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## Fintech Credit and Bank Efficiency Two-way Relationship: A Comparison Study Across Country Groupings

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**Abstract :** This paper studies the two-way relationship between fintech credit and banking efficiency using the Generalized panel Method of Moment (GMM) estimation in structural equation modeling (SEM). Banking system efficiency, defined as its ability to produce the existing level of outputs with minimal inputs, is measured using input-oriented data envelopment analysis (DEA), where the whole banking system of an economy is treated as a single DMU. Banks are considered an intermediary between depositors and borrowers, utilizing inputs (deposits and overhead costs) to provide outputs (increase credits to the private sector and its earnings). Analysis of the interrelationship between fintech credit and bank efficiency is conducted to determine the impact in different country groupings (ASEAN, Asia and OECD), in particular the banking system response to fintech credit platforms. Our preliminary results show that banks do respond to the greater pressure caused by fintech platforms to enhance their efficiency, but differently across the different groups. The author's earlier research on ASEAN-5 high bank overhead costs (as a share of total assets) as the determinant of economic growth suggests that expenses may not have been channeled efficiently to income-generating activities. One practical implication of the findings is that policymakers should enable alternative financing, such as fintech credit, as a warning or encouragement for banks to improve their efficiency.

Keywords: fintech lending, banking efficiency, data envelopment analysis, structural equation modeling

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