### 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 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 Chartered Accountant, M/s. C.C. Chokshi & Co. (Deloitte & Touche), Bombay 1973–1976: **AWARDS AND HONORS** 2015 Notable Contribution to Accounting Literature Award of the American Accounting Association and the American Institute of Certified Public Accountants Ranked the most prolific researcher in Management Accounting for the fifth consecutive 2014 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
- 2009: Musser Award for Faculty Research, Fox School of Business, Temple University

the top accounting journals over the past 20 years

2008: Best Paper Award, American Accounting Association Annual Meeting Gender Issues Section Best Paper Award, Cornell Quarterly 2006: Honored among the 30 most influential papers on the 30<sup>th</sup> anniversary of the *European* 2006: 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 Ranked 4th most highly cited paper in the 50-year history of Management Science 2003: 2003: Recognized by the Institute for Scientific Information (Web of Science) as one of only 243 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: Ranked as the Most Prolific Accounting Researcher among his cohort by Advances in Accounting 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 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:**

"The Confounding Effect of Cost Stickiness in Conservatism Research," with S. Basu, D. Byzalov, and J. Chen, conditionally accepted for publication in the Journal of Accounting and Economics, (2016)

"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, forthcoming in *Chinese Journal of Accounting Studies* 

"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.

"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, *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.

"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.

"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, *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 Non-financial 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, *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 Investments 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, *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 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 Study 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, *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, *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, *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, *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, *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:**

- "The Gender Pay Gap among Top Executives," with Mark Anderson, Rong Huang, Jiangxia Liu
- "Firm-Level Evidence of the Longitudinal Effects of IT Use on Employment," with Hilal Atasoy and Paul Pavlou
- "Implications of Accounting Practice for Conservatism Research," with Sudipta Basu and Dmitri Byzalov),
- "Executive Compensation and R&D Intensity," with Dmitri Byzalov and Chunwei Xian
- "Valuation and Compensation Coefficients on Earnings by Direction of Sales Change," with Hsihui Chang and Iny Hwang
- "Relative Evaluation of Investment Fund Manager Performance," with Janice Chen and Paul Klumpes
- "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
- "Market Reaction to Intangible Asset Value: Evidence on SG&A Expenditure," with Rong Huang, Ram Natarajan, and Sha Zhao
- "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
- "Innovation Activities and Financial Performance," with Mark Anderson, Dmitri Byzalov, Soonchul Hyun
- "The Impact of Demand Uncertainty on Outsourcing Decisions," with Hilal Atasoy and Dmitri Byzalov
- "Asymmetric Cost Behavior and DEA Efficiency Scores," with Hilal Atasoy, Dmitri Byzalov, and Shunlan Fang
- "IT Use, IT Skills, and Employment Opportunities of Workers," with Hilal Atasoy and Paul Pavlou
- "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
- "Asymmetric Behavior of Accruals," with Shunlan Fang and Byunghoon Jin
- "Are Monitoring and Monetary Incentives Substitutes in a Retail Store?" with Shunlan Fang and Seok-Young Lee
- "Anomalous Financial Performance Ratios during Economic Slowdowns," with Shunlan Fang and Mihir Mehta
- "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
- "Use of Data Envelopment Analysis for Incentive Regulation of Electricity Distribution Firms," with Finn Forsund 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
- "Short-Term Bonus for CEOs and Cost Stickiness," with Byunghoon Jin and Mihir Mehta
- "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
- "Measuring National Performance," 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 Gender," with Kikyung Song
- "Performance Scorecard for U.S. States," with Kikyung Song
- "Profitability Ratio Analysis for Professional Service Firms," with Eunyoung Whang
- "The Organizational Structure and Profitability of Professional Service Firms," with 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 Dagun Zhang
- "The Returns to Scale Assumption in Incentive Rate Regulation," with Daqun Zhang
- "Cost Reduction Programs," with Mark Anderson
- "Plans, Expectations and Cost Behavior," with Hilal Atasoy and Julia Nasev
- "Target Setting and Performance," with Hilal Atasoy and Luke Threinen
- "OLS versus LAD in Earnings Forecast Models," with Sudipta Basu and Dmitri Byzalov
- "Competition in the Audit Market," with Dmitri Byzalov and Seok-Young Lee
- "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 and Lucas Threinen
- "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
- "Perceptions of Organizational Justice and Performance of Audit Staff," with Seok-Young Lee, S. Ryu and Eunbin Whang

"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

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

"Returns to Scale Tests Using DEA," with Ram Natarajan

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

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

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

"Business Strategy, Cost Rigidity, and Variability of Earnings," with Dagun 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:**

"Does Information and Communication Technology Lead to the Well-Being of Nations?" with Kartik Ganju and Paul Pavlou, forthcoming in MIS Quarterly, (2015)

"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*, 21, 6, (October 2013), pp1-34.

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

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- "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.
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- "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).
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"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).

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"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).

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# **Working Papers / Research in Progress:**

"Implications of Accounting Practice for Conservatism Research," with Sudipta Basu and Dmitri Byzalov), under review at the *Accounting Review* 

"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

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

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"Does Information and Communication Technology Lead to the Well-Being of Nations?" with Kartik Ganju and Paul Pavlou

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

### C. OPERATIONS MANAGEMENT and MANAGEMENT SCIENCE

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

"Sensitivity and Stability in Stochastic Data Envelopment Analysis," with K. Kotarac and L. Neralic, forthcoming in *Journal of the Operational Research Society*, 66, 1, (January 2015), pp. 124-147.

- "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 W.W. Cooper, L. Seiford and J. Zhu, *Handbook on Data Envelopment Analysis*, W.W. Cooper, L. Seiford and J. Zhu (Eds.), Kluwer Academic Publishers, Norwell, MA, (2011).
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- "Evaluating Contextual Variables Affecting Productivity Using Data Envelopment Analysis," with R.Natarajan, *Operations Research*, 56, (January-February 2008), pp. 48-58.
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- "Simulation Studies of Efficiency and 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, (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).
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- "Efficiency Analysis for Exogenously Fixed Inputs and Outputs," with R. Morey, *Operations Research*, 34, 4, (July/August 1986), pp. 513-521.
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- "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.
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- "A Bi-Extremal Principle for Frontier Estimation and Efficiency Evaluation," 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.

## **Books and Edited Volumes:**

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:**

"The Impact of Demand Uncertainty on Outsourcing Decisions," with Hilal Atasoy and Dmitri Byzalov

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

"Use of Data Envelopment Analysis for Incentive Regulation of Electricity Distribution Firms," with Finn Forsund and Daqun Zhang

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

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

"Returns to Scale Tests Using DEA," with Ram Natarajan

### **RESEARCH SUPPORT:**

"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

 $\underline{2014} \quad \underline{2013} \quad \underline{2012} \quad \underline{2011} \quad \underline{2010} \quad \underline{2009} \quad \underline{2008} \quad \underline{2007} \quad \underline{2006} \quad \underline{2005}$ 

701	594	594	642	681	599	426	368	307	234
	2003 215			2000 174		<u>1998</u> 174		<u>1996</u> 207	

### AWARDS FOR DOCTORAL DISSERATIONS SUPERVISED

- 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)

Associate Editor, *Journal of Productivity Analysis* (2002–present)

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, 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; Accounting Review; Contemporary Accounting Research; Journal of Accounting Research; Journal of Accounting Research; Journal of Accounting 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**

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

"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).

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

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

## OTHER EXTERNAL ACTIVITIES

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

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

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

Keynot 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