

Factors Influencing the Implementation of Formal Accounting Practices Among Micro and Small Enterprises (MSEs) in Debre Markos Town, Ethiopia

Tenagne Amero, Beza Muche Tekla *

Department of Accounting and Finance Department, College of Business and Economics, Debre Markos University, Ethiopia

*Corresponding-author Email: bezamt@gmail.com or beza_muche@dmu.edu.et

Abstract

The main objective of the study was to investigate the factors influencing the implementation of formal accounting practices among micro and small enterprises (MSEs) in Debre Markos town. An explanatory research design was employed to examine the relationships among variables. A stratified random sampling technique was used to select 238 MSEs from different sectors. Primary data were collected using a structured questionnaire. The study applied an ordered probit model for data analysis. The regression results indicate that education, managerial experience, formal training, enterprise age, and the number of employees significantly influence the implementation of formal accounting practices. The study contributes to MSE development by providing evidence-based insights that can guide policy interventions aimed at strengthening accounting practices, thereby improving the financial management, transparency, and long-term sustainability of MSEs. To enhance accounting practices among MSEs owners and managers, policymakers and stakeholders (local government and financial institutions) should implement short term training programs focusing on both basic and advanced accounting skills.

Keywords: Accounting practice, financial management, micro and small enterprises (MSEs), ordered probit model, housing arrangement.

1. Introduction

1.1. Background and Rationale of the Study

There are different definitions given to Micro and Small Enterprises (MSEs) across the nation but all converge on the consensus that micro or small businesses typically employ a limited number of individuals and are characterized by a relatively modest amount of capital and

revenue (Goshu & Mba, 2015). According to Ethiopia's Micro and Small Enterprises (MSEs) Development Strategy (2011), MSEs are categorized based on the number of hired laborers and capital. Micro enterprises in the industry sector employ up to five workers and have a capital of up to Birr 100,000, while those in the service sector also employ up to five workers but have a capital of up to Birr 50,000. Small

enterprises in the industry sector hire between 6 and 30 workers and have a capital of up to Birr 1,500,000, whereas those in the service sector also employ between 6 and 30 workers but have a capital of up to Birr 500,000.

Micro and Small Enterprises (MSEs) are recognized as vital components and catalysts for economic growth and stability in the world. They serve as crucial drivers of economic development, particularly in developing countries (Obi, 2015). Globally, MSEs represent a substantial share of business entities and play an essential role in the economy by generating employment, producing goods and services, enhancing living standards, and significantly contributing to the gross domestic product (GDP) of many countries (Puspaningrum, 2020). They provide employment opportunity for nearly two-thirds of the workforce, contribute to government revenue through income tax payments, and generate income in the form of profits, dividends, and wages for households, exemplifying their importance in developing countries like Ethiopia.

However, for these enterprises to succeed, it is essential to implement formal accounting practices for every transaction. Formal accounting practice refers to the systematic and standardized process of recording, classifying, summarizing, and reporting financial transactions of a business in accordance with established accounting principles and regulatory requirements (Ayele, 2015; Melese, 2021). This necessity arises from the often limited resources available to businesses, making effective control over resource allocation and

performance measurement (Mekonnen, 2019). Accounting is fundamental to the success or failure of modern business organizations. It serves to analyze, document, and assess business transactions to determine an entity's performance. Accounting practices have a positive influence on the performance of MSEs (Negalign, 2019 & Musah, 2018). Effective recordkeeping can significantly boost the efficiency and effectiveness of micro and small enterprises. Consequently, those enterprises that adopt sound recordkeeping practices are likely to experience enhanced operational performance (Osim et al., 2020; & Musah, 2018). Good accounting practice is demonstrated through activities like maintaining precise and consistent records of revenues, expenses, purchases, receipts, payroll, taxes, invoices, changes in assets, and consistently applying accounting methods and internal control procedures (Pavtar, 2017 & Prempeh et al., 2022). MSEs with proper accounting records were more likely to secure loans and attract investments, underscoring the critical role of financial transparency in business success (Maseko and Manyani, 2021). Effective accounting practices are also crucial for improving operational efficiency and achieving long-term business goals (Osim et al., 2020).

According to Resource-Based View and Agency Theory, implementing sound accounting practices enhances the efficient utilization of financial resources and ensures the availability of accurate financial information for decision-making (Schillemans & Bjurström, 2020 ; Barney et al., 2021). Recent research emphasizes the

importance of robust internal control systems in MSEs to reduce agency problems. Effective governance mechanisms, including transparent accounting practices, are crucial for minimizing agency costs in micro and small enterprises. Micro and Small enterprises with better accounting practices experience lower agency costs and improved performance, as these practices provide a framework for monitoring and evaluating business operations (Zaman et al., 2021).

Institutional theory also posits that organizations adopt certain practices to gain legitimacy and align with external expectations. MSEs that adopt formal accounting practices are more likely to gain legitimacy in the eyes of stakeholders, including banks, investors, and regulatory authorities. This legitimacy can enhance their ability to secure funding and grow sustainably. Recent literature highlights the increasing pressure on MSEs to conform to regulatory standards and societal expectations (Greenwood et al., 2019). Compliance with institutional norms, including accounting standards, is essential for gaining access to financial resources and building stakeholder trust. MSEs that conform to institutional expectations regarding financial reporting are more successful in attracting investment and establishing long-term relationships with stakeholders, highlighting the importance of adhering to accepted accounting practices (Singh et al., 2020).

