

CHRIST (Deemed to be University), Bangalore

2020-21

**Workshop on Application of Econometrics in Business Research Report
2020**

School of Business and Management

Date: 23rd June to 27th June 2020

Mode: Online

Time: 4.00pm to 6.00pm

Platform: Cisco Webex



**Workshop on Application of Econometrics in Business Research
(23-27 June 2020)**

Day 1:

Orientation

This 5-day workshop focused on training participants with Eviews software which enabled us to learn and apply various econometric tools in Business Research. The inaugural session was delivered by Prof. Gnanendra M, Assistant Professor, followed by an address to the participants by Dr Jain Mathew, Dean of School of Business and Management. We set the base right for this workshop with a proper introduction on what we, as participants can expect from this workshop.

On Day 1, the resource person was Dr Manu KS, Assistant Professor, and he covered the introduction to econometrics wherein we were taught about the relevance of the subject, the types of data, different ways in which we can represent that data. We also understood the various steps involved in econometric modelling, importance of hypothesis, model estimation and their statistical inferences. We gained insights on the vitality of Classical Linear Regression Assumptions (CLRM), Modelling OLS, properties of estimators, R squared, Adjusted R squared, F Statistics, D-W statistics and ADF Test.

A handwritten signature in blue ink.



Day 2:

Day 2 session was conducted by Prof. Gnanendra M, Assistant Professor, wherein we discussed Unit-root tests & ARIMA modelling. We understood the use of graphs and correlogram, the ADF test, ARIMA Family Models, Box-Jenkins's methodology, AR, MA, ARMA and various integrated processes. We understood when to use ARIMA and ARMA. We got hand-on experience on how to identify models using correlogram, the model selection process, and how to forecast and evaluate the forecast using ARIMA. We gained knowledge on concepts like normality, autocorrelation and heteroskedasticity.

Day 3:

The topic for Day 3 was Volatility Analysis which was taken by Dr Natchimuthu, Assistant Professor. We understood the importance of measuring variance and the different traditional methods involved. We were given a thorough introduction to ARCH models and related concepts like volatility clustering; leverage effect, effect of heteroskedasticity and autocorrelation in the residuals, estimating ARCH modelling: mean equation and conditional variance equation. We got hands-on experience using EViews for estimating GARCH model, estimating T-ARCH, E-GARCH models, and ARCH in mean model (ARCH-M model).

Day 4:

On Day4 the resource person was Dr T. Mohanasundaram, Associate Professor, and he covered the introduction to Cointegration, EG Cointegration test, Johansen's Cointegration test, Vector Error Correction Model (VECM), and Autoregressive Distribution lag Model (ARDL). We briefly covered the concept of Wald Test which is a way to find out if explanatory variables in a model are significant.

Day 5:

To facilitate our learning process further, on Day 5 we had Prof. Bikramaditya Ghosh take a very insightful session on Panel Data Analysis. This session was very well structured as we first delved into the theory aspects of the topic like, cross-section vs. pooled data, pooled data vs. panel Data, composite error terms and its significance, and short-panel analysis. In short-



panel analysis we covered fixed effect model and random effect model, Hausman Test , Breush Pagan LM Test, and with this we gained a holistic view of short-panel analysis.

Valedictory & Vote of Thanks

We ended this interesting and interactive workshop with an address by Dr Jain Mathew, Dean, School of Business and Management followed by an address by Dr Amalanathan S, Head, School of Business and Management wherein he narrated a story that carried a message of how we as individuals should always strive to keep learning and expanding our horizons. This was followed by the vote of thanks which was delivered by Dr Manu KS, Assistant Professor, and we ended this workshop on a good note.

Conclusion

All sessions were conducted along with hands-on experience using the EViews software which made it a thorough learning experience. We were able to practically apply what was being taught. We wrapped up every session with an allotted time devoted to Q and A, wherein participants' doubts and clarifications were addressed. There were a few technical hiccups faced, but everything was handled well and this ensured no time of learning being lost. Daily feedback forms were also shared and overall, this workshop gathered positive feedbacks.

In conclusion, this 5-day workshop was an insightful learning experience and it definitely will aid us in our academics and future endeavours.



