

## Effect of Budgeting and Financial Awareness on Sustainability of Small and Medium Enterprises in South Africa during the COVID-19 Era

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**Abstract:** The objective of this study is to examine the effect of budgeting and financial awareness on sustainability of small medium enterprises. The quantitative research method was adopted for this study and the purposive sampling technique was chosen to select the participants for this study. The study collected primary data from respondents who are owners of SMEs in the retail, construction, manufacturing sectors, etc and the data was analysed using SPSS. A total of 310 research questionnaires was administered and 304 research questionnaires were returned for analysis (giving a 98% response rate). A regression analysis and Pearson's correlation analysis were conducted. The outcome of Pearson's correlation shows moderate correlation (r value is 0.372) between budgeting, financial awareness and sustainable SMEs. There is also a significant effect of budgeting and financial awareness on sustainability as revealed in p-value <0.0005. Budgeting plays an important role in SME sustainability more than financial awareness as budgeting uniquely accounts for the largest proportion of the variance in the regression model. This implies that SMEs should give more attention to budgeting to ensure their sustainability such that more training or awareness is given to forecasting and financial planning.

**Keyword:** Budgetary control; financial performance; financial decisions; financial strategies; small business.

**JEL Classification:** D22; M20; M41

### 1. Introduction

The growth and success of Small and medium-sized enterprises (SMEs) have been of great concern to economists, governments, financial institutions, venture capital firms, entrepreneurs and NGOs across countries, among others (Durst & Gerstlberger, 2021). These enterprises' performance is a key concern for the government and the economic regulators of both developed and developing countries. The success or failure of SMEs depends on their financial sustainability (Schwab, Gold & Reiner, 2019). Enterprises have been subjected to a multitude of obstacles as a result of the worldwide pandemic, and their responsiveness to this disturbance has influenced their endurance along with their prospects of surviving the crisis. SMEs have been compelled to rely tightly on their financial awareness and budgets in order to keep their business running while adapting to this change that has been brought about by this monstrosity diseases.

The uncertain and unstable relationship between the financial awareness and budgeting results in poor financial performance (Septria, and Heryanto, 2019). The lack of budgeting and poor understanding of

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financial awareness is one of the most common problems facing small businesses with the impact of COVID-19, more than 68% of SMEs have permanently collapsed (Baporikar, 2021; Naidoo, 2021). In enhancing transparency, performance, accuracy and accountability, financial awareness has been shown to be important, resulting in the business achieving its goals (Septria & Heryanto, 2019). Financial awareness is comprehension and understanding of financial principles; the ability to apply that knowledge; the ability to make educated or effective decisions about money management and use and the ability of a person to work with numbers (Massingham & Al Holaibi, 2017). Fundamentally, financial awareness allows an individual to understand how money functions in a company, how to make it, spend it and invest it wisely to strengthen the profitability of the business (Lusardi and Mitchell, 2014).

Financial awareness has been seen as a prerequisite for the sector to improve the functioning of the SME sector, as business owners make day-to-day financial decisions that lead to their success and growth (Kuruville & Harikumar, 2018). SMEs need to be armed with the skills needed to make good financial decisions in order to work efficiently and achieve expected business sustainability and growth (Lusardi & Mitchell, 2014). The main economic finding was that capital markets are more open to small investors, offering the consumer a variety of financial products to choose from (Kuruville & Harikumar, 2018). The decision would not be an easy one, however, as there are significant penalties that come with each wrong financial decision, which underscore the neural associations of financial awareness (Massingham & Al Holaibi, 2017). Numerous governments around the world have made financial education a priority to resolve the need to develop financial literacy and the skills needed by entrepreneurs to navigate the financial world (Lusardi and Mitchell, 2014). In addition, financial awareness plays a key role in achieving sustainable growth and development in economies (Duval-Couetil, 2013).

On the other hand, budgeting plays a significant role in the performance of businesses (King Clarkson and Wallace, 2010). Also, budgeting is a range of activities to predict the financial needs of the business in the future. The budget is a detailed plan that offers information on the acquisition and utilization of resources over a period of time (Rehman, Mohamed & Ayoup, 2019). During the budgeting process, management is allocated the estimated rate of revenue, cash flows and possible costs. Budgets are essential for SMEs because they provide forward-looking information that encourages management (Warrick, 2017). Budgets promote collaboration and alignment of various departments within an organization to shared goals by offering a wider view of the desired target of a SME (Muneer, Ahmad & Ali, 2017). Quantifying the target goals minimizes uncertainty and provides a mutual view of the goals and thus promotes contact (Rehman, Mohamed & Ayoup, 2019).

To evaluate employees' efficiency and to reward positive outcomes to encourage employees, budgets often provide a valuable measure (Muneer, Ahmad and Ali, 2017). In the form of a business plan, budgeting is important. This is especially important for SMEs because these businesses must provide compelling business strategies when they collect funds, unlike their larger counterparts (Warrick, 2017). In general, SMEs have few to no successful records and are therefore regarded by capital providers as high-risk activities (Durst & Gerstlberger, 2021). Without such track record, SME decision-makers must convincingly show that their organizations have a sound strategy and a reasonable profit plan. Consequently, a clear and practical budget is an integral part of a SME capital-raising business strategy (Warrick, 2017).

