



## Influence of financial literacy on investment decisions of managers of small and medium enterprises in Mogadishu, Somalia

Abdikarin Ahmed Abdi \*

Faculty of Management Science, SIMAD University, Mogadishu, Somalia

### ARTICLE INFO

#### Article history:

Received 26 July 2023

Received in revised form

22 February 2024

Accepted 21 March 2024

#### Keywords:

Financial literacy

Investment decisions

Small and medium enterprises

Modern portfolio theory

### ABSTRACT

This research aimed to explore how well managers of small and medium enterprises (SMEs) in Mogadishu, Somalia, understand financial concepts such as savings, managing debt, handling financial risks, and planning for retirement, and how this understanding affects their investment decisions. The background of the study highlights that many SMEs in Mogadishu struggle to sustain their operations, with low profits or failure often due to poor investment choices. To investigate the link between financial literacy and investment decision-making among these managers, the study was based on the principles of modern portfolio theory. The research used a correlational design to analyze data from 250 targeted SMEs, with 154 respondents selected through stratified random sampling. Data collection was facilitated by questionnaires, and the analysis involved calculating means, standard deviations, and conducting regression analysis. The findings indicated that among the financial literacy components, debt management had the most significant impact on investment decisions ( $\beta=0.490$ ,  $p<0.05$ ), followed by financial risk management ( $\beta=0.137$ ,  $p<0.05$ ), and lastly, the ability to save ( $\beta=0.128$ ,  $p<0.05$ ). The study concluded that financial literacy plays a crucial role in influencing investment decisions among SME managers in Mogadishu, suggesting that improving financial knowledge could lead to better business outcomes.

© 2024 The Authors. Published by IASE. This is an open access article under the CC BY-NC-ND license (<http://creativecommons.org/licenses/by-nc-nd/4.0/>).

### 1. Introduction

Making investment decisions is crucial for the sustainable growth of both developing and developed economies. Such decisions involve forgoing current spending, which is not simple (Alaaraj and Bakri, 2020). Financial literacy helps people gain knowledge and understanding of fundamental financial concepts like saving, insurance, managing debt, and planning for retirement, all of which are vital when making investment choices. Knowing these financial principles is essential for effective investment decision-making (Arianti, 2018). Scholars worldwide have significantly focused on the importance of financial literacy in making investment decisions. Seraj et al. (2022) suggested that financial literacy enables company managers to make informed and

rational investment choices. Knowledge about borrowing and saving can help managers handle both personal and corporate investments more effectively. A thorough understanding of financial risk management, insurance, and retirement planning enables individuals and organizations to manage their investments more efficiently (Kumari, 2020). Thus, it is expected that there is a positive relationship between financial literacy and investment decision-making, which was explored in this study. Small and medium enterprises (SMEs) are crucial for the economic growth and development of a country. They provide jobs and contribute to tax revenues, which helps reduce budget deficits (Mohamed and Ramli, 2022). In countries like Somalia, which have experienced prolonged civil conflicts, SMEs are vital for accelerating economic recovery. The effectiveness of SMEs in Somalia, particularly in sustaining their operations, largely depends on the quality of investment decisions made. Good investment decision-making by SME managers can maximize returns from investment projects (Abdulle et al., 2019). Therefore, studying financial literacy and investment decision-making among SME managers in Mogadishu is essential, prompting this current research.

Somalia is a nation currently recovering from a prolonged civil war. In this context, SMEs are critical to the country's economic revival. SMEs play a vital role in recovering economies like Somalia by creating jobs and contributing to tax revenues (Ali and Mukhongo, 2016). However, the continued success and sustainability of these enterprises largely depend on effective decision-making by their owners and managers. These managers face the challenge of needing sufficient knowledge of financial concepts such as savings, debt management, financial risk management, and retirement planning. In Mogadishu, many SMEs struggle with sustainability; low profits and business failures are common, often due to poor investment decisions.

