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ABANDONMENT OF CAPITAL INVESTMENTS AND SURVIVAL OF SMALL AND MEDIUM ENTERPRISES: EVIDENCE FROM NIGERIA

Abstract:

This paper presents empirical evidence on the impact of abandonment of capital investments on the survival of small and medium enterprises (SMEs) in Nigeria. It employs mixed methodological framework to question the extent to which abandonment of capital investments affects the performance of SMEs in five districts in Lagos. The study adopted survey inferential design. A total of 250 questionnaires were administered to different sets of enterprises, out of which 220 valid responses were received representing 88 per cent. Moreover, judgmental sampling technique was adopted for the purpose of this study. To validate or give further support to the results from specific data sources, triangulation method was used. This method includes both qualitative and quantitative phases. Content validity was adopted. Data gathered from the questionnaire were analysed with the aid of descriptive statistical techniques (such as standard deviation and arithmetic mean) and inferential statistical techniques (Regression analysis and ANOVA). Furthermore, multivariate analysis of factor analysis and its constituent tests were equally employed. Findings related to the study clearly show that the performance of SMEs is characterised by numerous problems including: lack of proper and effective capital budgeting mechanism, failure to access loan, lack of funds, strict banking policies, unethical business practices, lack of stable business policy, among others. The study also discovers that poor capital budgeting practice impacts on the survival of SMEs in Nigeria. The main contribution of this paper to knowledge lies in capital budgeting decision and abandonment option. This has strengthened our understanding that abandonment of capital investments is a critical factor in explaining SMEs survival in Nigeria.

Keywords:

Abandonment; Capital Investments; Survival; Capital Budgeting Theory; SMEs

JEL Classification: C12, O22, O10

Introduction

Literatures are replete with pieces of normative and empirical evidence on the inextricable nexus between small and medium enterprises (SMEs) and the economic fortunes of many countries, including Nigeria. They are best seen through the prism of the wide-ranging contributions they have made to the economies of developed countries and are capable of facilitating the growth and development of developing ones that are yearning for economic prosperity. From generation of employment opportunities (Safiriyu & Njogo, 2012; Kadiri, 2012) to serving as a means of achieving self-reliance and effective and efficient utilisation of local raw materials (Daniya, 2012), the contributions of SMEs are unarguably evident. As noted by Bamidele (2012), SMEs also help to mobilise idle financial resources, conserve foreign exchange, create room for utilising local raw materials, add varieties and choice for the consumers, check monopolistic tendency power, provide a veritable source for innovation, create conducive breeding ground for new industries, to mention but a few.

Capital budgeting can be conceptualised as the process of analyzing, evaluating and deciding whether resources should be allocated to a project or not. Their decisions are crucial to the survival and success of firms for several reasons, one of which includes that they require long-term commitment of financial resources (Chan, 2004), especially enterprises like SMEs. When capital budgeting mechanism are effectively deployed and utilised, controvertibly, they help to avoid capital projects failures which, more often than not, result in abandonment of capital investments. When capital projects fail beyond redemption and are subsequently abandoned, the much desired survival, growth and developments goals of SMEs are threatened and their invaluable contributions to national growth and development become elusive. The purpose of this study is to investigate the impact of abandonment of capital investments on the survival of SMEs in Nigeria.

We explore a link between abandonment of capital investments and the survival of SME in Nigeria through qualitative research with 220 SMEs managers who are entrepreneurs, financial managers of chosen small and medium enterprises, chief finance officers, employees, managers and managing director, management team, lower and middle level management of the organizations. In the light of the limit of prior research, we make theoretical contributions through this study. First, our theoretical contribution is to describe those factors that are needed to be considered in the capital investments carried out among SMEs. This bridges the gap in capital budgeting theory as theoretical evidences show that the theory is financially sophisticated and this cannot meet the investment decisions among SMEs. We contributed to factors that can be financially integrated and considered when appraising project in small enterprises. Secondly, we contributed to the abandonment option of capital investment. Our findings revealed that the performance of SMEs is characterised by numerous problems including: lack of proper and effective capital budgeting mechanism, failure to access loan, lack of funds, strict banking policies, unethical business practices, lack of stable business policy, among others. The study also discovers that poor capital budgeting practice

impacts on the survival of SMEs in Nigeria leading to investments abandonment. These findings contribute to abandonment option that tends to affect capital investments among SMEs which can affect their survival (e.g., Graham & Harvey, 2001; Uddin & Chowdhury, 2009; Bolarinwa; 2013). Apart from the general introduction, the rest of the paper is arranged as follows: section two (2) presents a review of literature. In section three (3), the methodological framework underpinning the study is presented, while section four (4) presents the analysis of the data collected and also presents empirical results. Section five (5) concludes the paper.

