Indonesia and Australia

Analysis of the Effect of Capital Structure, Corporate Governance and Intellectual Capital on the Possibility of Financial Distressin Coal Mining Companiesin

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#### **Abstract**

The purpose of this study is to analyze and find out how the influence of capital structure, corporate governance and intellectual capital on the possibility of companies experiencing financial distress in coal mining companies in Indonesia and Australia. The population of this study are coal mining companies listed on the Indonesia Stock Exchange and the Australian Stock Exchange for the 2016-2020 period. The research sample is 18 coal mining companies on the Indonesia Stock Exchange and 18 coal mining companies listed on the Australian Stock Exchange for the 2016-2020 period. The data analysis technique used logistic regression analysis with the SPSS program to test these variables. The evidence proves that (1) capital structure has a significant positive effect on the possibility of companies experiencing financial distress in Indonesian coal mining companies and Australian mining companies, (2) board size has a positive and insignificant effect on the possibility of companies experiencing financial distress in state coal mining companies. Indonesia and has a negative and insignificant effect on Australian mining companies, (3) board composition has a negative and insignificant effect on the possibility of companies experiencing financial distress in Indonesian state coal mining companies and has a positive and insignificant effect on Australian mining companies, (4) audit committee has a negative and insignificant effect on the possibility of the company experiencing financial distress at the Indonesian state coal mining company and a positive and significant effect on the company Australian mining companies, (5) remuneration committee has a positive and insignificant effect on the possibility of companies experiencing financial distress in Indonesian coal mining companies and negative and significant effects on Australian mining companies, (6) intellectual capital (VAIC) has a negative and insignificant effect on the possibility of the company experiencing financial distress in a coal mining company from Indonesia to the state of Australia

## Keywords

capital structure; corporate governance; intellectual capital; financial distress



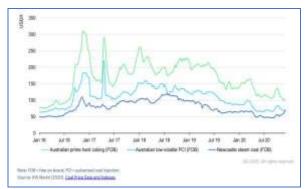
### I. Introduction

Indonesia and Australia are the world's coal producing and exporting countries (Energy Agency, 2020). According to Law Number 3 of 2020, coal mining is the mining of carbon deposits contained in the earth, including solid bitumen, peat, and asphalt rock. Factors that affect coal production are the availability of resource reserves, demand and development of exploration, mining and processing technology and other factors, namely

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considerations regarding economic, social and cultural aspects that affect coal production (Rosyid & Adachi, 2016).

According to the International Energy agency 2018-2021, Indonesia and Australia are coal producing countries as well as world coal exporters. China and India are the largest coal producing countries, but both countries still import coal from other countries to meet domestic coal needs. Indonesia and Australia are also countries that use coal as a source of fuel for power generation. According to the IESR, around 98% of Indonesia's coal use comes from power plants and the cement industry and Australia uses 80% of coal as fuel for power generation. The coal price based on IHS market 2020 can be seen in the following graph:



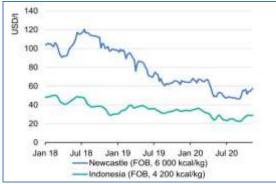


Figure 1. Coal prices based on Marker prices for various types of coal

**Figure 2**. Thermal coal prices vary in quality

In 2015 low coal prices caused around 40% of mines in Indonesia to stop their production activities. The Indonesian Coal Mining Association said that in 2015 there were 40 coal mining companies that had gone bankrupt where the companies were companies with provincial mining business permits. Company closures did not only occur in mining companies with provincial-level business licenses, but in the following years there were large companies experiencing difficulties with their operations which resulted in several companies being delisted from the Exchange. Coal mining companies that have been delisted from the stock exchange can be seen in the table below:

**Table 1.** List of Coal Mining Companies Delisted from the Exchange

No	Company name	Year Out
1	Moreton Resources LTD	August 28, 2020
2	Universal Coal PLC	July 3, 2020
3	PT Borneo Lumbung Energi dan Metal Tbk	January 20, 2020
4	PT Bara Jaya International Tbk	September 30, 2019
5	PT Permata Prima Sakti Tbk	November 16, 2017
6	PT Berau Coal Energy Tbk	November 16, 2017
7	PT Indo Setu Bara Resources Tbk	September 12, 2012

