Governance and the Financial Crisis

Finance Working Paper N°. 248/2009
April 2009

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ECGI Working Paper Series in Finance

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Abstract

Should boards of financial firms be blamed for the financial crisis? Using a large sample of data on nonfinancial and financial firms for the period 1996-2007, I document that the governance of financial firms is, on average, not obviously worse than in nonfinancial firms. Even the issue of executive compensation is not as clear cut as suggested by the media. I also document that bank directors earned significantly less compensation than their counterparts in nonfinancial firms and banks receiving bailout money had boards that were more independent than in other banks. I discuss implications of these findings.

Keywords: financial crisis, boards, executive compensation, financial firms

JEL Classifications: G32

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1. Introduction

Based on measures of world industrial output, world trade and stock markets, Eichengreen and O'Rourke (2009) argue that the current financial crisis may be worse than the Great Depression on a global scale. Perhaps no one would have been surprised if a crisis of this magnitude originated in an emerging market. Bordo and Eichengreen (2002) provide evidence that most financial crises occur in emerging markets. They describe that there were 139 financial crises between 1973 and 1997, 95 of which occurred in emerging market countries. There are many reasons why investors may lose confidence in emerging markets. If such markets are characterized by weak institutions and poor firm-level governance, then capital outflows and stock market crashes may occur. This is what Johnson, Boone, Breach and Friedman (2000), amongst others, argue happened in the Asian crisis of 1997-1998. But the current financial crisis originated in the USA, a country that is commonly held up as a role model in terms of institutional strength and good governance. For example, the US achieves the highest score on La Porta, Lopez-de-Silanes, Shleifer and Vishny (1998)'s anti-director rights index, which measures how well the legal system protects minority shareholders against managers or dominant shareholders.[2] In concurrent work, La Porta et al. (1997) show that common law countries, such as the US, and countries that score higher on their measure of anti-director rights have more developed capital markets. The explanation is that in countries with better protection of shareholders, financiers are willing to invest more money and on better terms for entrepreneurs.

Not only is the US seen as having relatively strong legal institutions, but recent regulation designed to strengthen firm-level governance, the Sarbanes-Oxley Act of 2002 (SOX) and new exchange listing requirements at the NYSE and Nasdaq, have served as models for governance reform around the world. The Sarbanes-Oxley Act and the new listing requirements were a reaction to a series of dramatic corporate and accounting scandals including those at Enron, Tyco and Worldcom. Much of the blame for these scandals was put on boards of directors. For example, in its report on Enron's collapse,

[2] La Porta, Lopez-de-Silanes, Shleifer and Vishny (1998) create this index for 49 countries. The other countries with scores as high as the US are Canada, Chile, Hong Kong, India, Pakistan, South Africa and the UK.

the US Senate argued that by not questioning management about the complicated financial transactions Enron was engaging in, the board had failed in its fiduciary duties to shareholders (U.S. House, 2002). Accordingly, both SOX and the NYSE and Nasdaq listing requirements contain a series of provisions designed to strengthen board oversight of management in publicly-traded firms.

Currently, for example, a company listed on the NYSE would have to have a majority of independent directors (new NYSE listing standard), an independent audit committee consisting of at least three members (NYSE) and a financial expert or a reason not to have a financial expert (SOX), a completely independent nominating/corporate governance committee (new NYSE listing standard), a completely independent compensation committee (new NYSE listing standard), regularly scheduled meetings of the non-management directors (new NYSE listing standard) and a yearly meeting of the independent directors (new NYSE listing standard). Nasdaq listed companies are subject to similar requirements, although they do not have to have a separate compensation or nominating committee. In addition, SOX, NYSE and Nasdaq have tightened the definition of independent director.[3]

Many countries followed the US's suit by tightening governance standards. According to the European Corporate Governance Institute, which maintains a comprehensive database of governance codes around the world (http://www.ecgi.org/codes/index.php), 18 countries published governance codes or made recommendations concerning governance in 2003 alone. Other countries instituted reforms in the ensuing years.

To a certain extent, the fact that the US is considered to have strong investor protection and good governance may help explain why the financial crisis was predicted by so few. But it raises the question whether and to what extent governance can be considered to be a cause of the financial crisis. The recent resignations of several high profile finance executives, e.g. Stan O'Neal at Merrill Lynch, Charles Prince at Citigroup and Marcel Ospel at UBS, and the recommendations by several proxy advisors against

[3] Regardless of exchange listing, all public companies are supposed to abide by SOX which requires that boards are responsible for internal control, audit committees consist entirely of independent directors, audit committees have at least one financial expert, management certifies financial statements and board members face large penalties for corporate accounting fraud.

the reelection of the board at Citigroup, amongst others (see e.g. Moyer, 2008) is direct evidence that boards are, at least partly, being blamed for the crisis. The OECD Steering Group on Corporate Governance goes further. It argues that weak governance is a major cause of the financial crisis (Kirkpatrick, 2009). It places much of the blame on board failures in financial firms, in particular,[4] and has launched an action plan to improve corporate governance.[5] Although the UK generally also scores highly on measures of investor protection, bank governance in the UK is also, at least partly, being blamed for the financial crisis. As a result, Sir David Walker has been commissioned to recommend measures to improve board-level governance at banks to the government.[6]

How can it be that governance problems still exist in the US despite strong shareholder protection mechanisms and recent governance reforms? Can boards of financial firms be to blame for the crisis when publicly-traded financial firms have to abide by the same governance requirements in SOX and the listing rules as nonfinancial firms? This article tries to shed more light on the extent to which the crisis can be attributable to bad financial firm governance, in particular board structure and incentives. It also examines some lessons we can draw for the future as to how financial firm executives should be paid, board competencies, best practices and so forth. Both because the financial crisis originated in the US and because of data limitations this article focuses on publicly-traded financial firms in the US. Because financial firms around the world have different activities and structures and face different regulatory constraints, providing an overview of financial firm governance across multiple countries is a complex task that is beyond the scope of this article.[7]

Section 2 discusses what one might expect a well-governed financial firm to look like. Section 3 compares some measures of governance structure across financial and nonfinancial firms in the US. Section 4 discusses whether bad governance contributed to the crisis. Section 5 discusses lessons for the future.

