
Analysis of the Influence of Profitability, Asset Structure, and Growth Rate on Capital Structure in Registered Mining Companies on the Indonesian Stock Exchange

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Abstract

This study aims to determine and analyze the effect of profitability, asset structure, and sales growth simultaneously and partially on the capital structure of mining companies listed on the Indonesia Stock Exchange.

The type of research used in this research is associative research with a causal quantitative approach. The population used in this study was taken from the annual reports of coal mining and metal mineral sub-sector companies that have been listed on the Indonesia Stock Exchange in the 2018-2022 period as many as 32 companies. Based on the purposive sampling method, the samples used in this study were 27 coal mining and metal mineral sub-sector companies on the Indonesia Stock Exchange in the 2018-2022 period. The validity test, reliability test, normality test, multicollinearity test, and heteroscedasticity test were carried out on research instruments.

The results of the study prove that profitability has a positive and significant effect on capital structure. Asset structure has a positive and significant effect on the capital structure. Sales growth has no significant effect on capital structure. Simultaneously, profitability, asset structure, and sales growth have a significant effect on the capital structure of mining companies listed on the Indonesia Stock Exchange. The coefficient of determination is 0.089 or 8.9%.

Keywords: Profitability, Asset structure, Sales growth, Capital structure

1. Introduction

Asset structure is one of the factors that influence the company's capital structure. Asset structure is wealth or economic resources owned by a company that is expected to provide benefits in the future, consisting of fixed assets, intangible assets, current assets, and non-current assets. The greater the assets, it is hoped that the greater the operational results generated by the company. An increase in assets followed by an increase in operating results will increase the trust of outsiders (creditors) in the company. With increasing outsiders' trust in the company, the proportion of debt will increase compared to equity. This is based on creditors' belief that the funds invested in the company are guaranteed by the size of the company's assets.

Another factor that affects the capital structure is the rate of growth of assets. Asset growth is the growth (increase or decrease) of total assets owned by the company. Companies with high growth rates tend to use more debt as a source of funding than companies with low growth rates. This is because companies with high growth rates will expand using external funds in the form of debt.

This research was conducted in the mining sector which is listed on the Indonesia Stock Exchange in 2018-2022. In the midst of increasingly fluctuating global economic conditions in recent years, funding issues have become the main problem that must be faced by companies in the mining sector. Mining sector companies have different characteristics and characteristics from other sectors. In the mining sector, investment costs are very large, long-term, and very risky and there is high uncertainty making funding problems a problem related to company development. Mining sector companies also need a very large capital to carry out natural resource investigations and development of the mining sector. So that many mining companies enter the capital market to obtain investment and strengthen their financial position.

Mining sector companies experienced a decline and had the lowest growth since 2013 until now. This is because world mining commodity prices are experiencing a decline following lower demand from China and other developing countries, as well as the existence of a policy of Law Number 4 of 2009 concerning Minerals and Coal which has contributed to suppressing the growth of the mining sector from an internal standpoint. Implementation of Law Number 4 of 2009 concerning Minerals and Coal within a certain period can have a positive impact on the growth of the mining sector, but can also reduce growth if the company's smelter construction process does not go according to plan.

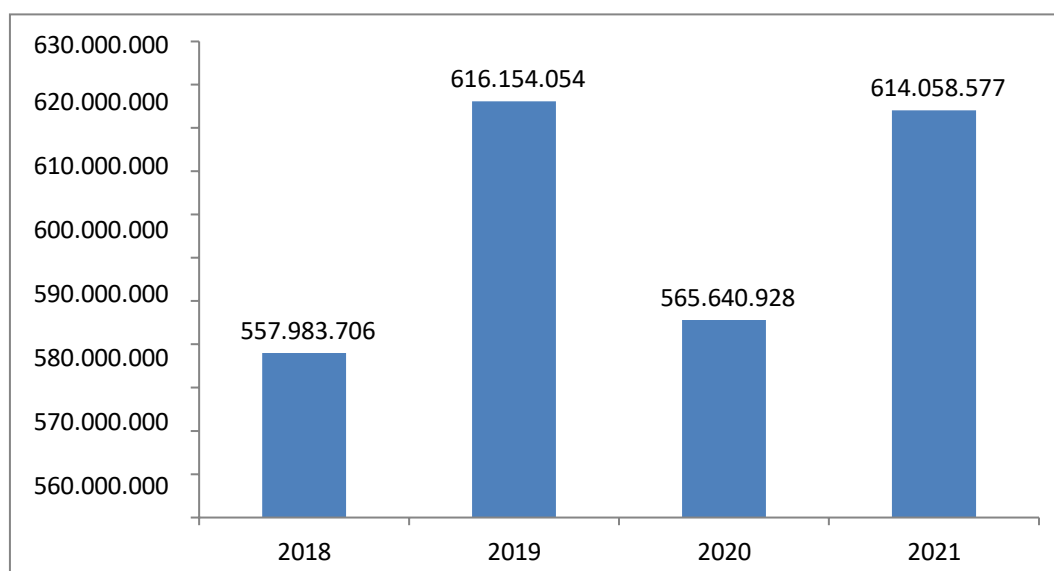


Figure 1.1 Mining Subsector Value and Growth Source: Central Bureau of Statistics (BPS)

