

***THE INFLUENCE OF SALES, COST OF REVENUE, REFERENCE COAL PRICES (HBA)
AND INFLATION ON ANNUAL NET PROFIT OF COAL SUB-SECTOR COMPANIES
LISTED ON THEINDONESIAN STOCK EXCHANGE, 2019-2023***

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ABSTRACT

This research aims to examine and analyze the relationship between sales, cost of revenue, reference coal prices andinflation on the annual net profit of coal sub-sector companies listed on the Indonesian Stock Exchange. The researchapproach is an associative quantitative approach with a causal nature. The population in this research is all 30 coal mining companies registered on the IDX. In this research, the analysis technique used is multiple linear regression analysis. Based on the test results, it was found that Sales, Reference Coal Prices (HBA) and Inflation had a positive influence while Cost of Revenue had a negative influence on the Annual Net Profit of Coal Sub Sector Companies Listed on the Indonesia Stock Exchange for 2019-2023

Keywords: Sales, Cost of Revenue, Reference Coal Price (HBA), Inflation

PENGARUH PENJUALAN, BEBAN POKOK PENDAPATAN, HARGA BATU BARA ACUAN (HBA) DANINFLASI TERHADAP LABA BERSIH PER TAHUN PERUSAHAAN SUB SEKTOR BATU BARA YANG TERDAFTAR DI BURSA EFEK INDONESIA TAHUN 2019-2023

ABSTRAK

Penelitian ini bertujuan untuk menguji dan menganalisis Hubungan Penjualan, Beban Pokok Pendapatan, Harga BatuBara Acuan dan Inflasi Terhadap Laba Bersih Per Tahun Perusahaan Sub Sektor Batu Bara Yang Terdaftar Di Bursa efek Indonesia. Pendekatan penelitian adalah pendekatan kuantitatif asosiatif dengan sifat kausal. Populasi dalam penelitian ini adalah seluruh perusahaan pertambangan batubara yang terdaftar di BEI sebanyak 30 perusahaan. Dalam penelitian ini teknik analisis yang digunakan adalah analisis regresi linear berganda. Berdasarkan hasil uji diperoleh hasil bahwa Penjualan, Harga Batu Bara Acuan (HBA) dan Inflasi berpengaruh positif sedangkan Beban Pokok Pendapatan Berpengaruh negatif terhadap Laba Bersih Tahunan Perusahaan Sub Sektor Batu Bara yang Terdaftar di Bursa Efek Indonesia Tahun 2019-2023

Kata Kunci: Penjualan, Beban Pokok Pendapatan, Harga Batu Bara Acuan (HBA), Inflasi

INTRODUCTION

In general, profit is the main objective that companies must achieve (Hambali & Lisna, 2014). Profit serves as a measure of corporate success because it enables companies to expand their business, maintain their existence, provide greater customer satisfaction, and strengthen the overall economic condition (Mahaputa, 2012). The size of a company's profit is influenced by several factors, including cost, selling price, and sales volume.

Coal is a sedimentary rock formed from preserved plant remains that have undergone physical and chemical processes, making it rich in carbon. The main components of coal are carbon, hydrogen, and oxygen. It is estimated that there are more than 984 billion tons of reserves (Andriyani, 2024).

Proven coal reserves are distributed across more than 70 countries worldwide. Assuming the global production level in 2004 was around 4.63 billion tons per year for hard coal and 879 million tons per year for brown coal, these reserves are projected to last up to 164 more years. In contrast, with the current rate of oil production, the world's crude oil reserves are expected to be depleted within 41 years, while natural gas reserves will run out in approximately 67 years. Moreover, the distribution of these reserves is limited, with 68% of global oil reserves and 67% of global gas reserves concentrated in the Middle East and Russia. This condition requires significant additional

transportation costs to deliver energy to consumers spread across the world (Scribd.com).

Table 1. The World's Largest Coal-Producing Countries

	2019	2020	2021	2022	2023	*million tons
CHINA	3700	3900	3900	4400	4430	
INDIA	783	757	700	1200	1030	
USA	640	485	640	700	808	
AUSTRALIA	550	477	500	524	547	
INDONESIA	616	566	580	625	725	

Sumber: SolarKita.Com (2022)

Based on Table 1, it can be seen that coal production in the world's largest coal-producing countries continues to increase. This trend occurs because coal is still highly needed as an energy source by those countries as well as others. One of the factors behind this is that coal is a relatively inexpensive energy source compared to other sources such as diesel, hydro, and wind power.

Table 2. Realization of Coal Production and Sales in Indonesia

	Actual Production	Actual Domestic Sales	Actual Exports	Actual DMO	* million tons
2019	616.16	108.27	454.5	138.42	
2020	565.69	219.7	331.94	131.89	
2021	606.28	237.91	322.07	133.04	
2022	685.8	301.76	367.94	215.81	
2023	770.88	344.56	406.67	71.06	
2024	637.9	285.88	323.94	0	

Based on Table 2, it can be seen why coal is an important asset for Indonesia: not only because of its abundant reserves, but also because coal sales in Indonesia continue to increase every year. According to Umiyati et al. (2021), several factors contributing to the rise in coal prices include the increasing use of electricity for both local and global industries, as well as the fact that some industries continue to rely on coal because it remains relatively affordable. Another factor is the rise in coal imports in India. The demand for coal is expected to remain high, particularly as the country seeks to overcome energy shortages and expand its power generation capacity. Global economic recovery has also led to an increase in trade volumes and commodity prices, including coal.

This is evident from the ICI-4 index price, which even reached USD 125.51 per ton in October 2021, the highest in history. The ICI-4 index price then gradually stabilized toward the end of 2021 at USD 65.52 per ton, still higher by 68.56%.

LITERATURE REVIEW

Net Income Per Year

Annual net income is a variable that can influence a company's value. Annual net income is the net result of various policies and decisions applied by the company. It represents the company's profit derived from sales activities. Annual net income plays an important role in all aspects of business because it reflects the company's efficiency and overall performance. Moreover, it also indicates that the company will provide greater returns to investors (Riyadi, 2019).

