

# **AZAM CHAUDHRY**

# Pro-Rector Professor and Dean, Faculty of Economics Lahore School of Economics

# WTO Chair for Pakistan

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## **EDUCATION**

Sept. 1997-May 2002	<ul> <li>BROWN UNIVERSITY, Providence, Rhode Island, USA.</li> <li>Ph.D. in Economics (June 2002).</li> <li>M.A. in Economics (June 1998).</li> <li>Specialized in International Trade, Economic Growth, Macroeconomics and Econometrics.</li> </ul>
Sept. 1991-May 1993	<ul><li>LONDON SCHOOL OF ECONOMICS, London, United Kingdom.</li><li>Bachelor of Science (Hons) in Economics.</li><li>Specialized in Monetary Economics and Econometrics.</li></ul>

### **EMPLOYMENT**

Sept. 2005-present	LAHORE SCHOOL OF ECONOMICS, Lahore, Pakistan
	<ul> <li>Pro-Rector</li> <li>Dean, Faculty of Economics.</li> <li>Co-Director, Innovation and Technology Center.</li> <li>Editor of the Lahore Journal of Economics, bi-annual scholarly journal cited in the JEL.</li> <li>Teaching undergraduate and graduate economics courses.</li> <li>Responsible for development of all undergraduate and graduate curriculum and research in the Department of Economics.</li> </ul>
Nov. 2004-Sept 2005	MULTILATERAL INVESTMENT GUARANTEE AGENCY, Economic Policy Group, World Bank, Washington D.C.
	• Economist responsible for creating and maintaining risk rating model for 150 countries used in pricing of investment insurance.

	• Conducted risk rating missions to Afghanistan and Pakistan, in order to assess risk and determine appropriate investment insurance premia.
Oct. 2002-May 2004	<b>INTERNATIONAL FINANCE CORPORATION,</b> Economics Department, World Bank, Washington D.C.
	<ul> <li>Economist responsible for analyzing the business environment in developing countries with particular emphasis on SMEs and the skill shortages they face.</li> <li>Responsible for economic environment and country risk rating meetings of the IFC Economics Department, evaluating the local investment climate of approximately 170 countries.</li> <li>Responsible for the preparation and implementation of a survey of developing country firms in preparation for the launching of the IFC's Global Business School Network.</li> </ul>
Sept. 2001-Sept. 2002, Dec. 1999-June 2000, June 1999-Aug.1999,	<b>OPERATIONS EVALUATION DEPARTMENT</b> , World Bank, Washington D.C.
June 1998-Aug. 1998	<ul> <li>Economist responsible for evaluating World Bank projects to measure their impact on incentives for corruption in the private and public sectors, including the impact on corruption of the tariff and regulatory structures.</li> <li>Assisted in the preparation of the OED's major report on the Bank's Anti-Corruption Strategy, including the identification of best practices and activities susceptible to governance related risks.</li> </ul>
Jan. 2001-June 2001	BROWN UNIVERSITY, Providence, Rhode Island.
	Instructor (Taught core courses in undergraduate Macroeconomics).
Sept. 1999-Dec. 2000	BOSTON UNIVERSITY, School of Management, Boston, Massachusetts.
	• Instructor (Taught MBA courses in Microeconomics and undergraduate courses in Managerial Economics.
June 1997-Aug. 1997	INTERNATIONAL LABOUR ORGANIZATION, Geneva, Switzerland.
	<ul> <li>Analyzed history of structural adjustment processes in Pakistani labor markets to estimate future levels of sectoral employment, with a particular emphasis on the regulatory framework and the integration of small enterprises into the formal sector.</li> <li>Developed "Labor and Society" project to increase the participation of workers, NGOs and civil society in the formulation of labor market policies in developing countries.</li> </ul>
June 1993-June 1997	LAHORE SCHOOL OF ECONOMICS, Lahore, Pakistan
	<ul><li>Lecturer, Department of Economics</li><li>Developed undergraduate and graduate economics courses.</li></ul>

