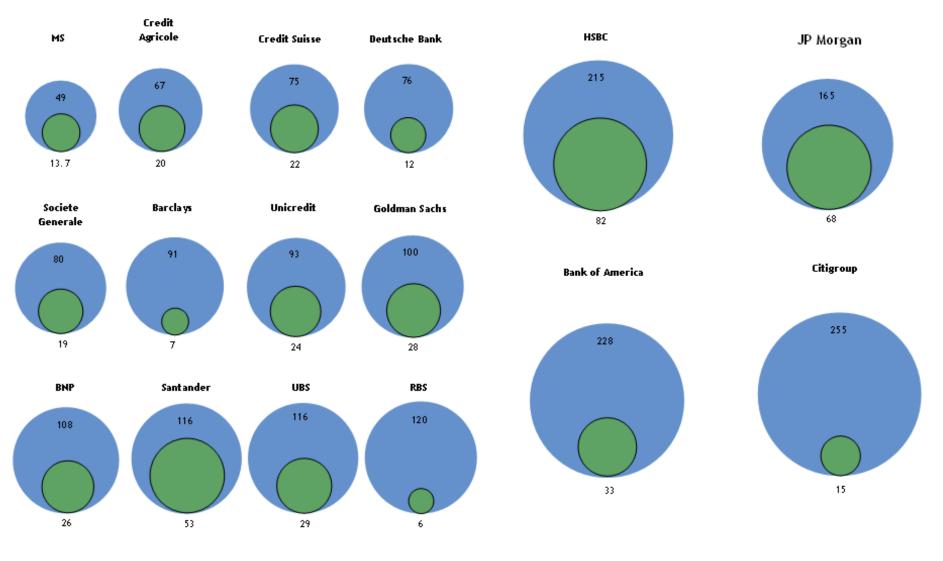
### Why did some banks perform better during the credit crisis?

René M. Stulz Everett D. Reese Chair of Banking and Monetary Economics Ohio State University, NBER, and ECGI Market Value as of January 20<sup>th</sup> 2009, \$Bn

#### Market Value as of Q2 2007, \$Bn



J.P.Morgan

### How does return performance differ?

- Sample of 164 large publicly traded banks in 31 countries.
- Banks in top quartile of performance in 2006:
  - 38.71% average return in 2006
  - --85.23% during the crisis
- Banks in bottom quartile in 2006:
  - 25.96% average return in 2006
  - -- 15.15% during the crisis

# Two perspectives on performance differences

- Understanding differences in bank performance is a way to evaluate many explanations advanced for why the financial crisis evolved as it did.
- It is important for managers and regulators as it helps to understand which features of banks make them more sensitive to systemic shocks.

#### Key explanations

- Losses on securities magnified through leverage
  - E.g. Brunnermeier
- Short-term funding, repo run
  - E.g. Brunnermeier, Diamond/Rajan, Gorton, Adrian and Shin
- Poor governance
   OECD, Diamond/Rajan, Bebchuk
- Lax regulation and regulatory arbitrage

   Stiglitz, Volcker, Acharya/Schnabl/Suarez

### Large bank evidence across countries

- Work with Andrea Beltratti (Bocconi and Intesa Sanpaolo).
- 164 large public banks (more than \$50 billion of assets) across 31 countries.
- Investigates performance and risk of banks across countries as a function of pre-crisis characteristics (2006).

# Were the banks that did better less risky in 2006?

- Not with some conventional risk measures.
- They had higher idiosyncratic volatility.
- They had lower distance to default.
- Same beta, same real estate beta.
- However, their tangible equity ratio was 50% higher.

# Performance: Stock returns, July 2007 to December 2008

- Increases with Tier 1 capital pre-crisis.
- Increases with deposits/assets, falls with more short-term market funding.
- Worse for banks that did better in 2006.
- Worse for banks with more shareholderfriendly boards.
- Worse for banks with greater exposure to U.S. real estate.

# What to make of the governance result?

- There is no theoretical reason to believe that better governed banks take less risks.
- We find that banks with more shareholderfriendly boards have a lower distance to default in 2006.
- So, why did Dodd-Frank include governance measures?

#### Is Volcker right?

- Regulation is not related to performance except that banks from countries with more restrictions on bank activities did better.
- But, banks from countries with more restrictions were not less risky.
- Those banks could not invest in some activities that performed poorly, but these activities were not expected to perform poorly.