Inflation

Inflation is a phenomenon in which the general price level increases continuously. Price increases in only one or two

goods cannot be regarded as inflation unless they spread and cause an increase in the majority of other goods (Salim, Fadilla, et al., 2021).

Reference Coal Price (HBA)

According to transisienergi.id, the coal price determined by the Ministry of Energy and Mineral Resources (ESDM) is based on the average of several coal price indices from the previous month. The HBA is used as a reference for determining coal sales prices, after being adjusted according to the specifications of the coal being sold (calorific value, moisture content, sulfur content, ash content).

Cost of Goods Sold (COGS)

The cost of goods sold (COGS) is defined as the purchase (acquisition) price of goods sold. In a trading company, the cost of goods sold is calculated by adding beginning inventory to net purchases during the period and then subtracting ending inventory (Soemarso, 2009).

Sales Growth

According to Sitohang (2010), the growth rate of a company can be observed from the increase in volume and price, particularly in terms of sales, since sales are a key activity conducted by companies to achieve expected profit levels. At the end of a period, if sales compared to the base period show a significant increase, it can be concluded that the company's sales growth is improving.

Hypothesis Development

Relationship Between Sales and Annual Net Income

The growth rate of a company can be measured by the increase in volume and prices, especially in sales, because sales are activities generally undertaken by companies to achieve the desired profit levels. At the end of a period, if sales compared to the base period increase significantly, it indicates better sales growth (Sitohang, 2010). Research by Manurung and Saragih (2023) shows that sales have a positive and significant effect on annual net income. This finding is consistent with studies by Gunawan & Wahyuni (2013), Hambali & Lisna (2014), Pusaka & Takarini (2023), and Sari et al. (2016).

H1: Sales have a positive effect on annual net income.

Relationship Between Cost of Goods Sold (COGS) and Annual Net Income

For a trading company, calculating and preparing the cost of goods sold is essential. According to Indonesian accounting principles, COGS is defined as the sum of expenses and costs, both direct and indirect, incurred to produce goods or services in the condition and location where they can be sold or used. According to Soemarso (2009), "the cost of goods sold (COGS) is the purchase (acquisition) price of goods sold." In a trading company, COGS is determined by beginning inventory plus net purchases during the period minus ending inventory. Research by Gunawan & Wahyuni (2013) shows that COGS has a negative and significant effect on annual net income. This is also supported by research conducted by Mariam & Munandar (2023), Ardiningsih & Musmini (2023), and Dewi (2023).

H2: COGS has a negative effect on annual net income.

Relationship Between Reference Coal Price (HBA) and Annual Net Income

According to transisienergi.id, the reference coal price (HBA) determined by the Ministry of ESDM is based on the average of several coal price indices from the previous month. The HBA is used as a reference for determining coal sales prices after adjusting for coal specifications (calorific value, moisture, sulfur, and ash content). Research by Aristiyanti (2020) shows that the HBA has a positive and significant effect on the annual net income of mining companies listed on the Indonesia Stock Exchange (IDX). This finding is also consistent with studies by Afkani (2023), Sundari (2015), and Ramadhan et al. (2020).

H3: The reference coal price (HBA) has a positive effect on annual net income.

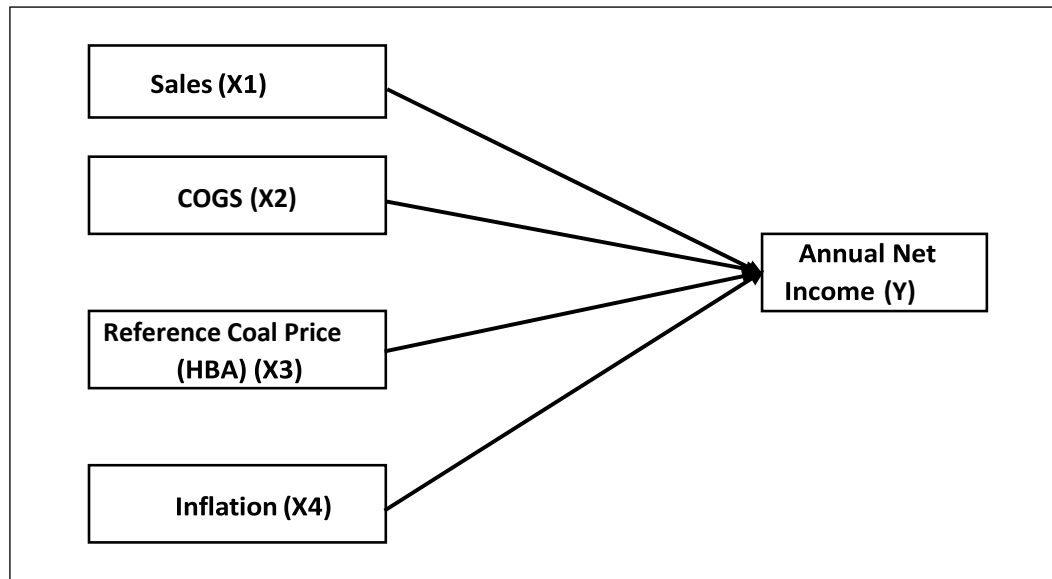
Relationship Between Inflation and Annual Net Income

Inflation is a phenomenon in which the general price level increases continuously. Price increases in only one or two goods cannot be considered inflation unless they spread and cause a rise in most other goods (Salim, Fadilla, et al., 2021). In general, economists argue that inflation reduces purchasing power, the extent of which depends on the elasticity of supply and demand for goods and services. However, during inflationary periods, some industries continue

to operate and even increase production, such as automobile factories, which keep expanding due to the rising demand for vehicles to deliver e-commerce goods. Since factories require energy to produce goods, and coal is among the cheapest options, coal companies continue to generate annual net income during inflationary periods. Research by Salim, Fadilla, et al. (2021) shows that inflation has a positive but insignificant effect on the annual net income of coal mining companies in Indonesia. This is consistent with studies by Nursyafina (2020) and Safitriyana (2021). H4: Inflation has a positive effect on annual net income.