The gross domestic product (GDP) of the coal and lignite mining sub-sector at current prices (ADHB) reached IDR 614.05 trillion in 2021. That figure reached 39.59% in 2020 amounting to IDR 565.640 trillion. However, this achievement is still lower than before the Covid-19 pandemic, which was able to grow above 10% in 2019 reaching IDR 616.154 trillion, as shown in the graph. The global economy which is starting to recover from the impact of the pandemic has increased the demand for coal commodity exports. As a result, coal prices on the international market will move up throughout 2021. Along with these price movements, Indonesia's coal export volume slightly increased by 1.14% to 345.45 million tonnes in 2021 compared to the previous year. Meanwhile, its value jumped 82.59% to US\$26.53 billion from the previous year which was only US\$14.53 billion. The largest export of Indonesian coal in 2021 was sent to China, with a volume of 108.49 million tonnes or 31.1% of the total national coal export, and a total value of US\$9.14 billion.

An empirical study conducted by Dewiningrat and Mustanda (2018), that liquidity, profitability, and sales growth has a negative effect on capital structure. Meanwhile, asset structure has a positive effect on capital structure. Ramadhanti (2019), that liquidity, sales growth, profitability, and asset growth do not affect capital structure. Meanwhile, firm size and asset structure have a positive effect on capital structure. Septiani and Suaryana (2018), company size has a positive effect on capital structure, assets, and liquidity have a negative effect on capital structure, and profitability and business risk have no effect on capital structure.

Based on this description, the formulation of the problem in this study is: Do profitability, asset structure, and sales growth have a simultaneous and partial effect on the capital structure of mining companies listed on the Indonesia Stock Exchange?

2. Literature Review

2.1 Profitability

Profitability can be interpreted as the company's ability to earn profits concerning sales, total assets, and own capital (Sartono, 2015). According to Hanafi and Halim (2009), the profitability ratio is the ratio used to measure a company's profitability over a certain period of time. Profitability is used to monitor the development of profits earned by the company. Profitability is the net result of many policies and decisions chosen by company management (Markonah, Salim, and Franciska, 2020). Profitability is defined as the ability of a good company to generate profits while still paying attention to the capital used. A company can be said to be financially healthy if, within a certain period, the company can generate profits as expected or desired.

Companies that have a high level of profitability will certainly increase the company's competitiveness. Every company or organization basically has a goal to make a profit by selling products to customers. From this sales activity, of course, the company's goal is to obtain profit both for the short term and for the long term.

Profitability ratios in financial terms are used to measure the level of a company's ability to manage and generate profits. According to Hery (2017: 150), the profitability ratio aims to determine the ability of a company to control profits, besides that the profitability ratio also aims to determine the level of effectiveness of management in carrying out company operations.

Profitability ratios can be used not only for internal companies, but external parties require profitability ratios as a basis for decision-making.

2.2 Asset Structure

According to Abdullah (2010: 36), assets are all economic resources owned by a company to carry out its business activities. Subramanyam and Wild (2014: 271) define assets as assets, assets are resources controlled by a company to generate profits. Asset structure is a comparison between fixed assets and total assets owned by a company that can determine the amount of fund allocation for each component of assets. The higher the company's asset structure indicates the higher the company's ability to obtain long-term debt guarantees (Brigham & Houston, 2011: 188). Companies with high asset structures tend to choose to use funds from outside parties or debt to fund their capital needs.

Sartono (2015) companies that have large amounts of fixed assets can use large amounts of debt. This is because of its scale, large companies will find it easier to get access to sources of funds compared to small companies. The number of fixed assets can be used as collateral or corporate collateral debt. The use of large amounts of debt will result in increased financial risk, while large amounts of fixed assets will certainly increase business risk and ultimately increase total risk.

Asset structure is a comparison between fixed assets and total assets owned by a company that can determine the amount of fund allocation for each component of assets. The higher the company's asset structure indicates the higher the company's ability to obtain long-term debt guarantees (Brigham & Houston, 2014: 188). Companies with high asset structures tend to choose to use funds from outside parties or debt to fund their capital needs. The asset structure will usually determine the long-term and short-term debt structure of the company.

2.3 Sales Growth

Rudianto (2009:56) states that sales growth is sales volume in the coming year, sales growth can be seen based on historical growth data from year to year. Sales growth is a change in increase or decrease in sales from year to year which can be seen in the company's income statement. The company is said to be good if sales increase from year to year, this can result in increased company profits so that the company's internal funding also increases.

Sales Growth Rate, namely the rate of change in sales from year to year. The method of measurement is to compare sales in year t after deducting sales in the previous period against sales in the previous period (Carnevela&Widyawati, 2017). A company that is in an industry that has a high growth rate must provide sufficient capital to finance the company. Companies that grow fast tend to use more debt than companies that grow slowly.

For companies with high sales growth rates, the tendency of companies to use debt as a source of external funding is greater than for companies with low sales growth rates. Companies with relatively stable sales can securely obtain more loans and bear higher fixed costs compared to companies with unstable sales (Brigham & Houston, 2014).

2.4 Capital Structure

Capital structure is an important thing in a company, in which there is a combination of debt and equity or is usually interpreted as a balance between foreign capital and own capital. Foreign capital consists of long-term and short-term debt. Meanwhile, equity is divided into retained earnings and can also include company ownership. The size of the capital structure will determine profitability so capital structure becomes an important issue in making decisions regarding company spending. Fahmi (2012: 106), states that the capital structure is an illustration of the form of the company's financial proportions, namely between owned capital originating from long-term debt (long-term liabilities) and equity (shareholder's equity) which is a source of financing for a company.

