

Risk Management, Corporate Governance, and Bank Performance in the Financial Crisis

The Future of Risk Management

Helsinki, 22 September 2011

Vincent Aebi
University of St. Gallen

Gabriele Sabato
Royal Bank of Scotland

Markus Schmid
University of Mannheim

Motivation

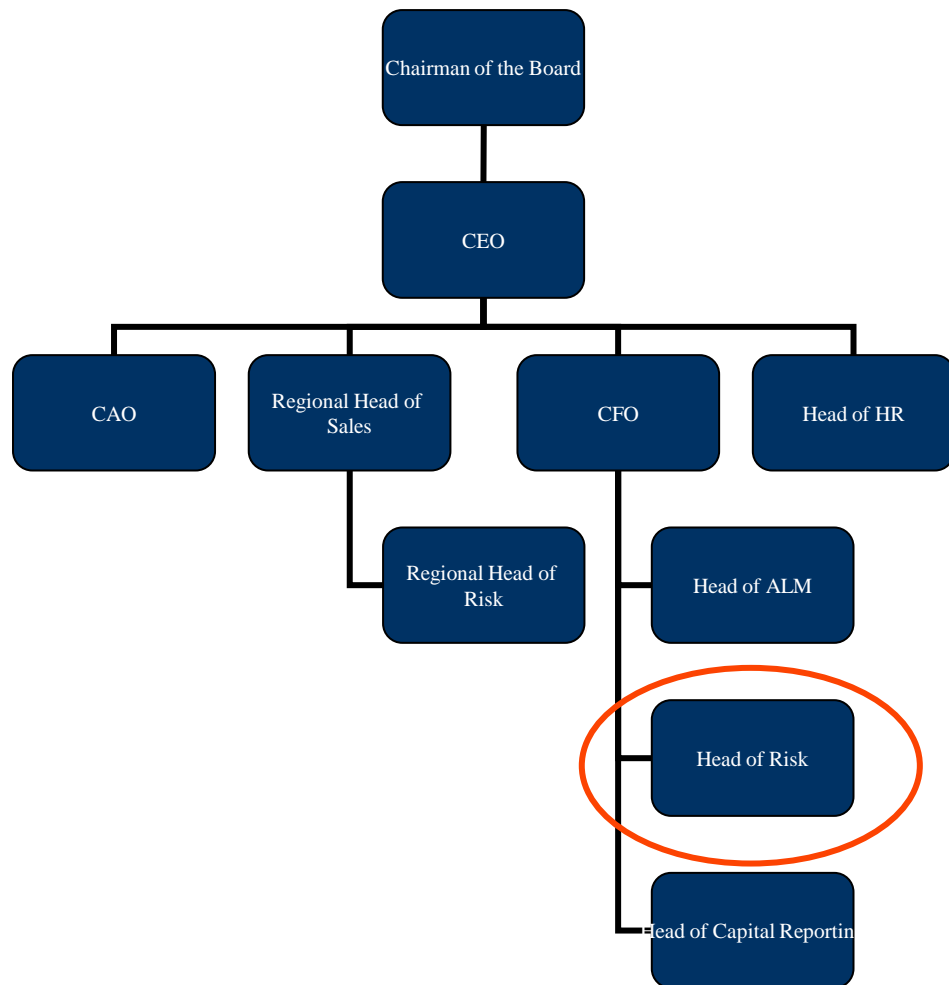
- In the search of explanations for the dramatic collapse of the stock market capitalization of much of the banking industry in the U.S. during the recent credit crisis, one prominent argument is that bank executives had poor incentives.
- Alan Blinder argues that poor incentives are “one of [the] most fundamental causes” of the credit crisis (Wall Street Journal, 2009).
- There is recent research on managerial incentives and “standard” governance characteristics and bank performance in the crisis.
- However, financial institutions are characterized by a higher opaqueness, heavy regulation and intervention by the government, which require a distinct analysis of corporate governance issues (Levine, 2004; Adams and Mehran, 2003).
- In our paper, we argue that banks pose unique governance problems, in particular related to risk management / governance as their business *is* risk.

