

Address: Department of Economics  
Engineering 2 Building  
University of California  
Santa Cruz, CA 95064

Telephone: (831) 459-4093  
Fax: (831) 459-5077  
Email: boxjenk@ucsc.edu  
Citizenship: United States

**CURRENT AND PREVIOUS EMPLOYMENT**

2013- Director, Center for Analytical Finance, UCSC  
2011- Associate Director, Center for Global, International and Regional Studies, UCSC  
2011- Director, Business Management Economics Program, UCSC  
2011-2013 Co-Director, Sury Initiative for Global Finance and International Risk Management, UCSC  
2010- Sarbjit Singh Aurora Chair in Sikh and Punjabi Studies, UCSC  
2007- Director, South Asian Studies Initiative, UCSC Social Sciences Division  
2007-2010 Special Advisor to the Chancellor, UCSC Silicon Valley Initiatives  
2006-08 Co-Director, Center for Global, International and Regional Studies  
2005-06 Associate Director, Center for Global, International and Regional Studies  
2001-03 Coordinator (Lead Co-Director), Santa Cruz Center for International Economics  
1997-2001 Founding Co-Director, Santa Cruz Center for International Economics  
1998-2007 Director, Business Management Economics Program, UCSC  
1992-95 University of California, Santa Cruz, Chair, Economics Department  
1993- University of California, Santa Cruz, Professor of Economics  
1988-93 University of California, Santa Cruz, Associate Professor of Economics  
1982-88 University of California, Santa Cruz, Assistant Professor of Economics  
1980 Bell Laboratories, Murray Hill, New Jersey, Member of Technical Staff (summer)  
1978 Lawrence Berkeley Laboratories, Research Assistant (summer)  
1977-82 University of California, Berkeley, Teaching and Research Assistant (Economics)  
1976-77 University of Delhi, Delhi School of Economics, Research Associate

**EDUCATION**

1982 University of California, Berkeley, Ph.D. in Economics  
1976 London School of Economics and Political Science, University of London,  
M.Sc. in Economics with Mark of Distinction:  
Awarded Ely Devons Prize

1975 London School of Economics and Political Science, University of London,  
B.Sc. in Economics with First Class Honors:  
Awarded Gonner Prize and Allyn Young Prize

**HONORS, AWARDS AND GRANTS**

2014-15 International Growth Centre, "Foreign Borrowing by Indian Firms: Implications for Growth and Macroeconomic Stability"

2011-12 International Growth Centre, "Foreign Investors under Stress: Evidence from Indian Firms"

2010-13 University of Pennsylvania Sub-Award, "Entrepreneurship in the Indian American Diaspora"

2010-11 International Growth Centre, "Do Foreign Portfolio Flows Affect India's Financial Vulnerability?"

2007-13 UCSC Committee on Research, Annual Faculty Research Grants

2007 NET Institute, Summer Grant for research on Network Economics and the Digital Divide in Rural South Asia (with J. Kendall and K. Williams)

2006-07 UCSC Committee on Research, Special Research Grant, Business Transformation and Services Innovation: Managing Communication and Adaptation across Organizational Cultures

2006 NET Institute, Summer Grant for research on Performance of Rural Internet Kiosks in India (with J. Kendall)

2005-06 IBM Faculty Award, Business Transformation and Services Innovation: Managing Communication and Adaptation across Organizational Cultures

2003-05 Reserve Bank of India Development Research Group Grant, "Regional Inequality in India: Recent Trends and Policy Implications"

2003-05 Rajiv Gandhi Institute for Contemporary Studies, and International Development Enterprises (India) "Economic Reform for India's Masses: The Role of Information and Communication Technologies"

2001-02 Rajiv Gandhi Institute for Contemporary Studies Grant, "Information Technology as an Engine of Broad-Based Growth in India: A Case Study of Punjab"

1999-00 UC Pacific Rim Research Program Grant, "Productivity and Economic Growth in East Asia: Innovation, Efficiency and Accumulation"

1998-99 Asia Foundation Grant for UCSC Conference, "Growth, Governance and Empowerment: The Future of India's Economy"

1995-96 IGCC Grant, "Managing Water Scarcity: The Interaction between International River Negotiations and Domestic Reform Conflicts"

1995-96 IRIS India Program Grant, "Water and Federalism: India's Institutions Governing Inter-State River Waters"

1994 IRIS India Program Grant, "Political Economy of Indian Fiscal Federalism"

- 1993-94 UERG Grant, "Cost Analysis of Wind Generated Electricity in California"
- 1992-93 IRIS Grant, "The Economic Role of Government: Rents, Reform and Rights"
- 1992-94 UC Pacific Rim Program Grant, "East Asian Growth: Lessons for Economic Policy," with six others, Co-PI and project coordinator
- 1990-91 UCSC Pacific Rim and IGCC grants for "Workshop on Political and Economic Change in the Asian Pacific Rim and South Asia"
- 1988-89 UERG Grant, "Specification Error and Systematic Response Error in Conditional Energy Demand Models," Co-Principal Investigator
- 1987-88 UERG/CEC Grant, "Evaluating Biases in Conditional Demand Models Using Validation Data," Co-Principal Investigator
- 1986-87 UERG/CEC Grant, "Specification Error in Residential Demand Models," Faculty Associate
- 1986-87 NSF Grant, "Intergovernment Grants and Asymmetric Information," Principal Investigator
- 1983-85 Affirmative Action Grants, University of California, Santa Cruz
- 1982-06 Faculty Research Committee Annual Grants and various Social Science Division Research Grants, University of California, Santa Cruz
- 1977-82 Flood Fellowship, Genevieve Lichtig Fellowship and Stanley Tasheira Scholarship, Department of Economics, University of California, Berkeley
- 1975-76 C.K. Hobson Studentship, London School of Economics, London, England
- 1972-76 Allyn Young Prize, Gonner Prize and Ely Devons Prize, London School of Economics
- 1972-75 British Council Overseas Student Scholarship, London, England
- 1971 All-India Entrance Scholarship, Delhi University (declined)
- 1971 IIT Entrance Examination, rank 43<sup>rd</sup> in India
- 1971 National Science Talent Scholarship (declined)
- 1971 Ranked among top 10 students all-India in Indian School Certificate Examination – Direct Admission to IIT (declined)

