

The Effects of Working Capital, Sales Volume, And Operating Costs on Net Income Are Moderated by Educational Level From A Sharia Financial Management Perspective

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Abstract

This study aims to analyze the effect of working capital, sales volume, and operational costs on net profit with education as a moderating variable reviewed from the perspective of Islamic financial management among coffee traders in Semendo Darat Laut District. This research used a quantitative approach with a descriptive associative research design. The population consisted of 60 coffee traders, while the sample included 37 respondents selected through purposive sampling technique. Research data were obtained from simple financial records and structured interviews. Data analysis techniques used descriptive statistical analysis, classical assumption tests, multiple linear regression, Moderated Regression Analysis (MRA), t-test, and coefficient of determination with the assistance of SPSS 25 software. The results showed that working capital did not affect net profit. Meanwhile, sales volume and operational costs had a positive and significant effect on the net profit of coffee traders in Semendo Darat Laut District. The moderation test results indicated that education was unable to moderate the effect of working capital, sales volume, and operational costs on net profit. From the perspective of Islamic financial management, net profit is obtained through lawful, trustworthy, and productive business activities. Properly managed sales volume and operational costs can increase business profits, while working capital that is not utilized effectively is not able to optimally increase net profit. This study is expected to serve as a reference for coffee traders in improving business management and as additional literature for future research in the field of Islamic financial management.

Keywords: *Working Capital, Sales Volume, Operational Costs, Education, Net Profit, Islamic Financial Management*

1. Introduction

Indonesia is the world's fourth-largest coffee producer after Brazil, as its coffee plantations yield abundant harvests and hold great potential for further development. The prospects for the development of the coffee industry in Indonesia include the growth of the coffee processing industry

from downstream to upstream, which will create jobs for the general public, increase farmers' incomes, and produce a variety of processed coffee products to meet the needs of the Indonesian people or for export to global markets. The many mountainous regions in Indonesia provide a landscape suitable for coffee cultivation. According to data from Eleven Coffees, Indonesia ranks as the fourth-largest coffee-producing country in the world.

Table 1. The 10 Largest Coffee-Producing Countries in the World

No.	Coffee-Producing Countries	Total Production
1.	Brazil	3.558.000 Metrix Ton
2.	Vietnam	1.830.000 Metrix Ton
3.	Colombia	858.000 Metrix Ton
4.	Indonesia	642.000 Metrix Ton
5.	Ethiopia	441.000 Metrix Ton
6.	Honduras	390.000 Metrix Ton
7.	India	329.100 Metrix Ton
8.	Mexico	273.000 Metrix Ton
9.	Peru	270.000 Metrix Ton
10.	Uganda	255.000 Metrix Ton

Source: elevencoffees.com, 2025

Indonesia ranks fourth in the world with a total coffee production of 642,000 tons per year by 2025. Robusta coffee accounts for the largest share of production at 91%, while Arabica makes up 9%. Favorable geographical conditions for growing cash crops mean that Indonesia has several regions with the potential to develop the plantation industry. Crop plants are often excellent candidates for cultivation in tropical and subtropical regions. Consequently, Indonesia produces a variety of agricultural commodities, including coffee, sugarcane, rubber, cocoa, tea, and oil palm. Regarding coffee specifically, according to the Central Statistics Agency (BPS), Indonesia's coffee exports from January to June 2025 reached 206.7 million kg, with a value of US\$1.13 billion.

As the world's fourth-largest coffee-producing country, the regions that dominate production include the islands of Sumatra, Java, and Kalimantan. Coffee has been cultivated in Indonesia for a long time. In addition to generating income for local residents, coffee is a major export commodity and a source of foreign exchange for the country. There are four well-known types of coffee: Arabica, Robusta, Liberica, and Hybrid. The province with the highest coffee production is South Sumatra, followed by Lampung, North Sumatra, and Aceh.

Table 2. The Largest Coffee-Producing Provinces in Indonesia

No.	Province	Total Coffee Production
1.	South Sumatra	198,1 Thousand (Tons)
2.	Lampung	108,1 Thousand (Tons)
3.	North Sumatra	87,9 Thousand (Tons)

4.	Aceh	71,1 Thousand (Tons)
5.	Bengkulu	55 Thousand (Tons)

Source: ojksumabgsel

One of Indonesia's coffee-producing regions is Muara Enim Regency, which ranks among the top three coffee producers in South Sumatra Province. In 2024, coffee production in Muara Enim Regency reached 28,650 tons. Of the 22 subdistricts in Muara Enim Regency, the primary coffee-producing area is Semendo Darat Laut Subdistrict, which accounted for 11,835 tons. The majority of the coffee produced is of the Robusta variety. Therefore, the success of coffee production must be balanced with effective corporate performance in generating profits to ensure the sustainability of the business.