Source: www.idx.co.id

Financial distress is a condition where the company experiences negative net operating income for several years, cash flows are smaller than long-term debt and for more than one year does not make dividend payments, lay off employees, or eliminate dividend payments. The following is the total operating profit of coal mining companies:

**Table 2.** Total Operating Profit of Coal Mining Companies for the 2019-2020 Period

<b>Stock Code</b>	Year	<b>Operating Profit</b>	<b>Total Debt</b>
DOID (\$)	2019	88.416.936	901.340.212
	2020	19.703.082	710.718334
PKPK (000)	2019	2.810.294	57.327.333
	2020	2.204.843	28.264.222
TER (\$000)	2019	18.402	421.801
	2020	-46.544	566.991
WEC(\$000)	2019	-8.316	94.776
	2020	-8.172	97.892
EER(\$)	2019	-242.413	2.093.489
	2020	-313.065	1.427.920

Source: company financial statements

From table 2 it can be seen that coal mining companies have large corporate debts. According to the IEEFA, Indonesian coal companies have loans of US\$3.8 billion to foreign and domestic banks. Based on this, the Indonesian coal industry is in structural and financial problems because many companies have difficulty reaching the break-even point of sales. The decline in coal prices in 2020 puts high pressure on coal producers, according to the International Energy Agency report on Coal (Energy Agency, 2020) where in 2020 many coal mining companies cannot generate profits. Capital structure generally refers to the amount of debt owned by the company and if the company cannot pay off its debts in accordance with the agreed time, the company will experience financial distress and can lead to bankruptcy and/or loss of shareholder value (Procasky et al., 2014). The following table shows the capital structure of coal mining companies:

**Table 3**. Capital structure of coal mining companies for the period 2019-2020

<b>Stock Code</b>	Year	LTD/ TC
DOID	2019	0,770
	2020	0,717
PKPK	2019	0,334
	2020	0,159
TER	2019	0,509
	2020	0,400
WEC	2019	0,080
	2020	0,080
EER	2019	0,016
	2020	0,023

\*TC = Total Capital

Source: Company financial reports, data processed

**Table 4.** Corporate Governance of Coal Mining Companies for the 2019-2020 Period

Stock Code	Year	BS	BC
DOID	2019	7	0,57
	2020	7	0,57
PKPK	2019	4	0,5
	2020	3	0,33
TER	2019	9	0,333
	2020	9	0,333
WEC	2019	5	0,6
	2020	4	0,5
EER	2019	3	0,333
	2020	8	0,125

\*BS= *Board size*; BC= *Board composition* Source: Company financial reports, data processed

Based on Table 4, it can be seen that the implementation of good corporate governance in the coal mining sector is still not up to standard, where the composition of the BC (board committee), namely the company's independent directors is still below the standard, which is 30% of the total board of size where the composition should be 50% of number of boards of sizes. Measurement of the quality of corporate governance can be seen from several measurements including the number of board size, board composition, audit committee and remuneration committee.

**Table 5.** Intellectual Capital of Coal Mining Companies for the Period 2019-2020

Stock	Tahun	VAC	VAHC	STVA	VAIC
code		A			
DOID	2019	0,084	0,546	-1,200	6,4
	2020	-0,152	-0,875	0,467	4,73
PKPK	2019	-0,103	1,522	2,916	3,19
	2020	0,055	1,313	4,195	1,46
TER	2019	0,623	16,761	1,063	-0,528
	2020	0,479	-	0,934	30,294
			14,072		
WEC	2019	0,249	-6,398	0,865	0,174
Kode	Tahun	VAC	VAHC	STVA	VAIC
Saham		A			
	2020	0,216	-8,336	0,893	-0,722
EER	2019	0,003	0,157	-0,186	-8,342
	2020	0,089	-1,093	0,522	-
					28,767

\*VACA= Value added to capital employee; VAHC = Value added to human capital \*STVA = Structure capital to value added; VAIC= Value added intellectual capital Source: Company financial reports, data processed

Based on Table 4, there are several indicators of intellectual capital measurement which have a negative proportion. The negative proportion is caused by the value added component and employee capital (net income and equity) of the company being in a

negative position which comes from the accumulation of losses generated by the company and the company does not have operating income. Intellectual capital is based on the premise of contemporary circumstances that intangible assets that are not listed on the balance sheet are very important for company operations because they can significantly increase the value of the company, Kolakovic (2003) in (Radjenovic & Krstic, 2017). This statement is based on the belief that a company's wealth depends on human, structural and relational capital and value is generated from changing one form of capital into another. The mining, oil and gas industry is dominated by mineral exploration, where expenditures for mineral exploration consist of costs for exploration, drilling, geological and geophysical expenditures related to the pre-industrial development and exploration stages in mining are categorized into intangible assets (Baldwin et al, 2009).