RESEARCH FRAMEWORK

Based on the theoretical explanations above, the research framework as seen in Figure 1 is developed.



Sumber: Processed Data, 2024

Figure 1. Research Framework

RESEARCH METHODOLOGY

Research Location and Period

This study was conducted on energy sector companies listed on the Indonesia Stock Exchange (IDX). The research period ran from September 2024 to January 2025.

Population and Sample

The population of this research consists of energy sector companies listed on the IDX. Based on data obtained in October 2024, there were 87 companies in the population. The sample comprises 30 companies from the energy sector listed on the IDX during the 2019–2023 period that met the research criteria.

Type and Source of Data

The data used in this study are secondary data, obtained from the annual reports of energy sector companies listed on the IDX for the 2019–2023 period. The data were collected through the IDX official website (www.idx.co.id). Some financial statement data were also retrieved from the official websites of the respective companies.

Data Analysis Technique

The data analysis method refers to the process of transforming data into comprehensible and useful information. The process begins with data grouping, followed by presenting the data for each research variable. The next stage involves conducting calculations to address the problem formulations and test the hypotheses.

In this study, data were processed using SPSS (Statistical Program for the Social Sciences) and PLS (Partial Least Squares). SPSS is a software application with advanced statistical analysis capabilities and data management support within a graphical environment. It employs simple descriptive menus and dialog boxes, making it user-friendly.

The software is used to analyze data and perform statistical calculations. In addition to its ease of use, SPSS is powerful for analyzing statistics, particularly for studies involving more complex variables.

Meanwhile, PLS is an analytical method used to predict models with multiple factors. PLS is part of Structural Equation Modeling (SEM). The purposes of PLS are to predict relationships among constructs, to confirm theories, and to explain the existence or absence of relationships between latent variables.

RESULTS AND DISCUSSION

This study was conducted to examine the relationship between Sales, Cost of Goods Sold (COGS), Reference Coal Price (HBA), and Inflation on the Annual Net Income of companies. The research objects were energy sector companies listed on the Indonesia Stock Exchange (IDX) during the 2019–2023 period. Based on the sampling technique described in the previous chapter, namely purposive sampling, 30 companies were selected. The selected samples were then used for data analysis and hypothesis testing.

Table 3. Descriptive Data of the Annual Net Income Variable

NO.	COMPANIES	YEAR					AVERAGE
		2019	2020	2021	2022	2023	
1	ADRO	6003000	2305500	14685888	43905979	28535465	19087166.4
2	AIMS	-697	-863	2615	190	-13760	-2503
3	ARII	-82800	-232000	14272	403234	15383	23617.8
4	BOSS	-106114	-165365	93796.9	93797	-127356	-42248.22
5	BSSR	414000	449500	2925760	3722160	2492046	2000693.2
6	BUMI	124200	-4886500	3182656	8979711	415341	1563081.6
7	BYAN	3229200	4988000	18068352	35701718	19690240	16335502
8	DSSA	993600	-841000	3782080	20223736	13306295	7492942.2
9	GEMS	924600	1392000	5052288	10794264	8137607	5260151.8
10	GTBO	-55200	-14500	-14272	124072	61532	20326.4
11	HRUM	276000	870000	1398656	5893420	3015068	2290628.8
12	INDY	69000	-1493500	899136	7925099	2322833	1944513.6
13	ITMG	1752600	551000	6779200	18595291	7691500	7073918.2
14	KKGI	69000	-130500	328256	604851	415341	257389.6
15	MBAP	483000	391500	1441472	2776111	338426	1086101.8
16	PTBA	4040394	2407927	8036888	12779427	6292521	6711431.4
17	SMMT	6234	-23386	249957	402880	255975	178332
18	TOBA	607200	522000	941952	1457846	323043	770408.2
19	BBRM	-55200	-159500	14272	15509	61532	-24677.4
20	BESS	9946.84	51194.84	112465.3	55922.23	79450	61795.842
21	DWGL	-21666.7	35565	94233.8	3400	15637	25433.82
22	FIRE	10539	13810	-45893	-94702	-516	-23352.4
23	MBSS	27600	-217500	171264	403234	384575	153834.6
24	PSSI	179400	116000	356800	651378	630703	386856.2
25	RIGS	-13800	14500	-71360	31018	1215257	235123
26	SGER	20366	27725	202568	590931	681306	304579.2

27	TCPI	269489	57730	84578	115667	188678	143228.4
28	TEBE	45954.5	-2525	165614.8	327830	221712	151717.26
29	TPMA	110400	29000	57088	217126	307660	144254.8
30	PTIS	13800	14500	14272	15509	15383	14692.8
AVERAGE		644801.52	202343.76	2300828.5	5890553.61	3232295.9	2454164.663
STD DEV		1369297.7	1476500.1	4314967.8	10645338.9	6466844.62	4644414.04
MIN		-106114	-4886500	-71360	-94702	-127356	-42248.22
MAX		6003000	4988000	18068352	43905979	28535465	19087166.4

Source : PLS Processed Data, 2024

From Table 3, it can be seen that the minimum value of Annual Net Income is -4,886,500, recorded by PT Bumi Resources Tbk (BUMI), due to the decline in profits experienced by the energy sector during the 2019–2020 period. The maximum value of 43,905,979 was obtained by PT Adaro Energy Indonesia Tbk (ADRO). The average value of the Annual Net Income variable is 2,454,165, with a standard deviation of 1,369,298, indicating that the distribution of Annual Net Income is heterogeneous since the standard deviation is greater than the mean value.