A company's growth and the profits it generates can serve as measures of its success in carrying out operational activities. If the company's objectives are met, its survival is secured and it can compete with other companies; profit is one of the primary objectives of any business entity. Without profit, a company cannot fulfill its other objectives, namely continuous growth and social responsibility. To ensure that the company is able to generate profits, management must plan and control profits.

Profit is the amount of money a company earns after deducting revenue and expenses for a given period (Lara, 2021). Revenue and expenses, particularly operating expenses, are inextricably linked to a company's profitability. Sales, expenses, gains, and losses all contribute to net income. The income statement provides a summary of these transactions. Profit is the difference between inflows (revenue and gains) and outflows (expenses and losses) (Pratiwi & Khoirawati, 2023). Profit is used to measure a company's performance; the higher the profit, the better the company's performance. If a company's operations are running smoothly, there is a high likelihood of increased revenue, which naturally leads to higher corporate income tax, since gross profit is a taxable item (Paradiba & Nainggolan, 2015).

One significant external factor affecting profit is capital. Every company always needs working capital to fund its day-to-day operations—for example, to advance funds for purchasing raw materials, pay labor wages, employee salaries, and so on. Working capital is a company's investment in the form of cash, marketable securities, accounts receivable, and inventory, minus current liabilities used to finance current assets. Effective working capital management is crucial to ensuring a company's business continuity and preventing bankruptcy.

Working capital is a crucial component of a business. With working capital, a company can carry out its operations and generate the profits it expects. A company's working capital is derived from its own funds. Broadly speaking, sources of funds can be obtained from equity and loans or debt. Each source of funds has its own advantages and disadvantages. The advantage of equity is that it is easy to obtain, and the repayment period is relatively long, but the amount is relatively limited, especially when large amounts of funds are needed. Meanwhile, the advantage of debt is that the amount is relatively unlimited, while the disadvantage is that the conditions for obtaining it are difficult, and the company is burdened with installment payments and other costs such as administrative fees, provision costs, and commissions (Kasmir, 2016: 220). Although debt is riskier, management often chooses borrowed funds as working capital to meet large working capital needs.

On the other hand, sales volume is the primary driver of revenue and is inherently positively correlated with net income. The higher the sales volume, the greater the potential revenue that can be generated (Laurensia et al., 2025). However, an increase in sales volume is often accompanied by higher production or operating costs, so management must be able to optimize the relationship between sales volume, costs, and prices to maximize profits. Effective marketing strategies and attractive product quality are key to increasing sales volume amid intense market competition.

Sales volume is the total amount generated from the sale of goods. The higher a company's sales volume, the greater the likelihood of the company generating a profit (Megawati et al., 2021). Therefore, sales volume is one of the key factors that must be evaluated to ensure the company does not incur losses. Ensuring better product quality and competitive pricing presents its own challenges for the

company; high production costs impact sales levels, so the company must pay close attention to production costs. The level of sales volume achieved during a given period can serve as an indicator of the success of a product's marketing efforts. Sales volume and revenue have a direct correlation.

Operating costs are a critical element that must be carefully managed. These costs include all expenses required to carry out day-to-day business operations, such as raw material costs, employee wages, rent, electricity, and transportation (Suratminingsih et al., 2024). Inefficient management of operating costs can erode profits, even when sales volumes are high. Optimizing operating costs without compromising product or service quality is a challenge that every business owner must face.

Operating expenses must be carefully controlled, because even if production and operations are running smoothly, if these are not supported by efforts to minimize the company's expenses, this will result in rising costs (F. M. Sari & Munandar, 2022). High total production costs impact sales levels, as production costs determine the selling price of a product or service, which in turn affects the amount of profit earned. Purchasing raw materials at excessively high prices leads to increased production costs, which can subsequently reduce the company's profits. Conversely, purchasing raw materials at excessively low prices—while potentially beneficial for the company—can create future problems, as the company may struggle to establish consistent purchasing and sales standards (Wuysang & Pusung, 2019). The selling price is an important factor because it is a major component of customer satisfaction, and price represents the value of a product as perceived by consumers.

