

PROFITABILITY RATIO ANALYSIS PROFIT GROWTH PT. GUDANG GARAM TBK ON THE IDX FOR THE 2014-2021 PERIOD

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Abstract: This study aims to analyze the effect of ROA, ROE, and NPM on the profit growth of cigarette manufacturing companies on the IDX for the period 2014-2021. This study uses the method of analyzing the relationship between the independent variables and the dependent variable with descriptive statistical analysis, multiple linear regression, assumption test, and hypothesis testing. The results of the study partially identified that ROE on profit growth had a significant effect at 2.221 and a p-value of 0.035. ROE on profit growth is not significant and negative at -1.593 and p-value 0.122. While NPM has a significant and positive effect on profit growth at 4.740 and a p-value of 0.000. Net Profit Margin, Return On Assets, and Return On Equity affect profit growth using secondary data from the IDX. PT. Gudang Garam must evaluate the aspects of the profitability ratio, this is proven by ROE which hurts profit growth so that equity is correct so that all assets can be used efficiently so that profits are maximized.

Keywords: *ROA; ROE; NPM; Profit Growth*

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1. Introduction

Financial Reports are the return of decisions and the formation of management policies by showing every problem that is owned by the company, both its weaknesses and strengths (Ramadita & Suzan, 2019). The components of financial statements are divided into several types and each has its financial components, aims, and objectives (Hernita et al, 2021). In practice, each part or whole of the financial statements will show the position and financial condition of a business (Mardjuni et al, 2022). Part of the components of other financial statements besides the statement of financial position, which is important is the income statement, which will show the results of the business entity's activities during a certain period (Hasniati et al, 2023). Financial ratio analysis is a tool to determine the company's growth potential (Marazani et al, 2017). With the existence of the company's financial ratios, the management section knows more about financial developments at any time that is running, so with this analysis process it can be seen the weaknesses of the company's activities and all the results that have been achieved which are considered good (Adams et al, 2021).

One of the measurements that are commonly used is using profitability ratios (Cristóbal et al, 2018). The profitability ratio is a ratio to assess a company's ability to make a profit (Rosko et al, 2020). This ratio also provides a measure of the effectiveness of a company's

management (Karim et al, 2021). For companies, the issue of profitability is very important (Dwiastuti & Dillak, 2019). For company leaders, profitability is used as a measure of the success or failure of the company they lead, while for company employees the higher the profitability obtained by the company or agency, the more there is an opportunity to increase employee salaries (Saptiani & Fakhroni, 2020). Measuring tools used to measure the level of profitability in companies, including gross profit margin, net profit margin, operating profit margin, return on investment, return on equity, return on assets, and measurement of profit growth (Karim et al, 2022). In this study, profitability is measured using industry average standards that have been used in high-profit industrial companies to support operational activities to the fullest (Helastica & Paramita, 2020).

Cigarette company PT. Gudang Garam Tbk is the largest cigarette manufacturer in Indonesia which was established in 1958 in Kediri City, East Java. Company PT. Gudang Garam is widely known both domestically and abroad as a producer of high-quality kretek cigarettes (Satriyo et al, 2017). In addition, this company has 36,400 employees employed and the amount of excise tax received by the state (Rani & Triani, 2021). This indicates that a cigarette company is a form of business that has prospects in Indonesia considering the high demand for cigarette products in Indonesia. PT. Gudang Garam Tbk is an example of a company that can adapt to globalization (Wahyuni et al, 2022). This has been proven so far that the company can survive and develop in carrying out the survival of the company (Carolina, 2020). In its development, PT. Gudang Garam Tbk. Experiencing many good changes in the status of the company capable of management (Madyan et al, 2020).

