The Impact of Earning Management, Business Strategy, and Firm Life Cycle on Financial Distress, with State Owned Enterprises as a Moderating Variable of Listed Company in Indonesia Stock Exchange 2019–2022

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Abstract. Company's management conduct the bankruptcy analysis to mitigate financial distress in the hope of making the right business strategy, in particular of stages in the firm's life cycle, to reduce the possibility of earning management that has close association with financial distress. This study examines the effect of earnings management, business strategy, and firm's life cycle on financial distress by using state-owned enterprises as a moderating variable. The study used a sample of 294 listed companies on the Indonesia Stock Exchange with a total of 3,528 observations. The selected research model was the fixed effect model, which the results showed that earnings management, cost leadership & differentiation business strategy, and the firm's life cycle with a proxy for retained earnings to total assets have an effect on the possibility of financial distress, but for the firm life with a proxy for retained earnings to total equity, found that no impact on financial distress. The moderating variable of state owned enterprises in companies can strengthen or weaken each independent variable's relationship to financial distress.

Keywords: Financial Distress · Earning Management · Business Strategy · Firm Life Cycle · State-Owned Enterprises

1 Introduction

Companies with good financial performance are easier to get funding because the company's financial ratios can prove that the company is in a good condition of business. On the other hand, listed companies that are in financial distress have insufficient cash flow to pay its short-term liabilities, which could impact the investors. (Sudjarat & Wijayanti, 2019) [1]. Companies in financial distress condition tend to conduct earnings management for specific purposes such as negotiating contracts and hiding financial difficulties from the public (Burgstahler & Dichev, 1997) [2]. According to agency theory, the difference in goals between agents (managerial) and principals (shareholders),

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where managers are more concerned with their private purpose, can cause earning management. In this case, the shareholders are the one who will be in disadvantages. In Indonesia, there are several companies did earnings management, such as PT Garuda Indonesia and PT Kimia Farma by changing some values in their financial statements.

The business strategy is implemented to improve the performance of the company. Porter (1980) [3] defines generic business strategies which companies can use, including a cost leadership strategy to help the companies become a market leader. Then, there is a differentiation strategy which the company's products should have a competitive advantage. Agustia (2020) [4], Zhang *et al*. (2022) [5], and Bryan *et al*. (2013) [6] revealed that there is a relationship between business strategy and financial distress, where the strategy made by the company has an effect on reducing bankruptcy risk because of the effect on the company's performance is getting better.

The stages in the firm's life cycle describe different characteristics such as ownership structure, company activities in financial management and investments (Vinh, 2022) [7]. For example, during the stages of growth and decline, companies tend to manage financial/accrual reports to make it easier for them to get loans, this can affect bankruptcy risk (Durana, 2021) [8].

From the good corporate governance (GCG), Indonesian government supports the implementation of good corporate governance (GCG) by issuing Minister of State-Owned Enterprises regulation No.PER-O1/MBU/2011 stating that good governance in state-owned enterprises (SOE) is based on principles of regulations and business ethics, which includes transparency, accountability, responsibility, independence and fairness, carried out by all related parties with the aim of realizing business continuity that takes into account the common interests of managers and stakeholders. This study uses the categorization of ownership of business entity or State-Owned Enterprises as a moderating variable. The proxy is the ratio of government ownership on the company. Following the theory of good corporate governance and the principles applied, this study aims to analyze whether government ownership can affect the relationship between independent variables tested and also to fill the gap on previous research.

This data used in this study is generated from Refinitiv Eikon and the sample is the listed companies of the Indonesia Stock Exchange in the last 3 years, 2019–2022. To process the data, Stata application is used by applying the fixed effect model to estimate the equation. The data regression was carried out in two stages. First, data is regressed without moderation variable, and the second is by including the moderation variable so that the results of the two regressions could be compared.

2 Literature Review and Hypothesis

2.1 Agency Theory

Jensen and Meckling (1976) [9] stated that agency theory is related to the development of corporate ownership structure theory. The theory explains that between shareholder (principal) and the manager (agent), agency problems can happen because there is a difference in information held by the principal and agent that could make managerial do adverse selection and moral hazard. Managers have a responsibility to maximize shareholder wealth, but their private purpose creates agency problems. There is a fact

that even though managers are being paid, the welfare that managers get is far less than the income that shareholders will get (Destriana, 2015) [10].

