GOLDEN RATIO OF MAPPING IDEA AND LITERATURE FORMAT
VOLUME 6, ISSUE. 2 (2026)
Website: https://goldenratio.id/index.php/grmilf

GOLDEN RATIO
ISSN [Online]: 2776-6381

MAPPING IDEA & LITERATURE FORMAT | RESEARCH ARTICLE

The Effect of Excise Tariff Increases and Electronic Cigarettes Brand Equity on Purchase Decisions in Palembang City, Indonesia

Musyari Az Zahran[1], Vhika Meiriasari[2], Reni Aziatul Pebriani[3]

[1,2,3] Department of Accounting Study Program, Faculty of Economics, Universitas Indo Global Mandiri, Palembang, Indonesia. Email: 2021520004@students.uigm.ac.id[1], vhikams@uigm.ac.id[2], renyaziatul@uigm.ac.id[3]

ARTICLE HISTORY

Received: September 25, 2025
Revised: January 26, 2026
Accepted: February 01, 2026

DOI
https://doi.org/10.52970/grmilf.v6i2.1762

ABSTRACT
This study aims to examine the effect of excise tax increases and e-cigarette brand equity on consumer purchasing decisions in Palembang. The rapid growth of the e-cigarette industry, coupled with government excise tax policies, has significantly reshaped consumer behavior and market dynamics. Excise tax increases are intended to regulate consumption and improve public health, yet they may also influence price sensitivity and purchasing preferences. Meanwhile, brand equity plays a crucial role in shaping consumer perceptions, loyalty, and decision-making, particularly in competitive markets such as e-cigarettes. This research adopts a quantitative approach to analyze these relationships empirically. Data were collected using structured questionnaires distributed to consumers who have experience purchasing e-cigarette products in Palembang. A purposive sampling technique was employed to ensure that respondents met specific criteria relevant to the study's objectives, yielding a total of 100 valid samples. Descriptive statistical analysis was conducted to identify respondent characteristics and variable tendencies. At the same time, multiple linear regression in SPSS version 25 was applied to test the proposed hypotheses and to measure the magnitude of each independent variable's influence on purchasing decisions. The findings indicate that both excise tax increases and e-cigarette brand equity significantly affect purchasing decisions. Specifically, higher excise taxes tend to alter consumer purchasing patterns, while substantial brand equity positively influences consumer confidence and preference, thereby encouraging purchase intentions. These results suggest that although fiscal policies may affect demand, brand strength remains a critical factor in sustaining consumer interest. The study provides practical implications for policymakers in designing effective taxation strategies and for industry players in strengthening brand equity to maintain competitiveness in an increasingly regulated market.

Keywords: Tax Rate Increase, Brand Equity, Purchasing Decision.

I. Introduction

Smoking has become a daily habit for many people. Typically, this habit involves burning a cigarette containing tobacco and a filter to filter the smoke produced. As is well known, smoking can lead to dependence. Although tobacco cigarettes are still widely used, new technology has emerged that offers

ISSN [Online]: 2776-6381

people an alternative option: e-cigarettes (Agustina & Sya'rawi, 2024). E-cigarettes, often referred to as vapes, have emerged as a popular alternative to conventional cigarettes in recent years. This product was first introduced in 2010 and has since experienced rapid growth in Indonesia, including in Palembang. The use of e-cigarettes is often promoted as a safer alternative to traditional cigarettes, given that e-cigarettes do not produce tobacco smoke, but rather vapor produced by heating a liquid containing nicotine and various flavorings.

The use of vaping is currently on the rise, with people switching from tobacco to vaping. In Palembang, where the majority of residents are e-cigarette users, the reasons for vaping vary. Some say they use e-cigarettes to follow trends or to keep up with friends, while others find them more practical and portable. Others are turning to e-cigarettes as a way to quit smoking. Many also believe that vapes are more affordable, especially for the lower-middle class, with a wide variety of flavors, easy availability in stores, and memorable brands and quality that fit their budget. One way the government can curb the consumption of products that can harm public health, such as e-cigarettes, is by increasing excise taxes. Seeing the high number of e-cigarette users in Indonesia, the Directorate General of Customs & Excise is the agency authorized to collect excise from cigarettes as a source of state revenue. Excise is distaxnatory tax on goods or services that have specific external impacts and/or are of a luxury nature (Preece, 2014). Excise regulations are regulated by Law No. 11 of 1995 concerning Excise, which was later amended by Law No. 39 of 2007, which amended Law No. 11 of 1995 concerning Excise. In 2024, e-cigarette users will face higher costs due to the government's increased excise and other taxes on these products. Based on data from the Indonesian government's Ministry of Finance, excise rates on tobacco products, including e-cigarettes, have been increased to reduce consumption. The tariff adjustment was gradual from 2023 to 2024, with the government increasing the average excise tax by 15% for all types of e-cigarettes, including solid e-cigarettes, open-system liquids, and closed-system liquids. This policy aims to increase state revenue and also reduce the negative health impacts of e-cigarette use.