The overall assets owned by the company PT. Gudang Garam Tbk tend to experience significant growth, namely, in 2015 it grew positively by 9.07%. In 2016 it decreased by -8.87%, in 2017 it grew by 6.04%. In 2018 it decreased by 3.50%, in 2019 it increased by 13.82%, in 2020 it decreased by -0.57% and in 2021 assets grew by 15.05%. PT. Gudang Garam Tbk shows that the net profit obtained from 2014-2021 is still fluctuating. In 2015 it increased by 18.77%. Then in 2016, it decreased by 3.44% and in 2017 it increased by 16.22% and in 2018 it again decreased by 0.48%. This is due to the large burden of the company in that period (Tandean & Winnie). Furthermore, in 2019 net profit increased by 40% which was the highest increase compared to other periods (Utami et al, 2021). In 2020 it has decreased drastically by -29.71% and in 2021 it also decreased by -26.70%. One important indicator in measuring profit growth in a company can show that the management has succeeded in managing the company's resources effectively and efficiently (Surya et al, 2021). A company in a certain year may experience quite rapid profit growth compared to the average company. However, for the following year, the company may experience a decline in profits (Grzybowski & Brona, 2021).

2. Research Method

The type of research used is quantitative data, which is an approach that has and has characteristics where the data used is in the form of numbers and statistical analysis. A quantitative approach is an approach that uses data in the form of numbers in statistical analysis (Samo & Murad, 2019). The data used to analyze the influence between variables is expressed in numbers or on a numerical scale. Data sources in this research use secondary data sources. The data source was obtained from the Indonesian stock exchange website (www.idx.co.id). The company's financial reports were published for the period 2014-2021 which are closely related to the discussion about this research.

Variables in a study determine the success or failure of the research conducted. Variables can be interpreted as a totality or object of observation under study. The research title was chosen by the author, namely profitability ratio analysis in measuring profit growth (Permadi et al, 2018). So, the authors grouped the variables used in the study into the independent variables used in this study, namely ROA, ROE, and NPM with the dependent variable used being profit growth.

The population is the whole area, object, or individual that has boundaries and certain characteristics that allow researchers to conclude. A phenomenon as well as providing guidelines for research results addressed to what and to whom the research can be generalized. The population in this study is the entire publication of financial report data of PT. Gudang Garam Tbk for 8 years for the 2014-2021 period which is published by the Indonesian Stock Exchange (IDX).

The sample is part of the population that will be taken and used as a representation of the population. The sample in this study is the financial position and income statement at PT. Gudang Garam Tbk from 2014-2021 where the data is taken in the company's annual and quarterly reports which have been published on the Stock Exchange (IDX) via www.idx.co.id and the website www.idnfinancials.com.

This analysis is used to collect data, process data, and present data. The presentation can use tables, diagrams, sizes, and pictures. Descriptive statistics are shown by frequency, measures of central tendency (mean, median, mode), and dispersion (range, variance, standard deviation). Multiple linear regression is a regression model that involves more than one independent variable. Multiple linear regression analysis was carried out to determine the direction and how much influence the independent variables have on the dependent variable.

$$Y = \alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + e$$

Description:

Y	= Dependent variable (profit growth)
α	= Constant
$\beta_1, \beta_2, \beta_3$	= Regression coefficient
X1	= Independent variable (ROA)
X2	= Independent variable (ROE)
X3	= Independent variable (NPM)
e	= Error

3. Results and Discussion

3.1. Results

Percentage generated by the company in one year so that it can describe the results of the company's financial performance in managing its assets. The higher the ratio value, the better a business is at earning profits. This ratio is important in evaluating the effectiveness and efficiency of the management of a business. Many assets should also be able to generate large profits for the company. Return On Assets can be measured by dividing net profit before tax by total assets owned. The following is the result of calculating profitability (ROA) at PT. Gudang Garam Tbk.

Table 1.
Calculation of Profitability ROA of PT. Gudang Garam Tbk Period 2014-2021

