Does Financial Experience Help Banks during Credit Crises?

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November, 24 2009

We analyze 398 U.S. banks during 2006-2007, and document that the financial experience of the banks' outside directors is positively related to the financial institutions' stock return performance during the credit crisis. This financial experience is also inversely related to the (i) likelihood of bank failure and (ii) amount of bailout funds banks get. Event study results during the collapses of Bear Stearns and Lehman Brothers show that abnormal returns increase as the board's financial expertise increases. Our findings indicate that the financial experience of external directors in banks affects how these institutions weather the credit crisis.

1. Introduction

A recent report from the International Monetary Fund (IMF) indicates that U.S. financial institutions could suffer $2.7 trillion in losses from the global credit crisis, part of worldwide total losses expected to top $4 trillion between 2007 and 2010.[1] According to the report, U.S. and European banks would need to raise $875 billion in equity by 2010 to return to levels of the years before the crisis — and twice that amount to match the levels of the mid-1990s. It is no secret that the massive losses suffered by banks stem from their reckless underwriting of subprime mortgage loans and their trading of related instruments. Indeed, these loans were frequently repackaged by financial institutions into securities generally known as collateralized debt obligations (CDOs) and sold to investors. Such activities seriously exposed these institutions, their investors, and scores of credit recipients to losses that materialized once real estate values and economic activity declined.

Consumer protection groups argue that loan recipients were victims of the predatory lending practices of many banks because borrowers lacked the expertise necessary to understand the risks associated with the loans they received.[2] The same might be true for many investors purchasing CDOs and similar instruments, because these securities often carried favorable credit ratings. Conversely, corporate governance policy groups accuse both bank managers and bank monitors of not assessing how the risk of their lending and underwriting activities would affect the health of their financial institutions during an economic downturn.

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[1] See: "Banks Need $875 Billion in New Equity, IMF Says," *The Wall Street Journal*, April 22, 2009, page A10.

[2] *Predatory lending* is a pejorative term used to describe the practice of a lender deceptively convincing borrowers to agree to unfair and abusive loan terms, or systematically violating those terms in ways that make it difficult for the borrower to defend against.

The above discussion raises the question of whether bank monitors had the expertise necessary to understand the risk associated with subprime lending and CDO trading and underwriting. One possibility is that monitors with superior financial expertise might be better able to prevent, or at least mitigate, the losses to their banks associated with these practices in the wake of a credit crisis. Alternatively, it is also possible that the expertise and quality of bank monitors was similar in most banks and the losses to these institutions resulted from the systemic nature of the crisis. In this paper, we perform a series of tests aimed at illuminating these issues.

Using the background of all outside directors serving on the boards of over 400 different publicly traded U.S. banks as input, we investigate whether the financial experience of these individuals is related to the way in which the financial crisis affected their banks. To do so, we estimate the average years of professional experience in the financial sector of the banks' outside directors. We use this variable as our proxy for financial expertise in a series of tests. The empirical results reveal that such financial experience appears to matter only during the credit crisis. During this period, the returns to banks appear to be an increasing function of the financial experience of their monitors. In addition, we find that as their financial experience increases, banks are less likely to fail. Moreover, we also show that the ratio of bailout funds to bank assets given to financial institutions under the Troubled Assets Relief Program (TARP)[3] decreases as the

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[3] The U.S. Government implemented TARP during 2008. The program goals were to purchase assets and equity from financial institutions to strengthen the financial sector. Under the TARP program, the U.S. Department of the Treasury would purchase or insure up to $700 billion of "troubled" assets. According to the Congressional Budget Office report titled "The Troubled Asset Relief Program: Report on Transactions Through December 31, 2008," troubled assets are defined as: (A) residential or commercial mortgages and any securities, obligations, or other instruments that are based on or related to such mortgages, that in each case was originated or issued on or before March 14, 2008, the purchase of which the Secretary determines promotes financial market stability; and (B) any other financial instrument that the Secretary, after consultation with the Chairman of the Board of Governors of the Federal Reserve System, determines the

financial experience of their monitors increases. In addition, three-day cumulative abnormal returns (*CARs*) for event studies around the collapses of Bear Stearns and Lehman Brothers, respectively, indicate that *CARs* become more positive as the financial experience of bank outside directors increases. We note that our results are robust to controls for board characteristics used in many studies, such as independence and separation of power between the CEO and the chairman of the board. We find that the inclusion of these variables does not influence the differential performance of banks during the financial crisis.

