

# A framework for holistic risk management and sustainability of fast moving consumer goods SMEs: Cape Metropole, South Africa

by

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# DECLARATION

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#### ABSTRACT

High failure rate of SMEs and their vulnerability have rendered risk management and sustainability very relevant areas for this study. The study aimed at contributing to the sustainability of SMEs by means of risk management practices. Specifically, the focus of the thesis is to investigate risk management and sustainability issues in SMEs with a focus on Fast Moving Consumer Goods (FMCG SMEs), which are based in the Cape Metropole, South Africa. The author seeks findings to present them as answers to the questions concerning risks which affect SMEs' performance, how owner-managers manage such risks, the obstacles to such risk management, components of sustainability relevant to SMEs and as well as the risks associated with such components. This was motivated by a lack of research in South Africa on risk management and sustainability issues of SMEs in the FMCG sector. This study therefore attempted to bridge the theoretical gap by combining the traditional risk categories and sustainability categories, to present a more holistic risk management framework for SMEs. To achieve this, 320 questionnaires were distributed to FMCG SME owners and managers for completion. In order to validate the quantitative data gathered through a questionnaire-tool, qualitative data were collected by interviewing four risk experts and also two focus group discussions of six and eight participants were held with FMCG SME owner-managers.

The results showed that strategic risk and environmental risk, in different forms, have major effects on the performance of FMCG SMEs. The results reflected the true Cape Metropole scenario, particularly with regard to environmental risk because Cape Town just survived day zero couples of years ago. To manage such risks, the results revealed that the FMCG SMEs have risk management mechanisms in place, but the tools are too simplistic and very informal. Besides, it was noted major that these enterprises tend to lack the crucial elements of a useful risk management toolkit as dictated by best practice. Aligned to this was the lack of budgetary control and contingency fund account in SMEs; lack of risk knowledge and so forth. Furthermore, the study revealed that SME owner-managers' characteristics such as their positions, experience and highest qualification are major determinants of risk management practices adopted by them, thus establishing a strong implication for SMEs' sustainability.

As far as the sustainability is concerned, the results revealed that the social, environmental and economic components of the critical factors of sustainability are major threats to the sustainability of SMEs, with the environmental component taking the lead, closely followed by the social component, and then the economic. The results of dynamics of risks associated with the aforesaid critical factors showed that these components present risks that pose a great threat to the sustainability of SMEs, with the environmental component taking the lead, closely followed by the social component, and least of all, the economic component. Despite this, it was noted that a majority of FMCG SMEs never incorporate robust analysis of sustainability factors into their risk management processes. Aligned to this was a lack of understanding of

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risk management process and its effect on enhancing business sustainability among SME owner-managers. This pose a great threat to the sustainability of FMCG SMEs and raised critical issues for policy framework.

Besides closing the knowledge gap, the study also provides important insights to the Department of Small Business Development as the findings can inform its interventions intended to boost the survival rate of the SMEs, by for example developing a risk management and sustainability training programme for SME owners and managers. The findings may also assist sustainability and risk managers to coordinate more with each other to enhance the sustainability of their businesses. Besides, the study presented a framework which was informed by the theoretical framework, empirical results and best practice as documented in the literature. This can serve as a practical risk management and sustainability toolkit for use by SME risk and sustainability managers.

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# LIST OF ABBREVIATIONS

ABBREVIATION	MEANING
SMEs	Small and Medium-sized Enterprises
USA	United State of America
OECD	Organisation for Economic Cooperation and Development
GDP	Gross Domestic Product
FMCG	Fast Moving Consumer Goods
ERM	Enterprise Risk Management
SAD	Single Approach Design
SABCOHA	South African Business Coalition on HIV and AIDS
SPSS	Statistical Package for Social Sciences
UK	United Kingdom
WEF	World Economic Forum
SSA	Statistics South Africa
SDGs	Sustainable Development Goals
RBV	Resource Based View
AMOS	Analysis of Moment Structure
KEQs	Key Evaluation Questions
COSO	Committee of Sponsoring Organisations of the Treadway Commission

#### CHAPTER ONE

# INTRODUCTION AND BACKGROUND

### **1.1 INTRODUCTION**

The high failure rate of small and medium enterprises (SMEs) is a global problem, and recent studies have shown that the failure rate ranges from 70% to 90%, depending on a country and industry (Kaminskaite, 2017:3). According to the Organisation for Economic Cooperation and Development (OECD) (2017), the number of SMEs in Japan dropped by 21% between 1999 and 2014, while the average failure rate for SMEs in the United Kingdom (UK) stood at 9% during 2015 (Rhodes, 2016:9). Also, about 50% of SMEs in the United States (US) failed within 5 years (Naude & Krugell, 2002:22).

SMEs in Africa are also being bedevilled by several factors militating against their performance, resulting in high SME failure rate. The failure rate of SMEs in Africa, however, is relatively higher than in developed countries, with 50% of the new SMEs failing within their first three years, while 95% fail within the first four years (Mungal & Garbharran, 2014:77). For example, 60% of SMEs in Zimbabwe fail within their first year of operating, an additional 25% fail within their first three years and the remaining 15% are likely to continue to exist (Nyamwanza, Paketh, Makaza & Moyo, 2016:305).

Furthermore, the rate of failure of SMEs in Uganda is alarming, with one-third of new SMEs not going beyond their first year of operation. In South Africa, the percentage of SMEs that fail within the first five years ranges between 50% and 95% (Mong, 2012:33-34), and nearly 75% of new SMEs fail to become established enterprises, which has been regarded as one of the highest failure rates in the world (Yeboah, 2015:4). Consequently, South Africa is losing millions of rand and job opportunities due to the high failure rate of SMEs (GEM, 2011). With such SME failure rate statistics, both in developed and developing countries, SMEs are facing significant sustainability<sup>1</sup> problems.

Many studies have examined the perceived reasons why SMEs fail to achieve sustainability (Islam & Tedford, 2012:3; Kaminskaite, 2017:11; Pyeman, Rashid, Hanif, Mohamad & Tan, 2015:247; Smit & Watkins, 2012:6325). Based on these studies, one chronic factor that was constantly pointed out as probably the most significant reason SMEs fail to achieve sustainability is the lack of appropriate management skills, including risk management skills. Also, a study by Chakabva and Thurner (2015:1106) shows that risk management frameworks

<sup>&</sup>lt;sup>1</sup> In this study, business sustainability is defined as the management and coordination of environmental, social and economic factors to ensure responsible and continued existence (survival).

such as Enterprise Risk Management (ERM), which provide a formal approach to risk management, are largely absent within SMEs.

According to the SME owner-managers surveyed in a study undertaken by Gunasekaran, Rai and Griffin (2011), a formal approach to risk management does not seem viable to them considering their limited resources. Consequently, most SME owner-managers do not formally identify, evaluate, treat, and report risks; they rely on a combination of experience, instinct, and luck (Henschel, 2008), thereby, exposing the sustainability of their businesses at risk.

Furthermore, findings from past studies indicate that risk management techniques in SMEs are largely limited to risk avoidance actions (Smit 2012:iii; Virdi, 2005). Darcy and Brogan (2001), however, view risks as a value-creating opportunity or potential profit. Not every risk event, therefore, should be regarded as a situation to be avoided (Yusuf & Dansu, 2013:81). SME owners and managers, therefore, should formally manage risks to ensure that constraints are minimised, and opportunities are maximised. Failure to engage in formal risk management practices and identify opportunities is adversely affecting the sustainability of SMEs (Smit, 2012:20). This elevates the importance of this study, as it attempts to contribute to the sustainability of SMEs by means of risk management practices. The success of SMEs is essential for the economic health of all countries. More so in developing countries like South Africa which are characterised by problems of slow economic growth and high unemployment.

# **1.2 OBJECTIVES OF THE THESIS**

The high failure rate of SMEs and their vulnerability has rendered risk management and sustainability very relevant areas of study. Regardless of this, theories, frameworks, tools and techniques used to examine sustainability and risk management were in most cases designed for application in large organisations. SMEs and large organisations particularly in South Africa are, however, fundamentally different, i.e. SMEs may share the same characteristics and challenges, like limited resources, which set them apart from their larger counterparts. This provides the impetus for the formulation of a holistic framework for risk management and sustainability within the SME industry in the Cape Metropole, South Africa. Therefore, the focus of the thesis is to investigate risk management and sustainability issues in SMEs with a focus on Fast Moving Consumer Goods (FMCG SMEs), which are based in the Cape Metropole, South Africa. The author of this thesis seeks findings to present them as answers to the questions concerning risks which affect SMEs' performance, how owner-managers manage such risks, the obstacles to such risk management, components of sustainability relevant to SMEs and as well as the risks associated with such components. By so doing, this study presents an initial attempt to bridge the identified theoretical gap by combining the traditional risk categories and sustainability categories, to present a more holistic risk management framework for SMEs. The approach that was used to build the proposed framework was based

on the theories underpinning the study, empirical results and best practice as documented in the literature. This has strengthened the proposed framework's theoretical and empirical base, and gave it a reasonable robustness.

Also, to fill the knowledge gap evidenced by a dearth of research on risk management and sustainability issues of SMEs, the following ancillary research objectives were formulated.

Despite the progress made in expanding SME risk and risk management research, imperative issues have remained unresolved because of research limitations or shortcomings. For example, most studies like those conducted by the Insurance Council of Australia (2008) and Smit (2012:236), reveal conflicting results regarding SMEs' risks creating a contradiction that needed be addressed by the current study. Besides, most of the existing studies are outdated since they were conducted more than five years ago (e.g. Smit and Watkins, 2012; Boubala, 2010:72; Smit, 2012), thus their results regarding SMEs risks and risk management may not be valid at the moment. This thesis, therefore, *seeks to close out these gaps in the literature by identifying the major business risks that affect SMEs' performance at the present time, as well as identifying how they are managing such risks.* 

Also traditionally, academic studies on SMEs in South Africa did not include a philosophical approach especially studies on risk management. Given this gap identified in prior studies, *this thesis seeks to achieve better results by introducing renowned theories to explain the motivation for risk management, obstacles to risk management and why owner-manager characteristics may be associated with risk management practices.* To the author's knowledge this is the first academic study on risk management of SMEs in South Africa that is built on a theoretical framework.

Furthermore, the latest Global Risks Report sees sustainability risk with no challenge as the defining risk of the age (Cooper, 2019). Yet, most of existing studies have focused on reporting of traditional risks such as machine breakdown, credit risk, fraud etc faced by SMEs, while sustainability risks related to these enterprises remain relatively unexplored. This thesis therefore *aims to close out this gap in the literature by unpacking emerging risk sources (components of sustainability) in SMEs, to determine the adequacy of the current risk management practices to address emerging risks, to determine SME owner-managers' level of knowledge on risk management and its contribution towards enhancing business sustainability, and to help SME owner-managers recalibrate risk management and balance their efforts between managing traditional risks and emerging risks.* 

Also, up until now, academic research have focused their work on SMEs risks in general (e.g. Bhatnagar, 2013:164; Aureli and Salvatori, 2013:23; Boubala, 2010:72; Smit, 2012), but rarely

focused or explicitly discussed the risks specific to the sectors within the SME industry. In fact, in literature and previous studies, it has been assumed by researchers that risks for one sector e.g. FMCG, are equal to those for any other sectors like tourism, consulting firms, microfinance providers within the SME industry. *The author will pursue in this thesis, to close out this gap in the literature and seek to identify risks which are specific to one sector i.e. the FMCG SMEs.* The justification for the selection of the FMCG SMEs is provided in Section 3.4

Summarily, the ancillary research objectives that support the main objective are as follows:

- To identify the major business risks that affect FMCG SMEs' performance
- To identify the current practices used to manage risks by South African FMCG SME ownermanagers
- To establish the relationship between FMCG SME owner-managers' characteristics and risk management practices
- To identify the factors that might inhibit effective risk management within South African FMCG SMEs
- To identify critical factors affecting the sustainability of FMCG SMEs
- To identify potential risks posed by critical factors of sustainability in FMCG SMEs
- To determine the adequacy of the current risk management practices to address critical factors of sustainability that might pose risks to FMCG SMEs
- To determine South African FMCG SME owner-managers' level of knowledge on risk management and its contribution towards enhancing business sustainability

# 1.3 BACKGROUND TO THE RESEARCH PROBLEM

The World Economic Forum (WEF) Global Risks Report (2019:5) reports that in 2019, three of the top global risks in terms of likelihood and impact are from the components of sustainability. This is a major shift from ten years prior 2016 when traditional risks like financial risks comprised the bulk of top global risks in terms of likelihood and impact (Irwin & Kennedy, 2017). In support, Koor (2018:1) mentions that components of sustainability are increasingly shaping trends in the business sector in terms of risk sources as depicted in the next three paragraphs.

Regarding the environmental component of sustainability, the WEF Global Risks Report (2019:5) reflects a stunning change in the risk landscape facing the business sector, with the rise of environmental issues to a level where they prevail over the long-term risk horizon as the most amazing transformation. Again, the WEF Global Risks Report (2016) revealed water crises as one of the global environmental risks of utmost concern over the next decade. For example, FMCG industry's operating activities are heavily reliant on water which represents about 42% of the total water consumed by all commercial users in Cape Town and, therefore,

the current scarce water supplies in Cape Town is a growing risk concern for many Capetonian FMCGs, especially fast food outlets. Also, FMCGs are popular, and the public consumes them daily; therefore, their packaging is frequently seen on the streets, affecting the environment negatively (EMF, 2012).

Concerning the economic component of sustainability, Statistics South Africa (2019) revealed that the food inflation in South Africa has reached its topmost level in eighteen months, recording 3.8% in August 2019, and this has an adverse impact on the business sector. Thus, customers are likely to spend less cash on discretionary products like cars, furniture, sweets, biscuits, cakes, processed meats and sweetened condensed milk, which hit hard on the retail sector. High input costs are another worrisome effect of inflation. For example, South African electricity public utility (Eskom) has put into effect a 14% tariff increase in April 2019 (Daniel, 2019), posing an increase in input costs for businesses. So, maintaining profits in 2019 has been a challenging task for businesses whose daily activities such as cooking, air conditioning, and refrigeration of products are heavily reliant on energy.

With regards to the social component of sustainability, Schlierer et al., (2012) expressed an opinion that the relationship between owner-managers and various stakeholders such as customers, suppliers, and the government is critical for the survival and sustainability of any business. Paying less attention to stakeholder relationships entails social risks such as negative publicity, non-compliance with legislative requirements and high cost of poor supplier relationships (Calton, 2001). It is therefore crucial for businesses to incorporate the social component of sustainability into their risk assessment to take advantage of potential opportunities as well as to ward off any social risks

As highlighted in the preceding paragraphs, risk sources in the business sector are no longer limited to traditional sources like compliance, operations, strategic planning and financial management, but are now expanding to the social, economic and environmental components of sustainability. This situation demands the need to incorporate components of sustainability into the risk assessment process. Whilst empirical evidence suggests that larger enterprises are increasingly incorporating components of sustainability into their risk assessments, prior research has revealed that SMEs lag behind in this respect. For example, research on the environmental component of sustainability within SMEs (see Environment Agency, 2005; Hillary, 2000) have portrayed SME owners and managers as unaware of sustainability risks like environmental risks, lacking the tools and resources to deal with such risks and being skeptical about the business benefits of sustainability risk management. Similarly, Revell (2007) interviewed 40 SMEs in the United Kingdom and found that owner-managers did not view the benefits from environmental risk solutions to be worth the investment in time and resources required to pursue them. Supporting this, a cross-sectoral survey and telephone

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interviews conducted by Simpson, Taylor & Barker (2004) with 64 UK SMEs found that 75% view environmental risk solutions as a cost, and 80% were against any linkage between environmental risk management and increased customer satisfaction.

Furthermore, SME owner-managers who participated in a study by Ismail, Othman, Yousop & Ahmad (2016:56-58) only identified traditional risks such as human errors, fraud, and failure to recognise a shift in consumer tastes and preferences as the most prominent risks affecting their businesses. Similarly, the selected SMEs in a survey research by Pradana and Bandula (2012) show that traditional risks, which come from mainly the pursuit of a failed business plan and poor business decisions are the major risks affecting their profits. Also, previous studies by Aureli and Salvatori (2013:23), Nyakang'o and Kalio (2013:257), indicate that SME ownermanagers regard traditional risks such as credit and cash flow risks as the only ones which significantly influence their revenue and profitability of businesses.

These findings show that the SME owner-managers' knowledge of risk is limited to traditional risks and tend to be ignorant of sustainability-related risks crippling their business success. Worse still, the risk management tools, including Enterprise Risk Management (ERM), which are supposed to help SMEs tackle risks holistically, are inherently internally focused, as they only look at reporting, operational, compliance, and strategic factors (Reuvid, 2010:7). To contribute to filling this gap, this study offers an expanded view of risks that is broader than the traditional perspective. In this case, the expanded view of risks includes social, economic and environmental considerations. By incorporating these three components of sustainability into risk assessment, the study seeks to introduce a more holistic view of risk sources that include evolving risk areas that are of growing importance in a rapidly changing global environment. This creates an opportunity for SMEs to consider emerging risk areas that might otherwise be missed by existing risk management tools.

Furthermore, despite SMEs being numerically predominant and the most vulnerable role players in the economy of many countries, a significant amount of research on sustainability risk focuses on facilitating the understanding of social, economic, and environmental components of large enterprises and multinational corporations with ambitious sustainability profiles only like Unilever, Colgate-Palmolive, PepsiCo, Nestlé etc. Also, the researcher has noticed that most of the few of the researchers such as Fiori and Foroni (2019), who have made efforts to research the sustainability issues of SMEs, have focused on the economic component, leaving the social and environmental aspects under-researched. This provides the impetus for the development of a holistic understanding of the social, economic, and environmental risks of SMEs. One of the current study's contributions is documenting this role, with a particular emphasis accorded to FMCG SMEs.

# 1.3.1 Problem statement

From the above background, it is quite evident that both traditional and emerging risks are prevalent in SMEs, yet these enterprises lack formal risk management practices required to deal with such risks. This potentially pose a great threat to their sustainability. Even though some studies in other countries have tested these perceptions attributed to risk management and sustainability issues of SMEs (e.g. Hillary, 2000; Revell, 2007), little research has been conducted on risk management and sustainability of SMEs operating in the FMCG sector of South Africa, let alone the Cape Metropolitan area. Therefore, the problem to be investigated by the current study is that the sustainability of South African SMEs operating in the FMCG sector is perceived to be adversely influenced by the accumulation of risks, which stem from a lack of effective risk management practices.

# **1.4 RESEARCH QUESTIONS**

This section entails the research questions that were developed to assist in solving the problem under study. As a first step, which risks affect SMEs' performance and how owner-managers manage such risks will be the focus of investigation. As alluded earlier, a review of prior studies such as the Insurance Council of Australia (2008) and Smit (2012:236) revealed conflicting results regarding SMEs' risks and risk management practices, creating a contradiction that needs to be addressed by a new study. Thus, the questions relating to the major business risks that affect SMEs' performance and the current practices used to manage those risks remain unanswered. This study attempts to fill in this gap in the prior literature by addressing the following first two questions:

- 1. What are the major business risks that affect FMCG SMEs' performance?
- 2. What are the current risk management practices deployed by South African FMCG SME owner-managers in their businesses?

A review of prior studies on the above-mentioned research questions have resulted in more gaps in prior literature being identified, which led to seven more research questions that have remained unanswered by the prior studies. Thus, a review of prior studies regarding the second research question (how SMEs manage risks) discloses that the existing studies on this area are devoid of any theoretical grounding especially in emerging economies like South Africa. This finding has triggered the need to introduce theories that explain why owner-manager characteristics may be associated with risk management practices, as well as to explain the obstacles to risk management by SMEs. These issues led to the third and fourth research questions:

- 3. What are the relationship between FMCG SME owner-managers' characteristics and risk management practices?
- 4. What are the potential obstacles to the successful implementation of effective risk management processes by South African FMCG SME owner-managers?

Then, a review of prior studies regarding the first research question (which risks affect SMEs' performance) revealed that most studies are outdated, since they were conducted more than five years ago, thus their results regarding risks may not be valid at the moment. Worse still, the WEF Global Risks Report (2019:5) reflects a stunning shift in the risk landscape facing the business sector, with the rise of sustainability risk to a level where they prevail over the long-term risk horizon as the most amazing transformation, yet the existing studies have concentrated on the traditional aspect of risks in SMEs. Given this gap identified in prior studies, there was a need to conduct this study to unpack emerging risk sources (components of sustainability) in SMEs, to determine the adequacy of the current risk management practices to address emerging risks, to determine SME owner-managers' level of knowledge on risk management and its contribution towards enhancing business sustainability, and to help SME owner-managers improve their risk management processes and balance their efforts between managing traditional risks and emerging risks. In order to achieve these objectives which were not covered by prior studies, the current study addressed the following questions:

- 5. What are the critical factors affecting the sustainability of FMCG SMEs?
- 6. What risks are presented by the critical factors of sustainability in FMCG SMEs?
- 7. To what extent do risk processes of FMCG SMEs incorporate robust analysis of sustainability factors?
- 8. Do South African FMCG SME owner-managers have adequate knowledge on risk management and its contribution towards enhancing business sustainability?
- 9. How can risk processes of FMCG SMEs incorporate robust analysis of sustainability issues?

To find answers to the above-mentioned first eight research questions, a survey questionnaire focusing on those questions was administered to 320 SME owner-managers for completion, which was then complemented by personal interviews with risk experts and focus group discussions with SME owner-managers. Then the ninth research question was answered by presenting a frameworkl (Chapter six) which was informed by the theoretical framework, empirical results and best practice as documented in the literature.

#### **1.6 RESEARCH METHODOLOGY**

This study adopted a specific tools and methods to solve the research problem pragmatically. It, however, should be noted that this section only provides a summary of the tools and methods that were used in this study, as they will be explained in greater depth in Chapter four. In particular, the summary pertains to a literature review, survey questionnaire, personal interviews, and focus group discussions.

A literature study was performed with the primary objective of gathering and integrating material regarding risk management and sustainability issues of SMEs. The study used various sources, including national statistics reports, university publications, published journal articles, and other academically accepted sources, to conduct desk analysis through which the author has critically analysed and integrated the theoretical background of the formulated problem. Furthermore, gaps in prior literature were identified during desk analysis and this led to the formation of eight research questions that have remained unanswered by the existing studies.

The empirical study comprised a survey questionnaire, personal interviews, and focus group discussions. The main empirical study took the form of a questionnaire survey to assemble data from 320 SME owner-managers. The design of the survey questionnaire went through three distinct stages which consisted of the initial development process, followed by the pretesting process, and last, the construction of the final survey questionnaire. Subsequently, focus group discussions and personal interviews were used to complement and validate the results of the survey questionnaire. Participants for the focus group discussion were chosen from the same sample from which the survey questionnaire participants had been chosen. Two groups of six and eight participants were created. Then, LinkedIn was used as a method for recruiting four risk experts for personal interviews. LinkedIn is the main platform for professional networking, which makes it the optimum choice for this study since the study seeks to reach people in a specific profession – risk experts.

The results of a questionnaire survey were analysed were analysed statistically using the Statistical Package for Social Sciences (SPSS). In a first step, descriptive statistics were utilised to analyse the biographic variables of the sample. The subsequent statistical methods which were utilised when performing the data analysis were: contingency tables, robust Chi-square difference testing, Chi-square test of association and proper check of the assumptions. In order to complement and validate the results of the survey questionnaire, the results of the four personal interviews, and two focus group discussions were analysed using qualitative content analysis method, following three distinct analytical procedures. In the first step, a list of key themes was generated, and the themes were organised into categories that were identified as key findings. Then, the non-numeric data were analysed to establish commonalities among the participants' responses, and conclusions were drawn from the data.

#### **1.7 SUMMARY FINDINGS**

The analysis and discussion of the findings of this study was based on major risks, risk management practices, the relationship between SME owner-managers' characteristics and risk management practices, main barriers, critical factors of sustainability, risks posed by critical factors of sustainability, risk processes of SMEs and sustainability factors, and risk management contribution towards enhancing the sustainability.

Concerning major risks, the results showed that strategic risk and environmental risk, in different forms, have major effects on the performance of FMCG SMEs. The results mirrored the true Cape Metropole scenario, especially with respect to the environmental risk mainly because Cape Town is an extremely water-stressed area with more likelihood of drought and flood.

About risk management practices, the results revealed that the FMCG SMEs have risk management mechanisms in place, but the tools are too simplistic and very informal. Besides this, it was noted major that these enterprises tend to lack the crucial elements of a useful risk management tool kit as dictated by best practice. Aligned to this was the lack of budgetary control and contingency fund account in SMEs; lack of risk knowledge and so forth.

Regarding the relationship between SME owner-managers' characteristics and risk management practices, the results indicated that there was a strong and significant association between SME owner-managers' characteristics and risk management practices. Therefore, SME owner-managers' characteristics such as their positions, experience and highest qualification are major determinants of risk management practices adopted by the FMCG SMEs operating in the Cape Metropole, thus establishing a strong implication for their sustainability.

With regard to main barriers, the results have shown that more than 70% of owner-managers agreed on the relevance of all the seven barriers which were stated on the questionnaire as informed by the literature. These included risk management knowledge, lack of financial resources, cost exceeding benefits of risk management, lack of holistic risk management model relevant for SMEs, difficulty in measuring the performance of risk management model, and insufficient record keeping, among others. This implied that policy direction to address these were imperative for FMCG SMEs' sustainability.

As far as the critical factors of sustainability are concerned, the results revealed that 53.6% of the respondents confirmed the social, environmental and economic components of the critical factors as major threats to their business sustainability, with the environmental component taking the lead with above 64% majorly affected, closely followed by the social component

having above 51% being majorly affected, and then the economic component carrying 57% being moderately and majorly affected.

In relation to risks posed by critical factors of sustainability, the results of dynamics of risks associated with the critical factors of sustainability showed that more than 57% agreed that all components present risks which pose a great threat to their business sustainability, with the environmental component taking the lead with above 70% respondents, closely followed by the social component, and least of all, the economic component.

With respect to risk processes of SMEs and sustainability factors, the results indicated that more than 80% of the respondents never incorporate robust analysis of sustainability factors into their risk management processes. This post a great threat to SMEs sustainability and raised critical issues for policy and managerial frameworks.

Concerning risk management contribution towards enhancing the sustainability, the results revealed that if risk management is adequately implemented, it could contribute towards enhancing the sustainability of SMEs by reducing environmental risks, social risks and economic risks. The analysis of results further revealed an increasing relationship between FMCG SME owner-managers' levels of understanding of risk management processes, procedures and tools, and the extent to which they believe that risk management has an impact on their business sustainability. Thus, the more FMCG SME owner-managers understand the risk management process, procedure and tool the more they comprehend the extent of risk management's impact on business sustainability enhancement. This implies that the previous results involving limited inclusion of sustainability factors into the risk management process of FMCG SMEs, is due to a lack of understanding of risk management process and its effect on enhancing business sustainability. This pose a great threat to FMCG SMEs' sustainability and raised critical issues for policy framework. The policy direction should be to increase Knowledge, Attitude and Practices (KAP) of owners-managers in FMCG SMEs about process, procedure, tools of risk management process and its impact on business sustainability enhancement effort.

# **1.8 RESEARCH CONTRIBUTION**

According to Jansen (2012), the importance of research is based on the contributions it makes to theory and practice. Accordingly, this study is intended to make the following practical and theoretical contributions as well as methodological contributions:

# **1.8.1 Practical contributions**

This study holds practical significance for SMEs and policy makers. The study offers insights to SMEs to assist them understand business risks crippling their business success, and sheds light on emerging risk sources particularly relevant for holistic risk assessment and Sustainable Development Goals (SDGs). To this end, the researcher has formulated a framework that captures sustainability dimensions into the risk assessment of SMEs, in order to help them tackle risks holistically (see Chapter six). Furthermore, high SME failure rate is a key challenge faced by developing countries and a study like this one, which investigates risk management and sustainability issues in SMEs, is a huge significance in terms of policy development to South Africa. It provides important insights to assist policy makers understand the challenges faced by SMEs. Thus, the results have practical implications for developing well-examined and defined measures at the policy level to address high SME failure rate and stimulate the sector's growth.

#### **1.8.2 Theoretical Contributions**

The study is likely to make a credible theoretical contribution to SME literature in South Africa. Thus, previous studies have focused less on the relevance of agency theory, RBV and upper echelons theory in SMEs creating a gap of knowledge. To close this gap, this study explores the agency theory, RBV and upper echelons theory in perspective of SMEs. To the best of my knowledge, this study is the first to explain the relevance of the aforementioned theories to SMEs, in the South African context. Clarifying the applicability of such imperative theories to the SME sector will offer valuable insights into broader risk management research. Also, the majority of studies on Agency theory, Resource Based View (RBV) and upper echelons perspective focus on enterprises from developed countries like the United States of America (USA). Therefore, existing knowledge on those theories almost exclusively based upon findings from developed countries. An important question left unanswered by extant agency theory, RBV and upper echelons research is whether the results generalise to enterprises from emerging markets like South Africa or not. Emerging markets may present a setup which differs greatly from the setup of developed countries. Thus, the current study puts to test propositions that were built in developed country settings in a developing country context, South Africa.

#### **1.8.3 Methodological Contributions**

The study also makes a significant contribution in terms of research methodology. The study adopted multiple data collection methods (data triangulation) to investigate risk management and sustainability issues of SMEs from the perspectives of both SME owner-managers and the risk experts. This approach is a significant academic contribution to the existing risk

management and sustainability literature, which is dominated by investigation of this area from the perspective of SME owner-managers and less from the perspective of risk experts, using either a quantitative or qualitative method. It provides a holistic, coherent and integrated view on risk management and sustainability issues faced by SMEs. Therefore, the comprehensive outcome of the study includes a true representation of risks faced by SMEs in South Africa, risk management plans deployed by SME owner-managers, as well as the sustainability issues encountered by SMEs.

# **1.9 THESIS STRUCTURE**

This thesis comprises seven interconnected chapters, which are described as follows:

**Chapter One**: This chapter starts with an introduction to the background of the study. Then it discusses the objectives of the thesis, background to the research problem and the research questions. Also, it presents the contribution of the research, and provides a brief overview of the other chapters.

**Chapter Two**: This chapter begins by introducing specific theories underpinning the study. It then presents a comprehensive review of prior studies and identifies gaps in knowledge along with issues that have remained unresolved.

**Chapter Three**: This chapter aimed at providing an in-depth analysis of the research methodology and design appropriateness. It then presents a detailed explanation on the research population, sampling method, and sample size to clarify how and why the research participants for this study were chosen.

Chapter Four: This chapter provides an analysis of data gathered and discusses the findings.

**Chapter Five**: This chapter provides the summaries and conclusion of the study along with its implications, delimitations and limitations, and suggestions for future research.

**Chapter Six:** Based on the theories underpinning the study, empirical results and best practice as documented in the literature, a framework was developed to capture sustainability into the risk management processes of Cape Metropole FMCG SMEs and emphasise the significance of effective risk management and how it contributes to the overall sustainability of SMEs. The formulation of this framework concludes the study.

#### **CHAPTER TWO**

#### LITERATURE REVIEW

#### 2.1 INTRODUCTION

The objective of this chapter is to provide a review of previous studies that have investigated risk management and sustainability issues of SMEs. In so doing, the chapter identifies gaps in the existing literature regarding the major business risks that affect SMEs' performance, how they manage such risks, the obstacles to such risk management, components of sustainability relevant to SMEs and as well as the risks associated with such components. However, the chapter will start by identifying relevant theories that explain the motivation for and obstacles to risk management by SMEs. Such theories include the agency theory, upper echelons theory and RBV theory and are explained in Section 2.2. This is followed by Section 2.3 which discusses previous studies addressing the research questions. Thereafter, Section 2.4 highlights limitations of existing studies and research questions that have remained unanswered. A summary of the entire literature review is then presented in Section 2.5 to conclude the chapter.

# 2.2 THEORIES SUPPORTING THE STUDY

This study follows and advanced the concept established by the agency theory, RBV and upper echelons theory with the expressed intention of attempting risk management into a more comprehensive framework.

# 2.2.1 Agency Theory

According to Mitnick (2006), Stephen Ross and Barry Mitnick were the first scholars to suggest the agency theory in 1973. Since then, many scholars, amongst them Jensen and Meckling (1976), have expanded the risk-sharing literature to agency problem that arises from misalignment of interests. Thus, Jensen and Meckling (1976) define agency theory as the relationship between a company's principal, generally the owner, and a company's agents, employed managers that control the use of resources. In this case, the principals appoint agents to run the business on their behalf. The interests of those principals and agents are, however, not necessarily aligned. Due to a conflict of interests, the separation of ownership and control can result in agency risk: a risk that agents will not act in the interests of principals. Failure by agents to act in the interests of principals includes a wide range of behaviour such as shirking, negligence, inappropriate decisions and fraud. Also, lack of information concerning the activities of the agents (information asymmetry) is another critical agency risk factor as it prevents principals from adequately protecting their own interests.

As a logical consequence, Jensen and Meckling (1976) argue that agency risks are absent when a business is managed by owner-managers. In this case, ownership and management are combined, which prevents agency risk and thus leading to an increase in value for the business (Jensen & Meckling, 1976). As a result, most previous studies have focused on the significance of agency risks in large enterprises only. Another gap in literature is that agency theory was propounded and mostly tested in full-market economies like USA and Europe. This indicates the need of research that demonstrates the applicability of the agency theory to SMEs especially in the context of developing economies. Therefore, the novelty of this study is that it addresses the commonly neglected topic of agency theory's relevance to the SMEs in emerging country context. In particular, the study presents theoretical and conceptual arguments concerning types of agency risks that prevail even when ownership and management are aligned like in SMEs, and use the agency theory to explain why ownermangers have to engage in risk management. Regarding this, the study has identified four main sources of agency risks in SMEs, i.e. conflict of objectives, information asymmetry, employment of family members and the desire of family welfare.

The proponents of agency theory approach like Jensen and Meckling (1976) argue for the absence of conflict of objectives in SMEs since ownership and management are aligned in these firms. However, this study argues that it can be arisen in SMEs because at times SMEs may employ non-family managers due to lack of qualified family members or lack of agreement regarding which family members should be involved in the management of the business. In this case, non-owner managers or non-family managers (agents) could act in their own best interest because of different priorities like supremacy, personal prestige, sales income, growth maximisation. Furthermore, potential agency risks in SMEs are aggravated by information asymmetries emanating from lack of consistent, publicly existing detailed accounting data. This information asymmetry brings about the issues of moral hazard (risk willing actions of the non-owner managers or non-family managers), who are not directly endangered by possible losses).

Other possible sources of agency risks in SMEs include employment of close relatives instead of more competent non-family managers, as well as the generous behaviours within family members and their exploitation. The desire of family welfare may lead to generous behaviour by owner-managers towards family members. As a result, family members affected by this kindness may exploit that attitude, mainly when their personal interests conflict with the family's, creating costs because of moral hazard. Then, hiring bias may give rise to additional costs, for instance, by favouring the employment of close relatives rather than more qualified managers. These close relatives may misinterpret or even ignore business risks because of their safe family embedment. The agency problems highlighted in the preceding paragraphs clarifies the linkage between agency theory to risk management in SMEs. In this case, risk management can reduce SME agency risks and increase its business value. Risk management can also be used as a surveillance tool to minimise asymmetric information and contribute to evasion of opportunistic behaviour of SME non-owner or non-family managers and close relatives. It is therefore important for SME owner-managers to mitigate agency risk by means of deploying effective risk management practices. Following the concept established by the agency theory and its proponents, the current study put forward a framework that presents possible sources of agency risks in SMEs as well as possible solutions to mitigate them (see Chapter six).

#### 2.2.2 Resource based view theory

The RBV is a renowned concept that has been applied to several strategic management researches (Hitt, Carnes & Xu, 2016). It is centered on the argument that a business's superior performance emanates from its resources that are rare, valuable, impossible to replicate, and hard to replace (Bromiley & Rau, 2016). For that reason, resources play a crucial role in the overall business's performance (Barney, 1991).

According to RBV theory, resources are generally divided into tangible and intangible (Galbreath, 2005). Tangible resources include physical assets like land, buildings, machinery, and equipment. While tangible resources are common in every business, intangible resources such as knowledge, skills education, innovation, and experience also contribute immensely to the business's performance (Pal, Torstensson & Mattila, 2014; Sirmon, Hitt & Duane, 2007). Previous studies using the RBV have unpacked the relationship between business resources and performance. First, Hall (1992) investigates the relative significance of intangible resources to business success and proposes the significance of intangible resources in contributing to business success. Even though acting as a practical guide for future studies, the study by Hall (1992) is void of theoretical grounding and statistical rigor, for example, tests of significance. In another study, Powell and Dent-Micallef (1997) investigate three resources constructs which include information technology, and the complementariness of human and business resources. The findings show that for overall business performance, human resources have a positive correlation, business resources have a moderate correlation, and technology resources have a negative correlation. The findings of this study appear to point to the significance of intangible resources in positively impacting business success. In addition to that, Fahy (2002) also tests the influence of resources on low-performing versus highperforming businesses by means of discriminant analysis. Top-performing businesses ascribe greater levels of significance to intangible resources than low-performing businesses.

Following the concept established by the RBV and its proponents, this study posits that for sustainable competitive advantage, SMEs should develop resources and capabilities to manage business risks. These resources and capabilities, in line with the RBV, are approaches in managing business risks which must be a collection of unique skills, knowledge and other resources that are commensurate to both the size and the supply chain setting of the SME. However, usually SMEs have greater difficulties than their large counterparts to access resources and capabilities. Thus, SMEs face several barriers to effective risk management, given the type of environment which they operate – financial constraints, lack of technology, and lack of knowledge. The exact nature of the business resources that influence risk management systems within SMEs, however, re-mains largely unexplored in South Africa. In exploring this area, this study uses the RBV theory to link risk management to an extended set of business resources. The results help to clarify the potential obstacles to risk management within SMEs.

#### 2.2.3 Upper echelons

Upper echelons perception focuses on the link between top management characteristics and firm outcomes. The underlying argument is that the top management decides business strategies and through the strategies they decide influence firm outcomes. Therefore, to appreciate what happens to a business, one must investigate the characteristics of its top managers (Carpenter, Geletkanycz & Sanders, 2004). To investigate top managers' influence on business strategies and outcomes, upper echelons viewpoint advocates the use of demographic attributes such as age, industry experience and education level (Carpenter 2002; Pitcher & Smith 2001).