Period	Quarter	EBIT (Million IDR)	Total assets (Million IDR)	ROA (%)	Standard	Average (%)
2014	Q1	1,913,861	52,470,532	3.65	5.98%	8.10
	Q2	3,648,893	53,839,153	6.78		
	Q3	5,428,623	56,579,914	9.59		
	Q4	7,205,845	58,220,600	12.38		
2015	Q1	1,715,665	59,699,967	2.87	5.98%	7.79
	Q2	3,216,871	59,343,354	5.42		
	Q3	5,495,197	59,341,389	9.26		
	Q4	8,635,275	63,505,413	13.60		
2016	Q1	2,279,796	63,260,429	3.60	5.98%	8.40
	Q2	3,817,542	63,529,940	6.01		
	Q3	6,150,801	62,817,278	9.79		
	Q4	8,931,136	62,951,634	14.19		
2017	Q1	2,534,177	59,490,774	4.26	5.98%	9.56
	Q2	4,213,368	62,364,930	6.76		
	Q3	7,274,166	62,797,627	11.58		
	Q4	10,436,512	66,759,930	15.63		
2018	Q1	2,531,018	63,304,028	4.00	5.98%	9.50
	Q2	4,749,780	65,977,228	7.20		
	Q3	7,760,790	66,751,360	11.63		
	Q4	10,479,242	69,097,219	15.17		
2019	Q1	3,145,217	65,660,622	4.79	5.98%	11.30
	Q2	5,709,054	66,700,099	8.56		
	Q3	9,670,596	71,970,293	13.44		
	Q4	14,487,736	78,647,274	18.42		
2020	Q1	3,173,278	76,828,599	4.13	5.98%	8.05
	Q2	4,938,174	79,158,868	6.24		
	Q3	7,278,794	76,929,023	9.46		
	Q4	9,663,133	78,191,409	12.36		
2021	Q1	2,229,374	79,824,097	2.79	5.98%	5.24
	Q2	2,954,523	79,436,578	3.72		
	Q3	5,279,408	83,251,441	6.34		
	Q4	7,286,846	89,964,369	8.10		

Table 2.
Calculation of Profitability ROE of PT. Gudang Garam Tbk Period 2014-2021

Period	Quarter	EBIT (Million IDR)	Total assets (Million IDR)	ROE (%)	Standard	Average (%)
2014	Q1	2,201,437	30,851,207	7.14	8.32%	16.67
	Q2	4,222,656	30,568,348	13.81		
	Q3	6,354,832	31,900,984	19.92		
	Q4	8,577,656	33,228,720	25.81		

2015	Q1	2,119,016	34,481,692	6.15	8.32%	13.29
	Q2	3,966,650	34,057,604	11.65		
	Q3	6,581,037	35,762,675	18.40		
	Q4	6,452,834	38,007,909	16.98		
2016	Q1	1,702,521	39,702,207	4.29	8.32%	10.35
	Q2	2,872,008	35,858,545	8.01		
	Q3	4,597,751	37,584,288	12.23		
	Q4	6,672,682	39,564,228	16.87		
2017	Q1	1,890,130	41,396,981	4.57	8.32%	9.97
	Q2	3,125,134	37,610,074	8.31		
	Q3	5,419,448	62,797,627	8.63		
	Q4	7,755,347	42,187,664	18.38		
2018	Q1	1,892,695	44,080,359	4.29	8.32%	10.93
	Q2	3,555,963	40,740,398	8.73		
	Q3	5,762,423	42,927,699	13.42		
	Q4	7,793,068	45,133,285	17.27		
2019	Q1	2,355,332	47,488,617	4.96	8.32%	12.81
	Q2	4,280,996	44,411,652	9.64		
	Q3	7,243,266	47,373,922	15.29		
	Q4	10,880,704	50,930,758	21.36		
2020	Q1	2,446,609	53,377,367	4.58	8.32%	8.65
	Q2	3,820,803	54,751,561	6.98		
	Q3	5,647,228	56,577,986	9.98		
	Q4	7,647,729	58,522,468	13.07		
2021	Q1	1,746,542	60,269,010	2.90	8.32%	5.83
	Q2	2,310,578	60,833,046	3.80		
	Q3	4,134,576	57,720,347	7.16		
	Q4	5,605,321	59,288,274	9.45		

