



## **The Effect of Excise Tax and Capital Structure on Profitability of Cigarette Subsector Companies Listed on the Indonesia Stock Exchange**

**Nur Fadilah<sup>1</sup>, Wirawan Suryanto<sup>2</sup>**

<sup>12</sup> Program Studi Manajemen, Fakultas Ekonomi dan Bisnis, Universitas Pamulang

\*Corresponding Author e-mail: [nurfadilah1323@gmail.com](mailto:nurfadilah1323@gmail.com), [dosen02244@unpam.ac](mailto:dosen02244@unpam.ac)

### **Article History:**

Received : 14-08-2026

Revised : 21-08-2026

Accepted : 11-10-2026

**Keywords:** *Excise Tax Expenses, Capital Structure, Profitability*

**Abstract:** *This study examines the relationship between excise tax burden, capital structure, and profitability in four cigarette subsector companies listed on the Indonesia Stock Exchange (IDX) during 2020–2024. A quantitative associative approach was employed using secondary data from company annual financial reports. The data were analyzed using panel data regression with EViews 12 and a Random Effect Model (REM). The results show that excise tax burden is not significantly associated with profitability ( $p = 0.3652$ ), whereas capital structure has a significant positive association with profitability ( $p = 0.0145$ ). The F-test indicates that excise tax burden and capital structure are jointly significant in relation to profitability ( $F = 6.297094$ ;  $p = 0.022771$ ). These findings highlight the different statistical relationships of the two independent variables with profitability during the observation period.*

**How to Cite:** Nur Fadilah, Wirawan Suryanto. (2026). *The Effect of Excise Tax and Capital Structure on Profitability of Cigarette Subsector Companies Listed on the Indonesia Stock Exchange*. 4(4). pp.29-34. <https://doi.org/10.61536/escalate.v4i4.707>



<https://doi.org/10.61536/escalate.v4i4.707>

This is an open-access article under the [CC-BY-SA License](https://creativecommons.org/licenses/by-sa/4.0/).



### **Introduction**

In recent years, the development of the cigarette industry in Indonesia has exhibited complex dynamics. This sector, a major contributor to state revenue, continues to grow in terms of production and sales, although the pace has begun to slow due to various external pressures. Cigarette companies listed on the Indonesia Stock Exchange have managed to survive by innovating products and optimizing operations. However, this is accompanied by government policies that routinely increase cigarette excise rates annually to control consumption and increase state revenue. Furthermore, consumption patterns have begun to change due to increasing public awareness of health, especially among the younger generation who are tending to avoid conventional cigarettes. Meanwhile, the industry faces increasingly fierce competition, both among cigarette manufacturers and from alternatives such as e-cigarettes. To maintain financial performance and ensure survival, particularly in achieving maximum profitability, companies are forced to adjust their business strategies due to this situation.

(Prisila et al, 2024) The cigarette industry is an industry that should not be underestimated in the wheels of the Indonesian economy because of its role in contributing to state revenue from cigarette excise which has a fairly large value in the state budget (APBN) and is a labor-intensive industry.

In recent years, global economic conditions have impacted various industrial sectors, including the cigarette industry. Events such as the COVID-19 pandemic, geopolitical tensions, and inflation in various countries have caused economic uncertainty, impacting people's purchasing power and international trade. The cigarette sector is known for its relatively stable demand, but a global economic slowdown can still hamper sales and financial performance. Furthermore, exchange rate fluctuations and rising raw material costs can contribute to increased production costs, which in turn impacts profitability. In such situations, companies need to be able to adapt to changes in the global economic environment through efficient strategies and appropriate financial management, including determining the most ideal capital structure to maintain stable company performance.

In this study, the two main variables focused on in studying the factors influencing a company's financial performance are excise tax and capital structure, and their relationship to profitability. Excise tax is a cost borne by cigarette companies as a result of government policies on excisable goods, which directly reduces the company's net profit. The greater the burden, the greater the impact on the company's profits. On the other hand, capital structure describes the ratio between debt and equity used to finance a company's operations. Optimal debt use can increase a company's ability to generate profits through leverage, but on the other hand, it can increase financial risk if not managed properly. Both variables are suspected to have a significant impact on company profitability, which in this study is measured by financial ratios to assess the company's ability to generate profits. Therefore, an analysis of the influence of excise tax and capital structure on the profitability of companies in the cigarette sub-sector listed on the Indonesia Stock Exchange is crucial.