### **SELECTED PAPERS**

- 1. "Measuring process innovation outputs and understanding their implications for firms and workers: Evidence from Pakistan," with Waqar Wadho in *Technovation*, 2024.
- "<u>The Closed-Form Solutions for a Model with Technology Diffusion via Lie symmetries</u>," with R. Naz in *Continuous Dynamical Systems Series S*, 2024.
- 3. "Empowered mothers and co-resident grandmothers: Two fundamental roles of women impacting child health outcomes in Punjab, Pakistan," with Rabia Arif and Theresa Chaudhry in *PLOS ONE*, 2023.
- 4. "<u>Adjustments in markups after a Free Trade Agreement: An analysis of Pakistani firms</u> <u>gaining increased access to China</u>," with Nida Jamil and Theresa Chaudhry in *Journal of International Trade and Economic Development*, 2023.
- 5. "<u>Strategic Trade Policy for Pakistan's Textile Sector in 2018: Enhancing High Value-Added</u> <u>Exports through Low-Priced Intermediate Input</u>", with Rabia Arif and Nida Jamil in *Pakistan Development Review*, 2023.
- 6. "<u>Emigration's Heterogeneous Impact on Children's Wellbeing in Punjab, Pakistan</u>," with Rabia Arif and Theresa Chaudhry in *Child Indicators Research*, 2023.
- 7. "<u>Trading Textiles along the New Silk Route: the impact on Pakistani firms of gaining market</u> access to China," with Nida Jamil and Theresa Chaudhry in *Journal of Development Economics*, 2022.
- 8. "Innovation strategies and productivity growth in developing countries: Firm-level evidence from Pakistani manufacturers," with Waqar Wadho in *Journal of Asian Economics*, 2022.
- 9. "<u>Home-based Enterprises: Experimental Evidence on Female Preferences from Pakistan,</u>" with Farah Said, Mahreen Mahmud and Giovanna d'Adda in *Economic Development and Cultural Change*, 2022.
- 10. "Where to Locate? The Correlation Between Spatial Proximity and Location Choice of New Firms: The Case of Pakistan," with Maryiam Haroon in Asian Economic Journal, 2021.
- 11. "First integrals of Hamiltonian systems: The inverse problem," with R. Naz and F. M. Mahomed in *Discrete & Continuous Dynamical Systems-S*, 2020.
- 12. "<u>It is not power, but how you use it: Experimental evidence on altruism from households in</u> <u>Pakistan</u>," with Farah Said, Mehreen Mahmud and Giovanna d'Adda in *Applied Economics Letters*, 2020.
- 13. "Do young innovative companies create more jobs? Evidence from Pakistani textile firms," with Waqar Wadho and Micheline Goedhuys in *World Development*, 2019.
- 14. "<u>Closed-form solutions of the Lucas-Uzawa model with externalities via the partial Hamiltonian</u> <u>approach,</u>" with R. Naz in *Computational and Applied Mathematics*, 2018.
- 15. "Innovation and Firm Performance in Developing Countries: The case of Pakistani Textile and Apparel Manufacturers," with Waqar Wadho in *Research Policy*, 2018.
- 16. "<u>Closed-form Solutions for the Lucas-Uzawa Growth Model with Logarithmic Utility Preferences</u> <u>via the Partial Hamiltonian Approach,</u>" with R. Naz in *Discrete and Continuous Dynamical Systems Series S*, 2018.
- 17. "<u>Organizational Barriers to Technology Adoption: Evidence from Soccer-Ball Producers in</u> <u>Pakistan,</u>" with David Atkin, Shamyla Chaudry, Amit K. Khandelwal and Eric Verhoogen in the *Quarterly Journal of Economics*, 2017.
- 18. "Unique and multiple equilibria in a macroeconomic model with environmental quality: An analysis of local stability," with Hafsa Tanveer and R. Naz in *Economic Modelling*, 2017.
- 19. "<u>Comparison of Closed-Form Solutions for the Lucas-Uzawa Model via the Partial Hamiltonian</u> <u>Approach and the Classical Approach</u>," with R. Naz in *Mathematical Modelling and Analysis*, 2017.

