



A discussion of  
Chionsini, Foglia & Reedtz

# “Bank mergers, diversification and risk”

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## Discussion of "Bank mergers, diversification and risk"

- **G-10 Consolidation in the Financial Sector:**
    - "Because the net impact of consolidation on individual firm risk is unclear, the net impact [...] on systematic risk is also unclear."
  - **Objective of this paper**
    - Identifying the net effects of mergers on credit VaR by:
      - diversification of idiosyncratic risk
      - changing lending policy / increased risk taking
  - **Why important?**
    - Regulation
      - banking supervision, merger policy
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## Discussion of "Bank mergers, diversification and risk"

### ■ Approach

- Merging bank portfolio's: different risk profiles
- Sources of default risk:
  - systematic (macro)
  - industry / regional
  - idiosyncratic
- Semi-parametric calculation of VaR

### ■ Insights

- HH-index falls due to merger from 4.8/6.9 to 4.2
  - Average unexpected credit losses (99.9% VaR) fall from 2.00/3.31% to 1.87 due to "diversification"
  - Riskiness more or less unchanged 2 years after merger
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## Discussion of "Bank mergers, diversification and risk"

### ■ Issues/questions

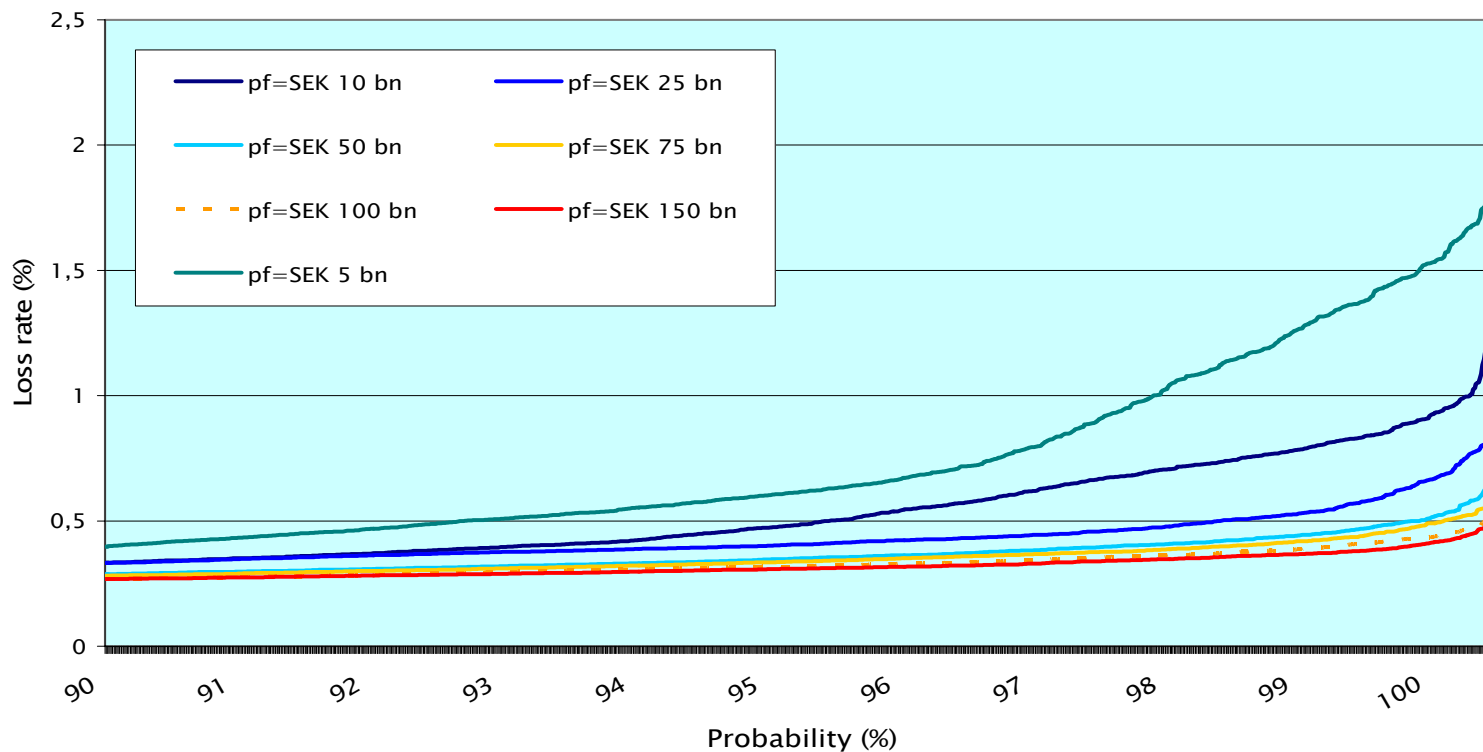
- Credit risk model
- Is the "concentration" effect a diversification effect or a portfolio size effect?
- Horizon: merger effects after 2 years?

### ■ Extensions

- Separate diversification effect, portfolio size effect and riskiness shift
  - Generate portfolios with identical profiles to calculate pure size effect
  - Change in "risk profile" due to size or diversification?
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# Discussion of "Bank mergers, diversification and risk"

Bank A: VaR probabilities 90 – 100%



# Discussion of "Bank mergers, diversification and risk"

VaR percentiles for different portfolio sizes (nr. simulated portfolios 10.000)

Size (SEK bn)	Horizon (quarters)	Value at Risk Percentiles							
		90	95	97,5	99	99,5	99,75	99,9	99,99
5	1	0,095	0,159	0,236	0,400	0,502	0,551	1,342	1,484
10	1	0,087	0,128	0,175	0,285	0,351	0,680	0,738	0,782
25	1	0,068	0,102	0,132	0,224	0,323	0,336	0,360	0,633
50	1	0,065	0,090	0,141	0,185	0,193	0,200	0,217	0,363
75	1	0,064	0,089	0,124	0,137	0,149	0,228	0,246	0,262
100	1	0,062	0,084	0,102	0,113	0,149	0,184	0,196	0,207
150	1	0,063	0,075	0,083	0,125	0,132	0,146	0,185	0,201
5	4	0,412	0,619	1,021	1,415	1,576	1,663	1,949	2,454
10	4	0,342	0,502	0,706	0,839	0,927	0,997	1,170	1,354
25	4	0,340	0,412	0,478	0,578	0,666	0,750	0,806	0,934
50	4	0,293	0,355	0,408	0,471	0,515	0,569	0,626	0,728
75	4	0,285	0,342	0,387	0,442	0,491	0,522	0,553	0,626
100	4	0,273	0,323	0,363	0,411	0,437	0,468	0,499	0,562
150	4	0,271	0,312	0,348	0,382	0,414	0,440	0,477	0,518