

## CURRICULUM VITAE

Name : Bishwanath Goldar  
Age : 73  
Sex : Male  
Marital Status : Married, Two children

Affiliation: Non-Resident Senior Fellow, Institute of Economic Growth, University of Delhi Enclave, North Campus, Delhi – 110 007, India

e-mail: [b\\_goldar77@yahoo.com](mailto:b_goldar77@yahoo.com); [bgoldar49@iegindia.org](mailto:bgoldar49@iegindia.org)

### **Academic Qualifications**

Ph.D. Economics, University of Delhi, 1982

M.A., Economics, Delhi School of Economics, University of Delhi, 1969-71.

### **Professional Experience**

Research Associate, Institute of Economic Growth, Delhi (1979-82), Reader, Institute of Economic Growth, Delhi (1982-88 and 1990-96); Senior Fellow, National Institute of Public Finance and Policy, New Delhi (1988-90); Professor, Institute of Economic Growth, Delhi (1996-2014); Professor, Indian Council for Research on International Economic Relations (2003-04); Visiting Professor, Centre for International Trade and Development, School of International Studies, Jawaharlal Nehru University, New Delhi (2012-13), ICSSR National Fellow (2015 - 2016)

Visiting Fellow at the Institute of Economic Research, Hitotsubashi University, Tokyo (June-August, 1992) and the Institute of Developing Economies, Tokyo (May-June, 1993).

### **Membership of Official Committee/Commission**

Former Member, National Statistical Commission

Non-official Member, Standing Committee on Statistics, Ministry of Statistics and Programme Implementation, Government of India.

### **Areas of Specialization/Interest**

Industrial Economics, Trade and Foreign Investment, Environmental Economics

## **Books / edited books**

*Productivity Growth in Indian Industry*, Allied Publishers, New Delhi, 1986.

*India's Economy and Growth*, Sage Publications, New Delhi, 2010 (edited by Pulin Nayak, Bishwanath Goldar and Pradeep Agrawal).

## **Select Publications**

### ***Productivity: Indian Industry and Indian Economy***

'Productivity Trends in Indian Manufacturing Industry: 1951-78,' *Indian Economic Review*, 18 (1), January-June 1983, pp. 73-99.

'Unit Size and Economic Efficiency in Small Scale Washing Soap Industry in India,' *Artha Vijnana*, 7(1), March 1985, pp. 21-40.

*Productivity Growth in Indian Industry*, Allied Publishers, New Delhi, 1986.

'Import Substitution, Industrial Concentration and Productivity Growth in Indian Manufacturing,' *Oxford Bulletin of Economics and Statistics*, 48(2), May 1986, pp. 143-64.

'Import Liberalisation and Industrial Efficiency,' in A. Guha (ed.) *Economic Liberalization, Industrial Structure and Growth in India*, Oxford University Press, Delhi, 1990.

'Productivity and Factor Use Efficiency in Indian Industry,' in A. Ghosh, K.K. Subramanian, M. Eapen and H.A. Drabu (eds.), *Indian Industrialization: Structure and Policy Issues*, Oxford University Press, Delhi, 1992.

'Technology Acquisition and Productivity Growth: A Study of Large Chemical Firms in India,' *Asian Economic Review*, 43 (3), December 2001.

'Total Factor Productivity Growth in Indian Industry: A Review of Studies,' in B.S. Minhas (ed.), *National Income Accounts and Data Systems*, Delhi: Oxford University Press, 2002 (co-author: Arup Mitra).

'TFP Growth in the Indian Manufacturing in the 1980s,' *Economic and Political Weekly*, 37(49), 2002.

'Import Liberalization and Productivity Growth in Indian Manufacturing Industries in the 1990s,' *Developing Economies*, December 2003 (co-author: Anita Kumari).

'Indian Manufacturing: Productivity Trends in Pre- and Post-Reform Periods,' *Economic and Political Weekly*, 29 (no. 46 and 47), November 2004.

'Manufacturing Productivity in Indian States: Does Investment Climate Matter?' *Economic and Political Weekly*, June 11, 2005 (co-author: C. Veeramani)

'Wage-Productivity Relationship in Organized Manufacturing in India: A state-wise analysis,' *Indian Journal of Labour Economics*, 48(2), April-June 2005, pp. 259-272 (co-author: Rashmi Banga).