Our results have important implications for the policy debate on the governance structure of financial institutions. Our estimates suggest that board independence is not enough to make boards accountable and effective. We show that the monitoring ability is a key issue. Our tests indicate that nonexecutive outside directors with substantial financial experience appear to generate nontrivial value for firm shareholders, particularly during a crisis. In contrast, the absence of a financially experienced board appears to correlate with the failure of many financial institutions. Consequently, our findings suggest that boards' monitoring ability is a function of the directors' experience in the industry in which the firm operates.

This study joins a rapidly emerging literature that examines the causes and consequences of the current financial crisis. Fahlenbrach and Stulz (2009) find no evidence that banks with CEOs whose incentives were better aligned with the interests of their shareholders performed better during the crisis. Erkens, Hung, and Matos (2009) find that banks with larger institutional ownership and more independent boards exhibit

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purchase of which is necessary to promote financial market stability, but only upon transmittal of such determination, in writing, to the appropriate committees of Congress.

larger write-downs during the crisis. Adams (2009) finds no significant differences between the governance structures of financial and nonfinancial firms during 1996–2007. Diamond and Rajan (2009) offer some conjectures on the causes of the crisis and suggest some potential remedies for the current credit crunch. Yermack (2009) reports that CEOs at many banks experienced severe personal losses during the financial crisis because their pay and ownership in their banks declined when equity values plummeted.

Our results highlight the importance of the financial experience of the board of directors of banks. The evidence we present, which is robust to numerous controls and different empirical specifications, indicates that financial expertise helps these institutions to better navigate the financial crisis.

The paper proceeds as follows. Section 2 identifies our data sources and describes our sample selection methods. Section 3 presents our empirical tests. Section 4 concludes the paper.

2. Data Sources and Sample Selection

The initial sample included all U.S. banks in the Datastream/WorldScope (DS/WS) database. The main performance measure we use is stock returns from January 2007 to December 2008. We restrict our sample to those banks whose stock return data are available from Datastream and whose accounting data for all financials are available from WorldScope. In addition, our sample includes all financial institutions whose governance and board structure data are available from the BoardEx database. As of 2006 end, our sample includes 398 different banks with a combined market capitalization of 1.5 trillion dollars. Table 1 provides information about the financial institutions in our sample using

the four-digit SIC taxonomy to classify banks. According to the information in Table 1, approximately 64% of the financial institutions we study are categorized as depository institutions, while about 32% are classified as holding and other investment offices.

2.1 Definition of Variables

As mentioned above, in order to obtain information regarding the banks' board members, we use the BoardEx database. BoardEx provides detailed information on the board composition of publicly listed firms, as well as a detailed biography of each board member. We use the information in BoardEx to construct several governance variables.[4] For each bank in our sample, we examine board independence (fraction of independent directors over board size), and identify whether the CEO is simultaneously the chairperson of the board. With this information, we define the following variables. "% of independent directors" is the percentage of independent directors on the board. "CEO is chairman (0,1)" is a dichotomous indicator variable that takes the value of one if the CEO also serves as the board's chair. In addition, for each board, we also compute the diversity of nationalities among board directors (Nationality mix), and the average age of external directors. Because directors who sit in multiple boards are potentially more distracted and may not be effective monitors (Fich and Shivdasani, 2006), we count the number of directorships board members have in other firms. We use this count to define the variable "Quoted boards" as the average number of board seats in other publicly traded corporations currently held by all board members.

The key independent variable in all of our tests measures the financial expertise of the board's outside (or nonexecutive) directors. We follow the director taxonomy in other

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[4] BoardEx data are used in Cohen, Frazzini, and Malloy (2008) to study links between CEOs and mutual fund managers in the U.S., and in Fernandes, Ferreira, Matos, and Murphy (2008) to study CEO compensation in firms worldwide.

studies, and define outside nonexecutive directors as those whose only tie to the bank is their board seat.[5] Outside directors are thus those nonexecutive directors who are not full-time or former employees of the bank, relatives of a bank employee, or current or previous consultants of the financial institution. We measure the board's industry expertise as the average years of experience of the directors in the financial sector. To do this, we examine each director's biographical record as provided in the BoardEx database. We add all the years every outside director has worked in the financial sector. We then divide this total by the number of outside directors on the bank's board. To track financial industry experience, we record employment or board service by each outside director in companies encompassing SIC codes 6020 to 6090, and 6710 to 6720.

In addition to the proxies that are related to board structure, we also use a number of other control variables. For example, bank size is the natural log of the market capitalization in U.S. dollars. We use the percentage of common stock holdings by institutional investors as an additional control variable.[6] Since our main focus in on explaining the variable performance of banks during the crisis period, all independent variables are measured as of December 31st, 2006.