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[4] But, it also identifies governance in large, complex nonfinancial firms as a problem.
[5] See http://www.oecd.org/document/48/0,3343,en_2649_34813_42192368_1_1_1_37439,00.html.
[6] See http://www.hm-treasury.gov.uk/press_10_09.htm.
[7] Laeven and Levine (2008) provide insights into the governance role of bank ownership structure across various countries.

2. What is a well-governed financial firm?

Descriptions in the media of what appear to be egregious governance failures at financial institutions have heightened the impression that governance failures play a large part in the financial crisis. For example, boards are being blamed for what appear to be excessive pay packages that executives of financial firms received even while their firms were failing or being bailed out by the government. Morgenson (2009) reports that executives at 7 major financial institutions that are in distress received $464 million in performance pay since 2005, while reporting losses of $107 billion since 2007. However, it is important to keep in mind that the media stories often describe individual cases, not the industry as a whole. To understand the role governance plays in the financial crisis, it is important to get a broader perspective of potential governance problems in the financial industry. Certainly any broad-based policy reform should not be based on the consideration of isolated cases. Ideally, the academic governance literature would provide guidance on the question of whether financial institutions are well-governed or not. However, because of the special nature of financial services, most academic papers exclude firms in the financial services from their data and focus on the governance of nonfinancial firms. Thus, to obtain a picture of the state of governance in the financial service industry, it is useful to directly examine some data on board characteristics and executive compensation. Before turning to the data, however, it is important to have a picture of what the board of a well-governed financial firm should look like.

Boards of financial firms have the same legal responsibilities as boards of nonfinancial firms, i.e. the duty of care and loyalty. In addition, publicly-traded financial firms have to abide by SOX. However, understanding what constitutes an effective governance structure for a financial firm is complicated by several factors. First, as Adams and Mehran (2003) describe, boards of financial firms may face more pressure to satisfy non-shareholder stakeholders than boards of nonfinancial firms. Regulators, for example, expect boards to act to ensure the safety and soundness of the financial institution, an objective that may not necessarily be in shareholders' best interest. Consistent with the idea that regulators and owners' interests may diverge, Laeven and Levine (2008) find in a cross-country analysis that the impact of regulation on bank risk-

taking depends on a bank's ownership structure. Adams and Mehran (2003, endnote 6) provide some examples of additional duties regulators impose on bank boards for the purpose of ensuring soundness, which include the adoption of real estate appraisal and evaluation policies (Federal Reserve Board Commercial Bank Examination Manual) and the annual approval of bank risk management policies (Federal Reserve Board Trading Activities Manual).

Second, financial firms are regulated by several different regulators. Investment banks are regulated by the Securities and Exchange Commission (SEC). Thrifts are regulated by the Office of Thrift Supervision. All banks with FDIC-insured deposits are subject to FDIC regulations. Because banks can choose to have a national or state charter and whether or not to be a member of the Federal Reserve, they effectively choose their regulatory authority. National banks are regulated by the OCC, while state banks are regulated either by the Federal Reserve or the FDIC. The presence of a regulator raises the question of whether regulatory scrutiny complements or substitutes for board-level governance. There is as yet no satisfactory answer to this question. Furthermore, it is not known whether regulators differ in the intensity with which they scrutinize the boards of the firms they examine. Some have argued that regulators may engage in a race to the bottom in order to attract banks with lax restrictions (see e.g. Rosen, 2003, 2005 and Whalen, 2002). Thus, it is possible that some regulators are more lenient in evaluating bank board behavior than others. For example, even though Federal Reserve Banks in theory penalize directors for poor attendance behavior, Adams and Ferreira (2008) find that the attendance behavior of directors of bank holding companies (BHCs) at board meetings is worse than in nonfinancial firms. Heterogeneity of regulators suggests that board-level governance may not be the same across all types of financial firms and the governance of each type of firm may need to be considered separately.

Third, the financial services industry underwent many recent changes that are likely to impact board governance. The banking industry underwent an intense period of consolidation in the 1990s through M&A activity. M&A activity affects board structure in several ways. First, it is common to add directors of target firms to the board of the acquirer in friendly acquisitions, as most banking M&As are. Consistent with this, Adams and Mehran (2008) show that M&A activity leads to an increase in BHC board

size. Second, M&A activity may have disciplining effects even if it is friendly. Thus, an active market for corporate control may improve board effectiveness. In the 1990s, banks were also increasingly allowed to engage in investment banking activities (culminating with the passage of the Gramm-Leach-Bliley Act in 1999). This created competition for investment banks, which may have put pressure on their boards. Consistent with this idea, Altınkılıç, Hansen and Hrnjić (2007) find that investment banks do not appear to be ineffectively governed during the 1990-2003 period.

These three factors notwithstanding; because their duties to shareholders are the same, the literature generally argues that the same standards should apply to boards of financial firms as to the boards of nonfinancial firms. The three most commonly studied features of board structure are board independence, board size and the number of other directorships directors hold. The literature generally argues that boards that are more independent, i.e. they contain more directors without social or business connections to management, should be more effective (see Adams, Hermalin and Weisbach, 2009, for a survey of the board literature). Smaller boards should be more effective because decision-making costs are lower in smaller groups. Because directors may become too busy when they hold more outside directorships, the literature argues that boards are more effective when directors hold fewer outside directorships.

