

Influence of Financial Management Capabilities on Semi-Formal Financial Accessibility among Incubated Small and Medium Entrepreneurs in Tanzania

Deo Gratias Kibona¹

Received: 6 May 2023

Revised: 2 April 2024

Accepted: 15 April 2024

Published: 12 June 2024

Abstract

Financial management capabilities are expected to positively influence financial accessibility among entrepreneurs. This article examines the influence of financial management capabilities among incubated entrepreneurs on their access to semi-formal finance. Financial management capabilities were measured by financial decision-making, analysis of financial information, and financial planning capabilities. Relevant information was collected from 117 Tanzanian incubated entrepreneurs. Data was analysed using the SPSS Version 20, and multiple regression analysis to test the impact of financial decision-making, financial information analysis, and financial planning capabilities on the access to semi-formal finance. Findings suggest that analysis of financial information capabilities positively influence accessibility of semi-formal finance. However, financial decision-making and planning capabilities do not influence accessibility of semi-formal finance. . The findings suggest that policy makers and other stakeholders should focus on building and improving capabilities to analyse financial information among incubated small and medium entrepreneurs to increase their accessibility to semi-formal finance.

Keywords: Financial management capabilities, semi-formal financial accessibility, small and medium entrepreneurs, incubated entrepreneurs, Tanzania,

¹Dar es Salaam Campus College, Mzumbe University, Email: de GRATIAS.kibona@mu.ac.tz

1.0 INTRODUCTION

Current scholarly debates have been punctuated by the influence of financial management capabilities² on access to semi-formal finances³ among incubated small and medium entrepreneurs. . The attention is partly attributed to the fact that small and medium entrepreneurs (SMEs) account for the largest portion of the enterprise sector, contributing significantly to economic development. SMEs contribute to economic growth by promoting new ideas and the use of resources (Eye & Lose, 2023). In addition, SMEs are involved in production activities and pay taxes. Similarly, SMEs create a very important source of employment (Zhao et al., 2023). As SMEs counter-balance the oligopolies and monopolies, they neutralise the ability of large companies to control the market. Another role played by SMEs is generation of technical innovation applicable to the economy (Mancini & González, 2021).

Despite their importance towards economic development, SMEs experience high failure rates. For example, over one-third of firms worldwide discontinue within two years of commencing operations (Eye & Lose, 2023). Most entrepreneurs point out financing as the foremost obstacle to their growth (OECD, 2024). Mancini & González (2021) are also of the same verdict as they reveal that about 40 per cent of entrepreneurs cited access to finance as a serious constraint to the growth of their businesses. OECD (2024) contends that most entrepreneurs indicated financial problems as a reason for quitting the business. Limited access to finance leads to limited financial capital for entrepreneurs. As a result, they cannot address other problems such as low technology, lack of business skills, poor business network, poor market access and poor management skills.

Limited accessibility to semi-formal finance among small and medium-incubated entrepreneurs is associated with their lack of financial management capabilities (Yi et.al., 2022). In turn, financial management capabilities influence financial accessibility (Robison et al., 2021). Incubated entrepreneurs with strong financial management skills are viewed as more creditworthy by semi-formal lenders (FinScope, 2023). This is because their ability to demonstrate responsible financial behaviour, such as maintaining good credit histories and managing cash flows effectively, enhances their chances of securing loans or investments

² This is the ability of a person to manage his/her day-to-day finances. It encompasses a person's skills and knowledge to recognize financial circumstances with motivation to take action.

³ Semi-formal finance consists of all financiers registered legally and regulated by authorities other than central banks, although they must be licensed by a central bank.

from semi-formal sources (Yi et.al., 2022). Effective financial management enables incubated entrepreneurs to better assess and manage the risks associated with semi-formal financial activities. They can make informed decisions about borrowing from semi-formal lenders, participating in peer-to-peer lending networks, or engaging in community-based financial initiatives (Munyalo & Njoka, 2022).

Entrepreneurs with good financial management capabilities are also more likely to engage in regular savings practices and make sound investment decisions. This can lead to increased participation in semi-formal savings groups, community-based investment opportunities, or even personal contributions to their business ventures. Proper financial management skills allow incubated entrepreneurs to manage their cash flows efficiently (Munyalo & Njoka, 2022). This is essential for maintaining liquidity, meeting financial obligations, and seizing new business opportunities, which can indirectly enhance their access to semi-formal finance (FinScope, 2023). Financial management capabilities can help incubated entrepreneurs build stronger relationships and negotiate better terms with semi-formal lenders (Robison et al., 2021). The trust and credibility, often established through responsible financial practices, are crucial in the semi-formal finance sector (FinScope, 2023). Incubated entrepreneurs who possess financial management skills are better equipped to navigate the complexities of semi-formal financial systems (Yi et.al., 2022). They are also more aware of the various options available to them, understand the associated risks and benefits, and can make informed decisions that optimize their financial accessibility.