Table 2 reports summary statistics for our variables. The data show that the industry expertise of nonexecutives averages 8.8 years, with a standard deviation of 3.8. Approximately 44% of banks in our sample have a combined CEO–chairman leadership structure, and 78% of the directors are independent. In terms of performance, during the crisis period (January 2007 to December 2008), banks lost an average 40% of market value.

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[5] See, for example, Fich and Shivdasani (2006) and Yermack (1996).
[6] Data on institutional holdings are collected from proxy statements filed by each bank.

3. Empirical Analyses

3.1 Financial Experience of Outside Directors: Does It Matter?

We begin by examining whether the financial experience of outside directors influences the stock market performance of their banks. In Table 3, we compare the stock return accruing to banks in our sample during January 1, 2004–December 31, 2005; January 1, 2005–December 31, 2006; and January 1, 2007–December 31, 2008, respectively.[7] To evaluate the importance of financial expertise represented in the banks' boards, in Table 3 the returns in these intervals are split by the median level of financial expertise of the boards' outside directors. Consequently, in Table 3, banks that exhibit experience above the median level of experience (8.5 years) as classified as "high experience," whereas those that exhibit a level below the median are classified as "low experience." For reference, the univariate tests presented in Table 3 also include some key governance characteristics.

The estimates in Table 3 reveal that experience is unrelated to performance in the periods preceding the crisis. However, financial experience appears to matter during the crisis. Indeed, although all banks fare poorly during the crisis, banks classified as "low experience" appear to fare the worst. This result appears consistent with the idea that the financial expertise of the bank's monitors helps these institutions during the crisis. However, given the univariate nature of the tests in Table 3 and due to the complex association between many variables, we now turn to our multivariate tests.

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[7] We estimate raw returns as the total stock return, adjusted for dividends and stock splits, from January 1st 2007 to December 31st 2008.

3.1.1 Multivariate Analyses

In Table 4 we run a set of three pairs of regressions in which the dependent variable is the bank's raw return during January 1, 2004–December 31, 2005; January 1, 2005–December 31, 2006; and January 1, 2007–December 31, 2008, respectively. In all regressions, the key independent variable is the financial experience of outside directors. All tests control for the bank's size measured as the logarithm of the market capitalization of the financial institution. The other independent variables in the tests, which are defined in the table's legend, control for different governance attributes.

As with the univariate tests, the results in Table 4 indicate that the financial experience of directors is unrelated to the stock performance during the periods preceding the financial crisis. The coefficient estimates for this variable in the 2004–2005 and the 2005–2006 regressions are not statistically significant at conventional levels. However, the estimate for the financial experience of outside directors variable (0.0104; t-statistic = 2.13) is significant for the stock return regressions during 2007–2008. According to the coefficient for this variable, a one standard deviation increase in the financial experience of outside directors (about 3.8 years) increases a bank's return by 410 basis points.

We interpret the results in Table 4 to indicate that the financial experience of the bank's outside directors has a material effect on the institution's stock performance during credit crises. Moreover, our results suggest that acquiring such financial experience could be valuable to banks in changing course during the crisis. The recent restructuring of the boards of prominent banks appears consistent with this view. For example, according to an article in the *Wall Street Journal* in July of 2009, Citigroup Inc.

revamped its board by appointing three new outside directors.[8] According to the report, these individuals exhibit résumés that reflect significant working experience in financial institutions and a deep understanding of regulatory issues. Citigroup's board changes follow similar ones by Bank of America Corp., which appointed four outside directors with experience in banking or financial oversight in June 2009.

3.2 Financial Experience, Bailouts, and Bank Failures

Many banks, particularly the larger ones, received funds and assistance from the TARP. Other banks, however, did not receive any assistance and failed, causing the Federal Deposit Insurance Company (FDIC) to provide restitution to thousands of depositors in these institutions. Based on these events, we examine whether the level of financial experience of outside directors is correlated with occurrence of bank failure and to the extent of the bailout assistance received by banks. We first check whether or not the bank receives funds and assistance from the TARP. We define "bailout (0,1)" as a dummy variable that equals one if the bank gets funds from the TARP. Data on the funds provided to each bank are collected from the U.S. government's Department of Treasury at http://www.financialstability.gov/. In addition, we search the Lexis/Nexis data retrieval system, the FDIC, and the Federal Reserve System Web sites for reports related to bank failures. We use this information to compute a dummy "Bank failure (0,1)" that equals one if the bank fails, and zero otherwise.