It is less clear from the literature what effective CEO and director compensation should look like. To align their incentives with those of shareholders, CEOs and directors should receive a certain amount of performance-based pay in the form of equity. In addition, holding performance-pay constant, total compensation should increase as risk increases. However, equity incentives may induce managers to take excessive risks. In addition, poorly governed firms may be more likely to overpay their directors. Thus it is not always clear whether a given compensation contract is effective or not. Using an industry study, Philippon and Reshef (2009) argue that bankers were overpaid during the mid-1990s to 2006, however, they do not control for individual firm characteristics, such as size or risk, that may influence compensation packages.

If governance failures at financial firms are partly to blame for the financial crisis, then we might expect that financial firms have worse governance in terms of board characteristics and incentives than nonfinancial firms. In a sample of data on 35 BHCs

ending in 1999, Adams and Mehran (2003) find that BHCs have larger boards, more independent directors and lower performance-based pay for CEOs than nonfinancial firms. Thus, in their sample banks could be considered to be better governed than nonfinancial firms in some aspects (independence) but worse in other aspects (board size and performance pay). Since their sample predates the Gramm-Leach Bliley Act of 1999 which may have influenced governance structures in the industry, it is worthwhile making a similar comparison in a larger sample of more recent data, as I do in the next Section.

3. The governance of financial firms-what are the facts?

(Insert Table 1 about here)

To compare board characteristics and incentives in financial firms and nonfinancial firms, I use the Riskmetrics director database from 1996 to 2007.[8] This is an unbalanced panel of director-level data for Standard & Poor's (S&P) 500, S&P MidCaps, and S&P SmallCap firms. It contains information on directors from company proxy statements or annual reports, such as whether the director is classified as independent and the number of other directorships each director holds. I merge this data to Compustat to obtain financial information and SIC codes, which I use to identify financial firms and banks. I obtain data on CEO compensation and director compensation from ExecuComp. All compensation numbers are measured in thousands and are adjusted to 2007 dollars using the CPI-U. Using this data, I construct a dataset containing 18,542 firm-year level observations of which 14.57% (2,702 observations) correspond to financial firms. Of the financial firm observations, 42.39% (1,136 observations) belong to banks. All of the firms in this database are publicly-traded firms and all banks are BHCs, thus this data does not allow me to shed any light on the governance of private financial firms. The number of BHCs represented in the sample varies over time from a low of 86 to a high of 105. The number of non-bank financial firms varies from 106 to 158. Although the number of banks in the sample is small relative to the banking industry, the banks in this sample represent a large fraction of industry assets. For example, according to the FDIC,

[8] I use this data only after extensive cleaning.

in 2007 there were 7,282 FDIC-insured commercial banks in the US with a total of 11,176 billion in assets. In 2007, there are 93 banks in my sample with assets comprising 69.15% of total commercial bank assets (7,728,449 million). Thus, although the comparisons I make and conclusions I draw need not apply to all banks, they are relevant for understanding potential governance failures at banks that are likely to matter the most for the crisis.

Because of the reasons outlined in the previous Section, I compare the governance characteristics of banks and non-bank financials to those of nonfinancials separately. Table 1 provides comparisons for banks and nonfinancial firms. Table 2 provides the same comparisons for non-bank financial firms. Columns I-III of Panel A, Table 1 show comparisons of means of board independence, board size and the average number of directorships per director for banks and nonfinancial firms. Columns IV-VI show comparisons for total CEO compensation (including the value of equity-based pay), the fraction of equity-based pay in total CEO compensation (a measure of performance pay) and average director compensation.[9] Columns I-VI are for the entire sample from 1996 to 2007. Columns VII-XII repeats the comparison for 2007 data only. Observations vary because of missing data. The coefficient on the Constant term measures the sample mean for nonfinancial firms. The coefficient on "Bank" ("Nonbank Financial Firm") measures the difference between banks (non-bank financial firms) and nonfinancial firms. Asterisks indicate statistical significance, with ***, ** and * indicating significance at the 1%, 5% and 10% level, respectively.

From Columns I-VI of Table 1, Panel A we see that banks have on average more independent boards, larger boards, fewer outside directorships, higher total CEO compensation and lower director compensation than nonfinancial firms. While board size is larger in banks, Adams and Mehran (2008) do not find that larger bank board size has detrimental effects on shareholder value. Thus, on average banks do not appear to be worse governed than nonfinancial firms, except possibly in terms of compensation. However, it is well known that wages increase in firm size and banks are generally much larger than nonfinancial firms in terms of assets. Thus, in Panel B, I perform the same

[9] The director compensation measures are only available for 2006 and 2007 due to changes in reporting requirements.

comparisons after controlling for firm size, as proxied by the natural logarithm of the book value of assets.[10] The picture looks slightly different now. Controlling for size, bank boards are less independent, larger, have fewer outside directorships, have less total CEO compensation, less incentive pay for the CEO and less director compensation than nonfinancial firms. These results hold even in the 2007 data. Clearly, firm size is an important factor influencing governance characteristics, consistent with findings in Boone, Fields, Karpoff and Raheja (2007), Coles, Daniel and Naveen (2008), Lehn, Patro and Zhao (2008) and Linck, Netter and Yang (2008). For example, the coefficient on "Bank" in the board size comparison decreases by roughly 50% in Column II after controlling for firm size and the compensation numbers decrease significantly. Although bank boards look less independent after controlling for firm size, the difference in magnitude (1.2% in Column I) is small compared to mean independence of 65.2% for nonfinancial firms. Based on these comparisons, it would be difficult to argue that banks are clearly poorly governed. In particular, much of the media attention focuses on "excessive" total pay and performance pay in financial firms, yet, *on average*, bank CEOs earn less and have less performance pay than CEOs of nonfinancial firms of similar size.

