ABSTRACT

Bank holds a crucial role in the financial system and economic growth of a country, including its international activities across borders. The direct operation in a multinational bank contributes to the financial stability, but at the same time its interconnection could possibly enlighten the beginning of a crisis if one of the banks is plunged into a risk and create a spillover effect to the other banks, which also called as systemic risk. Systemic risk is interpreted as a sudden event affects the entire institution, financial system, or even in a broader financial scope as a dominos effect in the chain of the affected party linkages which result in obligation fulfillment failure. Therefore, systemic risk needs to be concerned and addressed as it has a potential in ceasing financial intermediation function of a bank that leads to the disrupted financial system and global economic flow. As a result of this contradiction, this study aims to picture a phenomenon of systemic risk in a multinational bank.

This research used Vector Autoregression method, which includes three analyses: Granger Causality, Impulse Response Function, and Variance Decomposition. The sample used in this study was DBS subsidiaries in the time span of 2012-2021 with Non-performing Loan (NPL), Return on Asset (ROA), and Capital Adequacy Ratio (CAR) as the endogenous variables. This study used a secondary type of data, where it was sourced from Bloomberg in the form of financial reports in quarter.

There is a possibility of a spillover effect between bank's subsidiaries of multinational bank. Granger causality analysis shows there is a propagation of shock transmission in a form of causality relationship and one-way relationship. On average, when the shocks hit one of the bank subsidiaries, other subsidiaries responded significantly in the short term. Every subsidiary gives a contribution to the shock when another is affected by one standard deviation.

Keywords: Systemic Risk, Spillover Effect, Multinational Bank