The Influence of Capital Structure, Liquidity, Solvency and Firm Growth on the Company's Financial Distress That is Mediated by Profitability (A Study on 12 Indonesia General Insurance Companies Listed on the Indonesian Stock Exchange 2015-2020)

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Abstract

This research aims to analyze the influence of capital structure, liquidity, solvency and firm growth on the company's financial distress that is mediated by profitability in 12 (twelve) general insurance companies listed in the Indonesia Stock Exchange 2015-2020. It applies an associative quantitative research method using secondary data of the published Annual Report of the Indonesian general insurance companies during the above mentioned period, which therefore are determined as research samples and are made by the purposive sampling method. The panel data regression analysis was carried out by applying the EViews v9.0 software supported by Microsoft Excel usage. The data analysis uses the estimation method of multiple linear regression models with descriptive analysis. Classical assumption test consists of normality, autocorrelation, multi-collinearity and heteroscedasticity. Thereafter it is followed by hypothesis testing (t test, F test), detection of mediation effect and path analysis through the Sobel test. The results of this study provide information that all relevant companies as mentioned are all having the high probability of risking financial distress. Capital structure and solvency have immediate affect on profitability, whereas liquidity and firm growth does not, simultaneously the combination of all does have. In regard to financial distress, then capital structure and profitability does have affect, whereas liquidity, solvency and firm growth does not, but again the combination of all will have affect. Profitability mediates the capital structure that in turn influences financial distress, but this does not necessarily mediate liquidity, solvency and firm growth. Profitability however does affect on financial distress.

Keywords
Capital Structure, Liquidity, Solvency, Firm Growth, Profitability, Financial Distress

1. Introduction
The main purpose of an operating company is to maximize the value of the company and generate prosperity for the owners and parties who have an interest in the company, where the company faces the risk of loss or not getting the expected profit. According to the Indonesian Institute of Accountants (2019:30), in general a company faces risks that include the following 3 (three) situations:

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- Deteriorating market conditions (poor market conditions), which can trigger sluggish trade transactions so that it has an impact on decreasing sales and increasing company expenses.
- Weak control (poor control), such as quality control, activity control, administrative, resource control and other controls that can cause loss risk, reputation risk, and even fraud risk.
- Improper financial decisions, including funding decisions, investment decisions and asset management decisions, which can cause the company to lose money, fail to achieve the expected rate of return on investment..

The company's management must be able to control the three situations for the sake of the company's goals, where failure in this control can push the company into a loss condition which will directly or indirectly affect the disruption of cash flow. The company's negative cash flow can have an impact on the company's ability to grow and the company's obligations are not fulfilled which is an indication that the company is experiencing financial distress (financial distress) to the point of bankruptcy or company liquidation. According to Armadani, Fisabil and Salsabila (2020), financial distress conditions have a bad impact on companies, especially publicly traded companies that affect the confidence of investors and creditors as well as other external parties. In addition, the latest facts of the Covid-19 pandemic with all its impacts are additional factors that can be a catalyst for accelerating the occurrence of corporate financial distress.

At the Commemoration of Tax Day 2020 with the theme "Bangkit Bersama Pajak dengan Semangat Gotong Royong", the Director General of Taxes at the Ministry of Finance (Kemenkeu) Suryo Utomo revealed that "The economic turmoil caused by the Covid-19 pandemic hit Indonesia like a perfect storm to the Indonesian economy so that it entered in times of crisis", and there are at least 3 major impacts of the Covid-19 pandemic on the economy:

- Make household consumption or purchasing power which is the pillar of 60% of the economy fall quite deep.
- Leads to a prolonged uncertainty so that investment will also weaken and have implications for the cessation of business.
- The global economic downturn has caused commodity prices to fall and Indonesia's exports to several countries have also stalled.

This weakening or decline in the Indonesian economy was felt in almost all business sectors, including the Financial Services and Insurance sectors which play a role in supporting the Indonesian economy as a fundraiser as well as a guarantor of public protection, based on Law no. 2 of 1992 concerning Insurance Business. The insurance industry in Indonesia consists of 2 (two) major business groups, namely Insurance Companies and Insurance Supporting Companies. The Insurance Company itself consists of 3 (three) types of services, namely Loss Insurance Company or also known as General Insurance Company, Life Insurance Company and Reinsurance Company, with the following composition:

Table 1. 2015-2020 Insurance Ecosystem

Type of Company	2015	2016	2017	2018	2019	2020
General Insurance Company	76	78	80	79	73	72
Life Insurance Company	55	55	61	60	60	55
Compulsory Insurance Company	3	3	3	3	3	3
Social Insurance Company	2	2	2	2	2	2
Reinsurance Company	6	6	6	6	6	7
Direct Intermediary	166	169	169	166	161	160
Indirect Intermediary	37	40	43	43	42	42
General Insurance Agent	n/a	n/a	n/a	n/a	6,681	6,191
Loss Adjuster Company	28	28	28	28	28	28

(source: OJK & AAUI/)

The Financial Services Authority (OJK) noted that there were 139 companies with insurance business licenses in 2020, of which the General Insurance Association of Indonesia (AAUI) reported a decline in the performance of general insurance companies, which was indicated by negative growth in underwriting results and several financial ratios according to the following figure:

Table 2. The Performance of Indonesia Insurance Industry

Component	Insurance Industry			General Insurance		
	2019	2020	Growth	2019	2020	Growth
Total Investment	1,141.84	1,205.68	5.59%	78.42	81.27	3.64%

Investment Result				4.35	4.12	-5.27%
Total Assets	1,325.75	1,409.75	6.34%	157.93	166.78	5.60%
Total Liability	799.48	781.39	-2.26%	94.73	100.21	5.79%
Total Equity	524.63	627.25	19.56%	62.48	65.83	5.36%
Premium	478.65	499.23	4.3%	80.12	76.89	-4.04%
Claim	358.02	352.25	-1.61%	36.24	37.48	3.41%
Underwriting Result				15.27	14.18	-7.18%
Profit After Tax				5.88	4.94	-15.92%

(source: OJK – in IDR trillion)