Theoretical Foundations
Our study builds upon two theories of capital budgeting and abandonment. The first is the capital budgeting theory. The second is research in the area of abandonment linked to capital investment. However, before we explore these theories, definitions of "SMEs", "project abandonment" and "capital investment decision" are given.

Definition of SMEs, Capital Investment Decision and Project Abandonment
Historical facts, economic evidences and industrialization practices have established the immense contributions of SMEs in developed nations and the continuous acceleration of economic growth and development among developing countries (Omolumo, 2002; OCED, 2004; Ogechukwu, 2008). Literatures have defined SMEs in term of characteristics, size, capital based, behavioural approaches, and environment dynamics. These differences in opinion have led many authors and SMEs experts to note that there is no generally accepted definition of SMEs (Ekpenyong & Nyong, 1992; Jegede, 1990). Ekpenyong and Nyong (1992) buttressed those SMEs classifications into small or large scale is a subjective and qualitative conclusion. Jegede (1990) in his own opinion stated that since there is no unique international or national definition, then the acceptability of a particular SME definition is untrue. Bolarinwa (2013) argued that the varieties of definitions arise as a result of past, present, emerging, and future environmental factors affecting the survival of SMEs. She stressed further that author(s) or organization's definitions are dependent on the situations and experiences surrounding the developmental process and contributing factors of SMEs to economic growth. Despite this submission, definition of SMEs may be generally accepted in a particular industry. This will help to monitor SMEs growth and foster their economic contributions given some regulatory policies. For example, in the micro and cottage industries of Nigeria, SMEs are those whose capital investments do not exceed N100,000 excluding land (Jegede, 1990). However, few definitions will be given in our study. Wilson (2002) defines SMEs as characterized by sales turnover, value of capital employed, number of employees, and management level. SMEs may be defined as enterprises with relatively small market share and high economic contributions. Bolarinwa (2013) evidenced this that 80% of new jobs in United States are created by small businesses. In the Nigeria experience, Ogechukwu (2008) posits that SMEs constitute the fountain head of the economic vitality and a greater percentage of all registered companies in Nigeria. In the view of the credit providers, SMEs are

enterprise whose investments do not exceed N5,000,000. Adelaja (2005) views it in a two-way direction; capital and employees. He defines SMEs as small having a capital of N50M with a maximum of 100 employable people and medium having a capital of N100M with a maximum of 300 employable people. A critical examination of these few definitions shows that capital requirements, employees, turnover, and management are important to SMEs survival.

However, despite the huge capital involve, the practice of capital investments abandonment is high. This may raise different questions; do SMEs manage this capital effectively? Are competent employees employed? Are they favoured by economic conditions? And to the investment analysts, do SMEs appraise their capital investments before implementation? Our focus is on this last question and to see the impact of abandonment practices or behaviours on SMEs survival. Uddin and Chowdhury (2009) noted that the differences in SMEs are the possible reason why SMEs decide differently in capital budgeting and a gap in capital investment theory.

Many literatures have explained capital investment decision in terms of cash flows of a capital expenditure, planning, timing, changes in cash flows, and investment characteristics (Bonini, 1977; Olowe, 1997; Atkinson, 2004; Chandra, 2006; Yusuf, 2009; Bolarinwa, 2013). Bonini (1977) defines investment decision as a limitation to investment techniques. His research explores net present value (NPV) and internal rate of return (IRR) as two approaches to project selection. He explained further that a NPV equal or greater than zero and IRR equal or greater than a firm's cost of capital determine the overall firm's investment decision. Thus, it is a systematic approach in the evaluation of a long term asset (Atkinson, 2004). In addition, Yusuf (2009) viewed capital budgeting decision in the perception of fixed assets management. He defines it as a decision of addition, disposition, modification and replacement of capital expenditure involving outlays and anticipated benefits. Bolarinwa (2013) defines capital budgeting as a decision to undertake an investment which is enhanced by a company's changes in its cash flows. Considering investment characteristics, Olowe (1997) sees capital investment as involving an exchange of current-future cash flows, organization's decision, financial commitment, life span, and accruing returns all through the project life span. Chandra (2006) concluded that it is a complex process which involves planning, analysis, selection, financing, implementation and review. He justified this process that since investment decisions represent the most important decisions taken by a firm, investments are classified as physical, strategic investments, and for planning and control. We assumed that given these classifications, firms have the tendencies to survive over a period of time, that this classification shapes the strategic direction of the firm, and that it is likely to result in compliance with statutory requirements, reduced operating costs, increased capacity, market expansion, and technological advantage.