Previous studies have examined the relationship between financial literacy and investment decisions in various contexts. Seraj et al. (2022) investigated this link in Saudi Arabia and found that financial literacy significantly and positively influences investment decisions. Similarly, Akims and Jagongo (2017) assessed how financial literacy impacts investment choices in Nigeria, concluding that an individual's financial literacy plays a crucial role in their capacity to make informed investment decisions. Another study by Kumari (2020) focused on undergraduate students in Sri Lanka, emphasizing that financial skills are a critical factor in making investment decisions. These studies collectively highlight the importance of financial knowledge in managing and making investment choices effectively.

While there is existing research on the connection between financial literacy and investment decisions, studies like those by Seraj et al. (2022) and Akims and Jagongo (2017) were conducted in contexts such as Saudi Arabia and Nigeria, not Kenya. Additionally, some studies, like that of Akims and Jagongo (2017), used a desk review approach, which is qualitative rather than quantitative, leading to certain gaps in the research. To address these gaps, the proposed study analyzed the relationship between financial literacy and investment decisions among managers of SMEs in Mogadishu, Somalia. The study aimed to determine whether there is a statistically significant relationship between financial literacy and investment decisions among these managers. The findings indicated that there is no statistically significant relationship between financial literacy and investment decisions in this group.

## 2. Literature review

The study was guided by the modern portfolio theory developed by Markowitz (1952). This theory requires firms to adopt diversification as a strategy aimed at minimizing risks, thus maximizing returns. The theory indicates that efficiency is influenced by the ability to maximize expected returns. Thus, this theory was used to underpin financial risk as one key dimension of financial literacy.

The focus of the study conducted by Seraj et al. (2022) was on financial literacy and investment decisions by borrowing evidence from Saudi Arabia. In total, 180 participants were involved in the inquiry, and information gathering was supported by a questionnaire. After processing the gathered information, it was clear that the link between financial literacy and investment decisions was positive. Kumari (2020) focused on determining the implication of financial literacy on investment decisions among undergraduate students in Sri Lanka. A total of 4 universities owned by the government generated 200 students, and after gathering and processing the information, it was noted that financial skill was a key aspect of financial literacy that enhances investment decisions.

Alaaraj and Bakri (2020) analyzed financial literacy and its link with investment decision-making by borrowing evidence from Lebanon. Participants in the study were investors from banks, and the adopted approach was quantitative in nature. The analysis of evidence showed that financial literacy has positive and direct implications for investment decisions. Arianti (2018) conducted a study with an emphasis on financial literacy and its implication on investment decisions among students. After gathering and processing data, the study failed to establish a significant link between financial literacy and investment decisions.

Garang (2016) conducted an analysis of financial literacy and investment decisions in South Sudan. The study utilized participants from banks, and information gathering was supported by a questionnaire. It was indicated that financial literacy was a direct predictor of investment decisions. Janor et al. (2016) conducted an examination of financial literacy and investment decision-making views from the United Kingdom and Malaysia. The study adopted a comparative approach. Processing of the obtained information indicated that, in general terms, the level of financial literacy in both countries was very low. Amisi (2012) analyzed financial literacy and investment decisions by fund managers of pension funds in Kenya, where a significant connection between variables was registered.

Fig. 1 is the conceptual framework to be used in guiding the study.

## 3. Research methodology

Research design is an overall plan and structure in which a particular inquiry is conducted (Harris et al., 2019). This study adopted a correlational research design with the aim of establishing a relationship between financial literacy and investment decision-making. In a survey that was conducted by Abdi et al. (2023), it emerged that Mogadishu city and its environment have a total of 250 SMEs, which were selected as the target population of the present study. These firms are classified as small and medium entities as indicated in Table 1.

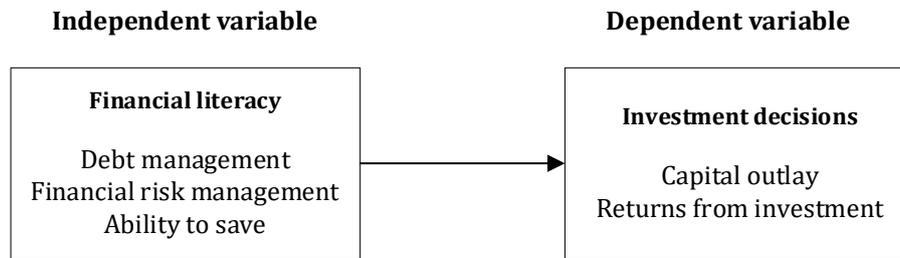


Fig. 1: Conceptual framework

Table 1: Target population

| Category of firm   | Population |
|--------------------|------------|
| Small firms        | 150        |
| Medium-sized firms | 100        |
| Total              | 250        |

