



## Development and Applied Economics Workshop

Date: *July 10, 2025*

Location: *Finance Decision Lab - 4 Eastern Road, Room 110*

Welcome to the **Development and Applied Economics Workshop** at Macquarie University. This event showcases six paper presentations on a wide range of topics delivered by distinguished scholars in development and applied economics.

### Program Schedule

- Title:** *Multidimensional Poverty: A New Perspective on Measurement*  
**Presenter:** Nanak Kakwani (Gulati Institute of Finance and Taxation, India, and UNSW)  
**Time:** 10:00 – 10:45  
**Abstract:** Amartya Sen’s work on functionings and capabilities has transformed the understanding of poverty as a multidimensional issue, emphasizing capability deprivation. This paper distinguishes between poverty and capability deprivation, arguing that poverty results from insufficient access to resources, whether through markets or public provisions. We highlight that many existing multidimensional poverty indices, including those of the UNDP and Alkire and Foster, focus predominantly on capability deprivation and incorrectly assume that all individuals who experience it are poor. We argue that a comprehensive definition of poverty requires considering both capability and access to resources. Our proposed framework for measuring multidimensional poverty addresses these shortcomings and discusses its policy implications.
- Title:** *Global Production Networks and Local Development: Evidence from Japanese Subsidiaries in South Korea*  
**Presenter:** Lisa Magnani (Macquarie University)  
**Time:** 10:50 – 11:35  
**Abstract:** The recent disruptions to Global Production Networks (GPNs), whether caused by national or sectoral lockdowns responding to pandemics or emerging from military conflicts in the world, have illustrated their fragility. Asia has both the world’s most fragmented production and its most complex and fast-growing GPNs. By focusing on South Korea, an East Asian economy that plays a central role in global production, this paper aims to explore how local (national) development is shaped by the global forces of GPNs and multinational enterprises (MNEs). In this study we exploit the 2011 Japanese natural disaster as a quasi-natural experiment. Using a Korean National Statistical Office panel database of firms between 2006 and 2019, we precisely investigate the propagation effects of this shock from Japan to Korean firms differentiated by the degree of Japanese parent’s ownership. We also detail Japan-parented Korean firms’ response strategy involving their diversification of sourcing and sale destinations after the 2011 disaster. By estimating propagation and diversification effects across three subperiods in the post-disaster

years 2011-2019, we find robust evidence that these effects are economically large and long-lasting, and potentially structurally change the affected GPNs. Importantly, these results suggest that the global transmission of a negative external shock may provide opportunities for firms without prior linkages with Japan-parented subsidiary firms to participate in their GPNs. This study thus contributes to an understanding of patterns of uneven development by illustrating how GPNs shape regional development outcomes and change the nature of global economic interdependence.

3. **Title:** *Internationalization of education and its effect on growth via the labor market*

**Presenter:** Shrabani Saha (University of Lincoln)

**Time:** 11:40 – 12:25

**Abstract:** The role of human capital as a determinant of economic growth has evolved since the advent of endogenous growth theory. Since then, empirical growth literature utilizes various education variables to represent human capital in empirical growth model. This study introduces a novel approach in measuring human capital through the internationalization of education and evaluating its impact on economic growth via the labor market channel. The scope is on 112 countries with a focus on top ten host countries from 2010 to 2022 to explore these dynamics. The study employs four econometric techniques (FE, PSCC-FE, IV-2SLS, IV-GMM) and consistent robustness results show that the nexus holds individually and interactively. The findings of the study reveal that the internationalization of education, measured by total international students (TIS) and international students' mobility rate (IMR), significantly enhances economic growth and living standards of host countries. This is achieved not only through substantial foreign exchange earnings, but also by mitigating labor shortages mostly in developed countries and serving as a crucial source of skilled labor migration. When evaluating employment and productivity indicators such as the employment-to-population ratio and labor force participation rate, the findings confirm that the influx of international students has a more pronounced impact in countries with better employment prospects. Notably, the conditional marginal effects of TIS and IMR on economic growth, when combined with employment factors, indicate that the other host countries achieve the positive threshold level to enhance growth much quicker than the top ten destinations for international education. Consequently, policy makers are recommended to integrate employment policies into their strategies for attracting international students, as these students play a crucial role in driving growth, serving as a source of future skilled migrants, advancement of host countries and enhancing global development.