Table 3. Financial Ratios of Indonesia Insurance Industry

Indicators	General Insurance			Reinsurance		
Year	2019	2020	Growth	2019	2020	Growth
Ratio of Premium Adequacy to Claim Payment	221.1%	205.2%	-7.20%	223.0%	164.6%	-26.20%
Ratio of Premium Adequacy to Claim Payment and General Expense	163.7%	153.1%	-6.49%	207.8%	158.7%	-23.61%
Ratio of Premium Adequacy and Investment Result to Claim Payment	233.1%	216.2%	-7.26%	230.8%	169.3%	-26.66%
Ratio of Premium Adequacy and Investment Result, Claim Payment and General Expense	172.6%	161.3%	-6.56%	215.0%	163.2%	-24.08%
Ratio of Insurance Cession	42.9%	43.3%	1.05%	40.6%	51.9%	28.01%
Ratio of Investment to Technical Reserve	117.9%	112.5%	-4.61%	106.5%	112.5%	5.59%

(source: OJK – in IDR trillion)

Many factors can cause a decrease in the quality of premium production and the claim contribution of general insurance companies, including the possibility of inadequate company capital structure, the company's liquidity level related to short-term liabilities, solvency level, the occurrence of company growth anomalies triggered by the Covid-19 pandemic situation. , where these factors can affect the level of profitability of the company which if not immediately observed and rescue steps taken by the management, this condition can develop into the company's financial difficulties leading to the bankruptcy of the company which is certainly not expected by stakeholders.
The following is an overview of GDP growth in several business fields:

Previous studies that have relevance to this material are as follows:

- Mailani (2020), who wrote about the effect of financial ratios using the Altman Z-Score method on the prediction of company bankruptcy: A case study on insurance companies listed on the BEI for the period 2014-2018.
- Afiqoh & Laila (2018) who wrote about the Effect of Financial Performance on the Bankruptcy Risk of Islamic Commercial Banks in Indonesia (Modified Altman Z-Score Method 2011-2017 Period)
- Sari (2018), who wrote about the Effect of Liquidity and Solvency on Profitability in Food & Beverage Companies Listed on the IDX 2013-2015
- Rachmatin and Kusumanegara (2017), who wrote about Predicting Financial Distress Using the Altman Model in Insurance Companies Listed on the Indonesia Stock Exchange

1.1 Objectives

The purpose and objective of this research is to obtain, collect and process data that have been determined to be able to study and analyze or test the effect of capital structure, liquidity, solvency and firm growth on financial distress and the role of profitability in mediating these effects.

The details of the aims or objectives are as follows:

1. To test or analyze and provide empirical evidence of the effect of capital structure on the company's profitability
2. To test or analyze and provide empirical evidence of the effect of liquidity on the company's profitability of
3. To test or analyze and provide empirical evidence of the effect of solvency on the profitability of the company.
4. To test or analyze and provide empirical evidence of the effect of firm growth on the company's profitability.
5. To test or analyze and provide empirical evidence of the effect of capital structure, liquidity, solvency and firm growth simultaneously on the company's profitability.

6. To test or analyze and provide empirical evidence of the effect of capital structure on the company's financial distress.
7. To test or analyze and provide empirical evidence of the effect of liquidity on the company's financial distress.
8. To test or analyze and provide empirical evidence of the effect of solvency on the company's financial distress.
9. To test or analyze and provide empirical evidence of the effect of firm growth on the company's financial distress.
10. To find out or analyze and provide empirical evidence of the effect of capital structure, liquidity, solvency, firm growth and profitability simultaneously on the company's financial distress.
11. To test or analyze and provide empirical evidence whether profitability mediates the effect of capital structure on the company's financial distress.
12. To test or analyze and provide empirical evidence whether profitability mediates the effect of liquidity on the company's financial distress.
13. To test or analyze and provide empirical evidence whether profitability mediates the effect of solvency on the company's financial distress.
14. To test or analyze and provide empirical evidence whether profitability mediates the effect of firm growth on the company's financial distress.
15. To test or analyze and provide empirical evidence whether profitability has an effect on the company's financial distress.

2. Literature Review

The following items are literature reviews taken from various sources that form the theoretical basis for the implementation of this research:

2.1. Management and Financial Management

Management is basically an art or process in getting things done related to the achievement of goals, which involves the following factors:

- The art of getting the job done
- Use of organizational resources, both human resources, natural, financial and information.
- A gradual process from planning, organizing, directing and implementing, to controlling and supervising
- There is a reciprocal relationship between management functions

According to Sunardi (20:9-13), financial management is the activity of the owner and management of the company to obtain the cheapest possible source of capital by using it as effectively, efficiently and productively as possible to generate profits. This describes the financial functions that are reflected in the main activities of financial managers, namely:

a. Rising of Fund, supported by 2 (two) sources:
   - Equity funding (own capital)
   - Funding from debt (loans)
b. Allocation of Funds, namely the allocation of funds compiled and reported in a balance sheet that describes the financial elements and is calculated in:
   - Liquidity Ratio
   - Leverage Ratio
   - Activity Ratio
   - Profitability Ratio
   - Growth Ratio
   - Rating Ratio
c. Sharing of Profit, which is to share profits with parties who are entitled and have a financial interest with the company

2.2. Signaling Theory

According to Wise (2013:15), in the field of economics "Signaling Theory is the idea that one party credibly conveys some information about itself to another party". This research was conducted through a review of the company's financial statement data published as a reference or signal for an investor in making a decision whether to invest in a general insurance company. The signal given is in the form of information regarding the adequacy of the capital structure, liquidity level, level of solvency achievement and firm growth trend of a public insurance company that

goes public which describes the profitability of the company, where in the latest developments related to the Covid-19 pandemic whether exposed to financial distress conditions that can lead to bankruptcy or company liquidation.

