Shareholder Empowerment and Bank Bailouts

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We investigate the hypothesis that shareholder empowerment may have led to more bank bailouts during the recent financial crisis. To test this hypothesis, we propose a management insulation index based on banks' charter and by-law provisions and on the provisions of the applicable state corporate law that make it difficult for shareholders to oust a firm's management. Our index is both conceptually and practically different from the existing alternatives. In a sample of US commercial banks, we show that management insulation is a good predictor of bank bailouts: banks in which managers are fully insulated from shareholders are roughly 19 to 26 percentage points less likely to be bailed out. We also find that banks in which the management insulation index was reduced between 2003 and 2006 are more likely to be bailed out. We discuss alternative interpretations of the evidence. The evidence is mostly consistent with the hypothesis that banks in which shareholders were more empowered performed poorly during the crisis.

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1– Introduction

One, of several, regulatory responses to the financial crisis has been to consider the extent to which bank failure can be explained by flaws in banks' corporate governance arrangements (Kirkpatrick, (2009); Walker, (2009)). Attention has been paid in particular to the relationship between board independence and bank failure (Adams, (2012); Minton, Taillard, and Williamson, (2010)). Limited attention has been given to the relationship between bank failure and core corporate governance rules that determine the ease with which shareholders can remove and replace management (Bruner, (2011); Laeven and Levine, (2009)). In this paper we examine the role played by such rules in mediating the different incentives of shareholders and bank managers, and the effect that such rules have on the probability of bank bailouts.

This paper has two main contributions. The first one is the proposal of an index to measure the extent to which corporate managers are insulated from shareholder pressure. Many corporate governance indices first identify a set of relevant legal rules and governance provisions and then award scores based on the existence or absence of these legal arrangements (La Porta et al (1998); La Porta et al (2006); Gompers, Ishii, and Metrick (2003); Bebchuk, Cohen and Ferrell (2009)). This way of indexing, however, ignores the fact that certain governance arrangements can be rendered functionally irrelevant by the presence or absence of other rules. As the absence or existence of an irrelevant governance provision still has an impact on the final score, it adds noise to the final index values. The inclusion of governance provisions that as a result of other legal provisions are rendered functionally irrelevant also means that similar index scores do not necessarily represent similar outcomes.

Our index, which we call the *management insulation index* (MII), takes a different route. Instead of linear indexing, the MII is what could be called a contingent index. After filtering out the governance arrangements most relevant to our research question, we identify six combinations of governance arrangements that can theoretically be considered distinct. Most of our index values are the result of different (but effectively equivalent) corporate governance arrangements. We detail the construction of the index in Section 2.

Our second contribution is to apply this index to show that banks with less insulated managers were more likely to receive capital injections under the Capital Purchase Program (CPP), the main bank-recapitalization program under the US Troubled Assets Relief Program

(TARP). Our evidence is based on hand-collected data of the governance arrangements of 276 banks from the applicable corporation laws and the banks' charters and by-laws.

US firms provide an optimal setting in which to apply our index, due to the considerable design flexibility provided by corporate law in the United States. The rules that are central to the construction of our index are the rules that determine: (i) the conditions under which a director can be removed – what percentage of the shareholder vote is required to remove the director and whether shareholders can remove directors without providing any reason; (ii) the rules that determine the circumstances in which, and the extent to which, the size of the board can be increased; and (iii) the rules determining when a shareholder meeting can be called or when shareholders can act without calling a meeting.

There are two main advantages of the MII in our setting. First, the MII is a theoretically motivated index, and as such it lends itself to a more natural interpretation than that of most alternative indices. Second, because of our contingent approach to the construction of the index, we expect the MII to be less affected by measurement errors. This is particularly important in small-sample settings. This conjecture is supported by the evidence that lagged values of the MII variable are robust predictors of bank bailouts. This result is economically and statistically strong, despite the relative small size of our sample. Such a result cannot be replicated with alternative measures of shareholder influence, such as ownership concentration, board independence, and board classification. Thus, the MII appears to contain information that is not captured by other governance variables.

Other than explanations based on omitted variables, which we consider in detail below, there are three leading interpretations of the evidence, all of which are interesting. The first one is the possibility that bank participation in the CPP is correlated with a bank's need to recapitalize after finding itself in a fragile position during the crisis. Consistent with this view, Bayazitova and Shivdasani (2012) show that weaker banks were more likely to apply for CPP equity injections than stronger banks were. Similarly, Taliaferro (2009) shows that banks with exposure to troubled asset classes were more likely to participate in the CPP. Thus, one interpretation of our evidence is that shareholder empowerment leads to decisions that make banks weaker and less able to weather the crisis.

A second possibility is the exact opposite of the first story: perhaps those banks with high management insulation scores were so weak that they did not qualify for government support. Duchin and Sosyura (2012) analyze in detail the criteria for selecting CPP participants. Many

measures of bank strength were considered as a pre-requisite for government investment. If banks with high management insulation scores were badly run, they may have been among those banks that had their CPP applications rejected.

A third interpretation is as follows. As CPP equity injections can be seen as a source of cheap capital, a decision not to participate in the CPP may be a symptom of poor governance. CPP participation came with strings attached, such as restrictions on executive compensation. It is possible that powerful executives would prefer not to participate. Cadman, Carter and Lynch (2012) show evidence that compensation restrictions affected TARP participation. Thus, perhaps when banks are offered the opportunity to recapitalize cheaply, only the well-governed ones do so.

The first two stories are mutually exclusive. To address them, we modify our bailout variable in the following way. We identify those banks that plausibly did not participate in CPP because they were too weak, and treat them as if they were bailed out. We find that the link between the MII variable and the bailout indicator becomes stronger. This finding strengthens the first interpretation: shareholder empowerment and bank strength at the beginning of the crisis seem to be negatively associated. We also show that banks with high MII were more likely to refuse CPP funds after the investment was approved. This evidence is inconsistent with the hypothesis that high MII banks did not receive funds because they were weak. The balance of the evidence thus rejects the second story.

This leaves us with the first and third stories, which are not mutually exclusive. Both stories are plausible. Although we cannot perfectly discriminate between them, we offer some additional evidence that they are not equally supported by the data. To address the third story, we first identify those banks that did not apply for funds, or that received CPP funds but repaid them early (before the end of 2009). The latter banks chose to replace cheap government capital with more expensive private capital. In particular, banks that exited CPP redeemed preferred shares at par, while the fair value of those shares was below par (Wilson and Wu, 2012). Thus, similarly to the decision not to participate, exiting CPP early could be a symptom of bad governance. However, we find that the link between the MII and CPP application (either including or excluding early-repayment banks) is both economically and statistically weak. This evidence is difficult to reconcile with the hypothesis that the negative relation between the MII and bailouts is mainly due to management's desire not to be bound by the CPP restrictions.

To investigate the mechanism further, we estimate the effects of management insulation on two additional variables. The first variable is the proportion of non-interest income in total income. Brunnermeier, Dong, and Palia (2012) present evidence that banks with higher non-interest income contribute more to systemic risk than banks that focus more on deposit taking and lending. We show that banks with high levels of management insulation in 2003 were less likely to increase their non-interest income ratios in the years prior to the crisis (2003-2006). The second variable is the proportion of Level 3 assets in total assets, which is a proxy for asset quality (Riedl and Serafeim, 2011). Level 3 assets are illiquid complex securities. We find that banks whose governance arrangements insulated them from managerial pressure were likely to have a lower proportion of Level 3 assets in 2008 than banks that were not as insulated. Overall, our evidence suggests that banks with empowered shareholders were more likely to be bailed out partly because they engaged in non-traditional commercial banking activities, such as investment banking and trading of complex securities.

The paper is structured as follows. Section 2 presents the management insulation index and explains its construction. Section 3 describes the data. Section 4 presents summary statistics. The main empirical results are then presented and discussed in Section 5. Section 6 concludes.

2 – The Management Insulation Index

In order to assess the level of managerial insulation of the banks in our sample, we design a corporate governance index. The *management insulation index* (MII) aims at measuring, in an objective way, the degree of managers' exposure to potential strategic intervention by activist shareholders.

2.1 Background and Elements of the MII

There are two distinctive aspects of corporate law in the United States that are of importance for this paper. First, corporate law in the United States is state-based. Each state is a separate corporate law jurisdiction. As is well known, Delaware is viewed as the market leader among US states.[2] Accordingly, when scholars consider 'US corporate law' they typically focus on the Delaware corporate code and Delaware case law. While there is significant convergence

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[2] Amongst all Fortune 500 companies, 59% are incorporated in Delaware, which has a 0.3% share of the US population; see Bebchuk and Hamdani (2002).

amongst states' corporate law rules - and has been since the early late 19th and early 20th century when many states followed the lead of the then market leader New Jersey - there are many notable differences of approach between states in relation to basic corporate rules, such as shareholder rights to call shareholder meetings and to remove directors. These differences are of importance in understanding the extent to which managers are insulated from shareholder pressure. A presumption of state-wide convergence to the Delaware approach will yield an inaccurate assessment of bank managers' insulation from shareholders. For example, the consequences of having a classified board in Delaware are very different from the consequences in Florida, Georgia, or California. The second distinctive aspect is that many of the core corporate law rules, including shareholder rights to remove directors and call shareholder meetings, are optional. This contrasts with other common and civil law jurisdictions such as the UK and Germany, where such rights are mandatory. It follows that in order to determine how exposed managers are to activist shareholder threats and pressure, we cannot simply consider the default corporate law rules of the state of the bank's incorporation, but need to look at those rules in combination with an analysis of the bank's constitutional documents, its charter and by-laws.

Given this variation in banks' shareholder rights and, as a corollary, managerial insulation, to understand the state of shareholder empowerment and its effects, we need a way of systematically assessing this variation in shareholder rights. The objective of the MII is to systematize this variation in relation to the sub-set of rights which shareholders can use to oust management, or – perhaps more importantly – credibly threaten to do so. It is not our aim to create a general shareholder rights index; we exclusively focus on answering the question of how core corporate law rules make it more or less difficult and time-consuming (and hence costly) to challenge incumbent management.

We analyze the availability to shareholders of different legal strategies aimed at replacing existing management under the applicable state law and the constitutional documents in force at the relevant time. A determined shareholder body can, in all US jurisdictions, ultimately decide on the composition of the board. The differences we identify mainly focus on the speed and level of coordination necessary to achieve a change in management. The underlying assumption is that time plays an important de facto role in insulating managers, as the financial return of shareholder intervention required by activist investors will crucially depend on the time horizon of such pay-off.

