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The Financial Crisis of 2007/2008: Causes and Consequences

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The project "The Financial Crisis of 2007/2008: Causes and Consequences" which is generously supported by the Swiss Finance Institute consists of several subprojects.

The first subproject deals with the question of whether banks can learn from crises. This question is of central importance to policymakers, market participants, and regulators. We examine in this project whether banks that were particularly affected by the 1998 financial crisis following Russia's default were also badly affected by the recent financial crisis, or whether they were able to change their business model or risk culture to decrease crisis exposure. We show that the stock market performance of banks in the recent crisis is positively correlated with the performance of banks in the 1998 crisis. This result holds whether we include investment banks in the sample or not. Our key result is that for each percentage point of loss in the value of its equity in 1998, a bank lost an annualized 66 basis points during the financial crisis from July 2007 to December 2008. We then seek to understand the correlation between returns during the 1998 financial crisis and the recent financial crisis and show that it is at least partly due to a business model that relies on higher leverage, more short-term funding, a larger proprietary trading desk, and stronger asset growth during the boom preceding a crisis.

It is easy to see the relevance of this project for society at large, especially for financial regulation. The subproject suggests that banks have difficulty learning from crises on their own, either because they follow a certain business model that is difficult to change or because their organization has a certain culture that is very persistent. Paired with either explicit or implicit too big to fail guarantees, our results suggest market-based solutions to problems in the financial sector may not always work. Our results speak for a more active role for regulators, which they have taken after the crisis. The first subproject also relates to the current discussion on a renewed separation of investment banking and commercial banking. Given our main result, some of the events subsequent to 1998 that have been argued to have played a key role in the performance of banks during the financial crisis have to be put in perspective. The Gramm-Leach-Bliley Act (GLBA) was signed into law in November 1999. GLBA repealed central provisions of the Glass-Steagall Act that restricted bank holding companies from affiliating with securities firms and insurance companies. The strong return predictability of 1998 crisis returns for the financial crisis of 2007/2008 suggests that part of the performance of banks during the recent crisis can be attributed to factors that already existed before the enactment of GLBA or other regulatory decisions such as the Commodities Futures Modernization Act or the SEC's amendments to the broker-dealer net capital rule.

In the second subproject, we investigate bank decisions with respect to the composition of regulatory capital. We find that upon their allowance in regulatory capital beginning in 1996, trust preferred securities quickly became a significant component of many banks' Tier 1 capital. Trust preferred securities are hybrid capital instruments treated as debt for accounting and tax purposes, but as Tier 1 capital, within limits, for regulatory purposes.

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Issuing trust preferred securities is a form of regulatory arbitrage that increases the bank's probability of default. We study the determinants of the issuance of a hybrid capital instrument and the consequences of its issuance. These trust-preferred securities were always controversial and will be phased out under the new stricter capital requirements in Basel III. The Basel Committee on Banking Supervision (BCBS) published a comprehensive capital reform paper in December 2009, "Enhancing the Resilience of the Financial System", which provided suggestions to strengthen the loss absorption capabilities of regulatory capital. Part of the suggestions, eventually implemented in the Basel III reforms, was to phase out the recognition of TPS for Tier 1 capital, starting in 2013. In the U.S., Section 171 of the Dodd Frank Act (the Collins Amendment) incorporated new rules for bank regulatory capital. One important implication of this requirement is that trust preferred securities can no longer be included in the definition of Tier 1 capital for large BHCs. Our paper shows that banks aggressively used these instruments to finance growth and to increase their probability of default, and suggests that the new implemented rules in Basel III could lead to the desired consequences of increasing the resilience of regulatory capital.

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Fields of Research

Finance & Society