What makes a bank misbehave? The Role of the Board

Name of the authors: Sibel YAMAK, Ömür SÜER ÖZTEK, Yeşim BÜKER

Sibel YAMAK
Address: Galatasaray University, Department of Management, Çırağan cad. No:36 Ortaköy 34357 ISTANBUL/TURKEY
Tel:+90 212 227 44 80 (ext:543)
Fax: +90 212 258 22 83
e-mail: syamak@gsu.edu.tr

Ömür SÜER ÖZTEK
Address: Galatasaray University, Department of Management, Çırağan cad. No:36 Ortaköy 34357 ISTANBUL/TURKEY
Tel:+90 212 227 44 80 (ext:543)
Fax: +90 212 258 22 83
e-mail: osuer@gsu.edu.tr

Yeşim BÜKER
Address: Galatasaray University, Department of Management, Çırağan cad. No:36 Ortaköy 34357 ISTANBUL/TURKEY
Tel:+90 212 227 44 80 (ext:545)
Fax: +90 212 258 22 83
e-mail: ybuker@gsu.edu.tr
What makes a bank misbehave? The Role of the Board

Abstract
The nature of corporate governance problems in banking seems to be different than that in non-banking firms. The present study investigates the role of corporate boards in financial fragility within the framework of banking sector in Turkey. More specifically, this study focuses on investigating the impact of the board on financial fragility through its monitoring role. A sample of private banks, over the period 1997-2000 is chosen. In order to test the hypotheses, logistic regression is used. This study aims to incorporate a new dimension to previous work, which often focuses on board size and composition in examining the impact of the board. For this purpose, two new concepts, namely owner intention and board intention are included in the model. Our findings suggest that although only one of the proxies (firm reputation) of owner’s intention is associated with financial fragility, all of the proxies (illegal activity and nonperforming loans) of board’s intention increase the likelihood of financial fragility. It is worth noting that board size and insider’s ratio are not related to financial fragility. Similarly, no association is observed between bank size and performance.

Keywords
EFM Classification codes: 110, 130, 150, 510, 520, 620
Research areas: 150, 510, 620

INTRODUCTION
In the wake of recent corporate scandals, board of directors as a monitoring mechanism has received heightened attention. The present study investigates the role of corporate boards in financial fragility within the framework of banking sector in an emerging country. Successive financial crises since 1994 makes Turkish context a prominent setting for our study. Byrd, et al. (2001) define crisis periods in a specific industry as a natural experiment setting that presents advantages for studying internal governance configurations. According to them, in such a case, first, the need to control for interindustry differences is reduced, the substitution effect between internal and external control mechanisms is minimized. Second, the concentration of firm failures in time reduces the influence of intertemporal changes in economic conditions and the complete list of failing firms during this period enhances the robustness of the statistical tests. Finally, crises may disclose the relative advantages and costs of alternative governance mechanisms, which are not apparent during the periods of prosperity.

In this exploratory research, we propose to study board intention as an alternative venue to further understand the link between board monitoring role and performance. We are particularly interested in the role that board intention might play in the board’s ability to monitor a firm.

This paper differs from previous work in different aspects:
1. There is a considerable stock of research on corporate boards. However, most of the findings are based on manufacturing sector data. In other words, the dearth of studies on financial sector is worth noting, especially in banking sector (Adams and Mehran, 2003; Belkhir, 2004). Therefore, this study provides additional data on boards in financial sector.
2. Moreover, many of these studies originate from developed country context. This one makes available evidence from an emerging country (Turkish banking sector). Emerging markets are known to be different from developed ones on several
dimensions in the sense that financial markets are not developed, minority shareholders are not properly protected and the business is more exposed to economic and political risks, and so on.

3. There are limited number of studies that investigate the relationship between board characteristics and illegal activity. This study integrates these two topics.

