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Article

Corporate Governance Compliance in Banking Industry: The Role of the Board

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Abstract: This study seeks to supply empirical evidence for how board characteristics influence corporate governance compliance in the Indonesian banking industry. Corporate governance compliance level represents a company's actions to fulfill regulatory obligations that aim to protect the public from potential investment losses in the banking industry. This research was conducted by analyzing the influence of board characteristics, specifically how a board of commissioners' institutions and their instruments affect corporate governance compliance. The entire banking industry, which was listed on the Indonesia Stock Exchange from 2010 to 2015, was employed as the population for this research. Purposive sampling was used as the sampling technique, resulting in 195 observations. To test this study's hypotheses, multiple regression was applied as the data analysis method. The results revealed that the size of the board of commissioners, the proportion of independent commissioners, the experience of commissioners, and the size of the audit committee were factors that encouraged management in the banking industry to improve their firms' corporate governance compliance. This indicates that monitoring from the board acts as an effective mechanism for reducing information asymmetry. This research also proves that open innovation following regulations can increase compliance with laws.

Keywords: Corporate governance; board; commissioners' board; audit committee; risk-monitoring committee

1. Introduction

When the Asian Corporate Governance Association (ACGA) conducted an annual survey related to the application of corporate governance (CG) in various countries, as shown in Table 1 Indonesia came in 11th place after other Southeast Asian countries, such as Thailand (5th), Malaysia (6th), and the Philippines (10th) [1]. This demonstrated that companies in Indonesia still scored relatively low compared to companies in other countries regarding its compliance level for implementing corporate governance. For the Indonesian banking industry, results [2] showed that it scored only 4 out of 10 for transparency and accountability.

Table 1. Corporate governance (CG) watch market scores: 2010–2016.

No.	Country	2010	2011	2014	2016	Change	Direction of CG Reform
1	Singapore	67	69	64	67	3	Mostly sunny, but storms ahead?
2	Hong Kong	65	66	65	65	-	Action. Reaction: The cycle of Hong Kong life.
3	Japan	57	55	60	63	3	Cultural change occurring, but rules still weak.
4	Taiwan	55	53	56	60	4	Form now in need of substance.
5	Thailand	55	58	58	58	-	Could be on the verge of something great, if.
6	Malaysia	52	55	58	56	-2	Regulation improving, public governance failing.
7	India	49	51	54	55	1	Forward movement impeded by vested interests.
8	Korea	45	49	49	52	3	Forward movement impeded by vested interests.
9	China	49	45	45	43	-2	Failing further behind, but enforcement better.
10	Philippines	37	41	40	38	-2	New policy initiatives, but regulatory ennui.
11	Indonesia	40	37	39	36	-3	Losing momentum after progress of recent years.

Source: Asian Corporate Governance Association (2016).

The implementation of CG in Indonesia is mandatory. The authors in [2] posited that the results of a study conducted by Fair Finance Guide International (FFGI) were due to (1) a lack of bank information transparency, (2) low bank compliance, (3) a low level of bank interest transparency, and (4) risk management. Other opinions about limited accountability and transparency point to weak monitoring mechanisms, leading to a low corporate governance compliance level in the banking industry [3].

In 2015 FFGI study on transparency and accountability in seven countries' banking industries, including Indonesia. Transparency and accountability are elements of corporate governance, and while this study shows that some banks tried to implement corporate governance, some banks still have low scores. Indeed, most banks in Indonesia have low scores (less than 4 out of 10) for their level of transparency and accountability [4].

In 2015, only two banks originating from Indonesia received the 2015 ASEAN Corporate Governance Award for the 50 best Southeast Asia banks at implementing corporate governance compliance, namely, Bank CIMB Niaga (Tbk) and Bank Danamon (Tbk) [5]. This award recognizes that a bank is managed fairly, transparently, and with accountability, thus protecting the community, and growing sustainably and stably [6]. The 2015 ASEAN Corporate Governance Award recipients were judged on the basis of their transparency and compliance with local regulations [7].

Compliance with corporate governance by applicable regulations is necessary for the banking industry to achieve legitimacy in society [8]. Implementing effective corporate governance is also essential for cultivating and maintaining public confidence in banks [9]. Furthermore, the poor implementation of corporate governance has led to a banking crisis. As a result, a significant consequence of bad bank governance lowers public trust, which paralyzes the economy. This is because bank managers have their interests, increasing the likelihood of bank failure, and limiting corporate finance and economic development.

The authors in argued that, in this era of globalization, companies need to take advantage of external ideas, and of research and development results and regulations from outside the company, which is called open innovation. This assumes that a company can use ideas or rules that come externally and internally, hoping that the company becomes more sustainable. One of the banking industry's innovations is consistently complying with regulations from outside the company, namely, regulators, including the implementation of corporate governance.

Compliance with corporate governance practices is indispensable in modern business management structures supported by capital and money markets because it can enhance public trust in these companies. Noncompliance with corporate governance in the banking industry has led to banks experiencing financial crises and scandals due to weak supervision. Corporate governance compliance also plays a significant role in business sustainability [10]. It is the responsibility (accountability) of top-level bank management to the public. They are also directly responsible for their banks' shareholders and creditors for creating incentives for increased compliance to minimize the company's capital costs [11].

Compliance with corporate governance in the banking industry is also a way to protect the public from bank investment losses. Another view is that implementing CG can create value for shareholders and protect other community interests. Therefore, there is a belief that banking management, following relevant regulations, impacts by increasing the discipline of owners and other management entities, thereby increasing compliance with corporate governance [12].

In [13], the authors state that CG implementation can create shareholder value and fulfill the needs of society. As a result, banking risk has become the responsibility of company owners and depositors. Several previous studies into CG compliance level within the banking industry have not achieved much. Research was conducted in Indonesia [14,15]. African countries [16], Romania [17], Australia [18], India [19], Bangladesh [20] and Turkey [21]. Based on the results of various previous studies, it can be seen that the level of compliance with corporate governance is still a problem in multiple countries, including Indonesia. Low accountability and transparency are indications of weak monitoring mechanisms. This is thought to be a factor in the low corporate governance compliance level in the banking industry. This is by the opinion of [22] argue that weak monitoring is the cause of vulnerable application of corporate governance principles.

This study concerns compliance with corporate governance in the Indonesian banking industry. It aims to examine banking industry practices in implementing corporate governance. Corporate governance compliance results from the supervision of a board of commissioners. Therefore, this study also analyzes the role of a board of commissioners in overseeing corporate governance practices. Limited accountability and transparency indicate a weak monitoring mechanism, so this is a contributing factor for the low level of corporate governance compliance in the banking sector. This agrees with; the authors in also argued that weak monitoring leads to the poor implementation of corporate governance principles. A board (namely, a board of commissioners, an audit committee, and a risk-monitoring committee) can encourage better management of compliance aspects such as corporate governance. This mechanism is intended as an early warning system to get the organization back on track before it faces an alarming level of difficulty [23,24].

Research related to this board's characteristics was conducted [25–27], but these studies' results led to inconsistent conclusions. According to one study, inconsistent findings produced by corporate governance research resulted from differences in the legal and regulatory policies.

