Original Research Article

An Empirical Analysis of the Impact of Cash Flow, Stock Returns, and Capital Structure on Investment Decisions in Cigarette Sub-Sector Manufacturing Companies Listed on the Indonesia Stock Exchange

ABSTRACT

Aims: This study aims to determine the effect of Cash Flow (CF), Stock Returns (SR) and Capital Structure (CS) on Investment Decisions (ID) in cigarette sub-sector manufacturing companies on IDX.
Study design: The method used is an associative method with a quantitative approach.
Place and Duration of Study: Indonesia Stock Exchange (IDX) between 2020 to 2024.
Methodology: The population in the study, namely the financial statements of cigarette sub-sector manufacturing companies that have gone public. The number of samples in this study from 5 companies for 5 years using a purposive sampling approach. The type of data used in this study is secondary data using financial statement data for the period 2020-2024. The data analysis method used is multiple linear regression using SPSS.
Results: Sig. value of influence between cash flow toward investment decisions is 0.004 with beta coefficient value of -5.109. It means that the influence of cash flow toward investment decisions is accepted. Furthermore, the Sig. value of the effect between capital structure on investment decisions is 0.010 with a beta coefficient value of -10.421. This provides information that the effect of stock return variables on investment decisions is accepted. However, the Sig. value of the effect between stock returns on investment decisions is 0.547 with a beta coefficient value of 1.105. This indicates that the effect of stock return variables on investment decisions cannot be accepted.
Conclusion: The results showed that cash flow (X1) had a significant effect on investment decisions, stock returns (X2) had no significant effect on investment decisions, capital structure (X3) had a significant effect on investment decisions. Simultaneously, the cash flow, stock return and capital structure variables have a significant effect on investment decisions in cigarette sub-sector manufacturing companies listed on the Indonesia Stock Exchange (IDX) for the period 2020-2024.

Keywords: Cash Flow, Stock Returns, Capital Structure, Investment Decisions, Cigarette Companies on IDX

1. INTRODUCTION

Investment is an activity of saving or placing funds in a certain period with the hope that the storage will cause profit or increase in investment value. A person who invests is called an investor or investor. The investment decision for individual investors is an important decision because it will have an impact on their economic life in the future. Therefore, setting investment goals is an important first step for an investor.

Furthermore, investors also need to recognize investment mechanisms and investment target environments such as buying and selling mechanisms, regulations related to the investment to be selected and taxes that must be paid on investment ownership. Investment decision is the most important policy as the main aspect of financial management policy because investment is a form of capital allocation whose realization must produce benefits or profits in the future. On the other hand, future investment benefits are covered by uncertainty, which in the concept of financial management is called investment risk.

The level of competition between companies is increasing as the business world develops, especially when there is intense competition between similar companies. Therefore, the company must maintain its business continuity to make decisions that will help the company achieve its goals and increase its competitive ability in the future. Financial statements are one of the sources or even the main source for investors to make decisions that can be tied to a company.

In the capital market, there are investment activities which are a form of investment in company assets in the long term with the hope of getting profits for the company's survival in the future (Priscilla & Salim, 2019). With the development of the capital market in this global economic situation, there is intense competition between companies with the emergence of various types of companies engaged in different fields. One example is a company engaged in the cigarette industry which is currently growing in improving its performance.

The development and growth experienced by cigarette sub-sector companies will certainly minimize the occurrence of a risk, because the company's performance is considered good enough to make investors buy as many shares as possible by providing large investments in cigarette sub-sector companies. Information on company development will help investors to be able to assess the performance of company management so as to prevent the emergence of risk. The more shares purchased, the more the company's stock price will increase, and in the end the stock return will also increase. Companies that need funds can sell shares issued on the capital market to potential fund owners or investors. These investors put their funds on the capital market with the hope of making a profit, the profit here is the stock return (Hidajat, 2018).

Currently, there are five cigarette issuers listed on the Indonesia Stock Exchange, namely PT Hanjaya Mandala Sampoerna Tbk (HMSP), PT Gudang Garam Tbk (GGRM), PT Wismilak Inti Makmur Tbk (WIIM), PT Bentoel International Investama (RMBA) and PT Indonesian Tobacco Tbk (ITIC). In its competition, there are threats and weaknesses faced by business people, especially in the cigarette industry. On October 18, 2018 the Minister of Finance inaugurated that cigarette excise tax increased by an average of 23 percent on January 1, 2020. With this policy, it has an impact on decreasing demand, resulting in the possibility of layoffs by companies**.**

In recent years, the government through the Ministry of Finance has aggressively programmed an increase in cigarette excise tax. On the one hand, the cigarette industry is one of the sources of financing for the government because taxes and excise on cigarette companies are recognized as having an important role in state revenue. Thus, the need for company managers to consider what factors will influence investment decisions in choosing good investment opportunities for a company.

In this study, there are several factors that influence investment decisions, namely cash flow. This is the cash available for distribution to investors after the company invests in fixed assets and working capital needed to maintain business continuity. Cash flow can also be interpreted as excess funds that must be distributed to shareholders, but the decision is influenced by management policy. Companies need to report information about events that cause changes in cash during a certain period of time in the cash flow statement Yulisma & Verawati (2020). The cash flow statement details the sources of cash receipts and disbursements based on operating, investing, and financing activities. Any information we want to know about the company's financial performance during a certain period is summarized through this cash flow statement.