4. This study introduces the concept of intention along with other characteristics of the board. We assume that board intention is an important factor determining the level and intensity of monitoring job of the board. Since financial fragility delineates a lack of monitoring capacity among other things, our main concern is to differentiate boards in terms of their characteristics and their intention in fragile and relatively safer banks.

The remainder of this paper is organized as follows. Next section discusses the relationship between owners’ intention, board’s intention, board characteristics, firm size and financial fragility. The following section describes the sample, data and variables. The section presenting our empirical findings is followed by the conclusion.

THEORETICAL BACKGROUND and HYPOTHESES

The nature of corporate governance problems in banking is not similar to that in non-banking firms. According to many authors (Ciancanelli and Gonzalez, 2000; Caprio and Levine, 2002) the application of standard agency theory of corporate governance, which focuses on the separation of ownership and control, to the banking sector is difficult since the assumptions of “agency theory” and the “bank’s characteristics” are not compatible. Two major factors mainly lead to this incompatibility. Firstly, the multiplicity of stakeholders in the banking sector renders more complex the asymmetric information problem between stakeholders (Ciancanelli and Gonzalez, 2000; Adams and Mehran, 2003). Secondly, financial institutions are subject to heavier regulation compared to their counterparts in unregulated industries, such as manufacturing firms (Scott, 2000).

Literature review on boards reveals an overwhelming number of works that focus on unregulated firms in general, and industrial firms in particular (Adams and Mehran, 2003; Ibrahim, et al, 2003; Belkhir, 2004). In other words, the effectiveness and the characteristics of board have been accorded a limited attention in banking sector. The main reason of this lack of interest may be the existence of regulation which homogenizes to a certain extent the characteristics and activities of the boards in banking sector. According to Adams and Mehran (2003), laws and regulations may act as a substitute for corporate governance. Pointing to the differences of financial and nonfinancial institutions in their respective operations, they claim that regulatory supervision makes governance less critical to the conduct and operation of banking firms. More specifically, the major characteristics of the directors and managers such as tenure and level of education are specified by laws and regulations. For example, in Turkey, according to Banks Act in force as of 1996 and 1999, the board of directors of any bank shall have at least five members. Moreover, the majority of the board of directors is required to have at least a graduate degree in one of the fields of law, economics, business administration, finance, banking, public administration or an equivalent field or in an engineering field related to any of the former. General managers are required to possess, along with previously mentioned characteristics in terms of education, a minimum of ten years of professional experience in banking or business activities. The overwhelming presence of laws and regulations may make such board characteristics a less discriminating factor.

From this perspective, we claim that so far utilized board characteristics in relation to size and composition can not be considered as discriminating factors for banks in terms of financial
fragility. Instead, we argue that the intention of the owners and the board may be more distinctive factors between financially fragile and relatively safer banks.

**Intention of owners**
Emerging countries are known for their weakness in legal protection of minority shareholders which results in concentrated ownership structures. This is also the case in Turkish business system, which is characterized by the domination of family holdings (Demirağ and Serter, 2003; Kula, 2005; Yamak and Üsdiken, forthcoming). Similarly the great majority of banks are owned by family holdings in Turkey. Moreover, external devices for managerial control are not developed and internal controls such as board of directors assume an important role in corporate governance (Kula, 2005).

Hence, the dominance of families in governance makes their intention a major factor in firm performance. While there may be opportunistic intentions such as benefiting from the gap in the law and increase family wealth, there may also be ambitious intentions such as being among the best companies.

