Journal of Ecohumanism
2024
Volume: 3, No: 8, pp. 1081 – 1092
ISSN: 2752-6798 (Print) | ISSN 2752-6801 (Online)
https://ecohumanism.co.uk/joe/ecohumanism
DOI: https://doi.org/10.62754/joe.v3i8.4797

Post-Pandemic Analysis of Governance and Performance in Indonesia's Regional Development Banks

Taufiqurrahman[1], Alvi Furwanti Alwie[2]

Abstract

This study examines the governance structures and mechanisms influencing the performance of Indonesia's regional development banks (BPDs) during and beyond the COVID-19 pandemic. By analyzing financial and annual reports from 27 regional development banks across Indonesia, the study explores both the immediate and lasting impacts of governance elements, including board size, board independence, and committee structures, on bank performance. Using a two-stage least squares (2SLS) regression model, findings reveal that certain governance elements, such as the risk monitoring committee size, positively impacted performance during the pandemic, whereas larger board sizes and higher board independence were associated with negative outcomes. Additionally, other governance factors, such as board meeting frequency and audit committee size, did not significantly influence performance during the crisis. The research highlights that the stability observed in BPDs during the pandemic was primarily driven by external factors, including regional economic growth and credit expansion, rather than governance mechanisms alone. These findings suggest that while crisis-era governance structures were adequate during the pandemic, post-pandemic recovery and resilience will require more adaptable governance frameworks. As BPDs face evolving challenges in the financial sector, this study underscores the importance of enhancing strategic oversight and adjusting governance practices to foster long-term stability. This research contributes to the literature on governance and crisis management in regional banks, offering insights for regulators and practitioners seeking to reinforce governance frameworks that support sustainable performance in the face of new economic realities.

Keywords: *Bank Performance, Governance, Regional Development Banks, Post-Pandemic Resilience, COVID-19 Impact.*

Introduction

The Covid-19 pandemic, which began in 2020, dramatically impacted the Indonesian economy, including the banking sector. While the performance of many banks declined during this period, Indonesia's regional development banks (BPD) showed notable resilience. The present study not only investigates BPD performance during the pandemic but extends the analysis to assess factors that may support their continued stability and growth in the post-pandemic era. Understanding how governance structures can adapt to both crisis and post-crisis conditions is essential as BPDs face new economic pressures and opportunities in the evolving financial landscape. They tend to be stable, while other banks are just the opposite. In general, the average return on assets (ROA) of banking before the pandemic was 2.47%, and when the pandemic hit, it was 1.72%. Specifically, state-owned and private banks fell deeper than BPDs. The average ROA of state-owned banks fell from 2.81% to 1.80% and private banks from 2.11% to 1.58%. Meanwhile, BPD only fell slightly, from 2.15% to 2.04%.

The positive performance of BPD during the pandemic has received much public attention, especially from regulators. It is because, before the pandemic, they experienced several problems. One of the crucial problems in BPD is related to its governance. The results of the audit of the Supreme Audit Agency of the Republic of Indonesia revealed that there were 117 findings containing 165 problems with BPD in 2019. Most of them are related to governance, especially the weaknesses of the internal control system and its non-compliance. In addition, the Financial Services Authority (hence shortened as OJK in Indonesian) also considers that the integrity and professionalism of its human resources are still low. Thus, it can potentially threaten the sustainability of their business in the future (Ulya, 2020). In line with that statement, the Research Director of the Center of Reform on Economics, Piter Abdullah, also assessed that their capital

[1] Leturer in the Department of Management, Faculty of Economics and Business, Universitas Riau, Indonesia. Email: taufiqurrahman@lecturer.unri.ac.id, (Corresponding author).
[2] Lecturer in the Department of Management, Faculty of Economics and Business, Universitas Riau, Indonesia, Email: alvi.furwanti@lecturer.unri.ac.id.

Journal of Ecohumanism
2024
Volume: 3, No: 8, pp. 1081 – 1092
ISSN: 2752-6798 (Print) | ISSN 2752-6801 (Online)
https://ecohumanism.co.uk/joe/ecohumanism
DOI: https://doi.org/10.62754/joe.v3i8.4797

and governance are still low and not optimal (Anggraeni, 2022). Why are they even better off during the pandemic?

It is undeniable that governance plays an essential role in company performance, especially in the financial sector, such as banks. Since first introduced until now, the concept of governance has been believed to be positively correlated with company performance. Good governance will drive good performance and vice versa. The past financial crisis experiences have all been triggered by poor governance, as stated by the Organization for Economic Cooperation and Development (OECD) and the National Commission on the Causes of the Financial and Economic Crisis in the United States. Banks with poor governance are involved in excessive risk-taking, resulting in more significant losses during the crisis (The Financial Crisis Inquiry Report, 2011).

However, the empirical evidence on this point is inconsistent. Most studies found a positive relationship between governance and performance (e.g., Chazi et al., 2018; Başar et al., 2021), some did not, and some found a negative relationship (e.g., Aebi et al., 2012; Moudud-Ul-Huq et al., 2018).

This article focuses on our main question above. Specifically, we will explore how governance plays a role in explaining their performance during the Covid-19 pandemic. This article makes two significant contributions to the academic literature. First, this research is the first to examine the effect of governance on bank performance during the Covid-19 pandemic. Therefore it is hoped to enrich the literature on the relationship between governance and bank performance during a crisis, more specifically due to the Covid-19 pandemic. Second, it enriches the literature on governance in local government-owned banks, which is also very rarely explored by other researchers.