The typical linear corporate governance indices first identify a set of relevant legal rules and governance provisions and then award scores based on the existence or absence of these legal arrangements (La Porta et al (1998); La Porta et al (2006); Gompers, Ishii, and Metrick (2003); Bebchuk, Cohen and Ferrell (2009)). This way of indexing, however, ignores the fact that certain governance arrangements can be rendered functionally irrelevant by the presence or absence of other rules (Bebchuk, Coates and Subramanian (2002)).

Even providing different numerical weighting to different provisions cannot overcome this problem. Apart from the obvious problem of quantifying the relative importance of each legal provision, weighting in and of itself does not take into account the interaction effects between different governance provisions; there simply is no single fixed relative "value" of two governance arrangements. The MII is a contingent index in the sense that the presence of each governance arrangements only affects the outcome where it has a real effect on manager insulation, taking into account all other governance arrangements.[3]

2.2 Distinctiveness and Equivalence of MII values

Our index takes values from one to six. We identify four main ways in which shareholders can gain control over the corporation's board.

First, where all directors are elected annually, shareholders can simply exercise their voting rights to elect different directors.

Second, many corporations have so-called classified (or staggered) boards, meaning that (typically) only a third of all directors stand for re-election each year. In this case, shareholders can either wait for two years (two consecutive annual stockholder meetings) in order to gain board control, or they can try to 'declassify' the board (i.e., changing the bank's governance arrangements to switch to annual election of all directors). The former option is time-consuming and costly; the availability of the latter option crucially depends on the bank's constitutional arrangements set forth in its charter and by-laws, as well as the rules determining how the constitution can be amended. In the absence of a contrary provision in

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[3] Although ever since Manne's seminal article (Manne, (1965)) the market for corporate control is typically viewed as one of the potentially most powerful corporate governance mechanisms, we do not include here measures of entrenchment relating to (hostile) takeovers. The reason for this is that banks, unlike industrial companies, are typically not exposed to the market for corporate control as the opacity of their balance sheet as well as regulatory hurdles provide for significant protection from disciplining takeovers (Levine, 2004).

the bank's charter, shareholders can typically amend a corporation's by-laws by majority vote. Accordingly, if the board's classification is set forth in the by-laws then it can be declassified by shareholders alone. However, in some states the charter may impose additional restrictions on a by-law amendment including board approval or a supermajority shareholder vote. A corporation's charter can only be amended with both board and shareholder approval. Accordingly, where board classification is set forth in the charter, de-classification is only possible with board approval. But note further, that where this de-classification strategy is available it will only be an effective means of gaining board control where declassification also results in the application of a 'without cause' removal right - which can be exercised following the declassification[4] (the directors' tenure will be unaffected by the declassification).[5]

Third, shareholders can elect additional directors to the board and thereby outnumber the incumbent directors. The availability of this option again depends on the provisions in the charter and by-laws of each corporation and the number of appointed directors: Shareholders must first have the right to increase the size of the current board, which differs from bank to bank. This depends on the provisions of the charter and by-laws, as well as on the state default rules. Moreover, if the charter provides for a maximum board size (as it often does), this maximum number must be large enough for the newly appointed directors to be able to outnumber the existing board members. In banks with classified boards, this means that the maximum board size has to be greater by at least a third than the current board size. Together with the third of directors elected annually, this allows shareholders to increase board size to the maximum and fill the vacancies created by the expiring directorships to gain (at least) 50% of the board seats.

Fourth, shareholders in corporations with both classified and unclassified boards sometimes (typically in the case of unclassified boards) have the right to simply remove directors "without cause."

The chart below (Figure 1) shows the different "paths" leading to each of our six outcomes.

[– Insert Figure 1 about here –]

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[4] Bylaw changes are effective immediately allowing for further corporate action in the meeting based on that change, see, for example, *Blasius Industries Inc. v Atlas Corporation* 564 A.2d 651.

[5] This latter assertion – i.e. that the directors' tenure is unaffected by a declassification – is a point of law on which there is some uncertainty; for a discussion, see the description of the index in the Appendix (text to n 17).

We check the availability of each of the above possibilities for all banks in our sample. Moreover, we also check whether shareholders need to wait for an annual stockholder meeting to exercise their control rights. This is the case where shareholders neither have the right to call a special (interim) meeting,[6] nor may "act by written consent". The latter right, available in some corporations, allows shareholders to solicit written consent statements from other shareholders and effect decisions within the powers of the general meeting without actually holding a meeting.[7]

This allows us to form three groups of banks where shareholders can, in theory, gain control over the bank's board almost immediately (MII scores of 1 and 2), within a one year (one meeting) timeframe (MII scores of 3 and 4), or after a two year (two meeting) timeframe (MII scores of 5 and 6). In the Appendix, we describe each index value in detail and the "paths" leading to these values.

3 – Data

Our initial sample consists of 476 US based commercial banks that were publicly listed in 2008 and for which data was available in the BoardEx database in May 2009. We define banks as those companies that held a banking license at the end of 2008. Our sample includes all US investment banks that obtained a banking license as part of the 2008 bailout. Our unit of analysis is a bank holding company; fully-owned subsidiaries are not included. We then exclude all banks that were initially floated after 2003, which reduces our sample to 421 banks.

In order to construct the management insulation index, we tried to obtain the articles of incorporation and by-laws applicable between 2003 and 2007 for all remaining banks in our sample. We first excluded all banks that were not listed throughout the 2003 – 2007 period.

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[6] Where shareholders do not have to wait for an annual stockholder meeting to exercise their rights, we also have to adjust our calculations of the "increase board size"-strategy. As directors' terms are unaffected by the holding of a special meeting, we compare the actual board size with the maximum board size. To illustrate this point, take a corporation with a maximum board size of 21, and an actual board size of 12. While shareholders could gain control over the board in an annual meeting (where the terms of 4 directors expire, and shareholders thus can elect a total of 13 directors), this is not true in a special meeting (where only 9 available seats could be filled, leaving the current board in control). Where, as in the above example, control can only be obtained by increasing board size coupled with the replacement of the directors whose term expires, banks can only be classified as MII 3 or 4 regardless of the existence of a right to call a special meeting.

[7] In our indexing, we only treat rights to act by written consent (i.e. without a meeting) as equivalent to special meeting rights, where its exercise does not depend on the consent of holders of all, or a supermajority of, outstanding shares.

For the remaining banks, the documents were hand-collected using the SEC EDGAR database as well as state-based document repositories.

Even though listed companies are in principle required to file with the SEC their articles of incorporation as part of their annual reports, we were not able to collect the relevant documents for some banks. First, corporations are allowed to incorporate the articles of incorporation and by-laws by reference to prior filings. In many instances, the filings referred to were submitted to the SEC before 1994, and are thus unavailable electronically through the EDGAR database. This concerns those banks in our sample that did not change their articles/by-laws between 1994 and 2007. Second, corporations are not required to restate their articles of incorporation or by-laws after each amendment. Consequently, if they choose not to consolidate the amendments, and where the original articles/by-laws date from a time prior to 1994, a precise re-construction of the corporate governance documents was not always possible. We were able to obtain at least partial information for 317 banks, and full sets of all constitutional documents for the 2003-2007 timeframe for 276 banks. We collect information on the specific governance provisions we identified when constructing the management insulation index (see the detailed description in Section 2).

We obtain bank financial data from Worldscope. We use book assets as proxies for bank size, and we measure leverage as assets over common equity. We collect detailed investor level ownership data from Bankscope and compensation data for the highest paid director from CapitalIQ. We also construct a variable that counts the number of bank acquisitions between 2003 and 2006. We only include those transactions in which the acquirer achieved full control by acquiring at least 50% of the target. For this we use the entire M&A database from Thomson One Banker, and match the acquirer's name against the bank names in our initial database per year. We match the acquisitions of subsidiaries to the parent company. We construct a banking experience indicator variable that equals one if the director had a prior managerial or top-executive position in any bank, and an independence variable based on whether a bank director is declared independent. We adjust the independence variable for a number of dimensions such as prior employment and material client relationship. For an extensive description of the adjustment process, see Ferreira, Kirchmaier, and Metzger (2010).

4 – Management Insulation Scores: Summary Statistics

We assign a score of 1 to 6 to each bank-year from 2003 to 2007, according to the procedure described in Figure 1. Table I shows the number of observations in each group. Figure 2 shows the frequency of each group per year. We find that most banks are either in group 2 (about 28%) or in group 6 (about 32%). Groups 1 and 4 are also significant (about 15% each), but group 3 and 5 are both fairly uncommon. The distribution of management insulation scores is very stable over the years.

– Insert Table I about here –

– Insert Figure 2 about here –

How should we aggregate these data? A typical procedure is simply to assign a score of 1 to 6 to each of these categories. We define such a variable as the *management insulation index* (MII). However, there is no a priori reason to assume that all categories are equally important. In fact, we believe that group 5 and 6 represent a level of management insulation that is vastly stronger than all the other levels. Thus, we also create an indicator variable that takes the value of one if the management insulation index is equal to five or six, otherwise it is zero. We call this variable the *management insulation dummy (MID)*. This variable has a straightforward interpretation: it indicates those banks for which it would take two consecutive shareholder meetings for a majority coalition of shareholders to gain control of the board. In unreported results, we also considered alternative ways of grouping the management insulation variables. These variations have no important consequences for our conclusions.

Table II shows the cross-sectional averages of the MII and MID variables per year. It also shows the average of a *classified board dummy (CBD)* variable. If we consider board classification (i.e. the existence of a staggered board) as a measure of managerial entrenchment, we note that, compared to our management insulation dummy, the classified board dummy substantially overestimates the extent to which managers are entrenched. While 77% of the boards in our sample are classified in 2003, in only 38% of the banks managers are substantially insulated from shareholder pressure, according to our measure. The MID variable thus paints a very different picture of management insulation in banks from the one suggested by the CBD variable.

– Insert Table II about here –

We expect the MID variable to contain different information than that in the CBD. Table III shows the percentage of banks that have classified boards, but do not have a management insulation index of 5 or 6. Just below 40% of all banks have classified boards and their managers are not fully insulated. In fact, it is possible for banks with classified boards to achieve very low scores of management insulation. For example, in 2007, 16% of the classified-board banks had a management insulation index of 1, and 19.5% of such banks had a management insulation index of 2 (results not tabulated).

– Insert Table III about here –

Table IV presents the summary statistics of the main variables used in our empirical analysis in Section 5. The unit of observation is a bank-year, thus the maximum sample size is 1267. Some variables however are only available for some years. We see from Table IV about 56% of the banks in the sample received CPP funds.