## RESEARCH STATEMENT

My current work includes projects on capital flows and monetary policy rules in India, including a NIPFP-DEA project funded by the Ministry of Finance; healthcare systems in Punjab; and Indian-American entrepreneurs in the US. I have also worked extensively for the past ten years on the Indian economy, with a particular focus on regional inequality, intergovernmental grants, local government reform, public service delivery, water use and management, and broader governance issues. I have also worked on the impacts of information technology on Indian economic development, the productivity of Indian manufacturing firms, and the delivery of information services in rural India, through Internet kiosks, including extensive fieldwork. These

research foci are documented by my numerous publications in these areas, including a major book with M. Govinda Rao on Indian federalism. The work on regional inequality was funded by a Reserve Bank of India DRG project grant. I also work on broader issues of growth and development, and theoretical issues of federalism, collective action and decentralization. These include applications to domestic and international river water sharing in South Asia. I have also worked on sources of growth and changes in trade patterns in East Asia: I have just finished co-editing the *Handbook of Economics of the Pacific Rim* for Oxford University Press. Finally, I work on Sikh Studies, a nascent field, where I have contributed historical analysis based on secondary sources.

## PUBLISHED AND FORTHCOMING WRITINGS

### Articles in Professional Journals

- 2014 Does Too Much Finance Harm Economic Growth?, (with S.H. Law), forthcoming, *Journal of Banking and Finance*
- 2013 Bridging the Digital Divide in Rural India: Lessons from a Survey in Four States (with Y. Zhou, K. Williams, J. Kendall and P.D. Kaushik), forthcoming, *Review of Market Integration*
- Dove or Hawk? Characterizing Monetary Policy Regime Switches in India (with M. Hutchison and R. Sengupta), forthcoming, *Emerging Markets Review*
- Foreign Investors under Stress: Evidence from India (with I. Patnaik and A. Shah), *International Finance*, 16 (2), pp. 213-244
- Turkey's Trilemma Trade-offs: Is there a role for reserves? (with O. Cortuk), *Iktisat Isletme ve Finans* 28 (328), pp. 105-122
- Trade productivity upgrading, trade fragmentation, and FDI in manufacturing: The Asian development experience (with J. Mora), *Indian Growth and Development Review*, 6 (1), pp. 61-87
- Trade Dynamics in the East Asian Miracle: A Time Series Analysis of US–East Asia Commodity Trade, 1962–1992 (with T. Carolan and J. Mora), *Millennial Asia*, 4 (1), pp. 87-108
- Information Technology and Productivity in Indian Manufacturing (with S. Sharma), *India Policy Forum*, Vol. 9, 2012-13, pp. 187-229
- 2012 Effectiveness of Capital Controls in India: Evidence from the Offshore NDF Market (with M. Hutchison and G. Pasricha), *IMF Economic Review*, 60, pp. 395–438.
- Internet Kiosks in Rural India: Gender, Caste and Location (with J. Kendall), *Review of Market Integration*, 4 (1), pp. 1-43
- India's Trilemma, (with M. Hutchison and R. Sengupta), *The World Economy*, 35(1), pp. 3-18

- 2011 Structural change and growth in India, (with O. Cortuk), *Economics Letters*, 110 (3), pp.178-181
- The Digital Divide in Rural South Asia: Survey Evidence from Bangladesh, Nepal and Sri Lanka (with Yan Zhou and P. D. Kaushik), *Indian Institute of Management (Bangalore) Review*, 23 (1), pp. 15-29
- 2010 Expenditure Governance and Information Technology: Assessing India's Situation and Potential, *India Review*, 9 (2), pp. 107-139
- Estimating a Monetary Policy Rule for India, (with Michael Hutchison and Rajeswari Sengupta), *Economic and Political Weekly*, 45 (38), pp. 67-69
- Market Institutions: An Expository Essay, *Economics, Management, and Financial Markets*, 5(2), pp. 210-36
- 2009 The Management of International Rivers as Demands Grow and Supplies Tighten: India, China, Nepal, Pakistan, Bangladesh, (with B. Crow), *India Review*, 8 (3), pp. 306-339
- 2008 Equilibrium Vengeance (with D. Friedman), *Games and Economic Behavior*, 66 (2), pp. 813-829
- Transaction Costs, Information Technology and Development, *Indian Growth and Development Review*, 1 (2), pp. 212-236
- Decentralization and Public Delivery of Health Care Services in India, *Health Affairs*, 27, no. 4 pp. 991-1001
- Buy-It-Now: A Hybrid Market Institution (with S. Anderson, D. Friedman and G. Milam), *Journal of Electronic Commerce Research*, 9 (2), pp. 137-153
- Fiscal Decentralization in China and India: Competitive, Cooperative or Market Preserving Federalism?, *Public Finance and Management*, 9 (1), available at <http://www.spaef.com/article.php?id=433>
- 2007 "Seller Strategies on eBay: Does Size Matter?", (with Steve Anderson, Daniel Friedman and Garrett Milam) *International Journal of Electronic Business*, Volume 5, Number 6, 30 December, pp. 643-669
- Lost, Dysfunctional or Evolving? A View of Business Schools from Silicon Valley, *Indian Institute of Management, (Bangalore) Review*, Vol. 19, No. 3, September, pp. 329-334
- The Dynamics of Reform of India's Federal System, *CESifo Forum - Issue on China & India*, vol. 8, No. 1, pp. 22-31
- The Political Economy of India's Fiscal Federalism and its Reform, (with M. Govinda Rao), *Publius: The Journal of Federalism*, Winter 2007; 37 (1): pp. 26 - 44
- 2005 The Green Revolution in Punjab, India: The Economics of Technological Change (with D.S. Kohli), *Journal of Punjab Studies*, vol. 12, no. 2, pp. 285-306
- Nash Bargaining versus Market Outcomes, *Indian Economic Review*, 40 (1), pp. 21-36