The cash flow statement is a report that presents information about cash inflows and outflows and cash equivalents of an entity for a certain period (Martani et al, 2017). This report presents information on net cash inflows or outflows in a period, the result of the company's three main activities, namely operations, investment and funding (Hanafi, 2016). Furthermore, the cash flow statement provides relevant information about the receipt and expenditure of cash or cash equivalents of a company in a certain period (Harahap, 2019).

Some analysts prefer the cash flow statement over other income statement-generated reports. The reason is that the cash flow statement better reflects the total net money coming in and out of the company. This relationship can be used to compare a company's financial performance over time or compare it with comparable companies in the same industry. A higher level of cash flow allows the company to pay off debt or buy fixed assets. The more cash flow a growing company has, the greater the investment made by the company (Vogt, 1994). This is because companies generally do not distribute dividends during the growth period, and managers will allocate the cash flow box owned by the company for investment activities investment decisions are also seen from the company's liquidity capabilities.

Another factor that can influence investment decisions is stock returns. Return is the result obtained from the investment that has been made and can be in the form of realization return, which is the return that has occurred and is calculated using historical data, and expected return, which is the return that is expected to be obtained by investors in the future, to calculate the expected return is to find the realized return first (Hartono, 2017). The relationship between stock returns and investor decisions is that when high returns are obtained in the capital market, investors will prefer to invest in the capital market because they get high returns.

In investment activities, if the investment period has passed, then the investor will get the level of return that he will receive. Sometimes at the end of the investment period, the expected rate of return and the actual rate of return obtained by the investor from the investment made can be different. The difference between expected returns and actual returns is a risk that must always be considered in investment activities. In addition to paying attention to the rate of return, investors must pay attention to the level of risk of an investment. Shares are basically proof of capital participation from investors to issuers that support proof of ownership of a company and investors have claims to income and assets owned by the company.

Return is one of the factors that motivates investors in investing and is also a reward for the courage of investors to bear the risk of their investment (Tandelilin, 2010). Stock return is the difference between the amount received and the amount invested, divided by the amount invested (Brigham & Houston, 2014). Stock return is the profit expected by an investor in the future on the amount of funds he has placed (Fahmi, 2014). Return is the return obtained by investors in carrying out investment activities. The higher the level of return obtained, the better. This means that when making an investment an investor makes a profit. Return is one of the motivations that influence a person to make a decision to invest (Sulistyowati et al, 2022).

Capital structure also plays an important role in investment decisions. It is a consideration between the amount of debt and equity owned by the company. A company is said to have an optimal capital structure if the combination of debt and equity (external sources) maximizes the company's share price (Brigham & Houston, 2014). Capital structure is fundamental to the company because of its role which has a close relationship with the position of the financial statements. This has a real impact on companies where companies that have large debts threaten the company's position if the level of capital structure is not good. The capital structure contains the company's fixed financing consisting of long-term debt and equity (Margaretha, 2011).

Capital structure is a mix of long-term funding and equity (Brealey et al., 2011). Capital structure is the balance of the amount of permanent short-term debt, long-term debt, preferred stock and common stock (Sartono, 2014). Capital structure is a description of the form of the company's financial proportions because of its role which has a close relationship with the position of the financial statements. This has a real impact on the company where the company will have a large debt that threatens the company's position if the level of capital structure is not good.

The group of companies incorporated into the cigarette industry that has been listed on the IDX was chosen for study by considering that the companies incorporated in this group have a highly competitive power, as well as the movement of the issuer's share price in this industry which attracts investors' interest in the shares of this company as seen from fluctuations in share prices on the Indonesia Stock Exchange. In addition, companies must be able to increase their company value so that they can create growth in stock sales in the capital market. Investment decisions are also one of the company's benchmarks in obtaining high returns in investing.

Table 1. Stock Prices of Cigarette Companies Listed on the IDX

Year	Lowest and highest share prices of cigarette companies on IDX				
	HSMP	GGRM	RMBA	WIIM	ITIC
2020	Rp. 3.230 - Rp. 5.550	Rp. 66.125 - Rp. 86.400	Rp. 280 - Rp. 398	Rp. 137 - Rp. 308	Rp. 50 - Rp. 1.500

Year	Lowest and highest share prices of cigarette companies on IDX				
	HSMP	GGRM	RMBA	WIIM	ITIC
2021	Rp. 1.900 - Rp. 4.080	Rp. 49.175 - Rp. 100.975	Rp. 302 - Rp. 450	Rp. 142 - Rp. 444	Rp. 412 - Rp. 2.600
2022	Rp. 1.084 - Rp. 2.350	Rp. 30.625 - Rp. 59.075	Rp. 210 - Rp. 675	Rp. 67 - Rp. 660	Rp. 600 - Rp. 4.550
2023	Rp. 950 - Rp. 1.535	Rp. 29.925 - Rp. 47.250	Rp. 246 - Rp. 420	Rp. 442 - Rp. 1.110	Rp. 600 - Rp. 4.550
2024	Rp. 835 - Rp. 1.170	Rp. 18.000 - Rp. 33.575	Stock Delisting 06/08/2023	Rp. 360 - Rp. 905	Rp. 242 - Rp. 750

Source: IDX, 2024

Based on table 1, it shows that there is a decrease in the share price of PT Hanjaya Mandala Sampoerna (HSMP) and PT Gudang Garam (GGRM) due to falling profits. PT Bentoel Internasional Investama (RMBA) closed its shares in 2023 due to losses in 2020 and the first quarter of 2024. The decline in profits and shares caused the financial performance of PT Hanjaya Mandala Sampoerna (HSMP) and PT Gudang Garam (GGRM) to decline. PT. Bentoel Internasional Investama (RMBA) experienced losses in 2020 and 2022. Furthermore, PT. Indonesian Tobacco (ITIC) also experienced losses in 2021 which resulted in poor financial performance.