2.2 Good Corporate Governance

According to Forum Corporate Governance in Indonesia or FCGI (2001), cited in Azmy *et al.* (2019) [11], Corporate Governance is corporate governance that regulates the relationship between shareholders, creditors, administrators, government, employees, and other internal & external stakeholders, as the system that direct, control, and monitor the company. Implementing a good corporate governance system is expected to have a positive influence on management in achieving common goals and prioritizing the purpose of the company and shareholders. Corporate governance systems encouraging companies to use resources more efficiently.

2.3 Financial Distress and Earning Management: The Role of Sate Owned Enterprises

Pramesti (2021) [12] explains that when managers have more information, it is used for agents to utilize sufficient information to carry out earnings management. This research raises the issue of earnings management because there are still differences between studies conducted by Sayidah (2020) [13], Durana (2021) [8], Li *et al.* (2022) [14] regarding the relationship between earnings management and financial distress. This study fills the research gap by using state-owned enterprises (SOE) as a moderating variable. SOE as moderator was chosen because of the different characteristic, rules, regulations, policies between SOE and non-SOE companies in Indonesia. SOE companies had support from the government because their capital comes from country's assets and used for the general public welfare. In addition, the government has the authority and power to determine firm's policies. The revenue of the SOE companies are also a part of country's income. Meanwhile, non-SOE companies is try get the maximal profits in their business. Capital in a non-SOE company is obtained from a person or group of people who has the same goals in making a profit. In addition, the income or revenue from non-SOE companies is managed for the company itself and partly distributed to shareholders.

H_1 = Earnings management has an effect on financial distress in listed companies in Indonesia.

H_4 = State-owned enterprises can strengthen/weaken the relationship of earnings management to financial distress.

2.4 Financial Distress and Business Strategy: The Role of State Owned Enterprises

Business strategy can affect company's income because not all companies with large assets are able to manage and get the same results as their competitors, where choosing the right business strategy can reduce business risk (Septiana, 2022) [15]. Hock-Doepgen *et al.* (2021) [16] explained that when the business model changes and companies are

late in implementing business strategies in order to adapt to the market, it will have a negative impact on the company's business.

In Indonesia, an example of an unsuccessful business strategy is the bankruptcy of PT Modern International Tbk (MDRN) or the 7-Eleven minimarket business due to the large operational costs that must be incurred. At first, 7-Eleven was not suitable for Indonesia because the selling price was relatively higher than in other stores (minimarket), and the demand for goods did not meet the daily needs of consumers. When sales declined, 7-Eleven did not implement any significant business strategies to increase their sales. In the end, PT Modern International Tbk. Had to be forced to close all of its outlets and was officially declared bankrupt. Bryan *et al*. (2013) [6] then found that the firm strategies had an effect on reducing bankruptcy risk. Bryan *et al.* (2013) [6] explained that implementing a business strategy will be able to outperform competitors and achieve great performance. Widiarto *et al*. (2019) [6] states that the business strategy implemented in SOE companies can influence the company's competitive advantages. Hence, this study aims to analyze the effect of business strategy on financial difficulties and also to determine the effect of SOE as moderating between business strategy and financial distress. Both SOE and non-SOE companies could make a different business strategy. This can be caused because the government participates in decision making in state-owned companies. For example, during the Covid-19 period PT Bio Farma (Persero) had duties from the government to distribute vaccines, provide medicines and vitamins, etc. to people (collaborate with Ministry of Health). On the other hand, non-SOE companies competed with other private companies to make strategies in selling their product.

H_2 = Business strategy has an effect on financial distress in listed companies in Indonesia.

H_5 = State-owned enterprises can strengthen / weaken the relationship of business strategy to financial distress.

2.5 Financial Distress and Firm Life Cycle: The Role of State Owned Enterprises

Financial distress in companies could be varied for each stage in the firm life cycle. It shows that the start-up companies or companies in a decline stage are more susceptible to lead into financial distress (Cao, 2012) [17]. Miller & Friesen (1984) [18] examined the general stages of firm's life cycle. Firm's life cycle has five stages: birth phase or start-up companies, grow/develop phase, mature phase, revival phase, and declining stage. At each phase of development, the organization will have different strategies and methodologies for making decisions to achieve company goals.