The increase in excise taxes on e-cigarettes also raises their prices, making them a key factor in consumers' purchasing decisions. Research by Gunardi et al. (2022) shows that increases in excise taxes can influence consumer purchasing decisions. The high demand for e-cigarettes has increased competition among vape stores in Palembang City, where a range of brands, both old and new, are emerging. They also began implementing various strategies to capture market share, including leveraging brand equity. Research shows that a positive brand image can increase consumer purchase intention, particularly for products like e-cigarettes, which can provide a profound emotional experience (Solihat & Gunadi, 2023). Product quality and brand reputation not only influence customer satisfaction but also their desire to continue using the product. In the context of e-cigarettes, where consumers tend to choose based on taste and experience, brand equity can be a crucial factor in purchase decisions (Solihat & Gunadi, 2023). A purchasing decision is a consumer decision influenced by economic, financial, political, technological, price, cultural, product, and process factors. A purchasing decision is a person's attitude when purchasing or using a product that they perceive as satisfying (Khaira et al., 2022). In recent years, e-cigarettes have gained increasing popularity, especially among young people, as an alternative to conventional cigarettes. This phenomenon encourages the need for a deeper understanding of consumer motivation in choosing this product, Armstrong. Armstrong (Iqbal et al., 2024) said that purchasing decisions are part of consumer behavior, namely the study of how individuals, groups, and organizations choose, buy, and use goods, services, concepts, or experiences to fulfill their needs and desires. Research by Priambodo (2020) shows that increases in excise taxes do not significantly affect purchasing decisions among e-cigarette consumers. This is based on the fact that the majority of respondents or e-cigarette consumers can still afford the price of e-cigarettes and that e-cigarettes are a lifestyle option for the majority of respondents. However, according to Agustina & Sya'rawi (2024) and Woyanti (2011), increases in excise taxes and brand equity positively affect e-cigarette purchasing decisions.

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ISSN [Online]: 2776-6381

II. Literature Review and Hypothesis Development

2.1. Theory of Planned Behavior (Theory of Planned Behavior)

The theory of planned behavior (TPB) focuses on a person's intention to perform certain behaviors. Companies or vendors can see the motivational factors that underlie a person's actions. Intention indicates how strongly people are willing to try and how much effort they expend to engage in a behavior, and one such behavior is word of mouth. (Purwanto et al., 2019). The Theory of Planned Behavior (TPB) is a development of the Theory of Reasoned Action (TRA) proposed by Fishbein and Ajzen in 1980 and refined by Ajzen (1991). TPB is used to predict and understand individual behavior in a social context by adding a new construct: perceived behavioral control. In TRA, it is assumed that when someone shows a "behavioral tendency or behavioral intention, they carry out the behavior without constraints, but the application of this assumption is not the same as the theory because in reality, the behavior is limited by time, unconscious habits, abilities, organizational or environmental limitations because of these limitations, a second theory emerged, namely the Theory of Planned Behavior (TPB) in the Theory of Planned Behavior (TPB) and explains that when an individual behaves, he is not free to behave without limits, but there is someone who controls it, therefore, the variable perceived behavioral control was added to the TPB theory (Ajzen, 1991).

The Theory of Planned Behavior was later expanded to include perceived behavioral control, which reflects an individual's perception of their ability to control the behavior. In this theory, attitude towards behavior refers to the extent to which a person gives a positive or negative assessment to a specific action (Ajzen, 1991). The Theory of Planned Behavior (TPB) explains the causes of behavioral intentions. According to the TPB, behavioral intentions are determined by three main determinants: attitudes, subjective norms, and perceived behavioral control. To date, this theory is widely used across disciplines that discuss behavior and environmental issues (Larasati, 2020). There are several goals and benefits of this theory, including predicting and understanding the motivational influences on behavior that are not under the individual's control or will. To identify how and where to direct strategies for behavioral change, and also to explain each important aspect of several human behaviors, such as why someone buys a new house, chooses a candidate in an election, why they do not go to work, or why they break the rules, and so on (Dr. Mahyani, 2013).

2.2. Buying Decision

Buchari (2016) defines a purchasing decision as a consumer decision influenced by economic, financial, political, technological, price, cultural, product, and process factors (Kira et al., 2022). Swastha and Handoko (Herianto, 2020) also state that a purchasing decision is a process in a real purchase, whether to buy or not. Thus, a purchasing decision is an action taken by a person to decide whether to purchase a product or service, after first considering the value to be obtained. Decision-making is the process individuals undertake to acquire and use goods offered by producers. Every consumer makes various decisions regarding the search, purchase, and use of products and brands over a specific period of time. Consumers make various decisions about their daily activities, often without realizing they are doing so (Agustina & Sya'rawi, 2024). Various factors can influence purchasing decisions, and these can vary depending on the product type and specific circumstances. However, several factors are generally identified in various studies (Sudirjo et al., 2019). When deciding to purchase something, customers often consider the perceived value of a product relative to its price. The brand preference can heavily influence their decision about what to buy. Brand loyalty, reputation, and image are crucial for many buyers, especially when choosing items like e-cigarettes.

