

# CORPORATE GOVERNANCE AND THE DODD-FRANK \$10B THRESHOLD

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## Abstract

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The financial crisis of 2007–2008 resulted in major changes to the financial industry including the passage of the Dodd-Frank Act in 2010. While the emphasis of Dodd-Frank was on systematically important banks that are “too big to fail”, the act also placed several conditions on financial institutions with assets greater than \$10B. Hogan and Burns (2019) show that Dodd-Frank imposed higher non-interest expenses on financial institutions, especially smaller institutions. Bouwman, Hu, and Johnson (2018) look at how financial institutions modified their behavior following passage including delaying crossing the threshold. Agrawal and Knoeber (2001) find that firms in more regulated industries are more likely to have politically connected board members. This article examines whether the corporate governance of financial institutions with assets just below the \$10B asset threshold affected their willingness to cross that threshold. Results indicate that firms with staggered boards and smaller boards took longer to cross the threshold while higher levels of ownership by the chief executive officer (CEO) resulted in faster crossings. Financial institutions were much quicker to pass the threshold in the later years of the study due to changes in the economic and regulatory environment.

**Keywords:** Corporate Governance, Financial Institutions, Regulation, Dodd-Frank Act, Systemic Risk

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## 1. INTRODUCTION

The Dodd-Frank Wall Street Reform and Consumer Protection Act of 2010 (hereafter Dodd-Frank or DF) was passed following the 2007–2008 financial crisis. Hogan and Burns (2019) outline many of the ramifications of the act. Financial institutions with assets greater than \$10B are required to undergo annual Dodd-Frank Act Stress Tests (DFAST) and to create a risk committee. Systemically important financial institutions with assets greater than \$50B have additional restrictions including resolution plans that outline their plan of action in case of insolvency. The act also created the Consumer

Financial Protection Bureau (CFPB) and gave them broad rule-making and enforcement powers and the ability to impose fines and penalties for deceptive practices. Restrictions on arbitration open the door to class-action lawsuits for institutions over \$10B. Stricter mortgage lending rules meant to end so-called NINJA (No Income, No Job, and No Assets) loans had a greater impact on community banks. The Volcker rule, which restricts proprietary trading, moves from the simplified to the standard level for banks above the \$10B threshold. Finally, the Durbin Amendment limits debit card interchange fees. All of these changes may result in reduced levels of income and higher costs for firms above the threshold.

If there are increased costs associated with Dodd-Frank, the question then arises as to how financial institutions, especially those near the \$10B threshold, would respond to DF. Bouwman, Hu, and Johnson (2018) point out that financial institutions above the threshold would be directly affected by DF, but firms just below the threshold were indirectly affected. They examined banks that were near-below-threshold and found that they had lower growth in assets, risk-weighted assets, and total loans relative to banks either above the threshold or well-below the threshold. Further, firms would only grow and pass the threshold if the growth were highly beneficial.

Given those extra burdens, one might wonder whether it is worth it for a bank to pass the \$10B threshold. The decision of whether or not to cross the threshold lays in the hand of the firm's board of directors and executive officers. An institution's corporate governance has been found to affect a firm's investment decisions, capital structure, merger decisions, risk tolerance, and many other factors. While many papers have looked at different aspects of corporate governance, Agrawal and Knoeber (2001) examine the role of politically connected board members in regulated industries.

These previous studies lead to the motivation of this paper. Hogan and Burns (2019) show that Dodd-Frank has a big impact on financial institutions, especially those that are near or above the \$10B threshold. Bouwman et al. (2018) find that financial institutions altered their behavior in the face of Dodd-Frank, including taking actions to remain below the \$10B threshold. Agrawal and Knoeber (2001) specifically look at the role of board members in highly regulated firms. Threading these together leads to the central question of this paper: *What corporate governance characteristics made a financial institution more or less likely to cross the \$10B threshold?*

The rest of this paper is structured as follows. Section 2 reviews the literature focusing on two areas: 1) how financial institutions are affected by the Dodd-Frank Act and 2) how corporate governance affects corporate decision-making. Section 3 lays out the hypotheses examined in this paper, the data sources, and the methodology used to test the hypotheses. Section 4 reports and discusses the empirical results while Section 5 concludes the paper and suggests opportunities for further research.

## 2. LITERATURE REVIEW

### 2.1. Impact of Dodd-Frank

The impact of Dodd-Frank on financial institutions has been widely investigated. Hogan and Burns (2019) look at how Dodd-Frank impacted bank non-interest expenses. Specifically, they looked at the different impacts on small (< \$10B) vs. large (> \$10B) banks. While large banks were more impacted by stress tests, small banks were primarily impacted by the plethora of new rules created by the new CFPB that was created by Dodd-Frank. Many of these rules related to real estate and small business loans — the heart of small and community bank's business.

They find that non-interest expenses for all banks increased significantly after Dodd-Frank went into effect. Industry-wide, these expenses increased by \$58.7B-\$86.1B per year after passage. Expenses were broken down further into salary and non-salary expenses. For small banks, the passage of Dodd-Frank led to a significant increase in non-salary expenses to an even greater extent than for large banks. Salary expenses also increased for small banks, but they were more related to the level and growth of regulation which may be the result of the CFPB adding additional regulations after the passage of Dodd-Frank.

Dolar and Dale (2020) also find that Dodd-Frank had a much greater impact on small banks leading to an intra-industry redistribution of wealth. Alvero, Ando, and Xiao (2022) find substantial regulatory costs associated with Dodd-Frank. However, they also find that these costs were considerably lower than self-reported estimates from the banks themselves. Conversely, McCord and Prescott (2014) find that Dodd-Frank had a minimal impact on bank expenses.

Gao, Liao, and Wang (2018) looked at the market reaction to 17 key events associated with the passage of Dodd-Frank. They calculated the difference between the average return of large banks (> \$50B) and other banks to determine the abnormal return and found that large financial institutions had a more negative stock return compared to smaller financial institutions. However, bond abnormal returns of these institutions were positive indicating an expectation that the act could reduce the level of risk.

Turk and Swicegood (2012) also look at the market reaction to 12 events, but they look at the average returns of banks with assets greater than \$1B and those with assets below \$1B. They found positive returns for large banks on 6 of the 12 event dates. However, they note that several of those dates were associated with events that reduced the impact of Dodd-Frank.

In the years following the passage of Dodd-Frank, several of its rules have been modified or repealed — most notably by the passage of the Economic Growth, Regulatory Relief, and Consumer Protection Act in 2018. Erkens and Gan (2022) examine 25 events between April 2016 and May 2018 to determine the market reaction to these deregulatory events. They found that small banks had more positive reactions to the deregulation than did the larger banks. They suggest that the large banks had already incurred the costs and would see little benefit while smaller banks would be freer to grow without having to incur as many costs.

In order to investigate institutions' response to the threshold, Bouwman et al. (2018) compare the growth rate of banks just below the threshold with those far below the threshold. They find that the growth rate for just-below banks is significantly less than the smaller banks. Similarly, Alford (2018) presents evidence that financial institutions clustered below that threshold and took actions to remain below that threshold. However, market pressures may have affected the strategies for public vs. private institutions. Private firms were more likely to manage their marketable securities accounts and their allowance for loan losses. Public firms were more likely to increase their liquidity risk and reduce their accruals quality. Bindal, Bouwman,

Hu, and Johnson (2020) find that just below the threshold banks engage in more acquisitions. They suggest that institutions need to be in the range of \$12-\$12.5 billion in assets to better bear the regulatory burdens.

## 2.2. Corporate governance

Decisions regarding how firms react to regulatory changes are determined by the firms' corporate governance. One of the most important components of corporate governance is the board of directors. Many different measures have been examined to express the quality of the board including whether the chief executive officer (CEO) is the Chair of the Board, the proportion of the board that is independent, the term of the board, and the size of the board. The decision of whether or not to cross the \$10B threshold may also be related to specific skills and knowledge of board members. Specifically, boards that include directors with a legal, regulatory, or political background may be better prepared to handle the additional regulatory burdens.

