Pricing Operational Risk in Commercial Banking

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Abstract:
How commercial banks can estimate a premium to be charged in loans to cover bank's operational risk? Although operational risk (i.e. "the risk of loss resulting from inadequate or failed internal processes, people and systems or from external events": Basel Committee on Banking Supervision, 2006 p.144) is one of main source of risk for commercial banks, there are no papers answering this question. This is surprising since, over the last decade, we observed some prominent examples of operating losses due to internal frauds [e.g. fraudulent trading in the Allied Irish Bank, Barings and Daiwa Bank Ltd generating operational losses of 691 USD million, 1 USD billion, and 1.4 USD billion, respectively], external fraud [e.g. the 611 USD million operational losses at the Republic New York Corp. for fraud committed by custodial clients], damage to physical assets [e.g. Bank of New York suffered 140 USD million operational losses to damage to facilities related to September 11, 2001], business disruption and system failures [e.g. Solomon Brothers suffered $303 million operational losses because of a change in computer technology that resulted in un-reconciled balances]. By using a unique data set (i.e. all operational losses suffered by Italian banks during the late 2000s), we develop a new approach to estimate the shadow price of operational risk. We find that …

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