http://ejournal.seaninstitute.or.id/index.php/Ekonomi
Jurnal Ekonomi, Volume 12, No 04 2023
ISSN: 2301-6280 (print) ISSN: 2721-9879 (online)

THE EFFECT OF FINANCIAL DISTRESS, CAPITAL STRUCTURE AND FIRM SIZE ON FIRM VALUE IN THE BANKING SECTOR IN SOUTHEAST ASIA

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ARTICLE INFO

Keywords:
FDS, DER, TA, Firm Value

ABSTRACT

The purpose of this study was to determine the effect of financial distress proxied by Financial Distress Score (FDS), the effect of capital structure proxied by Debt to Equity Ratio (DER) and the effect of firm size proxied by Total Assets (TA) on Firm Value (FV) in the banking sector in Southeast Asia. The number of samples in the study were 82 banks selected through purposive sampling method with the observation period for 2018 to 2022. This research is descriptive statistics with classical assumption tests. The analysis technique used is panel data regression where the common effect model (CEM) is chosen as the best model for this study. The results of the study with the coefficient of determination R^2 show that the FDS, DER and TA variables are able to explain changes in firm value by 4.72%. The results of research with the t test show that FDS has no effect on firm value, DER has a significant positive effect on firm value and TA has a significant positive effect on firm value.

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1. INTRODUCTION

In 2020 the corona virus began to spread countries around the world as a Global Pandemic. As a result of the Covid 19 pandemic, global economic activity decreased dramatically at the beginning of the pandemic until the beginning of 2023. The world slowly has the potential to experience a global recession in 2023 because central banks in the world together increase interest rates in response to inflation followed by a series of financial crises in developing countries where it will have a permanent detrimental impact (worldbank.org).

Predictions about this recession were also conveyed by the Managing Director of the International Monetary Fund (IMF), Kristalina Georgieva, who said that the IMF projects that half of the world's economies will experience a recession this year. Where the recession will be felt by millions of people living in countries that do not experience it directly. This projection is supported by several indications that have been seen, such as the aggressive increase in benchmark interest rates by central banks in various countries in an effort to reduce the rate of inflation. If the steps taken by central banks by various countries are to raise interest rates, then one of the sectors that will be affected is the banking sector. High interest rates can negatively affect financial stability, as they can undermine the capacity of borrowers to repay their loans, and increase default rates. This is in line with the results of research by Coelho et al., (2023) which states that a rapid increase in interest rates affects the solvency and liquidity position of banks. Whereas the Banking sector is one of the driving sectors of a country's economy. According to Jeanne Gobat as a senior economist at the IMF, if a bank is declared bankrupt, the impact is not only felt by customers, but also affects other banks and the market as a whole.

The recent phenomenon is that the Federal Reserve (Central Bank of the United States) raised its interest rate from 0.25% in 2021 to 5% in March 2023. As a result of this significant increase in interest rates, it seems to be one of the reasons for several banks in America to experience bankruptcy in 2023. Among them are Silicon Valley Bank, Signature Bank, Silvergate Bank and First Republic Bank.

According to Toto (2011), bankruptcy is a condition where the company is no longer able to pay off its obligations. This condition usually does not just appear in the company. There are early indications of

the company that can usually be recognized early if the financial statements are analyzed more carefully. Therefore, an early warning system can play an important role in preventing a company from bankruptcy. This early warning system can be done by assessing the level of financial distress of a company. Financial distress is the process of decreasing the company's financial condition before experiencing liquidation or bankruptcy (Platt & Platt, 2002). Brahmana (2007) states that if the company shows negative net income, the company takes merger action, negative book value of equity and negative operating profit, the company can be categorized as in financial distress.

To measure the level of financial distress itself there are many methods, including Altman's Model by Altman (1968) from the United States, Springate Model by Springate (1978) from Canada, Data stream's Model by Marais (1979) from the UK, prediction method by Zmijewski (1983), Fulmer Model (1984) from the US, and Ca-score Model (1987) from Canada. However, to measure the level of financial distress in the banking sector, the results of previous studies prove that the Bankometer Model can be used to determine financial distress for banks (Adnan et al., 2021). The Bankometer model was developed by Shar, et. al (2010) where the ratios used in this model are Capital Adequacy Ratio (CAR), Capital to Assets Ratio (CA), Equity to total Assets (EA), Non-Performing Loan (NPL), Cost to Income ratio (CIR), Loans to Assets (LA).

If a company experiences financial distress, it can be predicted that it will greatly affect the value of the company, which of course affects the selling value of the company's shares in the capital market. This is what happened in the case of the bankruptcy of Sillicon Valley Bank (SVB) in the United States, seen from the Wall Street Journal (SWJ) data in a few days the SVB stock price dropped dramatically, which was originally valued at US $ 267 on March 8, 2023 down to US $ 106 or down as much as -60.41% on March 9, 2023 until it was finally declared closed to protect customers. Yana & Purwanto (2022) showed that financial distress has a positive effect on increasing firm value. However, these findings differ from research conducted by Sumaryati & Tristiarini (2018) and Tamarani (2015) which shows that financial distress has an insignificant effect on firm value.