The main argument for the age is that when the average age of the top managers increases, top managers become more defiant to risk-taking and change, more conventional, and more afraid of adopting new information technology (Datta, Rajagopalan & Zhang, 2003; Escriba-Esteve, Sanchez-Peinado & Sanchez-Peinado, 2009; Tihanyi, Ellstrand, Daily & Dalton, 2000). Also, when the average age increases, top managers may face a reduced capacity to evaluate information which in turn may adversely impact activities like risk management, information technology adoption and international expansion. In congruence with these arguments, Chuang, Nakatani and Zhou (2009) proved that the average age of top managers was negatively related to the level of information technology adoption. Tihanyi et al. (2000) also established that lower managerial age was related to higher international expansion. Wiersema and Bantel (1992) reported that businesses experiencing strategic transform were more likely to be led by managers with lower average age.

Tenure is defined by Ng and Feldman (2010) as the length of employment. Research on tenure, in general, suggests that the manager's tenure is associated with commitment to

industry norms and traditional ways of conducting business which is then associated with commitment to status quo and risk-aversion (Datta et al. 2003). In this case, Hambrick, Geletkanycz and Fredrickson (1993) demonstrated that long-tenured managers were indeed more committed to the status quo than their low-tenured counterparts. Furthermore, Finkelstein and Hambrick (1996) argue that long-tenure causes managers not to make strategic changes since their experience is associated with commitment to industry norms and traditional ways of doing business. Likewise, Wiersema and Bantel (1992) established that strategic change was more likely in businesses led by run by low-tenured managers. In sum, the aforementioned discussed studies suggest that due to many years in an industry, managers become set in their ways, and less prepared to go out of their comfort zones.

The educational achievement is another frequently researched demographic attribute in the upper echelons prose and it refers to "an individual's highest educational achievement" (Bell, Villado, Lukasik, Belau & Briggs, 2011). Formal education is a means of acquiring the knowledge and information relevant to daily routines and hence is likely to influence individual performance in an additive manner (Bell et al. 2011). Upper echelons perspective suggested a positive linear relationship between managers' educational achievements and knowledge base. Thus, higher educational level points to greater knowledge base (Hermann & Datta 2005). The greater knowledge base, in turn, is likely to be connected with more successful policies and more efficient management of the business. Mangers with higher educational levels are, also, likely not to be resistant to change and risk-taking. For instance, Datta et al. (2003) demonstrated that lower educational level was connected with lower openness to change. Also, Wiersema and Bantel (1992) showed that education level was positively correlated to innovation.

Although the aforementioned upper echelons studies are relevant and educational, their findings are inconclusive. Thus, a significant amount of them focused on large firms. However, SMEs have much limited resources and lack administrative support that would assist with the decision-making processes and, therefore, they have to largely depend on their owner-managers. As such, owner-managers play a more crucial role in shaping major managerial decisions of SMEs, making SMEs a more ideal to empirically test the impact of demographic attributes on business' performance than do larger enterprises. Yet another limitation of the studies on upper echelon theory reviewed in this section is that, they were all conducted outside South Africa. Given that, it is imperative that a study on SMEs be conducted that employs the upper echelon theory to interpret the results obtained, in order to provide a deeper understanding of why owner-manager characteristics may be associated with certain business strategies and outcomes.

Therefore, this study will examine the relationship between owner-managers with respect to industry experience, education level, and position in the business and risk management practices of SMEs. By doing so, the current study accentuates the significance of demographic attributes of owner-managers of SMEs. In particular, this study addresses the influence of owner-managers characteristics over the risk management practices of SMEs. Owner-managers characteristics are regarded as predictors of effective risk management in SMEs. Thereby, the current study seeks to contribute to a more complete understanding of why owner-manager characteristics may be associated with risk management practices.

# 2.3 PRIOR STUDIES

While risk management and sustainability within the FMCG SME industry is the central theme of this study, the scope of the literature review in the following sections is expanded to embrace a generic discussion of risk management and sustainability issues in SMEs, due to the absence of literature specific to FMCG SMEs. In addition, the review of prior studies was conducted in the context of South Africa as well as other countries since prior studies conducted on risk management and sustainability of SMEs are scarce in South Africa.

#### 2.3.1 Categories of risks encountered by SMEs

SMEs are more exposed to a multitude of risks in their daily business operations due to a lack of adequate resources to manage them. While some of these risks such as those related to location, industry, and regulatory framework are macro in nature and affect the entire SME sector, others such as those related to the management of inventory, finance, products, and people are specific to individual SMEs. Risks, therefore, are categorised and discussed in this section to provide insights into the variations of risks SMEs encounter. The discussion is based on previous studies and existing literature.

In their studies, Ismail, Othman, Yousop and Ahmad (2016:56-58) used four dimensions to classify related risks that SMEs in the state of Johor, Malaysia, encounter in their day-to-day operations, namely financial risk, operational risk, compliance risk, and strategic risk. These dimensions were measured with the aid of a 7-point Likert scale ranging from "strongly agree" to "strongly disagree". Their findings disclose that operational risks such as human errors, fraud, and failure to recognise a shift in consumer tastes and preferences are the most prominent risks affecting SMEs. In line with this notion, survey findings by Pradana and Bandula (2012) show that operational risk is one of the biggest risks threatening the survival of SMEs in Sri Lanka. A possible clarification for this finding was provided by Yusuf and Dansu (2013:82) when they expressed that the managerial decision-making in SMEs resides with the owner, who, in most cases, lacks basic managerial skills and qualities to manage the operations of the business successfully.

SMEs are in most cases limited to one supplier in the procurement of trading stock which exposes them to supply chain risks. Accordingly, all the eleven SME owner-managers who participated in the qualitative field study by Ellegaard (2008) indicated that they have adopted single sourcing as a procurement strategy. This finding is echoed in a study by Thun, Drüke and Hoenig (2011), who are of the opinion that, since the total quantity purchased is not divided between several suppliers, SME owner-managers gain leverage in negotiations with their suppliers and, thus, a price advantage. Sadly, this approach also entails a strong dependence on one supplier. Any hitches with that supplier could result in production interruptions, which is a major supply chain risk for SMEs (Dubihlela & Park, 2016).

The selected Sri Lankan SMEs in a survey research by Pradana and Bandula (2012) show that strategic risks, which come from mainly planning, business decisions, and changes in the business environment, are considerably higher compared to the operational and financial risks. Ismail et al. (2016:57) also presented evidence that SMEs in the state of Johor, Malaysia, have a higher risk of strategic risk. They pointed out that the pursuit of a failed business plan, poor business decisions, and changes in the business environment are major strategic risks affecting SMEs' profits. A potential explanation for this finding might be that of Watt (2007) who found that SME entrepreneurs lack the knowledge of how the business must be run and have poor leadership styles. It is, therefore, likely that these entrepreneurs do not clearly define policies and procedures, and fail to identify threats and opportunities inside and outside the business. This maximises the chances of strategic risk occurrence, including governance risk and reputation risk.

In a study by Aureli and Salvatori (2013:23) involving 8 SMEs located in the Taranto Province and 2 in the Verona Province of Italy, it emerged that the most important risks in SMEs are related to the area of financial risks. Aureli and Salvatori (2013:23) further reported that credit risk and commodity risk are certainly the most important financial ones. This finding is complemented by the results of Nyakang'o and Kalio (2013:257), which indicate that financial risks such as credit and cash flow risks negatively and significantly influence the revenue and profitability of SMEs within Nakuru Municipality, Kenya. A potential explanation for these results was provided by Zhao and Zeng (2014:515) when they expressed that SMEs lack proper financial risk management, and using funds also lack proper financial planning, which culminates in the accumulation of financial risks.

Knowledge loss can also constitute a risk for SMEs. Accordingly, all the 40 British SME ownermanagers interviewed by Gilmore, Carson and O'Donnell (2004) unanimously agreed that nearly every enterprise is susceptible to loss of knowledge after skilled employees with valuable information, knowledge or contacts left the organisation. Thus, Gilmore et al. (2004) concluded that the loss of long-tenured employees or managers may be especially risky for

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SMEs since in most cases no other employees or managers in the business possess similar knowledge.

Regarding environmental risks, the SME owner-managers surveyed in a study by Aureli and Salvatori (2013:23) pointed out that such risks are less important to their businesses. Aureli and Salvatori (2013:23) further reported that their respondents perceive productive processes of SMEs as having an insignificant environmental impact and ultimately, little attention is given to the associated risks. In contrast to Aureli and Salvatori's (2013:23) arguments, the European Commission reported in its study that SMEs have a major environmental impact (accounts for about 64% of pollution in Europe), and most of them find it hard to comply with environmental legislation compared to their larger counterparts. This finding is echoed in a study by Li, Segarra-Ona and Peiro-Signes (2016:118) who agreed that SMEs lack environmental awareness, activeness, and performance, and as such, need help to rectify this area of their business operations. It, however, is worth noting that the environmental problems caused by SMEs do not fully materialise if one considers individual SMEs, but are pertinent considering SMEs' combined and cumulative impact (Iraldo et al., 2010:1).

The study by Sukumar, Edgar and Grant (2011), involving 15 qualitative interviews and a quantitative survey of 125 UK SMEs, found that the most dangerous risk in e-business is online safety. According to them, SMEs are vulnerable to a wide range of online threats, like credit card fraud and cyber-attacks. The use of computer systems can also involve a major risk for SMEs. As Poba-Nzaou, Raymond and Fabi (2014) showcased, putting in place mission-critical software poses a considerable risk SMEs since software implementations demand greater resource commitment in SMEs than in large enterprises, making the possible impact of implementation failure comparatively higher – particularly when SMEs choose open-source software vendors instead of large for-profit software vendors.

The study by Bhatnagar (2013:164), based on data from 75 SME entrepreneurs in India, found that there are ten risk areas for the SMEs. These risks include (1) political risk (arises from war, situations of communal riots, weak law, and order situations), (2) management risk (because of lack of knowledge of how the business must be run, poor leadership styles, and ineffective or inadequate internal controls), (3) industry risk (because of industry parameters such as entry barriers, competition, availability of substitutes, and seasonality of the industry), (4) Technology risk (emanates from using out-dated tools and machineries resulting in high cost of production). This makes it difficult for SMEs to meet the demand of their customers at a competitive price, (5) information risk (could be due to gathering incorrect information from the market such as the wrong discovery of the product on demand, failure to recognise current market trends, and failure to fulfil commitment to buyers), (6) competition risk (arises from a rivalry among firms, new entrants, and threat of substitutes), (7) accidental risk (arises from a

variety of incidents or accidents that might happen due to inevitable events and at times, due to negligence or failure to comply with correct procedures of work), (8) legal risk (arises due to non-adherence to applicable rules and that govern the operations of the business, (9) crime risk (arises due to criminal activities caused by employees, executive management, customers, and society in the form of fraud and other illegal practices for making instant and excess money), and (10) market risk (arises from market fluctuations and consumption behaviour, and failure of the business to judge prevailing market conditions).

In summary, the findings on SME risks based on earlier researches illustrate that SMEs face an array of risks that hinder their daily operations. While this could be a hurdle for SMEs' survival and growth, Yusuf and Dansu (2013:81) argued that business opportunities lie in risks and as such, risks can be exploited in favour of business objectives. As such, SME ownermanagers should carefully manage risks to ensure that constraints are reduced, and opportunities are exploited.

#### 2.3.2 Risk management practices in SMEs

A systematic approach to identify and evaluate risks along with mechanisms to minimise them are critical to guarantee a business's survival and create sustainable value. This holds, specifically for SMEs, as they are highly exposed to multiple risks because of limited resources (Verbano & Venturini, 2013:186). To mitigate the risks aroused out of various reasons in this study, it is found that by deploying risk management systems, SME owner-managers can easily save their businesses or, at least, lessen their losses. This section, therefore, explores past research and existing literature related to the risk management practices in SMEs to gain important insight regarding understanding how risks are managed in SMEs.

Leopoulos, Kirytopoulos & Malandrakis (2006) investigate the chances of computer-aided quantitative risk analysis mechanisms in a project environment and propose that these could assist SMEs "since due to their size they cannot afford project cost overruns". Leopoulos et al (2006) basically concentrated on an evaluation of the analytical tools and propose that "research efforts ... should be put towards the implementation of risk management techniques in SMEs". Blanc and Lagasse (2006) present the PRIMA (Project Risk Management) technique and tools. This approach is grounded on a decision support system for the bidding process, "considered in project management as the most important phase in terms of rewards". The benefits of this approach to SMEs include rapid building of more precise and competitive bids, and the recognition of the most favourable bids. Although informative, these two studies provide insufficient or no insight regarding understanding how risks are managed in SMEs. Instead, they focus more on possible tools that may help SMEs manage project risks
In a large-scale study, Kim and Vonortas (2014) investigated an extensive database of small enterprises spanning 10 European countries and 18 sectors. Their study revealed that building relationships is a frequently used risk mitigation strategy in SMEs, and according to their findings, mostly for coping with human resources, financial and market risks. This is echoed in a local study conducted by Sunjka and Emwanu (2015:1482) which showed that building a good working relationship with employees, banks, suppliers, and customers is a central risk management practice in SMEs. The study further clarifies that these relationships stimulate trust, offer mutual benefits, and eventually, contribute to risk mitigation. Although insightful and not dated, the study by Sunjka and Emwanu (2015:1482) was limited to only 4 South African SMEs, an aspect that weakens the generalisability of the findings to the entire SME sector in South Africa.

In a similar study conducted in UK, Gilmore et al. (2004) investigated the risk perceptions and risk management approaches of 40 SME owner-managers across a number of different industries, with an aim of understanding SME owner-managers' personal perceptions of risk, as well as determining the risk management practices adopted by them. Gilmore's et al.'s (2004) study revealed that the central areas in which risk was experienced most were in activities and decisions regarding cash flows, growth, penetrating a new market, and allocation of tasks to staff. Their study further revealed that the SME owner-managers use various strategies to mitigate the risk relating to these activities. The two major risk management techniques were found to be networking and the drawing on SME owner-managers' experiential knowledge built over time. Although insightful, Gilmore's et al.'s (2004) study did not investigate the characteristics of the owner-managers, factors that may inhibit effective risk management in SMEs and also, adopted a small sample size, thereby undermining the generalisability of its findings.

Insurance is another risk management strategy found in SMEs and it involves paying premiums to an insurance firm so that when a risk occurs, the insurance firm will take the business to its original position (Kagwathi, Kamau, Njau & Kamau, 2014:3-4). Hubbard (2009) described running an enterprise with basic insurance as a smart way of managing identified risks and reduces uncertainty. A survey of 1 000 registered Australian SMEs by the Insurance Council of Australia (2008), however, exposed that sole proprietors have the greatest rate of non-insurance, with 40% running their businesses without general insurance. The study further disclosed that 80% of the owners who bought insurance were under-insured. On the contrary, a local study conducted by Smit (2012:236) showed that a relatively higher percentage (58.2%) of the selected Western Cape SMEs use insurance is their primary tool for managing risks identified in financial, operational, and marketing areas. Thus, the findings of the Insurance Council of Australia (2008) and Smit (2012:236) create a contradiction that needs to be addressed by a new study.

Prior studies also found diversification as another strategy for risk management in SMEs. It involves selling a variety of products or services and is based on the philosophy that one should not put all eggs in one basket. In his study, Carter (2003) noted that, to some extent, owners and managers of SMEs adopt the diversification strategy but the way the process of diversification is performed by SME owner-managers is problematic. Accordingly, a study by Kagwathi et al., (2014:3) reported that many SME entrepreneurs have more than one business line as a diversification strategy to mitigate risks. Kagwathi et al., (2014:3) further reported that diversification strategy could be more effective if these entrepreneurs were skilled at choosing suitable business combinations in their portfolios. Alquier and Lagasse (2006), agrees with this strategy as a more suitable strategy to capture and deal effectively with the diversity of risk while achieving maximum returns. Although informative, the study by Carter (2003), Kagwathi et al., (2014:3) and Alquier and Lagasse (2006) were conducted outside South Africa, thus their findings may not be applicable to SMEs operating in South Africa.

In a local qualitative study, Boubala (2010:72) investigated the effectiveness of risk management practices in 150 SMEs within the Cape Metropolitan area. His findings revealed that most of the respondents do not know how to determine their business risk appetite and therefore resort to risk avoidance. In a similar study conducted in the Cape Metropolitan area, Smit (2012) investigated the extent to which SMEs successfully adopt a structured approach to risk management using a sample of 158 SME owner-managers. Her results revealed that SMEs' risk management techniques are largely limited to risk avoidance actions. In line with this finding, a study by Smit and Watkins (2012) concluded that SMEs owner-managers prefer to avoid risks instead of devising risk control methods. This hinders the economic progress of a nation since every enterprise can be defined by its capacity to take on greater risks. Although they are local studies, the studies by Smit and Watkins (2012), Boubala (2010:72), and Smit (2012) were conducted more than five years ago and thus, the applicability of their findings to SMEs operating in South Africa is questionable at the moment.

In another local but more recent study, Bruwer (2016) investigated the relationships between the managerial conduct and the internal control activities of South African FMCG SMEs. The findings of his study revealed that the sampled South African FMCG SMEs mainly use preventive internal control activities (e.g. access controls) to mitigate risks. Although based on the Cape Metropole FMCG SMEs, Bruwer's (2016) study only focused on internal control activities, thus its findings may not reflect the risk management practices of the Cape Metropole SMEs operating in the FMCG sector.

#### 2.3.3 Factors inhibiting effective risk management in SMEs

The above discussion confirmed that SME owner-managers have risk mitigation measures in place. While most SMEs adopt risk mitigation measures, the discussion further revealed that

these measures are not adequately and effectively employed. Several studies found numerous examples of SMEs that adopt an unstructured approach to risk management (Gao, Sung & Zhang, 2013; Poba-Nzaou et al., 2014; Sukumar et al., 2011). The findings established that the implementation of risk management in SMEs is influenced by financial constraints, lack of technology, and lack of knowledge.

According to Aureli and Salvatori (2013:23), a stringent risk management system requires sufficient financial resources. For example, cash is needed to hire risk experts to support the implementation of effective risk management. SMEs, however, are faced with funds mobilisation constraints (Yang, Chen, Gu & Fujita, 2019:1). Their financial exclusion is a major hampering factor because lending to these enterprises is considered inherently risky, as they lack collateral security (Booyens, 2011; FinScope, 2010). Still, Berger and Udell (2006) highlighted that the transactional income of SMEs does not sufficiently meet their financial requirements. As a result, Aureli and Salvatori (2013:30) noted that SMEs have little or no financial resources to invest in risk management activities.

Related risk tools and technologies such as the ERM software "help management visually depict, size, assess, and address risk concerns" (Patterson, 2015). Most SME entrepreneurs, however, are unaware of technology and if they know, it is often unaffordable to them (Farsi & Toghraee, 2014). The main obstacles to technology development within the SME sector are elaborated by Farsi and Toghraee (2014) as follow: (1) a shortage of funds, (2) the process of allocation of loans is very lengthy and expensive to SMEs, (3) the low profitability of SMEs, which restrains investment in technology modernisation, and (4) lack of knowledge of entrepreneurs regarding the importance of technology. The absence of technology within SMEs has made it difficult for these enterprises to attain effective risk management.

Furthermore, proper risk management practices require vigilant management attention, a high level of professionalism, and knowledge (Dubihlela & Nqala, 2018). SMEs, however, are often sole proprietorship and partnerships, which are characterised by poor employee education, lack of professionalism, and over-dependence on one or two key people (Zivanai, Onias, Lloyd, Felix & Chalton, 2014:195). As a result, SME owner-managers might face difficulty in identifying and evaluating emerging risks resulting in the under-treatment of risks (Financial Management Branch of Queensland Treasury, 2011:56), hence, the need to put forward measures to assist SMEs dealing with the lack of knowledge and other factors inhibiting effective risk management within their businesses.

#### 2.3.4 Sustainability

Sustainability was originally defined in the Brundtland Report of 1987 as "development that meets the needs of the present without compromising the ability of future generations to meet

their own needs" (Rezaee, 2017:64). Since then, there have been many variations and modifications on this original definition. Many argue that the original definition has been solely attributed to how environmental systems endure and remain diverse and productive (Gallo & Christensen, 2011:316). In terms of business, however, sustainability is not merely an environmental issue, but economic and social dimensions also pose a direct influence on the success and longevity of the business.

Consequently, during the mid-1990s, John Elkington, the founder of a British consultancy called SustainAbility, introduced a new accounting framework called the triple bottom line (TBL) to measure sustainability (Jones, 2017). He argued that businesses should measure performance by considering three different bottom lines of sustainability (Laurell, Karlsson, Lindgren, Andersson & Svensson, 2019). One is the traditional measure of the economic performance of the business, which includes costs and income (Glavas & Mish, 2015). The second bottom line is a measure that depicts how socially responsible a business has been during its operations (Schandl & Walker, 2017). The third bottom line is a measure that defines how environmentally responsible a business has been throughout its operations (Svensson & Wagner, 2015:196). The TBL, therefore, consists of three dimensions of performance: economic, social, and environmental (Laurell et al., 2019). The three aspects are related and when considered conjointly, can form a solid ground from which major sustainability decisions and actions can be made (Zott & Amit, 2010). In a broader context, sustainability, therefore, is the management and coordination of environmental, social and economic factors to ensure responsible, ethical and ongoing success (Nadaf & Nadaf, 2016:4356).

According to the WEF Global Risks Report (2019:9) environmental, social and economic factors were among the five areas of concern highlighted in the Global Risks Perception Survey (GRPS) in 2019. To the WEF's credit, risks posed by sustainability dimensions were initially pointed out in the first report in 2016, as risks that could rise up the agenda, and rise, they did (Cooper, 2019). The latest Global Risks Report sees sustainability risk with no challenge as the defining risk of the age (Cooper, 2019). Given this, Pojasek (2011:90) opined to the view that a more holistic assessment of risks considers sustainability factors instead of only focussing on the traditional aspect of risk factors. As a result, it is imperative for business owners and managers to incorporate sustainability factors into their risk management process. On that account, sustainability issues will be dealt with in the risk mitigation stage

#### 2.3.4.1 Components of SMEs sustainability and the risks posed by them

Fouad (2013) carried out a study to investigate the factors affecting SMEs operating in Cairo, Egypt. A self-designed questionnaire was used to collect data from a sample of 50 SMEs in the manufacturing sector. The results showed that economic factors have a direct influence on the sustainability of SMEs in Cairo, Egypt and that the economic initiatives of the respective government meant to boost the SME sector do impact the success of SMEs operating in the manufacturing sector. Even though educative, the study by Fouad (2013) was performed outside South Africa and therefore, the applicability of its findings to SMEs in South Africa is questionable. Besides, the study did not specifically focus on FMCG SMEs, did not investigate social and environment components, and also adopted a small sample size, an aspect that weakens the generalisability of its findings.

In a local study, Van Eeden, Viviers and Venter (2003) investigated the factors affecting SMEs. A survey questionnaire was used to collect data from 1038 SMEs in three Metropoles of South Africa which include Nelson Mandela, Cape Town and Egoli. The results revealed that factors within the economic component of sustainability which include inflation, interest rates and unemployment were the main factors negatively impacting the success of SMEs in the Metropoles under study. Although it was based on a large sample size, the study by Van Eeden, Viviers and Venter (2003) did not provide percentages of the respondents who perceived that inflation, interest rates and unemployment affect their SMEs, nor does it address all the objectives of the current study particularly those relating to sustainability issues of SMEs. Besides, the study was carried out more than five years ago and therefore its findings may not be relevant at the moment.

In another local but more recent study, Masocha (2019) investigated the social component of sustainability as a major driver of the performance of SMEs performance in emerging economies, with a case of South Africa being used. Data for the study was collected from 238 SMEs in the Limpopo province of South Africa through a survey questionnaire, and inferential analysis was used through Analysis of Moment Structures (AMOS Version 25.0) to test the hypotheses variable under study. The results revealed that the social component of sustainability was positively and significantly related with performance on the areas of finance, customer satisfaction as well as employee satisfaction. The results imply that by practising social sustainability, SMEs possibly benefit on a wider performance spectrum. Although informative, the study by Masocha (2019) focused on the social component of sustainability and as a result overlooked a plethora of other factors affecting the sustainability of SMEs.

In yet another local study, Sitharam (2016) assessed the factors affecting SMEs in KwaZulu-Natal, South Africa. A sample of 74 SMEs was selected, and data were collected using a questionnaire-tool which was filled in online by SME owner-managers and it was then analysed using SPSS software. Most of the SME owners-managers (more than 80%) revealed that the economic component of sustainability with factors such as the strength of the rand, inflation rate and interest rate all affect the success of their enterprises. In addition, the study revealed that the role of environmental factors like electricity and water is critical to the success of SMEs.

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Regarding this, more than 70% of the sampled SMEs perceived electricity as a major factor affecting their businesses. Even though the results reflected the true characteristics of South Africa like weak rand, high inflation rates and power supply issues, the study by Sitharam (2016) overlooked the social component of sustainability, did not give specific risks posed to SMEs by the factors under study and employed a small sample size.

So far, a majority of the prior studies reviewed focused more on the economic component of sustainability leaving the social and environmental components under-researched. Besides, none of them have investigated: (1) the specific risks posed to SMEs by the sustainability factors, (2) the adequacy of the current risk management practices to address critical factors of sustainability that might pose risks to SMEs, and (3) SME owner-managers' level of knowledge on risk management and its contribution towards enhancing business sustainability. In a clear departure from the prior studies discussed above, studies by the Environment Agency (2005), Hillary (2000) revealed that SME owner-managers are unaware of sustainability risks like environmental risks, lacking the tools and resources to mitigate such risks and being doubtful about the business benefits of sustainability risk management. In yet another related study, Revell (2007) conducted interviews with interviewed 40 SME ownermanagers in the UK and the analysis of results indicated that SME owner-managers could not perceive the benefits from environmental risk solutions to be worth the investment in time and resources required to implement them. Elsewhere in the UK, Simpson et al (2004) conducted a cross-sectoral survey and telephone interviews with 64 SME owner-managers and found that 75% perceived environmental risk solutions as a cost, and 80% were against any linkage between environmental risk management and increased customer satisfaction.

Prior studies on SMEs sustainability are scarce as evidenced by a few of them gathered above. Most of the few prior studies that have made efforts to research the sustainability issues of SMEs, have focused on the economic component, leaving the social and environmental aspects under-researched. Besides, they have ignored the risks associated with the aforesaid components which may pose a great threat to the SMEs sustainability. Many will therefore agree that prior to the current study, the understanding of components of sustainability relevant to SMEs and as well as the risks associated with such components was deemed to be evasive.

#### 2.4 LIMITATIONS OF EXISTING STUDIES

Based on the aforementioned literature review, the following limitations of existing studies have been identified.

Some studies reveal conflicting results regarding SMEs' risks and risk management practices, creating a contradiction that needs to be addressed by a new study. As a result, the questions

relating to the major business risks that affect SMEs' performance and the current practices used to manage those risks remain unanswered.

Most of the studies are out-of-date since they were conducted more than five years ago, thus their results regarding risks may not be valid at the moment. Also, the WEF Global Risks Report (2019:5) and Koor (2018:1) found that components of sustainability are increasingly shaping trends in the business sector in terms of risk sources, whereas the existing studies have focused on the traditional sources of risks in SMEs.

Also, it was discovered that the existing studies on SMEs in South Africa particularly on the areas of risk management are characterised by a lack of a theoretical framework. This context has triggered the need to introduce theories such as agency theory, RBV and upper echelons theory, to interpret the results obtained, in order to provide a broader understanding of the risks and risk management in SMEs.

Furthermore, the vast majority of studies on SMEs were conducted in other countries outside South Africa, thus the applicability of their results to the South African perspective is questionable. A few of the researchers who have made efforts to research on South African SMEs have adopted a small sample size, thereby undermining the generalisability of their findings to the South African SME sector. Yet others were carried out in other Metropoles other than the Cape Metropole, therefore the applicability of their results to the Cape Metropole SMEs is questionable.

Also, existing studies view all SMEs as a single, homogenous group, neglecting the fact that the concept of SMEs is broad and falls within an array of industries such as FMCG, tourism, microfinance, construction etc. This weakness undermines the generalisability of their findings. To fill in this gap in the prior studies, the author of this thesis has refined the study to focus on one industry, namely FMCG SMEs only.

The review of prior studies shows that there is a dearth of research on SMEs sustainability. Most of the few of existing studies have focused on reporting of the economic component, while other components of sustainability such as social and environmental aspects relevant to SMEs remain relatively unexplored. Yet others have ignored a plethora of sustainability-related risks which may pose a great threat to the SMEs sustainability.

Most of existing studies have also used a single method to conclude what constitutes risks and risk management within SMEs, creating an intrinsic bias that needs to be resolved by a new study. To overcome the intrinsic bias that emanates from the utilisation of a single method, this study aims at capturing a complete and contextualised portrait of the risk management and sustainability issues within SMEs by adopting multiple data collection methods (data

triangulation). In this case, data were collected from several people (individual SME ownermanagers, risk experts, and groups of SME owner-managers) to validate data through multiple perspectives on risks faced by SMEs as well as the practices deployed by these enterprises to manage risks. This provided an opportunity to evaluate the extent to which a consistent and coherent picture of the risk management and sustainability issues within SMEs emerges.

Given the aforementioned limitations of existing studies, the research questions in Section 1.4 have remained unanswered and thus, the understanding of risk management and sustainability in SMEs operating in South Africa still seems evasive. There was, therefore, a need to conduct this study to address the research questions that have remained unanswered and thereby, filling in the gaps in the prior literature.

## 2.5 SUMMARY AND CONCLUSIONS

The aim of this chapter was to provide a review of prior studies on risk management and sustainability issues of SMEs. The chapter commenced by identifying relevant theories that explain the motivation for and obstacles to risk management by SMEs. Such theories included the agency theory, upper echelons and RBV theory. This was then followed by a review of studies that have investigated risk management and sustainability of SMEs manage. On that account, the chapter identified gaps in the existing literature regarding which risk SMEs manage, how they manage such risks, the obstacles to such risk management, components of sustainability relevant to SMEs as well as the risks associated with such components. Among the gaps identified were: the vast majority of studies on SMEs were conducted in other countries outside South Africa, are outdated, are devoid of any theoretical grounding, employed a small sample size, had conflicting findings, did not achieve all the objectives pursued by the current study, and used a single method, creating an intrinsic bias.

In view of the gaps identified in existing studies along with the research questions that have remained unanswered, the current study concludes that the literature regarding the risks SMEs manage, how they manage such risks, the obstacles to such risk management, components of sustainability relevant to SMEs as well as the risks associated with such components, is still somewhat ambiguous.

The next chapter elaborates on the research design and methodology. The aim is to clarify how the research was conducted, as well as to shed light on how and why the research participants for this study were chosen.

#### **CHAPTER THREE**

#### **RESEARCH DESIGN AND METHODOLOGY**

## **3.1 INTRODUCTION**

This chapter provides an in-depth discussion of the research design and methodology adopted in this study. The discussion is organised as follows: Section 3.2 provides various categories that can be used in research, all with specific merits and demerits. From this section, an appropriate research design for this study was then chosen and clarified and justified in Section 3.3. Then Sections 3.4 defines the research population for this study. From this research population, a sample was drawn, and the methods that were used as well as the reasons for their use in this study are indicated in Section 3.5. After selecting the sample for this study, the next step was emphasising certain criteria that were supposed to be met by all the research participants for their responses to be considered and such criteria are set out in Section 3.6. The seventh section presents two data collection methods. In each of the methods, information is given on the instruments used, the data collection process, and the process of data analysis. The next step was to validate the findings of the study as highlighted in Section 3.8. A summary of the entire research design and methodology is presented in Section 3.9 to conclude the chapter.

## 3.2 CATEGORIES OF THE RESEARCH DESIGN

Research design refers to a research plan that presents an all-inclusive model for gathering data (McMillan & Schumacher, 2001:166). Research design communicates the type of data deemed necessary, methods that will be used to gather and analyse this data, and how all of this will be configured to answer the research questions and solve the research problem (Creswell, 2009). Several different designs are used in research, all with specific merits and demerits. The selection of appropriate research design, however, is determined by the aims of the study and the nature of the phenomenon under investigation. According to Kraska-Miller (2013:6), research designs can be classified into three distinct categories, namely descriptive research designs (non-experimental), experimental research designs, and quasi-experimental research designs.

## 3.2.1 Descriptive Research Design

In descriptive research design, the investigator is interested in observing and describing a certain situation or phenomenon under investigation (Palaiologou, Needham & Male, 2016:7). Traditionally, descriptive research involves the following main categories (Gabel, 2016:46; Jackson, 2014:20; McNabb, 2015):

- **Observation** involves collecting data without interfering with the occurring behaviour. It elicits information about the "what" of behaviour, but without disclosing the underlying motivation (the "why").
- **Case studies** are used to acquire an in-depth understanding of a complex situation, event or problem in its real-life context. It helps to clarify, describe or explore an event in the everyday contexts in which it occurs.
- **Personal interviews** are face-to-face conversations between the researcher and the respondents. It helps to explore the responses from the respondents to gather more and deeper information.
- Focus group is a group of people brought together to discuss a certain topic or topics during a specified time. It helps to obtain individuals' perceptions and opinions towards specific issues, concepts, products, or services.

Descriptive research is designed to generate a snapshot of the present state of the phenomenon under investigation (Calmorin & Calmorin, 2007:70). This provides a full picture of what is happening at a given time regarding the phenomenon under investigation, which allows the formulation of questions for further investigation (Stangor, 2011). Although descriptive research elicits information that describes the characteristics or elements of the phenomenon under investigation, it does not address cause-and-effect questions (Eliason, 2007:92). For example, an investigator gathers information about adults from divorced families and discovers that more of these people smoke than expected, which does not imply that divorce causes smoking. Perhaps a third factor causes both divorce and smoking. Addressing the cause-and-effect requires using the experimental research design (Mitchell, 2015:1).

## 3.2.2 Experimental research design

In an experiment, the researcher manipulates a single variable, known as the independent variable, affecting the experimental group, and then controls the rest of the variables (irrelevant variables) (Pirlott, & MacKinnon, 2016; Zaidah, 2003). Irrelevant variables are variables that researchers do not want to influence the results of an experiment (Anastas, 2012:89). Identifying and controlling of such variables is crucial to drawing a valid conclusion as well as minimising effects that can be traced back to third variables. Control over variables assists to remove extraneous and unwanted variables (Burns & Grove, 2010:40). Because of the control set up by the researcher and the strict conditions, better results are often achieved. Manipulating independent variables makes it easy to determine the cause and effect relationship (Burns & Grove, 2010:41). Despite these merits, experimental research designs have a distinct demerit in that it can create artificial situations that might not be a true reflection of real-life situations (Balaz & Williams, 2017:3; Zainal, 2017:4). This is mainly because all other variables are strictly controlled, which might not create a fully realistic state of affairs.

Experimental research design helps to ensure internal validity but, at times, at the expense of external validity (Balaz & Williams, 2017:5). When such happens, the findings cannot be generalisable to the entire population. Due to these shortcomings, Marczyk et al. (2005:137) argued that experimental research design is not usually feasible in all studies, and when such happens, the researchers can resort to quasi-experimental designs.

## 3.2.3 Quasi-experimental design

A quasi-experimental design looks a bit like experimental design, as both test causal hypotheses (Trochim, Donnelly & Arora, 2015:258). Quasi-experimental designs by definition, however, lack random assignment (Maxfield & Babbie, 2014:380). Hence, a quasi-experimental design is normally used where an experimental design is unfeasible; when it is impossible to randomly select a control group (Maxfield & Babbie, 2017:182). In its simplest form, quasi-experimental design entails selecting groups against which a variable is tested, with no random pre-selection processes (Bringle, Hatcher & Clayton, 2013). After this selection, the experiment continues just like any other experiment, with a variable being compared between different groups.

Quasi-experimental designs offer unique merits over true experimental research designs, specifically in social sciences where pre-selection and randomisation of groups are usually impractical; they can help generating findings for general trends (Mangal & Mangal, 2013:130). Furthermore, since there are no comprehensive pre-screening and randomisation that need to be undertaken, a quasi-experimental design reduces the time and resources required for experimentation (Shuttleworth, 2008). A quasi-experimental design, however, does not consider any pre-existing factors or acknowledges that factors outside the experiment could have influenced the results (Shuttleworth, 2008). As such, in the absence of proper pre-screening and randomisation, statistical tests can be meaningless.

Following the above description, it is evident that there is no perfect research design. Each research design has its strengths and weaknesses, and the need to acquire a thorough understanding of these limitations is crucial to arrive at correct study conclusions. After considering the literature on various research designs and other factors that will be described in the sections to follow, a mixed methods research design was chosen for this study. The next section clarifies and justifies why a mixed methods research design was considered ideal for this study.

# 3.3 CLARIFICATION AND JUSTIFICATION OF THE RESEARCH DESIGN

The primary objective of a sound research design is to attain greater control of the research and improve the credibility of the research findings (Denzin & Lincoln, 2000:22). To determine the effectiveness of the current plans put in place by South African SME owner-managers to manage traditional risks and sustainability risks, this study used both quantitative and qualitative research approaches, as explained below.

Quantitative research was used to gather numeric data from selected owner-managers of FMCG SMEs through a questionnaire-tool, comprising of mostly pre-populated questions. The argument for using a questionnaire-tool was threefold. First, and most importantly, it is a quick, accurate, and cost-effective way of assessing large amounts of information from a large number of people. Second, respondents have ample time to think about their replies; they are not generally expected to reply immediately. Last, the respondents can complete the questionnaires in their own time and not all in one session, thereby providing an opportunity to ask as many questions as possible. Despite these arguments, Buckley and Caple (2009:248) recommended that the questions be kept brief and simple since short questions are more likely to yield higher response rates and maintain the respondent's interest. A potential drawback of short questions, however, is the limited detail and, at times, ambiguous information provided. Furthermore, a questionnaire provides no way to prove how truthful a respondent is being. To combat these problems, qualitative research techniques, namely focus groups and personal interviews were employed to validate the results of the survey questionnaire. The focus group discussions and personal interviews provided an opportunity to elaborate on quantitative data that were collected through a survey questionnaire, which further strengthens this study.

From the above discussion of the research methodology, it is evident that the approach adopted by this study is mixed, which is shown by the triangulation of three methods, namely, survey questionnaire, focus group discussions, and personal interviews. In this case, the survey questionnaire was used as the primary data collection tool, while focus group discussions and personal interviews were used to supplement and authenticate the results of the survey questionnaire. This triangulation was applied by using both quantitative and qualitative research methods, in line with the view of (Lichtman, 2012:324) that quantitative and qualitative research are complementary rather than antipathetical<sup>2</sup>. Given this, quantitative and qualitative research approaches were used in a single approach design (SAD); one feeding off the other.

<sup>&</sup>lt;sup>2</sup> In this thesis, the word antipathetical means opposed in nature or character.

