

## INNOVATIONS

### **Board related corporate governance attribute and Financial Performance: Evidence from selected banks in Ethiopia**

**Asegid Getachew Woldeamanuel\* & M. Umma Devi\*\***

\*Research Scholar at the Department of Commerce and Management, Andhra University.

\*\*Professor at the Department of Commerce and Management, Andhra University.

---

#### **Abstract**

The interaction between board attributes (as corporate governance characteristics) and financial performance has for long attracted the interest of academic and organizational researchers. One of the critical attributes that have aroused the interest of several researchers is the effect that size of the board members has on financial performance. The current study carried on this tradition by looking into it in the Ethiopian banking sector. A total of fourteen banks, selected based on relevant criteria, were considered for the study. The study period ran from 2012/13-2019/2020. The data related to the variables of interest were extracted from the different sections of the annual reports of these banks. Fixed effect regression was found to be relevant for the selected model. The result indicated that there exists an inverse relationship between board size and the performance of banks. The result can inform the policymaking initiatives of regulators of the financial sector. It also helps banks to search for the optimal size of boards.

**Keywords:** 1. Boards 2. Board size 3. Corporate Governance.

---

#### **Introduction**

The world has witnessed the incidence of major accounting scandals in the last two decades. Big business (“big to fail”) in the global north and several other countries were at the center of such horrific scandals. The ramifications were crippling. Some of these businesses had to file bankruptcy and shut down their operation for good. Legal action was brought against the CEO and higher management officials, which resulted in their incarceration. It was believed that the perpetrators of the scandals benefited from these firms’ weak corporate governance system. In the wake of such disastrous malpractice, organizations started to implement an elaborate corporate governance regime to abate the future incidence of managerial frauds and embezzlement.

Corporate governance, conceptualized by Cadbury A. (1992) as a “system by which companies are directed and controlled”, has the major aim of ensuring that the management of an organization works in line with the values and interests of shareholders and stakeholders. Therefore, the makeup, size, and structure of the board of directors are all important elements in influencing the efficacy of corporate governance (Coles et al., 2008).

Boards exist for two basic reasons. First, they may be a market solution to mitigate agency problems. And secondly, they may exist due to state regulation or exchange market requirements (Zeigler, 2004). Whatever the reason behind their existence, the specific character of the board determines the nature of its action to enhance the performance of firms. Several studies have looked into the impact of board qualities on organizational performance. However, there is a paucity of empirical investigation in developing countries. The current research in this regard aims at investigating the link between board size and financial performance within the context of the Ethiopian banking sector.

The article is organized as follows. The next section presents literature related to the issue and elaborates the theoretical and empirical argument used in developing the main research hypothesis. The third section discusses issues related to data and variable measurements. The fourth part presents the result of the analysis of the data and discusses the implications. The last part provides the conclusion of the study and discusses some of its basic limitations.

### **Literature review and Hypothesis Development**

#### **Corporate governance in banks and the role of the board of directors**

The Basle Committee on Banking Supervision (2006) provides a thorough analysis of corporate governance in the banking industry. According to the report,

..from a banking industry perspective, corporate governance involves the manner in which the business and affairs of banks are governed by their boards of directors and senior management, which affects how they: set corporate objectives; separate the bank's business on a day-to-day basis; meet the obligation of accountability to their shareholders and take into account the interests of other recognized stakeholders; align corporate activities and behavior with the expectation that banks will operate in a safe and sound manner, and in compliance with applicable laws and regulations; and protect the interests of depositor. (p.4)

Kama and Chuku (2009 p.2) state that "Good corporate governance in banks focuses on building strong and effective boards, protecting shareholders and customers' rights, improving the bank's control environment, increasing financial and non-financial transparency and disclosure and ultimately contributing to the development of a sound financial system which guarantees sustainable economic growth". However, on the flip side, as much as effective corporate governance system contributes to the continued success of banks, a poor corporate governance system leads to their complete failure, which may have broader economic ramifications in developing countries where there is no deposit insurance (Basle Committee on Banking Supervision 2006).