ElBannan (2021) [19] states that companies with high capitalization and good investment decisions can prevent financial distress in MENA (Middle East/North Africa) countries, while Al-Hadi (2017) [20] stated that start-up companies are more vulnerable to financial distress exposure than companies that are already stable. Vinh (2022) [7] said that state-owned companies in Vietnam who get the support from the government such as resources and fresh money, giving the assumption "too big to fail". This government can prevent companies from going bankrupt. In addition, related to the firm's life cycle, it can be seen that it is easier for companies to enter the next life cycle stage with government support. So, this research analyzed the impact of firm life cycle to financial

distress and SOE as moderating can impact to relationship between firm life cycle and financial distress.

H_3 = Firm life cycle has an effect on financial distress in listed companies in Indonesia.

H_6 = State-owned enterprises can strengthen/weaken the relationship of firm life cycle to financial distress.

3 Math and Equations

3.1 Research Variable

This study uses data from 294 listed companies in Indonesia Stock Exchange from quarter 3 2019 to quarter 2 2022. This study excludes the sample of companies which has negative total equity & companies in financial sectors of business (ElBannan, 2021) [19]. The period chosen it was due to show the latest economic condition in Indonesia. According to the Coordinating Minister for the Economy in press release No. HM.4.6/163/SET.M.EKON.2.3/12/2019 Coordinating Ministry for Economic Affairs, there was a global economic slowdown and global uncertainty until the end of 2019. Then, at early 2020 Indonesia entered the Covid-19 era, where restrictions on activities due to a pandemic carried out by the government had an impact on national losses, sectoral losses, individual and corporate losses (Hadiwaryono, 2020) [21]. The impact of Covid-19 still happen until now, especially the company's vulnerability to experience financial distress.

This research use Altman's (1995) third generation discriminant analysis of Z-score to measure financial distress, which the original of Z-score was created by Altman in 1968. This formula (Z″-score) can be applied to non-manufacture, public & private companies, and Altman (2016) [22] used Z″-score to predict financial distress with the context of bankruptcy prediction for international companies and Mardaconsita (2019) [23] did research using this formula for Indonesian companies. So, Z″-score can defined as:

$$Z'' = 6{,}56\,X_1 + 3{,}26\,X_2 + 6{,}72\,X_3 + 1{,}05\,X_4 \tag{1}$$

where X_1 is working capital scaled by total assets, X_2 is retained earnings scaled by total assets, X_3 is earnings before interest and tax (EBIT) scaled by total assets, and X_4 is book value of equity scaled by total liabilities.

The first independent variable in this research is earnings management. This research use Healy model (1985) [24] to define earnings management by comparing the average total accruals. Total accruals include discretionary and non-discretionary, the formula is as follows (Sayidah, 2020) [13]:

$$\text{ACCRL} = \text{NI} - \text{CFO} \tag{2}$$

ACCRL is total accruals, NI is net income before extraordinary items, CFO is cash flow from operating activities.

Business strategy is another independent variable in this study. Cost leadership and differentiation are generic strategies stated by Porter (1980) [3] in business strategy theory. Agustia (2020) [4], Islami (2020) [25], Snow & Miles (1978) [26], David (2002) [27] used cost leadership and differentiation to describe business strategy. Asset turnover of operation (ATO) is used as a proxy for measuring cost of leadership because the higher ATO ratio the better of operations in that company because company has maximized the use of its resources and this shows the level of cost leadership used by the company. The formula of ATO as follows:

$$\text{ATO} = \frac{Operating\ Sales}{Average\ Operating\ Assets} \tag{3}$$

where operating sales is *total asset – cash – short term investment*.