Individual corporate governance variables have been found to affect corporate performance, valuation, and decision-making in many studies. Morck, Shleifer, and Vishny (1988) find that higher levels of CEO ownership lead to higher valuations, but it may entrench CEOs in their position and reduce value beyond a certain point. Shivdasani (1993) finds that combining the role of CEO and Chair reduces the likelihood of being acquired. Weisbach (1988) finds a stronger relationship between turnover and performance for outsider-dominated boards. Yermack (1996) found that smaller boards had higher valuations while Core, Holthausen, and Larcker (1999) find that CEOs are able to extract higher compensation when boards are large.

These individual measures can also be combined into an index to create an overall corporate governance score. Gompers, Ishii, and Metrick (2003) created a Governance Index for shareholder rights that includes 24 rules. Firms with more rules restricting shareholder rights were "dictatorships" with lots of management power while those with fewer rules were "democracies". They found that more democratic firms outperformed dictatorships by 8.5% per year from 1990-1999. Their index includes whether a board was classified and board independence. Bebchuk, Cohen, and Ferrell (2008) only included 6 of these measures in their index and determined that the other 18 were uncorrelated with firm valuation and performance. A concern with these corporate governance indices is that they use binary measures for continuous variables. They also include measures such as poison pills that are primarily takeover defenses and state laws that aren't under the control of the firm.

Other studies have examined the characteristics of individual board members to determine their effect on the firm. Gulla (2005) suggests that politically connected board members could be the result of both rent-seeking firms using the directors to navigate the regulatory process and/or politicians using their power to extract rents from firms in the form of directorships. An analysis of the appointment of 979 outside directors between 1997 and 2001 yielded a total of 184 political appointees including 134 previous government

employees (including 35 elected officials), 10 military officers (Lt., Col. or higher), 38 attorneys, and 2 political party employees.

Agrawal and Knoeber (2001) also show that outside directors with a background in law and politics are more common in industries where government plays a larger role as either a major customer or regulator. An example of this is electric utilities during a period of deregulation in the 1990s. They examined the proxy statements of 264 manufacturing firms (SIC Codes 20-39) that were among the 500 largest firms in terms of sales, total assets, market value, or profits from the Forbes list for 1987.

In their study, outside directors were identified if they had a background in government or if they had a law degree. A background in government included elected office, working for a political party, or having significant experience in a government agency. On average, firms in their sample had 0.73 directors with political experience and 0.76 directors with a law degree (some directors would have both).

Seven different measures were used to estimate the importance of politics to the firm. The first measure is firm size with the hypothesis that larger firms will be more political. Three additional measures include the level of government sales, pollution abatement capital expenditures, and exports. These were based on a firm's four-digit SIC code. Three final measures of the importance of politics are a firm's lobbying efforts defined as whether or not the firm has a public affairs office in Washington D.C., the number of employees at the office, and a measure of industry Political Action Committee (PAC) contributions.

Their dependent variable was the number of political or legal directors and the measures of the importance of politics were independent measures. Board size was used as a control variable in all regressions. Empirical results support the hypothesis that larger firms and firms with a public affairs office are more likely to have a political board member. Firms involved with environmental regulation as measured by pollution abatement capital expenditures had lawyers as board members.

Many corporate governance studies exclude banks and other financial institutions due to their regulated status, but others focus specifically on financial institutions. Diaz and Huang (2017) examine the effect of corporate governance on bank liquidity during and after the 2007-2009 financial crisis. They used Corporate Governance Quotient scores available from Institutional Shareholders Services as their measure of corporate governance. This score considers 56 different attributes including board independence, CEO/Chair separation, staggered boards, CEO stock ownership, and CEO compensation. Their full dataset includes 247 bank holding companies from 2003-2013. Their primary finding was that bank holding companies with higher governance scores created more liquidity, but their results were primarily driven by large banks that are also high liquidity creators.