Small firms had less than 49 employees, medium firms had 50-100 employees

### 3.1. Sample size and sampling technique

The determination of the sample size and sampling techniques are discussed below. The sample size of the study was determined in scientific terms using the below formula:

$$n = N/1 + Ne^2$$

where, n is the desired sample size. N is the target population. e is the acceptable margin of error estimated at 0.05 (at 95% confidence interval). Therefore, sample size  $n = 250 \div (1+250(0.0025))$  will return 154 respondents.

The study will adopt a stratified random sampling technique to select respondents as the sample size. In this regard, respondents will be stratified into two strata, and a representative sample will be selected, as shown in Table 2.

The study collected primary data using a questionnaire, which was divided into three sections: basic information about the respondents,

their financial literacy, and their investment decisions. The questionnaire was distributed to managers and owners of various SMEs.

To ensure reliability, the questionnaire was pilot-tested on 15 respondents from SMEs outside of Mogadishu, who were then excluded from the main study to prevent bias. The results of the pilot test were used to calculate Cronbach's Alpha coefficients, with values interpreted as acceptable at 0.7, following the guidelines set by Strijker et al. (2020). Additionally, the validity of the questionnaire was confirmed with the help of a supervising professor and two industry experts in corporate finance.

After obtaining complete information from respondents, the questionnaire responses were keyed into Excel for the sake of cleaning the data. From there, it will then be exported to SPSS for analysis guided by means and standard deviations as well as regression analysis, and the model is as indicated below:

$$Y = \beta_0 + \beta_1X_1 + \beta_2X_2 + \beta_3X_3 + \epsilon$$

where, Y is investment decision (as a composite score of capital outlay and return from investment).  $\beta_0$  is constant.  $\beta_1$ ,  $\beta_2$ , and  $\beta_3$  are coefficients.  $\epsilon$  is the error term.  $X_1$  is debt management.  $X_2$  is financial risk management.  $X_3$  is ability to save.

Table 2: Sampling technique

| Category of firm   | Population | Sample proportion        | Sampler size      |
|--------------------|------------|--------------------------|-------------------|
| Small firms        | 150        | $150/250 * 100\% = 60\%$ | $60\% * 154 = 92$ |
| Medium-sized firms | 100        | $100/250 * 100\% = 40\%$ | $40\% * 154 = 62$ |
| Total              | 250        |                          | 154               |

### 4. Results and discussion

Out of the 154 questionnaires distributed to owners and managers of SMEs in Mogadishu, 113 were fully completed and returned, resulting in a 73.3% response rate. This rate was deemed sufficient according to the standards recommended by Liamputtong (2019). The following sections of the study report provide detailed findings from the descriptive statistics on the key variables investigated. Table 3 presents a detailed analysis of the data on financial literacy.

According to Table 3, the ability to save (Mean=3.77) received the highest rating from respondents, followed by debt management (Mean=3.60) and financial risk management (Mean=3.59). This indicates that managers of SMEs

in Mogadishu generally have a better understanding of saving practices compared to managing financial risks. These results contrast with those found by Amisi (2012), who analyzed financial literacy and investment decisions among pension fund managers in Kenya and found a significant correlation between these variables. Table 4 provides a detailed breakdown of the descriptive statistics concerning investment decisions as the dependent variable.

The findings in Table 4 indicate that respondents highly rated most of the statements on investment decisions (M=3.67). This shows that the studied managers were able to make sound investment decisions. Testing of the formulated hypotheses in this study was conducted through regression analysis, as summarized in Table 5.