The rationale for using both quantitative and qualitative research was to provide a more effective way of evaluating the extent of similarities and identifying dissimilarities between the results generated by both approaches. Triangulation was also chosen so that the research methods can complement each other, thereby enhancing the credibility and validity of the study findings (Muhibbin & Mantja, 2015). Furthermore, Robson (2002:174) pointed out that triangulation investigates the research problem from more than one point of view so that the study becomes more robust. Within this context, triangulation has assisted in facilitating a more holistic and richer contextual understanding of this study, i.e. the effectiveness of the current plans put in place by South African SME owner-managers to manage traditional risks and sustainability risks.

## **3.4 RESEARCH POPULATION**

The research population refers to all the elements in the category of the items being researched (Denscombe, 2014:21). To define the population accurately and clearly for this study, a stringent screening process was conducted. At the preliminary stage of this study, the researcher wanted to study the entire SME sector out of overzealous. Upon completion of a comprehensive literature review, it became known that the concept of SMEs is broad and falls within an array of industries. In this case, it, therefore, was necessary to refine the study to emphasise one industry, namely FMCG SMEs only.

FMCG SMEs were chosen, as they are perceived as the most critical enterprises in the SME sector because of the nature of their products (necessities and perishables) (Singh, 2014:14). It, however, was extremely difficult to study all the South African FMCG SMEs, as there are millions of them across South Africa. As a result, the research population was further narrowed to FMCG SMEs within the Cape Metropolitan area. The Cape Metropolitan area was chosen to reduce the research budget since this area is close to the researcher's residence. Moreover, the Western Cape significantly contributes to South Africa's GDP, which further justifies the selection of this area (refer to Section 5.6.2.4).

Furthermore, to ensure that participants with sufficient and relevant work experience in the field of risk management and sustainability will be selected during the sampling process, the research population was trimmed down to managers and owners of FMCG SMEs within the Cape Metropolitan area. Managers and owners were chosen, as these people are the decision-makers in their businesses, and as such, they are likely to be familiar with risk management practices and sustainability.

Based on the above discussion, the population relevant to this study comprises managers and owners of all FMCG SMEs within the Cape Metropolitan area. Due to the absence of a complete list of all FMCG SMEs within the Cape Metropolitan area, the population size for this study, however, is unknown. Given this, the sample for this study was drawn from the research population using purposive and snowballing techniques.

# 3.5 THE SAMPLE DESIGN

At times, the research population might be small enough to deserve the inclusion of all the elements in a study. But most studies usually involve hundreds and thousands of elements, which makes it impossible to gather data from every element regarding time and cost (Sekaran, 2000). In this case, a portion of the population called a sample will then be selected for investigation (Chambliss & Schutt, 2012:86). Samples are drawn from the population using various sampling methods. These sampling methods can be classified into one of two categories shown in Figure 3.1. That, however, is not a complete list of the sampling methods, only the mainly used ones are described.



Figure 3.1: Sampling methods (Source: Ramzan & Eco, 2012)

As shown in Figure 3.1, there are generally two main types of research samples, namely probability and non-probability samples. Chambliss and Schutt (2012:86) described a probability sample as a portion of the research population that has been chosen using a random selection. Equally important is worth noting that there are certain traits that all

probability sampling approaches share, and there are a few things that might vary from one probability sampling approach to another. Thus, all of them start with a sampling frame, which is regarded as a list of all elements in the population of interest, for example, names of people, cell phone numbers and physical addresses (Krathwohl, 2009:164).

The most common type of probability sampling is simple random sampling, for which each element in the sampling frame has the same opportunity of being selected, and sampling is performed in one phase with all elements being selected independently (Singh & Mangat, 2013:30). On the other hand, systemic random sampling is a somewhat common type of probability sampling approach, for which samples are drawn by "starting at a randomly selected element in the sampling frame and then taking every n<sup>th</sup> element" (Singh & Mangat, 2013:30). Cluster sampling is yet another probability sampling approach, for which elements of a sample are chosen in stages, first choosing clusters (groups of elements) (e.g. locations in a town, schools), and then choosing individual elements from every cluster either randomly or by systematic sampling (Nargundkar, 2003:103). The common trait in these probability sampling approaches is that each element in a research population has an equal chance of being included in the sample (Babbie, 2016:227). Based on this fact DePoy and Gitlin (2015:194) argued that a probability sample is likely to be a more representative sample of the population and that the primary objective of using it is to minimise the sampling error. Despite this, there are circumstances where it is impractical or not theoretically sensible to use probability sampling approaches, for example, where there is no list of all the elements of the population or when the population size is unknown (Kusek, 2010:316). Under such circumstances, researchers turn to non-probability sampling approaches, as was the case in this study.

Non-probability sampling approaches include quota sampling, purposive sampling, convenience sampling and snowball sampling (Molina, 2015). Unlike probability sampling approaches, non-probability sampling approaches do not include the random selection of elements (Jha, 2014:191). Instead, elements are selected based on accessibility or the personal judgment of the researcher (Egan, 2014:124). The consequence is that an unidentified part of the population is excluded, for example, those who could not be accessible, which makes it impossible to calculate an ideal sample size (Wegner, 2010:215). Most researchers, therefore, prefer probability sampling approaches over non-probability, and regard them as more accurate and rigorous (Trochim et al., 2015:86). In the same light, this approach was deemed most suitable for this study.

In this study, the researcher took two steps in gathering the elements of the sample. Nonprobability sampling approaches, namely purposive and snowballing were adopted where 320 FMCG SMEs in the Cape Metropolitan area were selected. While some researchers regard non-probability sampling approaches as inferior to probability ones, there were significant theoretical and practical reasons for their use in this study. First, the researcher used the purposive sampling approach. According to this approach, sample members are selected based on their knowledge, relationship, and experience regarding the phenomenon to be researched (Johnson & Christensen, 2010:231). In the current study, the sample members who were chosen had adequate and appropriate work experience in the field of risk management and sustainability. Within this context, the participants in this study were managers and owners who have been responsible for sustainability and risk management in their businesses for a minimum of three years.

In this study, the purposive sampling method was considered appropriate due to several reasons. First, it involves a sample drawn from a population that has characteristics of the investigator's interest (De Vos, Strydom, Fouché & Delport, 2011:232). Second, the method is cost-effective and easy to apply given that few rules are governing the sample selection. Third, the non-existence of an all-inclusive list of FMCG SMEs within the Cape Metropolitan area renders using other sampling methods such as random sampling impossible. Last, the purposive sampling method was successfully used in previous studies on FMCG SMEs in the Cape Metropolitan area (Bruwer, 2016:151; Siwangaza, 2013:31).

To acquire additional participants, the researcher used the snowball sampling technique in the second step. The snowballing approach is used to expand the sample by requesting one participant to recommend others for interviewing (DePoy & Gitlin, 2015:194). The researcher asked the purposive sample participants to give, at their discretion, the details of at least two potential participants in the same suburb. Using snowballing was important in this study since the researcher was interested in surveying a specific group of people, namely owners and managers of SMEs only. It is challenging to convince busy owners and managers to take the time to fill out a questionnaire. The solution here was snowball sampling. Thus, the owners and managers who were selected through purposive sampling in the first step contacted other people in their social network who hold the same title to participate in this study. Since this approach relies on existing social relationships, the researcher had a better opportunity to recruit new participants. The participants, however, were supposed to meet certain delineation criteria outlined in the next section for their responses to be considered eligible for data analysis.

#### 3.6 DELINEATION OF THE RESEARCH

After the target population, sampling methods and sample size were clearly defined, the next step was to set the tone for the questionnaire's completion. Thus, the data collection of this study was limited to FMCG SMEs; large enterprises were excluded since most of them can afford risk experts (Franck, 2008:7). Also, most of them regard risk management as part of their business planning (Liu & Pergler, 2013). Furthermore, this study emphasised other criteria that were supposed to be met before any research participants' response was considered:

- All research participants must have owned or managed businesses that are operating in the Cape Metropolitan area.
- All research participants must have owned or managed businesses that have employed a minimum of 5 people and a maximum of 200 people in terms of the South African Small Business Amendment Act (No. 26 of 2003).
- All research participants must have owned or managed businesses that have been operating for a minimum of 3 years, to ensure that the participants have gained experience in the business and know the policies in place.
- All research participants must have been owners or managers of their businesses. The study assumed that owners and or managers of FCMG SMEs are the decision-makers in their businesses and as such, they are likely to be familiar with their sustainability and risk management practices.
- All research participants must have been responsible for sustainability and risk
  management in their businesses for at least three years. Similarly, the risk experts who
  participated in the interviews must have been in the field of risk management for at least
  three years.

## 3.7 DATA COLLECTION METHODS AND INSTRUMENTS

The primary data collection methods that were used in this study include a survey questionnaire, four personal interviews, and two focus group discussions. In this case, the survey questionnaire constituted one of the most important and valuable sources of primary data in this study. On the other hand, focus group discussions and personal interviews were used to complement and validate the results of the survey questionnaire. To supplement the primary data, secondary data were also used in this study. Bajpai (2011:127) described secondary data as data already available and collected by either individuals or organisations other than the researcher. In this study, secondary data formed the literature review and were collected from various sources, including national statistics reports, university publications, published journal articles, and other academically accepted sources.

## 3.7.1 Development of the survey questionnaire

The development of the survey questionnaire went through three major steps, as discussed below. The three steps consisted of the initial development process of the survey

questionnaire, followed by the pre-testing process, and last, the construction of the final survey questionnaire.

# 3.7.1.1 Initial development process

The initial development process of the survey questionnaire included a careful review of the literature on risk management and sustainability of SMEs, a review of related questionnaires that were applied in previous studies, and insights acquired from the evaluation of recent information obtained through radio and television broadcasts. All these activities culminated in the development of the first draft survey questionnaire with four sections and seventeen main questions. These questions are made up of closed- and open-ended questions.

Most of the questions, however, comprise closed-ended questions in a Likert scale format. Likert scale is a method that entails a sequence of numerically ordered options on a scale ranging from "strongly agree" to "strongly disagree" (Monette, Sullivan & DeJong, 2010:354). Such a scale was deemed necessary for this study, as it is relatively simple for participants to apply, and results from it are reliable (Lam & Kolic, 2008:246). On the other hand, open-ended questions where participants must answer in their words were minimised in the development of the questionnaire. The prevention of open-ended questions was prompted by the reality that participants do not have the same ability and willingness to write answers, and such questions could lead to responses that are difficult to interpret statistically.

When developing the questionnaire for this study, great attention was given to the questions to ensure that they are precise and easy to understand. As such, questions were kept as short as possible, and all the questions that could have two meanings or could lead to obvious or specific answers were avoided. Furthermore, clear instructions were given for each question to avoid any confusion. Also, great attention was given to the questions to ensure that they will help to answer the research questions addressed by the study.

# 3.7.1.2 Pilot testing of the survey questionnaire

After the researcher had developed the first draft questionnaire and obtained a consent letter from the Ministry of Micro, Small and Medium Enterprises Development (see Annexure K), a comprehensive pre-testing process was conducted to rectify any potential deficiencies that had remained after the initial development process. The pre-testing process involved testing the questionnaire on a sample of fifteen managers and owners of FMCG SMEs within the Cape Metropolitan area. These participants included eleven owners who were also managers of their businesses and four who were managers only. The sampled participants were asked to comment about any problems they had encountered in completing the questionnaire accurately. The questionnaire was then redesigned based on the comments and suggestions made by the pilot participants. Some questions were re-worded to remove any confusing technical jargon. Six of the preliminary variables were removed at this stage.

# 3.7.1.3 The final survey questionnaire

After the pre-testing process, the final survey questionnaire was developed by considering the relevant changes, as discussed above. To complete the development process of the survey questionnaire, the researcher asked the research principal and a recognised risk management expert to assess the questionnaire-tool for validity and reliability. All the parties were fully satisfied that the questionnaire includes all relevant areas and provides an accurate representation of risk management and sustainability in the SME sector. When all the steps were completed, the survey questionnaire (see Annexure B), ended up having questions that were organised into the following four sections, with each section addressing specific research questions.

# SECTION A: GENERAL INFORMATION

This section was used to elicit general information about the participants regarding their positions within the business, work experience, number of employees in their businesses, and the number of years their businesses have been in operation. The prime objective of this section was to determine whether the participants had met the delineation criteria (refer to Section 3.6). Any responses to the questions in this section that could not meet the delineation criteria, therefore, rendered the entire questionnaire void.

# SECTION B: RISKS AND RISK MANAGEMENT PRACTICES

Section B was used to gather in-depth information from participants on four central areas: (1) major risks that affect the performance of SMEs; (2) current practices used to manage risks by SME owner-managers; (3) factors that could inhibit effective risk management within South African SMEs; and (4) the level of knowledge on risk possessed by South African SME owner-managers. This section aimed at answering the following four investigative questions to achieve their respective research objectives:

- What are the major business risks that affect FMCG SMEs' performance? Question 7 of the survey questionnaire was designed to elicit answers for this research question.
- What are the current risk management practices deployed by South African FMCG SME owner-managers in their businesses? Questions 9, 10, 11, and 12 of the survey questionnaire were designed to elicit answers for this research question.

- What are the potential obstacles to the successful implementation of effective risk management processes by South African FMCG SME owner-managers? Question 13 of the survey questionnaire was designed to elicit answers for this research question.
- Do South African FMCG SME owner-managers have adequate knowledge on risk management and its contribution towards enhancing business sustainability? Questions 8 and 16 of the survey questionnaire were designed to elicit answers for this research question.

# SECTION C: SUSTAINABILITY

This section was used to acquire information on critical factors affecting the sustainability of SMEs. The main aim was to answer the fifth investigative question: What are the critical factors affecting the sustainability of FMCG SMEs? Question 15 of the survey questionnaire was designed to elicit answers for this research question.

# SECTION D: RISK MANAGEMENT AND SUSTAINABILITY

This section was used to elicit information concerning the potential risks posed by critical factors of sustainability and the degree to which the risk processes of SMEs incorporate robust analysis of sustainability issues. In core, this section was aimed at answering the following three investigative questions:

- What risks are presented by the critical factors of sustainability in FMCG SMEs? Question 18 of the survey questionnaire was designed to generate answers for this research question.
- To what extent do risk processes of FMCG SMEs incorporate robust analysis of sustainability issues? Question 17 of the survey questionnaire was designed to generate answers for this research question.

The final questionnaire was submitted to the CPUT Ethics Committee for ethical review and approval. The committee was fully satisfied that the final questionnaire falls within the ethical and professional parameters. Approval, therefore, was granted and subsequently, a written clearance certificate was obtained (see Annexure J). The next step was to administer the questionnaires to prospective participants.

## 3.7.1.4 Administration of the survey questionnaire

During data collection, hard copies of questionnaires were administered by recruiting fourteen research assistants who collected data from targeted SMEs. The research assistants were identified from among Research Methodology students within the Faculty of Business and

Management Sciences at CPUT. The researcher applied a stringent screening process for recruiting the research assistants to ensure that only competent, experienced, and motivated ones were selected for the data collection process. In the first step, the researcher randomly selected Research Methodology students' email addresses and an invitation was sent, which led to twenty-three responses. There was diversity among those who responded regarding age, gender, and race. Next, all prospective research assistants were thoroughly and effectively trained for three days. The training included:

- Training on data collection procedures, which include: (1) maintaining anonymity and confidentiality to protect participants from potential harms such as embarrassment, loss of employment, and damage to one's financial status; (2) ways to motivate participants to co-operate; and (3) examples of appealing introductions to arouse participants' interest;
- A demonstration of how data collection procedures should be performed. In this case, a few of the trainee research assistants pretended to be participants. Then the researcher demonstrated the data collection protocol;
- An overview of what the questionnaire is measuring including the purpose of the study so that the research assistants could answer unexpected questions during the data collection process;
- A detailed explanation of the purpose of each item on the survey questionnaire;
- An explanation of the contents of the ethics letter and the consent forms; and
- Questions to ask on the first day that the research assistants meet with prospective participants to ensure that questionnaires are only given to qualifying participants, e.g. how many employees do you have? Such a question ensures that the person receiving a questionnaire does not own a micro- or large enterprise, as they are outside the scope of this study.

To conclude the recruitment process, all the prospective research assistants participated in mock interviews. In this case, the research assistants were paired with a partner, one as the researcher and the other as a participant. Those who demonstrated poor research skills or a lack of motivation to follow proper data collection procedures were eliminated from the study, leading to a final list of fourteen research assistants.

The successful research assistants were allocated to areas in the Cape Metropole that were close to their places of residence. Each of them got twenty questionnaires to distribute to targeted SMEs, and then, collected them at an agreed time. The researcher took 40 questionnaires to distribute. In total, 320 questionnaires were administered. Out of the 320 questionnaires administered, 289 were returned, giving a final response rate of 90.31%. Non-responses were because of refusals and absences of participants from their business premises on the day of collecting the questionnaires.

The completed questionnaires went through various levels of quality checks by the researcher and research assistants. First, while they were still near the participants, research assistants went through completed questionnaires to check for missing information, irregularities, and illegible marks and handwriting. This allowed corrections to be made before leaving the participants' business premises. Subsequently, the researcher checked individually completed questionnaires to ensure that they were completed according to the instructions and that the responses were readable, clear, and consistent. Last, the researcher went through the questionnaires again to ensure that all questionnaires were completely answered before they were considered valid for data capturing. In cases where the researcher discovered questionnaires with missing information or was unhappy with how some of the answers were written, such questionnaires were rendered invalid. In this regard, no questionnaires had missing information or had irregularities, resulting in all 289 questionnaires being considered valid for data capturing.

## 3.7.1.5 Survey data processing

The quantitative data collected using a questionnaire tool were analysed using SPSS software. First, the data were cleaned and organised. The data were then described using descriptive statistics such as frequencies, percentages, and cumulative percentage. Also, the data analysis made use of contingency tables, Chi-square test of association and proper check of the assumptions.

#### >Chi-square test for independence

The Chi-square independence test was designed to examine the relationship between two categorical variables with or without control variable. Each of the involved categorical variables has two or more categories. This test compares the observed frequencies or proportions of cases that occur in each of the categories with the values that will be expected if there is no association between the two variables being measured. It is based on cross-tabulation, with cases classified according to the categories in each variable (entailing position in business, whether as owner, manager, or owner and manager; how often the respondents explored various risk management practices on the five Likert scale of 'Never', 'Seldom', 'Sometimes', 'Often', and 'Nearly always').

Additional assumptions: The lowest expected frequency in any cell should be 5 or more. Some authors suggested less stringent criteria: at least, 80 per cent of cells should have expected frequencies of 5 or more. If this assumption is violated, then the next consideration should be Fisher's Exact Probability Test instead of interpreting Chi-square. This is generated automatically by SPSS 26 and provided as part of the output from Chi-square.

#### >Interpretation of output from Chi-square for independence

**Assumptions:** The first thing to check is violation of Chi-square assumptions concerning the minimum expected cell frequency, which should be 5 or more (or at least, 80 per cent of cells have expected frequencies of 5 or more). This information is given in a footnote below the Chi-square tests table. The footnote of every Chi-square table explains the validation or invalidation of the assumption with indication that '0 cells (0.0%) have expected count less than 5'. This means that the assumption has not been violated, as all our expected cell sizes are greater than 5. The bracket interpretation specified the minimum number of cases (in our case, greater than 35.87). Having satisfied the minimum expected count assumption, the main value of Chi-square tests is of the major interest from the output is the Pearson Chi-Square value, which is presented in the Chi-square tests table. The column is labelled 'Asymptotic Significant' (Asymp. Sig. (2-sided). For the test to be significant, the value must be 0.05 or smaller, which is explained as 5% significant level or 95% confidence interval of not committing type 1 error.

**Effect size:** There are several effect size statistics available in the Crosstabs procedure. For 2 by 2 tables, the most commonly used one is the phi coefficient, which is a correlation coefficient and can range from 0 to 1, with higher values indicating a stronger association between the two variables. Cohen's (1988) criteria stressed: .10 for small effect, .30 for medium effect and .50 for large effect. For tables larger than 2 by 2, the value to report is Cramer's V, which takes into account the degrees of freedom. Slightly different criteria are recommended for judging the size of the effect for larger tables. The standard rule of thumb adopted by my authors in determining which criteria to use is: first subtract 1 from the number of categories in your row variable (R–1); and then subtract 1 from the number of categories in the column variable (C–1). Pick whichever of these values is smaller. For R–1 or C–1 equal to 1 (two categories): small=.01, medium=.30, large=.50. For either R–1 or C–1 equal to 2 (three categories): small=.07, medium=.21, large=.35. For either R–1 or C–1 equal to 3 (four categories): small=.06, medium=.17, large=.29 (Gravetter & Wallnau, 2004; Pallant, 2011)

#### 3.7.2 Focus group discussions

In this study, participants for the focus group discussion were chosen from the same sample from which the survey questionnaire participants had been chosen. Two groups of six and eight participants were created. The focus group discussions were then held during June and July 2018. Each focus group discussion was heterogeneous in that it represented a mixture of managers and owners of SMEs and lasted 1 hour 15 minutes. Great efforts were made to create a non-threatening and open environment from the time the participants arrived for a focus group discussion. In this case, the researcher greeted the participants as they were arriving and had a purposeful small talk to put them at ease. To build an environment of trust,

participants were assured that their identities will remain anonymous in the research report and that any information they disclose will be treated confidentially.

To ensure that each focus group discussion occurs within the ethical boundaries, written permission was obtained on a consent form from each participant (see Annexure A.2). Also, permission to use a smartphone to record the discussion was obtained from participants before the focus group discussions started. While the principal role of the researcher was to keep discussions flowing and on track, he also took minimal notes during the discussions. The researcher used voice recording and note-taking as methods to collect the data during the focus group discussions.

The focus group notes and audios were transcribed and went through various steps of analysis. First, the researcher performed a preliminary analysis to obtain a generic sense of the data and reflect on its meaning. This was followed by a comprehensive analysis in which data were divided into sections that reflected specific responses of participants. Then, a list of key themes was generated, and the themes were organised into categories that were identified as key findings. Data from the two focus group discussions were again analysed to classify it into these categories. Finally, these categories (key findings) were analysed to establish commonalities among the participants' responses. Ultimately, a picture of the effectiveness of the current plans put in place by SME owner-managers to manage risks and sustainability issues emerged.

## 3.7.3 Personal interviews

In this study, LinkedIn was used as a method for recruiting participants for personal interviews. LinkedIn is the main platform for professional networking, which makes it the optimum choice for this study since the study seeks to reach people in a specific profession – risk experts. First, the researcher logged into LinkedIn with his account and searched for "risk consultants in Cape Town". This approach relied on individuals self-identifying themselves as risk consultants or something similar. In this case, LinkedIn proved fruitful, as it returned 5 174 results, which the researcher compiled into a spreadsheet. Only 30 results, however, were added to the spreadsheet. A list of 30 potential participants was deemed adequate since the study targeted only 4 participants. To produce the 30 potential participants, the researcher first vetted the credentials by going through the LinkedIn profiles. Only those that he thought would best enhance the study were selected. For each candidate selected, the researcher noted his or her name, risk experience, location and any other relevant information listed in the profile. This information is already public and thus, the researcher has implied consent. Each potential

participant was then sent a personalised recruitment message explaining the study and how the researcher identified him or her as a potential participant.

Out of the 30 invitations sent out, 27 responses were received and 3 did not respond at all. Of the 27 responses received, 7 declined to take part in the study for a variety of reasons. One participant replied that he was overseas on a conference, five indicated that they were not in Cape Town at that time without giving any further information. The researcher then applied the criteria of availability and willingness to participate, resulting in a sampling frame of 14 risk experts. The next step was to draw a sample of 4 interviewees from the sampling frame. To achieve this, the researcher thought of using the order by which the responses to invitations were received. The responses 1, 2, 5 and 11 ended up being chosen. The responses 5 and 11 were purposefully selected since the participants who sent them were risk experts employed by banks. It was necessary to include bank officials in this study because a lack of access to loans by SMEs (a barrier to effective risk management) was voiced in the literature review. The opinions expressed by the bank officials in this study, however, are theirs and do not reflect the views of their employers.

Prior arrangements were made with the selected four risk experts to provide a suitable venue where the interviews could be conducted. Two participants chose to be interviewed in their offices and the other two in the researcher's office. The interviews were then held during June 2018 according to the interview guide (see Annexure D) and lasted between 40 minutes and 60 minutes. The participants were reminded of the interview on the morning of the interview. At the beginning of each interview, the participants were informed of the nature of the study, how the information they will provide would be used, and that a smartphone was going to be used to record the interview. Each participant was then requested to sign a consent form to indicate his or her willingness to participate (see Annexure A.2). Also, permission to use a smartphone to record the interview was obtained from each participant before the interview started.

The researcher recorded each interview and took notes at the same time. The audios for each interview were allocated codes as follows: bank employees, Participant – BE1 and Participant – BE2, then other business risk experts, Participant – BRE1 and Participant – BRE2. Later, the researcher listened to the audios and reviewed the notes, and then prepared an abridged transcript for each interview. Direct quotes that were deemed necessary were included in the abridged transcripts. Then, findings from each of the four participants were classified into themes. The themes arising from the responses of the two bank employees were compared and a single document was prepared to present the opinions of the bank employees. Likewise, the views of the other two risk experts were consolidated into one document.

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#### 3.8 VALIDATING THE FINDINGS OF THE STUDY

Lichtman (2012:324), Muhibbin and Mantja (2015), and Robson (2002:174) pointed out that using mixed methods such as triangulation enhances the reliability, validity, dependability and credibility of the research findings, as the methods will complement each other. In line with the views of these studies, efforts were made to ensure reliability and validity of this study by adopting a mixed approach, as shown by the triangulation of three methods, which are survey questionnaire, focus group discussions, and personal interviews. Thus, data were first collected using a survey questionnaire as the primary data collection tool. Subsequently, focus group discussions and personal interviews were used to complement and validate the results of the survey questionnaire.

Furthermore, the reliability test (Cronbach's Alpha Coefficient) was done on the measuring instrument (statements) to determine whether the scale was reliable or not. The results are attached in Annexure C.1.2. The results show the correlation between the respective item (statement) and the total sum score (without the respective item) and the internal consistency of the scale (coefficient alpha) if the respective item were to be deleted. By deleting the items (statements) one-by-one each time with the statement with the highest Cronbach Alpha value, the total Alpha value will increase. The third column of the tables in Annexure C.1.1 to C.1.10 shows that the reliability of the scale would be higher if some of these statements were to be deleted. For instance, if statement Q11\_b is deleted from this measuring scale in the first table of Annexure C.1.4, then the overall Cronbach Alpha Coefficient will increase from 0.5042 to 0.9609. This was done (see the second table of Annexure C.1.4) to have a reliable measuring instrument. It must be noted that if the Cronbach Alpha Coefficient is less than 0.70, the measuring instrument might not be reliable, or it could encompass multi constructs (measure more than one aspect).

#### **3.9 CHAPTER SUMMARY**

This chapter began with an introduction then described the research design employed in this study. Next, the problem statement was also discussed in great depth before discussing the research population, sampling methods, and data collection instruments used to conduct this research. The need to validate the survey questionnaire results was also highlighted and, in this case, the focus group discussions and personal interviews were the preferred modes of accomplishing that goal. Also, the reliability test (Cronbach's Alpha Coefficient) was done on the measuring instrument to determine whether the scale was reliable or not. The data that were collected will be analysed and discussed in the next chapter.

## **CHAPTER FOUR**

#### DATA ANALYSIS AND DISCUSSION OF RESULTS

#### **4.1 INTRODUCTION**

In the previous chapter, the research methodology and design were explained in great depth. In this chapter, the data gathered from the research participants will be presented and analysed according to the research questions. The findings will be discussed in three stages starting with personal interviews, followed by focus groups, and last, the survey questionnaire. A summary of the entire discussion of the findings is then presented in Section 4.5 to conclude the chapter.

#### 4.2 MAIN THEMES ARISING FROM THE PERSONAL INTERVIEWS

As mentioned in Section 3.7.3 of the previous chapter, the themes arising from the personal interviews were classified into two sections, with one section constituting the perspectives of bank employees (BE), and the other section constituting the perspectives of the business risk experts (BRE). The bank employees were labelled as Participant – BE1 and Participant – BE2. Likewise, the business risk experts were labelled as Participant – BRE1 and Participant – BRE2.

Based on the interviews conducted with the bank employees (see Annexure E), the following findings were established:

a) Bank accounts: Even though the bank employees interviewed indicated that they open bank accounts for SMEs, it, however, was noted that a big number of SMEs regard bank charges as exorbitant whereas some are simply ignorant (they think that banks are only for large enterprises). As a result, it was reported that SMEs tend to keep cash on their business premises. As such, their cash is exposed to potential risks such as theft and robbery.

**b)** Access to funding: The bank employees interviewed indicated that they provide bank loans to SMEs. It, however, was also noted that a very small percentage of the SMEs' loan applications get approved due to mainly lack of credit history and lack of transaction history (bank statements). This suggests that the bulk of the SMEs have no access to bank funding, leaving them with little or no cash to invest in their risk management initiatives.

The interviews conducted with risk experts were analysed around the following themes: major risks; risk management practices; main barriers; risks posed by sustainability factors; risk management contribution towards enhancing sustainability; risk processes of SMEs and

sustainability factors. Based on the risk experts' responses (see Annexure E), the following conclusions were made:

With regard to major risks, loss of competitive advantage, cash flow deficit, compliance risks, cyber risks, employee theft, spoiling of refrigerated products due to load-shedding, and damage to appliances due to a sudden power surge are the major risks affecting the performance of FMCG SMEs.

With respect to risk management practices, FMCG SMEs use informal risk assessment to manage risks and these include increasing the price of products, self-insurance, and employing family members. Furthermore, the risk management practices deployed by FMCG SMEs are reactive in nature, for example, machines are only serviced or changed when there is a breakdown. Some contributing factors to this phenomenon include ignorance and the lack of understanding of proper risk management practices.

Regarding main barriers, deficiency in risk management knowledge, lack of cash, perception that risk management is costly, and lack of appreciation of the benefit of implementing risk management are among the top five.

Concerning risks posed by sustainability factors, higher costs for energy, water and other resources, extreme water restrictions due to climate changes, significant loss due to economic circumstances such as inflation, public outcry, and damage to reputation are among major ones.

In relation to risk management contribution towards enhancing sustainability, business risk experts who participated in this study expressed the same sentiment that if risk management is adequately implemented, it could contribute towards enhancing the sustainability of SMEs by reducing environmental risks, social risks and economic risks.

As far as the risk processes of SMEs and sustainability factors are concerned, all the interviewed business risk experts believe that risk processes of SMEs are too simplistic and, therefore, do not incorporate a robust analysis of sustainability factors

#### 4.3 RESULTS OF THE FOCUS GROUP DISCUSSIONS

As mentioned in Section 3.7.2 of Chapter three, the two main techniques used to gather data during the focus group discussions were smartphone recording and note-taking. Later, the researcher listened to the audios and reviewed the notes, and then prepared an abridged transcript for each focus group discussion. The data contained in the abridged transcripts then went through various steps of analysis. First, a list of key themes was generated, and the

themes were organised into categories that were identified as key findings. Then, data from the two focus group discussions were analysed to classify it into these categories. Finally, these categories (key findings) were analysed to establish commonalities among the participants' responses, and the following conclusions were drawn from the data:

- a) Major risks: Even though participants mentioned a variety of risks affecting the performance of their businesses, the most frequently cited risks were power cuts resulting in an increase in operational cost, shrinkage and refrigeration disruption, product spoilage, cash till pocketing, employee shoplifting, cashier errors (giving customers too much money back in change and undercharging customers), competition, stealing of business ideas and clients by former employees. From the overall responses on major risks affecting the performance of SMEs, operational risks surpassed all other risks regarding frequency.
- b) Risk identification: Most of the participants at the focus group discussions indicated that they identify risks based on what happened to them in the past or on what has happened to other businesses. Furthermore, most of the time, the participants were referring to words "...when something happens I...", which is a clear indication that risks in SMEs are not identified beforehand. Instead, they wait for the risks to take place and then react accordingly.
- c) Risk evaluation: The results of the focus group discussions did not reveal any evidence of tools or activities that are used to evaluate risks in SMEs. From this observation, a conclusion was reached that SMEs rarely evaluate and prioritise risks. One possible contributing factor to this phenomenon could be the fact that a significant number of the participants expressed the same sentiment that every risk event is a situation to be avoided, which possibly renders risk evaluation less relevant.
- d) Risk treatment: A few participants indicated that they insure their assets but mostly assets with the biggest value such as delivery vehicles. Overall, there were no predetermined risk treatment strategies mentioned. Instead, it became apparent that most SMEs deal with risks as they arise.
- e) Risk monitoring: The focus group discussions revealed that SMEs rarely do have a risk report needed to facilitate an ongoing assessment of risks. Some of the participants, however, indicated daily cash count and stock take as the main techniques for monitoring risks such as theft. This is a clear indication that SMEs still lack systematic and comprehensive risk monitoring that can be achieved by using tools and techniques such as status meeting, risk audits, variance and trend analysis, and risk reassessment.

- f) Main barriers: According to participants, lack of management skills in risk management, lack of financial resources, and lack of technology are main barriers to effective risk management in their businesses.
- **g) Risks posed by sustainability factors:** First, the researcher explained the term sustainability regarding this study, including its critical components. Regarding this, the participants indicated the risks posed to their businesses by sustainability factors include customer risks, compliance risks, supplier risks, and a decrease in profits due to unfavourable economic factors such as raising interest rates and skyrocketing inflation.
- h) Risk management contribution towards enhancing the sustainability: After exploring the risks posed to their businesses by sustainability factors, the two focus group discussions concluded with most of the participants agreeing that risk management can contribute towards enhancing the sustainability of their businesses.

# 4.4 RESULTS OF THE QUANTITATIVE SURVEYS

As noted in Chapter three, the survey questionnaire constituted the principal source of primary data in this study even though personal interviews and focus group discussions were also used. Hence, the results of the quantitative survey questionnaire will be discussed first, then the direct quotes from personal interviews that are deemed necessary are used to complement and validate the results of the survey questionnaire.

## 4.4.1 Demographic Analysis

In Section A of the questionnaire, the respondents were requested to furnish data regarding their respective personal and business profiles. The personal profile data asked included their position within the business, number of years in their present positions and their highest qualification. On the other hand, the business profile data asked included number of years that the business had been operating and number of employees. This data was intended to guarantee that only suitable respondents were selected to partake in the survey and that those selected have unique characteristics to eliminate non-response bias.

## 4.4.1.1 Number of years that the business had been operating

As revealed in Figure 4.1, 43% of the respondents' FMCG SMEs had been operating for 0 to 5 years, while 27% had been operating for 6 to 10 years. Of the respondents, 18% had been operating for 11 to 15 years, while 9% had been operating for 16 to 20 years. Only 3% had been operating for more than 20 years. The results imply that 57% of the FMCG SMEs had

been operating for at least six years and hence had ample time to implement a holistic risk management, hence were optimal for this study. These findings are consistent with the generic depiction writhing most developing economies, particularly for the FMCG sector markets.



Figure 4.1: Number of years that the business had been operating

# 4.4.1.2 Number of employees

Concerning the number of employees, Figure 4.2 indicate that 65% of the FMCG SMEs had 5 to 9 employees, while 29% had 20 to 49 employees. Only 6% of the respondents revealed that their enterprises had 50 to 199 employees. As such, 100% of the sampled FMCG businesses can be classified as SMEs (total number of employees not greater than 200), hence were the right participants for this study.



 Table 4.2: Number of employees

# 4.4.1.3 Position within the business

With respect to the position within the business, Figure 4.3 indicate that 40% of the respondents were both owner and manager, while 35% were managers. Only 25% of the respondents were owners. The analysis confirms that only the targeted decision makers in the FMCG SMEs participated in this study, which had been defined as owners and managers. This further confirms the respondents' ability to provide reliable and quality information about the FMCG SMEs in the Cape Metropole.



Figure 4.3: Position within the business

# 4.4.1.4 Respondents' years of experience

As shown in Table 4.1 below, 43.3% had been in their present position for 0-5 years, 34.6% were present in their position for 6-10 years, 12.2% for 11-15 years, while 9.7% had been in their current position for 16-20 years. This implies that 56.5% of the participants had at least six years of experience in their present positions and thus confirming the validity and reliability of the information for policy direction.

How long have you been in this position?									
		Frequency	Percent	Valid Percent	Cumulative Percent				
	0-5 years	125	43.3	43.4	43.4				
	6-10 years	100	34.6	34.7	78.1				
	11-15 years	35	12.1	12.2	90.3				
	16-20 years	28	9.7	9.7	100.0				
	Total	288	99.7	100.0					
Missing	System	1	.3						
Total	·	289	100.0						

Table 4 1. Res	nondents' ve	ears of ex	nerience
	pondento ye	,ais oi ch	penence

# 4.4.1.5 Highest gualification

With regard to the highest qualification obtained within the FMCG SMEs, the results showed that 24.9% of the respondents had lower than grade 12 (refer to Table 4.2), while 47.1% had grade 12. Of the respondents, 11.8% had a National Higher Certificate, while 9.3% had a National Diploma. Then 4.2% had a Bachelor's Degree, while 2.8% had other qualifications. The distribution of the respondents' educational gualifications corresponded to the population distribution in the Cape Metropole. The participation in SMEs in South Africa is largely determined by unemployment and the rate of unemployment reduces as the individuals climb the ladder of educational qualifications showing in the current study's distribution of the respondents.

what is the ingriest qualification										
		Frequency	Percent	Valid Percent		Cumulative Percent				
Lower th	an grade 12	72	24.9		24.9		24.9			
Grade 12	2	136	47.1	47.1		72.0				
National	Higher Certificate	34	11.8		11.8		83.7			
National	Diploma	27	9.3		9.3		93.1			
Bachelor	's degree	12	4.2		4.2		97.2			
Other		8	2.8		2.8		100.0			
Total		289	100.0		100.0	100.0				
		Spe	Specify other							
							Cumulative			
		Frequency	Perce	ent	Valid Percent		Percent			
		28	31	97.2		97.2	97.2			
	Advanced Diploma		2	.7		.7	97.9			
	Honours		1	.3	.3		3 98.3			
	Honours Degree		2	.7	.7		7 99.0			
	Masters Masters Degree		1	.3	.3		3 99.3			
			1 .3		3 .:		99.7			
	MBA		1	.3		.3	100.0			
	Total	28	39 1	00.0		100.0				

Table 4.2: Highest Qualification

# What is the highest qualification

## 4.4.2 Major business risks that affect SMEs' performance

Question 7 of the questionnaire was meant to answer the first research question, namely; What are the major business risks that affect FMCG SMEs' performance? To answer this research question, respondents were asked to indicate the effects of the risks, listed on the questionnaire, on the performance of their business. For the sake of clarity and simplicity, a five-point Likert scale was employed with weightings of one for no effects, two for minor effects, three for neutral, four for moderate effects, five for major effects. The results are shown below.

