



## Impact of financial distress and CSR on the market value of the property sector

Bahrul Yaman<sup>1</sup>, Muhamad Rivo Andriansyah<sup>2</sup>, Bisri<sup>3</sup>, Eris Sudariswan<sup>4</sup>

<sup>1</sup>Management, Universitas Islam Negeri Syarif Hidayatullah Jakarta, Jakarta, Indonesia

<sup>23</sup>Management, Universitas Bina Sarana Informatika, Jakarta, Indonesia

<sup>4</sup>Management, Universitas Muhammadiyah Bandung, Bandung, Indonesia

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### ABSTRACT

The property and real estate construction sector became one of the sectors with very rapid growth in share value. However, the construction sector fell in value when the pandemic hit due to many projects not working. The importance of studying financial distress and CSR on the market value of property companies as a management decision in going through critical times. This study aims to analyze the influence of Financial Distress (FD), Corporate Social Responsibility (CSR), Price to Book Value (PBV), and Firm Value (Size Firm/Total Assets) on the Market Value of Equity (MVE). The financial distress variable is used to see the company's financial condition, and this study shows that Financial Distress does not affect the Market Value of Equity. Corporate Social Responsibility is used to the extent that the company fulfills its social obligations and, in this study, has an influence on the Market Value of Equity. To see the company's value, use price to book value. In this study, Price to Book Value influences the Market Value of Equity. Firm value (Total Assets) is used as a comparison of inter-company value, and in the research, firm value does not affect the Market Value of Equity. Financial Distress, Corporate Social Responsibility, Price Book Value, and firm value simultaneously influence.

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### Corresponding Author:

Bahrul Yaman,  
Management,  
Universitas Islam Negeri Syarif Hidayatullah Jakarta,  
Jl. Ibnu Sina IV, Tangerang Selatan, 15419, Indonesia,  
Email: [bahrul.yaman@uinjkt.ac.id](mailto:bahrul.yaman@uinjkt.ac.id)

## INTRODUCTION

The construction property sector is the most significant investment supporter because of the many developments. However, many investments continue mentioning that investing in the property sector is lacking because the development is considered quite sluggish (Agustin & Anwar, 2022; Nugraha & Putera, 2021). According to investors, most of these issuers take more goods and then resell them, which are very minimal (Fields & Rogers, 2021; Husnah et al., 2022). Buy goods/assets to be redeveloped. Even since the pandemic hit, as reported, it can be said that this property sector's stock price is the most subdued compared to other investment sectors. In addition, Utami and Kartika (2019) also mentions that the decline in the property sector has decreased due to many

restrictions on visits to hotels, malls, and the like, so the property sector has minimal asset turnover. This study delivers interest in researching the financial health in the sector, which used to be many supporters of economic development, whether it is still feasible to be used as an investment. However, the media market.bisnis.com also said this year, and it is predict that this sector will rise as the reconstruction progresses.

Understanding Market Value of Equity (MVE) (Kamalirezaei et al., 2020; Nugraha et al., 2021; Rusdi et al., 2018), in short, is the company's entire value calculated from the total shares outstanding with the share price. However, the decline in MVE does not necessarily mean that the company will go bankrupt because even though the share price is down, money management is still under control. Hence, the potential for bankruptcy is also very small.

Financial distress is one of the tools used by researchers to predict whether a company is experiencing financial problems or is in a safe condition. In connection with efforts to see the financial aspects and adequate risk in the property company industry, the level of health and company performance using indicators to make predictions about whether a company has the potential to go bankrupt or not. Health information and bankruptcy prediction are essential. Therefore, this research needs to be done. This study tries to test the theory generated by Altman Z-Score. In addition to financial data, non-financial factors will determine stock prices later, including CSR, GCG, and the like, where CSR (Corporate Social Responsibility) (Fatima & Elbanna, 2023; Grayson & Nelson, 2017; Siueia et al., 2019) is the activity of the company providing its responsibility to the local community for the impact of the company.