Dr.T.Mohanasundaram

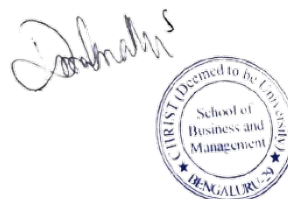
**Associate Professor,
Department of Management Studies,
Ramaiah Institute of Technology, Bangalore
Mob: 9655855677; E-mail: tms@msrit.edu**



Dr. T. Mohanasundaram has 16 years of work experience out of which 11 years in teaching and 5 years in corporate. He teaches subjects like International Finance, Merchant Banking and Financial Services, Financial Management, Managerial Economics, Project Finance, Banking Management, Accounting for Managers etc. He has obtained his B.Com and M.B.A from Bharathiar University, Coimbatore. He has received his Doctorate degree in Management from Anna University, Chennai. He has published more than 20 research articles in reputed Journals (indexed in SSCI/ABDC/Scopus/UGC). He has presented many research papers in International Conferences organised by IITs, IISc, IIMs etc. He has organised many research workshops and Faculty Development Programmes in the areas of Research and Finance. He has acted as a resource person in many research workshops organised across south India including BITS Pilani, Goa. He has received 'Best young Teacher Award' from Association of Indian Management School (AIMS) in 2018 and 'Best Young Faculty in Management Studies Award – Junior category' from Nehru Group of Institutions, Coimbatore in 2018.

Dr. Manu KS
Assistnant Professor,
School of Business and Management
CHRIST (Deemed to be University)

Dr.Manu K S completed Bachelor of Engineering from Visveswarya Technological University, Belgaum. Completed Master of Business Administration from Bangalore University. Completed Doctor of Philosophy from University of Mysore. Dr. Manu K S is presently working as an Assistant Professor in School of Business and Management , CHRIST (Deemed to be) University, Bengaluru. He possesses more than ten years of teaching, research and consultancy experience. His area of interest includes Financial Econometrics, Capital and Derivatives Markets, Business Analytics and other Financial Markets.



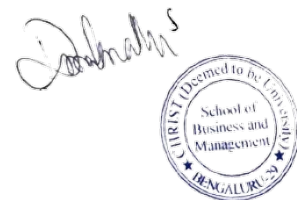
BRIEF PROFILE



Prof. GNANENDRA. M

**Assistant Professor,
School of Business and Management
CHRIST (Deemed to be University)**

Prof. Gnanendra. M currently working as an Assistant Professor in School of Business and Management at CHRIST (Deemed to be University), Bangalore Main Campus. He is an active researcher in the field of financial econometrics, financial risk management. He has experience of working in different institutions in various capacities for more than 13 years. He is also a Graduate in Bachelor of Commerce from Bangalore University and the holder of Master of Business Administration from Visvesvaraya Technological University. He has financial econometrics certificate from IIM Indore and Pondicherry university. He has been a resource person in delivering sessions/workshops/Fdp's on Data Analysis by using software's like Eviews, R, Gretl and SPSS. Areas of Interest: Financial Econometrics, Financial Risk Management, Derivatives, Security Trading, Investment Strategies, Micro finance etc



CHRIST (Deemed to be University)
School of Business and Management
Workshop on "Application of Econometrics in Business Research"
Participants Attendance

Sl. No	Name	23-06-2020	24-06-2020	25-06-2020	26-06-2020	27-06-2020
1	Ms.Chaithra.N	P	P	P	P	P
2	HARI BABU SINGU	P	P	P	P	P
3	Dr. Smitha V Shenoy	P	P	A	P	P
4	Sandesh Ramakant Bhat	P	P	P	P	P
5	Ms.Kajal Gupta	P	P	P	P	P
6	DR.KOMPALLI SASI KUMAR	P	P	P	P	P
7	SHUBHI SHARMA	P	P	P	P	P
8	M. SURENDAR	P	P	P	P	P
9	Mr Shrivangowda	P	P	P	P	P
10	T Anndal	P	P	P	P	P
11	Ms. Poonam Sharma	P	P	P	P	P
12	Dr. R K Sudhamathi	P	P	P	P	P
13	Dr. SERANMADEVI. R	P	P	P	P	P
14	Dr.Parminder Kaur Bajaj	P	P	P	P	P
15	BHUVANESKUMAR. A	P	P	P	P	P
16	Dr. MINI MATHEW K C	P	P	P	P	P
17	BALAMURALIKRISHNAN C	P	A	P	P	P
18	Ms. Smriti Kumar	P	P	P	P	P
19	Subhash Chandra Sharma	P	P	P	P	P
20	Abirami A	P	P	P	A	P
21	BINOY THOMAS	P	P	P	P	P
22	CA. Kurian V. John	P	P	P	P	P
23	Dr.G.RAMANAIAH	P	P	P	P	P
24	P B Saranya	P	P	P	P	P
25	Dr. Priya Kaushal	P	P	P	P	P
26	Khan Firdaus M. R.	P	P	P	P	P
27	Ms. Shobha S	P	P	P	P	P