- 2004 Negative Reciprocity: The Coevolution of Memes and Genes, (with Daniel Friedman), *Evolution and Human Behavior*, 25(3), pp. 155-173
- Patterns in Centre-State Fiscal Transfers: An Illustrative Analysis, (with Garima Vasishtha), *Economic and Political Weekly*, November 6, 39 (45), pp. 4897-4903
- Foreign Capital, Inflation, Sterilization, Crowding-Out and Growth: Some Illustrative Models, (with T.N. Srinivasan), *Economic and Political Weekly*, June 12-18, 39 (24), pp. 2469-2482
- Some Economic Consequences of India's Institutions of Governance: A Conceptual Framework, *India Review*, vol. 3, no. 2, April, pp. 114-146
- Information Technology and Broad-Based Development: Preliminary Lessons from North India, (with P.D. Kaushik), *World Development*, 32 (4), pp. 591-607
- Productivity Efficiency and Economic Growth: East Asia and the Rest of the World (with G. Han and K.P. Kalirajan), *Journal of Developing Areas*, vol. 37, no. 2, pp. 99-118
- 2003 Regional Inequality in India: A Fresh Look (with L. Bhandari, A. Chen and A. Khare), *Economic and Political Weekly*, 38 (11), pp. 1069-1073, March 15
- Regional Inequality in India: Addendum (with L. Bhandari), *Economic and Political Weekly*, 38 (30), p. 3213
- Analyzing Change: Demand, Organizational Structures and Supplier Relationships, *Metamorphosis*, 2(1&2), pp. 97-99
- 2002 Inter-state Water Disputes in India: Institutions and Policies (with A. Richards), *International Journal of Water Resources Development*, 18, 4, pp. 611-625
- Productivity and Economic Growth in East Asia: Innovation, Efficiency and Accumulation (with G. Han and K.P. Kalirajan), *Japan and the World Economy*, 420, pp.1-24
- Guru Nanak and the Sants: A Response to Professor McLeod, *International Journal of Punjab Studies*, 9:1, pp. 138-142
- Miracles and Reform in India: Policy Reflections, *Asian Survey*, 42, 5, September/October, pp. 708-722
- 2001 A Model of Inequality and Interest Group Politics (with I. Kohli), *Economics and Politics*, 13, 2, pp. 185-200
- Implementation with Partial Verification (with D. Wittman), *Review of Economic Design*, 6, pp. 63-84
- Contests Where There is Variation in the Marginal Productivity of Effort (with D. Wittman), *Economic Theory*, 18, pp. 711-744
- No Easy Exit: Property Rights, Markets, and Negotiations over Water (with A. Richards), *International Journal of Water Resources Development*, 17, 3, pp. 409-425
- Limited Liability, Contractual Choice, and the Tenancy Ladder (with T. Ray), *Journal of Development Economics*, 66, 1, pp. 289-303

- Guru Nanak and the Sants: A Reappraisal, *International Journal of Punjab Studies*, 8, 1, pp. 1-34
- 2000 Impediments and Innovation in International Rivers: The Waters of South Asia (with B. Crow), *World Development*, 28,11, pp. 1907-1925
- Welfare Policy: Cash vs. Kind, Self-selection and Notches (with R. Thomas), *Southern Economic Journal*, 66,4, pp. 976-990
- 1999 Total Factor Productivity Growth in Japan, South Korea and Taiwan (with H. Trieu), *Indian Economic Review*, 34 (2), pp. 93-112
- Rent Seeking and Rent Setting with Asymmetric Effectiveness of Lobbying (with I. Kohli), *Public Choice*, Vol. 99, No. 3-4, June, pp. 275-298
- 1998 The Composition of U.S.-East Asia Trade and Changing Comparative Advantage (with T. Carolan and C. Talati), *Journal of Development Economics*, Vol. 57, December, pp. 361-389
- 1997 On Federalism and Reform in India, *Seminar*, No. 459, November, pp. 54-62
- Nash Bargaining with the Option to Wait, *Economics Letters*, Vol. 55, No. 1, August, pp. 69-73
- Governance and Reform in India, *Journal of International Trade and Economic Development*, Vol. 6, No. 2, June, pp. 179-208
- Equilibrium Real Interest Rate Linkages: The United States and Japan (with M. Hutchison), *Journal of the Japanese and International Economies*, Vol. 11, No. 2, June, pp. 208-227
- Foreign Technology, Spillovers, and Research and Development Policy (with M. Muniagurria), *International Economic Review*, Vol. 38, No. 2, May, pp. 405-430
- 1995 Unilateral Altruism May Be Beneficial: A Game-Theoretic Illustration, *Economics Letters*, vol. 47(3), pp. 275-281
- The Economic Rationale of Apprenticeship: Lessons from US and British Experience (with B. Elbaum), *Industrial Relations*, Vol. 34, pp. 593-622
- 1994 Patterns in Residential Gas and Electricity Consumption: An Econometric Analysis, (with R. S. Lee), *Journal of Business and Economic Statistics*, vol. 12(2), pp. 233-41
- 1993 Capital Mobility and Japan-U.S. Real Interest Rate Differentials (with M. Hutchison), *Financial Review*, June, pp. 57-67
- 1992 Exports, Non-Exports and Externalities: A Granger Causality Approach (with M. Hutchison), *International Economic Journal*, Vol. 6, pp. 79-94
- Rent-Seeking and Peak-Load Pricing of Public Services: An Extension, *National Tax Journal*, 45 (4), December, pp. 443-446
- 1991 Posterior Preserving Information Improvements and Principal Agent Relationships, *Journal of Economic Theory*, Vol. 55, 192-202
- 1990 Entry Deterrence in Stackelberg-Perfect Equilibria (with K. Basu), *International*