Abandonment is a decision to discontinue on-going project(s) due to many categorized problems within the project environment. It is the inability of a capital investment to meet the criterion of project viability, feasibility, and profitability. Scholars conceptualize project abandonment as a capital budgeting decisions in

many ways. A common definition sees abandonment of capital investment as a decision in time in which the abandonment value of a project is higher than or exceeds its discounted net present value (Robichek & Van, 1967). Although, this definition is well accepted in capital investment research, investment analysts appear to differ in their understanding of project abandonment as relatively important for maximizing shareholders wealth (King, 1975; Ojiako, Chipulu, Gardiner, Williams, Anantatmula, Mota, Maguire, Shou, Nwilo, and Peansupap, 2012) or as decision maker's perception (Kumar, 2002). In the latter case, capital investment abandonment is viewed as derived from future date due to completed project life of an asset or current and estimated future cash flows becoming negative (Bonini, 1977). The focus of these studies was based on quantitative performance. However, our works builds beyond the NPV and IRR as determinants for project abandonment. We go further to examine qualitative factors affecting capital investment as they linked with investment abandonment. According to a field experience, project abandonment among SMEs may be due to lack of funds, strict economic policies, unethical practices, high transaction cost, project inexperience, and wrong choice of capital projects (Bolarinwa, 2013). Fuss and Vermeulen (2004) grouped these factors as demand and price uncertainty. They noted that these uncertainties require a firm to shift planned and realized decisions on capital investment. Fuss and Vermeulen (2004, p.7) explained that 'uncertainty increases the value of the waiting option thereby making it more optimal to postpone investment'. This practice at end may lead to outright project abandonment in firms especially among enterprises where the capital size is low or medium. From our study, SMEs are uncertain about the continuous funding of their capital projects and business environment. Our study focuses on the literatures of Fuss and Vermeulen (2007) and Bolarinwa (2013) as they explore the qualitative factors affecting capital investments leading to abandonment and affecting SMEs survival. Our definition of abandonment recognizes that it is the state of failure to continue investments which results from both quantitative and qualitative measures.

Research on Capital Budgeting Theory
The first literature upon which we build is capital investment research on capital budgeting theory. In a scientific sense, capital budgeting theory prescribes all possible courses of action and their consequences listed together under each possible condition.

As discussed in Uddin and Chowdhury (2009), the vast majority of research on SMEs and capital budgeting focuses on discounted capital budgeting techniques, which are significant in decision making. However, findings are not always in line with the capital budgeting theory. Among the most influential studies is the work of Danielson and Scott (2006) on 'agency conflict in small firm investment decision', they noted that SMEs do not rely on sophisticated techniques but rely heavily on the number of years a project is to payback. Thus, SMEs lack financial sophistication. Based on this, Danielson and Scott (2006) argued that the assumption of capital budgeting theory is not true for SMEs as these enterprises are constraint with the