– Insert Table IV about here –

Table V presents the averages of selected bank variables, conditional on the values of the management insulation dummy in 2003. We see that insulated banks were 22 percentage points less likely to be bailed out. That is, a negative relation between management insulation and bailouts exists and is quite strong, even before we consider the impact of additional variables on bailouts. The economic significance of this effect is substantial, as the unconditional probability of bailout in our sample is 56%. Management insulation is mechanically correlated to board classification in 2003, although this correlation is far from perfect. Insulated banks are smaller on average. All the other characteristics are very similar across the two groups.

– Insert Table V about here –

5 – Empirical Results

Our goal in this section is to estimate the probability that a bank is bailed out, which is measured by the bank's participation in the Capital Purchase Program (CPP) in 2008-2009. To investigate the role of bank characteristics on the probability of bailouts, we estimate the following model:

$$Prob(Y_i = 1 | x_i) = \Phi(x_i' \beta), \tag{1}$$

where Y_i is an indicator variable that takes the value of 1 if bank i has received CPP funds, x_i is a vector of lagged bank characteristics (as of 2006 or earlier), β is a vector of parameters to be estimated, and Φ is a the standardized normal cumulative distribution function (i.e. a Probit model).

Our main right-hand side variables of interest are the management insulation index (MII) and the management insulation dummy (MID). As we discuss above, the maximum level of insulation (MII=5 or MII=6) is likely to offer substantially more protection to managers than all the other levels. As further indication of the salience of that insulation level, we note that 37% of the banks in our sample have MII=5 or MII=6 in 2003. We thus define the MID variable as an indicator variable that takes the value of one if MII=5 or MII=6, and zero otherwise. Most of our conclusions are based on the MID variable. Results in which we use different partitions of the MII variable are similar.

Because of the small size of the sample, we choose a parsimonious set of covariates to be included in x_i. It is well known that larger banks are more likely to be bailed out (the "too big to fail" effect), thus it is important to control properly for size. We use (the natural logarithm of) the book value of assets as a proxy for size. In order to give more functional-form flexibility to the effect of size on bailouts, we run spline regressions in which the effect of size on bailouts is allowed to differ according to whether the value of the assets is in one of the following three groups: the bottom sextile (the 6-quantile) of the sample, the top sextile, or between these two. As it will become clear, this particular specification has no important effect on the results.

Alongside size, in our baseline specification we also include leverage. The reason for including leverage is clear: highly-levered banks are more likely to require bailing out. Importantly, we include dummies for the bank's state of incorporation in some of the regressions (there are banks from 38 states in our sample). We want to make sure that our results are not simply an artifact of differences in corporate law across states.

5.1 Main Results

In Table VI we report our first set of results. The table shows the marginal effects of the independent variables (evaluated at the means of the data) on the probability of bailouts. We report robust z-statistics (clustered by state) within brackets, below the estimated coefficients.

Our main variable of interest is the MID variable, which is measured as of 2003 (the earliest date for which we have data) in order to minimize concerns about reverse causality. Such a strategy is feasible because the MID variable is quite persistent. In column (a) we present the result of a univariate probit regression, in which the MID is the only variable on the right-hand side. We find that banks with insulated managers are 19 percentage points less likely to be bailed out. The economic significance of this effect is substantial, as the percentage of banks that were bailed out in our sample is 56%. This effect is statistically precise, being 3.085 standard errors away from zero. This effect is also very similar to the 22 percentage point effect found in the nonparametric univariate analysis, which is reported in Table V.

– Insert Table VI about here –

In column (b) we add a first set of controls: size variables and leverage. The effect of the MID is basically unchanged. We find that larger banks are indeed more likely to be bailed out. The estimated slopes are roughly similar across the three size groups. Indeed, the results are basically identical in (unreported) regressions in which size is broken down into a different number of groups (either more or fewer groups). Leverage appears to be positively related to bailouts. In column (c) we add state dummies. The number of observations is reduced because there are ten states with just one bank in the sample. Despite the loss of pure cross-state variation, all estimated coefficients remain roughly unchanged. The statistical precision of the estimates fall due to a dramatic reduction in degrees of freedom, but still remains at adequate levels.

In column (d) we include an additional set of control variables: board independence (as a proportion of board size), the proportion of independent directors with previous banking experience, a 20% block ownership dummy, the ownership stake of the insider with the largest interest in the bank, the number of acquisitions from 2003 to 2006, the fraction of variable pay over the total compensation for the highest paid director (which is typically the CEO), and (the natural logarithm of) the total compensation for the highest paid director. The effect of management insulation on the probability of bailouts is virtually unchanged in this specification: banks with insulated managers are 22 percentage points less likely to be bailed out. Regarding the other control variables, we note that the effect of leverage is now larger and statistically stronger. The number of acquisitions appears to be positively related to bailouts. The number of acquisitions is strongly correlated with bank size, and we cannot rule out the possibility that its positive effect on bailouts is simply a consequence of the too big to

fail effect. This interpretation is strengthened by the fact that the inclusion of the acquisition variable reduces the statistical precision of the size variables (this is also verified in unreported regressions).

Our preliminary conclusion is that the management insulation dummy is a robust predictor of bank bailouts. Its predictive power is not diminished by the inclusion of alternative governance variables, such as the presence of large block holders, board independence, board experience, and compensation variables.

It is important to clarify our interpretation of these results. The evidence shows that our measure of shareholder empowerment (the negative of management insulation) in 2003 predicts bailouts in 2008-09, after controlling for a set of other bank characteristics. It does not mean that shareholder interference "caused" the bailouts. First, in general we cannot ascertain causality from predictive regressions, as we cannot rule out the possibility that charters and by-laws are endogenously determined alongside bank policies that might have affected bank performance during the crisis or banks' incentives to apply for government support. Second, in a literal sense, laws, charters and by-laws (or any other governance variable) cannot directly cause bank bailouts; bailouts are ultimately determined by some ex ante actions by bank executives and some other variables outside their control (i.e. luck, politics, etc.). That is, if we could directly observe those ex ante actions and include them in our predictive regressions, we would expect the coefficient on the MID variable to be zero. Thus, the best one could hope for is to find out whether our management insulation index correlates with some of these ex ante actions that led to bank bailouts. The fact that the MID variable is a robust predictor of bailouts suggests that shareholder empowerment correlates with a set of ex ante decisions that eventually led to bailouts. We investigate this possibility in Subsection 5.3.4 below.

We next consider the effects of changes in the management insulation index. Such changes happen infrequently and are typically a consequence of modifications to the bank's charter or by-laws. In our data, a change in the MII occurs in less than 5% of the bank-years between 2003 and 2006. We postulate that changes that reduce the management insulation index are suggestive of episodes of shareholder activism, either explicit or implicit (for example, by the threat of exit – the "Wall Street walk"). We create a variable that measures the changes in the MII between 2003 and 2006. We interpret this variable as a proxy for recent shareholder interference (that is, negative changes mean that shareholders are more empowered, while

positive changes mean the opposite). The average change from 2003 to 2006 is just 0.024 (see Table IV). From 2003 to 2006, we find 23 annual decreases in MII, and 21 annual increases in MII (results not tabulated). There are a few cases of major changes, such as from 1 to 6 and from 6 to 2 (see Table IV).

Column (e) of Table VI reports the results of a regression using the same specification as in column (d), but now including the change in MII as another right-hand side variable. We first note that the inclusion of this variable increases the point estimate of the marginal effect of MID. In this specification, banks with insulated managers are 26.5 percentage points less likely to be bailed out. This effect also appears to be more statistically precise, at roughly 2.57 standard errors from zero. We also find that the change in MII has a strong effect on the probability of bailouts: a one-point reduction in the index increases the probability of a bailout by roughly 13 percentage points. This effect is statistically precise, with a z-statistic of -2.1.

We conclude that recent changes in the management insulation index from 2003 to 2006 contain information that helps explain the cross-section of bank bailouts. This information goes beyond that contained in the management insulation dummy in 2003.

5.2 Robustness

We now discuss some additional robustness checks and offer some more interpretation.

Although it is impossible to rule out omitted variables as an explanation for our findings, the pattern of estimated marginal effects as more controls are added is reassuring. In virtually all cases in Table VI, the inclusion of additional controls tends to make the results stronger (in an economic, not statistical sense). Because controls do not seem to make the estimated effects weaker, it seems unlikely that by simply adding more controls one could eventually find the key missing variable. For omitted variables to explain away the effect of the MID variable, we would need to find additional variables that are weakly correlated with the controls included in the specifications in Table VI. For example, suppose that we thought that bank size could explain the effect of the MID. Our flexible specification for bank size is surely still quite imperfect, thus one could make a case for adding more and better proxies for size. However, one would need to find an alternative size variable that is only weakly correlated with book assets, but strongly correlated with the MID variable. In other words,

the common factor between such a variable and the MID must be different than the common factor among all size variables.

Substantial research exists on the role of classified boards (also known as *staggered boards*) in entrenching managers.[8] According to our management insulation index, however, a classified board is a necessary but not sufficient condition for a firm achieving the maximum score of management insulation. In fact, it is even possible for a firm with a classified board to achieve the lowest score of management insulation. In 2003, 39.2% of the banks with classified boards had a management insulation index below 5. Still, given the high correlation between the MID variable and the board classification dummy, a question arises of whether our index is nothing more than a proxy for the simpler board classification dummy.

In Table VII, we report the output of regressions with the same specifications as those in columns (a)-(d) of Table VI, but we now replace the MID variable with the board classification dummy. We find that, even after dropping the MID variable from the regression, the marginal effects of the classified board variable are both economically and statistically insignificant, with the exception of the univariate specification (column (a)), where the estimated coefficient is borderline significant.

– Insert Table VII about here –

We conjecture that the management insulation dummy is a more precise measure of management entrenchment than the board classification dummy. In large samples, the board classification dummy may work well, as it is indeed correlated with management entrenchment. However, in small samples, such as ours, a less noisy measure is required. The construction of the management insulation index is theoretically motivated, with the explicit goal of being more precise than a simple categorization between classified and non-classified boards. This additional precision is valuable, not only for obtaining statistically significant results in small samples, but, crucially, for obtaining economically meaningful estimates in samples of any size.

There is evidence linking board structure to bank performance during the crisis (for some examples, see Adams, (2012); Beltratti and Stulz, (2012); Erkens, Hung, and Matos, (2012);

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[8] For examples, see Bebchuk, Coates and Subramanian (2002), Bebchuk and Cohen (2005), Masulis, Wang, and Xie (2007), Faleye (2007), Bates, Becher, and Lemmon (2008), and Bebchuk, Cohen, and Wang (2011).