2.3. Financial Distress

According to Platt and Platt (2002), financial distress is a condition where a company is facing financial problems or difficulties indicated by the stage of the company's financial decline, before the occurrence of liquidation / bankruptcy / bankruptcy. Furthermore, Jostarndt (2006:18-20), states that the condition of financial difficulties is indicated by the company's inability to meet the demands of its obligations, which are caused by 3 (three) factors:

a. Excessive leverage
b. Industry Downturn
c. Poor company-specific operating performance

In this study, the company's financial distress potential will be measured using the Alman Z-Score model or method developed by Altman, et.al. (1977) with the following formula:

$$Z = 1.2X1 + 1.4X2 + 3.3X3 + 0.6X4 + 1.0X5$$

Remarks:

X1 = Working Capital/Total Assets (WC/TA)
X2 = Retained Earnings/Total Assets (RE/TA)
X3 = Earnings Before Interest and Taxes/Total Assets (EBIT/TA)
X4 = Market Value Equity/Book Value of Total Liabilities, (MVE/TL)
X5 = Sales/Total Assets (S/TA)

The criteria for categorizing potential bankruptcy using the Altman Z-Score Method:

Table 4. The Performance of Indonesia Insurance Industry

Zeta-Score	Company Classification
Z score > 2,99	Healthy Company
1.81 < Z score < 2.99	Company in Grey Area
Z score < 1,81	Company with Bankruptcy potential

(source: Altman, et.al. - 1977)

2.4. Profitability

To be able to get a picture of the financial condition of a company obtained from the profitability ratio, which is the company's ability to generate profits during a certain period (Bambang Riyanto, 2001:35). The profitability of a company shows the ability to earn a profit in relation to sales which is expressed in a comparison between profit and total assets or own capital that generates the profit (Sartono, 2001).

This study applies the measurement of profitability ratios through the Return on Assets (ROA) formula which measures the company's ability to generate net income from the total assets owned by the company, with the formula ((Brealey and Myers, 2008:81) as follows:

$$\text{Return on Assets (RoA)} = \frac{\text{Earnings After Tax (EAT)}}{\text{Total Assets}} \times 100\%$$

Parameters:

RoA = + → the company is able to provide profit for the company
RoA = - → company loses

2.5. Capital Structure

From these several definitions, it can be synthesized that capital structure is the financial proportion between short-term debt, long-term debt and own capital used to fulfill the company's expenditure needs, where according to Bambang Riyanto (2001:227) there are 2 components of capital structure, namely capital foreign and own capital.

This study applies the calculation of capital structure through the measurement of the capital structure ratio Debt to Equity Ratio (DER) with the following formula:

$$DER = \frac{\text{Debt Total}}{\text{Equity Total}} \times 100\%$$

2.6. Liquidity

Liquidity shows how liquid the company is where according to Hestaningrum (2012), the liquidity ratio is a ratio that shows the company's ability to pay short-term debt that has matured with its current assets.

This study applies the measurement of the liquidity ratio in the form of the Current Ratio (CR) according to Musiega et al., (2013), with the following formula:

$$\text{Current Ratio (CR)} = \frac{\text{Total Current Assets}}{\text{Total Current Liabilities}} \times 100\%$$

2.7. Solvency

In risk management, general insurance companies are required to maintain the company's solvency to meet the requirements of the level of achievement or in the insurance world it is calculated using the risk based capital (RBC) measurement method, with a minimum requirement of 120% as the Solvency Level Limit (BTS) in accordance with POJK No. 71/POJK.05/2016 dated 28 December 2016 concerning Financial Health of Insurance Companies and Reinsurance Companies which is an improvement on the Regulation of the Minister of Finance of the Republic of Indonesia No. 53/PMK.010/2012 dated April 3, 2012, which failure to comply with these provisions may result in the termination of the Company's operational activities. This provision was born to respond to several cases of default and mismanagement of investment funds in the insurance industry. According to OJK Regulations, there are 3 (three) ratios that are indicators of financial health required in the insurance sector in Indonesia as shown in the following table:

Table 5. Financial Health of Insurance Companies and Reinsurance Companies Scenario

Type of Ratio	Minimum Threshold
a. Liquidity Ratio	Healthy Company
b. Investment Adequacy Ratio	Company in Grey Area
c. Solvency Ratio	Company with Bankruptcy potential

(source: OJK)

According to SK DJLK No. 5314/LK/1999, there are 4 (four) components in the Risk Based Capital (RBC) calculation method, namely:

a. Schedule A–Default Asset
b. Schedule B–Currency Mismatch
c. Schedule C–Claim Experience Worse than Expected
d. Schedule D–Reinsurance Risk

2.8. Firm Growth

According to Brigman Houston (2009), firm growth is a change (increase or decrease) in the total assets owned by the company, which shows the company's ability to increase company assets or sales in each period.

This study applies firm growth measurement according to Widarjo and Setiawan (2009), which states that firm growth measurement can be done by comparing the total sales (sales) of the relevant year (t-year) minus the total number of the previous year (t-1 year).

$$\text{Sales Growth (SG)} = \frac{\text{Sales (t)} - \text{Sales (t-1)}}{\text{Sales (t-1)}} \times 100\%$$

3. Research Methods

This research was conducted for approximately 5 (five) months from February 20, 2021 in South Tangerang City through literacy and a study of secondary data, namely Financial Statements published from 12 (twelve) general insurance sample companies listed on the Jakarta Stock Exchange (BEI) with a purposive sampling research sample determination technique within a time series of 6 (six) years, namely 2016-2020). Based on the identification and formulation of the problem, the nature and type of the data sample in the form of numbers, data collection techniques

and the way in which the data is analyzed, this research is classified as Quantitative Research with an associative approach (relationship).