Summary of the Paper and Main Findings

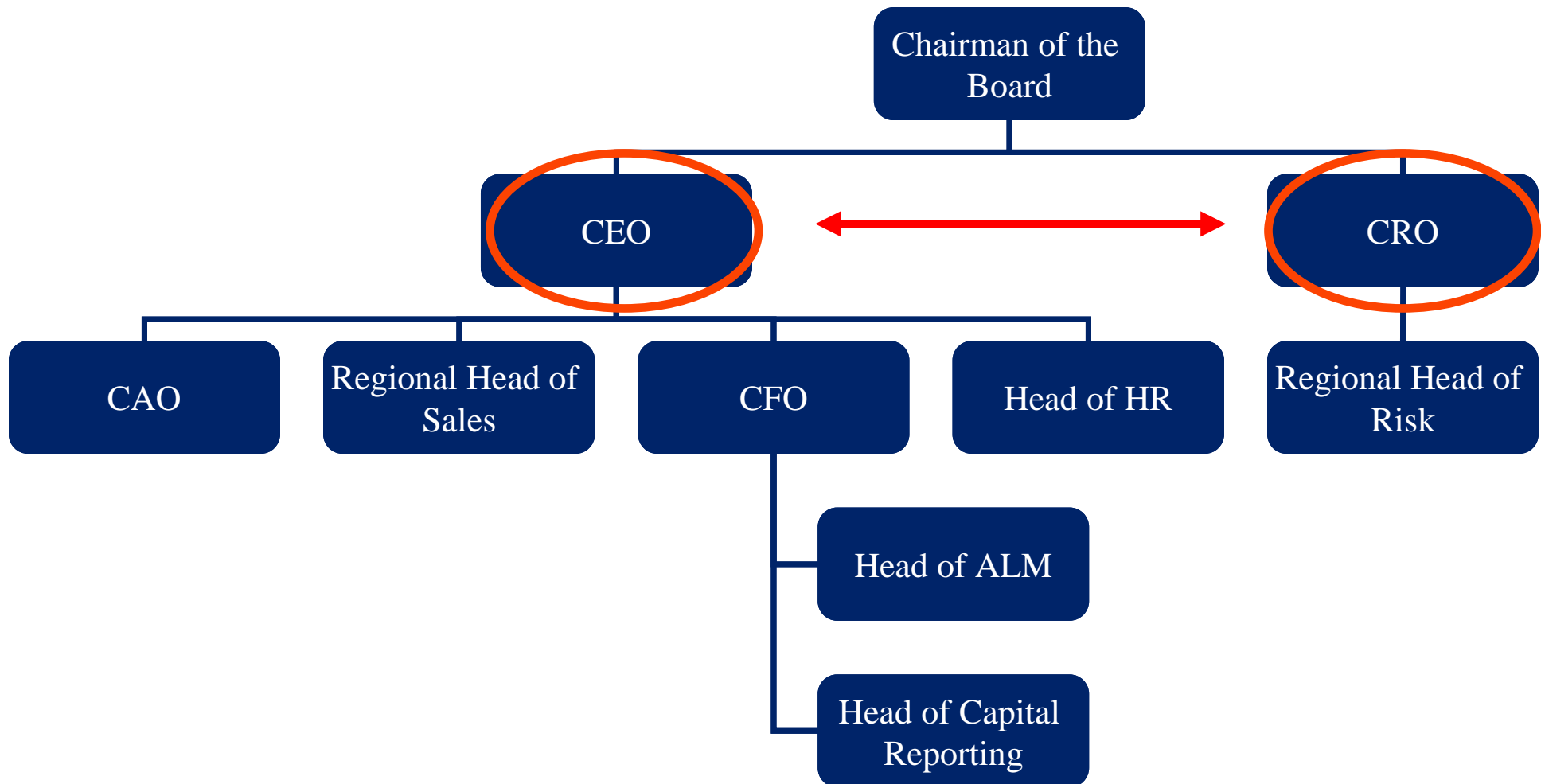
- We investigate the role of risk management *and* standard corporate governance structure on bank performance in the recent credit crisis of 2007/2008.
- What is considered good corporate governance practice (for non-financial firms), is either unrelated to bank performance during the crisis or is even negatively related to bank performance.
- Hence, banks may have in fact attempted to maximize shareholder wealth before the crisis, but took risks that were understood to create wealth but turned out poorly.
- Most variables related to the banks' risk management structure are insignificant as well.
- The only governance mechanism which is significantly and positively related to bank crisis performance is the dummy variable whether the CRO reports directly to the board of directors (and not the CEO).

Risk Governance

Typical Governance Structure pre-crisis



Is this the future?