#### II. Review of Literature

## 2.1 Relationship of Coal Capital Structure to Financial Distress

Capital structure or leverage, debt and equity decisions on the company's capital structure will affect the company's financial health. According to Savicz and Bak (2016) in their research, the decline in coal prices in 2011-2014 made it difficult for mining companies in Poland to obtain loans from banks during the decline in coal prices. The difficulty in obtaining loans experienced by the company due to the decline in coal prices will have an impact on the company's financial condition which will result in the company experiencing financial difficulties because it is unable to obtain external funding sources for the company's operational activities. The source of funding for the company comes from the company's internal and external funds. The combination of different types of debt and equity to form the total capital of the company is referred to as the capital structure (Asante, 2021). Organization must have a goal to be achieved by the organizational members (Niati et al., 2021). The success of leadership is partly determined by the ability of leaders to develop their organizational culture. (Arif, 2019). Capital structure decisions are very important for the success of the company's business because it affects the profitability of the company. Capital structure generally refers to the amount of debt owned by the company and if the company cannot pay off its debts in accordance with the agreed time, the company will experience financial distress and can lead to bankruptcy and or loss of shareholder value (Procasky et al., 2014).

## 2.2 Relationship of Board Size to Financial Distress

Based on agency theory, the relationship between board size and firm performance is negative, where a small board size will have greater managerial control (Jensen and Meckling 1996). Maintaining a small board size will help the company improve its performance and the number of board sizes that exceed 7 members is said to create ineffective operational activities, loss of commitment, moral hazard problems and great control by the CEO. According to the OECD guidelines on good corporate governance practices, the optimal board size has between five and nine core members. The structure of the board has a direct impact on the financial performance and reputation of a company and should be carefully analyzed by shareholders to balance the size according to expected returns and company features such as family ownership, export activity, and stock market norms. The size of the board of directors has been claimed to be an important influence on the performance of large companies. For many companies, the board role acts more as a substitute for the development of internal staff and management skills, indicating that directors of large corporations primarily support the control role of the Chief Executive

Officer. (Muchemwa et al., 2016) found that board size has a positive effect on company performance.

## 2.3 Relationship of Board Composition to Financial Distress

According to Baysinger and Butler's in Elloumi & Gueyié (2001) shows that the level of financial health is influenced by the composition of the board because companies with above average performance have a higher percentage of outside directors than companies with below average performance. Directors who come from outside are believed to provide several advantages, compared to their insider counterparts. This may be a characteristic of firms in persistent financial distress having weak corporate governance, as measured by board composition and structure. Pfeffer in Elloumi & Gueyié (2001) found that the percentage of insider directors was higher on the boards of declining firms. Expanding on these reasons for financial distress, one can assume that financially distressed firms are more likely to have fewer outside (independent) boards of directors.

Deviacita & Achmad, (2012) of the six factors studied (managerial ownership, institutional ownership, size of the board of commissioners, proportion of independent commissioners, board of commissioner's activity and audit committee expertise), it is proven that managerial ownership, institutional ownership and audit committee expertise have a positive effect. to financial distress. Meanwhile, other factors, namely the size of the board of commissioners, the proportion of independent commissioners, and the activities of the board of commissioners have no effect on financial distress.

### 2.4 Relationship of the Audit Committee to Financial Distress

The literature review says that the audit committee plays an important role in monitoring and holds an important position in the corporate governance mechanism. Based on agency theory where there is a conflict of interest between shareholders and managers, the role of the audit committee can be used to minimize this condition (Salloum et al., 2014). Khalid et al., (2020) in their research found that the composition of the audit committee had a significant influence on financial distress and companies experiencing financial difficulties were not found to have a majority of non-executive directors in their audit committee composition, and it was also found that companies experiencing financial difficulties received audit reports. which is unsatisfactory.