Sembiring and Trisnawati (2019) is a tool to see whether a company's stock price is high or cheap. This PBV is used to consider investors buying cheaper shares. For example, if the PBV value of a company is above 1, it can be said that the company's share price is high. The size of the company's company or total assets is also a consideration for investors to invest. Total assets are used as an indicator of company size because they are long-term compared to sales (Wardita et al., 2021).

Based on previous research, the results showed that the first previous research did not affect the effect of FD on MVE (Pietraszewski et al., 2023; Sudrajat & Wijayanti, 2019). The second research on CSR does not affect MVE (Rusdi et al., 2018). The second study on PBV influences company prices ((Irfan & Kharisma, 2020; Nasarudin et al., 2021; Nugraha, 2014)). Based on the description above, the central vision of writing is to see the condition of a company, especially the main discussion here is when the company's price decreases whether the company is bankrupt or not. The next step is to see how far the influence of FD, CSR, Firm Size, and PBV variables are on the company's MVE.

## RESEARCH METHOD

This research uses quantitative methods, namely research whose data is processed and analyzed quantitatively to conclude. The data for this study uses secondary data that is already available on websites such as [www.idx.co.id](http://www.idx.co.id) and the like. Panel data combines time series and cross-section, where the same cross-section unit is measured at different times. Panel data regression analysis observes the relationship between one dependent variable and one or more independent variables. The data collection technique used purposive sampling. According to Sugiyono (2019), purposive sampling is one of the non-random sampling techniques to determine sampling by setting criteria that are following the research objectives so that the data obtained can be more accurate. The criteria determined in this study are: 1) Companies in the property sub-sector are listed on the Indonesia Stock Exchange (IDX) until December 2020.; 2) Have complete financial report data from 2015 to 2020. Sekaran (2016) states that good research uses financial report data between 5 to 10 years.; 3) MVE changes fluctuate (Up Down/ Always Down).; 4) Shares are traded in a row on the IDX during the 2015-2020 period.

In the tests carried out by the panel data model as follows:

$$Y_{it} = \alpha_{it} + \beta_1 X_{1it} + \beta_2 X_{2it} + \beta_3 X_{3it} + \beta_4 X_{4it} + \varepsilon_{it}$$

- Y<sub>it</sub> = Market Value of Equity
- X<sub>1it</sub> = Financial Distrest
- X<sub>2it</sub> = Corporate Social Responsibility
- X<sub>3it</sub> = Price to Book Value
- X<sub>4it</sub> = Size

Before conducting data analysis, multicollinearity assumption tests and heteroscedasticity assumption tests were carried out, before determining the fixed effect panel data regression model used based on the Chow, Hausman, and LM tests.

## RESULTS AND DISCUSSIONS

### Results

#### Fundamental Analysis

In table 1, which companies are suitable for investment? Of course, an explanation of which company is good assumes that the best is always the one whose value goes up but take your time with the Z-Score weight. For example, company A is always at a value of 2.10 to 2.70 for 10 years, while company B is at a value of 2.90 and then drops to 1.90 within 1 year. This explains that the value of company A is more stable than company B (Davidson 2019). So, I conclude that companies that are considered good are GWSA, BEST, DMAS, DUTI, and JRPT.