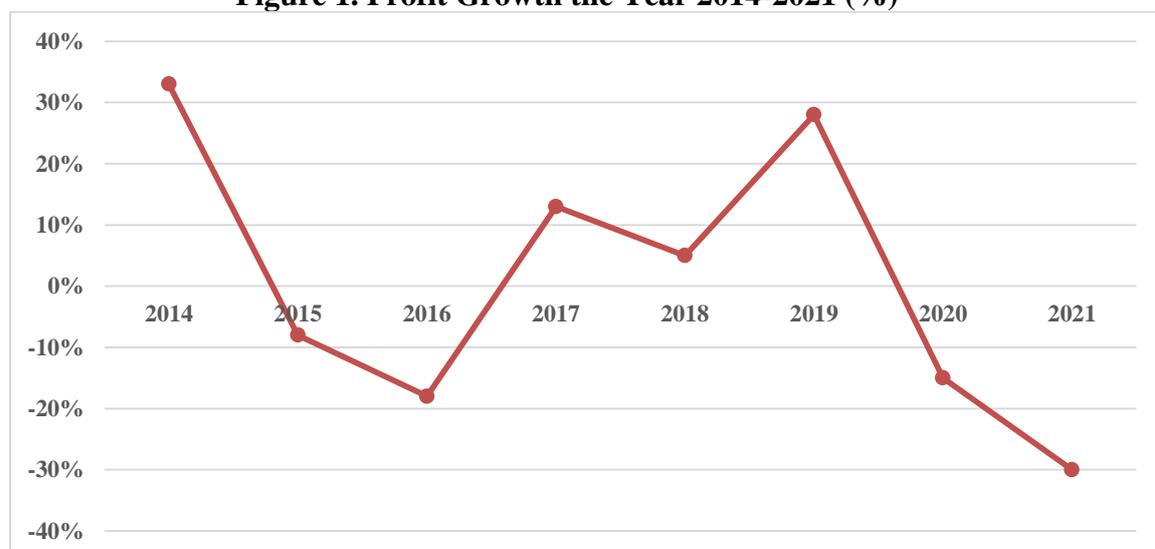
Table 3.
Calculation of Profitability NPM of PT. Gudang Garam Tbk Period 2014-2021

Period	Quarter	EBIT (Million IDR)	Total assets (Million IDR)	NPM (%)	Standard	Average (%)
2014	Q1	2,201,437	15,670,252	14.05	3.29%	13.33
	Q2	4,222,656	32,667,729	12.93		
	Q3	6,354,832	48,189,776	13.19		
	Q4	8,577,656	65,185,850	13.16		
2015	Q1	2,119,016	15,983,896	13.26	3.29%	11.82
	Q2	3,966,650	33,226,047	11.94		
	Q3	6,581,037	51,011,835	12.90		
	Q4	6,452,834	70,365,573	9.17		
2016	Q1	1,702,521	17,992,761	9.46	3.29%	8.54
	Q2	2,872,008	36,962,772	7.77		
	Q3	4,597,751	56,211,870	8.18		
	Q4	6,672,682	76,274,147	8.75		

2017	Q1	1,890,130	19,969,814	9.46	3.29%	8.84
	Q2	3,125,134	40,245,294	7.77		
	Q3	5,419,448	61,523,113	8.81		
	Q4	7,755,347	83,305,925	9.31		
2018	Q1	1,892,695	21,980,863	8.61	3.29%	8.21
	Q2	3,555,963	45,305,015	7.85		
	Q3	5,762,423	69,889,350	8.25		
	Q4	7,793,068	95,707,663	8.14		
2019	Q1	2,355,332	26,196,611	8.99	3.29%	8.95
	Q2	4,280,996	52,744,857	8.12		
	Q3	7,243,266	81,721,032	8.86		
	Q4	10,880,704	110,523,819	9.84		
2020	Q1	2,446,609	27,260,976	8.97	8.32%	7.39
	Q2	3,820,803	53,654,639	7.12		
	Q3	5,647,228	83,357,059	6.77		
	Q4	7,647,729	114,477,311	6.68		
2021	Q1	1,746,542	29,747,173	5.87	3.29%	4.67
	Q2	2,310,578	60,587,299	3.81		
	Q3	4,134,576	92,070,856	4.49		
	Q4	5,605,321	124,881,266	4.49		

The profit growth above can be seen in the first quarter of 2014 showing the highest of 0.42 while the lowest profit growth was in the second quarter of 2021 at -0.40. For more details, the data is made in the form of the following graph:

Figure 1. Profit Growth the Year 2014-2021 (%)



Profit growth graph of PT. Gudang Garam Tbk started in 2014 with an increase of 33%, this happened because sales increased. Then in 2015, it decreased by -8% this happened because there was no current annual profit from the operations carried out. In 2016 profit growth again decreased by -18%. This happened because the cost of goods sold increased and

raw material prices rose. In 2017 profit growth increased by 13%, this was due to increased sales. In 2018 profit growth decreased by 5% because the cost of goods sold increased due to rising raw material prices. In 2019 profit growth returned to increase by 28% this happened because sales increased. In 2020 profit growth decreased by -15% due to the increased cost of goods sold. In 2021, Return's profit growth has decreased quite drastically compared to previous years, namely by -30% due to increased cost of goods sold and raw material prices increased and production costs soared. So, profit growth at PT. Gudang Garam Tbk for 8 years from 2014-2021 experienced fluctuations.

