

An Empirical Study on the Effects of Managerial Competence on Firm Profitability

Beny Mwenda¹, Magwana Ngollo², Amos Mwasota³

¹²³College of Business Education, Tanzania

Correspondent: benybnjmn@gmail.com¹

Received : June 7, 2023

Accepted : July 16, 2023

Published : July 31, 2023

Citation: Mwenda, B., Ngollo, M., Mwasota, A. (2023). An Empirical Study of the Effect of Managerial Competence on Firm Profitability. *IloMATA International Journal of Tax and Accounting*, 4(3), 491-507. <https://doi.org/10.52728/ijtc.v4i3.794>

ABSTRACT: Profits are generated by managing assets and using them wisely to create revenues that exceed costs. This study aimed to analyse the effects of managerial competence on firm profitability listed in the Dar es Salaam stock exchange (DSE). The quantitative research design was used to collect, analyse and interpret data in this research while Panel Regression Model was selected to analyse the influence of Managerial competence on profitability of listed firms. POLS technique was used to check robustness and Diagnostic tests were used to meet the criteria of regression analysis. The regression analysis indicate that managerial competence had a significant effect on firm profitability. Raising managerial competence has the potential to significantly increase business profitability, as managers play a key role in an organization's overall functioning. The researchers suggested that shareholders should thoroughly analyse potential managers' competencies and credentials before allocating managerial duties since hiring a competent management team is likely to have a beneficial impact on the firm's profitability. Shareholders should strive to reduce the risk of choosing managers who lack the requisite abilities to maximize the firm's profitability by performing due diligence in the selection process.

Keywords: Profitability, Management Competence, Stock Exchange



This is an open access article under the CC-BY 4.0 license.

INTRODUCTION

The aspiration to attain the utmost profits has been an enduring pursuit of firms and businesses since the dawn of time ([Ajanthan, 2013](#)). Profits are the heart and soul of any businesses and are derived from the difference between the two components of daily business operations specifically revenues and expenses ([Akinleye. & Ademiloye, 2018](#)). Profits can be generated by managing intangible assets such as labour carefully and using them wisely to create revenues that exceeds costs, resulting in a positive profit margin ([Alarussi et al., 2018](#)). Profits can be affected by a variety of factors such as unique characteristics of a firm and its industry ([Assenga et al., 2018](#)) as well as the different leadership styles ([Ayako et al., 2015](#))

Leadership styles have a substantial influence on employee performance and productivity ([Bae et al., 2017](#)). At this juncture, it becomes clear that in order for the firms to maximize profits, it is imperative to have executives with the necessary skills required and the knowledge to manage resources and workforce of the firms by executing the tasks of planning, organizing, directing, and supervising activities competently while keeping in mind, the common aim of achieving the desired objectives of the firms ([Batchimeg, 2017](#)).

Building upon the concept that profits stem from executives possessing the necessary skills and knowledge, a vital question emerges: how can managerial competence be identified? Managerial competence is a subjective evaluation of an individual's knowledge, skills, and abilities required for effective performance as a manager under certain conditions ([Banafa et al., 2015](#)). In other words, a manager is considered competent if they can demonstrate the required skills and knowledge for their job ([Biorn, 2017](#)). Indicators of managerial competence include factors such as educational background and management tenure ([Borda et al., 2017](#)).

For the sake of obtaining a better comprehension of the significance of managerial competency, it is necessary to differentiate between profit and profitability ([Mwenda et al., 2021](#)). By distinguishing between these two concepts, a manager's ability to create values for a company and its stakeholders more accurately can possibly be identified. This is essential as it has been the common adage for firms to seek maximum profit but at the end it is essential to ask do maximum profits makes the firm profitable? Whereas profit is the monetary difference between revenues and expenditures ([Mutende et al., 2017](#)), profitability on the other hand is a comparative metric that evaluates the effectiveness and efficiency with which a company generates earnings relative to its expenses and other costs ([Mwenda & Magwana, 2022](#); [Omondi & Muturi, 2013](#)). Return on assets, return on equity, and net profit margin are common measures of profitability ([Mwenda et al., 2023](#)). These ratios provide insightful information regarding a company's ability to generate returns and create value.

From the observed differences between profit and profitability it becomes apparent that profit alone does not ensure a sustainable business, but the ability to consistently generate profit, i.e., profitability, acts as a moderator for sustainable business ([Matar & Eneizan, 2018](#); [Mule et al., 2015](#)). In addition, it is logical to believe that having a high degree of management competence increases the likelihood of company profitability, and this will lead to successful and sustainable firms ([Mwenda et al., 2021](#)). Furthermore, researchers across the globe have also been interested in the subject matter of this research.

([Sumaira & Amjad, 2013](#)) studied 64 Indonesian insurance firms between 2011 and 2015 and determined that managerial competency had a positive effect on ROA. They used the ratio of profit to total number of professionals to calculate the Management Competence Index. ([Bist et al., 2017](#); [Bryman, 2016](#)) studied insurance companies listed in Amman stock exchange and concluded that management competence had a positive and significant effect on ROA and ROE. They measured management competence as a ratio of net income to total number of employees. Besides, ([Dioha et al., 2018](#)) researched small firms in Ghana and determined that top management had the skills and attitudes to improve performance, nevertheless, due to some factors they failed to employ these talents effectively to enhance firm performance.