In the context of this study, the Sharia Financial Management approach offers an interesting and relevant perspective. Sharia principles emphasize justice, transparency, and the avoidance of *riba* (usury), *maysir* (gambling), and *gharar* (excessive uncertainty). In Islamic finance, the goal of profitability is not viewed solely from a material perspective but also in terms of the blessings and public benefit it generates (Addury, 2023). This means that financial decisions must be consistent with Islamic ethical values, such as paying *zakat*, giving charity, and avoiding haram business practices.

The implementation of Islamic financial management by coffee traders in Semendo Darat Laut Subdistrict can offer a new perspective on how working capital, sales volume, and operating costs are managed. Efforts to increase sales volume must be carried out in accordance with Islamic principles, and efforts to improve operational efficiency must also take into account the aspects of blessings and fairness for all parties involved.

Although there has been extensive research on the factors influencing net profit, significant research gaps remain, particularly in the context of Islamic Financial Management and the role of education as a moderating variable. Existing research tends to focus on conventional financial perspectives, overlooking Sharia principles that prohibit usury, speculation, and investment in haram sectors, which can fundamentally alter the cost and revenue structures, as well as the investment and financing decisions of coffee traders. Furthermore, while previous studies may have examined the impact of working capital, sales volume, and operating costs separately or in limited combinations, the literature remains deficient in understanding how the educational level of coffee traders in Semendo Darat Laut Subdistrict moderates the relationship between these variables and net profit within a Sharia framework. The lack of research integrating Sharia aspects and the moderating role of education creates a gap in our understanding of how Sharia-based coffee traders manage their finances to achieve net profit, and how education can strengthen or weaken the influence of these factors.

This study offers a novel approach by integrating the perspective of Islamic financial management to analyze the effects of working capital, sales volume, and operating costs on net profit, specifically among coffee merchants in the Semendo Darat Laut subdistrict. The uniqueness of this study lies in its exploration of the role of education as a moderating variable, a topic that has not been extensively studied in the context of micro and small Islamic businesses. Thus, this study aims to provide an in-depth understanding of how financial and operational factors interact with educational level in determining the profitability of coffee businesses based on Islamic principles, as well as to generate practical recommendations for improving the financial performance of coffee merchants in the region.

2. Literature Review

Liquidity – Profitability Trade Off Theory

The Liquidity–Profitability Trade-Off Theory explains that there is a trade-off between liquidity and profitability in a business. Liquidity indicates a business's ability to meet its short-term obligations, while profitability reflects its ability to generate profits. An increase in liquidity is not always accompanied by an increase in profits, as holding too much capital in the form of current assets can reduce efficiency and result in idle funds.

Conversely, excessively low working capital can disrupt operational smoothness and reduce sales potential, thereby causing profits to decline as well. Therefore, business owners need to maintain working capital at an optimal level to sustain a balance between operational efficiency and profit generation.

Profitability Theory

Profitability Theory explains a company's ability to generate profits from its operational activities by utilizing its resources effectively and efficiently. This theory is based on the fundamental view that a company's primary objective is to achieve optimal profits through the balanced management of sales, costs, and assets (P. D. Sari & Putikadea, 2025). Profitability is a key metric for assessing financial performance because it indicates a company's ability to generate profits from its total sales, assets, and equity used in its business operations (Setiawan & Dasman, 2025).

Working Capital

According to Hanafi (2018), working capital is the amount of funds a company uses to conduct its day-to-day operations and ensure the smooth running of its business activities. It encompasses all financial resources used to finance the company's cash conversion cycle—from inventory to accounts receivable, and then to cash through the sale of goods or services. Working capital consists of current assets and current liabilities. The concept of working capital is important because it reflects a company's ability to meet its short-term financial obligations and maintain smooth operations without significant financial disruptions.

By monitoring working capital, companies can identify trends in their operational cycles, manage cash flow more effectively, and anticipate future financial needs. In addition, healthy working capital is also a key factor in attracting investment and securing credit from lenders, as it demonstrates that the company has the ability to meet its financial obligations on time and continue to operate effectively.