Another factor that can affect firm value is the solvency ratio. The solvency ratio is a ratio used to measure the extent to which the company's assets are financed by debt. High financial leverage indicates that the business capital structure uses more debt than its own capital. Capital structure is a description of the form of the company's capital structure consisting of debt and equity capital which is the source of financing for a company (Fahmi, 2015). Based on Yana & Purwanto's research (2022), it is stated that capital structure is an important factor in influencing firm value. This is supported by research by Rizki et al., (2018) and Nindy Alisa et al. (2022) shows that capital structure affects firm value. Likewise, research conducted by Putra & Wiagustini (2013) and Bon & Hartoko (2022) in their research proves that the solvency ratio has a positive effect on firm value, the higher the leverage can increase firm value. However, the results of these studies differ from the results of research conducted by Cahyadi (2017) and Warisman and Andi (2022) which show that the capital structure proxied by the debt to equity ratio (DER) has no effect on firm value.

The next factor that can affect firm value is firm size (Mardiyah, 2002). Firm size is a scale that can be classified as the size of the company according to various ways, including: total assets log size, stock market value, and others Mardiyah (2002) and Widaryanti (2009). The conditions of the company had different size which means there are also companies that are small. companies so that for small-scale companies it is more difficult to get access to capital than large-scale companies in the capital market. This phenomenon in the competition of each company will run according to its conditions, large companies will have greater access while smaller companies will have smaller access as well, each of these companies must be able to read the market situation market situation in order to expand its business to get the maximum profit. In his research Hermuningsih (2012), Soliha & Taswan (2002), company value is significantly and positively influenced by firm size. The larger the firm size, the higher the company value and otherwise, the smaller the firm size, the greater the company value. However, this is different from the results of research conducted by Linawati et al., (2022) which states that bank size has a negative effect on firm value. Meanwhile, research conducted by Bon & Hartoko (2022) and Wahyudi & Sholahuddin (2022) shows the opposite result, namely company size has no effect on firm value. The results of the studies mentioned above show inconsistencies in the findings. The difference in the findings attracts the author to re-examine the effect of financial distress on firm value, the effect of capital structure on firm value and the effect of company size on firm value.

In terms of empirical phenomena, the banking sector in the Southeast Asian region, in this case the countries that are members of the Association of South East Asian (ASEAN), is interesting to observe. Because countries in the ASEAN region are mostly developing countries. In the midst of turbulent global economic conditions, developing countries are more easily affected. Based on Anggraeni (2019) the results reveal that banks in more developed markets in ASEAN, such as in Thailand, Malaysia, and Singapore, are very sensitive to global economic disruptions. The findings also reveal that during the global financial crisis, bank performance was at its weakest point before a significant recovery and based on research by Isnurhadi et al., (2022) related to risk in the banking industry in ASEAN countries shows that countries that have the highest risk in the banking industry are Indonesia, Thailand, the Philippines, Malaysia and Singapore. Learning from previous experience, ASEAN countries have been affected by the Asian Financial Crisis (1997-1998) and the Global Financial Crisis (2008-2009). At that time, many banks in ASEAN countries were declared bankrupt, such as in Indonesia there were 16 banks liquidated during the Asian Financial Crisis (1997-1998) while in Thailand there were 58 financial companies declared bankrupt. During these crises, countries in the ASEAN region increased their interest rates. Just like the current economic conditions, amidst the global recession and the impact of the US interest rate hike. ASEAN countries are currently raising interest rates. As the data in table 1 below presents the movement of interest rates in ASEAN countries. It can be seen that 7 out of 11 ASEAN member countries raised their country's interest rates higher in May of this year 2023.

Table 1 Interest Rates of Countries in Southeast Asia

No	Countries	2020 (%)	2021 (%)	2022 (%)	MAY 2023 (%)
1	Brunei Darussalam	5,50	5,50	5,50	5,50
2	Filipina	2,00	2,00	5,50	6,25
3	Indonesia	3,75	3,50	5,50	5,75
4	Kamboja	0,60	0,61	0,70	0,88
5	Laos	4,00	3,00	6,50	7,50
6	Malaysia	1,75	1,75	2,75	3,00
7	Myanmar	9,50	7,00	7,00	7,00
8	Singapore	0,18	0,07	1,65	3,65
9	Timor Leste	11,28	11,03	11,03	N/A
10	Thailand	0,50	0,50	1,25	1,75
11	Vietnam	4,00	4,00	6,00	6,00

Source: processed from various sources

The impact of rising interest rates in ASEAN countries has greatly affected the financial conditions in the banking sector of each country. According to Coelho et al., (2023) based on their research shows that the rapid increase in interest rates affects the solvency and liquidity position of banks through various interconnected channels. Like global banks, ASEAN banks are also exposed to credit risk (Non-Performing Loan / NPL). Credit risk arises due to an increase in non-performing loans, and these loans are a concern for both developed and emerging banking sectors (Alandejani & Asutay, 2017) . If seen in the table below, each ASEAN member country shows that there are differences in fluctuations in NPL rates.

