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Indian Institute of Management, Shillong

Email: msb@iimshillong.ac.in; journal@iimshillong.ac.in

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Co-integration Dynamics Amongst the Three MCX Commodity Indices: Linear and Non Linear Approaches

Rakesh Shahani and Uttara Bhardwaj

ABSTRACT

Purpose: The present study is an attempt to investigate the co-integration relation between daily movement of the three MCX India Commodity indices viz. MCX Agri, MCX Energy and MCX Metals for the period October 1, 2014 to September 30, 2019.

Design: The methodology employed for this purpose includes ARDL and Non Linear ARDL Partial Bounds Co-integration test after incorporating a single structural break. For optimal model, AIC criteria has been followed in the study. For detecting serial correlation, we have used BGLM test, ADF for stationarity while for stability CUSUM plots have been used. The linearity has been tested using Ramsey Reset test.

Findings: The results of the study as given by Partial 'F' Bounds test showed that long run co-integration under the linear ARDL was established for two of our indices MCX Energy and MCX Metals while MCX Agri had co-integration when the NARDL was employed. All the Models could satisfactorily pass all the required pre-requisites in terms of serial correlation, stationarity and stability. For structural break, Dummy was incorporated and was significant in both the linear ARDL Models. The ECM term was negative and significant in all the three models, however speed of adjustment was at a slow rate ranging between 1%-3% per period for all models.

Research implications: These results assumes importance for policy makers as any important policy announcement for one particular commodity sector is bound to have its repercussions on other sectors in due course of time. We have already seen how agriculture prices of some crops were driven by the crude prices in early 2000 which was commonly called energy-food nexus. Hence a similar situation is likely to emerge if policy makers decide to target any one commodity sector.

Originality and Value: The paper provides a useful value addition by showing that inter-linkages amongst commodity indices have a slow rate of adjustment. This may not always be harmful while on the contrary, this may become a good strategy in some situations e.g. by giving stimulus to agriculture, the government would be automatically passing on the benefit to other sectors with a lag period thereby avoiding simultaneous stimulus to all the commodity sectors

Keywords: ARDL, NARDL, Partial 'F' bounds test, Serial correlation, Structural break

JEL classification: G0, G12, Q0

Rakesh Shahani is currently working as Associate Professor (Business Economics) Dr. Bhim Rao Ambedkar College (University. of Delhi), He can be reached at: rakesh.shahani@gmail.com

Uttara Bhardwaj is a Student Researcher, BA(H) Business Economics, Dr. Bhim Rao Ambedkar College (University. of Delhi), She can be reached at: ubharadwaj0@gmail.com

Decision-making Process for Tobacco Consumption by Undergraduate Tobacco Consumers in Select Colleges in Mizoram

Shamim Akhtar and Laldinliana

ABSTRACT

High prevalence of tobacco consumption is a major public health challenge in the state of Mizoram. The undergraduate students in Mizoram are vulnerable to tobacco consumption and its related harmful consequences. The objective of the study is to understand the specific decision-making process adopted for tobacco consumption by undergraduate students in Mizoram. The study incorporated information obtained by analysing primary data collected from a selected sample of undergraduate students from two colleges in Mizoram. The decision-making process for tobacco consumption has been explained using relevant theoretical models in consumer behaviour. The tobacco consumption decision-making process highlights the roles of external influences like tobacco marketing and socio-cultural environment, psychological factors and experiences regarding decision-making and post-purchase behaviour of the respondents. It has been also explained how general positive attitudes and subjective norms towards tobacco consumption leads to positive intentions and subsequently manifested in the form of tobacco consumption by the respondents. The specific knowledge about this consumer decision-making process is helpful for understanding the determinants for tobacco consumption and its evaluation by undergraduate tobacco consumers and can be utilized to improve social marketing strategies for targeted tobacco control measures in Mizoram.

Keywords: Consumer behaviour, Consumption, Decision-making, Mizoram, Tobacco

JEL classification: M310 Marketing

Shamim Akhtar is the Head of the Department of Management, ICFAI University Mizoram and is presently pursuing his PhD from the Department of Commerce, Mizoram University. He can be reached at: worldofshamim@gmail.com

Laldinliana is the Associate Professor at the Department of Commerce, Mizoram University. He is also the Director of Mizoram University Incubation Centre. He can be reached at: madinavarte@gmail.com

An Empirical Study on Factors Affecting Adoption of Online Education

Virendra N. Chavda and Bhaveshkumar J. Parmar

ABSTRACT

COVID-19 pandemic has significantly disrupted the education sector in India and due to that there are abrupt changes occurred in various areas of education. The lock down has seized the education institutions which caused major interruption in students' learning and their assessment. Majority of academic institutes have started online education for the benefits of students. Developing countries like India where still the classroom teaching is the best medium of education and online education is at the initial stages. It is difficult for the various stakeholders to switch from classroom teaching to online education due to the mindset and various infrastructure concerns. Present study aims to investigate the various factors which are affecting adoption of online education among UG & PG college students. Online survey of 250 students has been conducted with the help of a structured questionnaire. Exploratory factor analysis and Confirmatory factor analysis were used to identify the factors; Infrastructure and Technology dimensions, students' related dimensions, faculty's related dimensions, facilitating dimensions, social influence dimensions, effort dimensions, perceived usefulness, performance expectations dimensions and security & risk dimensions. The study discusses the practical implications of these findings.

