

The Impact of Revenue Diversity on Banking  
System Stability  
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## Aim of the paper

**Problematic:** How strategies toward specialization and diversification of financial activities affect their ability to shelter from adverse economic conditions.

**Empirical paper:** Based on a measure of risk, determined on extreme value analysis.

**Results:** The shift to non-traditional banking activities reduces banking system stability. Traditional banking activities are less risky. Big implication in terms of prudential supervision.

# Empirical Analysis

**Data:** Balance sheet and income statement data from Bankscope datase. Stock returns and market capitalization from datastream. 15 European countries. Sample: 1992-2004. The panel is balanced so around 100 – 150 observations (1,500 observations).

**Measure of banking system stability:** Extreme systematic risk. estimate the probability of crashes in bank conditional on crashes of a market factor = co-crash probability =  $tail - \beta$  (Straetmans et ali, 2005).

**Methodology:** 2-step Cross-sectional analysis with time and cross section variations

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Analysis for eight overlapping time periods of 6 years shows instability. why not a formal test a la Phillips et al, Candelon and Straetmans, and Stratmans et al?

## A 2-step procedure

**Idea:** Once the systemic risk is estimated (first step), it is used as an endogenous variable in a second step regression (called the baseline equation) (cross-sectional analysis).

**Question:** did you correct for the statistical bias that results from using an estimated variable as endogeneous? Correction that should be applied would be similar to the one used in 2SLS.

## The baseline regression

**Explanatory variables:** Net commission income, net trading income, net other operating income, bank characteristics.

**Dependent variables:** Rolling  $Tail - \beta$  over 6 year. Problem: it introduces time dependence leading to bias in the coefficients of the regression + artificially introduces dynamic in the model. How to tackle that: realized  $Tail - \beta$ .

**Estimation methods:** QMLE + fixed time and country effect. Possible problems of endogeneity? Why not using a GMM methods?

## Robustness check

**Cluster** (large and complex banking groups, smaller financial institutions, out of the banking crisis, banks with moderate and aggressive growth strategy).

**other tests** Cross-sectional dependence (Pesaran), random specific effects vs fixed one (Hausman), dynamic models.