To find the relationship between the variables included in this study, the authors used panel data regression analysis (pooled data) which is a combination of time series data and cross-section data. Subsequently, hypothesis testing was carried out using the eViews 9.0 application on the following 6 operating variables, paradigms and frameworks:

Table 6. The Operation of Research Variables

Type of Variables	Variable Codes	Variabel	Skala Pengukuran
Bebas	X1	Capital Structure	Rasio (DER = Debt to Equity Ratio)
	X2	Liquidity	Rasio (CR = Current Ratio)
	X3	Solvency	Rasio (RBC = Risk Based Capital)
	X4	Firm Growth	Rasio (SG = Sales Growth)
Terikat	Y	Financial Distress	Nominal (Z-Score)
Moderasi	Z	Profitability	Rasio (ROA = Return on Assets)

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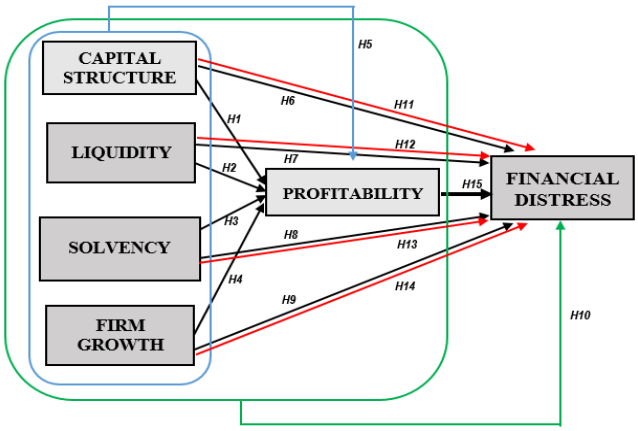

Figure 1. Framework of Thinking

Based on the paradigm, framework of thinking and operating variables that have been determined, each type of test in this research is carried out in 2 (two) models, namely:

- Model 1: to test the partial and simultaneous effect of the independent variable on the moderating variable. The results of testing this model will provide answers to the testing of Hypothesis 1 (H1) to Hypothesis 5 (H5).
- Model 2: to examine the effect of all independent variables and moderating variables on the dependent variable The results of testing this model will provide answers to the testing of Hypothesis 6 (H6) to Hypothesis 15 (H15).

5.1. Hypotesis Review

Based on the literature review or framework above, the hypothesis is formulated to be tested for truth, whether the research results will accept or reject the hypothesis, as follows:

- H01: Capital Structure affects the company's profitability.
- H02: Liquidity affects the company's profitability
- H03: Solvency on company profitability
- H04: Firm growth affects the company's profitability
- H05 : There is a simultaneous influence of capital structure, liquidity, solvency and firm growth on the profitability of the company

- H06: Capital Structure affects Financial Distress
- H07: Liquidity affects Financial Distress
- H08: Solvency margin affects the possibility of Financial Distress
- H09: Firm Growth has an effect on the possibility of the company's Financial Distress.
- H10: There is a simultaneous influence of Capital structure, liquidity, solvency and firm growth on the company's financial distress
- H11: Profitability is able to mediate the effect of capital structure on financial distress
- H12: Profitability is able to mediate the influence of liquidity on financial distress
- H13: Profitability is able to mediate the effect of solvency on financial distress
- H14: Profitability is able to mediate the influence of firm growth on financial distress
- H15: Profitability affects financial distress

4. Data Collection

Based on the criteria that have been determined through purposive sampling technique, then 12 (twelve) general insurance companies were obtained as samples of this study, with the following details:

Table 7. List of Research Object / Sample

No.	Issuer Code	Company Name
1.	ABDA	PT. Asuransi Bina Dana Arta, Tbk.
2.	AHAP	PT. Asuransi Harta Aman Pratama, Tbk.
3.	AMAG	PT. Asuransi Multi Artha Guna, Tbk.
4.	ASBI	PT. Asuransi Bintang, Tbk.
5.	ASDM	PT. Asuransi Dayin Mitra, Tbk.
6.	ASJT	PT. Asuransi Jasa Tania, Tbk.
7,	ASMI	PT. Asuransi Maximus Graha Persada, Tbk.
8.	ASRM	PT. Asuransi Ramayana, Tbk.
9.	LPGI	PT. Lippo General Insurance, Tbk.
10	MTWI	PT. Malacca Trust Wuwungan Insurance, Tbk.
11.	TUGU	PT. Asuransi Tugu Pratama Indonesia, Tbk.
12.	VINS	PT. Victoria Insurance, Tbk.

(source: www.idx.com Bursa Efek Indonesia)

A total of 72 (seventy two) observations were carried out by examining the capital structure, liquidity, solvency, firm growth, profitability and financial distress based on the information contained in the annual reports of companies included in the general insurance service sector obtained through the Indonesia Stock Exchange website in period of 2015 -2020 as well as the websites of each of these companies.

5. Results and Discussion

5.1 Data Descriptive Analysis

The descriptive analysis is the stage of research conducted to determine the value of the independent variable and the dependent variable by doing statistically analysis of each variable is capital structure, liquidity, solvency, firm growth, profitability and financial distress.

Table 8. Summary of Data Descriptive Analysis

Variable	N	Mean	Max	Min	Standard Deviation
Financial Distress	72	1.259597	2.000000	0.232000	0.321831
Profitability	72	0.023625	0.094000	(0.198000)	0.043106
Capital Structure	72	1.607542	4.932000	0.280000	0.895957
Liquidity	72	1.798931	4.493000	1.040000	0.643495
Solvency	72	3.208389	9.135000	1.280000	1.902322
Firm Growth	72	0.102083	3.348000	(0.760000)	0.470615

(Source: Output EViews v9.0, data diolah, 2021)

5.2. Linear Regression Analysis

Based on pairwise testing of the three panel data regression models, it can be concluded that the best model is the random effect model, according to the following test results:

Table 9. Summary of Research Model Determination

Jenis Uji	Model 1		Model 2	
	Nilai	Model	Nilai	Model
Chow-Test	0.0005	FEM	0.0000	FEM
Hausman Test	0.7470	REM	0.9724	REM
Lagrange Multipler (LM)	0.00000	REM	0.0000	REM
Keputusan Model	**Random Effect Model**		**Random Effect Model**	

(Source: Output EViews v9.0, data diolah, 2021)

5.3. Classical Assumption Test of Regression Model

a. Normality Test

The normality test through the eViews 9.0 program gives a probability value of > 0.05, which means that the data from the two models are normally distributed.