Sales Volume

Sales volume is the total number of units actually sold by a company during a specific period. This means that sales volume represents the measurable outcome of sales activities. Sales volume is a factor that can be used to assess whether a company's performance is optimal or requires a strategic overhaul. It is calculated based on the number of products sold and the company's revenue from those sales. The higher the sales generated by the company, the greater the likelihood of profit. In summary, sales volume represents the total sales of goods and/or services produced by the company; as sales volume increases, the company's profits will also rise significantly (Megawati et al., 2021).

Operational Costs

Operating expenses consist of asset disposals, the use of the company's assets by third parties, the incurrence of liabilities, or a combination of these three during the period in which

the company produces and delivers goods, provides services, or carries out other activities that constitute its core operations. Operating expenses play a significant role in determining the company's success in achieving its objectives (F. M. Sari & Munandar, 2022). Operating expenses are all costs related to a company's operations outside of the production process, including sales expenses and general and administrative expenses (Rahmawatiningsih & Huda, 2023).

Net Profit

According to Kasmir (2021:305), net income is income that has been reduced by expenses incurred by the company during a specific period, including taxes. The profits earned by the company will be used for various purposes by the owners and management. Profits will be used to improve the well-being of owners and employees as compensation for their services. Profits are also used to increase capital for production capacity or to expand marketing efforts to various regions (Suryani & Andriani, 2021).

Education

Education is defined as a systematic effort to create a learning environment and facilitate the learning process. This enables students to develop their potential in terms of religious knowledge, self-control, character, intelligence, noble character, and other necessary skills (Hermawan & Bahjatulloh, 2022).

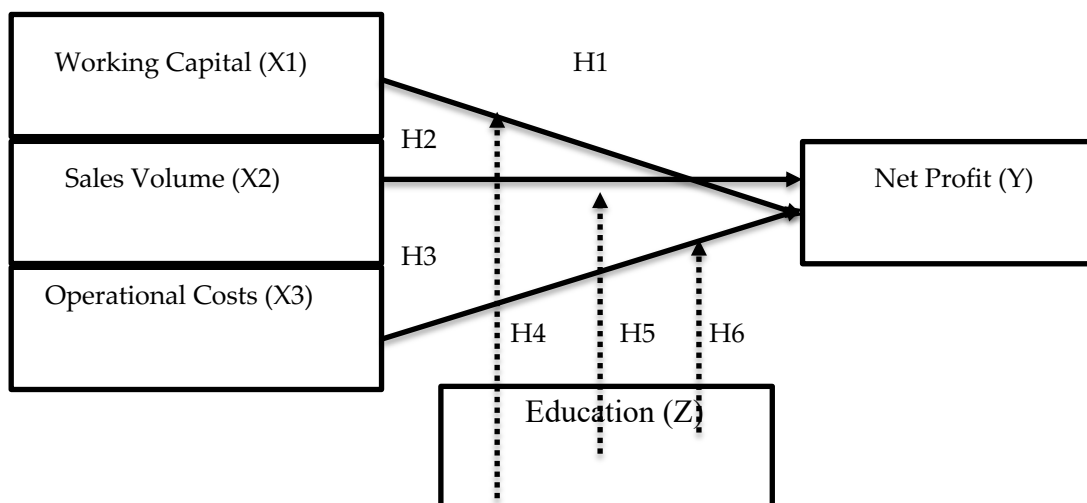


Figure 1. Framework

3. Research Methods

This study employs a descriptive-associative quantitative approach. This type of research is a causal study because it aims to determine the effect of independent variables on the dependent variable. The dependent variable in this study is net profit. The moderating variable is knowledge. The independent variables are working capital, sales volume, and operating costs. The population in this study consisted of 60 coffee vendors. The sample was selected using purposive sampling, which involves selecting participants based on specific criteria chosen by the researcher. The sample size was determined using a saturated sample, in which all members of the population were included in the sample based on specific criteria.

Table 3. Sampling Criteria

No	Description
1.	Merchants who have been active for at least one year, as determined by their business reports

2.	Maintaining simple financial records, such as daily or monthly summaries
3.	The educational level of merchants can be identified

Source: Processed by the author, 2026

The data used in this study consists of secondary data. It was obtained directly from merchants through reports or simple financial records documenting expenses and income in daily or weekly summaries of the merchants' business activities, as well as through structured interviews. The collected data was then analyzed using SPSS 25 software. The data analysis techniques used were descriptive statistical analysis, analysis of variances (ANOVA), moderated regression analysis, and hypothesis testing.