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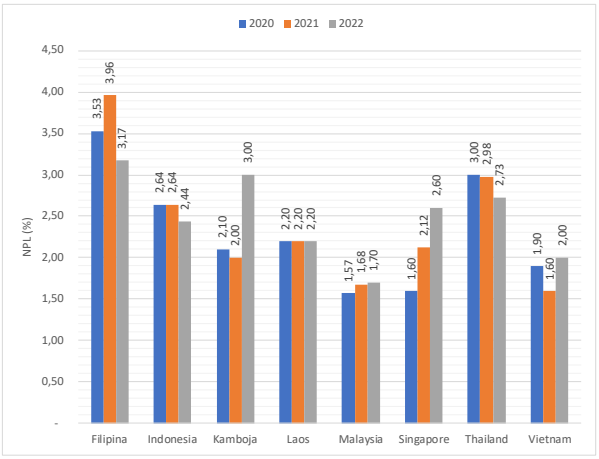

Figure 1: NPL of Countries in Southeast Asia
Source: processed from various sources

The higher the NPL ratio, the lower the performance or profitability of the bank and also the profit earned by the bank. Banks with high NPL values will increase the cost of both productive asset reserves and other costs, thus potentially leading to bank losses (Mawardi, 2005 in Perkasa, 2007). Based on the results of research by Suhartanto et al., (2022) Non-Performing Loan (NPL) affects the prediction of potential financial distress.

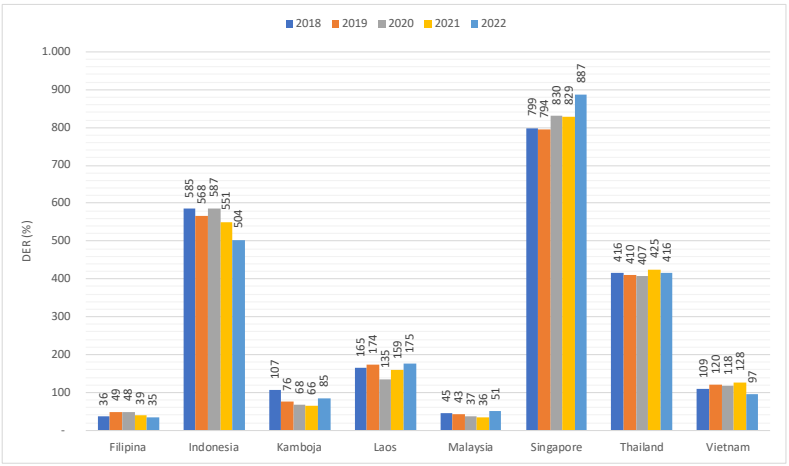

Figure 2: Debt to Asset Ratio (DER) of Countries in Southeast Asia
Sources: bank focus and annual report (processed)

Based on Figure 2. Debt to Asset Ratio (DER) of Countries in Southeast Asia shows the movement of the DER ratio during the 2018-2022 period in countries in Southeast Asia where Malaysia and the Philippines have the lowest percentage of DER ratio while Indonesia and Singapore have a high percentage of DER ratio during the 2018-2022 period. Debt to Equity Ratio (DER) or the ratio of total debt to total equity is a ratio that describes the composition between the amount of funds originating from debt and the amount of funds originating from the Company. For an example in Indonesia, it has been regulated in the Regulation of the Minister of Finance of the Republic of Indonesia Number 169 / PMK.010 / 2015, if the percentage of DER is 4 times or total debt exceeds 400% of total equity, the maximum tax charged to the company is only 4: 1 while the application of the provisions of the ratio between debt and capital is excluded for banks because the debt formed by banks is customer funds which will later be channeled back so that an increase in the percentage of DER in the chart above can affect the value of banking companies.

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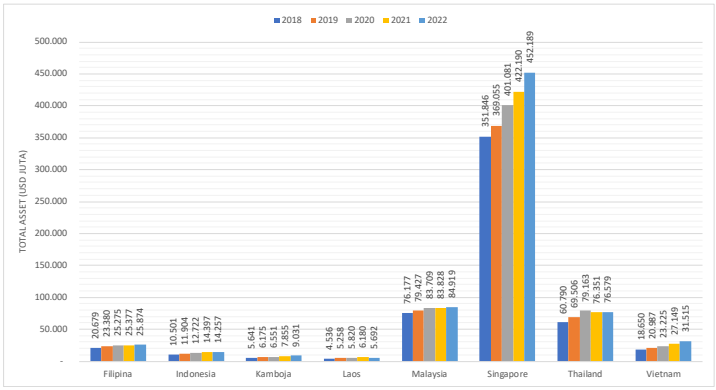

Figure 3: Total Assets (TA) of Countries in Southeast Asia
Sources: bank focus and annual report (processed)

Based on Figure 3. Total Assets (TA) Countries in Southeast Asia show the movement of the average value of TA tends to increase during the period 2018-2022. Total Assets (TA) is the overall assets owned by a company or financial institution consisting of total debt and total equity. Firm size is described by total assets which shows the size of the company. The greater the total assets, the greater the size of the company and the greater the capital that will be invested. Companies with high total assets make it easier for management to use change assets and can increase company value. The bigger the company, the more attractive it is for investors to invest their capital. Based on the description that has been submitted, this research will discuss the effect of financial distress, capital structure and firm size on firm value in the banking sector in Southeast Asia.