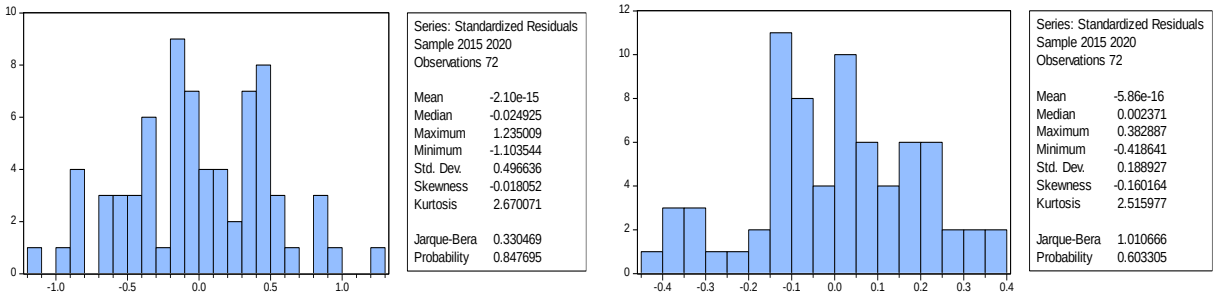

Figure 2 The Result of Normality Test

(Source: Output EViews v9.0, data diolah, 2021)

b. Heteroscedasticity Test

The heteroscedasticity test on the two observation models shows that there is no certain pattern on the graph, namely the inequality of variance in the residual error from one observation to another, which means that there is no deviation from this classical assumption requirement or there are no symptoms of heteroscedasticity in the data of this study.

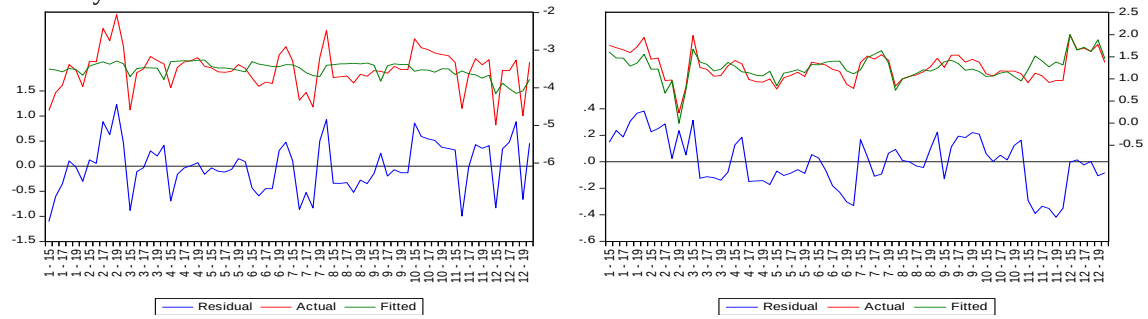

Figure 3 The Result of Heteroscedasticity Test

(Source: Output EViews v9.0, data diolah, 2021)

c. Multicollinearity Test

From the collinearity test of the two models above, it is known that all independent variables have a correlation coefficient below 0.8, so it can be concluded that the research data is free from multicollinearity problems.

Table 10. The Result of Multi-colinearity Test – Model 1

	Profitability	Capital Structure	Liquidity	Solvency	Firm Growth
Profitability	1	0.210744	-0.22968	-0.32366	0.11023
Capital Structure	0.210744	1	-0.56403	-0.70745	0.10412
Liquidity	-0.22968	-0.56403	1	0.70199	-0.12854
Solvency	-0.32366	-0.70745	0.70199	1	-0.03024

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Firm Growth	0.11023	0.10412	-0.12854	-0.03024	1

(Source: Output EViews v9.0, data diolah, 2021)

Table 11. The Result of Multi-colinearity Test – Model 2

	Financial Distress	Profitability	Capital Structure	Liquidity	Solvency	Firm Growth
Financial Distress	1	0.6560	-0.5326	0.3878	0.5287	0.1823
Profita-bility	0.6560	1	-0.1151	0.1106	0.2346	0.1530
Capital Structure	-0.5326	-0.1151	1	-0.476	-0.594	-0.0591
Liquidity	0.3878	0.1106	-0.4762	1	0.7537	0.1685
Solvency	0.5287	0.2346	-0.5945	0.7537	1	0.0960
Firm Growth	0.182	0.1530	-0.0591	0.1685	0.0960	1

(Source: Output EViews v9.0, data diolah, 2021)

d. Autocorrelation Test

The autocorrelation test resulted in the Durbin-Watson statistic being in the interval dU < d < 4-dU, which means that the data for both models are free from autocorrelation problems.

Table 12. The Result of Autocorelation Test - Durbin Watson

Model	d Statistik	dL	dU	4 - dU
Model 1	1.741831	1.4443	1.7274	2.2726
Model 2	1.781660	1.4732	1.77688	2.2312

(Source: Output EViews v9.0, data diolah, 2021)

5.4. Causality Test

a. Hypothesis Test

- **Individual Significance Test / Partial Test (t)**

The influence of the independent variables partially on the dependent variable with the provisions:
- t count < t table no effect
- probability value < 0.05 significant effect

The test results in 2 (two) models are as follows:

Table 13. Result of Autocorelation Test – t-test (Model 1)

Variabel	Coeffesient	Std. Error	t-Statistic	Prob
Capital Structure	0.8626	0.3786	2.2785	0.0266
Liquidity	0.5009	0.3967	1.2627	0.2120
Solvency	-0.7126	0.3174	-2.2452	0.0288
Firm Growth	-0.0198	0.2285	-0.0868	0.9312

(Source: Output EViews v9.0, data diolah, 2021)

For model 1, the t table value is obtained by using the provision that the value of (alpha) is 0.05 and the value of the degree of freedom (n-k = 60-4) is 56, so the t table value is 2.00324.

Table 14. The Result of Autocorelation Test – t-test (Model 2)

Variabel	Coeffesient	Std. Error	t-Statistic	Prob
Profitability	4.67145	0.42934	10.88064	0.00000
Capital Structure	-0.11316	0.02697	-4.19591	0.00008
Liquidity	0.04029	0.04580	0.87957	0.38229
Solvency	0.03447	0.02297	1.50071	0.13820
Firm Growth	0.01873	0.03218	0.58195	0.56258

(Source: Output EViews v9.0, data diolah, 2021)

For model 2, according to the provisions of the value of (alpha) of 0.05 and the value of the degree of freedom (n-k = 72-5) of 67, the t table is 1.996601.

- **Simoultancy Test / Partial Test (F)**

The results of the simultaneous influence test of all independent variables on the dependent variable and the moderating variable can be presented in the following table where all there are simultaneous effects between these variables.