To measure differentiation strategy, this study use profit margin. Company maximizes profit margins by offering good & unique products as their advantage. The products have great characteristics that reflect competitive advantage in the market through research and development and their innovative idea. Profit margin (PM) formula as follows:

$$\text{PM} = \frac{Operating\ Sales + R\&D\ Expenditure}{Sales} \tag{4}$$

Last, the independent variable of this study is firm's life cycle. ELBannan (2021) [19] use two proxy to measure firm's life cycle, namely retained earnings to total asset (RE/TA) and retained earnings to total equity (RE/TE), the higher value of those ratio usually the company is stable or in the mature stage. Hence, it is possible for the company to have good performance. Proxy of firm life cycle is;

$$\text{MatAsset} = \frac{RE}{TA} \tag{5}$$

where, RE is company's retained earnings and TE is total asset.

$$\text{MatEq} = \frac{RE}{TE} \tag{6}$$

where, RE is company's retained earnings and TE is total equity.

One of the purpose of this study is to analyze whether the state-owned enterprises (SOE) as moderating variable could influence the relationship between financial distress as dependent variable and earnings management, business strategy, and firm life cycle as independent variables and to know how these differences in firm ownership can strengthen or weaken the variables studied. As we know, SOE and non-SOE have a few differences such as there are rules for SOE companies to conduct public service to support the government and also to get help from the government in the form of subsidies or capital injection (Sayidah, 2022) [13]. In addition, the differences in management mechanisms such as company regulations, contracts, and company policies (Lin *et al.* 2020) [28]. For some SOE companies, they run their business in oligopolistic markets (Sridharan, 2018) [29]. Recently, several SOE companies in Indonesia are experiencing negative income (losses) and have poor management resulting in financial problems. Vinh (2022) [7] did research in Vietnam use state-owned enterprises as moderating variable, the proxy is a ratio of government ownership in the company.

Control variables are employed to prevent biased calculation result. The control variable is to maintain the relationship between the independent variable and the dependent variable not to be influenced by external factors outside the object of research (Sadjiarto et al., 2020) [30]. Control variables employed in this study are firm size calculated by taking the natural log of total asset in year *t* (Sadjiarto, 2020 [30]. ElBannan, 2021 [19]). Next is leverage calculated by dividing book value of total debt to book value of total asset (Liu, 2021 [31]. Sadjiarto, 2020 [30]). Growth opportunities described by market to book ratio (Garcia and Herrero, 2021) [32]. Loss by defining a value of 1 if the company has a negative net income and a value of 0 otherwise (Jacoby, 2016) [33].

3.2 Empirical Model

Following study by Sayidah (2020) [13], Agustia (2020) [4], Vinh (2022) [7], ElBannan (2021) [19]. The Ordinary Least Square model in this study is formulated as follows:

$$\begin{gathered} Y_{i,t} = \alpha + \beta_1 EM_{i,t} + \beta_2 BSCL_{i,t} + \beta_3 BSD_{i,t} + \\ \beta_4 FMA_{i,t} + \beta_5 FME_{i,t} + \beta_6 FS_{i,t} + \beta_7 LEV_{i,t} + \\ \beta_8 GO_{i,t} + \beta_9 LOSS_{i,t} + \varepsilon_{i,t} \end{gathered} \tag{7}$$

Then, this study add state-owned enterprises as moderating, shown in the model as follow:

$$\begin{gathered} Y_{i,t} = \alpha + \beta_1 EM_{i,t} + \beta_2 EM.SOE_{i,t} + \beta_3 BSCL_{i,t} + \\ \beta_4 BSCL.SOE_{i,t} + \beta_5 BSD_{i,t} + \beta_6 BSD.SOE_{i,t} + \\ \beta_7 FMA_{i,t} + \beta_8 FMA.SOE_{i,t} + \beta_9 FME_{i,t} + \\ \beta_{10} FMA.SOE_{i,t} + \beta_7 SOE_{i,t} + \beta_8 FS_{i,t} + \beta_9 LEV_{i,t} \\ + \beta_{10} GO_{i,t} + \beta_{11} LOSS_{i,t} + \varepsilon_{i,t} \end{gathered} \tag{8}$$

where, Y is financial distress, EM is earnings management, BSCL is business strategy – cost leadership, BSD is business strategy – differentiation, FMA is firm life cycle first proxy, FME firm life cycle second proxy, SOE is state owned enterprises, FS is firm size, LEV is leverage, GO is growth opportunities, Loss is loss or profit in company.

