

---

## BICM Research Seminar 53

---

We cordially invite you to join our research seminar and contribute to share academic excellence. Please note the following specifics about the upcoming seminar.

Paper details	
Title	<b>Natural Resource Intensity and Financial Distress Dynamics: An Empirical Investigation across South Asian Energy Firms</b>
Authors	<b>Gourav Roy</b> Lecturer Bangladesh Institute of Capital Market
	<b>Debashish Nath</b> Independent Researcher
	<b>Md. Ashak Bin Hasan</b> Independent Researcher
Presentation details	
Presenter researcher	<b>Gourav Roy</b>
Date	02 March 2026 (Monday)
Time	11:30 AM – 12:30 PM
Venue	BICM Multipurpose Hall
Expected Participants	Faculty Members of BICM & Invited Guests
Discussants	<b>Professor Dr. A. K. Enamul Haque</b> Director General Bangladesh Institute of Development Studies (BIDS)
	<b>Arif M. Faisal</b> Program Specialist (Nature, Climate & Energy) UNDP Bangladesh

## About the Presenter

Gourav Roy is a Lecturer at the Bangladesh Institute of Capital Market (BICM), where he has been serving for more than 3.5 years. He completed his BBA and MBA in Finance from the University of Dhaka and is currently pursuing a second master's degree in Environmental Economics at the Dhaka School of Economics, a constituent institute of the University of Dhaka. Prior to joining BICM, he served at Dhaka Power Distribution Company Limited and the Post and Telecommunication Division for a combined period of approximately 2.5 years. His research focuses on financial distress modeling, natural resource intensity, capital market analysis, sustainability–finance linkages, and corporate risk dynamics in emerging markets, with empirical studies concentrated on South Asian energy and textile sectors using advanced panel data methodologies.

Join us LIVE at BICM Facebook page <https://www.facebook.com/bicm.ac.bd>

The paper abstract is given below. If you have any questions regarding the seminar or you wish to present a paper or invite a guest researcher, please do not hesitate to contact S. M. Kalbin Salema, Assistant Professor, BICM at [kalbin@bicm.ac.bd](mailto:kalbin@bicm.ac.bd).

### **Natural Resource Intensity and Financial Distress Dynamics: An Empirical Investigation across South Asian Energy Firms**

Gourav Roy<sup>1</sup>, Debashish Nath<sup>2</sup> & Md. Ashak Bin Hasan<sup>2</sup>

#### **Abstract**

This study examines whether operational resource dependence constitutes a structural driver of financial distress in emerging energy markets. Using a balanced panel of 30 listed energy firms from Bangladesh, India, and Pakistan over the period 2015–2024 (300 firm-year observations), we analyze the impact of the Natural Resource Intensity Ratio (NRIR)—defined as resource-related input costs relative to total revenue—on corporate financial stability. Financial distress is proxied using both Altman's Z-score and Ohlson's O-score to capture accounting-based solvency and probabilistic bankruptcy risk, respectively. Employing fixed-effects estimators, robust standard errors, and dynamic specifications to account for unobserved heterogeneity and persistence in distress, the findings indicate that higher NRIR significantly reduces financial stability and increases bankruptcy likelihood. The magnitude of the marginal effects suggests that resource inefficiency has economically substantive consequences rather than merely statistical significance. Interaction models further reveal heterogeneous effects across firm size and country contexts, highlighting the role of institutional and structural differences in shaping vulnerability. The results establish that resource cost rigidity operates as a balance-sheet risk factor in capital-intensive sectors, providing implications for credit assessment, regulatory policy, and corporate risk management in resource-dependent emerging economies.

<sup>1</sup> Lecturer, BICM

<sup>2</sup> Independent Researcher