In addition to the previous studies mentioned, ([Daniel & Tilahun, 2013](#)) conducted a research in 23 insurance companies in Kenya and determined that managerial competence had a positive and significant influence on their profitability. Management competence was measured as a ratio of profit to total number of professionals. Lastly, ([Pervan et al., 2017](#); [Rwechungura et al., 2020](#)) studied commercial banks in Uganda. Their findings highlighted managerial competence's critical role in commercial banks' financial performance. They measured the competence in terms of knowledge, skills and experience of staff while financial performance was measured through by profitability and liquidity.

([Siwandeti et al., 2021](#)), used profitability as a proxy for financial performance and concluded that there was a significant positive relationship between managerial competence and financial performance of ABU SACCO. Their dimension of managerial competence included Interpersonal Skills, Training and Professional Competence. ([Pantea et al., 2014](#)) stated that there was a significant association between managerial competence and financial performance of small businesses operating in Mbarara district in Uganda. They measured management competence as knowledge, skills, and abilities using a point scale system, whereas knowledge was focused on the collection of current information, skills emphasized on the identification of problems, and abilities centred on achieving business objectives or goals.

Even though there is a common consensus on the relationship between managerial competence and profitability, the arising greatest challenge is the manner in which the managerial competence is measured. Some researchers measures it qualitatively as skills, knowledge and attributes ([Too & Simiyu, 2019](#); [Ubesie, 2014](#); [Zainudin et al., 2018](#)) while other researchers measured it quantitatively. Apart from that, ([Taouab & Issor, 2019](#)) also concluded that possession of competence doesn't necessarily lead to its proper and effective utilization in enhancing the firm performance. As it stands, managerial competence is a highly subjective measure and cannot be generalized to all firms at once. The same measure may lead to different results if employed elsewhere or a different proxy for managerial competence can also lead to different results due to the geographical locations, firm specific factors, culture and human behaviour. Hence, to simply conclude that managerial competence has a positive effect on the outlook which is based only on a highly agreeable consensus from elsewhere in the world will be a denial of further attainment of knowledge that would have proved otherwise.

Specific researches on specific markets such as DSE that leads to sub-optimal decision making due to its lack of specific clarity are still rare to find. Most of the prevailing researches have addressed firms' specific factors such as liquidity, leverage and gearing, and as such becomes imperative to conduct this study so as to analyse the effect of managerial competence on profitability of firms listed in the DSE. The findings will contribute to the current body of knowledge and provide a more specific and distinguished understanding of the issue as studied in the Tanzania's market. Apart from that, the need for empirical study will always persist in order to account for diverse factors affecting the relationship between managerial competence and firm profitability such as geographical diversification of the firm as a control variable in this study. With such view in mind, the researchers went forth and formulated the following hypothesis.

H_0 : Managerial competence does not influence profitability of firms listed at DSE.

Theoretical Reviews Underpinnings the Paper

This research employed Resource Based Theory (RBT) introduced by Wernerfelt's (1984) and supported by Barney's (1991) to analyse how management competence affects profitability of a firm. According to the RBT, a company's competitive advantage lies in the sum of its parts, including its assets, capabilities, talents, and other non-financial resources (Tailab, 2014). Both financial and non-financial resources are taken into account as contributing factors to a firm's ability in generating profit. Non-financial resources that comprises managerial competence, refers to the ability to optimize the existing professional and physical resources to effectively and efficiently generate the desired profit levels for the firm. Scholars have used this theory (Dioha et al., 2018; Lazăr, 2016) to examine the connection between non-financial indicators and performance in a variety of settings. In this research, we use the RBT to investigate the impact of management skills on firm profitability in Tanzania.

METHOD

This study employed a quantitative research design, a methodology which enables the gathering, analyzing, and interpreting the data using quantitative techniques (Creswell & Plano Clark, 2018). Quantitative data analysis was chosen due to its efficacy in elucidating the relationships between variables (Bryman, 2016). This approach has also been utilized by numerous researchers (Chandrapala & Knápková, 2013; Dioha et al., 2018; Omondi & Muturi, 2013) mainly due to its proficiency in establishing links between two variables

Model Specification and Analysis

The Panel Regression Model was employed to examine the impact of managerial competence elements on the profitability of firms listed on the Dar es salaam stock exchange. The data set utilized in this research (panel data) was ideally compatible with this model and was expected to yield legitimate results. The model was selected following the footsteps of previous researchers who have used similar approaches in their researches. Given that the dependent variable is numerical, it was deemed appropriate to use the model in this study. The panel regression model and its associated variables are depicted in equation (i) $ROA_{it} = \beta_0 + \beta_1 mc_{it} + \beta_2 sgrowth_{it} + \beta_3 divpay_{it} + \beta_4 firmlev_{it} + \beta_5 fsize_{it} + \beta_6 fage_{it} + fd_i + td_t + \varepsilon_{it}$ (i)

In the provided equation, the dependent variable is represented by *ROA*. The constant is denoted by β_0 , while the coefficients β_1 to β_8 represent coefficients of a set of independent variables (such as management competence, firm leverage, sales growth, dividend payout, firm size, and firm age). The variable that signified a firm-specific effect that doesn't change over time was the firm dummy (fd_i), while a variable that signified a time-specific effect that varies over time was time dummy (td_t). The error term is represented by ε and it was assumed to be a white noise. The variables *i* and *t* represent firm and time units respectively.

