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Back to the basics in banking? A micro-analysis of banking system stability

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The ongoing crisis serves as a reminder that disruptions in the smooth functioning of the banking industry tend to exacerbate overall fluctuations in output. Therefore, preserving banking sector stability is of the utmost importance to banking supervisors. That is, regulators are especially interested in the frequency and magnitude of extreme shocks to the system which threaten the smooth functioning (and ultimately the continuity) of the banking system.

An extensive literature reviews banking crises around the world. Initial research focussed on cross-country determinants, such as macro-prudential supervision. Subsequently, attention has shifted towards the impact of the regulatory and institutional environment on banking crises. However, not all banks within a country should be expected to be equally sensitive to instabilities that may arise in the banking system.
We investigate why some banks are better able to shelter themselves from the storm by analyzing the bank-specific determinants of individual banks' exposure to systemic banking risk. A bank's exposure to systemic banking risk is measured by a "tail beta". This tail beta measures the probability of a crash in a bank's stock price conditional on a crash in a European banking sector stock price index.

What makes banks more fragile?
Overall, we show that banks should go back to the basics. Our results establish that the shift to non-traditional banking activities, which generate commission, trading and other non-interest income, reduces banking system stability. More specifically, interest income is less risky than all other revenue streams. In addition, other indicators of bank specialization in traditional intermediation, such as a higher interest margin or higher loans-to-asset ratio, corroborate the finding that traditional banking activities result in lower systemic banking risk. Finally, all estimated relationships are stronger during turbulent times compared to normal economic conditions. These findings question the usefulness of financial conglomeration as a risk diversification device, at least in times of stock market turmoil. Overall, diversifying financial activities under one umbrella institution does not improve banking system stability, which may explain why financial conglomerates trade at a discount.

Other findings also bear implications for banking supervision and regulation. In particular, bank size is by far the most significant driver of banks' tail betas. Some particularly thorny issues are raised by the existence of financial institutions that may be perceived as "too big to fail" and the moral hazard issues that may arise when governments intervene in a financial crisis. The latter could be perceived as an implicit expansion of the safety net and may exacerbate the problem of "too big to fail," possibly resulting in excessive risk-taking and still greater systemic risk in the future.

Finally, the results are interesting in light of the third pillar of Basel II: market discipline. Market participants, in addition to armies of regulators, will do some of the work in assessing the overall risk position of the bank. A more complete and coherent disclosure of the different revenue streams facilitates a better understanding of the risks being taken by different institutions.