Descriptive statistics is an analysis that is used to analyze data by describing or describing the data that has been collected. Descriptive statistics provide an overview of the minimum value, maximum value, the average value (mean), and standard deviation of the variables studied.

Table 4. Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
ROA	32	2.79	18.42	8.4912	4.28492
ROE	32	2.90	25.81	11.0634	5.93335
NPM	32	3.81	14.05	8.9678	2.65003
Profit growth	32	-.40	.40	.0087	.23361
Valid N (listwise)	32				

The number of observations in one of the manufacturing companies PT Gudang Garam Tbk listed on the Indonesia Stock Exchange in 2014-2021 in this study was 32 data. The company's mean (average) profit is 0.0087. The lowest (minimum) company profit is -0.40 and the highest (maximum) company profit is 0.42. From these data, the average profit growth experienced a good increase of 0.008. This shows that the sample companies experienced a reasonably good profit increase. The standard deviation of profit growth is 0.233, more significant than the mean value of 0.008.

In the Return On Assets (ROA) variable, the largest (maximum) value is 18.42 and the smallest (minimum) value is 2.79. The average return on assets (ROA) is 8.49 with a standard deviation of 4.28. Return On Assets (ROA) variable data has a small distribution. So, it can be concluded that the data used is quite good. In the variable Return On Equity (ROE), the largest (maximum) value is 25.81 and the smallest (minimum) value is 2.90. The average return on equity (ROE) is 11.06 with a standard deviation of 5.93. Return On Equity (ROE) variable data has a small distribution which means the data used is good enough. In the Net Profit Margin (NPM) variable, the largest (maximum) value is 14.05 and the smallest (minimum) value is 3.81. The average value of the Net Profit Margin (NPM) is 8.96 with a standard deviation of 2.65. The Net Profit Margin (NPM) variable data has a small distribution. It can be concluded that the data used is quite good.

Good research is research that has a regression model that is not correlated between independent variables or can be said to be multicollinearity. To be able to see whether multicollinearity occurs in the regression model or not, the regression model must have a variance inflation factor (VIP) value less than 10 ($VIP < 10$) and a tolerance value greater than 0.10.

Table 5. Multicollinearity Test Results

Model			Standardized coefficients	t	Sig.	Collinearity Statistics	
	B	Std. Error	Beta			Tolerance	VIF
1 (Constant)	-.753	.146		-5.149	.000		
ROA	.036	.016	.667	2.221	.035	.183	5.474
ROE	-.021	.013	-.526	-1.593	.122	.151	6.610
NPM	.076	.016	.863	4.740	.000	.498	2.009

a. Dependent Variable: Profit growth

Autocorrelation testing is used to show whether a regression model has residual errors that are correlated with each other in a period with the previous period. A good regression model is a regression model that is free from autocorrelation because the correlation coefficient obtained in the regression model is not accurate. The Durbin – Watson (D-W) test is a method used in this research to detect the presence or absence of autocorrelation symptoms in the regression model.

Table 6. Autocorrelation Test

Model	R	R Square	Std. Error R Square	Std. Error of the Estimate	Durbin-Watson
1	.734 ^a	.538	.489	.16702	.754

a. Predictors: (Constant), NPM, ROA, ROE

b. Dependent Variable: Profit growth

Testing the multiple linear regression model is used to test and obtain an overview of the overall effect of the independent variable (X) which has a total of two or more on the dependent variable (Y). Multiple linear regression was carried out using SPSS Version 25 in this study.

Table 7. Multiple Linear Regression Test

Model			Standardized coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	-.753	.146		-5.149	.000
ROA	.036	.016	.667	2.221	.035
ROE	-.021	.013	-.526	-1.593	.122
NPM	.076	.016	.863	4.740	.000

a. Dependent Variable: Profit growth

3.2. Discussion

Discussion of the results of this study will provide an overview of the results of the analysis and findings in this research regarding the suitability of the various theories that have been studied, the opinions of experts, and previous research, each of which has been described in the previous discussion. Based on the research findings, the description of the discussion of the results and research findings is divided into four main sections.