Literature Review

Regional Development Banks and Their Governance

Regional Development Banks (*BPD*) are banks where the Regional Government controls most ownership. These banks were established with two main objectives, to encourage regional economic growth and to increase regional income. These banks operate like commercial banks but are not foreign exchange banks.

BPD governance adheres to a two-tier system separating supervisory and management functions. The supervisory function in this system is referred to as the board of Commissioners, while the management function is referred to as the Board of directors. Specifically, *BPD* governance arrangements are regulated under Law No. 13 of 1962 and Financial Services Authority Regulation No. 55/POJK.03/2016.

BPD is a bank controlled by the regional government, the election or replacement of the board of directors and commissioners is carried out directly by the governor through the General Meeting of Shareholders (GMS). However, the election or replacement must consider the remuneration and nomination committee's recommendations. The board of directors must be at least three people, and all of them must be Indonesian residents. The board of directors must be chaired by a presidential director and come from a party independent of the controlling shareholder. Most members of the board of directors must have experience, a minimum of five years in the operational field as a bank executive, and each member must also meet the fit and proper test requirements. In addition, board members of directors are prohibited from holding concurrent positions and owning shares of more than 25% of the paid-up capital in other companies. Most Board of Directors members are also prohibited from having family relationships to the second degree with fellow members of the Board of Directors or members of the Board of Commissioners.

Similar to the board of directors, the election or replacement of the board of commissioners is also carried out by the governor through the GMS by considering the recommendations of the remuneration and nomination committee. The minimum number of the board of commissioners is three people. The maximum is equal to the number of the board of directors, and a minimum of one of them must be an Indonesian resident. A president commissioner must lead the board of commissioners. Fifty percent of the board of commissioners are required to be independent, and all boards of commissioners must also meet the

Journal of Ecohumanism
2024
Volume: 3, No: 8, pp. 1081 – 1092
ISSN: 2752-6798 (Print) | ISSN 2752-6801 (Online)
https://ecohumanism.co.uk/joe/ecohumanism
DOI: https://doi.org/10.62754/joe.v3i8.4797

requirements of a competency and compliance assessment. The majority of the board of directors is also prohibited from having family relationships, as is the case with the board of directors. In order to support the effective implementation of duties and responsibilities, the board of commissioners must establish an audit committee, a risk monitoring committee, and a remuneration and nomination committee.

Bank Governance and Performance

The relationship between governance and performance has been studied extensively. The common hypothesis built for this relationship is positive. It is based on agency theory, where an active board can reduce agency problems. However, the empirical evidence regarding this relationship is diverse. Some studies show a positive relationship (e.g., Khanifah et al., 2020; Felício et al., 2018; Peni & Vähämaa, 2012; Al-Gamrh et al., 2018), while others find a negative relationship (e.g., Fahlenbrach and `Stulz, 2011; Beltratti and Stulz, 2012; Aebi et al., 2012; Erkens et al., 2012; Minton et al., 2011). The diversity in the results of studies of this relationship is caused by various factors, mainly due to the problem of measuring governance itself. Since the concept of governance was introduced until now, there has been no consensus on the measurement of governance. Some researchers use elements of governance structures and mechanisms (e.g., Bjagat and Bolton, 2019; Aebi et al., 2012), and others use specific indices (e.g., Moudud-Ul-Huq, 2015; Moudud-Ul-Huq et al., 2018; Al-Gamrh et al., 2018; Khanifah et al., 2020).

This study uses elements of governance structures and mechanisms by considering the following aspects: (1) This measurement is dominantly used by researchers; (2) for data reasons. The governance structure and mechanism elements include board size, board meetings, board independence, and committees. The relationship of the elements of the governance structure and mechanism to the company's performance will be described in the following sub-sections.

Board Size and Bank Performance

One of the critical issues in the governance literature is the size of the board to resolve agency problems. Board size refers to the number of directors (including commissioners in a two-tier system), where the higher number indicates a large board size, and vice versa. Board sizes vary by industry. Generally, board sizes in financial industries (such as banks) are larger than in non-financial industries, such as manufacturing and services. It is due to the very different characteristics between these industries, where the financial industry is subject to strict regulations.

There is no standard on board size, and the empirical evidence is also inconsistent. Some researchers found a positive relationship between board size and firm performance (e.g., Dalton et al., 1999; Adams and Mehran, 2005; Malik et al., 2014), and others found a negative relationship (e.g., Beltratti and Stulz, 2012; Liang et al., 2013; Amedi and Mustafa, 2020). Researchers who find a positive relationship argue that a large board size can improve monitoring and advisory functions, thereby improving the quality of governance and corporate performance. Meanwhile, the researchers who found a negative relationship argued that a large board size could lead to inefficiency. Specifically, a large board size can increase costs and information asymmetry, decrease productivity, coordination, and ineffective communication (Fidanoski et al., 2014). In banking in India, Gafoor et al. (2018) found that board size will positively impact bank performance when the board size ranges from 6 to 9 people, but if it is below or above that range, it becomes inefficient. Large board sizes will create diversity, but it will create coordination problems. On the other hand, a small board size will be more active but less than optimal and even have the potential to malfunction the board itself. Therefore, Mustafa et al. (2017) proposed an adequate board size of around eight people. Thus, the proposed hypothesis is:

H_1:Board Size Influences Bank Performance.