challenges of principal-agent relationship, size, investment decision inexperience, credit availability, and short life span. They concluded that since these factors do not meet the financial sophistication conditions, capital budgeting theory in SMEs cannot be justified. As a second example, Graham and Harvey (2001) noted that SMEs are characterized with the use of payback period. They further explained that the challenges faced by SMEs cannot be quantified as thus differ in the decision of capital investment. Uddin and Chowdhury (2009) however suggested a development in the capital budgeting theory to integrate small business challenges. To do this, there is need to find from small businesses the real factors affecting their capital investment decision. And secondly, to find way these factors can be financially evaluated and integrated into the capital budgeting decision. This exploration should also not leave out the form of separate ownership among small business. Bolarinwa (2013) did an extensive research in capital budgeting among SMEs in Lagos metropolis of Nigeria. She revealed that project selection, risk management analysis, project execution, abandonment, and capital structure are major real factors affecting SMEs survival in the face of capital investment conditions. We however limit the scope of this paper to abandonment. We assumed that despite the short life span as noted by Olowe (1997), and Graham and Harvey (2001), projects should be well appraised before been implemented. We assumed that abandonment of projects affect their survival considering the fact that they are the engine drivers of economic growth. We contributed to literature to establish factors that may be financial integrated by further researches when trying to explore the capital budgeting process among SMEs.

Abandonment Option and SMEs

A second literature that informs our research has investigated the interactions between capital investments abandonment and survival of SMEs. There is an overlap in literature as per the inclusion of abandonment option in capital budgeting process. Bonini (1977) stated that abandonment option is exclusive of the capital budgeting decision. Undoubtedly, this explains why Yusuf (2009) stated three options as accept-reject option, mutually exclusive option, and capital rationing option. He noted that non-acceptance of investment(s) may lead to rejection or may be best accepted or rationed based on available funds. Arguably, Robichek and Van Horne (1967) posited that the abandonment option can affect investment value. They justified this through the use of Monte Carlo methods such as the dynamic programming approach. Chandra (2006) has a different opinion. He asserted that the accept-reject option acknowledged by Yusuf (2009) is the same basic rule applied to project continuation and abandonment. Chandra (2006) stated that a positive NPV leading to project acceptance is tantamount to project continuation and a negative NPV leading to rejection is the same as project abandonment. Robichek and Van (1967) measured abandonment option as a situation when the abandonment value of a project is greater that the net present value of its next future cash flows. He was the first to have measured the abandonment option. Our aim in this paper is not to measure the capital investments of SMEs through the abandonment option but to

contribute to the significant variables that may be inclusive in the abandonment cost before realizing a project abandonment value. The factors leading to project discontinuation among SMEs should be expensed. This cost may be the opportunity cost of the abandonment option. For illustration, we may say that SMEs survival is affected by capital availability. A small business with only retained profits may affect its capital investment decision. The costs of other sources of fund such as share capital that are not available represents the opportunity cost of capital that should be included in the abandonment cost. This analogy goes for other factors affecting SMEs investment survival (e.g. the opportunity cost of life span, the opportunity cost of unskilled operating employees etc).

Capital Budgeting Decisions and Abandonment of Capital Investments

According to Currie (2000), the benefits of capital budgeting can be categorized into four (4) groups. The first group relates to the reduction of external and internal expenses, the second to the revenue generated either from current business or from new initiatives, the third to the tangible benefits, such as reduced costs and more flexible working practices, and the final group refers to intangible benefits of enhancing competitive positioning and customer relationships of firms.

Elumilade, Asaolu, and Ologunde (2006) submit that poor and unrealistic capital budgeting has long been the bane of socio-economic development in Nigeria. Consequently, they are to be well considered in devising potent strategies for capital investments, in order to ensure the growth and survival of SMEs in a competitive environment. It is then safe to contend that in an increasingly competitive environment, especially where SMEs fold up at a rate faster than the rate of set up, the capital budgeting decisions made by a company are critically important to their long-term survival (Hemawathy, 2005)

Abandonment option is the option to walk away from a project. It can add value to a project because a firm can drop a project if it turns out to be unsuccessful and still maximise the wealth of its shareholders (King, 2006). There are occasions where following the start of an investment project, it is possible to halt the investment and sell off assets to stave possible losses (Bhimani, Ncube and Soonawalla, 2006). They further contended that the choice of reversing a decision may follow where benefits fall short of those anticipated at the time of making the investment. Moreso, the possibility of abandoning an investment project once started is a factor which may influence the decision-maker's initial investment decision. It may therefore be judged worthwhile for an organisation to only temporarily or permanently abandon a project with the possibility of resuming the investment project at a later time. This will also potentially influence the decision-maker's perception of the project's worth at the outset (Kumar, 2002; Luehrman, 1998b).