- Economic Review*, Vol. 31, No. 1, February, pp. 61-71
- Regulating Externalities through Testing (with R. E. Grieson), *Journal of Public Economics*, Vol. 41, pp. 369-387
- 1989 Exports and Growth: Critical Minimum Effort and Diminishing Returns (with I. Kohli), *Journal of Development Economics*, Vol. 30, pp. 391-400
- Tariffs vs. Quotas with Uncertain Substitutability between Inputs (with M. Datta-Chaudhuri), *Journal of Quantitative Economics*, Vol. 5, No. 2, July, pp. 251-265
- Matching vs. Block Grants with Imperfect Information (with R. Thomas), *National Tax Journal*, Vol. 42, No. 2, June, pp. 191-203
- 1988 Economic Contests with Incomplete Information and Optimal Contest Design (with D. Wittman), *Management Science*, Vol. 34, April, pp. 528-540
- 1987 User Charges as a Delegation Mechanism: Response (with R. Thomas) *National Tax Journal*, vol. 40, 2, June, pp. 279-282
- On Moral Hazard and Cost-sharing under Sharecropping (with P. Bardhan), *American Journal of Agricultural Economics*, 69(2), pp. 382-3
- 1986 Equilibrium Price Dispersion with Sequential Search, *Journal of Quantitative Economics*, vol. 2, 2, July 163-171
- User Charges as a Delegation Mechanism (with R. Thomas), *National Tax Journal*, Vol. 39, 1, March, pp. 109-113
- 1985 Commitment and Entry Deterrence in a Model of Duopoly (with K. Basu), *Economics Letters*, Vol. 18, pp. 265-269
- Monitoring and Hierarchies: The Marginal Value of Information in a Principal-Agent Model, *Journal of Political Economy*, Vol. 93, 3, pp. 599-609
- 1984 Moral Hazard with a Finite Number of States, *Economics Letters*, Vol. 16, pp. 45-51
- Price and Quantity Competition in a Differentiated Duopoly (with X. Vives), *Rand Journal of Economics*, vol. 15(4), pp. 546-554
- Moral Hazard: Economic Meaning of the Conditions Justifying the First Order Approach, *Economics Letters*, Vol. 15, pp. 277-282

### Chapters in Books

- 2013 Introduction (with I. Kaur), in I. Kaur and N. Singh (eds.), *Oxford Handbook of the Economics of the Pacific Rim*, New York, Oxford University Press, forthcoming
- Federalism and Water Management in India, in S. Howes and M. G. Rao, eds., *Federal Reform Strategies: Lessons from Asia and Australia*, New Delhi: Oxford University Press

- Democracy, Diversity, and Development: India's Strategy and Outcomes, in A. K. Fosu, ed., *Achieving Development Success: Strategies and Lessons from the Developing World*, Oxford: Oxford University Press
- The Evolution of Fiscal Developments and Policies in the Pacific Rim (with M. Kumar and J. Woo), Chapter 9 in I. Kaur and N. Singh (eds.) *Oxford Handbook of the Economics of the Pacific Rim*, New York, Oxford University Press, forthcoming
- Federalism and Economic Development in India: An Assessment (with T.N. Srinivasan), in N. Hope, A. Kochar, R. Noll, T.N. Srinivasan, eds., *Economic Reform in India: Challenges, Prospects, and Lessons*, New York: Cambridge University Press
- 2012 Call Centres, in *Oxford Companion to Economics in India*, ed. K. Basu and A. Maertens, New Delhi: Oxford University Press, revised version for second edition
- Telecommunications, in *Oxford Companion to Economics in India*, ed. K. Basu and A. Maertens, New Delhi: Oxford University Press, revised version for second edition
- 2010 Some Market Measures of Capital Account Liberalization in India, (with Michael Hutchison and Gurnain Pasricha), in *China and Asia in the Global Economy*, ed. Yin-Wong Cheung and Guonan Ma, World Scientific Publishing
- 2009 Digital Economy, in *Handbook of Technology Management*, ed. Hossein Bidgoli, New York: Wiley International, pp. 19-36
- India's Growth and the Service Sector, *Annual Business Standard India 2010*, ed. T.N. Ninan, New Delhi: Business Standard Books, pp. 15-53
- Intermediaries in E-Commerce: Value Creation Roles, *Encyclopedia of E-Business Development and Management in the Digital Economy*, ed., In Lee, Hershey, PA: IGI Global, pp. 188-197
- 2008 How Well Has Electric Power Reform Worked in India?, Discussant's comments, *India Policy Forum, 2007-2008*, ed. Suman Bery, Barry Bosworth and Arvind Panagariya, New Delhi: Sage Publications, pp. 267-277
- India's Public Sector in Comparative Perspective, in *The Crossover: Public Sector in Globalised India*, ed. Bibek Debroy, New Delhi: The Times Group, pp. 111-113
- Crossing a Chasm: Technologies, Institutions and Policies for Developing a Regional IT Industry, *ICTs and Indian Social Change: Diffusion, Poverty and Governance*, Ashwani Saith, M. Vijayabaskar and V. Gayathri ed., New Delhi: Sage Publications, pp. 192-218
- 2007 Call Centres, in *Oxford Companion to Economics in India*, ed. K. Basu, New Delhi: Oxford University Press, 47-48
- Telecommunications, in *Oxford Companion to Economics in India*, ed. K. Basu, New Delhi: Oxford University Press, 522-25
- Services-Led Industrialization in India: Assessment and Lessons, in *Industrial*

*Development for the 21st Century: Sustainable Development Perspectives*, ed. David O'Connor, New York: UN-DESA, pp. 235-291

Regional Inequality in India: A Fresh Look, (with Laveesh Bhandari, Aoyu Chen and Aarti Khare), reprinted in *India's Economic Development Since 1947*, ed. Uma Kapila, New Delhi: Academic Foundation, 170-184

Asymmetric Federalism in India, (with M. Govinda Rao) in *Fiscal Fragmentation In Decentralized Countries Subsidiarity, Solidarity and Asymmetry*, Richard Bird and Robert Edel, eds., Cheltenham, UK: Edward Elgar, pp. 295-319

Floods and International Relations in South Asia: An Assessment of Multi-Track Diplomacy (with B. Crow), forthcoming in Peter Mollinga, ed., *Floods in South Asia: South Asia Consortium for Interdisciplinary Water Resources Studies* (forthcoming, Orient Longman)