Based on the explanation above, the authors conducted research on the problem by adopting the topic Analysis of Factors Affecting Investment Decisions in Cigarette Sub-Sector Manufacturing Companies Listed on the Indonesia Stock Exchange for the 2020-2024 Period.

2. MATERIAL AND METHODS

The research design used is a research design with quantitative descriptive methods. This study uses quantitative research with an associative design. Where this design is intended in order to determine whether or not there is an effect or relationship between the independent and related variables. Associative research is research that intends to describe and test the hypothesis of the relationship between two or more variables (Sugiyono, 2018). Researchers want to know the relationship between the independent variables of Cash Flow (X1), Stock Returns (X2), and Capital Structure (X3) and the dependent variable Investment Decisions (Y) in the cigarette sub-sector industry listed on the IDX for the period 2020-2024.

This study uses multiple regression techniques to analyse data and ascertain the impact of each independent variable (Cash Flow, Stock Returns, and Capital Structure) on Investment Decisions, both concurrently and individually. SPSS is used to analyze data and perform statistical calculations both parametric and non-parametric because it has quite high statistical analysis capabilities. Furthermore, SPSS also provides convenience in calculations and is also able to analyze research with more variables.

The sample technique used in this research is a purposive sample with certain criteria, such as:

a. The company sampled in this study is a type of cigarette sub-sector company listed on the IDX during the 2020-2024 period.
b. The company publishes complete financial reports, and data is available for analysis during the 2020-2024 period.

From the sample determination criteria above, there are 5 samples of cigarette sub-sector companies that have met the criteria with financial reports for 2020 – 2024, among others: PT Hanjaya Mandala Sampoerna Tbk (HMSP), PT Gudang Garam Tbk (GGRM), PT Wismilak Inti Makmur Tbk (WIIM), PT Bentoel International Investama (RMBA) and PT Indonesian Tobacco Tbk (ITIC).

3. Results and Discussion

3.1. Results

Table 2. Cash Flow of Cigarette Sub-Sector Companies listed on the IDX 2020-2024

Year	HMSP	GGRM	RMBA	WIIM	ITIC
2020	229,628	46,83997	-0,1475	93,85875	6,165882

2021	194,9735	44,23977	-15,5861	126,5525	-25,3896
2022	93,91376	102,7497	-81,7044	61,2735	-14,9711
2023	46,90532	18,77089	78,67435	33,16042	28,88925
2024	29,96601	33,88148	1041363	45,41596	21,75245

Source: IDX, 2024

Based on table 2, it is known that cash flow at HMSP has decreased over the past 5 years with the highest cash flow of 229.628 in 2020 and the lowest cash flow of 29.96601 in 2024. Meanwhile, cash flow at GGRM fluctuated with the highest cash flow ratio of 102.7497 in 2022 and the lowest cash flow ratio of 18.77089 in 2023. RMBA also fluctuates with the highest turnover of 104.1363 in 2024 and the lowest cash flow ratio of -0.1475 in 2020. WIIM also shows volatile development with the highest cash flow ratio of 126.5525 in 2021 and the lowest ratio of 33.16042 in 2023. ITIC shows a fluctuating trend where the highest cash flow ratio is 28.88925 in 2023 while the lowest ratio is -14.8711 in 2022.

A high cash flow ratio indicates that the company has a strong ability to generate cash from its business operations. This means that the company has sufficient cash flow to meet short-term and long-term obligations, pay debts, and fund expansion and investment without relying too much on external payments. Meanwhile, a low cash flow ratio indicates that the company has difficulty in generating sufficient cash from its business operations. This can signal that the company may face liquidity problems and is unable to meet its short-term obligations without seeking external financing.

Stock Returns are reviewed through the difference between the amount received and the amount invested, divided by the amount invested. In the cigarette sub-sector company, stock return data listed on the IDX from 2020 to 2024 is presented in the following table.

Table 3 Stock Returns of Cigarette Sub-Sector Companies listed on the IDX 2022-2024

Year	HMSP	GGRM	RMBA	WIIM	ITIC
2020	0,784355	0,997912	0,884615	0,492683	0,88
2021	0,566038	0,633782	1,434783	3,980198	1,181818
2022	1,766667	0,773585	1,030303	1,012438	0,230769
2023	0,260108	0,746341	0,958824	1,375921	0,456667
2024	0,870466	0,588235	0,93865	1,019643	0,970803

Source: IDX, 2024

Based on table 3, it is known that stock returns in HMSP fluctuate with the highest stock return level of 1.766667 in 2022 while the lowest stock return level is 0.260108 in 2023. Stock returns in GGRM also fluctuate with the highest stock return level of 0.997912 in 2020 while the lowest stock return is 0.588235 in 2024. Likewise, stock returns in RMBA also fluctuate with the highest return rate of 1.434783 in 2021 and the lowest return rate of 0.93865 in 2024. WIIM also fluctuates with the largest stock return of 3.980198 in 2021 while the lowest stock return is 0.492683 in 2020. ITIC also fluctuates where the highest stock return is 1.181818 in 2021 then decreases again by 0.230769 in 2022 and then increases in 2023 and 2024.