This current study assesses CG compliance by considering the items set by Bank Indonesia Regulation no. 8/14/2006. To the best of our knowledge, compliance level with corporate governance in the banking industry has not been examined in any previous research for Indonesia. To reach conclusions as to whether or not a board's characteristics influence the level of compliance with corporate governance, this study tested ten elements of the board.

2. Theoretical Background and Hypothesis Development

This study focuses on the level of compliance with corporate governance in the banking industry. According to one study, healthy CG implementation reduces the costs that a company must bear and brings long-term benefits. Indeed, favorable conditions can only be maintained for as long as investors are confident in a well-managed company. Therefore, companies need to improve their CG compliance, so that people are more interested in investing in them. The application of CG protects the interests of shareholders and the community, and the board plays the role of supervising and directing management in optimizing a company's performance. Thus, research from agency theory provides an understanding of the importance of monitoring manager behavior, which is carried out due to the separation between ownership and control of the company. Thus, this research looks at the importance of supervision in monitoring management and explains the monitoring role of a board in encouraging management to become more compliant with corporate governance regulations. Therefore, agency theory is based on the disharmonious relationship between company owners and managers, which leads to conflicts, and it emphasizes the vital role of a board in the CG mechanism.

In public companies, governance is a steering mechanism by a social system that manages public affairs, and collectively produces and implements decisions to improve people's welfare. Furthermore, corporate governance is a metaresponsibility and key in achieving responsibility for innovation. Study results proved that management policies influence the company's innovation process, including the dominant innovation model, technology development, and performance.

The larger the board size is, the more natural and effective it is to monitor management activities. The banking industry's compliance with regulations also reflects effective monitoring by a board of commissioners. One study posits that a larger commissioners' board may be advantageous because it increases the expertise and resources available in the company. Other studies [28–30] supported the positive effect on board size on the level of compliance with corporate governance. Corporate governance is the relationship among owners, managers, and stakeholders, and other rules that are used. Therefore, this rule refers to attributes of individual company managers. Thus, it is important to examine the characteristics of boards of commissioners in this study, which aims to examine the behavior of board of commissioners attributes in carrying out its responsibilities of supervising company managers.

Such boards have more power, so pressure exerted through more extensive monitoring is also more significant, leading to better compliance with corporate governance. The corresponding research hypothesis, therefore, is:

Hypothesis 1 (H1). *Commissioner Board Size Has A Positive Effect on the Level of Corporate Governance Compliance.*

Research found that including commissioners from outside the company increases its effectiveness at monitoring management. Indeed, a higher proportion of independent commissioners can help ensure that company management complies with applicable regulations [31,32], so the greater the number of independent members on a board is, the better its mechanism for monitoring company management. There is also the opinion that a high proportion of independent commissioners facilitates more substantial control over managerial decisions because they have an incentive to maintain a positive image and attract outside sources of capital. One area that may be affected by independent commissioners is compliance with corporate governance. One study found that independent commissioners can improve the quality of corporate governance. According to, effective monitoring is carried out by members of a commissioners' board, but their knowledge can vary, so it is not always optimal. The corresponding research hypothesis is:

Hypothesis 2 (H2). *A Higher Proportion of Independent Commissioners Has a Positive Effect on the Level of Compliance with Corporate Governance.*

Commissioners with more experience and knowledge about the company influence management performance, including increasing compliance with corporate governance. [33,34] study showed how experience leads to increasing corporate compliance for companies listed on the Danish Stock Exchange. In, meanwhile, the authors stated that a board of commissioners with expertise in various positions provides benefits for the company thanks to knowledge and insights. Therefore, the experience of board members is thought to be decisive in increasing compliance with corporate governance compliance.

Indeed, research showed that board members with extensive experience can improve compliance with corporate governance. Furthermore, another study for companies listed on the Danish Stock Exchange concluded that experience affects corporate governance compliance. The third research hypothesis is, therefore, as follows:

Hypothesis 3 (H3). *The Experience of Commissioners Has a Positive Effect on the Level of Corporate Governance Compliance.*

The number of board meetings is also proposed to improve a board's effectiveness. Some even believe that more sessions held by a board of commissioners can enhance compliance with regulations such as corporate governance. The supervisory role of a board of commissioners is determined not just by its structure and composition, but also by its process for meetings. During these, many supervisory matters are discussed, and important decisions are made. These meetings' frequency may also reflect the extent to which the board is involved in management oversight. Some propose that the monitoring activities carried out by a board of commissioners can be measured according to the number of meetings because it is one indication of an effective monitoring mechanism. For the banking industry of Malaysia, one study demonstrated the positive influence of many meetings by a board of commissioners on corporate governance [35]. This research was supported by another study of Southeast Asia that concluded that an increase in corporate governance compliance was influenced by the many decisions made at board of commissioners meetings. The corresponding research hypothesis is, therefore:

Hypothesis 4 (H4). *More Frequent Meetings of a Board of Commissioners Positively Affect the Level of Compliance with Corporate Governance.*

According [16] argued that more members on audit committees lead to improved management policies that follow regulations, including compliance with corporate governance. Therefore, the quality of management policies is determined by the results of effective monitoring, and the greater the size of an audit committee is in a company, the better its level of compliance with regulations such as corporate governance is. This agrees with other research that companies with larger audit committees tend to be more compliant with regulations.

Other research [36] also showed a positive influence of audit committee size on the level of compliance with corporate governance. The corresponding research hypothesis is, therefore, as follows:

Hypothesis 5 (H5). *The Size of An Audit Committee Has A Positive Effect on the Level of Corporate Governance Compliance.*

Researchers [37] argued that an audit committee with expertise can improve financial management and compliance with regulations because a committee with accounting and business skills can cultivate regulatory discipline, and thus enhance the quality of financial statements. The skills of an audit committee can also help increase the scope of compliance oversight in the United States, and the benefits resulting from a well-composed audit committee can have positive impact on a company when there are strong and binding regulations to follow. Another study [38] reinforced how audit committees play a significant role in organizational direction, supervision, and accountability. The associated research hypothesis is, therefore, as follows:

Hypothesis 6 (H6). *The Experience of An Audit Committee Has A Positive Effect on the Level of Compliance with Corporate Governance.*

Meetings are held to direct, monitor, and evaluate company policies. Some argued that frequent meetings of an audit committee result in more active monitoring. One study showed that, in Malaysia, the more the sessions that are held by an audit committee, the more it seems to produce management decisions regarding regulations and business ethics [39]. Another study argued that frequent meetings of an audit committee's members result in ineffective monitoring. Meanwhile, [40] stated that the frequency of audit committee meetings determines its assessment of disclosure, principles, and compliance. More frequent committee meetings allow for it to immediately identify problems that occur in the company, including those related to disclosure and compliance. Other research concluded that the frequency of meetings positively influenced the level of corporate governance compliance. The corresponding research hypothesis is, therefore, as follows:

Hypothesis 7 (H7). *The Frequency of Audit Committee Meetings Has A Positive Effect on the Level of Compliance with Corporate Governance.*

In [41] the authors posited that the more members there are on a risk-monitoring committee, the more optimal the monitoring of management becomes. Hence, information is more transparent and can be used to improve performance. The authors in found a similar effect of having more members on risk-monitoring committees. In, meanwhile, it was argued that a risk-monitoring committee can reduce management noncompliance with regulations, which, in turn, lowers company losses. The authors in studied businesses in the UK for the 1981–2001 period, and found that a larger risk-monitoring committee plays a significant monitoring role and ensures that company information is disclosed, thus potentially improving the quality of corporate governance. Research in also showed that a risk-monitoring committee's size has a positive effect on improving corporate governance compliance [42]. Thus, the size of a risk-monitoring committee seems to encourage management to comply with regulations, including corporate governance, as represented in the following research hypothesis:

Hypothesis 8 (H8). *The Size of A Risk-Monitoring Committee Has Positive Impact on the Level of Compliance with Corporate Governance.*

The authors in reported that a risk-monitoring committee's expertise is also crucial in overseeing risk management to implement corporate governance [43]. A risk-monitoring committee's expertise can effectively mitigate company risk and ensure that the company's operations are following applicable regulations, including corporate governance. Recommendations passed to a board of commissioners can be more optimal with a high level of expertise on a risk-monitoring committee.