## 4.4.2.1 Technological risk

						•	Mean	Remark
	No	Minor		Moderate	Major			
	effects	effects	Neutral	effects	effects			
Human error - incorrect data processing	116	56	11	43	63	289	2.5882	Neutral
	40.1%	19.4%	3.8%	14.9%	21.8%	100.0%		
Hardware and software	118	51	10	47	63	289	2.6055	Neutral
failure	40.8%	17.6%	3.5%	16.3%	21.8%	100.0%		
Virus attacks	167	90	6	13	13	289	1.6678	Minor effects
	57.8%	31.1%	2.1%	4.5%	4.5%	100.0%		
Spam, scams and phishing attacks	175	89	2	9	14	289	1.6089	Minor effects
	60.6%	30.8%	0.7%	3.1%	4.8%	100.0%		
Total	576	286	29	112	153	1156	2.1176	Minor effects
	49.8%	24.7%	2.5%	9.7%	13.2%	100.0%		

Table 4.3: The effects of technological risk, in different forms, on the performance of FMCG SMEs.

As far as the effects of technological risk, in different forms, on the performance of FMCG SMEs are concerned, the analysis of results in Table 4.3 revealed that all the forms of technological risk have major effects on the performance of a minority of the sampled FMCG SMEs. In particular, hardware and software failure had major effects on 21.8% of the sampled FMCG SMEs. Likewise, human error, in the form of incorrect data processing had major effects on 21.8% of the sampled FMCG SMEs. All other forms of technological risk had major effects on extremely small percentages of the sampled FMCG SMEs and these included virus attacks (4.5%), and spams, scams and phishing attacks (4.8%). This implies that, in general, technological risk in all forms is not a major risk faced by FMCG SMEs.

# The results of the focus group discussions and personal interviews did not show any dissimilar data except the fact that one of the risk experts interviewed indicated that:

"...in light of today's digital era, retail SMEs are now becoming more susceptible to cyber risks like hacking and online scams than before due to the use of weak passwords, downloading malicious applications and clicking links from untrusted sources. Because of this, retail SMEs now requires an online protection".

This is probably why some of the survey participants have indicated that spam, scams, and phishing attacks have a major effect on the performance of their businesses.

The preceding findings of the current study are consistent with those of Eniola and Ektebang (2014:82), who found that SMEs depend more on traditional labour than using modern

technology because of limited capital, hence, risks posed by using technology are less relevant to them.

# 4.4.2.2 Financial risk

	No	Minor		Moderate	Major		Mean	Remark
	effects	effects	Neutral	effects	effects			
Customer defaults	171	94	4	12	8	289	1.5882	Minor effects
	59.2%	32.5%	1.4%	4.2%	2.8%	100.0%		
Theft of cash by employees	50	33	5	29	172	289	3.8304	Moderate effects
	17.3%	11.4%	1.7%	10.0%	59.5%	100.0%		
Cash shortage	42	48	2	38	159	289	3.7750	Moderate effects
	14.5%	16.6%	0.7%	13.1%	55.0%	100.0%		
Unexpected increase in financial cost	135	71	7	26	49	288	2.2387	Minor effects
	46.9%	24.7%	2.4%	9.0%	17.0%	100.0%		
Total	398	246	18	105	388	1155	2.8606	Moderate effect
	34.5%	21.3%	1.6%	9.1%	33.6%	100.0%		

Table 4.4: The effects of financial risk, in different forms, on the performance of FMCG SMEs

As shown in Table 4.4, theft of cash by employees (59.5%) was perceived by the majority of the respondents as having major effects on the performance of their businesses, followed by cash shortage (55%). All other forms of financial risk were perceived by a minority of respondents to be having major effects on their businesses. These included unexpected increase in financial cost (17%), and customer defaults (2.8%).

Drawing from the findings, it is fair to conclude that the most important financial risks faced by FMCG SMEs are related to the area of cash. **Participants at the focus group discussions** shared the same sentiments, as a significant number of them indicated that many of the losses sustained by their businesses involve cash till pocketing.

The results of this study agree with those of Nyakang'o and Kalio (2013:257) who found that most of the SME owners and managers they sampled perceived cash flow risk as a major risk that negatively and significantly influence the revenue and profitability of their businesses. A possible clarification for this finding is provided by Zhao and Zeng (2014:515) when they opined to the view that SMEs lack proper planning regarding using funds, which results in proliferation of financial risks.
#### 4.4.2.3 Operational risk

	Ma	Minan		Madavata	Malan		14.0.00	Davaarda
	NO	winor		Moderate	Major		Mean	Remark
	effects	effects	Neutral	effects	effects			
Product failure	51	31	2	85	120	289	3.6643	Moderate effects
	17.6%	10.7%	0.7%	29.4%	41.5%	100.0%		
Theft of trading stock	53	33	3	26	174	289	3.8131	Moderate effects
	18.3%	11.4%	1.0%	9.0%	60.2%	100.0%		
Employees errors - overpaying/underpaying	57	27	4	22	179	289	3.8269	Moderate effects
customers	19.7%	9.3%	1.4%	7.6%	61.9%	100.0%		
Systems and device failures	59	116	4	49	61	289	2.7820	Neutral
	20.4%	40.1%	1.4%	17.0%	21.1%	100.0%		
Total	220	207	13	182	534	1156	3.5216	Moderate effects
	19.0%	17.9%	1.1%	15.7%	46.2%	100.0%		

Table 4.5: The effects of operational risk, in different forms, on the performance of FMCG SMEs

In relation to the effects of operational risk, in different forms, on the performance of FMCG SMEs, the results indicated that employee errors in the form of overpaying and underpaying customers (61.9%) have the greatest major financial effects on the performance of FMCG SMEs, followed by theft of trading stock (60.2%). All other forms of financial risk were also indicated as risks with major effects but only by a minority of the respondents. These included product failure (41.5%), and systems and device failures (21.1%). It is, therefore, fair to conclude that the operational risk faced by FMCG SMEs is high on the areas of employee errors in the form of overpaying and underpaying customers, and theft of trading stock. In the focus group discussions, an overwhelming majority of participants concurred with these findings on operational risk, but they have also indicated that

"power cuts are hampering their business operations by increasing operational costs and causing shrinkage and refrigeration disruptions."

Likewise, the personal interviews conducted with the risk experts conceded with these findings. Accordingly, below is what one of the business risk experts interviewed had to say:

"...load-shedding, which has now been raised to Stage 4, is also posing significant risks to the retail industry, especially to small retailers without backup power, for example, the spoiling of refrigerated products, damage to appliances because of sudden power surge et cetera..." (Participant – BRE1)

The above results concur with those of Pradana and Bandula (2012), Ismail, Othman, Yousop and Ahmad (2016:56-58), who found that operational risk is one of the major risks threatening

the survival of SMEs in Sri Lanka and the state of Johor respectively. However, the current study specified the major forms of operational risks faced by SMEs unlike the study of Pradana and Bandula (2012), Ismail, Othman, Yousop and Ahmad (2016:56-58), which gave a blanket conclusion.

#### 4.4.2.4 Strategic risk

	No effects	Minor effects	Neutral	Moderate effects	Major effects		Mean	Remark
Damage to reputation	53	28	3	45	160	289	3.7993	Moderate effects
	18.3%	9.7%	1.0%	15.6%	55.4%	100.0%		
Employees' disputes	55	36	0	43	155	289	3.7162	Moderate effects
	19.0%	12.5%	0.0%	14.9%	53.6%	100.0%		
Administration errors	66	49	0	20	154	289	3.5086	Moderate effects
	22.8%	17.0%	0.0%	6.9%	53.3%	100.0%		
Total	174	113	3	108	469	867	3.6747	Moderate effects
	20.1%	13.0%	0.3%	12.5%	54.1%	100.0%		

Table 4.6: The effects of strategic risk, in different forms, on the performance of FMCG SMEs

Concerning the effects of strategic risk, in different forms, on the performance of FMCG SMEs, the findings revealed that all the forms of strategic risk have major effects on the performance of a majority of FMCG SMEs: damage to reputation was mentioned by 55.4% of the respondents, followed by employees' disputes (53.6%), and then administration errors (53.3%). This implies that, in general, strategic risk, in all forms, is a major risk faced by FMCG SMEs. The personal interviews did not show any contradicting results but just added loss of competitive advantage as another strategic risk bedevilling SMEs. Accordingly, one of the risk experts made the following comment:

"They face many risks, firstly, there are so many big players in the retail industry and attaining competitive advantage is one of the most challenging issues facing small retailers..." (Participant – BRE1)

The preceding results of the current study support the views of Watt (2007), who indicated that SME entrepreneurs lack the knowledge of how the business must be run and, they have poor leadership styles.

#### 4.4.2.5 Compliance risk

	Minor effects	Neutral	Moderate effects	Major effects		Mean	Remark
Heavy fines	38	100	83	68	289	2.6262	Moderate effects
	13.1%	34.6%	28.7%	23.5%	100.0%		
Withdrawal/suspension o trade license	f 39	94	87	69	289	2.6435	Moderate effects
	13.5%	32.5%	30.1%	23.9%	100.0%		
Total	77	194	170	137	578	2.6349	Moderate effects
	13.3%	33.6%	29.4%	23.7%	100.0%		

Table 4.7: The effects of compliance risk, in different forms, on the performance of FMCG SMEs

As shown in Table 4.7, all the forms of compliance risk were indicated by the minority of the respondents as having major effects on the performance of their businesses. In particular, withdrawal or suspension of trade license had major effects on 23.9% of the sampled FMCG SMEs, while heavy fines had major effects on 23.5% of the sampled FMCG SMEs. This suggests that, in general, compliance risk is not a major risk faced by FMCG SMEs. On the contrary, some researchers have different opinions on compliance risks. Thus, in its study, SBP Alert (2013) identified the compliance burden as a major setback currently facing South African SMEs. In support, Viviers (2004) indicated that the cost of compliance with legislation is high and is considered a major threat to the South African SME industry. In line with prior research, the risk experts interviewed made the following comments:

"...Lastly, compliance with laws and regulations is a greater hindrance on small and medium retailers than on large retailers; it hinders their formation and growth". (Participant – BRE1)

"... Apart from this, retail SMEs often find regulation challenging, mainly because they lack the capacity to deal with regulation requirements making compliance difficult to achieve for them..." (Participant – BRE2)

The findings, therefore, send mixed opinions relating to whether those survey participants who have indicated that compliance is not a major risk area meant it or whether it is a matter of lack of knowledge.

#### 4.4.2.6 Environmental risk

	No effects	Minor effects	Neutral	Moderate effects	Major effects		Mean	Remark
pollution	5	19	4	42	219	289	4.5605	Major effects
	1.7%	6.6%	1.4%	14.5%	75.8%	100.0%		
High municipal cost	8	35	39	42	165	289	4.1107	Moderate effects
	2.8%	12.1%	13.5%	14.5%	57.1%	100.0%		
Violating water restrictions	40	10	33	33	173	289	4	Moderate effects
	13.8%	3.5%	11.4%	11.4%	59.9%	100.0%		
Total	53	64	76	117	557	867	4.2237	Moderate effects
	6.1%	7.4%	8.8%	13.5%	64.2%	100.0%		

Table 4.8: The effects of environmental risk, in different forms, on the performance of FMCG SMEs

With respect to the effects of environmental risk, in different forms, on the performance of FMCG SMEs, analysis of results revealed that all the forms of environmental risk had major effects on the majority of the sampled FMCG SMEs. In particular, pollution had major effects on 75.8% of the sampled FMCG SMEs, followed by violating water restrictions which had major effects on 59.9% of them, and then high municipal cost which had major effects on 57.1% of them. This suggests that, in general, environmental risk is a major risk affecting the performance of FMCG SMEs. The results of the focus group discussions and personal interviews did not show any parallel or new data regarding environmental risk.

The aforesaid results of the current study are echoed in a study by Li et al. (2016:118), who agreed that SMEs lack environmental awareness, activeness, and performance, and as such, need help to rectify this area of their business operations. The results of the current study however contrast those of Aureli and Salvatori (2013:23) who found that environmental risks were less important to SMEs. The cause for disparity in results is that the study by Aureli and Salvatori (2013:23) was conducted more than five years ago when traditional risks like financial risks comprised the bulk of top global risks in terms of likelihood and impact. Environmental risk became one of the global risks of utmost concern from 2016 as reported by the WEF Global Risks Report of 2016.

#### 4.4.3 Risk management practices deployed by FMCG SME owner-managers

This sub-section presents the analysis of the risk management practices deployed by FMCG SME owner-managers to identify, evaluate, treat and monitor risks that were identified in the previous research question analysis as major risks that affect the performance of FMCG SMEs. This is meant to answer the second research question: What are the current risk management

practices deployed by South African FMCG SME owner-managers in their businesses? For this purpose, respondents were asked to indicate the tools or activities that they use to identify, evaluate, treat and monitor risks in their businesses. A five-point Likert scale was adopted with weightings of one for never, two for seldom, three for sometimes, four for often, five for nearly always. For the sake of concision and clarity, the percentages of those that indicated either often or nearly always were added together and reported as the percentage that use the stated risk management practice. In addition, those who indicated "sometimes" were reported as not using the stated risk management practice since the word sometimes suggest a lack of a clear stand. This method is vindicated as it guaranteed that only those who indicated that they often or nearly always use the stated risk management practice are reported as such, and it has also been applied successfully in previous studies including that of Mjongwana and Kamala (2018).

#### 4.4.3.1 Risk management practices deployed to identify risks

This sub-section presents the analysis of the risk management practices deployed by FMCG SME owner-managers to identify risks that may affect the performance of their businesses. The results are shown below.

					Nearly	Tatal	% that	Mean	Remark
	Never	Seldom	Sometimes	Often	always	Iotal	use		
Customer complaints	5	3	13	108	160	289		4.4359	Often
	1.7%	1.0%	4.5%	37.4%	55.4%	100.0%	92.8%		
Expert judgment	202	20	15	28	24	289		1.7958	Seldom
	69.9%	6.9%	5.2%	9.7%	8.3%	100.0%	18%		
Lessons learned from	12	18	8	94	157	289		4.2664	0ten
other business	4.2%	6.2%	2.8%	32.5%	54.3%	100.0%	86.8%		
Previous experience	10	21	18	85	155	289		4.2249	Often
	3.5%	7.3%	6.2%	29.4%	53.6%	100.0%	86%		
Focus groups	177	54	18	21	19	289		1.5847	Seldom
	61.2%	18.7%	6.2%	7.3%	6.6%	100.0%	13.9%		
Brainstorming	169	88	9	8	15	289		1.6574	Seldom
	58.5%	30.4%	3.1%	2.8%	5.2%	100.0%	8%		
Documents review	235	15	14	13	12	289		1.4498	Never
	81.3%	5.2%	4.8%	4.5%	4.2%	100.0%	8.7%		
Use of financial	237	27	5	12	8	289			
statements to identify	82.0%	9.3%	1.7%	4.2%	2.8%	100.0%	7%	1.3633	Never
the sources of									
potential financial									
losses									
Opinions of experts	277	0	0	5	7	289			
(Delphi technique)	95.8%	0.0%	0.0%	1.7%	2.4%	100.0%	4.1%	1.1487	Never
Total	1324	246	100	374	557	2601			
	50.9%	9.5%	3.8%	14.4%	21.4%	100.0%	35.8%	2.4594	Seldom

Table 4.9: Tools or activities that are used by FMCG SMEs to identify risks

As shown in Table 4.9, the tools or activities that were used by most of the sampled FMCG SMEs to identify risks included customer complaints (92.8%), lessons learned from other business (86.8%) and previous experience (86%). All other tools or activities were used by a

smaller percentage of the sampled FMCG SMEs. These included expert judgment (18%), focus groups (13.9%), brainstorming (8%), documents review (8.7%), financial statements (7%) and opinions of experts (Delphi technique) (4.1%). From these findings, it is fair to conclude that most FMCG SMEs rely heavily on basic methods of identifying risks which include customer complaints, lessons learned, and previous experience. **Even though these findings are consistent with the findings of the focus group discussions**, it is also worthwhile to point out that during the focus group discussion, participants were frequently referring to the words "...*when something happens l...*", which is a clear indication that risks in FMCG SMEs are not identified beforehand. Instead, they wait for the risks to take place and then react accordingly.

#### 4.4.3.2 Risk management practices deployed to evaluate risks

This sub-section presents the analysis of the risk management practices deployed by FMCG SME owner-managers to evaluate risks identified in their businesses. The results are shown below.

					Nearly		% that	Mean	Remark
	Never	Seldom	Sometimes	Often	always		use		
Probability rating (calculated)	231	5	11	17	24	288	-	1.6041	Seldom
	80.2%	1.7%	3.8%	5.9%	8.3%	100.0%	14.2%		
Probability rating (Based on	78	14	19	38	139	288	-	3.5069	Often
experience)	27.1%	4.9%	6.6%	13.2%	48.3%	100.0%	61.5%		
Severity rating (calculated)	223	12	15	14	23	287	-	1.6132	Seldom
	77.7%	4.2%	5.2%	4.9%	8.0%	100.0%	12.9%		
Severity rating (based on	30	37	16	56	148	287	-	3.8885	Often
experience)	10.5%	12.9%	5.6%	19.5%	51.6%	100.0%	71.1%		
Total score (Severity rating	237	7	12	17	15	288		1.4930	Never
*Probability rating)	82.3%	2.4%	4.2%	5.9%	5.2%	100.0%	11.1%		
Ratio analysis	244	22	4	11	7	288		1.3159	Never
	84.7%	7.6%	1.4%	3.8%	2.4%	100.0%	6.2%		
Expert judgement	219	16	12	27	14	288		1.6145	Seldom
	76.0%	5.6%	4.2%	9.4%	4.9%	100.0%	14.3%		
Total	1262	113	89	180	370	2014		2.15044	Seldom
	62.7%	5.6%	4.4%	8.9%	18.4%	100.0%	27.3%		

Table 4.10: Tools or activities that are used by FMCG SMEs to evaluate risks

As shown in Table 4.10, the tools or activities that were used by most of the sampled FMCG SMEs to evaluate risks identified in these enterprises included severity rating based on experience (71.1%) and probability rating based on experience (61.5%). All other tools or activities were used by a minority of the sampled FMCG SMEs. These included probability rating (calculated) (14.2%), severity rating (calculated) (12.9%), total score (severity rating \* probability rating) (11.1%), ratio analysis (6.2%) and expert judgement (14.3%). These results imply that FMCG SME owner-managers evaluate the probability and severity of risk

occurrence using their experience and intuition. This is in congruence with the results of the focus group discussions, which did not reveal any evidence of tools or activities that are used to evaluate risks in SMEs.

The above results of the current study are in line with those of Henschel (2008), who found that most SME owner-managers do not have formal processes to identify, evaluate, treat, and report risks; they rely on a combination of experience, instinct, and luck, and in so doing, exposing the sustainability of their businesses at risk. The aforementioned results however contrast those of Covello et al., (2012:505), Lewis (2004:xiii), Sikich (2016), which have shown that risk owners often rely on mathematics to determine the probability of risk realisation and the severity of the impact thereof. The cause for disparity in results is that the studies by Covello, Menkes & Mumpower (2012:505), Lewis (2004:xiii), Sikich (2016) were based on risk owners from relatively larger enterprises. Risk owners from SMEs and large enterprises are, however, fundamentally different, i.e. SME risk owners may share the same characteristics and challenges, like limited risk knowledge, which set them apart from the ones found in large enterprises.

#### 4.4.3.3 Risk management practices deployed to treat or manage risks

This sub-section presents the analysis of the risk management practices deployed by FMCG SME owner-managers to manage risks identified in their businesses. The results are shown below.

	Never	Seldom	Sometimes	Often	Nearly always		% that use	Mean	Remark
Risk	198	9	32	14	35	288		1.8854	Seldom
transference	68.8%	3.1%	11.1%	4.9%	12.2%	100.0%	16.9%		
Risk avoidance	26	31	17	73	141	288	-	3.9444	Often
	9.0%	10.8%	5.9%	25.3%	49.0%	100.0%	74.3%		
Risk mitigation	152	60	31	20	25	288			
	52.8%	20.8%	10.8%	6.9%	8.7%	100.0%	15.6%	1.9791	Seldom
Risk	220	23	6	16	23	288	-	•	-
acceptance	76.4%	8.0%	2.1%	5.6%	8.0%	100.0%	13.6%	1.7743	Seldom
Risk	205	34	12	16	21	288			
exploitation	71.2%	11.8%	4.2%	5.6%	7.3%	100.0%	12.9%	1.6597	Seldom
Total	801	157	98	139	245	1440		2.2152	Seldom
	55.6%	10.9%	6.8%	9.7%	17.0%	100.0%	26.7%		

Table 4.11: Tools or activities that are used by FMCG SMEs to treat or manage risks

As revealed in Table 4.11, the tool or activity that was used by most of the sampled FMCG SMEs to manage risks identified in their businesses is risk avoidance (74.3%). All other tools or activities were used by a minority of the sampled FMCG SMEs. These included risk

transference (16.9%), risk mitigation (15.6%) risk acceptance (13.6%), and risk exploitation (12.9%). These results imply that risk avoidance is the most important form of risk management practice that is used to manage identified risks in FMCG SMEs. In the personal interviews, the risk experts concurred with these results, but also noted that most of the methods used by SMEs to manage or treat risks are either informal or reactive in nature, for example, the classical way of developing a credit policy is absent and instead, friendship, trust, and customer loyalty come into play. Accordingly, below is what the risk experts had to say:

"SMEs generally don't have specific risk management plans in place, their approach is to wait for problems to take place and then look for solutions to solve them as soon as possible. This would mean waiting for a cash register machine to break and then hire an expert to fix it or assuming workers are satisfied till one of them lodges a complaint" (Participant – BRE1).

"Risk management practices in retail SMEs are mostly informal due to ignorance and lack of understanding of proper risk management, for example, most of them do not take out insurance, they either increase the price or use their personal funds to rescue their business when a risk has taken place, some even employ their friends or relatives as a way of avoiding risks like employee theft. Moreover, credit facilities are in most cases given to clients based on friendship, trust and customer loyalty" (Participant – BRE2).

The preceding results of this study are in line with the findings of Smit (2012:iii), Virdi (2005), who found that risk management techniques in SMEs are largely limited to risk avoidance actions due to limited resources. The results of the current study are also consistent with those of the Insurance Council of Australia (2008), which showed that SMEs have the greatest rate of non-insurance since they regard risk as a situation to be avoided. From a qualitative point of view, the response from one of the risk experts interviewed that supports this result is:

"...most of them do not take out insurance, they either increase the price or use their personal funds to rescue their business when a risk has taken place..." (Participant – BRE2).

The focus group discussions equally concur with the findings as only a few participants have indicated that they insure their assets but mostly assets with the biggest value such as delivery vehicles.

#### 4.4.3.4 Risk management practices deployed to monitor risks

This sub-section presents the analysis of the risk management practices deployed by FMCG SME owner-managers to monitor risks identified in their businesses. The results are shown below.

	Never	Seldom	Sometimes	Often	Nearly always		% that use	Mean	Remark
Risk reassessment	130	18	21	68	51	288		2.625	Sometimes
	45.1%	6.3%	7.3%	23.6%	17.7%	100.0%	41.3%		
Risk Audits	125	21	23	65	54	288		2.6597	Sometimes
	43.4%	7.3%	8.0%	22.6%	18.8%	100.0%	41.4%		
Variance and trend	215	38	14	9	12	288	-	1.4895	Never
analysis	74.7%	13.2%	4.9%	3.1%	4.2%	100.0%	7.3%		
Performance	73	21	10	42	142	288	-	3.5520	Often
measurement	25.3%	7.3%	3.5%	14.6%	49.3%	100.0%	63.9%		
Reserve analysis	212	40	16	7	13	288	-	1.5034	Seldom
	73.6%	13.9%	5.6%	2.4%	4.5%	100.0%	6.9%		
Total	755	138	84	191	272	1440		2.3659	Seldom
	52.4%	9.6%	5.8%	13.3%	18.9%	100.0%	32.2%		

**Table 4.12:** Tools or activities that are used by FMCG SMEs to monitor risk

As indicated in Table 4.12, the tool or activity that was used by a majority of the sampled FMCG SMEs to monitor risks identified in their businesses is performance measurement (63.9%). All other tools or activities were used by a minority of the sampled FMCG SMEs. These included risk reassessment (41.3%), risk audits (41.3), variance and trend analysis (7.3%), and reserve analysis (6.9%). These results suggest that the most practised method of monitoring risks in FMCG SMEs is performance measurement. The effectiveness of this method, however, is questionable since a study by Hathway Management Consulting (2013:6) showed that SMEs do not have written business objectives, yet, clearly defined business objectives are central for performance measurement. The results of the personal interviews did not show any parallel or new data regarding the tools or activities used to monitor risk.

#### 4.4.3.5 Other risk management practices deployed

This sub-section presents the analysis of the risk management practices deployed by FMCG SME owner-managers in their businesses. In question 14 of the questionnaire, the respondents were requested to confirm, using a "YES" or 'NO" response whether the stated elements or activities of risk management exist in their businesses. The results are shown below.

	Yes	No	-	Mean	Remark
A risk appetite is set	51	238	289	1.8235	No
	17.6%	82.4%	100.0%		
A credit risk policy is developed and implemented	31	258	289	1.8927	No
	10.7%	89.3%	100.0%		
Offer employee development programs and continuing education	60	229	289	1.7923	No
	20.8%	79.2%	100.0%		
A system of budgeting and cost control is implemented to reduce the	38	251	289	1.8685	No
risk of continued unfavorable cost variances	13.1%	86.9%	100.0%		
A contingency fund to set aside for responding to identified risks	38	251	289	1.8685	No
	13.1%	86.9%	100.0%		
A risk management plan exists	56	233	289	1.8062	No
	19.4%	80.6%	100.0%		
A risk response strategy is developed and implemented	67	222	289	1.7681	No
	23.2%	76.8%	100.0%		
All staff levels are involved in risk management	47	242	289	-	
	16.3%	83.7%	100.0%	1.8373	No
A risk management framework is developed or adopted	80	209	289	1.7231	No
	27.7%	72.3%	100.0%		
Effective mechanisms of integral controls are developed	72	217	289	1.7508	No
	24.9%	75.1%	100.0%		
Risk management is incorporated into operating process and system	160	129	289	1.4463	Yes
design	55.4%	44.6%	100.0%		
The risk management process is regularly monitored, reported and	166	123	289	1.4256	Yes
kept up to date	57.4%	42.6%	100.0%		
Risks are actively identified, categorised, prioritised and documented	194	95	289	-	
before being treated	67.1%	32.9%	100.0%	1.3287	Yes
Total	1060	2697	3757		
	28.2%	71.8%	100.0%	1.7178	No

#### Table 4.13: Elements of risk management that exist in FMCG SMEs

As indicated in Table 4.13, activities or elements of effective risk management that were present in most of the sampled FMCG SMEs included risks are actively identified, categorised, prioritised and documented before being treated (67.1%), followed by the risk management process is regularly monitored, reported and kept up to date (57.4%), and then risk management is incorporated into operating process and system design (55.4%). Other activities or elements of risk management were used by only a minority of the sampled FMCG SMEs. These included a risk management framework is developed or adopted (27.7%), effective mechanisms of integral controls are developed (24.9%), a risk response strategy is developed and implemented (23.2%), offer employee development programs and continuing education (20.8%). The remainder of the activities or elements of risk management were used by an even lesser percentage of the sampled FMCG SMEs and these included a risk management plan exists (19.4%), a risk appetite is set (17.6%), all staff levels are involved in risk management (16.3%), a system of budgeting and cost control is implemented to reduce the risk of continued unfavorable cost variances (13.1%), a contingency fund is to be set aside for responding to identified risks (13.1%), and a credit risk policy is developed and implemented

(10.7%). Therefore, the feedback on the elements of risk management that exist in the FMCG SMEs indicates that these enterprises tend to lack the crucial elements of a useful risk management tool kit as dictated by best practice.

For further analysis, independence tests for the differences in the elements of risk management adopted by FMCG SMEs was performed using a Chi-square test. The results are shown below.

Table 4.14: Elements of risk management

Chi-Squa	are Tests
----------	-----------

			Asymptotic
			Significance (2-
	Value	df	sided)
Pearson Chi-Square	612.118ª	12	.000
Likelihood Ratio	582.304	12	.000
Linear-by-Linear Association	417.807	1	.000
N of Valid Cases	3757		

a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 81.54.

The Chi-square results in Table 4.14 confirm a statistically significant difference in deployment levels of 13 identified risk management elements among FMCG SMEs operating in the Cape Metropole. This implies that there was limited adoption of elements of risk management by FMCG SMEs. The results suggest that there existed inadequate elements of risk management in the operational systems of the FMCG SMEs, as more than 70% neither develop nor adopt/implement a risk management framework, an effective mechanism of integral controls, a risk response strategy, or other employee development programs and continuing education. More than 80% did not have existing risk management plan nor set risk appetite. More than 83% did not involve all staff levels in risk management process (lack of cooperate governance in risk management). More than 86% said 'No' to system of budgeting and cost control implemented to reduce the risk of continued unfavorable cost variances and 'No' to contingency fund set aside for responding to identified risks. Finally, close to 90% did not have a developed or implemented credit risk policy. This provides a comprehensive reason why 75% of SMEs fail in the first five years of existence, as it is a general assertion that failure to plan is planning to fail.

The implication is that policy direction should be towards comprehensive review of elements of risk management present among FMCG SMEs operating in the Cape Metropole. Otherwise,

a threat is posed to the sustainability of SMEs and many obstacles will stand against the growth of these enterprises in the Cape Metropole (A detail analysis of those obstacles shall be addressed by the fourth research question analysis). The statistically significant effect is confirmed in the FMCG SMEs operating in the Cape Metropole with Chi-square value:  $x^2(12, n = 3757) = 612.118$ , p = 0.000, and Cramer's V = 0.404. The Cramer's V result in Table 4.15 below as recommended by Gravetter and Wallnau (2004) and Pallant (2011) confirms a very large effect.

#### Table 4.15: Elements of risk management

Symmetric measures

			Asymptotic	Approximate	Approximate
		Value	Standard Error <sup>a</sup>	L D	Significance
Nominal by	Phi	.404			.000
Nominal	Cramer's V	.404			.000
	Contingency Coefficient	.374			.000
Interval by Interval	Pearson's R	334	.016	-21.679	.000 <sup>c</sup>
Ordinal by Ordinal	Spearman Correlation	334	.016	-21.679	.000 <sup>c</sup>
N of Valid Ca	ses	3757			

a. Not assuming the null hypothesis.

b. Using the asymptotic standard error assuming the null hypothesis.

c. Based on normal approximation.

# 4.4.4 Relationships between SME owner-managers' characteristics and risk management practices

Following the observed risk management practices deployed by FMCG SMEs in their businesses, the next step was to analyse the relationships between SME owner-managers' characteristics and their risk management practices. This is intended to answer the third research question: What are the relationships between SME owner-managers' characteristics and risk management practices? For this purpose, contingency tables, Chi-Square tests and robust Chi-square difference testing with mean were conducted, and the results are shown below.

## 4.4.4.1 Positions of the respondents in relation to the risk management practices

 Table 4.16:
 The distribution of the risk management tools according to the position

What is you	r position within the	Novor	Seldom	Sometimes	Often	Nearly	% that	Total
Owner	Risk transference	56	6	<u> 6</u>	4	aiways 1	use	73
e unior		76.7%	8.2%	8.2%	5.5%	1.4%	6.9%	100.0%
	Risk avoidance	7	6	6	17	37	,.	73
		9.6%	8.2%	8.2%	23.3%	50.7%	74%	100.0%
	Risk mitigation	38	18		8	4		73
	rtiok mitigation	52 1%	24 7%	6.8%	11.0%	5 5%	16.5%	100.0%
	Risk accentance	56	10	0.0 %	6	0.070	10.070	73
		76 7%	13 7%	0 0%	8.2%	1 /0/	0.6%	100.0%
	Pick exploitation	10.1 /0	13.7 %	0.0 %	0.2 /0	1.4 /0	9.070	72
	Risk exploitation	43 50 00/	20	0 20/	4 5 5 6/	0.00/	E E0/	100.00/
Tatal	-	20.9%	27.4%	0.2%	5.5%	0.0%	5.5%	100.0%
Total		200	60	23	39	43	00 50/	305
Owner and	Dick transformed	54.8%	16.4%	6.3%	10.7%	11.8%	22.5%	100.0%
manager	Risk transference	01 49/	ა ე 6%	C 1 20/	0 0%	ے 1 70/	1 70/	100.0%
manager	Risk avoidance	91.470	2.0 %	4.3 %	0.0%	68	1.7 /0	100.076
	Nisk avoidance	0.9%	3.4%	2.6%	34 5%	58.6%	93.1%	100.0%
	Risk mitigation	69	38	4	3	2	00.170	116
	gatter	59.5%	32.8%	3.4%	2.6%	1.7%	4.3%	100.0%
	Risk acceptance	107	5	2	0	2		116
	·	92.2%	4.3%	1.7%	0.0%	1.7%	1.7%	100.0%
	Risk exploitation	106	5	3	1	1		116
		91.4%	4.3%	2.6%	0.9%	0.9%	1.8%	100.0%
Total		389	55	17	44	75		580
		67.1%	9.5%	2.9%	7.6%	12.9%	20.5%	100.0%
Manager	Risk transference	36	0	21	10	32		99
		36.4%	0.0%	21.2%	10.1%	32.3%	42.4%	100.0%
	Risk avoidance	18	21	8	16	36	=0.00/	99
	Distantiantian	18.2%	21.2%	8.1%	16.2%	36.4%	52.6%	100.0%
	RISK mitigation	45	4	22	9	19	00.00/	400.00/
	Pick accontance	45.5%	4.0%	22.2%	9.1%	19.2%	28.3%	100.0%
	Risk acceptance	57.6%	0 8.1%	4 0%	10 1%	20 2%	30.3%	100.0%
	Risk exploitation	56	9	070	10.170	20.2 %	50.570	99
	nion exploitation	56.6%	9.1%	3.0%	11.1%	20.2%	31.3%	100.0%
Total		212	42	58	56	127		495
		42.8%	8.5%	11.7%	11.3%	25.7%	37%	100.0%
Total	Risk transference	198	9	32	14	35		288
		68.8%	3.1%	11.1%	4.9%	12.2%	17.1%	100.0%
	Risk avoidance	26	31	17	73	141		288
		9.0%	10.8%	5.9%	25.3%	49.0%	74.3%	100.0%
	Risk mitigation	152	60	31	20	25		288
	Ũ	52.8%	20.8%	10.8%	6.9%	8.7%	15.6%	100.0%
	Risk acceptance	220	23	6	16	23		288
		76,4%	8.0%	2.1%	5.6%	8.0%	13.6%	100.0%
	Risk exploitation	205	.34		16	21		288
		71 2%	11.8%	4 2%	5.6%	7 3%	12 9%	100.0%
Total	-	<u>, 1.2</u> /0 801	157	<u>۲.2</u> /0 ۵۵	120	2/5	12.070	1///0
		55 60/	10.00/	06 90	0.70/	240 17 00/	26 70/	100.00/
		00.0%	10.9%	0.0%	9.170	17.0%	20.170	100.0%

The contingency table above (Table 4.16) shows the tool or activity that was used by most of the sampled FMCG SME owners to manage risks identified in their businesses is risk avoidance (74%). All other tools or activities were used by a minority of FMCG SME owners. These included risk transference (6.9%), risk mitigation (16.5%) risk acceptance (9.6%), and risk exploitation (5.5%). It turns out that only 22.5% of the sampled FMCG SME owners had managed risks using the outlined tools but were more likely to use risk avoidance (74%).

The analysis of the results further revealed that risk avoidance (93.1%) was used by a majority of owners who were also serving as managers in their FMCG SMEs. (see Table 4.16). All other tools or activities were used by a very limited number of owners who were also serving as managers in their FMCG SMEs. Specifically, risk transference (1.7%), risk mitigation (4.3%) risk acceptance (1.7%), and risk exploitation (1.8%). All in all, only 20.5% of owners who were also serving as managers in their FMCG SMEs had managed risks using the outlined tools but were more likely to avoid risks (risk avoidance = 93.1%).

Furthermore, Table 4.16 indicated that a big number of the sampled FMCG SME managers had managed risks identified in their businesses using risk avoidance (74.3%). All other tools or activities had been used by a minority of managers to manage risks in their FMCG SMEs. In particular, risk transference (42.4%), risk mitigation (15.6%) risk acceptance (13.6%), and risk exploitation (12.9%). In sum, only 26.7% of the sampled FMCG SME managers had managed risks using the outlined tools but were more likely to use risk avoidance (74.3%).

In conclusion, it appears that for all three positions, risk avoidance is commonly used to manage risks. However, those in the positions of owner and manager were more likely to avoid risk than the managers.

A chi-square test was performed for further analysis of results. The results are shown below.

	Chi-Square Tests								
What is your position with	nin the business?	Value	df	Asymptotic Significance (2- sided)					
Owner	Pearson Chi-Square	194.183 <sup>b</sup>	16	.000					
	Likelihood Ratio	184.744	16	.000					
	Linear-by-Linear Association	17.779	1	.000					
	N of Valid Cases	365							
Owner and manager	Pearson Chi-Square	565.919°	16	.000					
	Likelihood Ratio	524.447	16	.000					
	Linear-by-Linear Association	60.998	1	.000					
	N of Valid Cases	580							

Table 4.17: The distribution of the risk management practices according to the position

Manager	Pearson Chi-Square	96.434 <sup>d</sup>	16	.000
	Likelihood Ratio	103.434	16	.000
	Linear-by-Linear Association	21.670	1	.000
	N of Valid Cases	495		
Total	Pearson Chi-Square	539.143 <sup>a</sup>	16	.000
	Likelihood Ratio	532.215	16	.000
	Linear-by-Linear Association	89.662	1	.000
	N of Valid Cases	1440		

a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 19.60.

b. 5 cells (20.0%) have expected count less than 5. The minimum expected count is 4.60.

c. 5 cells (20.0%) have expected count less than 5. The minimum expected count is 3.40.

d. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 8.40.