Capital structure is a company's permanent expenditure that reflects a balance or comparison between long-term debt and company capital (Riyanto, 2013). The capital structure is the balance of the amount of long-term debt, preferred shares, and common shares (Septantya, Dzulkirom,&Azizah, 2015). Optimal capital structure is a capital structure that must be in a balance between risk and return that maximizes stock prices (Brigham & Houston, 2014). The optimal capital structure can change over time, which can affect the weighted average cost of capital. Furthermore, changes in the cost of capital will affect capital budget decisions and will ultimately affect the company's stock price.

3. Conceptual Framework and Research Hypothesis

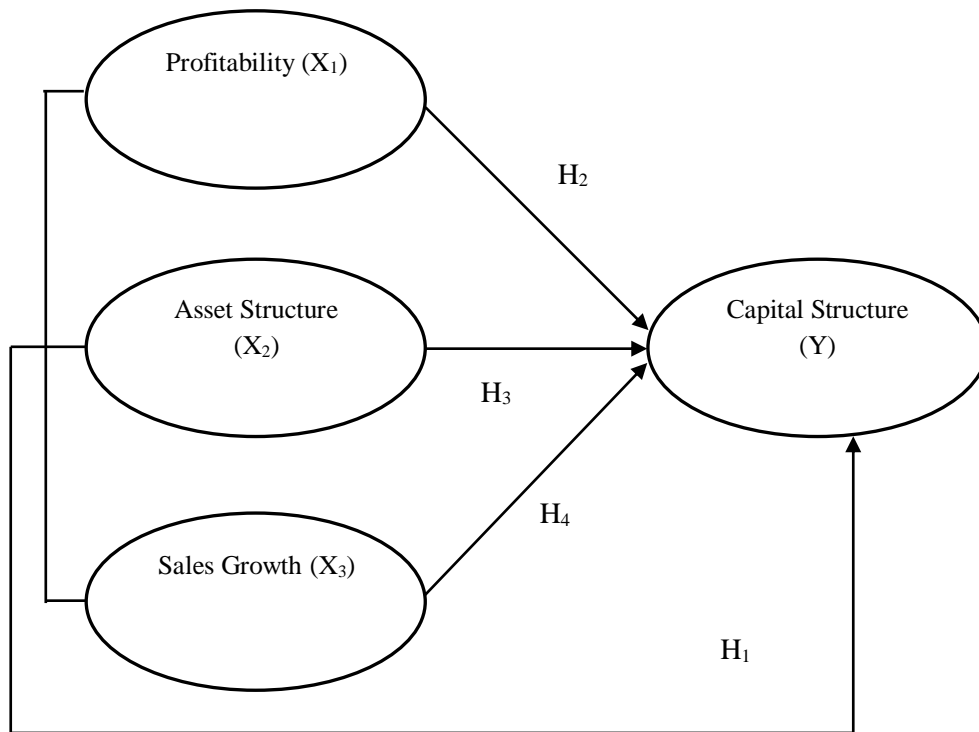


Figure 3.1 Research Conceptual Framework

Research Hypothesis

- H1 : Profitability, asset structure, and growth rates simultaneously influence the capital structure of mining companies listed on the Indonesia Stock Exchange.
- H2 : Profitability has a significant effect on the capital structure of mining companies listed on the Indonesia Stock Exchange.
- H3 : Asset structure has a significant effect on the capital structure of mining companies listed on the Indonesia Stock Exchange.
- H4 : Sales growth has a significant effect on the capital structure of mining companies listed on the Indonesia Stock Exchange.

4. Research Methodology

This type of research is associative research which is causal research. The quantitative research approach, namely data in the form of numbers and based on the source is secondary data. This study analyzes the relationship and examines the effect of profitability, asset structure, and sales growth on capital structure.

The population in this research is to limit the scope of objects to companies in the coal mining and metal mineral mining sector as many as 32 companies. Sampling using purposive sampling technique, with criteria 1). Coal mining sector companies were listed on the IDX before the year of listing. 2018 2). Metal mineral mining sector companies were listed on the IDX before the 2018 listing year. 3). The company publishes complete audited financial statements from 2018 - 2022 on the IDX. Out of a total of 32 companies in the coal and metal mineral mining sector that met the criteria for determining the sample, 27 companies were:

Table 4.1 List of Research Samples

No	Code Company	Company Name	Sub Sector	Date of Listing
1	ADRO	Adaro Energy Tbk.	Coal Mining	16 Jul 2008
2	ARII	Atlas Resources Tbk.	Coal Mining	08 Nov 2011
3	BUMI	Bumi Resources Tbk.	Coal Mining	30 Jul 1990
4	BSSR	Baramulti Suksessarana Tbk.	Coal Mining	08 Nov 2012
5	BYAN	Bayan Resources Tbk.	Coal Mining	12 Aug 2008
6	DEWA	Darma Henwa Tbk	Coal Mining	26 Sep 2007
7	DOID	Delta Dunia Makmur Tbk.	Coal Mining	15 Jun 2001
8	FIRE	Alfa Energi Investama Tbk.	Coal Mining	09 Jun 2017
9	GEMS	Golden Energy Mines Tbk.	Coal Mining	17 Nov 2011
10	GTBO	Garda Tujuh Buana Tbk.	Coal Mining	09 Jul 2009
11	HRUM	Harum Energy Tbk.	Coal Mining	06 Oct 2010
12	KKGI	Resource Alam Indonesia Tbk.	Coal Mining	01 Jul 1991
13	MBAP	Mitrabara Adiperdana Tbk.	Coal Mining	10 Jul 2014
14	MYOH	Samindo Resources Tbk.	Coal Mining	27 Jul 2000
15	PKPK	Perdana Karya Perkasa Tbk.	Coal Mining	11 Jul 2007
16	PTBA	Bukit Asam Tbk.	Coal Mining	23 Dec 2002
17	PTRO	Petrosea Tbk.	Coal Mining	21 May 1990
18	SMMT	Golden Eagle Energy Tbk.	Coal Mining	29 Feb 2000
19	TOBA	Toba Bara Sejahtra Tbk.	Coal Mining	06 Jul 2012
20	ANTM	Aneka Tambang Tbk.	Mineral Metal Mining	27 Nov 1997
21	CITA	Cita Mineral Investindo Tbk.	Mineral Metal Mining	20 Mar 2002
22	DKFT	Central Omega Resources Tbk.	Mineral Metal Mining	21 Nov 1997
23	INCO	Vale Indonesia Tbk.	Mineral Metal Mining	16 May 1990
24	MDKA	Merdeka Copper Gold Tbk.	Mineral Metal Mining	19 Jun 2015
25	SMRU	SMR Utama Tbk.	Mineral Metal Mining	10 Oct 2011
26	TINS	Timah Tbk.	Mineral Metal Mining	19 Oct 1995
27	ZINC	Kapuas Prima Coal Tbk.	Mineral Metal Mining	16 Oct 2017

Source: Indonesia Stock Exchange (processed) 2023

Based on Table 4.1, 27 companies/issuers meet the criteria with data for the 2018-2022 observation year, so there are 135 research data.

5. Research Results

5.1 Descriptive Analysis

The data in this study uses company financial report data for the period 2018 to 2022, with a population of 27 issuers listed on the Indonesian Stock Exchange with a population of 135 data mining companies. Profitability is measured using Return On Assets (ROA), asset structure is measured using Fixed Assets Ratio (FAR), and sales growth. Meanwhile, the capital structure is measured using the Debt to Equity Ratio (DER). The calculation results are presented in the following table:

Table 5.1
Capital Structure Data on Mining Companies
Listed on the Indonesia Stock Exchange in 2018-2022

No	Company name	Code	Capital Structure (DER)				
			2018	2019	2020	2021	2022
1	Adaro Energy Tbk.	ADRO	0,64	0,81	0,61	0,70	0,55
2	Atlas Resources Tbk.	ARII	34,06	6,90	11,79	8,45	3,98
3	Bumi Resources Tbk.	BUMI	0,63	0,47	0,38	0,72	0,52
4	Baramulti Suksessarana Tbk.	BSSR	6,76	6,26	24,85	5,53	4,52
5	Bayan Resources Tbk.	BYAN	0,70	1,06	0,88	0,31	0,29
6	Darma Henwa Tbk	DEWA	0,80	1,35	1,04	1,08	1,39
7	Delta Dunia Makmur Tbk.	DOID	3,53	3,21	2,69	5,16	1,58
8	Alfa Energi Investama Tbk.	FIRE	0,77	0,60	0,43	0,61	0,58
9	Golden Energy Mines Tbk.	GEMS	1,22	1,18	1,33	1,62	1,30
10	Garda Tujuh Buana Tbk.	GTBO	0,23	0,29	0,34	0,39	0,42
11	Harum Energy Tbk.	HRUM	0,20	0,12	0,10	0,34	0,24
12	Resource Alam Indonesia Tbk.	KKGI	0,35	0,35	0,29	0,34	0,36
13	Mitrabara Adiperdana Tbk.	MBAP	0,40	0,32	0,32	0,29	0,40
14	Samindo Resources Tbk.	MYOH	0,33	0,31	0,17	0,17	0,15
15	Perdana Karya Perkasa Tbk.	PKPK	1,30	3,99	0,66	0,37	1,00
16	Bukit Asam Tbk.	PTBA	0,49	0,42	0,42	0,49	0,56
17	Petrosea Tbk.	PTRO	0,66	0,61	1,29	1,05	1,09
18	Golden Eagle Energy Tbk.	SMMT	0,61	0,49	0,56	0,29	0,15
19	Toba Bara Sejahtera Tbk.	TOBA	1,33	1,40	1,65	1,42	1,13
20	Aneka Tambang Tbk.	ANTM	0,75	0,67	0,67	0,58	0,50
21	Cita Mineral Investindo Tbk.	CITA	1,18	0,92	0,20	0,17	0,77
22	Central Omega Resources Tbk.	DKFT	1,47	1,72	2,67	5,25	4,78
23	Vale Indonesia Tbk.	INCO	0,17	0,14	0,15	0,15	0,14
24	Merdeka Copper Gold Tbk.	MDKA	0,89	0,81	0,65	0,64	0,77
25	SMR Utama Tbk.	SMRU	0,99	1,17	1,88	3,86	5,37
26	Timah Tbk.	TINS	1,48	2,87	1,94	1,33	0,86
27	Kapuas Prima Coal Tbk.	ZINC	1,24	0,83	0,72	1,32	1,80