## 2.5 Relationship of the Remuneration Committee to Financial Distress

The remuneration committee has an important role in maintaining and controlling the board of directors and executives, where an effective remuneration committee can ensure that the remuneration structure (salaries, honorariums, incentives, and benefits from the board of directors and executives has been established to maximize performance, thereby reducing agency costs and reducing agency costs). asymmetric information Remuneration of the board of directors and executives needs to be considered in corporate governance because remuneration levels must be designed in such a way as to be attractive enough to incentivize the board of directors and executives to run the company effectively.

Under agency theory, shareholders allow executives to manage business operations on their behalf (Jensen and Meckling, 1976), but in this setting differences in interests between shareholders and managers may occur. This conflict is usually known as the agency problem. Jensen and Meckling (1976) stated that, to reduce agency problems, companies should increase remuneration and align it with the interests of executives and shareholders. Better remuneration helps retain and motivate executives and managers to produce higher performance. Based on agency theory, the objectives of shareholders and

management must be harmonized, thus a higher level of compensation will result in higher company performance in companies with diversified ownership (Kraft and Niederprüm, 1999).

# 2.6 Intellectual Capital against Financial Distress

Intellectual capital performance is negatively related to the possibility of the company experiencing financial distress. Intellectual capital can relate to the possibility of the company experiencing financial distress in the future. High intellectual capital performance will provide high performance and in the long term will result in the company's financial stability (Cenciarelli et al., 2018). The results of the research by Cenciarelli et al (2018) stated that the performance of intellectual capital is negatively related to the possibility of the company experiencing financial distress. The coal mining industry relies on technology and maintenance in the mining process which requires technology mastery by employees. Employees who have expertise and experience can improve company performance and reduce operational costs. Optimal management of intellectual capital will make the company's condition better and reduce the risk of financial distress.

### III. Research Method

This research is quantitative research that uses numbers as a research approach with a causal research method to measure the relationship and influence between variables. This research was conducted by looking at the data on the Indonesia Stock Exchange and the Australian Stock Exchange through the internet using the website www.idx.co.id, www2.asx.com.au and the official website of each company. The population in this study are coal mining companies listed on the Indonesia Stock Exchange and Australia Stock Exchange for a 5-year period, from 2016 to 2020. There are a population of 18 companies engaged in coal mining listed on the Indonesia Stock Exchange and 18 mining companies. coal listed on the Australian Stock Exchange. The sample used in this study is a purposive sampling method with the criteria of coal mining companies listed on the Indonesia Stock Exchange and the Australian Stock Exchange and have been listed on the stock exchange since 2016. The secondary data used in this study is the final annual financial report presented. by the company which can be accessed through the company's official website, the Indonesia Stock Exchange and the Australian Stock Exchange.

This study consisted of the independent variable (independent variable) and the dependent variable (dependent variable). The independent variable consists of capital structure, corporate governance and intellectual capital and the dependent variable is the prediction of financial distress (financial distress). The independent variables in this study are the price of capital structure, corporate governance and intellectual capital which are proxied by VAIC. In this study, data processing was carried out using the SPSS program. This study was conducted using a logistic regression model because the dependent variable in the model is a categorical variable with a value of 1 for companies that are considered likely to experience financial distress and 0 for companies that are not likely to experience financial distress. This study has two objects of different countries, the researchers will process descriptive statistical analysis, the selection of logistic regression in two processing, namely: 1) Testing specifically for the State of Indonesia, and 2) Testing specifically for the State of Australia.

### IV. Result and Discussion

Table 6. Statistics of Indonesia and Australia Partial Test

В	S.E.	Wald	df	Sig.	Exp(B) I	ndonesia Au	stralia B	S.E.	Wald	df	Sig.	Exp(B)
4,	728 1,95	6 5,84	1	0,016	113,085	X1 (Capital Structure)	4,611	1,936	5,672	1	0,017	100,537
0,	319 0,45	2 0,496	1	0,481	1,375	X21 (Board Size)	-0,209	0,174	1,449	1	0,229	0,811
-1,	614 3,91	5 0,17	1	0,68	0,199	X22 (Board Composition)	0,038	2,083	0	1	0,985	1,039
-7,	057 6,21	3 1,29	1	0,256	0,001	X23 (Audit Committee	5,859	2,076	7,962	1	0,005	350,452
0,	045 2,72	2 0	1	0,987	1,046	X24 (Remuneration Committee	e) -3,537	1,244	8,088	1	0,004	0,029
-0,	164 0,09	5 2,997	1	0,083	0,849	X3 (Intellectual Capital)	-0,014	0,013	1,309	1	0,253	0,986
-2,	442 3,73	1 0,428	1	0,513	0,087	Constant	-2,601	1,096	5,63	1	0,018	0,074