Research has indicated that the incomplete maintenance of accounting records is largely attributed to a deficiency in

accounting knowledge and the financial burden of employing professional accountants. This inefficiency hampers the ability of MSEs to accurately assess their business profitability (Gilbert & Amoako, 2013). Inadequate record-keeping is a major constraint on the growth of micro and small enterprises in many developing countries (Osim et al., 2020; Maseko & Manyani, 2021).

In Ethiopia, poor accounting practices are a major factor hindering the growth and sustainability of micro and small enterprises (MSEs) (Kahsay & Zeleke, 2019; Melese, 2021). Many MSEs fail to maintain accurate financial records due to limited financial resources, high costs of hiring skilled accountants, lack of basic accounting knowledge, and low awareness of the benefits of formal accounting (Negalign, 2019; Alattar et al., 2019). This limits their ability to monitor financial performance, access to finance, and the effectiveness of their risk management practice. Studies show that MSEs with formal accounting systems achieve better financial performance (Melese, 2021; Hailu, 2020; Enyew et al., 2020), yet little empirical research has been conducted so far to investigate the factors affecting the adoption and implementation of such practices in Ethiopia in general and in the study area in particular. The majority of previous research on MSEs in Ethiopia has concentrated on general financial management topics, with minimal exploration of the practices and difficulties related to accounting practices (Melese, 2021). Therefore, this study aims to fill this gap by examining the determinants of

formal accounting practice implementation among MSEs in the study area.

1.2. Conceptual Framework of the Study

Based on the available theoretical and empirical literatures, the following

conceptual framework has been developed to examine the influence of operational, managerial, enterprise characteristics and demographic factors on the implementation of formal accounting practices among Micro and Small Enterprises (MSEs).

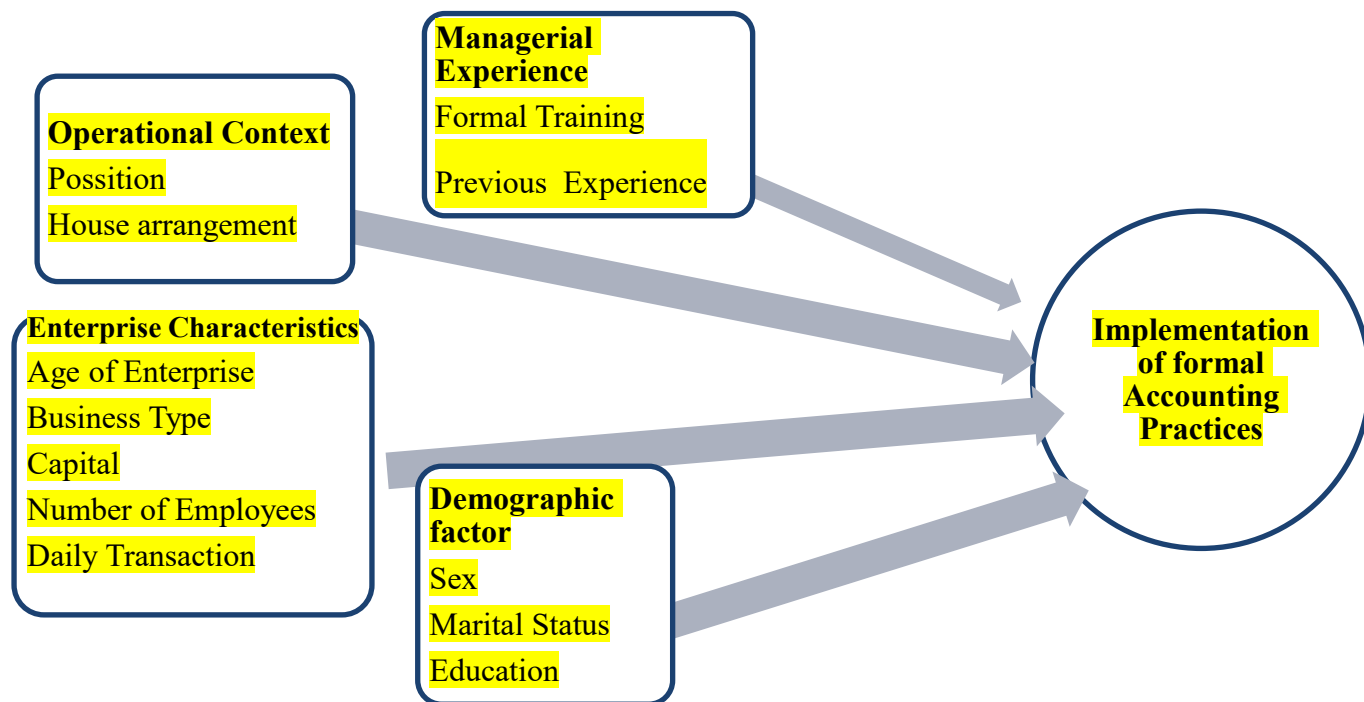


Figure 1: Conceptual framework

Source: (Maseko and Manyani, 2021; Enyew et al., 2020; Kahsay & Zeleke, 2019; Alattar et al., 2019 & Melese, 2021).

