Information on Managerial Expertise & Pay-Performance Sensitivity," with Shaopeng Li

"Production Outsourcing and Demand Uncertainty," with Hilal Atasoy and Dmitri Byzalov

"Screening versus Sorting in a Principal-Agent Model with Moral Hazard and Adverse Selection," with Shaopeng Li

"Returns to Scale Tests Using DEA" with Han-Up Park

"Cost Behavior Model Implicit in Individual Analyst's Sales and Earnings Forecasts," with Janice Chen and Han-Up Park

"Forecast Error due to Asymmetric Cost Behavior: Subsequent Analyst Forecasts, Earnings Surprise and Abnormal Returns," with Han-Up Park

"Crowdsourced Earnings Forecasts: Implications for Analyst Forecast Timing and Market Efficiency" with Han-Up park and Joshua Khavis.

"Changes in Operating Margins during a Sales Decline and Abnormal Returns" with Han-Up Park.

"Labor Adjustment Costs and Boundary of Firms: Evidence from Outsourcing Decisions in Brazilian Electricity Distribution Industry" with Soojin Lee and Han-Up Park.

"Price volatility and oil reserve balance not reflecting reality" with Han-Up Park.

"Conservative financial strategy and efficiency" (CANADA DEA Study for O&G firms) with Han-Up Park.

"Does Simulated Feedback Reduce Information Overload? Evidence from a High-end Retailer" with Soojin Lee.

"Information and Communication Technology and National Performance," with Kikyung Song

"Business Strategy, Cost Rigidity, and Variability of Earnings," with Daqun Zhang

"Effect of Incentive Regulation on Performance in the Electric Power Industry," with Daqun Zhang

"Activity Based Costing and Data Envelopment Analysis," with Daqun Zhang

# **Practitioners Oriented Publications:**

"The Activity Analysis Advantage," with S. Haribhakti, Business India, (April 1991), p. 77.

# **B. INFORMATION SYSTEMS**

# **Published Papers/Accepted for Publication:**

"The Impact of Information Security Breach Incidents on CIO Turnover" with Cecilia Feng, forthcoming in *Journal of Information Systems* 

"On the Longitudinal Effects of IT Use on Firm-Level Employment," with Hilal Atasoy and Paul Pavlou, *Information Systems Research*, 27, 1, (2016), pp 6-26.

"Does Information and Communication Technology Lead to the Well-Being of Nations?" with Kartik Ganju and Paul Pavlou, *MIS Quarterly*, 40, 2, (2016), pp 417-430.

"The Red Queen in Action: The Longitudinal Effects of Capital Investments in the Mobile Telecommunications Sector," with Z. Cao, N. Menon, and R. Mudambi, *Industrial and Corporate*  Change, 22, 5, (October 2013), pp 1195-1228.

"Implementing Enterprise Resource Planning Systems: Organizational Performance and the Duration of the Implementation," with M. Anderson, N. Menon, and J. Romero, *Information Technology and Management*, 12, 3, (2011), pp 197-212

"The Judgmental Effects of Strategy Maps in Balanced Scorecard Evaluations," with M. Pizzini and H. Chang, *International Journal of Accounting Information Systems*, 12, 4 (December 2011), pp. 259-279.

"R&D versus Acquisitions: Role of Diversification in the Choice of Innovation Strategy by IT Firms," with J. Plehn-Dujowich and S. Wattal, *Journal of Management Information Systems*, 28, 2 (Fall 2011), pp. 109-144.

"The Effects of Digital Trading Platforms on Commodity Prices in Agricultural Supply Chains," with S. Mitra and V. Sambamurthy, *MIS Quarterly*. 35, 3 (September 2011), pp. 599-611.

"On the Use of Neurophysiological Tools in IS Research: Developing a Research Agenda for NeuroIS," with A. Dimoka, I. Benbasat, F. Davis, A. Dennis, D. Gefen, A. Gupta, A. Ischebek, P. Kenning, G. Müller-Putz, P. Pavlou, R. Riedl, J. von Brocke, and B. Weber, *MIS Quarterly*, 3, (September 2012), pp. 679-702.

"CIO Reporting Structure, Strategic Positioning, and Firm Performance," with N. Hu, P.A. Pavlou, and J. Luftman, *MIS Quarterly*, 35, 2 (June 2011), pp. 487-504.

"On the Foundations of NeuroIS: Reflections on the Gmunden Retreat 2009," with I. Benbasat, F. Davis, A. Dennis, A. Dimoka, D. Gefen, A. Gupta, A. Ischebek, P. Kenning, G. Müller-Putz, D. Straub, P. A. Pavlou, R. Riedl, J. von Brocke, B. Weber, *Communications of the Association for Information Systems*, 27, (2010), article 15.

"The Technology Acceptance Model and Cognitive Neuroscience," with F. Davis, *Business & Information Systems Engineering*, 6, (December 2010), pp. 399-400.

"Best Pricing Strategy for Information Services," with S.Y. Wu, *Journal of the Association for Information Systems*, 11, 6 (June 2010), Article 1.

"Evaluating Cross-Organizational Impacts of Information Technology-An Empirical Analysis," with H. Chang and Y. Kao, *European Journal of Information Systems*, (April 2010), 19, pp. 153-167.

"ERP: Drilling for Profit in the Oil and Gas Industry," with M. Anderson and J. Romero, *Communications of the ACM*, (July 2010), 53, 7, pp. 118-121.

"Procurement Models in the Agricultural Supply Chain: A Case Study of Online Coffee Auctions in India," with S. Mitra, *Electronic Commerce Research and Applications*, (2007), 6, 3, pp.309-321.

"Government as Catalyst: Can it Work Again with Wireless Internet Access?" with Jain, A. and Mandviwalla, M., *Public Administrative Review*, (November 2007), 67, 6, pp. 993-1005.

"Understanding the Impact of Collaboration Software on Product Design and Development," with I. Bardhan and O. Asdemir, *Information Systems Research*, 17, 4, (December 2006).

"Value Implications of Investments in Information Technology," with M. Anderson, and S. Ravindran, *Management Science*, 52, 9, (September 2006), pp. 1359–1376.

"Information Technology, Contract Completeness and Buyer-Supplier Relationships," with J. Kalvenes and R. Patterson, *Information Systems Research*, (June 2006), 17, 2, pp.180-193.

"Plant Information Systems, Manufacturing Capabilities, and Plant Performance," with I. Bardhan, H. Chang, S. Lin, *MIS Quarterly*, (June 2006), pp.315-337.

"50th Anniversary Article: The Evolution of Research on Information Systems: A Fiftieth-Year Survey of the Literature in Management Science" with R. Kauffman, *Management Science*, 50, 3, (March 2004). pp. 281-298.

"The New Productivity Paradox," with M. Anderson and S. Ravindran, *Comm. of the ACM*, 46, 3, (March 2003), pp. 91-94.

"Introduction to Special Issue on Software Management," with S. Slaughter, *Information Technology and Management*, 3, 1/2, (January 2002), pp. 5-9.

"Software Errors and Software Maintenance Management," with S. Datar, C. Kemerer and D. Zweig, *Information Technology and Management*, 3, 1/2, (January 2002), pp. 25-41.