4. Result and Discussion← 11pt, Palatino Linotype

Results

Descriptive Statistic Analysis← 11pt, Palatino Linotype

Table 4. Descriptive Analysis Results

Descriptive Statistics					
	N	Minimum	Maximum	Mean	Std.Deviation
Working Capital	37	168000000	342000000	247216216.22	49422293.179
Sales Volume	37	3850	6900	5160.81	895.369
Operational Costs	37	39000000	76500000	55513513.51	11115233.845
Net Profit	37	62000000	127500000	90418918.92	19824057.184
Education	37	0	1	.59	.498
Valid N (listwise)	37				

Source: data processed by SPSS25, 2026

Based on the results of the descriptive analysis above, which involved 37 data points examined for each variable in Table 4, this provides an overview of the characteristics of the data for the five variables studied. It is known that the working capital structure variable has a minimum value of Rp 168,000,000 and a maximum value of Rp 342,000,000, indicating a wide range of capital among coffee traders, while the average of Rp 247,216,216 suggests that the average working capital spent by traders is quite high. The sales volume has a minimum value of 3,850 kilograms and a maximum value of 6,900 kilograms, with an average of 5,160.81 kilograms. The Operational Costs variable has a minimum value of Rp 39,000,000 and a maximum value of Rp 76,500,000, with an average of Rp 55,513,513, indicating that operational costs are quite substantial; the majority of these costs are used to pay employees and for transportation. The Net Profit variable has a minimum value of Rp 62,000,000 and a maximum value of Rp 127,500,000, with an average net profit of Rp 90,418,918. The Education variable has a minimum value of 0 and a maximum value of 1, with an average of 0.59.

Classical Assumption Test

Normality Test

Table 5. Normality Test Results

One-Sample Kolmogorov-Smirnov Test	
	Unstandardized Residual
N	37

Normal Parameters^{a,b}	Mean	.0000000
	Std. Deviation	933767.42445455
Most Extreme Differences	Absolute	.140
	Positive	.065
	Negative	-.140
Test Statistic		.140
Asymp. Sig. (2-tailed)		.063 ^c

a. Test distribution is Normal.

b. Calculated from data.

c. Lilliefors Significance Correction.

Source: data processed by SPSS25, 2026

Based on the results of Normality test, Asymp. Sig 0.063 was obtained, which is greater than 0.05. This indicates that the residuals in the regression model are normally distributed.

Multicollinearity Test

Table 6. Multicollinearity Test Results

Coefficients^a			
	Model	Collinearity Statistics	
		Tolerance	VIF
1	Working Capital	.558	1.793
	Sales Volume	.997	1.003
	Operational Costs	.548	1.824
	Education	.900	1.111
a. Dependent Variable: Net Profit			

Source: data processed by SPSS25, 2026

Based on Table 6, the results of the multicollinearity test above show that for variables X1, X2, X3, and Z on Variable Y, the tolerance is greater than 0.1 and the variance inflation factor (VIF) is less than 10. Therefore, it can be concluded that there is no multicollinearity issue in the regression model.

Heteroscedasticity Test

Table 7. Heteroscedasticity Test Result

Coefficients^a					
	Model	Unstandardized Coefficients		Standardized Coefficients	
		B	Std. Error	Beta	
1	(Constant)	1773266.997	1423194.792		1.246 .222
	Working Capital	-.004	.035	-.294	-.102 .919
	Sales Volume	-94.672	1918.274	-.142	-.049 .961
	Operational Costs	.005	.139	.091	.035 .972
	Education	51578.977	200776.529	.043	.257 .799

a. Dependent Variable: ABS_Res

Source: data processed by SPSS25, 2026

Based on Table 7 above, the results of the heteroscedasticity test for the Working Capital variable show a significance value of 0.919. The Sales Volume variable has a significance value of 0.961. The Operational Costs variable has a significance value of 0.972, and the Education variable has a

significance value of 0.799. This means that the significance values of X1, X2, X3, and Z relative to Y do not indicate a problem of heteroscedasticity because the significance values are greater than 0.05.