Board Meeting and Bank Performance

Board meetings are an essential part of the corporate governance mechanism. It is intended to discuss essential issues to make decisions for the company's progress and growth (Eluyela et al., 2018). Meeting

Journal of Ecohumanism
2024
Volume: 3, No: 8, pp. 1081 – 1092
ISSN: 2752-6798 (Print) | ISSN 2752-6801 (Online)
https://ecohumanism.co.uk/joe/ecohumanism
DOI: https://doi.org/10.62754/joe.v3i8.4797

frequency indicates the number or how often the meeting is held. Board members' diligence shows their activeness in carrying out their duties. This persistence can be measured by board attendance at each meeting (Ghosh, 2007; Johl et al., 2015; Ilaboya and Obaretin, 2015). The meeting frequency that is too high is considered unfavourable because it often causes the diversion of time, energy, and organizational resources to less productive activities. Most empirical studies also show that high meeting frequency is negatively related to bank performance (e.g., Taghizadeh and Saremi, 2013; Johl et al., 2015; Lorsch and Maclver, 1989; Ilaboya and Obaretin, 2015). Therefore, Johl et al. (2015) suggested that meetings should only discuss important issues less frequently. Thus, the proposed hypothesis is:

H_2: The frequency of board meetings is negatively related to bank performance.

Board Independence and Bank Performance

Board independence refers to directors (including commissioners in a two-tier system) who do not have any relationship with the company except for the board's position. The percentage of independent boards can measure board independence for the entire board. Agency theory proposes separating ownership and management to maximize their interests (Jensen and Meckling, 1979). In order to reduce conflicts of interest, an independent board is expected to be able to monitor and control management activities to encourage company performance (Walsh and Seward, 1990). Board independence is considered very important to increase the effectiveness of supervision (Chancharat et al., 2012) to prevent opportunistic behaviour from management (Lo et al., 2010). In addition, an independent board also plays a vital role in the decision-making process, especially strategic decisions (Nugroho and Eko, 2012).

Empirical evidence regarding the relationship of board independence with performance is also inconsistent. The majority of researchers found a positive relationship (Gafoor et al., 2018; Francis et al., 2012; Liang et al., 2013; Muniandy and Hillier, 2015; Liu et al., 2015), and some did not find a significant relationship (e.g., Francis et al., 2012). Fuzi et al. (2016) argue that the relationship between board independence and performance varies. If independent boards are assigned to compliance issues, their presence will not improve performance. However, expanding their duties may encourage better performance. Thus, the proposed hypothesis is:

H_3: The Independence of board meetings is positively related to bank performance.

Bank Governance and Performance Committee

In line with Financial Services Authority Regulation No. 55/POJK.03/2016, commercial banks (including BPD) are required to form at least three committees, the audit committee, the risk monitoring committee, and the remuneration and nomination committee. These committees are aimed at increasing the effectiveness of the implementation of supervisory duties and responsibilities, which will positively impact bank performance. Specifically, Tao and Hutchinson (2013) found that the size of the risk and compensation committee is positively related to risk and, in turn, will affect bank performance. Meanwhile, Salim et al. (2016) found that committee meetings positively affect company efficiency. Similarly, Munisi and Randoy (2013) and Chou and Buchdadi (2017) also found the critical role of governance committees on bank performance. Thus, the proposed hypothesis is:

H_{4a}: The size and frequency of audit committee meetings are positively related to bank performance.

H_{4b}: The size and frequency of risk monitoring committee meetings are positively related to bank performance.

H_{4c}: The size and frequency of remuneration and nomination committee meetings are positively related to bank performance.

Journal of Ecohumanism
2024
Volume: 3, No: 8, pp. 1081 – 1092
ISSN: 2752-6798 (Print) | ISSN 2752-6801 (Online)
https://ecohumanism.co.uk/joe/ecohumanism
DOI: https://doi.org/10.62754/joe.v3i8.4797

Methodology

This study encompasses a two-year analysis, capturing both the height of the COVID-19 pandemic and the immediate post-pandemic period to identify governance structures that may sustain or hinder long-term bank resilience.

Data

The data covers all regional development banks (27) between 2020 and 2021. The data is collected from the financial and annual reports of each bank.

Independent Variables: Bank Performance

Bank performance is proxied by capital, profitability, efficiency, and liquidity. Capital is measured by the capital adequacy ratio (CAR = capital/risk-weighted assets*100%), with the minimum CAR standard for commercial banks in Indonesia being 8% (Bank Indonesia Regulation No. 10/15/PB/2008). Profitability is measured by return on assets (ROA = profit/total assets*100%), and there is no standard for this ratio. Efficiency is measured by operating costs to operating income (OEOI = operating expenses/operating income*100%), with a healthy standard ratio ranging from 94%-96% (Bank Indonesia Circular No. 6/23/DPNP/2004). Liquidity is measured by loan to deposits ratio (LDR = total loan/total deposits*100%), with an ideal standard ratio of 75%-80%.

Independent Variables: Bank Governance

Governance is proxied by five indicators, namely:

- Board size (BS) is measured by the natural logarithm of the number of board members.
- Board meetings (BM) are measured by the natural logarithm of the number or frequency of board meetings per year.
- Board Independence (BI) is measured by the ratio of the number of independent boards to total board members.
- Committee Size (CZ) consists of three, namely the audit committee size (CZ_Aud), the risk committee size (CZ_Risk), and the remuneration and nomination committee size (CZ_RN). Committee size is measured by the natural logarithm of the number of committee members.
- The committee meeting (CM) consists of three, namely the audit committee meeting (CM_Aud), the risk committee meeting (CM_Risk), and the remuneration and nomination committee meeting (CM_RN). Committee meetings are measured by the natural logarithm of the number or frequency of meetings per year.