The Idea of South Asia and the Role of the Middle Class, *Engaging South Asia: Challenges and Opportunities*, ed. Hernaikh Singh and Jayan Jose Thomas: Singapore, Marshall Cavendish, pp. 99-127

2006 Digital Economy, in *The Internet Security Handbook, Volume 1*, Hossein Bidgoli, ed., Hoboken, NJ: John Wiley & Sons, pp. 15-36

State Finances in India: A Case for Systemic Reform, in *Documenting Reforms: Case Studies from India*, ed. S. Narayan, New Delhi: Macmillan, pp. 56-86

2005 International Labor Standards: From Theory to Policy, in Andrew P. Morriss and Samuel Estreicher, ed., *Cross-Border Human Resources, Labor and Employment Issues*: Kluwer Law International, pp. 795-854

Fiscal Policy in India: Lessons and Priorities, (with T.N. Srinivasan), in *A Sustainable Fiscal Policy for India: An International Perspective*, Peter Heller and M. Govinda Rao, ed., Oxford University Press, pp. 393-439

India's Federal Institutions and Economic Reform, (with M. Govinda Rao), in Devesh Kapur and Pratap Bhanu Mehta, eds., *India's Public Institutions: Performance and Design*: Oxford University Press, pp. 351-405

Vengefulness Evolves in Small Groups, (with Daniel Friedman), in *Advances in Understanding Strategic Behaviour: Game Theory, Experiments and Bounded Rationality*, Steffen Huck ed., Palgrave Macmillan, pp. 28-54

Indian Federalism, Economic Reform and Globalization (with T.N. Srinivasan), in Jessica Wallack and T.N. Srinivasan, eds., *Federalism and Economic Reform: International Perspectives*: Cambridge University Press, pp. 301-363

Digital Economy, in *The Internet Encyclopedia, Volume 1*, ed. H. Bidgoli, pp. 477-492

Information Technology and Rural Development in India, in *Integrating the Rural Poor into Markets*, in Bibek Debroy and Amir Ullah Khan, eds., New Delhi: Academic Foundation, pp. 221-246

- Information Technology and India's Economic Development, in *India's Emerging Economy: Performance and Prospects in the 1990's and Beyond*, ed. K. Basu, MIT Press, pp. 223-261
- 2003 Introduction (with S. Marjit), in *Joint Ventures, Technology Transfer and International Investment*, eds. N. Singh and S. Marjit, New Delhi: Oxford University Press, pp. 1-36
- How to Think About Local Government Reform in India (with M.G. Rao), in *Economic Reform and the Liberalisation of the Indian Economy: Essays in Honour of Richard T. Shand*, ed., K.P. Kalirajan. Edward Elgar., pp. 335-390
- The Political Economy of Center-State Fiscal Transfers in India (with M.G. Rao), in *Institutional Elements of Tax Design and Reform*, Washington, DC: World Bank, ed., J. McLaren, pp. 69-123
- The Impact of International Labor Standards: A Survey of Economic Theory, in *International Labor Standards*, ed. K. Basu, et al, Basil Blackwell., pp. 107-181
- Information Technology as an Engine of Broad-Based Growth in India, in *The Knowledge Economy in India*, ed. Parthasarathi Banerjee and Frank-Jürgen Richter, London: Palgrave/Macmillan, pp. 34-57
- Foreign Technology, Spillovers, and R & D Policy (with M. Muniagurria), *International Economic Review*, 1997, reprint in *Joint Ventures, Technology Transfer and International Investment*, eds. N. Singh and S. Marjit, pp. 262-293
- 2001 The Economies and Economics of South Asia: In Search of Lost Time, *International Encyclopedia of Social and Behavioral Sciences South Asian Studies: Economics 22*: pp. 14631-6, eds., Paul B. Baltes and Neil J. Smelser
- The Evolution of Negative Reciprocity (with D. Friedman), in *Evolutionary Controversy in Economics*, ed. Y. Aruka, Tokyo: Springer Verlag, pp. 103-114
- 2000 Indian Fiscal Federalism: Political Economy and Issues for Reform" (with K. Kletzer) in *Institutions, Incentives and Economic Reforms in India*, ed. S. Kahkonen and A. Lanyi, New Delhi: Sage Press, pp. 37-76
- Theories of Sharecropping, reprinted with minor revisions in *Readings in Development Economics, Volume 1: Micro-Theory*, ed. P. Bardhan and C. Udry, MIT Press, pp. 19-71
- 1999 Old Culture, New Knowledge: The Writings of Bhai Mohan Singh Vaid (with A. Singh) in *Sikh Art and Literature*, ed. K. Brown, London: Routledge, pp. 172-180
- 1998 Contest Design and the Objective of the Contest Designer: Sales Promotions, Sporting Events, and Patent Races (with D. Wittman), in *Advances in Applied Microeconomics, Volume 7: Contests*, ed. Michael Baye, Stamford, CT: JAI Press, pp. 139-167
- Cultural Conflict in India: Punjab and Kashmir, in *The Myth of "Ethnic Conflict": Politics, Economics, and "Cultural" Violence* ed. B. Crawford and R. Lipschutz, Berkeley: International and Area Studies, University of California at Berkeley, pp. 320-352

- 1997 Two-Level Negotiations in Bargaining Over Water (with A. Richards) in *Game Theoretical Applications to Economics and Operations Research*, ed. T. Parthasarathy, B. Dutta, J.A.M. Potters, T.E.S. Raghavan, D. Ray and A. Sen, Boston: Kluwer Academic Publishers, pp. 257-273
- The Political Economy of Indian Fiscal Federalism (with K. Kletzer) in *Fiscal Policy in India*, ed. S. Mundle, Oxford University Press, pp. 259-298.
- 1995 Technology and Indian Industry (with S. Marjit) in *Indian Industry: Policies and Performance*, ed. D. Mookherjee, Oxford University Press, pp. 191-235
- 1994 Some Aspects of Innovation and Technological Change in Agriculture, in *Agrarian Questions*, ed. K. Basu, Oxford University Press, pp. 92-129
- 1992 Multinationals, Technology and Government Policy, in *Development Policy and Economic Theory*, ed. K. Basu and P. Nayak, Oxford University Press, pp. 199-238
- 1989 Theories of Sharecropping, in *Economic Theories of Agrarian Institutions*, ed. P. Bardhan (Oxford University Press), pp. 33-72
- 1985 Resale Price Maintenance: A Simple Analysis (with R.E. Grieson), in *Antitrust and Regulation*, ed. R.E. Grieson, pp. 127-133
- 1984 Tenurial Insecurity and Land Improvements (with P. Bardhan), Chapter 8 in *Land, Labor and Rural Poverty*, P. Bardhan (Oxford University Press), pp. 105-111
- 1984 Incentives, Sharecropping, and Cost Sharing (with P. Bardhan), Chapter 7 in *Land, Labor and Rural Poverty*, P. Bardhan (Oxford University Press), pp. 95-104