2. Research Methodology

2.1. Research Design

The study employed explanatory research designs. The explanatory design was used to explore the causal relationship between the independent variables and the dependent variable.

2.2. Sampling Technique and Sample Size Determination

The total population for the study comprises 585 micro and small enterprises located

within Debre Markose City Administration (2024 report). The researchers employed a stratified random sampling method to select the respondents. Different strata were established based on the type of business activities undertaken by the micro and small enterprises, which include service sectors (153), trading (8), manufacturing (269), urban agriculture (119), and construction (36). The overall sample size was determined by using Yamane (1967) sample size determination formula for finite population as presented below.

$$n = N / 1 + N(e)^2$$

Where: n is the sample size, N is the population size, and e is the level of

precision.

$$\text{Therefore, } n = 585 / 1 + 585(.05)^2 = 238$$

Table 1. Sample Allocation for each Sector (Strata)

Sectors	Total population	Sample
Manufacturing	269	110
Service	153	62
Urban agriculture	119	48
Construction	36	15
Trading	8	3
Total	585	238

2.3.Data Source and Method of Collection

For the current study, primary data were collected using a structured questionnaire administered to managers of MSEs. The manager could either be the owner of the enterprise or an employed manager. The questionnaire included both closed and open-ended questions, with items measured using Likert scale indicators. To check the reliability of the questionnaire, a pre-test was conducted with 15 selected respondents, and corrective actions were taken based on the pre-test results before the final questionnaire was distributed by trained data enumerators. In addition, to ensure its validity, the questionnaire was reviewed by selected experts in the field.

2.4.Method of Data Analysis

The Ordered probit model was used to examine the effect of independent variables on the dependent variable. The status of Accounting Practices (dependent variable) was measured using an ordinal scale, where 1 represents firms with low accounting practice implementation, 2 indicates firms with medium accounting practice implementation, and 3 signifies firms with high accounting practice implementation. According to the

International Accounting Standard Board, a firm is considered to be practicing accounting if it prepares at least an income statement and balance sheet (Aboagye-Otchere & Agbeibor, 2012).

2.4.1. Specification of the Ordered Probit Model

The ordered probit model is appropriate when the dependent variable consists of more than two categories that follow a logical order, as is the case in this study (Green, 2018). The ordered probit model can be represented by the following equation:

$$y_i^* = x_i' \beta + \varepsilon_i \quad i = 1, \dots, N \text{ respondent}, \dots \quad (1)$$

Where i refers to the observation (i.e., a firm manager/respondent), y^* ($i = 0, 1, 2$) is a latent variable (i.e., unobservable) that represents the respondents participation range i , x_i is a vector of independent β is a vector of parameters to be estimated, and ε are the random error terms assumed to be standard normal distributed. Since y_i^* is latent (unobserved), we observe discrete responses of the variable y_i as follows:

$$y_i = 0 \text{ (low accounting practice,) if } y_i^* \leq 0, \dots \dots \dots (2)$$

$$y_i =$$

$$1 \text{ (medium accounting practice) if } 0 \leq y_i^* \leq \mu_1, \dots \dots \dots (3)$$

$$y_i = 2 \text{ (High accounting practices) if } \mu_1 < y_i^* \leq \mu_2, \dots \dots \dots (4)$$

Where, μ_j are unknown ordered threshold parameters to be estimated with the unknown coefficients, β . The probability that the ordered dependent variable y takes the different possible values is

$$p\left(y = \frac{0}{x}\right) = \Phi(\mu_1 - x'\beta) \dots \dots \dots (5)$$

$$p\left(y = \frac{1}{x}\right) = \Phi(\mu_2 - x'\beta) - \Phi(\mu_1 - x'\beta) \dots \dots \dots (6)$$

$$p\left(y = \frac{2}{x}\right) = 1 - \Phi(\mu_2 - x'\beta) \dots \dots \dots (7)$$

Where, Φ indicates a cumulative normal distribution. The cut-points μ_j divide the categories of the dependent variable. The marginal effect is used to determine the influences of the independent variable per

unit change on the dependent variable while everything else is constant. Computation of marginal effects is meaningful for the ordered probit model because estimated parameter coefficients do not represent the magnitudes of the effects of independent variables on the categories of dependent variable (Green, 2018). Therefore, the marginal effects of changes in the regressors are:

$$\frac{\partial \text{prob}\left(y = \frac{0}{x}\right)}{\partial x} = -\Phi(x'\beta) \beta \dots \dots (8)$$

$$\frac{\partial p\left(y = \frac{1}{x}\right)}{\partial x} = [\Phi(\mu_1 - x'\beta) - \Phi(x'\beta)] \beta \dots \dots (9)$$

$$\frac{\partial p\left(y = \frac{2}{x}\right)}{\partial x} = \Phi(\mu_2 - x'\beta) \beta \dots \dots (10)$$

The parameter of the ordered probit model is estimated by the maximum likelihood method. The entire test is performed by using STATA version 16 software.