2.3. Advertising

The effects of advertising and marketing efforts on customer purchasing behavior have been well documented. Effective advertising can significantly influence customer perceptions and choices. Excise, or

ISSN [Online]: 2776-6381

state levies imposed on certain goods, are crucial today because the government desperately needs to maintain public health. Excisable goods are those whose distribution is monitored by the state, serving as a means of collecting state revenue and as a control tool to limit the consumption of goods with negative impacts (MH & Putra Pangestu, 2022). Excise in Indonesia has two primary roles: as a source of state revenue, contributing to the state budget, and as a regulatory tool for the government, serving as an instrument to control the consumption of excisable goods (Solihat & Gunadi, 2023). The implementation of excise taxes can also affect producers and the distribution of excisable goods. For example, products subject to high excise taxes tend to experience lower demand because consumers feel burdened by the higher prices. On the other hand, if excise taxes are reduced or removed, this can encourage increased consumption of these goods. Factors influencing the increase in excise rates include several important aspects that can influence consumers' decisions to purchase e-cigarettes. The following is an explanation of each factor (Excise, 2022):

In terms of health, the increase in excise rates is expected to strengthen the primary function of excise as a tool to control consumption levels and monitor the circulation of goods that hurt health, such as cigarettes. Tobacco farmers play a crucial role in the tobacco industry's supply chain, producing cigarettes, which are a primary target of excise taxes. Increasing excise rates have both direct and indirect impacts on tobacco farmers, as they provide the primary raw material for the industry. The increase in excise rates is not only aimed at controlling cigarette consumption for the sake of public health, but also as a tool to suppress the circulation of illegal cigarettes. Increasing excise rates is one of the government's strategies to increase state revenue, particularly from indirect taxes. Excise taxes are levied on certain goods whose consumption is controlled, such as cigarettes and alcoholic beverages. These goods remain in high demand among the public, so an increase in excise rates could directly contribute to state revenue.

2.4. Brand Equity

According to Akbar (Wulansari, 2022), brand equity is the added value that products and services provide. This may be reflected in how consumers think, feel, and act regarding the brand, as well as in price, market share, and profitability. Brand equity is also the added value a brand provides to a product or service, which can influence consumer purchasing decisions. Brand equity influences purchasing decisions because consumers tend to choose brands they already know or have a positive image of. Brands are a means of identification and reference for consumers. The higher a product's brand equity, the greater the chance of consumer acceptance, as consumers have a strong preference for the brand. Thus, when making a purchasing decision, the brand is a means of identification and reference for consumers (Sinambela, 2017). This explanation shows that brand equity has a vital role in a product. Brand equity can create a unique experience for each potential customer by leaving a strong first impression, which influences their decision to purchase. A brand can be considered good if it has substantial brand equity and provides added value in consumers' eyes. According to Herianto (2020), to determine the strength of a brand, you can look at the factors that influence brand equity, as follows:

1. Brand elements are components that help shape and increase consumer awareness of a brand. These elements include the name, symbol, logo, packaging, and other visual aspects that reflect a brand's identity, helping consumers recognize and remember it.
2. Brand association is the initial perception that forms in consumers' minds when they interact with a product. This association becomes embedded in consumers' minds and contributes to building brand image. When a brand has a strong, positive image, consumers tend to remember it easily, distinguish it from other brands, and have a favorable view of it, which ultimately influences their purchasing decisions.

The ease with which consumers recognize and remember a brand does not happen suddenly; it results from company efforts, one of which is an effective marketing strategy. Well-executed marketing has a

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significant impact on a brand's value. Marketing activities are not limited to discounts; they also include providing satisfactory service and quick responses to consumer complaints or problems, creating a sense of comfort when making a purchase.

III. Research method

The chosen research methodology is quantitative. The objects of this research are: electronic cigarettes as a product will be analyzed in relation to the increase in the excise tax, the influence of brand equity, and the people of Palembang City who purchase electronic cigarettes or have the potential to become electronic cigarette consumers. Based on the problems previously stated, this research is an associative quantitative study. The study states that associative quantitative research is intended to examine the relationship between two or more variables (Pratama, 2024). The source used in this research is primary data. Data generated by the researcher himself, surveys, interviews, and experiments, which are specifically designed to understand and solve the research problems faced. Primary data were collected through a questionnaire distributed to e-cigarette consumers in Palembang city to obtain direct data on their perceptions of excise and brands, and their influence on purchasing decisions.