Table 4. Descriptive Data of the Sales Variable

NO.	COMPANIES	YEAR					AVERAGE
		2019	2020	2021	2022	2023	
1	ADRO	47706600	36757500	56988096	125653918	100266394	73474502
2	AIMS	1	4718.43	38507.2	32544.67	9756.09	17105.478
3	ARII	869400	609000	1641280	3815214	4322623	2251503.4
4	BOSS	170386	43523	402976	402976	141972	232366.6
5	BSSR	5768400	4799500	9861952	15958761	17444322	10766587
6	BUMI	15359400	11455000	14386176	28381470	25843440	19085097
7	BYAN	19209600	20227500	40703744	72954336	55086523	41636341
8	DSSA	22990800	21851500	30898880	92371604	77145745	49051706
9	GEMS	15276600	15384500	22635392	45286280	44641466	28644848
10	GTBO	220800	14500	57088	759941	907597	391985.2
11	HRUM	3629400	2291000	4795392	14020136	14075445	7762274.6
12	INDY	38405400	30116500	43800768	67231515	46564341	45223705
13	ITMG	23680800	17182500	29642944	56390724	36519242	32683242
14	KKGI	1587000	1044000	1883904	3954795	4537985	2601536.8
15	MBAP	3601800	2914500	4424320	6979050	3445792	4273092.4
16	PTBA	21787564	17325192	29261468	42648590	38488867	29902336
17	SMMT	250264	209445	508273	1049271	1016267	606704
18	TOBA	7258800	4814000	6607936	9863724	7706883	7250268.6
19	BBRM	234600	159500	114176	139581	169213	163414
20	BESS	240358	295532	404097	404470	363741	341639.6

21	DWGL	1724237	1568496	2297546	2784896	3261184	2327271.7
22	FIRE	1221662	1069005.5	841151	250182	264364	729272.9
23	MBSS	1076400	797500	1041856	1364792	969129	1049935.4
24	PSSI	1035000	913500	1555648	1845571	1569066	1383757
25	RIGS	372600	420500	242624	325689	5260986	1324479.8
26	SGER	1275379	2035077	3924500	10448875	12312862	5999338.6
27	TCPI	2319911	1672368	1670829	1758131	1825854	1849418.6
28	TEBE	379904	197952.8	448008	781794	632233	487978.36
29	TPMA	662400	580000	599424	977067	1030661	769910.4
30	PTIS	179400	174000	171264	279162	215362	203837.6
AVERAGE		7949829	6564260.3	10395007	20303835	16867977.2	12416182
STD DEV		12093175	9814171.9	15501540	31837193	25140108.7	18633451
MIN		1	4718.43	38507.2	32544.67	9756.09	17105.478
MAX		47706600	36757500	56988096	125653918	100266394	73474502

Source: PLS Processed Data, 2024

From table 4, the minimum value of Firm Value is 1, recorded by PT Artha Mahiya Investama Tbk (AIMS), due to financial difficulties experienced by the company during the 2018–2019 period, which led to a decline in sales and consequently impacted its firm value. The maximum value of 56,988,096 was obtained by PT Adaro Energy Indonesia Tbk (ADRO), indicating that during 2019–2020 the company was able to increase its sales, which also positively affected its firm value. The average value of the Firm Value variable is 12,416,182 with a standard deviation of 18,633,451. This indicates that the distribution of firm value is heterogeneous, as the standard deviation is greater than the mean value.

Table 5. Descriptive Data of the Cost of Goods Sold (COGS) Variable

NO.	COMPANIES	YEAR					AVERAGE
		2019	2020	2021	2022	2023	
1	ADRO	-34403400	-28391000	-31726656	-53490541	-61224340	-41847187.4
2	AIMS	-697	-4487.03	-35228.15	-29175	-9160	-15749.436
3	ARII	-869400	-681500	-1370112	-2946710	-3922665	-1958077.4
4	BOSS	-178731	-68532	-236103	-236103	-188799	-181653.6
5	BSSR	-4250400	-3364000	-4852480	-8778094	-12044889	-6657972.6
6	BUMI	-13896600	-10135500	-11503232	-22627631	-23735969	-16379786.4
7	BYAN	-12447600	-13514000	-15784832	-23945896	-29489211	-19036307.8
8	DSSA	-14986800	-14195500	-18025536	-51381317	-45256786	-28769187.8
9	GEMS	-10294800	-9889000	-11831488	-24891945	-27012548	-16783956.2
10	GTBO	-220800	-14500	-42816	-558324	-507639	-268815.8
11	HRUM	-2691000	-1667500	-2312064	-5629767	-8352969	-4130660
12	INDY	-32512800	-26433500	-30699072	-44727956	-38072925	-34489250.6
13	ITMG	-19168200	-14297000	-16555520	-27016678	-25105056	-20428490.8

14	KKGI	-1338600	-971500	-1298752	-2807129	-3722686	-2027733.4
15	MBAP	-2332200	-1943000	-2026624	-2853656	-2738174	-2378730.8
16	PTBA	-14176060	-12758932	-15777245	-24682304	-29331562	-19345220.6
17	SMMT	-212905	-196640	-346110	-711911	-838891	-461291.4
18	TOBA	-5989200	-4292000	-5494720	-7754500	-6722371	-6050558.2
19	BBRM	-234600	-203000	-85632	-108563	-92298	-144818.6
20	BESS	-167077	-195282	-241219	-307158	-234225	-228992.2
21	DWGL	-1614839	-1382767	-2121283	-2641602	-2991658	-2150429.72
22	FIRE	-1034915	-828783	-617664.7	-191711	-194721	-573558.84
23	MBSS	-814200	-739500	-827776	-961558	-676852	-803977.2
24	PSSI	-772800	-812000	-1056128	-1178684	-999895	-963901.4
25	RIGS	-289800	-333500	-285440	-248144	-3568856	-945148
26	SGER	-1203577	-1929521	-3551864	-9718905	-11254656	-5531704.6
27	TCPI	-32023	-24337	-1348278	-1383758	-1348819	-827443
28	TEBE	-264399	-160440	-206885	-319527	-302612	-250772.6
29	TPMA	-455400	-464000	-470976	-651378	-646086	-537568
30	PTIS	-110400	-116000	-128448	-201617	-199979	-151288.8
AVERAGE		-5898807	-5000240.7	-6028673	-10766075	-11359576.6	-7810674.44
STD DEV		9165078.4	7642603.2	8787378.2	15673392.3	15788498.3	11244525.09
MIN		-34403400	-28391000	-31726656	-53490541	-61224340	-41847187.4
MAX		-697	-4487.03	-35228.15	-29175	-9160	-15749.436

Source: PLS Processed Data, 2024

From Table 5, the minimum value of the company's Cost of Goods Sold (COGS) is -28,391,000, recorded by PT Adaro Energy Indonesia Tbk (ADRO), which indicates that in addition to increasing sales, the company was also able to reduce its COGS, thereby improving its firm value. The maximum value of -697 was obtained by PT Artha Mahiya Investama Tbk (AIMS), indicating that the company's COGS was very high, which could worsen the company's condition. The average value of the COGS variable is -7,810,671 with a standard deviation of 11,244,525. This shows that the distribution of firm value is heterogeneous, as the standard deviation is greater than the mean value obtained.