To verify the robustness of the results, the Pooled Ordinary Least Squares technique (POLS) was implemented and was executed with three estimations, labeled as 1, 2, and 3. This involved the

exclusion of control variables to ascertain whether or not the results were in line with those of the baseline model (Fixed Effect).

Data Type and Source

The study gathered panel data on Return on Assets (ROA, the dependent variable), Managerial Competence (the independent variable), and various control variables including leverage, sales growth, dividend pay-out, firm size, and firm age. This data was sourced from the audited annual reports of companies listed on the DSE. The panel data from all locally listed firms for the period spanning of 2006 to 2022 were collected.

Panel data was chosen because of its distinct advantages: it is highly informative, offers more variability, reduces collinearity, and has a higher degree of freedom and efficiency. Additionally, it can detect and measure effects that are not easily identified through cross-sectional and time series dimensions, leading to more reliable and generalized outcomes ([Batchimeg, 2017](#)).

The data from 2006 onwards were used as this was the year when electronic data records began for listed firms in accordance with the Company Ordinance. It's also the same year that DSE started maintaining electronic data. Additionally, this year marked the start of compliance with the International Financial Reporting Standards by listed firms, which were introduced in 2004. Thus, for this research, the collected data for each year spanned from January to December

Sampling and Sample Size

A census method was employed to select a comprehensive sample of 21 local trading companies that had been officially listed by the end of the year 2022. The rationale was due to the limited number of firms listed on the DSE. If the sample size was reduced, it would have compromised the accuracy and reliability of the results. Thus, all 21 firms were included in the analysis for this research.

Measurement of variables

The measurement of firm profitability in this study was through the utilization of Return on Assets (ROA). This choice was made due to ROA being an accounting performance metric that effectively assesses a company's capacity to generate profits by efficiently utilizing its available resources. As a result, it serves as a valuable indicator of managerial competence in the realm of profitability (Liargovas and Skandalis, 2010). Other studies ([Mwenda et al., 2023](#)), employed ROA in determining firm profitability.

Table 1 presents the measurement of each variable and the expected signs.

Table 1: Explanation of variables and expected signs

Parameters of study	Descriptive name	Definition of quantification	Anticipated Sign
target parameter			
ROA	Return on Asset	Profit before tax divided by total assets expressed as a percentage	+/-
Explanatory parameter			

An Empirical Study of the Effect of Managerial Competence on Firm Profitability

Mwenda, Ngollo, and Mwasota

Mc	Management competence	Profit before tax divided by the number of professionals with degrees.*	+
Control			
Firmlev	Firm leverage	Total debt to equity (debt/equity ratio)	+
Sgrowth	Sales growth	Current year's sales minus previous year's sales divided by previous year's sales	+
Divpay	Dividend pay-out	Dichotomous variable: 1 for some dividend, 0 for none	+
Fsize	Firm size	Natural logarithm of total assets	+/-
Fage	Firm age	Number of years since incorporation until the study period	+/-

The study focuses on the pre-tax profits from each year between 2006 and 2022. The count of degree-holding professionals remains constant throughout these years, assuming the firm has been listed during this period. It's presumed that any changes during these years are minor and have minimal or no impact.

Anyone classified as professionals have to meet two requirements. Firstly, they must have a university degree. Secondly, they must either have direct control or be part of the management team, as previously defined by Skandalis et al., in 2008.

Diagnostic Tests

Regression analysis is done under the guidance of necessary conditions that guarantee the validity and precision of the results. As a result, these circumstances were investigated before doing the study. According to (Nwanna & Ivie, 2017) important assumptions include normality, multicollinearity, heteroscedasticity, and autocorrelation which were all evaluated in order to meet the criteria of regression analysis in this study.

Normality

For classical linear regression to produce the best unbiased estimates the residuals must be assumed to have a normal distribution. Data with a normal distribution should have 0 skewness, an acceptable range of -1.0 to +1.0, and a kurtosis range of -3.0 to 3.0. The results shown in Table 7 demonstrates that all variables are within the acceptable ranges for both skewness and kurtosis to confirm the assumption of normality.

Multicollinearity Test

A matrix of pair-wise correlations between variables and correlation coefficients of these variables was used to investigate Multicollinearity. Correlation coefficients often reflect the strengths and linear relationship lies between the two variables. While they should not be highly associated, their value does not fully reflect their connection. The assumption of Multicollinearity is met when correlation coefficients between variables lie between the ranges of +0.9 or -0.9. In absolute terms, the correlation coefficients in Table 2 were determined to be within the required ranges of +0.9 or -0.9. Conclusion was reached that there was a lack of Multicollinearity among the variables included in the multiple regression model used for this study.