Literature Review

Relationship between Financial Distress Score (FDS) and Firm Value (FV)

Financial distress is a condition in which a company is unable to fulfil its financial obligations to creditors. Financial distress conditions have a variety of approaches, it depends on the situation that occurs such as bankruptcy, uncapped bonds and unpaid dividends (Purwanto et al., 2023) . Over time, bankruptcy prediction methods continue to develop, this is because the prediction of bankruptcy risk is increasingly important for corporate governance (Horvathova and Mokrisova, 2018). Many models have been developed by experts to predict corporate bankruptcy, with their strengths and weaknesses, and it is not easy to select such methods to be used empirically (Alisa & Dwi Nita Aryani, 2022) . Agarwal & Taffler (2008), Das et al. (2009) and Bauer and Agarwal (2014) proved the reliability of prediction models based on accounting, market, and hazard. From the accounting side, known factors that can affect financial distress include profitability ratios (Chancharat, 2008; Nur Hafizah, 2015; Idris, 2008; Liloshna et al, 2017) and liquidity ratios (Khunthong, 1997; Nur Hafizah, 2015). Currently, there are several methods that can be used to predict financial difficulties, but the bankometer S-Score model is more relevant for predicting financial difficulties in the banking sector (Bella & Radianto, 2021) .

Previous research by Utami et al., (2022) which examined the effect of GCG, Corporate Risk Management and Financial difficulties on firm value in the banking sector on the Indonesia Stock Exchange (IDX) and Stock Exchange of Thailand (STE) concluded that financial difficulties have a negative effect on firm value, Renalita & Tanjung (2023) who examined the effect of financial difficulties, profitability and current ratio on firm value concluded that financial difficulties have no effect on firm value. Yana & Purwanto (2022) who examined the effect of financial distress, capital structure and firm size on property companies listed on the Indonesia stock exchange 2016-2020 concluded that there is a positive and significant effect on financial distress and capital structure on firm value so that financial distress and capital structure are important factors in influencing firm value. Ayu et.al., (2022) who examined the factors that affect firm value during the covid-19 pandemic concluded that leverage with the proxy Debt to Equity Ratio (DER) and financial distress have a positive effect on firm value, while profitability with the proxy Return on Equity (ROE) and Dividend Payout Ratio (DPR) have no effect on firm value. Simultaneously, profitability, leverage, financial distress, and Dividend Payout Ratio (DPR) affect firm value. Sudarma & Sari (2020) who examined financial difficulties, opportunities for growth, dividend policy on firm value concluded that financial difficulties have a negative effect on firm value,

Growth Opportunities and dividend policy have a positive effect on firm value and in the study were unable to prove the Company's hedging policy as a mediating variable.

H1: Financial distress has a negative effect on firm value

Relationship between Debt to Equity Ratio (DER) and Firm Value (FV)

Capital structure is a description of the form of the company's capital structure consisting of debt and equity capital which is the source of financing for a company (Fahmi, 2015). The need for funds to strengthen the capital structure of a company can be sourced from internal and external sources, provided that the source of funds needed is sourced from places that are considered safe and if used has a thrust value in strengthening the company's financial capital structure. Funding decisions are closely related to the capital structure which is the most important part in the formation of firm value (Mahendra, 2015).

Previous research by Amin & Yunanto (2019)which examined the effect of capital structure on the value of banking companies listed on the IDX concluded that capital structure has a positive effect on firm value. Ayu (2022) who examined the factors that affect firm value during the covid-19 pandemic concluded that DER and financial distress have a positive effect on firm value. Rizki et al., (2018) who examined the effect of capital structure on firm value with profitability as an intervention variable concluded that capital structure has a significant positive effect on firm value, Debt to Asset Ratio (DAR) has no effect on firm value, Debt to Equity Ratio (DER) has a significant effect on firm value, Equity to Asset Ratio (EA) has no significant effect on firm value, Return on Asset (ROE) is able to mediate the effect of capital structure on firm value and according to Priya et al. (2015) who examined the Impact of Capital Structure on the Firm Value: Case Study of Listed Manufacturing Companies in Sri Lanka concluded that the Equity to Asset Ratio and Debt Ratio have an effect on firm value.

H2: Debt to Equity Ratio (DER) has a positive effect on firm value.

Relationship between Total Assets (TA) and Firm Value (FV)

Firm size can be measured using the total assets, sales, or capital of a company. One of the benchmarks that shows the size of the company is the size of the assets of a company. Companies that have large total assets indicate that the company has reached the maturity stage where at this stage the company is considered to have good prospects. The capital structure decision is determined by the size of the company besides that it also reflects that the company is relatively more stable and more capable of generating profits than companies with small total assets (Ismu, 2006). Firm size can be seen from the amount of equity value, sales value and asset value (Riyanto, 2013). Firm size is believed to affect firm value because the larger the scale of the company, the easier it is for the company to obtain funding sources that can be used to achieve company goals.