As of 2022, the financial management capabilities among Tanzanian entrepreneurs varied widely; while some entrepreneurs demonstrated strong financial literacy and management skills, others faced challenges in this area. Entrepreneurs with formal education in business or finance generally exhibited better financial management skills (Munyalo & Njoka, 2022). However, many entrepreneurs lacked access to quality financial education and training programmes. Limited access to financial tools, such as accounting software, and professional financial advice hindered the ability of some entrepreneurs to manage their finances effectively. Traditional financial practices and beliefs sometimes clash with modern financial management principles, leading to misconceptions and poor financial decisions (Magede, 2021). Likewise, complex and frequently changing regulatory frameworks pose challenges to entrepreneurs in terms of compliance and understanding financial regulations (Belluci et.al., 2023). To improve the financial management capabilities among entrepreneurs, there has been

a growing emphasis on financial literacy programmes, entrepreneurship training, and development of accessible financial products and services tailored to the needs of small and medium-sized enterprises (Berrones, 2010). Additionally, partnerships between the government, the private sector, and international organizations have been established to promote financial inclusion and education among entrepreneurs in Tanzania.

Financial management capabilities can have a substantial impact on the semi-formal financial accessibility among incubated entrepreneurs (Magede, 2021). Given the unique economic and financial landscape of Tanzania, where formal banking services are often limited in reach, it is crucial to understand how financial management skills influence access to semi-formal finance among incubated entrepreneurs. Incubated entrepreneurs with strong financial management skills are perceived as more creditworthy within Tanzania's semi-formal lending networks (Ismail, 2022). Effective financial management enables incubated entrepreneurs to better assess and manage the risks associated with semi-formal financial activities in Tanzania (Magede, 2021). Incubated entrepreneurs with good financial management capabilities are also more likely to engage in regular savings practices and make sound investment decisions. This fosters financial resilience and security, allowing them to accumulate capital that can be reinvested in their businesses or used as collateral to access credit from semi-formal sources (Ismail, 2022). Proper financial management skills allow incubated entrepreneurs to manage their cash flows efficiently, which is essential for maintaining liquidity, meeting financial obligations, and seizing new business opportunities in Tanzania's dynamic and often unpredictable business environment.

Improved financial management capabilities, often resulting from financial literacy and training initiatives, enable incubated entrepreneurs to navigate the complexities of Tanzania's semi-formal financial systems more effectively (Azadnia et al., 2022). They become more aware of the various semi-formal financing options available to them, understand the associated risks and benefits, and can make informed decisions that optimize their financial accessibility. The volatile nature of Tanzania's semi-formal finance sector requires incubated entrepreneurs to be adaptable and resilient (Magede, 2021). Those with strong financial management capabilities are better prepared to navigate financial challenges, adapt to changing market conditions, and maintain financial stability, thereby sustaining their access to semi-formal finance.

In general, financial management capabilities significantly influence the semi-formal financial accessibility of incubated entrepreneurs in Tanzania. By fostering responsible financial behaviour, enhancing creditworthiness, improving risk management, and promoting financial literacy (Azadnia et al., 2022), these capabilities can empower entrepreneurs to leverage semi-formal financial systems effectively, to facilitate business growth, and to enhance overall financial resilience in the Tanzania's unique economic context.

From a theoretical viewpoint, the small and medium entrepreneurs' inaccessibility to semi formal financing is associated with the breakdown between financiers and the theory of information asymmetry. The theory argues that there are some information breakdowns between financiers and borrowers. It further contends that information asymmetries refer to a situation whereby some information is known in one part but not in the other. It also refers to one part of a financing transaction having more information than the other. This study focused on the access of incubating entrepreneurs to semi-formal finance. Entrepreneurs usually face difficulties when approaching financiers for finance to support operations and investment. Different scholars have well elaborated the finance gap among entrepreneurs (OECD, (2024; Mancini & González, 2021; UNCTAD, 2023).

It has been contended that information asymmetries majorly cause the financial gap among entrepreneurs (Belluci et.al., 2023). The problems emanating from information asymmetry can be moral hazard or adverse selection. Financiers get incomplete information about the quality of the borrower's project and the entrepreneur's management capability, resulting in a problem of adverse selection (Akbas et.al., 2023). In other ways, entrepreneurs can perform below their expected capacity, leading to the problem of moral hazard. Both adverse selection and moral hazards can lead to financiers denying credit to entrepreneurs with quality projects or providing loans to low-quality projects who fail to repay loans (Belluci et.al., 2023). However, these information asymmetric problems are caused by low financial management capabilities among entrepreneurs, which results in poor financial decisions, information and planning (Berrones, 2010). This motivated the researcher to study the influence of financial management capabilities on financial accessibility. In particular, the researcher focused on semi-formal finance, the dominant form of finance in Tanzania.