Over the past few years, the financial performance of PT Gudang Garam Tbk, PT Hanjaya Mandala Sampoerna Tbk, PT Wismilak Inti Makmur Tbk, and PT Indonesia Tobacco Tbk has varied. Generally, all four entities have felt the impact of the annual excise tax increases, resulting in increased operating expenses and pressure on margins. Profit. Furthermore, shifts in consumer consumption patterns and increased health awareness have also impacted cigarette sales volume. Furthermore, fluctuating raw material prices and increasingly fierce industry competition have forced companies to adopt efficiency strategies to maintain their financial performance. This is evident in the fluctuations in profitability across each company, with both increases and decreases from year to year. Therefore, these four companies merit further study, particularly regarding the impact of excise taxes and capital structure on profitability.

## Literature Review

### 1. Excise Duty

Yosefani P, (2024) Excise duty or stamp is a document that functions as a sign of payment of excise in the form of paper which contains security elements with specifications and patterns that have been determined. Meanwhile, the definition of excise according to the Directorate of Customs and Excise is that the state levy on certain goods specified in the Excise Law, including ethyl alcohol, drinks containing ethyl alcohol, and tobacco products including cigars, leaf cigarettes, sliced tobacco, cigarettes, and other tobacco processing products (Law of the Republic of Indonesia Number 39 of 2007 concerning Excise, 2007).

### 2. Capital Structure

(Dzikriyah & Sulistyawati, 2020). Quoted in (Alvin Aisyah Rahmah & Anwar Hariyono, 2025) An optimal capital structure is a capital structure that should be able to maintain a balance between profits and losses, so as to maximize the value of the Company's shares.

### 3. Profitability

Profitability Setiawan (2022) cited in (Swecananda et al., 2026) states that profitability reflects the overall effectiveness of management, as evidenced by the level of profit earned in relation to both sales and investments. The higher a company's profitability ratio, the better its ability to generate profits and optimize its resources.



## Research methods

### Sample and Population

The population of this study is all financial reports of cigarette companies listed on the Indonesia Stock Exchange (IDX) during the 2020-2024 period. In this study, the samples were 4 (four) cigarette companies, because these companies were selected based on certain criteria (*purposive sampling*).

### Data collection technique

This study uses a quantitative method with an associative approach because this study uses data in the form of figures from financial reports and aims to test the relationship and influence between variables statistically. By using the EViews 12 application, the panel data regression analysis approach was used in this study. The following is the form of the regression equation model:

$$Y = \alpha + \beta_1 X_1 + \beta_2 X_2 + \varepsilon$$

Information:

Y = Profitability

$\alpha$  = Constant

$\beta_1, \beta_2$  = Regression Coefficient

X1 = Excise Duty

X2 = Capital Structure

$\varepsilon$  = Error

## Results and Discussion

### Descriptive Statistical Results on Cigarette Subsector Companies

The variables in this study are described through descriptive analysis based on the average value, standard deviation, maximum value, and lowest value. Excise Tax, Capital Structure and Profitability are the variables considered in this study.

**Table 1. Descriptive Statistical Analysis Test Results**

|              | X1        | X2       | Y         |
|--------------|-----------|----------|-----------|
| Mean         | 58.57700  | 57.43650 | 13.82100  |
| Median       | 63.05500  | 51.89500 | 13.23500  |
| Maximum      | 97.59000  | 94.48000 | 28.37000  |
| Minimum      | 24.15000  | 33.59000 | 1,580,000 |
| Std. Dev.    | 21.27344  | 19.34564 | 8.908396  |
| Skewness     | -0.141168 | 0.672526 | 0.305662  |
| Kurtosis     | 2.137964  | 2.141476 | 1.719156  |
| Jarque-Bera  | 0.685682  | 2.121857 | 1.678564  |
| Probability  | 0.709751  | 0.346134 | 0.432021  |
| Sum          | 1171,540  | 1148,730 | 276.4200  |
| Sum Sq. Dev. | 8598524   | 7110819  | 1507,831  |
| Observations | 20        | 20       | 20        |