24,000 e-cigarette users are members of the e-cigarette community group in Palembang City. In this study, a non-probability sampling technique was used with a purposive sampling approach. (Primary, 2024) . Non-probability sampling is a sampling technique that does not provide equal opportunity for each member of the population to be selected into the sample, because selection is based on specific criteria. Meanwhile, purposive sampling is a sampling technique conducted based on specific considerations or characteristics. Specifically relevant to the research (Pratama, 2024). Researchers used the Slovin formula to select a sample population according to the characteristics or sampling criteria. The Slovin formula yields 99.58, indicating that 99.58 samples are needed for this study. However, to facilitate the research, the sample size of 99.58 is rounded to 100. Therefore, this study requires 100 respondents. Data were collected through literature studies, observations, and questionnaires. The data processing method in this study uses SPSS (Statistical Package for the Social Sciences) version 25. Data analysis in this study includes: descriptive statistical analysis, validity test, reliability test, Classical Assumption test, Multiple Linear Regression Test, Simultaneous Significance Test (F Test), Partial Significance Test (t Test), and Coefficient of Determination Test.

IV. Results and Discussion

4.1. Result

4.1.1. Descriptive Statistical Analysis

Researchers typically use descriptive statistics to provide an overview, including the average (mean), maximum, minimum, and standard deviation. This standard deviation indicates how the data are distributed in a sample and how close each data point is to the mean. or average mark sample. The following are the descriptive statistics results, which can be seen in the following table:

Table 1. Descriptive Analysis Results

	N	Minimum	Maximum	Mean	Standard Deviation
TP	100	9	25	21.76	3.108
EM	100	9	25	20.10	4,863
KP	100	10	25	21.05	3,046
Valid N (listwise)	100				

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4.1.2. Validity Test

Table 2. Validity Test Results (Purchase Decision Variable)

Items	R_{count}	R_{tabel}	Criteria
KP1	0.415	0.196	Valid
KP2	0.370	0.196	
KP3	0.437	0.196	
KP4	0.518	0.196	
KP5	0.369	0.196	

Based on the results of testing the purchasing decision variable, which consists of 5 questions, the test was found to be valid. This is indicated by the total correlation value above 0.25, indicating that all questions in the purchasing decision variable can be used and are reliable for collecting the necessary data. Based on the comparison in Table 2, the corrected item-total correlations for each item in the purchasing decision variable question are deemed valid. This occurs because the calculated r value is greater than the r value in the table, which is greater than 0.196. This means that the purchasing decision questionnaire can measure what it should, ensuring respondents' answers are consistent and stable. Based on the degree of frn-2m (df) = n-2, df = 100-2 = 98, the r table for 100 respondents in this study is 0.196. It can be seen as follows:

Table 3. Validity Test Results (Tax Rate Increase Variable)

Items	R_{count}	R_{tabel}	Criteria
TP1	0.641	0.196	Valid
TP2	0.550	0.196	
TP3	0.577	0.196	
TP4	0.651	0.196	
TP5	0.509	0.196	

Based on the comparison in Table 3, the corrected item-total correlations for each item in the tax incentive variable are deemed valid. This occurs because the calculated r value is greater than the table r, which is greater than 0.196. This means that the tax rate increase questionnaire can measure what it should, ensuring respondents' answers are consistent and stable.

Table 4. Validity Test Results (Brand Equity Variable)

No Pertanyaan	R_{count}	R_{tabel}	Criteria
EM1	0.811	0.196	Valid
EM2	0.849	0.196	
EM3	0.866	0.196	
EM4	0.816	0.196	
EM5	0.872	0.196	

Based on the comparison in Table 4, the corrected item-total correlations for each item in the brand equity variable question are deemed valid. This occurs because the calculated r value is greater than the r value in the table, which is greater than 0.196. This means that the tax rate increase questionnaire can measure what it should, ensuring respondents' answers are consistent and stable.

4.1.3. Reliability Test

Reliability tests assess the extent to which research measurement results are consistent when repeated two or more times. The index that shows the extent to which a measuring instrument can be trusted or relied upon is called reliability. Reliability testing for this research instrument uses Cronbach's Alpha in SPSS 25. The results of all reliability tests for this research instrument are deemed reliable because the Cronbach's alpha value is > 0.6. The test results can be seen in Table 5 below:

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Table 5. Reliability Test Results

No	Variables	Cronbach Alpha	Criteria
1	Buying decision	0.662	Reliable
2	Tax Rates	0.801	
3	Brand Equity	0.942	

Cronbach's Alpha values for all variables exceed 0.60, indicating that the indicators or questionnaires used for tax rates, tax incentives, and tax sanctions on taxpayer compliance are reliable and can be trusted.

4.1.4. Normality Test

The normality test determines whether the independent and dependent variables are typically distributed. This normality test uses the One-Sample Kolmogorov-Smirnov Test formula, which determines whether the data are normally distributed if Asymp.Sig. (2-tailed) ≥ α (0.05) and the data is not normal if Asymp.Sig. (2-tailed) < α (0.05).

Table 6. Normality Test Results

One-Sample Kolmogorov-Smirnov Test		
		Unstandardized Residual
N		100
Norm l Pa ra meters [a,b]	Mea n	.0000000
	Std.	1.76785600
Most Extreme Differences	Absolute	0.088
	Positive	0.088
	Negative	-.087
Test		0.088
A symp. Sig. (2-ta iled)		.056 [c]
a . Test distNormalis Norma l.		
b. Calculated from data.		
c Lilliefors Significance Correction.		