- 20. "Pakistan's Experience with the Pak-China Free Trade Agreement: Lessons for CPEC," with Theresa Chaudhry and Nida Jamil in the *Lahore Journal of Economics*, 2017.
- 21. "<u>On the Origins and Development of Pakistan's Soccer-Ball Cluster</u>," with David Atkin, Shamyla Chaudry, Amit K. Khandelwal and Eric Verhoogen in the *World Bank Economic Review*, 2016.
- 22. <u>Closed-form solutions for the Lucas –Uzawa model of economic growth via the partial</u> <u>Hamiltonian approach,</u>" with R. Naz and F. M. Mahomed in *Communications in Nonlinear Science and Numerical Simulation*, 2016.
- 23. "<u>A partial Lagrangian method for dynamical systems</u>," with R. Naz and F. M. Mahomed in *Nonlinear Dynamics*, 2016.
- 24. "<u>Does genetic proximity to high growth countries affect a country's own growth</u>?" with Rabia Ikram in *Economic Modelling*, 2016.
- 25. "<u>A Panel Data Analysis of Electricity Demand in the Pakistani Industrial Sector</u>," in *Energy Sources Part B: Economics, Planning and Policy*, 2016.
- 26. "<u>Innovation in the Textiles Sector: A Firm-Level Analysis of Technological and</u> <u>Nontechnological Innovation</u>," with Waqar Wadho in the *Lahore Journal of Economics*, 2016.
- 27. "<u>Reforming a Broken System: A New Performance Evaluation System for Pakistan Civil</u> <u>Servants</u>," with Maryam Tanwir in *Pakistan Development Review*, 2016.
- "<u>Markup and Cost Dispersion across Firms: Direct Evidence from Producer Surveys in Pakistan</u>," with David Atkin, Shamyla Chaudry, Amit K. Khandelwal and Eric Verhoogen in the *American Economic Review*, *Papers and Proceedings*, 2015.
- 29. "The effects of external migration on enrolments, accumulated schooling and dropouts in <u>Punjab</u>," with Rabia Arif in *Applied Economics*, 2015.
- "<u>A Partial Hamiltonian Approach for Current Value Hamiltonian Systems</u>," with R. Naz and F. M. Mahomed in *Communications in Nonlinear Science and Numerical Simulation*, 2015.
- 31. "<u>Beyond the Poverty Line: A Multi-dimensional Analysis of Poverty in Pakistan</u>," with Theresa Chaudhry, Muhammad Haseeb, and Uzma Afzal, in Rashid Amjad and Shahid Javed Burki (ed.) *Pakistan: Moving the Economy Forward*, Cambridge University Press, 2015.
- 32. "<u>The Need for a Coordinated Industrial Strategy to Boost Pakistani Exports: Lessons from Asia</u>," with Gul Andaman in the *Lahore Journal of Economics*, 2014.
- 33. "<u>Patronage in Rural Punjab: Evidence from a New Household Survey Dataset</u>," with Kate Vyborny in the *Lahore Journal of Economics*, 2013.
- 34. "<u>A structural V AR analysis of the impact of macroeconomic shocks on Pakistan's textile</u> <u>exports</u>," in *Economic Modelling*, 2013.
- 35. "<u>The Political Economy of Income Comparisons and Economic Growth</u>," with Phillip Garner in *Economic Modelling*, 2013.
- 36. "<u>The Birth of Exporters: Entry and Scale of Firms in Punjab's Export Sectors</u>," with Marjan Nasir and Maryiam Haroon in the *Lahore Journal of Economics*, 2012.
- 37. "Tariffs, Trade and Growth: Do Institutions Matter?" in the Lahore Journal of Economics, 2011.
- 38. "<u>A Panel Data Analysis of Electricity Demand in Pakistan</u>," in the *Lahore Journal of Economics*, Special Edition, 2010.
- 39. "<u>Total Factor Productivity Growth in Pakistan: An Analysis of the Agricultural and</u> <u>Manufacturing Sectors</u>," in the *Lahore Journal of Economics*, 2009.
- 40. "<u>The Effects of Rising Food and Fuel Costs on Poverty in Pakistan</u>," with Theresa Thompson Chaudhry, in the *Lahore Journal of Economics*, 2008.
- 41. "Do Governments Suppress Growth? Institutions, Rent-Seeking and Innovation Blocking in a Model of Schumpeterian Growth," with Phillip Garner in *Economics and Politics*, 2007.
- 42. "<u>Political Competition Between Countries and Economic Growth</u>," with Phillip Garner in the *Review of Development Economics*, 2006.
- 43. "<u>Corruption and Trade Liberalization: Has the World Bank Anti-Corruption Initiative Worked</u>?" in the *Lahore Journal of Economics*, 2005.