Multiple Linear Regression Test

Table 8. Multiple Linear Regression Test Results

Coefficients ^a					
Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	-16728565.119	2325425.045		-7.194	.000
Working Capital	.028	.057	.069	.487	.630
Sales Volume	11855.736	3151.346	.535	3.762	.001
Operational Costs	.704	.226	.395	3.120	.004

a. Dependent Variable: Net Profit

Source: data processed by SPSS25, 2026

$$Y = -16728565.119 + 0.28 + 11855.736 + 0.704 + \epsilon t$$

Based on the results of the Multiple Linear Regression Analysis in the table above, the following conclusions can be drawn:

1. The β value is a constant of -16,728,565.119; the negative sign indicates that variables X1, X2, and X3 are held constant, so the value of Y is -16,728,565.119.
2. The regression coefficient for X1 is 0.28, which is positive (+); this means that if the value of X1 increases, the value of Y also increases, and vice versa.
3. The regression coefficient for X2 is 11,855.736, which is positive (+). This means that if the value of X2 increases, the value of Y also increases, and vice versa.
4. The regression coefficient for X3 is 0.704, which is positive (+). This means that if the value of X3 increases, the value of Y also increases, and vice versa.

Moderated Regression Analysis

Table 9. Moderated Regression Analysis

Coefficients ^a					
Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	-19548438.527	2596364.098		-7.529	.000
Working Capital	.219	.108	.547	2.028	.052
Sales Volume	12324.444	3207.944	.557	3.842	.001
Operational Costs	-.151	.490	-.084	-.307	.761
Education	3153444.094	1811043.688	.079	1.741	.092
X1xZ	-.219	.117	-1.437	-1.873	.071

X2xZ	97.439	255.015	.013	.382	.705
X3xZ	.922	.515	1.360	1.790	.084

a. Dependent Variable: Net Profit

Source: data processed by SPSS25, 2026

$$Y = -19548438.5 + 0.219 + 12324.444 + (-0.151) + 3153444.094 + (-0.219) + 97.439 + 0.922 + \epsilon t$$

Based on the results of the Moderated Regression Analysis in the table above, the following conclusions can be drawn:

1. The β value is a constant of -19,548,438.5; since this is a negative value, it indicates that the variables X1, X2, X3, Z, X1xZ, X2xZ, and X3xZ are held constant, so the value of Y is -19,548,438.5.
2. The regression coefficient for X1 is 0.219, which is positive (+). This means that if the value of X1 increases, the value of Y also increases, and vice versa.
3. The regression coefficient for X2 is 12,324.444, which is positive (+). This means that if the value of X2 increases, the value of Y also increases, and vice versa.
4. The regression coefficient for X3 is -0.151, which is negative (-). This means that if the value of X3 increases, the value of Y decreases, and vice versa.
5. The regression coefficient for Z is 3,153,444.094, which is positive (+). This means that if the Z variable increases, the Y variable also increases, and vice versa.
6. The regression coefficient for X1xZ is -0.219, which is negative (-). This means that if the X1xZ variable increases, the Y variable decreases, and vice versa.
7. The regression coefficient for X2xZ is 97.439, which is positive (+). This means that if the Z variable increases, the Y variable also increases, and vice versa.
8. The regression coefficient for X3xZ is 0.922, which is positive (+). This means that if the Z variable increases, the Y variable also increases, and vice versa.

T-test← 11pt, Palatino Linotype

Table 10. T-test Result

Coefficients^a					
Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	-16728565.119	2325425.045		-7.194	.000
Working Capital	.028	.057	.069	.487	.630
Sales Volume	11855.736	3151.346	.535	3.762	.001
Operational Costs	.704	.226	.395	3.120	.004

a. Dependent Variable: Net Profit

Source: data processed by SPSS25, 2026

Based on the results of the T-Test in the table above, the following conclusions can be drawn:

1. Given that the calculated t-value is 0.487 < the table t-value (1.69236) and the significance level is 0.630 (>0.05) for working capital relative to net income, it can be concluded that working capital does not affect net income. Hypothesis 1 is not supported.

- Given that the calculated t-value is $3.762 >$ the table t-value (1.69236) and the significance level is 0.001 (<0.05) for sales volume on Net Profit, it can be concluded that sales volume has a positive and significant effect on Net Profit. Hypothesis 2 is supported.
- Given that the calculated t-value is $3.120 >$ the table t-value (1.69236) and the significance level is 0.004 (<0.05) for operating expenses on Net Profit, it can be concluded that operating expenses have a positive and significant effect on Net Profit. Hypothesis 3 is supported.