Determinants of Long Term Survival of SMEs

Neneh (2011) found that firm's survival rates increase with the age of the business. McPherson (1996) in his analysis considered the number of employees to have a positive relationship with long term survival of SMEs, by stating that SMEs that added more workers were more likely to survive than SMEs that maintain their start

up sizes. Furthermore, he posited that the start-up size in terms of the number of equipment or assets a business owned are also seen to have a positive relationship with the long term survival of SMEs. In this regard, the start-up size is one of the most important characteristic for the survival of SMEs (Lopez-Garcia and Puente (2006). However, Mata and Portugal (2003) stressed that when considering the start-up size, the current size of a firm should also be taken into consideration. Likewise, Reid (1993) established that a key variable to consider in an analysis of a small firm's long run survival is net profit. Liedholm and Mead (1999) identified a firm's location, composition of activities labour force characteristics and gender of the entrepreneur as important determinants of firm survival and growth. Macgregor and Varzalic (2005) further established that for SMEs to survive and succeed in their business operations, it is pertinent that its owners or managers possess certain entrepreneurial characteristics including requisite entrepreneurial experience to carry out specific business practices profitably.

Moreover, entrepreneurial skills, management practices, access to money and capital markets, poor infrastructural facilities, availability of skilled manpower, multiplicity of regulatory agencies, overbearing operating environment, societal and attitudinal problems, restricted market access, lack of skills in international trade, access of quality information, amongst others factor, have equally been identified as key determinants of SMEs survival in Nigeria (Onugu,2005).

It is noteworthy that Nigerian SMEs have not fared particularly well because of hostile operating environment among other challenges (Nwankwo, et al, 2012). According to Aremu and Adeyemi (2010, citing Basil, 2005), most SMEs in Nigeria die within their first five years of existence due to insufficient capital, lack of focus, inadequate market research, over-concentration on one or two markets for finished products, lack of succession plan, inexperience, lack of proper book keeping, irregular power supply, infrastructural inadequacies (water, roads etc), lack of proper records or lack of any records at all, inability to separate business and family or personal finances, lack of stable business strategy resulting in frequent changes in organisational strategic direction and project policies, inability to distinguish between revenue and profit, inability to procure the right plant and machinery, inability to engage or employ the right calibre staff, cut-throat competition.

Methodology

This study adopted survey inferential design. The population for this study comprises Small and Medium Scale enterprises in five (5) districts in Lagos metropolis, with fifty (50) SMEs selected from each of these districts. Two methods were used to identify the SMEs selected, since no comprehensive listing of SMEs is available in the State. A total of 250 questionnaires were administered to entrepreneurs, financial managers of chosen small and medium enterprises, chief finance officers, employees, managers and managing director, management team, lower and middle level management of the organizations, out of which 220 valid responses were received representing 88 per cent. The survey targeted manufacturing, construction, service rendering and agro allied sectors in 5 districts of Lagos State.

Moreover, judgmental sampling technique was adopted for the purpose of this study. To validate or give further support to the results from specific data sources, triangulation method was used. This method includes both qualitative and quantitative phases. To determine the reliability of this study, a pilot study was first conducted on twenty (20) SMEs in the manufacturing, construction and service sectors, in two districts of Ikeja and Ikorodu areas of Lagos State, Nigeria, using SMEs. Reinforcing the results of the pilot study was Cronbach's alpha coefficient of reliability which shows a coefficient of 0.562. This indicates that the research items fairly measures the same construct. Content validity was adopted.

Data gathered from the questionnaire were analysed with the aid of descriptive statistical techniques (such as standard deviation and arithmetic mean) and inferential statistical techniques (Regression analysis and ANOVA). The inferential technique was used to test the level of significance of the formulated hypothesis.

Furthermore, multivariate analysis of factor analysis and its constituent tests were equally employed. In order to determine the applicability of factor analysis on the data, two statistical measures were used. These measures are: (a) Kaiser-Meyer-Olkin (KMO) test which is utilized in testing the adequacy of samples the coefficient of which must be greater than 0.5 to be adequate and (b) Barlett's test of sphericity. All these analyses were carried out using Statistical Package for Social Sciences (Version 17.0).