"The Moderating Effects of Structure on Volatility and Complexity in Software Enhancement," with S. Slaughter, *Information Systems Research*, (September 2000), pp. 219-240.

"Executive Compensation in the Information Technology Industry," with M. Anderson and S. Ravindran, *Management Science*, 46, 4, (April 2000), pp.530-547.

"Economies of Scope in the U.S. Telecommunications Industry," with H. Chang and S. Majumdar, *Information Economics and Policy*, 10, 2, (June 1998), pp. 253-272.

"Software Development Practices, Software Complexity, and Software Maintenance Performance: A Field Study," with G. Davis and S. Slaughter, *Management Science*, 44, 4, (April 1998), pp. 433-451.

"A Field Study of Scale Economies in Software Maintenance," with S. Slaughter, *Management Science*, 43, 12, (December 1997), pp. 1709-1725.

"Value of Computerized Reservation Systems in the Airlines Industry: An Empirical Study," with H. Johnston, *Journal of Organizational Computing*, (1995).

"Evidence on Economies of Scale in Software Development," with H. Chang and C. Kemerer, *Information and Software Technologies*, 36, 5, (May 1994), pp. 275-282.

"Tools for Managing Repository Objects," with T. Isakovitz, R. Kauffman, R. Kumar and D. Zweig, *Analytical Methods for Software Engineering Economics II*, P. Geriner (Ed.), Springer- Verlag, New York, NY, (1994).

"Automating Output Size and Reuse Metrics in a Repository-Based Computer Aided Software Engineering Environment," with R. Kauffman, C. Wright and D. Zweig, *IEEE Transactions on Software Engineering*, 20, 3, (March 1994), pp. 169-187.

"Software Complexity and Maintenance Costs," with S. Datar, C. Kemerer and D. Zweig, *Comm. of the ACM*, 36, 11, (November 1993), pp. 81-94.

"Repository Evaluation of Software Reuse," with R. Kauffman and D. Zweig, *IEEE Transactions on Software Engineering*, 19, 4, (April 1993), pp. 379-389.

"Measuring the Development Performance of Integrated Computer Aided Software Engineering (ICASE): A Synthesis of Field Study Results from the First Boston Corporation," with R. Kauffman, *Analytical Methods in Software Engineering Economics*, T. Gulledge and W. Hutzler, (Eds.), Springer-Verlag, Berling, (1993), pp. 39–74.

"Managing the Performance of Computer Aided Software Engineering (CASE) Development with Life Cycle Trajectory Metrics," with R. Kauffman and R. Kumar, Ch. 15 in *Software Engineering Productivity Handbook*, J. Keyes (Ed.), McGraw Hill, New York, NY, (1993), pp. 263-284.

"Performance Evaluation Metrics for Information Systems Development: A Principal-Agent Model," with C. Kemerer, *Information Systems Research*, (December 1992), pp. 379-400.

"An Empirical Test of Object-based Output Measurement Metrics in a Computer Aided Software Engineering (CASE) Environment," with R. Kauffman and R. Kumar, 8, 3, *Journal of Management Information Systems*, (Winter 1991-92), pp.127-150.

"Reuse and Productivity in Integrated Computer-Aided Software Engineering: An Empirical Study," with R. Kauffman, *MIS Quarterly*, 15, 3, (September 1991), pp. 374-401.

"A Case Study of Electronic Banking Operations at Meridian Bancorp," with R. Kauffman, *Information and Software Technology*, (1991).

"A Model to Evaluate Variables Impacting the Productivity of Software Maintenance Projects," with S. Datar and C. Kemerer, *Management Science*, 37, 1, (January 1991), pp. 1-18.

"Measuring Gains in Operational Efficiency from Information Technology: A Study of the Positran Deployment at Hardee's Inc." with R. Kauffman and R. Morey, *Journal of Management Information Systems*, (Fall 1990), pp. 29-54.

"Scale Economies in New Software Development," with C. Kemerer, *IEEE Transactions on Software Engineering*, 15, 10, (October 1989), pp. 1199-1205.

# **Books and Edited Volumes:**

*Neuroscience in Information Systems Research* (with R. Riedl, F. Davis, and P. Kenning), Springer International Publishing, 2017.

*Strategic Information Technology Management: Perspectives on Organizational Growth and Competitive Advantage*, Idea Group Publishing, Harrisburg, PA, 1992, (a volume of refereed articles that focus on methodological advances and recent empirical results in the area of IT value research), co-edited with R. Kauffman and M.A. Mahmood.

## **Refereed Papers in Conference Proceedings:**

"Can Information and Communication Technology lead to Well-Being? An Empirical Analysis," with K. Ganju and P. Pavlou, Proceedings of *the 34th International Conference on Information Systems*, Milan, Italy, (December 2013).

"Winner Determination of Open Innovation Contests in Online Markets," with P. Chen and Y. Yang, Proceedings of the *International Conference on Information Systems*, (December 2011).

"Human Capital of IT Professionals: A Research Agenda," with B. Ravi, S. Slaughter, A. Soon, and S. Wattal, Proceedings of the *International Conference on Information Systems*, (December 2011).

"Complementarity of the Impact of Alternative Service Channels on Bank Performance," with P. Chen, F. Liu, and C. Ou, Proceedings of *International Conference on Information Systems*, St. Louis, U.S. A., December 2010.

"Signaling Mechanisms and Survival of Service Providers in an Electronic Market," with I. Hwang, and S. Wattal, Proceedings of the *16<sup>th</sup> Americas Conference on Information Systems*, (August 2010).

"Business Value of IT in Commercial Banks," with P. Chen, F. Liu, and C. Ou, Proceedings of the *International Conference on Information Systems*, Phoenix, (December 2009).

"Interdependence between employee education and R&D investment in impacting IT firm performance," with F. Liu, C. Ou, and S. Wattal, Proceedings of the *42nd Annual Hawaii International Conference on System Sciences*, Waikoloa, Big Island, Hawaii, U.S. A., January 2009.

"Value Contributed by Education in IT Firms," with F. Liu, S. Wattal, and C. Ou, Proceedings of the *International Conference on Information Systems*, Paris, (December 2008).

"Impact of Information Technology on Agricultural Commodity Auctions in India," with S. Mitra, Proceedings of the *International Conference on Information Systems*, Las Vegas, (December 2005), pp.11-21.

"Comparing Commodity Prices in Electronic and Traditional Auctions," with S. Mitra, Proceedings of the *International Conference on Electronic Commerce*, Xian, China, (August 2005)

"The Impact of Information Technology Spending on Future Performance," with M. Anderson and N. Hu, Proceedings of the *International Conference on Information Systems*, Seattle, (December, 2003).

"Impact of Manufacturing Practices on Adoption of Plant Information Systems," with I. Bardhan, H. Chang and S. Lin, Proceedings of the *International Conference on Information Systems*, Seattle, (December 2003).

"Incentive Value of Stock Options at Information Technology Companies in the Down Markets," with M. Anderson and R. Natarajan, Proceedings of the *International Conference on Information Systems*, Barcelona, Spain, (December 2002).