Source: Indonesia Stock Exchange (processed) 2023

Based on Table 5.1, the capital structure (DER) of mining companies from 2018 to 2022 fluctuates every year. During the 2018-2022 period, the highest capital structure was at the company Atlas Resources Tbk, which was 34.06, while the lowest capital structure was at the company Harum Energy Tbk. which is equal to 0.10

Table 5.2
Profitability Data on Mining Companies
Listed on the Indonesia Stock Exchange in 2018-2022

No	Company name	Code	Profitability (ROA)				
			2018	2019	2020	2021	2022
1	Adaro Energy Tbk.	ADRO	0,07	0,05	0,02	0,15	0,06
2	Atlas Resources Tbk.	ARII	0,59	0,26	0,84	0,80	0,51
3	Bumi Resources Tbk.	BUMI	0,28	0,12	0,11	0,47	0,47
4	Baramulti Suksessarana Tbk.	BSSR	0,04	0,15	0,10	0,05	0,01
5	Bayan Resources Tbk.	BYAN	0,43	0,20	0,20	0,54	0,14
6	Darma Henwa Tbk	DEWA	0,09	0,07	0,44	0,18	0,05
7	Delta Dunia Makmur Tbk.	DOID	0,07	0,02	0,02	0,05	0,04
8	Alfa Energi Investama Tbk.	FIRE	0,24	0,28	0,20	0,71	0,27
9	Golden Energy Mines Tbk.	GEMS	0,14	0,09	0,12	0,07	0,47
10	Garda Tujuh Buana Tbk.	GTBO	0,45	0,24	0,02	0,34	0,96
11	Harum Energy Tbk.	HRUM	0,09	0,05	0,12	0,11	0,25
12	Resource Alam Indonesia Tbk.	KKGI	0,04	0,04	0,08	0,17	0,15
13	Mitrabara Adiperdana Tbk.	MBAP	0,29	0,18	0,15	0,39	0,09
14	Samindo Resources Tbk.	MYOH	0,20	0,17	0,14	0,16	0,05
15	Perdana Karya Perkasa Tbk.	PKPK	0,03	0,58	0,78	0,06	0,41
16	Bukit Asam Tbk.	PTBA	0,24	0,15	0,09	0,21	0,25
17	Petrosea Tbk.	PTRO	0,04	0,05	0,06	0,07	0,18
18	Golden Eagle Energy Tbk.	SMMT	0,11	0,04	0,02	0,24	0,28
19	Toba Bara Sejahtera Tbk.	TOBA	0,13	0,07	0,04	0,04	0,09
20	Aneka Tambang Tbk.	ANTM	0,04	0,03	0,03	0,07	0,08
21	Cita Mineral Investindo Tbk.	CITA	0,18	0,13	0,15	0,06	0,09
22	Central Omega Resources Tbk.	DKFT	0,03	0,04	0,11	0,15	0,02
23	Vale Indonesia Tbk.	INCO	0,03	0,03	0,03	0,07	0,06
24	Merdeka Copper Gold Tbk.	MDKA	0,11	0,06	0,04	0,02	0,02
25	SMR Utama Tbk.	SMRU	0,03	0,11	0,25	0,23	0,07
26	Timah Tbk.	TINS	0,02	0,03	0,03	0,09	0,10
27	Kapuas Prima Coal Tbk.	ZINC	0,08	0,13	0,02	0,04	0,01

Source: Indonesia Stock Exchange (processed) 2023

Based on Table 5.2, the profitability (ROA) of mining companies during the period 2018 to 2022 fluctuates every year. During the 2018-2022 period the highest profitability was at Garda Tujuh Buana Tbk, which was 0.96, while the lowest profitability was at Baramulti Suksessarana Tbk and Kapuas Prima Coal Tbk. that is equal to 0.01.

Table 5.3
Asset Structure Data in Mining Companies
Listed on the Indonesia Stock Exchange in 2018-2022