Chesney, Stromberg, and Wagner, (2012); and Minton, Taillard, and Williamson, (2010)). In particular, a positive relation between board independence and bank bailouts is found in Adams (2012) and Minton, Taillard, and Williamson (2010). As we see from Table VI, the effect of board independence on the probability of bailouts is small and statistically insignificant. We conjecture that board independence is a noisy proxy for shareholder empowerment. As such, its effect in our sample is likely to be small, either because our sample is small or because the management insulation dummy is a more precise proxy for (less) shareholder empowerment, or both.

5.3 Investigating the Mechanism

As discussed in the introduction, there are three leading explanations for the negative relation between management insulation and the probability of bailouts. First, management insulation may be correlated with decisions that made banks stronger during the crisis, leading to fewer bailouts. Second, management insulation may be correlated with decisions that made banks *weaker* during the crisis, and because of such weakness, such banks did not qualify for CPP investments. Third, insulated managers may have chosen not to apply for bailout funds. Here we investigate each of these explanations in turn to see whether they survive further scrutiny.

5.3.1 Management Insulation and Bank Performance

Banks with serious liquidity needs had no option but to apply for CPP funds. However, some banks did not qualify for CPP capital injections or had their applications rejected because they were too weak (Bayazitova and Shivdasani, (2012); Duchin and Sosyura, (2012)). Our bailout indicator is at best a noisy proxy for performance/liquidity needs, because some of the worst-performing banks did not receive CPP funds.

To address the concern that our bailout dummy is a poor proxy for bank strength, or perhaps worse, that it might be a proxy for bank weakness, we first identify those banks that did not receive funds because they were too weak. These are banks that were closed by the FDIC shortly after the CPP was announced, or banks that stated that they could not issue preferred shares because they had already defaulted/delayed payment on subordinated debt, or there were other clear reasons for not receiving funds due to weakness. There are 14 banks in this category. We also identify 8 banks that did not receive funds and subsequently failed (as of 2010). We then create two new indicator variables. The first one, which we call "bailout + weak bank dummy," is equal to 1 if a bank either is bailed out or is weak but is not bailed

out. The second variable, which we call "bailout + weak + failed banks," is equal to the first one except that it also includes the failed banks in the group of bailed out and weak banks. These two new variables are arguably less noisy proxies for poor performance.

In Table VIII, columns (a) and (b), we report the output of regressions using the same specification as in column (e) of Table VI (which is the one with the largest set of controls), but replacing the bailout variable with these two different indicator variables. We find that the results become stronger. Now those banks with MID=1 are about 33 to 35 percentage points less likely to be poor performers.

– Insert Table VIII about here –

As these results are directly comparable to those from Table VI, the evidence here supports an interpretation in which management insulation may have made some banks stronger.

5.3.2 Management Insulation and Incentives to Apply for CPP funds

The negative relation between management insulation and the acceptance of CPP funds could be explained by badly-governed banks choosing not to apply for these funds. In that case, we expect the negative relation between management insulation and the decision to apply for CPP funds to be even stronger than that between management insulation and bailouts. To test this hypothesis, we create an indicator variable that takes the value of 1 if a bank applied for CPP funds. We assume that all banks that received CPP funds applied for them. Of the remaining banks, we identify 34 banks that did apply for the funds, but did not get them. This information comes from the banks' company reports, such as 10-Ks, annual reports, or documents on their web pages.

From Table VIII, column (c), we see that the MID variable has a negative effect on the probability of applying for funds. This effect is, however, economically smaller than that of the bailout variable and is statistically imprecise. Empirically, this result is explained by the fact that a large number of banks that applied for CPP funds, but did not get them, had the highest insulation scores (MII=5 or 6). This evidence is difficult to reconcile with an interpretation in which badly-governed banks choose not to apply for bailout funds.

Some banks that received CPP funds exited from the program very early. An early exit could also be a symptom of bad governance. Bayazitova and Shivdasani (2012) show evidence that banks with high levels of CEO compensation were more likely to exit CPP early. Wilson and

Wu (2012) argue that there was no compelling economic reason to repay CPP investments early, leaving open the possibility that badly-governed banks chose to exit the program against the interests of their shareholders. To address this possibility, we identify 23 banks that received CPP funds but repaid these funds at or before October 2009. We use this information to refine our CPP application dummy, which now classifies those banks that exited early in the same group as those that did not apply. We report the results in Table VIII, column (d). The estimated effect of the MID variable on the probability of applying for funds and not repaying them early is economically weaker than that reported in column (c), and its statistical precision is weak.

5.3.3 Management Insulation and Rejection of CPP funds

The strong correlation between management insulation and the probability of receiving CPP is not fully explained by the decision to apply for CPP funds. Thus, it is likely that some banks with MID=1 applied for CPP funds, but did not get them. There are two main reasons for a bank not to receive CPP funds, conditional on applying for such funds. As discussed above, some banks were too weak to qualify for such funds. But we already know from column (a) that MID=1 banks were less likely to be denied funds because they were weak. Alternatively, some banks had their applications approved, but rejected the CPP investments. The latter banks were relatively strong, as evidenced by the approval of funds and the fact that they believed that they could go on without such funds.

In column (e) from Table VIII we estimate the probability of rejecting CPP funds, conditional on approval. The sample is restricted to those banks that had their applications approved. We find that banks with MID=1 are 27.6 percentage points more likely to reject CPP funds after approval. This result again casts doubt on the hypothesis that banks with insulated managers did not receive funds because they were weak. However, the regression in column (e) is not able to separate between the main two competing hypotheses (the first story and the third story), as rejecting CPP funds may not only be an indicator of strength, but also a symptom of bad governance.

Overall, the evidence in Table VIII is quite compelling. The negative correlation between management insulation and bailouts is mostly driven by a combination of low-insulation banks being weak, and thus not receiving CPP funds (columns (a) and (b)), and high-insulation banks being sufficiently strong to reject CPP funds (column (e)). On the other hand, the decision to apply for CPP funds explains only a small part of the results. We

conclude that the data support the hypothesis that management insulation is correlated with decisions that made banks stronger during the crisis. There is very little support for the alternative hypothesis that the management insulation index works as a proxy for badly-governed banks that choose not to raise cheap government capital.

5.3.4 Bank Scope: Income and Asset Composition

If management insulation is related to different choices in the period before the crisis, what are these choices? Here we investigate the relation between management insulation and some accounting variables that might be informative about bank choices prior to the crisis.

Using accounting data to assess pre-CCP bank strength is problematic. Accounting data such as leverage ratios are likely to be an opaque and noisy measure of the risk of a bank's asset profile, as such ratios are not informative about the risk attributes of the asset portfolio itself. Likewise, even risk-based capital ratios as measures of bank strength or solvency are similarly opaque and noisy due to their regulatory use[9] and because their calculation, pre-crisis, was based on assumptions that were proven incorrect by the ensuing financial crisis.[10] In unreported regressions, we find only weak evidence of associations between management insulation and traditional proxies for risk and performance, such as leverage, accounting performance, stock market performance, non-performing loans, and measures of volatility prior to the crisis.[11]

We next investigate the relation between management insulation and variables related to bank *scope*. The first variable that we consider is the proportion of non-interest income over total income. Non-interest income is a (possibly noisy) measure of a commercial bank's focus on

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[9]See section 38 of the Federal Deposit Insurance Corporation Act and section 325.103 of the FDIC Rules and Regulations (12 C.F.R. § 325.103). For investment bank conglomerates, see the voluntary regime under the Supervised Investment Bank Holding Company Rules (now repealed), 17 CFR § 240.17i–7.

[10]For example, in the last Form 10-Q Lehman Brothers filed before its bankruptcy (Q2 2008), its reported Total Risk-Based Capital Ratio exceeded the equivalent figures reported by both JPMorgan Chase and Goldman Sachs.

[11] The literature on TARP offers some contradictory evidence on the relation between bailouts and bank performance. For example, Ng, Vasvari, and Wittenberg-Moerman (2011) show that banks that participated in the CPP experienced lower stock returns relative to nonparticipants during the CPP initiation period. However, CPP participants appeared to have stronger fundamentals than nonparticipants. The authors interpret this finding as evidence that the market irrationally perceived CPP participation as bad news. However, it is also possible to reinterpret these findings as consistent with a view in which accounting data from banks are noisy, and that the market learns about important soft information from CPP participation. As troubled banks indeed improve after receiving CPP funds, eventually their valuations go back in line with those of nonparticipants.

noncore activities, such as investment banking and trading. Brunnermeier, Dong, and Palia (2012) argue that banks with higher non-interest income ratios contribute more to systemic risk than banks that focus more on deposit taking and lending. They also show that banks have increased their non-interest income ratios in the years prior to the crisis; the largest increases happened between 2000 and 2003. However, in their sample – as well as in ours – the average non-interest income ratio decreases between 2003 and 2006 (see our Table IV and Brunnermeier et al's Figure 1).

In Table IX we consider the correlations between bank characteristics in 2003 and the subsequent change in non-interest income ratios. The dependent variable is the log of the 2006 non-interest income ratio divided by the 2003 non-interest income ratio:

$$Change\ in\ NII \equiv ln\left(\frac{Non-interest\ income}{Net\ interest\ income}\right)_{06} - ln\left(\frac{Non-interest\ income}{Net\ interest\ income}\right)_{03}. \tag{2}$$

We use the same variables as before as covariates. The size of the sample falls because of missing data. We find that banks with the highest management insulation scores (MID=1) experienced larger reductions in their non-interest ratios than those banks with low management insulation scores. To understand the economic significance of these results, consider for example the point estimate of -0.21 in the first row of column (a) (Table IX). This coefficient roughly means that, compared to an otherwise identical low-insulation bank with no change in its non-interest income ratio, a high-insulation bank would have decreased its non-interest income ratio by 21%. From Table IV, we see that the average (log) change in NII between 2006 and 2003 is -23.2%. Thus, the estimates suggest that a large fraction of the decrease in NII comes from banks with high management insulation scores.

Next, we consider Level 3 assets (*L3 assets*) as an alternative measure of a bank's focus on less traditional banking activities. L3 assets are assets, such as financial instruments (SFAS 133, 2008), that are reported at fair value determined through the application of a financial model for which there are no observable market inputs (SFAS 157, 2006). We postulate that a bank's L3 assets as a percentage of its total assets is indicative of the extent of the bank's focus on trading of complex, opaque and illiquid securities. We take L3 assets from the financial statements for the financial years beginning after November 15, 2007, the first year that US GAAP required the reporting of this information. Importantly, this financial year end is the closest in time to the implementation of the CPP program, which was announced on October 14, 2008.