"An Empirical Study of the Impact of Information Technology Externalities on the Audit Production Function," with H. Chang and Y. Kao, Proceedings of the *Americas Conference on Information Systems*, Dallas, (August 2002).

"Estimating the Business Value of Investments in Information Technology," with M. Anderson and N. Hu, Proceedings of the *Americas Conference on Information Systems, Dallas,* (August 2002).

"Investigation of Lagged Impacts of Information Technology Expenditures in a Public Accounting Firm," with H. Chang and Y. Kao, Proceedings of the *Americas Conference on Information Systems*, Boston, Massachusetts, (August 2001).

"Information Technology, Contract Completeness, and Buyer-Supplier Relationships," with J. Kalvenes and R. Patterson, Proceedings of the *International Conference on Information Systems*, Brisbane, Australia, (December 2000).

"Application Portfolio Diversity and Software Maintenance Productivity: An Empirical Analysis," with G. Davis and S. Slaughter, Proceedings of the *Americas Conference on Information Systems*, Boston, Massachusetts, (1995).

"Project Size and Software Maintenance Productivity: Empirical Evidence on Economies of Scale in Software Maintenance," with S. Slaughter, Proceedings of the *International Conference on Information Systems*, (December 1994).

"In Search of Software Maintenance Productivity and Quality: Does Software Complexity Matter?" with S. Slaughter, Proceedings of the *International Conference on Information Systems*, (December 1994).

"Gauging the Quality of Managerial Decisions Regarding Electronic Banking Location Design Choices," with R. Kauffman and L. Lally, Proceedings of the *Hawaii International Conference on System Sciences*, (1991).

"Output Measurement Metrics in an Integrated Computer-Aided Software Engineering Environment: Critique, Evaluation and Proposal," with R. Kauffman and R. Kumar, Proceedings of the *Hawaii International Conference on System Sciences*, (1991).

"Measuring Input Productivity Gains from Information Technology: A Case Study of Positran at Hardee's Inc.," with R. Kauffman and R. Morey, Proceedings of the *Hawaii International Conference* on System Sciences, (January 1990), Vol. IV.

"Software Complexity and Maintainability," with S. Datar and D. Zweig, Proceedings of the *International Conference on Information Systems*, (December 1989).

"Strategic Contributions of Information Technology: An Empirical Study of ATM Networks," with R. Kauffman, Proceedings of the *International Conference on Information Systems*, (December 1988).

"Factors Affecting Software Maintenance Productivity: An Exploratory Study," with S. Datar and C. Kemerer, Proceedings of the *International Conference on Information Systems*, (December 1987).

# Working Papers / Research in Progress:

"Impact of Banking Service Infrastructure Strategy on Performance," with P. Chen, F. Liu, and C. Ou

"Impact of Workforce Capital on the Performance of Information Technology Firms," with F. Liu, C. Ou, and S. Wattal

"IT Skills and Employment Opportunities of Workers," with Hilal Atasoy and Paul Pavlou, under review at *Management Science*.

"Why Do Information Technology Firms Hold Large Cash Balances?" with Shunlan Fang and Daqun Zhang

"CIO Turnover and Data Breach," with Cecilia (Qian) Feng

"CIO Educational Background, Strategic Positioning, and Investor Reaction," with Cecilia (Qian) Feng and Paul Pavlou

"Signaling Mechanisms and Survival of Service Providers in an Electronic Market," with I. Hwang and S. Wattal

"Impact of R&D Investment and Workforce Education on the Performance of Information Technology Firms," with F. Liu, C. Ou, and S. Wattal

# C. OPERATIONS MANAGEMENT and MANAGEMENT SCIENCE

# **Published Papers/Accepted for Publication:**

"Advances in data envelopment analysis: Celebrating the 40th anniversary of DEA and the 100th anniversary of Professor Abraham Charnes' birthday" with Ali Emrouznejad and Luka Neralić, forthcoming in *Europeon Journal of Operational Research* 

"Two-Stage Estimation of the Impact of Contextual Variables in Stochastic Frontier Production Function Models Using Data Envelopment Analysis: Second Stage OLS versus Bootstrap Approaches" with Ram Natarajan, Daqun Zhang, forthcoming in *Europeon Journal of Operational Research*, (forthcoming October 2019), pp. 368-384. "Editorial: Recent developments on the use of DEA in the Public Sector", with A. Emrouznejad, H. Ahn, and M. Afsharian. *Socio-Economic Planning Services*. (May 2017).

"Novel theory and methodology developments in data envelopment analysis," with V. Podinovski. *Annals of Operations* Research 250:1 (February 2017).

"On the Use of Super-Efficiency Procedures for Ranking Efficient Units and Identifying Outliers" with Hsihui Chang and Zhiqiang (Eric) Zheng, *Annals of Operations Research*, (2015).

"Sensitivity and Stability in Stochastic Data Envelopment Analysis," with K. Kotarac and L. Neralic, *Journal of the Operational Research Society*, 66, 1, (January 2015), pp. 134-147.

"Performance Measurement in Nonprofit Governance: An Empirical Study of the Minnesota Independent School Districts," with H. Chang and E. Feroz, *Annals of Operations Research*, 221, 1, (October 2014), pp. 47-71.

"Data Envelopment Analysis in the Public Sector," with A. Emrouznejad, A. Lopes and M. Rodrigues de Almeida, *Socio-Economic Planning Science*, (March 2014), 48, 1, pp. 2-3.

"Statistical Tests Based on DEA Efficiency Scores," with R.Natarajan, *Handbook on Data Envelopment Analysis*, W.W. Cooper, L. Seiford and J. Zhu (Eds.), Kluwer Academic Publishers, Norwell, MA, (2011).

"Returns to Scale in DEA," with W.W. Cooper, L. Seiford and J. Zhu, in *Handbook on Data Envelopment Analysis*, W.W. Cooper, L. Seiford and J. Zhu (Eds.), Kluwer Academic Publishers, Norwell, MA, (2011), pp. 43-75.

"Performance Impact of Research Policy at the Chinese Academy of Sciences," with X. Li, W. Liu, D. Zhang, *Research Policy*, 40, 6, (July 2011), pp. 875-885.

"Productivity and Technical Changes in the Indian Pharmaceutical Industry," with H. Saranga, *Journal of the Operational Research Society*, 61, 12 (December 2010), pp. 1777-1788.

"DEA-based Hypothesis Tests for Comparing Two Groups of Decision Making Units," with Z. Zheng and R. Natarajan, *European Journal of Operational Research*, 206, 1, (October 2010), pp. 231-238.

"Differential Impact of Korean Banking System Reforms on Bank Productivity," with H. Chang and S.Y. Lee, *Journal of Banking & Finance*, (July 2010), 34, 7, pp. 1450-1460.

"Performance Measurement in the Financial Services Sector: Frontier Efficiency Methodologies and Other Innovative Techniques," with D. Cummins and P. Klumpes, *Journal of Banking & Finance*, (July 2010), 34,7, pp. 1413-1416.

"Efficiency and Productivity: Theory and Applications," with A. Emrouznejad, *Annals of Operations Research*, 173, 1, (January 2010), pp. 1-3.