Control Variables

The researcher used four main control variables (two of which are from internal banks, and the other two are from external banks). The control variables from the internal bank are company size (log_total assets) and loan growth (LG), while the external ones are regional economic growth (REG) and population. Data for internal control variables were obtained from the bank's financial and annual reports, while data for external control variables were obtained from the Central Bureau of Statistics.

Journal of Ecohumanism
2024
Volume: 3, No: 8, pp. 1081 – 1092
ISSN: 2752-6798 (Print) | ISSN 2752-6801 (Online)
https://ecohumanism.co.uk/joe/ecohumanism
DOI: https://doi.org/10.62754/joe.v3i8.4797

Data Analysis Model

Data analysis used a two-least squares (2SLS) model, intended to control the endogeneity problem between elements of governance and bank performance. The equation model that we developed for this research is:

$$|CAR_{it}|, |ROA_{it}|, |OEOI_{it}|, |LDR_{it}| = \alpha + \beta_1 BS_{it} + \beta_2 BM_{it} + \beta_3 BI_{it} + \beta_4 CS\_Aud_{it} + \beta_5 CS\_Risk_{it} + \beta_6 CS\_RN_{it} + \beta_7 CM\_Aud_{it} + \beta_8 CM\_Risk_{it} + \beta_9 CM\_RN_{it} + \beta_{10} Size_{it} + \beta_{11} LG_{it} + \beta_{12} REG_{it} + \varepsilon_{it}$$

Where: CAR_{it} is bank capital i in year t; ROA_{it} is the profitability of bank i in year t; $OEOI_{it}$ is the efficiency of bank i in year t; LDR_{it} is the liquidity of bank i in year t; BS_{it} is the board size for bank i in year t; BM_{it} is a board meeting for bank i in year t; BI_{it} is board independence for bank i in year t; CS_Aud_{it} is the size of the audit committee for bank i in year t; CS_Risk_{it} is the size of the risk committee for bank i in year t; CS_RN_{it} is the size of the remuneration and nomination committee for bank i in year t; CM_Aud_{it} is the audit committee meeting for bank i in year t; CM_Risk_{it} is a risk committee meeting for bank i in year t; CM_RN_{it} is the meeting of the remuneration and nomination audit committee for bank i in year t; $Size_{it}$ is the size of bank i in year t; LG_{it} is credit growth for bank i in year t; REG_{it} is regional economic growth for bank i in year t; α is a constant; β is the slope; and ε is the residual error.

Results and Discussion

During the Covid-19 pandemic, the performance of regional development banks tends to be stable. All their key performance indicators are still at the standards the central bank and financial services authorities set, except for the LDR, which has slightly increased (see Table 1). Their average CAR is 21.65%, ROA is 2.14%, and OEOI is 78.29%. The average LDR is 82.71%, higher than the standard, 75%-80%. The average company board is eight people, 54% of the board of directors and 46% of the board of commissioners, with an average proportion of independent boards of around 45.94%. On average, the number of board meetings is six times per year, with the lowest frequency only five times, while the highest is 29 times per year.

The committees formed to improve governance quality are almost identical from one bank to another. All *BPD*s have three committees: the audit, risk monitoring, and remuneration and nomination committees. The average size of each committee is around four people, the lowest is three people, and the highest is 5 to 6 people. However, the meeting frequency of each committee varies greatly. On average, the audit committee meets about six times yearly; the lowest is four times, and the highest is 31 times. Meanwhile, the risk monitoring committee held up to 17 meetings a year on average, with the lowest meeting frequency three times and the highest meeting 24 times. It shows that the Covid-19 pandemic causes bank risk to increase. The remuneration and nomination committees meet on average only two meetings per year, but some hold more than two meetings, some even 16 meetings per year.

Table 1. Statistics

	N	Min	Max.	Mean	STDev.	Kurt.	Skew.
Performance							
CAR (%)	54	18.60	25.38	21.65	2.06	-0.59	0.55
ROA (%)	54	1.40	3.20	2.14	0.56	0.45	1.12
OEOI (%)	54	67.65	86.32	78.29	5.58	-0.07	-0.66
LDR (%)	54	68.06	91.19	82.71	8.27	-0.99	-0.67
Board Size	54	7.00	11.00	8.33	1.44	0.21	1.07
Board Meetings	54	5.00	29.00	5.56	9.73	0.81	1.52
Board Independent	54	0.67	75.00	45.94	25.99	-0.47	-0.73
Committee Size							
CS_Aud	54	3.00	5.00	4.17	0.94	-1.93	-0.38
CS_Risk	54	3.00	6.00	4.33	0.98	-0.31	0.56

Journal of Ecohumanism
2024
Volume: 3, No: 8, pp. 1081 – 1092
ISSN: 2752-6798 (Print) | ISSN 2752-6801 (Online)
https://ecohumanism.co.uk/joe/ecohumanism
DOI: https://doi.org/10.62754/joe.v3i8.4797

CS_RN	54	3.00	5.00	4.33	0.78	-0.79	-0.72
Committee Meetings							
CM_Aud	54	4.00	31.00	5.70	9.86	1.38	1.66
CM_Risk	54	3.00	24.00	17.00	11.00	4.00	7.00
CM_RN	54	2.00	16.00	2.12	4.08	6.90	2.60
Controls							
Size (Asset Rp Tril)	54	7.72	167.01	34.24	41.10	11.16	3.24
LG (%)	54	-0.25	13.52	5.59	3.49	1.91	0.53
REG (%	54	-15.74	8.83	1.72	4.35	2.49	-1.10

During the pandemic, BPD's average total assets were around 34.24 trillion; the lowest was Rp. 7.72 trillion, and the highest was Rp. 165.01 trillion. It shows that BPD size is varied. The BPDs with the largest total assets are dominantly located on Java Island. In contrast, the opposite is located in the eastern part of Indonesia. Despite the pandemic, BPD could increase its credit distribution. On average, they have positive credit growth, 5.59% per year, with the highest growth reaching 13.52%. Only a few of them experienced negative credit growth. In addition, economic growth in the region is very extreme. In 2020 almost all provinces recorded negative economic growth, and the worst was -15.74 %. However, in 2021, most of the regions in Indonesia will bounce back by recording positive economic growth, the highest reaching 8.83%. The average regional economic growth during the pandemic was around 1.72%.