Empirically, there is a financing gap of about \$5.2 trillion, and 40 per cent of this gap is observed among entrepreneurs in developing economies (IFC, 2020). Likewise, UNCTAD

(2023) argued that the major setback to the growth of entrepreneurs' business is the financing gap, which is very common among micro and small businesses. To solve this problem, researchers have argued that business incubation programmes have proved to be very successful in helping entrepreneurs improve their accessibility to finance by building their financial management capabilities. Rens et al. (2021) point out that business incubators contribute significantly to financial accessibility among incubated entrepreneurs. Generally, the study showed a positive relationship between business incubation and financial accessibility. Studies have further revealed that business incubators improve financial management capabilities of incubated entrepreneurs, which is an important requirement for financiers. Business incubators, among other services, provide financial education services to incubated entrepreneurs to improve their financial management capabilities. For example, a study by Munyalo & Njoka (2022) shows that financial education positively impacts financial management capabilities. Correspondingly, Berrones (2010) found that incubated entrepreneurs' professionalization, which is an indicator of improved financial management capabilities, is a very important criterion for access to finance. Furthermore, research by Magede (2021) indicates that financial management capabilities positively impact financial accessibility. However, it is still unclear as to whether improved financial management capabilities improve financial accessibility among incubated entrepreneurs.

All the above-reviewed studies have focused on business access to formal finance, and it should be noted that most entrepreneurs, including the incubated ones in developing countries, rely mainly on non-formal finance, including semi-formal finance. FinScope (2023) has shown the dominance and extension of non-formal finance in developing economies and how important this kind of financing is to the growth of businesses. Nevertheless, a very limited number of studies highlight the impact of financial management capabilities on incubated entrepreneurs' access to semi-formal finance, which is part of non-formal finance; this explains why this paper focuses on this research gap.

From the theoretical and empirical literature reviewed above regarding financial management capabilities and financial accessibility, a conceptual framework is developed to summarize the relationships of variables which are presented through the following hypotheses:

H₁: Financial decision-making capabilities have a significant positive impact on semi-formal financial accessibility.

H₂: Financial information analysis capabilities have a significant positive impact on semi-formal financial accessibility

H₃: Financial planning capabilities have a significant positive impact on semi-formal financial accessibility.

This conceptual framework aims to understand the intricate relationship between financial management capabilities and accessibility of semi-formal financial services. It considers the role of financial literacy, trust, perceived benefits, socio-economic status, and cultural factors in shaping this relationship.

In Tanzania, SMEs contribute significantly to the development of the economy, and they employ a significant number of Tanzanian youths. Specifically, around 700,000 youths graduate from various learning institutions and enter the Tanzanian labour market annually; nevertheless, only around 40,000 new job opportunities are created yearly in the formal sector (NBS, 2020). This means that the remaining job seekers are absorbed into the non-formal sector, mainly dominated by micro and small entrepreneurs. These entrepreneurs contribute about a third of the Tanzanian GDP, and around 30 per cent of the labour force (NBS, 2020). However, despite the importance of SMEs to the economic development in Tanzania, SMEs still do not survive very long. For example, about 90 per cent of SMEs have no access to formal finance, and some of these enterprises are served by non-formal financiers, while the majority have no access to any form of credit (Mpofu & Sibindi, 2022). This fiscal gap is now addressed by several interventions established in the country. In Tanzania, the concept of business incubation is relatively new; it was embraced for the first time in 2002. By the year 2019, there were more than 593 entrepreneurs incubated in Tanzanian incubators.

This paper examines the impact of incubated entrepreneurs' financial management capabilities on their access to semi-formal finance in Tanzania. This is because incubation programmes in Tanzania provide, among other services, training and mentoring services to build and improve entrepreneurs' financial management capabilities. This fact is supported by Munyalo & Njoka (2022), who argued that entrepreneurs can develop or improve financial management capabilities through financial education. The study enhances the existing literature on financing incubated entrepreneurs, and contributes to the field by revealing the role played by financial management capabilities on the aspect of semi-formal financing.

2.0 METHODS

In this section, a research design for this study has been explained. It includes the approach, sampling size and process, key research variables, and their measurements and analysis method.

2.1 Research design and sampling

This was a cross-sectional study whereby data were collected only once and then subjected to analysis. A quantitative analysis approach was adopted, and data collection was conducted through a self-administered questionnaire. The study involved Tanzanian regions with business incubators: Arusha, Dar es Salaam, Mbeya, Mwanza, Morogoro, Iringa, Kilimanjaro and Dodoma. A stratified sampling technique was used because of the diversity of the business incubation programmes, i.e. With-wall incubators, without-wall incubators and co-working spaces. A total of 117 incubated entrepreneurs were involved in this study, out of 593 incubated entrepreneurs. This sample size aligns with Jenkins (2020), who stated that a sample size of more than 100 respondents is convenient and reliable for studies involving inferential analysis, particularly multiple regression analysis as employed in this study.