Table 15. The Result of Simoultancy Test – F-test

	Perbandingan		Probabilitas	
Model 1	F-statistic	4.341406	Prrob (F-statistic)	0.004014
	F tabel	2.77	Taraf alpha	0.05
	F statistic > F tabel Berpengaruh		Prob F statistic < α Berpengaruh	
Model 2	F-statistic	40.71417	Prrob (F-statistic)	0.000000
	F tabel	2.51	Taraf alpha	0.05
	F statistic > F tabel Berpengaruh		Prob F statistic < α Berpengaruh	

(Source: Output EViews v9.0, data diolah, 2021)

b. Analisis Korelasi Berganda atau Uji Koefesien Determinasi (R2)

The level of confidence of the research data indicated by the value of determination R2 which reflects the large proportion of the variation in the dependent variable that can be explained using independent variables, according to the following table:

Table 16. The Result of Coefessian Determination Test – F-test

	Model 1	Model 2
R-squared	0.239971	0.755166
Adjusted R-squared	0.184696	0.736618

(Source: Output EViews v9.0, data diolah, 2021)

Based on the data above, the rise and fall of profitability in model 1 23.997% can be explained by four independent variables, 76.003% is explained by other factors. The same explanation applies to model 2.

5.5. Path Analysis

Path analysis (path analysis) through eViews 9.0 to test the correlation matrix and causal relationship between independent variables (capital structure, liquidity, solvency and firm growth) to the dependent variable (financial distress) through moderating variables (profitability) produces the following path coefficients :

Table 17. The Summary of Path Coeffesien

Hubungan Variabel	Coeffesien	Standar Error	t Hitung	Probability	Test Result
Capital Structure - Profitability	0.8626	0.3786	2.2785	0.0266	Significant
Liquidity - Profitability	0.5009	0.3967	1.2627	0.2120	Not Significant
Solvency - Profitability	-0.7126	0.3174	-2.2452	0.0288	Significant
Firm Frowth - Profitability	-0.0198	0.2285	-0.0868	0.9312	Not Significant
Capital Structure - Financial Distress	-0.1132	0.0270	-4.1959	0.0001	Significant
Liquidity - Financial Distress	0.0403	0.0458	0.8796	0.3823	Not Significant
Solvency - Financial Distress	0.0345	0.0230	1.5007	0.1382	Not Significant
Firm Frowth - Financial Distress	0.0187	0.0322	0.5819	0.5626	Not Significant
Capital Structure - Profitability	4.6714	0.4293	10.8806	0.0000	Significant

(Source: Output EViews v9.0, data diolah, 2021)

This path analysis econometric model takes into account the influence of independent variables on the moderating variable (profitability) and the dependent variable (financial distress), resulting in a summary of the coefficient of determination and the structural equation as follows:

Table 18. The Summary of Path Coeffesien

Hubungan Variabel	R-squared	Adjusted R-squared	Koefesien Determinasi	Persamaan Struktural
Model 1 (ε1) Profitability	0.239971	0.184696	ε1 = 0.8718	ROA = 0.8626DER + 0.5009CR + -0.7126RBC + -0.0198SG + 0.8718

Model 2 (ε2) Financial Distress	0.755166	0.736618	ε2 = 0.4948	ALTM = 4.6714DER + -0.1132CR + 0.0403RBC + 0.0345SG + 0.4948

(Source: Output EViews v9.0, data diolah, 2021)

Based on this path analysis model, a path diagram shows the influence between variables as follows:

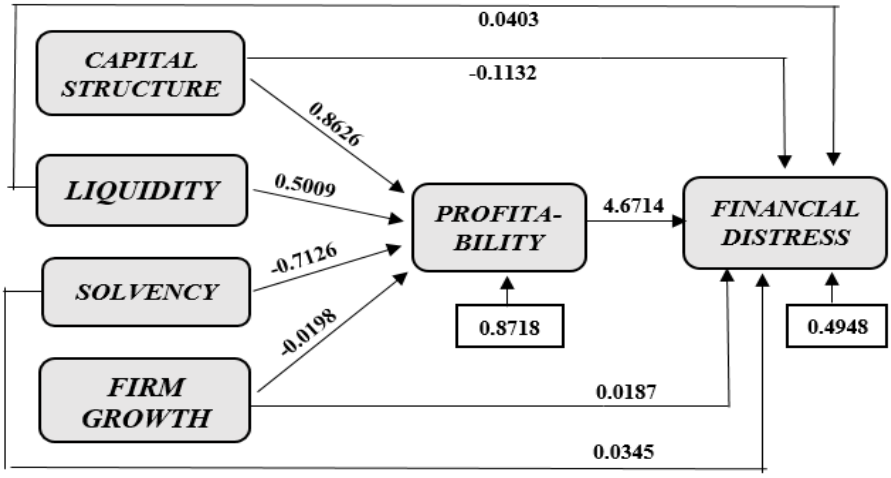


Figure 3. Path Diagram

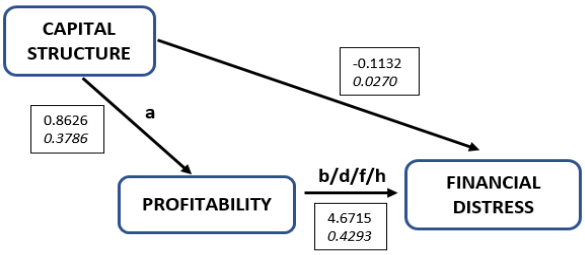
(Source: Output EViews v9.0, data diolah, 2021)

5.6. Moderating Test

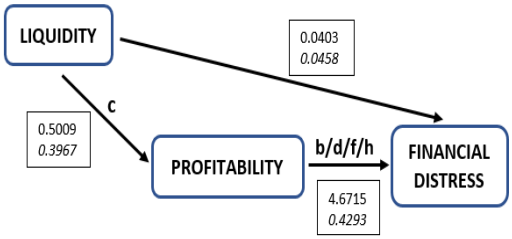
Sobel test was conducted to test the strength of the indirect effect of the independent variable on the dependent variable which was mediated by the moderating variable.