To this effect, Kama & Chuku(2009) posit banks require a certain level of trust and confidence from the public to function properly. One of the ways that they get this is through establishing an effective corporate governance system.

Corporate governance may have a similar purpose in financial and non-financial organizations. However, specific factors pertinent to the banking industry create some differences in the way it is applied. One of such factors is the level of importance attached to bank stakeholders.(Pathan et al. 2007 )

Banks are subject to more regulations than other businesses since they protect savers' interests, maintain stable payment operation, and reduce moral hazard. Furthermore, the banking industry's activity is defined by the complexity of its operations, resulting in asymmetric information and

limiting stakeholders' ability to monitor bank managers' decisions. As a result of these factors, banking organizations' corporate governance has distinct characteristics (Turlea et al. (2010).

Mülbart (2009) provides a specific account of factors that lead to dissimilarity of the corporate governance of banks and non-financial firms. The first problem is associated with banks' liquidity production function, which is based on discrepancies in deposit and loan term structures. Banks accept term structure disparities on their balance sheet voluntarily. Banks, on the other hand, are highly indebted institutions. The other area of difference pertains to the fact that banks are the most opaque institutions, making it impossible to assess the quality of their assets. The last and important reason is related to the difference in term structure, banks are prone to "bank runs" which is a situation that arises when depositors collectively decide to withdraw their balances from a bank, ultimately causing it insolvency. Because of their economic importance and the potential negative externality due to their failure banks are heavily regulated organizations.

Corporate governance of banks also has special significance in developing countries. Arun & Turner (2004) provides some basic explanations for why corporate governance is so important for banks in emerging economies.

- Banks are important and major player in the financial system and main pillars of the economy.
- Because financial markets are underdeveloped or not available in some situation's banks are considered as major sources of finance.
- They provide an important mechanism to facilitate payment transaction and savings in the economy.

The board of directors is a major corporate governance structure in both financial and non-financial firms. It sits at the top and is responsible for monitoring, supervising and giving strategic direction for managers (Adams & Ferreira, 2007). Moreover, by its power of hiring and firing management and setting their benefits packages, the board of directors is considered the main mechanism to deal with problem of agency emanating from separation ownership from management (Baysinger & Butler, 2019).

### **Hypothesis Development**

Two basic points of view dominate the debate about the impact of board size on financial success. The first point of view is based on agency theory. The proponents of this view Fama & Jensen (1983) & Jensen (1993) argue that smaller boards effectively monitor and supervise management. Their rationale is based on the presumption that smaller boards know each other very well, are cohesive and can analyze complicated information and, as a result, make an effective decision in time.

As Lipton & Lorsch (1992) proposed, organizations should not have a board greater than ten. The central thesis of these perspectives is that the benefit of a large-sized board is outweighed by the additional cost associated with the protracted decision-making process. Zeiler (2004 p.13) justifies this, stating, "The idea is that when boards become too big, agency problems (such as director free-riding) increase within the board and the board becomes more symbolic and less a part of the management process".

The second view favors large-sized boards, and it is based on the resource dependency theory. One of the ardent supporters of this view, Pfeffer (1972, 1973), for instance, argue that a large-sized board has members who can use their external contact and rich expertise to help an organization secure critical resources.

There are a plethora of empirical findings relating board size to financial performance. The outcomes, however, are contradictory.

According to several studies, board size has a positive impact on financial performance. Huang (2010), for example, looked into bank financial performance in connection to corporate governance systems. The study focused on major banks in Taiwan to achieve its goal. Sample was drawn from 41 banks over a period of ten years. The research looked into the effects of several corporate governance factors on bank performance. One of the study's primary findings is that the size of the board of directors has a positive and significant impact on financial performance. Liang et al. (2013) did a comprehensive review regarding the link between board size and other corporate governance attributes (board composition and board functioning) on financial performance (measured by ROA, ROE, re-provision ratio and, NPL ratio) of enterprises. Data for this was collected from Chinese banks. A total of 50 banks from a variety of functional areas were considered for the investigation. The research discovered significant relationships between the selected variables using OLS with a robust standard error. One of the study's key results is that board size has a negative and considerable impact on bank financial performance in China.

