RISK FINANCING TECHNIQUES AND SMEs PERFORMANCE: EMPIRICAL EVIDENCE FROM NIGERIA

Pretoria IPIGANSI¹, Sunday Stephen AJEMUNIGBOHUN²
¹Department of Insurance, Niger Delta University, Bayelsa State, Nigeria
E-mail: pretoriaipigansi@ndu.edu.ng
²Department of Insurance, Faculty of Management Sciences, Lagos State University, Nigeria
E-mail: sunday.ajemunibohun@lasu.edu.ng


Abstract
Risk financing is a critical element of a resilient future. Risk management techniques are important metrics in safeguarding the lives and property of mankind. Therefore, this study aimed at assessing the effects of financial risk management techniques on business performance, with specific reference to the perceptions of selected SMEs in Lagos, Nigeria. The study adopted a cross-sectional survey research design. The study population consisted of the total number of registered SMEs recorded in Lagos State at 11,666. Thus, both single-stage cluster and convenience sampling technique were employed in the questionnaire distribution and data collection processes. Two hundred and forty-eight (248) respondents were used in the study. The statistical technique employed was simple regression. This study confirms the importance of financial risk management techniques in business performance of selected SMEs operators in Lagos, Nigeria. It is recommended that insurance providers in Nigeria should attempt to tailor insurance products in a lovable and affordable manner to SMEs’ operators/owners in a bid to improve on their behavioural risk attitudes. More so, interest should be placed on impressive risk management communication and ideal physical risk control techniques among SMEs’ owners/operators.
1.0. Introduction

Small and medium enterprises (SMEs) are being acknowledged as steady vehicle that stimulate the essential profitable drive globally (Ajemunigbohun, Isimoya, & Elegunde, 2020; Ledwin & Watson, 2019). Thoughts evident from studies (such as Alaka, Ajemunigbohun, & Balogun, 2022; Anokwu & Wike, 2021; Ibiwoye, Mojekwu, & Dansu, 2020) concurred that most businesses are occupied by SMEs. SMEs’ contributions within the African sub-region stand around 90% (businesses) and 50% (job creation). This, invariably, can be supported by the risk financing techniques adopted.

Risk financing technique, is an indispensable financial instrument required for all-round safety to lives, properties, businesses, to mention few. Risk financing technique, according to Arunajatesan and Viswanathan ((2017), is a combination of risk transfer and risk retention. Risk transfer technique such as insurance is key to the advance or size (severity). This, then, necessitate the need to carry out the study on the relationship between risk financing techniques and business performance among SMEs in Lagos, Nigeria.

This study is to evaluate the relationship that exist between risk financing techniques and business performance among SMEs operators. The specific objectives are to ascertain the significant effect of the risk retention technique on SMEs performance in Lagos State; and thus, examine the relationship between risk transfer techniques and SMEs performance in Lagos State.

2.0. Literature Review

2.1. Conceptual Review

2.1.1. Business Risk Management

Risk, as a construct, is defined as anything that probably causes an entity to lose its business value (Turner, 2010 as cited in Obalola, & Ajemunigbohun, 2017). It is also depicted as an element that can deeply impact business objectives; and possibility that both expected and unanticipated situations may have divergent consequence on business capital and earnings (Gwangwava, Manuere, Kudakweshe, Tough, & Rangarirai, 2014). It is delineated as a sustained process
that can assist priorities, operations, and resources, find out legal compliance, gaining performance targets, enhance pecuniary stability and predominantly, avert business losses and destructions to the (Alaka, Ajemunigbohun, & Balogun, 2022). Kleffner, Lee, and McGannon (2003) as cited in Obalola and Ajemunigbohun (2017) stipulated that business risk management is the step-by-step handling of operational and financial risk management in a bid to curtail the cost suitability of handling risks within the limits of business tolerance for risk. Studies (such as Al-Qubtan, Gan, Abd. Hadi, Abdul Jalil, & Rambeli, 2021; Gatzert & Martin, 2013; Zoghi, 2017) came up that business risk management is an aggregate of an all-round business risk by taking account of interdependence between risks that allow for improved evaluation of an entity’s risk event and afterward increasingly link decision process with strategic and operative advancement.

