

ABSTRACT

The COVID-19 pandemic, which began to hit Indonesia in early 2020, created inevitable disruptions, including for Indonesia's manufacturing industry. The decline in production output observed in several manufacturing subsectors does not necessarily indicate that technical efficiency in production processes has also declined. This raises an important question regarding the extent to which the pandemic has affected the manufacturing industry's ability to continue operating efficiently. Therefore, this study aims to examine the level of technical efficiency and analyze the impact of the COVID-19 pandemic on technical efficiency in Indonesia's manufacturing industry. Using subsector-level data for the 2017-2022 period, this study employs the Stochastic Frontier Analysis (SFA) method with a transcendental logarithmic (translog) production function model. The results indicate that the technical efficiency of Indonesia's manufacturing industry increased during the pandemic. The average technical efficiency reached its peaked in 2020 (0,869) and 2021 (0,865), higher than in other years within the observation period. Furthermore, technical efficiency tends to be higher in industries with larger sizes, higher market concentration, lower capital output ratio, and smaller proportion of state ownership.

Keywords: *Pandemic COVID-19, Technical Efficiency, Stochastic Frontier Analysis, Manufacturing Industry*

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