Table 2: Pair-Wise Correlation Matrix of the Explanatory Variables

	ROA	Leverage	Sales growth	Dividend pay-out	Managerial competence	Firm size	Firm age
ROA	1						
Leverage	-0.2955	1					
Sales growth	0.0094	-0.0539	1				
Dividend pay-out	0.5451	-0.0627	-0.2134	1			
Managerial competence	0.4824	-0.5563	-0.0348	0.4178	1		
Firm size	0.4286	-0.4198	0.0543	0.1764	0.7736	1	
Firm age	0.4671	-0.4073	-0.0624	0.1208	0.1841	-0.0413	1

Furthermore, Variance Inflation Factors (VIFs) were used to assess multicollinearity. That claims independent variables have multicollinearity if the inverse of the VIF value is less than 0.1 or if the VIF is more than 10.

Table 3: Variance Inflation Factor (VIF) for Multicollinearity Test

Variables	Management competence	Firm size	Firm leverage	Dividend pay-out	Sales growth
VIF	3.41	3.52	1.53	1.70	1.36
1/VIF	0.2632	0.2721	0.5024	0.5174	0.6151

Table 3 shows that none of the variables confers to multicollinearity since the inverse values of the VIF are more than 0.1.

Heteroskedasticity Test

In this study, the researchers employed the Breusch-Pagan/Cook-Weisberg test to assess heteroskedasticity in panel data, as illustrated in Table 4. The null hypothesis for this test indicates that the error variance remains constant (homoskedastic).

$$H_0: \text{Constant variance}$$

Table 4: Breusch-Pagan / Cook-Weisberg test for heteroskedasticity

Return on assets (ROA)	chi ² (1)	6.31
	Prob > chi ²	0.6542

For the ROA model, the Breusch-Pagan test yielded a p-value of 0.6542 and a chi-square value of 6.31. At a 5% level, the chi-square probability was statistically significant. Since there was no evidence of heteroskedasticity in the study's data, the null hypothesis (H₀) of constant variance was not rejected (p-value 0.05).

Auto-correlation test

The Wooldridge test was used in this work to assess auto-correlation, as shown in Table 5. The results showed that ROA had a p-value of 0.2421 and an associated F-statistic value of 1.213. This test's null hypothesis assumed that the data lacked first-order auto-correlation.

$$H_0: \text{No first-order auto-correlation}$$

Table 5: Wooldridge test for auto-correlation in panel data

Return on Assets (ROA)	F(1,18)	1.213
	Prob > F	0.2421

The p-value for the ROA results was 0.2421, higher than the chosen alpha threshold of 0.05 (p-value 0.05). As a result, the null hypothesis that there was no serial correlation rejected, indicating that all relevant variables had been taken into account for the study and that the model had the proper functional form.

Hausman Test

To decide whether to utilize the Fixed Effect (FE) or Random Effect (RE) model, the Hausman specification test was used. The FE model implies that these mean scores are fixed, whereas the RE model assumes that the group's mean scores are picked at random from the population. According to the Hausman null hypothesis there is no systematic difference between the coefficients. The alternative hypothesis (fixed effects would be consistent and efficient) was accepted in the case of the ROA model test because the reported p-value of 0.0124 was lower than the chosen alpha level of 0.05 (Table 6). This resulted in the rejection of the null hypothesis (random effects would be consistent and efficient).

$$H_0: \text{Difference in coefficients is not systematic}$$

Table 6: Hausman test for fixed effects model

Return on equity (ROE)	chi²(8)	13.61
	Prob > chi ²	0.0124

The Fixed Effect model was deemed appropriate in light of the results of this investigation because the Prob > chi2 value was 0.0124, which is lower than the 0.05 alpha level used. In order to analyse the effects of Managerial Competence on firm profitability of listed enterprises, the study used the FE model as a foundation.

RESULTS AND DISCUSSIONS

Descriptive statistics on Managerial competence, profitability and control variables

By displaying the descriptive statistics for the research variables, this part provides a thorough overview of the variables and aids in understanding their behaviour. The mean and the minimum, maximum, and standard deviations were used as indices of central tendency and dispersion respectively. Table 7 provides an overview of the estimated descriptive statistics.

Table 7: Descriptive statistics summary of dependent and independent variables

Variable	Obs	Mean	Std. Dev	Min	Max	Skewness	Kurtosis
ROA	265	13.1732	24.0152	-103.77	60.15	-0.3243	2.2325
Leverage	265	0.4723	0.5424	0.0170	3.5144	-0.5364	2.1510
Sales growth	265	0.6343	8.6343	-0.7651	101.414	0.4273	2.2110
Dividend pay-out	265	0.5422	0.4712	0	1	-0.3732	1.1342
Managerial competence	265	13.6622	4.2721	3.7423	18.8432	-0.1861	2.2151
Firm size	265	7.5670	1.2043	3.4634	10.2455	-0.2364	2.0652
Firm age	265	24.5541	16.1702	0	69	0.8836	2.0353

Descriptive statistics from table 7 shed light on how the study variables such as ROA, Leverage, Sales Growth, Dividend Pay-Out, Managerial Competence, Firm Size, and Firm Age behaved. The data were generated from 265 observations that cover 21 companies between the year 2006 and 2021.

The profitability of various businesses showed significant variation with a mean of 13.1732 and a standard deviation of 24.0152 for ROA. The distribution characteristics of the ROA values are further highlighted by the skewness of -0.3243 indicating that there is a higher concentration of firms with ROA values below the mean. Since ROA measures efficient utilization of assets to generate profit, this is an indication that a large proportion of firms in DSE may not be efficient in utilizing their assets to generate average profits even though the Kurtosis value for ROA of 2.2325 indicates that the majority of the firms' profitability is concentrated not far from the mean value.