2.1.2. Business Risk Financing

According to Poole (2014), risk financing involves the retention of risks combined with the adoption of an explicit financing strategy (insurance) to ensure that adequate funds are available to meet financial needs should a disaster occur. It is also seen as the estimation of how best an organisation will pay for loss events in the most effective and least costly way possible. Risk financing techniques are into two divisions namely risk retention and risk transfer (Outreville, 1998 as cited in Diaz & Sanchez, 2016). Risk retention, according to Mumassabba, Mukulu, and Atikiya (2022), is seen as the practice of setting up a self-insurance reserve fund to pay for losses as they occur, rather than shifting the risk to an insurer or using hedging instrument. They stressed that risk retention is when a company decides to
take responsibility for a risk it faces, as opposed to transferring the risk over to a third party. It is also seen as the method is appropriate when the risks of loss or the loss exposure is either too small with little impact or too great to be able to do anything with it (Kokobe & Gemechu, 2016). For risk transfer, according to Owolabi and Oloyede (2021), is a risk control option that embraces the contractual shifting of a pure risk from one individual to another. However, it is a voluntary arrangement between two parties, the insurer and the policyholder, where the insurer assumes strictly defined financial risks from the policyholder (Thuku & Muchemi, 2021)

### 2.1.3. SMEs’ Performance

Every organisation works in a competing milieu, and if such wishes to pull through with the current changes, it has to overcome so many difficulties that can possibly hamper its performance. Organisational performance, therefore, has been agreed to impart on organisation’s success or failure (Bin-Nashwan, Abdullah, & Obaid, 2017; Durendez, Rulz-Palom, Garcia-Perez-de-Lema, & Dieuez-soto, 2016). Organisational performance, according to Henri (2004) as cited in Rehman, Mohamed, & Ayoup (2019), means the efficaciousness of an organisation in the attainment of its desired objectives. It is also seen as a determinant that measures how well an organisation achieve its goal (Zehir, Yildiz, Kole, & Basar, 2016).

Accordingly, Cokins (2004) as cited in Obalola and Ajemunigbohun (2017) remarked that managing performance helps managers to sense unforeseen situations at the earlier stage and give it a swift response. Earlier submission by Armstrong (2006) opined that managing organisation’s performance assists in creating a high-performance culture whereby every organisation’s member takes cognisance of frequently upward movement of the expertise and business activities. Vichitdhanadadee, Wilmshurst and Cliff (2009) stipulated that the survival and success of SMEs activities dependent upon the constant development of their performance alongside maintaining adequate resources encompassing employee and prompt information, combine them towards creating great deal of business benefits.

### 2.2. Theoretical Review

#### 2.2.1. Risk Management Theory

Risk management theory is a formation of three basic phenomena namely utility, regression and diversification (Ajupov, Sherstobitova, Syrotiuk, & Karataev, 2018). The financial risk management theories and practices were rooted in the wider risk management perspectives, hence it deepest part is traceable to the
decision analysis. However, the Expected Utility Theory (EUT) was formulated in the 18th century by Bernoulli (1738), and later developed, nurtured, and axiomatised in the mid-20th century by Von Neumann and Oskar (1944) to deal with events of quantifiable risk. Bernoulli’s introduction of the expected utility theory was mainly to resolve predicaments by employing the expected value paradox posed by Petersburg. Bernoulli achieved the paradox’s resolution by infusing the logarithmic utility function of wealth, characterised mainly as 'diminishing marginal utility'. This theory is based on the rationality of individual approaches to judgment making within the objective risk. The basic ideology behind its emergence was the desire to define people or people's rational thinking and behavioural attitudes when exposed to risky situations.

In his work, Zurita (2005) has argued that, under an objectivist explanation, the Expected Utility Theory presupposes that an economic agent has sufficient knowledge of the probabilities of all relevant events before he can make a rational choice. Furthermore, Lusardi and Mitchell (2014) found that an increase in the level of financial knowledge will lead to less deviation in the expected utility. Expected utility theory also assumes that decision makers will be able to make rational decisions if they have knowledge about the available choices and use that knowledge (OECD, 2013). In other words, decision makers must be financially literate regarding the expected utility of their choices.

2.3. Empirical Review

Several surveys have been dedicated both in Nigeria and other countries of the world to identify with risk financing techniques and how they are in relations to insurance companies and other areas of endeavours (e.g., Al Qubtan et al., 2021; Bashaija, 2022; Diaz & Sanchez, 2016; Offiong, Udoka, & Bassey, 2019; Pitchaya & Widya, 2020).

