The Optimal Basel Capital Requirement to Cope with Pro-cyclicality : A Theoretical Approach

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This paper focuses on the role of the Basel capital requirement and proposes a new counter cyclical measure by use of a simple general equilibrium model.

(i)The Basel capital requirement ratio should depend on various economic factors such as GDP, stock prices, interest rates and land prices, based on a simple general equilibrium model in order to cope with pro-cyclicality. Otherwise expansion of bank loans will be enhanced during boom period and they will face with credit crunch in sluggish period. Previous papers do not show any specific model and conclude that the capital requirement ratio would be better if adjusted based on stock price or economic growth, etc.

(ii)The Basel minimum capital requirement rule should be different from country to country, since the economic structures and the behavior of banks are different from each other.

(iii)The Basel capital requirement ratio should vary during the period of economic boom and during the period of economic downturn since the coefficient obtained from the theoretical model varies.

(iv)Cross-border bank operation should follow the minimum capital requirement ratio where bank lending activities are going on rather than the origin of the source of fund.

Empirical estimations are now underway. Some restricted cases of empirical results are reported in this paper.