Based on the normality test table using the Kolmogorov-Smirnov (KS) method, it can be seen that the Asymp. Sig (2-tailed) value is greater than the significance level of 0.05, namely 0.56 (0.56 > 0.05). Therefore, the Kolmogorov-Smirnov (KS) normality test indicates that the data distribution is typical, or meets the normality assumption, allowing for further testing.

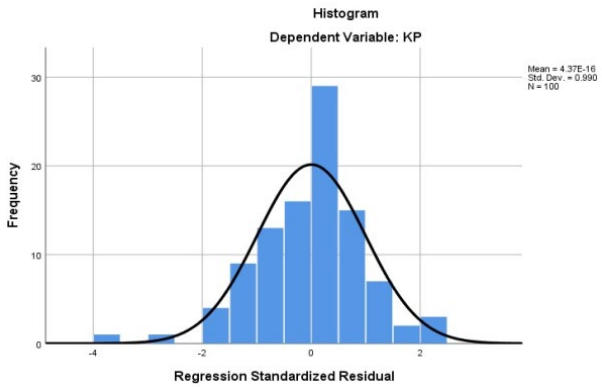

Figure 1. Normality Test – Histogram

Based on Figure 1, the histogram shows a bell-shaped curve and does not skew to the right or left, indicating a normal distribution.

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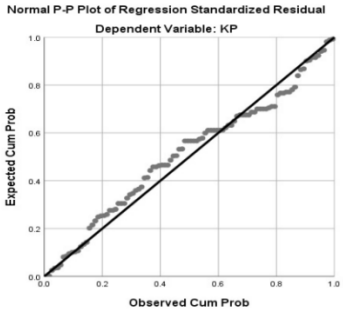

Figure 2. Normality Test – Diagram

Figure 2 shows a standard P-P plot, which shows points distributed around the diagonal; thus, the plot indicates that the regression model is suitable for use because it meets the normality assumption.

4.1.5. Multicollinearity Test

The multicollinearity test is used to determine the correlation between independent variables by examining the regression model. A research regression model is considered reasonable if there is no correlation between the independent variables. This study uses Tolerance and Variance Inflation Factor (VIF) values to assess multicollinearity in the regression model. The test results in Table 7 are as follows:

Table 7. Multicollinearity Test

Model		Collinearity Statistics	
		Tolerance	VIF
1	(Constant)		
	Tax Rates	.979	1,022
	Brand Equity	.979	1,022
a. Dependent Variable: Purchase Decision			

In Table 7, the tolerance values for the Tax Rate (X1) and Brand Equity (X2) variables are greater than 0.10, namely 0.979 (X1) and 0.979 (X2), respectively. Similarly, the variance inflation factor (VIF) values for both variables are less than 10, namely 1.022 (X1) and 1.022 (X2), respectively. From these results, it can be said that there is no multicollinearity problem. Tolerance and VIF are methods used to assess multicollinearity problems in regression analysis. High tolerance values and low VIF values indicate that these variables do not exhibit significant multicollinearity, so the regression results are more reliable and can be interpreted accurately.

4.1.6. Heteroscedasticity Test

The heteroscedasticity test is used to determine whether the residual variances differ across observations in the regression model of this study. If the residual variances across observations remain constant, the distribution is said to be homoscedastic. However, if the variances of the observations differ, this is called heteroscedasticity. The results of the heteroscedasticity test are shown in Figure 3:

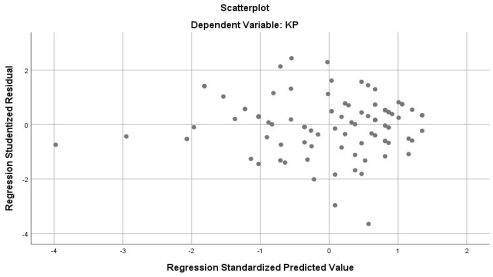

Figure 3. Heteroscedasticity Test

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Based on the scatter plot, the residuals are evenly distributed and do not exhibit any systematic pattern. The relatively balanced distribution of points around the 0 line on the Y-axis indicates no heteroscedasticity problem in the regression model. Therefore, the regression model in this study is suitable for estimating purchasing decisions, with tax rates and brand equity as independent variables.

4.1.7. Multiple Linear Analysis Test

This test aims to determine and demonstrate the independent influence of the independent variables on the dependent variable using regression analysis, with Tax Rates (X1) and Brand Equity (X2) as independent variables and Purchase Decision (Y) as the dependent variable. The results of the multiple linear regression test are shown in Table 8 below.

Table 8 Multiple Linear Regression Test Results

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	3,182	1,389		2,291	.024
	Tax Rates	.488	.058	.498	8,354	.000
	Brand Equity	.361	.037	.576	9,674	.000
a.	Dependent Variable: Purchase Decision					

Based on the data in Table 8, it is concluded that:

1. The variable of increase in excise tax rates has a significance value of 0.000 < 0.05, meaning that the increase in tax rates has a significant positive effect on purchasing decisions.
2. The brand equity variable has a significance value of 0.000 < 0.05, meaning that brand equity has a significant positive effect on purchasing decisions.