Subhash



28	Dr. Vani Ramesh	P	P	P	P	P
29	G.Gnanachandran	P	A	P	P	P
30	Dr. Sathyanarayana S	P	P	P	P	P
31	Mr. Bharatkumar R Gaonkar	P	P	P	P	P
32	Alpha Abani Ch Marak	P	P	P	P	P
33	Sushila Telgiri	P	P	P	P	P
34	Niyas N	P	P	P	P	P
35	Miss Nidhi Gupta	P	P	P	P	P
36	Dr. Ketan Vira	P	P	A	P	P
37	Hemalatha Ramakrishnan	P	P	P	P	P
38	Dr.K.Amutha	P	P	P	P	P
39	Ms. K.M JEMIMA NILOFAR	P	P	P	P	P
40	B.Mirttika	P	P	P	P	P
41	GAYATHRY.P	P	P	P	P	P
42	Dr. P. ARUN PRAKASH	P	P	P	P	P
43	G. T. THIRU AROORAN	P	P	P	P	P
44	Abinash Mandal	P	P	P	P	P
45	Dr. D. VIJAYALAKSHMI	P	P	P	P	P
46	Keerthika.P	P	P	P	P	P
47	Nasir Yaseen Khanday	P	P	P	P	P
48	Charu Sharma	P	P	P	P	P
49	Ashley D'Souza	P	P	P	P	P
50	Ravikumar T	P	P	P	P	P
51	Sandhya M	P	P	P	P	P
52	Mr. Adesh Ram Bhadiyar	P	P	P	P	P
53	SRF SEEMA SINGHA	P	P	P	P	P
54	Ayyappan M	P	P	P	P	P
55	Shubham Jhunjunwala	P	P	P	P	P
56	Ms Simtiha Ishaq Mir	P	P	P	P	P
57	Mr. Akshaya Kumar Sahu	P	P	P	P	P
58	Amit Naik	P	P	P	P	P
59	Prarthana Melavazhai	P	P	P	P	P
60	Dr Karthika P	P	P	P	P	P

Dubhah's



61	Dr. Sanjeev Kumar Srivastaw	P	P	P	P	P
62	JOHN PRADEEP KUMAR	P	P	P	P	P
63	Mrs. R Sushma	P	P	P	P	P
64	STEGY VJ	P	P	P	P	P
65	Dr. Giridhari Mohanta	P	P	P	P	P
66	Felix Arokiya Raj	P	P	P	P	P
67	Prof. Rashpal Kaur Saini	P	P	P	P	P
68	Aparna R Hawaldar	P	P	P	P	P
69	Mareena Mathew	P	P	P	P	P
70	SHILPI GUPTA	P	P	P	P	P
71	Ms. Kirti Gautam	P	P	P	P	P
72	Rajesh Gangakhedkar	P	P	P	P	P
73	P Balaji Reddy	P	P	P	P	P
74	Chaya Bagrecha	P	P	P	P	P
75	Dr. Narayanaswamy T	P	P	P	P	P
76	V Harshitha Moulya	P	P	P	P	P
77	Latha Ramesh	P	P	P	P	P
78	MR.SHASHI KUMAR C	P	P	P	P	P
79	Prof Rajesh R	P	P	P	P	P
80	M. Chandra shekar	P	P	P	P	P
81	Mr. Arkaprabha Das	P	P	P	P	P
82	Mr. Animesh Bhattacharjee	P	P	P	P	P
83	Mr. Mukesh Nepal	P	P	P	P	P
84	Heena	P	P	P	P	P
85	Mr. Mahesh Dahal	P	P	P	P	P
86	R. SENTHAMIZH VEENA	P	P	P	P	P
87	Yash Kumar	P	P	P	P	P
88	Dr. Rajat Deb	P	P	P	P	P
89	Trishala Saxena	P	P	P	P	P
90	Mr.Diganta Roy Barman	P	P	P	P	P
91	Sourav Chakraborty	P	P	P	P	P
92	Abhisha Naique	P	P	P	P	P
93	Dr. H. R. Laskar	P	P	P	P	P