Previous research by Selly et al., (2022) which examined the Effect of Good Corporate Governance, Profitability, Millennial Leadership, Family Ownership and Firm Size on Firm Value concluded that good corporate governance has no significant effect on firm value, profitability has a significant positive effect on firm value, millennial leadership has no significant effect on firm value, family ownership has no effect on firm value, firm size has a significant positive effect on firm value. Listyaningsih (2020) who examines the effect of profitability, liquidity and firm size on firm value concludes that the profitability ratio and firm size proxied by ROA and Total Asset affect firm value, while the liquidity ratio proxied by the current ratio has no effect on the effect on firm value. Anam (2017) who examines the effect of investment decisions, funding decisions, dividend policy and firm size on firm value concludes that investment decisions have a positive and insignificant effect on firm value while dividend policy and firm size have a positive and significant effect on firm value.

Sondakh (2019) who examined the effect of dividend policy, liquidity, profitability and firm size in the financial institution service industry listed on the Indonesia stock exchange 2015-2018 concluded that dividend policy has a negative and significant effect on firm value, liquidity and firm size partially have a positive and significant effect on firm value while profitability is not appropriate and insignificant to firm value. Natsir & Yusbardini (2020) who examined the effect of capital structure and firm size on firm value through profitability as an intervening variable concluded that firm size has a significant effect on profitability, while firm size, capital structure and profitability have a significant effect on firm value. The results also show that profitability is able to mediate the effect of firm size and capital structure on firm value.

H3: Total Assets (TA) has a positive effect on firm value.

Based on the explanation along with the theories put forward by several researchers and experts, the conceptual framework that becomes the research flow is as follows:

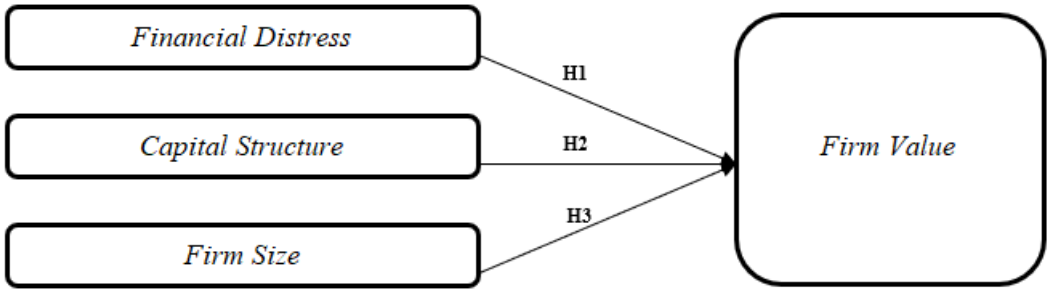

Figure 4: Conceptual Framework

2. METHOD

In this study there are 3 (three) independent variables, namely Financial Distress proxied by Financial Distress Score (FDS), capital structure proxied by Debt to Equity Ratio (DER) and firm size proxied by Total Assets (TA). Meanwhile, the dependent variable is Firm Value (FV) which is proxied by Free Cash Flow to Equity. The study uses secondary data, namely financial data on the banking sector for 5 (five) periods, namely 2018-2022. The scope of this research is banking in Southeast Asia. The population of this study is the financial sector included in the classification of the bank sector listed in the Southeast Asian Region, namely Indonesia, Singapore, Thailand, Vietnam, the Philippines, Cambodia, Laos, Myanmar, Malaysia, Brunei Darussalam and Timor Leste for the period 2018 to 2022. The sample in the study used purposive sampling method with the following criteria:

a. Banks that belong to the Southeast Asia Region.
b. Banks that have public bank status and are listed on the stock exchange in their respective countries.
c. Banks that publish financial reports for the period 2018 to 2022.
d. Banks that have the required data for the period 2018 to 2022, namely reports that include statements of financial position, income statements, cash flow statements, reports on financial ratios and notes to financial statements.

Based on the criteria specified above, a sample of 82 banks for Indonesia, Singapore, Thailand, Vietnam, the Philippines, Cambodia, Laos and Malaysia can be obtained with a period of 5 years so that the data observed in the study is 410 data. This study uses secondary data obtained from annual reports, financial reports and banking databases (bank focus) during the period 2018 to 2022. The study uses panel data regression as an analysis model that aims to analyse partially or simultaneously and the effect of financial distress, capital structure and firm size on firm value in the banking sector in Southeast Asia. The statistical measurement tool used in the research is Stata software version 17. Researchers use descriptive analysis to collect and present data in detail to make it easier to understand.

3. RESULT AND DISCUSSION

Result

Descriptive Statistical Analysis

Descriptive statistical analysis is used to determine the description of data seen from the maximum value, minimum value, average value (mean), and standard deviation value. In this study, the variables used in the calculation of descriptive statistics are FV, FDS, DER and TA. Based on descriptive statistical analysis, the sample description is obtained as follows.