2.2 Key research variables

The key variables in this study were financial decision-making capabilities, financial information analysis capabilities, financial planning capabilities, semi-formal financial accessibility, business age, business capital and incubation period. Out of these variables, financial decision-making capabilities, financial information analysis capabilities and financial planning capabilities are independent variables, while semi-formal financial accessibility is a dependent variable. The remaining business age, business capital and incubation period are control variables. Literature shows that financial decision-making capabilities are positively associated with semi-formal financial accessibility, which means that as the decision-making capabilities of a borrower increase, their semi-formal financial accessibility also increases. Likewise, literature suggests that financial planning capabilities are positively related to an entrepreneur's semi-formal financial accessibility, which implies that as the financial planning capabilities of an entrepreneur increase, their semi-formal financial accessibility also increases.

Financial information analysis capabilities have a positive association with an entrepreneur's semi-formal financial accessibility, which indicates that as the financial information analysis capabilities of an entrepreneur increase, their semi-formal financial accessibility also

increases. Based on the literature, it is expected that business age, capital and incubation period have a positive relationship with semi-formal financial accessibility of incubated entrepreneurs. This implies that semi-formal financiers consider age, the amount of capital of an entrepreneur and their incubation period when providing credits.

2.3. Variable measurements

In this research, semi-formal financial accessibility was measured through the level of satisfaction with the amount of loan obtained, interest rate, loan repayment term, general credit contract agreements, required collateral, necessary managerial background, credit processing procedures and credit processing time. Accessibility of semi-formal finance was calculated as an average of the above indicators, which were ordinally measured, i.e. respondents replied by ranking the indicators through a 5-point Likert scale.

The study consisted of three independent variables, i.e. financial decision-making capabilities, financial information analysis capabilities and financial planning capabilities; and three control variables, i.e. business age, business capital and incubation period. Measurement of financial decision-making capabilities is adopted from Berrones (2010), who measured financial decision-making capabilities by making financial decisions in collaboration with staff, regular meetings for making financial decisions, investment decisions in collaboration with staff, and regular meetings to make investment decisions.

Similarly, measurement of financial information analysis capabilities is also adopted from Berrones (2010), who measured financial information analysis capabilities through the ability of incubated entrepreneurs to prepare cash flow statements, income statements, and capital. The author retained earning statements and balance sheets, and used special accounting standards. In contrast, financial planning capabilities are measured by the ability of incubated entrepreneurs to prepare annual budgets and revenue forecasts. The measurement of financial planning capabilities was also adopted from Berrones (2010).

The control variables were metrically measured, whereby business age was measured by the number of years of operation of incubated entrepreneur's business. On the other hand, business capital was measured by the amount of money invested as capital by the incubated entrepreneur (Quinonez et al., (2022)). In contrast, incubation period was measured by the number of years an entrepreneur has been set.

2.4 Data analysis

The collected data were analysed using descriptive and inferential analysis from multiple regression analyses. All variable constructs were analysed, and all of them had Cronbach's alpha values above 0.70, which is a minimum acceptable Cronbach's alpha value for construct reliability (Cheung et.al., 2023). The descriptive analysis was done to generate the mean, mode and standard deviations; and inferential analysis was achieved through multiple regressions analysis. A regression model predicted semi-formal financial accessibility from financial decision-making, financial information analysis, and financial planning capabilities. To investigate the impact, regression analysis was used as expressed generally as;

$$SFA = f (FDC, FIC, FPC, BA, BC, IP).$$

In the equation above, the SFA is the dependent variable influenced by the independent variables, i.e. FDC, FIC, FPC, BA, BC and IP.

Regression model

FDC – Financial decision-making capabilities positively influence SFA, i.e. as an entrepreneur's financial decision-making capabilities improve, the SFA also increases, and the vice versa is true.

FIC – Financial information analysis capabilities positively influence SFA, i.e. when an entrepreneur's financial information analysis capabilities improve, the SFA also increases and vice versa.

FPC – Financial planning capabilities positively influence SFA, i.e. as an entrepreneur's financial planning capabilities improve, the SFA also increases and vice versa.

$$SFA = \alpha_0 + \alpha_1 BA + \alpha_2 BC + \alpha_3 IP + \alpha_4 FDC + \alpha_5 FIC + \alpha_6 FPC$$

Where

$\alpha_0, \alpha_1, \alpha_2, \alpha_3, \alpha_4, \alpha_5$ and α_6 are regression parameters which stand for the coefficients of the independent variables

BA is the entrepreneur's business age.

BC is the entrepreneur's business capital.

