



Five-Day National Workshop on **TIME SERIES AND PANEL DATA ANALYSIS**



Date
22-26 January 2024



Venue
Seminar Hall,
University Guest House, CUTN



Registration Deadline
~~31st December 2023~~ 15th January 2024



Resource Person

Prof. Vijayamohanan Pillai N

Gulati Institute of Finance and Taxation,
Thiruvananthapuram, Kerala



Department of Commerce

School of Commerce and Business Management
Central University of Tamil Nadu (CUTN)



About the University

Welcome to the **Central University of Tamil Nadu**, Thiruvarur, a hub of academic excellence and innovation. The Central University of Tamil Nadu was established through an Act of Parliament in 2009. It is located in the Thiruvarur District of Tamil Nadu on the banks of the famous river Cauvery's branch, Vettaaru. The elegant flow of the river adds to the University's tranquility. Being one of the capitals of the ancient Chola Empire, Thiruvarur was a town of great antiquity and a nursery for the traditional forms of agriculture, dance and music in the Cauvery delta region. The University comprises twelve schools and twenty-eight departments offering a total of sixty-four academic programs, including twenty-two postgraduate programs, two undergraduate programs, six integrated programs, and two PG Diploma Courses. Additionally, the University offers twenty-nine research programs. The University has been ranked 89th in the NIRF ranking. The institution has grown significantly over time, broadening its academic programmes and providing more opportunities for interdisciplinary research.

About the Department

The **Department of Commerce** was established in 2017 to expand the horizons of business studies with a focus on sustainability, emphasizing locally driven business values and ethics. The Department has emerged as one of the University's unique and vibrant Departments within a short time span. The Department offers P.G. and Ph.D. programmes that envision the dynamics of the economy. The Department is equipped with faculties with international exposure, academic collaboration and publication in international journals of repute. The Department's research programmes primarily focus on identifying and promoting local sustainability, addressing the ESG aspects. Further, the Department undertakes skill assessment and development research aligning with SDGs essential for grassroots-level livelihood enhancement and development. The courses offered by the Department under various curricula are possibly the first in Indian universities to emphasize ESG in line with the SDGs.

About the Workshop

The workshop is designed to equip researchers with the expertise and skills necessary to apply econometric techniques to thrive in the dynamic fields of finance and economics. Data-driven decision-making is crucial in this complex and volatile era to produce accurate results that have a societal impact through effective policymaking. However, it requires dependable outcomes by applying predictive analysis of historical data. Recently, abundant



research has been taking place by relying on secondary data sources, mainly consisting of time series and panel data in economics and finance. Such data ought to be analyzed carefully using statistical and econometric techniques. However, applying these techniques necessitates a thorough comprehension of fundamental statistical and economic concepts. It would also make it easier for the researcher to deduce outcomes. Thus, using the right statistical tools is always necessary to bring the accurate results out of the analysis. Hence, the workshop is designed to impart the basic and advanced concepts and techniques of time series and panel data analysis with hands-on sessions. The five-day workshop will cover the following modules:

- Cross Section Data – Model Estimation, Hypothesis Testing and Inference
- Time Series Data – Non-Stationarity, Unit Root Test
- ARMA, ARIMA, Granger Causality, Vector Autoregressive Processes
- Cointegration, VECM, ARCH and GARCH Models
- Introduction to Panel Data: Structure, Pooled Model, Error Components Model
- Fixed Effects Model, Random Effects Model, Probability Tests, Model Selection (Hausman Test)
- Panel Data – Heteroskedasticity, Autocorrelation
- Linear Dynamic Panel Data Model
- Instrumental Variable, GMM Estimation
- Panel Data Unit Root Test, Panel Data Cointegration Test

Program Objectives

- Familiarize with the basic and advanced concepts and techniques of time series and panel data analysis.
- Impart hands-on training to analyze time series and panel data using Gretl.

Learning Outcomes

At the end of the workshop participants would be able to...

- Understand the theoretical concepts and assumptions of standard econometric models.
- Choose appropriate econometric models for different types of data.
- Perform analysis using econometrics software.
- Interpret and critically evaluate the outcomes of an empirical analysis.