"The Impact of Supervisory Monitoring on High-end Retail Sales Productivity," with S.Y. Lee, G. Potter, and D. Srinivasan, *Annals of Operations Research*, 173, 1, (January 2010), pp. 25-37.

"Technological Progress and Productivity Growth in the U.S. Mobile Telecommunications Industry," with Z. Cao, N. Menon, and R. Natarajan, *Annals of Operations Research*, 173, 1, (January 2010), pp. 77-87.

"Evaluating Contextual Variables Affecting Productivity Using Data Envelopment Analysis," with R.Natarajan, *Operations Research*, 56, (January-February 2008), pp. 48-58.

"Estimating DEA Technical and Allocative Inefficiency Using Aggregate Cost or Revenue Data," with H. Chang and R. Natarajan, *Journal of Productivity Analysis*, 27, 2, (April 2007) pp.115-272.

"The Super-Efficiency Procedure for Outlier Identification, Not for Ranking Efficient Units," with H. Chang, *European Journal of Operational Research*, 175, 2, (Dec. 2006), pp. 1311-1320.

"IFORS Operational Research Hall of Fame: William W. Cooper," *International Transactions in Operational Research*, 13, 4, (July 2006) pp.379-383.

"Productivity Change, Technical Progress, and Relative Efficiency Change in the Public Accounting Industry," with H. Chang and R. Natarajan, *Management Science*, 51, 2, (February 2005), pp. 291-304.

"Statistical Tests Based on DEA Efficiency Scores," with R. Natarajan, *Handbook on Data Envelopment Analysis*, W.W. Cooper, L. Seiford and J. Zhu (Eds.), Kluwer Academic Publishers, Norwell, MA, (2004), pp. 299-321.

"Analysis of Trends in Technical and Allocative Efficiency: An Application to Texas Public School Districts." with S. Janakiraman and R. Natarajan, *European Journal of Operational Research*, 154, 2, (April 2004), pp. 477-491.

"A Balanced Scorecard Analysis of Performance Metrics," with H. Chang, S. Janakiraman and C. Konstans, *European Journal of Operational Research*, 154, 2, (April 2004), pp. 423-436.

"Returns to Scale in Different DEA Models," with W.W. Cooper, L. Seiford, R. Thrall, J. Zhu, *European Journal of Operational Research*, 154, 2, (April 2004), pp. 345-362.

"A Simulation Study of DEA and Parametric Frontier Models in the Presence of Heteroscedasticity," with H. Chang and W.W. Cooper, *European Journal of Operational Research*, 153, 3, (March 2004), pp. 624-640.

"Evaluating the Adequacy of Parametric Functional Forms to Represent Monotone and Concave Production Functions," with S. Janakiraman and R. Natarajan, *Journal of Productivity Analysis*, 17, 1/2, (January/March 2002), pp. 111-132.

"Small Sample Properties of ML, COLS and DEA Estimators of Frontier Models in the Presence of Heteroscedasticity by A.J. Bojanic, S.B. Caudill and J.M. Ford: A Comment," with H. Chang and W.W.Cooper, *European Journal of Operational Research*, 136, 2, (January 2002).

"Work-Team Implementation and Trajectories of Manufacturing Quality: A Longitudinal Field Study," with J. Field and K.K. Sinha, *Manufacturing and Service Operations Management*, 3, 1 (Winter 2001), pp.25-42.

"Recent Methodological Advances in Data Envelopment Analysis: An Application to the U.S. Public Accounting Industry," with H. Chang, R. Cunningham and R. Natarajan, *Data Envelopment Analysis in the Public and Private Service Sector*, G. Westermann (Ed.), Harzer Wirtschafkswissenschaftliche Schriften, Deutscher University, Verlag, (1999), pp. 159-182.

"Quality and Competition," with I. Khosla and K.K. Sinha, *Management Science*, 44, 9, (September1998), pp. 1179 - 1192.

"Hypothesis Tests Using Data Envelopment Analysis," *Journal of Productivity Analysis*, (July 1996), pp. 139-160.

"Simulation studies of efficiency, returns to scale and misspecification with nonlinear functions in DEA," with H. Chang and W.W. Cooper, *Annals of Operations Research*, 66, 4, (August 1996), pp. 231-253.

"Equivalence and Implementation of Alternative Methods for Determining Returns to Scale in Data Envelopment Analysis," with H. Chang and W.W. Cooper, *European Journal of Operational Research*, 89, 3, (March 1996), pp. 473-481.

"Estimating Production Frontier shifts: An Application of DEA to Technology Assessment," with R.C. Morey, *Annals of Operations Research*, (1996), pp.181-196.

"A Note on Returns to Scale in DEA," with I. Bardhan and W.W. Cooper, *European Journal of Operational Research*, (1995).

"A Simulation Study of Hypothesis Tests for Relative Efficiencies," with H. Chang, *International Journal of Production Economics*, 39, 1-2, (April 1995), pp. 37-54.

"Economics of Operations Management: A Research Perspective," with I. Khosla, *Journal of Operations Management*, 12, 3-4, (June 1995), pp. 423-436.

"Validation and Generalization of DEA and Its Uses," with W.W. Cooper, *T.O.P. Spanish Journal of Statistics and Operational Research*, (1995).

"Simulation Studies of Efficiency and Returns to Scale with Nonlinear Functions in DEA," with H. Chang and W.W. Cooper, *Annals of Operations Research*, (1995).

"Evaluating the Impacts of Operating Strategies on Efficiency in the U.S. Airline Industry," with H. Johnston, Chapter 6 in *Data Envelopment Analysis: Theory, Methodology and Applications*, A. Charnes, W.W. Cooper, A. Lewin and L. Seiford (Eds.), Kluwer Academic Publishers, (1995).

"Maximum Likelihood, Consistency and Data Envelopment Analysis: A Statistical Foundation," *Management Science*, 39, 10, (October 1993), pp. 1265-1273.

"Manufacturing Performance Reporting for Continuous Quality Improvement," with G. Potter and R. Schroeder, *Management International Review*, (January 1993), pp. 53-68.

"Integrated System Design for Service Sector Retail Outlets," with R. Morey, *Journal of Operations Management*, 11, 1, (March 1993), pp. 81-98.

"Estimation of Returns to Scale using Data Envelopment Analysis," with R. Thrall, *European Journal* of Operational Research, 62, 1, (October 1992), pp. 74-84.

"A Monte Carlo comparison of two production frontier estimation methods: corrected ordinary least squares and data envelopment analysis" with V. Gadh and W. Gorr, *European Journal of Operational Research*, 37, 3, (June 1993), pp. 332-343.

"Maximum likelihood estimation of monotone and concave production frontiers," with A. Maindiratta, *Journal of Productivity Analysis*, (December 1992), pp. 401-416.

"Evaluating Performance in Regulated and Unregulated Markets: A Discussion," *Telecommunications Deregulation: Market Power and Cost Allocation Issues*, J. Allison and D. Thomas (Eds.), Quorum Books, (1990), pp. 254-258.