IP is the entrepreneur's incubation period.

3.0 RESULTS

3.1 Descriptive statistics

Table 1 summarizes the descriptive results for semi-formal financial accessibility, financial decision-making capabilities, financial information analysis capabilities and financial planning capabilities. All of the variables had the Cronbach's alpha value above 0.70, which shows that the reliability of all variable constructs was acceptable.

Table 1: Descriptive Statistics on Financial Management Capabilities and Semi-formal Financial Accessibility

Variable	Indicator			Construct			
	Mode	Mean	S.D	Mode	Mean	S.D	Cronbach's Alpha
Financial decision making capabilities				3.00	1.96	1.42	0.71
Regular meetings (at least monthly) to make financial decisions	1.00	1.42	0.50				
Investment decisions made by owner-manager in collaboration with staff	2.00	1.58	0.50				
Regular meetings to make investment decisions	1.00	1.48	0.50				
Financial decisions made by owner-manager in collaboration with staff	2.00	1.53	0.50				
Financial information analysis capabilities				5.00	2.86	2.22	0.84
Preparing yearly Cash flow statement	2.00	1.56	0.50				
Preparing monthly income statement	1.00	1.35	0.48				
Preparing monthly Capital and retained earnings statement	2.00	1.57	0.50				
Preparing monthly Balance sheet	2.00	1.57	0.50				
Preparing monthly Cash flow statement	2.00	1.59	0.50				
Using special accounting standards	1.00	1.49	0.50				
Financial planning capabilities				1.00	1.51	0.79	0.81
Having a one year financial plan	1.00	1.20	0.50				
Having a two years financial plan	1.00	1.29	0.50				
Semi-formal financial accessibility				3.00	2.98	0.74	0.84
Satisfaction level on interest rate agreed	3.00	2.97	1.07				
Satisfaction level on loan repayment term	3.00	3.08	0.91				
Satisfaction level on conditions of credit contract	3.00	2.98	0.88				
Satisfaction level on requirement of collateral	3.00	2.74	1.19				
Satisfaction level on requirement of managerial background	3.00	2.81	1.24				
Satisfaction level on financier's credit services procedure	3.00	3.01	1.04				
Satisfaction level on length of credit processing time	4.00	3.16	1.10				
Satisfaction level on amount of credit obtained	3.00	3.07	1.13				

Source:

As shown in Table 1, financial information analysis capabilities recorded a mean value of 2.88, the highest of all financial management capabilities. This indicates that incubated entrepreneurs have relatively higher financial information analysis capabilities than financial decision-making and planning capabilities. Among the items of financial information analysis capabilities, most incubated entrepreneurs showed they could prepare yearly and monthly cash flow statements. However, the incubated entrepreneurs indicated they are relatively poorer in financial planning-related items, and relatively better in financial information-related items. The semi-formal financial accessibility shows a mode and mean value of 3.50

and 2.98, respectively. Based on the categorical rank shown in the methodology section, the incubated entrepreneurs had an average accessibility of semi-formal finance.

3.2 Correlation between Variables

This section attempts to find out the relationship between the variables used in this study by employing the Pearson's Coefficient of correlation analysis. The findings in Table 2 depict the relationship between decision-making capabilities, financial information analysis capabilities, financial planning capabilities, semi-formal financial accessibility, business age, business capital, and incubation period.

Table 2: Correlations between Variables

	SFA	FDC	FIC	FPC	BA	BC	BC
SFA	1.000						
FDC	0.115	1.000					
FIC	0.238**	0.090	1.000				
FPC	0.101	0.178*	0.132	1.000			
BA	-0.283**	-0.151*	-0.129	-0.067	1.000		
BC	-0.059	0.068	0.048	-0.042	0.290**	1.000	
IP	-0.110	-0.179*	-0.119	0.131	0.490**	0.104	1.000

** = $p \leq 0.01$, * = $p \leq 0.05$

BA = Business Age, BC = Business Capital, IP = Incubation Period, FDC = Decision-making capabilities
FIC = Financial information analysis capabilities, FPC = Financial planning capabilities, SFA = Semi-formal financial accessibility.

From the analysis depicted in Table 2, a number of observations can be made. First, the correlation coefficient between incubated entrepreneur's decision-making capabilities and semi-formal financial accessibility shows an insignificant relationship between the two variables; which means that any change in the incubated entrepreneur's decision-making capabilities has nothing to do with semi-formal financial accessibility. Second, the correlation between incubated entrepreneur's financial information analysis capabilities and semi-formal financial accessibility is 0.238 with $P \leq 0.01$; and this indicates that there is a significant positive relationship between incubated entrepreneur's financial information analysis capabilities and semi-formal financial accessibility. This, in turn, means that when incubated entrepreneur's financial information analysis capabilities increase, semi-formal financial accessibility increases as well, and the vice versa is also true. Third, the correlation coefficient between an incubated entrepreneur's financial planning capabilities and semi-formal financial accessibility shows an insignificant relationship between the two variables, implying that any

change in an incubated entrepreneur's financial planning capabilities has nothing to do with semi-formal financial accessibility.