**Table 1.** Financial distress results

No	Company Name	Year's					
		2015	2016	2017	2018	2019	2020
1	ASRI	0.647*	0.637*	0.915*	0.951*	0.456*	0.405*
2	BEST	1.613*	1.682*	1.861**	1.865**	1.792*	1.420*
3	BKSL	0.488*	0.563*	0.962*	0.834*	0.630*	0.280*
4	DILD	0.773*	0.667*	0.678*	0.667*	0.828*	0.521*
5	DMAS	4.897	10.477	7.285	10.581	3.751	3.226
6	DUTI	4.250	4.437	3.763	3.661	4.282	4.643
7	FMII	2.999	5.159	3.023	1.655*	1.587*	1.622*
8	GWSA	11.743	21.490	27.375	21.598	23.074	60.061
9	JRPT	1.537*	1.652*	1.834**	1.747*	1.640*	1.753*
10	KIJA	1.407*	1.454*	1.326*	1.205*	1.242*	1.203*
11	LPCK	2.638**	2.851**	1.655*	3.363	4.317	0.916*
12	LPKR	1.310*	1.359*	1.298*	1.394*	1.435*	0.897*
13	MDLN	1.190*	1.030*	1.179*	0.920*	0.618*	0.241*
14	MMLP	2.125**	2.647**	3.291	3.294	2.512**	2.879**
15	MTLA	1.650*	1.811**	1.151*	1.371*	1.809*	1.901*
16	NIRO	3.374	1.729*	1.505*	2.072**	1.769*	0.921*
17	PLIN	1.253*	1.436*	1.001*	0.963*	6.006	4.519
18	PWON	1.200*	1.317*	1.455*	1.827**	2.222**	1.652*
19	RDTX	3.733	4.160	5.186	5.896	5.074	6.072
20	RODA	2.769**	2.493**	1.692*	1.464*	1.023*	0.803*
21	SMRA	1.193*	1.089*	1.009*	1.016*	0.976*	0.886*
Average		2.514	3.340	3.307	3.254	3.192	4.611
Low - Financial Distress		11.743	21.490	27.375	21.598	23.074	60.061
High - Financial Distress		0.488	0.563	0.678	0.667	0.456	0.241

Note:

- \*\* : Shows that the company is in the gray area
- \* : Indicates that the company is in a state of threat of bankruptcy
- : The company is not experiencing financial problems

It can be seen from the data processing in table 2, that the correlation between variables shows that nothing exceeds the value of 0.9. So, it can be concluded that the data that I processed did not have symptoms of multicollinearity.

**Table 2.** Multicollinearity test

	X <sub>1</sub>	X <sub>2</sub>	X <sub>3</sub>	X <sub>4</sub>
X <sub>1</sub>	1	-0.198	-0.102	-0.115
X <sub>2</sub>	-0.198	1	-0.080	0.457
X <sub>3</sub>	-0.102	-0.080	1	-0.501

Source: Data Processing 2022

In the heteroscedasticity test shown in table 3, each variable's probability value has a value above 0.05. So, the data I use here do not experience symptoms of heteroscedasticity.

**Table 3.** Heteroscedasticity test

Variable	Coefficient	Std. Error	t-Statistic	Prob
C	-0.347	0.753	-0.461	0.646
X <sub>1</sub>	-0.006	0.003	-1.581	0.117
X <sub>2</sub>	-0.053	0.266	-0.199	0.842
X <sub>3</sub>	0.004	0.014	0.293	0.769
X <sub>4</sub>	0.021	0.026	0.787	0.433

Note: p < 0.10; \* p < 0.05; \*\* p < 0.01; \*\*\* p < 0.001

Judging from the t-test table 4 below, it can be concluded that: (a) The X1\_FD has no influence on MVE, so H1 is rejected with a significance value of 0.3365. (b) The X2\_CSR variable influences MVE, so H1 is accepted with a significance value of 0.0476. (c) The X3\_PBV variable influences MVE, so H1 is accepted with a significance value of 0.0003. (d) The X4\_SizeFirm has no effect on MVE, so H1 is rejected with a significance value of 0.3880.

**Table 4.** T-test

Variable	FEM	
	Coefficient	Prob
Y_MVE	24.113	0.000***
X <sub>1</sub> _FD	0.009	0.336
X <sub>2</sub> _CSR	-2.202	0.048**
X <sub>3</sub> _PBV	0.146	0.000***
X <sub>4</sub> _SizeFirm	0.187	0.388

Note: p < 0.10; \* p < 0.05; \*\* p < 0.01; \*\*\* p < 0.001

It can be seen from table 5 that the F-statistic value is at 0.000. It is concluded that all the independent variables simultaneously influence the dependent variable. And also, the R-Squared value is at 86%. This explains that all these variables have demonstrated the effect of the independent variable on the dependent variable by 86%. While the rest is explained by other variables or outside the regression model used.