Table 6. Descriptive Data of the Gross Profit Margin (GPM) Variable

NO.	COMPANIES	YEAR					AVERAGE
		2019	2020	2021	2022	2023	
1	ADRO	0.2789	0.2276	0.4433	0.5743	0.3894	0.3827
2	AIMS	-696	0.049	0.0852	0.1035	0.0611	-139.1402
3	ARII	0	-0.119	0.1652	0.2276	0.0925	0.0733
4	BOSS	-0.049	-0.5746	0.4141	0.4141	-0.3298	-0.025
5	BSSR	0.2632	0.2991	0.508	0.45	0.3095	0.3659
6	BUMI	0.0952	0.1152	0.2004	0.2027	0.0815	0.139
7	BYAN	0.352	0.3319	0.6122	0.6718	0.4647	0.4865

8	DSSA	0.3481	0.3504	0.4166	0.4438	0.4134	0.3944
9	GEMS	0.3261	0.3572	0.4773	0.4503	0.3949	0.4012
10	GTBO	0	0	0.25	0.2653	0.4407	0.1912
11	HRUM	0.2586	0.2722	0.5179	0.5985	0.4066	0.4107
12	INDY	0.1534	0.1223	0.2991	0.3347	0.1824	0.2184
13	ITMG	0.1906	0.1679	0.4415	0.5209	0.3126	0.3267
14	KKGI	0.1565	0.0694	0.3106	0.2902	0.1797	0.2013
15	MBAP	0.3525	0.3333	0.5419	0.5911	0.2054	0.4048
16	PTBA	0.3494	0.2636	0.4608	0.4213	0.2379	0.3466
17	SMMT	0.1493	0.0611	0.319	0.3215	0.1745	0.2051
18	TOBA	0.1749	0.1084	0.1685	0.2138	0.1277	0.1587
19	BBRM	0	-0.2727	0.25	0.2222	0.4545	0.1308
20	BESS	0.3049	0.3392	0.4031	0.2406	0.3561	0.3288
21	DWGL	0.0634	0.1184	0.0767	0.0515	0.0826	0.0785
22	FIRE	0.1529	0.2247	0.2657	0.2337	0.2634	0.2281
23	MBSS	0.2436	0.0727	0.2055	0.2955	0.3016	0.2238
24	PSSI	0.2533	0.1111	0.3211	0.3613	0.3627	0.2819
25	RIGS	0.2222	0.2069	-0.1765	0.2381	0.3216	0.1625
26	SGER	0.0563	0.0519	0.095	0.0699	0.0859	0.0718
27	TCPI	0.9862	0.9854	0.193	0.2129	0.2613	0.5278
28	TEBE	0.304	0.1895	0.5382	0.5913	0.5214	0.4289
29	TPMA	0.3125	0.2	0.2143	0.3333	0.3731	0.2867
30	PTIS	0.3846	0.3333	0.25	0.2778	0.0714	0.2634
AVERAGE		-22.9772	0.1665	0.3089	0.3408	0.2533	-4.3815
STD DEV		124.9773	0.2465	0.1717	0.1606	0.1721	25.0244
MIN		-696	-0.5746	-0.1765	0.0515	-0.3298	-139.1402
MAX		0.9862	0.9854	0.6122	0.6718	0.5214	0.5278

Source: PLS Processed Data, 2024

From table 6, the lowest Gross Profit Margin (GPM) value was recorded by PT Artha Mahiya Investama Tbk (AIMS) at -697,000, due to a decline in gross sales during 2018–2019. Meanwhile, the highest GPM value was obtained by PT Transcoal Pacific Tbk (TCPI) at 0.9682, as the company experienced a significant increase in sales during 2018–2019. This indicates that the distribution of GPM is heterogeneous, as its value is greater than the mean.

Table 7. Descriptive Data of the Net Profit Margin (NPM) Variable

NO.	COMPANIES	YEAR					AVERAGE
		2019	2020	2021	2022	2023	
1	ADRO	0.1258	0.0627	0.2577	0.3494	0.2846	0.2161
2	AIMS	-697	-0.1829	0.0679	0.0058	-1.4104	-139.7039