No	Company name	Code	Asset Structure (FAR)				
			2018	2019	2020	2021	2022
1	Adaro Energy Tbk.	ADRO	0,77	0,71	0,73	0,63	0,66
2	Atlas Resources Tbk.	ARII	0,85	0,83	0,83	0,80	0,64
3	Bumi Resources Tbk.	BUMI	0,63	0,69	0,64	0,38	0,43
4	Baramulti Suksessarana Tbk.	BSSR	0,88	0,88	0,88	0,82	0,79
5	Bayan Resources Tbk.	BYAN	0,57	0,59	0,53	0,42	0,37
6	Darma Henwa Tbk	DEWA	0,74	0,63	0,60	0,71	0,73
7	Delta Dunia Makmur Tbk.	DOID	0,63	0,60	0,62	0,59	0,53
8	Alfa Energi Investama Tbk.	FIRE	0,51	0,55	0,62	0,57	0,62
9	Golden Energy Mines Tbk.	GEMS	0,56	0,53	0,50	0,48	0,42
10	Garda Tujuh Buana Tbk.	GTBO	0,89	0,97	0,97	0,95	0,91
11	Harum Energy Tbk.	HRUM	0,34	0,35	0,50	0,72	0,60
12	Resource Alam Indonesia Tbk.	KKGI	0,75	0,69	0,70	0,62	0,52
13	Mitrabara Adiperdana Tbk.	MBAP	0,38	0,31	0,31	0,19	0,13
14	Samindo Resources Tbk.	MYOH	0,32	0,29	0,23	0,18	0,21
15	Perdana Karya Perkasa Tbk.	PKPK	0,71	0,82	0,90	0,90	0,67
16	Bukit Asam Tbk.	PTBA	0,53	0,55	0,65	0,50	0,47
17	Petrosea Tbk.	PTRO	0,55	0,60	0,58	0,56	0,60
18	Golden Eagle Energy Tbk.	SMMT	0,94	0,90	0,89	0,77	0,78
19	Toba Bara Sejahtra Tbk.	TOBA	0,72	0,87	0,91	0,76	0,74
20	Aneka Tambang Tbk.	ANTM	0,77	0,75	0,71	0,64	0,64
21	Cita Mineral Investindo Tbk.	CITA	0,81	0,75	0,70	0,71	0,61
22	Central Omega Resources Tbk.	DKFT	0,69	0,64	0,62	0,59	0,54
23	Vale Indonesia Tbk.	INCO	0,71	0,74	0,70	0,66	0,61
24	Merdeka Copper Gold Tbk.	MDKA	0,81	0,78	0,79	0,68	0,78
25	SMR Utama Tbk.	SMRU	0,74	0,84	0,88	0,84	0,85
26	Timah Tbk.	TINS	0,41	0,40	0,55	0,49	0,53
27	Kapuas Prima Coal Tbk.	ZINC	0,50	0,70	0,74	0,65	0,70

Source: Indonesia Stock Exchange (processed) 2023

Based on Table 5.3, the asset structure (FAR) of mining companies during the period 2018 to 2022 fluctuates every year. During the 2018-2022 period, the highest asset structure (FAR) was in the Garda Tujuh Buana Tbk company, which was 0.97, while the lowest asset structure (FAR) was in the Mitrabara Adiperdana Tbk company. that is equal to 0.13.

Table 5.4
Data on Sales Growth in Mining Companies
Listed on the Indonesia Stock Exchange in 2018-2022

No	Company name	Code	Sales Growth				
			2018	2019	2020	2021	2022
1	Adaro Energy Tbk.	ADRO	-0,15	-0,17	-0,91	1,28	1,37
2	Atlas Resources Tbk.	ARII	0,48	-0,54	2,15	-0,02	-0,34
3	Bumi Resources Tbk.	BUMI	0,72	-0,57	0,01	5,82	-0,04
4	Baramulti Suksessarana Tbk.	BSSR	0,25	2,51	-0,39	-0,34	-0,80
5	Bayan Resources Tbk.	BYAN	1,48	-0,48	0,24	3,15	-0,68
6	Darma Henwa Tbk	DEWA	0,03	-0,05	5,44	-0,58	-0,69
7	Delta Dunia Makmur Tbk.	DOID	-0,27	-0,77	-0,07	3,84	-0,27
8	Alfa Energi Investama Tbk.	FIRE	1623,74	0,08	-0,33	2,45	-0,64
9	Golden Energy Mines Tbk.	GEMS	0,93	-0,34	0,43	-0,38	7,13
10	Garda Tujuh Buana Tbk.	GTBO	-0,13	-0,49	-0,91	14,94	1,96
11	Harum Energy Tbk.	HRUM	-0,37	-0,51	1,94	0,64	2,02
12	Resource Alam Indonesia Tbk.	KKGI	1,40	0,14	0,60	1,65	0,01
13	Mitrabara Adiperdana Tbk.	MBAP	-0,08	-0,30	-0,23	2,69	-0,71
14	Samindo Resources Tbk.	MYOH	0,86	-0,07	-0,20	0,22	-0,66
15	Perdana Karya Perkasa Tbk.	PKPK	0,04	10,02	0,30	-0,93	5,57
16	Bukit Asam Tbk.	PTBA	-0,18	-0,34	-0,41	2,37	0,34
17	Petrosea Tbk.	PTRO	-0,44	0,29	-0,02	0,25	1,69
18	Golden Eagle Energy Tbk.	SMMT	-0,33	-0,65	-0,45	11,74	0,21
19	Toba Bara Sejahtera Tbk.	TOBA	0,32	-0,33	-0,23	0,08	1,30
20	Aneka Tambang Tbk.	ANTM	9,45	-0,33	0,09	-1,00	0,21
21	Cita Mineral Investindo Tbk.	CITA	-0,17	-0,12	0,21	-0,56	0,56
22	Central Omega Resources Tbk.	DKFT	-0,06	0,09	1,72	0,23	-0,88
23	Vale Indonesia Tbk.	INCO	-1,00	-0,10	0,36	1,12	0,01
24	Merdeka Copper Gold Tbk.	MDKA	0,45	-0,28	-0,33	-0,26	1,13
25	SMR Utama Tbk.	SMRU	0,83	1,79	0,77	-0,28	-0,73
26	Timah Tbk.	TINS	-0,46	1,52	-0,46	2,58	-0,07
27	Kapuas Prima Coal Tbk.	ZINC	-0,07	0,64	-0,84	1,69	-0,62

Source: Indonesia Stock Exchange (processed) 2023

Based on table 5.4, sales growth at mining companies during the period 2018 to 2022 fluctuates every year. During the 2018-2022 period the highest sales growth was at the company Alfa Energi Investama Tbk, which was 1623.74, while the lowest sales growth was at the company Vale Indonesia Tbk., which was 0.01.