As depicted in Table 4.17, the Chi-square value is 194.183 which shows a statistically significant difference in the risk management practices adopted by respondents who occupied the ownership position in the business. The next row gives the Chi-square value for those respondents that function as both owners and managers of the FMCG SMEs, which is 565.919 with p-value of (0.000) which is less than alpha level of 0.05. This shows a statistically significant difference in the respondents of those who serves as both managers and owners in the FMCG SMEs. The next categories involve those who are employed as managers in the business with a Chi-square value of 96.434 with p-value of 0.000 among the respondents who are positioned as managers in their respective businesses. The results show that there is a statistical difference in the response of the managers about their risk management practices adopted which ranges from risk transferences, risk avoidance, risk mitigation, risk acceptance and risk mitigation. The main assumption of not less than 5 expected count in less than 20% of the column was satisfied which shows the suitability and reliability of the statistical techniques (Chi-square).

Furthermore, a robust Chi-square difference testing with mean was conducted for further analysis of the results. The results are shown below.

Risk Management	Practic	ces						
			Std.	Std.	Me	an		
	Ν	Mean	Deviation	Error	Lower Bound	Upper Bound	Minimum	Maximum
Owner	73	2.0822	.53835	.06301	1.9566	2.2078	1.00	4.00
Owner and	116	1.8983	.41072	.03813	1.8227	1.9738	1.60	4.80
manager								
Manager	99	2.6848	.96810	.09730	2.4918	2.8779	1.80	4.80
Total	288	2.2153	.76257	.04493	2.1268	2.3037	1.00	4.80

#### Table 4.18: Risk management practices according to the position

Descriptive

Risk Management Practice

		Levene Statistic	df1	df2	Sig.
Risk Management Practices	Based on Mean	78.243	2	285	.000
	Based on Median	50.575	2	285	.000
	Based on Median and with adjusted df	50.575	2	256.946	.000
	Based on trimmed mean	76.213	2	285	.000

#### Test of Homogeneity of Variances

#### ANOVA

#### Risk Management Practices

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	34.779	2	17.390	37.513	.000
Within Groups	132.114	285	.464		
Total	166.893	287			

#### **Multiple Comparisons**

#### Dependent Variable: Risk Management Practices

		-				95% Cor	fidence	
	(I) What is your	(J) What is your Mean				Interval		
	position within the	position within the	Difference (I-	Std.		Lower	Upper	
	business?	business?	J)	Error	Sig.	Bound	Bound	
Scheffe	Owner	Owner and manager	.18392	.10172	.197	0664	.4342	
		Manager	60266*	.10504	.000	8611	3442	
	Owner and manager	Owner	18392	.10172	.197	4342	.0664	
		Manager	78657 <sup>*</sup>	.09316	.000	-1.0158	5573	
	Manager	Owner	.60266*	.10504	.000	.3442	.8611	
		Owner and manager	.78657*	.09316	.000	.5573	1.0158	
Bonferroni	Owner	Owner and manager	.18392	.10172	.215	0610	.4289	
		Manager	60266*	.10504	.000	8556	3497	
	Owner and manager	Owner	18392	.10172	.215	4289	.0610	
		Manager	78657 <sup>*</sup>	.09316	.000	-1.0109	5622	
	Manager	Owner	.60266*	.10504	.000	.3497	.8556	
		Owner and manager	.78657*	.09316	.000	.5622	1.0109	

\*. The mean difference is significant at the 0.05 level.

Risk Management Practices							
	What is your position within the		Subset for alpl	ha = 0.05			
	business?	Ν	1	2			
Scheffe <sup>a,b</sup>	Owner and manager	116	1.8983				
	Owner	73	2.0822				

Manager	99		2.6848
Sia.		.187	1.000

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 92.535.

b. The group sizes are unequal. The harmonic mean of the group sizes is used. Type I error levels are not guaranteed.



**Figure 4.4:** The relationship between risk management practices and the position of the respondents in the SMEs

As revealed in Figure 4.4, there is a sharp dip in the graph for those occupying the position of owner and manager while thereafter, the mean of risk management practices increases. The graph depicts that overall, the manager was fully involved in risk management practices while the owner-manager was least likely to be involved in those practices.

The preceding results of the current study support the upper achelons theory which advocates for the link between management characteristics and performanace, in the context of this study the link between the position of the FMCG SME leaders and their involvement in risk management practices. Furthermore, these are important results since the proponets of the upper achelons (e.g. Chuang, Nakatani and Zhou (2009), Hambrick, Geletkanycz and Fredrickson (1993), Wiersema and Bantel (1992) focused on investigating other characteristics such as age, industry experience, education level etc., while characteristics pertaining to the position in the business such as owner, owner and manager, employed manager etc. remain relatively unexplored.

### 4.4.4.2 Period spent in different positions in relation to the risk management practices

**Table 4.19**: Contingency table showing the period spent in different positions in relation to the risk management practices

						Nearly	% that	
		Never	Seldom	Sometimes	Often	always	used	Total
0-5 years	Risk transference	123	0	0	0	2		125
		98.4%	0.0%	0.0%	0.0%	1.6%	1.6%	100.0%
	Risk avoidance	1	2	0	2	120	-	125
		0.8%	1.6%	0.0%	1.6%	96.0%	97.6%	100.0%
	Risk mitigation	123	0	2	0	0	•	125
	5	98.4%	0.0%	1.6%	0.0%	0.0%	0%	100.0%
	Risk acceptance	123	0	0	2	0		125
		98.4%	0.0%	0.0%	1.6%	0.0%	1.6%	100.0%
	Risk exploitation	123	0	0	2	0		125
		98.4%	0.0%	0.0%	1.6%	0.0%	1.6%	100.0%
Total		493	2	2	6	122	11070	625
lotai		78.9%	0.3%	0.3%	1.0%	19 5%	20.5%	100.0%
6-10 years	Risk transference	70.370	0.070	25	2	10.070	20.070	99
e re yeare		70.7%	1.0%	25.3%	2.0%	1.0%	3%	100.0%
	Risk avoidance	0	6	8	66	19		99
		0.0%	6.1%	8.1%	66.7%	19.2%	85.9%	100.0%
	Risk mitigation	25	53	16	5	0		99
		25.3%	53.5%	16.2%	5.1%	0.0%	5.1%	100.0%
	Risk acceptance	88	11	0	0	0		99
		88.9%	11.1%	0.0%	0.0%	0.0%	0%	100.0%
	Risk exploitation	77	19	3	0	0		99
		77.8%	19.2%	3.0%	0.0%	0.0%	0%	100.0%
lotal		260	90	52	/3	20	10 70/	495
44.45	Dieletropotoropoo	52.5%	18.2%	10.5%	14.7%	4.0%	18.7%	100.0%
11-15 Voars	RISK transference	4	/ /۵۵ ۵۵	/ ۵۰ ۵۷	۲ /00 دد	9 25 70/	10 60/	35 100.09/
years	Pick avoidance	11.4%	20.0%	20.0%	22.9%	20.7%	40.0%	100.0%
	RISK avoluatice	0 22 0%	12 0%	0 22 0%	د %۵۶	2 0%	11 5%	100.0%
	Risk mitigation	ZZ.970 A	42.970	22.370	0.078 Q	2.370	11.370	35
	Risk miligation	- 11 4%	- 11 4%	31.4%	25.7%	20.0%	45 7%	100.0%
	Risk acceptance	8	9	5	7	6	1011 /0	35
		22.9%	25.7%	14.3%	20.0%	17.1%	37.1%	100.0%
	Risk exploitation	4	12	9	4	6		35
	·	11.4%	34.3%	25.7%	11.4%	17.1%	28.5%	100.0%
Total		28	47	40	31	29		175
		16.0%	26.9%	22.9%	17.7%	16.6%	34.3%	100.0%
16-20	Risk transference	1	0	0	4	23		28
years		3.6%	0.0%	0.0%	14.3%	82.1%	96.4%	100.0%
	Risk avoidance	17	8	0	2	1		28
	Dist. with a first	60.7%	28.6%	0.0%	7.1%	3.6%	10.7%	100.0%
	Risk mitigation	0	3	1	6	18		28
	Diak appartance	0.0%	10.7%	3.6%	21.4%	64.3%	85.7%	100.0%
	Risk acceptance	2 60/	ے 7 10/	2 69/	/ 25.00/	60 70/	05 70/	28
	Risk exploitation	3.0%	1.1% 0	<u>3.0%</u> 0	20.0%	00.7%	00.1%	100.0% 20
	Nor exploitation	ו א 6%	∠ 7 1%	0 0.0%	10 35 7%	10 53 6%	80 3%	∠o 100 0%
Total		20	15	2	29	74	00.070	140
		14.3%	10.7%	1.4%	20.7%	52.9%	73.6%	100.0%

Total	Risk transference	198	8	32	14	35		287
		69.0%	2.8%	11.1%	4.9%	12.2%	17.1%	100.0%
	Risk avoidance	26	31	16	73	141		287
		9.1%	10.8%	5.6%	25.4%	49.1%	74.5%	100.0%
	Risk mitigation	152	60	30	20	25		287
		53.0%	20.9%	10.5%	7.0%	8.7%	15.7%	100.0%
	Risk acceptance	220	22	6	16	23		287
		76.7%	7.7%	2.1%	5.6%	8.0%	13.6%	100.0%
	Risk exploitation	205	33	12	16	21		287
		71.4%	11.5%	4.2%	5.6%	7.3%	12.9%	100.0%
Total		801	154	96	139	245		1435
		55.8%	10.7%	6.7%	9.7%	17.1%	26.8%	100.0%

The contingency table above (Table 4.19) shows that risk avoidance (97.6%) was used to manage risks by almost all the respondents who had been in their current positions for between zero and five years. Other tools or activities were used by a very limited number of the respondents who had been in their current positions for the same duration. These included risk transference (1.6%), risk acceptance (1.6%), and risk exploitation (1.6%). The results, however, revealed that risk mitigation (0%) was never used by these respondents. It turns out that only 20.5% of the respondents who had been in their current positions for between zero and five years had managed risks using the outlined tools but were more likely to avoid risks (risk avoidance = 97.6%).

Concerning the respondents who had been in their current positions for between six and five years, the analysis of the results revealed that risk avoidance (85.9%) was used by a majority of those respondents. Other tools or activities were used by a minority of those respondents and these included risk transference (3%) and risk mitigation (5.1%). The remainder of the tools or activities were, however, never used by those respondents. All in all, only 18.7% of the respondents who had been in their current positions for between six and five years had managed risks using the outlined tools but were more likely to use risk avoidance (85.9%).

For positions occupied between 11 and 15 years, a minority of the respondents who have been in their current positions for this duration had managed risks through the outlined tools. In particular, risk transference was used by 48.6% of those respondents, followed by risk mitigation (45.7%), followed by risk acceptance (37.1%), followed by risk exploitation (28.5%), and then risk avoidance (11.5%). In sum, only 34.3% of the respondents who have been in their current positions for this duration of time had managed risks using the outlined tools but were more likely to transfer risks to third parties (risk transference = 48.6%).

Concerning the respondents who had been in their current positions for between 16 and 20 years, the results indicated that most of them had managed risks through risk transference (96.4%), followed by risk exploitation (89.3%), and then risk mitigation (85.7%) and risk

acceptance (85.7%). Risk avoidance had been also used by those respondents but by only a few (only 10.7%). It turns out that, 73.6%% of the respondents who had been in their current positions for between 16 and 20 years, had managed risks using the outlined tools but were more likely to transfer risks to third parties or exploit the risk events or mitigate the risks.

A chi-square test was performed for further analysis of results. The results are shown below.

How long have you	been in this position?		df	Asymptotic Significance (2- sided)
0-5 vears	Pearson Chi-Square	609.091 <sup>b</sup>	16	.000
,	Likelihood Ratio	599.691	16	.000
	Linear-by-Linear Association	73.851	1	.000
	N of Valid Cases	625		
6-10 years	Pearson Chi-Square	541.654°	16	.000
-	Likelihood Ratio	527.662	16	.000
	Linear-by-Linear Association	81.118	1	.000
	N of Valid Cases	495		
11-15 years	Pearson Chi-Square	24.038 <sup>d</sup>	16	.089
	Likelihood Ratio	26.494	16	.047
	Linear-by-Linear Association	.163	1	.686
	N of Valid Cases	175		
16-20 years	Pearson Chi-Square	92.777 <sup>e</sup>	16	.000
	Likelihood Ratio	90.747	16	.000
	Linear-by-Linear Association	4.116	1	.042
	N of Valid Cases	140		
Total	Pearson Chi-Square	541.592ª	16	.000
	Likelihood Ratio	534.728	16	.000
	Linear-by-Linear Association	89.473	1	.000
	N of Valid Cases	1435		

Table 4.20: The risk management practices according the number of years in the current position

a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 19.20.

b. 15 cells (60.0%) have expected count less than 5. The minimum expected count is .40.

c. 5 cells (20.0%) have expected count less than 5. The minimum expected count is 4.00.

d. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 5.60.

e. 15 cells (60.0%) have expected count less than 5. The minimum expected count is .40.

As indicated in Table 4.20, the Chi-square value is 609.091, which indicates statistically significant difference in risk management practices adopted by respondents based on how long they have been in their current positions, with a p-value of 0.000. Among those who had stayed between 0-5 years, the Chi-square shows statistically significant differences in the risk management practices adopted by them. The positions occupied are classified into three, which include manager, owner and owner and manager. The next row gives the Chi-square value for those respondents within 5-10 years in their positions with Chi-square value of 541.654 and p-value of 0.000 which is less than alpha level of 0.05. The respondents within 11-15 years of experience in their positions have chi-square value of 24.038 with p-value of 0.089 which is greater than alpha value of 0.05. This shows that there is no statistically

significant difference in the respondents having 11-15 years' experience. This confirms that those who had occupied positions between 11 to 15 years were adopting relatively similar risk management practices.

The main assumption of not less than 5 expected count in less than 20% of the column is satisfied, which shows the suitability and reliability of the statistical techniques (Chi-square). The footnote in the Table 4.20 underscores the significant effect of how long respondents have been in their positions on risk management practices adopted and indicates that '0 cells (.0%) have expected count less than 5' "a". This means that the assumption is not violated, as all the expected cell sizes are greater than 5 (in this case, greater than 19.20).

Furthermore, robust Chi-square difference testing with mean was conducted for further analysis of the results. The results are shown below.

Risk M	anage	ement Practice	S					
					95% Confid	ence Interval for Mean		
					Lower			
	Ν	Mean	Std. Deviation	Std. Error	Bound	Upper Bound	Minimum	Maximum
0-5	125	1.8192	.24019	.02148	1.7767	1.8617	1.00	3.60
years								
6-10	99	1.9960	.30234	.03039	1.9357	2.0563	1.80	2.80
years								
11-	35	2.9200	.78095	.13200	2.6517	3.1883	1.80	4.20
15								
years								
16-	28	3.8714	.65141	.12311	3.6188	4.1240	1.80	4.80
20								
years								
Total	287	2.2146	.76382	.04509	2.1259	2.3034	1.00	4.80
			Tes	t of Homog	eneity of Va	riances		
					Levene			
					Statistic	df1	df2	Sig.
Risk		Management	Based on Mear	n	54.555	3	283	.000
Practio	ces		Based on Medi	ian	39.619	3	283	.000
			Based on Me	edian and	39.619	3	205.148	.000
			with adjusted d	lf				
			Based on trimn	ned mean	54.237	3	283	.000

Table 4.21: The risk management practices according to the number of years in the current position

Descriptive

Risk Managen	Risk Management Practices										
	Sum of Squares	Df	Mean Square	F	Sig.						
Between	118.553	3	39.518	231.517	.000						
Groups											
Within	48.305	283	.171								
Groups											
Total	166.859	286									

ANOVA

#### Multiple Comparisons

Dependent Variable: Risk Management Practices

		0					
	(I) How long	(J) How long				95% Cor	fidence
	have you	have you				Inter	rval
	been in this	been in this				Lower	Upper
	position?	position?	Mean Difference (I-J)	Std. Error	Sig.	Bound	Bound
Scheffe	0-5 years	6-10 years	17676 <sup>*</sup>	.05558	.019	3331	0204
		11-15 years	-1.10080*	.07901	.000	-1.3230	8786
		16-20 years	-2.05223*	.08638	.000	-2.2952	-1.8093
	6-10 years	0-5 years	.17676*	.05558	.019	.0204	.3331
		11-15 years	92404*	.08125	.000	-1.1525	6955
		16-20 years	-1.87547*	.08843	.000	-2.1242	-1.6268
	11-15 years	0-5 years	1.10080*	.07901	.000	.8786	1.3230
		6-10 years	.92404*	.08125	.000	.6955	1.1525
		16-20 years	95143*	.10475	.000	-1.2460	6568
	16-20 years	0-5 years	2.05223*	.08638	.000	1.8093	2.2952
		6-10 years	1.87547*	.08843	.000	1.6268	2.1242
		11-15 years	.95143*	.10475	.000	.6568	1.2460
Bonferroni	0-5 years	6-10 years	17676*	.05558	.010	3244	0291
		11-15 years	-1.10080*	.07901	.000	-1.3107	8909
		16-20 years	-2.05223*	.08638	.000	-2.2817	-1.8227
	6-10 years	0-5 years	.17676*	.05558	.010	.0291	.3244
		11-15 years	92404*	.08125	.000	-1.1399	7082
		16-20 years	-1.87547*	.08843	.000	-2.1104	-1.6405
	11-15 years	0-5 years	1.10080*	.07901	.000	.8909	1.3107
		6-10 years	.92404*	.08125	.000	.7082	1.1399
		16-20 years	95143*	.10475	.000	-1.2297	6731
	16-20 years	0-5 years	2.05223*	.08638	.000	1.8227	2.2817
		6-10 years	1.87547*	.08843	.000	1.6405	2.1104
		11-15 years	.95143*	.10475	.000	.6731	1.2297

\*. The mean difference is significant at the 0.05 level.

#### **Risk Management Practices**

	Ν	Subset for alpha = 0.05

				-	
	How long				
	have you				
	been in this				
	position?		1	2	3
Scheffe <sup>a,b</sup>	0-5 years	125	1.8192		
	6-10 years	99	1.9960		
	11-15 years	35		2.9200	
	16-20 years	28			3.8714
	Sig.		.220	1.000	1.000

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 48.552.

b. The group sizes are unequal. The harmonic mean of the group sizes is used. Type I error levels are not guaranteed.



**Figure 4.5:** The relationship between risk management practices and the number of years in the current position

As revealed in Figure 4.5, for those SME owner-managers that had occupied positions in the duration of "0-5 years" to "6-10 years", the mean of risk management practices grows gently, and for those who have occupied a position for more than 10 years, the mean shoots up very fast and is constantly increasing. The graph depicts that overall, the duration that SME owner-managers have occupied a position is directly proportional to the mean of risk management practices carried out. This indicates that the longer these respondents had been in their positions, the more risk management practices they got involved in.

The aforementioned results of the present study are consistent with those of Datta et al. (2003), Hambrick, Geletkanycz and Fredrickson (1993), Finkelstein and Hambrick (1996), Wiersema and Bantel (1992), who found that long-tenured managers are associated with more commitment, in the context of this study more commitment to effective risk management.

#### 4.4.4.3 Highest educational qualifications in relation to the risk management practices

**Table 4.22**: Contingency table showing the relationship between various forms of risk management tools

 and the highest educational qualifications obtained

			_	_		Nearly	% that	
		Never	Seldom	Sometimes	Often	always	used	Total
Lower	Risk transference	72	0	0	0	0		72
than		100.0%	0.0%	0.0%	0.0%	0.0%	0%	100.0%
grade 12	Risk avoidance	1	0	0	0	71		72
		1.4%	0.0%	0.0%	0.0%	98.6%	98.6%	100.0%
	Risk mitigation	72	0	0	0	0		72
		100.0%	0.0%	0.0%	0.0%	0.0%	0%	100.0%
	Risk acceptance	72	0	0	0	0	•	72
		100.0%	0.0%	0.0%	0.0%	0.0%	0%	100.0%
	Risk exploitation	72	0	0	0	0	· · ·	72
		100.0%	0.0%	0.0%	0.0%	0.0%	0%	100.0%
Total	-	289	0	0	0	71	•••••	360
		80.3%	0.0%	0.0%	0.0%	19.7%	19.7%	100.0%
Grade 12	Risk transference	124	4	6	2	0		136
		91.2%	2.9%	4.4%	1.5%	0.0%	1.5%	100.0%
	Risk avoidance	0	5	6	57	68		136
		0.0%	3.7%	4.4%	41.9%	50.0%	91.9%	100.0%
	Risk mitigation	74	54	3	5	0		136
		54.4%	39.7%	2.2%	3.7%	0.0%	3.7%	100.0%
	Risk acceptance	128	8	0	0	0		136
		94.1%	5.9%	0.0%	0.0%	0.0%	0%	100.0%
	Risk exploitation	115	18	3	0	0		136
		84.6%	13.2%	2.2%	0.0%	0.0%	0%	100.0%
Total		441	89	18	64	68		680
	<u></u>	64.9%	13.1%	2.6%	9.4%	10.0%	19.4%	100.0%
National	Risk transference	1	5	26	1	0	<b>0</b> 0/	33
Cortificato	Diele evenidence	3.0%	15.2%	/8.8%	3.0%	0.0%	0%	100.0%
Certificate	RISK avoidance	2	5	11	14	1	AE 40/	33
	Dick mitigation	0.1%	15.2%	33.3%	42.4%	3.0%	40.4%	100.0%
	RISK IIIIIgalion	ے 61%	0.1%	22 66 7%	15.2%	3.0%	18.2%	100.0%
	Risk accentance	15	13	2	3	0	10.270	33
		45.5%	39.4%	6.1%	91%	0.0%	9.1%	100.0%
	Risk exploitation	13	14	6	0	0.070	0.170	33
		39.4%	42.4%	18.2%	0.0%	0.0%	0%	100.0%
Total		33	40	67	23	2	0,0	165
		20.0%	24.2%	40.6%	13.9%	1.2%	15.1%	100.0%
National	Risk transference	1	0	0	11	15		27
Diploma		3.7%	0.0%	0.0%	40.7%	55.6%	96.3%	100.0%
	Risk avoidance	10	15	0	1	1		27
		37.0%	55.6%	0.0%	3.7%	3.7%	7.4%	100.0%
	Risk mitigation	4	1	3	10	9		27
		14.8%	3.7%	11.1%	37.0%	33.3%	70.3%	100.0%

	Risk acceptance	5	0	3	11	8		27
		18.5%	0.0%	11.1%	40.7%	29.6%	70.3%	100.0%
	Risk exploitation	5	0	3	13	6		27
		18.5%	0.0%	11.1%	48.1%	22.2%	70.3%	100.0%
Total		25	16	9	46	39		135
		18.5%	11.9%	6.7%	34.1%	28.9%	63%	100.0%
Bachelor's	Risk transference	0	0	0	0	12		12
degree		0.0%	0.0%	0.0%	0.0%	100.0%	100%	100.0%
	Risk avoidance	8	3	0	1	0		12
		66.7%	25.0%	0.0%	8.3%	0.0%	8.3%	100.0%
	Risk mitigation	0	2	1	0	9		12
		0.0%	16.7%	8.3%	0.0%	75.0%	75%	100.0%
	Risk acceptance	0	2	1	0	9		12
		0.0%	16.7%	8.3%	0.0%	75.0%	75%	100.0%
	Risk exploitation	0	2	0	1	9		12
		0.0%	16.7%	0.0%	8.3%	75.0%	83.3%	100.0%
Total		8	9	2	2	39		60
		13.3%	15.0%	3.3%	3.3%	65.0%	68.3%	100.0%
Other	Risk transference	0	0	0	0	8		8
		0.0%	0.0%	0.0%	0.0%	100.0%	100%	100.0%
	Risk avoidance	5	3	0	0	0		8
		62.5%	37.5%	0.0%	0.0%	0.0%	0%	100.0%
	Risk mitigation	0	0	2	0	6		8
		0.0%	0.0%	25.0%	0.0%	75.0%	75%	100.0%
	Risk acceptance	0	0	0	2	6	4000/	8
		0.0%	0.0%	0.0%	25.0%	75.0%	100%	100.0%
	RISK exploitation	0	0	0	2	6	4000/	8
<u> </u>		0.0%	0.0%	0.0%	25.0%	75.0%	100%	100.0%
Iotal		5	3	2	4	26	350/	40
T-1-1	Diale transformers	12.5%	7.5%	5.0%	10.0%	65.0%	75%	100.0%
Total	RISK transference	198	9	32	14	35		288
		68.8%	3.1%	11.1%	4.9%	12.2%	17.1%	100.0%
	Risk avoidance	26	31	17	73	141		288
		9.0%	10.8%	5.9%	25.3%	49.0%	74.3%	100.0%
	Risk mitigation	152	60	31	20	25		288
		52.8%	20.8%	10.8%	6.9%	8.7%	15.6%	100.0%
	Risk acceptance	220	23	6	16	23		288
		76.4%	8.0%	2.1%	5.6%	8.0%	13.6%	100.0%
	Risk exploitation	205	34	12	16	21		288
	1	71.2%	11.8%	4.2%	5.6%	7.3%	12.9%	100.0%
Total		801	157	0. <u>_</u> ,0	139	245	,	1440

The contingency table above (Table 4.22) shows that risk avoidance (98.6%%) was used to manage risks by almost all the respondents who had lower than Grade 12. All other tools or activities were never used by those respondents. These findings suggest that FMCG SME owner-managers with lower than Grade 12 are more likely to avoid risks.

Concerning the respondents who had Grade 12, the analysis of the results revealed that risk avoidance (91.9%) was used by a majority of those respondents. Other tools or activities were used by a very limited number of those respondents and these included risk transference (1.5%) and risk mitigation (3.7%). The remainder of the tools or activities were, however, never

used by those respondents. The results imply that FMCG SMEs with Grade 12 are more likely to manage risks through risk avoidance (91.9%).

For the National Higher Certificate, a minority of the respondents who had this qualification had managed risk through risk avoidance (45.4%), followed by risk mitigation (18.2%), and then risk acceptance (9.1%). The remainder of the tools or activities were, however, never used by those respondents. These results suggest that that a majority of the FMCG SME owner-managers with National Higher Certificate do not manage risk with the outlined tools, a few who does are more likely to avoid risks (risk avoidance =45.4%).

Regarding the respondents who had a National Diploma, the results indicated that most of them had managed risks through risk transference (96.3%), followed by risk exploitation (70.3%), and risk mitigation (70.3%), and risk acceptance (70.3%). Risk avoidance had been also used by those respondents but by only a few (7.4%). These results suggest that a majority of the FMCG SME owner-managers with a National Diploma manage risks with the outlined tools but are more likely to transfer risks to third parties (risk transference =96.3%).

With respect to the respondents who had a Bachelor's Degree, the findings revealed that a majority of them had managed risks through risk transference (100%), followed by risk exploitation (83.3%), and then risk mitigation (75%) and risk acceptance (75%). Risk avoidance had been also used by those respondents but by a very limited number of them (8.3%). These findings indicate that most of the FMCG SME owner-managers with a Bachelor's Degree manage risks with almost all the outlined tools but commonly adopt risk transference (100%).

For respondents with the other qualifications, the analysis of results discloses that all of them had managed risks through risk transference (100%), risk exploitation (100%), and risk acceptance (100%). A majority of these respondents also indicated that they had used risk mitigation (75%) to manage risks. None of them had, however, used risk avoidance. These results imply that most of the FMCG SME owner-managers with other qualifications are equally likely to manage risks by mitigation, acceptance and exploitation.

A chi-square test was performed for further analysis of results. The results are shown below.

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				Asymptotic Significance (2-
What is the highest qualification		Value	Df	sided)
Lower than grade 12	Pearson Chi-Square	353.772 <sup>b</sup>	4	.000
	Likelihood Ratio	346.960	4	.000
	Linear-by-Linear Association	44.099	1	.000
	N of Valid Cases	360		
Grade 12	Pearson Chi-Square	701.135°	16	.000
	WLikelihood Ratio	680.096	16	.000
	Linear-by-Linear Association	76.211	1	.000
	N of Valid Cases	680		
National Higher Certificate	Pearson Chi-Square	102.860 <sup>d</sup>	16	.000
	Likelihood Ratio	106.673	16	.000
	Linear-by-Linear Association	39.790	1	.000
	N of Valid Cases	165		
National Diploma	Pearson Chi-Square	91.857 <sup>e</sup>	16	.000
	Likelihood Ratio	91.498	16	.000
	Linear-by-Linear Association	.002	1	.967
	N of Valid Cases	135		
Bachelor's degree	Pearson Chi-Square	51.282 <sup>f</sup>	16	.000
	Likelihood Ratio	55.477	16	.000
	Linear-by-Linear Association	1.324	1	.250
	N of Valid Cases	60		
Other	Pearson Chi-Square	53.077 <sup>f</sup>	16	.000
	Likelihood Ratio	51.563	16	.000
	Linear-by-Linear Association	3.042	1	.081
	N of Valid Cases	40		
Total	Pearson Chi-Square	539.143 <sup>a</sup>	16	.000
	Likelihood Ratio	532.215	16	.000
	Linear-by-Linear Association	89.662	1	.000
	N of Valid Cases	1440		

Table 4.23: The risk management practices according to the highest educational qualification

Chi-Square Tests

a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 19.60.

b. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 14.20.

c. 5 cells (20.0%) have expected count less than 5. The minimum expected count is 3.60.

d. 10 cells (40.0%) have expected count less than 5. The minimum expected count is .40.

e. 10 cells (40.0%) have expected count less than 5. The minimum expected count is 1.80.

f. 20 cells (80.0%) have expected count less than 5. The minimum expected count is .40.

Table 4.23 shows the Chi-square value of 353.77, indicating a statistically significant difference in risk management practices adopted by respondents which was based on their experience and how long they have been in their current positions with qualifications lower than Grade 12. This is ascertained with a p-value of 0.000. Among those who had Grade 12 qualification, the results show statistically significant differences in the risk management practices adopted, with a Chi-square value of 701.135 and p-value of 0.000 which is less than alpha level of 0.05.

The main assumption of not less than 5 expected count in less than 20% of the column is satisfied, thus showing the suitability and reliability of the statistical technique (Chi-square). The footnote in the table above shows the significant effect of how the educational

qualifications of the owners and managers affected the risk management practices adopted. An indicator that shows '0 cells (.0%) have expected count less than 5' "a" posits confirms the assumption has not been violated, as all the expected cell sizes are greater than 5 (in this case, greater than 19.60).

Furthermore, the Chi-square results reported in Table 4.24 confirm lack of independence in the risk management practices adopted by owners and managers and indeed confirm a statistically significant effect of educational qualification on risk management practices. This implies that educational qualification was the contributor to the difference in the skills of owners and managers of FMCG SMEs in the Cape Metropole, with Chi-square value:  $x^2(16, n = 1440) = 539.143$ , p = 0.000, and Cramer's V = 0.306. The Cramer's V result shown in Table 4.24 below as recommended by Gravetter & Wallnau (2004) and Pallant, 2011) confirms a very large effect of respondents' educational qualifications on risk management practices adopted in FMCG businesses.

What is the highest qualification	<u> </u>		Value	Approximate Significance
Lower than grade 12	Nominal by Nominal	Phi	.991	.000
-	·	Cramer's V	.991	.000
	N of Valid Cases	<u>.</u>	360	
Grade 12	Nominal by Nominal	Phi	1.015	.000
		Cramer's V	.508	.000
	N of Valid Cases		680	
National Higher Certificate	Nominal by Nominal	Phi	.790	.000
		Cramer's V	.395	.000
	N of Valid Cases		165	
National Diploma	Nominal by Nominal	Phi	.825	.000
		Cramer's V	.412	.000
	N of Valid Cases		135	
Bachelor's degree	Nominal by Nominal	Phi	.925	.000
		Cramer's V	.462	.000
	N of Valid Cases		60	
Other	Nominal by Nominal	Phi	1.152	.000
		Cramer's V	.576	.000
	N of Valid Cases		40	
Total	Nominal by Nominal	Phi	.612	.000
		Cramer's V	.306	.000
	N of Valid Cases		1440	

Table 4.24: The risk management practices according to the highest educational qualification

Symmetric Measures

Furthermore, a robust Chi-square difference testing with mean was conducted for further analysis of the results. The results are shown below.

Table 4.25: The risk management practices according to the highest educational qualification

Risk Management Prac	isk Management Practices										
					95% Confiden	ce Interval for					
			Std.	Std.	Me	an					
	Ν	Mean	Deviation	Error	Lower Bound	Upper Bound	Minimum	Maximum			
Lower than grade 12	72	1.7889	.09428	.01111	1.7667	1.8110	1.00	1.80			
Grade 12	136	1.8662	.19785	.01697	1.8326	1.8997	1.60	2.80			
National Higher	33	2.5212	.31992	.05569	2.4078	2.6347	2.00	3.40			
Certificate											
National Diploma	27	3.4296	.80709	.15532	3.1104	3.7489	1.80	4.80			
Bachelor's degree	12	3.9167	.68468	.19765	3.4816	4.3517	2.60	4.80			
Other	8	4.0750	.30119	.10649	3.8232	4.3268	3.60	4.40			
Total	288	2.2153	.76257	.04493	2.1268	2.3037	1.00	4.80			

### Descriptive

#### **Test of Homogeneity of Variances** Levene Statistic df1 df2 Sig. **Risk Management Practices** Based on Mean 33.852 5 282 .000 Based on Median 5 282 .000 21.395 Based on Median and with 21.395 5 93.337 .000 adjusted df Based on trimmed mean 32.995 5 282 .000 ANOVA **Risk Management Practices** Sum of Mean Squares df Square F Sig. **Between Groups** 134.974 5 26.995 238.498 .000

Within Groups	31.919		282	.113			
Fotal 166.893 287							
		Risk Managemei	nt Practice:	5	-	-	
	What is the			S	Subset for	alpha = 0.05	
	highest qualification	Ν	1		2	3	4

	nignest qualification		Ν		1	2	3	4
Scheffe <sup>a,b</sup>	Lower th grade 12	nan		72	1.7889			
	Grade 12			136	1.8662			
	National Higl Certificate	her		33		2.5212		
	National Diploma			27			3.4296	
	Bachelor's degree			12				3.9167
	Other			8				4.0750
	Sig.				.991	1.000	1.000	.815

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 20.208.

b. The group sizes are unequal. The harmonic mean of the group sizes is used. Type I error levels are not guaranteed.



Figure 4.6: The risk management practices according to the highest educational qualification

As indicated in Figure 4.6, for those FMCG SME owner-managers with qualifications that ranged from "Lower than Grade 12" to "Grade 12", the mean of risk management practices appears to be constant, after which it goes up from there. The graph depicts that overall, the qualifications of the respondents is directly proportional to the mean of risk management practices carried out. This indicates that the higher the qualifications of these respondents, the more risk management practices they got involved in.

The preceding results of the current study supports the upper echelons theory which suggested a positive linear relationship between managers' educational achievements and knowledge base. The upper echelons theory further posits that higher educational level points to greater knowledge base, which in turn is likely to be connected with more effective management, in the context of this study effective risk management.

#### 4.4.5 Potential obstacles to effective risk management within FMCG SMEs

This sub-section presents the analysis of the potential obstacles to the successful implementation of effective risk management processes by South African SME ownermanagers. This is meant to answer the fourth research question: What are the potential obstacles to the successful implementation of effective risk management processes by South African SME owner-managers? To address this research question, respondents were asked to indicate the relevancy of the stated possible risk management barriers to their businesses. A five-point Likert scale was adopted with weightings of one for not at all relevant, two for slightly relevant, three for relevant, four for fairly relevant, five for very relevant. The results are shown below. 
 Table 4.26:
 The potential obstacles to effective risk management within FMCG SMEs

				-		
	Not at all	Slightly	Delevent	Fairly	Very	Tatal
	relevant	relevant	Relevant	relevant	relevant	lotal
Lack of risk knowledge	26	12	27	48	175	288
	9.0%	4.2%	9.4%	16.7%	60.8%	100.0%
Lack of financial resources	12	25	46	58	147	288
	4.2%	8.7%	16.0%	20.1%	51.0%	100.0%
Cost exceeds the benefit	47	6	20	42	173	288
	16.3%	2.1%	6.9%	14.6%	60.1%	100.0%
Lack of holistic risk management	24	26	29	46	163	288
models relevant to the SMEs	8.3%	9.0%	10.1%	16.0%	56.6%	100.0%
Difficulty of measuring the	26	16	30	45	171	288
performance of risk management	9.0%	5.6%	10.4%	15.6%	59.4%	100.0%
Insufficient record keeping	42	27	23	63	134	289
	14.5%	9.3%	8.0%	21.8%	46.4%	100.0%
Reluctance from employees	61	68	27	50	83	289
	21.1%	23.5%	9.3%	17.3%	28.7%	100.0%
Other	14	30	41	56	148	289
	4.8%	10.4%	14.2%	19.4%	51.2%	100.0%
Total	252	210	243	408	1194	2307
	10.9%	9.1%	10.5%	17.7%	51.8%	100.0%

What do you regard as the main barriers to effective risk management in your business?

As revealed in Table 4.26 most of the sampled respondents indicated that a lack of risk knowledge (60.8%) was a very relevant barrier to their effective risk management, and that costs exceeds benefits was also very relevant to them (60.1%). A majority of the respondents also indicated that difficulty of measuring the performance of risk management (59.4%) was a very relevant barrier to their effective risk management, followed by a lack of holistic risk management models relevant to the SMEs (56.6%), and then a lack of financial resources (51.0%). Insufficient record keeping turned-out to be a very relevant barrier to a minority of the respondents (46.4%). Then reluctance from employees was also considered very relevant but to a lesser extent (only 28.7%).

Given that 51.8% of the sampled FMCG SMEs acknowledges that the issues stated in Table 4.29 are very relevant barriers to their effective risk management, it is fair to conclude that all the barriers that were initially stated as potential barriers are indeed barriers to the effective risk management within FMCG SMEs. It seems, however, that the most important barrier is a

lack of risk knowledge, while reluctance from employees is not as common as the others. The risk experts interviewed concurred with the preceding survey questionnaire results, as noted in the following sentiments shared:

"Lack of competent employees who can identify and manage risks is a big one and what makes it even worse is the fact that they don't have the required cash to outsource services of experienced risk professionals, so risk management remains problematic within small retailers" (Participant – BRE1).

"I think, the absence of expertise and knowledge in retail SMEs is a huge obstacle for them to implement effective risk management. Most of them are managed by people with a low level of education who could be the owners..." (Participant – BRE2).

Furthermore, Table 4.26 shows that an overwhelming majority of the survey questionnaire participants perceive the cost of implementing risk management exceeds the benefit thereof. This finding is in sync with the verbal response of one of the risk experts interviewed who had this to say:

"...most of them view risk management as additional cost which could have a huge impact on their profit, they actually don't see the need to have it" (Participant – BRE2).