Abhisha



94	SANA FATIMA	P	P	P	P	P
95	YASHIKA TYAGI	P	P	P	P	P
96	VISHAL SHARMA	P	P	P	P	P
97	MS AMITA CHAUDHARY	P	P	P	P	P
98	Dr ARUN KUMAR D C	P	P	P	P	P
99	Dr Sangeetha R	P	P	P	P	P
100	Kowshika P	P	P	P	P	P
101	Jayanth R Kalghatgi	P	P	P	P	P
102	NANDHINI. S	P	P	P	P	P
103	Shruti Arya S	P	P	P	P	P
104	Suresh G	P	P	P	P	P
105	Vanishree.M.R.	P	P	P	P	P
106	Dr. Rameesha Kalra	P	P	P	P	P
107	Parvathy VK	P	P	P	P	P
108	Nisha P	P	P	P	P	P
109	Dinesh Kumar S	P	P	P	P	P
110	Dr. Surekha Nayak	P	P	P	P	P
111	Dr.K.V.Manju	P	P	P	P	P
112	Younis Ahmed Ghulam	P	P	P	P	P
113	SANTOSH KUMAR S	P	P	P	P	P
114	Sukhmani kaur	P	P	A	P	P
115	Mr. Kartik Gupta	P	P	P	P	P
116	Anushka Deoli	P	P	P	P	P
117	Divyani S Chhabria	P	P	P	P	P
118	Kavisanmathi J K	P	P	P	P	P
119	MANGALAA RK	P	P	P	P	P
120	Austin Jeremiah D	P	P	P	P	A
121	E.KALAIVANI	P	P	P	P	P
122	Dr Kavitha Desai	P	P	P	P	P
123	Ms. Savina Annie Rebello	P	P	P	P	P
124	Dr.Macherla Bhagyalakshmi	P	P	P	P	P
125	Dr Sunita Dutta	P	P	P	P	P
126	Krishna M C	P	P	P	P	P

Sankar



127	Sourav khan	P	P	P	P	P
128	Saravanakrishnan V	P	P	P	P	P
129	Mr. Karthikeya Holla K	P	P	P	P	P
130	Ashish Kumar	P	P	P	P	P
131	Sankul Daga	P	P	P	P	P
132	Dr. G. Parimalarani	P	P	P	P	P
133	Mr. Yugantar Singh	P	A	P	P	P
134	Shikha rani	P	P	P	P	P
135	Ms. Sonia Peter	P	P	P	P	P
136	SELVI J	P	P	P	P	P
137	Aakruthi Alarnkar	P	P	P	P	P
138	Dr. Meenu Baliyan	P	P	P	P	P
139	Krishna Devang Choksi	P	P	P	P	P
140	KRISHNA PRIYA PAREPALLI	P	P	P	P	P
141	Dr. Meera Bamba	P	P	P	P	P
142	Ms. Asra wani	P	P	P	P	P
143	Vishmitha K	P	P	P	P	P
144	Dr.S.Padmavathy	P	P	P	P	P
145	AARTHIYA N	P	P	P	P	P
146	REENA RAJ	P	P	P	P	P
147	PAPRI RAY	P	P	P	P	A
148	M AJAY KUMAR	P	P	P	P	P
149	Neha Grover	P	P	P	P	P
150	Dr.Nisha Shankar	P	P	P	A	P
151	VIVEK G S	P	P	P	P	P
152	Sangeeta Mehrolia	P	P	P	P	P
153	Srinivasan K	P	P	P	P	P
154	PUNJIKA RATHI	P	P	P	P	P
155	Rakesh M	P	P	P	P	P
156	Ankita Gupta	P	P	P	P	P
157	Dr.R.Priya	P	P	P	P	P
158	Prof. Nijumon K John	P	P	P	P	P
159	SHAIKH ASHFA BI	P	A	P	P	P

Signature



160	Namrata Wagle	P	P	P	P	P
161	Mr. Akshay Naik	P	P	P	P	P
162	Dr, Anuradha R	P	P	P	P	P



Dr. Amalanathan S

Head

School of Business and Management