During the pandemic, performance in terms of capital (CAR) was positively correlated with the risk monitoring committee size (CS_Risk) and negatively with the bank size (see Table 2). It shows that a small risk monitoring committee tends to improve capital performance. Meanwhile, small-sized banks also tend to improve their capital performance. However, uniquely, smaller banks tend to have more significant risk monitoring committees, while larger banks tend to have smaller risk monitoring committees.

During the pandemic, bank profitability (ROA) was only significantly related to efficiency (OEOI). Both have a negative correlation, which indicates that the more efficient the bank's operations during the pandemic, the smaller the profits will be. On the other hand, the more inefficient the bank's operations, the greater the bank's profit. This finding contradicts the general understanding that efficiency and profitability are positively related. However, in a pandemic context, it might happen, due to limitations, both from the bank's and customers' side. The majority of banks are forced to operate online, but the majority of customers in the regions are less technologically literate. As a result, banks that are forced to operate traditionally will bear higher costs, such as costs for implementing health protocols, and in turn, it will reduce bank profits.

Unlike other performance indicators, liquidity (LDR) does not show a significant correlation with other variables. It shows that other performance indicators are not related to liquidity, likewise with the structure and mechanism of bank governance.

During the pandemic, BPD governance structures and mechanisms tend to correlate with each other. Board size (BS) is positively correlated with board independence (BI), audit committee meetings (CM_Aud), and bank size (Size), but negatively with credit growth. It shows that large banks tend to have large board sizes and tend to have more independent boards. As a result, they can improve their supervisory performance. However, large board sizes tend to be less effective, as can be seen from the negative correlation between board size and credit growth.

During the pandemic, board meetings (BM) tend to increase, and it is positively correlated with audit committee meetings (CM_Aud), risk monitoring committee meetings (CM_Risk), and remuneration and nomination committee meetings (CM_RN). In contrast, board meetings have a negative correlation with board independence (BI), audit committee size (CS_Aud), remuneration and nomination committee size (CS_RN), and credit growth.

Journal of Ecohumanism
2024
Volume: 3, No: 8, pp. 1081 – 1092
ISSN: 2752-6798 (Print) | ISSN 2752-6801 (Online)
https://ecohumanism.co.uk/joe/ecohumanism
DOI: https://doi.org/10.62754/joe.v3i8.4797

Just like other elements of the governance structure, the elements in the governance mechanism process are also correlated with each other. Board Independence (BI) is negatively correlated with the risk monitoring committee size (CS_Risk) and its meetings (CM_Risk) but positively correlated with the remuneration and nomination committee size (CS_RN) and its committee meetings (CM_RN). It shows that the less the proportion of independent boards, the larger the size of the audit committee needed, and the higher the frequency of their meetings. In contrast, low board independence tends to increase the remuneration and nomination committees' size, which is accompanied by a high frequency of their meetings. These findings indicate that independent boards do play an essential role in governance mechanisms. Their existence can create efficiency and reduce conflicts of interest. Specifically, these correlations can be seen in Table 2.

Table 2. Correlation Matrix

	CAR	ROA	OEOI	LDR	BS	BM	BI	CSA	CSR	CSRN	CMA	CMR	CMRN	Size	LG
CAR	1														
ROA	.11	1													
OEOI	.11	-.84***	1												
LDR	.30	-.13	.40	1											
BS	-.48	.46	-.75**	-.39	1										
BM	.18	.34	-.24	.63	.13	1									
BI	-.58	-.01	-.07	-.41	.50***	-.51***	1								
CS_Aud	.14	.09	-.38	-.61	.29	-.46***	-.07	1							
CS_Risk	.77**	.02	.04	.11	-.17	-.04	-.38**	.56***	1						
CS_RN	.10	-.29	.44	-.13	-.17	-.68***	.62***	.03	.26	1					
CM_Aud	-.16	.45	-.46	.40	.50***	.90***	-.13	-.43***	-.28	-.63***	1				
CM_Risk	.17	.36	-.31	.56	.14	.99***	-.59***	-.35**	-.03	-.79***	.88***	1			

Journal of Ecohumanism
2024
Volume: 3, No: 8, pp. 1081 – 1092
ISSN: 2752-6798 (Print) | ISSN 2752-6801 (Online)
https://ecohumanism.co.uk/joe/ecohumanism
DOI: https://doi.org/10.62754/joe.v3i8.4797

CM_RN	-.36	-.05	.06	.17	-.24	.36**	.34**	-.51***	-.74***	-.68***	.31	.40***	1		
Size	-.73**	.27	-.46	-.14	.60***	.36**	.29	-.34**	-.83***	-.54***	.66***	.37**	.59***	1	
LG	.53	.16	.09	-.13	-.52***	-.47***	-.16	.31	.49***	.43***	-.68***	-.46***	-.33**	-.72***	1
REG	.23	-.31	.07	-.19	-.04	-.09	-.01	.11	.12	.08	-.11	-.08	-.12	-.05	-.02

Elements of governance structures and mechanisms affected the performance of Regional Development Banks during the pandemic (see Table 3). However, the effect of each element of governance on their performance tends to vary. Specifically, the board size and the board's independence affect all bank performance indicators negatively. It shows that banks with large board sizes and board independence reduce bank performance, in terms of capital (CAR), profit (ROA), efficiency (OEOI), and liquidity (LDR). Meanwhile, the board meeting is not significant with all bank performance indicators.