Table 2: Descriptive Statistics

Variables	Units	Minimum	Maximum	Mean	Std. Deviation
FDS	Score	89	654	178	74
DER	%	-	1.673	390	357
TA	USD Million	128	743.368	43.094	104.083
FV	USD Million	- 6.178	120.674	2.667	9.660

Sources: bank focus and annual report (processed)

Based on Table 3, it is known that the FDS variable has a minimum value of 89 obtained by Joint Stock Commercial Bank for Foreign Trade from Vietnam on 2019, a maximum value of 654 obtained by Bank KB Bukopin From indonesia on 2020, an average value of 178 and a standard deviation value of 74. It is known for the DER variable has a minimum value of 0 (zero) obtained by Philippine Bank of Communication from Philipines on 2018, a maximum value of 1.673% obtained by China Construction Bank from Indonesia on 2018, an average value of 390% and a standard deviation value of 357%. It is known for the TA variable has a minimum value of USD128 billion obtained by Bank Amar Indonesia Tbk. from Indonesia on 2018, a maximum value of USD743.368 billion obtained by DBS Bank from singapore on 2022, an average value of USD43.094 billion and a standard deviation value of USD104.083 billion. It is known that the FV variable has a minimum value of USD-6.178 billion obtained by Bank of Ayudha Company Limited on 2021, a maximum value of USD120.674 billion obtained by DBS Bank from singapore on 2020, an average value of USD2.667 billion and a standard deviation value of USD9.660 billion.

Panel Data and Reression Model Estimation

Panel data regression has a combination of characteristics, namely data consisting of several objects and covering time. Data with these characteristics have advantages, especially because they are robust to heterocedaticity and normality. Panel data regression can be done with three panel data models, namely the common effect model (CEM), fixed effect model (FEM) and random effect model (REM). Selection of the best panel data regression model can be done by testing the three models through the Chow test, Hausman test and Breusch & Pagan Lagrangian Multiplier test in determining the best model.

To determine the best model among CEM or FEM models using the Chow Test while to determine the best model among FEM and REM models using the Hausman Test and to determine the best model among CEM and REM models, the Bresuch-Pagan Lagrange Multiplier Test will be conducted. the chow test results show a probability value of 0.1799 so that if the probability value is greater than 0.05 or or p> 0.05 then H0 is accepted and the model chosen is the Common Effect Model (CEM) approach.

The hausman test results show a probability value of 0.2383 so that if the probability value is greater than 0.05 or or p> 0.05 then H0 is accepted and the selected model is the Random Effect Model (REM) approach. Because the chow test results state that the Common Effect Model (CEM) is the best and the hausman test states that the Random Effect Model (REM) model is the best so that one more test will be carried out to determine the best model between CEM and REM. The test performed is the Breusch-Pagan Lagrange Multiplier test, the following are the results of the Breusch-Pagan Lagrange Multiplier test. The Breusch Pagan Lagrangian Multiplier test results show a probability value of 0.2924 so that if the probability value is greater than 0.05 or or p> 0.05 then the best model is the Common Effect Model (CEM).

Statistic Test

Table 3: Common Effect Model (CEM) Regression Result

Variables	Coefficient	Prob. t	R-Squared	Prob F
FDS	-0.0097364	0.188	0.0472	0.0002
DER	0.0044975	0.001		
LnTA	0.5975927	0.038		
Constant	4.085967	0.445		

Source: STATA software processing result

Test Coefficient of Determination R^2

Based on Table 3, the coefficient of determination R^2 is 0.0472 or 4.72%. This value means that the FDS, DER and LnTA variables are able to explain changes in FV value by 4.72%.

Model Fit Test (F Test)

Based on Table 3, it shows the Prob> F value of 0.0002 so that if the probability value is smaller than 0.05 or or prob <0.05, the model is declared to be suitable or fit.

Individual Parameter Coefficient Test (t-test)

Based on Table 3, the regression equation results are LnFV=4.085967-0,0097364(FDS) + 0.0044975(DER) + 0.5975927(LnTA) + e. Based on the statistical values and the regression equation, it can be concluded that:

1. FDS has no effect on LnFV with a regression coefficient of -0.0097364 and probability value of P> | z | = 0.188 > 0.05.
2. DER has a positive effect on LnFV with a regression coefficient value of 0.0044975 and is significant as indicated by a probability value of P> | z | = 0.001 < 0.05.

b. LnTA has a positive effect on LnFV with a regression coefficient of 0.5975927 and is significant as indicated by a probability value of P> | z | = 0.0038 < 0.05

Discussion

The Effect of Financial Distress Score (FDS) on Firm Value (FV)

The results showed that H1 was rejected because FDS had no effect on FV. Signal theory explains that a financial state that has good performance is a signal that the company has been operating properly (Ross, 1977). Signal theory is the basis for companies to be willing to make voluntary disclosures, as stated in the company's annual report. The signal is in the form of information about the efforts made by management to realise investors' wishes (Dody, 2020). Signals can be in the form of certain information, for example, disclosure of information on the company's financial condition. This is done by the company to attract investors to invest, increase positive reputation, and at the same time, increase company value. Signal theory assumes that efficient companies provide investors with relevant and better information than less efficient companies to raise capital (Al-Sartawi, 2016).