"Constrained Game Formulations and Interpretations for Data Envelopment Analysis," with A. Charnes, R. Clarke, and W.W. Cooper, *European Journal of Operational Research*, (1989), pp. 299-308.

"Nonparametric Analysis of Technical and Allocative Efficiencies in Production," with A. Maindiratta, *Econometrica*, (November 1988), pp. 1315-1332.

"A Comparison of DEA and Translog Estimates of Production Frontiers Using Simulated Observations from a Known Technology" with A. Charnes, W.W. Cooper and A. Maindiratta, *Applications of Modern Production Theory: Efficiency and Productivity*, A. Dogramaci and R. Fare (Eds.), Kluwer Academic Publishers, Boston, MA, (1987), pp. 33-58.

"Efficiency Analysis for Exogenously Fixed Inputs and Outputs," with R. Morey, *Operations Research*, 34, 4, (July/August 1986), pp. 513-521.

"The Use of Categorical Variables in Data Envelopment Analysis," with R. Morey, *Management Science*, 32, 12, (December 1986), pp. 1613-1627.

"Piecewise Loglinear Estimation of Efficient Production Surfaces," with A. Maindiratta, *Management Science*, 32, 1, (January 1986), pp. 126-135.

"A Comparative Application of Data Envelopment Analysis and Translog Methods: An Illustrative Study of Hospital Production," with R.F. Conrad and R.P. Strauss, *Management Science*, 32, 1, (January 1986), pp. 30-44.

"Estimating Most Productive Scale Size Using Data Envelopment Analysis," *European Journal of Operational Research*, 17, 1, (July 1984), pp. 35-44.

"Models for Estimating Technical and Scale Inefficiencies in Data Envelopment Analysis," with A. Charnes and W.W. Cooper, *Management Science*, 30, 9, (September 1984), pp. 1078-1092.

"A Bi-Extremal Principle for Frontier Estimation and Efficiency Evaluations," with A. Charnes, W.W. Cooper and A.P. Schinnar, *Management Science*, 27, 12, (December 1981), pp. 1370-1382.

"A Game Theoretic Approach to Measuring Efficiency," *European Journal of Operational Research*, (October 1980), pp. 262-266.

## **Unpublished Manuscript:**

"A relative efficiency model for the evaluation of public health nurse productivity," with JL Gifford Pittsburgh: Carnegie Mellon University, 117 1988

## **Books and Edited Volumes:**

*Data Envelopment Analysis and its Applications*: Proceedings of the 13<sup>th</sup> International Conference of DEA, August 2015, Braunschweig, Germany, with A. Emrouznejad, H. Ahn and M. Afsharian. ISBN: 978 1 85449 497 9.

*Sustainable Development and Performance Measurement*: Proceedings of the International DEA Workshop, September 2014, Mexico, with A. Emrouznejad, F. Vargas, and P. Flores. ISBN: 978 1 85449 482 5.

*Theory and Applications of Data Envelopment Analysis*: Proceedings of the 12<sup>th</sup> International Conference of DEA, April 2014, Malaysia, with A. Emrouznejad, S. Munisamy, and B. Arabi. ISBN: 978 1 85449 487 0.

*Recent Developments in Data Envelopment Analysis and its Applications:* Proceedings of the 12<sup>th</sup> International Conference of DEA, April 2014, Malaysia, with A. Emrouznejad, S. Doraisamy and B. Arabi. ISBN: 978 1 85449 487 0

*Data Envelopment Analysis and Performance Measurement*: Proceedings of the 11th International Conference of DEA, June 2013, Turkey, with A. Emrouznejad, H. Bal, I. Alp, and M. Ali Cengiz. ISBN: 978 1 85449 477 1

*Data Envelopment Analysis: Theory and Applications*: Proceedings of the 10th International Conference on DEA, August 2012, Brazil, with A. Emrouznejad, A.L.M. Lopes and M.R. de Almeida. ISBN: 978 185449 437 5.

## Working Papers/Research in Progress:

"Enlightened Human Resource Practices and Manufacturing Plant Performance" with S. Hyun.

"How does Culture affect Labor Cost Behavior?" with S. Hyun.

"Forecasting Earnings for Manufacturing Plants" with S. Hyun.

"Manufacturing management ability and performance" with M. Anderson and S. Hyun.

"Strategic Positioning and Long-term Plant Performance" with S. Hyun.

# **RESEARCH SUPPORT:**

"Convergence of Managerial and Financial Accounting Research," conference support form Certified Institute of Management Accounting (2012, 2013, 2014, 2016)

"Incentive Regulation in the Electric Power Industry in Brazil," with A. Lopes, research support from CEMIG and FAPMG (2011-14).

"Wireless Internet Access," with M. Mandviwalla and A. Jain, research support from I.B.M. (2006-07).

"Impact of Collaborative Product Development Software," with I. Bardhan, research support from MatrixOne, Inc., (2001–02).

"Performance Measurement," with S. Janakiraman and M. Pizzini, research support from the American Institute of Certified Public Accountants, (2001–02).

"Balanced Scorecard: Integrated Performance Measurement System for Operating Managers," with S. Janakiraman and C. Konstans, research support from the Financial Executives Research Foundation, (1998–2000).

"Causes and Consequences of Yield Variability," with K.K. Sinha and J. Field, research support from the Quality Leadership Center and Honeywell Corporation, (1994–95).

"Quality in Software Maintenance," with G. Davis and S. Slaughter, research support from Quality Leadership Center, Dayton Hudson Corporation, and Norwest Bank, (1994–95).

"Evaluation of Incentive Plans," with G. Potter, research support from Dayton Hudson Corporation, (1992–94).

"Manufacturing Overhead Cost Driver Analysis," with G. Potter, funded by the Institute of Management Accounting, (1992–93).

"Software Development in an Integrated CASE Environment," with R. Kauffman, research support from Seer Technologies, Inc. and First Boston Corporation, (1989–91).

"Evaluating Factors Affecting Productivity," funded by the National Science Foundation, (1987– 89).

"Business Value of Information Technology," with R. Kauffman, Faculty Development Grant, Carnegie Mellon University, (1987–88).

"Measurement of Software Development Productivity," with S. Datar, research support from Mellon Bank, (1986–87).

"Accounting for Labor Productivity," with S. Datar, funded by Division of Research, Harvard Business School, (1985–86).

"Productivity Accounting for Performance Evaluation," with S. Datar, funded by the American Accounting Association, (1984–86).

"Measurement of Manufacturing Performance and Productivity," with S. Datar, research support from T.R.W. Inc., Cleveland, (1984–85).

## **ANNUAL CITATIONS IN THE SOCIAL SCIENCE CITATION INDEX 1996-2014**

	 	 <u>2010</u> 692	 	 
 	 	 <u>2000</u> 174	 	 

## **GOOGLE SCHOLAR CITATION COUNT:**

September, 2020: 58,095

## AWARDS FOR DOCTORAL DISSERATIONS SUPERVISED

- 2016: Soonchul Hyun (University of Calgary) American Accounting Association/Grant Thornton Doctoral Dissertation Award
- 2006: Jorge Romero Best dissertation in accounting information systems.
- 2004: Yi-ching Kao Best dissertation in accounting information systems.
- 1998: Joy Field Elwood Buffa doctoral dissertation award of the Decision Science Institute.
- 1998: Dhinu Srinivasan Best dissertation in management accounting.
- 1995: Sandra Slaughter Best dissertation in information systems.
- 1993: Alex Thevaranjan Best dissertation in management accounting (runner-up).
- 1993: Laurie Kirsch Best dissertation in information systems (finalist).
- 1990: Holly Johnston Best dissertation in management accounting.
- 1988: Robert Kauffman Best dissertation in information systems (finalist).