The objectives of SME budgets are to force decision-makers to follow a long-term outlook, rather than distracting themselves by short-term daily activities which do not impact a company's long-term

competitiveness and longevity (Muneer, Ahmad & Ali, 2017). Budgets also help to review profitability by helping SMEs decisions to define, appreciate and concentrate on their companies' most valuable products by maximizing the distribution of resources (Arnold & Artz, 2019). In addition, the budgets enable SME decision makers to predict their enterprises' potential success and proactively shape the future rather than depend upon their business environment developments. In addition, they push SMEs decision-makers, rather than abstract generalizations without commitment, to effectively forecast by translating their forecasts in specific quantified plans (Arnold & Artz, 2019).

Notwithstanding the potential budgetary benefits mentioned above and financial awareness of SMEs, previous studies have found that a great many SMEs do not plan budgets, nor do they update their budgets continuously, and nor do they follow up on their budget progress (Warrick, 2017; Rehman, Mohamed & Ayoup, 2019). This is the case for many SMEs. On the other hand, many reports have shown that small and medium-sized businesses are implementing a high budget (Arnold & Artz, 2019). These reports, however, have shown broad dissatisfaction with the budgets after they had been introduced. Budgets were explicitly criticized for being an obstacle to successful resource allocation as they would enable myopic decision-making and other budgetary inefficiency (Muneer, Ahmad & Ali, 2017).

In South Africa, despite the significance of budgeting and the importance for the economy of SMEs, only a small number of studies have been carried out in the country to examine how these enterprises use their budget. As a result of a lack or inefficiency in the use of the budget in previous studies in other nations, the high rate of failure of small enterprises has resulted in a need for a study of the budgets and financial awareness on SMEs in South Africa. Thus, this study emphasizes the importance of budgeting for small enterprises in South Africa and promotes it. Specifically, the goal of this paper is to address small businesses' misinformation gap and to boost their financial awareness. This paper also examines the relationship between financial awareness and budgeting which makes it serve as a forum for further review, clarification and contribution to current literature and knowledge.

### **1.1. Overview of South African SMEs during COVID-19**

The ongoing COVID-19 epidemic is inflicting immeasurable human misery throughout the African continent and is expected to have long-term consequences for the continent's small and medium-sized businesses (SMEs). Even though some sectors have demonstrated resilience or even established a new operational niche, the majority of small firms have found themselves in "new normal" operating circumstances. Extra shocks from COVID-19 are placing additional strain on South African SMEs, who are already dealing with a shrinking economy. Many SMEs' revenues have plummeted as a result of lockdown measures, and the majority indicate that they are being compelled to cut back on company expenditures in order to survive. Because of the Covid-19 epidemic, more than half of the owners of Small, Medium, and Micro Enterprises have been concerned about the long-term viability of their enterprises in recent months.



Source: <https://www.ipsos.com/en-za/smmes-understanding-impact-covid-19>.

## 2. Literature Review

### 2.1. Conceptual Review:

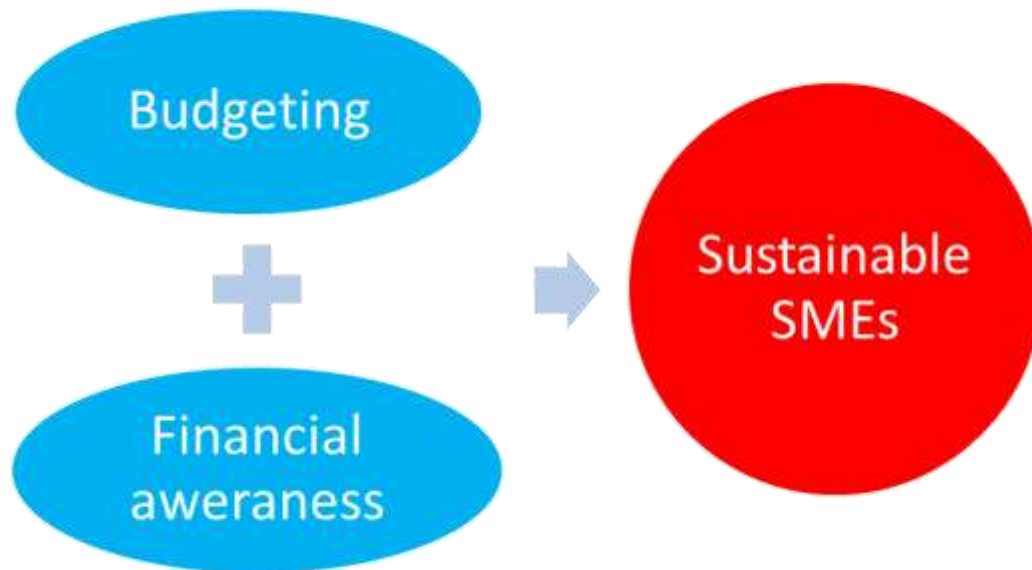
#### 2.1.1. Importance of Budgeting on SMEs