Source: data processed by the author 2026

According to the results of descriptive statistical data processing (Table 1), based on the results of descriptive statistics for 20 observations, Excise Burden has an average value of 58.5770 with a std. dev/standard deviation of 21.2734, Capital Structure has an average value of 57.4365 with a std. dev/standard deviation of 19.3456, and Profitability has an average value of 13.8210 with a std. dev/standard deviation of 8.9084. The Excise Burden variable has the highest level of data dispersion, as indicated by a std. dev/standard deviation of 21.2734. The results of the Jarque-Bera test show that Excise Burden has a probability of 0.709751, Capital Structure 0.346134, and Profitability 0.432021.



Since these three values are greater than 0.05, it can be concluded that the data for Excise Tax, Capital Structure, and Profitability are normally distributed.

### Results of Panel Data Regression Model Selection Estimation Tests on Cigarette Subsector Companies

Testing the estimation of the selection of the panel data regression model used requires a choice between CEM or FEM for the test. Chow, between REM or FEM for the Hausman Test, and between CEM or REM for the Lagrange Multiplier Test. The results of the Chow Test provide a probability value of Cross-section F and Cross-section Chi-square of  $0.0000 < \alpha$  (0.05), so the Fixed Effect Model (FEM) is selected. After the Hausman Test, it was found that the probability value of the random Cross-section was  $0.3337 > \alpha$  (0.05), so the Random Effect Model (REM) was selected. Furthermore, based on the Lagrange Multiplier Test, the probability value of the Breusch-Pagan Cross-section was  $0.00013 < \alpha$  (0.05), so the Random Effect Model (REM) was selected. Therefore, in this study, from the Chow Test, Hausman Test, and Lagrange Multiplier Test, it was decided to use the Random Effect Model (REM). If the results of the Hausman Test and the Lagrange Multiplier Test indicate the selection of the Random Effect Model (REM), therefore it is necessary to conduct a classical assumption analysis. Classical assumption testing is carried out in the Multicollinearity Test to detect high correlation between independent variables and the Heteroscedasticity Test to ensure equality of residual variances, (Basuki & Prawoto, 2023)

### Classical Assumption Test: Multicollinearity Test in Cigarette Subsector Companies

Based on the results of the Multicollinearity Test, the correlation coefficient value between Excise Burden (X1) and Capital Structure (X2) is -0.074417. This correlation coefficient value is smaller than 0.85, so it can be concluded that there is no multicollinearity problem between the independent variables in the research model.

### Classical Assumption Test: Heteroscedasticity Test in Cigarette Subsector Companies

Based on the results of the Heteroscedasticity Test, the probability value of Excise Burden (X1) is 0.5499 and Capital Structure (X2) is 0.4509, both of which are greater than 0.05. This indicates that  $H_0$  is accepted and  $H_a$  is rejected, so it can be concluded that the regression model is free from heteroscedasticity problems.

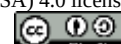
### Results of Panel Data Regression Testing using the LSDV approach on Cigarette Subsector Companies

**Table 2. Results of Panel Data Regression Analysis Using the Least Square Dummy Variable Approach for Cigarette Subsector Companies 2020-2024**

| Variable | Coefficient | Std. Error | t-Statistic | Prob.  |
|----------|-------------|------------|-------------|--------|
| C        | -12.16085   | 7.686034   | -1.582201   | 0.1523 |
| X1       | 0.092032    | 0.095882   | 0.959846    | 0.3652 |
| X2       | 0.340331    | 0.109506   | 3.107891    | 0.0145 |

From Table 2, the test results of the effect of Excise Burden on Profitability obtained a probability value of 0.3652, which is greater than 0.05, so that Excise Burden does not have a significant effect on Profitability. Meanwhile, Capital Structure on Profitability obtained a probability value of 0.0145, which is smaller than 0.05, so that Capital Structure has a significant effect on Profitability. Based on the results of the panel data regression test using the Random Effect Model (REM), the following regression equation was obtained:

$$\text{Profitability} = -12.16085 + 0.092032 \text{ Excise Expenses} + 0.340331 \text{ Capital Structure}$$



## DISCUSSION

### The Impact of Excise Tax on Profitability

Based on the Partial Test (t-Test), it can be seen that Excise Burden has a t-count value of 0.959846 which is smaller than the t-table of 2.10092204 ( $0.959846 < 2.10092204$ ) and a probability value of 0.3652 which is greater than the significance level of 0.05 ( $0.3652 > 0.05$ ). Therefore,  $H_0$  is accepted and  $H_a$  is rejected, so it can be concluded that Excise Burden has no significant effect on Profitability.