High and low stock returns refer to the percentage of profit or loss generated by a stock over a period of time. High stock returns provide significant gains over a period of time, but high returns are also often accompanied by greater risk. Stocks with high returns may have higher volatility or be affected by market speculation. Thus, a high return indicates a high profit with potentially high risk. Whereas a low stock return means that it provides a small profit or even a loss over a period of time, low return stocks can be considered more stable but can also be less attractive to investors looking for quick profits. However, stocks with low returns often have a lower risk than stocks with high returns. Thus, a low return indicates a small profit with a lower potential risk.

The Capital Structure is reviewed through the Debt to Equity Ratio (DER) by comparing the total liability with the company's total equity. In the cigarette sub-sector company, the Capital Structure (DER) data listed on the IDX from 2020 to 2024 is presented in the following table.

Table 4. Capital Structure (DER) of Cigarette Sub-Sector Companies listed on the IDX 2020-2024

Year	HMSP	GGRM	RMBA	WIIM	ITIC

2018	0,318007	0,653185	0,05798	0,249033	0,726451
2019	0,318007	0,5442	0,299381	0,2578	0,682552
2020	0,426659	0,336092	0,845137	0,36142	0,804967
2021	0,818701	0,517406	0,621782	0,434459	0,622228
2022	0,944859	0,530743	0,318383	0,444969	0,51846

Source: IDX, 2024

Based on table 4, it is known that the Debt to Equity Ratio (DER) at HMSP for the last 5 years has been experiencing an increase where the highest DER was 0.944859 in 2024 while the lowest DER was 0.318007 in 2021 and 2022. DER in GGRM was fluctuating where the highest DER was 0.653185 in 2020. DER in RMBA also fluctuates where the highest DER ratio is 0.845137 in 2022 while the lowest DER ratio is 0.05798 in 2020. WIIM shows that the DER ratio for 5 years 2020 to 2024 has increased. Where the highest ratio was 0.444969 in 2022 while the lowest ratio was 0.249033 in 2020. The DER ratio at ITIC fluctuates where the highest ratio is 0.804967 in 2022 while the lowest ratio is 0.51846 in 2024.

The DER ratio shows the extent to which the company uses debt to finance its operations compared to using its own capital. The higher the DER ratio means the company has more debt compared to equity. On the contrary, a low DER ratio means that the company has more equity than debt. With a low DER is considered more stable and less risky because it is less dependent on debt, and has a better capacity to face difficult times without being burdened by large debt obligations.

Investment Decision is the growth of the company's total assets from year to year showing the development of the company's investment, where investment decisions are calculated using the Price Earning Ratio (PER) ratio comparing the capital spent divided by the amount of fixed assets. Data on investment decisions (PER) listed on the IDX from 2020 to 2024 are presented in the following table.

Table 5. Investment Decision (PER) Cigarette Sub-Sector Companies listed on the IDX 2020-2024

Year	HMSP	GGRM	RMBA	WIIM	ITIC
2018	46602419	69097218	14879588	1,02436	3,55679
2019	50902805	78647273	17000329	1,29952	4,47812
2020	49674029	78191408	12464004	1,61444	5,05077
2021	53090427	89964368	9392514	1,89117	5,26704
2022	54786991	88562616	8879539	2,16879	5,53207

Source: IDX, 2024

Based on table 5, it turns out that investment decisions as measured by the Price Earning Ratio (PER) in HMSP fluctuate with the highest value of 54786991 in 2024. GGRM also fluctuates with the highest value of 89964368 in 2023. PER at RMBA increased by 17000329 in 2021 and then decreased from 2022 to 2024 with the lowest decrease of 8879539 in 2024. WIIM for 5 years from 2020 to 2024 has increased with the lowest PER value of 1.02436 in 2020 while the highest PER value is 2.16879 in 2024. ITIC also experienced an increase from 2020 to 2024 with the highest PER value of 5.53207 in 2024 while the lowest value was 3.55679 in 2020.

3.1.1. Normality Test

To detect the normality test, namely by graph analysis. Graphical analysis is done by looking at the histogram graph which compares the observed data with a distribution that is close to the normal distribution. A more reliable method is to look at the Normal Probability Plot (P-P Plot) which compares the cumulative distribution of the normal distribution. If the distribution of residual data is normal, then the line describing the actual data will follow the diagonal line, **(**Ghozali, 2019). The results of the normality test using the help of the SPSS computer program, as follows:

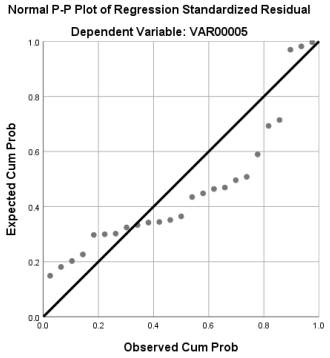

Figure 1. Normality Test 1

The data above shows that the data is not normal because the data points spread far from the diagonal line, so it is necessary to transform the data. Data transformation is an attempt made with the main purpose of changing the original data measurement scale into another form so that the data can fulfill the assumptions underlying the analysis of variance. The type of data transformation used in this study is the Natural Logarithm (Ln) transformation, which is commonly used for time series data.

