

# **Credit Losses in Economic Downturns: Empirical Evidence for Hong Kong Mortgage Loans**

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## **Summary**

Economic downturns, such as the current US subprime mortgage crisis, translate into unexpected losses to financial institutions as the number of borrowers who are unable to meet payment obligations increases and the amount of the receivables which financial institutions recover decreases. Generally speaking, financial institutions have a good understanding of default rates. However, recoveries or losses given default and therefore loss forecasts are often based on strong assumptions.

This working paper develops an empirical framework for deriving loss forecasts given default as well as credit portfolio loss forecasts for economic downturns. The approach is based on the risk characteristics of the underlying credit portfolio and does not require the estimation of the Value-at-Risk.

This exercise is important to financial institutions for meeting regulatory requirements. As a matter of fact, the Internal Ratings-Based approach of the proposals of the Basel Committee on Banking Supervision derives the regulatory capital from a Value-at-Risk model in which individual credit risk parameters are based on an economic downturn scenario.