The budgets are short-term financial strategies, normally with a one-year horizon (Zor, Linder & Enderich, 2019). The budget provides the business with a focus, promotes the planning of operations and facilitates regulation (Suurd, 2020). Planning is accomplished by means of a fixed master budget, while regulation is usually exerted by combining the current costs with a variable budget (Henttu-Aho, 2018). Budgeting is universal and can be implemented in all industries, such as SMEs, as it has the sole purpose of meeting corporate targets. Budgets are used to guarantee that costs stay within the existing limits and that business management officially approves performance targets and tracks intra-period progress (Henttu-Aho, 2018). Finally, by contrasting budgetary targets and real performance, budgets serve as metrics for the assessment of employees and business operations (Zor, Linder & Enderich, 2019). Budgeting can also make a significant contribution to the success of SMEs, as they have a vital responsibility to promote the economic and social well-being of the country, and hence indigenous entrepreneurship is likely to be more important in small enterprises than in large companies (Suurd, 2020). The budgetary control of any business is an important part of the management process. The manner in which revenue is generated and used in the business will include a roadmap to achieve the company's goals (Henttu-Aho, 2018). The organization's budgeting method influences the level of success of the company and it is therefore critical that the organization adopts effective budgeting processes that will be able to produce more reliable results of the firm's performance over the targeted timeframe (Eniola and Entebang, 2017). Despite the critical role that a budget can ultimately play in preserving the long-term health of a business, most SMEs still struggle to establish and make full use of one (Suurd, 2020).

## **2.2. Financial Awareness of SMEs**

Financial awareness refers to the ability to know and understand the financial concepts and to implement knowledge in decision-making about money management and usage. Financial awareness helps a business owner to understand the products and services offered by financial institutions, including how to invest for future financial goals. Financial awareness is needed as a basic financial concept that helps a business owner to manage finance and help with short-term to long-term investment decisions (Damayanti et al. 2018). This suggests that business owners who are unaware of finance concepts might be challenged with making effective decisions to propel the growth of their business. Financial awareness impacts the behaviour of the business owner in terms of how to use money. It also helps to understand the financial market and how new product development can meet the new needs on the financial market (Dalkilic & Kirkbesoglu, 2015).

Naidu (2020) indicated that economic and financial market problems encourage the use of new financial products. As a result, new products created “to meet new needs in financial markets will influence the effectiveness of financial awareness” (Eniola & Entebang, 2017). Since finance is at the core of the social life of small businesses, owners are finding it important to handle financial circumstances (Dalkilic & Kirkbesoglu 2015). Financial awareness also influences a small business owner’s decision on which financial professional to consult during financial challenges of the business owner (Eniola & Entebang, 2017). Financial awareness helps in planning retirement for SME owners. Esiebugie, Richard and Emmanuel (2018) suggested that the level of education, as well as courses taken in business, influence financial product awareness. The lack of financial awareness might influence the decisions of an SME’s owner and impact on the growth of a business. In this regard, training of SME owners on financial awareness is imperative for business growth. The level of financial awareness needed can differ based on the type of SME. However, it is necessary for owners/managers to understand key financial reports and accounting concepts; the cash flow and profit; customised reporting to meet the specific needs of the type of SME; help to identify weaknesses in functional areas of SMEs operation; monitoring of year-on-year income and expenditure; and finding automation options to save time and money.



**Figure 1. Conceptual framework to link budgeting and financial awareness on SMEs Sustainability.**

*Source: Authors' Design (2021)*

Figure 1 portrays the connection between budgeting and financial awareness (independent variables) and SMEs sustainability (dependent variable).

### **2.3. Theoretical Framework: Financial Literacy Theory**

Financial literacy theory posits that the conduct of people with a high degree of financial literacy relies, according to dual process theories, on the prevalence of both thought styles: intuition and cognition. Dual-process theories (Evans, 2018) promote the notion of making choices through intuitive as well as cognitive processes. Various fields have been researched and applied to dual process theories, for example reasoning and social cognition (Evans, 2018). In both the developing and the emerging economies, financial literacy remains an interesting subject, and has caused great concern in recent times, due to rapidly changing financial landscapes. According to this theory, the Gallery, Newton and Palm (2018) financial awareness framework is a form of capital investment, and several empirical surveys show that people have to know more to learn. The authors explain how financial literacy affects economic outcomes. To better inform empirical and theoretical models as well as public policy, they conclude with research requires considerations. The theory of financial literacy suggests that the behaviour of individuals with a high level of financial literacies may be based, according to dual-process theories, on the prevalence of the two thinking styles: intuition and cognition. Dual-process theories (Idowu, 2019) support the notion that both intuitive and cognitive processes can affect decision-making.

## **2.4. Review of Past Literature**

Research literature provides evidence of the link between budgeting literacy and sustainability (Tuffour, Amoako & Amartey, 2020). Нургалиева (2016) opined those small businesses cannot have processes that promote the budgeting process, unlike large companies that try to have a robust budgeting process. They might not even have the skills required to prepare the budget or to be aware of the importance of using the budget as a guide for their activities. Chepngetich (2016) argues that budgeting among SMEs faces major challenges due to transparency, lack of cooperation and involvement, lack of understanding of the budgeting process, failure to meet set deadlines, and unrealistic estimates that make implementation of the budget unrealistic. These issues are aggravated by poor accounting systems, which do not make it easier to provide accurate and sufficient data in a timely manner on the basis of revenue and expense management and budget planning.