The audit committee size and its meetings do not affect the bank's performance during the pandemic, in contrast to the risk monitoring committee size. The remuneration and nomination committee size has a positive effect on bank profitability and efficiency, but only at a low level of significance. In general, the remuneration and nomination committee meetings also do not affect performance, except in terms of efficiency. However, it is also at a low level of significance. For the control variable, bank size is negatively related to all bank performance indicators. It shows that small-sized banks have a superior performance during the pandemic, while large-sized banks underperform. In addition, credit growth and economic growth also significantly affect bank performance. Both of them affect bank performance positively.

Table 3. Regression

	CAR		**ROA**		**OEOI**		**LDR**	
	β	***t***	***β***	***t***	***β***	***t***	***β***	***t***
Constant	3.16	8.03***	3.94	9.46***	4.71	8.90***	4.32	7.18***
BS	-0.44	-8.03***	-0.15	-8.76***	0.14	-9.50***	0.00	-9.13***
BM	-0.06	-0.81	0.28	-0.57	0.62	-0.33	0.45	-0.45
BI	-0.57	-4.78***	-0.30	-5.08***	-0.02	-5.37***	-0.16	-5.22***
CS_Aud	0.16	0.45	0.53	0.86	0.90	1.27	0.72	1.07
CS_Risk	0.79	7.13***	1.25	8.44***	1.70	9.76***	1.47	9.10***
CS_RN	0.12	1.13	0.49	1.63*	0.85	2.14*	0.67	1.88
CM_Aud	-0.18	-0.52	0.15	-0.24	0.47	0.04	0.31	-0.10
CM_Risk	-0.02	0.95	0.33	1.43	0.67	1.99*	0.50	1.67
CM_RN	-0.22	-0.64	0.10	-0.38	0.42	-0.11	0.26	-0.24
Size	-0.75	-5.05***	-0.50	-5.38***	-0.25	-5.71***	-0.38	-5.55***
LG	0.56	3.65**	0.99	4.49***	1.41	5.34***	1.20	4.91***
REG	0.21	3.96**	0.59	4.84***	0.97	5.73***	0.78	5.29***
Memo Items								
R-Square	0.88		0.93		0.95		0.2	
Adj. R^2	0.46		0.69		0.77		0.64	
F-stat.	44.48***		38.95***		165.30***		82.91***	
Obs.	54		54		54		54	

Journal of Ecohumanism
2024
Volume: 3, No: 8, pp. 1081 – 1092
ISSN: 2752-6798 (Print) | ISSN 2752-6801 (Online)
https://ecohumanism.co.uk/joe/ecohumanism
DOI: https://doi.org/10.62754/joe.v3i8.4797

The findings above show that the elements of the governance structure and mechanism at regional development banks during the Covid-19 pandemic were not optimal. Although, during the pandemic, their performance was relatively stable, the stability was more dominantly explained by other factors not discussed in this study. During the pandemic, elements of governance are inversely proportional to bank performance. In general, these findings are in line with those found by Fahlenbrach and Stulz (2011), Beltratti and Stulz (2012), Aebi et al. (2012), Erkens et al. (2012), and Minton et al. (2011). In crisis conditions, they also found a negative relationship between governance and performance.

Specifically, Gafoor et al. (2018) and Mustafa et al. (2017) proposed that an adequate board size of around is around 6 to 9 people, and our findings suggest an average board size of about eight people. However, this measure is still negatively associated with performance. It implies that board size may be less relevant in explaining bank performance. In addition, board meetings may also be less relevant in explaining performance. Some researchers argue that a high frequency of meetings is considered less effective (e.g., Taghizadeh and Saremi, 2013; Johl et al., 2015; Lorsch and Maclver, 1989; Ilaboya and Obaretin, 2015), but we found the opposite that relatively low frequency of meetings is also not able to boost performance. The same applies to the independence of the board and the support committees.

Implications for Post-Pandemic Governance

While the size of the risk monitoring committee was found to positively influence bank performance during the pandemic, a reassessment of these structures may be necessary for continued resilience post-pandemic. The economic landscape post-COVID-19 requires BPDs to adapt their governance frameworks to address new market dynamics, including digital transformation, evolving regulatory demands, and heightened risk management. Consequently, BPDs may benefit from smaller, more specialized committees focused on strategic oversight and adaptive risk management. Emphasizing the independence and expertise within these committees could further enhance their capacity to manage emerging challenges effectively.

Conclusion

During the Covid-19 pandemic, the performance of regional development banks in Indonesia tended to be stable, but this stability was only partially explained by elements of the structure and mechanism of corporate governance. Only the risk monitoring committee size contributes positively to their performance, while the board size and the board's independence are negative. Meanwhile, other elements of governance, such as board meetings, the audit committee size, remuneration, compensation, and the meetings of these committees, did not have a significant impact. Their good performance during the pandemic was dominantly explained by other factors, such as credit growth and regional economic growth. Thus, the results suggest that existing and widely used governance measures are irrelevant, particularly in crises. Therefore, it will be homework for academics to explore governance measurement models from other perspectives.