3	ARII	-0.0952	-0.381	0.0087	0.1057	0.0036	-0.0716
4	BOSS	-0.6228	-3.7995	0.2328	0.2328	-0.8971	-0.9708
5	BSSR	0.0718	0.0937	0.2967	0.2332	0.1429	0.1676
6	BUMI	0.0081	-0.4266	0.2212	0.3164	0.0161	0.027
7	BYAN	0.1681	0.2466	0.4439	0.4894	0.3574	0.3411
8	DSSA	0.0432	-0.0385	0.1224	0.2189	0.1725	0.1037
9	GEMS	0.0605	0.0905	0.2232	0.2384	0.1823	0.159
10	GTBO	-0.25	-1	-0.25	0.1633	0.0678	-0.2538
11	HRUM	0.076	0.3797	0.2917	0.4204	0.2142	0.2764
12	INDY	0.0018	-0.0496	0.0205	0.1179	0.0499	0.0281
13	ITMG	0.074	0.0321	0.2287	0.3298	0.2106	0.175
14	KKGI	0.0435	-0.125	0.1742	0.1529	0.0915	0.0674
15	MBAP	0.1341	0.1343	0.3258	0.3978	0.0982	0.218
16	PTBA	0.1854	0.139	0.2747	0.2996	0.1635	0.2124
17	SMMT	0.0249	-0.1117	0.4918	0.384	0.2519	0.2082
18	TOBA	0.0837	0.1084	0.1425	0.1478	0.0419	0.1049
19	BBRM	-0.2353	-1	0.125	0.1111	0.3636	-0.1271
20	BESS	0.0414	0.1732	0.2783	0.1383	0.2184	0.1699
21	DWGL	-0.0126	0.0227	0.041	0.0012	0.0048	0.0114
22	FIRE	0.0086	0.0129	-0.0546	-0.3785	-0.002	-0.0827
23	MBSS	0.0256	-0.2727	0.1644	0.2955	0.3968	0.1219
24	PSSI	0.1733	0.127	0.2294	0.3529	0.402	0.2569
25	RIGS	-0.037	0.0345	-0.2941	0.0952	0.231	0.0059
26	SGER	0.016	0.0136	0.0516	0.0566	0.0553	0.0386
27	TCPI	0.1162	0.0345	0.0506	0.0658	0.1033	0.0741
28	TEBE	0.121	-0.0128	0.3697	0.4193	0.3507	0.2496
29	TPMA	0.1667	0.05	0.0952	0.2222	0.2985	0.1665
30	PTIS	0.0769	0.0833	0.0833	0.0556	0.0714	0.0741
AVERAGE		-23.2135	-0.1854	0.1571	0.2013	0.0845	-4.5912
STD DEV		125.1191	0.735	0.1712	0.1702	0.3588	25.0909
MIN		-697	-3.7995	-0.2941	-0.3785	-1.4104	-139.7039
MAX		0.1854	0.3797	0.4918	0.4894	0.402	0.3411

Source: PLS Processed Data, 2024

From table 7, the lowest Gross Profit Margin (GPM) value was recorded by PT Artha Mahiya Investama Tbk (AIMS) at -697,000, due to a decline in gross sales during 2018–2019. Meanwhile, the highest GPM value was obtained by PT Golden Eagle Energy Tbk (SMMT) at 0.4918, as the company experienced a significant increase in sales during 2020–2021. This indicates that the distribution of GPM is heterogeneous, as the value is greater than the mean.

Table 8. Descriptive Data of Coal Sub-Sector Companies for the 2019–2023 Period

No	Variable	2019	2020	2021	2022	2023
1	ANNUAL NET INCOME	644801.5213	202343.7613	2300828.527	5890553.608	3232295.9
2	SALES	7949828.853	6564260.324	10395007.31	20303835.32	16867977.17
3	COST OF GOODS SOLD	-5898807.41	5000240.701	6028672.788	10766074.73	11359576.57
4	GPM	22.97721301	0.166518162	0.308922401	0.340783795	0.253344904
5	NPM	-23.2135428	0.185378582	0.157142099	0.201284362	0.084511427

Source: PLS Processed Data, 2024

Table 8 presents the average values of all companies, and it can be observed that each value or ratio fluctuated from year to year. Variables such as annual net income, sales, cost of goods sold, as well as GPM and NPM, all experienced increases and decreases caused by changes in company systems, both internal and external, which affected the values of these variables during the 2019–2023 period.

Table 9. Results of the Multicollinearity Test

No.	Variable	VIF	Details
1	SALES	2.395	No multicollinearity
2	COST OF GOODS SOLD	1.586	No multicollinearity
3	HBA	-0.003	No multicollinearity
4	INFLATION	0.045	No multicollinearity

Source: PLS Processed Data, 2024

In Table 9, it can be seen that the purpose of the multicollinearity test is to examine whether there is a correlation among the independent variables in the regression model. Multicollinearity is tested by observing the Variance Inflation Factor (VIF) value of each independent variable. If the VIF value is less than 10, it can be concluded that the data are free from multicollinearity symptoms.

Table 10. R-Square Model Feasibility Test Results

No.	Variable	Adjusted R-square
1	Annual Net Income	0.944

Source: PLS Processed Data, 2024

In Table 10, it can be seen that the adjusted R-Square value for the variables sales, cost of goods sold, reference coal price, and inflation on annual net income is 0.944 or 94.4 percent, while the remaining 0.056 or 5.6 percent is explained by other variables not examined in this study.

Table 11. Path Coefficients Result

Variable	Original sample (O)	Hypothesis	T statistics (O/STDEV)	P values	Conclusion	Decision
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Positive and

Sales -> LBPT	2.395	Positive	9.221	0	significant	accepted
COGS -> LBPT	1.586	Positive	5.634	0	Positive and significant	accepted
HBA -> LBPT	-0.003	Negative	0.077	0.939	Negative and not significant	declined
Inflation -> LBPT	0.045	Positive	1.822		Positive and significant	accepted

Source: Processed Data, 2024

Relationship Between Sales and Annual Net Income

Based on the table above, the Smart PLS output shows that the sales variable has a p-value of $0.000 < 0.10$ and a path coefficient of 2.395. Thus, it can be concluded that H1 is accepted. This indicates that sales have a positive and significant effect on annual net income.

Previous studies reported inconsistent findings. For example, Hasanah and Sukiyaningsih (2023) found that sales (revenues) did not affect annual net income in coal companies in Indonesia. However, this study is consistent with earlier research showing that growth or sales have a positive and significant effect on changes in annual net income among coal mining companies listed on the Indonesia Stock Exchange (IDX) (Sari et al., 2016).

Relationship Between Cost of Goods Sold (COGS) and Annual Net Income

The Smart PLS output shows that the COGS variable has a p-value of $0.000 < 0.10$ and a path coefficient of 1.586. Thus, it can be concluded that H1 is rejected. This indicates that COGS has a positive and significant effect on annual net income.

