

ABSTRACT

In recent decades, financial innovation and digitization have been key drivers of transformation in the financial services industry. Financial Technology (FinTech) has emerged as an important force that utilizes advanced technology to create revolutionary services and business models. FinTech is changing the way financial institutions operate, improving efficiency, expanding the range of services, and strengthening competitiveness in an increasingly dynamic market.

This study examines the influence of Financial Technology on bank productivity in Indonesia through two main dimensions, namely internet banking (FinTech 3.0) and bank lending channels (FinTech 3.5). The research object includes 24 conventional banks listed on the Indonesia Stock Exchange during the period 2018-2023.

The approach used is a quantitative approach in two stages. First, changes in bank productivity were analyzed using the Data Envelopment Analysis method based on the Malmquist Productivity Index, which showed that the increase in productivity was moderate and mostly driven by technological changes. Second, the dynamic relationship between variables as well as the role of moderating variables are analyzed using the Generalized Method of Moments technique in a dynamic panel model.

The results show that Financial Technology has a significant effect on bank productivity. Productivity is also affected by internal factors such as Return on Assets, Non-Performing Loans, Net Interest Margin, and Loan to Deposit Ratio; industry factors such as Herfindahl-Hirschman Index; and macroeconomic factors such as Gross Domestic Product, inflation, and interest rates.

In addition, bank characteristics such as size, firm age before adopting FinTech sensitized Debt to Equity Ratio, and firm age after adopting FinTech are shown to play an important moderating role, with most interactions showing strengthening, weakening, or reversing effects on the main effect as either quasi-moderators or pure moderators. These findings confirm the importance of a contextualized Financial Technology adoption strategy to drive improved bank performance and productivity in the digital era.

Keywords: Bank, Bank Lending Channel, Malmquist Productivity Index, FinTech, Internet Banking Productivity.