**Table 5.** F-test

R-squared	0.866	Mean Dependent Var.	29.079
Adjusted R-Squared	0.834	S.D. Dependent Var	0.941
S.E. of Regression	0.383	Akaike Info Criterion	1.094
Sum Squared resid	14.817	Schwarz Criterion	1.657
Log Likelihood	-43.935	Hannan-Quinn Criter	1.323
F-Statistic	27.254	Durbin-Watson Stat	1.383
Prob (F-Statistic)	0.000		

## Discussion

We know through the t-test that this FD variable has no effect. The finding is in line with previous research, namely the influence of Financial Distress on the Market Value of Equity by (Sudrajat, 2015; Sudrajat & Wijayanti, 2019), which states that this FD value does not significantly affect MVE. The result is that most FD values do not always experience significant changes. The result explains that the financial situation in the property sector is relatively controlled and stable. With the finding that FD value tends to be stable and even continues to increase, the results conclude that the natural and estate property sector is still outstanding if investors choose companies in this sector. Of course, they still look at other factors besides the value of this Financial Distress.

The difference with previous research on the influence of CSR on MVE by (Rusdi et al., 2018; Saridakis et al., 2023) is that the relationship between CSR and MVE has no value, whereas if the CSR value is stable and will not affect the MVE value as well. Previous research is different from the research finding where the value of CSR and MVE has a significant influence relationship and a negative influence relationship where if the value of CSR increases, then the value of this MVE decreases. The different could be because this real estate property's CSR only focuses on their property. As long as the investor reads the annual report of this real estate property company, it is more like how residents around their company can only feel its facilities. This could be the cause of CSR is not felt by many citizens, so its effect decreases the company's price.

The result explains that the PBV value also influences the MVE. The explanation could be because the PBV value has changed, even those that tend to change significantly where the lower the PBV value also affects the MVE value, which is also decreasing. The results of this study are in line with previous research on the effect of PBV on stock prices by Irfan and Kharisma (2020) which states that the value of this PBV has a positive influence on company prices. The greater the PBV value in a company, of course it will be able to attract investors to invest in the company. Therefore, the PBV ratio must be maintained so that the company's value can be stable and maintain investor confidence.

The company's size here also does not align with the previous research on the effect of Total Assets on stock prices by (Halawa & Purba, 2020; Muttaqin et al., 2019). This is because the company's value, which also tends to be stable, does not change significantly. Here the company's value is used as a comparison for investors to determine which companies are worth investing. Because if the company's value is high, the more likely it is that the MVE value will be higher. This is also in line with previous research where Firm Size does not affect the MVE. However, with the value of assets remaining stable and coupled with the real estate property sector, which also relies on assets to develop its business, it is terrific if we pay attention to assets in this sector. With so many assets owned, the real estate property sector can develop many businesses, and the MVE value will also increase to attract investors.

## CONCLUSION

After carrying out the data regression test in this study, the researchers concluded that: First, there is no effect of Financial Distress on the Market Value of Equity in the Property and Real Estate sector companies; Second, Corporate social responsibility influences the Market Value of Equity in the Property and Real Estate sector companies; Third, Price to Book Value affects the Market Value of Equity in the Property and Real Estate sector companies; Fourth, Firm Size has no effect on the Market Value of Equity in Property and Real Estate sector companies; And fifth, Based on the F test, Financial Distress, Corporate social responsibility, Price to Book Value, and Corporate Value have a combined effect on the Market Value of Equity. Based on finding and limitation this study, for future study the variable financial distress can be a moderator variable in testing the effect of corporate social responsibility on the market value of equity, companies that have high financial distress tend to hold back CSR spending compared to companies with low financial distress.

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