4 Results and Discussion

4.1 Description Analysis

Total number of observations in this study is 3,528 observations. The result of statistical analysis are presented as below:

Mean value of Z"score of 294 companies in the last three years is 1.92. Based on Altman (1983), 1.92 is on gray area, meaning that the company tends to get into financial distress condition. The minimal score belongs to PT Sidomulyo (SDMU), which could be due to that SDMU had profit decline of 29.8% and asset decline reach to Rp 20M. PT Waskita until 2022, had losses of up to Rp 236M because the project was not running well. Max value of Z'score comes from Ace hardware (ACES) and Ultrajaya (ULTJ), considering that those company's product have a lot of demand and loyal consumers (Table 1).

Tabel 1. Descriptive Statistic

Variable	Obs	Mean	Std. Dev.	Min	Max
FD	3,528	1.92	2.02	0.095	7.77
EM	3,528	24.72	1.96	17.67	30.30
BSCL	3,528	1.38	0.53	−3.26	8.59
BSD	3,528	12.30	15.05	1.42	61.37
FMA	3,528	0.00	0.03	−0.44	0.31
FME	3,528	−0.02	0.54	−18.2	5.34
FS	3,528	28.84	1.67	24.59	33.26
LEV	3,528	0.28	0.18	0.00	0.92
GO	3,528	1.86	1.91	0.25	7.49
Loss	3,528	0.33	0.47	0	1

Table 2. Regression Model Test

Panel Model Test	Result	Remarks
Chow Test	0.00	FEM is preferred
Hausman Test	0.00	FEM is preferred
Bruesch-pagan Test	No Test	

4.2 Panel Model Test

This test is to determine the best suitable model for this research based on the observation data.

The Chow test show the probability value is 0,00, it is means that H_0 is rejected and fixed effect model is preferred. Then Hausman test with the probability value is 0,00, can be conclude that fixed effect model was chosen to be the best model (Table 2).

4.3 Heteroscedasticity and Autocorrelation Test

The heteroscedasticity test is to find out whether there is an unequal variance of the residuals of an observation. While the autocorrelation test is to analyze whether the linear regression model has a correlation between the current *t* error with the previous *t* (Launa & Respati, 2014) [34]. The BLUE assumption explains that OLS estimation should be free from heteroscedasticity and autocorrelation.

The value 0.00 indicate that there is heteroscedasticity in this research (Table 3).

The value 0.00 indicate that there is autocorrelation in this research (Table 4).

Table 3. Heteroscedasticity Test

Wald-test	
chi2 (294)	1.4e + 06
Prob > chi2	0.00

Table 4. Autocorrelation

Wooldridge Test	
F(1,294)	94,66
Prob > chi2	0.00

4.4 Regression with Robustness Check

Following the fixed effect model being chosen from the Chow test, Table 5 presents the results of regression:

This study also winsorizes the data to balance extreme data. In addition, this study also applies fixed effect regression model with robustness check to overcome auto-correlation and heteroscedasticity problems. The regression results show that earnings management (EM), differentiation business strategy (BSD), cost leadership business strategy (BSCL) & firm's life cycle (FMA) with proxy retained earnings to total asset have a significant effect on financial distress. Meanwhile, the firm life cycle (FME) with proxy retained earnings to total equity shows no significant results on financial distress.

The control variable show that firm size does not affect financial distress, the opposite result is shown by leverage, growth opportunities, and losses have influence to financial distress.

The value of R^2 in the first model (without moderating variable) shows a value of 0.6116 and in the second model (with a moderating variable) shows a value of 0.5809 which means that the model being tested can explain the proportion of the contribution of the independent variable to explain the dependent variable (Ginting & Silitonga, 2019) [35]. The value of 61.16% in the model before the moderating variable, means that the variability of financial distress can be explained by these variables, while the other 38.84% is explained by other variables not included in the model.

Earnings management (EM) has a coefficient of 0.020 which means that higher earnings management leads to higher financial distress. It is supported by study by Sayidah (2020) [13] and Jacoby (2019) [33] who show that there is a positive relationship between EM and FD. It is aligned with the Agency theory (Jensen & Meckling, 1976) [9], where agency relationships could bring problems caused by a misalignment between the goals of the principal and the agent, so that managers can manipulate the company's performance in financial reports.