A caveat about the reliability of these accounting data must be considered when interpreting the results we report below. Regulators have expressed doubts about the ability of auditors to operate effectively in relation to level-3 fair value accounting. In the absence of any observable market inputs, auditors may be over-reliant upon, or lack the capacity to challenge, management's determination of the applicable valuation model and on the selected inputs and assumptions.[12] Accordingly, there is a risk that the audit will not operate as a robust check on reporting distortions resulting from managerial preferences (PCAOB 2008). This could result in either the overvaluation (delay in write downs) of L3 assets in weak banks (Vyas, 2011) or their undervaluation in strong banks interested in future earnings management. Paradoxically, however, to the extent that these respective distortions are applicable in weak and strong banks, they may operate as unintended indicators of weakness and strength, with weak banks reporting a higher percentage of total assets than would be the case under conditions of effective auditing and strong banks reporting a lower percentage.[13]

Table X reports the results of regressions in which the percentage of L3 assets is regressed on the management insulation dummy and a number of other bank characteristics. We find that banks with MID=1 in 2003 end up with less 0.512 percentage points in L3 assets in 2008 than banks with MID=0 (see column (a)). This effect is economically strong: the average percentage of L3 assets in our sample is 0.56% and the standard deviation is 1.26% (see Table IV). One caveat here is that about half of the banks used in column (a) had no L3 assets (116 out of 240). The OLS regression in column (a) is thus necessarily misspecified. In column (b) we then ask a different question: Does the MID affect the percentage of L3 assets among those banks with nonzero L3 assets? The answer is yes. The results are now statistically weaker, but this is to be expected because the sample has been halved. The point estimate of -0.771 of the coefficient on the MID variable translates into a marginal effect of -0.428 percentage points, for a bank with the average amount of L3 assets (0.56%).

The evidence in this subsection is only suggestive, thus our conclusions are tentative. Banks with high management insulation scores appear to have been focused more on traditional

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[12] See 'PCAOB: Can Auditors Handle Fair Value?' CFO.com reporting the concerns of the Chairman of the Public Company Accounting Oversight Board about the auditing of fair value accounting entries (available at: http://www.cfo.com/article.cfm/9319788/c_9320361).

[13] Existing research suggests that the Level-3 assets variable contains useful information. Riedl and Sarafeim consider level-three assets as a proxy for information risk. Lev and Zhou find that investors have a strong adverse reaction to liquidity constraining events as a function of a bank's level-two and level three assets.

commercial banking activities (deposit taking and lending) than those banks with low management insulation scores. Such a difference in the scope of bank activities is reflected in the different levels of non-interest income ratios and L3 assets.

VI – Final Remarks

One of the main contributions of this paper is to illustrate the usefulness of theoretically-motivated corporate governance indices. We develop an index of management insulation from shareholder pressure, which we call the management insulation index (MII). The MII is an attempt to answer the question of how core corporate law rules make it more or less difficult and time-consuming to replace incumbent management. We show that this index contains information that is useful for predicting bank bailouts during the crisis. Going forward, we note that the methodology that we develop to construct the index is not specific to financial firms. This methodology may prove useful in future studies on the costs and benefits of shareholder empowerment.

The results presented in the paper suggest that banks whose managers enjoyed a higher degree of insulation from shareholder pressure were less reliant on state bailouts than banks whose managers were subject to stronger shareholder rights. One explanation of these results could be that banks that were poorly governed as a result of weaker shareholder discipline may have elected not to participate in the CPP, in order to avoid the restrictions imposed by it and in particular the restrictions placed on executive compensation. The data provide only weak support for such an explanation, although we cannot rule it out. Overall, the evidence in this paper is consistent with the hypothesis that banks in which managers enjoyed a higher degree of insulation from shareholder pressure were more able to survive without government support.

We posit that an explanation can be found in the relationship between bank scope, shareholder pressure, and governance arrangements. Bank shareholders may have incentives to increase risk taking beyond the socially-optimal level. A reason for this may be the well-known risk-shifting incentives that create conflicts between creditors and shareholders (Jensen and Meckling, 1976). In an efficient debt market, the debt holder will require an increased return or contractual safeguards to compensate him for the increase in the risk of default. However, in this regard banks and financial institutions are fundamentally different

from non-financial corporations. Although sophisticated debt providers may be capable of incorporating variation in the risk profile of banks into the price of their credit, there might be no reason for them to do so. Sovereigns provide explicit and implicit guarantees to bank lenders. The explicit guarantees typically take the form of deposit insurance up to a pre-specified amount of deposits (Demirguc-Kunt and Detragiache, 2002).

It is thus possible that, in search for higher returns, bank shareholders had incentives to push their banks towards less traditional banking activities. Such a push may have encountered some resistance from bank managers. A bank manager's human capital, reputational capital, private benefits of control, and financial capital are typically highly undiversified. An increase in the risk profile of the bank results in an increase in the probability of losses for the manager in all of these capital categories, but particularly the first three categories which cannot be diversified at all.

Accordingly, shareholders with strong incentives to pursue high-yield activities may face managers who have a preference for more traditional banking activities. Shareholders who cannot successfully persuade or incentivize managers to alter the bank's strategy may resort to more forceful persuasion: they may threaten managers with removal or loss of control if they fail to implement the shareholders' preferred investment policy. The extent to which any such threat is a credible one is a function of the basic corporate law rules governing a bank, and the extent to which such rules enable an active investor to take control of the bank away from those managers. We would thus expect banks with a low MII score to adopt more aggressive investment strategies, and to be more likely to fail than banks with a high MII score.

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Table I – Management Insulation Scores 2003-2007

This table shows the number of US commercial banks in each of the six management insulation scores described in Figure 1. Sample size (276) is determined by the availability of constitutional documents for the entire 2003-2007 timeframe and other bank characteristics that are used in our analysis.

Insulation score	Year				
	2003	2004	2005	2006	2007
1	41	40	37	34	36
2	72	74	76	79	83
3	20	17	18	21	18
4	40	42	44	41	39
5	17	15	14	13	12
6	86	88	87	88	88
Total	276	276	276	276	276

Table II – Management Insulation Variables and Board Classification: Average Values 2003-2007

This table shows cross–sectional average values per year of the management insulation index (MII), the management insulation dummy (MID), and the board classification dummy (BCD). The MII variable classifies each bank into one of the six insulation scores described in Figure 1 and, in more details, in the Appendix. The MID variable equals 1 if MII=5 or MII=6, and zero otherwise. The BCD variable equals 1 if the bank has a classified board and zero otherwise. The sample size is 276 in each year.

Year	Variable		
	Management Insulation Index - MII	*Management Insulation Dummy - MID*	*Board Classification Dummy -BCD*
2003	3.64	0.38	0.77
2004	3.66	0.38	0.77
2005	3.66	0.37	0.76
2006	3.67	0.37	0.75
2007	3.62	0.37	0.73

Table III – Classified-board Banks with Low Insulation Scores

This table shows the percentage of banks for which the board classification dummy equals 1 and the management insulation dummy equals zero.

	Year				
	2003	2004	2005	2006	2007
Percentage	39.5%	39.9%	39.1%	38.4%	36.6%

Table IV – Bank Characteristics: Summary Statistics

This table shows the summary of some bank characteristics. The *bailout dummy* equals 1 if the bank received CPP funds in 2007-08. The *change in management insulation* variable is the change in the MII variable from 2003 to 2006. *Bailed out or weak banks* corrects the bailout dummy by adding those banks that were too weak to receive CPP. *Bailed out or weak banks or failed banks* further corrects that dummy by adding banks that subsequent failed. *Applied for CPP* is a dummy for banks that applied to the CPP program, and *Applied for CPP and no early repayment* adjusts that variable by correcting for banks that repaid early. *Approved, but rejected CPP* is a dummy variable indicating those banks that rejected CPP after having been approved. The *number of acquisitions 2003-2006* is the count of control stakes (>50%) acquired in other banks from 2003 to 2006 inclusive. All the other variables are for bank-years between 2003 and 2007. The *classified board dummy* equals 1 if the bank has a classified board in 2006. *Book value of assets* is measured in millions of US dollars. *Leverage* is the book value of assets divided by the book value of total equity. *ROE* is net income over equity. *Nonperforming loans* is the fraction of non-performing loans over the book value of total equity. *Board independence* is the proportion of independent directors on the board. *Board directors' banking experience* is the proportion of independent directors with previous managerial experience in the banking industry. The *block ownership dummy (20%)* indicates the presence of at least one shareholder with an ownership stake of 20% or more. *Inside owner* (in %) denotes the ownership stake of the insider with the largest interest in the bank. HPD denotes the highest paid director in a bank, typically the CEO. *Change in Non-Interest Income* is the change of a banks' log-ratio of non-interest income to net interest income between 2003 and 2006. *L3 Assets* is the percentage of Level 3 assets over all assets.

Variable	*mean*	*st. dev.*	*min*	*max*	*n*
		Summary Statistics			
Bailout dummy	0.560	0.497	0	1	1267
Change in management insulation (2003-06)	0.024	0.748	-4	5	1267
Bailed out or weak banks	0.610	0.488	0	1	1267
Bailed out or weak banks or failed banks	0.637	0.481	0	1	1267
Applied for CPP	0.679	0.467	0	1	1267
Applied for CPP and no early repayment	0.592	0.492	0	1	1267
Approved, but rejected CPP	0.090	0.286	0	1	1267
Classified board dummy	0.757	0.429	0	1	1267
Book assets	23,184	135,195	76	1,715,746	1267
Leverage	11.384	3.290	2.512	38.307	1267
ROE	0.106	0.065	-0.622	0.391	1267
Nonperforming loans	5.564	7.087	0	93	1192
Number of acquisitions (2003-06)	2.114	5.273	0	52	1267
Board independence	0.735	0.134	0	0.944	1267
Board directors' banking experience	0.181	0.159	0	0.800	1267
Block ownership dummy (20%)	0.088	0.284	0	1	1267
Inside owner	2.547	6.075	0	50.030	636
HPD variable pay (as fraction of total pay)	0.241	0.224	0	1	1231
Total HPD pay ('000)	1,632	4,414	18	54,000	1230
Change in Non-Interest Income (2003-06)	-0.232	0.429	-1.977	1.177	919
L3 Assets (2008)	0.556	1.262	0	8.292	1128

Table V – Bank Characteristics: Sample Averages Conditional on Management Insulation in 2003

This table shows the sample averages of selected bank characteristics conditional on the 2003 value of the management insulation dummy (MID). The *bailout dummy* equals 1 if the bank received CPP money in 2007-08. The *number of acquisitions 2003-2006* is the count of control stakes (>50%) acquired in other banks from 2003 to 2006 inclusive. The *classified board dummy* equals 1 if the bank had a classified board in 2003. All the other variables are from 2006. *Book value of assets* is measured in millions of US dollars. *Leverage* is the book value of assets divided by the book value of total equity. *Return on equity (ROE)* is net income over common equity. *Nonperforming loans* is the value of such loans divided by total equity. *Board independence* is the fraction of independent directors on the board. *Board directors' banking experience* is the fraction of independent directors with previous managerial experience in the banking industry. The *block ownership dummy (20%)* indicates the presence of at least one shareholder with an ownership stake of 20% or more. *Inside owner* (in %) denotes the ownership stake of the insider with the largest interest in the bank.