- *Lunch and networking*

Time: 12:30 – 13:30

4. **Title:** *How Legacy Operations Shape Development Effectiveness: A Look at the Asian Development Bank's Experience*

**Presenter:** Hyun H. Son (University of Sydney)

**Time:** 13:30 – 14:00

For the details, see the attachment.

5. **Title:** *Structural Change and Growth Trajectories through Counterfactual Quantile Decomposition*

**Presenter:** Matteo Lanzafame (Asian Development Bank)

**Time:** 14:05 – 14:50

**Abstract:** Structural transformation remains a central driver of economic development, yet recent challenges such as premature deindustrialization have raised critical questions about the sustainability of traditional growth paths. This paper addresses these issues through a comprehensive

analytical framework that integrates growth decomposition techniques, quantile regression, and counterfactual analysis to examine productivity growth dynamics both at the aggregate level and within manufacturing sectors. The findings reveal pronounced differences: while manufacturing continues to serve as a powerful engine of convergence, particularly for less productive sectors, economy-wide growth increasingly benefits already-productive economies, reflecting divergent structural transformation patterns. In addition, counterfactual scenarios underscore significant growth opportunities for developing and emerging economies, particularly through enhanced technological capabilities and institutional quality. However, they also highlight hurdles in translating observable factor accumulation into sustained productivity gains, especially in manufacturing, where unobservable factors such as technological diffusion and cross-border knowledge spillovers are becoming increasingly decisive. These insights provide actionable guidance for industrial policy design, emphasizing tailored strategies to foster inclusive and sustainable economic growth amid shifting global economic dynamics.

6. **Title:** *The Average versus the Marginal: A Novel Way to Measure the Mortality Risk of an Infectious Disease*

**Presenter:** Hanbat Jeong (Macquarie University)

**Time:** 14:55 – 15:20

**Abstract:** Policymakers need to evaluate the severity of an infectious disease when deciding whether to impose mitigation policies (e.g., lockdowns). We propose a novel measure of mortality from an infectious disease, the marginal case-fatality rate (MCFR), which quantifies the effect of an additional case at one time on subsequent mortality, and is well-suited to policymaking. We estimate the MCFR from a dynamic geospatial model that incorporates case transmission within and across county borders, the lag effects of cases on deaths, differences across demographic groups (e.g., old versus young), and spillovers to mortality of causes other than the focal infectious disease (e.g., through worse mental health). We apply this framework to the early stage of the COVID-19 pandemic using weekly data from large U.S. counties. We find that one case creates 0.1489 additional COVID-19 deaths in the next 16 weeks in the county in which a case originates. The majority (82%) of increased mortality is due to disease transmission. Moreover, one additional case leads to 0.0594 additional non-COVID deaths in the origin county. Over 16 weeks, one extra case in a county creates 0.6255 higher all-cause deaths nationally. Two-thirds of the increased mortality occurs outside the origin county. We find stark differences in mortality risks by age, race/ethnicity, and education level. Our framework and results underscore the magnitude of COVID-19 externalities and the multifaceted consequences of a new case on mortality, emphasizing its crucial role in guiding public health policies. Accordingly, state-level lockdown measures are more effective in reducing mortality when implemented by states that are geospatially more connected.