In Table 5 we compare the incidence of bailouts and failure of the financial institutions in our sample with the median financial expertise. About 34% of all banks in our sample receive funds from the TARP. The incidence of bailout appears greater for banks with low financial expertise. About 36% of these institutions (against 32% of high-

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[8] See "Citi Taps Directors With Fix-It Expertise," *The Wall Street Journal*, July 25, 2009, Page B.1.

expertise banks) are bailed out. Nevertheless, the difference is not statistically significant at conventional levels. The univariate comparisons related to bank failures also reveal that financial institutions categorized as "low financial experience" exhibit a higher rate of failure than "high experience" banks. In fact, both parametric and nonparametric tests indicate that the incidence of failures for "low experience" banks (at 4.7%) is significantly higher than the incidence of failure in "high experience" banks (at only 1%). To assess the robustness of these tests, we proceed with a set of multivariate analyses.

3.2.1 Regression Analyses

In model (1) of Table 6, we report estimates of a probit model in which the dependent variable is a bailout indicator. In model (2) of Table 6, we run a different probit model in which the dependent variable equals one if the bank fails. In model (3), we condition on banks being bailed out, and use the ratio of the bailout funds received to total assets as the dependent variable. In all three regressions, the key independent variable is the financial experience of outside directors. All tests control for the banks' size and different governance attributes as in Table 4.

The coefficient estimate for the financial experience of outside directors in model (1) of Table 6 is negative, suggesting that the probability of a bailout decreases as experience increases. However, the coefficient is not statistically significant at conventional levels. We note, however, that the probability of being bailed out increases as bank size increases. This result appears in line with the commonly held view that many banks were bailed out because they were deemed "to big to fail" by regulators.[9]

The results in model (2) of Table 6 indicate that the probability of bank failure decreases as the financial experience of outside directors increases. In terms of the

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[9] See, "Too Big to Fail, or Succeed," *The Wall Street Journal*, June 19, 2009, page B.13.

marginal effect implied by the coefficient estimate in model (2), a one standard deviation increase in experience reduces the probability of failure by 1.48 percentage points. This result is economically meaningful since the unconditional probability of bank failure is close to 3%.

Estimates in model (3) suggest that bailout funds as a fraction of bank assets also decline as the financial experience of outside directors increases. The coefficient estimate in this regression indicates that a one standard deviation increase in experience reduces the fraction by approximately 0.38%. This decline is nontrivial in economic terms, since the average amount of bailout funds as a percentage of total assets for all banks in our sample equals 0.95%. Overall, the results in Table 6 are also consistent with the idea that the financial experience of outside directors sitting on the boards of banks enables these institutions to better handle the credit crisis. Banks with higher level of board expertise failed less and need less capital from the TARP funds.

3.3 The Collapse of Bear Stearns and Lehman Brothers

Perhaps the most momentous events of the financial crisis are the fall of Bear Stearns and Lehman Brothers. For years, these firms were leaders in the investment banking field and epitomized the U.S. financial sector. For the banks in our sample, we use the standard event study methodology (Dodd and Warner, 1986) to estimate three-day *CARs* around the time of announcement of the collapse of these twin pillars of the U.S. financial sector. Since all firms in these tests operate in the banking industry, we compute raw *CARs*.[10] The results of these event studies, which we report in Table 7, reveal that both events met with a muted reaction. For the downfall of Bear Stearns, which occurred on March 15, 2008, the average 3-day *CAR* is 0.08%, (two-tailed *p*-value = 0.95), and the

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[10] Nonetheless, the use of market-adjusted *CARs* yield results similar to those reported.

ratio of positive to negative *CARs* (220:171) exhibits a generalized *Z*-statistic of 0.01. Similar 3-day *CARs* in which day zero corresponds to September 15, 2008, the day when Lehman Brothers collapsed, yield similar results. For this event, the average *CAR* is −0.38% (*p*-value = 0.85) and the ratio of positive to negative *CARs* is 206:169 (generalized *Z*-statistic = 0.21).

We believe that these event study results provide a unique way to test our hypotheses. On the one hand, it is possible that the systemic nature of the crisis affected all financial institutions in the same manner. If so, corporate governance characteristics, such as the financial experience of banks' outside directors, might be unrelated to bank performance. On the other hand, it is also possible that the detrimental impact of the crisis is mitigated at banks in possession of such experience. To address this issue, we also sort the *CARs* in Table 7 by the median financial expertise of the banks' outside directors. The sorting reveals that, for both events, banks with high experience exhibit significantly higher investor reactions than those with low experience. Around the time of the Bear Stearns episode, on average, high-experience banks outperform low-experience banks by about 1.2%. Results are similar for the Lehman Brothers event.