Zoghi (2017) examined the relationship between risk management practices and SMEs in Turkey. The study thus attempted to investigate the current state of risk management in Turkish SMEs in detail. The study population was 2000 Turkish SMEs. The study sampled 192 respondents and gathered relevant information via the questionnaire. The study employed Chi-square test and Cross-tabulation in the statistical analysis of collected data. The findings from the study proved a relationship and association between the variables in many cases.

Van den Boom (2019) evaluated the empirical analysis of financial risk management in Dutch SMEs. The study adopted a descriptive research design. The study collected its data through a questionnaire approach with 97 cases selected during the period from 2013 to 2016. Responses for the study were gathered those
involved in trading, servicing, logistics, engineering, construction, trading, and auditing. The findings show that possible determinants on the level of financial risk management in the Dutch SMEs were estimated by the level of education of the risk manager and the degree of decentralisation.

Chakabva, Tengeh, and Dubhilela (2021). Investigated factors inhibiting effective risk management in emerging market SMEs, with case of South Africa. The study engaged questionnaire, as a research instrument, in the collection of data, with 320 responses from FMCG. The findings of the study disclosed the significance of both tangible and intangible resources in positively impacting the efficaciousness of risk management in the world of SMEs in South Africa. The study concluded that owner-manager must pay close attention to both intangible and tangible resources, which could have positive impact resulting to effective risk management.

Aduloju and Akindipe (2022) ascertained the effect of risk control techniques on organisational performance of selected SMEs in Lagos State. The study covered ten major clustered markets in Lagos comprised of oil and gas, manufacturing, servicing, and general merchandised companies. The study adopted both survey research design and convenience sampling method. A regression technique was employed in the data analysis. The findings proved that there is a positive correlation between risk control techniques and SMEs’ performance in Lagos State. The study suggested that SMEs should increase its risk appetite to improve efficient management of their businesses.

3.0. Methods

The method adopted for this study was a cross-sectional survey research design. This design thus assisted in planning and executing the research in a manner to acquire planned outcomes and thus, created a nexus with the real-life global situation (Creswell & Creswell, 2018; Gray, 2017). The population of this study consisted of the total number of registered small and medium enterprises in Lagos State. In accordance with the Small and Medium Enterprises Development Agency of Nigeria (2013), the totality of micro, small and medium enterprises (MSMEs) as cited in Alaka et al. (2022) stood at 37,067,416 with 36,914,578 micro, 68,168 small and 4,670 medium enterprises. Lagos State, being the research ground, is said to have a share of 11,666 registered SMEs. Some major markets chosen for study areas were Alaba International Market (Ojo); Trade Fair (Amuwo Odofin); and Computer Village (Ikeja).
The study adopted both single-stage cluster and convenience sampling technique. The aim of selecting this sampling technique was due to the fact that it allowed the researchers to divide the population into favourable clusters by indiscriminately selecting the needed number of clusters as representative variables and examined all the cases in each of the randomly chosen clusters. This sampling technique is beneficial because its timely and inexpensive (Wilson, 2014). In a quest to collect additional information, convenience sampling technique was adopted at all study based on the availability and readiness of the respondents to complete the research instrument; as carried out by the researcher.

Since the target population comprised of all registered motor users in Lagos metropolis, the total sample size for the study was statistically determined by Taro Yamane’s (1967) formula as cited in Amah and Okoisama (2017), given as:

\[ n = \frac{N}{1 + Ne^2} \]

\[ n = \frac{11666}{1 + 11666(0.05)^2} = 399 \]

Where:
- \( n \) = the sample size
- \( N \) = the population size
- \( e \) = the acceptable sampling error
- 95% confidence level and \( p = 0.05 \) are assumed.

Data collection was carried out through field survey among chosen small and medium-sized enterprises with the assistance of the questionnaire. The choice of selecting the participants were due to their vital significance in economic sustenance of our nation. The use of this data collection instrument was because of its appropriateness to the design of the study with regards to being relatively cheap, wider usage and more sample representative, sufficiency of time for participants to assign well thought out responses and simplicity in the administration the research instrument (Cooper & Schindler, 2014; Kothari & Garg, 2016). The data instrument adopted a Likert scale measurement of ‘strongly agree’, ‘agree’, ‘undecided’, ‘disagree’, and ‘strongly disagree’. These responses, according to Pallant (2011), were accorded values as follows: strongly agree = 5, agree = 4, undecided = 3, disagree = 2, strongly disagree = 1. The study observed tests of validity comprised of congruent, content, and criterion-related in nature. While the congruent validity was structured in accordance to preceding literature, content validity took cognisance of the specifics on the survey instrument, and the criterion-relation validity took a probe of the outcomes from other related participants (Booth, Colomb, Williams, Bizup, & Fitzgerald, 2016). Also, the
reliability test was conducted with a Cronbach alpha of 0.703 for risk financing techniques, and 0.713 for business performance. These results were in consonance with statistical interferences of the soundness of the scale, and the safety of the internal consistency.

