Summary

Gürtler, Marc, Heithecker, Dirk, and Hibbeln, Martin

"Concentration Risk under Pillar 2: When are Credit Portfolios Infinitely Fine Grained?"

The ongoing debate concerning credit concentration risk is mainly driven by the requirements on credit risk management due to Pillar 2 of Basel II since risks (e.g. concentration risk) that are not fully captured by Pillar 1 should be adequately considered in the banks' risk management. This instruction is indeed relevant since quantifying credit portfolio risk in Pillar 1 is based on an Asymptotic Single Risk Factor (ASRF) framework in which concentration risk is not covered. Against the background of the ASRF model, we determine the number of credits up to which concentration risk leads to a significant estimation error so that the assumption of an infinitely fine grained portfolio is inadequate. We conclude that the critical portfolio size varies from 22 up to 35,986 debtors, dependent on assets correlation and probability of default. Using a modified valuation function (granularity adjustment) it is possible to reduce the critical number of credits by averaged 83.04 %. (JEL G21, G28)