HYPOTHESIS FORMULATED

H_0: Abandonment of Capital Investments affects on the survival of Small and Medium Enterprises in Nigeria

DATA RESULTS AND ANALYSIS

DESCRIPTIVE STATISTICAL ANALYSIS

Mean scores and Standard Deviations of Responses on Abandonment of capital investments and SMEs Survival

Table 1

S/N	STATEMENT ABANDONMENT OF CAPITAL INVESTMENTS	Mean	Standard Deviation(SD)
1	Failure to access loan contributes to projects abandonment by SMEs	4.48	.527
2	Strict banking policies increase abandonment of capital investments	4.20	.719
3	Frequent change of viable project policies by SMEs is a driver of projects abandonment	4.03	.953
4	Poor application of financial management standards increases level of abandonment of capital investments	3.73	1.153
5	Lack of fund is one of the major cause of abandonment of capital investments	4.29	.715

6	Unethical business practices by entrepreneur causes abandonment of projects	4.04	1.076
	AVERAGE MEAN	**4.128**	**0.8572**
	SURVIVAL OF SMEs		
7	Failure of SMEs in Nigeria is as a result of inadequate financing of viable projects generated	3.82	1.034
8	Poor funding adversely affect the operational strength and capacity of SMEs.	3.96	.896
9	The challenges faced by SMEs hinders economy growth	4.03	.926
10	High administrative costs is a determinant of abandonment of capital investments which threatens the survival of SMEs	4.30	.796
11	Lack of fund is one of the major causes of survival of SMEs	4.29	.715
12	Entrepreneurs' inexperience in project implementation leads to abandonment of project and poses a threat to the survival of SMEs	4.44	.566
13	Wrong selection of capital project contributes to abandonment of capital investments, and in turn negatively affects SMEs growth	3.91	1.001
14	Frequent changes in organization goal and objectives causes abandonment and thwart the development of SMEs	3.71	1.104
15	Political and economic factors cause abandonment of capital project, and by extension, imperils the survival, growth and development of SMEs	3.96	.871
	AVERAGE MEAN	**4.0411**	**0.8787**

Source: Field Survey, 2013

The table above reveals the perceptions of respondents on abandonment of capital investments and SMEs survival. The respondents' average mean score of 4.128 for abandonment of capital investments is higher than a hypothetically established 3.5 benchmark. This presupposes that failure to access loan by the SMEs, lack of funds, strict banking policies, frequent changes of viable project policies by SMEs, unethical business practices by entrepreneur and poor application of financial management standards are all responsible for projects abandonment by SMEs in Nigeria.

On the other hand, the average means scores for determinants of SMEs survival was 4.0411, an index greater than the hypothetically established 3.5 benchmark. It means that ability of SMEs to survive in Nigeria can be attributed to several factors, paramount of which include :   the inexperience of entrepreneurs in project implementation leading to abandonment of project by SMEs and which in turns threatens the survival of these enterprises. The primacy of this point is premised on the fact that it has the highest mean agreement level of 4.44. Also, high

administrative costs incurred by SMEs and lack of fund are also key drivers of SMEs survival.

FACTOR ANALYSIS

A factor analysis was performed to identify the effects of abandonment of capital investments on the survival of SMEs in Lagos State. Table 2 shows KMO and Bartlett's test of the construct. The rule of the thumb is that the KMO coefficient must be greater than 0.5 for samples selected to be deemed adequate. The values in table 2 confirm the suitability of the data from this measure for factor analysis.

KMO and Bartlett's Test of Abandonment of Capital Investments and Survival of SMEs Variables

Table 2   **KMO and Bartlett's Test**

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.595
	Approx. Chi-Square	405.337
Bartlett's Test of Sphericity	Df	91
	Sig.	.000

Source: Field Survey, 2013

Also, the linear component within the data set (eigenvectors) was determined by calculating the eigen values of the R-matrix. Eigen values associated with each component represent the variance explained by that particular linear component. Kaiser's criterion states that only factors with eigen values greater than 1 should be retained (Field, 2006: 652). Table 3 lists the Eigen values associated with each component before and after extraction. Before extraction, 14 components were identified which are equivalent to the number of variables, but only six components were retained after extraction due to the fact that they have Eigen value which are greater than 1 (2.479, 1.618, 1.396, 1.313, 1.170 and 1.006 for factors 1, 2, 3, 4, 5, and 6 respectively). The six factors explained 64.165% of the total variance in this measure. The subsequent components have Eigen values less than 1 and explains only small amount of variance