Karkowska and Acedanski (2020) examined the effect of corporate board attributes on bank stability by looking at 239 banks across 40 countries from 1997-2016. Their corporate governance measure is based on the ASSET4 ESG Thomson Reuters Datastream glossary and includes board size, independence, affiliations, experience, and skills as factors. They found that larger boards were

negatively related to bank stability and that more independent boards resulted in greater risk-taking, perhaps in an effort to increase value.

There is considerable evidence that corporate governance affects corporate decisions. This paper looks at the relationship between corporate governance variables and the decision to cross the \$10B threshold and the associated regulations imposed by Dodd-Frank.

### 3. HYPOTHESES AND RESEARCH METHODOLOGY

The first hypothesis (*H1*) looks at whether publicly and privately held financial institutions had the same tendency or hesitancy to cross the threshold. Alford (2018) found that publicly traded and privately held firms had different responses to the threshold. If shareholders value growth, then publicly traded firms may be punished by the market for remaining below the threshold. Thus, they may be more willing to cross the

threshold even if the costs of crossing are high. Simple descriptive statistics are used to compare private and public institutions.

The second hypothesis (*H2*) looks at publicly traded firms that crossed the threshold to see if there was an abnormal return in the market associated with crossing. Gao et al. (2018) had found that large institutions had a more negative reaction to the passage of Dodd-Frank, but it is unclear whether or not there should be any reaction to crossing the threshold as it indicates both higher growth (a positive) and higher costs (a negative) to the company. The variable of interest is the abnormal return in the quarter in which they crossed the threshold.

The event-study methodology is used to test whether there is an abnormal return associated with crossing the threshold. For each firm crossing the threshold, the abnormal return is calculated as the return in that quarter minus the average return of the other firms in the sample:

$$AbnRet = Ret \text{ of firm crossing the threshold} - AvgRet \text{ of remaining firms} \quad (1)$$

Since the sample is composed of financial institutions of similar size, they make a better control group than would a measure of the overall market. Prices and dividends for each firm were collected using FinDynamics and XBRL. Calculations and statistical tests were performed in Excel.

As an additional method of examining the market reaction to crossing the threshold, the quarterly returns of banks that have already crossed the threshold are compared to those that remain below the threshold to determine if there is a difference in performance. Firms that crossed the threshold in that quarter were not included.

$$AbnRet = AvgRet \text{ of above threshold firms} - AvgRet \text{ of below threshold firms} \quad (2)$$

If limiting growth to avoid crossing the threshold is punished by the market, then we would expect crossed firms to outperform and for this number to be positive. However, if the increased costs associated with crossing the threshold outweighs any benefits, and then we would expect negative abnormal returns.

The primary hypothesis of interest is whether the corporate governance of the institution affects its decision to cross the threshold. Simple and multiple ordinary least-squared regressions are used to determine the significance of the overall model and the individual variables. The dependent variable in the regressions is *the number of quarters* it took financial institutions to cross the \$10B threshold once they became "just-below" threshold defined as \$8B in assets.

The independent variables relate to the studies discussed earlier. *BRDSIZ* is the number of directors on the board of directors. Yermack (1996) and others have found evidence that larger boards are less effective. *INDBRD* is the proportion of directors that are considered independent. Boards with more independence have been found to be more effective by Weisbach (1988) and others. *LAWBRD* is an indicator variable equal to one if any board member has had significant legal, political, regulatory experience or was a certified public accountant (CPA). Agrawal and Knoeber (2001) find that firms in regulated industries are more likely to have board members with political and legal experience. *STGBRD* is an indicator variable equal to one if the board is staggered. Several companies

declassified their boards over the time period and were defined as being not staggered if they voted to declassify in the year they entered the threshold. *CEOOWN*

is the percentage of stock owned by the CEO. The effect of CEO ownership is mixed because it both aligns managers' interests with shareholders and entrenches managers according to Morck et al. (1988).

The expected sign of these variables is unknown because it is not clear whether crossing the \$10B threshold will have a positive or a negative effect. The effect could also be different for different players. For example, management and the board of directors may not want the extra burdens associated with crossing the threshold even if crossing the threshold is value-increasing.

The final variable included in the regression is the *PERIOD* in which the institution first entered the threshold of \$8B in assets. As noted above, some of the restrictions associated with Dodd-Frank were relaxed after 2015 and the regulatory relief act was passed in 2018. The Tax Cuts and Jobs Act of 2017 reduced corporate tax rates and might also have affected decisions. The lower limit of the fed funds rate was 0% from 2008 until the fourth quarter of 2015. This could have encouraged banks to make additional loans or take on more risk as the cost of funds increased. All of these factors may affect the firm's decision to cross the threshold. The period variable began with the first quarter of 2007 set equal to one and going up to the last quarter of 2020 set at 56.

$$Quarters = f(BRDSIZ, INDBRD, LAWBRD, STGBRD, CEOOWN, PERIOD) \quad (3)$$

#### 4. EMPIRICAL RESULTS

Information on Bank Holding Companies (BHCs) was gathered from the Federal Financial Institutions Examination Council (FFIEC) website. Quarterly consolidated assets for each BHC are available going back to 2002. Beginning with the first quarter of 2008 through the fourth quarter of 2017, all BHCs with assets between \$8-\$10B were collected to determine if and when they crossed the \$10B threshold into the Peer 1 Group for the first time.

In total, there were 72 BHCs that reached \$8B in assets from 2008 to 2017. Of these, 64 crossed the \$10B threshold as of the fourth quarter of 2020. Of the remaining eight, four were acquired and four remained below the \$10B threshold. The first hypothesis looks to see if there was a difference in behavior between public and private banks. Table 1 presents the number of firms becoming just below the threshold and those crossing the threshold by year. Table 2 presents the outcome for public and private firms.

**Table 1.** Institutions just-below and crossing the threshold by year

Year	Entered	Crossed/Acquired
2007	4	0
2008	4	0
2009	6	0
2010	3	0
2011	4	4
2012	5	4
2013	3	4
2014	6	5
2015	19	5
2016	11	10
2017	7	16
2018	0	10
2019	0	6
2020	0	4
Total	72	68

**Table 2.** Public vs. private financial institutions (FI)

	N	Crossed	Acquired	Remained	Months
Total FI	72	64	4	4	11.125
Public	54	51	3	0	10.1
Private	18	13	1	4	14.2

Publicly traded firms were more likely to cross the threshold (or be acquired) and did so faster than privately held firms. Fifty-one of the 54 publicly traded firms crossed the \$10B threshold and the other 3 were acquired. On average, they took 10.1 quarters to cross the threshold or be acquired. Twenty-three of the firms crossed the threshold by acquiring another institution. Of the 18 privately held firms, 13 crossed the threshold, 1 was acquired, and 4 remained below the threshold. It took an average of 14.2 quarters to pass the \$10B threshold once they reached the \$8B level (excluding those that never crossed the threshold).

The next hypothesis questioned whether crossing the threshold had a significant impact on stock returns. In order to test this, the abnormal quarterly return was calculated for each of

the 51 publicly traded firms that crossed the threshold. The acquired firms were not included as their abnormal return would be the result of the acquisition instead of crossing the threshold. The abnormal return was calculated as a firm's quarterly return in the quarter they crossed the threshold minus the average return of the remaining firms for that quarter. Table 3 presents the mean abnormal return for the quarter crossed as well as the 2 quarters pre- and post-crossing.

**Table 3.** Abnormal returns associated with crossing the threshold

Period	-2	-1	0	1	2
Mean AbRet	0.0066	0.0109	-0.0058	-0.0117	-0.0234
Standard Error	0.0181	0.0131	0.009	0.0108	0.0124

The average abnormal return in the quarter crossed was -0.583% which is not significantly different from zero. The abnormal returns prior to crossing were positive while returns following the crossing were negative suggesting that the market may have punished firms for crossing the threshold. If institutions incurred expenses after crossing the threshold when this could have impacted earnings. In order to further investigate this issue, an additional test was conducted. The average return of the firms that had already crossed the threshold was compared to the average return of the firms that remained below the threshold for each quarter from the first quarter of 2013 to the first quarter of 2019. The results were limited to these dates to ensure that there were at least five institutions in each group. The average abnormal return for firms that had crossed the threshold was -2.67% indicating that crossing the threshold leads to diminished shareholder value that is significant at the 1% level.