‘Small versus large manufacturing units: How efficient are they?’ *Journal of Asia Pacific Economy*, 18 (4), 2013 (co-author: Arup Mitra).

‘Productivity in Indian Manufacturing in the Post-Reform Period: A review of studies,’ in Vinish Kathuria, S.N. Rajesh Raj and Kunal Sen (eds.), *Productivity in Indian Manufacturing: Measurement, Methods and Analysis*, Routledge, New Delhi, 2014.

‘Productivity in Indian Manufacturing (1999-2011), Accounting for Imported Materials Input,’ *Economic and Political Weekly*, 50(35), 29 August 2015.

‘Productivity growth in India since the 1980s: the KLEMS approach,’ *Indian Economic Review*, October 2017 (coauthors: K. L. Krishna, Suresh Chand Aggarwal, Deb Kusum Das, Abdul Azeez Erumban, and Pilu Chandra Das).

‘Intangible Capital and Firm Productivity: A Study of Indian Corporate Sector Firms,’ *South Asia Economic Journal*, 18 (2): 246-275, 2017 (co-author: Yashobanta Parida).

‘Source of Growth and Changes in the Structure of the Indian Economy since 1980,’ in Deb Kusum Das (ed), *Productivity Dynamics in Emerging and Industrialized Countries*, Routledge, 2018.

‘Trade liberalization and productivity of Indian manufacturing firms,’ *Indian Growth and Development Review*, 2020,13(1): 73-98, <https://doi.org/10.1108/IGDR-10-2018-0108> (co-authors: Isha Chawla, Smruti Ranjan Behera).

‘Services input and productivity in Indian manufacturing plants,’ *Indian Growth and Development Review*, 2020, 13 (1): 99-124. <https://doi.org/10.1108/IGDR-11-2018-0117>

‘Manufacturing Productivity in India: The Role of Foreign Sourcing of Inputs and Domestic Capacity Building,’ In Fraumeni, B. (Ed.), *Measuring Economic Growth and Productivity: Foundations, KLEMS Production Models, and Extensions*, pp. 95-116. 2020 (coauthors: K.L. Krishna, D.K. Das, S.C. Aggarwal, A.A. Erumban, & P.C. Das).

‘Did Trade Liberalization Boost Total Factor Productivity Growth in Manufacturing in India in the 1990s?’ *International Productivity Monitor*, No. 43, Fall 2022.

‘Sources of India’s Post-reform Economic Growth: An Analysis Based on India KLEMS Database.’ *Economic and Political Weekly*, vol 57, no. 31., 2022. (Co-authors: K. L. Krishna, Abdul A. Erumban, Pilu Chandra Das and Suresh Chand Aggarwal).

‘Determinants of Total Factor Productivity Growth in India,’ *Theoretical Economics Letters*, Vol.13 No.3, 2023 (coauthors: Sadhan Kumar Chattopadhyay, Siddhartha Nath, Sreerupa Sengupta, and Pilu Chandra Das)

### ***Other Industry Studies***

‘Employment Growth in Indian Industry,’ *Indian Journal of Industrial Relations*, 22 (3), January 1987, pp. 271-85.

‘Relative Efficiency of Modern Small Scale Industry in India,’ in K.B. Suri (ed.) *Small Scale Enterprises in Industrial Development: The Indian Experience*, Sage Publications, New Delhi, 1988.

‘Substitution among Labour, Capital and Energy in Indian Industries,’ *Journal of Quantitative Economics*, 7(1), January 1991, pp. 65-78 (co-author: H. Mukhopadhyay).

‘Ancillarisation and Subcontracting in Indian Industry,’ *Studies in Industrial Development*, Paper no. 18, Ministry of Industry, Government of India, October 1995 (co-authors: D.B. Gupta, R.S. Bora, H.S. Gill and Anuradha Krishna).

‘Econometrics of Indian Industry,’ in K.L. Krishna (ed.), *Econometric Applications in India*, Delhi: Oxford University Press, 1997.