#### **EDITORIAL ACTIVITIES**

Editor-in-Chief, the Data Envelopment Analysis Journal, (2011-present)

Information Systems Department Editor, Management Science, a journal of the Institute for

Operations Research and Management Science (INFORMS), (2002–2005)

Senior Editor, *Manufacturing and Service Operations Management*, a journal of the Institute for Operations Research and Management Science (INFORMS), (1997–2003)

Associate Editor, *Journal of Accounting, Auditing and Finance* (2000–04)

Associate Editor, Journal of Management Accounting Research (2000–04)

Member, Editorial Advisory Board, *Information Systems Research*, (1994–2002), Associate Editor, (1991–94), a journal of the Institute for Operations Research and Management Science (INFORMS)

Member, Editorial Advisory Board, Journal of Information Systems, (2001-present)

Member, Editorial Advisory Board, Information Technology and Management, (1997-present)

Member, Editorial Board, Advances in Management Accounting, (1993–2001)

Member, Editorial Board, Research in Governmental and Nonprofit Accounting, (1988–2001)

Member, Editorial Advisory Board, Journal of Accounting Literature, (1990–2003)

Member, Editorial Board, *Technology and Operations Review*, (1994–2001)

Member, Editorial Advisory Board, Journal of Operations Management, (1993–95)

Member, Editorial Advisory Board, Management Accounting Research (U.K.), (1989-2000)

Co-Editor, Journal of Productivity Analysis, (1987–92), Editorial Advisory Board (2002-present)

Member, Editorial Board, *The Accounting Review*, (1984–86; 1989–91)

Member, Editorial Board, Journal of Management Accounting Research, (1988–90)

Ad hoc reviewer for: National Science Foundation, Management Science; Operations Research; European Journal of Operational Research; Econometrica; Journal of Econometrics; American Economic Review; Scandinavian Journal of Economics; International Journal of Production Economics; Managerial and Decision Economics; Information Economics and Policy; Information Systems Research; M.I.S. Quarterly; IEEE Transactions on Software Engineering; Journal of Management Information Systems; Information and Software Technology; Information Management; Journal of Software Maintenance; The Accounting Review; Contemporary Accounting Research; Journal of Accounting and Economics; Journal of Accounting Research; Journal of Management Accounting Research; Journal of Accounting, Auditing and Finance; Journal of Accounting and Public Policy; Journal of Accounting Literature; Research in Governmental and Nonprofit Accounting; Glasnik Mathematicki (Croatia); Journal of Productivity Analysis; Journal of Business and Statistics; Omega; Journal of Operations Management

Member, the Scientific Committee for the North America Productivity Workshop (NAPW) VI

Conference special track co-organizer, 2010 INFORMS annual meeting

## **GUEST EDITOR**

"Data Envelopment Analysis in the Public Sector," with A. Emrouznejad, A. Lopes, and M. R. de Almeida, *Socio-Economic Planning Sciences*, 48 1, (2014).

"Efficiency and Productivity: Data Envelopment Analysis," with A. Emrouznejad, special issue of *IMA Journal of Management Mathematics*, 22, 4, (2011).

"Efficiency and Productivity: Theory and Applications," with A. Emrouznejad, *Annals of Operations Research*, 173, 1, (2010).

"Software Management," with S. Slaughter, special issue of *Information Technology and Management*, (2002).

"Economics of Operations Management: A Research Perspective," with I. Khosla, *Journal of Operations Management*, 12, 3-4, (June 1995).

# ACCREDITATION

Led the successful effort to obtain the first-time independent accreditation for the Accounting department, University of Texas at Dallas, (1998-2001).

# **OTHER EXTERNAL ACTIVITIES**

Member of the Notable Contributions to Accounting Literature Award Selection Committee, 2016-17.

Co-organizer of Annual International Conference on Data Envelopment Analysis (2009, 2010, 2011, 2012, 2013, 2014, 2015, 2016, 2017)

Co-organizer of Annual Conference of Convergence of Financial and Managerial Accounting Research (2012, 2013, 2014, 2015, 2016, 2017)

Keynote speaker, the Dean's Advisory Council at the Haskayne School of Business, University of Calgary (June 2015)

President, International Data Envelopment Analysis Society (2007-present)

Chair, International Conference in DEA and Performance Management (January 2007)

Co-Chair, International Symposium of Information Systems (December 2006, December 2007)

External Reviewer, Doctoral Program, University of Cincinnati, School of Business (2006)

Established Dean's Leadership Council, Center for Banking and Financial Services and Advisory Board, and Center for Asian American Business Studies and Advisory Board, Anderson Graduate School of Management, University of California, Riverside, October 2004

Established the Accounting Center for Excellence, Center for Practice and Research in Software Management, and the Center for Excellence in Asian Management, The University of Texas at Dallas

Head, Information Systems Faculty, Indian School of Business, Hyderabad (2002-06)

Co-Chair, Workshop on Information Systems and Economics WISE, with Sandra Slaughter, (1999)

External Reviewer, Information Systems Department, Anderson Graduate School of Management, U.C.L.A. (1996)

Member, Management Science Departmental Editor (Information Systems) Search Committee (1996)

Co-Director, Management Accounting Research Conference (1990–91, 1994–95)

Member, Advisory Board, International Conference on Contemporary Accounting Issues (1993–94)

Chair-AAA (1992–93), Joint AAA/AICPA Notable Contribution to Accounting Literature Award Committee

Member, Accreditation Committee (2000–01), Accounting Program Leaders Group, American Accounting Association

Member, Program Committee (1987–88), Competitive Manuscript Award Committee (1988–89), International Scholar Committee (1998–99), American Accounting Association

Member, Research Colloquium Committee (1990–91) and Data Base Committee (1991–92), Notable Contribution Award Committee (1999–2000), Management Accounting Section, American Accounting Association

Member, Committee for Research in Governmental and Nonprofit Accounting, American Accounting Association (1983–91)

Member, Finance Committee, The Institute of Management Science (1984–86)

