

## Bank Capital: Lessons from the Financial Crisis

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### Abstract

Using a multicountry panel of banks, we study whether better capitalized banks experienced higher stock returns during the financial crisis. We differentiate among various types of capital ratios: the Basel risk-adjusted ratio, the leverage ratio, the Tier 1 and Tier 2 ratios, and the tangible equity ratio. We find several results: (i) before the crisis, differences in capital did not have much impact on stock returns; (ii) during the crisis, a stronger capital position was associated with better stock market performance, most markedly for larger banks; (iii) the relationship between stock returns and capital is stronger when capital is measured by the leverage ratio rather than the risk-adjusted capital ratio; (iv) higher quality forms of capital, such as Tier 1 capital and tangible common equity, were more relevant.

### LITERATURE CITED

Basel Committee on Banking Supervision. (2009) "Consultative Proposals to Strengthen the Resilience of the Banking Sector." Bank of International Settlements, <http://www.bis.org/press/p091217.htm>.

[Google Scholar](#)

Berger, Allen N., and Christa H.S. Bouwman. (2009) "Bank Capital, Performance, and Survival around Financial Crises." Unpublished manuscript.

[Google Scholar](#)

Blum, M. Jürg. (2007) "Why Basel II May Need a Leverage Ratio Restriction." Swiss National Bank Working Paper 2007-4.

[Google Scholar](#)

Calem, Paul, and Rafael Rob. (1999) "The Impact of Capital-Based Regulation on Bank Risk-Taking." *Journal of Financial Intermediation*, 8, 317–52.

[Web of Science®](#) | [Google Scholar](#)

---

Caprio, Gerard, and Patrick Honohan. (1999) "Beyond Capital Ideas: Restoring Banking Stability." World Bank Policy Research Working Paper No. 2235.

[Google Scholar](#)

---

Caprio, Gerard, Asli Demirgüç-Kunt, and Edward Kane. (2010) "The 2007 Meltdown in Structured Securitization: Searching for Lessons, Not Scapegoats." *The World Bank Research Observer*, 25, 125–55.

[Web of Science®](#) | [Google Scholar](#)

---

Demirgüç-Kunt, Asli, and Luis Servén. (2010) "Are All Sacred Cows Dead? Implications of the Financial Crisis for Macro and Financial Policies." *The World Bank Research Observer*, 25, 91–124.

[Web of Science®](#) | [Google Scholar](#)

---

Diamond, Douglas W., and Raghuram Rajan. (2000) "A Theory of Bank Capital." *Journal of Finance*, 55, 2431–65.

[Web of Science®](#) | [Google Scholar](#)

---

Drukker, David M. (2003) "Testing for Serial Correlation in Linear Panel Data Models." *Stata Journal*, 2, 168–77.

[Google Scholar](#)

---

Estrella, Arturo, Sangkyun Park, and Stavros Peristiani. (2000) "Capital Ratios as Predictors of Bank Failure." *Economic Policy Review*, Federal Reserve Bank of New York, July, 33–52.

[Google Scholar](#)

---

Fama, Eugene F., and Kenneth R. French. (1996) "Multifactor Explanations of Asset Pricing Anomalies." *Journal of Finance*, 51, 55–84.

[Web of Science®](#) | [Google Scholar](#)

---

Financial Stability Institute. (2010) "Survey on the Implementation of the New Capital Adequacy Framework." Occasional Paper No. 9.

[Google Scholar](#)

---

Furlong, Frederick, and Michael Keeley. (1989) "Capital Regulation and Bank Risk-Taking: A Note." *Journal of Banking and Finance*, 13, 883–91.

[Web of Science®](#) | [Google Scholar](#)

---

Furlong, Frederick, and Michael Keeley. (1990) "A Re-examination of the Mean-Variance Analysis of Bank Capital Regulation." *Journal of Banking and Finance*, 15, 69–84.

[Google Scholar](#)

---

Hellwig, Martin. (2010) "Capital Regulation after the Crisis: Business as Usual?" Max Planck Institute Working Paper.

[Google Scholar](#)

---

Kim, Daesik, and Anthony Santomero. (1988) "Risk in Banking and Capital Regulation." *Journal of Finance*, 43, 1219–33.

[Web of Science®](#) | [Google Scholar](#)

---

Koehn, Michael, and Anthony M. Santomero. (1980) "Regulation of Bank Capital and Portfolio Risk." *Journal of Finance*, 35, 1235–44.

[Web of Science®](#) | [Google Scholar](#)

---

Merrouche, Ouarda, and Erland Nier. (2010) "What Caused the Global Financial Crisis? Evidence on Drivers of Financial Imbalances 1999–2007." IMF Working Paper 10/265.

[Google Scholar](#)

---

Rochet, Jean-Charles. (1992) "Capital Requirements and the Behaviour of Commercial banks." *European Economic Review*, 36, 1137–78.

[Web of Science®](#) | [Google Scholar](#)

---

Santos, Joao A.C. (2001) "Bank Capital Regulation in Contemporary Banking Theory: A Review of the Literature." *Financial Markets, Institutions, and Instruments*, 10, 41–84.

[Google Scholar](#)

---

Tong, Hui, and Shang-jin Wei. (2010) "The Composition Matters: Capital Inflows and Liquidity Crunch during a Global Economic Crisis." *Review of Financial Studies*, 24, 2023–52.

[Web of Science®](#) | [Google Scholar](#)

---

Viñals, José, Jonathan Fiechter, Ceyla Pazarbasioglu, Laura Kodres, Aditya Narain, and Marina Moretti. (2010) "Shaping the New Financial System." *IMF Staff Position Note*, 10/15.

[Google Scholar](#)



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