### Books and Monographs

- 2013 *Oxford Handbook of the Economics of the Pacific Rim*, ed. (with I. Kaur), New York, Oxford University Press, forthcoming
- 2010 *Regional Inequality in India: Trends and Policy Implications*, (with Jake Kendall, R. K. Jain and Jai Chander), Development Research Group Study No. 36, Mumbai: Department of Economic Analysis and Policy, Reserve Bank of India
- 2008 *Waiting To Connect: Indian IT Revolution Bypasses The Domestic Industry*, with Shubhashis Gangopadhyay and Manisha Singh, New Delhi: Lexis-Nexis-Butterworth
- 2005 *Political Economy of Federalism in India*, (with M.G. Rao), New Delhi: Oxford University Press.
- 2003 *Joint Ventures, Multinational Investment and Technology Transfer*, ed. (with S. Marjit), New Delhi: Oxford University Press.

**Book Reviews**

- 2010 *Indian Agriculture: Challenges of Globalization*. Ed., A. Vinayak Reddy and M. Yadagira Charyulu, *Agricultural History*, 84 (3), pp. 418-419
- 2009 *India: The Emerging Giant*, by Arvind Panagariya, *International Review of Economics and Finance*, 18 (3), pp. 535–536
- 2007 *Economic Reforms and Food Security*, by S.C. Babu and A. Gulati, *Journal of Asian Business*
- 2003 *India Working* by Barbara Harriss-White, *International Journal of Punjab Studies*, 10 (1&2), pp. 227-230
- 2001 *Unintended Consequences: The Impact of Factor Endowments, Culture, and Politics on Long-Run Economic Performance*, Deepak Lal, *American Journal of Agricultural Economics*, 83, 3, 795-796.
- 2000 *The Invisible Computer: Why Good Products Can Fail, the Personal Computer Is So Complex, and Information Appliances Are the Solution*, Donald A. Norman, *American Journal of Psychology* (with Dominic W. Massaro), 113, 1, 123-135.
- 1994 *Transfer, Adoption, and Diffusion of Technology for Small and Cottage Industries*, R. Islam, ed., *Pacific Affairs*, 67, 2, Summer, 297-298.
- 1994 *Studying the Sikhs: Issues for North America*, J. Stratton Hawley and G.S. Mann, eds., *Sikh International*, August, 36-37.

**Other**

- 2010- Fortnightly column on global economic trends and the Indian economy, for *Financial Express*, a leading Indian financial daily
- 2008-10 Fortnightly column on global economic trends and the Indian economy, for *Mint*, a leading Indian financial daily
- 2007 India: Going Forward, *Harvard International Review*, special issue on South Asia, January 7  
A Road-Map for Inclusive Growth, *Yojana (Indian Planning Commission Journal)*, 19-22.
- 2006 Fiscal Federalism and Decentralization in India, background paper for World Bank independent evaluation unit, December
- 2005-07 Monthly column on Indian Economic Reform, for *Financial Express* newspaper
- 2004 India's System of Intergovernmental Fiscal Relations, paper prepared for the 10th Anniversary Conference of the Financial and Fiscal Commission of South Africa, August 10-12
- 2003 India's Information Technology Sector: What Contribution to Broader Economic Development? (OECD Development Centre Technical Paper No. 207)  
Can India Survive Globalization? (with T.N. Srinivasan), published at

- www.project-syndicate.org/commentaries/commentary\_text.php?id=1223, July
- Guru Nanak and the Sikh Religion: A Personal Reflection, 1<sup>st</sup> Annual Guru Nanak Lecture, San Jose State University (published as booklet), November
- Information Technology as an Engine of Broad-Based Growth in India: A Case Study of Punjab RGICS Report (published as booklet), May
- 2002 Fiscal Transfers in a Developing Country: The Case of India, (with M. Govinda Rao), paper presented at Birmingham Conference on Fiscal Federalism, January
- 2001 DotCom Deflation: What the Burst Bubble Means for India, <http://news.sawaal.com/expertsays/guest/index163.htm>
- 2000 Union-State Relations: Discussion Paper for the Constitution Review Committee of India (with M. Govinda Rao)
- Building the Foundations of India's New Economy, <http://news.sawaal.com/expertsays/guest/index151.htm>
- 1999 The Past and the Future of Economics in India: In Search of Lost Time, in *The Social Sciences in India: 1947-1997 and Beyond*, Symposium Papers, Center for South Asian Studies, UC Berkeley
- 1998 The Composition of US-East Asia Trade and the East Asian Miracle, *HKCER Letters*, 48, January, 3-4
- 1994 Cost of Wind Energy in California: A Model and Estimates for 1995-2030, report to UC Energy Institute
- 1993 Literature and Society: The Writings of Bhai Mohan Singh Vaid," *Sikh Review*, March
- 1991 Political and Economic Change in the Asian Pacific Rim and South Asia: A Report on a Workshop at the University of California, Santa Cruz, October 20, 1990
- Specification Error and Systematic Response Error in Conditional Energy Demand Models (with P. Ong and R. S. Lee), report to UERG
- 1989 Evaluating Biases in Conditional Energy Demand Models (with P. Ong and S. Holt), report to UERG/CEC.
- 1987 Conditional Energy Demand and Sample Selection Bias (with S. Holt and P. Ong), report to UERG/CEC.