# **INVITED PRESENTATIONS** (since January 1989, excludes normal conference presentation)

Colloquium on Management Control, Harvard Business School, January 1989

Department of Accounting, University of Minnesota, January 1989

Department of Accounting, San Diego State University, February 1989

Naval Postgraduate School, Monterey, February 1989 Department of Accounting, Stanford University, February 1989 Department of Accounting, Pennsylvania State University, March 1989 Fisher School of Accounting, University of Florida, March 1989 School of Accountancy, University of Southern California, April 1989 IC<sup>2</sup> Institute, The University of Texas at Austin, September 1989 Colloquium on Management Science Approaches in Management, Carnegie Mellon University, October 1989 Department of Accounting, Massachusetts Institute of Technology, December 1989 School of Management, Rutgers University, December 1989 Fisher School of Accounting, University of Florida, December 1989 Symposium on Management Accounting organized by the Management Accounting Section of the American Accounting Association and the National Association of Accountants, March 1990 Plenary Speaker, Public Sector Section, European Operational Research Society Conference, Vienna, August 1990 Department of Accounting, University of New South Wales, September 1990 Institute of Internal Auditors, Bombay Chapter, January 1991 Department of Accounting, U.C.L.A., March 1991 Department of Accounting, San Diego State University, March 1991 Department of Information Systems, University of California at Irvine, March 1991 Department of Accounting, Michigan State University, March 1991 Jones School of Management, Rice University, April 1991 Department of Operations Management, Stanford University, April 1991 Department of Accounting, University of California at Berkeley, April 1991 MIS Research Center, Minneapolis, April 1991 Software Engineering Economics, MITRE, Washington, DC, April 1991 Department of Accounting, University of Wisconsin at Madison, May 1991 Department of Accounting, Columbia University, September 1991 Management Accounting Research Colloquium, Atlanta, October 1991 Department of Accounting, University of Iowa, November 1991 Control Area, Harvard Business School, January 1992 Department of Accounting, Oklahoma State University, February 1992 Department of Accounting, New York University, March 1992 Department of Operations Management, Carnegie Mellon University, April 1992

Management Accounting Research Colloquium, Albuquerque, October 1992 School of Management, University of California at Irvine, December 1992 Institute of Management Accountants, St. Paul Chapter, March 1993 Department of Accounting, University of Michigan, April 1993 Department of Accounting, Penn State University, April 1993 Department of Accounting, Carnegie Melon University, April 1993 KPMG Peat Marwick Boston Accounting Research Consortium, May 1993 Tuck School of Management, Dartmouth College, December 1993 International Conference on Contemporary Accounting Issues, January 1994 Department of Accounting, National Chengchi University, January 1994 Department of Accounting, Hong Kong University of Science and Technology, January 1994 Department of Accounting, City University of Hong Kong, January 1994 Department of Accounting, Michigan State University, August 1994 Department of Accounting, University of Missouri at Columbia, September 1994 Distinguished Speaker, National Chengchi University, February 1995 Department of Accounting, Hong Kong University of Science and Technology, February 1995 Department of Accounting, University of Washington, April 1995 Department of Accounting, University of Memphis, April 1995 School of Management, Odense University, Denmark, May 1995 Department of Accounting, University of Nebraska, November 1995 Department of Accounting, Arizona State University, November 1995 Department of Accounting, Wharton School of Business, University of Pennsylvania, November 1995 Department of Accounting, University of Rochester, January 1996 Accounting and Control Area, Harvard Business School, February 1996 Tuck School of Business, Dartmouth College, April 1996 Department of Information Systems, U.C.L.A., June 1996 Department of Accounting, The University of Texas at Dallas, January 1997 Plenary Speaker, Big 10+ Doctoral Consortium, University of Iowa, May 1997 Plenary Speaker, International Symposium on Accounting Research, Hong Kong University of Science and Technology, June 1997 Plenary Speaker, European Symposium on Productivity Analysis, Copenhagen School of Agriculture, October 1997

Plenary Speaker, Department of Accounting, Vrije University and University of Amsterdam, Advanced Management Accounting Seminar, November 1997 Department of Accounting, University of South Carolina, January 1998 Department of Accounting, Nanyang Technological University, Singapore, July 1998 Plenary Speaker, Malaysian Association of Accountants, July 1998 Plenary Speaker, European Symposium on DEA, Hochschule Harz, Germany, October 1998 Distinguished Speaker, Information Systems, University of Dayton, November 1998 Department of Information Systems and Operations Management, Southern Methodist University, March 1999 Department of Accounting, University of Maryland, April 1999 Plenary Speaker, EDSER, International Conference in Software Engineering, May 1999 Department of Accounting, University of Southern California, November 1999 Indian Institute of Management, Ahmedabad, January 2000 Indian Merchants Chamber, Mumbai, January 2000 Institute of Chartered Accountants of India, Goa, January 2000 Department of Management Information Systems, University of Pittsburgh, May 2000 Department of Information Systems, Carnegie Mellon University, May 2000 Department of Managerial Economics and Decision Sciences, Northwestern University, May 2000 Department of Accounting, Seoul National University, June 2000 Institute of Industrial Policy, Seoul, June 2000 Department of Accounting, University of Maryland, August 2000 Department of Accounting, University of Arizona, September 2000 Department of Accounting and Information Systems, Ohio State University, October 2000 Department of Accounting, University of Texas at Austin, October 2000 Department of Accounting and Information Systems, University of Melbourne, December 2000 Department of Accounting, University of Auckland, December 2000 Department of Information Technology and Operations Management, University of Washington, January 2001 Department of Information Systems, New York University, January 2001 Department of Accounting and Information Systems, University of Kansas, February 2001 Research Symposium in Accounting and Information Technology, University of Oklahoma, May 2001 Department of Accounting, Texas A & M University, October 2001 Indian School of Business, Hyderabad, January 2002

SAP Research Institute, February 2002

Plenary Speaker, Southwestern American Accounting Association Doctoral Consortium, March 2002

Department of Accounting, University of Kentucky, March 2002

Boston Accounting Research Consortium, April 2002

Polykarp Kusch Lecture, The University of Texas at Dallas, April 2002

Plenary Speaker, Efficiency and Productivity Analysis in the 21<sup>th</sup> Century Congress, Russian Science Council, Moscow, June 2002

AICPA National Performance Measurement Symposium, July 2002

Taiwan Science Council, August 2002

Department of Economics, Academia Sineca, Taiwan, September 2002

National Taiwan University, September 2002

National Chengchi University, September 2002

Plenary Speaker, Taiwan Accounting Association, October 2002

Plenary Speaker, Management Accounting Conference, European Institute for Advanced Studies in Management, Brussels, December 2002

Department of Information Systems, University of California at Irvine, February 2003

Department of Operations Management and Information Systems, University of Southern California, February 2003

Department of Information Systems, University of Michigan, March 2003

Department of Accounting and Information Systems, Michigan State University, April 2003

Guanghua School of Management, Peking University, August 2003

Operations and Information Management Department, University of Florida, October 2003

National Chengchi University, November 2003

School of Management, Georgia Tech University, November 2003

Department of Accounting, Jesse H. Jones Graduate School of Management, Rice University, March 2004

Department of Management Science and Information Systems, McCombs School of Business, University of Texas at Austin, April 2004

Information Systems Department, Graduate School of Management, University of California, Davis, April 2004

Distinguished Speaker, College of Business Administration, The University of Tulsa, April 2004

Distinguished Speaker, Management Information Systems Department, Krannert School of Management, Purdue University, April 2004

Plenary Speaker, Fourth International Symposium on DEA, Birmingham, England, September 2004

Plenary Speaker, 37<sup>th</sup> Annual Convention of the Operational Research Society of India, January 2005