Research conducted in Australia showed that a risk-monitoring committee's expertise plays a role in reducing banks' risk, and compliance with corporate governance practices can also reduce business risk in banks [44]. The associated research hypothesis is, therefore, as follows:

Hypothesis 9 (H9). *A Risk-Monitoring Committee's Expertise Positively Influences the Level of Compliance with Corporate Governance.*

In, the authors posited that a risk-monitoring committee's meetings effectively obtain information about management compliance with risk management, which in turn manifests in corporate governance [45]. The authors in proposed that the number of risk-monitoring committee meetings positively affects company management's compliance with applicable regulations, including corporate governance [46–48]. Furthermore, found that risk-monitoring committee meetings effectively obtain management compliance information for risk management, which is essential to corporate governance [49]. Therefore, the frequency of risk-monitoring committee meetings affects the early detection of risks and management's compliance levels. The authors in stated that a risk-monitoring committee can function effectively in monitoring management if it holds enough management meetings [35,50–53]. The corresponding research hypothesis is, therefore, as follows:

Hypothesis 10 (H10). *The Frequency of Risk-Monitoring Committee Meetings Has A Positive Impact on the Level of Compliance with Corporate Governance.*

3. Methodology and Data

This study's population comprised Indonesia's banking industry as listed on the Indonesia Stock Exchange over the 2010–2015 period: 42 banks, including 4 state-owned banks, 37 privately owned banks, and 2 mixed-ownership banks.

Choosing 2010 was because of Bank Indonesia Regulation no. 11/1/2009 for commercial banks. The regulation reaffirms the obligations of the banking industry in Indonesia to implement corporate

governance. Meanwhile, the mandatory implementation of corporate governance is stipulated in Bank Indonesia Regulation no. 8/14/PBI/2006 concerning corporate governance in the Indonesian banking industry.

Another cause is the global financial crisis in 2008–2009, which affected the financial sector, especially banking in Indonesia. Therefore, this study examines whether these events subsequently affected the level of corporate governance compliance during the 2010–2015 period. Two studies had been carried out in Indonesia for the Islamic banking industry [54,55].

This research formulates its operational variables and their measurements as follows:

The size of a board of commissioners is the total number of commissioners from internal and external companies who supervise the directors.

$$\text{Size_BC} = \sum \text{president commissioner} + \text{independent commissioners} \quad (1)$$

Independent commissioners are not affiliated with company management, other board members, or controlling shareholders. They are free from business or other relationships that may affect their ability to act independently.

$$\text{Prop_IC} = (\sum \text{of independent commissioners}) / (\text{size of board of commissioners}) \quad (2)$$

Commissioner experience is based on the number of members on a board of commissioners with previous experience in various positions. Experienced commissioners are members of a board of commissioners who have previous experience in multiple places. In addition, a board of commissioners that has experience in various positions provides benefits for the company because of the knowledge and insights that it has.

$$\text{Commissioner experience} = (\sum \text{of experienced commissioners}) / (\text{number of commissioners}) \quad (3)$$

A board of commissioners' meeting frequency is based on how many meetings they hold each year [2].

$$\text{Meet_BC} = \sum \text{meetings of board of commissioners in a year} \quad (4)$$

The size of an audit committee is the total number of members on the audit committee in the company.

$$\text{Size_AC} = \sum \text{audit committee member} \quad (5)$$

Audit committee expertise is defined in this study on the basis of its members' accounting and financial knowledge. This definition was formulated on the basis of PBI no. 8/14/PBI/2006 concerning the implementation of corporate governance for commercial banks.

$$\text{Expt_AC} = (\text{Members of AC with accounting/financial education}) / (\sum \text{audit committee members}) \quad (6)$$

Audit committee meeting frequency is based on how many meetings they hold each year.

$$\text{Meet_AC} = \sum \text{audit committee meetings in a year} \quad (7)$$

Risk-monitoring committee size is the number of members tasked with ensuring sound risk management.

$$\text{Size_RC} = \sum \text{members of risk-monitoring committee.} \quad (8)$$

Risk-monitoring committee expertise is based on how many members have a certificate of risk expertise or previous relevant experience in the bank.

$$\text{Expr_RC} = \frac{(\sum \text{accounting/risk-management background})}{(\sum \text{risk-monitoring committee member})} \quad (9)$$

In line with, the frequency of risk-monitoring committee meetings is based on the committee's number of sessions each year.

$$\text{Meet RC} = \sum \text{audit committee meetings in a year} \quad (10)$$

This study's dependent variable is the level of corporate governance compliance, specifically for the banks listed on the Indonesia Stock Exchange from 2010 to 2015. The more items that comply with CG regulations in a bank there are, the higher its CG compliance score is. Therefore, a higher CG compliance score reflects that a bank has implemented CG more comprehensively than a bank with a lower score has.

The formula used is as follows:

$$\text{CG} : \sum \frac{\text{The CG Disclosure score is available in the annual report}}{\text{The Overall CG disclosure score}} \times 100\% \quad (11)$$

where CG, level of CG compliance; 1, CG disclosure score is available in the annual report; and 0 = CG disclosure score is not available in the annual report.

Measurement of compliance with corporate governance using a disclosure score informs on variations in compliance with corporate governance items in the annual report. This study's scoring method is the unweighted method, where each item on the level of corporate governance compliance has the same weight (considered equally important). The researcher gives each item of CG compliance a score of 1 for compliance with regulations (Comply) and a score of 0 for noncompliance.

Measurement of the level of corporate governance compliance uses scoring techniques to indicate variations in corporate governance compliance. The scoring method is carried out by preparing a corporate governance compliance checklist on the basis of Bank of Indonesia Regulation no. 8/14/2006 concerning good corporate governance for commercial banks. On the basis of these regulations, each bank is required to disclose 114 items and six elements of corporate governance.

Additional testing is carried out to support the primary model and provide confidence in the obtained results, so this study carried out further testing by dividing the research sample into 2 parts, examples of state ownership and private ownership, and by dividing the models with high and low CG compliance levels. The aim was to obtain proof that additional test results support the main test results. The used test tool was logistic regression.