Leverage among listed companies had a mean value of 0.4723 which shows that businesses finance around 47.23% of their assets through borrowing (debt) with equity accounting for the remaining 52.77%. The standard deviation of 0.5424 indicates that there is a wide range in the firms' levels of leverage. Given that the distribution of leverage values is negatively skewed. A skewness of -0.5364 indicating a higher concentration of businesses with leverage values that are below the mean indicating a modest borrowing rate. This could be an indication that businesses have various strategies, risk tolerances, or financing availability, all of which could affect their overall risk appetite and the desire for leverage.

With as low as -0.7651 and a maximum of 101.4141, sales growth had a mean of 0.6343 and a standard deviation of 8.6343 indicating a considerable dispersion with some firms seeing negative growth and others seeing astounding increase of in sales. The large variation in sales growth rates among the businesses as indicated by the standard deviation of 8.6343, could possibly be the result of the differences in the industries, market conditions, level of competition or other factors that can hardly be comprehended at the time of publishing this paper. However there is higher

concentration of businesses with sales growth rates above the mean as indicated by the positive skewness of 0.4273.

With a minimum of 0 and a maximum of 1, the dividend pay-out had a mean of 0.5422 and a standard deviation of 0.4712. Implying that, 54% of firms in the dataset distribute portion of their earnings as dividends to shareholders, with some variation in the pay-out. The distribution of dividend pay-out values is further described by the skewness of -0.3732 and kurtosis of 1.1342.

A minimum score of 3.7423 and a maximum score of 18.8432 were displayed for managerial ability, with a mean of 13.6622 and a standard deviation of 4.2721. Since the mean is close to the maximum value, it can be conferred that on average, firms have managerial staffs that are highly competent. The distribution of managerial skill levels among the enterprises is shown by the slight skewness of -0.1861 which indicates a few firms might have managerial competence levels which are below average. The kurtosis of 2.2151 shows that the majority of managerial competence is clustered around and slightly over the average competence value, which indicates a few firms with exceptional managerial competence levels.

Firm size had a mean of 7.5670, a standard deviation of 1.2043, and values as low as 3.4634 and as high as 10.2455. Additional details on the distribution of business sizes are provided by the skewness of -0.2364 and kurtosis of 2.0652, and when taken together with the mean, it can be conferred that the majority of the firms in the DSE are of moderate size with many of them clustered close but below the mean value.

Firm age ranged from 0 to 69, with a mean value of 24.5541 suggesting that the majority of firms in the data set have been in operation for a relatively long period of time. A standard deviation of 16.1702 indicates that there is a relatively high level of dispersion or variability in the ages of the firms in the sample with some firms being much older or younger than others. The distribution of firm ages among the listed firms is shown by the skewness of 0.8836 and the kurtosis of 2.0353 which indicate that there are relatively older firms in the sample than younger firms and they are clustered close yet above the average age value.

Regression Results and Discussion on Managerial competence and firm profitability

Regression analysis was conducted to investigate the effect of managerial skill on the profitability of listed firm using the Fixed Effect (FE) model. Table 8 presents a summary of the findings based on the three baseline model estimations denoted 1, 2, and 3 in table 8. The three models were tested to gauge the effect of the control variables in the results of the model. Model 1 incorporated all the variables, while in model 2 and 3, some of the variables were dropped to see if the effect of managerial competence on profitability would still be significant even in their absences.

Table 8: Baseline Model on Management competence and firm profitability

Variables	1	2	3
Firm leverage	9.6779*** (3.360)	9.3776*** (3.363)	10.8014*** (3.206)

An Empirical Study of the Effect of Managerial Competence on Firm Profitability

Mwenda, Ngollo, and Mwasota

Sales growth	1.0540*** (0.123)	1.0540*** (0.124)	1.0680*** (0.110)
Dividend pay-out	6.0739** (2.781)	6.7701** (2.870)	5.5028** (2.710)
Management competence	1.1410** (0.46)	1.7989*** (0.44)	1.2650*** (0.408)
Firm size	3.9801* (2.0591)	3.8113* (2.080)	
Firm age	0.2220** (0.086)		0.2640*** (0.083)
Firm dummy	Yes	Yes	Yes
Time dummy	Yes	Yes	Yes
Constant	7.4042 (29.081)	22.4222 (28.123)	13.1908 (10.377)
Number of FIRMS	21	21	21

Standard errors in parentheses Key: * Significant at 10%, ** significant at 5%, *** significant at 1%

Table 8 displaying the findings from three Fixed Effects (FE) regression models examined how management competence affects a company's profitability as determined by Return on Assets. The FE model was used so as to account for time-invariant, unobserved firm characteristics. In this case, managerial competence should ideally exhibit changes across time. From table 8, it can be observed that management competence variable positively and significantly affects profitability (ROA) at the 95% confidence level across the three models. This suggests that raising managerial competence raises business profitability. All models of standard errors are fairly low, giving an indication that the estimates are accurate.

The results aligns with the resource-based theory used in this study which holds that a firm's distinct and priceless resources and skills are what provide a competitive edge, thus it enhanced profitability. A key resource in this study is management competency. Highly competent managers are more likely to have the necessary information, skills and aptitudes to efficiently distribute and use resources, make wise choices, and adjust to the ever-changing market conditions. Higher degrees of management competences increases the likelihood that the management team will successfully use and leverage the firm's resources to increase profits.

It is arguably true that an increase in management competence has the potential to dramatically increase the business profitability. This is partly because managers play a key role in an organization's overall functioning, since they constantly make decisions that have a significant influence on its future direction. By maximizing resource allocation, establishing a positive work atmosphere, and making well-informed choices, competent managers have the ability to build a successful and profitable firm (Kazibudzki, 2023). When management competence develops, there is a higher chance for more informed decisions that allow the organization to thrive in the long run. Competent managers have the skills and knowledge required to allocate resources appropriately, ensuring that the appropriate resources are assigned to the appropriate tasks at the

appropriate time. This effective resource allocation boosts production and contributes to higher profitability.

Furthermore, a stronger capability for risk management inside the company may be attributed to higher managerial expertise. Competent managers are proficient at putting into practice effective risk mitigation measures and have a keen grasp of various risks and issues the firm may face. This proactive risk management approach decreases the possibility of expensive failures and boost firm profitability. When risks are reduced and workers are motivated and interested in their work, employee morale goes up. This boost in morale leads to higher output, which has a direct effect on the amount of profit the company makes. Inspired workers who are driven by their own needs tend to go above and beyond standards and deliver increased output.

Another angle of enhanced profitability due to managerial competence may arise from Customer satisfaction. Competent managers are adept at discovering and comprehending the demands and preferences of their target market. Firms may nurture a loyal client-based business and achieve better levels of customer satisfaction by properly meeting their demands. Customers that are satisfied are more inclined to repurchase, suggest the company to others, and contribute to improved sales and profitability (Jin et al., 2022). An informed and educated decision making is required to effectively meet consumer's expectations and demands. Competent managers can obtain and evaluate relevant data, allowing them to make well-informed decisions crucial to meet customers' satisfaction.

Lastly, it can be summarized that with good management, the firm is more likely to have high-quality internal control mechanisms and better company governance instituted in place. Competent managers are likely to put in place solid systems and procedures to assure the organization's openness, accountability, and ethical behaviour. As a result, this improves overall organizational efficiency and protects against fraudulent or mismanaged actions fostering long term profitability.

Robustness Check on Managerial competence and profitability

A Pooled Ordinary Least Squares (POLS) regression was used as an alternative baseline model to confirm the consistency and trustworthiness of the data obtained from the fixed effect model. POLS was chosen because of its broad use in researching firm profitability and its constant track record of producing satisfying results. Furthermore, POLS is a straightforward and suitable approach for estimating relationships in econometric models like the one used in this work. The same variables as in the baseline model were used, the dependent variable was the Return on Assets (ROA), functioned as a measure of firm profitability. Management competence was the independent variable while dividend payout, sales growth, leverage, firm size and age were the control variables. The results of the POLS regression analysis are then reported in Table 9.

Table 9: Analysis of effect of managerial competence on Firm profitability by Using POLS

VARIABLES	1	2	3
Firm Leverage	13.9946*** (3.522)	11.6527*** (3.621)	14.1414*** (3.544)
Sales growth	1.0534*** (0.133)	1.0483*** (0.134)	1.0544*** (0.137)
Dividend pay-out	7.9821*** (2.764)	8.2360*** (2.950)	6.8023** (2.858)
Management competence	2.1702*** (0.422)	1.5032*** (0.477)	2.1855*** (0.713)
Firm size	3.8208* (2.092)	3.7291* (2.063)	
Firm age	1.3043*** (0.329)		1.2203*** (0.257)
Firm dummy	Yes	Yes	Yes
Time dummy	Yes	Yes	Yes
Constant	-33.2194*** (7.146)	-17.7147** (8.899)	-44.2609*** (16.889)
Number of FIRMS	21	21	21

Standard errors in parentheses Key: * Significant at 10%, ** significant at 5%, *** significant at 1%.

The findings clearly show that the factors of statistically significant impact on firm profitability in the baseline model also had a statistically significant impact on firm profitability when assessed using the POLS technique. As indicated in Table 8, the similarity of findings between the two models improves the robustness of the results obtained. As a result, these data provide compelling evidence to reject the null hypothesis.

CONCLUSIONS

This study looked at the effect of managerial competency on the profitability of firms listed on the DSE. The study findings demonstrated a favourable relationship between management competency and profitability for publicly traded enterprises. It is quite likely that organizations with competent management teams will be more likely to achieve profitability. Competent managers have the abilities and expertise required to efficiently utilize the resources available to them, hence increasing the firm's total profitability. The capacity to make educated financial judgments is an important part of good management.

Competent managers understand the purpose of borrowing and when and how to get essential finance through borrowing. They can also identify the types of individuals who will contribute

favorably to the firm's overall objectives and put in place strategic initiatives targeted at growing the firm's sales volume, which has an impact on profitability. When all of these aspects are adequately-controlled, businesses are more likely to run smoothly and profitably. It can, therefore, be conclusively argued that management competence positively and significantly affect firm profitability.