Zubeltzu-Jaka et al. (2018) found a similar finding after meta-analyzing 80 papers based on data from more than 80,000 international enterprises and published over 21 years (between 1997 and 2018). According to the conclusions of the study, the size of a corporate board has a major impact on its success. The findings also reveal that the independence of the board tends to amplify the impact of board size on performance. Furthermore, the type of the legal environment in which businesses function has been proven to have an impact on the relationship between board size and performance. Ohl, Isik and Riza (2016), and Uadiale (2010) also undertook a study that reported the same result.

According to other studies, the size of the board of directors has an adverse association with financial performance. Conyon and Peck (1998) observed similar findings in a study to determine how board size influences financial performance (measured in terms of ROE and TOBIN's Q). The research looked at businesses in five European countries (the UK, France, Italy, Denmark, and the Netherlands). The researchers looked at the impact of firm size on performance consistency. In all of the countries investigated, the size of the board of directors is inversely related to corporate performance, according to their findings. Bennedson et al. (2008) studied 700 closely held businesses. They discovered that increasing the size of boards has a detrimental impact on the financial success of the companies studied.

Other researchers, such as Coles et al. (2008), found a non-linear (U-shaped) relationship. They argue that a small or large number of boards may be the optimal size depending on the situation. Moreover, some actually connect the size of a company's board of directors to its financial performance. Kathuria & Dash (1999), in this regard, documented that large-sized firms may benefit from large-sized boards.

Given the contradictory nature of previous findings, the current study proposes the following:

**H<sub>a</sub>: Board size is significantly related to the financial performance of banks.**

## **Data and Variables**

The data for the study was obtained from secondary sources. Annual reports of the selected banks were content analyzed to extract the desired data related to each study variable. The annual reports were downloaded from the websites of each bank. Board size-related data were computed by

counting the board members appearing in the board of directors' section of the annual reports. Data related to financial performance and control factors were taken from the financial statement section of the annual report.

A total of fourteen banks (14) were included in the study. The study period ran from 2013 to 2020 (eight years), amounting to 112 bank years. The banks were selected based on specific criteria. The first is that the banks should be in operation within the period selected for the study. Secondly, their annual report should contain the data related to all the variables of the study. Thirdly the annual reports of the banks should be verified by external auditors.

**Measurement of variables and econometric specification**

The study included three groups of variables. Dependent, independent and control variables. Financial performance measured by the level of return on equity is the independent variable of the study. The size of the board is the dependent variable. The study controls for the effect of firm size, leverage, bank age and size of deposit. The details of this measurement are given below:

**ROE (return on equity):** relates to the return the owners of the banks generate per each investment in the shares of the banks. It is computed as the ratio of net income to average equity.

**Board size:** refers to the total number of members in the board room each year.

**Firm size:** refers to the size of the banks as measured by the total asset of each bank.

**Leverage:** refers to the level of debt in the capital structure of the banks. It is measured by scaling total debt to the total asset of the banks.

**Age:** refers to the number of years that have elapsed from the official establishment of each bank.

**Loan to deposit ratio:** refers to the deposit to loan mix of each bank. It is computed scaling the total loan to the total deposit of each bank.

**Size of deposit:** refers to the size of operation (in terms of level of deposit) for each bank. It is simply the total reported value total deposit in the balance sheet of each bank.