**Table 3: Financial literacy**

| Statements on debt management   | Mean | Std. dev |
|---|------|----------|
| I repay interest on loans borrowed by this firm on time from returns generated on investments         | 3.67 | .765     |
| Loans borrowed by this firm are prudently used to finance investments                                 | 3.59 | .875     |
| Your firm maximizes the interest tax shield that accrues from the use of debts to finance investments | 3.53 | .889     |
| Overall score   | 3.60 | .843     |
| <b>Statements on financial risk management</b>  |      |          |
| I am able to carry out comprehensive financial risk assessment  | 3.51 | .880     |
| I manage some of the financial risks of this enterprise through insurance                             | 3.79 | .772     |
| I leverage diversification to manage some of the financial risks in this firm                         | 3.49 | .748     |
| Overall score   | 3.59 | .800     |
| <b>Statements on the ability to save</b>  |      |          |
| All cash balances are saved in the bank account in this firm  | 3.87 | .859     |
| I use savings to invest   | 3.63 | .653     |
| Retained earnings represent an important saving in this firm  | 3.81 | .993     |
| Overall score   | 3.77 | .835     |

**Table 4: Investment decisions**

| Statements on investment decisions                                | Mean | Std. dev |
|---|------|----------|
| Your firm invests in projects that require huge capital outlay    | 3.47 | .883     |
| Investing in projects requiring high capital outlay is more risky | 3.93 | .961     |
| Your firm always seeks to maximize the returns from investment    | 3.61 | .750     |
| Overall score   | 3.67 | .865     |

**Table 5: Regression result findings**

|                           | Unstandardized coefficients |                           | Standardized coefficients | t     | Sig. |
|---------------------------|-----------------------------|---------------------------|---------------------------|-------|------|
|                           | B                           | Std. error                | Beta                      |       |      |
| (Constant)                | 9.948                       | 1.880                     |                           | 5.292 | .000 |
| Debt management           | .490                        | .100                      | .713                      | 4.900 | .000 |
| Financial risk management | .137                        | .053                      | .127                      | 2.585 | .011 |
| Ability to save           | .128                        | .035                      | .038                      | 3.657 | .023 |
| R=.760                    | R <sup>2</sup> =.577        | Adj. R <sup>2</sup> =.571 |                           |       |      |

From **Table 5**, the following model is predicted between financial literacy and investment decision:

$$Y = 9.948 + 0.490X_1 + 0.137X_2 + 0.128X_3 + \varepsilon$$

where, Y is investment decision (as a composite score of capital outlay and return from investment).  $\varepsilon$  is the error term.  $X_1$  is debt management.  $X_2$  is financial risk management.  $X_3$  is ability to save.

**Table 5** shows that debt management ( $\beta=0.490$ ,  $p<0.05$ ) had the most significant impact on investment decisions among managers in SMEs in Mogadishu, followed by financial risk management ( $\beta=0.137$ ,  $p<0.05$ ) and the ability to save ( $\beta=0.128$ ,  $p<0.05$ ). These findings suggest that financial literacy significantly influences investment decisions, supporting the findings of [Seraj et al. \(2022\)](#), who reported a positive relationship between financial literacy and investment decisions. [Kumari \(2020\)](#) highlighted that financial skills are a crucial component of financial literacy that enhances investment decisions. Similarly, [Alaaraj and Bakri \(2020\)](#) found that financial literacy positively and directly affects investment decisions. However, these results contrast with [Arianti \(2018\)](#), who did not find a significant link between financial literacy and investment decisions. The findings also align with [Garang \(2016\)](#), who identified financial literacy as a direct predictor of investment decisions. [Janor et al. \(2016\)](#) noted that, in general, financial literacy levels in both countries they studied were very low.

## 5. Conclusion and recommendations

This study aimed to explore the relationship between financial literacy and investment decisions. The data analysis revealed that managers of SMEs in

Mogadishu have greater knowledge and understanding of savings compared to financial risk management. Regression analysis indicated that financial literacy, specifically in terms of debt management, financial risk management, and saving abilities, significantly influences investment decisions.

Based on the findings, the following recommendations are proposed:

- Managers of SMEs in Mogadishu should participate in refresher courses to enhance their understanding of debt management and risk management.
- Managers and owners should recognize the importance of using diversification as a strategy for managing financial risks.

## Compliance with ethical standards

## Conflict of interest

The author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

## References

- Abdi AA, Mohamud IA, and Hussein FM (2023). Borrower's characteristics and loan repayment performance among small and medium enterprises in Mogadishu, Somalia. *Journal of Asian and African Social Science and Humanities*, 9(2): 87-95. <https://doi.org/10.55327/jaash.v9i2.306>
- Abdulle AS, Zainol Z, and Mutalib HA (2019). Impact of computerised accounting information system on small and medium enterprises in Mogadishu, Somalia: The balance scorecard perspectives. *International Journal of Engineering*

- and *Advanced Technology*, 8(5): 159-165.  
<https://doi.org/10.35940/ijeat.E1023.0585C19>
- Akims MA and Jagongo A (2017). Financial literacy and its impact on investment decisions in Nigeria: A theoretical perspective. *International Journal of Scientific Research and Innovative Technology*, 4(11): 18-24.
- Alaaraj H and Bakri A (2020). The effect of financial literacy on investment decision making in Southern Lebanon. *International Business and Accounting Research Journal*, 4(1): 37-43. <https://doi.org/10.15294/ibarj.v4i1.118>
- Ali ATA and Mukhongo AL (2016). Effects of cash flow management on the financial performance of the small and medium enterprise in Mogadishu Somalia (a case study of Bakara market). *Elixir International Journal: Finance Management*, 94: 40538-40546.
- Amisi SARAH (2012). The effect of financial literacy on investment decision making by pension fund managers in Kenya. Ph.D. Dissertation, University of Nairobi, Nairobi, Kenya.
- Arianti BF (2018). The influence of financial literacy, financial behavior and income on investment decision. *Economics and Accounting Journal*, 1(1): 1-10.  
<https://doi.org/10.32493/eaj.v1i1.y2018.p1-10>
- Garang M (2016). The effect of financial literacy on investment decisions in the Juba City South Sudan. Research Project, University of Nairobi, Nairobi, Kenya.
- Harris DE, Holyfield L, Jones L, Ellis R, and Neal J (2019). Research methods. In: Harris DE, Holyfield L, Jones L, Ellis R, and Neal J (Eds.), *Spiritually and developmentally mature leadership: Towards an expanded understanding of leadership in the 21<sup>st</sup> century*: 57-65. Springer, Cham, Switzerland.
- [https://doi.org/10.1007/978-3-030-11175-5\\_4](https://doi.org/10.1007/978-3-030-11175-5_4)  
**PMCID:PMC6642834**
- Janor H, Yakob R, Hashim NA, Zanariah Z, and Wel CAC (2016). Financial literacy and investment decisions in Malaysia and United Kingdom: A comparative analysis. *Geografia: Malaysian Journal of Society and Space*, 12(2): 106-118.
- Kumari DAT (2020). The impact of financial literacy on investment decisions: With special reference to undergraduates in Western Province, Sri Lanka. *Asian Journal of Contemporary Education*, 4(2): 110-126.  
<https://doi.org/10.18488/journal.137.2020.42.110.126>
- Liamputtong P (2019). *Handbook of research methods in health social sciences*. Springer, Singapore, Singapore.  
<https://doi.org/10.1007/978-981-10-5251-4>
- Markowitz HM (1952). Portfolio selection. *Journal of Finance*, 7(1): 77-91.  
<https://doi.org/10.1111/j.1540-6261.1952.tb01525.x>
- Mohamed AI and Ramli A (2022). Factors influencing the implementation of computerized accounting systems in small and medium-sized enterprises in Mogadishu, Somalia. *Journal of Positive School Psychology*, 6(4): 63-82.
- Seraj AHA, Alzain E, and Alshebami AS (2022). The roles of financial literacy and overconfidence in investment decisions in Saudi Arabia. *Frontiers in Psychology*, 13: 1005075.  
<https://doi.org/10.3389/fpsyg.2022.1005075>  
**PMid:36248580 PMCID:PMC9565838**
- Strijker D, Bosworth G, and Bouter G (2020). Research methods in rural studies: Qualitative, quantitative and mixed methods. *Journal of Rural Studies*, 78: 262-270.  
<https://doi.org/10.1016/j.jrurstud.2020.06.007>