Table 4.26 further shows that a lack of financial resources is another significant hurdle that many SMEs are facing in their efforts to implement effective risk management. Worse still, an overwhelming majority of the questionnaire survey participants have indicated that their profit margins are usually too small to sustain risk management. Sadly, the personal interviews with the bank employees revealed that a small percentage of the SMEs' loan applications get approved due to mainly a lack of credit history and lack of transaction history (bank statement). Accordingly, bank employees made the following comments:

"Yes, we do but the quality of applications we receive is the biggest challenge. Like I said before, a number of small businesses keep cash on their business premises even those with accounts, very few deposit all their proceeds into the bank account yet the most important source of financials is the bank statement, so by not depositing all their proceeds in the bank account, they may be disadvantaged when they ask for funding because their statements do not show all their revenue" (Participant – BE1).

"Yes, but often you will find that because these entrepreneurs have no credit history, they get turned away when they apply for loans, only around 15% of our small to medium enterprise clients get their loan applications approved" (Participant – BE2).

The preceding findings of the current study support the RBV theory which postulates that resources are important drivers of performance. These include both intangible (e.g. knowledge) and tangible (e.g. raised financial capital) resources. Based on the RBV theory, the sampled FMCG SMEs operating in the Cape Metropole face obstacles when attempting to implement effective risk management as they lacked these factors.

#### 4.4.6 Critical factors affecting the sustainability of SMEs?

This sub-section presents the analysis of the critical factors affecting the sustainability of SMEs. This is meant to answer the fifth research question: What are the critical factors affecting the sustainability of FMCG SMEs? To address this research question, respondents were asked to indicate the relevancy of the stated possible risk management barriers to their businesses. A five-point Likert scale was adopted with weightings of one for no effects, two for minor effects, three for neutral, four for moderate effects, five for major effects. The results are shown below.

What effects do the following components have on the sustainability of your business?

			Effect					
		No effects	Minor effects	Neutral	Moderate effects	Major effects	Total	
Social	Customers	14	18	18	25	214	289	
		4.8%	6.2%	6.2%	8.7%	74.0%	100.0%	
	Suppliers	20	26	26	56	161	289	
		6.9%	9.0%	9.0%	19.4%	55.7%	100.0%	
	Government	0	35	100	82	72	289	
		0.0%	12.1%	34.6%	28.4%	24.9%	100.0%	
Total		34	79	144	163	447	867	
		3.9%	9.1%	16.6%	18.8%	51.6%	100.0%	
Environmental	Packaging waste and	4	18	4	42	219	287	
	food residues	1.4%	6.3%	1.4%	14.6%	76.3%	100.0%	
	Water Usage	18	29	34	39	169	289	
		6.2%	10.0%	11.8%	13.5%	58.5%	100.0%	
	Energy Usage	24	20	37	36	171	288	
		8.3%	6.9%	12.8%	12.5%	59.4%	100.0%	
Total		46	67	75	117	559	864	
		5.3%	7.8%	8.7%	13.5%	64.7%	100.0%	
Economic	Level of Inflation	23	21	19	42	180	285	
		8.1%	7.4%	6.7%	14.7%	63.2%	100.0%	
	Changes in Interest rate	82	105	31	48	23	289	
		28.4%	36.3%	10.7%	16.6%	8.0%	100.0%	
	Financial Strength	23	36	17	29	180	285	
		8.1%	12.6%	6.0%	10.2%	63.2%	100.0%	
Total		128	162	67	119	383	859	

#### Table 4.27: The critical factors affecting the sustainability of SMEs

			14.9%	18.9%	7.8%	13.9%	44.6%	100.0%
Total	Customers		14	18	18	25	214	289
			4.8%	6.2%	6.2%	8.7%	74.0%	100.0%
	Suppliers		20	26	26	56	161	289
			6.9%	9.0%	9.0%	19.4%	55.7%	100.0%
	Government		0	35	100	82	72	289
			0.0%	12.1%	34.6%	28.4%	24.9%	100.0%
	Packaging waste and		4	18	4	42	219	287
	food residues		1.4%	6.3%	1.4%	14.6%	76.3%	100.0%
	Water Usage		18	29	34	39	169	289
			6.2%	10.0%	11.8%	13.5%	58.5%	100.0%
	Energy Usage		24	20	37	36	171	288
			8.3%	6.9%	12.8%	12.5%	59.4%	100.0%
	Level of Inflation		23	21	19	42	180	285
			8.1%	7.4%	6.7%	14.7%	63.2%	100.0%
	Changes in Interest rate		82	105	31	48	23	289
			28.4%	36.3%	10.7%	16.6%	8.0%	100.0%
	Financial Strength		23	36	17	29	180	285
			8.1%	12.6%	6.0%	10.2%	63.2%	100.0%
		Total	208	308	286	399	1389	2590
			8.0%	11.9%	11.0%	15.4%	53.6%	100.0%

As indicated in Table 4.27, the results of the critical factors affecting the sustainability of FMCG SMEs looking at the major effects column show that, for social component, 74% of the respondents said that customers have major effects on the sustainability of their businesses, followed by 55.7% who said suppliers, and then 24.9% who said the government. In sum, given that over half (51.6%) of the respondents indicated major effects as their responses to the social component of sustainability, one can conclude that this component has a major effect on the sustainability of FMCG SMEs and in this case, the customers play a big role.

Concerning the environmental component, 76.3% of the respondents said that packaging waste and food residues have major effects on the sustainability of their businesses, followed by 59.4% who said the energy usage, and then 58.5% who said the water usage. In sum, given that 64.7% of the respondents indicated major effects as their responses to the environmental component, it is fair to conclude that this component has a major effect on the sustainability of FMCG SMEs and in this case, the major issues are packaging waste and food residues.

Regarding the economic component, 63.2% of the respondents said that the level of inflation has major effects on the sustainability of their businesses, followed by 63.2% who said it is the financial strength, and then 8.0% who said it is the changes in interest rates. In sum, given that 44.6% of the respondents indicated major effects as their response to the economic component of sustainability, one can conclude that this component has a major effect on the sustainability of FMCG SMEs and in this case, the major economic issues being inflation and financial strength.

Overall, 53.6% of the respondents said that the aforesaid critical factors of sustainability majorly affect their business sustainability, with the environmental component taking the lead, closely followed by the social component, and then the economic component.

# From a qualitative viewpoint, the response from a risk expert that supports the preceding survey questionnaire results is:

"A retail SME's economic, environmental and social performance is likely to have financial impacts, legal impacts and reputational impacts. It is important that these factors are understood and considered when preparing a risk management plan and in subsequent risk assessment activities, in order to minimise and manage the risks caused by them" (Participant – BRE2).

#### 4.4.7 Risks are presented by the critical factors of sustainability in FMCG SMEs

Given the observed critical factors affecting the sustainability of FMCG SMEs in the Cape Metropole, this subsection will analyse the risks that these factors pose to FMCG SMEs. This is meant to answer the sixth research question: What risks are presented by the critical factors of sustainability in FMCG SMEs? To address this research question, respondents were asked to indicate the relevancy of the stated possible risk management barriers to their businesses. A five-point Likert scale was adopted with weightings of one for no effects, two for minor effects, three for neutral, four for moderate effects, five for major effects. The results are shown below.

		Degree of Agreement					
Risk posed to m	y business by components of	Strongly				Strongly	
sustainability include the following		disagree	Disagree	Undecided	Agree	agree	Total
Social	Loss of customers	- 14	18	18	25	214	289
		4.8%	6.2%	6.2%	8.7%	74.0%	100.0%
	Loss of key suppliers	20	25	26	52	166	289
		6.9%	8.7%	9.0%	18.0%	57.4%	100.0%
	Heavy fines	0	37	94	84	74	289
		0.0%	12.8%	32.5%	29.1%	25.6%	100.0%
	Withdrawal/suspension of	0	37	90	86	76	289
	trade license	0.0%	12.8%	31.1%	29.8%	26.3%	100.0%
Total		34	117	228	247	530	1156
		2.9%	10.1%	19.7%	21.4%	45.8%	100.0%
Environmental	Pollution	4	20	7	40	218	289
		1.4%	6.9%	2.4%	13.8%	75.4%	100.0%
	High municipal cost	7	37	38	40	166	288
		2.4%	12.8%	13.2%	13.9%	57.6%	100.0%
	Violating water restrictions	35	11	37	33	172	288
		12.2%	3.8%	12.8%	11.5%	59.7%	100.0%
Total	46	68	82	113	556	865	

Table 4.28: Risks are presented by the critical factors of sustainability in FMCG SMEs

		5.3%	7.9%	9.5%	13.1%	64.3%	100.0%
Economical	Unexpected increase in	84	100	30	51	24	289
	financial cost	29.1%	34.6%	10.4%	17.6%	8.3%	100.0%
	Decrease in sales and profit	23	20	19	42	185	289
	volumes	8.0%	6.9%	6.6%	14.5%	64.0%	100.0%
Total		107	120	49	93	209	578
		18.5%	20.8%	8.5%	16.1%	36.2%	100.0%
Sustainability	Loss of customers	14	18	18	25	214	289
		4.8%	6.2%	6.2%	8.7%	74.0%	100.0%
	Loss of key suppliers	20	25	26	52	166	289
		6.9%	8.7%	9.0%	18.0%	57.4%	100.0%
	Heavy fines	0	37	94	84	74	289
		0.0%	12.8%	32.5%	29.1%	25.6%	100.0%
	Withdrawal/suspension of	0	37	90	86	76	289
	trade license	0.0%	12.8%	31.1%	29.8%	26.3%	100.0%
	Pollution	4	20	7	40	218	289
		1.4%	6.9%	2.4%	13.8%	75.4%	100.0%
	High municipal cost	7	37	38	40	166	288
		2.4%	12.8%	13.2%	13.9%	57.6%	100.0%
	Violating water restrictions	35	11	37	33	172	288
		12.2%	3.8%	12.8%	11.5%	59.7%	100.0%
	Unexpected increase in	84	100	30	51	24	289
	financial cost	29.1%	34.6%	10.4%	17.6%	8.3%	100.0%
	Decrease in sales and profit	23	20	19	42	185	289
	volumes	8.0%	6.9%	6.6%	14.5%	64.0%	100.0%
Total		187	305	359	453	1295	2599
		7.2%	11.7%	13.8%	17.4%	49.8%	100.0%

As shown in Table 4.28, the results of the risks posed to FMCG SMEs by the critical factors of sustainability looking at the strongly agree column indicate that, for the social component, 74.0% of the respondents strongly agreed that it is loss of customers, followed by 57.4% who strongly agreed that it is loss of key suppliers, followed by 26.3% who strongly agreed that it is withdrawal/suspension of trade license, and then 25.6% who strongly agreed that it is heavy fines. Overall, 45.8% of the respondents strongly agreed that the social component of sustainability pose risks to their FMCG SMEs and in this case, the biggest risk being loss of customers.

Concerning the environmental component, 75.4% of the respondents strongly agreed that it is pollution, followed by 59.7% who strongly agreed that it is violating water restrictions, and then 57.6% who strongly agreed that it is high municipal cost. Overall, 64.3% of the respondents strongly agreed that the environmental component of sustainability pose risks to their FMCG SMEs and in this case, the most significant environmental risk is pollution.

Regarding the economic component, 64.0% of the respondents strongly agreed that it is decrease in sales and profit volumes, and then 8.3% who strongly agreed that it is unexpected
increase in financial cost. Overall, 36.2% of the respondents strongly agreed that the economic component of sustainability pose risks to their FMCG SMEs and in this case, the most significant economic risk is decrease in sales and profit volumes.

In sum, 49.8% of the respondents strongly agreed that the aforesaid critical factors of sustainability pose risks to their FMCG SMEs with the environmental component taking the lead, closely followed by the social component, and least of all, the economic component.

### The risk experts interviewed concurred with the preceding survey questionnaire results, as noted in the following sentiments shared:

"All the areas you have mentioned pose many risks to every business, for example, the environmental part may cause the business to experience higher costs for energy, water and other resources, extreme water restrictions due to climate changes may also affect businesses. Then for the economic part, circumstances like inflation and the general government regulations may result in significant loss for any business. Lastly, for the social part, if the business doesn't properly manage its actions that affect the community around it including customers, it is likely to be faced with public outcry and damage to reputation" (Participant – BRE1).

"A retail SME's economic, environmental and social performance is likely to have financial impacts, legal impacts and reputational impacts. It is important that these factors are understood and considered when preparing a risk management plan and in subsequent risk assessment activities, in order to minimise and manage the risks caused by them" (Participant – BRE2).

# 4.4.8 The extent to which risk processes of FMCG SMEs incorporate robust analysis of sustainability factors

Given the observed risks that are posed to FMCG SMEs by critical factors of sustainability, this subsection will analyse the extent to which risk processes of FMCG SMEs incorporate robust analysis of sustainability factors. This is meant to answer the seventh research question: To what extent do risk processes of FMCG SMEs incorporate robust analysis of sustainability factors? To address this research question, some statements which show the extent to which risk processes of FMCG SMEs incorporate robust analysis of sustainability factors were given to the respondents and their levels of agreement or disagreement are discussed below.

	How do	you agree st	or disagree atements?	to the fo	llowing	
	Strongly disagree	Disagree	Undecided	Agree	Strongly agree	Total
We are concerned about sustainability issues	195	33	14	27	20	289
when making risk management decisions in my business	67.5%	11.4%	4.8%	9.3%	6.9%	100.0%
We have integrated sustainability into our	199	35	17	26	12	289
business risk management agenda	68.9%	12.1%	5.9%	9.0%	4.2%	100.0%
In my business, we have implemented an on-	238	24	12	9	6	289
going risk management process that includes an evaluation of critical components of sustainability	82.4%	8.3%	4.2%	3.1%	2.1%	100.0%
Critical components of sustainability are	231	21	14	13	10	289
considered as important aspects when assessing risks in my business	79.9%	7.3%	4.8%	4.5%	3.5%	100.0%
We have identified critical components of	209	29	14	9	28	289
sustainability and the risks they can pose on our business	72.3%	10.0%	4.8%	3.1%	9.7%	100.0%
We periodically collect risk information from the	208	36	12	3	29	288
critical components of sustainability	72.2%	12.5%	4.2%	1.0%	10.1%	100.0%
Total	1280	178	83	87	105	1733
	73.9%	10.3%	4.8%	5.0%	6.1%	100.0%

**Table 4.29:** The extent to which risk processes of FMCG SMEs incorporate robust analysis of sustainability factors

As disclosed in Table 4.29, the results on the extent to which risk processes of FMCG SMEs incorporate robust analysis of sustainability factors reveal higher percentages of disagreement compared to agreement. The statements to which the 289 respondents agreed or disagreed are labelled for easy reference as follows:

A – We are concerned about sustainability issues when making risk management decisions in my business.

B – We have integrated sustainability into our business risk management agenda.

C – In my business, we have implemented an on-going risk management process that includes an evaluation of critical components of sustainability.

D – Critical components of sustainability are considered as important aspects when assessing risks in my business.

E – We have identified critical components of sustainability and the risks they can pose on our business.

F – We periodically collect risk information from the critical components of sustainability.

Of the sampled respondents, 78.9% of them had some form of disagreement with statement A, that their SMEs are concerned about sustainability issues when making risk management decisions. Slightly above 80% disagreed with statement B, that sustainability is integrated into their business risk management agenda while a little over 90% did not agree with statement C. Just over 86% disagreed with statement D, 82.3% disagreed with statement E and just over 84% disagreed with statement F, that risk information from the critical components of sustainability are periodically collected.

In conclusion, the percentages of disagreement with these statements are high which would mean that the risk processes of these SMEs rarely incorporate robust analysis of sustainability measures. The personal interviews conducted with risk experts equally concur with this finding, as noted in the following comments:

"Risk management in SMEs is not well developed and it would be an overstatement to say that their risk assessment activities incorporate a robust analysis of sustainability factors" (Participant – BRE1).

"Well, the risk processes of SMEs are too simple and informal, and I, therefore, strongly believe that they do not include a robust analysis of sustainability factors" (Participant – BRE2).

### 4.4.9 The understanding of risk management and its contribution towards enhancing business sustainability among FMCG SME owner-managers

Given the observed current state of the risk management processes of FMCG SMEs with regard to inclusion of sustainability factors, this subsection will analyse the understanding of risk management and its contribution towards enhancing business sustainability among FMCG SME owner-managers. This is meant to answer the eighth research question: Do South African FMCG SME owner-managers have adequate knowledge on risk management and its contribution towards enhancing business sustainability? To address this research question, respondents were asked to rate their understanding of the risk management process, procedures and tools in the context of their businesses. In a separate question, respondents were also asked to indicate the extent to which they think risk management could contribute towards enhancing the sustainability of their businesses. A comparative analysis of the

crosstabulation of the responses generated by the two aforesaid questions was performed and the results are shown below.

**Table 4.30:** The understanding of risk management and its contribution towards enhancing business

 sustainability among FMCG SME owner-managers

	sustainability of your business? Crosstabulation					
	To what strength could risk management contribute towards enhancing the sustainability of your business?					
	Very little extent	Little extent	Some extent	Great extent	Very great extent	Total
Poor	22	19	25	33	43	142
	15.5%	13.4%	17.6%	23.2%	30.3%	100.0%
Fair	0	0	0	21	40	61
	0.0%	0.0%	0.0%	34.4%	65.6%	100.0%
Good	0	0	0	0	41	41
	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
Very good	0	0	1	1	25	27
	0.0%	0.0%	3.7%	3.7%	92.6%	100.0%
Excellent	0	0	0	0	18	18
	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
Total	22	19	26	55	167	289
	7.6%	6.6%	9.0%	19.0%	57.8%	100.0%

How would you rate your understanding of the risk management process, procedures and tools in the context of your business? \* To what strength could risk management contribute towards enhancing the sustainability of your business? Crosstabulation

Table 4.30 clearly shows some evidence of ignorance and this is revealed in the respondents with "poor" understanding of risk management processes, procedures and tools. Barely above 50% of these respondents, in particular, 53.5% of them perceived that their level of understanding was poor and that risk management had a "great" or "very great" impact on their business sustainability while just a little above 99% of those who said that their understanding was "fair" perceived that risk management had a great or very great impact on their business sustainability, and then 100% of those who perceived that they had a "good" understanding also perceived that risk management had a great or very great impact on their business sustainability, A little above 95% of those with "very good" understanding perceived that risk management had a great or very great impact on their business sustainability, A little above 95% of those with "very good" understanding perceived that risk management had a great impact on their business and lastly, 100% of those who claimed "excellent understanding" perceived that risk management had a great impact on the sustainability of their business.

In conclusion, the results have revealed an increasing relationship between the respondents' levels of understanding of risk management processes, procedures and tools and the extent

to which they believe that risk management has an impact on their business sustainability. A Chi-square test was, therefore, drawn up to check the effects of these levels of understanding of risk management processes, procedures and tools on business sustainability. The results are shown below.

	Chi-Square Tests		
			Asymptotic
	Value	Df	Significance (2-
	value		Sided)
Pearson Chi-Square	132.344 <sup>a</sup>	16	.000
Likelihood Ratio	167.701	16	.000
Linear-by-Linear Association	71.587	1	.000
McNemar-Bowker Test	248.000	9	.000
N of Valid Cases	289		

**Table 4.31:** The understanding of risk management and its contribution towards enhancing business

 sustainability among FMCG SME owner-managers

The Chi-square results in Table 4.31 confirm a statistically significant effect of understanding rating of the process, procedure and tools on business sustainability enhancement. The more the understanding of risk management process, procedure and tools, the more they comprehend the extent of risk management's impact on business sustainability enhancement. This implies that the limited inclusion of sustainability factors into risk management processes among FMCG SMEs is largely attributed to a lack of understanding of the risk management process and its effect on enhancing business sustainability. The results confirmed inadequate knowledge of risk management process as the statistically significant effect was affirmed with Chi-square test value:  $x^2(16, n = 289) = 132.344, p = 0.000$ , and Cramer's V = 0.338. The Cramer's V result in Table 4.32 below as recommended by Gravetter and Wallnau (2004) and Pallant (2011) confirms a very large effect of comprehensive knowledge of risk management process sustainability.

**Table 4.32:** The understanding of risk management and its contribution towards enhancing business

 sustainability among FMCG SME owner-managers

	Symmetric Measures					
			Asymptotic Standard	Approximate	Approximate	
		Value	Error <sup>a</sup>	T♭	Significance	
Nominal by	Phi	.677			.000	
Nominal	Cramer's V	.338			.000	

Interval by	Pearson's R	.499	.026	9.744	.000 <sup>c</sup>
Interval					
Ordinal by	Spearman	.603	.035	12.810	.000 <sup>c</sup>
Ordinal	Correlation				
N of Valid Cases		289			
			_		

a. Not assuming the null hypothesis.

b. Using the asymptotic standard error assuming the null hypothesis.

c. Based on normal approximation.



**Figure 4.7:** The understanding of risk management and its contribution towards enhancing business sustainability among FMCG SME owner-managers

The results in Figure 4.7 confirmed the effect of understanding rating of the process, procedure and tools on business sustainability enhancement. The more the understanding of risk management process, procedure and tools, the more they comprehend the extent of risk management's impact on business sustainability enhancement. This further supports the previous observation that the limited inclusion of sustainability factors into risk management processes among FMCG SMEs is largely attributed to a lack of understanding of the risk management process and its effect on enhancing business sustainability.

#### **4.5 CHAPTER SUMMARY**

The aim of this chapter was to analyse and discuss the findings of study conducted to investigate the risk management and sustainability issues of SMEs operating in the FMCG sector of the Cape Metropole. This was done in three stages. Thus, the findings from personal interviews were presented in the first stage. Then, the findings from the focus group

discussions were presented in the second stage. Lastly, the findings from the survey questionnaire were presented in the third stage. When the findings from the survey questionnaire were presented, considerable efforts were made to integrate the findings from the personal interviews and focus group discussions. That way, the qualitative data collection methods complemented the quantitative data collection method, thereby validating the study.

The subsequent chapter (chapter five) gives the summary and conclusion of the study, deliberates on implications of this study, its delimitation and limitations and gives suggestions for further studies.

#### **CHAPTER FIVE**

#### CONCLUSIONS AND RECOMMENDATIONS

#### **5.1 INTRODUCTION**

The data gathered from the research participants were presented, analysed, and discussed in the previous chapter. This chapter begins with a summary of the objectives of the thesis in Section 5.2. Thereafter, Section 5.3 provides a summary of how the sample was identified, how data was collected and analysed. This is followed by a summary of analysis and findings in Section 5.4. The chapter proceeds by discussing the results in relation to theoretical, managerial, and policy implications in Section 5.5. Section 5.6 gives a concise discussion on the delimitation and limitations of the study, while Section 5.7 gives suggestions for further studies. Lastly, Section 5.8 provides the concluding remarks.

#### **5.2 SUMMARY OF THE OBJECTIVES OF THE THESIS**

This study aimed at contributing to the sustainability of SMEs by means of risk management practices. The study was motivated by a lack of research in South Africa on risk management and sustainability of SMEs in the FMCG sector. This study attempted to bridge this theoretical gap by combining the traditional risk categories and sustainability categories, to present a more holistic risk management framework for SMEs. Also, to fill the gap evidenced by the scant research on risk management and sustainability, the eight secondary objectives were formulated (see Section 1.2).

#### 5.3 SUMMARY OF THE RESEARCH DESIGN AND METHODOLOGY

The study adopted a methodological triangulation, which involved the collection, and analysis of quantitative data followed by two qualitative methods. The survey questionnaire was found to be appropriate for investigating SME risk and risk management from the perspective of SME owner-managers in Stage One and the perspective of risk experts in Stage Two. The core attribute of this research design is that Stage One - quantitative method constitutes the main

methodology of this study which was then substantiated by the Stage Two which comprised two qualitative methods. Accordingly, three different collection methods were adopted to collect data from different stakeholders:

Stage One – Administering questionnaires to the SMEs in the Cape Metropole, South Africa.
 Stage Two – Conducting personal interviews with risk experts and focus group discussions comprising SME owner-manager.

In Stage One, a total of 320 questionnaires were distributed to SME owner-managers in the Cape Metropole, South Africa, through purposive sampling to represent the entire SME industry in South Africa. Out of the 320 questionnaires administered, 289 were returned, giving a response rate of 90.31%. The statistical analysis of the survey questionnaire data was performed through descriptive statistics, Chi-Square tests and robust Chi-square difference testing with mean using the SPSS software.

The data collection for Stage Two began only after completion of Stage One data analysis. In Stage Two, LinkedIn was used as a method for recruiting four risk experts for personal interviews. LinkedIn is the main platform for professional networking, which makes it the optimum choice for this study since the study seeks to reach people in a specific profession – risk experts. Also, a sample size of four risk experts was considered appropriate due to the lesser weighting of the qualitative stage. Still on Stage Two, two focus group discussions of six and eight participants were held with SME owner-managers. Participants for the focus group discussion were chosen from the same sample from which the survey questionnaire participants had been chosen. The results of the four personal interviews, and two focus group discussions were analysed using qualitative content analysis method, following three distinct analytical procedures explained in detail in Chapter four.

#### 5.4 SUMMARY OF ANALYSIS AND FINDINGS

In this sub-section, the key findings are summarised in the context of the research questions. Each research question is deliberated upon in turn.

#### 5.4.1 Major business risks that affect SMEs' performance

Regarding the first research question, "what are the major business risks that affect SMEs' performance?", the result showed that technological risks have minor effects on FMCG SMEs' performance while financial risks (on the average) have a moderate effect. Among major financial effects identified were theft of cash by employees and cash shortage.

Operational risks averagely have moderate effects on FMCG SMEs' performance. Among the major effects identified by more than 60% were theft of trading stock, employees' errors involving overpaying/underpaying customers, and systems and device failures. Moreover, compliance risks have moderate effects, which included both heavy fines and withdrawal of license.

Strategic risks have major effects, and more than 50% of the respondents experienced major effects on reputational damage, employees' disputes, and administration errors. Also, environmental risks have major effects which included pollution and high municipal cost, hence revealing the true Cape Metropole scenario, where the environmental risk affected the sustainability of SMEs. The reason is not farfetched: Cape Town is an extremely water-stressed area with more likelihood of drought and flood. The city just survived day zero couples of years ago.

#### 5.4.2 Risk management practices deployed by South African SME owner-managers

Concerning the second research question, "what are the current risk management practices deployed by South African SME owner-managers in their businesses?", the results confirmed that customer complaints, lessons learned from other businesses, and previous experience took the lead regarding risk identification. Other tools such as expert judgement, focus group, brainstorming, documents review, financial statements, and opinions of experts were never used by more than 60% of FMCG SMEs operating in the Cape Metropole.

Severity rating based on experience took the lead among risk evaluation tools and was followed closely by probability rating based on experience. The result implied that out of seven risk evaluation tools identified in the literature, only two were nearly always used by FMCG SMEs, thus revealing absence of comprehensive evaluation of identified risks.

Risk avoidance took the lead as the form of tool used to manage identified risks. More than 90% of the FMCG SME owner-managers had once used risk avoidance. The management of identified risks was not complete without effective monitoring of the identified risks, considering that dynamics of risk is a very critical issue for SMEs as risk may metamorphosize into a complex situation that shuts down more than 75% of SMEs in their first five years.

The results also showed that performance measurement took the lead as the form of tools or activities used to monitor risks identified in FMCG SMEs. More than 63% of the respondents relied on this tool to monitor their identified risks, while the other tools were majorly never used.

Furthermore, the importance of other risk management practices adopted by FMCG SMEs cannot be over-emphasized, with the result showing that out of 13 major elements of risk

management identified by the researchers, only three were mostly present among the FMCG SMEs in Cape Metropole. Specifically, 67.1% of these businesses actively identified, categorised, prioritised and documented risks before the risks were treated. And 57.4% of them regularly monitored the reported and updated risk management process. This was followed by 55.4% that incorporated risk management process into their operating process and system design. The Chi-square results confirmed a statistically significant difference in deployment levels of the thirteen identified various risk management elements present in FMCG SMEs operating in the Cape Metropole. This implied limited adoption of elements of the risk management process by FMCG SMEs. The results suggested that there existed inadequate risk management practices in the operational system of the FMCG SMEs, as more than 70% did neither develop nor adopt/implement a risk management framework, an effective mechanism of integral controls, a risk response strategy, or other employee development programs and continuing education. More than 80% did not have an existing risk management plan nor set risk appetite. More than 83% did not involve all staff levels in the risk management process (lack of cooperate governance in risk management). More than 86% said 'No' to the system of budgeting and cost control implemented to reduce the risk of continued unfavourable cost variances and 'No' to contingency fund set aside for responding to identified risks. Finally, close to 90% did not have a developed or implement credit risk policy. This is why 75% of SMEs fail in the first five years of existence. It implied that policy direction should be towards a comprehensive review of elements of risk management present among FMCG SMEs.

Based on the aforesaid results, one can conclude that most SME owner-managers do not formally identify, evaluate, manage, and monitor risks, they depend on a combination of experience and intuition. In addition, it is fair to conclude that a majority of SME owner-managers tend to lack the crucial elements of a useful risk management tool kit as dictated by best practice.

# 5.4.3 Relationships between SME owner-managers' characteristics and risk management practices

To answer the third research question, "what are the relationship between SME ownermanagers' characteristics and risk management practices?", the relationship between ownermanagers' characteristics and risk management was tested, using the Chi-square and Crammer's V to confirm the degree of the association of the effect of manager-owners' characteristics on risk management practices. This is not counter-intuitive as the positions occupied by the respondents in the businesses had a significant effect on risk management practices adopted. The reasons for this is not farfetched as the enterprises only employed skilled managers and these were more knowledgeable in risk management than the owners and than those functioning as both managers and owners.

Also, the result revealed a large effect of experience in current position on the effectiveness of risk management practices, because as the experience grew, the effectiveness in risk management practices also increased.

Furthermore, the results revealed a strong effect of qualification on the effectiveness of risk management practices adopted, because as the higher the qualification, the higher the level of risk management understanding and its effectiveness.

Summarily, the result confirmed that there was a strong and significant association between SME owner-managers' characteristics and risk management practices. Therefore, it is fair to conclude that SME owner-managers' characteristics such as their positions, experience and highest qualification are major determinants of risk management practices adopted by the FMCG SMEs operating in the Cape Metropole, thus establishing a strong implication for their sustainability.

#### 5.4.4 Obstacles to effective risk management within FMCG SMEs

To answer the fourth research question, "what are the potential obstacles to the successful implementation of effective risk management processes by South African SME owner-managers?", seven identified barriers were mentioned as informed by the literature with allowance to add others suggested by the respondents. All the barriers were the potential obstacles to the effective management of risks by the FMCG SMEs, as more than 70% of owner-managers agreed on the relevance of all the obstacles, which included risk management knowledge, lack of financial resources, cost exceeding benefits of risk management, lack of holistic risk management model relevant for SMEs, difficulty in measuring the performance of risk management model, and insufficient record keeping, among others. This implied that policy direction to address these were imperative for FMCG SMEs' sustainability.

#### 5.4.5 Critical factors affecting the sustainability of FMCG SMEs

Concerning the fifth research question, "what are the critical factors affecting the sustainability of FMCG SMEs?", the study found that the sustainability of FMCG SMEs is affected by all three components of sustainability, namely social, environmental and economic factors. It, however, seems that the environmental component has the largest effect on the sustainability of FMCG SMEs, and more specifically:

- Packaging waste and food residues (76.3% of the respondents indicated it has a major effect)
- Water usage (58.5% of the respondents indicated it has a major effect)
- Energy usage (59.4% of the respondents indicated it has a major effect)

The social component has the second largest effect on the sustainability of FMCG SMEs, and more specifically:

- Customers (74.0% of the respondents indicated it has a major effect)
- Suppliers (55.7% of the respondents indicated it has a major effect)

The economic component has the third largest effect on the sustainability of FMCG SMEs, and more specifically:

- Level of inflation (63.2% of the respondents indicated it has a major effect)
- Financial strength (63.2% of the respondents indicated it has a major effect)
- Changes in interest rates do not seem to have such a major effect (8.0% of the respondents indicated it has a major effect)

### 5.4.6 Risks posed to FMCG SMEs by the critical factors of sustainability

Concerning the sixth research question, "what risks are presented by the critical factors of sustainability in FMCG SMEs?", the analysis of results revealed that all the components of sustainability, namely social, environmental, and economic factors pose several risks to FMCG SMEs. The analysis, however, shows that the environmental component/factor of sustainability poses the largest risk on the sustainability of FMCG SMEs, and more specifically:

- Pollution (75.4% of the respondents strongly agree)
- High municipal cost (57.6% of the respondents strongly agree)
- Violating water restrictions (59.7% of the respondents strongly agree)

The social component/factor of sustainability poses the second largest risk on the sustainability of FMCG SMEs, and more specifically:

- Loss of customers (74.0% of the respondents strongly agree)
- Loss of key suppliers (57.4% of the respondents strongly agree)

The economic component/factor of sustainability poses the third largest risk on the sustainability of FMCG SMEs, and more specifically:

• Decrease in sales and profit volumes (64.0% of the respondents strongly agree)

### 5.4.7 The extent to which risk processes of FMCG SMEs incorporate robust analysis of sustainability factors

With regards the seventh research question, "To what extent do risk processes of FMCG SMEs incorporate robust analysis of sustainability factors?", the analysis of results revealed that more than 80% of the respondents never incorporate robust analysis of sustainability factors into their risk management processes. This suggest that FMCG SME owners and managers are taking no steps to incorporate critical components of sustainability in their risk management process and thereby, exposing the sustainability of their businesses at risk.

### 5.4.8 Understanding of risk management and its contribution towards enhancing business sustainability among FMCG SME owner-managers

In relation to the eighth research question, "What is the effect of understanding risk management process, procedure and tools on business sustainability?", the results have revealed an increasing relationship between their levels of understanding of risk management processes, procedures and tools and the extent to which they believe that risk management has an impact on their business sustainability. The more the understanding of risk management process, procedure and tools, the more they comprehend the extent of risk management's impact on business sustainability enhancement. This implies that the limited inclusion of sustainability factors into risk management processes among FMCG SMEs, revealed by the previous research question findings, is largely attributed to a lack of understanding of the risk management process and its contribution towards enhancing business sustainability. This pose a great threat to FMCG SMEs' sustainability and raised critical issues for policy framework. The policy direction should be to increase Knowledge, Attitude and Practices (KAP) of owners-managers in FMCG SMEs about process, procedure, tools of risk management process and its impact on business sustainability enhancement effort.

#### 5.5 RESEARCH IMPLICATIONS

In this section, the results are discussed in relation to theoretical, managerial, and policy implications

#### 5.5.1 Theoretical implications

The central theoretical proposition of this study is that sustainability dimensions can be seen as breeding grounds for risks, which need to be incorporated into the risk management process. Drawing on risk management theory that view risks as a value-creating opportunity or potential profit (Darcy & Brogan, 2001), this study argues that by designing and implementing appropriate risk treatment strategies, business sustainability can be improved, and the negative consequences of the sustainability-related risks can be restrained. The empirical results of this study indicate that risk management is a tool that can be used to enhance the sustainability of the business. Previous studies have proved that a more holistic assessment of risks considers sustainability dimensions instead of only focusing on the traditional aspect of risks (Pojasek, 2011:90), something that can also be drawn from this study.

Furthermore, this is the first study to investigate risk management and sustainability of SMEs operating in the FMCG sector of the Cape Metropole. This study, therefore, contributes to the literature by uniquely investigating risk management and sustainability in a crucial but neglected sector of the Cape Metropole. In addition, this study uniquely adopts agency theory, RBV theory and upper echelons theory to interpret the results, which provides a better insight into the risk management practices, unlike the previous South African studies on the same topic.

#### 5.5.2 Managerial implications

By taking into account sustainability-related risks, the results of this empirical study have strong implications for developing sustainable business practices. The study highlights that the bulk of the most significant sustainability-related risks accrue from the business daily activities, process or products that it sells. In their efforts to attain business sustainability, the priority of sustainability and risk managers would therefore be to identify sustainability-related risks through risk identification tools and techniques, and treat them appropriately.

Furthermore, this study increases understanding of the potential risks posed to FMCG SMEs by the components of sustainability, and this creates an opportunity for risk managers to consider emerging risk areas that might otherwise be missed by existing risk management tools. In practice, this study suggests that the environmental aspect of sustainability may cause the business to experience higher costs for energy and water, and face extreme water restrictions due to climate changes. Then for the economic aspect, circumstances like inflation pose significant loss for any business due to increase in input costs like electricity. Lastly, for the social aspect, if the business doesn't properly manage its actions that affect key stakeholders such as customers, suppliers and the community around, it is likely to be faced with negative publicity. Based on this understanding, risk managers should capture sustainability factors into their risk management process. By so doing, sustainability issues will be dealt with in the risk mitigation stage. Ultimately, the management will achieve cost reduction while also contributing to the SDGs through reduced energy consumption, improving hygiene, sustainable packaging, and effective water risk management and stewardship.

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Prior studies by Finnman (2013), Pojasek (2011) revealed that sustainability and risk management have much in common and both can be practically applied in the assessment and evaluation of business risks. Similarly, the results of the current study indicate that if sustainability-related risks are proactively identified and monitored, risk management can make a significant contribution to the achievement of sustainability. Based on these findings, sustainability and risk managers have a critical role to play in driving the sustainability of their businesses through an integrated approach. These teams therefore need to coordinate more with each other to enhance the sustainability of their businesses.

Lastly, the findings of the current study appear to indicate the significance of both intangible and tangible resources in positively impacting the effectiveness of risk management within FMCG SMEs. This leads the present study to conclude that owner-managers must pay particular attention to their intangible and tangible resource structure, which will impact the positive response towards superior performance and competitive advantage by focusing more on coalescing resources that lead to effective risk management.

#### 5.5.3 Policy implications

The findings of this study could be of great importance to the Department of Small Business Development, which provides financial and non-financial support services aimed at creating an enabling environment for SMEs to flourish. Drawing upon the RBV, the results of the current study have revealed that effective risk management is rooted in intangible (e.g. knowledge) and tangible (e.g. raised financial capital) resource structure. This insight may be used to inform future attempts of the Department of Small Business Development when designing interventions intended to boost the survival rate of the SMEs.

Regarding, intangible resources like knowledge, the Department of Small Business Development, in collaboration with universities, could offer short courses or workshops based on risk management, to help SME owner-managers understand risks faced by their businesses and how they can effectively manage such risks.

Concerning, tangible resources like raised financial capital, the findings of this study also revealed that many of the SMEs are averse to borrow from commercial banks because of stringent lending requirements. As a result, SMEs often have meagre financial resources to invest in risk management activities. As such, the Department of Small Business Development, in collaboration with commercial banks may consider revising the current credit policies accordingly, to match with the individual conditions of SMEs, and not solely evaluate the creditworthiness of these firms on the basis of credit history or collateral security. They may

consider placing more weight on other factors like the growth potential of the enterprise or feasibility of the enterprise's future business plan.