Keywords: Confirmatory factor analysis, COVID-19, Exploratory factor analysis, Online education

JEL classification: I21 and I20

Virendra N Chavda is currently working as Associate Professor of MBA Department in

Gandhinagar Institute of Technology (Affiliated to Gujarat Technology University (GTU), Gandhinagar-382721, Gujarat, India. He can be reached at: chavdavirendra@gmail.com

Bhaveshkumar J. Parmar is currently working as Associate Professor in Department of Business Management, Sankalchand Patel College of Engineering, Visnagar, Gujarat (India), He can be reached at: callbhavesh@gmail.com

Job Stress among the Information Technology Professionals of Software Development Companies of Bangladesh

Kazi Nazmul Huda, Rashedul Hassan and Mohammad Imran

ABSTRACT

Job stress is a negative pressure typically created out of poor workplace conditions severely affecting individual performance and organizational productivity. This study endeavored to identify the symptoms and sources of job stress among Bangladesh's information technology professionals and a quantitative research method was used here in this regard. A multiple response questionnaire was distributed among 110 information technology professionals for data collection, where one-sample t-test was used for data analysis. Managerial implications for minimizing job stress were prepared based on a series of interviews with academicians and software professionals. The study discovered that information technology professionals have a moderate level of stress symptoms like Headaches, Tension, and Aggressiveness, and time-related stressors as the primary source of job stress.

Keywords: Information technology, IT professionals, Job stress, Software programmers, Stress management, Stressors, Symptoms of stress

JEL classification: M5

Kazi Nazmul Huda is currently working as Associate Professor, Southern University Bangladesh, New/471, Arefinnagar, Baizid Bostami, Chattogram, Bangladesh, He can be reached at: knhuda@yahoo.com

Rashedul Hassan is currently working as Assistant Professor, Southern University Bangladesh, New/471, Arefinnagar, Baizid Bostami, Chattogram, Bangladesh, He can be reached at: rashed@southern.edu.bd

Mohammad Imran is currently working as Assistant Professor University of Science and Technology Chittagong Zakir Hossain Road, Foy's Lake, Khulshi, Chattogram 4202, Bangladesh, He can be reached at: imran610@gmail.com

Evaluating Marketing Strategies of Compressed Biogas (CBG) Companies in India using Decision Tree Analysis

Monika Sirothiya and Chandan Chavadi

ABSTRACT

Purpose: An international study by Unilever (2017) has reported that one-third of the consumers are interested in buying a sustainable brand or product. CBG (Compressed Biogas) is a sustainable and versatile energy source. CBG sector in India is in its nascent stage and faces myriad challenges to market its products. The present study evaluates the marketing strategies of different CBG companies in India. This study categorizes the companies into high performing and low performing companies by using advanced statistical tools based on market performance. Further, the study identifies the main predictors influencing the marketing performance of CBG companies.

Design/Methodology/Approach: Data from 41 CBG companies were collected using direct interview and survey methods. This data was analyzed using descriptive statistics, multiple regression, decision tree, and cluster analysis via the Statistical Package for Social Sciences (SPSS) 24.

Findings: The results of multiple regression verified that 4P's of the marketing mix has a significant impact on CBG marketing performance. The decision tree authenticated that price level is the best predictor for discriminating between high and low performing companies. The two-step clustering method proved that companies' functional characteristics and design of effective marketing strategies result in high performance.

Originality/Value: The study contributes to the literature by classifying companies into high performance and low performance based on the formulation and implementation of different target markets' marketing strategies, using advanced statistical methods.

Research Limitations/Implications: The CBG plants were selected from 6 states of India based on maximum production capacity. These companies may not represent the entire population of CBG in India.

Practical implications: The outcome of the study would help marketers, practitioners, and new entrepreneurs formulate marketing strategies using 4 P's (product, price, place and promotion) to enhance their marketing performance and overcome marketing challenges.

Keywords: Compressed biogas (CBG), Decision tree, Marketing mix strategies, Marketing performance

JEL classification: C38, C44, L1, M31

Monika Sirothiya is a PhD Research Scholar in Bangalore University; she can be reached at: monikasirothiya@gmail.com

Chandan Chavadi is currently working as Associate Professor, Presidency College, Affiliated to Bangalore University; He can be reached at chandan.chavadi@presidency.edu.in