## Participant Information

1. **Nanak Kakwani:** Professor Nanak Kakwani has been a visiting scholar at Institute of Applied Economic Research known as IPEA in Brazil. He was also a visiting scholar at the Philippines Institute of Development Studies in Manila. He was Principal Researcher and Director/Chief Economist during 2003-2006 at UNDP's International Policy Centre for Inclusive Growth in Brazil. Before joining the Centre, he was Professor of Economics for 30 years at the University of New South Wales in Sydney, Australia. His research areas include poverty, inequality, pro-poor growth, taxation, public policies, human development, etc. He has published more than 100 articles in international journals. He also published four books; one by Cambridge University Press, another by Oxford University Press, and two jointly edited books (with Jacques Silber) by Palgrave Macmillan. He was elected as fellow of Australian Research Committee of Social Science. He was also awarded Mahalanobis gold medal for outstanding contribution in quantitative economics. He is on the advisory board of the Journal of Economic Inequality. He has been visiting professor at many universities and consultant to the World Bank, UNDP, and the Asian Development Bank.
2. **Lisa Magnani:** Elisabetta (Lisa) Magnani specialises in labour markets, wages and employment conditions in a global perspective, firms finance and labour decisions contemporary continental philosophy and the economic discourse. The unifying focus of this research is the need to understand how labour markets perform in the face of structural change, and the factors that impact on their flexible responses, resilience and outcomes, particularly in terms of employment, wages and labour relations, in Australia and in emerging economies in our region. With a thoughtful combination of theoretical and empirical techniques, along with attention to the interdisciplinary dimensions of these issues, Lisa's work aims to a broad reach and influence in public policy formation to address the salient challenges of our times. Namely full employment, the quality of work and the impact of these labour outcomes for social and environmental sustainability.
3. **Shrabani Saha:** Professor Shrabani Saha holds the Professorial Chair of Development Economics at the University of Lincoln, United Kingdom.  
Prof. Shrabani Saha holds a PhD in Economics from Massey University, New Zealand, Master of Economics (MEC) from University of Sydney, Australia, MSc in Economics from the University of Calcutta, India. She also holds a professional teaching qualification from Higher Education Academy, UK (HEA) as Fellow.  
Prof. Shrabani Saha is an Executive Guest Editor – Journal of Development Economics (ABS – 3\*) Associate Editor of International Journal of Finance and Economics (ABS-3\*) and an editorial board member of Journal of Travel Research (ABS-4\*) and Tourism Analysis (ABS-2\*).  
Prof. Saha is deeply interested in political economy, terrorism and tourism economics, economic growth, development economics and international trade issues. The main areas of her research focus on causes and effects of corruption across nations and corruption's relations with institutional factors, such as democracy and economic freedom. She has been also engaged in research involving political instability and its effects on tourism demands and economic growth.
4. **Hyun H. Son:** Hyun H. Son is an economist and evaluation specialist who worked at the Asian Development Bank (ADB) until May 2025. She joined ADB in 2007,

having previously served as a poverty specialist at the United Nations Development Programme and having worked at the World Bank in Washington, D.C. With 25 years of experience at these international organizations, Dr. Son has authored about 40 articles in refereed international journals, including *Economics Letters*, *Oxford Bulletin of Economics and Statistics*, *Journal of Economic Inequality*, *Review of Income and Wealth*, *China Economic Review*, and *World Development*, among others. She has also published three books: *Economic Inequality and Poverty* (2022, Oxford University Press), *Social Welfare Functions and Development: Measurement and Policy Applications* (2016, Palgrave Macmillan), and *Equity and Well-Being: Measurement and Policy Practice* (2011, Routledge: Taylor & Francis Group). Additionally, she edited *Economic Growth and Poverty* (2018, Edward Elgar) and a special issue of the *Journal of Income Distribution* (2022). Dr. Son holds a Ph.D. in Economics from the University of New South Wales and a master's degree in public policy from Harvard University.

5. **Matteo Lanzafame (Asian Development Bank)**: Matteo Lanzafame is a Principal Economist at the Asian Development Bank. He is part of the team in the Macroeconomic Division that produces the Asian Development Outlook report and conducts macroeconomic surveillance and monitoring. He holds an MA in Development Economics and a PhD in Economics from the University of Kent (UK). His research centers on applied macroeconomics, with a particular focus on growth and development issues. He has published in several peer-reviewed academic journals.
6. **Hanbat Jeong (Macquarie University)**: Hanbat Jeong is a Senior Lecturer in the Department of Economics at Macquarie University, specializing in spatial economics. He earned his Ph.D. in Economics from The Ohio State University in 2019 and has held positions as a Postdoctoral Researcher at The Ohio State University. His research focuses on spatial econometrics and dynamic interaction models, with publications in journals such as the *Journal of Econometrics*, *Journal of Applied Econometrics*, *Journal of Economic Dynamics and Control* and others. Dr. Jeong has presented at numerous international seminars and conferences and has received several NIH grants for his work on the economic impacts of COVID-19.