‘Economic Reforms and R&D Expenditure in Industrial Firms in India,’ *Indian Economic Journal*, 46(2): 60-75, October-December, 1998 (co-author: V.S. Renganathan).

‘Employment Growth in Organised Manufacturing,’ *Economic and Political Weekly*, April 1-7, 2000.

‘Contribution of Services to Output Growth and Productivity in Indian Manufacturing: Pre- and Post-Reform,’ *Economic and Political Weekly*, June 30, 2007 (co-author: Rashmi Banga).

‘Modernization of Small and Medium Scale Industries in India,’ in K. Odaka and Y. Kiyokawa (eds.), *Small and Medium Scale Industry in India and the Model of Japan*, New Delhi: Allied Publishers, 2008.

‘Subcontracting in Indian Industry: A study of small-large industry linkage,’ in K. Odaka and Y. Kiyokawa (eds.), *Small and Medium Scale Industry in India and the Model of Japan*, New Delhi: Allied Publishers, 2008 (co-author: D.B. Gupta).

‘Import Penetration and Capacity Utilization in Indian Industries,’ Working Paper no. E/293/2008, Institute of Economic Growth, Delhi, 2008 (co-author: V.S. Renganathan)

‘Performance of Unorganized Manufacturing in the Post Reform Period’ in Keshab Das (ed.), *Micro and Small Enterprises in India: The Era of Reforms*, Routledge, New Delhi, 2010 (co-authors: Arup Mitra and Anita Kumari).

‘Growth in Organised Manufacturing Employment in Recent Years,’ *Economic and Political Weekly*, 46 (7), February 12, 2011.

‘Informalization of Industrial Labor in India: Effects of labor market rigidities and import competition,’ *Developing Economies*, 50(2): 141-69, 2012 (co-author: Suresh Chand Aggarwal).

‘Elasticity of Substitution between Capital and Labour Inputs in Manufacturing Industries of the Indian Economy,’ *Journal of Industrial Statistics*. 2 (2), 2013. pp.169-194 (co-authors: Basanta K. Pradhan and Akhilesh K. Sharma).

‘Employment of Casual Workers in Organized Manufacturing in India: Analysis of Trends and the Impact of Labour Reforms,’ *Indian Journal of Labour Economics*, 57(3), 2014, pp.283-302 (co-author: Suresh Chand Aggarwal).

‘Sustaining a High Rate of Industrial Growth in India in the Next 10 Years,’ in Pradeep Agrawal (ed.), *Reviving Growth in India*, Cambridge University Press, Delhi, 2015, pp. 47-81.

‘Growth in Gross Value Added of Indian Manufacturing: 2011–12 Series vs. 2004–05 Series,’ *Economic & Political Weekly*, 50(21), May 23, 2015, pp. 10-13.

‘Employment and Wages in Indian Manufacturing: Post-reform Performance,’ *Employment Working Paper* no. 185, Employment and Labour Market Policy Branch, International Labour Office (ILO), June 2015 (co-author: Amit Sadhukhan).

‘Gender Discrimination in Manufacturing Employment in India, 1999-2009,’ in K.V. Ramaswamy (ed.), *Labour, Employment and Economic Growth in India*, Delhi: Cambridge University Press, pp. 181-218, 2015 (co-author: Suresh Chand Aggarwal).

‘Post-Reforms Trends in Growth and Productivity in Indian Manufacturing,’ in C. Veeramani and R. Nagaraj (eds.), *International Trade and Industrial Development in India*, Orient BlackSwan, New Delhi, 2016, pp.45-102 (co-author: Sreerupa Sengupta).

‘Contract Labour in Organized Manufacturing in India,’ in K. P. Kannan, Rajendra P Mamgain and Preet Rustagi (eds.), *Labour and Development- Essays in honour of Professor T S Papola*, Academic Foundation, New Delhi, 2016 (co-author: Suresh R.).

‘Employment Growth in India’s Organised Manufacturing: Trends and Determinants,’ *Review of Development and Change*, 2015 (co-author: Maitri Ghosh).

‘Manufacturing growth in India in recent years: Is it getting overstated in India’s new GDP series?’ *Indian Growth and Development Review*, 2016.

