

Chapter 2: Executive Summary

How Banks Played the Leverage “Game”

Viral V. Acharya and Philipp Schnabl

Background

Credit risk transfer mechanisms such as securitization are simply supposed to transfer assets and risk off bank balance sheets and on to other investors in the economy. Nevertheless, it appears that in the build-up to the financial crisis, banks increased their leverage and exposure to aggregate risk precisely by availing themselves of such mechanisms. In the process, they exposed themselves to the risk that a significant economy-wide shock would be sufficient to wipe out their capital base rapidly. And, as we all know, this risk did indeed materialize, starting with an increase in delinquencies on subprime mortgages in 2006 and 2007 followed by the subsequent collapse in home prices.

The Issues

The immediate policy questions are as follows:

1. How could excessive leverage and aggregate risk get built up to such a scale in a financial sector that is so heavily regulated?
2. In particular, how and why did capital adequacy requirements fail in their stated job of limiting bank leverage and risk?

Credit Risk Transfer and Regulatory Arbitrage

Our analysis of the credit risk transfer mechanisms employed during the period 2003–2007 suggests the answer is simple: While credit risk transfer may have economic merit as a risk-transfer tool, its “dark” side is that many of its incarnations may have been clever innovations of the financial sector to arbitrage regulation. Such regulatory arbitrage took two principal forms: first, a setting up of asset-backed commercial paper (ABCP) “conduits” (and its sister entities such as “SIVs”) by banks, and, second, a significant retention by banks of AAA-rated asset-backed securities.

- ABCP conduits: Banks set up off-balance-sheet ABCP conduits where they transferred some of the assets they would have otherwise held on their books, funded them with a sliver of equity and the rest with rollover commercial paper, and provided *liquidity enhancement* and *credit enhancement* to these conduits. The enhancements implied that investors in conduits had recourse

to banks in case the quality of assets deteriorated. Put simply, investors would return the assets back to bank once they suffered a loss. Such enhancements were treated as capital-light in existing Basel rules for capital requirements. As banks rolled out more and more ABCP conduits, they increased their short-term liabilities. But their effective or contingent leverage remained in the “shadow banking system”. What is more, they were able to free up capital to originate more assets, generally of lower quality, and hide them in the shadow banking system.

- Retention of AAA-rated ABS: Banks also exploited the fact that they could get capital relief by simply switching away from loans into investments in the form of AAA-rated tranches of CDOs and CLOs, which again had a significantly lower capital charge. About 30% of all AAA asset-backed securities remained *within* the banking system, and if one includes ABCP conduits and SIVs with recourse, this fraction rises to 50%. While AAA-rated securities are typically expected to carry low absolute risk, the fact that the newer assets originated by banks were down the quality curve was ignored and thus their ratings were overly generous.

Regulatory arbitrage as a business model is a dangerous undertaking. While it brings short-run rewards, the lack of any core economic value rears its ugly head in economic downturns. Not surprisingly, banks that were more funded through ABCP relative to their equity and had greater capital-light investments, suffered the greatest losses and equity price declines during the crisis.

Policy Recommendations

1. Regulation that focuses narrowly on just one performance metric of banks will be easy to game. The current regulatory focus is on a single ratio (capital to suitably risk-weighted assets). Regulators should take a more rounded approach that examines bank balance sheets as equity or credit analysts would do. By relying on several aspects (such as loans to deposits, insured deposit to assets, holdings of liquid treasuries and OECD government bonds relative to assets, etc.) regulators would have an “early warning” system that raises a flag when further investigation is needed.
2. Regulators should recognize that isolated failures of credit intermediaries are not a problem for economies per se; but systemic failures of many credit intermediaries are. This intuitive observation suggests that regulation designed to make banks individually safer may encourage excessive credit risk transfer that makes aggregate crises more severe. Hence, the bank regulation apparatus around us needs to be reformed and focused more on aggregate risk to the economy rather than on a single capital ratio tied to individual bank risk.

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