**Ownership change:** After 1994’s financial crisis, in order to protect the depositors from the negative effects of financial crisis, the government decided to adopt full deposit insurance policy. The aim was to minimize the risk of deposit runs and in turn to preserve market discipline. However, the adoption of such a system increased the risks of “moral hazard”, “adverse selection” and “excessive risk taking”. In fact, as it is claimed by Demirgüç-Kunt and Detragiache (2002), the probability of banking crises escalates as the level of deposit insurance rises in a country. Deposit insurance alters the expectations for major stakeholders and consequently changes the nature of the relationships by modifying existing risk structure, contractual forms and institutional context. Furthermore, deposit insurance distorts the *depositor/ shareholder relationship* by reducing the motivation of the former to monitor the bank since the insurance reduces the need to check the risk level of the bank's portfolio (Jordan, 2000). This, in turn, stimulates the bank to shift from uninsured creditors to insured depositors for resource generation since they do not need anymore to pay higher risk premiums that their portfolio would have required in an uninsured system. Expectations of stakeholders will differ according to the changing level of risk. Therefore, uninsured depositors who are inherently encouraged to monitor banks’ activities would ask for higher returns from insured banks. One major consequence of such a distortion of depositors’ behavior may be moral hazard, in which bank shareholders are able to pass off some of their losses onto innocent third parties such as healthy banks and ultimately taxpayers who contribute to the insurance funds (Macey and O’Hara, 2003). Deposit insurance, which creates wrong incentives, also distorts the vigilance of the lender in making loans. In fact, the insured deposits, which constitute the funding of a relatively risky loan portfolio, play a major role in the distortion of not only the lender’s but also the borrower’s behavior. Since the ultimate responsibility for non-repayment becomes the government’s (state’s) instead of the bank’s owners, hazardous action by bank owners becomes more likely (Yamak and Süer, 2005). Similarly, borrowers will be eager to take risks since they receive all of the "upside" benefits from undertaking greater risks but will not bear the "downside" costs of the losses (White, 1999). This situation, which may typically lead to moral hazard and adverse selection problems, was the case in Turkey following the implementation of full deposit insurance. So, the banking sector became an attractive target for the opportunistic investors and witnessed successive ownership changes and new entrants. Therefore, an ownership change after 1994 may stand for the opportunistic intention of the owner which may have negative implications on bank performance.

**Reputation:** An alternative way of appraising the intention of owner is to refer to the other activities of the holding. The relative size of the affiliated firms on a national scale may give
an idea about the commitment of the owner. The opportunistic owner is less likely to have firms ranked among the largest in the country. The owners of the banks, affiliated with the firms that are ranked among the largest 500 enterprises, are expected to be more risk averse in their activities and eager to protect their established corporate reputation.

In the light of these arguments, the following hypotheses are developed.

*Hypothesis 1a:* The likelihood of financial fragility is greater when the ownership changes.

*Hypothesis 1b:* Higher reputation will decrease the likelihood of financial fragility.

**Board Intention**

Despite the fact that the board of directors is assumed to have an important role in corporate governance and company performance, there is little study on the manners and behaviors of boards of directors (Pettigrew, 1992, 2002). This gap in the literature encouraged us to study an additional construct, which is the intention of the board. Boards in banks are entitled by law to monitor all activities of TMT’s regarding loans. Turkish banking law has clear provisions concerning general lines of credit. For instance, a bank can not extend credit to any natural or legal person in excess of twenty-five percent of its own funds. On the other hand, in such a regulated sector, although the tasks are identical for all boards, the latter differ in their manners and behaviors. During the period of financial crises, all boards were subject to same rules and restrictions to better monitor TMT. Demirağ and Serter (2003) state that one of the key advantages of the governance structure in Turkey appears to be the direct monitoring of the managers by a small number of large owners. Some boards allowed their large owners to make use of the bank’s resources for their personal interests in a manner to jeopardize the secure functioning of the bank while other boards preferred to behave in line with the existing legal requirements. It is worth noting the ownership concentration in Turkish banking firms. Overwhelming majority of banking firms belong to family holdings. Therefore, the monitoring role appears to be closely related to board willingness to supervise. A vigilant monitoring may prevent illegal loan activities. Hence, the intention of the board can be assessed through the existence of illegal activity of the bank as reported by Banking Regulatory and Supervisory Authority (BRSA) and the level of nonperforming loans. More specifically, the existence of illegal activities and nonperforming loans delineates a lack of monitoring which may be possible with the compliance of the board with the owners.