The findings also indicate an insignificant relationship between business capital and semi-formal financial accessibility; and between incubation period and semi-formal financial accessibility as both have $P \geq 0.05$, which means business capital and incubation period have nothing to do with incubated entrepreneurs' access to semi-formal finance. However, the correlation coefficient between business age and semi-formal financial accessibility is -0.283 with $P \leq 0.01$, which suggests a significant negative relationship between business age and semi-formal financial accessibility. This implies that access to semi-formal finance decreases as the business age increases.

Findings also indicate an insignificant relationship between incubated entrepreneurs' decision-making capabilities and their financial information analysis capabilities, which means that improvement in incubated entrepreneurs' decision-making capabilities has nothing to do with financial information analysis capabilities. Nevertheless, there is a significant positive relationship between incubated entrepreneurs' decision-making capabilities and their financial planning capabilities, which means that as incubated entrepreneurs' decision-making capabilities improve, financial planning capabilities also improve. Similarly, there is a significant negative relationship between incubated entrepreneurs' decision-making capabilities and their incubation period and business age, suggesting that the longer the incubated entrepreneurs' incubation period and business age, the lower the decision-making capabilities. However, there is an insignificant relationship between incubated entrepreneurs' decision-making capabilities and their business capital, suggesting that improved incubated entrepreneurs' decision-making capabilities has nothing to do with their business capital.

Findings also indicate an insignificant relationship between incubated entrepreneurs' financial information analysis capabilities and their financial planning capabilities. This shows that improvement in incubated entrepreneurs' financial information analysis capabilities is not related to their financial planning capabilities. Interestingly, all the three control variables, i.e. business age, incubation period and business capital have insignificant relationships with financial information analysis capabilities.

3.3 Results of Regression Analysis

Table 3 presents results for the multiple regression model. Multicollinearity was tested through Tolerance and VIF, and showed no multicollinearity problem. This implies that one regression model was enough for data analysis. The results indicate that financial decision-making ($b = 0.034$, $p = 0.434$) and planning capabilities ($b = 0.067$, $p = 0.395$) have an insignificant impact on the semi-formal financial accessibility of incubated entrepreneurs. This means that semi-formal financiers do not consider incubated entrepreneurs' financial decision-making and planning capabilities in assessing entrepreneurs' loans. It also implies that semi-formal financiers do not care whether an entrepreneur makes decisions on their own or they involve employees in the process of making decisions on a business. Results further indicate that semi-formal financiers do not consider entrepreneurs' ability to prepare annual and forecasted budgets. Table 3 summarizes the results of multiple regression analysis.

Table 3: Results of Multiple Regression Analysis ($R^2 = 0.361$)

	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
	B	Std. Error	Beta			Tolerance	VIF
(Constant)	2.896	0.266		10.884	0.000		
FDC	0.034	0.044	0.066	0.785	0.434	0.916	1.092
FIC	0.064	0.028	0.191	2.307	0.023	0.946	1.057
FPC	0.067	0.079	0.072	0.853	0.395	0.910	1.099
BA	-0.097	0.035	-0.270	-2.746	0.007	0.674	1.485
BC	0.011	0.104	0.009	0.103	0.918	0.896	1.115
IP	0.031	0.061	0.049	0.514	0.608	0.722	1.385

Dependent: Semi-formal financial accessibility

BA = Business Age, BC = Business Capital, IP = Incubation Period, FDC = Decision-making capabilities, FIC = Financial information analysis capabilities, FPC = Financial planning capabilities, SFA = Semi-formal financial accessibility.

The findings also reveal that financial information analysis capabilities significantly positively impact the semi-formal financial accessibility of incubated entrepreneurs. This suggests that semi-formal financiers consider the ability of entrepreneurs to prepare financial statements as an indicator of an entrepreneur's ability to manage the financial resources of a business.

The results also show that business capital and incubation periods have an insignificant influence on the semi-formal financial accessibility of incubated entrepreneurs. This suggests that semi-formal financiers do not consider incubated entrepreneurs' business capital and incubation period in assessing entrepreneurs' eligibility for loans. However, findings have also revealed that business age significantly negatively impacts the semi-formal financial

accessibility of incubated entrepreneurs. This implies that as the age of a business increases, its access to semi-formal finance decreases, and vice versa is true.