	Average Values Conditional on MID	
Variable	*MID = 0*	*MID = 1*
Bailout dummy	0.63	0.41
Classified board dummy	0.60	1.00
Book assets	34,759	7,207
Leverage	11.30	10.74
Return on Equity (ROE)	0.11	0.10
Nonperforming loans over equity	4.38	5.11
Number of acquisitions 2003-2006	1.78	1.50
Board independence	0.76	0.73
Board directors' banking experience	0.17	0.19
Block ownership dummy (20%)	0.08	0.12
Inside owner	7.62	7.55
Number of observations	173	103

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Table VI – Marginal Effects of Management Insulation on the Probability of Bailouts (2008/09)

This table shows results of Probit regressions of bank bailouts on bank characteristics. The sample consists of all US banks for which data are available. The dependent variable – the bailout dummy – is equal to one if the bank received CPP money in 2008-09. The *management insulation dummy* (MID) is from 2003. The change in management insulation variable is the change in the MII variable from 2003 to 2006. The small size dummy indicate banks in the lowest sextile (6-quantile) of the sample size distribution, as measure by book assets, the large size dummy indicate banks in the top sextile, and the medium size dummy indicates banks in between the bottom and the top sextiles. See Table IV for the definition of variables. All control variables are from 2006, unless otherwise stated. HPD denotes the highest paid director in a bank, typically the CEO. Robust standard errors are clustered at state level. The reported coefficients represent marginal effects evaluated at the means of the data. Robust z-statistics are in brackets. Asterisks indicate significance at 0.01 (***), 0.05 (**), and 0.10 (*) levels.

Independent Variable	*Dependent Variable: Bailout dummy*				
	(a)	(b)	(c)	(d)	(e)
Management Insulation Dummy-MID (2003)	-0.191***	-0.182**	-0.201**	-0.221**	-0.265**
	[-3.085]	[-2.215]	[-2.036]	[-2.004]	[-2.573]
Change in management insulation (2003-06)					-0.130**
					[-2.103]
Log assets times small size dummy		0.078	0.130	0.105	0.111
		[1.410]	[1.550]	[0.809]	[0.842]
Log assets times medium size dummy		0.093**	0.149**	0.127	0.135
		[2.196]	[2.153]	[1.097]	[1.134]
Log assets times large size dummy		0.094***	0.135**	0.107	0.113
		[2.883]	[2.482]	[1.062]	[1.096]
Leverage		0.019**	0.023**	0.040***	0.039***
		[2.034]	[2.074]	[3.857]	[4.099]
Board independence				0.066	0.066
				[0.198]	[0.189]
Board directors' banking experience				0.158	0.099
				[0.706]	[0.445]
Block ownership dummy (20%)				-0.100	-0.076
				[-0.741]	[-0.528]
Inside owner				-0.002	-0.002
				[-0.438]	[-0.618]
Number of acquisitions 2003-2006				0.041*	0.039*
				[1.833]	[1.704]

HPD variable pay (as fraction of total pay)				0.129	0.154
				[0.486]	[0.543]
Log total HPD pay				-0.030	-0.037
				[-0.312]	[-0.368]
State dummies	No	No	Yes	Yes	Yes
Observations	276	276	266	248	248

Table VII – Bailouts and Board Classification

This table shows results of Probit regressions of bank bailouts on bank characteristics. The sample consists of all US banks for which data are available. The dependent variable – the bailout dummy – is equal to one if the bank received CPP money in 2008-09. The *classified board dummy (CBD)* is from 2003. The small size dummy indicate banks in the lowest sextile (6-quantile) of the sample size distribution, as measure by book assets, the large size dummy indicate banks in the top sextile, and the medium size dummy indicates banks in between the bottom and the top sextiles. See Table IV for the definition of variables. Standard errors are clustered on state level. The reported coefficients represent marginal effects evaluated at the means of the data. Robust z-statistics are in brackets. Asterisks indicate significance at 0.01 (***), 0.05 (**), and 0.10 (*) levels.

Independent Variable	Dependent Variable: Bailout dummy			
	(a)	(b)	(c)	(d)
Classified board dummy – CBD (2003)	-0.121*	-0.070	-0.087	-0.145
	[-1.745]	[-0.965]	[-0.847]	[-1.396]
Log assets times small size dummy		0.085	0.148*	0.129
		[1.634]	[1.928]	[1.131]
Log assets times medium size dummy		0.099**	0.164**	0.147
		[2.433]	[2.544]	[1.402]
Log assets times large size dummy		0.098***	0.147***	0.122
		[2.972]	[2.836]	[1.324]
Leverage		0.020**	0.024**	0.041***
		[2.078]	[2.039]	[4.385]
Board independence				0.162
				[0.492]
Board directors' banking experience				0.098
				[0.435]
Block ownership dummy (20%)				-0.082
				[-0.585]
Inside owner				-0.002
				[-0.445]
Number of acquisitions (2003-06)				0.041*
				[1.848]
HPD variable pay (as fraction of total pay)				0.075
				[0.289]
Log total HPD pay				-0.022
				[-0.220]
State dummies	No	No	Yes	Yes
Observations	276	276	266	248

Table VIII – Bailouts, Bank Strength, and the Decision to Participate

This table shows results of Probit regressions of five different indicator variables on bank characteristics. The dependent variables are: (a) banks that received CPP funds in 2008-09 or did not receive funds because they were too weak, (b) the same as in (a) plus all banks that failed up to 2010, (c) banks that applied for CPP funds, (d) the same as in (c) but without those banks that repaid funds before October 2009, and (e) banks that rejected CPP for a subsample of banks that did apply and were approved for CPP. All the other variables are as in Table VI. Robust standard errors are clustered on state level. The reported coefficients represent marginal effects evaluated at the means of the data. The fraction of banks meeting the criteria is for: (a) 0.598, (b) 0.627, (c) 0.670, (d) 0.587 and (e) 0.141. Robust z-statistics are in brackets. Asterisks indicate significance at 0.01 (***), 0.05 (**), and 0.10 (*) levels.

Independent Variable	Dependent Variable				
	(a) *Bailed out or weak banks*	(b) *Bailed out or weak banks or failed banks*	(c) *Applied for CPP*	(d) *Applied for CPP and no early repayment*	(e) *Approved, but rejected*
Management Insulation Dummy -MID (2003)	-0.353***	-0.329***	-0.116	-0.067	0.276***
	[-3.611]	[-3.438]	[-1.553]	[-0.811]	[3.121]
Change in management insulation (2003-06)	-0.102**	-0.093**	-0.097*	-0.062	0.106**
	[-2.113]	[-1.982]	[-1.757]	[-1.058]	[2.197]
Log assets times small size dummy	0.061	0.048	0.114	0.046	0.006
	[0.491]	[0.395]	[1.076]	[0.373]	[0.081]
Log assets times medium size dummy	0.091	0.076	0.128	0.060	-0.020
	[0.839]	[0.732]	[1.377]	[0.562]	[-0.301]
Log assets times large size dummy	0.076	0.061	0.103	0.033	-0.018
	[0.801]	[0.687]	[1.319]	[0.382]	[-0.298]
Leverage	0.059***	0.059***	0.035***	0.003	-0.022
	[4.572]	[4.619]	[3.222]	[0.282]	[-1.492]
Board independence	-0.120	-0.073	0.040	0.219	-0.202
	[-0.302]	[-0.191]	[0.092]	[0.580]	[-0.893]
Board directors' banking experience	0.196	0.138	0.207	0.369*	0.072
	[0.823]	[0.565]	[1.152]	[1.772]	[0.476]
Block ownership dummy (20%)	-0.072	-0.061	-0.014	0.045	-0.031
	[-0.633]	[-0.509]	[-0.110]	[0.385]	[-0.306]
Inside owner	-0.002	-0.001	-0.004	-0.006	-0.002
	[-0.589]	[-0.141]	[-0.931]	[-1.171]	[-0.508]

Number of acquisitions 2003-06	0.035*	0.026	0.026	-0.011	-0.034*
	[1.830]	[1.426]	[1.064]	[-0.902]	[-1.869]
HPD variable pay (as fraction of total pay)	0.060	0.011	0.120	-0.181	-0.293
	[0.170]	[0.032]	[0.491]	[-0.837]	[-1.160]
Log total HPD pay	0.030	0.062	-0.044	0.035	0.025
	[0.235]	[0.579]	[-0.511]	[0.366]	[0.296]
State dummies	Yes	Yes	Yes	Yes	Yes
Observations	248	246	236	239	126

Table IX – Banks' Non-Interest Income

This table shows results of OLS regressions of the change of a banks' log-ratio of non-interest income to net interest income between 2003 and 2006 on bank characteristics. The dependent variable is

$$ln\left(\frac{Non\ interest\ income}{Net\ interest\ income}\right)_{06} - ln\left(\frac{Non\ interest\ income}{Net\ interest\ income}\right)_{03}$$

All the other variables are as in Table VI, but are based on 2003 values unless otherwise stated. Standard errors are clustered on state level. Robust t-statistics are in brackets. Asterisks indicate significance at 0.01 (***), 0.05 (**), and 0.10 (*) levels.