(Insert Table 2 about here)

The picture looks slightly different when we compare non-bank financial firms to nonfinancial firms in Table 2. Comparing Panel A (simple means) to Panel B (means after controlling for firm size), it is clear that firm size again has a significant effect on governance characteristics. After controlling for firm size, non-bank financial firms have less independent boards, smaller boards, fewer outside directorships, lower performance pay and lower director compensation than nonfinancial firms. However, now CEO compensation is still higher than in nonfinancial firms even after controlling for size, although the difference is not significant in 2007. Based on these comparisons, one might argue that board independence is too low and CEO pay too high in financial firms. However, it is not clear whether better performance on other governance measures such as smaller boards and fewer outside directorships could compensate for these differences.

[10] These results are obtained by OLS regressions of the dependent variables on a dummy variable which is defined to be one for banks and 0 for nonfinancial firms and the proxy for firm size.

Some conclusions one can draw from the discussion in this Section are as follows: First, banks and non-bank financial firms do not have exactly the same governance characteristics. Second, although executive pay in financial firms appears larger than in nonfinancial firms, much of this difference is driven by differences in firm size. Of course, CEOs at *some* financial firms may have received what many consider to be unfair or excessive pay. However, *on average* financial CEO pay does not seem to be excessive. If anything, the phenomenon of "excess pay" for CEOs appears to be driven by non-bank financial firms. Third, although financial firms score worse on some governance characteristics than nonfinancial firms, they score better on others. Thus, it would be difficult to say that *on average* financial firms are clearly governed worse than nonfinancial firms. Nevertheless, it is possible that these differences are partly to blame for the problems facing financial firms. I turn to this issue in the next Section. A final and potentially very important observation is that director pay is significantly lower in banks, even without controlling for firm size. This fact is also pointed out in Adams and Ferreira (2008). From Table 1, Panel A, Column XII, one can see that in 2007 average bank director compensation is lower than average nonfinancial director compensation by $62,866.00. Since average director compensation in nonfinancials is $193,931, bank director compensation is roughly 32% lower. This may have serious consequences for governance. If the pool of director candidates is the same for financial firms and nonfinancial firms, then the better qualified candidates may prefer to join the boards of firms that pay more. Of course, factors other than pay play a role in an individual's decision to join a board, but this finding raises the possibility that the pool of bank directors may be worse along some dimensions than the pool of nonfinancial firm directors.

4. Is governance to blame for the problems at banks?

In the previous Section, I showed that the governance of financial firms differs from that of nonfinancial firms. Although it is not clear whether these differences are in the direction of worse governance, the differences are almost all statistically significant. Naturally one would like to know whether these differences contributed to the problems

facing financial firms. In general, this is not an easy question to answer, especially not now while the crisis is still playing itself out. One way of trying to answer this question is to compare the governance characteristics of financial firms that received bailout money from the Federal Government to those that did not. The Troubled Assets Relief Program (TARP) is designed to strengthen the financial system by enabling the government to purchase or insure up to $700 billion in troubled assets. Although the US treasury does not describe it as a bailout program (see http://www.financialstability.gov/roadtostability/capitalpurchaseprogram.html), many observers refer to it as such (see e.g. the TARP entry on Wikipedia). Nevertheless, it is clear that recipients of TARP money face some sort of financial difficulties, thus a comparison of characteristics of firms with and without TARP assistance may still be illustrative. In addition, I can eliminate firms that failed or were acquired from my sample to ensure that I am comparing institutions that are essentially healthy that did not receive bailout funds to those that did.[11]

As of April 10, 2009 only 6 non-bank financial firms received TARP assistance. Thus, I limit the comparison to banks. To determine which of the banks in my sample received TARP funds, I matched their names and locations to the names and locations in the list of TARP recipients maintained by the New York Times (http://projects.nytimes.com/creditcrisis/recipients/table). Of the 93 banks in my sample in 2007, 56 received bailout funds in either 2008 or beginning of 2009 (until April 10, 2009). To determine whether any of the remaining institutions failed or were acquired, I first merge my sample to data from Osiris gathered on April 8, 2009. This dataset contains information about the current status of institutions. For the 16 institutions whose status I was unable to verify using Osiris, I checked institutional histories on the National Information Center's website,[12] a website containing information on banks collected by the Federal Reserve System. Four institutions in my sample disappeared by 2009. Two were acquired (Wachovia and National City Corp), one closed (Downey Financial Corp) and one failed (Franklin Bank Corp). I eliminate these observations from my sample. In Table 3, I perform a similar comparison for 2007 as in Tables 1 and 2 after restricting my

[11] Unfortunately, it is not possible to determine whether any of the banks in my sample applied for TARP money but were turned down.
[12] http://www.ffiec.gov/nicpubweb/nicweb/NicHome.aspx.

sample to banks. The coefficients on "Bailout" measure differences in governance characteristics for banks that received TARP money in 2008 and 2009 to those that did not. Because the sample is so small, I do not also report the results after controlling for firm size. They are similar in sign, although less significant, except for director compensation which becomes significantly negative.