- 44. "Survey of IFC Firms on Local MBA Quality," World Bank Policy Research Working Paper Number 3182, World Bank, Washington D.C., 2004.
- 45. "Procurement and the World Bank's Anti-Corruption Initiatives," Operations Evaluation Department Working Paper, World Bank, Washington D.C., 2000.

#### **CURRENT RESEARCH**

- Measuring the Barriers to Industrial Upgrading using Evidence from Pakistan with David Atkin, MIT, Amit K. Khandelwal, Yale University and Eric Verhoogen, Columbia University.
- Promoting investment in Solar Energy across SMEs in Pakistan: The Role of Information Provision with Theresa Chaudhry, Lahore School of Economics, Phillip Garner, Utah Tech University and Nikita Grabher-Meyer, University of East Anglia.
- Measuring Innovation in the Pakistani Textile Sector with Matthew McCartney (Oxford University) and Waqar Wadho, Lahore School of Economics.
- Developing an Optimal Industrial Strategy in the Context of the China Pakistan Economic Corridor (CPEC) with Theresa Chaudhry, Lahore School of Economics, Maryiam Haroon, Lahore School of Economics and Nida Jamil, Lahore School of Economics.
- Impact assessment of start-up loans to female run micro-enterprises with Farah Said, Lahore University of Management Sciences, Naved Hamid, Lahore School of Economics, and Mahreen Mahmud, University of Exeter.
- Measuring the effects of agglomeration on new firms in Punjab with Maryiam Haroon, University of Chicago.
- Spillovers in technology adoption: evidence from a randomized experiment in Pakistan with David Atkin, MIT, Amit K. Khandelwal, Yale University and Eric Verhoogen, Columbia University.

#### SELECTED RESEARCH GRANTS

- International Growth Centre (FCDO, UK) for Research on Promoting Investment in Solar Energy across SMEs in Pakistan, 2023.
- World Trade Organization (WTO) Chair, 2022.
- Global Challenges Research Fund (UK) for Research on Innovation and Firm Growth in the Pakistani Textile Sector, 2018.
- International Growth Center (DFID/UK) for Research on Measuring Innovation in the Pakistani Textile Sector, 2014.
- Private Enterprise Development in Low Income Countries (PEDL/UK) for Research on Barriers to Industrial Upgrading in Pakistan, 2014.
- British Academy (UK) Grant for Research on Patron Client Relations in Rural Punjab (Pakistan), 2014.
- International Growth Center (DFID/UK) Project Grant for Research on Technology Spillovers in the Pakistani Manufacturing Sector, 2011.
- International Growth Center (DFID/UK) Project Grant for Research on Technology Spillovers in the Pakistani Manufacturing Sector, 2010.
- Open Society Institute Grant for Social Choice and Network Assistance Survey, 2010.

#### **OTHER RESPONSIBILITIES**

- Co-Director, Innovation and Technology Centre, Lahore School of Economics.
- Head, Quality Assurance Cell, Lahore School of Economics.
- Editor, Lahore Journal of Economics.

- Member of Board, Punjab Innovation Development Fund, Government of the Punjab.
- Invited Researcher, Abdul Latif Jameel Poverty Action Lab (J-PAL), MIT.
- Research Affiliate, International Growth Centre, DFID, UK.
- Research Supervisor:
  - Higher Education Commission of Pakistan (HEC) Approved PhD Supervisor.
  - PhD Economics (completed thesis: Dr. Maryiam Haroon, Dr. Farah Said and Dr. Ayesha Afzal).
  - MPHIL Economics (completed theses: (i) Rabia Ikram, (ii) Rabia Arif, (iii) Maryiam Haroon, (iv) Marjan Nasir, (v) Zehra Gardezi, (vi) Taimoor Naseer, (vii) Mahnoor Asif, (viii) Saba Firdousi, (ix) Hafsa Tanveer, (x) Mehreen Zahid, (xi) Mehreen Irshad, (xii) Ammara Riaz, (xiii) Tahreem Zia and (xiv) Nayab Kanwal).

### **OTHER ACHIEVEMENTS**

• Ranked as one of the top 5 research economists in Pakistan in 2023 International RePEc (Research Papers in Economics) Rankings:

https://ideas.repec.org/top/top.pakistan.html#authors10.