#### WRITINGS IN PROGRESS

- ICTs and Rural Development in India, report to IDEI(I) and RGICS, New Delhi
- Inequality, Coalitions and Collective Action, (with Pranab Bardhan) (under revision)
- The Economic Role of Government: Reform as a Mechanism Design Problem.
- Export Performance Requirements and Multinational Technology Choice (with I. Kohli)

Entry Incentives to Multinationals and Potential Competition (with P. Bardhan)

Government Policy towards Joint Ventures with Multinational Rivalry (with P. Bardhan)

The Role of R&D in Explaining Total Factor Productivity Growth in Japan, Korea and Taiwan (with H. Trieu)

The Economic Role of Government: Property Rights, Externalities and Mechanism Design

### DISSERTATIONS SUPERVISED (MAIN ADVISOR)

"Information Cascades and their Application to Technology Diffusion", Deepali Singhal

"Growth, Technology, Research and Development, and Convergence: The Experience of Japan, South Korea, and Taiwan", Hung Trieu

"Fiscal Decentralization, Public Spending and Economic Growth: The Experience in Post-Reform China", Tao Zhang

"Three Empirical Essays on Trade Policy", Terrie Carolan

(Served on over three dozen other UCSC dissertation committees and oral qualifying exam committees, external PhD examiner for seven dissertations)

### PROFESSIONAL ACTIVITIES

#### Service to Staff or Editorial Board of Scholarly Journals

Refereeing for:

*American Economic Review, American Journal of Agricultural Economics, American Journal of Sociology, Canadian Journal of Economics, Econometrica, Economic Inquiry, Economic Theory, Economics and Politics, Economics Letters, Economics of Governance, Energy Journal, European Economic Review, European Journal of Political Economy, Games and Economic Behavior, International Economic Journal, International Economic Review, International Journal of Game Theory, International Journal of Industrial Organization, International Tax and Public Finance, Japan and the World Economy, Journal of Comparative Economics, Journal of Development Economics, Journal of Economic Behavior and Organization, Journal of Economic Studies, Journal of Economics, Journal of Economics and Business, Journal of Economics and Management Strategy, Journal of Environmental Economics and Management, Journal of Industrial Economics, Journal of International Trade and Economic Development, Journal of Money, Credit and Banking, Journal of Policy Reform, Journal of Public Economic Theory, Journal of Public Economics, Journal of Quantitative Economics, Journal of the European Economic Association, Managerial and Decision Economics, National Tax Journal, Oxford Economic Papers, Quarterly Journal of Economics, Regional Science and Urban Economics, Review of Development Economics, Review of Economic Studies, Southern Economic Journal, World Development.*

**Selected Recent Presentations and Lectures**

- 2013      Indian Federalism and Expenditure Governance, Rockefeller Foundation Bellagio Center, Italy, July
- Foreign Portfolio Flows into India: Firm Level Evidence, International Growth Centre, New Delhi, July
- 2012      Information Technology and Indian Economic Development, Indira Gandhi Institute for Development Research, 25<sup>th</sup> Anniversary Conference, Mumbai, December
- Capital Controls in India, National Institute of Public Finance and Policy, new Delhi, September
- Information Technology and Manufacturing Productivity in India, Brookings-NCAER India Policy Forum, New Delhi, July
- Foreign Direct Investment and Trade Fragmentation in Asia, National Institute of Public Finance and Policy, New Delhi, March
- 2011      Global Slowdown and Economic Policymaking in Emerging Economies, Delhi Economic Conclave, Ministry of Finance, Plenary Panel, December
- Global Financial Architecture: Towards Consensus?, Delhi Economic Conclave, Confederation of Indian Industry, December
- Water Management and Federalism in India, Australian National University, December
- Foreign Investors under Stress: Evidence from India, International Growth Centre, London, September
- India's Economic Growth? What Can We Expect?, The Commonwealth Club, San Francisco, August
- 2010      Inclusive Growth in India, Delhi Economics Conclave, Ministry of Finance, New Delhi, December
- Water Management and Federalism in India, National Institute of Public Finance and Policy, New Delhi, December
- Analyzing the Innovator's Dilemma, Indian Institute of Management (Bangalore), March 5, Bangalore, India
- Analyzing the Innovator's Dilemma, Bay Area Services Science, Management and Engineering Forum, IBM, April, San Carlos, CA

Macroeconomic and Financial Sector Policies: A Research Agenda, Conference on IGC Growth Research Program on India, April 19, New Delhi, India

Monetary policy in India, Conference on IGC Growth Research Program on India, April 20, New Delhi, India

Participant and panelist for “India’s financial sector reforms,” Stanford Center for International Development annual India conference, June 3-4, Stanford, CA

Panel presentation on “India’s Public Finances and Prospects,” BayBrazil Emerging Markets Forum, June 10, Sunnyvale, CA

Impacts of Information Technology Use on Indian Firms, Stanford-SJSU Conference on “The Future of Industry and Innovation in Asia: Firms, Networks and Alliances,” July 8, Stanford University, Stanford, CA

Opening keynote presentation, “Water Choices in India,” Conference on India’s Water Issues, US State Department, July 11, Washington DC

Mitigation Options and Future Government Actions, Conference on India’s Water Issues, US State Department, July 11, Washington DC

India’s trilemma: Financial liberalization, exchange rates and monetary policy, Ministry of Finance-National Institute of Public Finance and Policy Conference, September 1, New Delhi, India

2009 Expenditure Governance and Information Technology: Assessing India’s Situation and Potential, conference on From Outlays to Outcomes, CPR-IFMR, New Delhi, August

International water cooperation in South Asia,” Conference on India’s Foreign Policy, Center for Advanced Study of India, University of Pennsylvania, April, Philadelphia, PA

Panelist and presenter on “Highlights of India’s Budget,” KPMG-US India Business Council, July, Menlo Park, CA

Participant and discussant for “India’s management of the economic crisis,” Stanford Center for International Development annual India conference, October, Stanford, CA

Participant, Santa Cruz Institute for International Economics Annual Conference, October, Santa Cruz, CA

Rediscovering India, SAGE-Madras School of Economics Annual Distinguished Lecture, November, Chennai, India