2.5.Measurement of Variables

Variables	Variable Type	Variable definition and measurement	Expected Effect
Sex	Dummy	1 if manager head is male and otherwise 0 (Amidu et al., 2011)	+
Age of enterprises	Continuous	The age of enterprises in years (Melese, 2021)	+
Educational level	Continuous	Manager education level in years of schooling (Nguyen and Pham, 2022)	+
Experience of managers	Continuous	Experience of manager/owner in years (Maseko and Manyani, 2021)	+
Capital	Continuous	The amount of total capital allocated for the operation of MSEs in ETB (Chen and Zhang, 2020)	+
Number of employees	Continuous	Total number of employees working in the MSEs (Melese, 2021).	+
Marital Status	Dummy	1 if the manager is married, otherwise 0 Alattar et al., 2019)	-
Daily transaction	Continuous	The total amount of transaction performed	+

Formal training	Dummy	daily in ETB (Ahmed and Rahman, 2023) 1 if the manager has access to related formal training, otherwise 0 (Nguyen and Pham, 2022)	+
Housing arrangement	Categorical	1 if the enterprise has private, 2 if rented and 3 if gift from Kebele to working house (Sallem et al., 2017)	+
Position	Categorical	1, owner, 2 manager, 3 both (Osim et al., 2020)	-/
Business type	Categorical	1 manufacture and construction, 2 Trade and services and 3 urban agriculture (Ahmed and Rahman, 2023)	+/-

3. Results and Discussions

This section provides a detailed presentation and discussion of the findings obtained from the data analysis. It aims to provide a clear and concise understanding of the variables'

relationships and their effect on implementation of formal accounting practices.

3.1.Descriptive Statistics of Dependent and Independent variables

Table 2. Descriptive statistics of Accounting Practice (Dependent Variable)

Accounting Practice	Freq.	Percent	Cum.
Low practice	59	24.79	24.79
Medium practice	60	25.21	50.00
High practice	119	50.00	100.00
Total	238	100.00	

Table 3. Descriptive Statistics of Independent variables

Variable	Obs	Mean	Std. Dev.	Min	Max
Education	238	11.954	2.332	8	15
Managerial experience	238	2.887	2.429	0	6
Age of enterprise	238	4.727	1.995	2	9
Number of employees	238	6.151	4.14	2	16
Capital	238	89233.193	74627.452	18000	250000
Daily transaction	238	304.202	660.208	50	8000

Source: STATA output, 2025

3.2.Econometric Analysis

3.2.1. Model Evaluation and Diagnostics

3.2.1.1.Correlation and Multicollinearity Analysis

The Pearson correlation matrix analysis confirms that the independent variables in

the study do not suffer from severe Multicollinearity, as all correlation coefficients are below the critical threshold of 0.75 (Hair et al., 2010). The absence of Multicollinearity ensures that the regression model is robust, with reliable and meaningful coefficient estimates (table 4)

Table 4. Pearson Correlation Matrix

Variables	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
(1) sex	1.000											
(2) marital.St	0.022	1.000										
(3) education	0.191	0.080	1.000									
(4) training	0.052	0.076	0.341	1.000								
(5) experience	0.281	0.045	0.739	0.380	1.000							
(6) age	0.033	0.368	0.298	0.530	0.282	1.000						
(7) employee	0.107	0.293	0.360	0.557	0.266	0.421	1.000					
(8) capital	0.159	0.043	0.661	0.209	0.389	0.174	0.325	1.000				
(9) transaction	0.039	0.012	0.001	0.021	0.035	0.071	0.106	0.022	1.000			
(10) Bus-Type	0.120	0.078	0.002	0.086	0.015	0.030	0.088	0.088	0.074	1.00		
(11) position	0.029	0.163	0.008	0.011	0.014	0.124	0.009	0.097	0.048	0.44	1.000	
(12) house	0.104	0.237	0.240	0.282	0.156	0.056	0.474	0.282	0.056	0.05	0.030	1.00

Source: STATA output, 2025

3.2.1.2. Model Specification Test

The link test is used to test model specification. A significant $_hat$ term indicates that the model explains variations in accounting practice implementation, while an insignificant $_hatsq$ term suggests no major specification errors. The results confirm the model's adequacy, supporting its use for policy recommendations and further research on MSE accounting practices. In the ordered probit model, the cut points ($cut1$ and $cut2$) represent threshold values on the latent (unobserved) variable that define the boundaries between the ordered categories of the dependent variable. These cut points indicate the values at which the latent variable causes the observed outcome to shift from one category to the next (e.g., from low to medium, or

from medium to high levels of accounting practice implementation) (Long, 1997) (Table 5).

3.2.1.3. Model Fitness Test Using Akaike's Information Criterion (AIC) and Bayesian Information Criterion (BIC)

The model's fit was assessed using Akaike's Information Criterion (AIC) and Bayesian Information Criterion (BIC). The log-likelihood improved significantly from -247.449 (null model) to -61.902 (fitted model), indicating that the predictors substantially enhance the model's ability to explain the data. The AIC value of 157.804 and BIC value of 216.832 suggest the model achieves a good balance between fit and simplicity.

Table 5. Link Test

Accounting practice	Coefficient	Std. err.	Z	P>z
$_hat$	0.090	0.038	2.400	0.016
$_hatsq$	-0.806	0.711	-1.130	0.257
$/cut1$	0.305	3.381		
$/cut2$	4.688	3.205		

In general, lower AIC and BIC values indicate better model fit, as they reflect models that explain the data well without unnecessary complexity. The significant improvement in log-likelihood, along with

favorable AIC and BIC values, confirms the model's robustness and suitability for predicting the implementation of formal accounting practices in MSEs (Long, 1997; Green, 2018) (Table 6).

Table 6. Model Fitness Test

Observation	ll(null)	ll(model)	Df	AIC	BIC
238	-247.449	-61.902	17	157.804	216.832

Predictive Margins Analysis for Accounting Practice Levels

The predictive margins analysis shows that 50% of MSEs are predicted to engage in high accounting practices, while 24.9% and 25.1% are predicted to use medium and low practices, respectively. All probabilities are statistically significant ($P = 0.000$), with narrow confidence intervals for high and

Table 7. Predictive Margins Test

Expression	Margin	std. err	Z	P>z
High	0.500	0.013	37.920	0.000
Medium	0.249	0.018	13.580	0.000
Low	0.251	0.013	19.610	0.0

low categories, indicating precise estimates. These results suggest that while half of the enterprises have adopted strong accounting practices, a substantial portion still operates at lower levels, highlighting the need for targeted policy measures to support improvements in accounting practice implementation among MSEs (Long, 1997; Green, 2018) (table 7).

3.2.2. Ordered Probit Regression Output and Interpretation of its Marginal Effect

3.2.3. Discussions of the Ordered Probit Model Regression Result

Sex: The regression result indicates that male MSE owners / managers are 14.82% more likely to adopt high accounting practices compared to females.

This effect is statistically significant at the 10% level ($p=0.096$).

This difference suggests a potential gender disparity in the implementation of formal accounting practices, which could be attributed to differences in access to resources and support. The positive association between being male and implementing higher accounting practices may stem from several socio-economic and cultural factors. For instance, in our country, males generally have better educational attainment and greater exposure to training and technology

Table 8. Result of Ordered Probit Model Regression

Accounting practice	Coef.	St.Err.	z-value	p-value	dy/dx high	dy/dx medium	dy/dx low	Sig
sex : female								
Male	.547	.329	1.66	.096	.1482104	-0.148	-.0000049	*
marital status :sin								
Married	-.583	.349	-1.67	.095	.1458783	0.146	.0000036	*
Education	.352	.137	2.58	.01	.0907619	-0.091	-.0000019	**
								*
Position: M&O								
Manger	-.013	.463	-0.03	.977	.0034194	-0.003	-.0000071	
Owner	.178	.449	0.40	.692	.0464615	-0.046	-.0000078	
Bus-Type: manufact								
Trade &serv	-.428	.4	-1.07	.285	.1215849	0.122	.0000004	
Agri	.181	.369	0.49	.623	.0457112	-0.046	-.0000009	
Training : not Trained	1.129	.416	2.72	.007	.2887339	-0.289	-.000002	**
								*
Experience	.453	.127	3.58	.000	.1167154	-0.117	-.0000024	**
								*
house : private								
Rented	.872	.423	2.06	.039	.2201148	-0.22	-.0000077	**
Kebele	1.476	.519	2.84	.004	.289804	-0.289	-.0000092	**
								*
Age of enter Employee	.18	.087	2.08	.038	.0463868	-.046	.0000006	**
	.235	.07	3.37	.001	.0604487	-.060	-.0000012	**
								*
Capital Transaction	.00005	.000001	5.21	.00	.000129	.000129	.0000007	**
cut1	.00046	.0004	1.17	.24	.001207	.001206	.0000002	
cut2	9.116	1.602						
	12.918	2.012						
Mean dependent var		2.252	SD dependent var			0.829		
Pseudo r-squared		0.750	Number of obs			238		
Chi-square		371.095	Prob > chi2			0.000		
Akaike crit. (AIC)		157.804	Bayesian crit. (BIC)			216.832		

*** $p < .01$, ** $p < .05$, * $p < .1$

Source: STATA output, 2025

compared to females (Nguyen and Pham, 2022). Amidu et al. (2011) on their empirical studies also suggest that male-owned businesses often have greater access to financial resources and external networks, which can facilitate the implementation of formal accounting practices. Similarly, Enyew et al. (2020) highlight that male MSE owners or managers are more likely to have prior business experience and education in

financial management, which positively impacts their ability to implement structured accounting systems. Moreover, studies by Bardasi et al. (2011) found that gender disparities in access to credit and business support services further exacerbate the differences in accounting practices between male and female MSE owners or managers (table 8).

Marital Status: With regard to marital status, the result indicates that married MSE owners or managers are 14.59% less likely to implement high accounting practices compared to single MSE owners or managers, significant at the 10% level ($p=0.095$). This may reflect the additional responsibilities and resource constraints associated with family life, which could impact business management focus. The negative relationship between being married and the likelihood of implementing higher accounting practices can be attributed to increased family responsibilities that may divert attention and resources from business operations. Alattar et al. (2019) also found that married MSE owners or managers often prioritize family obligations, which can limit their focus on business management. Family commitments can lead to more conservative business practices, reducing the willingness to invest in formal accounting systems (table 8).

Education: The result about the effect of education revealed that for each additional year of education, the probability of an enterprise adopting and implementing high accounting practices increases by approximately 9.08%, holding all other variables constant. With this effect being highly significant at the 1% level ($p=0.01$), reflects the critical role of education in enhancing financial literacy and the capacity to implement structured accounting systems. Education plays a crucial role in enhancing the adoption of advanced accounting practices. Higher educational attainment improves financial literacy, which is essential for understanding and implementing effective financial management systems. Similarly, Nguyen

and Pham (2022) also emphasize that educated MSE owners or managers are better equipped to comprehend the importance of accurate financial records and their role in business success. Additionally, Melese (2021) found that higher levels of education are associated with improved cognitive skills, which enhance problem-solving abilities in financial management. Moreover, a study by Owolabi and Alu (2012) indicates that education significantly impacts the adoption of modern accounting practices, as educated MSE owners or managers are more likely to embrace new technologies and methodologies in financial management (table 8).

Formal Training: The ordered probit regression shows that enterprises with formally trained managers are 28.87% more likely to adopt and implement high accounting practices, highly significant at the 1% level ($p=0.007$). This highlights the crucial role of financial training in enhancing formal accounting implementation (Nguyen and Pham, 2022). Studies by Osim et al. (2020) and Akhtar et al. (2015) also confirm that training improves financial record-keeping, decision-making, and regulatory compliance, ultimately strengthening business performance (Table 8).

Managerial Experience: The ordered probit regression results show that each additional year of managerial experience increases the probability of an enterprise implementing high accounting practices by 11.67%, a result that is highly significant at the 1% level ($p < 0.001$). This strong positive association suggests that experienced managers are more aware of the value of

financial records and better equipped to apply formal accounting systems that support business performance. However, an interesting anomaly emerges: MSEs led by managers with very short managerial experience tend to lag significantly in adopting formal accounting practices, regardless of their capital or sector. This highlights the critical role of hands-on business experience in shaping sound financial management. These findings are consistent with Maseko and Manyani (2021), who reported that prior business experience is key to the adoption of sophisticated accounting systems. Furthermore, managerial experience enhances an entrepreneur's ability to anticipate financial risks and implement effective internal controls (Table 8).

Age of Enterprise: The effect of age on MSEs formal accounting practice indicates that an additional year in the age of an enterprise increases the probability of implementing high accounting practices by 4.64%, significant at the 5% level ($p=0.038$). This indicates that older enterprises are more likely to adopt formal accounting practices due to their experience in navigating financial challenges and understanding the importance of financial oversight. Melese (2021) also found that as businesses mature, they develop more sophisticated financial management systems to handle increased operational complexity. The implication is that older enterprises are more likely to adopt formal accounting practices as they seek to improve financial transparency and credibility with stakeholders (table 8).

Number of Employees: The ordered probit regression result revealed that for each additional employee, the probability of the enterprise adopting and implementing high accounting practices increases by 6.04%, significant at the 1% level ($p=0.001$). This reflects the growing need for structured financial management as the size of the enterprise increases. Larger enterprises, as measured by the number of employees, are more likely to implement advanced accounting systems (Melese, 2021). Chen and Zhang (2020) also found that as enterprises grow, the complexity of managing financial transactions increases, necessitating the adoption and implementation of more structured accounting practices (table 8).

Capital: The ordered probit regression results reveal a clear trend: enterprises with higher levels of capital are significantly more likely to implement advanced accounting practices. Specifically, for each additional Ethiopian Birr of capital, the probability of adopting high accounting practices increases by 0.01% ($p < 0.001$). While the marginal effect per Birr is small, the impact becomes substantial as capital levels grow, illustrating how capital variability across MSEs contributes to differences in accounting practice implementation. This suggests that MSEs with stronger financial resources are better positioned to invest in accounting systems, technology, and professional services. These results align with findings from Chen and Zhang (2020), Parnell et al. (2020), Adekunle and Fadeyi (2013), and Schmid (2017), who emphasize that access to capital supports financial transparency, operational

efficiency, and better business performance (Table 8).

Housing Arrangement: The ordered probit regression results show that individuals in rented housing are 22.01 % more likely to engage in high accounting implementation practices compared to those in private housing (p-value=0.039). MSE owners or managers in Kebele-provided housing are 28.98 more likely to implement high accounting (p-value=0.004). This suggests that the stability of Kebele housing reduces financial stress, supporting better business practices. The implication is that living in Kebele housing may provide a sense of stability and security, particularly for low-income MSE owners or managers. When basic housing needs are met affordably, business owners may feel more confident to invest in formalizing their operations and adopting better accounting practices which is in line with the resource-based theory (Singh et al., 2020; Berner et al., 2012; Schillemans & Bjurström, 2020 ; Barney et al., 2021).