Eniola and Entebang (2017) looked at the impact of financial awareness initiatives on owners of small and medium-sized enterprises. They noticed that better-performing small and medium-sized companies had owners/managers with greater financial awareness. Lusardi and Mitchell (2014) reached the conclusion that more than 57% of these business operators seldom engaged in any business training programme, despite the fact that more than 60% of them have little to no knowledge of financial awareness and therefore financial knowledge that is essential to the management of their companies. These studies have showed that the profitability of small and medium-sized companies was relatively poor. A strong financial base for owner-managers of SMEs is a substantial barometer of progress and sustainability in the performance of SMEs (Odoom, 2016). Furthermore, financial awareness has an effect on the accessibility and repayment of loans. The shortage of formal sector funding in South Africa is one of the causes of the high failure rate of new micro companies.

Okeyo, Gathungu, and Peter (2014) found that owners who received business advice and resources had seen an improvement in sales growth and market share in an overview of the impact of business development services on the performance of SMEs. The study also found that those who completed the education programs saw an improvement in sales and profits in their businesses. 83.3% of those who had been trained had substantial increases in their earnings compared to 41.2% of those who had never been trained (Álvarez-Franco, Muñoz-Murillo and Restrepo-Tobón, 2017). Chepngetich (2016) concluded that improved financial awareness helps to ensure a more regular financial reporting performance. Lower chances of redemption of loans and lower chances of voluntary closure are for small companies that more frequently produce a financial statement.

Esiebugie, Richard and Emmanuel (2018) claim that a low level of financial awareness is one of the problems facing SMEs. It was concluded by Chaulagain (2017) that financial awareness is a very powerful explanatory factor for the use of financial services. Low financial awareness would escape the comprehension and evaluation of financial products by SME owners, which reduces their service delivery and the productivity of their growth. In addition, financial awareness may make innovative use of budget control for owners and management (Xu, Shi, Rong and Yuan, 2020)

Akpan, Udoh and Adebisi (2020) analysed budgeting as well as financial awareness in a survey by 54 medium-sized and large companies in Bahrain, which centred on budget planning and control, budgetary engagement and motivation and performance assessment. These researchers found that an improvement in the size of an organization contributes to a stricter budgeting method for better performance. Furthermore, the size and scope of the operations typical of the company influenced the nature of the budget.

### 3. Methodology

This study used quantitative research design and hence, positivist paradigm. Data were gathered from the five-point Likert scale closed-ended questionnaire. Retail, construction, manufacturing and agriculture SMEs in the KwaZulu-Natal (KZN) province have been selected to analyse its budgeting decisions and financial awareness. The estimated target population for the study is 700 small business in KZN. The Cochran's formula is adopted in research when the target population is unknown or too large (Hoaglin, 2016; Ajakaiye, Afolabi, Akinola, Okagbue, Olagunju & Adetoro, 2018).

For this study, the modified version of the Cochran formula for sample size determination in small population was adopted. The sample size for this study was 321 SMEs. SME owners or a suitable representative of the business owner were selected based on the fact that the business has employees between 10 to 200 employees.

$$n_0 = \frac{Z^2 pq}{e^2}$$

Where:

$n_0$  = minimum sample size

Z = value of the selected alpha level (1.96)

P = the (estimated) proportion which has the attribute in question (0.5)

Q = is (1-p)

E = is the margin of error (0.05 which is calculated at 95% confidence interval).

$$\text{Minimum sample size} = \frac{((1.96)^2 (0.5) (0.5))}{(0.05)^2} = 385$$

However, for the purpose of this study, the modified version of the Cochran formula for sample size determination in small populations may be adopted. The formula is stated below:

$$n = \frac{n_0}{1 + \frac{(n_0 - 1)}{N}}$$

Here  $n_0$  is Cochran's sample size endorsement, N (where N is assumed to be 2000) is the population size and n is the adjusted sample size. The sample size for SMEs in Durban based on this formula is calculated thus:

$$385 / (1 + (384 / 2000)) = 321$$

Therefore, the sample size for this study will be 321 SMEs in Durban.

This study focuses on SMEs in the KwaZulu-Natal Central Business District (CBD), Durban which employ between 10 and 200 employees, selected because these SMEs cannot keep up with budget and have demonstrated poor financial which leads to difficulties with sustaining their businesses. The unit of analysis of this study is the SME players. Table below presents the sample size.

**Table. Sample Size**



Nature of SMEs	Nature of Participates	Target sample size
Manufacturing	Owner of the SMEs or Manager	115
Construction	Owner of the SMEs or Manager	30
Agriculture	Owner of the SMEs or Manager	33
Retail sector	Owner of the SMEs or Manager	126
<b>Total</b>		<b>321</b>

Source: Author's compilation (2021)

The recruitment process was conducted by the researcher who approached the business owners electronically (via email) to express the research intentions of the study. The respondents' email addresses were extracted from their websites and/or from the Small Enterprise Development Agency (SEDA) online database. A purposive sampling technique is found appropriate to allow the researcher use own judgement to select suitable representative of the business owner of which 89 were from manufacturing, 97 from retail sector, 48 from agriculture and 72 from construction. Questionnaire was administered to a total of 321 respondents. Three hundred and ten (310) respondents returned the questionnaire out of which six (6) of the questionnaires were not properly completed and were discarded. The remaining 304 which constituted 98% of the response rate, were coded and analysed for this study.