### The Influence of Capital Structure on Profitability

Capital Structure shows a t-value of 3.107891 which is greater than the t-table of 2.10092204 ( $3.107891 > 2.10092204$ ) and a probability value of 0.0145 which is smaller than the significance level of 0.05 ( $0.0145 < 0.05$ ). Therefore,  $H_0$  is rejected and  $H_a$  is accepted. Thus, it can be concluded that Capital Structure has a significant effect on Profitability.

### The Effect of Excise Tax and Capital Structure on Profitability

Based on the Simultaneous Test (F Test), the calculated F-value was 6.297094 which was greater than the F-table of 3.591530568 ( $6.297094 > 3.591530568$ ). Furthermore, the probability value of 0.022771 is smaller than the significance level of 0.05 ( $0.022771 < 0.05$ ). Therefore,  $H_0$  is rejected and  $H_a$  is accepted. This indicates that Excise Burden and Capital Structure simultaneously have a significant effect on Profitability in cigarette subsector companies listed on the Indonesia Stock Exchange for the 2020–2024 period.

## Conclusion and Suggestions

### Conclusion

Based on the results of research on the influence of Excise Tax and Capital Structure on Profitability in cigarette sub-sector companies listed on the Indonesia Stock Exchange for the 2020–2024 period, it can be concluded that:

1. **Excise tax burden does not have a significant effect on profitability.** This is indicated by the probability value of 0.3652 which is greater than the significance level of 0.05, as well as the T-count value of 0.959846 which is smaller than the T-table value of 2.100922. Thus,  $H_0$  is accepted and  $H_a$  is rejected, so that Excise Expenses partially have no significant effect on Profitability.
2. **Capital structure has a significant effect on profitability.** This is indicated by the probability value of 0.0145 which is smaller than the significance level of 0.05, as well as the calculated T-value of 3.107891 which is greater than the T-table value of 2.100922. Thus,  $H_0$  is rejected and  $H_a$  is accepted, so that Capital Structure partially has a significant effect on Profitability.
3. **Excise Tax and Capital Structure simultaneously have a significant effect on Profitability.** This is indicated by the calculated F-value of 6.297094 which is greater than the F-table value of 3.591530, as well as the probability value of 0.022771 which is smaller than the significance level of 0.05. Thus,  $H_0$  is rejected and  $H_a$  is accepted, so that Excise Expense and Capital Structure simultaneously have a significant effect on Profitability.

### Suggestion

Based on the limitations mentioned previously, the following are suggestions for further research:

1. The aim of this research is to increase the number of companies sampled so that the results can describe the condition of the cement subsector more clearly and accurately.
2. It is hoped that further research can shorten the research period so that we can observe how the company's operations develop over a longer period of time and obtain more consistent analysis results.



3. Researchers are encouraged to include other variables not used in this study, such as macroeconomic factors, capital structure, inflation, and government policies that may affect business operations.
4. It is hoped that further research will not only examine the cement subsector, but also compare it with other industrial subsectors so that the results can be more comprehensive.