Source: SPSS Results

## 4.1 Effect of Capital Structure on Financial Distress

Based on the results of the partial significance test in Table 5. it is found that the capital structure has a positive and significant effect on the possibility of companies experiencing financial distress in Indonesian state coal mining companies and Australian state coal mining companies. These results can be seen from the test which shows that the Indonesian state coal mining company has a probability of (0.016) and the Australian state coal mining company (0.017) where the value is smaller than 5% (>0.05). A positive value result means that each unit increase in the capital structure will increase the log of odds the company will experience financial distress. On the other hand, every decrease in the capital structure unit as proxied by the long-term debt to the company's total capital, the possibility that the company will experience financial distress will decrease.

Based on the results of the descriptive statistical analysis in Indonesia in Table 5. shows that the average capital structure ratio value of Indonesia is (0.3357) greater than that of Australia (0.1591). This value indicates that the average use of long-term debt in Indonesia is higher than Australia. Indonesian coal mining companies experiencing financial distress are companies with a high composition of long-term debt, which is more than 40%. Based on the results of the descriptive statistical analysis in Table 5. coal mining companies in Australia show that the average ratio value of the Australian state capital structure is (0.1591). Australian coal mining companies that do not have long term debt as their capital structure composition are on average companies that do not experience distress. This value indicates that the use of less long-term debt as a capital structure reduces the possibility of financial distress for coal mining companies in Australia. These results are also in accordance with the statistical data phenomenon of the Australian state which uses more equity as a capital structure and there are several companies that do not have long-term debt as a capital structure in the company.

### 4.2 Effect of Board Size on Financial Distress

Based on the results of the partial significance test in Table 5. the results show that the board size has a positive and insignificant effect on the possibility of companies experiencing financial distress in Indonesian state coal mining companies and negative and insignificant effects for Australian state coal mining companies. These results can be seen from the test which shows that the Indonesian state coal mining company has a probability of (0.481) and the Australian state coal mining company (0.229) where the value is greater than 5% (> 0.05). So that hypothesis 1 which states that board size has a negative and significant effect on the possibility of companies experiencing financial distress in Indonesian and Australian coal mining companies is rejected. These results prove that the composition of the board size does not affect the possible occurrence of financial distress

in coal mining companies in Indonesia and Australia.

The result of a negative value means that every increase in the board size, the possibility of the company experiencing financial distress decreases, on the contrary, the lower the board size, the possibility that the company will experience financial distress will increase. This shows that companies with low board size can increase the possibility of companies experiencing financial distress. The result of a positive value means that any increase in the board size can increase the possibility of the company experiencing financial distress. On the other hand, the higher the board size, the possibility that the company will experience financial distress will increase. Based on the results of descriptive statistical analysis of coal mining companies in Australia and Indonesia, it shows that the average number of board sizes in Australia is (5.9) greater than Indonesia (5.3). The results of the positive hypothesis in Indonesian state coal mining companies where the larger the number of board sizes will increase the probability of the occurrence of financial distress conditions of coal mining companies in Indonesia.

These results are supported by data on statistical phenomena in Indonesia which have a small number of board sizes and the condition of companies experiencing low (slight) financial distress. These results are not in accordance with the OECD guidelines where the number of large and varied board sizes will increase the company's performance and company value and will reduce the possibility of the company experiencing financial distress. Based on agency theory, the relationship between board size and firm performance is negative, where a small board size will have greater managerial control (Jensen and Meckling 1996). Maintaining a small board size will help the company improve its performance and the number of board sizes that exceed 7 members is said to create ineffective operational activities, loss of commitment, moral hazard problems and great control by the CEO. Board size as an element of corporate governance has a very strong influential power to send positive signals to the market which reduces information asymmetry and ensures honest signals from different stakeholders. Companies with high quality are generally more motivated to send high quality signals than companies with low quality. Good corporate governance can be a positive signal for the company.