To further probe the results in Table 7, we examine the Bear Stearns and Lehman related *CARs* in a multivariate context. In Panels A and B of Table 8, we present regressions in which the dependent variables are the three-day mean *CARs* accruing to Bear Stearns and Lehman, respectively. In both panels, the key independent variable is the experience of outside directors. All tests control for firm size, other board characteristics, as well as the level of institutional ownership in the banks. The estimates indicate a positive association between *CARs* and the average experience of outside

directors. The results appear economically meaningful. For instance, in the case of Bear Stearns, a one standard deviation increase in experience increases the bank's returns by about 91 basis points. The estimates for Lehman lead to similar conclusions.

The multivariate results in Table 8 are in agreement with those presented earlier. The financial knowledge of the bank monitors, which we proxy with the average years of financial sector experience of the banks' outside directors, has a meaningful impact on the way the financial crisis affected these institutions. In two large shocks to the financial system that occurred upon the collapses of Bear Stearns and Lehman Brothers, the market assessed differently the prospects of different banks. Our results suggest that investors penalized banks with boards where outside directors had relatively lower levels of financial expertise.

4. Conclusions

This paper investigates the link between board composition and bank performance. In particular, we focus on a specific board attribute: the members' professional experience in the sector the firms operate in. Previous research focuses on how incentives or conflict of interests of board members impact firm performance. In addition, other papers examine whether and how board attributes such as independence and size affect shareholder wealth.[11] However, this literature largely overlooks whether the directors' professional experience directly affects the boards' monitoring ability.[12] Our interest in examining the importance of financial experience in a bank's board is motivated by the

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[11] An incomplete list of studies include Weisbach (1988), Yermack (1996), Denis and McConnell (2003), and Dahya, Dimitrov, and McConnell (2008).

[12] An exception is Agrawal and Chadha (2005). They find that the probability of a restatement is lower in companies whose boards or audit committees have an independent director with financial expertise.

following statements in the seminal study by Jensen and Meckling (1976). In that paper, the authors indicate that they "expect monitoring activities to become specialized to those individuals who possess comparative advantage in these activities." Their arguments imply that boards that include experienced directors can provide valuable guidance on strategic decision making. Put differently, it is not just a question of monitoring management decisions; boards should also be able to understand the impact of those decisions. Consistent with the assertions in Jensen and Meckling (1976), we find that boards vary in their ability to monitor and that specialization in the financial sector, which we refer to as financial experience, is closely related to the level of board oversight and bank performance.

We begin by testing whether the financial expertise of nonexecutive outside directors is related to bank performance. We find no differences in stock returns between banks with and without such expertise prior to the credit crisis. However, we find that during the crisis, banks with greater financial experience outperform their counterparts. The first finding is helpful in that it establishes that our results during the crisis are not spurious. Together, these results suggest that the board's financial experience matters the most during crisis periods.

Next, we examine whether financial expertise is related to the probability that a bank fails and/or that it receives assistance under the TARP. Our estimates suggest that financial expertise has a nontrivial effect on failure. We show that a one standard deviation increase in experience can almost cut the unconditional probability of bank failure in half: from 3 percentage points to about 1.52 percentage points. In addition, we also document that bailout funds as a fraction of the bank assets decline as financial

experience of outside directors increases. For all banks in our sample, the average amount of bailout funds as a percentage of total assets is 0.95%. We find that a one standard deviation increase in financial experience reduces that average by approximately 0.38%. We view the evidence related to our bank failure and bailout tests as providing support for the thesis that superior financial experience of outside directors sitting in the boards of banks enables these institutions to better cope with the credit crisis.

Our empirical analyses conclude with multivariate event study analyses of banks related to the Bear Stearns and Lehman Brothers episodes. Although the mean and median bank in our sample exhibits muted *CARs* during both events, we find that investor reactions significantly increase as the financial experience of the bank directors increases. These tests suggest that, during the crisis, some boards possess superior knowledge that enables them to better monitor the company. As a result, investors appear to perceive more favorable prospects for banks with superior financial expertise.

Based on our findings, we conclude that outside directors can be more effective if they know the business in which their firm operates; otherwise, they could become a liability to the company, particularly in period of crises. In this vein, our results have meaningful implications for the design of effective governance structures and the debate regarding the qualifications of directors serving on the boards of publicly traded firms.

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Table 1
Sample of Financial Institutions
This table sorts the banks in our sample according to their four-digit SIC classification. We select the sample as follows. We begin with all U.S. banks in the Datastream/WorldScope (DS/WS) database from January 2007 to December 2008. From that group, we retain those with stock return data from Datastream and accounting information from WorldScope. In addition, our sample includes all financial institutions whose governance and board structure data are available in the BoardEx database. At the end of 2006, our sample includes 398 banks.