Table 3: Factor Analysis (Total Variance Explained) of Abandonment of Capital Investments and Survival of SMEs Variables

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	2.479	17.711	17.711	2.479	17.711	17.711	2.003	14.308	14.308
2	1.618	11.561	29.271	1.618	11.561	29.271	1.464	10.455	24.763
3	1.396	9.968	39.239	1.396	9.968	39.239	1.462	10.443	35.207
4	1.313	9.382	48.621	1.313	9.382	48.621	1.377	9.835	45.042
5	1.17	8.355	56.976	1.17	8.355	56.976	1.359	9.71	54.753
6	1.006	7.189	64.165	1.006	7.189	64.165	1.318	9.413	64.165
7	0.898	6.418	70.583						
8	0.825	5.89	76.473						
9	0.759	5.425	81.898						
10	0.66	4.716	86.614						
11	0.567	4.05	90.664						
12	0.526	3.76	94.425						
13	0.413	2.949	97.374						
14	0.368	2.626	100						

Extraction Method: Principal Component Analysis.
Source: Field Study (2013)

The component matrix after rotation is displayed on Table 3. It contains the loading of each variable into three components. As shown in Table 3, six components with Eigen value greater than 1.0 were extracted. The components can be considered as the causes of abandonment of capital investments which endangers the survival of SMEs in Lagos State.

Factor Analysis (Structural Matrix) of causes of project failures and abandonment of Capital Investments among SMEs in Lagos State

Table 4   Rotated Component Matrix[a]

	Component					
	1	2	3	4	5	6
F1					.647	
F2						.676
F3	.719			.414		
F4		.720				
F5	.736					
F6		.770				
F7	.646					
F8				.770		
F9			.717		.401	
F10					.775	
F11	-.571			.431		
F12						.815

F13		.688			
F14		.490			

Extraction Method: Principal Component Analysis.
Rotation Method: Varimax with Kaiser Normalization.
a. Rotation converged in 8 iterations.
(Source: Field Study, 2013)

From Table 4, it could be deduced that the causes of abandonment of capital investments which threaten the survival of SMEs in Lagos State include: poor application of financial management standards (F5: 0.736), poor funding (0.770), frequent changes of viable project policies (0.717), lack of funds (0.770), lack of experience on the part of entrepreneurs in project implementation (0.775) and wrong selection of capital projects (0.815).

Summary of Regression Analysis between Independent variable (and Dependent Variable (SMEs survival)

Table 5

Model	R	R^2	Adjusted R^2	Std. Error of Estimate	Durbin-Watson
1	.412	.170	.166	2.89346	1.267

Source: Field Survey, 2013
Predictors: (Constant): Abandonment of Capital Investments
Dependent variable: Survival of SMEs

Table 5 above depicts that a positive relationship between abandonment of capital investments and the survival of small and medium sized enterprises in Nigeria. The coefficient of determination (R^2) is 0.170. This indicates that abandonment of capital investments only accounts for 17% of the variation in the survival of SMEs in Nigeria, while the remaining 83% in the survival of SMEs is explained by other factors mentioned above. Also, a brief look at the adjusted R^2 value of 16.6% indicates that after removing the effect of insignificant regressor (abandonment of capital investments), about 83.4% variation in the survival of SMEs is still not accounted for by abandonment of capital investments. This value is very low indicating that abandonment of capital investments inconsequentially contributes to the survival of small and medium enterprises. It results in waste of financial resources committed to projects.

The Durbin-Watson statistic used to detect the presence of autocorrelation (a relationship between values separated from one another by a given time-lag) from a regression analysis, that is, it tests the independence of error in the least square regression. As a rule of thumb, if D-W is less than 2.0, there is an induction that the successive error terms are, on average, close to one another and positively correlated. It therefore means there is presence of autocorrelation and if greater than

2.0, there is no autocorrelation. On the basis of the foregoing, the D-W for this model is 1.267 which shows that there is a presence of autocorrelation. However, it is the considered view of this study that the effect of the serial correlation is empirically inconsequential considering the fact that time series data were not employed in this study.