References

Adam, R.B., and Mehran, H. (2005). Corporate Performance, Board Structure and its Determinants in the Banking Industry. EFA 2005 Moscow Meetings, https://dx.doi.org/10.2139/ssrn.302593.

Aebi, V., Sabato, G., and Schmid, M. (2012). Risk Management, Corporate Governance, and Bank Performance in the Financial Crisis. Journal of Banking & Finance, Vol. 36 No. 12, pp. 3213-3226, https://doi.org/10.1016/j.jbankfin.2011.10.020.

Al-Gamrh, B., Islmail, K.N.I.K, and Al-Dhamari, R. (2018). The role of corporate governance strength in crisis and non-crisis times, Applied Economics, DOI: 10.1080/00036846.2018.1489513

Amedi, A.M.R., and Mustafa, A.S. (2020). Board Characteristics and Firm Performance: Evidence from Manufacture Sector of Jordan. Accounting Analysis Journal, Vol. 9 No. 3, pp. 146-151, https://doi.org/10.15294/aaj.v9i3.39577.

Anggraeni, R. (2022). Pengamat: BPD Masih Punya Pekerjaan Besar. Accessed from https://finansial.bisnis.com/read/20220321/90/1513055/pengamat-bpd-masih-punya-pekerjaan-rumah-besar.

Başar, B.D., Bouteska, A., Büyükoğlu, B., and Ekşi, I.H. (2021). The Effect of Corporate Governance on Bank Performance: Evidence from Turkish and Some MENA Countries Banks. Journal of Asset Management, Vol. 22 No. 1, pp. 153-162.

Volume: 3, No: 8, pp. 1081 – 1092
ISSN: 2752-6798 (Print) | ISSN 2752-6801 (Online)
https://ecohumanism.co.uk/joe/ecohumanism
DOI: https://doi.org/10.62754/joe.v3i8.4797
Beltratti, A., and R. M. Stulz. 2012. "The Credit Crisis around the Globe: Why Did Some Banks Perform Better." Journal of Financial Economics 105 (1): 1–17. doi:10.1016/j.jfineco.2011.12.005.
Bhagat, A., and Bolton, B. (2019). Corporate Governance and Firm Performance: The Sequel. Journal of Corporate Finance, Vol. 58 No. 1, pp. 142-168, https://doi.org/10.1016/j.jcorpfin.2019.04.006.
Chancharat, N., Krishnamurti, C., & Tian, G. (2012). Board structure and survival of new economy IPO firms. Corporate Governance: An International Review, 20(2), 144–163.
Chazi, A., Khallaf, A., and Zantout, Z. (2018). Corporate Governance and Bank Performance: Islamic versus Non-Islamic Banks in GCC Countries. The Journal of Developing Areas, Vol. 52 No. 2, pp. 109-126, DOI: 10.1353/jda.2018.0025.
Chou, T-K., and Burchdadu, A.D. (2017). Independent Board, Audit Committee, Risk Committee, the Meeting Attendance Level and Its impact on the Performance: A Study of Listed Banks in Indonesia. International Journal of Business Administration, Vol. 8 No. 3, 24-36, https://doi.org/10.5430/ijba.v8n3p.
Dalton, D.R., Daily, C.M., Johnson, J.L., and Ellstrand, A.E. (1999). Number of directors and financial performance: A meta-analysis Academy of Management Journal, 42 (6) (1999), pp. 674-686.
Eluyela, D.F., Akintimehin, O.O., Okere, W., Ozordi, E., Osuma, G.O., Ilogho, S.O., and Oladipo, A. (2018). Board meeting frequency and firm performance: examining the nexus in Nigerian deposit money banks. Heliyon, Vol. 4 No. 10, https://doi.org/10.1016/j.heliyon.2018.e00850.
Erkens, D. H., M. Hung, and P. Matos. 2012. "Corporate Governance in the 2007–2008 Financial Crisis: Evidence from Financial Institutions Worldwide." Journal of Corporate Finance 18 (2): 389–411. doi:10.1016/j.jcorpfin.2012.01.005.
Fahlenbrach R, Stulz R (2011) Bank CEO incentives and the credit crisis. Journal of Financial Economics 99:11–26
Felício, J.A., Rodrigues, R., Grove, H., and Greiner, A. (2018). The Influence of Corporate Governance on Bank Risk during a Financial Crisis. s, Economic Research-Ekonomska Istraživanja, Vol. 31 No. 1, pp. 1078-1090, DOI: 10.1080/1331677X.2018.1436457
Fidanoski, F., Mateska, V., and Simeonovski, K. (2014). Corporate Governance and Bank Performance: Evidence from Macedonia. Economic Analysis, Vol. 47 No. 1-2, pp. 76-99.
Francis, B.B., Hasan, I., and Wu, Q. (2012). Do corporate boards matter during the current financial crisis? Review of Financial Economics, 21 (2) (2012), pp. 39-52.
Fuzi, S.F.S., Halim, S.A.A., and Julizaerma, M.K. (2016). Board Independence and Firm Performance. Procedia Economics and Finance, Vol. 37 (2016), pp. 460-465.
Gafoor, C.P.A., Mariappan, V., and Thiyagarajan, S. (2018). Board Characteristics and Bank Performance in India. IIMB Management Review, Vol. 30 No. 2, pp. 160-167, https://doi.org/10.1016/j.iimb.2018.01.007.
Ghosh, S. (2007). Board diligence, director busyness and corporate governance: an empirical analysis for India. Rev. Appl. Econ., 3 (1-2) (2007), pp. 91-104, https://ageconsearch.umn.edu/bitstream/50159/2/6-Saibal%20Ghosh.pdf.
Ilaboya, O.J., and Obaretin, O. (2015). Board characteristics and firm performance: evidence from Nigerian quoted companies Acad. J. Interdiscipl. Stud., 4 (1) (2015), pp. 4-11.
Jensen, M. C., & Meckling, W. H. (1979). Theory of the firm: Managerial behavior, agency costs, and ownership structure. In Journal of financial economics (Vol. 3).
Johl, S.K., Kaur, S., and Cooper, B.J. (2015). Board characteristics and firm performance: evidence from Malaysian public listed firms. J. Econ. Bus. Manag., 3 (2) (2015), pp. 239- 243
Khanifah, K., Hardiningsih, P., Darmaryantiko, Iryantik, I., and Udin, U. (2020). The Effect of Corporate Governance Disclosure on Banking Performance: Empirical Evidence from Iran, Saudi Arabiya, and Malaysia. The Journal of Asian Finance, Economics, and Business, Vol. 7 No. 3, pp. 41-51, https://doi.org/10.13106/jafeb.2020.vol7.no3.41.
Liang, Q., Xu, P., and Jiraporn, P. (2013). Board characteristics and Chinese bank performance. Journal of Banking & Finance, 37 (8) (2013), pp. 2953- 2968
Liu, Y., Miletkov, M.K., wei, Z., and Yang, T. (2015). Board independence and firm performance in China. Journal of Corporate Finance, 30 (2015), pp. 223- 244
Lo, A. W. Y., Wong, R. M. K., & Firth, M. (2010). Can corporate governance deter management from manipulating earnings? Evidence from related-party sales transactions in China. Journal of Corporate Finance, 16(2), 225–235.
Lorsch, J.W., and Maclver, E. (1989). Pawns or Potentates: The Reality of America's Corporate Boards Harvard Business School Press, Boston, MA (1989).
Malik, M., Wan, D., Ahmad, M.I, Naseem, M.A., and Rehman, R.U. (2014). Role of board size in corporate governance and firm performance applying Pareto approach, is it cultural phenomena? Journal of Applied Business Research, 30 (5) (2014), p. 1395.
Minton, B., J. Taillard, and R. Williamson. 2011. "Do Independence and Financial Expertise of the Board Matter for Risk Taking and Performance" In, 14. Working Paper, Fisher College of Business
Moudud-Ul-Huq, S. (2015). Corporate governance practices in Bangladesh: A comparative analysis between conventional banks and islamic banks. International Journal of Management and Business Research, Vol. 5 No. 1, pp. 53-60.
Moudud-Ul-Huq, S., Zheng, C., and Gupta, A.D. (2018). Does Bank Corporate Governance Matter for Bank Performance and Risk-Taking? New Insights of an Emerging Economy. Asian economic and Financial Review, Vol. 8 No. 2, pp. 205-230, https://doi.org/10.18488/journal.aefr.2018.82.205.230.
Muniandy, B., and Hillier, J. (2015). Board independence, investment opportunity set and performance of South African firms. Pacific-Basin Finance Journal, 35 (2015), pp. 108- 124
Munisi, G., & Randoy, T. (2013). Corporate Governance and Company Performance across Sub-Saharan African Countries. Journal of Economics and Business, 70, 92-110. http://doi.org/10.1016/j.jeconbus.2013.08
Mustafa, A., Che-Ahmad, A., Chandren, & Sitraselvi. (2017). Board diversity and audit quality: Evidence from Turkey. Journal of Advanced Research in Business and Management Studies, 6(1), 50–60.