Herewith 4 (four) alternatives of Sobel test result:

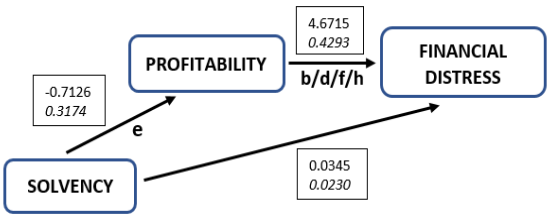
a. Capital Structure → Profitability → Financial Distress



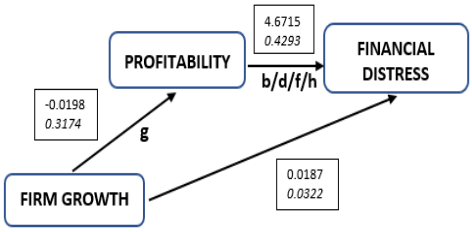
b. Liquidity → Profitability → Financial Distress



c. Solvency → Profitability → Financial Distress



d. Firm Growth → Profitability → Financial Distress



5.7. Validation

Based on the series of tests above, it is possible to study the 15 (fifteen) hypotheses that have been determined, as follows:

- t arithmetic > t table (2.27853 > 2.00324) with a probability value of 0.026601 < 0.05, and a correlation coefficient of -0.113158.

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The Capital Structure sends information signals to investors and stakeholders regarding the general insurance company's ability to meet its debts / obligations and shows management's involvement in the company's performance, especially in funding policies related to selecting the right funding source, thereby bringing profitability to the company.
→ H01 (Capital Structure affects the company's Profitability): **accepted**

- t arithmetic value < t table (1.26266 < 2.00324) with a probability value of 0.8292 > 0.05, and a correlation coefficient of 0.500896.
  For general insurance companies, a high level of liquidity can ensure the company is able to provide compensation for insurance claims in the long term which in turn improves the company's reputation in handling claims. However, in the short term, this liquidity ratio must be compared against the allowed assets to be able to determine whether it is possible to disrupt the company's cashflow and company profitability.
  → H02 (Liquidity affects the company's profitability): **rejected**

- t count > t table (2.245169 > 2.00404) with probability value 0.026601 < 0.05, and correlation coefficient of -0.7126093
  For general insurance companies, Risk Based Capital (RBC) is a benchmark for assessing the company's financial health, the higher the RBC level, the healthier the company's finances, which means that the company is able to meet the liability for the policies issued, and ultimately the profitability will increase. company.
  → H03 (Solvency to Profitability of the company): **accepted**

- The value of t count < t table (-0.0867669 < 2.00404) with a profitability value of 0.931172 > 0.05, and the correlation coefficient of -0.019824.
  This increase in sales can show high public confidence through insurance coverage according to products marketed by general insurance companies, but this still needs to be studied further and monitored considering the growth in insurance premiums will be accompanied by an increase in the potential for claims. The increase in high production at low risk quality will increase the liability policy ensuring that sales growth does not affect profitability.
  → H04 (Firm growth affects the company's profitability): **rejected**

- F-statistics / count > t table (4.3414059 > 2.54)
  For general insurance companies, the profitability of the company reflects the level of efficiency (ratio) of the use of assets and the management of all resources owned by the company in synergy with all the factors measuring the company's performance and becomes the main target that determines the success of the implementation of business as usual and a series of other business activities. Appropriate management decisions in managing capital structures, including portfolio management, proper management of liquid funds for the company's operational interests and payment of compensation and other short-term obligations, then responsible underwriting process which results in liability policies far below the allowable asset value, and the growth in the level of general insurance product marketing along with the high collectivity of premiums will increase the company's profitability.
  → H05 (There is a simultaneous influence of capital structure, liquidity, solvency and firm growth on the profitability of the company): **accepted**

- t count < t table (-4.1959138 <1.99656) with a probability value of 0.00008 <0.05, and the correlation coefficient is -0.113158.
  The low debt obligations for a certain period of time that become the company's burden or on the other hand, the high capital or wealth of the entity or net assets (net assets) consisting of investments and profits from its business activities indicate a low debt ratio as well as indicate the high ability of capital owners to cover their debts and the large opportunity to obtain additional capital or funding from investors, because the company has small debt obligations so that it is profitable to invest, and ultimately supports the reduction or suppression of the potential occurrence of corporate financial distress.
  → H06 (Capital Structure affects Financial Distress): **accepted**

- t count < t table (0.879566 < 1.99656) with a probability value of 0.38229 > 0.05, and a correlation coefficient of 0.04029
  The liquidity ratio is calculated to determine the company's ability to meet the company's short-term obligations by using its current assets, this is an indicator for an investor, as a business evaluation tool on the ability to pay current liabilities and determine the profitability of a company. For general insurance companies, the company's inability to pay policy liability is not the main factor driving the company's financial difficulties, because there is a risk transfer mechanism and claim recovery.

→ H07 (Liquidity affects Financial Distress): **rejected**

- t count < t table (1.500712042 < 1.99656) with a probability value of 0.13820 > 0.05, and a correlation coefficient of 0.03447
  Solvency is also known as solidity or leverage which measures how much the company is financed by debt, in insurance companies the terms claim reserve and incurred but not reported claims are based on the calculation of the capability and financial health of general insurance companies. However, this factor is not only sufficient to influence the occurrence of financial distress in general insurance companies, because there are other factors that have more potential to cause financial difficulties for the company.
  → H08 (Solvency margin affects the possibility of Financial Distress): **rejected**

- t count < t table (0.58194785 < 2.00404) with a probability value of 0.56258 > 0.05, and the correlation coefficient is 0.01873.
  The company's success in dealing with risks and implementing its product marketing strategy is shown by the high level of firm growth and at the same time showing high public trust which in turn increases the company's profit. However, the high growth of the company does not necessarily prove the company's ability to reduce the potential for financial distress, considering that general insurance companies still have the potential for losses due to risk or liability on the policies issued.
  → H09 (Firm Growth affects the possibility of the company's Financial Distress) : **rejected**