About the Resource Person

Dr. Vijayamohanan Pillai N is an Honorary Fellow at Gulati Institute of Finance and Taxation, Thiruvananthapuram, Kerala. Earlier, he worked at the Bureau of Industrial Costs and Prices, Government of India, New Delhi; Department of Econometrics, University of Madras, Chennai; Stansfield School of Business (London School of Economics Programme), Singapore; and Centre for Development Studies, Thiruvananthapuram. He has published seven books, fifty-five working papers, more than thirty-two journal articles in National and International journals, and edited books. He is a reviewer of journals of international repute, such as the International Journal of Energy and Power Engineering, American Journal of Theoretical and Applied Statistics, American Journal of Electrical Power and Energy Systems, and the like. He contributed to the Markov Chain Model in the context of analysis of inflation and human development-growth nexus. Moreover, he has made theoretical and empirical contributions to Peak Load Pricing, Reliability Analysis, and Aggregation Theory. His skills and expertise include econometrics, stochastic modelling, mathematical statistics, etc., and he is a leading resource person for the workshop exclusively conducted on time series and panel data analysis.

Workshop Methodology/ Pedagogy

The methodology would be based on lectures, interaction, experience sharing and hands on sessions.

Who can Participate?

The faculty members, researchers, industry professionals, practitioners, educators, and students across all disciplines interested in econometric analysis. The number of participants will be limited to 60 (50 outstation and 10 local participants) in order to ensure individual attention.

Workshop Requirements

The participants must bring their own laptops with the Gretl software installed.

Important Dates	
Registration Starts	02 nd December 2023
Registration Ends	31st December 2023 15 th January 2024

Note: Seats will be allocated on a first come first serve basis



Registration

The interested persons may register for the workshop using the following link **after making the payment** of the registration fee.

[REGISTER NOW](#)

Registration Fee

Outstation Participants	Rs. 6000
Local Participants (Thiruvarur and nearby districts)	Rs. 3000

- ✓ The **registration fee of the outstation participants includes boarding and lodging** for five days of the workshop. The outstation participants will be accommodated in the University Guest House on a twin-sharing basis.
- ✓ No accommodation for local participants.
- ✓ All the local participants will be given a working lunch and refreshments.
- ✓ TA/DA **will not be** provided to the participants.

How to Make the Payment?

1. Visit the official website of SBI Collect (Click '**Pay Now**') [PAY NOW](#)
2. Select Category: **Educational Institutions**
3. Name of Educational Institution: Select **Central University of Tamil Nadu**
4. Payment Category: Select **Seminar/Workshop/Conference**
5. Please fill in **Name of the Candidate, Mobile No., E-Mail Id** and **Conference/Seminar/Workshop Fee**
6. Name of the Seminar/Conference: **WTPA 2024**
7. Department: Select **Commerce**
8. Enter other required details and make payment
9. Save the receipt in PDF format then attach it to the registration form (Click '**Register Now**' to access the registration form).

How to Reach Thiruvarur?

Thiruvarur district is well connected by road and rail transport. There are direct trains to Thiruvarur from various cities such as Chennai, Thanjavur, Trichy, Mayiladuthurai, Coimbatore, Ernakulam, and Karaikal. Participants may connect to Thiruvarur district (Thiruvarur Jn. or Nidamangalam Jn.) from these cities via trains or buses. The nearest airports are in Trichy (Approx. 130 Kms) and Chennai (Approx. 300 Kms).



Organising Committee

Chief Patron	Prof. M. Krishnan, The Hon'ble Vice-Chancellor, CUTN
Patron	Prof. R. Thirumurugan, The Registrar, CUTN
Chair	Prof. G. Sudha, The Dean, School of Commerce and Business Management, CUTN
Co-Chair	Dr. A. Vinodan, The Head, Department of Commerce, CUTN
Workshop Directors	Dr. S. Mahalakshmi, Assistant Professor, Department of Commerce, CUTN Dr. S. Rameshkumar, Assistant Professor, Department of Commerce, CUTN
Workshop Committee	Dr. Velmurugan PS, Associate Professor, Department of Commerce, CUTN Dr. Vilas, Assistant Professor, Department of Commerce, CUTN Dr. S. Sivaprakash, Assistant Professor, Department of Commerce, CUTN
Student Coordinators	Sabirali K P, Research Scholar, Department of Commerce, CUTN Anju S Jose, Research Scholar, Department of Commerce, CUTN Arunima P, Research Scholar, Department of Commerce, CUTN Ashique Ali K A, Research Scholar, Department of Commerce, CUTN

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