After the data transformation is performed, it is retested whether it meets the normality assumption. The results of the normality test after data transformation in the form of Natural Logarithm (Ln) using SPSS, as follows:

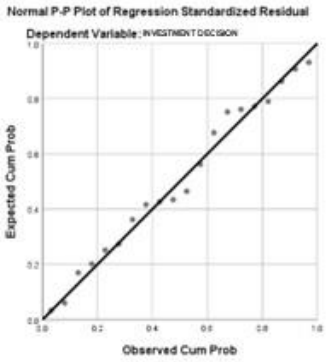

Figure 2. Normality Test 2

3.1.2. Autocorrelation Test

The autocorrelation test is used to determine whether or not there is a deviation from the classic assumption of autocorrelation, which is the correlation that occurs between residuals on one observation and other observations in the regression model. The requirement that must be met is the absence of autocorrelation in the regression model. The test method that is often used is the Durbin-Watson test (DW test) with the following conditions:

a. If the DW number is below -2, it means that there is positive autocorrelation.
b. If the DW number is between -2 to +2, it means there is no autocorrelation.
c. If DW is above +2, it means there is positive autocorrelation.

Table 6. Autocorrelation Test

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.687[a]	.472	.373	4.01876	.962

a. Predictors: (Constant), CAPITA_STRUCTURE, RETURN, CASH_FLOW
b. Dependent Variable: INVESTMENT_DECISION

Based on the table above, the Durbin-Watson (D-W) value is 0.962. As explained that if the D-W value lies between -2 to +2, it means that there are no autocorrelation symptoms. Therefore, it can be concluded that there are no autocorrelation symptoms in the regression model of this study.

3.1.3. Heteroscedasticity Test

If the dot scatterplot graph depicts a certain pattern, it indicates heteroscedasticity. But if there is no clear pattern and the dots spread above and below the number 0 on the Y axis, then there is no heteroscedasticity (Ghozali, 2019). The results of the heteroscedasticity test using SPSS are as follows:

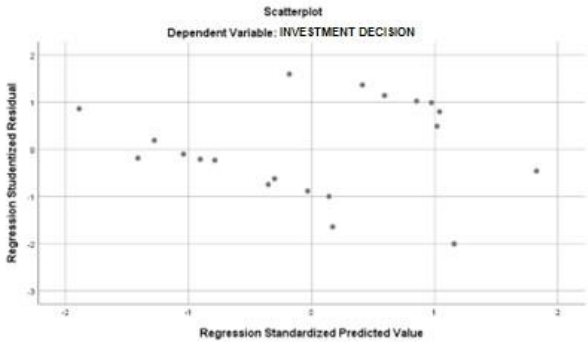

Figure 3. Heteroscedasticity Test

Based on this figure, it can be concluded that there are no symptoms of heteroscedasticity in this regression model. This is because most of the points spread above and below the number 0 on the Y axis.

3.1.4. Multicollinearity Test

Testing can be done by looking at the Tolerance and Variance Inflation Factor (VIF) values in the regression model. The decision-making criteria related to the multicollinearity test are as follows:

a. If the VIF value < 10 or the Tolerance value> 0.01, it is stated that there is no multicollinearity.
b. If the VIF value > 10 or Tolerance value <0.01, then it is stated that multicollinearity occurs.

The results of the multicollinearity test with SPSS are as follows:

Table 7. Multicollinearity Test
Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients			Collinearity Statistics	
		B	Std. Error	Beta	t	Sig.	Tolerance	VIF
1	(Constant)	34.122	4.615		7.393	.000		
	CASH_FLOW	-5.109	1.500	-.865	-3.407	.004	.512	1.953
	RETURN	1.105	1.796	.120	.615	.547	.865	1.156
	CAPITAL_STRUCTURE	-10.421	3.586	-.777	-2.906	.010	.461	2.169

a. Dependent Variable: INVESTMENT_DECISION

Based on the table above, it can be seen that all independent variables have a tolerance value> 0.10 and a VIF value < 10, therefore it can be concluded that there is no multicollinearity in the regression model of this study.

3.1.5. Regression Test

Table 8. Regression Test
Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients			Collinearity Statistics	
		B	Std. Error	Beta	t	Sig.	Tolerance	VIF
1	(Constant)	34.122	4.615		7.393	.000		
	CASH_FLOW	-5.109	1.500	-.865	-3.407	.004	.512	1.953
	RETURN	1.105	1.796	.120	.615	.547	.865	1.156
	CAPITAL_STRUCTURE	-10.421	3.586	-.777	-2.906	.010	.461	2.169

a. Dependent Variable: INVESTMENT_DECISION

Based on the results of the multiple regression test that has been carried out, the following equation is obtained:

$$Y = 34.122 - 5.109X1 + 1.105X2 - 10.\ 421X3 + e$$

- The constant is 34,122, meaning that the investment decision variable will remain at 34,122 if the value of the cash

flow variable, stock return and capital structure is 0.

- b1 = X1 regression coefficient of -5.109, meaning that every addition of one unit of cash flow variable (X1) there will be a change in value of -5.109 to the investment decision variable, assuming that the other variables (X2 & X3) are 0.
- b2 = X2 regression coefficient of 1.105, meaning that each addition of one unit of stock return variable (X2) will increase the value by 1.105 on the investment decision variable, assuming that the other variables (X1 & X3) are 0.
- b3 = X3 regression coefficient of -10.421, meaning that each addition of one unit of the capital structure variable (X2) will change the value by -10.421 on the investment decision variable, assuming that the other variables (X1 & X2) are 0.