4.0. Data Analysis and Results
4.1. Descriptive Analysis

Table 4.1. Respondents’ Perceptions of Bio-Data of the Business

<table>
<thead>
<tr>
<th>Variables</th>
<th>Options</th>
<th>Responses</th>
<th>Percentages</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td>Male</td>
<td>152</td>
<td>53.5</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>132</td>
<td>46.5</td>
</tr>
<tr>
<td>Ages</td>
<td>18 &lt;30</td>
<td>51</td>
<td>18.0</td>
</tr>
<tr>
<td></td>
<td>30 &lt; 40</td>
<td>90</td>
<td>31.7</td>
</tr>
<tr>
<td></td>
<td>40 &lt; 50</td>
<td>89</td>
<td>31.3</td>
</tr>
<tr>
<td></td>
<td>50 &lt; 60</td>
<td>38</td>
<td>13.4</td>
</tr>
<tr>
<td></td>
<td>60 &amp; above</td>
<td>16</td>
<td>5.6</td>
</tr>
<tr>
<td>Education</td>
<td>BSc/HND</td>
<td>151</td>
<td>53.2</td>
</tr>
<tr>
<td></td>
<td>MSc.</td>
<td>34</td>
<td>12</td>
</tr>
<tr>
<td></td>
<td>Ph.D.</td>
<td>13</td>
<td>4.6</td>
</tr>
<tr>
<td></td>
<td>Professional Certificate</td>
<td>35</td>
<td>12.3</td>
</tr>
<tr>
<td></td>
<td>Others</td>
<td>51</td>
<td>17.9</td>
</tr>
<tr>
<td>Business Size Classification</td>
<td>Small</td>
<td>113</td>
<td>39.8</td>
</tr>
<tr>
<td></td>
<td>Medium</td>
<td>142</td>
<td>50</td>
</tr>
<tr>
<td></td>
<td>Large</td>
<td>29</td>
<td>10.2</td>
</tr>
<tr>
<td>Risk Management Guidelines</td>
<td>Yes</td>
<td>73</td>
<td>25.7</td>
</tr>
<tr>
<td></td>
<td>No</td>
<td>211</td>
<td>74.3</td>
</tr>
</tbody>
</table>

Source: Field Survey, 2022

The analysis of Table 4.1 reveals that 53.5% of the respondents were male, while 46.5% were female. While the majority of the respondents’ ages were both 31.7% and 31.3% for ages 18 years but less than 30 and 40 years but less than 50 respectively, those respondents of 18 years but less than 30 recorded 18.0%, while aged 50 years but less than 60 were 13.4%, 5.6% was recorded for respondents aged 60 years and above. For education qualification, 53.2% represented those respondents with B.Sc./HND. While 17.1% was for others, 12.3% was recorded for professional certificate holders. While 12% claimed to have Master degree, 4.6% were said to be doctoral degree holders. The business size classification of the SMEs’ operators shows that majority were medium, representing 50%. While
39.8% are recorded for small business, 10.2% were said to be large business. As for the risk management guidelines, majority of the business investigated revealed that no risk guidelines on their part.

4.2. Test of Hypotheses

Table 4.2: Simple Regression Results for Risk Retention vs. SMEs’ Performance

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
<th>Change Statistics</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>R Square Change</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>F Change</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>df1</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>df2</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Sig. F Change</td>
</tr>
<tr>
<td>1</td>
<td>.471a</td>
<td>.221</td>
<td>.218</td>
<td>2.573</td>
<td>.221</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>23.970</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>283</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>.000</td>
</tr>
</tbody>
</table>
a. Predictors: (Constant), Risk retention

ANOVA

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Squares</th>
<th>Df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
<td>158.682</td>
<td>1</td>
<td>158.682</td>
<td>23.970</td>
<td>.000</td>
</tr>
<tr>
<td>Residual</td>
<td>1595.425</td>
<td>283</td>
<td>6.620</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>1754.107</td>
<td>284</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
a. Dependent Variable: SMEs’ Performance