4. Results and Discussion

On the basis of Table 2 mean CG score is 0.955, meaning that the average level of CG compliance in the sample companies was 95.50%. This indicates that Indonesia's banking industry complies reasonably well with regulations through the implementation of corporate governance.

Table 3 below shows the pooled data by subcategory for the level of compliance with corporate governance. These subcategories are Directors (91%–100%), Audit Committee (95%–100%), Risk-Monitoring Committee (87%–100%), Remuneration and Nomination Committee (91%–100%), and Audit Functions, which seemed to be stable (100%). The Board of Commissioners, meanwhile, experienced the fewest changes (91%–95%).

Table 2. Descriptive statistics.

Variable		Minimum	Maximum	Mean	Median	Std. Dev
CG	(%)	0.83	1	0.955	0.97	0.05
Size BC	(People)	2	9	4.91	4	1.8
Prop IC	(%)	0.5	1	0.59	0.57	0.1
Expr. BC	(%)	0.2	1	0.55	0.5	0.2
Meet BC	(X)	4	64	14.75	10	14.03
Size AC	(People)	2	8	3.8	3	1.1
Expt. AC	(%)	0.25	1	0.71	0.67	0.21
Meet AC	(X)	3	46	15.07	13	7.75
Size RC	(People)	2	8	4.16	4	1.41
Expt. RC	(%)	0.13	1	0.42	0.33	0.16
Meet RC	(X)	2	36	9.08	7	6.28
LDR	(%)	1	140.72	82.45	84.95	15.17
Size AT	(Rp)	6.81	28.36	16.48	16.59	2.72

Variable descriptions:

CG: Corporate governance;

Size BC: Size of a board of commissioners;

Prop IC: Proportion of independent commissioners;

Expr. BC: Commissioner experience;

Meet BC: Frequency of commissioner board meetings;

Size AC: Audit committee size;

Expt. RC: Expertise of risk-monitoring committee;

Meet AC: Frequency of audit committee meetings;

Size RC: Size of risk-monitoring committee;

Expt. RC: Expertise of risk-monitoring committee;

Meet RC: Frequency of risk-monitoring committee meetings;

LDR: Loan-to-deposit ratio;

Size AT: Asset total.

Table 3. Pooled data.

Subcategory	Data Pooled	2010	2011	2012	2013	2014	2015	Trend
Board of Commissioners	93%	91	91	93	95	95	94	Increase
Directors	96%	92	91	95	100	100	100	Increase
Audit Committee	97%	95	95	97	100	100	100	Increase
Risk-Monitoring Committee	94%	87	86	92	100	100	100	Increase
Remuneration and Nomination Committee	96%	91	91	95	100	100	100	Increase
Audit Function	100%	100	100	100	100	100	100	Stable
Level of Compliance	96%	93	92	95	99	99	99	Increase

Table 3 details the changes in each subcategory for levels of corporate governance compliance each year. The lowest overall corporate governance compliance level occurred in 2011, with a percentage value of 92%. However, board of Commissioners subcategories, namely, Directors, Audit Committee, Risk-Monitoring Committee, and Remuneration and Nomination Committee, increased almost every year. The highest compliance (99%) was sustained over the final three years of the study period, while the audit function was overall consistently good (100%).

As a comparison, previous studies found that the average level of compliance with corporate governance in the banking sector in various countries was: India, 82.47%; Bangladesh, 54% [4]; Tunisia, 54%; Turkey, 84.44%, and Bosnia Herzegovina, 76%. However, this study's results indicate that the Indonesian banking industry's CG compliance rate is 96%. These results suggest that CG compliance with CG was relatively higher than it is was other countries from to previous studies. When referring to the effects of other studies, namely, [56,57] results are contrary to this study's results. These results suggest that the Indonesian banking industry only complied with regulators' regulations, aiming to avoid sanctions imposed by regulators.

Table 4 shows that the adjusted R^2 score is 0.384, meaning that variations in the independent variables can explain 38.4% of the characteristic variables. Other variables outside the model must, therefore, explain the remaining 61.6%. On the basis of the ANOVA test, an F value of 14.461 was obtained with a significance level of 0.000, clearly less than 0.05. Therefore, this regression model is suitable for estimating the level of corporate governance compliance. The small adjusted R^2 value is due to other factors that could affect corporate governance compliance. Conceptually, other factors that affect corporate governance compliance include ownership structure and capital structure. Another cause of the low adjusted R^2 value is that some of the variables in this study produce nominal values.

Table 4. Regression results.

Variable	Regression Coefficient	T Count	Sig	
Size BC	0.007	3.331	0.001	***)
Prop IC	0.070	1.676	0.095	*)
Expr BC	0.027	1.814	0.071	*)
Meet BC	−0.066	−1.109	0.269	
Size AC	0.006	1.807	0.072	*)
Expt. AC	0.013	0.501	0.842	
Meet AC	0.045	−0.727	0.468	
Size RC	0.075	0.807	0.421	
Expt. RC	0.029	0.501	0.617	
Meet RC	−0.061	−1.001	0.318	
LDR	0.010	0.155	0.877	
Size AT	0.041	0.703	0.483	
Type Bank	0.017	2.427	0.014	**)
Year_2011	0.052	0.681	0.497	
Year_2012	0.028	2.915	0.004	***)
Year_2013	0.068	7.069	0	***)
Year_2014	0.070	7.312	0	***)
Year_2015	0.069	7.902	0	***)
R^2	0.413			
Adjusted R^2	0.384			
F	14.461			
Sig	0.000			

***) significant at $\alpha = 1\% = 0.01$. **) significant at $\alpha = 5\% = 0.05$. *) significant at $\alpha = 10\% = 0.1$.

From results of the predicted value of the relationship between variables, it can be concluded that the monitoring role carried out by the Board of Commissioners in the Indonesian banking industry has not been able to overcome the weak implementation of corporate governance. Therefore, the regulators' role is crucial in monitoring the banking industry's activities in Indonesia so that public trust in the banking industry can improve. This result states that law enforcement is weak in the Indonesian banking industry.

Research findings in Table 4 show that the size of a board of commissioners helps monitor management in making decisions. Support for this result can be found in previous research that posited that, as a board of commissioners grows larger, it encompasses more knowledge and skills among its members. The proportion of independent commissioners also positively affects the level of corporate governance compliance, supporting the argument that a more independent board is better at carrying out effective monitoring and improving compliance with corporate governance. The results of this study are in line with some prior research.

Research findings also demonstrate the influence of commissioners' experience on the level of corporate governance compliance. According to, two things affect commissioners' experience: Their time in office as company management and their performance. This is also consistent with the evidence of other research in that the amount of experience possessed by commissioners influences

improvements in performance, such as better corporate governance. This study also supports the analysis of two other studies [58,59].

This study's results showed no evidence for the frequency of meetings of a board of commissioners influencing corporate governance compliance. During these meetings, routine activities are carried out, such as presenting management reports and other formal events, and unfocused company issues are discussed [60]. They take up much of the time in the conference, and thereby reduce the effectiveness of the commissioners. This finding is not in line with those of other studies [61,62].

The findings of this study also revealed the positive influence of audit committee size on the level of compliance with corporate governance. An audit committee oversees managers, internal auditors, and external auditors, and ascertains whether they are acting in the company's significant interests. This finding agrees with that of a previous study that found that an audit committee influences management monitoring. Other research showed that audit committee size can be a factor in reducing errors in policy and ensuring the effectiveness of its monitoring.

There was no proof that an audit committee's expertise influences corporate governance compliance, even though this would presumably affect its supervision results. This finding does not support the opinion that an audit committee's expertise helps a board of commissioners oversee the financial reporting process. The overall process is increasingly significant for forming a company with the right corporate governance [63]. However, this study's results were not in line with those of similar studies in Indonesia. Still, they support research that found that an audit committee's expertise reduced the level of corporate governance compliance.

The hypotheses suggest the positive influence of an audit committee's meeting frequency on corporate governance compliance, supporting the findings of a previous study. Still, this study's results indicate that this does not hold. Therefore, this study supports some research, but not the findings of other studies [64].

Research showed that the size of a risk-monitoring committee does not affect the level of corporate governance compliance, which conflicts research conducted in Taiwan that found a positive influence on corporate governance quality. However, this finding does agree with research conducted for the banking industry in the United States, which concluded that risk-monitoring committee size has no influence. This study also supports the research conducted by [65].

This study also proves expected that the expertise of a risk-monitoring committee may influence corporate governance compliance. However, this study's results indicated that it has no such effect on corporate governance compliance. Therefore, the value of recommendations given to a board of commissioners is not determined by the expertise of a risk-monitoring committee, reinforcing similar research conducted in Australia.

This study also suggested that the frequency of meetings for a risk-monitoring committee may positively affect the level of corporate governance compliance. A risk-monitoring committee is a risk oversight mechanism for monitoring company management. However, the results do not support this conjecture. Therefore, the frequency of meetings is not a relevant factor in determining the monitoring function of a risk-monitoring committee and its effect on the level of compliance with corporate governance. Therefore, this study supports some research [66] while disagreeing with the findings of other studies [67].

4.1. Additional Testing Analysis

Additional testing was carried out to establish whether the above analysis results were consistent with and applicable to subsamples with similar characteristics. This test was performed by grouping banks on the basis of their level of corporate governance compliance. Therefore, the sample was divided into two groups: Banks with low and high levels of corporate governance compliance. Furthermore, this division used the story of bank compliance with state-owned enterprises (SOEs) and non-SOEs. This relates to large companies' high banking risks, thus encouraging them to closely follow applicable

regulations. The purpose of this is to ensure that the main test results can predict according to the criteria for grouping the research sample.

Table 5 indicates that there is empirical evidence for accepting H2, so the proportion of independent commissioners positively influences the level of compliance with corporate governance. There was also support for H5 and the positive effect of audit committee size on the level of corporate governance compliance. Thus, accepting Hypotheses H2 and H5 implies that a more significant proportion of independent commissioners and a larger audit committee can increase the chances of increasing its corporate governance compliance level.

Table 5. Effect of board characteristics on level of corporate governance compliance (logistic regression model).

Variable	Regression Coefficient	Wald	Sig	
Size BC	0.461		0.497	
Prop IC	6.211	5.357	0.021	**)
Expr BC	0.060		0.807	
Meet BC	1.306		0.253	
Size AC	0.400	2.992	0.084	*)
Expt. RC	1.090		0.297	
Meet AC	0.053		0.817	
Size RC	1.297		0.255	
Expt. RC	0.058		0.810	
Meet RC	0.067		0.796	
LDR	0.032	5.171	0.023	**)
Size AT	0.001		0.981	
Type Bank	−1.082	5.850	0.016	**)
Year_2011	−2.116		0.000	
Year_2012	−0.967		0.067	
Year_2013	6.934		0.008	
Year_2014	6.549		0.010	
Year_2015	19.393	0.000	0.997	
Summary model:				
Cox and Snell R square	0.268			
Nagelkerke R square	4.955			
Homer and Lemeshon test:				
p value	0.762			
Chi squared	4.955			
Prediction:				
n Total			195	
Sample prediction with a high CG level category			11	143 92.90%
Sample prediction with a low CG level category			19	22 46.30%
Overall prediction				83.10%

**): significant at $\alpha = 5\% = 0.05$. *): significant at $\alpha = 10\% = 0.1$.

Research findings also employed the loan-to-deposit ratio (LDR) as a control variable. Results indicate that the LDR influences the level of corporate governance compliance. In contrast, the Total Assets (Ln_Asset) control variable did not affect the level of corporate governance compliance. Lastly, bank type as a control variable significantly influenced corporate governance compliance.

Furthermore, dummy variables 2011, 2012, 2013, 2014, and 2015 were used as control variables in this study. This study indicated that the 2011 and 2012 dummy variables affected the level of compliance with corporate governance but reduced respect.

4.2. Analysis Results Based on Groups of Bank Types

This study pursued further analysis in the form of testing the banking industry sample on the basis of ownership, namely, for BUMN (state-owned) and non-BUMN banks.

The test results of Table 6 show that variables for the size of a board of commissioners (Size BC), the proportion of independent commissioners (Prop IC), audit committee size (Size AC), the expertise of an audit committee (Expt. AC), and the frequency of audit committee meetings (Meet AC) were deemed to influence corporate governance compliance. However, a board of commissioners (Size BC) and the proportion of independent commissioners (Prop IC) negatively affect corporate governance compliance. The control variable was just Year_2013, with Year_2014 and Year_2015 showing a change in the level of corporate governance compliance in testing state-owned banks. Meanwhile, test results also showed that commissioner experience (Expr. BC), the frequency of meetings for a board of commissioners (Meet BC), the size of a risk-monitoring committee (Size RC), the expertise of a risk-monitoring committee (Expt. RC), and the frequency of meetings of a risk-monitoring committee (Meet. RC) do not significantly affect the level of corporate governance compliance. Meanwhile, the LDR control variable, Size AT, Year_2011, and Year_2012 were also not influential.

Table 6. Analysis results for state-owned and non-state-owned banks.

Variable	CG (State-Owned)		CG (Non-State-Owned)	
Size BC	−0.022		0.007	
	0.002	***)	0.003	***)
Prop IC	−0.208		0.113	**)
	0.017	**)	0.022	
Expr. BC	0.078		0.008	
	0.206		0.909	
Meet BC	−0.129		−0.052	
	0.269		0.460	
Size AC	0.041		0.002	
	0.000	***)	0.987	
Expt. AC	0.097		0.080	
	0.004	***)	0.238	**)
Meet AC	0.004		−0.070	
	0.007	***)	0.327	***)
Size RC	0.093		0.002	***)
	0.645		0.987	
Expt. RC	−0.076		0.080	
	0.563		0.238	
Meet RC	−0.017		−0.070	
	0.883		0.327	
LDR	0.008		0.001	
	0.953		0.011	
Size AT	0.099		0.043	
	0.363		0.542	
Year_2011	−0.118		−0.062	
	0.311		0.000	
Year_2012	0.061		−0.029	
	0.601		0.005	
Year_2013	0.032		0.073	
	0.017	**)	0.307	
Year_2014	0.061		0.101	
	0.000	***)	0.154	
Year_2015	0.030		0.127	
	0.025	**)	0.082	
R ²	0.846		0.286	
Adjusted R ²	0.776		0.264	
F	12.188		12.747	
Sig	0.000		0.000	

***): Significant at $\alpha = 1\% = 0.01$. **): Significant at $\alpha = 5\% = 0.05$.

This study's findings for this group of state-owned banks showed differences when compared to examining the entire sample. This reinforces the notion that the type of bank affects its compliance with corporate governance. Of course, differences in the number of observations could cause these variations in state-owned banks' results compared with those for the whole sample. However, the optimal role of elements of a board in state-owned banks was highlighted in the studies.

These results support variables for a board of commissioners (Size BC) and the proportion of independent commissioners (Prop IC). Significant control variables were just Year_2011 and Year_2012, which were shown to influence the level of corporate governance compliance in testing non-BUMN banks. Still, these were found to reduce the level of compliance with corporate governance. Meanwhile, test results also showed that commissioner experience (Expr. BC), the frequency of meetings for a board of commissioners (Meet BC), audit committee size (Size AC), the expertise of an audit committee (Expt. AC), the frequency of audit committee meetings (Meet AC), the size of a risk-monitoring committee (Size RC), the expertise of a risk-monitoring committee (Expt. RC), and the frequency risk-monitoring committee meetings (Meet RC) did not have a proven effect on the level of corporate governance compliance. Meanwhile, control variables Size AT, Year_2013, Year_2014, and Year_2015 also did not prove to be influential.

Testing this group of non-state-owned banks again showed differences when compared to examining entire sample. This also reinforces the notion that the type of bank affects its level of compliance with corporate governance. However, these results do indicate the optimal role played by elements of a board in non-state-owned banks. However, it is possible that differences in the number of observations could have caused observed variations in the results for non-state-owned banks.

This study proves that compliance with corporate governance is one way for innovation for the banking industry [68]. Design is also key to increasing productivity and competitiveness. An innovative company stems through the desire of company owners and stakeholders that it can improve performance. The absence of innovation can lead to business stagnation, which makes it vulnerable to decline in performance. Therefore, the banking industry must innovate and think outside the box to compete with other sectors.

Corporate governance can direct a business towards better innovation to avoid losses. Innovation made through compliance with corporate governance creates legitimacy, effectiveness, and efficiency in corporate management. Thus, without innovation by the banking industry through compliance with the implementation of corporate governance, it is impossible to achieve challenging goals and business sustainability [69]. According to [70], the banking industry that will be sustainable has open innovation; however, the more significant the free design, the greater the risks. This is because there will be more and more potential information and policies received from outside the company, which will result in massive policy changes. Therefore, optimal control and management supervision are expected to produce innovative policies that provide opportunities for business sustainability [68].

Thus, the banking industry's development in a modern economy requires various technical expertise and adjustments to the environment, including regulations. Therefore, the process of innovation in services increasingly implies connection, linkage, and cooperation with multiple organizations, one of which is the regulator in various stages of developing new services in the banking industry [70].

5. Conclusions

These results indicated that the size of a board of commissioners has a positive influence; the greater the size of the board is, the more compliant a bank is with corporate governance practices. With more commissioners, it is also easier to supervise and control the management of the company. Independent commissioners also have more power to supervise a company, and because they can act more independently, their supervisory function is more effective.

Commissioners' experiences also affect the effectiveness of their supervisory activities. When they have an excellent level of knowledge and understanding, they can provide more effective supervision

and advice to encourage management to be more compliant with corporate governance practices. The research did not find any effect of meeting frequency for a board of commissioners on the level of corporate governance compliance. Therefore, corporate governance compliance is determined by the quality of the held meetings rather than by their frequency.

The size of an audit committee positively affects the level of corporate governance compliance, reflecting how an audit committee is tasked with assisting the board of commissioners in monitoring a company. However, this study could not establish that this committee's expertise positively influences the level of compliance with corporate governance. This may be because members' expertise on an audit committee is limited to financial matters.

This study's results indicated that risk-monitoring committee size does not affect the level of corporate governance compliance. It is suspected that many, or at least some, members on risk-monitoring committees are not effectively monitoring management. This committee's expertise also did not seem to affect the level of compliance with corporate governance. It was also established that increasingly complex banking business activities followed developments in the banking sector's external and internal environment, so the banks' risks are even more complicated. This study could not prove that the frequency of meetings for a risk-monitoring committee influences corporate governance compliance. It is suspected that the banking industry's complex risks are not resolved through a more significant number of meetings, but rather through fewer, highly productive meetings.

The results of this study have implications for policymakers, among others, Financial Services Authority (OJK) drafts rules regarding criteria for the size of a board of commissioners according to the complexity of the banking industry. There are rules from the Financial Services Authority that regulate the number of independent commissioners according to the level of each bank's risk and compliance with laws. The Financial Services Authority needs to prepare rules regarding the requirements to become a member of a commission, namely, having previous experience, being on a board of commissioners, or being the president director of a company. The Financial Services Authority prepares rules regarding criteria for the size of audit committees that are adjusted to the size and complexity of the banking sector.

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References

1. Asian Corporate Governance Association (ACGA). Available online: <http://acga-asia.org> (accessed on 3 May 2017).
2. Ali, A. 48 Banks in Seven Countries Received Transparency Red Report Cards. 2015. Available online: <http://economy.okezone.com/read/2015/06/11/457/1163744/48-bank-in-seven-countries-can-report-red-transparency> (accessed on 11 June 2017).
3. Akinkoye, E.Y.; Olanmi, O.O. Corporate governance practice and level of compliance among firms in Nigeria: Industry analysis. *J. Bus. Retail. Manag. Res.* **2014**, *9*, 13–25. Available online: https://www.jbrmr.com/cdn/article_file/i-20_c-179.pdf (accessed on 11 June 2017).
4. Fair Finance Guide International (FFGI). Accountability and Transparency. 2015. Available online: <https://fairfinanceguide.se/media/60800/ffgi-transparency-report-2015.pdf> (accessed on 12 July 2016).
5. TheJakartapost. Available online: <https://www.thejakartapost.com/news/2015/11/17/corporate-governance-indonesia-below-asean-par.html> (accessed on 18 May 2017).
6. Finansialbisnis. Available online: <https://finansial.bisnis.com/read/20151116/90/492648/danamon-raih-asean-corporate-governance-awards-2015> (accessed on 21 April 2017).
7. Infobanknews. Available online: <https://infobanknews.com/kumpulan-berita-bank-hari-ini/btn-raih-asean-corporate-governance-award/> (accessed on 22 November 2016).

8. Benson, J.K.; Pfeffer, J.; Salancik, G.R. The External Control of Organizations. *Adm. Sci. Q.* **1978**, *23*, 358. [CrossRef]
9. Basel Committee on Banking Supervision. Principles for Effective Risk Data Aggregation and Risk Reporting. 2013. Available online: <http://www.bis.org/publ/bcbs222.pdf> (accessed on 11 June 2017).
10. Madhani, P.M.; Sapovadia, V.K. Corporate Governance and Disclosure Practices in India: MNC Subsidiaries versus Domestic Cross-Listed Firms. *SSRN Electron. J.* **2015**. [CrossRef]
11. Schadewitz, H.; Niskala, M. Communication via responsibility reporting and its effect on firm value in Finland. *Corp. Soc. Responsib. Environ. Manag.* **2010**, *17*, 96–106. [CrossRef]
12. Kirkpatrick, G. The corporate governance lessons from the financial crisis. *OECD J. Financ. Mark. Trends* **2009**, 61–87. [CrossRef]
13. Rezaee, Z. *Corporate Governance and Ethics*; John Wiley and Sons: Hoboken, NJ, USA, 2009.
14. Saramawati, D.A.M.; Lubis, A.T. Analysis of Sharia Compliance Disclosure in the Implementation of Good Corporate Governance in Bank Syariah Indonesia. *Jurnal Akuntansi dan Keuangan Islam* **2014**, *2*, 107–126. [CrossRef]
15. Darmadi, S. Do women in top management affect firm performance? Evidence from Indonesia. *Corp. Gov. Int. J. Bus. Soc.* **2013**, *13*, 288–304. [CrossRef]
16. Jallow, K.; Ntim, C.G.; Opong, K.K.; Danbolt, J.; Thomas, D.A. Voluntary corporate governance disclosures by post-Apartheid South African corporations. *J. Appl. Account. Res.* **2012**, *13*, 122–144. [CrossRef]
17. Danescu, T.; Spatacean, O. Assessing compliance with corporate governance principles in case of Romanian financial investment companies. *Ann. Univ. Apulensis Ser. Oeconomica* **2011**, *13*, 338–350. Available online: <https://pdfs.semanticscholar.org/abae/625db678a34c68067ec609d9e18478ae543a.pdf> (accessed on 20 June 2016).
18. Safari, M.; Mirshekary, S.; Wise, V. Compliance with corporate governance principles: Australian evidence. *Australas. Account. Bus. Financ. J.* **2015**, *9*, 3–19. [CrossRef]
19. Hossain, M.; Reaz, M. The determinants and characteristics of voluntary disclosure by Indian banking companies. *Corp. Soc. Responsib. Environ. Manag.* **2007**, *14*, 274–288. [CrossRef]
20. Azim, M.I.; Ahmed, S.; Islam, S. Corporate Social Reporting Practice: Evidence from Listed Companies in Bangladesh. *J. Asia-Pac. Bus.* **2009**, *10*, 130–145. [CrossRef]
21. Gurarda, S.; Ozsoz, E.; Ates, A. Corporate Governance Rating and Ownership Structure in the Case of Turkey. *Int. J. Financ. Stud.* **2016**, *4*, 8. [CrossRef]
22. Abu-Risheh, K.E.; Al-Sa'Eed, M.A. The impact of good corporate governance practices on financial reporting quality: Empirical evidence from Jordanian listed companies. *Corp. Ownersh. Control.* **2012**, *9*, 178–186. [CrossRef]
23. Fama, E.F.; Jensen, M.C. Separation of ownership and control. *J. Law Econ.* **1983**, *26*, 301–325. [CrossRef]
24. Lukviarman, N. *Corporate Governance: Towards Conceptual Strengthening and Implementation in Indonesia*; Era Adicitra Intermedia: Jawa Tengah, Indonesia, 2016.
25. Holm, C.; Scholer, F. Board Competency Explanations for Differentiation in a Harmonisation Environment. *Rev. Eur. Stud.* **2012**, *4*. [CrossRef]
26. Ibrahim, M.Y.; Che-Ahmad, A.; Johl, S.K.; Rahman, H.U. The Impact of Corporate Governance Regulations on the Board of Independence and Quality of Financial Information Reporting: A Proposed Study. In Proceedings of the Euro Proceedings of Soc and Behav Sc EpSBS, Tomsk, Russia, 11–16 September 2016.
27. Saad, N.M. Corporate Governance Compliance and the Effects on Capital Structure in Malaysia. *Int. J. Econ. Financ.* **2010**, *2*. [CrossRef]
28. Joshi, A.; Ruparel, P. *Angel Financing in the Asia Pacific*; Emerald Publisher: Bingley, UK, 2016; pp. 151–169.
29. Kang, H.; Cheng, M.; Gray, S.J. Corporate governance and board composition: Diversity and independence of Australian boards. *Corp Gov. An. Int. Rev.* **2007**, *15*, 194–207. [CrossRef]
30. Chau, G.; Gray, S.J. Family ownership, board independence and voluntary disclosure: Evidence from Hong Kong. *J. Int. Account. Audit. Tax.* **2010**, *19*, 93–109. [CrossRef]
31. Grassa, R.; Chakroun, R. Ownership structure, Board's characteristics, and corporate governance disclosure in GCC banks: What about Islamic banks? *Int. J. Account. Audit. Perform. Eval.* **2016**, *12*, 360–395. [CrossRef]
32. Ettredge, M.L.; Heintz, J.; Li, C.; Scholz, S. Auditor Realignment Accompanying Implementation of SOX 404 ICFR Reporting Requirements. *SSRN Electron. J.* **2010**. [CrossRef]
33. Tagesson, T.; Collin, S.O.Y. Corporate governance influencing compliance with the Swedish Code of Corporate Governance. *Int. J. Discl. Gov.* **2016**, *13*, 262–277. [CrossRef]