### 5.6 LIMITATIONS OF THE STUDY

This section gives a concise discussion on the delimitation and limitations of the study.

#### 5.6.1 Delimitations

According to Mitchell and Jolley (2010), delimitations are boundaries that a researcher imposes to focus the scope of the study. This study's focus, therefore, is on contributing to the sustainability of SMEs by means of risk management practices. It also focuses on providing a framework with the potential to improve risk and sustainability management and help reduce FMCG SME failure rate. This study did not include other provinces in South Africa, as the data collection was confined to the Cape Metropolitan area only.

#### 5.6.2 Limitations

Simon (2011) defined limitations as potential weaknesses that cannot be reasonably dismissed and if not stated, can influence the interpretation of the results in a study. Furthermore, Simon (2011) believed that limitations are beyond the control of a researcher given the statistical model constraints, limited funding and or other limiting factors. This was complemented by Simon and Goes (2013) when they stated that the researcher cannot always solve limitations and it affects virtually all research projects. Similarly, an array of limitations exists in this study despite the proposed contributions highlighted in the preceding section. The first limitation pertains to participants, followed by the time limit, then the sampling method, then the geographic area, and finally, using LinkedIn.

#### 5.6.2.1 Participants

Only the owners and managers of SMEs in the FMCG sector operating in the Cape Metropole were invited to participate in this study. These might not be the only decision-makers in this sector who are well-informed about the sustainability and risk management.

#### 5.6.2.2 Time limit

Because of the time limit, this study was conducted on a sample size of 320 owners and or managers of FCMG SMEs. Ideally, the study should have involved more research participants in different areas of South Africa to generalise the results for all the SMEs in South Africa. Similar sample sizes, however, were successfully used in earlier studies (refer to Section 3.5), which provides some form of justification for using this sample size in this study.

#### 5.6.2.3 Sampling method

Lack of a complete list of South African FMCG SMEs existing in the Cape Metropolitan area renders using probability sampling methods impossible, which would have given all elements of the target population equal chances of being selected for the survey. Consequently, the researcher had to resort to a non-probability sampling method, specifically purposive and snowball sampling methods. As such, not all the FMCG SMEs existing in the Cape Metropolitan area had equal chances of being selected for this study. Purposive sampling method, however, was successfully used in previous studies (refer to Section 3.5), which provides some form of justification for using this sampling method as the main method.

#### 5.6.2.4 Geographic area

Because of limited funding, this study was conducted on FMCG SMEs existing in the Cape Metropolitan area only, since this area is close to the researcher's residence. The South African Business Coalition on HIV and AIDS (SABCOHA) (2014:14), however, indicates that

the Western Cape significantly contributes to South Africa's GDP, approximately at 14.5%, which justifies the selection of this area for this study.

#### 5.6.2.5 Using LinkedIn

This study used LinkedIn as a method for recruiting participants for personal interviews. Although the researcher vetted the credentials of the potential participants by going through their LinkedIn profiles, there is a possibility of misrepresentation. LinkedIn, however, is the main platform for professional networking, which makes it the optimum choice for this study since the study seeks to reach people in a particular profession, i.e. risk experts.

#### **5.7 SUGGESTIONS FOR FURTHER STUDIES**

The above-mentioned limitations of this study pave the way for suggestions for further studies. Thus, only FMCG SME owners and managers were viewed as decision-makers of FMCG SMEs in the current study. There might be others who could have been involved. Thus, further studies may incorporate other individuals who are involved in the decision-making processes of FMCG SMEs.

This study only investigated risk management and sustainability of FMCG SMEs operating in the Cape Metropole, future studies may investigate risk management and sustainability of FMCG SMEs operating in other Metropoles or even the risk management and sustainability of large FMCG enterprises.

Furthermore, the results of the current study were based on a sample of 320 FMCG SMEs and four risk experts. The future studies must incorporate a larger sample size for both the survey of SME owner-managers and personal interviews with risk experts, to generate substantial data and for better generalisation of the findings. It is further suggested that both rural and urban-based FMCG SMEs be involved, to overcome the provincial imbalance of the current study. Thus, another fruitful avenue for future studies could be a comparative study between South African FMCG SMEs in urban and rural areas. The larger and diverse structure of the sample size is likely to accomplish more in-depth data regarding risk management and sustainability of FMCG SMEs in South Africa.

FMCG SMEs exist in various forms which may include caterers, retail businesses, wholesale shops, café businesses, pharmaceutical stores, liquor stores, convenience shops etc. As such, there could be a strong effect of differences in business type on forms of risks affecting FMCG SMEs. This implies that a blanket recommendation on the risk associated with the sustainability of FMCG SMEs would not be enough for policy direction on mitigating strategies. Rather, a close study of how different risk forms affecting the sustainability of different types

of FMCG SMEs is required. Thus, another research avenue could examine the relationships between different types of FMCG SMEs and forms of risk that affect the business.

#### **5.8 CONCLUDING REMARKS**

High failure rate of SMEs and their vulnerability to risks have rendered risk management and sustainability very relevant areas of study. Against this background, the research was derived from the view that the sustainability of SMEs is adversely influenced by the accumulation of risks, which stem from a lack of effective risk management practices. Despite this, there is scant research on SMEs' sustainability and particularly their ability to mitigate risks. In an attempt to fill this knowledge gap, this study investigated risk management and sustainability of FMCG SMEs in the Cape Metropolitan Area.

The empirical results revealed that risk sources are no longer limited to traditional sources, but are now expanding to sustainability dimensions. The results further revealed that the FMCG SMEs have risk management mechanisms in place, but the tools are too simplistic and very informal; hence, the reason for SMEs constantly showing poor results regarding their income and sustainability levels. In addition, it was noted major that SME owner-managers tend to lack the crucial elements of a useful risk management tool kit as dictated by best practice. Aligned to this was the lack of budgetary control and contingency fund account in SMEs; lack of risk knowledge and so forth. As such, this study proposes a practical framework for holistic risk management and sustainability that is aligned with the needs of FMCG SMEs. The framework (Chapter six) presented in this study was informed by the theoretical framework, empirical results and best practice as documented in the literature. Besides closing the knowledge gap, the framework may serve as a practical risk management and sustainability toolkit for use by SMEs. This answered the last research question, "How can risk processes of SMEs incorporate robust analysis of sustainability issues?", and concluded the study.

#### CHAPTER SIX

### FRAMEWORK FOR HOLISTIC RISK MANAGEMENT AND SUSTAINABILITY OF FAST MOVING CONSUMER GOODS SMES

#### **6.1 INTRODUCTION**

When the discussion of the agency theory in Section 2.2.1, and the study findings in Tables 4.3 – 8 and 4.28 are coalesced, it can be seen that FMCG SMEs face an array of risks in their operations. These risks are related to social, environmental, operational, economic, strategic, and agency risk factors. There is, however, currently no holistic risk management framework specifically addressing SME social, environmental, and agency risk factors. The traditional risk management approaches, including ERM, are inherently internally focused, as they only look at operational, compliance, and strategic factors (Reuvid, 2010:7). Based on this, lay the need to develop a framework for holistic risk management and sustainability proposed in this chapter, to address all key risk areas in FMCG SMEs. This framework captures key risk areas including social, environmental, and agency risk factors into the risk assessment of FMCG SMEs, thus, looking beyond compliance, strategic, and operational factors. Furthermore, the framework illustrates steps that FMCG SMEs can follow in their journey toward implementing a holistic risk assessment approach.

The proposed framework for holistic risk management and sustainability of FMCG SMEs comprises three interconnected phases, as shown in Figure 6.1. The three phases are grounded on the theoretical framework underpinning the study, the point of view of SME owner-managers and risk experts (study findings), and best practice as document in the literature. These aspects were utilised as a reference point and shaped the foundation for the framework.

A FRAMEWORK FOR HC	LISTIC	RISK MANAGEMENT AND SU	JSTAIN	ABILITY OF FMCG SMEs	
PHASE 1	₹	PHASE 2	₹	PHASE 3	
KNOWLEDGE MAP OF RISK SOURCES WITHIN FMCG SMEs		KNOWLEDGE MAP OF CRITICAL ELEMENTS FOR MANAGING BUSINESS RISKS		THREE PILLARS FOR MANAGING THREE BROAD CATEGORIES RISKS WITHIN FMCG	



**Figure 6.1:** A Depiction of the Phases of a Framework for Holistic Risk Management and Sustainability of FMCG SMEs (**Source:** author's own)

#### 6.2 KNOWLEDGE MAP OF RISK SOURCES WITHIN FMCG SMEs

The initial phase of a framework for holistic risk management and sustainability of FMCG SMEs is termed the knowledge map of risk sources within FMCG SMEs. This phase was deemed necessary given that the topped-ranked barrier was a lack of risk knowledge (see Section 4.4.5) and, as such, the importance of understanding the risks relating to FMCG SMEs became apparent. The initial step, therefore, helps to build knowledge and the understanding of risks by outlining the risks that could impede on FMCG SMEs' performance and survival. Accordingly, in this step, the author sought to integrate the most recent literature sources discussed in Section 1.3, the agency theory discussed in Section 2.2.1, prior studies on categories of risks encountered by SMEs discussed in Section 2.3.1, prior studies on SMEs sustainability discussed in Section 2.3.4.1, knowledge views of risk experts discussed in Section 4.2, the results of the quantitative surveys on major business risks that affect SMEs' performance discussed in Section 4.4.2, the results of the quantitative surveys on risks posed to FMCG SMEs by sustainability factors discussed in Section 4.4.7. Through the integration of these different perspectives on risks, three broad categories of risks are identified that could inhibit FMCG SMEs from attaining their objectives. The three broad categories of risks are portrayed in the form of a map shown in Figure 6.2.





Figure 6.2: Knowledge Map of Risk Sources Within FMCG SMEs (Source: author's own)

A review of the literature and most of the empirical studies on categories of risks encountered by SMEs in Section 2.3.1 brings four common risk subcategories to the fore, namely strategic, operations, financial, and compliance. These common risk subcategories form the first broad risk category which is termed traditional risks. On the other hand, the most recent literature sources in Section 1.3 highlighted a number of eminent sustainability-related risks which emanate from the business activities and products that they sell. Similarly, findings from this study (see Section 4.4.7) show that risks in FMCG SMEs are no longer confined to traditional sources, but are now expanding to sustainability lens - social, economic and environmental areas. This led to the second broad risk category i.e. sustainability risks. However, one may argue that the economic, environmental and social performance of the business is likely to have financial impacts, legal impacts, operational impacts etc and as such, sustainability risks are part of the common risk categories such as financial risks, compliance risks, operational risks etc. While this could be true, it should be noted that past studies presented in Sections 1.3 and 2.3.4.1 show that SMEs are neglecting sustainability risks mainly because they are not aware of them. This context has triggered the need to unpack these emerging risks and present them separately, thereby, making them known. Also, by separating and clarifying such important categories, the knowledge map of risk sources proposed in this study aims at facilitating a balanced effort between managing traditional risks and emerging risks.

Furthermore, following the concept established by the agency theory and its proponents, the study has identified four main sources of agency risks in SMEs (see Section 2.2.1). This led to the third board risk category i.e. agency risks.

The unique attribute of the knowledge map of risk sources proposed in this study is that, it offers an expanded view of risks that is broader than the traditional perspective. In this case, the expanded view of risks includes social, economic, and environmental considerations as well as agency risks. By incorporating the three components of sustainability and the agency risk sources into the knowledge map of risk sources, this study presents holistic view of risk sources that include evolving risk areas that are of growing importance in today's rapidly changing global environment. This creates an opportunity for FMCG SMEs to consider emerging risk areas that might otherwise be missed by existing risk management tools. The following three sections detail the traditional categories of risks and an expanded view of risk categories (sustainability risks and agency risks).

#### 6.2.1 Traditional risks

Based on the literature review conducted in Section 2.3.1, and the survey results analysed in Section 4.2 and 4.4.2, traditional risks that SMEs face are subdivided into operational risk, strategic risk, financial risk, and compliance risk. The specific risks under the four main categories of traditional risks are collaborated in the next four tables.

Table 6.1: Examples of S	Specific Operational Risks	(Source: author's own)
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#### OPERATIONAL RISKS

Allied to failures in internal controls, information and technology, and people (employees) that might disrupt daily operations

	Internal controls
Risk description	Fraud and theft
Possible causes	<ul> <li>Ineffective internal control system for fraud and theft prevention that could include:</li> <li>Poor segregation of duties</li> <li>Ambiguous policies and procedures</li> <li>Inadequate supervision</li> </ul>
Possible impacts	<ul> <li>Increase in expenses</li> <li>Decrease in profit</li> </ul>
Possible solutions	<ul> <li>Implement effective internal control activities for fraud and theft prevention that could include:</li> <li>Segregation of duties</li> <li>Written policies and procedures</li> <li>Immediately fire employees involved in fraud</li> <li>Perform regular independent verification of the accuracy of transactions</li> <li>Regularly rotate employees</li> </ul>

	Information and Technology
Risk description	Hardware and software failure
Possible causes	<ul> <li>Lack of training on using information and technology devices such as computers</li> <li>Failure to install and update the anti-virus regularly</li> <li>Poor maintenance culture</li> <li>Failure to invest in modern technology</li> </ul>
Possible impacts	<ul> <li>Loss of data</li> <li>Business disruption</li> </ul>
Possible solutions	<ul> <li>Conduct in-house training regarding using information and technology devices such as computers</li> <li>Install and update the anti-virus regularly</li> <li>Have good maintenance culture, e.g. service computers regularly instead of only repairing them when they become malfunction</li> <li>Invest in modern technology</li> </ul>

	People (employees)				
Risk description	High employee turnover and high absenteeism				
Possible causes	<ul> <li>Job dissatisfaction</li> <li>Uncompetitive remuneration</li> </ul>				
Possible impacts	<ul> <li>Business disruption due to loss of key employees</li> <li>Delay in delivery of business objectives</li> </ul>				
Possible solutions	<ul> <li>Maintain trained and highly motivated employees by:</li> <li>Training (continuously providing knowledge and skills to workers)</li> <li>Rewarding employees (offering competitive compensation package and recognition of individual achievements)</li> </ul>				

Table 6.2: Examples of Specific Strategic Risks (Source: author's own)

#### STRATEGIC RISKS

Allied to how the FMCG SMEs are managed (governance) and how the people in general describe, remember, and relate to FMCG SMEs (reputation)

	Governance
Risk description	Employee disputes and conflicts, administrative errors, etc.
Possible causes	<ul> <li>Poor governance practices such as:</li> <li>Misdirected and ambiguous instructions from the superiors</li> <li>Dissemination of incomplete and inaccurate information to decision-makers</li> <li>Policies and procedures not clearly defined</li> </ul>
Possible impacts	<ul> <li>Low employee productivity</li> <li>Decrease in sales and profit</li> </ul>
Possible solutions	<ul> <li>Poor governance practices such as:</li> <li>Clearly communicate instructions to subordinates</li> <li>Disseminate complete and accurate information to decision-makers</li> <li>Policies and procedures that are written, simple, clear and accessible to all employees to execute their duties diligently</li> </ul>

	Reputation
Risk description	Bad publicity
Possible causes	<ul> <li>Lack of clear channels for client complaints</li> <li>Failure to establish trust, for example, by not keeping your word</li> <li>Less responsive to calls and emails from customers</li> </ul>
Possible impacts	<ul> <li>Losing potential customers and clients to competitors</li> <li>Sales decline</li> <li>Massive trading losses</li> </ul>
Possible solutions	<ul> <li>Creating clear channels for client complaints with effective response mechanisms</li> <li>Establish trust, for example, keep your word no matter what regarding rendering services to customers</li> <li>Keep your employees informed and educated</li> <li>Be responsive, for example, return all customer calls and answer emails from customers promptly</li> <li>Have reputation policies that create a framework for managing reputation risk continuously</li> </ul>

# Table 6.3: Examples of Specific Compliance Risks (Source: author's own) COMPLIANCE RISKS

Fails to	act accor	ding to	industry	lawe a	nd regul	ations
rais iu	allallu	ungio	muusuy	iaws a	inu regui	alions

Food Safety			
Risk description	Unsafe practices as well as unsafe foods: contaminants, microbes, pesticides, metals, etc.		
Possible causes	No attention is given to food safety standards and regulations		
Possible impacts	<ul><li>Legal penalties</li><li>Suspension of trade license</li></ul>		
Possible solution	Embed food safety standards and regulations into in-house training		

Workplace Health and Safety			
Risk description	Work-related sickness or injury		
Possible causes	No attention is given to the health, safety, and welfare of employees		
Possible impacts	Legal penalties		

Possible solution	Pay specific attention to the health, safety, and welfare of employees to		
	reduce work-related sickness or injury		
	Maintain a clean working environment		

### Table 6.4: Examples of Specific Financial Risks (Source: author's own)

EIN	1			DI	CL	10
– F II	<b>NAI</b>	NC	IAL	КІ	Sr	10

Allied to financial activities and transactions

	Cash management
Risk description	The risk that an entity cannot settle its debts promptly and cost-effectively (liquidity risk)
Possible causes	<ul> <li>Failure to project future cash requirements</li> <li>Failure to plan cash requirements based on worst-case scenarios to prevent liquidity issues</li> <li>Failure to set minimum and maximum cash levels</li> </ul>
Possible impacts	<ul><li>Credit score of the business drops</li><li>Over-indebtedness</li></ul>
Possible solutions	<ul> <li>Project future cash requirements</li> <li>Plan cash requirements based on worst-case scenarios to prevent liquidity issues</li> <li>Set minimum and maximum cash levels</li> <li>Develop a framework for systematically projecting cash flows arising from assets and liabilities</li> <li>Set a cash flow risk tolerance that is relevant to the business strategy.</li> </ul>
	Set a cash flow risk tolerance that is relevant to the business strategy

Credit transactions			
Risk description	The risk of selling to someone who will not be able to pay (credit risk)		
Possible causes	<ul> <li>Not asking for a surety before giving a credit facility</li> <li>Not confirming credit history with the Credit Bureau</li> <li>Non-existence of a credit policy that depicts the terms and conditions of all credit transactions</li> </ul>		
Possible impacts	<ul> <li>Massive customer defaults</li> <li>Decrease in operating profit</li> </ul>		
Possible solutions	<ul> <li>Ask for a surety or collateral before giving a credit facility</li> <li>Confirm credit history with the Credit Bureau</li> </ul>		

	<ul> <li>Have a credit policy which depicts terms and conditions of all credit transactions</li> </ul>				
	Accounts receivable management				
Risk description	Late payments from debtors, missed payment by debtors, etc.				
Possible causes	<ul> <li>Not performing age analysis regularly to identify late payments and make a follow up</li> <li>Non-existence of a collection policy for accounts receivable</li> </ul>				
Possible impacts	<ul> <li>Massive customer defaults</li> <li>High delinquency management costs</li> <li>Decrease in operating profit</li> </ul>				
Possible solutions	<ul> <li>Perform age analysis regularly to identify late payments and make a follow up</li> <li>Have a collection policy for accounts receivable</li> </ul>				

#### 6.2.2 Sustainability risk

From the literature review conducted in Section 2.3.4, this study defines sustainability risks as uncertainties arising from sustainability factors, namely, environmental, social, and economic factors. These factors lie outside FMCG SMEs and are beyond their control. As such, sustainability risks cannot be prevented, instead, FMCG SME owner-managers must focus on the identification and mitigation of such risks. Based on the literature review conducted in Sections 1.3 and 2.3.4.1, and the survey results analysed in Section 4.4.7, possible risks from sustainability dimensions include but not limited to economic factors (high input cost due to inflation, unexpected increase in finance cost due to fluctuating interest rates), environmental factors (pollution, unproductive use of energy, water scarcity, excessive or unnecessary packaging, product waste), and social factors (poor relations with stakeholders). Examples of specific risks under the three main categories of sustainability risks along with their possible solutions are collaborated in the next three tables.

 Table 6.5: Examples of Specific Environmental Risks (Source: author's own)

 ENVIRONMENTAL RISKS

 Allied to food packaging, water consumption, and energy efficiency

Packaging waste and food residues

Risk description	Pollution
Possible causes	Lack of recycling bins on the business premises
Possible impacts	<ul> <li>Adverse publicity</li> </ul>
	<ul> <li>Suspension of trade license</li> </ul>
Possible	Have recycling bins on the business premises
solutions	Use more recycling facilities especially flexible plastics such as plastic bags
	and shrink wraps
	Educate consumers about recycling, e.g. display messages as "please
	recycle" and "100 per cent recyclable" at checkout points

Energy usage			
Risk description	Excessive energy consumption		
Possible causes	<ul> <li>Negligence, e.g. leaving lights, ventilation fans, and other equipment on when not in use</li> </ul>		
	Poor lighting measures, e.g. using bulbs that use high energy		
	<ul> <li>Failure to identify areas where energy is being wasted</li> </ul>		
Possible impacts	High municipal cost		
	Downward spiral for profits		
Possible	Switch off lights, ventilation fans and other equipment when not in use		
solutions	Use energy saver bulbs		
	Perform regular audits to identify areas where energy is being wasted		

Water usage			
Risk description	Violating water restrictions, e.g. breach of level 6 B water restrictions		
Possible causes	Lack of knowledge on the legislative requirements		
	Poor water-conservation practices, e.g. not recycling water		
	Negligence, e.g. not fixing leaky faucets and leaving the tap running		
Possible impacts	<ul> <li>High municipal cost</li> </ul>		
	High fines, e.g. for breaching level 6 B water restrictions		
Possible	Create internal capacity on water and ensure water issues are embedded		
solutions	into employee and supplier training		
	<ul> <li>Work to understand and communicate water regulation</li> </ul>		
	Embed regulatory issues into in-house training		
	Fix leaky faucets the moment it is noticed		
	Implement water-conservation practices e.g. not recycling water		

Table 6.6: Examples of	of Specific Social Risks	(Source: author's own)
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#### SOCIAL RISKS

#### Allied to parties of FMCG SMEs such as customers, suppliers, etc

Customers			
Risk description	Poor relations with the customers		
Possible causes	<ul> <li>Uncaring employee attitudes</li> <li>Employee rudeness</li> <li>Poor reliability</li> </ul>		
Possible impacts	<ul> <li>Decrease in sales and profit</li> <li>Adverse publicity</li> <li>Loss of customers</li> </ul>		
Possible solutions	<ul> <li>Creating clear channels for client complaints with effective response mechanisms</li> <li>Establish trust, for example, keep your word no matter what in terms of rendering services to customers</li> <li>Provide in-house customer care training</li> <li>Be responsive, for example, return all customer calls and answer emails from customers promptly</li> </ul>		

Suppliers		
Risk description	Poor relations with the suppliers leading to loss of key suppliers	
Possible causes	<ul> <li>Poor practices for managing accounts payable, e.g. late payments to suppliers</li> </ul>	
Possible impacts	Loss of revenue and profits due to loss of key supplier	
Possible solution	<ul> <li>Implement good practices for managing accounts payable, e.g. make payments promptly</li> </ul>	

### Table 6.7: Examples of Specific Economic Risks (Source: author's own)

ECONOMIC RISKS Allied to interest rates, inflation, and foreign exchange rates

Interest rates	
Risk description	Interest rate risk
Possible causes	<ul> <li>Fluctuating interest rates</li> </ul>

	Escalating interest rates		
Possible impacts	Increase in finance charges, which ultimately depletes profit margins		
Possible solution	Have a reserve fund that can be used in case of emergency instead of borrowing		

Inflation		
Risk description	Customers buying less products	
Possible causes	<ul><li>Decrease in disposable income</li><li>Increase in prices</li></ul>	
Possible impacts	Decrease in sales and profit volumes	
Possible	Gradually increase the prices to prevent a sudden price hike	
solutions	<ul> <li>Shrink the package size while maintaining the same price. This is "stealth inflation" since most customers do not notice the quantity change, as they are more focused on price</li> </ul>	

Foreign exchange rates			
Risk description	Exchange rates		
Possible causes	<ul><li>Fluctuating interest rates</li><li>Escalating interest rates</li></ul>		
Possible impacts	Increase in finance charges which ultimately depletes profit margins		
Possible solution	Consider the appropriate strategy to minimise risk, e.g. currency hedging (an agreement to buy a currency at a specific rate in the future)		

#### 6.2.3 Agency risks

Following the concept established by the agency theory (see Section 2.2.1), the current study presents possible agency risks in SMEs. Each agency risk has its own core sources. Each possible solution also has its strengths and weaknesses. Therefore, in order to deal swiftly with a specific agency risk, risk owners have to analyse the causes of the risk and opt the optimum approach to deal with it. In other words, risk owners have to know what agency risks the SME is facing and why they occur. Table 6.8 outlines the possible approaches to deal with agency risks.

Table 6.8: Agency Risks (Source: author's own)

AGENCY RISKS				
Risk source	Risk description	Possible solution		
Conflict of objectives	A risk that a non-owner	Aligning the interests of non-		
	manager or non-family manager	owner managers with those of		
	(agent) will not act in the	the owners through incentive		
	interests of the owner (principle)	payments tied to the business		
		performance. This encourages		
		the non-owner managers to act		
		in value-added ways to owners.		
Information asymmetry	A risk that a non-owner	Accounts audit even in an		
	manager or non-family manager	informal setting		
	(agent) will conceal the financial			
	prospects and circumstances of			
	the enterprise from the owner			
	(principle) due to lack of publicly			
	existing detailed accounting			
	data			
Employment of close relatives	Close relatives may misinterpret	Implement good governance		
(family managers)	or even ignore business risks	and accountability. Governance		
	because of their safe family	which is mostly exercised by the		
	embedment.	owner (principal) who controls		
		the family manager (agent)		
		based on the enterprise's rules		
		and regulations.		
The desire of family welfare	Family members affected by the	Implement good governance		
leading to a generous behaviour	owner's kindness may exploit	and accountability.		
by the owner (principal) towards	that attitude, mainly when their			
family members (agents)	personal interests conflict with			
	the family's, creating costs as a			
	result of moral hazard.			

# 6.3 KNOWLEDGE MAP OF CRITICAL ELEMENTS FOR MANAGING BUSINESS RISKS WITHIN FMCG SMEs

For the risk management initiatives to provide strategic and operational value to enhance business performance, they must be sustained by certain critical elements that ensure their success (Aureli & Salvatori, 2013:23). However, the results discussed in Section 4.4.3.5 indicate that the incorporation of the essential aspects still lacks in practice, and most SMEs often tend to manage risks spontaneously and reactively (see Section 4.4.3.3). It is against this background that the author has proposed and recommended certain critical elements that are crucially important to manage risks within the FMCG SMEs successfully. The goal is to

create a knowledge base that offers a unifying frame in the form of a knowledge map shown in Figure 6.3. This may serve as a practical risk management toolkit for use by SMEs.



**Figure 6.3:** Knowledge Map of Critical elements for Managing risks in FMCG SMEs in South Africa (**Source**: author's own)

From the knowledge map in Figure 6.3, a successful risk management initiative is underpinned by a set of critical elements that are explained in the succeeding sections. It should be noted that these elements were drawn upon a combination of the RBV discussed in Section 2.2.2 and best practice as documented in the literature.

#### 6.3.1 Build capacity

Drawing upon the RBV, this study suggests that for a constant and efficient approach to risk management, SMEs should develop both tangible and intangible resources to manage business risks.

Regarding tangible resources, the findings in Section 4.4.5 revealed that a stringent risk management system requires sufficient tangible resources like financial resources. For instance, cash is required to hire risk experts to support the execution of effective risk management (Aureli & Salvatori, 2013:23). Accordingly, SMEs may plough back profits or obtain microloans from microfinance providers or even borrow from friends and relatives.

Furthermore, the findings of this study (see Section 4.4.5) revealed that efficient allocation of intangible resources is crucial to achieving good risk management performance. Intangible resources may include knowledge, skills education, and experience (Pal, Torstensson & Mattila, 2014). Therefore, employees at all levels of the business must have a chance to build competency through continuous learning and development initiatives. Building the risk capacity of employees is a continuous process. With continuous learning and development, a business can create risk awareness among its employees, which improves the understanding and management of risks across the business.

#### 6.3.2 Policies and procedures

As revealed in Table 4.13, close to 90% of the sampled SMEs did not have a developed or implemented risk policy like a credit risk policy. SME owners and managers are, therefore, recommended develop a risk policy that could be a statement denoting the commitment to risk management within a business. The objective is to communicate the commitment to risk management by the management, to assign authority and responsibilities as well as to emphasise collaboration of all levels in the business regarding risk management. Also, procedures should be in place that act as protocols for undertaking the risk assessments (El Arif & Hinti, 2014:60). Procedures are implemented to ensure that risk responses are performed effectively and consistently. Sound policies and procedures designed to manage risk are the basis of effective risk management (El Arif & Hinti, 2014:60). For policies and procedures to be effective, the following underlying factors, however, must be present (Campion, 2000:10, Van Greuning & Iqba, 2008:179):

- Written: Oral instructions lack consistency and is easily misunderstood.
- **Simple and clear**: Written instructions should be in simple English and could use flowcharts to show the flow of operations.
- Available: Ensure that the policies and procedures are made available to all employees.
- **Understood**: Instructions should be properly and clearly explained to all employees, for example, through training.
- **Relevant**: Revised policies should be timeously communicated to all employees and training for the new policy should be provided.
- **Implemented**: All employees should follow the policies and procedures as expected of them.

#### 6.3.3 Conducive environment

Drawing on the study conducted by Campion (2000:10), owners and managers must create a conducive environment by allowing employees to participate in the risk management process. Thus, managing risks should not only be a responsibility of owners and managers, all employees, including shop assistants, should work as a team in implementing and maintaining risk management practices. This could involve identifying risks and monitoring the internal and external working environment. If employees from all levels of the business are involved in identifying and managing risks, improvement to risk management will be enhanced through suggestions and observations made by employees in different levels or positions. Furthermore, owners and managers must create a conducive environment by stressing the benefits of risk management and focusing on searching for solutions to problems as opposed to blaming subordinates.

#### 6.3.4 Communication

With reference to the information and communication component of the Committee of Sponsoring Organisations of the Treadway Commission (COSO) ERM framework of 2004, communication is vital for disseminating information for making decisions regarding risk management. Thus, accurate, timeous, and up-to-date risk information must be disseminated to SME decision-makers for them to identify and manage risks before such risks significantly affect the business. Also, discussions on risks and strategies present opportunities for open dialogue within SMEs, regarding both what is working well and where extra resources can reduce risks or improve competency. Generally, people tend to forget something over time and in this case, a committed and continuous focus on communications the whole year helps to emphasise crucial risk management concepts that do not always come easy to SME employees who are occupied with other daily activities.

#### 6.3.5 Effective internal controls

As noted by Bruwer (2016), an effective system of internal controls is crucial for the sound functioning of risk management. Accordingly, SME owner-managers should design and implement effective internal control activities such as segregation of duties, isolation of responsibility, and access to controls. Also, SME owner-managers must take security measures to foster the safe safekeeping of assets and data, including storing cash in safes and creating back up files regularly.

#### 6.3.6 Risk management plan

Drawing on lessons learnt from a study by Marcelino-Sádaba, Pérez-Ezcurdia, Lazcano, and Villanueva (2014), SME owner-managers should have a risk management plan in place, which is a vital tool that documents the resources required to manage risk, the person responsible for assessing risks, criteria against which risks will be assessed, and how risks will be dealt with when they occur. The risk management plan is explained in greater depth in Section 6.4.1.

#### 6.3.7 Implant risk management into daily activities

Drawing upon the study by Likhang (2009:3), incorporating risk management into processes and systems design helps SMEs to track and evaluate risk response actions, and new risks can be quickly identified during the operating process and allow corrective action to be implemented timeously.

#### 6.3.8 Prioritise significant risks

The findings of the study by Bartlett (2004:101) revealed that risks are not of tantamount importance to business and as such, there is a need for SMEs to prioritise risks to determine significant risks that require management's close attention. Such a practice is key to effective risk management in that early treatment of risks requires less time and people, and allows corrective action to be implemented before severe damage to the business is caused.

#### 6.3.9 Continuous measurement and enhancement

Based on a study by Berwick (2007:22), SME owner-managers should regularly evaluate and measure their risk management plan to see if it is yielding positive results. Evaluating and measuring the risk management plan is enhanced by integrating the internal audit activities into the risk management process. The internal audit function should evaluate the risk management plan and helps assess its effectiveness in mitigating risk. The audit findings might
recommend how to enhance the effectiveness of the risk management plan. This allows essential adjustments to be made to the risk strategies to reduce the potential for risks.

# 6.3.10 Keep it simple

As pointed out by Ortiz and Nitzen (2006:20), a complicated system of managing risks is less useful and is likely to face resistance by management, hence, SME owner-managers need to develop a simple system that encourages managers to think and respond to risk timeously.

# 6.4 THE THREE PILLARS FOR MANAGING THREE BROAD CATEGORIES RISKS WITHIN FMCG SMEs

As revealed by Table 4.26 in Chapter four, a lack of holistic risk management framework relevant to the SMEs is one of the most significant obstacles to effective risk management within the SME sector. In turn, most SMEs resort to basic methods of identifying, assessing, treating, and monitoring risks (see Sections 4.4.3.1- 4 and 5.4.2). This further accentuates the need to propose a framework that articulates proper implementation of risk management practices within this sector. Against this background, the second phase of the framework for holistic risk management and sustainability of FMCG SMEs was formulated and termed "three pillars for managing three broad categories risks within FMCG SMEs". This phase shows coordinated activities which provide guidance on how to proactively respond to the three pillars for managing three broad categories of risks within FMCG SMEs.



Figure 6.4: Three Pillars for Managing Three Broad Categories of Risks Within FMCG SMEs (Source: author's own

The three pillars for managing three broad categories of risks within FMCG SMEs indicated in Figure 6.4 were drawn upon a combination of the agency theory discussed in Section 2.2.1, RBV theory discussed in Section 2.2.2, upper echelons theory discussed in Section 2.2.3, and best practice as documented in the literature.

## 6.4.1 Initiation stage

A study by Dubihlela and Ezeonwuka (2018) revealed that even the most carefully managed business can encounter unexpected problems. Employees fall sick or quit, the major supplier might go out of business, and even the government might produce new policies that could affect the business. When such risks occur in the business, it will be too late to do anything about it, hence, the need to have a risk management plan in place. However, the results in Table 4.13 indicate that more than 80% of the sampled FMCG SMEs did not have existing risk management plan, that is why this study strongly recommends a risk management plan in the initial step of managing the three broad categories of risks depicted in Figure 6.2. A risk management plan is, therefore, the key output of the initiation stage, which documents the resources required to manage risks, the person responsible for assessing risks, criteria against which risks will be assessed, and how risks will be dealt with when they occur. The proposed steps regarding the initiation stage are schematically depicted in Figure 6.5.



After coalescing a study by Smit (2012), agency theory discussed in Section 2.2.1, RBV theory discussed in Section 2.2.2, and upper echelons theory discussed in Section 2.2.3, it is proposed that SME owner-managers, the risk team or designated party undertake the following steps regarding the initiation stage:

- Define objectives: A risk is an uncertainty event that affects the achievement of business objectives. Risks, therefore, cannot entirely be identified if these objectives are not clearly defined. For example, a clearly defined business objective could be to increase sales from trading stock by R200 000 in the first quarter.
- Evaluate enterprise, sustainability and agency risk factors: An evaluation of traditional, sustainability and agency risk factors during the initiation phase assists in identifying the factors that could pose significant risks and, as such, would receive the greatest value from the risk assessment. Regarding traditional factors, consideration should be given to operating activities, financial management, strategic planning, human resources, and health and safety. Then, regarding sustainability factors, consideration should be given to the environmental, economic, and social aspects. Lastly, concerning agency risk factors, consideration should be given to conflict of objectives, information asymmetry, employment of close relatives etc. Not all factors need to be articulated at this stage; however, the major factors that might currently affect the business should be acknowledged. The knowledge map of risk sources discussed in phase one could be used to guide owner-managers when evaluating risk factors.
- **Define the risk criteria:** Define and document the criteria against which risk will be assessed. These criteria will be utilised in the execution stage during the risk evaluation. The risk criteria could include:
  - types of risks that might prevent the business from achieving its objectives (refer to the knowledge map of risk sources in Figure 6.2).
  - the risk measurement criteria, which can either be qualitative (high/medium/low) or quantitative (amount of bad debts, the value of fines, number of clients lost).
  - terms to be used such as effect or impact or consequence and probability or likelihood or frequency.
  - defining when the risk is important (risk materiality), e.g. when the associated loss is more than R5 000.
  - when is risk expected to happen, e.g. next month, next quarter, next year.
- Allocate resources: According to the RBV theory, resources are important drivers of performance, in the context of this study effective risk management. As such, SME owner-managers, the risk team or designated party should allocate the necessary resources to manage risks. The resources could include people and skills, software applications and data repositories, funds, and other resources for specific risk management activities. The risk management plan should also indicate how the risk management skills of SME owner-managers, the risk team or designated party will be developed and maintained.

• Select the risk owner: First, consider the source of the risk and then identify someone who is best placed to understand the risk and implement the selected responses. Drawing upon the concept established by the upper echelons theory and its proponents, this study regards risk owner characteristics as predictors of effective risk management in SMEs. So, when selecting a risk owner, consideration should be given to demographic attributes such as age, industry experience and education level. The selected risk owner should be added to the risk register. He/she is then expected to assess the assigned risk and regularly report its status to the management.

#### 6.4.2 Execution stage

In this stage, the plan from the previous stage will be put into action. Thus, the execution stage involves the steps SME owners and managers should follow in addressing business risks. Figure 6.6 depicts the ongoing nature of risk management and how it applies within FMCG SMEs. The processes in the execution stage are set out in a continuous cycle, as risk management is not a once-off activity (Young, 2006). Risk documentation is represented as a fundamental principle relevant to all stages of the execution stage (see Figure 6.6). Furthermore, this stage is deemed necessary since the results analysed in Sections 4.4.3.1 – 4 show that a majority of FMCG SMEs do not have formal processes to identify, evaluate, treat, and monitor risks; they rely on a combination of experience, instinct, and luck, and thus, exposing the sustainability of their businesses at risk.





# 6.4.2.1 Generate risks from agency risk factors, traditional risk factors and sustainability factors

This step involves generating a comprehensive list of risks that could cause a loss or disruption to the operations of the business. Drawing upon the studies by Pojasek (2011), and Smit (2012), the process of generating risks from various sources is proposed and schematically depicted in Figure 6.7.