(Insert Table 3 about here)

Table 3 indicates that banks with TARP funds have more independent boards, larger boards, more outside directorships and greater incentive pay for CEOs. Some of these results are consistent with the idea that TARP banks have worse governance. In particular, the fact that TARP banks had higher performance pay for CEOs is consistent with the idea that performance pay may have led executives of banks to take on too much risk. The coefficient on the number of directorships is also consistent with potentially worse governance since taking on too many directorships can lead directors to become too unfocussed. The fact that TARP banks have larger boards is also a potential indication of worse governance. Perhaps the most surprising result, however, is the finding that TARP banks have boards that are more independent. What is going on here? There are several possible explanations. For example, it is possible that the governance of TARP banks is not worse than that of non-TARP banks. However, given that a large part of the problems at banks was caused by securitization, a different explanation seems more plausible. An independent director, by definition, is a director who has not worked for the bank and has no business dealings with the bank. Because of potential conflicts of interests, independent directors are generally not employees of other financial firms. What this means is that independent directors are less likely to have an in-depth knowledge of the internal workings of the banks on whose boards they sit. They are also less likely to have the financial expertise to understand the complexity of the securitization processes banks were engaging in or to assess the associated risks banks were taking on. Thus, although board independence is generally seen to be a good thing, in the case of banks, greater independence may be a bad thing because a more independent board will not have sufficient expertise to monitor the actions of the CEO. This finding is also consistent with Guerrera and Larsen (2008) who describe that more than two-thirds of the directors at eight large US financial institutions did not have any

significant recent experience in the banking industry and more than half had no financial service experience at all.

If we accept that independence may be a sign of poor governance, then the conclusion to be drawn from Table 3 is that it appears that TARP-banks were indeed governed worse than non-TARP banks. However, because the message from Tables 1 and 2 is mixed, i.e. banks and financial firms do not necessarily appear to be worse governed than nonfinancial firms, it is not obvious what the policy implications are. I discuss some lessons we can learn in the next Section.

5. What lessons can we learn?

Because it is the duty of the board to oversee management and many bank and financial firm managers led their banks to the brink of failure, boards of financial firms clearly share some responsibility for the crisis. But the question is how much of the blame should they shoulder? Popular opinion, fueled by stories of what seems to be excessive executive compensation at financial firms, might argue: a lot. However, it is important to keep several facts in mind, particularly when considering potential policy changes.

First, few people predicted the financial crisis. Rushe (2008) describes, for example, how little attention was paid to Nouriel Roubini's prediction that problems in the subprime mortgage market would trigger a financial crisis. While the boards of financial firms should have better information than outsiders, directors are generally not experts on the economy. Thus, it seems unreasonable to expect that they should have been better able to predict the problems financial firms would face than academics, regulators and financial analysts. Rodrik (2009) argues in his blog that blame should be spread more widely than bankers to the broader economics and policymaking community.

Second, financial firms are regulated. It is still not clear whether regulators substitute or complement board-level governance. However, it is possible that directors *perceive* a substitution effect. It is not hard to imagine that a bank director does not

understand all risk implications of particular transactions but agrees to them anyhow, because he assumes that regulators would identify any potential problems.

Third, the data in this paper show that governance in financial firms is, *on average*, not *obviously* worse than in nonfinancial firms. While financial firm governance may appear worse in some dimensions, it appears better in others. Ex post, it is easy to argue that governance problems occurred, but ex ante it is not clear that boards of financial firms were doing anything much different from boards in other firms. Even the issue of executive compensation is not as clear cut as it appears at first. CEOs of financial firms do earn significantly more than CEOs of nonfinancial firms, but this is no longer true for bank CEOs once firm size is accounted for. However, two particular findings suggest that banking firm governance may have been worse, but in ways that might not have been predicted ex ante. Banks receiving bailout money had boards that were more independent and bank directors earned significantly less compensation than their counterparts in nonfinancial firms. What this suggests is that board independence may not necessarily be beneficial for banks. Independent directors may not always have the expertise necessary to oversee complex banking firms. The fact that bank directors earn so much less than their counterparties in nonfinancial firms raises the possibility that the pool of bank directors is different from the pool of directors of nonfinancial firms. Further research is needed to examine why director pay is so low in banking.[13] However, regardless of whether low pay is a sign of a governance problem or not, it seems clear that if it is not increased it will be difficult to attract candidates to bank director positions given the additional duties expected of them in the future.

While representing a large fraction of banking industry assets, the sample in this paper is relatively small compared to the number of institutions in the financial sector. Furthermore, many more factors affect governance characteristics than firm size. Thus, much more research is needed to understand the extent to which governance contributed to the financial crisis. Nevertheless, the simple analysis in this paper is still suggestive that board-level governance of publicly-traded financial firms may have played a part in the crisis. However, it also suggests that the recent governance reform movement embodied in SOX and the NYSE and Nasdaq listing standards may be as much to blame.

[13] It is possible that regulators do not look favourably on pay raises for directors.

SOX and the listing standards place a lot of emphasis on director independence. However, it is not clear that director independence is always beneficial because independent directors lack information (see also the arguments in Adams and Ferreira, 2007). The problem may be exacerbated for financial firms because of the complex nature of their businesses. This is a point the OECD Steering Committee on Corporate Governance (Kirkpatrick, 2009) also makes. It argues that independence at financial firms may have been overemphasized at the expense of qualifications. Guerrera and Larsen (2009) also discuss the fact that SOX made it more difficult for financial firms to hire suitable directors with financial expertise because of the perception of conflicts of interests.