The Statistical Package for the Social Sciences (SPSS) was used for the data analysis through Exploratory Factor Analysis (EFA) to determine the factor structures of items employed to measure each of the constructs in this study. Then, the Cronbach's alpha test was conducted to determine the reliability of each construct. Kaiser-Meyer-Olkin (KMO) is employed to establish the adequacy of the sample size for this study. Hayakawa (2020) stated that the KMO test is used to measure the suitability of data for factor analysis. Lastly, linear regression was done to determine the effect of the independent variables on the dependent variable.

#### 4. Results and Discussion of Data Analysis

Table 1. Descriptive analysis

S/N	Statements	SD	D	N	A	SA
<b>1.1</b>	<b>Financial Awareness</b>					
1.1.1	I can analyse the financial performance periodically	48 (15.8%)	65 (21.4%)	74 (24.3%)	86 (24.3%)	31 (10.2%)
1.1.2	I prepare monthly income statements	53 (17.4%)	82 (27.0%)	56 (18.4%)	80 (26.3%)	33 (10.9%)
1.1.3	I have received training on book-keeping	71 (23.4%)	80 (26.3%)	52 (17.1%)	63 (20.7%)	38 (12.5%)
1.1.4	My business has bought formal insurance for the business	57 (18.8%)	68 (22.4%)	55 (18.1%)	73 (24.0%)	51 (16.8%)
1.1.5	I can compute the cost of loan capital	9 (3.0%)	47 (15.5%)	93 (30.6%)	108 (35.5%)	47 (15.5%)
1.1.6	I have a savings account	0	20 (6.6%)	35 (11.5%)	61 (20.1%)	188 (61.8%)
1.1.7	I am aware of the required documents to get a loan from a bank to fulfil our financial needs	3 (1.0%)	46 (15.1%)	73 (24.0%)	122 (40.1%)	60 (19.7%)
1.1.8	I am aware of the costs and benefits of accessing credit	6 (2.0%)	49 (16.1%)	78 (25.7%)	118 (38.8%)	53 (17.4%)

1.1.9	I can calculate the interest rates and loan payments correctly	8 (2.6%)	30 (9.9%)	73 (24.0%)	124 (40.8%)	69 (22.7%)
1.1.10	I have the skills required to assess the financial outlook for the business	1 (0.3%)	40 (13.2%)	94 (30.9%)	117 (38.5%)	52 (17.1%)
1.1.11	I have skills for minimizing losses by minimizing bad debts	4 (1.3%)	33 (10.9%)	81 (26.6%)	105 (34.5%)	81 (26.6%)
1.1.12	I have basic accounting knowledge	6 (2.0%)	41 (13.5%)	74 (24.6%)	120 (39.5%)	63 (20.7%)
1.1.13	I am aware that decision making in management is an essential skill required for businesses as it determines the success business.	3 (1.0%)	15 (4.9%)	41 (13.5%)	124 (40.8%)	121 (39.8%)
1.1.14	I am aware of competition and always consider better ways to improve the business.	1 (0.3%)	20 (6.6%)	48 (15.8%)	97 (31.9%)	138 (45.4%)
<b>1.2</b>	<b>Budgeting by SMEs</b>					
1.2.1	The business consistently prepares operational budgets on a predetermined basis, e.g., bi-annual, annual	20 (6.6%)	43 (14.1%)	57 (18.8%)	132 (43.4%)	52 (17.1%)
1.2.2	The business prepares the budget beginning of the financial year and review at the year end	21 (6.9%)	34 (11.2%)	78 (25.7%)	111 (36.5%)	60 (19.7%)
1.2.3	Budgets forms a basis for employment performance contracts.	4 (1.3%)	36 (11.8%)	63 (20.7%)	138 (45.4%)	63 (20.7%)
1.2.4	There is strong alignment of the budget to the business strategy	1 (0.3%)	19 (6.3%)	105 (34.5%)	108 (35.5%)	71 (23.4%)
1.2.5	The business makes use of budgeting process such as activity-based budgeting beyond budgeting, rolling budget instead of traditional budgeting	19 (6.3%)	43 (14.1%)	100 (32.9%)	99 (32.6%)	43 (14.1%)

The analysis of the survey response on financial awareness and budgeting in SMEs is presented below. The responses were presented in frequency and percent from the scale of strongly disagree (SD), disagree (D), neutral (N), agree (A) and strongly agree (SA).

The outcome presented in Table 1 in terms of **Financial Awareness**, indicates that 24.3% of respondents who are owners of SME can analyse the financial performance of their business periodically. However, 27.0% disagree with preparing monthly income statements. The outcome provides evidence that 26.3% disagree with having received training on bookkeeping. It is evidence that 45.4% of respondents strongly agree to “aware of the competition and always consider better ways to improve the business” and 61.8% strongly agree to had savings account. It is evident that respondents agree to their business having formal insurance (24.0%), owners can compute the cost of loan capital (35.5%), aware of required documents to get a loan from a bank (40.1%), aware of the costs and benefits of accessing credit (38.8%), owners can compute interest rate and load payment

correctly (40.8%), owners have the required skills to access financial outlook (38.5%), owners have skills to minimize losses by reducing bad debts (34.5%), owners have basic accounting knowledge (39.5%) and owners are aware of their decision making in management is an essential skill required for their business which determines its success (40.8%).