Four-Digit SIC Classification	N	% of Sample	Type of Financial Institution
6060	5	1.26%	Credit unions
6090	2	0.50%	Functions related to depository banking
6153	2	0.50%	Nondepository credit institutions
6020	57	14.32%	Commercial banks
6021	42	10.55%	Commercial banks
6022	69	17.34%	Commercial banks
6030	40	10.05%	Saving institutions
6035	38	9.55%	Saving institutions
6036	12	3.02%	Saving institutions
6710	88	22.11%	Holding and other investment offices
6711	14	3.52%	Holding and other investment offices
6712	29	7.29%	Holding and other investment offices

Table 2
Descriptive Statistics

This table presents descriptive statistics of firm level variables. "Financial experience (board)" is the average number of years of professional experience in the financial sector of the bank's non-executive outside directors. "Bank size" is the natural log of the bank's market capitalization; "CEO is chairman (0,1)" is a dummy variable that equals one if the CEO is also the Chairman of the Board. "% of Independent directors" is the percentage of independent directors. "% Nonexecutive directors" is the percentage of non-executive members in the Board. "Nationality mix (board)" is the ratio of the number of different nationalities of directors to the board size. "Quoted boards" is the average number of quoted boards of which non-executives of the bank are members. "Financial experience executives" is the average number of years of professional experience in the financial sector of the bank's executive board members. "Institutional holdings" is the ownership held by institutional investors as a percentage of common stock outstanding. "Return 2007–2008" is the stock return from January 1st 2007 to December 31st 2008. "Return 2005–2006" is the stock return from January 1st 2005 to December 31st 2006. "Return 2004–2005" is the stock return from January 1st 2004 to December 31st 2005. All variables, except returns, are measured in December 2006. All ratios are winsorized at the 1% and 99% levels.

Variable	Source	Mean	Median	St. Dev.	p95%	p5%
Financial experience (board)	BoardEx	8.81	8.50	3.80	15.50	3.10
Bank size	WorldScope	5.63	5.30	1.80	9.08	3.37
CEO is chairman (0,1)	BoardEx	0.44	0.00	0.50	1.00	0.00
% of Independent directors	BoardEx	0.78	0.80	0.14	1.00	0.54
% of Nonexecutive directors	BoardEx	0.79	0.82	0.11	0.92	0.60
Nationality mix (board)	BoardEx	0.01	0.00	0.05	0.00	0.00
Quoted boards	BoardEx	1.45	1.10	0.82	3.30	1.00
Financial experience (executives)	BoardEx	10.53	9.32	6.26	21.90	2.45
Institutional holdings	Company filings	0.29	0.24	0.23	0.68	0.01
Return 2007–2008	Datastream	−0.40	−0.43	0.36	0.15	−0.95
Return 2005–2006	Datastream	0.11	0.09	0.22	0.48	−0.19
Return 2004–2005	Datastream	0.15	0.09	0.28	0.69	−0.25

Table 3
Financial Experience and The Performance of Banks during the Financial Crisis: Univariate Splits

This table presents the average of different variables for firms with high and low levels of experienced board members. The first column presents the overall sample average. The second column presents the average of the different variables for banks whose non-executive board members have experience above the median. The third column presents the average of the different variables for banks whose nonexecutive board members have experience below the median. The fourth column presents the difference high–low experience (the difference between high and low experience levels), and the last columns test for differences in means and medians. All variables are as defined earlier. All ratios are winsorized at the 1% and 99% levels. The symbols *** and ** denote statistical significance at the 1% and 5% levels, respectively.

	Total Sample	High Experience Level	Low Experience Level	Difference High–Low	Mean Equality: *t*-Test	Median Equality: Wilcoxon Z-Test
Return 2007–2008	−39.9%	−34.2%	−45.6%	11.4%	3.27***	3.47***
Return 2005–2006	10.9%	10.1%	11.7%	−1.6%	0.73	1.56
Return 2004–2005	15.5%	12.9%	18.3%	−5.3%	1.75	1.48
Bank size	5.63	5.70	5.56	0.14	0.82	0.87
CEO is chairman (0,1)	44.1%	45.7%	42.5%	3.3%	0.67	0.67
% of Independent directors	78.1%	77.8%	78.3%	−0.5%	0.33	0.18
% of Nonexecutive directors	79.3%	78.5%	80.0%	−1.5%	1.45	0.98
Nationality mix (board)	0.9%	1.0%	0.8%	0.2%	0.37	0.85
Quoted boards	1.45	1.45	1.45	0.00	0.04	0.09
Institutional holdings	28.8%	28.5%	29.1%	−0.6%	0.29	0.85

Table 4
The Impact of Financial Experience on Stock Returns

The dependent variable is the banks' stock returns in each period. The first column uses as dependent variable the stock returns accruing to our sample banks during the crisis period. The second and third columns use stock returns for our sample banks in the precrisis period. All variables are as defined earlier. Absolute values of t-statistics are presented below the coefficients. The symbols ***, ** and * denote statistical significance at the 1%, 5%, and 10% levels, respectively.