## 4.3 Effect of Board Composition on Financial Distress

Based on the results of the partial significance test in Table 5. the results show that board composition has a negative and insignificant effect on the possibility of companies experiencing financial distress in Indonesian state coal mining companies and positive and insignificant effects for Australian state coal mining companies. These results can be seen from the test which shows that the Indonesian state coal mining company has a probability of (0.680) and the Australian state coal mining company (0.985) where the value is greater than 5% (> 0.05). The result of a negative value means that any increase in the composition of the board composition can reduce the possibility of the company experiencing financial distress, on the contrary, the lower the composition of the board composition, the possibility that the company will experience financial distress will increase. The result of a positive value means that any increase in the composition of the board composition can increase the possibility of the company experiencing financial distress. On the contrary, the lower the composition of the board composition, the possibility of the company experiencing financial distress will be low. This shows that companies with low board composition can increase the likelihood of companies experiencing financial distress.

Based on the results of descriptive statistical analysis of Indonesian coal mining companies, it shows that the average ratio value of the composition of the board composition of the Indonesian state is (0.4) smaller than that of Australia (0.5). This value

indicates that the composition of the Indonesian board of commissioners is still lower than that of Australia, which is based on the OECD guidelines that the composition of independent directors must be greater than or at least equal to half the number of directors.

Board composition as an element of corporate governance has a very strong influential power to send positive signals to the market which reduces information asymmetry and ensures honest signals from different stakeholders. Independent directors on board composition reduce agency problems and send positive signals to outsiders. Stakeholders have high expectations from independent directors because they have no direct relationship with business management and have a lot of experience in the relevant field, besides that independent directors feel pressure as experts and their reputation is at stake in the market, which motivates them to disclose more information to the public. organizational sustainability issues (Mi Bae et al., 2018). The composition of independent directors on the board composition which refers to good corporate governance guidelines will help companies to improve company performance. Increased company performance will reduce the risk of the company being in financial distress.

### 4.4 The Effect of the Audit Committee on Financial Distress

Based on the results of the partial significance test in Table 5. it is found that the audit committee has a negative and insignificant effect on the possibility of the company experiencing financial distress in the Indonesian state coal mining company and a positive and significant effect on the Australian state coal mining company. These results can be seen from the test which shows that the Indonesian state coal mining company has a probability of (0.256) and the Australian state coal mining company (0.005) where the value is greater than 5% (> 0.05). These results prove that the composition of the audit committee affects the possible occurrence of financial distress in coal mining companies in Australia.

Based on agency theory there is a conflict between shareholders and managers, the separation of management policies will help to control the asymmetry relationship by limiting the power of managers and protecting the interests of shareholders. The composition of the audit committee focuses on the aspect of independence. It is determined by the ratio of non-executive and executive directors. The audit committee is considered independent when the dominance of non-executive directors is considered. However, executive members can interfere with the effectiveness of the audit committee by influencing the decision-making process of the board. Based on the explanation above, the composition of independent directors on the audit committee can reduce conflicts of interest between managers and shareholders.

Most independent directors increase management oversight which proves that a more independent audit committee has a high level of audit coverage and there is evidence that a more independent audit committee strives to maintain the independence of the external audit process. The participation of non-executive members in a large proportion increases the independence of the audit committee. This increased independence of the audit committee should facilitate decisions and ensure objectivity of information. For this reason, the audit committee should maintain a monitoring role delegated by the board with the aim of providing greater reliability of information. The existence of an independent director enhances the capacity of the company's board to effectively advise, monitor and discipline top management. The independent director on the composition of the audit committee will assist in supervising and as a party who has no interest in the company will help oversee the audit committee to hold meetings frequently which will assist audit committee members to ensure the integrity of financial statements to supervise and

effectively review the company's operations. The audit committee as an element of corporate governance has a very strong influential power to send positive signals to the market which reduces information asymmetry and ensures honest signals from different stakeholders.