Table 11. T-test Result with moderating effect

Coefficients ^a					
Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1					
Education	3153444.094	1811043.688	.079	1.741	.092
X1xZ	-.219	.117	-1.437	-1.873	.071
X2xZ	97.439	255.015	.013	.382	.705
X3xZ	.922	.515	1.360	1.790	.084

a. Dependent Variable: Net Profit

Source: data processed by SPSS25, 2026

Based on the results of the T-Test with moderating effect in the table above, the following conclusions can be drawn:

- Given that the significance value of the working capital variable on net profit, moderated by education, is 0.071 (>0.05), it can be concluded that education does not moderate the effect of working capital on net profit.
- Given that the significance value of the sales volume variable on net profit moderated by education is 0.705 (>0.05), it is concluded that education does not moderate the effect of sales volume on net profit.
- Given that the significance value of the operational costs variable on net profit moderated by education is 0.084 (>0.05), it is concluded that education does not moderate the effect of operational costs on net profit.

Coefficient of Determination
Table 12. Coefficient of Determination Results

Model Summary ^b				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.999	.998	.998	921182.484

Source: data processed by SPSS25, 2026

Based on the results of the coefficient of determination test in the table above, it can be seen that the coefficient of determination, or R-squared, for Net Profit is 0.998. These results indicate that the variables Working Capital, Sales Volume, Operating Costs, and Education account for 99.8% of the variation in Net Profit, while the remaining 0.2% can be explained by other variables outside the scope of this study.

Discussion
The Effect of Working Capital on Net Profit Among Coffee Merchants in Semendo Darat Laut Subdistrict

The results of the analysis show that the calculated t-value of 0.487 is less than the critical t-value (1.69236) and the significance level is 0.630 (greater than 0.05) for working capital relative to net profit. Therefore, it can be concluded that working capital does not affect net profit, and thus Hypothesis 1 is not supported. This means that a higher level of working capital does not necessarily increase the net profit of merchants.

These findings align with the Liquidity–Profitability Trade-Off Theory, which explains that there is a trade-off between a company's liquidity and profitability. This theory states that the more funds allocated to maintaining liquidity through working capital, the lower the potential profits may be, as those funds are not used productively to generate profit. Conversely, if working capital is too low, operational activities may be disrupted.

These findings are supported by research conducted by Nevin Wijaya, Veronika, Silvia Kosasih, and Feby Natalia, which states that working capital does not affect net profit (Wijaya et al., 2021). Furthermore, research conducted by Dewi Ayu Lestari and Riska Damayanti reached the same conclusion: in a partial test, working capital has no effect on net income. Furthermore, research conducted by Dewi Ayu Lestari and Riska Damayanti reached the same conclusion: in a partial test, working capital has no effect on net income (Lestari & Damayanti, 2023).

The Effect of Sales Volume on Net Profit Among Coffee Merchants in Semendo Darat Laut Subdistrict

The analysis results show that the calculated t-value of 3.762 is greater than the critical t-value (1.69236) and the significance level is 0.001 (<0.05) for the relationship between sales volume and net profit; therefore, it can be concluded that sales volume has a positive and significant effect on net profit. Hypothesis 2 is supported. This means that the more coffee sold, the higher the net profit for coffee merchants.

These research results align with Profitability Theory, which emphasizes that profitability is a measure of management's success in managing resources to generate profits. One factor influencing profitability levels is sales volume, as the greater the quantity of goods or services sold, the higher the revenue received by the company. Assuming that operating costs remain relatively constant, an increase in sales volume will have a positive effect on net profit. Based on profitability theory, an increase in sales volume reflects good marketing performance and operational efficiency, which will ultimately increase the company's net profit.

The results of this study are consistent with research conducted by Karmilah, Mursalin, and Andri Eko Putra, which explains that sales volume has a positive and significant effect (Karmilah et al., 2024). The same results were obtained in a study conducted by Naufald Abdul Jawad, which found that sales volume affects a company's profits (Jawad, 2019). In addition, similar findings were reported in a study by Maulidya Masputri Ambarini, which found that sales volume has a positive effect on net income (Ambarini et al., 2020).