From Table 8, we can formulate the following equation:

$$Y = 3.182 + 0\ .488(X1) + 0.361\ (\ X2\ ) + e$$

Based on the equation above, we can provide a detailed analysis of the influence of each independent variable on the dependent variable. The explanation can be outlined as follows: From the results of the multiple linear regression equation above, the constant value obtained is 3.182. A positive value for the constant indicates a unidirectional relationship between the independent and dependent variables. This means that if the overall value of the independent variables, Tax Rate (X1) and Brand Equity (X2), remains unchanged or equals 0, then the Purchase Decision variable will equal 3.182. The coefficient for the Tax Rate variable (X1) in the regression model is 0.488. This means that every 1% increase in the Tax Rate variable (X1) will result in an increase of 0.488 in the Purchase Decision variable (Y), assuming the other variables remain constant. The Brand Equity variable (X2) in the regression model shows a positive value of 0.361. This means that every 1% increase in the Brand Equity variable (X2) will increase by 0.361. on the Purchase Decision variable (Y), assuming the value of the other independent variables remains constant. Based on the data above, it is concluded that:

1. The excise tax rate increase variable has a significance value of 0.000 < 0.05, meaning that the increase in tax rates has a significant positive effect on purchasing decisions.
2. The brand equity variable has a significance value of 0.000 < 0.05, meaning that brand equity has a significant positive effect on purchasing decisions.

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4.1.8. F-Test

The F test is used to determine whether there is a joint influence between certain variables. In this study, the variables examined are Tax Rates and Brand Equity on Purchasing Decisions. The test is carried out by looking at the significance value; if the significance value (sig) is less than 0.05, then all variables are considered to have a joint influence. The F table in this study is shown in the appendix, where the formula df = nk-1 is used, with n = number of samples, k = degrees of freedom for the variable, and 1 = degrees of freedom for the conditions, so that df = 100-2-1 = 97, with an F table of 3.09.

Table 9. Simultaneous Test Results (F)

ANOVA [a]						
Model		**Sum of Squares**	**df**	**Mean Square**	**F**	**Sig.**
1	Regression	609,344	2	304,672	95,516	,000 [b]
	Residual	309,406	97	3,190		
	Total	918,750	99			
a. Dependent Variable: Purchasing Decision						
b. Predictors: (Constant), Tax Rate, Brand Equity						

Based on the data in Table 9, it can be concluded that the variables of increasing excise tax rates and brand equity together influence purchasing decisions, as the SIG value is < 0.05.

4.1.9. t-Test

A partial test is used to determine how each independent variable, individually or in combination, affects the dependent variable. The test is carried out by comparing the calculated t value with the t table value and examining the significance column for each calculated t, with the test criterion being a Sig t value <0.05. To find out the t table value, you can see the t table with the formula df = nk-1, where n is the total value of the observation data and k is the number of variables. The test results are seen in Table 10 below:

Table 10. Partial Test Results (t-Test)

Coefficients [a]						
Model		Unstandardized Coefficients		Sta nda rdized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	3,182	1,389		2,291	0.024
	Tax Rate	0.488	0.058	0.498	8,354	0,000
	Brand Equity	0.361	0.037	0.576	9,674	0,000
a . Dependent Variable: in Purchasing						

$$\mathbf{t_{tabel} = t\ (a/2, nkl) = (0.05/2\ ;\ 100\ -2-1) = (0.025\ ;\ 97\ ) = 1.984}$$

Based on the data above, it is concluded that:

1. The variable of increase in excise tax rates has a significance value of 0.000 < 0.05, meaning that the increase in tax rates has a significant positive effect on purchasing decisions.
2. The brand equity variable has a significance value of 0.000 < 0.05, meaning that brand equity has a significant positive effect on purchasing decisions.

4.1.10. Coefficient of Determination Test (R^2)

Correlation coefficient analysis is used to determine the strength of the relationship between independent variables, namely the influence of Tax Rates and Brand Equity, both partially and simultaneously, on Purchasing Decisions as the dependent variable, by calculating the correlation coefficient value. The test results are seen in Table 11 below:

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Table 11. Results of Coefficient Test (R) and Determinant (R^2)

Summary [b Model]				
Model	**R**	**R Square**	**Adjusted R Square**	**Standard Error of the Estimate**
1	.814 [a]	.663	.656	1,786
a . Predictors: (Constant), Tax Rate, Brand Equity				
b. Dependent ValueDecision				

The coefficient of determination (R^2) is used to assess how well the independent variable explains the dependent variable. The coefficient of determination is used to measure the ability of a variable tax rate (X1) and brand equity (X2) to explain the success variable of purchasing decisions. The results of the determination coefficient test (R^2) are shown in the Mode Summary output from the simple regression analysis. The higher the value, the better the proposed model's research performance. Table 11 shows the coefficient of determination (R^2) of 0.663. This indicates that the contribution of the tax rate, tax incentive, and tax sanctions variables can explain the purchasing decision variable by 66.3%; the remaining 33.7% can be influenced by other variables not included in this study, such as financial ratios, financial management efficiency, tax management, and so on.