**Illegal activity:** Board characteristics and illegal activity has only been studied in a limited number of study (Williams, Fadil, Armstrong, 2005). In an event history study investigating corporate misconduct, Baucus and Near (1991) found that illegal activity is likely to occur in larger firms operating in dynamic environments and in certain industries. They also report that firms with prior violations are more inclined to commit illegal activity. At a managerial level, misconduct is found to be related to environmental factors, organization’s structural complexity and managerial intent. (Szwajkowski, 1985). The pressure of environmental forces may trigger illegal behavior if the misbehavior’s expected benefit is greater than its estimated costs. Similarly, the complex structural design of the organization may encourage the managers to commit illegal acts since the complexity may help them to avoid detection. Last, managers may choose intentionally to misbehave. The model of Szwajkowski (1985) for managerial misconduct may be applied to boards. The occurrence of illegal activity may delineate the intention of the board since every action requires their signature to be implemented. Thus, it displays the compliance of the board with the owner which, in turn may negatively affect the bank performance.

**Nonperforming loans:** The amount of nonperforming loans is displayed on the balance sheet of the bank. So, by analyzing the balance sheets, one can be able to evaluate the strength of
the bank’s credit policy. According to Banking Law, the board of directors is authorized to lend credits. The board of directors may delegate this authority to a credit committee in accordance with the principles and procedures defined by the former. Formation of a credit committee and its decision making principles shall be laid down by the board. The increase in nonperforming loans refers to the inability in collecting the receivables. This may originate not only from the incapacity of the board in evaluating the borrowers but also from the deliberate action of the former in order to use the bank’s funds for theirs and/or owners’ behalf. The incidences of wealth transfer to owners and interested third parties was observed before and during the financial banking crisis in Turkey (see Pesqueux, et al., 2004). Hence, nonperforming loans may be a good proxy of the board’s intention.

Second group of hypotheses is developed following these arguments.  
**Hypothesis 2a:** The likelihood of financial fragility increases with the existence of illegal activities.  
**Hypothesis 2b:** The likelihood of financial fragility increases with the existence of nonperforming loans.  

**Board characteristics**  
Since this study is focused on investigating the impact of the board on financial fragility through its monitoring role, board size and insiders ratio are chosen as board characteristics related to the latter. However, there is no agreement about the impact of board size on the balance of power between the board and the TMT and the board’s ability to monitor the firm (Williams, Fadil, Armstrong, 2005). Usually, studies on boards investigated board characteristics such as size, duality (corporate leadership structure) and board composition. We follow the same path with the exception of duality since only three of private banks had dual corporate leadership within the period investigated. For this reason, we focus on board size and the ratio of insiders as a proxy of board composition. They both have an impact on monitoring capacity of the board.

**Board size:** Few studies (Adams and Mehran, 2003; Belkhir, 2004) provide empirical evidence regarding the relationship between board size and performance in banking sector. They claim that increasing number of directors does not decrease the performance of the bank contrary to the evidence of positive correlation between smaller boards and performance in non-financial sectors. Larger boards are expected to have better monitoring capacities given that they have more human assets to do so. Furthermore, larger boards may challenge top management team by providing an environment, which allows the emergence of rival parties. Adams and Mehran (2002) pointing to the differences between the governance of banking and manufacturing firms state that the governance structure may be industry specific.

