Abstract

This study performs a stress testing exercise on the Italian banking system in view of the 2007 financial crisis which was triggered by the crash of subprime mortgages. At the base of the global financial crisis was a failure of financial regulators to quantify the accumulation of endogenous risks. Following the crisis, stress testing has acquired particular emphasis in the field of risk measurement under the Basel II supervisory framework. An econometric relationship between the probability of default and the macroeconomic indicators is modeled according to the Merton approach for structural analysis using data on the Italian banking system. A latent factor model is employed to understand the dependence of the credit risk on the changes in the macroeconomic environment. The resulting relationship is exploited to compute the capital requirement under stressed conditions in order to draw inference about the resilience of the Italian banking system.

JEL Classification G0, G01, G17, G10, C50, C22

Keywords Financial crisis, macroeconomic stress testing, credit risk, latent-factor model

Author’s e-mail jacomessi@yahoo.it
Supervisor’s e-mail petr.gapko@seznam.cz

Abstrakt

Klasifikace JEL G0, G01, G17, G10, C50, C22
Klíčová slova Financial crisis, macroeconomic stress testing, credit risk, latent-factor model

E-mail autora jacomessi@yahoo.it
E-mail vedoucího práce petr.gapko@seznam.cz