Regression results of the earnings management with SOE as moderating variable indicate that the moderating variable has no significant effect. It can be concluded that business ownership by the government does not affect the earnings management variable

Table 5. Regression

	without moderating variable		*with moderating variable*	
Variables	**Coef.**	**Std. Error**	**Coef.**	**Std. Error**
EM	0,02	0,0103**	0.019	0,010**
EM.SOE			−0,012	0,028
BSCL	−0,67	0,1399***	−0.656	0,138***
BSCL.SOE			23,21	6.56***
BSD	−0,01	−0,0027*	−0.005	0.002*
BSD.SOE			−0,813	0,228***
FMA	1,409	0.728*	1,376	0,743*
FMA.SOE			−8,452	2,774***
FME	−0,02	0.022	−0,191	0,022
FME.SOE			0,764	0,71
FS	0,102	0.326	0,108	0,327
LEV	−4,45	0.705***	−4,483	0,712***
GO	0,563	0.059***	0,56	0,059***
LOSS	−0,12	0.032***	−1,119	0,032***
constant	−0.31	9.236	−0,445	9,283
Regression				
R2	0,6116			
Prob > F	0			
F-stat	25,61			
Regression with moderation				
R2			0,5809	
Prob > F			0	
F-stat			117,36	

Note: The dependent variable is financial distress (FD), the moderating variable is government ownership (SOE). * significance $\alpha = 1\%$, ** significance $\alpha = 5\%$, *** significance $\alpha = 10\%$,

on financial distress, which means it does not weaken or strengthen the relationship between these variables. Whether the company is state-owned or private companies, they will face financial difficulties if they do earnings management activities.

The cost leadership strategy (BSCL) shows that this variable has a negative and significant effect of −0.674, which means that every change of 1 unit of cost leadership strategy will reduce the possibility of financial distress by 0.674. Companies that implement strategies to minimize costs can provide more flexibility in dealing to supplier when there is an increase in input costs (Porter, 1998) [3]. For example, the company Kalbe Farma (KLBF), with massive and aggressive production, can reduce other costs

so that it can increase profits such as in the second quarter of 2022, with a profit increase 9.33%. A low-cost position usually places the company in an advantageous position relative to its competitors in the industry.

BSCL.SOE moderation variable shows a positive and significant effect. This means that the state-owned enterprises increases the influence of the cost leadership business strategy (BSCL) on the possibility of financial distress. Supported by several examples of SOEs that operate in oligopolistic or being market leader ways, such as PT Pupuk Indonesia and PT Kereta Api Indonesia, enabling production in large quantities to make the company more efficient.

In the second strategy which is differentiation strategy (BSD), show that BSD has a negative and significant effect, the coefficient value is –0.005 indicating that for every change of 1 unit of differentiation strategy will reduce financial difficulties. Carl Shapiro (1989) [36] states that business competition models must frequently evolve over time, adapt, and be applicable in dynamic business conditions. Product differentiation is an innovation step taken by management as an effort to maintain existence in the market, so that consumers can see the advantages (the differentiation) of the company.

The moderating variable of BSD.SOE gets significant results with a negative coefficient value of −0.813. This means that SOE weakens the relationship between business strategy differentiation and financial difficulties compared to private companies. For example, PT Kino, a private company that is implementing a differentiation strategy to increase profit margins, was successfully carried out in 2022 by cutting general & administrative expenses. Meanwhile, state-owned companies are less flexible in implementing this strategy because it has to be aligned with the government's goals, for example PT Pertamina which provides ordinary product quality, compared to other oil companies which have better quality of products such as Shell, BP, Vivo.

RE/TA (FMA) showed significant positive regression results. Every change of 1 unit of retained earnings to total assets at firm's life cycle stage increases the possibility of financial distress. High RE/TA shows that the company has better liquidity. It is supported by ElBannan (2021) [19] who shows that financial difficulties occur related to liquidity at each stage of firm's life cycle. On the other hand, RE/TE (FME) show insignificant results indicating that retained earnings against total equity in the company's life cycle has no effect on the possibility of financial distress. According to DeAngelo *et al*. (2006) [37], a lower RE/TE is a younger company that tends to be more vulnerable to financial difficulties.