**Insiders:** Whether directors should be employees of or affiliated with the firm or outsiders has been a long debated issue. Studies investigating the monitoring function have shown a general preference for boards dominated by independent outside directors (Weisbach, 1988; Barnhart, Marr and Rosenstein, 1994; Daily & Dalton, 1994 a,b; Daily, 1995; Feng et al, 2005). They maintain that boards composed primarily of insiders (current or former managers/employees of the firm) are less motivated to monitor management, owing to their dependence on the CEO/organization. Boards dominated by outside directors are thought to be better monitors. While inside directors may be more familiar with the firm’s activities and may possess considerable firm specific knowledge, outside directors by creating competition among insiders may stimulate actions consistent with firm performance. However, many studies (Pi and Timme, 1993; Adams and Mehran, 2002) find that the proportion of outside directors is not related to performance measures in banking sector. Similarly, Hermelin and Weisbach (2003) report no association between insider/outsider ratio and firm performance. Moreover,
Agrawal and Knoeber (1996) suggest that boards expanded for political reasons often result in too many outsiders on the board, which does not help performance. In sum, the evidence on the impact of board characteristics on performance appears to be inconsistent. While we agree that the study of these board attributes is important, we argue that the effect of board on certain organizational outcomes have never been fully resolved. Booth et al (2002) point to the impact of regulations on internal control mechanism in regulated industries such as banking. The homogeneizing effect of laws on boards may limit the influence of board size and composition on performance. Formally, we hypothesize:

*Hypothesis 3a:* There will be no relationship between the board size and financial fragility.  
*Hypothesis 3b:* There will be no relationship between the ratio of insiders and financial fragility.

**METHODOLOGY**

**Data and Sample**

In order to test the hypotheses, a sample of private banks, over the period 1997-2000, was chosen. Public banks and foreign banks operating in Turkey were excluded from the sample, which consisted of 40 banks finally. The beginning date (1997) of the study is important since it delineates the beginning of a period of successive bank failures in Turkey. Logistic regression was used to test the hypotheses.

Data about variables were collected from different sources. Data about financial fragility and illegal activity were obtained from the database of Deposit Insurance Fund. Turkish Banks Association database provided the indicators of nonperforming loans, board size, insiders, firm size and ownership change. Finally, firm reputation variable was constituted from the annual publication of Istanbul Chamber of Industry on 500 largest firms.

**Variables**

*Dependent variable:* Financial fragility is the dependent variable.

*Financial fragility:* Literature review demonstrates that financial failure and probability of bankruptcy can be considered as main indicators of corporate financial fragility (Hudson, 1986; Cuthbertson and Hudson, 1996; Vlieghe, 2001). We take into account financial fragility in a similar way. We identify it as a (0,1) dummy variable. It takes the value of “1” if the bank has a financial failure and ceases its activities and “0” otherwise.

*Independent variables:* There are four groups of independent variables in this study. The first group of variables that aims at measuring owning family’s intention includes such variables as ownership change and reputation. The second group aiming to assess board intention consists of two variables, namely illegal activity and nonperforming loans. Third group comprises two variables that measure board characteristics which are the ratio of insiders and board size. Lastly, firm size constitutes the control variable. Detailed explanations of independent variables are as follows:

*Owning family’s intention:*

*Ownership change:* It is a dummy variable taking the value of “1” if there was any change in the ownership structure of the bank following the implementation of full deposit insurance policy in 1994 or it was established after this date and “0” otherwise.
**Firm reputation:** Number of firms among the largest 500 enterprises, belonging to the group of companies (holding) that the bank is affiliated with.

**Board intention:**

**Illegal activity:** Citations of banking regulation violation as detected by BRSA and the Deposit Insurance Fund (DIF) are used to assess illegal activity. This is a dummy variable assessed by the reports of these two institutions. It takes the value of “1” when the bank is reported by these institutions to have committed any violation regarding its credit allocation. After examining the evaluations of BRSA and DIF regarding the performances of the banks, we concluded that the common violation appears to be an improper transfer of funds to the companies affiliated with the bank. This variable demonstrates the intention of the board about not fulfilling its monitoring role.