	(1)	(2)	(3)
	R_{it} 2007-08	R_{it} 2005-06	R_{it} 2004-05
Financial experience (board)	**0.0104****	−0.0033	−0.0025
	2.13	1.2	0.66
Bank size	0.0062	**0.0317*****	**0.0257*****
	0.49	4.41	2.68
CEO is chairman (0,1)	−0.0093	0.0033	−0.0332
	0.25	0.16	1.18
% of Independent directors	0.1698	−0.124	−0.0761
	1.33	1.71	0.78
% of Nonexecutive directors	−0.0129	0.0814	0.0394
	0.07	0.76	0.27
Nationality mix (board)	0.0983	0.0493	0.0826
	0.25	0.23	0.29
Quoted boards	−0.0089	−0.0004	−0.0209
	0.34	0.03	1.05
Financial experience (executives)	−0.0017	−0.0006	−0.0027
	0.56	0.38	1.2
Institutional holdings	−0.0731	−0.1106**	0.0195
	0.77	2.05	0.27
Constant	−0.6181***	0.0267	0.1218
	3.2	0.24	0.82
N	398	379	366
Adjusted R^2	0.0321	0.0464	0.0132

Table 5
Financial Experience and Performance during the Crisis: Evidence from Bailouts and Bank Failures

This table presents the average of different variables for firms with high and low levels of experienced board members. The first column presents the overall sample average. The second column presents the average of the different variables for banks whose non-executive board members have experience above the median. The third column presents the average of the different variables for banks whose nonexecutive board members have experience below the median. The fourth column presents the difference high–low experience (the difference between high and low experience levels), and the last columns test for differences in means and medians. Bailout (0,1) is a dichotomous indicator variable that equals one if the bank was a recipient of bailout funds. Bank failure (0,1) is a dummy variable that equals one if the bank defaulted. The symbols ***, ** and * denote statistical significance at the 1%, 5%, and 10% levels, respectively.

	Total Sample	High Experience Level	Low Experience Level	Difference High–Low	Mean Equality: t-Test	Median Equality: Wilcoxon Z-Test
Bailout (0,1)	34.1%	31.9%	36.3%	−4.4%	0.95	0.96
Bank Failure (0,1)	2.8%	1.0%	4.7%	−3.8%	2.33***	2.32***

Table 6
The Impact of Financial Experience on Bailouts and Bank Failures

In column (1) the dependent variable is a dummy variable that equals one if the bank received money under the bailout plan. In column (2) the dependent variable is a dummy variable that equals one if the bank defaults. In column (3) the dependent variable is the ratio of amount received under the bailout plans to the bank's total assets. Columns (1) and (2) present coefficient estimates from a probit regression. Column (3) presents coefficient estimates from a Tobit regression. All the other variables are defined in Table 2. Absolute values of t-statistics are presented below the coefficients. The symbols ***, ** and * denote statistical significance at the 1%, 5%, and 10% levels, respectively.

	(1)	(2)	(3)
	Bailout	**Failure**	**Bailout-assets**
Financial experience (board)	−0.0112	**−0.0777***	**−0.001****
	0.57	1.67	2.24
Bank size	**0.1213****	−0.0406	0.0012
	2.50	0.42	0.99
CEO is chairman (0,1)	−0.2089	−0.1884	0
	1.45	0.64	0
% of Independent directors	0.531	0.6066	−0.0019
	1.07	0.57	0.2
Quoted boards	0.1473	−0.1843	−0.001
	1.43	0.86	0.5
Financial experience (executives)	0.0086	0.0116	0.0002
	0.73	0.49	0.63
Institutional holdings	0.1256	1.2556*	−0.0132
	0.34	1.87	1.59
Constant	−1.618**	−1.7035*	0.0359***
	3.49	1.75	4.04
N	398	398	136
Pseudo R2	0.045	0.066	0.009

Table 7
Event Study: The Collapse of Bear Stearns and Lehman Brothers
This table reports three-day cumulative abnormal returns for our sample firms. **Bear Stearns *CAR*** is the abnormal stock return accruing to all banks in our sample during the –1;+1 interval centered around March 15, 2008, the date of the Bear Stearns collapse. **Lehman Brothers *CAR*** is the abnormal stock return that all our financial institutions exhibit during the –1;+1 interval centered around September 15, 2008, the date of the Lehman Brothers collapse. The symbols ***, ** and * denote statistical significance at the 1%, 5%, and 10% levels, respectively.