### 4.5 Effect of Remuneration Committee on Financial Distress

Based on the results of the partial significance test in Table 5. the results show that the composition of the remuneration committee has a positive and insignificant effect on the possibility of companies experiencing financial distress in Indonesian state coal mining companies and negative and significant effects on Australian state coal mining companies. These results can be seen from the test which shows that the Indonesian state coal mining company has a probability of (0.987) and the Australian state coal mining company (0.004) where the value is greater than 5% (> 0.05). These results prove that the composition of the remuneration committee does not affect the possible occurrence of financial distress in coal mining companies in Indonesia. Positive hypothesis results in Indonesian state coal mining companies where the number of positive hypothesis results in Australian coal mining companies where the greater the number of audit committee compositions will increase the probability of the occurrence of financial distress conditions of coal mining companies in Indonesia. The result of a negative value means that every increase in the composition of the remuneration committee can reduce the possibility of the company experiencing financial distress, on the contrary, the lower the composition of the remuneration committee, the possibility that the company will experience financial distress will increase. These results are supported by data from the Australian statistical phenomenon which has a larger number of remuneration committee compositions but the condition of companies experiencing high financial distress.

This positive relationship is not in accordance with the OECD guidelines where the composition of the remuneration committee is large and varied will increase the company's performance and company value and will reduce the possibility of the company experiencing financial distress. Regarding the remuneration policy for managers, the Code of Corporate Governance issued by the OECD states that the board should establish a remuneration committee among its members to help formulate the remuneration policy for directors and managers and should establish the committee's internal rules. The remuneration policy must be approved by the GMS. The remuneration committee based on the OECD corporate governance guidelines can reduce agency problems between managers and shareholders.

Based on agency theory, shareholders provide freedom for executives to run the company on behalf of shareholders (Jensen & Meckling, 1976). Agency problems will be created due to differences in interests between managers and shareholders and to minimize this the company needs to increase remuneration and straighten it out to executives and shareholders' interests. The existence of an independent director in the composition of the remuneration committee can minimize conflicts of interest between managers and shareholders. The objectives of shareholders and management must be harmonized; thus a higher level of compensation will result in higher company performance in companies with diversified ownership (Kraft and Niederprüm, 1999).

## 4.6 Influence of Intellectual Capital (VAIC) on Financial Distress

Based on the results of the partial significance test in Table 5. it is found that Intellectual Capital (VAIC) has a negative and insignificant effect on the possibility of companies experiencing financial distress in Indonesian coal mining companies in

Australia. These results can be seen from the test which shows that the Indonesian state coal mining company has a probability of (0.083) and the Australian state coal mining company (0.253) where the value is greater than 5% (> 0.05). The result of a negative value means that any increase in intellectual capital can reduce the possibility of the company experiencing financial distress. On the other hand, the lower the intellectual capital proxied by the company's VAIC, the more likely the company will experience financial distress. High intellectual capital performance will provide high performance and in the long term will result in the company's financial stability.

Intellectual capital is based on the premise of contemporary circumstances that intangible assets that are not listed on the balance sheet are very important for company operations because they can significantly increase the value of the company, Kolakovic (2003) in (Radjenovic & Krstic, 2017). Increased firm value will reduce the possibility of a company to experience financial distress. Every stock constitution (material or non-material) is qualified as capital as long as it can generate income (Fisher, 1906). Human capital theory considers that human capital is an analogy to conventional capital and uses a neoclassical theoretical framework for analysis on human capital. The accumulation of productive immaterial human capital contained in humans will increase the productivity of the owner and this will usually lead to an increase in income.

The results show that the intellectual capital coefficient value is negative but not significant, meaning that the size of the intellectual capital value does not have a significant effect on the possibility of financial distress in Indonesian and Australian coal mining companies.

### V. Conclusion

Based on the analysis and discussion, several conclusions can be drawn on coal mining companies in Indonesia and Australia as well as the following suggestions:

- 1. Capital structure has a significant positive effect on the possibility of companies experiencing financial distress in Indonesian coal mining companies and Australian mining companies.
- 2. Board Size has a positive and insignificant effect on the possibility of companies experiencing financial distress in Indonesian coal mining companies and has a negative and insignificant effect on Australian mining companies.
- 3. Board composition has a negative and insignificant effect on the possibility of companies experiencing financial distress in Indonesian coal mining companies and has a positive and insignificant effect on Australian mining companies
- 4. Audit Committee has a negative and insignificant effect on the possibility of companies experiencing financial distress in Indonesian state coal mining companies and has a positive and significant effect on Australian mining companies.
- 5. Remuneration Committee has a positive and insignificant effect on the possibility of companies experiencing financial distress in Indonesian state coal mining companies and negative and significant effects on Australian mining companies.
- 6. Intellectual Capital (VAIC) has a negative and insignificant effect on the possibility of companies experiencing financial distress in Indonesian coal mining companies in Australia.