**Nonperforming loans:** The ratio of nonperforming loans to total credits.

**Board characteristics:**

**Board size:** A count variable is used to measure the number of directors on each board.

**Insiders:** The ratio of directors who are members of the current management team of the bank.

**Control variable:**

**Firm size:** Market share in terms of total assets of the bank.

**RESULTS**

This section presents our empirical results. Table 1 provides descriptive statistics for all variables and a correlation matrix.

(Table 1 about here)

The ownership structure of Turkish banks is highly concentrated. The banks are usually owned by family holdings except for 5 banks out of 40. The sample seems to be distributed almost evenly between financially fragile banks and the relatively safer ones which are respectively 22 and 18 in number. Moreover, almost half of the banks experienced ownership change after the implementation of full deposit insurance policy. The mean of affiliated companies that are ranked among the 500 largest companies ranges around 2 with a standard deviation of 3.67. While there are affiliated family holdings that do not possess any firm among the largest companies, there are also those that hold 14 companies on that list. About 38% of the banks appear to have committed illegal activity according to the reports of BRSA. The mean of the ratio of nonperforming loans to total credit equals 85%. The minimum and maximum values are respectively 0.13% and 2321%. The considerable difference between the two values increases also the standard deviation which is around 367.8. Contrary to the assumption of Baucus and Near (1991), illegal activity was unrelated to firm size. In various studies (Hermalin and Weisbach, 2003; Yermack, 1996), board size is usually found to be positively correlated with firm size. However, in our sample no such correlation was observed. Adams and Mehran (2003) report board size in BHCs to be 17 in US context. They affirm that banks usually have larger boards. However, the Turkish case seems to be different since the boards appear to have approximately 8 directors in Turkish banking firms. However, similar to the findings of Adams and Mehran (2003), banks’ boards seem to be larger than that of manufacturing companies in Turkey. For instance, boards are composed, on average, of 6 directors, in manufacturing companies quoted in Istanbul Stock Exchange (Bolak, et al, 2003) and of 5 directors in privately owned firms (Kula, 2005). Furthermore, the ratio of insiders is located around 12% with a standard deviation of 0.09. While there are boards that hold an insider ratio as high as 40%, some boards are only composed of outsiders.

(Table 2 about here)
Table 2 presents the results of the logistic regression. The Mc Fadden $R^2$, measuring the success of the regression in predicting the values of the dependent variable, equals to 0.65 in our model. It means that %65 of the variance of the dependent variable namely financial fragility, is explained by the independent variables.

The hypothesis 1a that examines the effect of ownership changes on the likelihood of financial fragility is not supported. The hypothesis 1b proposes higher reputation will decrease the likelihood of financial fragility. Table 2 exhibits that the odds of being a financially fragile firm are decreased by a factor of $e^{0.51}$ for a unit increase in the number of firms among the largest 500 enterprises, belonging to the group of companies that the bank is affiliated with.

Hypotheses 2a and 2b state that the likelihood of financial fragility increases with the existence of illegal activities and nonperforming loans as proxies of the board intention. As it is displayed in Table 2, the odds of being a financially fragile bank significantly increases with the presence of illegal activity and nonperforming loans. In other words, the odds of being a financially fragile bank are increased by a factor of $e^{39.50}$ ($p < .001$) for a unit increase in illegal activity and by a factor of $e^{0.30}$ ($p < .01$) for a unit increase in nonperforming loans.

Hypotheses 3a and 3b state that there will be no relationship between the financial fragility and the board characteristics measured with the board size and the ratio of insiders. The model displayed in Table 2 confirms these hypotheses by providing no significant relationship between these variables.

**CONCLUDING REMARKS**

We investigated the role of corporate boards in financial fragility within the framework of banking sector in Turkey. Intentions of both owners and boards appear to be influential on financial fragility. In that sense, this study may incorporate a new dimension to previous work, which often focuses on board size and composition in examining the impact of board. Our findings suggest that although only one of the proxies (firm reputation) of owner’s intention is associated with financial fragility, all of the proxies (illegal activity and nonperforming loans) of board’s intention increase the likelihood of financial fragility. It is worth noting that bank size is not related to financial fragility.