Rady School of Management, University of California, San Diego, February 2005

School of Management, University of Nevada, Las Vegas, March 2005

Fox School of Business, Temple University, March 2005

School of Management, SUNY at Albany, April 2005

School of Management, University of Central Florida, April 2005

Department of Technology and Operations Management, UCLA, March 2006

School of Management, University of South Florida, April 2006

Keynote Speaker, Fifth International Conference on Performance Measurement and Management, London, July 2006

Department of Information, Risk, and Operations Management, University of Texas at Austin, November 2006

Zicklin School of Business, The City University of New York-Baruch College, November 2006

Department of Accounting, University of California, Berkeley, March 2007

Department of Accounting and Finance, University of Auckland, April 2007

Keynote Speaker, New Zealand Management Accounting Conference, April 2007

London School of Economics and Operational Research Society of Britain, April 2007

CITNE, Indian School of Business, September 2007

Keynote Speaker, Chinese Academy of Science International Workshop on Innovation and Performance Management, Beijing, October 2007

Department of Finance and Accounting, Imperial College, London, October 2007

International Symposium on Information Systems, India, December 2007

Plenary Speaker, the Seventh International Conference on Data Envelopment Analysis, Philadelphia, July 2009

Carnegie Mellon University, March 2009

Plenary Speaker, Israel Accounting Research Conference, Tel Aviv, June 2009

Seoul National University, Seoul, April 2009

London School of Economics, London, June 2009

Peking University, Beijing, July 2009

National Sun Yat-Sen University, Kaohsiung, Taiwan, July 2009

Indian School of Business, Hyderabad, India, September 2009

City University of Hong Kong, January 2010

Seoul National University, Seoul, May 2010

Plenary Speaker at the 8<sup>th</sup> International Conference on Data Envelopment Analysis, Beirut, Lebanon, June 2010

8<sup>th</sup> International Conference on Data Envelopment Analysis, Beirut, Lebanon, June 2010

Plenary Speaker at the American University of Beirut, Beirut, Lebanon, June 2010

Smeal School of Business, Penn State University, October 2010

Carnegie Mellon University, October 2010

University of Pittsburgh, October 2010

Plenary Speaker at Data Envelopment Analysis Track, INFORMS Annual Meeting, November 2010

University Federal de Minas Gerais, Brazil, December 2010

International Conference on Information Systems, St. Louis, December 2010

Drexel University, April 2011

Seoul National University, May 2011

Plenary Speaker at the 9<sup>th</sup> International Conference on Data Envelopment Analysis, Thessaloniki, Greece, August 2011

Plenary Speaker at the 8th Annual Accounting Conference, Prague, September 2011

Plenary Speaker at the KPMG-Journal of Accounting, Auditing and Finance Conference, New York, November 2011

International Conference on Information Systems (ICIS), December 2011

Workshop on Information Systems and Economics, December 2011

Seoul National University, Department of Accounting, April 2012

Korea Advances Institute of Science and Technology, Dean's Lecture, April 2012

University of Oslo, May 2012

Norwegian School of Economics, Froystein Gjesdal Lecture, May 2012

Performance Scorecard Conference, May 2012

China Summer Workshop on Information Management, Beijing, China, July 2012

Plenary Speaker at the 10<sup>th</sup> International Conference on Data Envelopment Analysis, Natal, Brazil, August 2012

Michigan State University, September 2012

Southwestern University of Finance and Economics, Chengdu, China, Oct 2012

International Symposium of Information Systems (ISIS), January 2013

Plenary Speaker, 11<sup>th</sup> International Conference on Data Envelopment Analysis, Samsun, Turkey, August 2013

University of Malaya, October 2013

Keynote Speaker at Workshop on Incentive Regulation, Brazil, November 2013

International Conference on Accounting and Information Technology, February 2014

Keynote Speaker at the 12th International Conference on Data Envelopment Analysis, Malaysia, April 2014

Department of Economics, University of Malaya, April 2014

Department of Accounting, Wuhan University, China, May 2014

School of Management, Jianghan University, Wuhan, China, May 2014

Keynote Speaker at the Chinese Accounting Conference, Wuhan, China, May 2014

Plenary Speaker at the Abacus Conference, Chengdu, China, May 2014

Plenary Speaker at the Temple University Conference on Convergence of Managerial and Financial Accounting, August 2014

Research Presentation at the Indian School of Business, October 2014

Plenary Speaker at Conference on Sustainable Development, Mexico, October 2014

School of Business, University of Calgary, Canada, November 2014

School of Management. Stony Brook University, November 2014

Department of Accounting, Kent State University, February 2015

Department of Accounting, Seoul National University, Korea, March 2015

Department of Economics, University of Sonora, Mexico, April 2015

Department of Accounting, Haskayne School of Business, University of Calgary, April 2015

Department of Information Systems, Georgia Tech University, May 2015

Plenary Talk at the Conference on Convergence of Financial and Managerial Accounting Research in Banff, Canada, June 2015

Keynote Speaker, Dean's Advisory Council, Haskayne School of Management, University of Calgary, June 2015

Keynote Speaker, 13<sup>th</sup> International Conference of Data Envelopment Analysis, Germany, August 2015

Heinz College of Public Policy and Information Management, September 2015

Invited Speaker, Jianghan University, Wuhan, China, October 2015

Keynote Speaker, Accounting and Finance Conference, Brisbane, Australia, December 2015

Invited Speaker, Singapore Management University Accounting Conference, Singapore, December 2015

Management Accounting Midyear Meeting, Dallas, Texas, January 2016

Department of Accounting, Seoul National University, Korea, May 2016

Department of Accounting, Utah State University, June 2016

Keynote Speaker, 14<sup>th</sup> International Conference of Data Envelopment Analysis, Chengdu, China, June 2016.

Department of Accounting, Southwest University of Finance and Accounting, Chengdu, China, June 2016

Invited Speaker, Journal of Accounting, Auditing and Finance Conference, Banff, Canada, June 2016

Department of Accounting, University of Utah, September 2016

Accounting and Control Faculty, Harvard Business School, September 2016

Tepper School of Business, Carnegie Mellon University, September 2016

Indian School of Business, Hyderabad, October 2016

Indian Institute of Management Bangalore, October 2016

Department of Accounting, National University of Singapore, November 2016

Department of Accounting, Duke University, November 2016

Department of Accounting, University of Texas at Rio Grande, November 2016

Department of Accounting, Sungkyunkwan University, Seoul, Korea, May 2017

Department of Accounting, Louisiana State University, November 2017.

Keynote Speaker, Asia Pacific Management Accounting Conference, November 2017

Keynote Speaker, Shanghai National Accounting Institute, November 2017

Antai College of Economics and Management at Shanghai Jiao Tong University, November 2017

Indian Institute of Management, Ahmedabad, January 2018

Plenary Speaker at Conference on the Convergence of Financial and Managerial Accounting Research Louise, June 2019

Plenary Speaker at International Data Envelopment Analysis, Calgary, Canada, July 2019

Plenary Speaker at Asia Pacific Management Accounting Association, Doha, Qatar, November 2019