The regression model used in the study is specified as follows:

$$ROE_{it} = \beta_1 BSZ_{it} + \beta_2 SZ_{it} + \beta_3 LV_{it} + \beta_4 Ag_{it} + \beta_5 L/D_{it} + \beta_5 LgDEP_{it} + \epsilon_{it} \dots \dots \dots Eq.1$$

Where:

- *ROE<sub>it</sub>*= Return on equity for bank *i* at time *t*.
- *SZ<sub>it</sub>*= Size for bank *i* at time *t*.
- *LV<sub>it</sub>*= Leverage for bank *i* at time *t*.
- *Ag<sub>it</sub>*= Age of bank *i* at time *t*.
- *Ag<sub>rit</sub>*= Asset growth of bank *i* at time *t*.
- *L\_D<sub>it</sub>*= The loan to deposit ratio of bank *i* at time *t*.
- *LgDep<sub>it</sub>*= The logarithmic value of the size of deposit of of bank *i* at time *t*.

**Results and Discussions**

The current section contains a presentation of the findings as well as a discussion of the implications of the findings. The first section provides descriptive data for the study's variables, while the second section displays and explains the results of the regression model chosen for the investigation.

**Table 1** Descriptive statistics

	Mean	Median	Maximum	Minimum	Std. Dev.	Observations
ROAE	0.154528	0.138187	0.494012	0.019351	0.072246	112
BS	10.25893	10	14	7	1.64807	112
LGTASS	23.56272	23.51082	27.42503	20.63572	1.29294	112
LEV_	0.862064	0.867445	0.958134	0.740482	0.041372	112
LGAG	2.585453	2.639057	4.343805	0.693147	0.729962	112
L_D	0.656406	0.648264	1.121762	0.366695	0.115989	112
LGDEP	23.30956	23.26953	27.10964	20.27745	1.32018	112

Notes: In the table above, BS refers to the total size of the bank's board. LGTASS refers to the logarithmic transformed value of the total asset. Lev\_ refers to the value of leverage computed as a ratio of total debt and total assets. LGAG refers to the logarithmic transformed value of the age of the banks. L\_D refers to the loan to deposit ratio of the selected banks. LGDEP refers to logarithmic transformed value the total deposit of the firm ,

As can be seen in the table 1 above the average return on average asset for the entire sampled banks is 15.5 % and it has a standard deviation of .007. The average board size for the selected period turned out to be 10 with a variation of 1.6. the logarithmic value of the asset of the selected banks was computed to be 23.5 and has a standard deviation of 1.3. The leverage of the entire bank has a mean value of .86 and ranges within the maximum and minimum value of .95 and .74. The logarithmic age of the banks has a mean value 2.58. the loan to deposit ratio of the sampled bank turns out to have an average value of 0.65 and has a deviation of 0.12. The logarithmic value of the size of deposit of the selected banks amount to an average value of 23.3 with a standard deviation of 1.32

**Table 2 Panel regression**

Dependent Variable: ROAE				
Method: Panel EGLS (Cross-section weights)				
Sample: 2013 2020				
Periods included: 8				
Cross-sections included: 14				
Total panel (balanced) observations: 112				
Linear estimation after one-step weighting matrix				
Cross-section SUR (PCSE) standard errors & covariance (no d.f. correction)				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.829587	0.308693	2.687412	0.0085**
BS	-0.006560	0.003786	-1.732943	0.0865*
LGTASS	-0.309586	0.101905	-3.037990	0.0031**
LEV_	0.490055	0.246917	1.984690	0.0502*
LGAG	0.049964	0.020156	2.478941	0.0150**
L_D	0.249984	0.040735	6.136841	0.0000***
LGDEP	0.256170	0.096837	2.645373	0.0096**
Effects Specification				
Cross-section fixed (dummy variables)				
Weighted Statistics				
R-squared	0.700558	Mean dependent var	0.210820	
Adjusted R-squared	0.638717	S.D. dependent var	0.088680	
S.E. of regression	0.039010	Sum squared resid	0.140001	
F-statistic	11.32833	Durbin-Watson stat	1.713186	
Prob(F-statistic)	0.000000			

