

"Gheorghe Asachi" Technical University of Iasi, Romania



GREEN DIRECT FINANCING AND THE BOND DEFAULT RISK OF HEAVILY POLLUTING FIRMS

Chunqing Gu, Bin Jiang*

School of Modern Finance, Jiaxing Nanhu University, Jiaxing, Zhejiang, China

Abstract

The relationship between green credit and the financial stability of heavily polluting firms (HPFs) has drawn significant attention in the context of sustainable development and environmental regulation. However, the specific impact of green direct financing, represented by Green Credit Guidelines (GCGs)—on the bond default risk of HPFs remains unclear. This study investigates how the implementation of GCGs affects the financial health of HPFs by analyzing their influence on bond default risk.

Using a difference-in-differences approach, we provide empirical evidence that GCGs increase the bond default risk of HPFs. This effect is primarily driven by the exacerbation of the maturity mismatch between investment and financing, where HPFs face increased constraints in securing long-term funding while still engaged in capital-intensive projects. The study identifies the mediating role of this maturity mismatch in linking green credit policies to elevated default risks. Furthermore, cross-sectional analysis reveals that the adverse impact of GCGs on HPF bond default risk is mitigated in regions with higher levels of digital inclusive finance and in firms with greater corporate transparency. Digital inclusive finance facilitates improved access to long-term financial resources, reducing the financing gap, while corporate transparency helps alleviate information asymmetry, improving creditworthiness in the eyes of investors and financial institutions.

These findings underscore the need for a balanced implementation of green credit policies that encourage sustainable industrial transformation without disproportionately increasing financial distress in HPFs. The study contributes to the literature by providing insights into the financial risks associated with environmental credit regulations and highlights the role of financial technology and transparency in mitigating unintended negative consequences.

Key words: bond default risk, difference-in-differences, green credit guidelines, heavily polluting firms

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^{*} Author to whom all correspondence should be addressed: e-mail: jiangb128@163.com