

Bank Capital and Securitization

Ali Termos

American University in Bulgaria

April 2024

Global banks use their own internal risk models to determine their capital adequacy and loan loss provisions. However, these models are not always aligned with regulatory models, namely, the Bank for International Settlement (BIS) Basel III models. The banks' argument is that their internal models are far more robust. In this paper, I show how global banks' internal models fare regarding regulatory ones in maintaining the levels of capital that warrant immunity of loan losses in distressed times. Because internal models are mostly proprietary, I use Merton (1973)'s model to determine the Expected Default Frequency (EDF) of these banks throughout various business cycles while gauging this to the EDF of the other group of banks that uses external models. Furthermore, I examine the correlation between EDF and the level of loan securitization by banks.