5.2 Multiple Linear Regression Analysis

Table 5.5
Multiple Linear Regression Results
Coefficients^a

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	-2,335	1,219	,216	-1,916	,058
Profitability (X ₁)	4,578	1,775		2,579	,011
Asset structure (X ₂)	5,210	1,801	,241	2,893	,004
Sales growth (X ₃)	-,024	,159	-,013	-,150	,881

a. Dependent Variable: Capital structure (Y)

Based on Table 5.5, the linear regression equation is $Y = -2.335 + 4.578 X_1 + 5.210 X_2 - 0.024 X_3$ From the regression equation it can be explained that:

1. A constant value of -2.335 means that if the independent variables namely profitability, asset structure and sales growth are 0 (zero), then the capital structure (Y) is a constant of -2.335.
2. The profitability coefficient (X₁) is 4.578 meaning that every 1 increase in profitability will result in an increase in the capital structure (Y) of 4.578. Assuming other variables are constant.
3. The coefficient of the asset structure (X₂) is 5.210, meaning that every 1 increase in profitability will result in an increase in capital structure (Y) of 5.210. Assuming other variables are constant.
4. The coefficient of sales growth (X₃) is -0.024 meaning that every increase in profitability of 1 will result in an increase in the capital structure (Y) of -0.24. Assuming other variables are constant.

5.3 Analysis of the Coefficient of Determination (R²)

Table 5.6
Determination Coefficient Results
Model Summary^b

Model	R	RSquare	Adjusted RSquare	Std. Error of the Estimate
1	,330 ^a	,109	,089	3,71585

a. Predictors: (Constant), Sales growth (X₃), Asset structure (X₂), Profitability (X₁)

b. Dependent Variable: Capital structure (Y)

From Table 5.6, the coefficient of determination (R²) in the Adjusted R Square column is 0.089 or 8.9% indicating that the influence of profitability, asset structure, and sales growth on the capital structure of mining companies listed on the Indonesia Stock Exchange in 2018-2022 is 8.3%, while the remaining 91.1% is influenced by other factors that are not included in this regression equation.

5.4 F Test (Simultaneous)

Table 5.7
F Test Results (simultaneous)

ANOVA^a

Model	Sum of Squares	df	Mean Square	F	Sig.
1 Regression	221,317	3	73,772	5,343	,002 ^b
Residual	1808,787	131	13,808		
Total	2030,103	134			

a. Predictors:(Constant),Sales growth (X₃), Asset structure (X₂), Profitability (X₁)

b. Dependent Variable:Capital structure (Y)

Based on Table 5.7, the calculated F value is 5.343 with a significant level of 0.002. Because the significance level is less than 0.05 (0.002 <0.05), it means that profitability, asset structure, and sales growth simultaneously (together) have a significant effect on the capital structure of mining companies listed on the Indonesia Stock Exchange. From the results of the data analysis above, it can be concluded that this research model is feasible because the significance value is <0.05.

5.5 T test (Partial)

Table 6.8
T test results (partial)

Coefficients^a

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std.Error	Beta		
1 (Constant)	-2,335	1,219		-1,916	,058
Profitability (X ₁)	4,578	1,775	,216	2,579	,011
Asset structure (X ₂)	5,210	1,801	,241	2,893	,004
Sales growth (X ₃)	-,024	,159	-,013	-,150	,881

a. Dependent Variable: Capital structure (Y)

Testing the significance of the regression coefficient of profitability (X1).

From the results of the t-test (partial), it is known that the magnitude of the profitability regression coefficient is 4.578 and a significance value of 0.011. At a significance level of $\alpha = 5\%$ (0.05), the regression coefficient is significant because the significance is $0.011 < 0.05$ so it can be concluded that profitability has a positive and significant effect on the capital structure of mining companies listed on the Indonesia Stock Exchange.

Testing the significance of the regression coefficient of the asset structure (X2).

From the results of the t (partial) test, it is known that the magnitude of the regression coefficient of the asset structure (X2) is 5.210 and a significance value of 0.004. At a significance level of $\alpha = 5\%$ (0.05), then 0.004 is less than 0.05 so it can be concluded that asset structure has a positive and significant effect on the capital structure of mining companies listed on the Indonesia Stock Exchange.

Testing the significance of the regression coefficient of sales growth (X3)

From the results of the t (partial) test, it is known that the magnitude of the regression coefficient of sales growth (X3) is -0.024 and a significance value of 0.881. At a significance level of $\alpha = 5\%$ (0.05), then 0.881 is greater than 0.05 so it can be concluded that sales growth has a negative and insignificant effect on the capital structure of mining companies listed on the Indonesia Stock Exchange.

6. Discussion

Based on the results of statistical analysis in this study, shows that the first hypothesis (H1) is accepted. From the results of data processing, it is concluded that profitability, asset structure, and sales growth simultaneously have a positive and significant effect on the capital structure of mining companies listed on the Indonesia Stock Exchange in 2018-2022. This shows the relationship between profitability, asset structure, and unidirectional sales growth and is able to influence the increase in the capital structure of mining companies listed on the Indonesia Stock Exchange.