The researchers make the following suggestions based on the insights generated from the output of this research. Given the favourable influence of management competence on profitability, it is recommended that the owners of the firms thoroughly analyse potential managers' competencies and credentials before allocating managerial duties. Additionally, it is critical to properly investigate and evaluate the managerial candidates. Competent managers may successfully mix financial and non-financial resources to boost overall corporate profits. As a result, hiring a competent management team is likely to have a beneficial impact on the firm's profitability. Shareholders should strive to reduce the risk of choosing managers who lack the requisite abilities to maximize the firm's profitability by performing due diligence in the selection process and emphasizing management competency.

Contribution of the paper and Areas for further study

The study contributes to the existing body of knowledge by focusing on the Tanzanian market and examining the specific relationship between managerial competence and firm profitability in that particular context. It provides empirical evidence that managerial competence has a significant influence on firm profitability and it highlights the importance of competent management in maximizing firm's profitability. The resource-based theory study emphasizes the significance of non-financial resources including managerial capabilities in generating a competitive advantage and enhancing profitability.

Additional areas for research in this field of study might be to examine the specific aspects of managerial competence and how they influence profit. Such study provides a glimpse of which managerial competence has the greatest effect on firm profitability. Industrial or sectoral comparisons could be carried out. It is possible that different industries have distinctive traits that affect the association between managerial competence and profitability. Examining different industrial settings and traits might make the results more generalized. Lastly a qualitative research can be employed to provide a better comprehension of the ways in which management competency influences profitability. The experiences, viewpoints and tactics of managers in regard to profitability might be captured via qualitative methods like interviews or case studies, hence, these can offer further insights on the subject matter.

REFERENCES

- Ajanthan, A. (2013). A Nexus between Liquidity & Profitability: A Study of Trading Companies in Sri Lanka. *European Journal of Business and Management*, 7(5), 221–237.

- Akinleye., G., & Ademiloye, D. (2018). Dividend Policy and Performance of Quoted Manufacturing Firms in Nigeria. *International Journal of Scientific & Engineering Research*, 9(7), 1768–1784.
- Alarussi, A., S., Alhaderi, S., & M. (2018). Factors affecting profitability in Malaysia. *Journal of Economic Studies*, 45(3), 442–458. <https://doi.org/10.1108/JES-05-2017-0124>.
- Assenga, P., Aly, D., & Hussainey, K. (2018). The impact of board characteristics on the financial performance of Tanzanian firms. *Corporate Governance: The International Journal of Business in Society*, 18(6). [org/10.1108/CG-09-2016-0174](https://doi.org/10.1108/CG-09-2016-0174).
- Ayako, A., Kungu, G., & Githui, T. (2015). Determinants of the Performance of Firms Listed At the Nairobi Securities Exchange. *Research Journal of Finance and Accounting*, 6(12), 157–164.
- Bae, J., Kim, S., & Oh, H. (2017). Taming polysemous signals: The role of marketing intensity on the relationship between financial leverage and firm performance. *Review of Financial Economics*, 33(1). [org/10.1016/j.rfe.2016.12.002](https://doi.org/10.1016/j.rfe.2016.12.002).
- Banafa, A. M., W., & Ngugi, K. (2015). The impact of leverage on financial performance of listed non-financial firm in Kenya. *International Journal of Finance and Accounting*, 4(7), 1–20.
- Batchimeg, B. (2017). Financial performance determinants of organizations: The case of Mongolian companies. *Journal of Competitiveness*, 9(3). <https://doi.org/10.7441/joc.2017.03.02>.
- Biorn, E. (2017). *Economics of Panel Data; Methods and Applications*. Oxford University Press.
- Bist, J., Mali, R., Sabita, P., Jha, R., Sachyam, K., & Bhattarai, S. (2017). Impact of firm characteristics on financial performance of insurance companies in Nepal. *Osmania Journal of International Business Studies*, 12(1), 1–11 [10 1108 -09-2017-0029](https://doi.org/10.1108-09-2017-0029).
- Borda, A., Geleilate, J., Newburry, W., & Kundu, S. (2017). Firm internationalization, business group diversification and firm performance: The case of Latin American firms. *Journal of Business Research*, 113(doi), [10 1016 2016 11 006 0148-2963](https://doi.org/10.1016/2016.11.006.0148-2963).
- Bryman, A. (2016). *Social Research Methods, (5th Edition)*. Oxford University Press.
- Chandrapala, P., & Knápková, A. (2013). Firm-specific factors and financial performance of firms in the Czech Republic. *Acta Universitatis Agriculturae et Silviculturae Mendelianae Brunensis*, 61(7), 2183–2190. <https://doi.org/10.11118/actaun201361072183>.
- Creswell, J. W., & Plano Clark, V. L. (2018). *Designing and conducting mixed methods research*. SAGE Publications.
- Daniel, M., & Tilahun, A. (2013). Firm specific factors that determine insurance company listed, Performance in Ethiopia. *European Scientific Journal*, 10(9), 245–255. <https://doi.org/10.19044/esj.2013.v9n10p>
- Dioha, C. M., N., & Okpanachi, J. (2018). Effect of firm characteristics on profitability of listed consumer goods companies in Nigeria. *Journal of Accounting, Finance and Auditing Studies*, 4(2), 14–31. [org/10.19044/esj.2019.v15n1p93](https://doi.org/10.19044/esj.2019.v15n1p93).
- Jin, G., Jiang, Q., & Liu, X. (2022). Customer Concentration, Managerial Ability, and Corporate Performance. *Frontiers in Psychology*, 12.