4.2. Discussion

4.2.1. The Impact of Increasing Excise Tax Rates on Electronic Cigarettes on Purchasing Decisions

The results indicate that an increase in Excise Tax Rates (X1) significantly influences purchasing decisions (Y). The influence of each independent variable (X) on the dependent variable (Y) was tested using a t-test (partial). The results of the partial t-test show that the significance value for the Increase in Excise Tax Rates (X1) on Purchasing Decisions (Y) is 0.000 < 0.05, with a calculated t of 8.354 > t table of 1.984. This shows that H0 is rejected and H2 is accepted, indicating that an increase in Excise Tax Rates has a positive and significant influence on Purchasing Decisions. This finding indicates that, despite higher excise rates that raise product prices, consumers still choose to buy e-cigarettes. This can be explained from a tax perspective, as excise is an indirect tax levied on the selling price, so consumers do not directly perceive its impact. Furthermore, e-cigarettes' inelastic demand characteristics and their perception as lifestyle products mean consumers will continue to purchase them despite price increases. Therefore, while the excise tax increase increases the tax burden on the selling price, it does not significantly impact consumers' direct purchasing decisions. This discussion can be strengthened by using the Theory of Planned Behavior (THB) approach proposed by Ajzen (1991). According to this theory, a person's behavior is influenced by three main factors: attitude toward the behavior, subjective norms, and perceived control over the behavior. In this context, consumer attitudes toward e-cigarettes subject to higher excise taxes may remain positive because they are perceived as legal and high-quality products. Subjective norms such as encouragement from the social environment, the vape user community, and general perceptions of the product also support purchase intentions. Meanwhile, perceived behavioral control related to ease of access to products remains high due to the widespread availability of e-cigarettes in the market.

Thus, despite the price increase barrier, consumer intentions remain strong and translate into actual behavior, such as purchasing decisions. This demonstrates that the three components of the TPB (attitude, subjective norms, and perceived behavioral control) mutually reinforce each other, supporting the positive influence of excise rates on purchasing decisions. However, the findings of this study do not always align with those of other studies. For example, a study by Kowitt et al. (2022) in the BMJ Open journal, entitled " Impact of an e-cigarette tax on cigarettes and e-cigarette use in a middle-income country," found that the implementation of an e-cigarette excise tax actually led to a decrease in e-cigarette use and an increase in conventional cigarette consumption in Indonesia. This suggests that some consumers in specific segments are more price-sensitive and tend to switch to cheaper alternatives when excise rates are increased. The findings of Kowitt et al. (2022) differ from those of the current research. This indicates that the effects of excise tax increases are highly contextual. In some market segments or regions, high excise rates may actually reduce

ISSN [Online]: 2776-6381

purchasing power and shift consumption, especially if they are not offset by brand strength or high-quality perceptions. In contrast, research by Agustina & Sya'rawi (2024), which aligns with this study, found that despite the excise tax increase, vape consumers continued to purchase vapes due to brand preference, lifestyle, and perceived product legality. This suggests that the excise tax increase is not a primary barrier to purchasing decisions but can instead trigger the perception of added value in the product. Therefore, it can be concluded that the increase in e-cigarette excise tax has a positive effect on purchasing decisions in a loyal market with purchasing power that perceives product legality and quality as important factors in consumption decisions.

4.2.2. E-Cigarette Brand Equity on Purchasing Decisions

The results of the study indicate that Brand Equity (X2) has a significant influence on Purchasing Decisions (Y). The influence of each independent variable (X) on the dependent variable (Y) was tested using a t-test (partial). The results of the partial t-test show that the significance value for Brand Equity (X2) on Purchasing Decisions (Y) is 0.000 < 0.05, with a calculated t of 9.674 > t table 1.984. This shows that H0 is rejected and H3 is accepted, indicating that Brand Equity has a positive and significant influence on Purchasing Decisions. These findings align with the Theory of Planned Behavior (TPB). Within the Theory of Planned Behavior framework, e-cigarette purchasing decisions are influenced by attitudes, subjective norms, and perceived behavioral control. When excise taxes and product prices increase, perceived behavioral control can decrease. However, substantial brand equity, including loyalty, a positive image, and a high-quality perception, can maintain consumers' positive attitudes towards the brand. This strengthens purchasing intentions, enables purchasing decisions to proceed despite price pressures arising from tax policies and excise rate increases, and increases purchasing power. Thus, brand equity acts as a moderator, reducing the negative impact of taxation on purchasing behavior within the TPB framework. This research is supported by findings (Agustina & Sya'rawi, 2024) that state brand equity has a dominant influence on vape purchasing decisions in Banjarmasin, and is further supported by findings (Wulansari, 2020) that examined the influence of brand equity on e-cigarette purchasing decisions in Palangka Raya. Both studies indicate that vape consumers tend to be more trusting and confident in purchasing products from reputable brands, despite other factors such as price or excise regulations.