Moderating variables SOE show a significant effect on FMA and have no effect on FME. The FMA proxy shows that SOE could weaken the relationship between the firm's life cycle and the financial life cycle. This can happen because SOE companies have responsibility to do public services (Sayidah, 2020) [13] which are supported by the government, and it could be concluded that SOE companies are more stable than private companies because the support given by government. FME proxy with the SOE moderating variable have no influence with the firm's life cycle and financial distress.

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References

1. Sudjarat, M. A., & Wijayanti, E. (2019). Analisis Prediksi Kebangkrutan (Financial Distress) dengan Perbandingan Model Altman, Zmijewski dan Grover. Inventory: Jurnal Akuntansi. Vol 3. No 2. 116 – 129
2. Burgstahler, David., & Dichev, I. (1997). Earnings management to avoid earnings decreases and losses. Journal of Accounting & Economics. Vol 24 (1), hal: 99 -126.
3. Porter, Michael E. (1998). Competitive Strategy – Techniques for Analyzing Industries and Competitors. New York: The Free Press.
4. Agustia, Dian et al. (2020). Earnings Management, Business Strategy, and Bankruptcy Risk: Evidence from Indonesia. Heliyon. Vol 6 (2), 1 – 9.
5. Zhang et al. (2022). Corporate Business Strategy and Tax Avoidance Culture: Moderating Role of Gender Diversity in an Emerging Economy. Front Psychol. Vol 13, 827553
6. Bryan, Daniel., Fernando, G. D., & Tripathy, A. (2013). Bankruptcy Risk, Productivity, and Firm Strategy. Review of Accounting and Finance. Vol 12 (4), 309 – 326.
7. Vinh, N. Kuong. (2022). Firm Life Cycle and Earnings Management: The Moderating Role of State Ownership. Cogent Economics and Finance. Vol 10 (1), 2085260
8. Durana, P., Michalkova, L., Privara, A., Marousek, J., & Tumpach, M. (2021). Does the life cycle affect earnings management and bankruptcy?. Oeconomia Copernicana, 12(2), 425–461.
9. Jensen, MC., & Meckling, W. H. (1976). Theory of The Firm: Managerial Behavior, Agency Costs, and Ownership Structure. Journal of Financial Economics. Vol 3, pp 305 – 360.
10. Destriana, Nicken. (2015). Pengaruh Debt to Equity Ratio, Dividen, dan Faktor Non Keuangan terhadap Agency Cost. Jurnal Bisnis dan Akuntansi. Vol 17 (2), 125 – 133.
11. Azmy, A., et al. (2019). Effect of Good Corporate Governance on Company Profitability RE & Property Sector in Indonesia. Jurnal Akuntansi. Vol 23 (1), pp 18 – 33.
12. Pramesti, E., & Rahayu, Y. (2021). Pengaruh Corporate Governance, Leverage, and Kinerja Keuangan terhadap Manajemen Laba. JIRA: Jurnal Ilmu dan Riset Akuntansi. Vol 10 (6).
13. Sayidah, N. Assagaf, A., & Faiz, Z. (2020). Does earning management affect financial distress? Evidence from state-owned enterprises in Indonesia. Cogent Business & Management, Vol 7 (1): 1832826.
14. Li, et al. (2020). Predicting The Risk of Financial Distress using Corporate Governance Measures. Pacific-Basin Finance Journal.
15. Septiana. F. (2022). Determinant of Financial Performance for General Insurance Companies in Indonesia. Junral Ecodemica: Jurnal Ekonomi, Manajemen, dan Bisnis. Vol 6 (1), 88 – 97.
16. Hock-Doepgen et al. (2021). Knowlegde Management Capabilities and Organizational Risk-taking for Business Model Innovation in SMEs. Journal of Business Research. 130: 683 – 697.
17. Cao, Yu., & Chen, Xiao-hong. (2012). An Agent-based Simulation Model of Enterprises Financial Distress for The Enterprise of Different Life Cycle Stage. Simulation Modelling Practice and Theory, 20, 70-88.
18. Miller, D., & Fiersen, P. H. (1984). A Longitudinal Study of the Corporate Life Cycle. The Institute of Management Sciences – INFORMS. Vol 30 (10), pp 1161 – 1183.