In this study, financial distress is proxied by Financial Distress Score (FDS). FDS through the bankometer model is a model that measures the level of financial distress through a solvency score (S-Score) where the parameters are developed based on IMF recommendations (Hussain Shar et al., 2010). FDS is a calculation consisting of solvency ratios namely Capital to Asset Ratio (CA), Equity to Asset Ratio (EA) and Capital Adequacy Ratio (CAR), profitability ratios namely Cost to Income Ratio (CIR), Leverage namely Loans to Asset Ratio (LA) and Indicators of financial institution quality namely Non-Performing Loan Ratio (NPL).

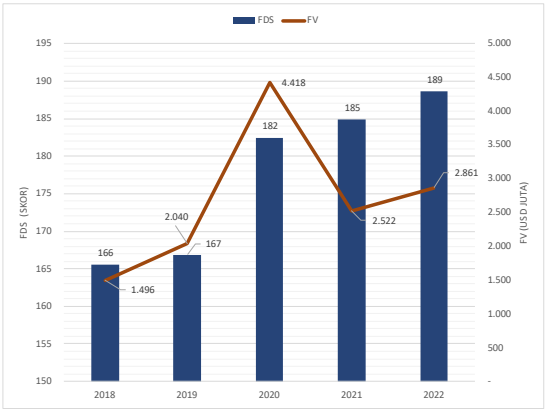

Figure 5 : FDS dan FV of Banks in Southeast Asia
Sources: bank focus and annual report (processed)

Based on the research results, it was found that FDS has no effect on FV, this can be seen from the movement of FDS scores during the period 2018 to 2022 where in general the FDS score has increased but the FDS score has fluctuated during that time period. The results of this study are in line with the research of Renalita & Tanjung (2023) which examines the effect of financial difficulties, profitability and current ratio on the value of the Company which conveys that financial difficulties do not have an impact on firm value, Sumaryati & Tristiarini (2018); Widagdo & Sa'diyah (2022) who found that financial difficulties do not affect the value of the Company, but the results of this study are not in line with Utami et al., (2022) which examines the effect of GCG, Corporate Risk Management and Financial difficulties on firm value in the banking sector on the Indonesia Stock Exchange (IDX) and the Stock Exchange of Thailand (STE) concluded that financial difficulties have a negative effect on firm value, according to

Sudarma & Sari (2020) related to financial difficulties, opportunities for growth, dividend policy on firm value concluded that financial difficulties have a negative effect on firm value.

The Effect of Debt to Equity Ratio (DER) on Firm Value (FV)

The results showed that H2 was accepted because DER has a positive effect on FV. The results of this study reveal that the higher the DER ratio will have a significant positive effect on firm value. Pecking Order Theory states that companies tend to prioritise internal funding over external funding. Specifically, companies have preferences in optimising the use of funds. According to Myers (2001) there is a hierarchical scenario in choosing funding sources, namely (1) Companies choose to use internal funding sources rather than external funding; (2) If external funding is needed, then the company will choose first starting from the safest securities, namely the lowest risk debt, down to more risky debt, hybrid securities such as convertible bonds, preferred shares, and ordinary shares; (3) There is a constant dividend policy, that is, the company will set a constant amount of dividend payments, regardless of how much the company is profitable or loss; (4) To overcome the shortage of cash supply due to the constant dividend policy and fluctuations in the level of profit, as well as investment opportunities, the company will take a smooth investment portfolio available. Capital structure management is something that needs to be considered, because decisions in the optimal use of debt can increase the value of the company.

In this study, the capital structure is proxied by Debt to Equity Ratio (DER). DER or the ratio of total debt to total equity is a ratio that describes the composition between the amount of funds originating from debt and the amount of funds originating from the Company. A high DER ratio assumes that the bank has greater debt than the available equity. Debt owned by banks in the form of funds from customers that can be in the form of deposits or savings so that with the high income of deposits from these customers, the bank has the opportunity to be able to channel funds to debtors where the margin for channeling these funds is a profit for the bank. If it is associated with the results of the study which found that banking DER has a significant positive effect on firm value, the higher the debt owned by the bank, in this case deposits, it has the potential to increase firm value through improved bank performance.

The results of this study are in line with Amin & Yunanto (2019)who examined the effect of capital structure on the value of banking companies listed on the IDX, concluding that capital structure has a positive effect on firm value, Rizki et al., (2018) which examines the effect of capital structure on firm value with profitability as an intervening variable concludes that DER has a significant effect on firm value, Ayu (2022) who examines the factors that affect firm value during the covid-19 pandemic concludes that DER and financial distress have a positive effect on firm value, Priya (2015) who examines the effect of capital structure on firm value concludes that capital structure affects firm value and Wahyudi & Sholahuddin (2022); Natsir & Yusbardini (2020) state that DER has a significant effect on firm value. However, the results of this study are not in line with Toni et al. (2020) which found that DER has no effect on firm value.