Results of Statistical Significance of the regression analysis (ANOVA)

Table 6 ANOVA[a]

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	373.471	1	373.471	44.609	.000[b]
	Residual	1825.124	218	8.372		
	Total	2198.595	219			

Source: Field Survey, 2013

Dependent Variable: Survival of SMEs

Predictors: (Constant), Abadonment of Capital Investments

Table 6 depicts the results of the statistical of significance of the regression analysis. This tests the null hypothesis that correlation coefficient R in the population equals 0 (Pallant, 2007). The larger the F ratio, the more the variance in the dependent variable is explained by the independent variable. In this study, the F ratio (ANOVA) is 44.609 thereby indicating that the model is highly significant at the 0.000 level as compared to the level of significance of 5%. This implies that abandonment of capital investments impacts on the survival of small and medium enterprises in Nigeria.

Coefficients of the parameter estimates of the regression analysis

Table 7 Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	19.656	1.874		10.488	.000
	Abandonment of capital investments	.503	.075	.412	6.679	.000

Source: Field Survey, 2013

Significant at P<0.05

Dependent Variable: SMEs survival

As revealed in table 7, the regression coefficient of abandonment of capital investments is 0.503 while that of the constant is 19.656. These coefficients are statistically significant at 5% level. This means that abandonment of capital investments significantly determines the survival of small and medium sized enterprises in Nigeria.

Discussion of Findings

SMEs fail due to myriad of reasons. One of such reasons is lack of proper and effective capital budgeting mechanism resulting in abandonment of capital investments. This study established that failure to access loan by SMEs, lack of funds, strict banking policies, frequent changes of viable project policies, unethical business practices by entrepreneurs and poor application of financial management standards are key factors responsible for projects abandonment by SMEs in Nigeria. These findings are in line with extant and contemporary literatures. As noted by Aremu and Adeyemi (2010, citing Basil,2005), inadequate capital owing to lack of funds, lack of stable business strategy resulting in frequent changes in the strategic directions of SMEs and their project policies, amongst other factors, are key factors responsible for abandonment of capital investments, and by extension, the survival of SMEs in Nigeria.

Furthermore, the determinants of SMEs survival, as revealed by this study, include: inexperience of entrepreneurs in project implementation, high administrative costs and unfavourable political and economic environment. These findings empirically confirmed the submission of Onugu (2005) that overbearing operating environment and lack of strong entrepreneurial skills greatly determine the survival of SMEs. Finally, this study also revealed that abandonment of capital investments, resulting from poor capital budgeting practice, impacts on the survival of SMEs in Nigeria. Our work makes theoretical contributions. First, our theoretical contribution is to describe those factors that are needed to be considered in the capital investments carried out among SMEs. This bridges the gap in capital budgeting theory as theoretical evidences show that the theory is financially sophisticated and this cannot meet the investment decisions among SMEs. We contributed to factors that can be financially integrated and considered when appraising project in small enterprises. Secondly, we contributed to the abandonment option of capital investment. We specified the opportunity costs of factors affecting SMEs survival as components of the abandonment costs which in turn will help ascertain the total abandonment value of an investment.

Conclusions and Recommendations

Capital budgeting is an un-negotiable investment decision making strategy that must be taken seriously. Capital investment decision involves drastic change in a company. Acceptance of a project may significantly change a company's position and operation, profitability and risk implication since the benefits accrue in the future. These changes might also affect investor's evaluation of a company (Osaze, 1996). These investment decisions can also affect the firm's sales turnover for years. A good decision will boost earnings sharply and dramatically increase the firm's value. A bad decision, conversely, can lead to project failures, abandonment of capital investments and bankruptcy. Hence, effective planning and control are essential if the health and long run viability of firm is to be assured.

For SMEs to survive in Nigeria, key measures and structures should be put in place. Such measures include: favourable economic policies that would improve and guide

the activities of SMEs; increased grants and loans by the government to SMEs through established institutions such as National Employment Directorate Agency (NEDA), Central Bank of Nigeria (CBN), Small and Medium Enterprises Development Agency if Nigeria (SMEDAN) as this will ease funding challenges. Furthermore, government research agencies should be encouraged to support these enterprises in the areas of knowledge management, manpower development, orientation and re-orientation, provision of research-based information that will aid prudent and good financial management practice. In terms of contribution to knowledge, this study has not only added to the body of literatures in this field of research but also empirically determined the fact that abandonment of capital investments is a salient driver of SMEs' survival in Nigeria.

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