‘Do Technological Conditions of Production Explain Industrial Growth? The Indian Manufacturing, 1998–1999 to 2007–2008,’ *Journal of Quantitative Economics*, 2017 (coauthors: Alokesh Barua, Himani Sharma, and Priyanta Ghosh).

‘Structural Changes in Manufacturing Employment in India, 1999-2011,’ SSRN Paper, 2017 (coauthor: Suresh Chand Aggarwal)

‘Growth, Productivity and Job Creation in Indian Manufacturing,’ in Uma Kapila (ed), *India’s Economy, Pre-liberalisation to GST: Essays in honour of Raj Kapila*, Academic Foundation, 2017.

‘Growth in Output, Employment and Productivity in Indian Manufacturing, 1993-2013: A Comparative Study of Indian States,’ in Arup Mitra (ed.), *Economic growth in India and Its Many Dimensions*, Orient Blackswan Private Limited, 2018, pp.83-112 (co-author: Anita Kumari).

‘Sustaining India’s Manufacturing Sector Growth in the Face of Increasing Competition from Chinese Imports,’ in Pradeep Agrawal (ed.), *Sustaining High Growth in India*, Cambridge University Press, pp.147-174, 2018 (co-author: Yashobanta Parida).

‘Use of Contract Labour in India’s Organized Manufacturing: Role of Import Competition and Labour Regulations,’ in Niti Mehta and Anita Arya (eds.), *Role of Public Policy in Development Process: Emerging Socioeconomic Scenario in the Indian Economy*, New Delhi: Academic Foundation, 2018.

‘Labour regulations and Informalization of Industrial Labour in India,’ in K. R. Shyam Sundar (ed.), *Globalization, Labour Market Institutions, Processes and Policies in India: Essays in Honour of Lalit K. Deshpande*, Palgrave Macmillan, pp.109-141 (Co-author: Suresh Chand Aggarwal).

‘Structure and growth of employment: evidence from India KLEMS data,’ *Indian Growth and Development Review*, vol 12 (no. 2), pp. 202-228, 2019 (Co-author: Suresh Chand Aggarwal).

‘Trends in Employment, Productivity, Real Wages and Labour Standards in Indian Manufacturing in Recent Years,’ *Indian Journal of Labour Economics*, 2023 (Co-author: Suresh Chand Aggarwal).

‘Export Participation and Employment of Contract Workers in Organized Manufacturing Plants in India.’ *Journal of South Asian Development*, 2023.

### ***Trade and Foreign Direct Investment***

‘Determinants of Iron and Steel Exports,’ *Developing Economies*, 23(1), March 1985, pp. 40-52 (co-author: R.N. Bhardwaj).

‘Determinants of India's Export Performance in Engineering Products, 1960-79,’ *Developing Economies*, 27(1), March 1989, pp. 3-18.

‘Structure of Nominal Tariff Rates in India,’ *Studies in Industrial Development*, paper no. 3, Ministry of Industry, Government of India, July 1992 (co-authors: A.V.L. Narayana and Hasheem N. Saleem).

‘India's Tariff Structure: Effective Rates of Protection of Indian Industries,’ *Studies in Industrial Development*, Paper no. 5, Ministry of Industry, Government of India, October 1992 (co-author: Hasheem N. Saleem).

‘Study of India's Tariff Structure,’ *Studies in Industrial Development*, Paper no. 12, Ministry of Industry, Government of India, November 1994 (co-author: Hasheem N. Saleem).

‘Incidence of Tariff: The Case of India, 1982-93,’ *Applied Economic Letters*, vol. 4, 1997, pp 583-86. (co-author: Hasheem N. Saleem).

‘Foreign Direct Investment in Asia,’ *Economic and Political Weekly*, May 29, 1999 (co-author: Etsuro Ishigami).

‘Trade Liberalisation and Employment: The Case of India,’ *Employment paper*, no. 2002/34, ILO, Geneva, 2002.

‘Trade Liberalisation and Real Wages in Organised Manufacturing Industries in India,’ in A. Karnik and L.G. Burange (eds). *Economic Policies and the Emerging Scenario: Challenges to Government and Industry*, Mumbai: Himalaya, 2004.

‘Ownership and Efficiency in Engineering Firms in India, 1990-91 to 1999-2000,’ *Economic and Political Weekly*, January 31-February 6, 2004 (co-authors: V.S. Renganathan and Rashmi Banga).

‘Commercial Presence in the Hospital Sector under GATS: A Case Study of India,’ *Journal of International and Area Studies*, 11(2), 2004, pp. 17-43 (co-author: Indrani Gupta)

‘Trade Liberalization and Price-Cost Margin in Indian Industries,’ *Developing Economies*, 43(3), September 2005 (co-author: Suresh Chand Aggarwal).

'Export Intensity of Indian Industrial Firms in the Post-Reform Period,' in S.R. Hashim, K.S. Chalapati Rao, K.V.K. Ranganathan, and M.R. Murty (eds), *Indian Industrial Development and Globalisation: Essays in Honour of Professor S.K. Goyal*, New Delhi: Academic Foundation, 2009 (co-author: Atsushi Kato).

'Import Penetration and Price-Cost Margins in Indian Manufacturing Industries,' *Indian Economic Journal*, 56(2), July-September, 2008, pp. 166-91 (co-author: Atsushi Kato).

'Impact of Trade Liberalization on Foreign Direct Investment in Indian Industries,' in S. Mahendra Dev and N. Chandrasekhara Rao (eds.) *India: Perspectives on Equitable Development*, Academic Foundation, New Delhi, 2009 (co-author: Rashmi Banga).

'Impact of Trade on Employment Generation in Manufacturing in India,' *Working Paper* no. E/297/2009, Institute of Economic Growth, Delhi, 2009.

'Trade Liberalization and Labour Demand Elasticity in Indian Manufacturing,' *Economic and Political Weekly*, August 2009, pp. 51-57.

'Foreign Direct Investment and Technology Spillover: An evaluation across different clusters in India,' *Working Paper* no. 200, Centre for Development Economics, Delhi School of Economics, August 2011 (co-authors: Smruti Ranjan Behera and Pami Dua).

'Impact of tariff reduction according to Doha modalities on India's trade of agricultural products,' *Economic and Political Weekly*, 47 (no. 2), January 14, 2012, pp. 57-64 (co-authors: Devender Pratap and Yashobanta Parida)

'Foreign Direct Investment and Technology spillover: Evidence across Indian Manufacturing Industries,' *Singapore Economic Review*, 57(2), 2012 (co-authors: Smruti Ranjan Behera and Pami Dua).

'Determinants of Import Intensity of India's Manufactured Exports Under the New Policy Regime,' *Indian Economic Review*, 48 (1), 2013.

'R & D intensity and exports: A study of Indian pharmaceutical firms,' *Innovation and Development* (Special Issue: Innovation and Global Competitiveness: Case of India's Manufacturing Sector), 3 (2), 2013.

'The European Union and India Free Trade Agreement Negotiations: Economic Dimensions,' in Manish Thapa, Jakub Zajackowshi and Jivanta Schottli (eds), *India in the Contemporary World: Polity, Economy and International Relations*, Routledge, London, 2014.

'Foreign Investment in Indian Industrial Firms and Its Impact on Firm Performance,' *Journal of Industrial Statistics*, 4(1), March 2015, pp.1-19 (co-author: Akhilesh Kumar Sharma).

'Direction of Outward FDI of Indian Manufacturing Firms: Influence of Technology and Firm Productivity,' in Filip De Beule and K. Narayanan (eds), *Globalization of Indian Industries: Productivity, Exports and Investment*, Singapore, Springer, 2016, pp. 71-96.

'Impact of trade reforms on price-cost margins in Indian manufacturing firms,' *Indian Journal of Economics*, Special Centennial Issue, July 2016.

‘Export Orientation, Import Competition and Plant Survival in Indian Manufacturing,’ *Journal of International Trade*, 2016 (coauthor: Sonia Mukherjee).

‘India’s linkages into global value chains: The role of imported services,’ In Shah, S., Bosworth, B. and Muralidharan, K. (eds.), *India Policy Forum 2017-18*, NCAER, New Delhi: Sage Publications, pp.107-64, 2018. (Co-authors: Rashmi Banga and Karishma Banga).