- F statistic > F table (40.71416958 > 2.35)
  Financial distress which can be a potential bankruptcy of the general insurance company being studied is influenced by several factors other than profitability, including the four variables carried in this study, which must be managed properly by the general insurance company in order to synergize in the company's operational activities in order to reduce or reduce the possibility of corporate financial distress. The success of general insurance companies in managing capital structure, maintaining liquidity and solvency and simultaneously increasing firm growth can be a preventive action for companies to avoid financial distress situations.
  → H10 (There is a simultaneous influence of Capital structure, liquidity, solvency and firm growth on the company's financial distress): **accepted**

- F statistic > F table (40.71416958 > 2.35)
  A company is said to have an optimal capital structure if it has been able or has succeeded in optimizing the balance between risk and return so as to maximize stock prices. On the one hand, the use of debt has a positive impact on increasing company profits which can lead to the growth of general insurance companies in dealing with debt risk or claim payment obligations according to the policy responsibility issued by the company.
  → H11 (Profitability is able to mediate the effect of capital structure on financial distress): **accepted**

- t count < t table (1.2490 < 1.99495)
  A low current ratio indicates the company's low liquidity ability to pay current obligations of short-term debt by using its current assets to determine the profitability of a company, which shows the high tendency of this company to fulfill its debt obligations that will mature, at least in the range of 12 (twelve).) months ahead in accordance with the annual period of the policy, as well as being a parameter for optimization (efficient and effective) of financial management (capital and other resources).
  → H12 (Profitability is able to mediate the influence of liquidity on financial distress): **rejected**

- t count < t table (-2.19000 < 1.99495).
  The level of achievement of low solvency indicates the high liability or ability of the general insurance company to manage the risks it handles and to pay claims and the low assets allowed by the company. If the Risk Based Capital (RBC) of a general insurance company is low or below the minimum limit set by the regulator (OJK), then the company manager is required to provide additional capital to cover the lack of RBC ratio or take action / steps to save the company.
  → H13 (Profitability is able to mediate the effect of solvency on financial distress): **rejected**

- t count < t table (-0.0864 < 1.99495)
  Advances in technology and the uncertainty of the current global economic conditions can create a riskier and more rigid business environment. The fact that can be seen is that the general insurance company's growth conditions in the last five years experienced a decline in sales but in terms of profitability there was an increase where this trend became an anomaly, especially triggered by the Covid-19 pandemic. This indicates that there is a

potential for financial distress that must be immediately reviewed and anticipatory steps taken without taking into account profitability mediation.
→ H14 (Profitability is able to mediate the influence of firm growth on financial distress): **rejected**

- t arithmetic > t table (10.8830634 > 1.99656) with a probability value of 0.00000 < 0.05, and a correlation coefficient of 4.67145.
  This high profitability will help finance the company's operational activities as well as fulfill the company's obligations so as to avoid the risk of default on claims, thus profitability supported by the company's efficiency and effectiveness in managing assets (including internal resources) provides a high opportunity to reduce costs. potential financial distress.
  → H15 (Profitability affects financial distress): **accepted**

6. Conclusion

6.1. Conclusion

Based on the literature review, research results and discussions that have been described in previous chapters, the researchers draw conclusions about the effect of the independent variables of capital structure, liquidity, solvency and firm growth on profitability and their implications for financial distress in 12 (twelve) general insurance companies. listed on the Indonesia Stock Exchange with a research period of 2015 – 2020, as follows:

1. Capital structure affects the profitability of the company
2. Liquidity does not affect the profitability of the company
3. Solvency affects the profitability of the company
4. Firm growth has no effect on company profitability
5. Capital structure, liquidity, solvency and firm growth simultaneously affect the profitability of the company
6. Capital structure affects the company's financial distress
7. Liquidity does not affect the company's financial distress
8. Solvency does not affect the company's financial distress
9. Firm growth has no effect on the company's financial distress
10. Capital structure, liquidity, solvency, firm growth and profitability simultaneously affect the company's financial distress
11. Profitability is able to mediate the effect of capital structure on the company's financial distress
12. Profitability is not able to mediate the influence of liquidity on the company's financial distress
13. Profitability is not able to mediate the effect of solvency on the company's financial distress
14. Profitability affects the company's financial distress

Based on the prediction of bankruptcy using the Altman method, 12 (twelve) general insurance companies listed on the Indonesia Stock Exchange which were sampled in the 2015 – 2020 research period are in a condition that has the potential to experience operational failure due to financial distress, except:

- PT. Multi Artha Guna Insurance, Tbk. and PT. Victoria Insurance, Tbk. in 2015
- PT. Asuransi Bina Dana Arta, Tbk. In 2020

6.2. Proposed Improvements

Based on the conclusions above, through this opportunity the researcher intends to convey the following suggestions:

1. For company management:
   - Information on research results can assist company management in considering business decisions considering the Covid-19 pandemic has affected almost all business sectors, including general insurance companies. Product diversification, operational and marketing activities that adapt to this pandemic situation, as well as responsible financial management can help companies to maintain company value and performance in the midst of uncertain economic developments today.
   - The company's financial manager begins to predict the company's bankruptcy so that certain conditions can be immediately identified that can increase the potential for financial distress and can determine anticipatory steps embodied in responsible business and operational decisions.

2. For investors:

- Information on research results presented in this thesis is expected to assist investors in making investment decisions considering that in general almost all investments contain an element of uncertainty. Therefore, in making investments, investors should carefully consider several very important things, especially during the Covid-19 pandemic which can greatly affect the company's performance.
- Appropriate and observant consideration of the company's performance can assist investors in making investment decisions, so as to produce better profits and to identify changes so that they are not wrong in making investments.

3. For further researchers:

- Assessment of the effect of capital structure, liquidity, solvency and firm growth on company financial distress with profitability as an intervening variable can be used as additional knowledge for further researchers and conduct better research and increase the number of variables and research periods in order to provide better research results because there are still 24.483% outside the predetermined variables, which can affect the occurrence of financial distress.
- In addition to increasing the number of variables, another thing that can be done is to carry out bankruptcy predictions with other prediction methods, such as Springate, Zmijewski or other computer-based methods which are certainly more accountable for the accuracy of the research results.

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