Previous studies also show inconsistent findings. For instance, Sulistyo & Yogivaria (2020) found that costs or COGS did not affect annual net income in coal sector companies listed on the IDX. However, this study is in line with Ardiningsih & Musmini (2023), who found that COGS had a positive but not significant effect on annual net income among coal mining companies listed on the IDX.

Relationship Between Reference Coal Price (HBA) and Annual Net Income

The Smart PLS output shows that the reference coal price (HBA) variable has a p-value of $0.939 < 0.10$ and a path coefficient of -0.003 . Thus, it can be concluded that H1 is accepted. This indicates that the HBA has a negative and insignificant effect on annual net income.

Previous studies have produced inconsistent results. Sundari (2015) found that the HBA had a positive effect on annual net income in Indonesian coal companies. However, this study is consistent with Afkani (2023), who found that the HBA had a negative and significant effect on annual net income in coal mining companies.

Relationship Between Inflation and Annual Net Income

The Smart PLS output shows that the inflation variable has a p-value of $0.069 < 0.10$ and a path coefficient of 0.045. Thus, it can be concluded that H1 is accepted. This indicates that inflation has a positive and significant effect on annual net income.

Again, previous studies reported differing results. For example, Zaenab Adnania et al. (2021) found that inflation had no significant effect on annual net income. In contrast, this study is consistent with Zuchrinata (2019), who showed that inflation simultaneously had a positive and significant effect on annual net income.

CONCLUSION

The purpose of this study was to determine whether sales, cost of goods sold (COGS), reference coal price (HBA), and inflation affect annual net income (an empirical study of energy sub-sector companies listed on the IDX for the 2019–2023 period). The research period covered five years, from 2019 to 2023. The sample consisted of 30 companies.

Based on the hypothesis testing results, the study concludes as follows: (1) Sales have a positive effect on annual net income, meaning that higher sales lead to higher annual net income. (2) COGS has a negative effect on annual net income, meaning that lower COGS leads to higher annual net income. (3) Reference Coal Price (HBA) has a positive effect on annual net income, meaning that higher HBA leads to higher annual net income. (4) Inflation has a positive effect on annual net income, meaning that higher inflation leads to higher annual net income.

REFERENCES

- Afkani, H. (2023). *Analisis Dampak Harga Batubara Terhadap Kinerja Keuangan Perusahaan Pertambangan Batubara Dengan Menggunakan Model Prediksi Kebangkrutan Altman Z Score*.
- Andriyani, T. (2024). *Faktor Penyebab Konsumsi Energi Listrik Di Indonesia Masih Rendah*.
- Anwar, S., & Jamal, W. (2017). Analisis Pengaruh Likuiditas terhadap Profitabilitas pada Sub Sektor Pertambangan Batubara yang Terdaftar di BEI Tahun 2017-2019. In *Borneo Student Research* (Vol. 2, Issue 1). www.idx.co.id.
- Ardiningsih, N. K. S., & Musmini, L. S. (2023). Pengaruh Biaya Produksi, Biaya Operasional, dan Pertumbuhan Penjualan Terhadap Profitabilitas Pada Perusahaan Sektor Batubara. *Akuntansi Profesi*, 14.
- Aristiyanti, D. P. (2020). *Pengaruh Produksi, Harga Batu Bara Acuan, Harga Batu Bara Australia, Dan Kurs Terhadap Profitabilitas dan Ekspor Batu Bara Di Indonesia*.
- Dami, Y. F. (2022). *PENGARUH RASIO KEUANGAN TERHADAP PERTUMBUHAN LABA*.
- Dawwas, J. A., & Sundari, S. (2023). Pengaruh Harga Batu Bara Acuan, Kebijakan Dividen, Dan Profitabilitas Terhadap Nilai Perusahaan Dengan Harga Saham Sebagai Variabel Intervening. *Jurnal Aplikasi Akuntansi*, 8(1), 222–238. <https://doi.org/10.29303/jaa.v8i1.323>
- Gunawan, A., & Wahyuni, S. F. (2013). Pengaruh Penjualan dan COGS Terhadap Pertumbuhan Laba Pada Perusahaan Perdagangan Di Indonesia. *Manajemen & Bisnis*, 13.
- Hambali, D., & Lisna, T. (2014). Pengaruh Biaya Produksi, Harga Jual dan Volume Penjualan Terhadap Laba Bersih (Studi Kasus Perusahaan Pertambangan Batubara yang Terdaftar di Bursa Efek Indonesia Periode 2014 – 2017). *Ekonomi Dan Bisnis Indonesia*, 05(02), 41–49. <http://www.idx.co.id>
- Hanafi, M., & Halim. (2009). Analisis Laporan Keuangan. *Akuntansi*.
- Hasanah, A. N., & Sukiyarningsih, T. W. (2023). Study Pertumbuhan Laba: Pengaruhnya Terhadap Profitabilitas Dan Likuiditas Perusahaan Batu Bara Indonesia. *Jurnal Akuntansi, Kewirausahaan Dan Bisnis*, 8(2), 126–134. <http://www.ejournal.pelitaIndonesia.ac.id/ojs32/index.php/KURS/index>
- Kasmir. (2019). Analysis Of The Effect Of Return On Equity (ROE) And Debt To Equity Ratio (DER) On Stock Price On Cement Industry Listed In Indonesia Stock Exchange (IDX) In The Year Of 2022. In *International Organization of Scientific Research* (Vol. 14, Issue 2).
- Mariam, & Munandar, A. (2023). Pengaruh Current Ratio Dan Quick Ratio Terhadap Pertumbuhan Laba Pada Perusahaan Sektor Pertambangan (Sub Sektor Minyak Dan Gas Bumi) Yang Terdaftar Di Bursa Efek Indonesia. *INNOVATIVE: Journal Of Science Research*, 3.
- Mulyadi. (2015). Pengaruh Biaya Produksi, Biaya Operasional, Dan Pertumbuhan Penjualan Terhadap Profitabilitas Pada Perusahaan Sektor Batubara. *Akuntansi Profesi*, 14.
- Munawir. (2015). *Pengaruh Manajemen Keuangan Terhadap Profitabilitas Pada Perusahaan Pertambangan Batu Bara Yang Terdaftar Di BEI*.
- Nursyafina. (2020). *Pengaruh Inflasi Terhadap Profitabilitas Perusahaan Pertambangan Di Indonesia*.
- Pangesti, I., & Susanto, R. (2018). Pengaruh Inflasi Terhadap Indeks Pembangunan Manusia (Ipm) Di Indonesia. *Journal of Applied Business and Economics*, 5(1), 70–81.
- Ramadhan, R., Sinurat, M., & Sembiring, R. (2020). *Pengaruh Harga Minyak Dunia Dan Harga Batubara Acuan Terhadap Profitabilitas Dengan Kurs Sebagai Variabel Intervening Pada Perusahaan Sektor Mining And Coal Di Bursa Efek Indonesia*. www.idx.co.id
- Ravasadewa, R. P., & Fuadati, S. R. (2010). Pengaruh Rasio Keuangan Terhadap Pertumbuhan Laba Pada Perusahaan Batubara Di Bursa Efek Indonesia. *Ilmu Dan Riset Manajemen*.
- Riyadi, J. (2019). Pengaruh Ukuran Perusahaan, Leverage Dan Profitabilitas Terhadap Nilai Perusahaan. *Laporan Keuangan Perusahaan*, 2(2).
- Rudianto, D. (2011). Analisis Faktor-Faktor Pasar Dan Pengaruhnya Terhadap Return Saham Pada Perusahaan Pertambangan Sub Sektor Batubara Yang Terdaftar Di Bursa Efek Indonesia. *Manajemen*.
- Safitri, F. R., Fitria, D., & Suhendra, C. (2023). Pengaruh Likuiditas, Solvabilitas Dan Aktivitas Terhadap Profitabilitas Perusahaan Pertambangan Subsektor Batu Bara Di Indonesia. *Akuntansi, Keuangan, Perpajakan Dan Tata Kelola Perusahaan (JAKPT)*, 1(2).
- Salim, A., Uin, P., & Palembang, R. F. (2021). Pengaruh Inflasi Terhadap Pertumbuhan Laba Perusahaan Batubara yang Terdaftar di BEI. *Pemikiran Dan Pengembangan Ekonomi Syariah*. www.bps.go.id,
- Samryn, L. M. (2012). Pengantar Akuntansi : Mudah Membuat Jurnal Transaksi Dengan Pendekatan Siklus Transaksi.