3.1.6. Partial Test

The t test aims to show how far the influence of one independent variable individually in explaining the variation in the dependent variable. The t test can also be done by looking at the significance value of each variable in the output of regression results using SPSS with a significance level of 0.05 (α = 5%).

The partial test results can be explained in the table below:

Table 9. Partial Test

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	34.122	4.615		7.393	.000
	CASH_FLOW	-5.109	1.500	-.865	-3.407	.004
	RETURN	1.105	1.796	.120	.615	.547
	CAPITAL_STRUCTURE	-10.421	3.586	-.777	-2.906	.010

a. Dependent Variable: INVESTMENT_DECISION

a. Based on the table above, it shows that the significance value (Sig) of the Cash Flow variable of 0.004 is smaller than the significance level of 0.05, (0.004 <0.05), so it can be concluded that the Cash Flow variable has a significant influence on investment decisions in cigarette companies listed on the IDX for the 2020-2024 period.
b. Based on the table above, it shows that the significance value (Sig) of the Return variable of 0.547 is greater than the significance level of 0.05, (0.547> 0.05), so it can be concluded that the Return variable has no significant effect on investment decisions in cigarette companies listed on the IDX for the 2020-2024 period.
c. Based on the table above, it shows that the significance value (Sig) of the Capital Structure variable of 0.010 is smaller than the significance level of 0.05, (0.010 <0.05), so it can be concluded that the Capital Structure variable has a significant influence on investment decisions in cigarette companies listed on the Indonesia Stock Exchange for the 2020-2024 period.

3.1.7. Simultaneous Test

The F test is used to test the coefficient together, this test is used to determine whether the regression model can be used to simultaneously influence the dependent variable or not, with a significant level test criterion α = 0.05.

The simultaneous test results can be explained in the following table:

Table 10. Simultaneous Test

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	231.182	3	77.061	4.771	.015[b]
	Residual	258.407	16	16.150		
	Total	489.589	19			

a. Dependent Variable: INVESTMENT_DECISION

b. Predictors: (Constant), CAPITAL_STRUCTURE, RETURN, CASH_FLOW

Based on the description of the table above, it can be seen that the significance value (Sig) is 0.015 which is below 0.05. (0.015 <0.05), these results indicate that the Cash Flow, Return, and Capital Structure variables jointly affect the Investment Decision variable.

3.1.8. Determination Test

In finding the effect of variable variance, statistical techniques can be used by calculating the coefficient of determination. The coefficient of determination is calculated by squaring the correlation coefficient that has been found, with the following equation:

$$KD = r^2 \times 100\%$$

The results of the determination test can be explained in the table below:

Table 11. Determination Test

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.687[a]	.472	.373	4.01876	.962

a. Predictors: (Constant), CAPITAL_STRUCTURE, RETURN, CASH_FLOW

b. Dependent Variable: INVESTMENT_DECISION

Based on the table above, it can be seen that the correlation coefficient number (R Square) is 0.472. This means that the relationship between Cash Flow, Return, and Capital Structure with Investment Decisions is 47.2% (0.472 x 100).

3.2. Discussion

3.2.1. Cash Flow (X1) on Investment Decision (Y)

Based on the results of the analysis regarding cash flow on investment decisions, the findings from data processing show that the Sig. value of the influence between cash flow on investment decisions is 0.004 with a beta coefficient value of -5.109. The results of these two values provide information that the effect of cash flow variables on investment decisions is accepted, because it meets the requirements below 0.05 for Sig., thus it can be said that these findings can be accepted.

In general, in a business context, if higher cash flow reduces the decision to invest, this indicates that the company becomes more conservative in managing available funds. Conversely, when cash flow decreases, the company is considered necessary to invest more aggressively as an effort to improve performance or business diversification. If this is attributed to uncertainty, then cash flow will have a significant impact on investment decisions. Higher cash flow uncertainty leads to more cautious and conservative investment decisions, while lower cash flow uncertainty encourages bolder investments (Beladi et al., 2021).

This research is also in line with previous studies such as those conducted by Subiyanto, (2019) that partially cash flow has a negative and significant effect on investment decisions where the research shows that companies with stronger cash flow tend to make more careful or conservative investment decisions. Another finding, research conducted by Pintarto & Pujiono (2021). states that partially cash flow has a negative and significant effect on investment decisions. However, the results of this study contradict the research conducted by Lee & Mankyu (2015).

3.2.2. Stock Return (X2) on Investment Decision (Y)

The results of the analysis regarding stock returns on investment decisions, found that stock returns have a positive influence on investment decisions, which means that the higher the stock return owned, the higher the decision to invest. Based on the results of data processing, it is known that the Sig. value of the influence between stock returns on investment decisions is 0.547 with a beta coefficient value of 1.105. The results of these two values provide information that the effect

of the stock return variable on investment decisions cannot be accepted, because it does not meet the requirements below 0.05 for Sig., thus it can be said that this finding cannot be accepted or rejected.

Stock return is a form of profit obtained by investment players. If the stock return obtained is higher, it shows that the better the investment decision making is done and vice versa. Investors want a high stock return on their investments, while the company wants to have a high corporate value. However, in this research shows that although stock return is an important indicator, there are certainly many factors that can be the main determinant in making investment decisions in cigarette sub sector manufacturing. Companies may prefer to focus on long-term investment strategies that are less influenced by short-term fluctuations in stock prices, investment decisions are more directed towards achieving long-term goals, such as market expansion, product development, operational efficiency rather than capitalizing on short-term stock movements, financial stability as well as other fundamental factors that are considered more relevant to investment success.