2024
Volume: 3, No: 8, pp. 1081 – 1092
ISSN: 2752-6798 (Print) | ISSN 2752-6801 (Online)
https://ecohumanism.co.uk/joe/ecohumanism
DOI: https://doi.org/10.62754/joe.v3i8.4797
Nugroho, B. Y., & Eko, P. U. (2012). Board characteristics and earning management. BISNIS & BIROKRASI: Jurnal Ilmu Administrasi Dan Organisasi, 18(1).
Peni, E., and Vähämaa, S. (2012). Did Good Corporate Governance Improve Bank Performance During the Financial Crisis? Journal of Financial Services Research, Vol. 41 No. 1, https://doi.org/10.1007/s10693-011-0108-9.
Salim, R., Arjomandi, A., & Seufert, J. H. (2016). Does corporate governance affect Australian banks' performance? Journal of International Financial Markets, Institutions and Money, 43, 113-125. http://doi.org/10.1016/j.intfin.2016.04.0.
Taghizadeh, M., and Seremi, S. (2013). Board of directors and firms performance: evidence from Malaysian public listed firm. Int. Proc. Econ. Develop. Res., 59 (37) (2013), pp. 178-182.
Tao, N. B., & Hutchinson, M. (2013). Corporate governance and risk management: The role of risk management and compensation committees. Journal of Contemporary Accounting & Economics, 9(1), 83-99. http://doi.org/10.1016/j.jcae.2013.03.
Ulya, F.N. (2020). OJK Soroti Masalah Integritas di Bank Pembangunan Daerah. Accessed from https://money.kompas.com/read/2020/12/08/180803526/ojk-soroti-masalah-integritas-di-bank-pembangunan-daerah.
Walsh, J. P., & Seward, J. K. (1990). On the efficiency of internal and external corporate control mechanisms. Academy of Management Review, 15(3), 421–458.