Respondents, in terms of **SME budgeting**, were neutral on the business outcome of the budgeting process, such as activity-based budgeting beyond budgeting, rolling budgeting instead of traditional budgeting (32.9%). Whereas the respondents agree on the following: Business consistently prepares operating budgets on a predetermined basis, e.g., bi-annual, annual (43.4%), Business prepares the budget at the beginning of the financial year and reviews it at the end of the year (36.5%), Budget provides the basis for employment performance contracts (45.4%) and a strong budget alignment with business strategies (35.5%).

#### 4.1. Exploratory Factor Analysis (EFA)

The EFA was carried out to screen data and determine the factor structure of the items used to measure the variables in this study. The Principal Component Analysis (PCA) was valuable in the determination of the factors to be extracted for the variables measured in this study (Ganiyu, Derera, Fields and Atiku, 2020). The EFA conducted provided clarity on factors that are moving together via factor extraction (Hadi, Abdullah and Sentosa, 2016). An item with loadings of .40 upwards was retained for this study. The sample size adequacy was ensured using the Kaiser-Meyer-Olkin (KMO). Kaiser (1974) cited in Ganiyu et al. (2020, p.6) “suggests 0.5 as the threshold for the KMO, while the value between 0.5 and 0.7 is considered as a mediocre, value between 0.7 and 0.8 are good, 0.8 and 0.9 are considered great value and 0.9 and above are considered excellent.” The reliability of the research instrument was measured using Cronbach’s alpha coefficient test of reliability. Table 2 illustrates the factor loadings of each item.

**Table 2. Exploratory Factor Analysis**

	<b>1</b>	<b>2</b>	<b>3</b>
FA_1	.765		
FA_2	.785		
FA_3	.774		
FA_4	.738		
FA_7	.560		
FA_8	.488		
FA_10	.475		
Budgt_1		.747	
Budgt_2		.760	
Budgt_3		.696	
Budgt_4		.624	
Budgt_5		.764	
FA_5			.474
FA_6			.403
FA_9			.563
FA_11			.548
FA_12			.622
FA_13			.452
FA_14			.537
<b>Cronbach’s</b>	<b>.883</b>	<b>.906</b>	<b>.842</b>
<b>Eigenvalue</b>	<b>3.584</b>	<b>2.142</b>	<b>1.794</b>
<b>Variance (%)</b>	<b>5.514</b>	<b>3.295</b>	<b>2.760</b>

**KMO = .917;  $X^2 = 13987.325$ ;  $df = 2080$ ;  $p < 0.001$**

The table 2 revealed that (3) factors emerged from the EFA. The outcome of the EFA revealed good reliability of all the factors extracted in this study. The Cronbach's alpha coefficient indicated that factor 3, has Cronbach's alpha of .842, while factor 2 revealed reliability of .906. Factor 1 have Cronbach's alpha of .883. The Eigenvalue for factor 1 which measures Financial Awareness (FA) factor is 19.336 and explained 29.748% of the variance. Factor 2 measures Budgeting produced an Eigenvalue of 2.142 and explained 3.295% of the variance. The KMO test of 0.917 is an indication of the study sample size adequacy. The Bartlett Test of Sphericity is significant at  $p < 0.0005$ .

The paper was formulated to establish the influences of budgeting and financial awareness on SMEs sustainability. Table 3 illustrates the summary of the regression analysis which was used to determine the effect of the independent variables on the dependent variable in this study.

**Table 3. Outcome of Regression Analysis of the Effects of Budgeting and Financial Awareness on SMEs Sustainability.**

Variables in the equation	B	Beta	t	p-value	R <sup>2</sup>	F	df	p-value
Constant	15.783		14.718	<0.0005	0.232	45.411	2; 301	<0.0005
Budgeting	0.372	0.337	5.172	<0.0005				
Financial awareness	0.148	0.192	2.944	<0.0005				

a. Predictor: (Constant), budgeting & financial awareness;

b. DV: SMEs sustainability.

The research presents the regression model with two independent variables where budgeting has the largest absolute value 0.372, which indicates budgeting uniquely accounts for the largest proportion of the variance in the regression model. This revelation seems to agree with the statement that the statement by Yogendrarajah, Kengatharan and Jeyan Suganya (2017), that capital budgeting factors are important source of funding for SME. Although, this study could not relate budgeting to the source of funding, it suggests that when the SME has the requisite knowledge on budgeting it can facilitate investor decision to invest in the SME. Financial awareness on retirement plans for SME owner might be a challenge to ensure sustainable SME, as this study could not establish a clear fact on retirement plans of owners.

**Table 4. Pearson Correlation Coefficient**

		1	2
1	SMEs sustainability	—	
2	Budgeting	0.452**	—
3	Financial awareness	0.335**	0.603**

\*\* Correlation is significant at the 0.01 level (2-tailed).