- Kazibudzuki, P. T. (2023). Competence of managers from the perspective of corporate social responsibility: The case study. *International Journal of Multidisciplinary Research and Growth Evaluation*.
- Lazăr, S. (2016). Determinants of firm performance: evidence from Romanian listed companies. *Review of Economic and Business Studies*, 9(1), 53–69. <https://doi.org/10.1515/rebs-2016-0025>
- Matar, A., & Eneizan, B. (2018). Determinants of financial performance in the industrial firms: Evidence from Jordan. *Asian Journal of Agricultural Extension, Economics & Sociology*, 22(1), 1–10. <https://doi.org/10.9734/AJAEES/2018/37476>.
- Mule, K. R., Mukras, M. S., Nzioka, O., & M. (2015). *Corporate size, profitability and market value: An econometric panel analysis of listed firms in Kenya*. 13(11 (pp. 376–396). <https://doi.org/10.10016/j.ijhm.2015.03.009>.
- Mutende, E. A., Mwangi, G. M., Njihia, J. M., & Ochieng, D. E. (2017). The moderating role of firm characteristics on the relationship between free cash flows and financial performance of firms listed at the Nairobi securities exchange. *Journal of Finance and Investment Analysis*, 6(4), 1–3.
- Mwenda, B., & Magwana, I. (2022). Nexus Between Corporate Social Responsibility Disclosure and Profitability of Firms Listed at Dar Es Salaam Stock Exchange. *Jurnal Manajemen Dayasaing*, 24(2), 122–132. <https://journals.ums.ac.id/index,DOI>:
- Mwenda, B., Ndiege, B. O., & D, P. (2021). Influence of Firm-Specific Factors on Performance of Firms Listed at Dar es Salaam Stock Exchange, Tanzania. *East African Journal of Social and Applied Sciences*, 3(2), 1–15. https://doi.org/10.1007/978-3-030-68836-3_24
- Mwenda, B., Ngollo, M., & Mwasota, A. (2023). *Effects of Macroeconomic Variables on Performance of Listed Firms at Dar es Salaam Stock Exchange*.
- Nwanna, I., & Ivie, G. (2017). Effect of financial leverage on firm's performance: A study of Nigerian banks. *International Journal of Recent Scientific Research*, 8(7), 18554–18564. <https://doi.org/10.24327/ijrsr.2017.0807.0530>.
- Omondi, M., & Muturi, W. (2013). Factors affecting the financial performance of listed companies at the Nairobi Securities Exchange in Kenya. *Research Journal of Finance and Accounting*, 4(15), 99–104.
- Pantea, M., Gligor, D., & Anis, C. (2014). Economic determinants of Romanian firms' financial performance. *Procedia-Social and Behavioral Sciences*, 124, 272–281. [org/10.1016/j.sbspro.2014.02.486](https://doi.org/10.1016/j.sbspro.2014.02.486).
- Pervan, M., Pervan, I., & Ćurak, M. (2017). The influence of age on firm performance: evidence from the Croatian food industry. *Journal of Eastern Europe Research in Business and Economics*, 7(1). <https://doi.org/10.5171/2017.618681>.
- Rwechungura, K., Kaleshu, J., & Ndiege, B. (2020). Stability and Profitability of Commercial Banks in Tanzania. *East African Journal of Social and Applied Sciences*, 2(1), 76.
- Siwandeti, M., Sanga, C., & Panga, F. (2021). Technological factors influencing vendors' participation in public electronic procurement system in Ilala, Tanzania. *East African Journal of Social and Applied Sciences*, 3(1), 91–102.

- Sumaira, B., & Amjad, T. (2013). Determinants of profitability panel data evidence from Insurance sector of Pakistan. *Elixir Financial International Management Journal*, 57(3), 14377–14382.
- Tailab, M. M. (2014). Analyzing factors effecting profitability of non-financial US firms. *Research Journal of Finance and Accounting*, 22(5), 17–26.
- Taouab, O., & Issor, Z. (2019). Firm performance: Definition and measurement models. *European Scientific Journal*, 15(1), 93-106.
- Too, I., & Simiyu, E. (2019). Firms characteristics and Financial Performance of general insurance firms in Kenya. *International Journal of Business Management and Finance*, 2(1), 672–689.
- Ubesie, M. (2014). of Firms Specific Factors That Determine Financial Performance of the Nigerian Breweries Sector. *International Journal of Science And, nology*. 29 (1). [org/10.21512/bbr.v9i1.4047](https://doi.org/10.21512/bbr.v9i1.4047).
- Zainudin, N. R., Mahdzan, N. S., & Leong, E. S. (2018). Firm-specific internal determinants of profitability performance: An exploratory study of selected life insurance firms in Asia. *Journal of Asia Business Studies*, 12(4), 533–550. <https://doi.org/10.1108/JABS-09-2016-0129>