	Total Sample	High Experience Level	Low Experience Level	Difference High–Low	Mean Equality: *t*-Test	Median Equality: Wilcoxon Z-Test
Bear Stearns *CAR*	0.08%	0.7%	−0.5%	1.2%	2.38***	1.96**
Lehman Brothers *CAR*	−0.38%	0.9%	−0.1%	1.1%	1.65*	2.04**

Table 8
Panel A. Financial Experience and the Reaction to the Bear Stearns Announcement

The dependent variable is the banks' *CAR* during the −1;+1 interval centered around March 15, 2008, the date of the Bear Stearns collapse. All the other variables are defined in Table 2. Absolute values of t-statistics are presented below the coefficients. The symbols ***, **, and * denote statistical significance at the 1%, 5%, and 10% levels, respectively.

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Financial experience (board)	**0.0015***	**0.0015***	**0.0015***	**0.0014***	**0.0014***	**0.0014***	**0.0016***	**0.0016***
	2.95	2.95	2.9	2.84	2.83	2.79	2.78	2.77
Bank size	0.0047***	0.0047***	0.0050***	0.0041***	0.0042***	0.0052***	0.0052***	0.0053***
	4.41	4.16	4.4	3.31	3.22	3.63	3.61	3.53
CEO is chairman (0,1)		0.0003	0.0017	0.0002	0.0001	-0.0002	0.0003	0.0004
		0.07	0.42	0.04	0.03	0.05	0.07	0.09
% of Independent directors			−0.016	−0.0111	−0.011	−0.0075	−0.0079	−0.0072
			1.13	0.77	0.77	0.52	0.54	0.49
% of Nonexecutive directors				−0.0367*	−0.0365*	−0.0412**	−0.0427**	−0.0444**
				1.77	1.76	1.97	2.03	2.05
Nationality mix (board)					−0.0078	0.0076	0.0082	0.0087
					0.18	0.17	0.18	0.19
Quoted boards						−0.0049*	−0.0049*	−0.0047
						1.68	1.66	1.55
Financial experience (executives)							−0.0002	−0.0002
							0.65	0.66
Institutional holdings								−0.0036
								0.33
Constant	−0.0404**	−0.0404**	−0.0288*	0.0039	0.0034	0.0062	0.0072	0.0079
	5.17	5.16	2.23	0.18	0.15	0.28	0.33	0.35
N	385	385	385	385	385	385	385	385
Adjusted R^2	0.0678	0.0654	0.0661	0.0719	0.0696	0.0741	0.0727	0.0705

Table 8
Panel B. Financial Experience and the Reaction to the Lehman Brothers Announcement

The dependent variable is the banks' *CAR* during the −1;+1 interval centered around September 15, 2008, the date of the Lehman Brothers collapse. All variables are defined in Table 2. Absolute values of t−statistics are presented below the coefficients. The symbols ***, **, and * denote statistical significance at the 1%, 5%, and 10% levels, respectively.

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Financial experience (board)	**0.0014***	**0.0014***	**0.0014****	**0.0014***	**0.0014***	**0.0013***	**0.0016****	**0.0016****
	1.92	1.91	1.98	1.93	1.88	1.84	1.99	1.99
Bank size	0.0083***	0.0084***	0.0084***	0.0075***	0.0083***	0.0106***	0.0105***	0.0105***
	5.34	5.13	5.07	4.16	4.39	5.15	5.16	4.88
CEO is chairman (0,1)		−0.001	−0.0022	−0.0039	−0.0042	−0.005	−0.004	−0.004
		0.16	0.38	0.64	0.68	0.83	0.65	0.65
% of Independent directors			0.0243	0.0299	0.0301	0.0387	0.0381	0.0379
			1.16	1.39	1.4	1.79	1.77	1.74
% of Nonexecutive directors				−0.0357	−0.0334	−0.0449	−0.0497	−0.0492
				1.17	1.1	1.48	1.63	1.58
Nationality mix (board)					−0.0873	−0.0519	−0.0508	−0.0509
					1.39	0.82	0.8	0.8
Quoted boards						−0.0113***	−0.0113***	−0.0113***
						2.7	2.7	2.65
Financial experience (executives)							−0.0004	−0.0004
							0.9	0.89
Institutional holdings								0.0011
								0.07
Constant	−0.0568**	−0.0568**	−0.0744**	−0.0403	−0.0455	−0.0389	−0.0369	−0.037
	5.04	5.03	3.95	1.28	1.43	1.23	1.17	1.17
N	375	375	375	375	375	375	375	375
Adjusted R^2	0.0785	0.076	0.0769	0.079	0.0814	0.0974	0.0969	0.0944