This study revealed that based on the regression model budgeting has the largest absolute value 0.372, indicating that budgeting accounts for the largest proportion of the variance in the regression model. The findings of this study are in line with those of the study of Santra (2018), which observed that knowledge of finances and budget have positive impact on sustainability of SMEs. Нурғалиева (2016) added that financial awareness along with the usage of budgeting skills have strong relationship towards survival, sustainability and viability of SMEs. Rini and Iramani (2021) observed a connection between financial awareness, budgeting and the sustainability of SMEs and found that financial awareness and budgeting significantly affects SME sustainability. Similar to the study of Maziriri and

Mapuranga's (2017) analysis of the effect of budgeting practices on the business execution of SMEs in South Africa designated that planning emphatically impacts the sustainability of SMEs. Eniola and Entebang (2016) Świecka, Grzesiuk, Korczak and Wyszowska-Kaniewska (2019); Kiptum (2019); Maziriri and Chivandi (2020) among others who argued that financial awareness is and should be taken as a crucial tool for SME sustainability. The study of Esiebugie, Richard and Emmanuel (2018) noticed that budget and financial awareness support the survival and success of SMEs. The study of Fatoki (2014) observed that financial awareness incorporates the capacity to comprehend monetary decisions; entrepreneurial performance and poverty reduction.

## 5. Concluding Remark

Based on the summary of findings, the paper concludes that budgeting plays an important role in SME sustainability more than financial awareness. It is therefore recommended that SMEs should give more attention to budgeting to ensure sustainable SME; More training or awareness is needed in bookkeeping. This is because training equips SMEs owners with the needed skills to ensure accurate recording of business transaction which is beneficial when SMEs need financial assistance from banks. COVID-19 pushes SMEs to reevaluate their core strengths, explore new possibilities, and reinvent sustainable business skills such awareness in finances as well as budgeting to more intensive and efficient manner as a result of its effect. Also, based on the findings of the study, conclusions that were drawn was that budgeting uniquely accounts for the largest proportion of the variance in the regression model.

The budgeting and financial awareness influences on SMEs were identified, where the regression analysis to determine the influences between the variables calculated indicated that budgeting has the highest absolute value of 0.372, which shows that budgeting accounts for the largest proportion of the variance in the regression model in a unique way.

The study was limited in terms of finding the level of financial awareness needed by each sector of SME. The demographic information was not correlated with the responses from the various categories namely retail sector, construction, agriculture, and manufacturing. Such correlation is recommended for future work.

Further research should consider comparative analysis of retail sector, manufacturing, agricultural sector, and other sectors within the SMEs to understand the influence of financial awareness, budgeting on SMEs sustainability.

## References

- Ajakaiye, O. O.; Afolabi, H. A.; Akinola, A. O.; Okagbue, H. I.; Olagunju, O. O. & Adetoro, O. O. (2018). *Datasets on factors influencing trading on pedestrian bridges along Ikorodu road*. Lagos, Nigeria. Data in brief, 19, pp. 1584-1593.
- Akpan, I. J.; Udoh, E. A. P. & Adebisi, B. (2020). Small business awareness and adoption of state-of-the-art technologies in emerging and developing markets, and lessons from the COVID-19 pandemic. *Journal of Small Business & Entrepreneurship*, pp. 1-18.
- Álvarez-Franco, P. B.; Muñoz-Murillo, M. & Restrepo-Tobón, D. A. (2017). *Challenges in assessing the effectiveness of financial education programs: The Colombian case*. Cuadernos de Administración, 30(54), pp. 155-180.
- Arnold, M. & Artz, M. (2019). The use of a single budget or separate budgets for planning and performance evaluation. *Accounting, organizations and society*, 73, pp. 50-67.