*Notes: In the table above, BS refers to the total size of the bank's board. LGTASS refers to the logarithmic transformed value of the total asset. Lev\_ refers to the value of leverage computed as a ratio of total debt and total assets. LGAG refers to the logarithmic transformed value of the age of the banks. L\_D refers to the loan to deposit ratio of the selected banks. LGDEP refers to logarithmic transformed value the total deposit of the firm \*significant at 10%, \*\*significant at 5%, \*\*\*significant at 1%*

The result in table two above contains values obtained by running fixed effect regression. Before running the model, however a number of assumptions were tested. The data was found to satisfy the assumption of normality (tested using Jarque-Bera). The requirements of autocorrelation was also tested using Durbin-Watson stat, which happened to be within the acceptable range. The assumption of homoskedasticity, however was not satisfied and as a result an estimated generalized least square regression (EGLS) with a fixed effect was run to deal with heteroskedasticity.

As the result indicates the model (with an R-square of 70% and a p-value of .0000) is fit for the purpose. The value for R-square indicates that the 70% of the variation in financial performance of the selected banks is explained by the variation in the size of boards controlling for the effect of bank specific factors.

The value obtained for board size indicates (with  $\beta = -0.00656$  and a P-value of  $=0.0865$ ) that it negatively and significantly affects the financial performance of banks. This implies that an increase in the size of board members is followed by a decline in return that owners generate over their equity investment. This result confirms the findings of Yermack (1996) who also documented an inverse association between the variables. It also goes in line with the assertion of agency theory that small boards are effective at monitoring and supervising the agents. Although large size may have its own benefits, the added cost associated with miscommunication and slow decision making outweighs it.

The control variables in the study also have all significant values. The size of the banks (measure in terms of their asset) is found to have an inverse relationship with performance. This indicates that larger banks may be entangled by diseconomies of scale and bureaucratic procedures which may hamper their performance. Leverage is found to be positively related with performance indicating that increased level of debt may sometimes generate additional return.

The relationship between age and performance is positive and significant, this indicates that banks who have been around for longer time benefit from the experience and learning obtained from longer years of operation. The level of deposit (measure as a ratio of loan to deposit and the logarithmic value ending balance of deposits) had a strong and beneficial impact on performance.

### **Conclusion and limitations**

The main purpose of the current study was to investigate the association between board size and financial performance. The study secured data from fourteen randomly selected banks in Ethiopia. The research used a panel regression model. According to the findings, board size has an unfavorable relationship with return on equity (financial performance).

The result conforms with the main tenets of agency theory, which claims that smaller boards are better at aligning managers' interest with that of shareholders of the banks. The results, however, failed to support the assertion of resource dependency theory which argues that large-sized board is better at dealing with the resource requirements of banks. Instead, the result has once again confirmed that board-related attributes like size are critical factors that the regulators need to seriously look at while developing proclamation, regulation, and directives related to the corporate governance of banks.

The study, however, has its limitations. The result of the study may not be generalized to the organization in other sectors. The study only focused on size. Other attributes such as experience, knowledge and skills, age, etc., were not considered. Other studies are expected to understand the effect of different board-specific attributes on the performance of banks. The study also didn't look into the effect that specific composition of board (such as the proportion of executive and non-executive board members or the presence of independent executives) may have on performance. Future research in this regard should investigate the potential contribution of board composition factors on performance of bank. It is also possible that banks may increase or decrease board size

based on the level of profit. Future research to this effect should look into the causality between the two variables,