34. Chemmanur, T.J.; Paeglis, I.; Simonyan, K. Management quality, financial and investment policies, and asymmetric information. *J. Financ. Quant. Anal.* **2009**, *44*, 1045–1079. [CrossRef]
35. Abdullah, S.N.; Yusof, N.Z.M.; Nor, M.N.M. Financial restatements and corporate governance among Malaysian listed companies. *Manag. Audit. J.* **2010**, *25*, 526–552. [CrossRef]
36. Crişan, A.R.; Fülöp, M.T. The Role of the Audit Committee in Corporate Governance—Case Study for a Sample of Companies Listed on BSE and the London Stock Exchange-FTSE 100. *Procedia Econ. Financ.* **2014**, *15*, 1033–1041. [CrossRef]
37. Baxter, P.; Cotter, J. Audit committees and earnings quality. *Account. Financ.* **2009**, *49*, 267–290. [CrossRef]
38. Lee, H.Y.; Mande, V. The relationship of audit committee characteristics with endogenously determined audit and non-audit fees. *Q. J. Bus. Econ.* **2005**, *44*, 93–112. [CrossRef]
39. Saleh, N.M.; Iskandar, T.M.; Rahmat, M.M. Audit committee characteristics and earnings management: Evidence from Malaysia. *Asian Rev. Account.* **2007**, *15*, 147–163. [CrossRef]
40. Islam, M.; Haque, R. Disclosure of Corporate Governance Compliance of State Owned Commercial Banks in Bangladesh and Stakeholders' Expectation. *Res. J. Financ. Account.* **2015**, *6*. Available online: <https://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.914.2595&rep=rep1&type=pdf> (accessed on 22 June 2016).
41. Nor, F.M.; Shaharuddin, A.; Marzuki, A.; Nawai, N.; Zainuddin, W.M. Risk Management, Shariah Compliance Governance and Sustainable Growth of Islamic Banks in Malaysia. *Adv. Sci. Lett.* **2017**, *23*, 5011–5015. [CrossRef]
42. Ng, T.H.; Chong, L.L.; Ismail, H. Is the risk management committee only a procedural compliance? *J. Risk Financ.* **2013**. [CrossRef]
43. Krus, C.M.; Orowitz, H.L. The Risk-Adjusted Board: How Should The Board Manage Risk? *Corp. Gov. Advis.* **2009**, *17*, 2–35. Available online: <https://us.eversheds-sutherland.com> (accessed on 22 June 2016).
44. Harris, M.; Raviv, A. A Theory of Board Control and Size. *Rev. Financ. Stud.* **2006**, *21*, 1797–1832. [CrossRef]
45. Tao, N.B.; Hutchinson, M. Corporate governance and risk management: The role of risk management and compensation committees. *J. Contemp. Account. Econ.* **2013**, *9*, 83–99. [CrossRef]
46. Subramaniam, N.; McManus, L.; Zhang, J. Corporate governance, firm characteristics and risk management committee formation in Australian companies. *Manag. Audit. J.* **2009**, *24*, 316–339. [CrossRef]
47. Ingle, C.; Van Der Walt, N. Do Board Processes Influence Director and Board Performance? Statutory and performance implications. *Corp. Gov. Int. Rev.* **2005**, *13*, 632–653. [CrossRef]
48. Ntim, C.G. The King reports, independent non-executive directors and firm valuation on the Johannesburg stock exchange. *Corp. Ownersh. Control.* **2011**, *9*, 428–440. [CrossRef]
49. Shawtari, F.A.; Salem, M.A.; Hussain, H.I.; Alaeddin, O.; Thabit, O.B. Corporate governance characteristics and valuation: Inferences from quantile regression. *J. Econ. Financ. Adm. Sci.* **2016**, *21*, 81–88. [CrossRef]
50. Albring, S.; Robinson, D.; Robinson, M. Audit committee financial expertise, corporate governance, and the voluntary switch from auditor-provided to non-auditor-provided tax services. *Adv. Account.* **2014**, *30*, 81–94. [CrossRef]
51. Al-Mamun, A.; Yasser, Q.R.; Rahman, M.A.; Wickramasinghe, A.; Nathan, T.M. Relationship between audit committee characteristics, external auditors and economic value added (EVA) of public listed firms in Malaysia. *Corp. Ownersh. Control* **2014**, *12*, 899–910. [CrossRef]
52. Saufanny, A.D.; Khomsatun, S. Corporate Governance and Risk Management Disclosure for Islamic Banks in Indonesia. 2017. Available online: <https://ouci.dntb.gov.ua/works/98ywjRR7/> (accessed on 22 June 2016).
53. Maradita, A. Karakteristik Good Corporate Governance Pada Bank Syariah dan Bank Konvensional. 2014. Available online: <https://e-journal.unair.ac.id/YDK/article/view/366> (accessed on 22 June 2016).
54. Henry, D. Agency costs, ownership structure and corporate governance compliance: A private contracting perspective. *Pac. Basin Financ. J.* **2010**, *18*, 24–46. [CrossRef]
55. Del Carmen Briano-Turrent, G.; Poletti-Hughes, J. Corporate governance compliance of family and non-family listed firms in emerging markets: Evidence from Latin America. *J. Fam. Bus. Strategy* **2017**, *8*, 237–247. [CrossRef]
56. Magang, T.I.; Magang, V.G. Corporate Governance and Compliance in Botswana: Issues and Challenges. 2016. Available online: <https://core.ac.uk/download/pdf/267833059.pdf> (accessed on 22 June 2016).
57. Alfraih, M.M. The effectiveness of board of directors' characteristics in mandatory disclosure compliance. *J. Financ. Regul. Compliance* **2016**, *24*, 154–176. [CrossRef]

58. Al-Sartawi, A.M.M.; Alrawahi, F.; Sanad, Z. Board characteristics and the level of compliance with IAS 1 in Bahrain. *Int. J. Manag. Financ. Account.* **2017**, *9*, 303–321. [\[CrossRef\]](#)
59. Juhmani, O. Corporate governance and the level of Bahraini corporate compliance with IFRS disclosure. *J. App. Acc. Res.* **2017**. [\[CrossRef\]](#)
60. Talaular, T.; Werder, A.V. Patterns of compliance with the German corporate governance code. *Corp. Gov. Int. Rev.* **2008**, *16*, 255–273. [\[CrossRef\]](#)
61. Safari, M. Board and audit committee effectiveness in the post-ASX Corporate Governance Principles and Recommendations era. *Manag. Financ.* **2017**, *43*, 1137–1151. [\[CrossRef\]](#)
62. Bansal, N.; Sharma, A.K. Audit committee, corporate governance and firm performance: Empirical evidence from India. *Int. J. Econ. Financ.* **2016**, *8*, 103. [\[CrossRef\]](#)
63. Crawford, M.; Stein, W. Risk management in UK local authorities. *Int. J. Pub. Sect. Manag.* **2004**, *17*, 498–512. [\[CrossRef\]](#)
64. Al-Hadi, A.; Hasan, M.M.; Habib, A. Risk committee, firm life cycle, and market risk disclosures. *Corp. Gov. Int. Rev.* **2016**, *24*, 145–170. [\[CrossRef\]](#)
65. Manab, N.A.; Kassim, I.; Hussin, M.R. Enterprise-Wide Risk Management (EWRM) Practices: Between Corporate Governance Compliance and Value. 2010. Available online: [https://www.semanticscholar.org/paper/Enterprise-Wide-Risk-Management-\(EWRM\)-Practices%3A-Manab-Kassim/e3d94bd5bb714ba20087dc9964a5cf27e0a06149](https://www.semanticscholar.org/paper/Enterprise-Wide-Risk-Management-(EWRM)-Practices%3A-Manab-Kassim/e3d94bd5bb714ba20087dc9964a5cf27e0a06149) (accessed on 5 May 2017).
66. Tornjanski, V.; Marinkovic, S.; Levi-Jaksic, M.; Bogojevic-Arsic, V.; Vesna, T.; Sanja, M.; Maja, L.-J. The prioritization of open innovation determinants in banking. *Industrija* **2015**, *43*, 81–105. [\[CrossRef\]](#)
67. Xiaoren, Z.; Ling, D.; Xiangdong, C. Interaction of open innovation and business ecosystem. *Int. J. u- e-Serv. Sci. Technol.* **2014**, *7*, 51–64.
68. Marinkovic, S.; Jaksic, M.L.; Manic, B. Service innovations based on ICT implementation-roles of NSD participants. *Tech. Technol. Educ. Manag.* **2011**, *6*, 438–446. Available online: https://www.researchgate.net/publication/286688905_Service_innovations_based_on_ICT_implementation_-_roles_of_NSD_participants (accessed on 11 May 2016).
69. Witt, U. What kind of innovations do we need to secure our future? *J. Open Innov. Tech. Mark. Comp.* **2016**, *2*, 17. [\[CrossRef\]](#)
70. Ismail, T.; Meutia, M.; Ummi, N. Enabling management control in improving the performance of SMEs. *Manag. Sci. Lett.* **2019**, 1823–1832. [\[CrossRef\]](#)

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