Research findings based on statistical tests with individual (partial) hypothesis testing. At the significance level = 5%, it shows that the variable Return On Assets (ROA) has a significant influence on profit growth (PL) at PT. Gudang Garam Tbk. This can be seen from

the partial test results in table 12 where $t \text{ count} > t \text{ table}$ ($2.221 > 1.6991$) and the significance value is less than 0.05 ($0.035 < 0.05$) which means that if there is an increase in Return On Assets (ROA) will be followed by an increase in the company's profit growth. From the calculation of the ratio is 2014 to 2021 it can be seen that PT. Gudang Garam Tbk indicates that the company is efficient in managing its assets for the production process so that the company's sales can increase profits. The results of the ROA variable have a positive and significant effect on profit growth.

Research findings based on statistical tests with individual (partial) hypothesis testing. At the significance level = 5%, it shows that the variable Return On Equity (ROE) has no significant effect on profit growth (PL) at PT. Gudang Garam Tbk. This can be seen from the partial test results in table 12 where $t \text{ count} < t \text{ table}$ ($-1.593 < 1.6991$) and the significance value is greater than 0.05 ($0.122 > 0.05$) which means that Return On Equity (ROE) has a negative and insignificant effect on the company's profit growth. From the calculation of the ratio is 2014 to 2021 PT. Gudang Garam Tbk indicated that this was caused by the nature and pattern of investments made by the company that was not appropriate so all assets were not used efficiently, so the profit earned was not optimal. In addition, the owned capital is also used to cover the debts owed. The results of the study show that ROE has a negative and insignificant effect on profit growth.

Research findings based on statistical tests with individual (partial) hypothesis testing. At the significance level = 5%, it shows that the Net Profit Margin (NPM) variable has a significant influence on profit growth (PL) at PT. Gudang Garam Tbk. This can be seen from the partial test results in table 12 where $t \text{ count} > t \text{ table}$ ($4.740 > 1.6991$) and the significance value is less than 0.05 ($0.000 < 0.05$) which means that if there is an increase in Net Profit Margin (NPM) will be followed by an increase in company profit growth. This indicates that a high NPM indicates that the company can increase its business by achieving operating profit in that period. By achieving this profit, investors can expect a high return on their capital. Thus, it can be said that profit growth will increase. The results of the NPM variable have a positive and significant effect on profit growth.

4. Conclusion

The partial test shows that the variable Return On Assets (ROA) has a positive and significant influence individually on profit growth at PT. Gudang Garam Tbk. This means that if there is an increase in Return On Assets (ROA) it will be followed by an increase in the company's profit growth. The partial test shows that the variable Return On Equity (ROE) has a negative and not significant effect individually on profit growth at PT. Gudang Garam Tbk. This means that Return On Equity (ROE) has a negative and not significant effect on the company's profit growth. The partial test shows that the variable Net Profit Margin (NPM) has a positive and significant influence individually on profit growth at PT. Gudang Garam Tbk. This means that if there is an increase in the Net Profit Margin (NPM) it will be followed by an increase in the company's profit growth. The simultaneous test concluded that there was a significant and positive effect simultaneously between the independent variables, namely Return On Assets (ROA), Return On Equity (ROE), and Net Profit Margin (NPM) on profit growth at PT. Gudang Garam Tbk.

PT Gudang Garam is advised to evaluate the existing aspects of the profitability ratio. This study proves that if ROE hurts profit growth low equity must manage the right investment pattern so that all assets can be used efficiently then the profit earned will be maximized. In addition, the income generated by the model that comes from debt can also be

used to cover the high cost of capital. For future researchers, when conducting further research, it is better if the financial ratios used do not only use one type of financial ratio, it is better if all types of financial ratios are used but adapted to the problem to be studied. Further research should also be able to pay attention to other factors that can affect profit growth besides financial ratios. In addition, using a longer period to obtain accurate data completeness and objects for further research should use a wider range of objects, not only tobacco industry companies but other companies listed on the IDX.

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