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## BICM Research Seminar 42

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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>The Impact of Bank Stability Metrics on Distance-from-Default</b>
Authors	<b>Faysal Ahmad Khan</b> Assistant Professor Bangladesh Institute of Capital Market
	<b>Imran Mahmud</b> Lecturer Bangladesh Institute of Capital Market
Presentation details	
Presenter researcher	<b>Imran Mahmud</b>
Date	26 February 2025 (Wednesday)
Time	03:00 PM – 4:30 PM
Venue	BICM Multipurpose Hall
Expected Participants	Faculty Members of BICM & Invited Guests
Discussants	<b>Professor Abu Ahmed</b> Chairman Investment Corporation of Bangladesh
	<b>Sheikh Farid</b> Joint Secretary Financial Institutions Division, Ministry of Finance Government of the People's Republic of Bangladesh
	<b>Dr. Md. Mahabbat Hossain, CIPA, CSAA</b> Associate Professor Bangladesh Institute of Bank Management

## About the Presenter

Mr. Imran Mahmud serves as a Lecturer at the esteemed Bangladesh Institute of Capital Market (BICM). He holds an MBA and BBA in Finance from the distinguished Department of Finance at the University of Dhaka, where he excelled academically and was awarded the Dean's Merit Award in recognition of his outstanding achievements. Additionally, Mr. Mahmud has successfully passed CFA Level 1 and CFA Level 2 and is actively pursuing the last level of this prestigious professional certification. Having embarked on his professional journey as a Lecturer of Finance in the Department of Business Administration at Notre Dame University Bangladesh, Mr. Mahmud later assumed a pivotal role as a Lecturer at BICM, further honing his expertise in the field of finance. His contributions to the field are evident through the publication of eight research papers, focusing on various aspects of the country's capital market, both in domestic and international journals. Mr. Mahmud's engagement with the CFA program and his extensive research endeavors have equipped him with in-depth knowledge of diverse facets of capital markets, including equity and debt markets, IPOs, bonds, derivatives, and investment banking.

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).

## The Impact of Bank Stability Metrics on Distance-from-Default

Faysal Ahmad Khan<sup>1</sup> & Imran Mahmud<sup>1</sup>

### Abstract

The study aims to determine whether bank stability metrics can predict the default risk of listed banks in Bangladesh. To achieve this, a sample of 29 banks (7 Shariah-based banks and 22 conventional banks) from 2010 to 2023 is used. As a proxy for default risk, ROA based Altman's Z score and Merton's distance to default (DTD) were used. For bank stability ratios, non-performing loan to equity (NPLE), return on equity (ROE), liquidity coverage ratio (LCR), and capital adequacy ratio (CRAR) were taken. Age, GDP growth, and a dummy for COVID were taken as control variables. Random effect model was tested to interpret the results across all models. The impact of stability metrics differs depending on the proxies taken in the study, as evidenced by the endogeneity and robustness test; however, it was found that capital adequacy, asset quality and profitability significantly impact bank's default risk for all models, respectively. Additionally, shariah-based banks are more sensitive to asset quality and profitability, where changes in these factors have a heightened effect on default risk. Conventional banks tend to be more sensitive to capital adequacy suggesting that capital adequacy management is critical for these banks' default risk.

**Keywords:** Z-score, Metron's distance to default, Default risk, Random effect model, Conventional banks, Shariah-based banks, Endogeneity test

**JEL Classification:** C23, C36, G21, G32, G33, G41

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