Generally, the finding in Table 3 can be summarised into the following regression equation:

$$SFA = 2.896 - 0.097BA + 0.011BC + 0.031IP + 0.034 FDC + 0.064FIC - 0.067FPC$$

Key:

BA = Business age

BC = Business Capital

IP = Incubation Period

FDC = Decision-making capabilities

FIC = Financial information analysis capabilities

FPC = Financial planning capabilities

SFA = Semi-formal financial accessibility

4.0 DISCUSSION

Descriptive statistics suggest that incubated entrepreneurs are moderately satisfied with preconditions and processing of semi-formal finance. Specifically, they are delighted with the semi-formal credit processing time length. Normally, processing credits from semi-formal financiers takes longer than processing credits from formal financiers. Likewise, incubated entrepreneurs are satisfied with credit service procedures and the credit provided. This implies that semi-formal credit procedures are relatively less bureaucratic than formal credit procedures. The findings also reflect that semi-formal financiers provide the same amount of credit requested by a borrower or close to the requested amount.

Correspondingly, incubated entrepreneurs were moderately satisfied with the conditions of credit contracts, interest rates, loan repayment schedules and collateral and managerial background requirements. The study suggests that semi-formal finance is key to incubating entrepreneurs in Tanzania. The results align with a report by FinScope (2023), who found that non-formal finance, including semi-formal finance, is dominant in developing countries.

Multiple regression analyses indicate that financial information analysis capabilities significantly impact incubated entrepreneurs' semi-formal financial accessibility. The results concur with the findings from a number of previous studies (Munyalo & Njoka, 2022; Berrones, 2010; Magede, 2021). These studies revealed a similar relationship, but their studies focused on financial management capabilities in general and access to formal finance. These are expected results because, in most cases, semi-formal financiers use financial reports as one of the criteria to assess loan eligibility for incubated entrepreneurs. Specifically, they

require income statements, cash flow statements and balance sheets to evaluate the ability of a business to repay the loan, and the entrepreneur's financial management capabilities.

Findings revealed that financial decision-making capabilities have no impact on the ability of incubated entrepreneurs to access semi-formal finance. . These are unexpected results as they contradict the majority of studies, including the study by Munyalo & Njoka (2022), which found a significant impact of financial decision-making capabilities on access to finance. This could be associated with the fact that semi-formal financiers do not use decision-making attributes like entrepreneurs having regular meetings to make financial decisions while collaborating with their employees and having regular meetings to make investment decisions while making investment decisions in collaboration with employees. As a result, financial decision-making capabilities have nothing to do with the semi-formal financial accessibility among incubated entrepreneurs.

Similarly, financial planning capabilities have no impact on the semi-formal financial accessibility of incubated entrepreneurs as well. It is also an unexpected result as it contradicts most studies, including the study by Robison et al. (2021), which has shown that financial planning capabilities significantly impact financial accessibility. This could be because semi-formal financiers need to use financial planning variable items like preparing quarterly, semi-annual and annual budgets.

5.0 CONCLUSION

Financial management capabilities related to financial decision-making, financial information analysis and financial planning play a significant role in incubating entrepreneurs' access to semi-formal finance. The findings in this research paper reveal the type of financial management capabilities which are the main focus of semi-formal financiers. The findings create awareness among financiers about financial decision-making and planning capabilities as other important criteria to use when evaluating the eligibility of incubated entrepreneurs for loan provision.

The research results in this paper and previous research about business incubation and entrepreneurs' financing provide information for policymakers. Recommendations are made

in this article to enable policymakers and other stakeholders to improve financial accessibility among entrepreneurs.

From these findings, it is suggested that governments and other stakeholders should still put much effort into supporting business incubators to enable them to incubate more entrepreneurs and to develop and improve their financial management capabilities to facilitate financial accessibility, particularly semi-formal financial accessibility. Similarly, business incubators and other interventions should improve incubated entrepreneurs' financial information analysis capabilities to improve their access to semi-formal finance.

Policymakers should also promote awareness among semi-formal financiers on the importance of using decision-making and planning capabilities as key criteria in determining entrepreneurs' eligibility for loans. This is because the study has revealed that semi-formal financiers like PRIDE and SIDO evaluate entrepreneurs who borrow finance from them mainly based on their ability to prepare and interpret financial statements.

Since this paper is confined to the impact of financial management capabilities on semi-formal financial accessibility, it may be extended to the impact of financial management capabilities on access to formal finance. Such a study will reveal how incubated entrepreneurs can utilize their financial management capabilities to improve their financial accessibility.

The scope of this research may also be extended to the assessment of the services provided to business incubators and their influence on incubated entrepreneurs' financial management capabilities. It is important to know the influence of the services provided to business incubators on their financial management capabilities because incubators purposely provide professional services to improve incubated entrepreneurs' management capabilities, including financial management capabilities. It is, therefore, imperative to check if the provided services significantly improve the management capabilities associated with financial management.

