

QUANTIFICATION APPROACH OF SYSTEMIC RISK IN FINANCIAL INSTITUTIONS

Ada ALIAJ¹, Ilir HOTI²

Lecturer at Faculty of Bussiness, “Aleksander Moisiu” University Durrës
Dean of Faculty of Bussiness, “Aleksander Moisiu” University Durrës

Abstract

In this paper we address the question of the prediction of large failures, busts, or system collapse, and the necessary concepts related to risk quantification, minimization and management. The driving motive is dependent to the fact that the predictions using standard financial techniques and statistical distributions fail to predict or anticipate rating down/upgrades of financial institutions. The key points contributing to a framework for measuring and stress testing the systemic risk of the set of major banks and financial institutions interrelate the distinction between approaches designed for high frequency and low severity loss scenarios from low frequency and high severity ones. The actions and motivations of managers and supervisory human resources are analyzed in the presence or absence of learning effects. Therefore the possibility of failures is closely depicted due to human involvement in rare or low frequency events. The hypothesis we try to test as true one is the statement that the risk exposure of a bank or financial institution is directly due to human influence, and reflects both learning and risk taking, with the presence of the finite and persistent human error contribution while taking or exposed to risk. The systemic risk is measured by the price of insurance against financial distress, which is based on ex ante measures of default probabilities of individual banks and forecasted asset return correlations. Outstandingly, using realized correlations estimated from high-frequency equity return data can notably improve the accurateness of forecasted correlations.

Keywords: *Stress testing, Systemic Risk, default probabilities, forecasted asset return correlatio*