This study also supports previous studies such as those conducted by Kengatharan & Kengatharan (2014) and Sarbabidya & Saha (2018) that stock returns have no significant effect on investment decisions. On the other hand, this result contradicts research from Syafaah & Aeni (2020) which states that return has a positive and significant influence on investment decisions.

3.2.3. Capital Structure (X3) on Investment Decision (Y)

Based on the results of data processing, it is known that the Sig. value of the influence between capital structure on investment decisions is 0.010 with a beta coefficient value of -10.421. The results of these two values provide information that the effect of stock return variables on investment decisions is accepted, because it meets the requirements below 0.05 for Sig., thus it can be said that these findings can be accepted.

Capital structure refers to the combination of debt and equity that a company uses to finance its operations. When it shows a negative effect, this means that when the company increases the proportion of debt in its capital structure, investment decisions tend to decrease. Meanwhile, a significant effect indicates that changes in capital structure such as an increase in debt are consistently associated with changes in investment decisions. Hence, the implication for the company is that if it knows that the capital structure has more debt, it will tend to reduce investment and the company will be more careful in adding debt or looking for other alternatives to finance the project. Therefore, investing in a company with a high level of debt has a high possibility of experiencing losses, where the returns obtained are smaller than the cost of capital spent on investing.

This study also supports previous studies such as those conducted by Himelda & Imelda (2021) and Shahwan (2018) where capital structure has a significant effect on investment decisions.

3.2.4. Cash Flow, Stock Return and Capital Structure on Investment Decision

Based on the results of research simultaneously cash flow, stock returns, and capital structure on investment decisions. Where, the F test results show that the calculated F value is 4.771 with a significant level of 0.015 <0.05. So, it can be concluded that simultaneously cash flow, stock returns, and capital structure have a significant effect on investment decisions. The existence of this effect shows that these three variables when considered together or collectively will affect investment decisions. Cash flow is an important indicator of a company's liquidity and ability to finance its operations, pay debts and make investments. When cash flow has a significant influence on investment decisions, it shows that companies or investors really consider liquidity and the availability of cash before making investment decisions.

Meanwhile, stock returns show the level of profit or loss obtained from stock investment. The significant effect of stock returns on investment decisions indicates that investors tend to consider the performance of stocks in their portfolios when deciding whether or not to make further investments. Likewise, the significant effect of capital structure on investment decisions indicates that the ratio of debt to equity is seriously considered by investors or company management in determining investment decisions. A high or low level of leverage (use of debt) can affect the level of risk and potential return from investment.

4. CONCLUSION

a. Cash flow has a significant effect on investment decisions in cigarette sub-sector companies listed on the IDX for the period 2020 - 2024. This shows that cash flow has an important contribution to influence investment decision making. When the cash flow value is high, the interest in investing is also high.
b. Stock returns have an insignificant effect on investment decisions in cigarette sub-sector companies listed on the IDX for the period 2020 - 2024. This shows that the value of stock returns is high, but not meaningful or insignificant to the

increase in investment decision making.

c. Capital structure has a significant effect on investment decisions in cigarette sub-sector companies listed on the IDX for the period 2020-2024. This shows that companies consider the capital structure used when making investment decisions. When the value of the capital structure is high (high leverage) it will encourage companies to make larger investments but will also increase financial risk. Likewise, when the composition of the capital structure (high equity) will increase financial stability and reduce risk but can result in a higher cost of capital and limit the amount of investment.
d. Cash flow, stock returns and capital structure have a significant effect on investment decisions in cigarette sub-sector companies listed on the IDX for the period 2020 - 2024. This shows that when together (simultaneously), the value of cash flow, stock returns and capital structure is high, it will affect investment decisions taken by companies where investment activities will also increase.

5. RESEARCH IMPLICATION

Theoretically, the results of this study can be used as a contribution to ideas to add insight and knowledge that can be used in science, especially those related to cash flow, stock returns and capital structure on investment decisions or as a reference for future researchers using other companies or different periods. This research can also contribute to the development of investment decision theory and financial model testing.

Practical implications of the results of this study can be used as input for companies in terms of company management and investment decision making in the company both in terms of cash flow management strategies, stock return assessment, capital structure optimization and its effect on the cost of capital, investment planning based on cash flow, risk and return evaluation.

6. RESEARCH LIMITATIONS

Some of these limitations are due to several things such as, this study only looks at the effect of cash flow, stock returns and capital structure on investment decisions and ignores other influences, such as company size, company value, company age, and economic and social factors that might affect the company's investment decisions. Furthermore, the sample in this study only uses several cigarette sub-sector manufacturing companies while there are still many other types of sub-sectors in manufacturing companies listed on the IDX. In addition, the number of cigarette sub-sector companies listed on the IDX is only 5 companies out of 7 companies in Indonesia.

7. FUTURE RESEARCH RECOMMENDATIONS

Future researchers are expected to expand the variables and research samples in order to obtain more comprehensive results, such as government policies or investor behaviour, so that it can be used as an illustration or comparison related to financial ratios in the company.

COMPETING INTERESTS DISCLAIMER:

AUTHORS HAVE DECLARED THAT THEY HAVE NO KNOWN COMPETING FINANCIAL INTERESTS OR NON-FINANCIAL INTERESTS OR PERSONAL RELATIONSHIPS THAT COULD HAVE APPEARED TO INFLUENCE THE WORK REPORTED IN THIS PAPER.