The Effect of Total Assets (TA) on Firm Value (FV)

The results showed that H3 was accepted because TA has a positive effect on FV. The results of this study reveal that the higher the TA value will have a significant positive effect on firm value. Firm size is divided into 3 categories, namely large firms, medium-size firms and small firms where the determination of firm size is based on the company's total assets (Suwito et.al, 2005). Firm size can be measured using the total assets, sales, or capital of a company. One of the benchmarks that shows the size of the company is the size of the assets of a company. Companies that have large total assets indicate that the company has reached the maturity stage where at this stage the company is considered to have good prospects. The capital structure decision is determined by the size of the company, besides that it also reflects that the company is relatively more stable and more capable of generating profits than companies with small total assets (Ismu, 2006). Firm size is believed to affect firm value because the larger the scale of the company, the easier it is for the company to obtain funding sources that can be used to achieve company goals. In this study, firm size is proxied by Total Assets (TA). TA is the total assets owned by a company or financial institution consisting of total debt and total equity.

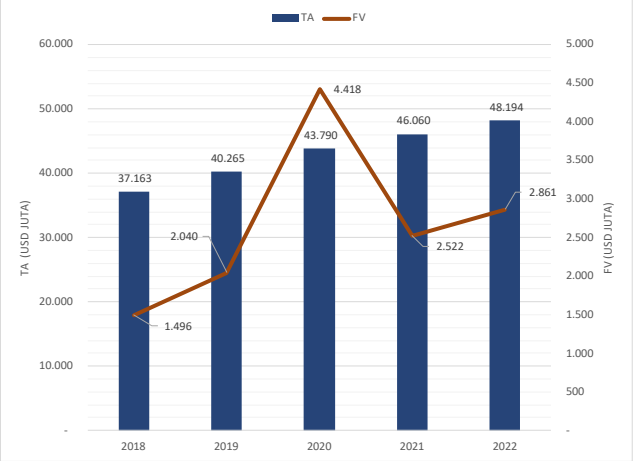

Figure 6: TA dan FV of Banks in Southeast Asia
Sources: bank focus and annual report (processed)

Based on the results of the study, it was found that TA has a significant positive effect on FV, this can be seen from the movement of TA during the period 2018 to 2022 where from 2018 the TA value continues to increase until 2022 where the FV value continues to increase from 2018 to 2020 but in 2021 it decreased due to the impact of the covid-19 pandemic and increased again in 2022.

The results of this study are in line with Selly et. al, (2022) who examined the Effect of Good Corporate Governance, Profitability, Millennial Leadership, Family Ownership and Firm Size on Firm Value concluded that good corporate governance has no significant effect on firm value, profitability has a significant positive effect on firm value, millennial leadership has no significant effect on firm value, family ownership has no effect on firm value, firm size has a significant positive effect on firm value. Listyaningsih (2020) who examines the effect of profitability, liquidity and company size on firm value concludes that the profitability ratio and company size proxied by ROA and Total Asset have an effect on firm value, while the liquidity ratio proxied by the current ratio has no effect on the effect on firm value, Sondakh (2019); Anam (2017) who said that company size has a positive and significant effect on firm value. However, the results of this study are not in line with Yana & Yana & Purwanto (2022) who examined the effect of financial difficulties, capital structure and firm size on firm value, concluding that financial difficulties and capital structure have a positive effect on firm value and firm size proxied by Total Assets has no significant effect on firm value, Bon & Hartoko (2022) examining the effect of dividend policy, investment decisions, leverage, profitability and firm size on firm value shows that dividend policy has no effect on firm value. Wahyudi & Sholahuddin (2022) who examined the effect of profitability, leverage and company size on companies listed on the Jakarta Islamic Index concluded that company size has no effect on firm value.

4. CONCLUSION

Based on the analysis and research results with the selection of the best model, the results of testing the FDS, DER and TA variables on FV for the period 2018 to 2022 in the banking sector in Southeast Asia, it can be concluded that FDS has no effect on FV, DER has a significant positive effect on FV, TA has a significant effect on FV. Based on the research results, suggestions from researchers as an effort to increase company value for companies engaged in the banking sector to consistently evaluate performance, innovate and maintain financial ratios so that companies can survive and grow in the current digital disruption era. The company can optimise available customer funds by channeling business capital loans and maintaining the Non Performing Loan (NPL) ratio at a predetermined limit. The company can optimise available funds by educating customers and increasing facilities or offers that can be tailored to customer needs, through this it is hoped that in addition to increasing company value, it is hoped that it will also have an impact on micro and macro economic growth. This research is designed in such a way as to obtain the expected results. However, this study has limitations faced by researchers, including the results show that there is still no effect of the FDS variable on firm value so that there are still other independent variables that need to be taken into account to see the effect on firm value, Limited information on the data studied for Myanmar where the available financial data is incomplete for the time

period 2018 to 2022 and for Brunei Darussalam and Timor Leste do not have a stock exchange so that information for banking financial data is not available.

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