Some tentative policy implications that can be drawn are as follows: By placing too much emphasis on independence SOX and recent listing standards may have worsened board governance at publicly-traded financial firms. Not only are financial firms complex, but the financial industry is complex due to the existence of different regulators. Until the governance of financial firms is better understood, it may be better not to impose restrictions on the governance of financial firms. Further regulating governance may have unintended negative side-effects, as SOX may have had. In addition, compliance with regulation may be costly. For example, some evidence exists that suggests that complying with the requirements in SOX and the listing standards imposed significant costs on small firms. Amongst others, Leuz, Triantis and Wang (2008) find that compliance with SOX was a significant factor in companies' decisions to delist in 2002-2004. Since the majority of firms in the banking sector are relatively small, at this point in time, not having an explicit governance policy for financial firms may be better than imposing additional restrictions on governance.

However, it may be beneficial for financial firms to try to increase the financial sophistication of their boards, either through hiring new directors or through additional education. Because financial firms, such as Citigroup, are already trying to change their boards, it is not clear that increasing the financial sophistication of the board requires regulation. Regardless of their expertise, it is also likely that directors of financial firms will not need any regulatory prodding to ask more tough questions of management in the future. One problem that remains is the issue of director compensation. It may be difficult

to institute pay raises for directors of financial firms given the current outrage over executive compensation at AIG and other large financial firms. But, to ensure that financial firms retain good directors and attract good candidates, directors of financial firms should be adequately compensated for the difficulties of their duties and the additional costs they bear in undertaking any additional training.

6. References

'A Theory of Friendly Boards', Adams, R. and D. Ferreira, Journal of Finance, 62(1), pp. 217-250, 2007.

'Does Regulatory Pressure Provide Sufficient Incentives for Bank Directors? Evidence from Directors' Attendance Records,' Adams, R. and D. Ferreira, University of Queensland Working Paper , 2008.

'The Role of Boards of Directors in Corporate Governance: A Conceptual Framework and Survey', Adams, R., B. Hermalin and M. Weisbach, forthcoming Journal of Economic Literature, 2009.

'Corporate Performance, Board Structure and its Determinants in the Banking Industry', Adams, R. and H. Mehran, University of Queensland Working Paper, 2008.

'Is Corporate Governance Different for Bank Holding Companies?' Adams, R. and H. Mehran, Economic Policy Review, 9(1), pp. 123-142, 2003.

'Investment Bank Governance', Altınkılıç, O., R. Hansen and E. Hrnjić, Tulane University Working paper, 2007.

'The determinants of corporate board size and composition: An empirical analysis', Boone, A., L. Field, J. Karpoff and C. Raheja, Journal of Financial Economics 85, pp. 66-101, 2007.

'Crises now and then: What lessons from the last era of financial globalization?' Bordo, M. and B. Eichengreen, NBER Working Paper No. 8716, 2002.

'Boards: Does one size fit all?' Coles, J., N. Daniel, L. Naveen, Journal of Financial Economics 87, pp. 329—356, 2008.

'A Tale of Two Depressions', Eichengreen, B. and K. O'Rourke, http://www.voxeu.org/index.php?q=node/3421, April 6, 2009.

'Gone by the board? Why bank directors did not spot credit risks', Guerrera, F. and P. Larsen, Financial Times, June 25, 2008.

'Corporate Governance in the Asian Financial Crisis', Johnson, S., P. Boone, A. Breach and E. Friedman, Journal of Financial Economics, 58, pp. 141-186, 2000.

'The Corporate Governance Lessons from the Financial Crisis,' Kirkpatrick, G., Financial Markets Trends, 2009/1, OECD, 2009.

'Legal Determinants of External Finance', La Porta, R., F. Lopez-de-Silanes, A. Shleifer R. Vishny, Journal of Finance 52(3), pp.1131-1150, 1997.

‘Law and Finance’, La Porta, R., F. Lopez-de-Silanes, A. Shleifer R. Vishny, Journal of Political Economy 106(6), pp.1113-1155, 1998.

‘Corporate Governance, Regulation, and Bank Risk Taking’, Laeven, L. and R. Levine, forthcoming, Journal of Financial Economics, 2008.

‘Determinants of the Size and Composition of U.S. Corporate Boards: 1935-2000’, Lehn, K., S. Patro and M. Zhao, forthcoming Financial Management, 2008.

‘Why Do Firms Go Dark? Causes and Economic Consequences of Voluntary SEC Deregistrations’, Leuz, C., A. Triantis and T. Wang, Journal of Accounting and Economics 45, pp. 181-208, 2008.

‘The determinants of board structure’, Linck, J., J. Netter and T. Yang, Journal of Financial Economics 87(2), pp. 308-328, 2008.

‘After Huge Losses, a Move to Reclaim Executives’ Pay’, Morgenson, G., The New York Times, p. BU1, February 22, 2009.

‘Off with their heads’, Moyer, L., Forbes.com, available at http://www.forbes.com/2008/04/11/shareholders-banking-iss-biz-wallcx_lm_0411proxy.html, April 4, 2008.

‘Wages and Human Capital in the U.S. Financial Industry: 1909-2006’, Philippon, T. and A. Reshef, NBER Working Paper No. 14644, 2009.

‘Simon Johnson's morality tale’, Rodrik, D., http://rodrik.typepad.com/dani_rodriks_weblog/2009/03/simon-johnsons-morality-tale.html, March 30, 2009.

‘Is three a crowd? Competition among regulators in banking’, Rosen, R., Journal of Money, Credit, and Banking 35, pp. 967–998, 2003.

‘Switching primary federal regulators: Is it beneficial for U.S. banks?’ Rosen, R., Economic Perspectives 29, 2005.

‘Nouriel Roubini: I fear the worst is yet to come’, Rushe, D., The Sunday Times, October 26, 2008.