Data and Variables: Sample

- As a starting point for our sample, we use all 770 banks available in the COMPUSTAT Bank North America database in 2006.
- All banks in our sample are either primarily commercial banks (SIC code 6020) or savings institutions (SIC codes 6035 and 6036).
- We delete 197 observations for which
 - a key variable (total assets, common shares outstanding, total common/ordinary equity, income before extraordinary items) is missing,
 - total assets are less than USD 100 Mio.,
 - and banks which are not covered by the Center for Research in Security Prices (CRSP) database.
- We hand-collect a set of five corporate and risk governance variables from 10k (Annual Report) and Def 14A (Proxy Statement) forms in the SEC's EDGAR database; data is available for a sample of 372 U.S. banks in 2006.

Data and Variables: Measures of Risk Governance

- The five risk management / corporate governance measures are:
 - a dummy variable whether the Chief Risk Officer (CRO) is a member of the executive board
 - the percentage of directors with a finance background
 - whether there is a dedicated risk committee
 - board size
 - board independence
- We control for standard corporate governance variables used in previous research on non-banks and in Beltratti and Stulz (2010) and Fahlenbrach and Stulz (2011): board size, board independence, whether the CEO is also chairman of the board, board busyness, board attendance, nominating committee independence, director age, the % directors which were appointed before the CEO took office, institutional ownership, CEO ownership, and the “G-Index” of Gompers, Ishii, and Metrick (2003).
- These variables are available for between 55 and 86 banks in 2006.

Data and Variables: Measures of “Standard” Corporate Governance and Bank Performance

- We then collect another five variables for a sample of 86 banks in 2006:
 - Dummy variables whether the CRO reports directly to the board of directors or whether he reports to the CEO
 - the number of meetings of the risk committee
 - the number of directors in the risk committee
 - the percentage of independent directors in the risk committee
- The main measure of bank performance is the banks’ buy-and-hold returns over the time period July 1, 2007, to December 31, 2008.
- Alternative measures are the alpha from a Carhart (1997) four-factor model, estimated over the crisis period, or the return on assets or return on equity over the crisis period.

Main Results (I)

- Regressions of buy-and-hold returns on corporate governance variables

Dependent variable: *Buy-and-hold returns* (from July 1, 2007, to December 31, 2008)

	(1)	(2)	(3)	(4)	(5)	(6)
<i>CRO in executive board</i>	-0.024 (-0.423)	-0.071 (-1.145)	-0.052 (-0.576)	-0.047 (-0.525)	-0.095 (-1.321)	-0.077 (-0.819)
<i>Risk committee</i>	-0.093 (-1.190)	0.076 (0.968)	0.100 (0.912)	0.101 (0.866)	-0.010 (-0.103)	0.050 (0.402)
<i>Ln(Board size)</i>	0.214 *** (3.167)	0.293 ** (2.061)	0.327 * (1.848)	0.248 (1.554)	0.377 ** (2.171)	0.256 * (1.674)
<i>Board Independence</i>	-0.321 * (-1.792)	-0.536 (-1.016)	-1.400 *** (-3.267)	-1.275 *** (-2.873)	-0.844 (-1.552)	-1.108 ** (-2.468)
<i>% dir. w. finance backgr.</i>	-0.378 ** (-2.328)	-0.295 (-0.820)	-1.027 ** (-2.245)	-1.161 ** (-2.311)	-0.203 (-0.436)	-1.055 * (-1.987)
<i>Institutional shareh.</i>	-0.242 ** (-2.427)	-0.466 ** (-2.252)	-0.237 (-0.591)	-0.166 (-0.420)	-0.352 * (-1.662)	-0.195 (-0.469)
Observations	372	86	61	56	79	55
R-squared	0.257	0.477	0.545	0.594	0.416	0.584

Main Results (II)

- Regressions of buy-and-hold returns on corporate governance variables – Extended set of corporate and risk governance variables (I)

Dependent variable: *Buy-and-hold returns* (from July 1, 2007, to December 31, 2008)