[1] Predictors: (Constant), Risk retention

Coefficients

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>T</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>(Constant)</td>
<td>13.482</td>
<td>1.251</td>
<td>10.78</td>
</tr>
<tr>
<td></td>
<td>Risk retention</td>
<td>.157</td>
<td>.032</td>
<td>.301</td>
</tr>
</tbody>
</table>
a. Dependent Variable: SMEs’ performance

Source: Researcher’s computation, 2022

From the results of the regression analysis presented above, it is clear that there is positively relationship between risk retention and SMEs’ performance. The model also shows the variations experienced by the dependent variable that could be explained by the independent variable (R square) which shows that risk retention is responsible for about 22.1% of variance in SMEs’ performance. This means that 77.9% of the SMEs’ performance enjoyed by the SMEs’ operators comes from other factors other than the predictor used in this model (risk retention). The generalisation of the results (Adjusted R square) indicates that true
21.8% of the variation in SMEs’ performance is explained by risk retention. This result is almost close to reality as the difference between R Square and Adjusted R Square is not high. The standard error fit, which is a measure of the precision of the model, shows how wrong the statistical outcomes could be at 3% if one uses this model to make real life predictions. The above result is statistically significant as seen in the ANOVA table (p-value = 0.157) as they are less than the 0.05 confidence interval used in this study. A value greater than 1 shows that F-ratio yield an efficient model but 23.97 F-ratio indicates that this model is not very efficient.

Table 4.3: Simple Regression Results for Risk Retention Techniques vs. SMEs’ Performance

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adj. R Square</th>
<th>Std. Error of the Estimate</th>
<th>R Square Change</th>
<th>F Change</th>
<th>df1</th>
<th>df2</th>
<th>Sig. F Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.760a</td>
<td>.577</td>
<td>.513</td>
<td>4.205</td>
<td>.577</td>
<td>17.416</td>
<td>1</td>
<td>283</td>
<td>.000</td>
</tr>
</tbody>
</table>

a. Predictors: (Constant), Risk transfer

<table>
<thead>
<tr>
<th>Source</th>
<th>Researcher’s computation, 2022</th>
</tr>
</thead>
</table>

Source: Researcher’s computation, 2022
From the results of the regression analysis presented above, it is clear that there is positively low relationship between risk transfer and SMEs’ performance. The model also shows the variations experienced by the dependent variable that could be explained by the independent variable (R square) which shows that risk transfer is responsible for about 57.7% of variance in SMEs performance. This means that 42.3% of the SMEs performance enjoyed by the SMEs’ operators comes from other factors other than the predictor used in this model (risk transfer). The generalisation of the results (Adjusted R square) indicates that true 51.3% of the variation in SMEs performance is explained by risk transfer. This result is almost close to reality as the difference between R Square and Adjusted R Square is not high. The standard error fit, which is a measure of the precision of the model, shows how wrong the statistical outcomes could be at 4% if one uses this model to make real life predictions. The above result is statistically significant as seen in the ANOVA table (p-value = 0.373) as they are less than the 0.05 confidence interval used in this study. A value greater than 1 shows that F-ratio yield an efficient model but 17.416 F-ratio indicates that this model is not very efficient.

5.0. Conclusion and Recommendations
From the empirical analyses conducted and the test of hypotheses carried out, this study has been able to address the research objectives. The results show that financial risk control techniques have positive and significant effects on SMEs performance in Lagos, Nigeria, leading to the rejection of all null hypotheses at 0.05 level of significance. The findings show that financial risk control techniques play a vital role in imparting SMEs performance. The responses of the respondents largely proved that effective implementation of financial risk control techniques will help enhance the capacity of SMEs operators to a moderate extent. The findings of this research reveal that risk management techniques (i.e., financial control) are significant in influencing business performance among SMEs owners/operators. Thus, insurance providers in Nigeria should focus on the risk management proxies that will have greater effects on the buying behaviour of the SMEs owners/operators and other entrepreneurs or business-related industries.

Based on the justification adduced to in this study, the researchers recommended that insurance education, as a field of study, should be taken as seriously as possible so that it can help develop the peoples’ minds psychologically and sociologically to get attracted to insurance in order to manage their future. More so, insurance providers in Nigeria should make attempt to make the business of insurance lovable and affordable to SMEs’ operators/owners in a bid to sharpen
their behavioural risk attitudes. The SMEs operators should try to shift their desire to managing the thrust of risk off to the insurance providers for adequate business, economic and financial security.

References:


