INTAN APRIADI. The Competition, Efficiency, and Stability of Banking in Indonesia. Supervised by MUHAMMAD FIRDAUS, ROY SEMBEL and PERDANA WAHYU SANTOSA.

Banking industry is like a heart in the body of economy that plays the role to pump the ‘blood’ in the form of money and to distribute it to the organs of the body in need of blood. Thus, if the ‘heart’ is paralyzed, the economic system will crumble. Thus, the banking industry is the main channel where fragility is transmitted to other sectors in the economy by disrupting the interbank lending market and payment mechanism, and/or by reducing the availability of the financing.

Since 1970, there have been recorded 117 cases of systemic banking crises and 51 cases of non-systemic banking crises in developed countries and emerging market countries. Banking instability has created a large cost, one of which is in the form of fiscal resolution cost for the government. This cost comprises various expenses to rehabilitate the banking system including bank recapitalization cost and payment to depositors or savings through the deposit guarantee (insurance) scheme. This fiscal resolution cost on average is quite substantial, amounting to 15% of GDP. This cost is higher in emerging market countries especially when accompanied by currency crisis. In Indonesia, as a result of 1997-1998 crises, the overall total cost of recovery of the banking system through the issuance of government bonds was around Rp658 trillion, consisting of Rp430 trillion for bank recapitalization cost, Rp218 trillion for BLBI (Bank Indonesia Liquidity Support) cost, Rp9.97 trillion for program credit cost.

The first objective of this study was to measure the competition, efficiency, and stability of banking in Indonesia. Competition was measured by the Herfindahl-Hirschman Index, efficiency was estimated by the Stochastic Frontier Analysis approach, and stability was calculated by Z-Score. The second objective was to analyze the effect of competition on banking stability in Indonesia, whether it follows the Competition-Stability Hypothesis or the Competition-Fragility Hypothesis; the effect of the opposite direction was also analyzed, to see the influence of stability on the banking competition in Indonesia. The third objective was to analyze the effect of competition on banking efficiency in Indonesia, whether it follows the Competition-Efficiency Hypothesis or the Competition-Inefficiency Hypothesis; the effect of the opposite direction was also analyze, to find out the influence of efficiency on banking competition in Indonesia. The fourth objective was to analyze the effect of stability on banking efficiency in Indonesia and the effect of opposite direction as well.

To examine the relationship between competition, efficiency and stability, the Panel Vector autoregression model was used. The first stage of this test was conducting a formal test to determine data stationarity. The second stage was determining the number of optimal lags by using five methods or criteria. The third stage was ensuring that the Panel VAR model used met the conditions of stability on the optimal lags. The last stage was then the estimation of VAR Panel and Granger Causality Analysis. As a robustness test of the results of this Panel
VAR estimation, Impulse Response Function of the endogenous variables due to the shock from other variables was conducted.

The results of this study indicated that HHI affected the level of banking efficiency with a positive relationship. This means that in Indonesia the increase of competition (indicated by the declining HHI) will reduce the level of banking efficiency. Therefore, the behavior of banking in Indonesia follows the Competition-Inefficiency Hypothesis. As for stability, it affected the level of banking efficiency in Indonesia with a positive relationship. This means that in Indonesia the increase of stability will also increase the level of banking efficiency.

Efficiency affected the HHI of banking with a negative relationship. This means that in Indonesia the increase of efficiency will ultimately increase banking competition (indicated by a decrease in HHI). On the other hand, stability did not significantly affect (not Granger cause) competition.

HHI affected stability with a positive relationship. This means that in Indonesia the increase of competition (indicated by the declining HHI) will decrease banking stability. This is in accordance with the Competition-Fragility Hypothesis. On the contrary, efficiency did not significantly affect banking stability in Indonesia.

On the macro prudential level, the first implication of these results is connected with the issue of interest rate management. The results of this study can explain, among others, the difficulty on lowering bank interest rates in Indonesia. The second one is the suggestion on the improvement of the Single Presence Policy. The third one is related to the evaluation of the magnitude of Counter-Cyclical Buffer. The fourth one is linked to the sharpening of the criteria for Domestic Systemically Important Banks. Lastly, the fifth implication is associated with the quality improvement of the monitoring and maintenance of the condition of financial system stability that is carried out by the Financial System Stability Committee. There were some managerial implications on micro prudential level on result of this study as well.

Keywords: banking stability, competition, granger causality analysis, panel vector autoregression,