‘Country Origin of Foreign Direct Investment in Indian Manufacturing and Its Impact on Productivity of Domestic Firms,’ in N.S. Siddharthan and K. Narayanan (eds), *FDI, Technology and Innovation*, Springer, 2020, pp. 13-55. (co-author: Karishma Banga) [https://doi.org/10.1007/978-981-15-3611-3\\_2](https://doi.org/10.1007/978-981-15-3611-3_2)

‘Domestic Versus Imported Contents in Exports: The Case of India’s Merchandise Trade’. *Journal of South Asian Development*, 15(1) 62–96, 2020. (Co-authors: Deb Kusum Das, Pilu Chandra Das, and Neha Gupta).

‘Productivity, Competitiveness and Export Performance: A Plant-Level Analysis of India’s Wearing Apparel Industry. In: Seema Bathla and Elumalai Kannan (eds), *Agro and Food Processing Industry in India: Inter-sectoral Linkages, Employment, Productivity and Competitiveness*, pp. 345-362. *Indian Studies in Business and Economics*, Springer Nature, Singapore, 2021. (co-author: Yashobanta Parida).

‘Impact of trade reforms on labour income share in Indian manufacturing.’ In: Rajesh Raj S. N. and Komol Singha (eds.), *The Routledge Handbook of Post-Reform Indian Economy*, pp. 135-156. Routledge, Taylor and Francis Group, London and New York, 2022.

*Exports and Growth in Indian Manufacturing: An Econometric Analysis*, ISID Working Paper no. 247, Institute for Studies in Industrial Development, New Delhi, June 2022.

‘ICT Investment, Adoption of ISO 14000 Certification, and Export Performance in Indian Manufacturing Plants,’ *Journal of Quantitative Economics*, 2023.

### ***Environmental Economics***

‘Water Pollution Abatement Cost Function: Methodological Issues and An Application to Small-Scale Factories in An Industrial Estate in India,’ *Environment and Development Economics*, Vol. 6, February 2001, pp. 103-22 (co-authors: Smita Misra and Badal Mukherji).

‘Valuation of Environmental Goods: Correcting for Bias in Contingent Valuation Studies based on Willingness-to-Accept,’ *American Journal of Agricultural Economics*, 83(1), February 2001, pp.150-56 (co-author: Smita Misra).

*Sustainable development framework for India: the case of water resources*, Report prepared for UN University, Tokyo, October 2000 (co-author: Kanchan Chopra).

‘Water Pricing and Abatement of Industrial Water Pollution: A Study of Distilleries in India,’ *Environmental Economics and Policy Studies*, 4(2), 2001 (co-author: Rita Pandey).



‘Sustainable Use of Water in India: Implications for Alternative Scenarios for 2020,’ in K. Prasad (ed), *Water Resources and Sustainable development*, Delhi: Shipra Publications, 2003 (co-author: Kanchan Chopra).

‘Water Use in Indian Industry: Estimates of value of water and price elasticity of demand,’ in K. Chopra, C.H. Hanumantha Rao and R. Sengupta (eds.), *Water Resources, Sustainable Livelihoods and Eco-System Services*, New Delhi: Concept Publishing Company, 2003.

*Fighting Arsenic – Listening to Rural Communities: Willingness to Pay for Arsenic-free, Safe Drinking Water in Bangladesh*, Water and Sanitation Program – South Asia, August 2003 (co-authors: J. Ahmad, Smita Misra and M. Jakariya)

‘Impact of informal regulation of pollution on water quality in rivers in India,’ *Journal of Environmental Management*, 73(2), 2004, pp. 117-130 (co-author: Nandini Banerjee).

‘Value of arsenic-free drinking water to rural households in Bangladesh,’ *Journal of Environmental Management*, 74 (2), 2005, pp. 173–185 (co-authors: Junaid Ahmad and Smita Misra).

‘Do stock markets penalize environment-unfriendly behaviour? Evidence from India,’ *Ecological Economics*, 52(1):81– 95, 2005 (co-author: Shreekant Gupta).

‘Rural Communities’ Preferences for Arsenic Mitigation Options in Bangladesh,’ *Journal of Water and Health*, 04-4, 2006, pp. 463-477 (co-authors: Junaid Ahmed and Smita Misra).