The results of *H1* indicate that publicly traded companies are more likely to cross the threshold and do it quicker than privately held firms. The results of *H2* indicate that the market punishes firms that cross the threshold. These results lead to an interesting question: *Why do publicly traded companies cross the threshold so quickly?* One possible explanation is that the firms' corporate governance structure affected their decision.

Information on the Board of Directors and CEO was gathered from the proxy statement of each firm for the year in which they first entered the \$8-\$10B range. There were 49 publicly traded firms in the sample after five firms were dropped because there was no proxy statement for that year. Table 4 gives the descriptive statistics for the variables while Table 5 provides the correlations between the variables. The average *BRDSIZ* for the sample was 11.9% of directors, 57.1% of the institutions had staggered boards, and 81.1% of directors were considered independent. Lawyers were on 83.7% of boards, CPAs served on 71.4%, and 93.9% of boards had at least one of them. The CEO owned an average of 1.33% of common shares outstanding.

**Table 4.** Descriptive statistics of variables

	<i>Quarters</i>	<i>BRDSIZ</i>	<i>INDBRD</i>	<i>LAWBRD</i>	<i>STGBRD</i>	<i>CEOOWN</i>	<i>PERIOD</i>
Mean	10.25	11.9	0.811	0.939	0.571	0.013	29.1
Median	8	12	0.833	1	1	0.006	34
St. Dev.	7.45	3.45	0.098	0.242	0.5	0.017	11.8

**Table 5.** Correlations between variables

	<i>Quarters</i>	<i>BRDSIZ</i>	<i>INDBRD</i>	<i>LAWBRD</i>	<i>STGBRD</i>	<i>CEOOWN</i>
<i>BRDSIZ</i>	-0.0225					
<i>INDBRD</i>	0.2021	-0.2236				
<i>LAWBRD</i>	0.2163	0.2912	-0.1599			
<i>STGBRD</i>	0.2469	0.1069	0.0259	0.1229		
<i>CEOOWN</i>	-0.3563	-0.2323	-0.1414	-0.2250	0.0030	
<i>PERIOD</i>	-0.6214	-0.1779	-0.0535	-0.2172	-0.0470	0.2229

Simple regressions were run for each of the independent variables upon the dependent variable and the results are shown in Table 6. The simple regressions included all observations that had the data, including the acquired BHCs. The positive coefficient on the staggered board variable indicates that these boards take longer to cross the threshold. Staggered boards are often cited as a signal of poor corporate governance. Faley (2007) shows that these boards have a negative effect on firm value due to diminished oversight by outside directors which effectively protects current management. Rosenbaum (1998) reports that a majority of firms (59%) have classified boards which is similar to the 57.1% in this study.

Higher levels of CEO ownership are negatively related to periods and are significant at the 5% level. CEOs with higher levels of ownership are more likely to make decisions consistent with shareholder wealth maximization. If crossing the threshold is a value-decreasing decision as suggested by the earlier results, then this indicates that CEOs may be acting foolishly. However, CEOs may have other objectives. Powerful CEOs may be able to entrench themselves to the detriment of the company. CEOs may also benefit from managing a larger company and may be able to extract non-pecuniary benefits from the firm.

The period variable is highly significant. As suggested earlier, changes in the regulatory, tax and economic environment in the later years of the study may have made the decision to cross the threshold less painful and firms crossed the threshold much quicker than in earlier periods. Board size, board independence, and the presence of lawyers or CPAs on the board were not significant variables.