Independent Variable	Dependent Variable: Change in non-interest income (2003-06)	
	(a)	(b)
Management Insulation Dummy-MID (2003)	-0.210***	-0.163***
	[-3.687]	[-3.153]
Change in management insulation (2003-06)	-0.041	-0.033
	[-1.590]	[-1.009]
Log assets times small size dummy	0.117	0.154**
	[1.672]	[2.179]
Log assets times medium size dummy	0.087	0.126*
	[1.592]	[1.785]
Log assets times large size dummy	0.066*	0.095*
	[1.802]	[1.736]
Leverage	-0.012**	-0.007
	[-2.117]	[-0.386]
Board independence	0.164	0.229
	[0.650]	[1.031]
Board directors' banking experience	-0.137	-0.229
	[-0.532]	[-1.002]
Block ownership dummy (20%)	-0.006	-0.004
	[-0.054]	[-0.027]
HPD variable pay (as fraction of total pay)		0.066
		[0.245]
Log total HPD pay		-0.029
		[-0.457]
State dummies	Yes	Yes
Observations	184	179
R-squared	0.232	0.238

Table X – Level 3 Assets

This table shows results of OLS regressions of the percentage of assets classified as Level 3 assets on bank characteristics and the MII. The dependent variables are (a) Level 3 assets as a percentage of total assets in 2008 and (b) the natural logarithm of Level 3 assets as a percentage of total assets in 2008 for the sub-sample of banks with non-zero Level 3 assets. All the other variables are as in Table VI. Standard errors are clustered on state level. Robust t-statistics are in brackets. Asterisks indicate significance at 0.01 (***), 0.05 (**), and 0.10 (*) levels.

Independent Variable	Dependent Variable	
	Proportion Level 3 Assets	Proportion Level 3 Assets (log)
	(a)	(b)
Management Insulation Dummy-MID (2003)	-0.512**	-0.771*
	[-2.640]	[-1.764]
Change in management insulation (2003-06)	0.119	0.193
	[1.017]	[0.928]
Log assets times small size dummy	-0.087	0.242
	[-0.420]	[0.525]
Log assets times medium size dummy	-0.079	0.162
	[-0.440]	[0.430]
Log assets times large size dummy	-0.051	0.063
	[-0.289]	[0.186]
Leverage	0.036	0.107**
	[0.830]	[2.143]
Board independence	-1.153	1.180
	[-1.366]	[0.572]
Board directors' banking experience	-0.492	-1.219
	[-0.592]	[-0.737]
Block ownership dummy (20%)	0.448*	0.718
	[1.733]	[0.885]
HPD variable pay (as fraction of total pay)	-1.160**	-1.944*
	[-2.298]	[-1.904]
Log total HPD pay	0.716**	0.851*
	[2.627]	[1.814]
State dummies	Yes	Yes
Observations	240	124
R-squared	0.346	0.409

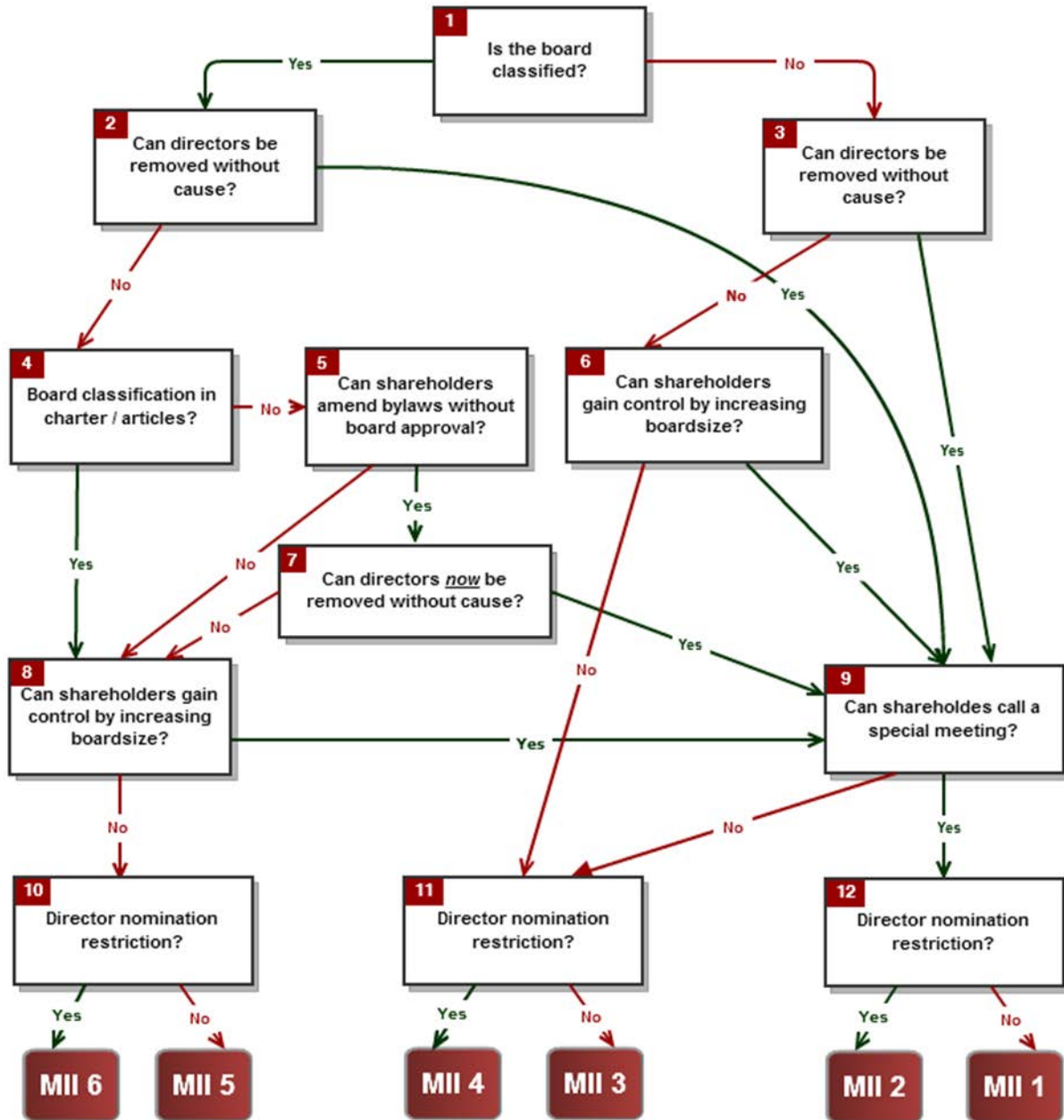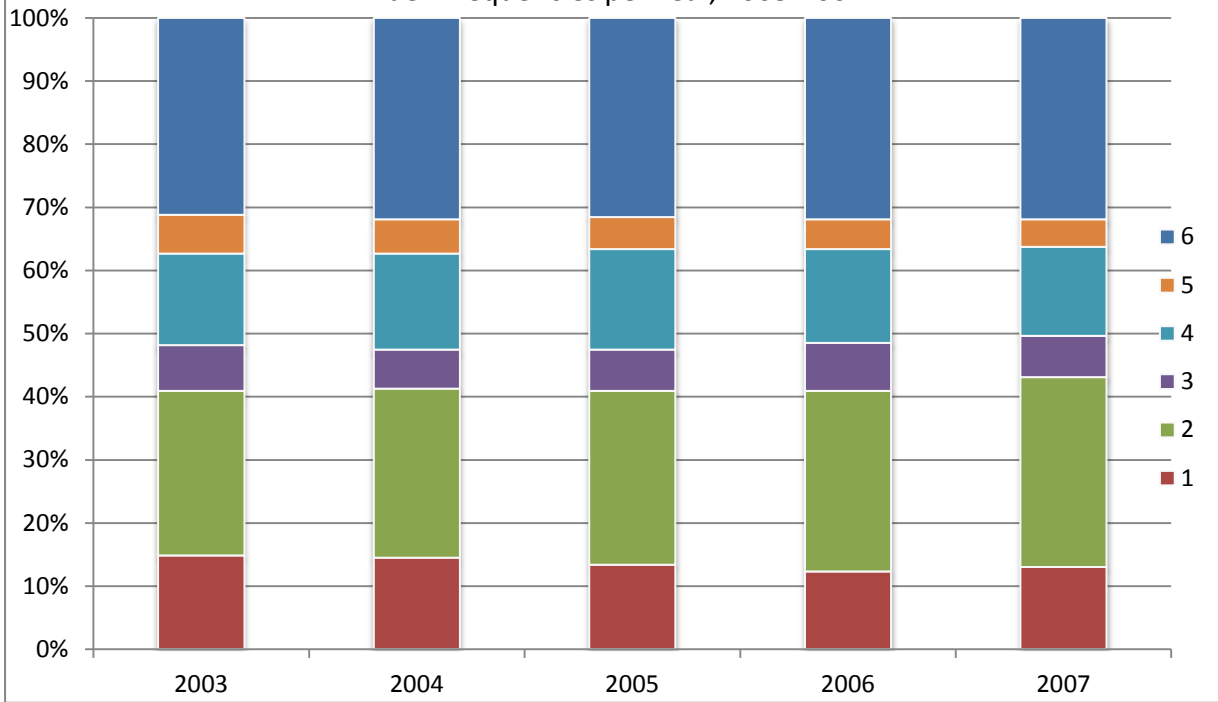# Figure 1 – The Management Insulation Index

Figure 2 - Management Insulation Index
Index Frequencies per Year, 2003-2007

Appendix – Detailed Description of the Management Insulation Index

Index value	Explanation
6	Corporations with an index value of **6** follow one of two "governance paths". Path 1 (see boxes `1`–`2`–`4`–`8`–`10` – `MII 6` in Figure 1 above) - The board is classified; - shareholders have no right to remove directors without cause; - the classification is contained in the corporation's charter, meaning that a decision to declassify the board requires board approval; - shareholders are unable to gain control over the board by electing additional directors; - director nomination restriction determines whether the final outcome is MII5 or MII6. Corporations with a board classification in their by-laws also fall into this category if an amendment of the bylaws is subject to board approval (this can be stated in the charter or be a default rule under state corporate law).[14] Path 2 (see boxes `1`–`2`–`4`–`5`–`7`–`8`–`10` – `MII 6` in Figure 1 above) - The board is classified; - shareholders have no right to remove directors without cause; - the classification of the board is not contained in the corporate charter, but in the by-laws; - shareholders can amend the by-laws to declassify the board; - following declassification the directors still cannot be removed without cause; - shareholders are unable to gain control over the board by electing additional directors; - director nomination restriction determines whether the final outcome is MII5 or MII6. **Assessment:** The boards of banks with an index value of 6 enjoy the maximum amount of "insulation" from shareholder pressure. The board is classified, meaning that only a third of the directors stand for re-election each year. Thus, it takes shareholders about two years (two meetings) to reverse the corporation's strategy by gaining

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[14]Where by-laws can be amended by shareholders, but only by supermajority vote, we proceeded as follows: If the supermajority is calculated based on *all* outstanding shares, we assumed that shareholders will not be able, in effect, to amend the by-laws against the will of the incumbent management. Where only shareholders present at the meeting count, we assumed that supermajority requirements *above 66 2/3%* (typically 80%) render it effectively impracticable to rely on changes to the corporation's by-laws in order to gain control over the board.

	control over the board.
	We ignore special meeting rights for MII-5 and MII-6 banks: Shareholders can neither remove directors, nor add a relevant number of directors or declassify the board in a special meeting. Hence, we deem the existence of such right to be irrelevant.
	As for restrictions to nominate directors:[15] Such restrictions can limit the effectiveness of a proxy fight by giving the board enough time to react to activist shareholders. We note, however, that this is likely to be less relevant in MII-5 and MII-6 banks, since management is always secure for at least the time until the second-next general meeting, effectively always allowing for sufficient "response time". Nevertheless, such provisions can result in a prolonged period of insulation even for classified boards, particularly where an activist period commences before an annual general meeting but after the advanced notice cut off date.