The coefficient of determination (R^2) of 0.089 or 8.9% indicates that the influence of profitability, asset structure, and sales growth on the capital structure of Mining Companies Listed on the Indonesia Stock Exchange in 2018-2022 is 8.9%, while the remainder is 91.1% is influenced by other factors that are not included in this regression equation.

Capital structure refers to differences in the choices companies use to finance their capital (Saleem et al., 2013). Pahuja and Sahi (2012) revealed that determining the optimal capital structure is a balance between risk and profit achieved in achieving the goal of maximizing stock prices. A different view is expressed in the theory of Modigliani and Miller (1958) that the way a company finances its operations means nothing so the capital structure is irrelevant. Houlthausen and Verrechia (1991) say that the investment policies or decisions of investors are strongly influenced by information on the company's financial performance. The Pecking order theory explains that companies in obtaining internal funding sources need to obtain high profitability in the form of retained earnings (Myers, 1984). In addition, Sujoko and Soebiantoro (2007) suggest

that with high profitability, investors will respond positively to this signal so that the company's value increases.

Based on the results of partial testing (t-test) shows that profitability has a positive and significant effect on the structure. Capital (Debt to Equity Ratio). This shows that the higher the profitability obtained by the company, the more it increases the company's capital structure policy. Companies with high-profit levels generally use relatively little debt because those with high profits can be used as a source of funds.

Profitability (ROA) is one of the variables whose influence on capital structure (Debt to Assets Ratio) cannot be ignored. Profitability (ROA) indicates that a company has stability and good financial resources. The high level of profitability (ROA) on investment in mining sector companies allows the company to finance most of its funding needs with internal funds generated by the company. Good financial resources will tend to encourage mining sector companies to reduce the proportion of debt to reduce bankruptcy risk, and agency costs, and anticipate potential uncertainties. Following the pecking order theory, the use of internally generated funding sources in the form of retained earnings is more attractive to companies. Companies with high profitability will prevent companies from going bankrupt and are expected to have better investment opportunities. This makes investors or creditors more confident in giving their debts to the company so that the relationship between profitability and capital structure is positive.

The results of this study indicate that an increase or decrease in profitability (ROA) affects changes in the value of the company's capital structure (DER) because the company has determined its capital structure based on the benefits and sacrifices that arise as a result of using debt to support the company's operations. So that the company does not look at the size of the amount of profit generated in determining its capital structure, but rather the size of the sacrifices and profits obtained by the company.

The results of the partial test (t-test) show that the asset structure has a positive and significant effect on capital structure (Debt to Equity Ratio). This shows that the greater the asset structure, the company's capital structure derived from debt will increase. In addition, the asset structure can affect the capital structure because companies that have large fixed assets will tend to get loans where these assets can be used as collateral to increase their operating activities.

The structure of assets in this study is a comparison of fixed assets and total assets of the company which describes the number of assets that can be guaranteed by the company when making loans to creditors. Based on the trade-off theory, asset structure has a positive effect on capital structure. The more assets of a company mean the more collateral assets to be able to get external funding sources in the form of debt. Mining sector companies have a fixed asset composition that is different from companies in general. Fixed assets in mining sector companies are mostly dominated by machinery, factories, and production installations. In relation to Brigham and Houston's opinion regarding the types of assets that can be guaranteed, fixed assets owned by companies in the mining sector are multipurpose assets that are not very good as

collateral. Therefore, creditors will choose assets and other agreement terms as collateral in providing credit to mining sector companies, for example, shares, certificates of ownership, cash deeds, corporate guarantees, sales and purchase contracts, bank accounts, insurance claims, and deposits. This is why the increase in the company's fixed assets does not have a significant effect on the capital structure of companies in the mining sector.

Based on the results of partial testing (t-test) shows that sales growth has a negative and insignificant effect on capital structure (Debt to Equity Ratio). Sales growth is stated to have a negative and insignificant effect on the capital structure because sales to companies are more on credit sales, namely in the form of receivables so creditors do not consider the company's sales growth in providing credit. This shows that companies that have high potential sales growth rates will tend to generate larger cash flows so that these companies will ultimately rely more on internal funding. Not affecting sales growth on the capital structure can also be caused by companies with high sales growth preferring to use their own capital or retained earnings to finance their operations activities compared to using long-term debt. So that in meeting their funding needs, companies that experience increased sales do not always take funds from debt but rather use their own capital or retained earnings.

7. Conclusion

Based on the data analysis and hypothesis testing described in the previous chapter regarding the Influence of Profitability, Asset Structure, and Sales Growth on Capital Structure in Mining Companies Listed on the Indonesia Stock Exchange in 2018-2022, the following conclusions can be drawn:

1. Profitability, asset structure, and sales growth simultaneously have a significant effect on the capital structure of mining companies listed on the Indonesia Stock Exchange.
2. Profitability has a positive and significant effect on the capital structure of mining companies listed on the Indonesia Stock Exchange.
3. Asset structure has a positive and significant effect on the capital structure of mining companies listed on the Indonesia Stock Exchange.
4. Sales growth has no significant effect on the capital structure of mining companies listed on the Indonesia Stock Exchange.

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