**Table 6.** Simple regression results

<i>Variable</i>	<i>Coefficient</i>	<i>t-statistic</i>
<i>BRDSIZ</i>	-0.0485	-0.1543
<i>INDBRD</i>	15.3574	1.4144
<i>LAWBRD</i>	6.6522	1.5190
<i>STGBRD</i>	3.6786	1.7470*
<i>CEOOWN</i>	-154.8181	-2.6144**
<i>PERIOD</i>	-0.3928	-5.4370***

Note: Significance given at the 10%, 5%, and 1% level indicated by \*, \*\*, and \*\*\*.

The results of the multiple regression are shown in Table 7. The overall model is significant at the 1% level with an F-score of 8.248 and an Adjusted R<sup>2</sup> of 47.5%. The multiple regression results are consistent with the simple regression results showing a positive and significant effect (5%) for the staggered board indicator variable and

a negative and significant effect (5%) on the level of CEO ownership. The period variable is still negative and highly significant at the 1% level.

In the multiple regression, board size becomes significant at the 10% level. The negative coefficient indicates that larger boards cross the threshold sooner.

**Table 7.** Multiple regression results

<i>Variable</i>	<i>Coefficient</i>	<i>t-statistic</i>
<i>BRDSIZ</i>	-0.4494	-1.8074*
<i>INDBRD</i>	7.4525	0.8805
<i>LAWBRD</i>	2.6320	0.7500
<i>STGBRD</i>	3.4286	2.1701**
<i>CEOOWN</i>	-106.6407	-2.1656**
<i>PERIOD</i>	-0.3597	-5.1824***

Note: Significance given at the 10%, 5%, and 1% level indicated by \*, \*\*, and \*\*\*.

## 5. CONCLUSION

The passage of the Dodd-Frank Act in 2010 resulted in major changes to the regulatory framework for financial institutions as described by Hogan and Burns (2019). Institutions with assets greater than \$10B were especially affected. Bouwman et al. (2018) looked at institutions near the \$10B threshold and found that they altered their behavior — including taking actions to avoid crossing the threshold.

This paper makes a number of contributions to the existing literature. It first looks at the responses of public and private financial institutions in the wake of the \$10B threshold set forth in the Dodd-Frank Act. Public institutions were found to be more likely to cross the threshold and did so at a faster rate. Crossing the threshold results in higher costs to the institution, but constraining the firm's growth rate also has consequences.

The second hypothesis looks at the market response to firms that cross the threshold. While there is no significant abnormal return in the quarter in which the firm crossed, firms that cross underperform firms that do not cross. Private institutions may have avoided crossing the threshold in order to avoid those costs. Public institutions also want to avoid costs, but they may have additional reasons to cross other than shareholder wealth maximization.

The central question in this paper was how a financial institution's corporate governance affected its decision to cross. Overall, the results are consistent with the idea that corporate governance affected the decision-making of firms. Both the staggered board variable and the board size variable were significant. Staggered boards may impede drastic changes in companies and may have

led to delays in crossing the \$10B threshold. Researchers have generally found that smaller boards perform better than larger boards. In this case, larger boards were related to firms crossing the threshold sooner. Board independence and legal or accounting experience were not significant.

The motivations of the CEO are also important to these decisions. CEOs have the ability to initiate change if they have sufficient power, but they would only do so if they were to benefit from the change. CEOs with higher levels of stock ownership crossed the threshold quicker. However, it is unclear if they benefitted given that crossing the threshold had no significant abnormal returns. Faster growth and higher levels of assets may have led to other benefits for the CEO. Compensation packages may incentivize growth even if it is not wealth maximizing. Additional research could look at the compensation packages of CEOs to determine if that had an effect.

It is also possible that CEOs and the market had different expectations about crossing the threshold. Lack of growth is often punished by the market and CEOs may have believed that staying below the threshold would hurt their stock performance. It is also unclear how quickly the higher costs associated with crossing the threshold began. A disappointing earnings report after crossing could result in lower stock returns even if the higher costs should have been anticipated. Examining analyst reports could help determine if crossing the threshold was being adequately considered. An investigation into earnings reports pre-and post-crossing could also reveal the financial statement impact of crossing the threshold and how that affected the market response. A textual analysis of earnings calls could yield insights into the thought processes of both CEOs and analysts that cover the company.

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