### References

- Agency Theory an overview | ScienceDirect Topics. (n.d.). Retrieved June 17, 2021, from https://www.sciencedirect.com/topics/economics-econometrics-and-finance/agency-theory
- Arif, S. (2019). Influence of Leadership, Organizational Culture, Work Motivation, and Job Satisfaction of Performance Principles of Senior High School in Medan City. Budapest International Research and Critics Institute-Journal (BIRCI-Journal). P. 239-254
- Asante, K. O.-, Dissertations, W., Studies, D., & Opoku-Asante, K. (2021). The Relationship Between Capital Structure Practices and The Relationship Between Capital Structure Practices and Financial Distress in West Africa Financial Distress in West Africa [University of Ghana]. https://scholarworks.waldenu.edu/dissertations
- Baldwin, J. R., Gu, W., Lafrance, A., & Macdonald, R. (n.d.). Investment in Intangible Assets in Canada: R&D, Innovation, Brand, and Mining, Oil and Gas Exploration Expenditures The Canadian Productivity Review. Retrieved November 25, 2021, from www.statcan.gc.ca
- Cenciarelli, V. G., Greco, G., & Allegrini, M. (2018). Does intellectual capital help predict bankruptcy? Journal of Intellectual Capital, 19(2), 321–337. https://doi.org/10.1108/JIC-03-2017-0047
- Deviacita, A. W., & Achmad, T. (2012). ANALYSIS OF THE EFFECT OF CORPORATE MECHANISM. 1–15.

Energy Agency, I. (n.d.). Coal 2020.

International Energy agency 2018-2021

- Jensen, M. C., & H, M. W. (1976). No Title. Theory of The Firm: Managerial Behavior, Agency Costs and Ownership Structure, 3(J. financ. econ.), 305–360. https://doi.org/https://doi.org/10.1016/0304-405X(76)90026-X
- Khalid, M., Abbas, Q., Malik, F., & Ali, S. (2020). Impact of audit committee attributes on financial distress: Evidence from Pakistan. International Journal of Financial Engineering, 07(01), 2050005. https://doi.org/10.1142/s242478632050005x

Kolakovic (2003) in (Radjenovic & Krstic, 2017).

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- Muchemwa, M. R., Padia, N., & Callaghan, C. W. (2016). BOARD COMPOSITION, BOARD SIZE AND FINANCIAL PERFORMANCE OF JOHANNESBURG STOCK EXCHANGE COMPANIES. SAJEMS NS, 19, 497–513. https://doi.org/10.17159/2222-3436/2016/v19n4a3
- Niati, D. R., Siregar, Z. M. E., & Prayoga, Y. (2021). The Effect of Training on Work Performance and Career Development: The Role of Motivation as Intervening Variable. Budapest International Research and Critics Institute (BIRCI-Journal): Humanities and Social Sciences, 4(2), 2385–2393. https://doi.org/10.33258/birci.v4i2.1940
- Procasky, W., Ujah, N. U., & King, Z. A. (2014). Funds from Operations to Total Debt: A More Efficient Measure of Leverage for Capital Structure Decision Making. Journal of Accounting & Finance (2158-3625), 14(6), 71–90. http://search.ebscohost.com/login.aspx?direct=true&db=bth&AN=100414853&site=ehost-live
- Rosyid, F. A., & Adachi, T. (2016). Forecasting on Indonesian Coal Production and Future Extraction Cost: A Tool for Formulating Policy on Coal Marketing. Natural Resources, 07(12), 677–696. https://doi.org/10.4236/nr.2016.712054

Salloum, C., Azzi, G., & Gebrayel, E. (2014). Audit Committee and Financial Distress in the Middle East Context: Evidence of the Lebanese Financial Institutions. International Strategic Management Review, 2(1), 39–45. <a href="https://doi.org/10.1016/J.ISM.2014.09.001">https://doi.org/10.1016/J.ISM.2014.09.001</a>