Disclaimer (Artificial intelligence)

Author hereby declare that NO generative AI technologies such as Large Language Models (ChatGPT, COPILOT, etc.) and text-to-image generators have been used during the writing or editing of this manuscript.

REFERENCES

1. Beladi, H., Deng, J., & Hu, M. (2021). Cash flow uncertainty, financial constraints and R&D investment. International Review of Financial Analysis, 76, 101785.
2. Brealey, R A., Stewart C M., & Franklin, A. (2011). Principles of Corporate Finance, Tenth Edition. New York: McGraw-Hill.
3. Brigham, F F., & Houston, J F. (2014). Fundamentals of Financial Management Translation, Eleventh Edition. Jakarta: Salemba Empat.
4. Fahmi, I. (2014). Financial Performance Analysis. Bandung: Alfabeta.
5. Ghozali, I. (2019). Multivariate Analysis Application. Semarang: Diponegoro University.
6. Hanafi, M. (2016). Financial Statement Analysis. Yogyakarta: UPP STIM YKPN.
7. Harahap, S. S. (2019). Critical Analysis of Financial Statements. Jakarta: PT. Raja Grafindo Persada.
8. Hartono, J. (2017). Portfolio Theory and Investment Analysis, Eleventh Edition. Yogyakarta: BPFE.
9. Hidajat, N. C. (2018). The effect of return on equity, earnings per share, economic value added, and market value added on stock returns of agricultural sector companies listed on the Indonesian stock exchange for the period 2010-2016. Journal of Economics, 23(1), 62-75.
10. Himelda, D., & Imelda, E. (2021). The Influence of Capital Structure on Company Performance with Investment Decisions as a Mediating Variable. Journal of Accounting Paradigms, 3(1), 56-65.
11. Kengatharan, L., & Kengatharan, N. (2014). The influence of behavioral factors in making investment decisions and performance: Study on investors of Colombo Stock Exchange, Sri Lanka. Asian Journal of Finance & Accounting, 6(1), 1.
12. Lee, M. C., & Mankyu. (2015). Effect of Cash flow on the R&D investment of Pharmaceutical Companies: focused on KOSDAQ market. 15(8), 473–480.
13. Margaretha, F. (2011). Financial Management for Non-Financial Managers. Jakarta: Salemba Empat.
14. Martani, D., Siregar, S. V., Wardhani, R., Farahmita, A., Tanujaya, E. (2017). Intermediate Financial Accounting Based on PSAK, Second Edition. Jakarta: Salemba Empat.
15. Pintarto, M. R., & Pujiono, P. (2021). The Effect of ACCOUNTING Profit & Operating Cash Flow on Investment Decisions (Stock Returns). Journal of Accounting, Finance, Taxation, and Auditing (JAFTA), 3(2), 147–170. https://doi.org/10.28932/jafta.v3i2.3662
16. Priscilla, W., & Susanto, S. (2019). Factors Affecting Investment Decisions in Infrastructure, Utilities and Transportation Companies. Multiparadigma Accounting Journal, 1(3), 580-588.
17. Sarbabidya, S., & Saha, T. (2018). Factors affecting investment decisions: A study on Bangladesh stock market. Journal of Accounting, 8(2), 1-19.
18. Sartono, A. (2014). Financial Management Theory and Application. Yogyakarta: BPFE.
19. Shahwan, Y. (2018). The mediating effect of investment decisions and financing decisions on the influence of capital structure against corporate performance: evidence from Jordanian listed commercial banks. *Academy of accounting and Financial Studies journal*, *22*(6), 1-20.
20. Subiyanto, A. (2019). Analysis of the Influence of Cash Flow on Investment Decisions with Cash Holdings as a Moderating Variable in Food and Beverage Sub-Sector Companies on the Indonesia Stock Exchange. FIN-ACC (Finance Accounting), 3(10).
21. Sugiyono. (2018). Quantitative, Qualitative, and R&D Research Methods. Bandung: Alfabeta.
22. Sulistyowati, A., Rianto, M. R., Handayani, M., & Bukhari, E. (2022). The influence of financial literacy, return and risk on investment decisions of Islamic millennial generation in Bekasi City. Scientific Journal of Islamic Economics, 8(2), 2253-2260.
23. Syafa'ah, N. L. (2020). THE INFLUENCE OF THE LEVEL OF RETURN AND RISK ON INVESTMENT DECISIONS IN ISLAMIC MUTUAL FUNDS. IHTIYATH: Journal of Islamic Financial Management, 4 (1). https://doi.org/10.32505/ihtiyath.v4i1.1797
24. Tandelilin, E. (2010). Portfolio and Investment: Theory and Application, First Edition. Yogyakarta: Kanisius.
25. Vogt, S. C. (1994). The Cash Flow Financial Investment Relationship: Evidence from US Manufacturing Firms. Financial Management, 23, 3-20.
26. Wijaya, A. L., & Murwani, J. (2011). The Influence of Managerial Ownership, Leverage and Profitability on Company Investment Policy. Journal of Accounting Dynamics, 3(1).
27. Yulisma, M., & Verawati. (2020) Application of Cash Flow Reports at PT. Saritama Cipta Usaha Bandar Lampung. Online Journal of Information Systems and Accounting Students. ONESISMIK Journal, 4(1).