19. ElBannan, M. A. (2021). On The Prediction of Financial Distress in Emerging Markets: Whats Matters More? Empirical Evidence from Arab Sring Countries. Emerging Markets Review. Vol 47, 100806. https://doi.org/10.1016/j.ememar.2021.100806
20. Al-Hadi et al. (2017). Corporate social responsibility performance, financial distress, and firm life cycle: evidence from Australia. Accounting & Finance 59 (2), 961 – 989.
21. Hadiwardoyo, Wibowo. (2020). Kerugian Ekonomi Nasional Akibat Pandemi Covid-19. Baskara: Journal of Business & Entrepreneurship. Vol 2 No.2, 83 – 91.
22. Altman, E. I., et al. (2016). Financial Distress Prediction in an International Context: A Review and Empirical Analysis of Altman's Z-score Model. Journal of International Financial Management & Accouting. Vol 28 (2), 132 – 171.
23. Mardaconsita., & Soelton, Mochamad. (2019). Analysis of Accuracy Level of Altman Z-score Model and Springate Model in Measuring the Potential of Financial Distress in Plantations Industries. International Journal of Economics and Financial Research. Vol 5 (2), 16 – 25.
24. Healy, P. M. (1985). The Effect of Bonus Schemes on Accounting Decisions. Journal of Accounting and Economics. Vol 7, 85 – 107.
25. Islami, Xhavit., Mustafa, Naim., Latkovikj, M. T. (2020). Linking Porter's Generic Strategies to Firm Performance. Future Business Journal: Vol 6 (1).
26. Miles, R. E., & Snow, C. C. (2003). Organizational Strategy, Structure, and Process. California: Stanford University Press.
27. David, J. S., Hwang, Y., Pei, B. K. W., & Reneau, J. H. (2002). The Performance Effects of Congruence Between Product Competitive Strategies and Purchasing Management Design. Management Science, 48(7), 866–885.
28. Lin, K. J., Lu, X., Zhang, J., Zeng, Y. (2020). State-owned enterprises in China: A review of 40 years of research and practice. China Journal of Accounting Research. Vol 13: 31 – 55.
29. Sridharan, S, & Joshi, M. (2018). Impact of Ownership Patterns and Firm Life-Cycle Stages on Firm Performance: Evidence from India. The Journal of Corporate Accounting & Finance. 29(1): 117-136.
30. Sadjiarto., et al. (2020). Analysis of The Effect of Business Strategy and Financial Distress on Tax Avoidance. Journal of Economics and Business. Vol 3 (1), pp 238 – 246.
31. Liu, B., el at. (2021). Imitative Innovation and Financial Distress Risk: The Moderating Role of Executive Foreign Experience. International Review of Economics and Finance. Vol 71, pp 526 – 548.
32. Garcia, C. J., & Herrero, Begona. (2021). Female directors, capital structure, and financial distress. Journal of Business Research: Vol 136, pp 592 – 601.
33. Jacoby, G., Li, Jialong, & Liu, M. (2016). Financial distress, political affiliation and earnings management: the case of politically affiliated private firms, The European Journal of Finance, https://doi.org/10.1080/1351847X.2016.1233126
34. Launa, Elvia., & Respati, N. M. (2014). Pengaruh Mekanisme Corporate Governance dan Ukuran Perusahaan terhadap Manajemen Laba. Jurnal Reviu AKuntansi dan Keuangan, Vol 4 (1): pp 507 – 524.
35. Ginting, M Christina., & Silitonga, Ivo M. (2019). Pengaruh Pendanaan dari Luar Perusahaan dan Modal Sendiri terhadap Tingkat Profitabilitas pada Perusahaan ¬Property and Real Estate yang Terdaftar di Bursa Efek Indonesia. Jurnal Manajemen: Vol 5 (2): 195 – 204.
36. Shapiro, Carl. (1989). The Theory of Business Strategy. RAND Journal of Economics. Vol 20 (1), 125 – 137.
37. DeAngelo, H., DeAngelo, L., (2006). The irrelevance of the MM dividend irrelevance theorem. Journal of Financial Economics Vol 79, 293–315.