Political administration in India, Individual presentation, US State Department, December, Washington DC

- Political Economy of India's States, US State Department, March, Washington, DC
- 2008 Investing in India, US State Department, Washington, DC, October  
 India's 13<sup>th</sup> Finance Commission: Issues and Agenda, World Bank, Washington DC, October  
 Indian capital control liberalization: Evidence from NDF markets, NIPFP-DEA Program on Capital Flows 2<sup>nd</sup> and 3<sup>rd</sup> Meetings, New Delhi, March and September  
 India's development strategy, WIDER, Helsinki, June  
 International water cooperation in South Asia, University of Pennsylvania, April
- 2007 Rule and Reform in India and China, Harvard University  
 IT and India's development: Annual South Asia conference, University of Wisconsin, Madison  
 Panelist, Brookings-IMF Forum on India's Growth, Washington DC  
 Fiscal Federalism, Decentralization and Health Services Delivery in India, Harvard School of Public Health  
 Speaker, India's Budget, 2007-08, The Indus Entrepreneurs, Santa Clara, CA  
 Panelist, The Global Economy, The Indus Entrepreneurs Annual Conference, opening keynote panel  
 Services-Led Industrialization in India, Institute for South Asian Studies, National University of Singapore  
 Decentralization, Information Technology and Rural Water Supply, World Bank, New Delhi  
 Regional Inequality in India, Reserve Bank of India, Mumbai  
 Discussant on Indian Electricity Reforms, India Policy Forum, New Delhi, India  
 Decentralization in India, Democracy and Governance conference, UC Berkeley
- 2006 Panelist, CGIRS workshop on Transforming Asia in the 21<sup>st</sup> Century  
 Services-Led Industrialization in India, Workshop on Industrial Development for the 21<sup>st</sup> Century, UN-DESA, New York  
 Information Technology and Development in India, World Information Technology Congress, Austin, TX  
 Federalism and India's Economic Development, Pan-Asia conference, Stanford University  
 The Interpretation and Significance of Guru Arjan Dev's Martyrdom, International Conference on Guru Arjan, San Jose State University  
 Reform of State Level Finances in India, Observer Research Foundation Conference, New Delhi

- 2005      An Analytical Framework For Services Science, Services Innovation Conference, e-Business Research Center, Pennsylvania State University
- The Idea of South Asia and the Role of the Middle Class, International conference on South Asia, Institute for South Asian Studies, National University of Singapore
- Management Education, Trends and Implications for India, conference on Higher Education, Rajiv Gandhi Institute for Contemporary Studies, New Delhi
- Speaker, India's Budget, 2005-06, The Indus Entrepreneurs, Santa Clara, CA
- Regional Inequality in India, Institute for South Asian Studies, National University of Singapore
- The Idea of South Asia and the Role of the Middle Class, National Institute for Public Finance and Policy, New Delhi

### Other Professional Activities

- Infosys Prize Jury, Social Sciences (Economics) 2012
- Advisory Board, The Indus Entrepreneurs Economic Forum
- Treasurer, Sikh Music Heritage Institute
- Legal expert witness on political economy of tax reform and economic growth in India
- Consulting and/or academic (pro bono) advising for technology firms: PostX, Jareva, Evalueserve, Drishtee, Seroia Research
- Editorial Advisory Board, *Journal of Punjab Studies*
- Editorial Board, *Journal of International Trade and Economic Development*
- Member, University of California Institute on Global Conflict and Cooperation, Systemwide Committee, 2000-2003
- Consultant, World Bank, project on decentralization in India, 2006; prepared background paper on local government reform in India for workshop on decentralization, 1997; research on water and federal issues in India, 1996
- Member, University of California Pacific Rim Research Program Executive Committee, 1994-97
- Referee, National Science Foundation, various years
- Referee, University of California Energy Institute, various years
- Trustee, Sikh Foundation Board (1998-2001)
- Visiting Scholar, Center for Research on Economic Development and Policy Reform, Stanford University, Fall 1998 and Fall 1999
- Visiting Fellow, Department of Economics, Research School of Pacific and Asian Studies, Australian National University, July-August, 1997
- Senior Visiting Fellow, Centre for Development Economics, Delhi School of Economics,

December 1995-January 1996

Visiting Fellow, Indian Statistical Institute, Delhi, February-March, 1994

Visiting Fellow, Indian Statistical Institute, Delhi, December, 1992

Visiting Fellow, Delhi School of Economics, University of Delhi, Fall, 1984, taught two courses on "Uncertainty, Game Theory and Industrial Organization"

Visiting Fellow, Erasmus University, Rotterdam, Summer, 1984

## **TEACHING EXPERIENCE**

### **Undergraduate**

Introductory Microeconomics, Intermediate Microeconomics, Statistical Methods, Econometrics, Mathematics for Economists, Managerial Economics, Business Strategy, Economics and Management of Technology and Innovation, Economics of Electronic Commerce, E-Commerce Strategy, Economic Development, Poverty Wealth and Inequality, Corporate Finance

### **Master's**

Applied Microeconomics, Econometric Theory, Applied Econometrics, Forecasting, Industrial Organization, Mathematics for Economists

### **Doctoral**

Microeconomic Theory (all three courses in year-long sequence), Applied Econometrics

**REFERENCES**

Professor Kaushik Basu  
Chief Economist  
World Bank  
Washington, DC  
USA  
kb40@cornell.edu

Professor Devesh Kapur  
Director, Center for Advanced Study of India  
University of Pennsylvania  
3600 Market Street, Suite 560  
Philadelphia, PA 19104-2653  
USA  
dkapur@sas.upenn.edu

Dr. M. Govinda Rao  
Member, Fourteenth Finance Commission of India  
B 14/A Chatrapati Shivaji Bhawan  
Qutub Institutional Area  
New Delhi-11016  
INDIA  
membergr-ffc@nic.in

Professor T.N. Srinivasan  
Department of Economics and Economic Growth Center  
Yale University  
27 Hillhouse Avenue, P.O. Box 208269  
New Haven, CT 06520  
USA  
t.srinivasan@yale.edu