Index value	Explanation
5	Banks with an index value of 5 are effectively a variation of MII-6 banks. They follow the same two "governance paths", but there are no significant director nomination restrictions in place.
	Assessment:
	The absence of director nomination restrictions arguably slightly reduces the costs of gaining control over the board when compared to MII-6 banks. On the effect of such provisions on the difference in insulation between MII-5 and MII-6 banks see MII-6 Assessment above.

	Corporations with an index value of **4** follow one of seven "governance paths".
4	Path 1 (see boxes 1 - 3 - 6 - 9 - 11 - MII 4)
	- The board is not classified;
	- shareholders have no right to remove directors without cause;
	- but shareholders are able to gain control over the board by electing additional directors;
	- shareholders have no right to call a special meeting;[16]
	- there are some director nomination restrictions in place.
	Path 2 (see boxes 1 - 3 - 6 - 11 - MII 4)
	- The board is not classified;

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[15] We define director nomination restrictions as legal arrangements that require more than 90 days advance notice for the nomination of directors by shareholders (and any rule more burdensome than this).

[16] We treat the right to act by written consent (i.e. without a meeting) as equivalent to a special meeting right, unless acting without a meeting requires the written consent of the holders of all, or a supermajority of, outstanding shares.

- shareholders have no right to remove directors without cause;
- shareholders are unable to gain control over the board by electing additional directors.
- there are some director nomination restrictions in place.

Path 3 (see boxes 1 - 3 - 9 - 11 - MII 4)

- The board is not classified;
- shareholders have the right to remove directors without cause;
- shareholders have no right to call a special meeting;
- there are some director nomination restrictions in place.

Path 4 (see boxes 1 - 2 - 9 - 11 - MII 4)

- The board is classified;
- nevertheless, shareholders have the right to remove directors without cause;
- shareholders have no right to call a special meeting;
- there are some director nomination restrictions in place.

Path 5 (see boxes 1 - 2 - 4 - 5 - 7 - 9 - 11 - MII 4)

- The board is classified;
- shareholders have no right to remove directors without cause;
- the classification of the board is not contained in the corporate charter, but in the by-laws;
- shareholders can amend the by-laws to declassify the board;
- the directors can now be removed without cause and are removed in the same meeting (presuming notice of removal has been given in accordance with the advanced notice bylaws);
- Shareholders have no right to call a special meeting
- there are some director nomination restrictions in place.

Path 6 (see boxes 1 - 2 - 4 - 5 - 7 - 8 - 9 - 11 - MII 4)

- The board is classified;
- shareholders have no right to remove directors without cause;
- the classification of the board is not contained in the corporate charter, but in the by-laws;
- shareholders can amend the by-laws to declassify the board;
- the directors cannot now be removed without cause;
- shareholders can, however, increase the size of the board to gain control;
- shareholders have no right to call a special meeting;
- there are some director nomination restrictions in place.

Path 7 (see boxes 1 - 2 - 4 - 8 - 9 - 11 - MII 4)

- The board is classified;
- shareholders have no right to remove directors without cause;
- the classification of the board is contained in the corporate charter;
- shareholders can, however, increase the size of the board to gain control;

	- shareholders have no right to call a special meeting;
	- there are some director nomination restrictions in place.
	Assessment:
	Banks with a MII value of 4 differ significantly from MII-6 banks. Even though the board may be classified (Paths 4-7), shareholders can effectively gain control over the board within a year. As Path 3 shows, even where the board is classified it is possible that shareholders retain the right to remove directors without cause. This renders the board classification irrelevant. Even without such a removal right, some corporations provide for classified boards in their by-laws only, and allow their shareholders to amend the relevant provisions. This means that shareholders can simply declassify the board, rendering the insulation typically offered by staggered boards irrelevant where declassification results in the application of a without cause removal right (see Paths 5). Note, however, that the declassification *in itself* does not typically affect the term length of sitting directors.[17] Furthermore, even where shareholders cannot remove directors without cause or declassify the board against the will of the management, shareholders are sometimes able to increase board size so as to outnumber the incumbent directors (Path 6 and 7). These three sets of governance provisions result in a level of entrenchment equivalent to some banks with unclassified boards and without cause removal rights (Path 3).
3	Banks with an index value of 3 are effectively a variation of MII-4 banks. They follow the same eight "governance paths", but there are no significant director nomination restrictions in place.
	Assessment:

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[17] In some States, for example New York and Texas the statute clarifies that a director's term of appointment is the term s/he was appointed for. § 703 New York Business Corporation Law provides for example that "each director shall hold office until the expiration of the term for which he is elected". In other jurisdictions, for example Delaware, the statute is unclear as to the effects of declassification on the director's term where that director was originally appointed for a three year term under a classified board structure. A case could be made that declassification alters the directors term (from three years to annual election), however, similarly a case could be made that the term is the term for which he/she was elected (i.e., for three years). The courts have not addressed this issue although the arguments made by the litigants in one case (*Roven v Cotter* 547 A.2d 603) assume the continued application of the three year term (in Delaware the issue is unlikely to be litigated given the application of a without cause removal right following declassification). Similar problems arise in other States that do not take the New York approach. On balance we think in the States that do not take the New York approach the argument for the continued applicability of the original (three year) term is the better position, although with respect to some States the answer may also depend on the exact wording of the relevant bylaws. The issue has similarly not been addressed in other States' case law. For our purposes this is relevant in only one context where: (i) classification is in the by-laws; (ii) following declassification the removal right remains a with cause removal right; and (iii) the bank's articles or bylaws allow the shareholders to call an interim meeting. If courts in States that do not take the New York approach were to provide that declassification reduces a three year term to annual election at the annual general meeting then even in banks that, post-declassification, have a with cause removal right control could be obtained within a year by: (i) calling an interim meeting to declassify; and (ii) at the following annual general meeting removing the whole board. If, in contrast, the terms are unaffected by declassification then it will take approximately two years to obtain control of the board in these circumstances. Given this uncertainty in relation to States that do not take the New York approach we have elected to take the position that terms are unaffected by declassification in all States for the purposes of the Management Insulation Index. *Importantly*, for the purposes of our results taking the opposite view (that declassification results in annual election) does not affect the MID score of any bank in our sample. Any future use of the MII would however want to take this point into account.

	Activist shareholders have to wait until the next general meeting to gain board control (see above). The absence of director nomination restrictions arguably slightly reduces the costs of gaining control over the board when compared to MII-4 banks.
2	Banks with an index value of 2 follow one of six different "governance paths".

Path 1 (see boxes `1`-`2`-`9`-`12`- `MII 2`)

- The board is classified;
- nevertheless, shareholders have the right to remove directors without cause;
- shareholders have the right to call a special meeting;
- there are some director nomination restrictions in place.

Path 2 (see boxes `1`-`2`-`4`-`5`-`7`-`9`-`12`- `MII 2`)
- The board is classified;
- shareholders have no right to remove directors without cause;
- the classification of the board is not contained in the corporate charter, but in the by-laws;
- shareholders can amend the by-laws to declassify the board;
- The directors can now be removed without cause;
- shareholders have the right to call a special meeting;
- there are some director nomination restrictions in place.

Path 3 (see boxes `1`-`2`-`4`-`5`-`7`-`8`-`9`-`12`- `MII 2`)
- The board is classified;
- shareholders have no right to remove directors without cause;
- the classification of the board is not contained in the corporate charter, but in the by-laws;
- shareholders can amend the by-laws to declassify the board;
- The directors cannot following declassification be removed without cause;
- shareholders can, however, increase the size of the board to gain control;
- shareholders have the right to call a special meeting;
- there are some director nomination restrictions in place.

Path 4 (see boxes `1`-`2`-`4`-`8`-`9`-`12`- `MII 2`)
- The board is classified;
- shareholders have no right to remove directors without cause;
- the classification of the board is contained in the corporate charter;
- shareholders can, however, increase the size of the board to gain control;
- shareholders have the right to call a special meeting;
- there are some director nomination restrictions in place.

Path 5 (see boxes `1`-`3`-`9`-`12`- `MII 2`)
- The board is not classified;
- shareholders have the right to remove directors without cause;
- shareholders have the right to call a special meeting;
- there are some director nomination restrictions in place. |

Path 6 (see boxes see boxes 1 – 3 – 6 – 9 – 12 – MII 2)

- The board is not classified;
- shareholders have no right to remove directors without cause;
- shareholders can gain control over the board by increasing the size of the board;
- shareholders have the right to call a special meeting;
- there are some director nomination restrictions in place.

Assessment:

As with MII-4 banks, an MII value of 2 can be the result of very different looking governance arrangements. As we can see in Paths 1-4, even where the board is classified it is possible that shareholders can gain control over the board almost immediately. In Paths 1 and 2, the combination of special meeting rights and the ability to declassify the board or remove without cause directors renders the board classification irrelevant for entrenchment. Paths 3 and 4 describe a situation where shareholders of a corporation with a classified board can gain control via an increase of board size. These three sets of governance provisions result in a level of entrenchment equivalent to banks with unclassified boards, without cause removal rights, and without cause removal rights (Path 5). Even where no without cause removal right exists, shareholders can gain control over unclassified corporate boards before the next general meeting where they can increase board size in a special meeting (Path 6).

Thus, the connecting characteristic of all MII-2 banks is the ability of shareholders to obtain control at a special meeting. Director nomination restrictions may slightly increase managerial insulation.

1	Banks with an index value of 1 are effectively a variation of MII-2 banks. They follow the same six "governance paths", but there are no significant director nomination restrictions in place. Assessment: Activist shareholders can in principle gain control over the board almost immediately, as they are able to call a special meeting (see above). The absence of director nomination restrictions arguably slightly reduces the costs of gaining control over the board when compared to MII-2 banks.