However, not all studies indicate that brand equity consistently positively influences purchasing decisions. For example, a study by Rath et al. (2021) titled "E-cigarette brand equity and intentions to use: A longitudinal evaluation of a health campaign," published in the journal BMC, found that increasing brand equity from a health campaign actually decreased e-cigarette intentions and use. This study showed that brand equity built within the context of an anti-vape campaign (focusing on health risks and negative education about vaping) resulted in decreased purchase and consumption intentions, particularly among adolescents and young adults. This difference confirms that the influence of brand equity on purchasing decisions is highly context-dependent, shaped by brand formation and public perception. In a commercial context, positive brand equity drives purchasing decisions. However, in the context of a health campaign, negatively associated brand equity actually suppresses purchasing interest. Therefore, marketers and policymakers need to understand the direction of brand messages and the segmentation of their audiences when determining product communication and branding strategies.

4.2.3. The Effect of Excise Tax Increases and E-Cigarette Brand Equity on Purchasing Decisions

Based on the results of the F test or simultaneous test conducted in this study, it shows that the variables of Excise Tariff Increase (X1) and Brand Equity (X2) have a significant influence on Purchasing Decisions (Y) with a significance value of 0.00 < 0.05 and a calculated F value of 95.516 > F table 3.09. These results confirm that these factors together play an important role in influencing purchasing decisions. These findings demonstrate that the combination of government regulations in the form of excise tax increases and substantial brand equity can influence consumer purchasing behavior. On the one hand, the excise tax

ISSN [Online]: 2776-6381

increase policy creates the perception that the product is legal and high-quality. On the other hand, brand equity fosters a positive image, trust, and loyalty toward the product. The correlation coefficient (R) of 0.814 indicates a relatively strong, positive relationship between Excise Tariff Increase and Brand Equity on Purchasing Decisions, suggesting that consumers will continue to purchase because they feel confident in the quality and value offered. Thus, e-cigarette companies need to pay attention to both of these important factors simultaneously. An effective marketing strategy should not only focus on brand image but also align with government regulations to foster a positive perception among consumers. Efforts to build a strong brand and comply with excise policies indirectly increase product appeal and strengthen the company's market position. In conclusion, the results of the simultaneous analysis show that success in driving e-cigarette purchasing decisions is not determined solely by brand strength or price regulation, but by the synergy of both in creating added value and consumer trust in the product.

V. Conclusion

This study investigated the influence of excise tax increases and e-cigarette brand equity on purchasing decisions in Palembang City, providing empirical evidence on how fiscal policy and branding factors interact to shape consumer behavior in the e-cigarette market. The findings demonstrate that both variables, individually and simultaneously, exert a positive and significant effect on purchasing decisions, highlighting the multifaceted nature of consumer choice in this increasingly regulated industry.

The positive and significant effect of excise tax increases on purchasing decisions suggests that price-related policy instruments do not merely function as restrictive measures but also influence consumer evaluation processes. Rather than leading to a straightforward decline in purchasing activity, higher excise tariffs appear to encourage consumers to become more selective, prioritizing perceived value, product quality, and brand reputation. This suggests that excise policies may reshape consumption patterns rather than suppress demand, prompting consumers to adjust their preferences toward products with more substantial perceived benefits relative to their costs. In this context, excise taxation serves as both an economic and a psychological signal, shaping how consumers interpret product value and make purchasing decisions. Furthermore, brand equity was found to have a substantial positive impact on purchasing decisions, underscoring the importance of brand-related attributes such as awareness, perceived quality, brand associations, and loyalty. Substantial brand equity enhances consumer trust and reduces perceived risk, particularly in markets characterized by regulatory uncertainty and health-related concerns. As excise tariffs increase, consumers tend to rely more heavily on established brands, as these brands assure product consistency and credibility. This finding reinforces the strategic role of branding in maintaining market competitiveness, even amid rising costs and tighter regulations.

Notably, the simultaneous influence of excise tax increases and brand equity confirms that the combined effects of external policy pressures and internal consumer perceptions shape purchasing decisions. While fiscal measures affect affordability and accessibility, brand equity moderates these effects by strengthening consumer attachment and willingness to pay. This interaction suggests that policy interventions alone may not fully determine consumption outcomes unless they are considered alongside market-based factors such as brand strength. This study contributes to a deeper understanding of consumer behavior in the e-cigarette sector by integrating economic and marketing perspectives. The results offer practical implications for policymakers seeking to design effective excise strategies and for industry stakeholders aiming to sustain consumer engagement through brand development. Future research is encouraged to incorporate additional variables, such as perceived health risk, income level, and social influence, and to draw on broader samples across different regions, further to enrich insights into purchasing behavior within regulated consumer markets.

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ISSN [Online]: 2776-6381

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