## Bibliography

- Alvin Aisyah Rahmah, & Anwar Hariyono. (2025). Pengaruh Profitabilitas, Likuiditas, dan Struktur Aset terhadap Struktur Modal. *Jurnal Ilmiah Ekonomi, Akuntansi, Dan Pajak*, 2(4), 137–152. <https://doi.org/10.61132/jieap.v2i4.1835>
- Amalya. (2023). Jurnal Ilmiah Swara MaNajemen (Swara Mahasiswa Manajemen) Pengaruh Struktur Modal dan Pertumbuhan Perusahaan Terhadap Profitabilitas. *JISM Jurnal Ilmiah Swara Manajemen Jurnal Ilmiah Swara MaNajemen*, 3(4), 820–827. <https://doi.org/10.32493/jism.v3i4>
- Amanda, A. M., Guci, P. I., Dwi, D., Ninggrum, G., Budi, N., & Herawati, H. (2025). *Analisis Komprehensif Jenis dan Komponen Laporan Keuangan Berdasarkan Standar Akuntansi Keuangan ( Studi Kasus PT Angkasa Pura II ) A Comprehensive Analysis of Financial Statement Types and Components Based on Financial Accounting Standards ( Case Study o.* 347–354.
- Basuki, A. T., & Prawoto, N. (2023). *Analisis Data Panel Dalam Penelitian Ekonomi Dan Bisnis (Dilengkapi dengan Penggunaan Eviews).* 1–236.
- Ekinanda, F. (2020). Pengaruh Firm Size, Likuiditas, Struktur Modal Terhadap Profitabilitas. *Jurnal Neraca: Jurnal Pendidikan Dan Ilmu Ekonomi Akuntansi*, 4(1), 41–49. <https://doi.org/10.31851/neraca.v4i1.3915>
- Fitriyanti, L. (2024). Pengaruh Struktur Modal Terhadap Profitabilitas Pada Perusahaan Sektor Telekomunikasi Yang Terdaftar Di Bursa Efek .... *Jurnal Akuntansi*, 17(2), 1–9. <http://repository.uhn.ac.id/handle/123456789/1077>
- Harahap, Z., Hesinto, S., & Prabumulih, U. (2026). *Liquidity ratio analysis in assessing financial performance at pt. indofood sukses makmur tbk. in 2020 – 2023 analisis rasio likuiditas dalam menilai kinerja keuangan pada pt. indofood sukses makmur tbk. tahun 2020 – 2023.* 9, 1065–1073.
- Kamila, A. L., Auliya, I., Restu, M. A., Janudin, P., Studi, P., Fakultas, M., & Pamulang, U. (2022). *Prosiding Seminar Nasional Manajemen Pengaruh Struktur Modal terhadap Profitabilitas PT Ultrajaya Milk Industry & Trading Company Tbk di Era Digital.* 1(2), 188–193.
- Mulyani, N., & Agustinus, E. (2021). Analisa Pengaruh Ukuran Perusahaan, Struktur Aset, dan Struktur Modal terhadap Profitabilitas. *Jurnal Arastirma*, 2(1), 19. <https://doi.org/10.32493/arastirma.v2i1.16844>
- Prima Dewi, S., Susanti, M., Susanto, L., & Sufiyati. (2021). Dampak Leverage, Likuiditas, Dan Pertumbuhan Penjualan Terhadap Profitabilitas. *Jurnal Akuntansi*, 21(1), 67–80. <https://doi.org/10.36452/akunukd.v21i1.2166>
- Salsabila, S. M., & Prihastuty, D. R. (2026). *PENGARUH STRUKTUR MODAL , INFLASI , DAN BEBAN CUKAI TERHADAP KINERJA KEUANGAN PERUSAHAAN ROKOK YANG TERDAFTAR DI BURSA EFEK INDONESIA.* 4(1), 1–12.
- Setiadi, A., Sidharta, E. A., & Syaifudin, N. (2024). Analisis Pengaruh Biaya Produksi, Likuiditas Dan Leverage Terhadap Profitabilitas. *Inovasi*, 11(1), 56–68.
- Swecananda, M. L., Tulung, J. E., Mandagie, Y., Operasional, P. E., Kredit, K., Likuiditas, D. A. N., Swecananda, M. L., Tulung, J. E., & Mandagie, Y. (2026). *TERHADAP PROFITABILITAS PADA BANK UMUM SWASTA NASIONAL PERIODE 2020- THE EFFECT OF OPERATIONAL EFFICIENCY , CREDIT QUALITY , AND LIQUIDITY ON THE PROFITABILITY OF PRIVATE COMMERCIAL BANKS FOR THE PERIOD 2020-2024 Jurnal EMBA Vol . 14 , No . 1 Januari 2026.* 14(1), 106–117.