4. Conclusion, Recommendation and Direction for Future Studies

This study aimed to examine the factors influencing the implementation of formal accounting practices among MSEs using the ordered probit model. Key findings indicated that higher education, managerial experience, and formal training positively influenced the implementation of formal accounting practices. Enterprise characteristics, such as age and size, were also linked to better accounting practices. To enhance accounting practices among MSEs, policy makers should implement short-term

training programs in areas such as basic financial accounting, cashflow management, tax compliance and reporting, budgeting and financial planning, as well as introduction to accounting software's like Peachtree and QuickBooks. In addition, financial institutions should offer loan products specifically designed for MSEs to invest in accounting infrastructure and workforce development along with financial services such as mobile banking that are tailored to their business needs. Future research should focus on sector-specific challenges to address the unique needs of industries such as manufacturing, agriculture, and services. Comparative studies across different towns or regions should also be conducted to detect variations in accounting practices influenced by local socio-economic factors. Furthermore, key infrastructural challenges that hinder the adoption and implementation of formal accounting system, such as power outages, high ICT access costs, and limited digital infrastructure should be considered by future studies.

Acknowledgement

I would like to express my sincere gratitude to the owners and managers of the MSEs for their invaluable cooperation, which played a key role in the successful completion of this study. Their participation was crucial to the effectiveness of the research.

5. References

Aboagye-Otchere, F., & Agbeibor, J. (2012). The International Financial Reporting Standard for Small and Medium-sized Entities (IFRS for SMEs): Suitability for small Ghana businesses. *Journal of Financial*

- Reporting and Accounting*, 10(2), 190–214.
- Adekunle, E., & Fadeyi, O. (2013). The impact of financial management on the performance of manufacturing companies in Nigeria. *Research Journal of Finance and Accounting*, 4(17), 156–161.
- Ahmed, M., & Rahman, R. (2023). The role of digital accounting in enhancing the performance of SMEs in developing countries. *Journal of Accounting and Public Policy*, 42(2), 101–118.
<https://doi.org/10.1016/j.jaccpubpol.2023.01.002>
- Akhtar, S., Raheel, M., & Ahmed, I. (2015). The impact of training on SMEs' performance in Pakistan. *Journal of Business Research*, 68(8), 1810–1817.
- Alattar, J., Kouhy, R., & Innes, J. (2019). The adoption of management accounting practices in MSEs in Bahrain. *Journal of Accounting and Finance*, 29(4), 567–590.
<https://doi.org/10.1080/09638180.2019.1659090>
- Amidu, M., John, E., & Joshua, A. (2011). E-Accounting practices among SMEs in Ghana. *Journal of Management Policy and Practice*, 12(4), 146–155.
- Ayele, G. (2015). Assessment of financial record-keeping practices of SMEs in Bahir Dar City, Ethiopia. *Bahir Dar University. Journal of Economics and Management*, 3(1), 23–35.
- Bardasi, E., Sabarwal, S., & Terrell, K. (2011). How do female MSE owners or managers perform? Evidence from three developing regions. *Small Business Economics*, 37(4), 417–441.
- Barney, J., Wright, M., & Ketchen, D. (2021). Resource-based theory and the MSE: Foundations, extensions, and future. *Journal of Management*, 47(1), 302–318.
<https://doi.org/10.1177/0149206320977090>
- Berner, E., Gomez, G., & Knorringa, P. (2012). Helping a large number of people become a little less poor: The logic of survival MSE owners or managers. *The European Journal of Development Research*, 24(3), 382–396.
- Chen, L., & Zhang, W. (2020). Barriers to effective accounting practices in small enterprises: A case study of Chinese SMEs. *Small Business Economics*, 54(1), 33–49.
<https://doi.org/10.1007/s11187-018-0123-4>
- Enyew, M. Z., Tamiru, A. A., & Kenubish, A. A. (2020). Determinants of accounting practice in micro and small enterprises: Evidence from Ethiopia. *Journal of Economics, Business, and Accountancy Ventura*, 23(2), 293–303.
- Ethiopia's Micro and Small Enterprises (MSEs) Development Strategy. (2011). Micro and Small Enterprises (MSEs) Development Strategy.

- Ministry of Trade and Industry, Government of Ethiopia.
- Gilbert, K., & Amoako. (2013). Accounting practices of SMEs: A case study of Kumasi Metropolis in Ghana. *International Journal of Business and Management*, 8(24).
- Goshu, F., & Mba, F. (2015). Determinants of micro and small enterprises growth in Ethiopia: The case of Nekemte town of Oromia region, Ethiopia. *Journal of Investment and Management*, 7(13), 92–105.
- Greene, W. H. (2018). *Econometric analysis* (8th ed.). Pearson.
- Greenwood, R., Oliver, C., Lawrence, T., & Meyer, R. (2019). *The Sage handbook of organizational institutionalism* (2nd ed.). SAGE Publications.
- Hailu, A. Y. (2020). Financial management practices of micro and small enterprises in Addis Ababa.
- Hair, J., Black, W. C., Babin, B. J., and Anderson, P. E. (2010). *Multivariate Data Analysis* (7th ed.). New Jersey: Pearson Prentice Hall.
- Kahsay, G., & Zeleke, G. (2019). Factors affecting use of accounting records on small & micro enterprises (the case of Debre Birhan City, Ethiopia). *Journal of Investment and Management*, 8(1), 1–7.
- Long, J. S. (1997). *Regression models for categorical and limited dependent variables*. SAGE Publications.
- Maseko, N., & Manyani, O. (2021). Accounting practices of SMEs in Zimbabwe: An investigative study of record-keeping for performance measurement. *Journal of Accounting and Taxation*, 3(8), 158–161.
- Mekonnen, G. B. (2019). Accounting practices of small and micro enterprises in North Shewa Zone Amhara Regional State of Ethiopia. *Journal of Investment and Management*, 8(2), 40–47.
- Melese, A. (2021a). Accounting practices and financial performance of small and medium enterprises: The case of selected SMEs in Addis Ababa. *Ethiopian Journal of Economics*, 29(2), 45–60.
- Melese, A. (2021b). Bookkeeping practices and financial performance of small and medium enterprises: The case of selected SMEs in Addis Ababa. *Ethiopian Journal of Economics*, 29(2), 45–60. <https://www.ethiopianjournalofeconomics.org>
- Musah, A. (2018). Benefits and challenges of bookkeeping and accounting practices of SMEs and its effect on growth and performance in Ghana.
- Negalign, N. O. (2019). The accounting practice of small and medium-sized enterprises and its effect on access to finance: A case study of Arba Minch Town, Southern Region. *International Journal of Academic Research in Business and Social Sciences*, 11(28).

- Nguyen, T., & Pham, H. (2022). Accounting practices in micro enterprises: Evidence from Vietnam. *International Journal of Accounting*, 57(1), 24–35. <https://doi.org/10.1016/j.inta.2022.01.001>
- Obazee, A. T. (2019). Exploring financial management practices of small and medium-sized enterprises in Nigeria.
- Obi, J. (2015). The role of small-scale enterprises in the achievement of economic growth in Nigeria. *International Journal of Social Sciences and Humanities*, 3(1), 1–27.
- Osim, E., Umoffong, N., & Goddymkpa, C. (2020). Management accounting practices and the performance of small and medium-sized enterprises in Akwa Ibom State, Nigeria. *Business Perspective Review*, 2(2), 57–74.
- Owolabi, F., & Alu, O. (2012). Effective accounting systems in small and medium scale enterprises in Nigeria: A catalyst for business growth. *Journal of Management Research*, 4(4), 12–18.
- Parnell, J., Long, Z., & Lester, D. (2020a). Competitive strategy and MSE performance: Exploring the moderating role of accounting practices. *Journal of Small Business Management*, 58(3), 420–437. <https://doi.org/10.1080/00472778.2019.1641540>
- Parnell, J., Long, Z., & Lester, D. (2020b). Competitive strategy and MSE performance: Exploring the moderating role of accounting practices. *Journal of Small Business Management*, 58(3), 420–437.
- Pavtar, A. (2017). Accounting practices of SMEs: Challenges and effects: A survey of SMEs in Makurdi Metropolis-Benue State-Nigeria. *World Journal of Finance and Investment Research*, 2(1), 16–29.
- Prempeh, A., Osei, B., Osei, F., & Kuffour, E. O. (2022). Accounting records keeping and growth of small and medium enterprises in Kumasi Metropolitan. *Journal of Social Sciences*, 184–207. <https://doi.org/10.4236/jss.2022.1013015>
- Puspaningrum, A. (2020). Market orientation, competitive advantage and marketing performance of small medium enterprises (SMEs). *Journal of Economics, Business, & Accountancy Ventura*, 23(1), 19–27.
- Sallem, N., Nasir, N., Nori, W., & Kassim, C. (2017). Small and medium enterprises: Critical problems and possible solutions. *International Business Management*, 11(1), 47–52.
- Schillemans, T., & Bjurstrøm, K. (2020). Accountability and agency theory in the MSE context. *Public Administration Review*, 80(4), 521–530. <https://doi.org/10.1111/puar.13206>
- Schmid, S. (2017). Financial management in SMEs: The impact of financial literacy on firm performance.

- Journal of Small Business and Enterprise Development*, 24(1), 106–123.
- Singh, S., Best, P., & Bojei, J. (2020). Institutional pressures and the adoption of accounting practices in MSEs. *Journal of Business Research*, 118, 372–384. <https://doi.org/10.1016/j.jbusres.2020.07.003>
- Yemane, T. (1967). *Elementary sampling theory*. New Jersey.
- Zaman, M., Saleh, M., & Aldakhil, A. (2021). The impact of internal controls on agency costs in small enterprises. *International Journal of Accounting & Information Management*, 29(1), 15–35. <https://doi.org/10.1108/IJAIM-07-2020-0105>