This study stressed the concept of intention of the board. We argue that board intention may have substantial consequences in determining the level and intensity of board monitoring which is crucial for bank performance. Our study differentiated boards in terms of their intention in fragile and safe banks. This study integrating also corporate illegal activity to board’s intention contributes to the limited amount of work on this issue.

This work examined board intention in a regulated industry setting. Since not only the type of stakeholders but also the interaction between them is different from those in nonregulated industries, the implementation of agency theory’s assumptions is restricted. Moreover, the fact that there are limited studies in banking context constitutes the strength of this study. However, this may also be a limitation since it may restrict the generalizibility of the findings to non regulated industries. Similarly, a large body of research on boards originates from developed country context. Our study provides evidence from an emerging country. Emerging markets deserve special attention since they differ from developed countries on several dimensions in the sense that financial markets are not developed, minority shareholders are not properly protected and the business is more exposed to economic and political risks. Our
findings may provide valuable insight to both practitioners and academics working in and/or on emerging markets.

REFERENCES


Banking Law No. 4389, approved on 18 June 1999.

Banking Law No. 3182, approved on 25 April 1985.


Yamak, S. and Süer, Ö. (2005) State as a Stakeholder, Corporate Governance, 5, 111-120.


Table 1
Descriptive Statistics and Correlation Matrix

<table>
<thead>
<tr>
<th>Variable</th>
<th>Mean</th>
<th>SD</th>
<th>Correlations</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>1. financial</td>
<td>0.55</td>
<td>0.50</td>
<td></td>
</tr>
<tr>
<td>fragility</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. ownership</td>
<td>0.48</td>
<td>0.51</td>
<td>.06</td>
</tr>
<tr>
<td>change</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. reputation</td>
<td>2.02</td>
<td>3.67</td>
<td>-.32*</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. illegal activity</td>
<td>0.38</td>
<td>0.49</td>
<td>.70*</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. nonperforming</td>
<td>85.63</td>
<td>367.83</td>
<td>.21</td>
</tr>
<tr>
<td>loans</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. insiders</td>
<td>0.12</td>
<td>0.09</td>
<td>-.03</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. board size</td>
<td>7.75</td>
<td>2.11</td>
<td>.01</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. firm size</td>
<td>1.44</td>
<td>1.91</td>
<td>-.14</td>
</tr>
</tbody>
</table>

*: Correlation is significant at the 0.05 level (2-tailed)
**: Correlation is significant at the 0.01 level (2-tailed)
Table 2
Results of Logistic Regression

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient</th>
<th>s.e.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Owner’s intention</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ownership change</td>
<td>1.16</td>
<td>1.52</td>
</tr>
<tr>
<td>Reputation</td>
<td>-0.51**</td>
<td>0.20</td>
</tr>
<tr>
<td>Board’s intention</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Illegal activity</td>
<td>39.50***</td>
<td>1.27</td>
</tr>
<tr>
<td>Nonperforming loans</td>
<td>0.30**</td>
<td>0.12</td>
</tr>
<tr>
<td>Board characteristics</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Insiders</td>
<td>-6.18</td>
<td>7.81</td>
</tr>
<tr>
<td>Board size</td>
<td>0.32</td>
<td>0.20</td>
</tr>
<tr>
<td>Control variable</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Firm size</td>
<td>0.47</td>
<td>0.29</td>
</tr>
<tr>
<td>C</td>
<td>-4.76*</td>
<td>2.19</td>
</tr>
<tr>
<td>Likelihood Ratio chi-square</td>
<td>35.99***</td>
<td></td>
</tr>
<tr>
<td>Mc Fadden R²</td>
<td>0.65</td>
<td></td>
</tr>
</tbody>
</table>

* p < .05
** p < .01
*** p < .001