### More on governance and incentives

- Work with Rüdiger Fahlenbrach (EPFL and SFI) on U.S. data.
- The general belief is that CEOs whose compensation increases more with shareholder wealth have incentives better aligned with the interests of shareholders.

#### Largest equity portfolios

- 1. James Cayne (Bear Stearns, \$1,062 million)
- 2. Richard Fuld (Lehman Brothers, \$911.5 million)
- 3. Stan O'Neal (Merrill Lynch, \$359 million)
- 4. Angelo Mozilo (Countrywide Financial, \$285 million)
- 5. Robert J. Glickman (Corus Bankshares, 281.1 million)

15 additional bank CEOs in our sample have equity stakes valued at more than \$100 million.

	Stock returns	ROE
Bonus/Salary	0.014	0.09
Ownership (\$)	-0.079**	-0.073**
Equity risk (\$)	0.030	0.022

#### CEO incentives and performance – summary of results

- No evidence that better alignment of incentives led to better bank performance during the crisis.
- No evidence that short-term incentives or option compensation is to blame for the poor performance of banks.
- Evidence consistent with the hypothesis that CEOs who took exposures that performed poorly did so because they thought it was good for shareholders as well as for themselves.

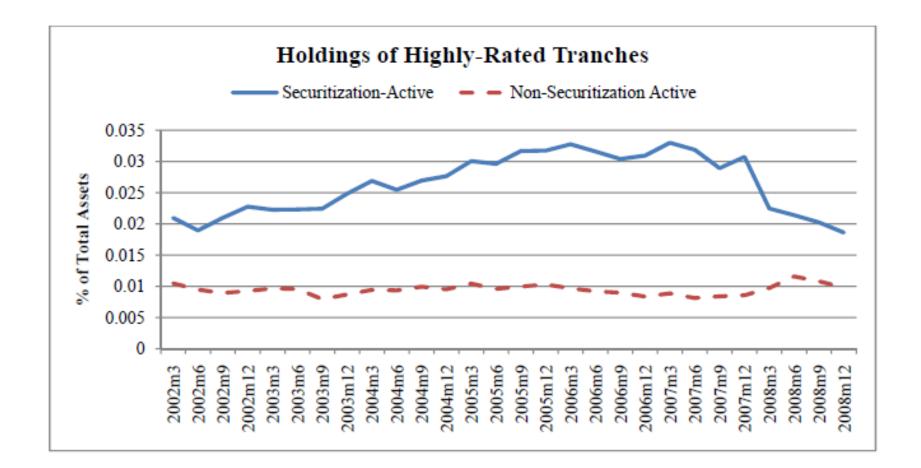
## Holdings of highly-rated tranches

- Work with Isil Erel (OSU) and Taylor Nadauld (Brigham Young)
- We investigate determinants of holdings of highly-rated securitization tranches by U.S. banks.

#### The bottom line

- For the typical bank, holdings of highly-rated tranches were economically trivial:
  - Mean (median) holdings of 1.3% (0.2%) of assets in 2006
  - Large trading banks had higher holdings (mean of 5% of assets) in univariate tests but not in regressions controlling for other bank characteristics
- These holdings are negatively related to bank performance during the crisis.
- Holdings increase with bank assets, but not for banks with more than \$50 billion of assets.
- No support for "bad incentives" explanations.
- Securitization-active banks hold more such tranches.

### Banks with large holdings were active in securitization



#### "The worst financial crisis in the last fifty years"

**Robert Rubin** 

#### This time was the same

- Work with Rüdiger Fahlenbrach and Robert Prilmeier.
- A one percentage point lower return in the 1998 crisis for a large bank predicts a one percentage point lower return in the recent crisis!
- Banks that did poorly in both crises had fragile funding.

#### Beyond large sample studies

- For holdings of highly-rated tranches in 2006:
  - Citi, 5.68%; JPMC, 0.69%; BAC, 1.88%.
- CSFB versus UBS
- Merrill versus Goldman
- RBS versus Barclays
- We need clinical research.

#### Conclusions

- Poor governance and poor managerial incentives cannot explain poor bank performance during the crisis.
- Differences in regulation across countries do not explain differences in performance.
- Fragile short-term funding, low equity, U.S. real estate exposure contributed to poor performance.
- Business models that are more affected by crises are persistent.