Manajemen Keuangan.

- Saputra, I., & Ridhawati, R. (2023). PENGARUH EARNING PERSHARE, HARGA BATU BARA ACUAN DAN NILAI TUKAR TERHADAP HARGA SAHAM. *Jurnal Komunikasi Bisnis Dan Manajemen*, 10(1).
- Sari, I., Firmansyah, M. A., & Mahardika, B. W. (2016). Pengaruh Pertumbuhan Penjualan Dan Return On Equity Terhadap Perubahan Laba Pada Perusahaan Pertambangan Batu Bara Yang Terdaftar Di Bursa Efek Indonesia Tahun 2010-2015. *Jurnal Balance*, XIII.
- Sitohang, S. (2010). *Pengaruh Economic Value Added, Return on Assets, Net Profit Margin, dan Earning Per Share Terhadap Harga Saham Perusahaan Manufaktur yang Tercatat di Bursa Efek Indonesia.*
- Soemarso. (2009). *Akuntansi Suatu Pengantar.*
- Stice, & Skousen. (2011). *Akuntansi Keuangan Menengah.*
- Subramanyam, K. R., & Wild, J. J. (2010). Analisis Laporan Keuangan. *Akuntansi.*
- Sudarsono, H. (2009). Dampak Krisis Keuangan Global Terhadap Perbankan Di Indonesia:Perbandingan antara Bank Konvensional dan Bank Syariah. *Pengembangan Pemikiran Dan Kebudayaan.*
- Sugiyono. (2022). *Metode Penelitian Kuantitatif, Kualitatif, dan R&D.* CV Alfabeta.
- Sujarweni, V. W. (2017). Analisis Laporan Keuangan: Teori, Aplikasi dan Hasil Penelitian. *Ilmiah.*
- Sukirno. (2016). Pengaruh Inflasi Terhadap Perekonomian Indonesia. In *Journal of Applied Business and Economics* (Vol. 5, Issue 1).
- Sulistyo, & Yogivaria. (2020). Pengaruh Biaya Produksi, Biaya Operasional Dan Pertumbuhan Penjualan Terhadap Profitabilitat Perusahaan Sektor Batu Bara. *Ekonomi Mikro.*
- Sundari, C. (2015). Pengaruh Harga Batubara Acuan (HBA) Terhadap Return Saham Dengan Profitabilitas Sebagai Variabel Intervening Pada Perusahaan Tambang Batubara Di BEI. *Jurnal TRANSFORMASI*, 11(2), 150–162.
- Suwandi, S., Thalia, J., Syakina, S., Munawarah, M., & Aisyah, S. (2019). Pengaruh Rasio Aktivitas, Solvabilitas dan Likuiditas Terhadap Profitabilitas pada Perusahaan Pertambangan Batubara. *Journal of Education, Humaniora and Social Sciences (JEHSS)*, 1(3), 181–187. <https://doi.org/10.34007/jehss.v1i3.42>
- Zaenab Adnania, S., Nurhayati, I., & Shinta Aminda, R. (2021). Pengaruh Tingkat Suku Bunga Dan Inflasi Terhadap Profitabilitas. *Manager Jurnal Ilmu Manajemen*, 4(3), 383–392. <http://ejournal.uika-bogor.ac.id/index.php/MANAGER>
- Zuchrinata, F. A. (2019). *Pengaruh Inflasi, Suku Bunga Bank Indonesia, Debt To Equity Ratio (DER), Ukuran Perusahaan, Dan Umur Perusahaan Terhadap Profitabilitas Perusahaan Sub Sektor Pertambangan Batu Bara Yang Terdaftar Di BEI Tahun 2013-2017.* Universitas Telkom.