‘The role of the board of directors in Enron’s collapse’, U.S. House, Committee on Governmental Affairs, Permanent Subcommittee on Investigations, 107th Cong., 2d sess., Committee Print, 2002.

‘Charter Flips by National Banks’, Whalen, G., Office of the Comptroller of the Currency, E&PA Working Paper 2002-1, 2002.

Table 1 Comparison of selected governance characteristics of banks to nonfinancial firms

The table shows a comparison of selected governance characteristics between banks and nonfinancial firms. The sample consists of an unbalanced panel of 18,542 firm-year level observations for S&P 1500 firms for the period 1996-2007 which were in the Riskmetrics Director Database. Data on assets and SIC codes is from Compustat. Data on CEO and director compensation is from ExecuComp. SIC codes were used to classify firms into banks, financial firms and nonfinancial firms. 14.57% (2,702 observations) correspond to financial firms. Of the financial firm observations, 42.39% (1,136 observations) belong to banks. Riskmetrics classifies directors as independent if they have no business relationship with the firm, are not related or interlocked with management and are not current or former employees. Board Independence is the number of independent directors on the board divided by board size. Number of Directorships is the average number of directorships in other for-profit companies per director. Total CEO Compensation is the sum of Salary, Bonus, Other Annual, Total Value of Restricted Stock Granted, Total Value of Stock Options Granted (using Black-Scholes), Long- Term Incentive Payouts, and All Other Total. Fraction CEO Incentive Pay is 1-(Salary+Bonus)/Total CEO Compensation. Director Compensation is only available for the years 2006 and 2007 and is the average compensation paid to directors. All compensation numbers are measured in thousands and have been converted to 2007 dollars using the CPI-U. Firm Size is the natural logarithm of the book value of assets. Assets are measured in millions. Bank is a dummy variable equal to 1 if the sample firm is a bank. Observations vary because of missing data. Absolute values of t-statistics are in brackets. Asterisks indicate significance at 0.01 (***), 0.05 (**), and 0.10 (*) levels.

	Entire sample 1996-2007						*2007 data only*					
	Board Independence	Board Size	# directorships	CEO compensation	Fraction equity based pay CEO	Director Compensation	Board Independence	Board Size	# directorships	CEO compensation	Fraction equity based pay CEO	Director Compensation
	I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII
	Panel A: simple comparison of means for banks versus nonbanks											
Bank	0.045***	4.624***	-0.306***	313.872***	0.001	-45.347***	-0.007	3.055***	-0.471***	-124.31	-0.076**	-62.866***
	[8.07]	[56.86]	[14.73]	[6.33]	[0.11]	[3.56]	[0.56]	[12.82]	[8.42]	[0.44]	[2.16]	[2.81]
Constant	0.652***	9.145***	0.838***	1,181.748***	0.525***	176.188***	0.773***	9.019***	0.914***	1,189.315***	0.715***	193.931***
	[455.20]	[434.75]	[156.92]	[94.50]	[217.00]	[50.78]	[233.18]	[138.34]	[59.73]	[16.27]	[79.32]	[33.77]
Obs.	16976	16976	14268	14503	14408	1669	1269	1269	1269	702	702	700
R-sq.	0.004	0.16	0.015	0.003	0	0.008	0	0.115	0.053	0	0.007	0.011
	Panel B: comparison of means for banks versus nonbanks after controlling for firm size as proxied by the natural logarithm of assets											
Bank	-0.012**	2.310***	-0.775***	-760.329***	-0.131***	-106.091***	-0.034***	1.369***	-0.777***	-932.094***	-0.204***	-124.593***
	[2.07]	[30.26]	[38.52]	[15.81]	[13.21]	[8.31]	[2.74]	[6.66]	[14.67]	[3.25]	[5.97]	[5.52]
Firm Size	0.023***	0.935***	0.193***	428.237***	0.053***	28.763***	0.014***	0.858***	0.154***	361.605***	0.057***	27.586***
	[25.21]	[79.56]	[62.34]	[59.05]	[35.18]	[14.22]	[6.77]	[25.27]	[17.67]	[8.67]	[11.53]	[8.40]
Constant	0.481***	2.267***	-0.590***	-2,010.768***	0.132***	-52.474***	0.665***	2.383***	-0.277***	-1,750.618***	0.250***	-30.25
	[69.17]	[25.65]	[25.21]	[36.41]	[11.54]	[3.20]	[40.58]	[8.90]	[4.02]	[5.06]	[6.08]	[1.11]
Obs.	16616	16616	13956	14503	14408	1669	1261	1261	1261	702	702	700

Table 2 Comparison of selected governance characteristics of non-bank financial firms to nonfinancial firms

The table shows a comparison of selected governance characteristics between non-bank financial firms and nonfinancial firms. The sample is described in Table 1. Riskmetrics classifies directors as independent if they have no business relationship with the firm, are not related or interlocked with management and are not current or former employees. Board Independence is the number of independent directors on the board divided by board size. Number of Directorships is the average number of directorships in other for-profit companies per director. Total CEO Compensation is the sum of Salary, Bonus, Other Annual, Total Value of Restricted Stock Granted, Total Value of Stock Options Granted (using Black-Scholes), Long- Term Incentive Payouts, and All Other Total. Fraction CEO Incentive Pay is 1-(Salary+Bonus)/Total CEO Compensation. Director Compensation is only available for the years 2006 and 2007 and is the average compensation paid to directors. All compensation numbers are measured in thousands and have been converted to 2007 dollars using the CPI-U. Firm Size is the natural logarithm of the book value of assets. Assets are measured in millions. Nonbank Financial Firm is a dummy variable equal to 1 if the sample firm is a financial firm that is not a bank. Observations vary because of missing data. Absolute values of t-statistics are in brackets. Asterisks indicate significance at 0.01 (***), 0.05 (**), and 0.10 (*) levels.