## References

1. Adams, R. B., & Ferreira, D. (2007). *A theory of friendly boards*. *Journal of Finance*, 62(1), 217–250.
2. Baysinger, B. D., & Butler, H. N. (2019). *Corporate governance and the board of directors: Performance effects of changes in board composition*. *Corporate Governance: Values, Ethics and Leadership*, 1(1), 215–238.
3. *Basle Committee on Banking Supervision (2006): Enhancing corporate governance for banking organizations*. February 2006. Basel: Bank for Internat. Settlements.
4. Cadbury, A. (1992). *Report of the Committee on the Financial Aspects of Corporate Governance*. London: Gee.
5. Conyon, Martin J.; Peck, Simon I. (1998): *Board size and corporate performance. Evidence from European countries*. In *The European Journal of Finance* 4 (3), pp. 291–304.
6. Coles, J. L., Daniel, N. D., & Naveen, L. (2008). *Boards: Does one size fit all?* *Journal of Financial Economics*, 87(2), 329–356.
7. Fama, E. F., & Jensen, M. C. (1983). *Separation of ownership and control*. *Journal of Law and Economics*, 26(2), 301–325.
8. Huang, Chi-Jui (2010): *Board, ownership and performance of banks with a dual board system. Evidence from Taiwan*. In *Journal of Management & Organization* 16 (2), pp. 219–234.
9. ISIK, Ozcan; Riza INCE, Ali (2016): *Board Size, Board Composition and Performance. An Investigation on Turkish Banks*. In *IBR* 9 (2), p. 74.
10. JENSEN, M. C. (1993). *The Modern Industrial Revolution, Exit, and the Failure of Internal Control Systems*. *The Journal of Finance*, 48(3), 831–880.
11. Johl, Satirenjit Kaur; Kaur, Shireenjit; Cooper, Barry J. (2015): *Board Characteristics and Firm Performance. Evidence from Malaysian Public Listed Firms*. In *JOEBM* 3 (2), pp. 239–243.
12. Kathuria, V., & Dash, S. (1999). *Board Size and Corporate Financial Performance : An Investigation*. 24(3), 11–17.
13. Kama, U.; Chuku, C. (2009): *THE COPORATE GOVERNANCE OF BANKS IN NIGERIA. HOW EFFECTIVE ARE THE BOARDS OF DIRECTORS?*
14. h, J. W. (1992). *A modest proposal for improved corporate governance: Business source*. *Business Lawyer*, 42(1), 59–78.
15. Mülbert, Peter O. (2009): *Corporate Governance of Banks*. In *Eur Bus Org Law Rev* 10 (3), pp. 411–436.
16. Pathan, Shams; Skully, Michael; Wickramanayake, J. (2007): *Board Size, Independence and Performance. An Analysis of Thai Banks*. In *Asia-Pacific Finan Markets* 14 (3), pp. 211–227.
17. Pfeffer, J. (1973). *Size , Composition , and Function of Hospital Boards of Directors : A Study of Organization-Environment Linkage* .*Administrative Science Quarterly*, 18(3), 349–364.
18. Pfeffer, J. (2019). *Size and composition of corporate boards of directors: The organization and its environment*. *Corporate Governance: Values, Ethics and Leadership*, 17(2), 53–64.
19. TURLEA, Eugeniu; Mocanu, Mihaela; Radu, Carmen (2010): *Corporate governance in the banking industry*. In *Accounting & Management Information Systems / Contabilitate si Informatica de Gestiune* 9 (3), pp. 379–402.
20. Uadiale, Olayinka M. (2010): *The Impact of Board Structure on Corporate Financial Performance*

- in Nigeria. In International Journal of Business and Management 5 (10), pp. 155–166.*
21. Yermack, D. (1996). *Higher market valuation of companies with a small board of directors. Journal of Financial Economics, 40(2), 185–211.*
  22. Zubeltzu-Jaka, Eugenio; Andicoechea-Arondo, Lorea; Alvarez Etxeberria, Igor (2018): *Corporate social responsibility and corporate governance and corporate financial performance. Bridging concepts for a more ethical business model. In Bus Strat Dev 1 (3), pp. 214–222.*
  23. Zeiler, L. J. (2004). *Boards of Directors as an Endogenously Determined Institution: A Survey of the Economic Literature. CFA Digest, 34(1), 21–22.*