- Atkinson, A. & Messy, F. A. (2012). *Measuring financial literacy: Results of the OECD/International Network on Financial Education (INFE) pilot study*.
- Atkinson, A. & Messy, F.A. (2012). *Measuring financial literacy: Results of the OECD/International Network on Financial Education (INFE) pilot study*. [https://www.oecd-ilibrary.org/finance-and-investment/oecd-working-papers-on-insurance-and-private-pensions\\_19936397](https://www.oecd-ilibrary.org/finance-and-investment/oecd-working-papers-on-insurance-and-private-pensions_19936397). (accessed by 20 June 2020).
- Chaulagain, R. P. (2017). Relationship between financial literacy and behavior of small borrowers. *NRB Economic Review*, 29(3): pp. 33-53.
- Chepngetich, P. (2016). *Effect of financial literacy and performance SMEs. Evidence from Kenya*.
- Dalkilic, N. & Kirkbesoglu, E. (2015). The role of financial literacy on the development of insurance awareness. *International Journal of Economics and Finance*, 7(8), pp. 272-280.
- Damayanti, R.; Al-shami, S.S.A.; Rahim, B.; Rahim, A. B.; Marwati, F. S. & Malaysia, M. (2018). Factors That Influence Financial Literacy on Small Medium Enterprises: A Literature Review. *Opción*, 34(86): pp. 1540-1557.
- Durst, S., & Gerstlberger, W. (2021). Financing Responsible Small-and Medium-Sized Enterprises: An International Overview of Policies and Support Programmes. *Journal of Risk and Financial Management*, 14(1), p. 10.
- Duval-Couetil, N. (2013). Assessing the impact of entrepreneurship education programs: Challenges and approaches. *Journal of Small Business Management*, 51(3), pp. 394-409.
- Eniola, A. A. & Entebang, H. (2017). SME managers and financial literacy. *Global Business Review*, 18(3), pp. 559-576.
- Esiebugie, U.; Richard, A. & Emmanuel, A., 2018. Financial literacy and performance of small and medium scale enterprises in Benue State, Nigeria. *International Journal of Economics, Business and Management Research*, 2(4): pp. 65-79.
- Foley, J. (2018). We really need to talk about owner-managers and financial awareness. *Small Enterprise Research*, 25(1), pp. 90-98.
- Franco, P. B. A.; Murillo, A. M. M. & Tobón, D. A. R. (2017). Programas de Educación Financiera en Colombia: Retos para Evaluar su Efectividad. *Cuadernos de Administración*, 30(54).
- Ganiyu, I. O.; Derera, E.; Atiku, S. O. & Fields, Z. (2020). Measuring the effectiveness of work–life balance strategies in the manufacturing sector. *SA Journal of Human Resource Management*, 18, p. 10.
- Hadi, N. U.; Abdullah, N. & Sentosa, I. (2016). An easy approach to exploratory factor analysis: Marketing perspective. *Journal of Educational and Social Research*, 6(1), p. 215.
- Henttu-Aho, T. (2018). The role of rolling forecasting in budgetary control systems: reactive and proactive types of planning. *Journal of management control*, 29(3), pp. 327-360.
- Hoaglin, D. C. (2016). Misunderstandings about Q and ‘Cochran’s Q test’ in meta-analysis. *Statistics in medicine*, 35(4), pp. 485-495.
- Kaiser, H. F. (1974). An index of factorial simplicity. *Psychometrika*, 39(1), pp. 31-36.
- King, R.; Clarkson, P. M. & Wallace, S. (2010). Budgeting practices and performance in small healthcare businesses. *Management Accounting Research*, 21(1), pp. 40-55.
- Kuruvilla, R. R. & Harikumar, P. N. (2018). A study on the financial awareness among women entrepreneurs in Kottayam district. *Journal of Management Research and Analysis*, 5(3), pp. 331-335.
- Lusardi, A. & Mitchell, O. S. (2014). The economic importance of financial literacy: Theory and evidence. *Journal of economic literature*, 52(1), pp. 5-44.
- Massingham, P. & Al Holaibi, M. (2017). Embedding knowledge management into business processes. *Knowledge and Process Management*, 24(1), pp. 53-71.
- Muneer, S.; Ahmad, R. A. & Ali, A. (2017). Impact of financial management practices on SMEs profitability with moderating role of agency cost. *Information Management and Business Review*, 9(1), pp. 23-30.
- Naidu, M. K. (2017). *Financial Literacy awareness among SMEs in Western Division of Fiji Mr. Avineel Avineet Kumar the University of Fiji*.

- Odoom, R. (2016). Brand-building efforts in high and low performing small and medium-sized enterprises (SMEs). *Journal of Small Business and Enterprise Development*, 23 (4), pp. 1229-1246.
- Okeyo, W. O.; Gathungu, J. & Peter, K. O. (2014). The effect of business development services on performance of small and medium manufacturing enterprises in Kenya. *The Effect of Business Development Services on Performance of Small and Medium Manufacturing Enterprises in Kenya*.
- Rehman, S. U.; Mohamed, R. & Ayoup, H. (2019). The mediating role of organizational capabilities between organizational performance and its determinants. *Journal of Global Entrepreneurship Research*, 9(1), p. 30.
- Schwab, L.; Gold, S. & Reiner, G. (2019). Exploring financial sustainability of SMEs during periods of production growth: A simulation study. *International Journal of Production Economics*, 212, pp. 8-18.
- Septria, D. & Heryanto, H. (2019). Performance Capability Analysis and Regional Budget Evaluation in Implementing Regional Autonomy in Dharmasraya District. *Archives of Business Research*, 7(7), pp. 180-187.
- Suurd, A. (2020). Why you need to budget: business-budgeting. *Farmer's Weekly*, 2020(20029), pp. 32-34.
- Tuffour, J. K.; Amoako, A. A. & Amartey, E. O. (2020). Assessing the effect of financial literacy among managers on the performance of small-scale enterprises. *Global Business Review*, 0972150919899753.
- Warrick, D. D. (2017). What leaders need to know about organizational culture. *Business Horizons*, 60(3), pp. 395-404.
- Woolson, R. F.; Bean, J. A. & Rojas, P. B. (1986). Sample size for case-control studies using Cochran's statistic. *Biometrics*, pp. 927-932.
- Xu, N.; Shi, J.; Rong, Z. & Yuan, Y. (2020). Financial literacy and formal credit accessibility: Evidence from informal businesses in China. *Finance Research Letters*, 36, 101327.
- Yogendrarajah, R.; Kengatharan, L. & Jeyan, Suganya, S. (2017). *International Journal of Accounting & Business Finance*. Financial management practices and performance of SMEs in Sri Lanka: evidence from Jaffna District.(1), pp. 61-72.
- Zor, U.; Linder, S. & Endenich, C. (2019). CEO characteristics and budgeting practices in emerging market SMEs. *Journal of Small Business Management*, 57(2), pp. 658-678.
- Нургалиева, А. И. (2016). Advantages and disadvantages of small business. In *роль инноваций в трансформации современной науки/ The role of innovation in the transformation of modern science*, pp. 204-206.