	Entire sample 1996-2007						*2007 data only*					
	Board Independence	Board Size	# directorships	CEO compensation	Fraction equity based pay CEO	Director Compensation	Board Independence	Board Size	# directorships	CEO compensation	Fraction equity based pay CEO	Director Compensation
	I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII
	Panel A: simple comparison of means for nonbank financial firms versus nonfinancial firms											
Nonbank Financial Firm	-0.025***	1.214***	-0.031*	914.753***	0.030***	6.091	-0.032***	0.950***	-0.082*	345.224	-0.038	4.903
	[5.21]	[18.01]	[1.75]	[18.99]	[3.46]	[0.61]	[3.32]	[4.97]	[1.84]	[1.49]	[1.47]	[0.31]
Constant	0.652***	9.145***	0.838***	1,181.748***	0.525***	176.188***	0.773***	9.019***	0.914***	1,189.315***	0.715***	193.931***
	[448.45]	[452.40]	[157.00]	[86.25]	[215.10]	[51.74]	[230.67]	[137.16]	[59.26]	[14.47]	[77.93]	[34.17]
Obs.	17406	17406	14667	14775	14679	1750	1332	1332	1332	751	751	749
R-sq.	0.002	0.018	0	0.024	0.001	0	0.008	0.018	0.003	0.003	0.003	0
	Panel B: comparison of means for nonbank financial firms versus nonfinancial firms after controlling for firm size as proxied by the natural logarithm of assets											
Nonbank Financial Firm	-0.061***	-0.243***	-0.310***	127.647***	-0.060***	-32.330***	-0.054***	-0.156	-0.273***	-199.976	-0.105***	-29.755*
	[12.17]	[4.06]	[18.55]	[2.81]	[7.00]	[3.33]	[5.49]	[0.96]	[6.46]	[0.89]	[4.23]	[1.90]
Firm Size	0.024***	0.908***	0.179***	447.951***	0.051***	28.199***	0.016***	0.838***	0.142***	421.555***	0.052***	26.722***
	[26.71]	[85.74]	[60.17]	[58.66]	[35.36]	[15.01]	[8.26]	[25.79]	[16.82]	[9.73]	[10.84]	[8.85]
Constant	0.477***	2.462***	-0.490***	-2,157.734***	0.143***	-47.992***	0.647***	2.535***	-0.185***	-2,238.021***	0.294***	-23.227
	[70.85]	[30.83]	[21.70]	[37.04]	[12.91]	[3.14]	[41.42]	[9.86]	[2.76]	[6.20]	[7.41]	[0.92]
Obs.	17041	17041	14348	14775	14679	1750	1322	1322	1322	751	751	749
R-sq.	0.041	0.314	0.202	0.208	0.079	0.114	0.057	0.347	0.179	0.115	0.138	0.095

Table 3 Comparison of selected governance characteristics for sample banks receiving bailout money to surviving sample banks that did not

The table shows a comparison of selected governance characteristics in 2007 between sample banks that received bailout money from the US government in 2008 and beginning of 2009 (up until April 10, 2009) and sample banks that survived until April, 2009 and did not receive bailout money. I define a bank to have received bailout money if it received funds from the US government under the Troubled Asset Relief Program (TARP). The underlying sample is described in Table 1. To determine which of the banks in my sample received TARP funds, I matched their names and locations to the names and locations in the list of TARP recipients maintained by the New York Times (http://projects.nytimes.com/creditcrisis/recipients/table). Of the 93 banks in my sample in 2007, 56 received bailout funds in either 2008 or beginning of 2009 (until April 10, 2009). To determine whether any of the remaining institutions failed or were acquired, I first merge my sample to data from Osiris gathered on April 8, 2009. This dataset contains information about the current status of institutions as of beginning of 2009. For the 16 institutions whose status I was unable to verify using Osiris, I checked institutional histories on the National Information Center's website, a website containing information on banks collected by the Federal Reserve System. Four institutions in my sample disappeared by 2009. Two were acquired, one closed and one failed. I eliminate these observations from my sample. Board Independence is the number of independent directors on the board divided by board size. Number of Directorships is the average number of directorships in other for-profit companies per director. Total CEO Compensation is the sum of Salary, Bonus, Other Annual, Total Value of Restricted Stock Granted, Total Value of Stock Options Granted (using Black-Scholes), Long- Term Incentive Payouts, and All Other Total. Fraction CEO Incentive Pay is 1-(Salary+Bonus)/Total CEO Compensation. Director Compensation is the average compensation paid to directors. Bailout is a dummy variable equal to 1 if the sample firm received bailout money from the US government. Observations vary because of missing data. Absolute values of t-statistics are in brackets. Asterisks indicate significance at 0.01 (***), 0.05 (**), and 0.10 (*) levels.

	2007 data only					
	Board Independence	Board Size	# directorships	CEO compensation	Fraction equity based pay CEO	Director Compensation
	VII	VIII	IX	X	XI	XII
Bailout	0.037*	1.340**	0.265***	302.53	0.163*	-3.699
	[1.68]	[2.13]	[2.66]	[0.78]	[1.97]	[0.14]
Constant	0.745***	11.303***	0.246***	861.947**	0.517***	131.295***
	[42.67]	[22.64]	[3.11]	[2.69]	[7.59]	[5.98]
Obs.	89	89	89	44	44	44
R-sq.	0.031	0.049	0.075	0.014	0.085	0

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