The Effect of Operating Costs on Net Profit Among Coffee Merchants in Semendo Darat Laut Subdistrict

The results of the analysis show that the calculated t-value of 3.120 is greater than the critical t-value (1.69236) and the significance level is 0.004 (<0.05) for the relationship between operating expenses and net profit. Therefore, it can be concluded that operating expenses have a positive and significant effect on net profit. Hypothesis 3 is supported. This means that the expenditures made by merchants for business operating costs are able to increase the business's net profit. This occurs because the operating costs incurred by merchants are generally used to support productive business activities.

These research findings align with Production Theory and the concept of operational efficiency, which explain that the appropriate use of operational costs can increase business output and revenue. In this theory, operational costs are viewed as an economic sacrifice made to obtain greater benefits in

the future, including increased profit. The more effectively operational costs are used to support business activities, the greater the business's ability to generate profits.

These findings are consistent with research conducted by Aditya Achmad Fathony and Yulianti Wulandari, which found that, in part, operating costs have a significant effect on net profit (Fathony & Wulandari, 2020). Similarly, a study conducted by Ike Rahmawatiningsih and Nurul Huda found that operating expenses have a significant partial effect on net income (Rahmawatiningsih & Huda, 2023). Furthermore, in the study conducted by Rahmi Lara, the partial operational model has an effect on net income (Lara, 2021).

The Role of Education in Moderating the Effect of Working Capital on Net Profit Among Coffee Merchants in Semendo Darat Laut Subdistrict

The analysis results show that the significance value of the working capital variable on net profit, moderated by education, is 0.071 (>0.05). Therefore, it can be concluded that education does not moderate the effect of working capital on net profit; thus, Hypothesis 4 is not supported.

In the practice of the coffee trading business, working capital management is more influenced by business experience, market conditions, coffee prices, and trading practices that have been passed down through generations than by formal educational background. Although some traders have varying levels of education, this does not necessarily make them more effective in utilizing working capital to increase business profits.

These findings align with research conducted by I Wayan Andika Suryana, who stated that education and training cannot strengthen the relationship between personal technical skills and performance (Suryana, 2020).

The Role of Education in Moderating the Effect of Sales Volume on Net Profit Among Coffee Merchants in Semendo Darat Laut Subdistrict

The results of the analysis show that the significance value of the sales volume variable on net profit, moderated by education, is 0.705 (>0.05); therefore, it can be concluded that education does not moderate the effect of sales volume on net profit. Thus, H5 is not supported.

The results of this study indicate that the coffee trading business in Semendo Darat Laut Subdistrict is still dominated by practical experience and traditional business practices passed down through generations, rather than the application of formal knowledge acquired through education. Most traders acquire their trading skills from direct experience in the field, such as determining the timing of sales, maintaining coffee quality, and building relationships with collectors and buyers. Consequently, formal education has not been able to make a significant contribution to strengthening the influence of sales volume on net profit.

These findings align with research conducted by I Wayan Andika Suryana, who stated that education and training cannot strengthen the relationship between personal technical skills and performance (Suryana, 2020).

The Role of Education in Moderating the Effect of Operational Costs on Net Profit Among Coffee Merchants in Semendo Darat Laut Subdistrict

The analysis results show that the significance value of the operational costs variable on net profit, moderated by education, is 0.084 (>0.05); therefore, it can be concluded that education does not moderate the effect of operational costs on net profit. Thus, H6 is not supported.

In the practice of the coffee trade, the use of operating costs is largely adjusted to daily business needs, such as transportation, labor, shipping, storage, and distribution costs. These expenditures are made based on field conditions and business experience; thus, the level of formal education has not yet had a significant influence on the effectiveness of operating cost utilization in increasing net profit.

These findings align with research conducted by I Wayan Andika Suryana, who stated that education and training cannot strengthen the relationship between personal technical skills and performance (Suryana, 2020).

5. Conclusion

Based on the results of this study, The results of the partial analysis of the relationship between Working Capital (X1), Sales Volume (X2), and Operating Expenses (X3) and Net Profit (Y) indicate that working capital has no effect on net profit. However, there is a positive and significant effect of Sales Volume and Operating Expenses on Net Profit. The results of the test examining the relationship between Working Capital (X1), Sales Volume (X2), and Operating Costs (X3) on Net Profit (Y), moderated by Education (Z), show no statistically significant results for the variables as a whole. This means that Education was not found to moderate the relationship between the effects of Working Capital (X1), Sales Volume (X2), and Operating Costs (X3) on Net Profit (Y).

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