	(1)	(2)	(3)	(4)	(5)	(6)
<i>CRO in executive board</i>	-0.035 (-0.553)	-0.008 (-0.129)	0.060 (0.532)	0.053 (0.450)	-0.052 (-0.645)	0.049 (0.390)
<i>Risk committee</i>	-0.315 ** (-2.603)	-0.354 *** (-2.816)	-0.284 (-1.022)	-0.249 (-0.858)	-0.268 (-1.418)	-0.206 (-0.659)
<i>Nr. of meetings of risk com.</i>	0.047 ** (2.350)	0.056 ** (2.588)	0.065 (1.630)	0.060 (1.438)	0.043 (1.593)	0.053 (1.190)
<i>Nr. of directors in risk com.</i>	0.019 (0.839)	0.021 (0.915)	0.029 (0.768)	0.028 (0.685)	0.022 (0.778)	0.032 (0.752)
<i>% of indep. dir. in risk com.</i>	-0.079 (-0.794)	-0.099 (-0.984)	-0.374 (-1.642)	-0.370 (-1.544)	-0.092 (-0.639)	-0.353 (-1.437)
...
Observations	85	85	55	54	69	54
R-squared	0.541	0.547	0.618	0.621	0.510	0.620

Main Results (III)

- Regressions of buy-and-hold returns on corporate governance variables – Extended set of corporate and risk governance variables (II)

Dependent variable: *Buy-and-hold returns* (from July 1, 2007, to December 31, 2008)

	(1)	(2)	(3)	(4)	(5)	(6)
<i>CRO reports to board</i>	0.244 *** (2.826)	0.255 *** (2.911)	0.330 ** (2.350)	0.317 ** (2.181)	0.301 *** (2.681)	0.385 ** (2.331)
<i>CRO reports to CEO</i>	-0.281 * (-1.943)	-0.318 ** (-2.197)	-0.366 ** (-2.185)	-0.344 * (-1.756)	-0.326 * (-1.868)	-0.359 * (-1.796)
<i>Ln(Board size)</i>	0.236 * (1.708)	0.268 * (1.879)	0.375 * (1.907)	0.391 * (1.987)	0.283 * (1.860)	0.434 ** (2.166)
<i>Board Independence</i>	-0.042 (-0.086)	-0.050 (-0.100)	-1.221 *** (-2.808)	-1.290 ** (-2.672)	0.181 (0.281)	-1.077 ** (-2.225)
<i>% directors w. fin. backgr.</i>	-0.128 (-0.401)	-0.148 (-0.445)	-1.099 ** (-2.267)	-1.172 ** (-2.163)	-0.184 (-0.462)	-1.124 * (-1.936)
<i>Institutional shareh.</i>	-0.706 *** (-4.304)	-0.665 *** (-3.636)	-0.025 (-0.054)	0.013 (0.027)	-0.780 *** (-2.947)	-0.031 (-0.064)
...
Observations	85	85	55	54	69	54
R-squared	0.541	0.547	0.618	0.621	0.510	0.620

Main Results (IV)

- Regressions of buy-and-hold returns on corporate governance variables – Extended set of corporate and risk governance variables (III)

Dependent variable: <i>Buy-and-hold returns</i> (from July 1, 2007, to December 31, 2008)						
	(1)	(2)	(3)	(4)	(5)	(6)
<i>G-Index</i>		-0.005 (-0.517)		0.012 (0.599)		0.017 (0.864)
<i>Independent nom. com.</i>			0.117 (0.691)	0.117 (0.714)		0.052 (0.329)
<i>Combined CEO/Chair</i>			-0.063 (-0.387)	-0.073 (-0.413)		-0.099 (-0.534)
<i>% of dir. joining board b. CEO</i>			0.107 (0.566)	0.084 (0.415)		0.058 (0.271)
<i>% of directors older than 72</i>			0.398 (0.852)	0.473 (0.961)		0.405 (0.711)
<i>Director non-attendance</i>			-2.881 * (-1.901)	-3.079 (-1.446)		-2.785 (-1.274)
<i>Busy board</i>			0.258 (1.694)	0.269 (1.616)		0.301 (1.419)
...
Observations	85	85	55	54	69	54
R-squared	0.541	0.547	0.618	0.621	0.510	0.620

Conclusions

- What is considered good corporate governance practice (for non-financial firms), is either unrelated to bank performance during the crisis or is even negatively related to bank performance.
- Hence, banks may have in fact attempted to maximize shareholder wealth before the crisis, but took risks that were understood to create wealth but turned out poorly.
- This is also confirmed by a negative relation between bank performance during the crisis and pre-crisis performance.
- Most variables related the banks' risk management structure are insignificant as well.
- The only governance mechanism which is significantly and positively related to bank crisis performance is the dummy variable whether the CRO reports directly to the board of directors (and not the CEO).

Thanks!