‘Likely Impact of Reforming Water Supply and Sewerage Services in Delhi,’ *Economic and Political Weekly*, 43(41): 57-66, October 11, 2008 (co-author: Smita Misra).

‘Impact of Environmental Management Practices on Profitability and Market Value of Indian Industrial Firms,’ in Raj Kumar Sen (ed.), *Environment, Ecology and Sustainable Economic Development*, Deep and Deep, New Delhi, 2011.

‘Energy Intensity of Indian Manufacturing Firms: Effect of Energy Prices, Technology and Firm Characteristics,’ *Science, Technology and Society*, 16(3): 351-72, 2011.

‘Energy Use Efficiency of India’s Organised Manufacturing,’ *Review of Market Integration*. 5 (2), August 2013, pp. 131 - 154.

‘Scope for Reducing CO<sub>2</sub> Emissions of Indian Manufacturing: Its Likely Impact on Export Competitiveness,’ *Journal of International Commerce, Economics and Policy*, 6(3) (27 pages), 2015 (Co-author: Meera Bhalla).

‘Reduction in Carbon Emissions Intensity and Impact on Export Competitiveness: Evidence from Indian Manufacturing Firms’ *Journal of International Commerce, Economics and Policy* 8(2), 1750012 (2017), (co-authors: Yashobanta Parida and Deepika Sehdev)

‘Water Quality in Indian Rivers: Influence of Economic Development, Informal Regulation and Income Inequality,’ in Vikram Dayal, Anantha Duraiappah and Nandan Nawn (eds.), *Ecology, Economy and Society: Essays in Honour of Kanchan Chopra*, pp. 137-163, Springer, 2018 (Co-author: Amrita Goldar).

Environmental performance and capital markets--evidence from India, Working paper no. 303, Centre for Development Economics, Delhi School of Economics (Co-authors: Shreekant Gupta and Shubham Dang)

'Impact of export intensity on energy intensity in manufacturing plants: Evidence from India.' *Journal of International Trade and Economic Development*, 2022. (Co-author: Amrita Goldar).

'What factors drive industrial plants in emerging economies to adopt ISO 14000 environmental management standards: Evidence from the Indian organized manufacturing sector'. *Environmental Development* 44, 2022. (Co-author: Piyali Majumder).

### ***Miscellaneous***

'Optimal Programs of Capital Accumulation Under Exogenous Embodied Technical Change', *Journal of Economic Theory*, 7(2), February 1974, pp. 224-29.

'India: Whither Reform?' in K. Odaka and J. Teranishi (edited), *Markets and Government: In Search of Better Coordination*, Maruzen Co. Ltd, Tokyo, 1998.

'Employment and Poverty in Rural India: A Study of the NSS Regions in the 1990's,' in M.S. Bhatt (ed.), *Poverty and Food Security in India: Problem and Policies*, New Delhi: Aakar Books, 2004 (co-author: S. Sakthivel).

'Female Labour Supply in Rural India: An Econometric Analysis,' *Indian Journal of Labour Economics*, 49(2), April-June 2006, pp.293-310 (co-author: Purnamita Dasgupta).

'Productivity Increase and Changing Sectoral Composition: Contribution to Economic Growth in India,' in Pulin Nayak, Bishwanath Goldar and Pradeep Agrawal (eds.), *India's Economy and Growth*, Sage Publications, New Delhi, 2010 (co-author: Arup Mitra).

'Population Ageing and Its Implications on the Labour Market: The South Asian Experience,' in Moneer Alam and Armando Barrierntos (eds.) *Demographics, Employment and Old Age Security* Macmillan, Delhi, 2010 (co-author: Nilabja Ghosh and Arup Mitra).

'Wages and Wage Share in India During the Post Reform Period,' *Indian Journal of Labour Economics*, 56 (1), 2013.

'Globalisation, Growth and Employment in the Organised Sector of the Indian Economy,' Working Paper no. 06/2014, Institute for Human Development, 2014.

'Costing for Elevation in Development Expenditure: Illustrative Evidence from India.' *Journal of Quantitative Economics*, 2017 (co-author: Purnamita Dasgupta).