Future research may also focus on specific business sectors to assess the impact of financial management capabilities on semi-formal financial accessibility. This paper involved incubated entrepreneurs from various business sectors like ICT, food processing, other manufacturing activities, marketing and business development services. It is important to

check whether financial management capabilities have a role to play in each business sector and semi-formal financial accessibility of incubated entrepreneurs.

REFERENCES

- Akbas, O., Betz, F., & Gattini, L. (2023). *Quantifying credit gaps using Survey data on discouraged borrowers*. European Investment Bank, EIB Working Paper 2023/06.
- Azadnia, A., Stephens, S., Ghadimi, P. & Onofrei, G. (2022). A comprehensive performance measurement framework for business incubation centres: Empirical evidence in an Irish context. *Business Strategy and the Environment*, Vol. 31(5): 2437-2455.
- Belluci, A., Borisov, A., Giombini, G., & Zazzaro, A. (2023). Informational asymmetry, external certification, and the cost of bank debt. *Journal of Corporate Finance*, Vol. 78.
- Berrones, H. C. N. (2010). *Formal Financial Management and its Relation with Internal Aspects of Enterprises and the Financing Process: The Case of Incubated and Non-Incubated Young SMEs in Mexico*. PhD thesis, Faculty of History and Oriental Studies, University of Leipzig.
- Cheung, G., Cooper-Thomas, H., Lau, R., & Wang, L. (2023). Reporting reliability, convergent and discriminant validity with structural equation modelling: A review and best-practice recommendations. *Asia Pacific Journal of Management*. Published online. <https://doi.org/10.1007/s10490-023-09871-y>.
- EBMS (2023). *World of business incubators for startup success 2023*. EBMS Business Services LLC, Dubai, Emirates.
- Eye, I. & Lose, T. (2023). Consequences of failure and challenges of Small Businesses in South Africa: A theoretical review. *Business Excellence and Management*, Vol. 13(3).
- Finscope (2023). *The state of financial inclusion and key development*. Retrieved from <https://www.fsdt.or.tz> > Finscope-Tanzania-2023-Report-Key-Insights-One-Page.pdf.
- International Finance Corporation (IFC). (2020). *Annual report 2020: Transformation*, Washington D.C.

- Ismail, J. (2022). Entrepreneurs' competencies and sustainability of SMEs in Tanzania. A mediating effect of entrepreneurial innovations. *Cogent Business & Management*, Vol. 9(1).
- Jenkins, D.G. (2020). A solution to minimum sample size for regressions. *PLoS One*, Vol. 15(2).
- Magede, Z.N. (2021). *Influence of financial management skills on accessing finance by entrepreneurs*. Masters thesis, Gordon Institute of Business Science, University of Pretoria.
- Mancini, S. & González, J. (2021). Role of Technology Transfer, Innovation Strategy and Network: A Conceptual Model of Innovation Network to Facilitate the Internationalization Process of SMEs. *Technology and Investment*, Vol. 12: 82-128.
- Mpofu, O. & Sibindi, A. (2022). Informal finance: A Boon or Bane for African SMEs? *Journal of Risk and Financial Management*, Vol. 15(6): 1-15.
- Munyalo, A., & Njoka, C. (2022). Financial management capabilities and financial health of Nyeri County, Kenya public secondary schools. *African Journal of Emerging Issues*, Vol. 4 (3): 11-41.
- National Bureau of Statistics (NBS) (2020). *Tanzania Integrated Labour Force Survey 2020*, Dar-es-Salaam, Tanzania: NBS.
- OECD (2024). *Financing SMEs and Entrepreneurs 2024: An OECD Scoreboard*. OECD Publishing, Paris.
- Quinonez, H., Diaz, A. & Estavez, L. (2022). Financial capital measure with item response theory: A didactic approximation. *Entrepreneurial Business and Economics Review*, Vol. 10 (1): 65-80.
- Rens, V., Iwu, C., Tengeh, R., & Esambe, E. (2021). SMEs, Economic growth, and Business incubation Conundrum in South Africa: A literature appraisal. *Journal of Management and Research*, Vol. 8(2): 214-251.
- Robison, L., Hanson, S. & Black, R. (2021). *Financial Management for Small Businesses Financial Statements and Present Value Models*. Second Open Edition, East Lansing, MI.

UNCTAD (2023). *Bridging the Financing gap: Unleashing the potential of SMEs*, SDG Action Weekend report, Trusteeship Council Chamber, UN Headquarters, New York USA.

Yi, H., Meng, X., Linghu, Y. & Zhang, Z. (2022). Can financial capability improve entrepreneurial performance? Evidence from rural China. *Economic Research*, Vol 36 (11). DOI:10.1080/1331677X.2022.2091631.

Zhao, T., Matthews, K. & Munday, M. (2023). Neither true nor fair-weather friend: relationship banking and SMEs borrowing under Covid-19, *The European Journal of Finance*, Vol. 29 (16): 1957-1974.