**Figure 6.7:** The proposed Process of Generating Risks from Various Sources (**Source:** author's own)

From Figure 6.7, FMCG SME owners and managers should generate a comprehensive list of risks from agency risk factors, traditional factors and sustainability factors. Some recommended tools and techniques for generating risks include document review, checklist analysis, brainstorm, audits, and personal experience. All risks identified in this step should be documented on a risk register or risk worksheet (See Annexure F.1), along with their causes and effects on the business. Risks should be documented in a standard layout, to assist the risk team in staying focused on risks and their causes and impacts: Cause => Risk => Impact. Establishing the sources of risks by category is an alternative way of exploring risks. In this case, FMCG SME owners and managers can use the knowledge map of risk sources discussed in phase one as the basis for developing a risk breakdown structure. A risk breakdown structure arranges the risks that have been organised into categories by using a table or decision tree, with increasing levels of details to the right. An example of the risk breakdown structure is shown in Figure 6.8 and Figure 6.9.



Figure 6.8: An Example of the Sustainability Risk Breakdown Structure (Source: author's own)



# Figure 6.9: An Example of the Traditional Risk Breakdown Structure (Source: author's own)

## 6.4.2.2 Evaluate and prioritise agency risks, traditional risks and sustainability risks

The second step represents the core process of risk management, which entails risk evaluation and prioritisation. The objective of risk evaluation and prioritisation is to determine the frequency with which risk events will occur and how severe the consequences would be if they occur (Dubihlela & Ezeonwuka, 2018). By combining the studies by Smit (2012), Department of Environmental Affairs and Tourism (DEAT) (2006), and (Bartlett, 2004), the process of evaluating and prioritising risks is proposed and summarised in Figure 6.10.



Figure 6.10: The Process of Evaluating and Prioritising Risks (Source: author's own)

From Figure 6.10, risks are first evaluated based on the probability of occurrence and possible loss associated with it (impact) and documented on a risk register or risk worksheet (see Annexure F.1). Thus, the risk team should evaluate the probability of each risk occurring and allocate it a rating. For instance, a scale of 1 to 5 can be used where 1 = Very Low (VL), 2 = Low (L), 3 = Medium (M), 4 = High (H), and 5 = Very High (VH) (Smit, 2012). Reflect on the

records of such risks happening in the past when making a decision on the probability of occurrence. Table 6.9 shows an example of probability ratings.

Value	Probability level	Probability of occurrence			
5	Very High	Likely to occur several times in twelve months			
4	High	Likely to occur once in twelve months			
3	Medium	Could occur once in thirty-six months			
2	Low	Could occur once in sixty months			
1	Very Low	Could occur once in one hundred and twenty months			

 Table 6.9: Probability Table (Source: Smit, 2012)

On the other hand, evaluate the impact on the business if the risk occurs using the same scale as that of probability: 1 = Very Low (VL), 2 = Low (L), 3 = Medium (M), 4 = High (H), and 5 = Very High (VH) (Smit, 2012). Factors such as monetary loss to the business, time lost, and the severity of damage are all crucial in accurately evaluating the impact of each risk.

After all risks have been evaluated, the risk team will then prioritise the risk events by giving first preference to the most likely and the most expensive ones (Bartlett, 2004:101). This is achieved by determining the risk rating (probability rating × impact rating) (DEAT, 2006). The risk rating will then be utilised to prioritise the risks according to their importance. The product of this activity is a risk matrix (see Table 6.10). This is a graphical representation of the risk evaluation and prioritisation, depicting areas of low, medium, and high importance. The next step is to update the risk register by indicating the risk level as high or medium or low. This allows FMCG SMEs to direct their focus on risk treatment resources. Table 6.10 shows an example of a risk matrix.

Table 6.10: An Example of a Risk Matrix (probability × impact) (Source: DEAT, 2006)

IMPACT

		Very High	High	Medium	Low	Very Low
		(5)	(4)	(3)	(2)	(1)
PROBABILITY	Very High (5)	25 Stop activity	20 Stop activity	15 High priority	10 Proceed with care	5 Acceptable risk
	High (4)	20 Stop activity	16 Stop activity	12 High priority	8 Proceed with care	4 Acceptable risk
	Medium (3)	15 High priority	12 High priority	9 Proceed with care	6 Acceptable risk	3 Acceptable risk
	Low (2)	10 Proceed with care	8 Proceed with care	6 Acceptable risk	4 Acceptable risk	2 Acceptable risk
	Very Low (1)	5 Acceptable risk	4 Acceptable risk	3 Acceptable risk	2 Acceptable risk	1 Acceptable risk

Key:

COLOUR	RISK SCORE	RISK LEVEL	POSSIBLE ACTION		
	16 - 25	High	Stop activity associated with this risk		
	12 - 15	Warning	High priority remedial action, proceed with extreme caution, put in place emergency control measures etc.		
	8 - 10	Medium	Proceed with care and additional control is advised.		
	1 - 6	Warning	There are no imminent dangers and therefore accept the risk. However, risk reduction can also be opted particularly with regard to severity.		

# 6.4.2.3 Treat agency risks, traditional risks, and sustainability risks

This step entails planning how the FMCG SMEs will act on the risks to which they are exposed. Thus, the risk team should design responses for the risks in the risk register or risk worksheet (see Annexure F.2). These responses are the individual plan or plans that the risk team will put in place to reduce the probability and impact of each significant risk (Smit, 2012). This step was deemed desirable given that most of the sampled SME owner-managers' risk treatment approaches are limited to risk avoidance and tend to be ignorant of other worthwhile risk treatment options (see Section 4.4.3.3). In order to assist FMCG SMEs in this respect, the author of this thesis combined the studies by Smit (2012), New South Wales (NSW) Treasury. 2004, Bahamid and Doh (2017:5), Wang and Chou (2003), and proposed the following action planning and implementation steps:

**Step 1: Select the treatment option to be implemented:** Depending on the type of risk, the following alternatives are available:

- **Risk transfer or sharing:** Implies transferring or sharing risk with third parties, for instance, insurance.
- **Risk reduction:** Implies limiting the occurrence or severity of risks, for instance, by designing and implementing internal controls.

- Risk acceptance: Implies taking on the risk, for instance, because of cost-benefit analysis.
- Risk avoidance: Implies avoiding the risk event entirely, for instance, by not selling a product associated with a certain risk.

The risk team can use the risk impact and probability to plot the risks on a graph. This gives the risk team a quick and clear view of the priority that should be given to each risk. The risk team members can then decide what method and resources they will allocate to manage that specific risk. The basic form of the impact /probability graph is shown in Figure 6.11.



Figure 6.11: The basic form of the impact /probability graph (Source: NSW Treasury. 2004)

The four corners of the risk impact/probability graph in Figure 6.11 have the following characteristics:

- **High impact/high probability** Risks in the top right corner are of great significance when they occur. They require high priority remedial action and the risk owners must pay close attention to them. In some cases, the activity associated with such risks must be avoided.
- **High impact/low probability** Risks in the bottom right corner are of high significance when they occur, but they are very unlikely to take place. For these risks, measures such

as a contingency plan and reserves should be in place to reduce the impact they will have on the business when they occur.

- Low impact/high probability Risks in the top left corner are of moderate significance but they are likely to happen. As such, measures should be in place to manage them, e.g. taking out insurance.
- Low impact/low probability Risks in the bottom left corner causes no imminent dangers to the business and, therefore, can be accepted.

Step 2: Document the risk treatment option agreed: Indicate in the risk register the method to be used to treat each risk.

**Step 3: Assign an appropriate owner:** A person who will be responsible for monitoring and reporting on the progress of the action plan implementation.

**Step 4: Articulate a target resolution date:** In cases where a risk treatment has a long lead time, the development of temporary measures are deemed necessary. For instance, it is likely unacceptable for a residual risk to be rated "very high" and to have a risk treatment with a resolution timeframe of say two years.

**Step 5: Implementation of the action plan:** Involves the execution of the risk treatment technique agreed. Whichever action plan is implemented, it must commensurate with the level of risk the enterprise is willing to accept.

# 6.4.2.4 Monitor progress

Once a risk treatment technique has been implemented, the risk management process should be continuously monitored and reviewed due to the evolving nature of risks, business processes, and the environment in which the business operates (Berwick, 2007:22). Also, the risk management process should be monitored to ensure that it is accurately implemented and is effective both in design and operation (Smit, 2012).

The monitoring progress step was considered imperative seeing that a majority of the sampled FMCG SME owner-managers' risk monitoring tools are limited to performance measurement and tend to be less familiar with other valuable risk monitoring tools (see Section 4.4.3.4). Drawing upon the studies by Berwick (2007:22) and Project Management Institute (2016), an integrated view of monitoring progress is proposed and shown in Figure 6.12, to assist FMCG SMEs with a systematic risk monitoring toolkit.



Figure 6.12: The Proposed Monitoring Progress Step (Source: author's own)

As shown in Figure 6.12, to monitor progress, the risk owner should have a list of identified risks and a plan to treat the risks. Accordingly, the input items to progress the monitoring are the risk register and risk management plan. These items can help the risk owner verify if risk response plans are being implemented, if those implementations are yielding the preferred results, and if there are signs of emerging risks. Various tools and techniques are available to detect emerging risks and respond effectively to them. The following tools and techniques are proposed:

- Risk reassessment Risks should be continually reassessed as risk management progresses. For instance, a risk on the watchlist might become important enough that the risk owner might need to design a treatment plan for it. On the contrary, a risk could disappear and should then be marked as retired or removed from the main page of the risk register. For instance, a risk that certain products might not be delivered on time by the supplier could be retired the moment the products are delivered to the business.
- Status meetings The risk management should be put as an agenda item at business meetings. Keeping risk management on the business meeting agenda and discussing it with the risk team regularly helps make risk management more effective.
- **Risk audits** A risk audit is performed to analyse (1) sources of the identified risks, (2) the effectiveness of the risk treatment techniques, and (3) the effectiveness of the risk management processes.

After applying the tools and techniques, monitoring the progress requires updates to the risk register and risk management plan. Updates to the risk register and risk management plan include outcomes of risk reassessments, risk reviews, and risk audits. Then, two actions are proposed because of the monitoring progress: corrective actions and preventive actions. Preventive actions comprise proactive steps to ensure a possible risk identified during monitoring progress does not occur. This brings the risk management process into compliance with the risk management plan. On the other hand, corrective actions consist of emergency

plans and workaround plans if new risks have been identified. A workaround is a comeback to an adverse risk that has happened. A workaround is grounded on a hasty remedial solution and is not planned before the risk occurrence.

# 6.4.3 Measurement stage

Businesses commit significant resources towards managing risks, and as such, it is important to measure the performance and effectiveness of their risk management plans in achieving predefined objectives (Berwick, 2007:22). This stage was deemed necessary considering that a majority of the respondents indicated that difficulty of measuring the performance of risk management (59.4%) was a very relevant barrier to their effective risk management (see Section 4.4.5). Drawing from the studies by Berwick (2007:22), Smit (2012), and Project Management Institute (2016), actions that should be taken by SME owners and managers during the measurement stage are proposed and depicted in Figure 6.13.



Figure 6.13: The Proposed Actions for the Measurement Stage (Source: author's own)

As shown in Figure 6.13, SME owners and managers should take the following proposed actions during the measurement stage:

- Determine the measurement criteria for each objective defined in the risk plan, for example, the objective of increasing customer satisfaction can be measured with the number of customer complaints.
- Match the outcomes of the risk management plan with its pre-defined objectives. If it
  produces the desired results, then the plans put in place are effective at managing
  traditional, sustainability and agency risks. But if it fails to produce what is required, try to
  make possible changes in the action plan of the next cycle, to get the desired results.
- Develop Key Evaluation Questions (KEQs) to measure the complete traditional, sustainability and agency risk management process. KEQs are questions that the measurement stage is designed to answer. The following questions are proposed:
- Did the traditional, sustainability and agency risk management actions help the business to perform better during a specified time?
- Did the traditional, sustainability and agency risk management actions add value to the business during a specified time?
- Do the traditional, sustainability and agency risk management outcomes make you feel confident that the business is running on course?

Summarise and save the successes and failures of the plans put in place to manage traditional, sustainability and agency risks. This assists in guiding future risk assessment exercises and ensures that good practices are upheld by drawing on lessons learnt from previous exercises

# 6.5 CLARIFICATION OF THE FRAMEWORK FOR HOLISTIC RISK MANAGEMENT AND SUSTAINABILITY OF FMCG SMEs

Given the diverse nature of SMEs, the proposed framework was developed to mainly tackle the needs of specific enterprises in the SME sector. Thus, this framework outlines the processes involved in conducting a holistic risk assessment and has been designed to better assist FMCG SMEs to accomplish their objectives, and to contribute to the continuous enhancement of performance throughout the FMCG SME industry. Although this framework relates to FMCG SMEs, any SME, in any industry, that can adopt it will increase its ability to survive, adapt, and grow. Even large enterprises are not excluded from using the proposed framework; however, it is recommended that they adjust it given the complexity and magnitude of the risks that they face. The initial phase of the framework, namely, the knowledge map of risk sources within FMCG SMEs, provides several categories of risks identified for risk management purposes in FMCG SMEs based on the cited literature sources, survey results and agency theory. While the list does address key risks in FMCG SMEs, it does not claim to be exhaustive and is provided as an example only. SME owner-managers, therefore, should alter the list to reveal the specific risks hindering their enterprise objectives. Similarly, the third phase of the framework depicts the preferred criteria for measuring the successes and failures of the plans put in place to manage traditional, sustainability and agency risks. The right measurement criteria for one SME, however, might not be the right measurement criteria for another SME. As such, the proposed measurement criteria serve as a guide that can be modified as required by adding or deleting items.

The second pillar for managing traditional risks, sustainability risks and agency risk, namely, the execution stage, outlines a cyclical process in which one step seemingly leads to the next one, as depicted in Figure 6.6. In practice, however, activities in different steps could occur concurrently or might be switched and as such, the steps identified in Figure 6.6 serve as a guide to the activities that FMCG SMEs would typically carry out when conducting a holistic risk assessment.

# 6.6 BENEFITS OF IMPLEMENTING THE FRAMEWORK FOR HOLISTIC RISK MANAGEMENT AND SUSTAINABILITY OF FMCG SMEs

The proposed framework offers a wide range of benefits to FMCG SMEs. First, the framework captures components of sustainability into risk assessment, which serves as an assurance that all the risks and opportunities within and outside the business are adequately identified and analysed. It also assists the business to effectively manage both internal and external weaknesses and threats that might prevent it from achieving its objectives, as well as to recognise where opportunities exist and take advantage of them to help the business grow and develop.

As evidenced by the results analysed in Section 4.4.6, the social component of sustainability has a major effect on the sustainability of most SMEs in the FMCG sector and in this case, the customers play a big role. By, therefore, capturing the social component of sustainability into the risk assessment, the proposed framework assists FMCG SME management in identifying current relationships with clients and minimise their dissatisfaction. Also, poor customer service certainly poses risks such as a damaged reputation, loss of key customers, and a downward spiral for profits. So, by looking at relations with customers in tandem with risk

assessment, the proposed framework ensures that all the customer service-related risks are dealt with adequately and efficiently. Furthermore, the results in Section 4.4.7 revealed that a majority of FMCG SMEs are experiencing a loss of key suppliers (57.4% strongly agreed). So, capturing the social component of sustainability into the risk assessment, the proposed framework ensures that supplier-related risks are kept to the FMCG SMEs' acceptable risk level.

Every business should be aware of and adhere to relevant government laws and regulations such as environmental protection. In this case, the proposed framework assists the FMCG SME management to gain a clear understanding of the areas of compliance that must be managed and monitored, including the risks related with non-compliance and the measures that can be taken to avoid non-compliance (see Table 6.3).

When the results in Table 4.27 and 4.28 are coalesced, it becomes apparent that the economic component of sustainability includes factors like inflation and interest rate which adversely affect profits of SMEs in the FMCG sector. Given this, the proposed framework helps FMCG SMEs to proactively identify and monitor economic factors to foster robust economic risk management by incorporating the economic component of sustainability into the risk management process. This further helps FMCG SME risk decision-makers to identify and address economic risks facing their enterprises and in so doing, increase the chances of successfully achieving their profit targets.

The findings of the current study (see Section 4.4.6 and 4.4.7) show that the environmental component of sustainability includes factors such as packaging waste and food residues, water usage, and energy use which exposes FMCG SMEs to pollution, violation of water restrictions, and high municipal cost. The proposed framework, therefore, helps FMCG SME owners and managers understand the environmental issues related to the three most significant environmental factors affecting their gross profit and on which they could take immediate action. These factors embrace water, energy, and packaging. For each factor, the proposed framework identifies key risks and provides steps for managing related environmental risks. In addition, the proposed framework provides useful insight into environmental risks FMCG SMEs face and good practice solutions to inspire FMCG SME owners and managers to overcome these threats.

Finally, the framework consists of three phases, which means there is plenty of opportunity for enterprises to improve their risk management systems to enhance the ability of the business to survive and grow. The goal is to identify and mitigate not only traditional risks but also sustainability risks and agency risk. This is a shift from a traditional assessment of risks to a more holistic assessment of risks.

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## ANNEXURE A: BUSINESS ETHICS LETTERS



## A.1 - ETHICAL CONSIDERATIONS

Keizersgracht and Tennant Street P. O. Box 652 Zonnebloem, Cape Town

Tel: (+27) 21 460 3911

20 August 2018

**Dear Participant** 

I am currently pursuing a course of studies under the supervision of Prof. RK Tengeh and Prof. J Dubihlela leading to a Doctor of Commerce Degree in Internal Auditing from the Cape Peninsula University of Technology. This study is based on the evaluation of current risk management practices and their adequacy to address traditional risks sustainability issues of Fast-Moving Consumer Goods SMEs in the Cape Metropole. I would like to invite you to be a part of this study. Below is some information to assist you in making an informed decision.

**Purpose and Procedure:** This research seeks to determine the effectiveness of the current risk management practices deployed by South African SME owner-managers as well as their adequacy to address business sustainability issues. Furthermore, the study will demonstrate the link between risk management and sustainability, in order to come to a thorough understanding of the implications of ineffective risk management on the overall sustainability of SMEs.

In order to give your opinion and contribution to this study, you are requested to complete a questionnaire with questions based on general information, risk management practices and sustainability. The questionnaire comprises closed- and open-ended questions. Closed-ended questions have possible answers provided and you will respond by selecting your most
appropriate answer. Open-ended questions do not have possible answers given and you will complete such questions by writing your opinions in the space provided.

When you have read and understood and signs the Consent Form, you will be given a questionnaire to complete. The completion of the questionnaire is estimated to take approximately less than 20minutes.

**Confidentiality:** The data collected from this survey is intended for purely academic purpose. Please note that, gathered information will not be made accessible to anyone who is not

directly involved in this study. The results of the survey will be reported in an anonymous manner in order to protect your identities.

**Right to Withdraw:** Please note that your permission to take part in this research is entirely voluntary. You have the right to withdraw from this study at any time without having to give a reason and without any penalty.

Please do not hesitate to contact the researchers if you have any further questions and/ or if you would like further information. You can contact the researchers using the following contact details:

Student Researcher: Oscar Chakabva Telephone: 0623165689 Email: <u>chakabvao@gmail.com</u> Supervisor: Prof. RK Tengeh Telephone: +2721 460 3450 Email: tengehr@cput.ac.za

Supervisor: Prof. J Dubihlela Telephone: +2721 460 3266 Email: <u>dubihlelaj@cput.ac.za</u>

### A.2 - LETTER OF CONSENT



I confirm that I have read and understood the information about this study being conducted by Oscar Chakabva, a Doctoral student under the supervision of Prof. RK Tengeh and Prof. J Dubihlela at Cape Peninsula University of Technology in the Department of Internal Auditing. I was free to ask questions before making my decision on whether or not to participate and all questions were answered to my satisfaction. If I have any further questions about the study, I can contact Prof. RK Tengeh or Prof. J Dubihlela, by calling Department of Internal

Auditing on (+27) 21 460 3911 or write to them at the Department of Internal Auditing, Cape Peninsula University of Technology, PO Box 652, Cape Town, 8000. I am aware that my participation in this study is entirely voluntary and I can discontinue participation with no penalty.

I agree to the use of data collected from this survey in the dissertation writing.

My signature below will indicate that I have agreed to participate in this study and that I have read and understood the information provided above:

Name of Participant

Date

Signature

### Researcher information

I, Oscar Chakabva, have explained the research to the participant before requesting the signature above. A copy of this form has been given to the participant.

Name of Researcher

Date

Signature

Annexure B : Letter of confirmation of proofreading



Client: OSCAR CHAKABVA

This certificate is to record that I, <u>Yvonne Thiebaut</u>, have completed a copyedit, layout and reference list check of your consultancy report "A HOLISTIC COST-EFFECTIVE MODEL FOR RISK MANAGEMENT AND SUSTAINABILITY WITHIN THE FAST-MOVING CONSUMER GOODS SME INDUSTRY: CAPE METROPOLE, SOUTH AFRICA".

The edit <u>included</u> the following:

Spelling; Tenses; Vocabulary; Punctuation; Pronoun matches; Word usage; Sentence structure; Table and figure numbers and layout; Content (limited); Reference list check and format

The edit <u>excluded</u> the following:

Correctness or truth of information (unless obvious); Correctness/spelling of specific technical terms and words (unless obvious); Correctness/spelling of unfamiliar names and proper nouns (unless obvious); Correctness of specific formulae or symbols or illustrations

Name of Editor: Yvonne Thiebaut

**Qualifications:** Bachelor of Arts Honours (Psychology) degree and Bachelor of Arts (Theatre Arts & Drama) degree

Signature:

Wake-T. Juone Thicbaut

Date Issued: 16 September 2019

The editor will not be held accountable for any later additions or changes to the document that were not edited by the editor, nor if the client rejects/ignores any of the changes, suggestions or queries, which he/she is free to do. The editor can also not be held responsible for errors in the content of the document or whether or not the client passes or fails. It is the client's responsibility to review the edited document before submitting it for evaluation.

### ANNEXURE C: RESEARCH QUESTIONNAIRE

#### **RESEARCH TITLE**

A holistic cost-effective model for risk management and sustainability within the Fast-Moving Consumer Goods SME industry: Cape Metropole, South Africa.

#### PRIMARY OBJECTIVE OF THE SURVEY

This study seeks to determine whether adequate plans are put in place by South African SME owner-managers to effectively manage traditional risks and sustainability risks. As a result of the research findings, a model for risk management and sustainability will be developed, in order to help articulate proper implementation of an integrated management system within the SME industry.

#### CONFIDENTIALITY AND ANONYMITY

Please note that, information provided is intended for purely academic purposes only and will be kept strictly confidential. The anonymity of all respondents is guaranteed.

RESEARCHER DETAILS	
Name	Oscar Chakabva
E-mail:	chakabvao@gmail.com
Contact number:	0623165689

SECTION A: GENERAL INFORMATION		
1. How long has your business been o appropriate box).	perating? (Please insert an X in the	
0 – 5 years 11 – 15 years	lore than 20 years	
6 – 10 years 16 – 20 years		
2. How many employees does your be appropriate box).	usiness have? (Please insert an X in the	
0 – 4 employees	20 – 49 employees	
5 – 19 employees	50 – 199 employees	
3. What is your position within the bu <i>appropriate box</i> ).	isiness? (Please insert an X in the	
Owner Owner and manager	Manager	
4. How long have you been in this pos appropriate box).	sition? (Please insert an X in the	
0 – 5 years 11 – 15 years	lore than 20 years	
6 – 10 years 16 – 20 years		
5. What is highest qualification? (Plea	se insert an X in the appropriate box).	
Lower than grade 12	National diploma	
Grade 12	Bachelor's degree	
National higher certificate	Other	
If other, please specify here:		

SECTION B: RISKS AND RISK MANAGEMENT PRACTICES

7. The following section relates to the question: What are the effects of the										
following risks on the performance of your business?										
(Please insert an X in the appropriate box). No effects = 1, Minor effects= 2,										
Neutral= 3, Moderate effects= 4, Major effects = 5)										
Risk Description										
Human error - incorrect data processing 1 2 3 4										
	Hardware and software failure	1	2	3	4	5				
Technological	Virus attacks	1	2	3	4	5				
risk	Spam, scams and phishing attacks	1	2	3	4	5				
	Customer defaults	1	2	3	4	5				
	Theft of cash by employees	1	2	3	4	5				
Financial risk	Cash shortage	1	2	3	4	5				
	Unexpected increase in finance cost	1	2	3	4	5				
	Product failure	1	2	3	4	5				
	Theft of trading stock	1	2	3	4	5				
Operational risk	Employee errors -	1	2	3	4	5				
	overpaying/underpaying customers									
	Systems and device failures	1	2	3	4	5				
	Damage to reputation (for example,	1	2	3	4	5				
	unfavourable publicity)									
	Employees' disputes (for example, due to	1	2	3	4	5				
	misdirected and ambiguous instructions									
Strategic risks	from the superiors)									
	Administrative errors (for example, due	1	2	3	4	5				
	to policies and procedures not clearly									
	defined)									
	Heavy fines (For example, due to failure	1	2	3	4	5				
	to comply with applicable laws and									
Compliance rick	regulations)									
Compliance risk	Withdrawal/suspension of trade license	1	2	3	4	5				
	(For example, due to failure to comply									
	with applicable laws and regulations)									
	Pollution (For example, due to packaging	1	2	3	4	5				
	waste and food residues)									
Environmental	High municipal cost (due to excessive	1	2	3	4	5				
risk	water and energy consumption)									
	Violating water restrictions e.g. breach of	1	2	3	4	5				
	level 6 B water restrictions									
Other: (please spe	ccify below)									
					•••••					
					•••••					

8.	How wou	How would you rate your understanding of the risk management										
	process,	process, procedures and tools in the context of your business?										
	Poor		Very good									
	Fair		Excellent									
	Good											

9.	The following section relates to the question: What tools or methods									
	do you use to identify risks in your business?									
	(Please insert an X in the appropriate box). Never = 1, Seldom= 2,									
	Sometimes= 3, Often= 4, Nearly always =	= 5)	1	-	1	1				
9a	Customer complaints	1	2	3	4	5				
9b	Expert judgment	1	2	3	4	5				
9c	Lessons learned from other business	1	2	3	4	5				
9d	Previous experience	1	2	3	4	5				
9e	Focus groups         1         2         3         4         5									
9f	Brainstorming	1	2	3	4	5				
9g	Documents review	1	2	3	4	5				
9h	Use of financial statements to identify	1	2	3	4	5				
	the sources of potential financial									
	losses									
9i	Opinions of experts (Delphi technique)	1	2	3	4	5				
9j	Other: (please specify below)									

10	The following section relates to the question: What tools or activities do you use to evaluate risks identified in your business? (Please insert an X in the appropriate box). Never = 1, Seldom= 2, Sometimes= 3, Often= 4, Nearly always = 5)								
10a	Probability rating (calculated) 1 2 3 4 5								
10b	Probability rating (based on experience)	1	2	3	4	5			
10c	Severity rating (calculated)	1	2	3	4	5			
10d	Severity rating (based on experience)	1	2	3	4	5			
10e	Total score (Severity rating * Probability rating)	1	2	3	4	5			
10f	Ratio analysis	1	2	3	4	5			
10g	Expert judgment	1	2	3	4	5			
10h	Other: (please specify below)								

11.	The following section relates to the question: What tools or activities do you use to manage risks identified in your business?							
	(Please insert an X in the appropriate box). Never = 1, Seldom= 2, Sometimes= 3, Often= 4, Nearly always = 5)							
11a	Risk transference: Liability for the risk is transferred12345to a third party e.g. through insurance.							
11b	Risk avoidance: Risk is eliminated altogether.	1	2	3	4	5		
11c	Risk mitigation: The impact of the risk is reduced e.g. by improving internal controls.	1	2	3	4	5		
11d	Risk acceptance: Risk are identified, but no action is taken.	1	2	3	4	5		
11e	Risk exploitation: Exploit the opportunity and make sure its value is realized.	1	2	3	4	5		
11f	Other: (please specify below)							

12.	The following section relates to the question: What tools or activities do you use to monitor risks in your business? (Please insert an X in the appropriate box). Never = 1, Seldom= 2, Sometimes= 3, Often= 4, Nearly always = 5)					
12a	Risk reassessment - reassessment of current risks and closing of risks resulting in identification of new risks.1234					
12b	Risk audits - examining the effectiveness of risk responses in dealing with identified risks and their root causes, as well as the effectiveness of the risk management process.	1	2	3	4	5
12c	Variance and trend analysis - comparing planned results to the actual results, in order to control and monitor risk events.	1	2	3	4	5
12d	Performance measurement - comparing accomplishments plans.	1	2	3	4	5

12e	Reserve analysis - compares the amount of	1	2	3	4	5			
	remaining contingency reserves (time and cost) to								
	the amount of remaining risks in order to determine								
	if the amount of remaining reserves is enough.								
12f	Other, please specify here								

13.	The following section relates to the question: What do you regard as the main barriers to effective risk management in your business? Not at all relevant= 1, Slightly relevant= 2, Relevant= 3, Moderate effects= 4, Major effects = 5)								
13a	Lack of risk knowledge	1	2	3	4	5			
13b	Lack of financial resources	1	2	3	4	5			
13c	Cost exceeds the benefit	1	2	3	4	5			
13d	Lack of holistic risk management models relevant to the SMEs	1	2	3	4	5			
13e	Difficulty of measuring the performance of risk management	1	2	3	4	5			
13f	Insufficient record keeping	1	2	3	4	5			
13g	Reluctance from employees	1	2	3	4	5			
13h	Low profit margin	1	2	3	4	5			
13i	Other: (please specify below)								

### SECTION C: BUSINESS SUSTAINABILITY

In this study, business sustainability is defined as the management and coordination of environmental, social and economic/financial demands and concerns to ensure responsible, ethical and ongoing success.

· · ·

14.	The following section relates to the question: Do the following elements of risk management exist in your business?		
	(Please write "YES" or "NO" inside the appropriate		
	box)	Yes	No
14a	A risk appetite is set.		
14b	A credit risk policy is developed and implemented		
14c	Offer employee development programs and continuing education.		
14d	A system of budgeting and cost control is implemented to reduce the risk of continued unfavourable cost variances.		
14e	A contingency fund is set aside for responding to identified risks.		
14f	A risk management plan exists.		
14g	A risk response strategy is developed and implemented.		
14h	All staff levels are involved in risk management.		
14i	A risk management framework is developed or adopted.		
14j	Effective mechanisms of internal controls are developed.		
14k	Risk management is incorporated into operating process and systems design.		
14	The risk management process is regularly monitored, reported and kept up to date.		
14m	Risks are actively identified, categorised, prioritised and documented before being treated.		

### SECTION D: RISK MANAGEMENT AND SUSTAINABILITY

16.	To what extent could risk management contribute towards enhancing the sustainability of your business?									
	Very little ex Little extent Some exten	xtent Great extent Great extent Very great t Very great	ent t exte	ent						
15. The f compone (Please ii Neutral=	iollowing secti ents have on t nsert an X in t 3, Moderate	ion relates to the question: What effect the sustainability of your business? The appropriate box). No effects = 1, Min effects= 4, Major effects = 5)	s do or e <u>f</u>	the f	follo ;= 2,	wing				
Compon	ent	Elements								
Social - I	ooks at the	Customers - e.g. customer loyalty and brand preference etc	1	2	3	4	5			
society and on the busi	their impact iness	Suppliers- their reliability in terms of prompt deliveries etc	1	2	3	4	5			
(customers governmer	s, suppliers and nt etc)	Government - changes in laws and regulations etc	1	2	3	4	5			
Environ	mental –	Packaging waste and food residues	1	2	3	4	5			
looks at ca	rbon	Water usage	1	2	3	4	5			
footprints, waste, wat the overall environme	packaging er usage and effect on the nt.	Energy usage	1	2	3	4	5			

Economic - pertains	Level of inflation	1	2	3	4	5
to pertains to the	Changes in interest rates	1	2	3	4	5
economic factors	Financial strength	1	2	3	4	5

17.	How do you agree or disagree to the following statements? (Please insert an X in the appropriate box). Strongly disagree = 1, Disagree = 2,					
	Undecided= 3, Agree= 4, Strongly agree= 5).					
17a	We are concerned about sustainability issues when	1	2	3	4	5
	making risk management decisions in my business.					
17b	We have integrated sustainability into our business risk	1	2	3	4	5
	management agenda.					
17c	In my business, we have implemented an on-going risk			3	4	5
	management process that includes an evaluation of					
	critical components of sustainability.					
17d	Critical components of sustainability are considered as	1	2	3	4	5
	important aspects when assessing risks in my business.					
17e	We have identified critical components of sustainability	1	2	3	4	5
	and the risks they can pose on our business.					
17f	We periodically collect risk information from the critical	1	2	3	4	5
	components of sustainability.					

18. How do you agree or disagree to the following statements?
(Please insert an X in the appropriate box). Strongly disagree = 1, Disagree= 2, Undecided= 3, Agree= 4, Strongly agree= 5).

Risks posed to my business by components of sustainability include the following:						
Component	Risk posed					
	Loss of customers- The risk of losing customers due to uncaring staff attitudes, staff rudeness, poor reliability etc	1	2	3	4	5
Social - looks at the stakeholders in the society and their impact	Loss of key supplier- The risk of losing key suppliers due to failure to make payments within the credit period granted etc	1	2	3	4	5
on the business (customers, suppliers etc)	Heavy fines (For example, due to failure to comply with applicable laws and regulations)	1	2	3	4	5
	Withdrawal/suspension of trade license (For example, due to failure to comply with applicable laws and regulations)	1	2	3	4	5
Environmental – looks at carbon	Pollution (For example, due to packaging waste and food residues)	1	2	3	4	5
footprints, packaging waste, water usage and	High municipal cost (due to excessive water and energy consumption)	1	2	3	4	5
the overall effect on the environment.	Violating water restrictions e.g. breach of level 6 B water restrictions	1	2	3	4	5
Economic – pertains to pertains to the	Unexpected increase in finance cost (For example, due to escalating or fluctuating interest rates)	1	2	3	4	5
economic factors like interest rate, inflation etc	Decrease in sales and profit volumes (For example, due to decrease in disposable income as a result of inflation)	1	2	3	4	5

### THANK YOU

Thank you for your participation and if you wish to receive feedback from this study, write your email here .....

### ANNEXURE D: RELIABILITY TESTING

### C.1 Cronbach Alpha testing

## C.1.1 Cronbach's Alpha Coefficient for measuring scale for the risks which affect the performance of SMEs

Stat	tements	Variable no.	Correlation with total	Cronbach's Alpha Coefficient	
Stat	tement 7:				
A: 1	echnological risk				
1.	Human error – incorrect data processing	Q07_a1	0.0415	0.8731	
2.	Hardware and software failure	Q07_a2	0.0007	0.8748	
3.	Virus attacks	Q07_a3	0.5220	0.8544	
4.	Spam, scams and phishing attacks	Q07_a4	0.5671	0.8533	
B: F	inancial risk				
1.	Customer defaults	Q07_b1	0.5271	0.8549	
2.	Theft of cash by employees	Q07_b2	0.8119	0.8396	
3.	Cash shortage	Q07_b3	0.8221	0.8394	
4.	Unexpected increase in finance cost	Q07_b4	0.4193	0.8570	
C: (	Dperational risk				
1.	Product failure	Q07_c1	0.8031	0.8408	
2.	Theft of trading stock	Q07_c2	0.8109	0.8394	
3.	Employee errors – overpaying/underpaying customers	Q07_c3	0.8054	0.8395	
4.	Systems and device failure	Q07_c4	0.1091	0.8689	
D: S	Strategic risk				
1.	Damage to reputation	Q07_d1	0.7944	0.8406	
2.	Employees' disputes	Q07_d2	0.7654	0.8416	
3.	Administrative errors	Q07_d3	0.4677	0.8554	
E: 0	Compliance risk				
1.	Heavy fines	Q07_e1	-0.3168	0.8757	
2.	Withdrawal/suspension of trade license	Q07_e2	0.3248	0.8760	
F: Environmental risk					
1.	Pollution	Q07_f1	0.3510	0.8592	
2.	High municipal costs	Q07_f2	0.4316	0.8565	
3.	Violating water restrictions	Q07_f3	0.4888	0.8542	
Cro	nbach's Coefficient Alpha for raw variables			0.8619	
Cronbach's Coefficient Alpha for standardised variable				0.8484	

According to the Cronbach's Alpha Coefficients (Annexure C.2.1) for all the items entered to the test:

0.8619 for raw variables; and

0.8484 for standardized variables;

which are more than the acceptable level of 0.70, these items prove to be reliable and consistent.

# C.1.2 Cronbach's Alpha Coefficient for measuring scale for tools or methods which are used to identify risks in SMEs

Stat	ements	Variable no.	Correlation with total	Cronbach's Alpha		
				Coefficient		
Statement 9:						
1.	Customer complaints	Q09_a	-0.1649	0.9117		
2.	Expert judgment	Q09_b	0.8395	0.8398		
3.	Lessons learned from other business	Q09_c	0.4327	0.8791		
4.	Previous experience	Q09_d	0.4457	0.8782		
5.	Focus groups	Q09_e	0.8748	0.8360		
6.	Brainstorming	Q09_f	0.8994	0.8371		
7.	Documents review	Q09_g	0.8155	0.8450		
8.	Use of financial statements to identify the	Q09_h	0.8498	0.8448		
	sources of potential financial losses					
9.	Opinions of experts (Delphi technique)	Q09_i	0.5750	0.8685		
Cro	0.8763					
Cro	nbach's Coefficient Alpha for standardised var	iable		0.8638		

According to the Cronbach's Alpha Coefficients (Annexure C.2.2) for all the items entered to the test:

- 0.8763 for raw variables; and
- 0.8638 for standardized variables;

which are more than the acceptable level of 0.70, these items prove to be reliable and consistent.

C.1.3 Cronbach's Alpha Coefficient for measuring scale for tools or activities which are used to evaluate risks in SMEs

Stat	tements	Variable no.	Correlation with total	Cronbach's Alpha Coefficient	
Stat	tement 10:				
1.	Probability rating (calculated)	Q10_a	0.7841	0.6825	
2.	Probability rating (based on experience)	Q10_b	0.1798	0.8300	
3.	Severity rating (calculated)	Q10_c	0.7916	0.6825	
4.	Severity rating (based on experience)	Q10_d	-0.0300	0.8494	
5.	Total score ((Severity rating* Probability rating)	Q10_e	0.7778	0.6924	
6.	Ratio analysis	Q10_f	0.7584	0.7147	
7.	Expert judgment	Q10_g	0.6656	0.7117	
Cro	0.7732				
Cro	Cronbach's Coefficient Alpha for standardised variable				

According to the Cronbach's Alpha Coefficients (Annexure C.2.3) for all the items entered to the test:

0.7732 for raw variables; and

0.8820 for standardized variables:

which are more than the acceptable level of 0.70, these items prove to be reliable and consistent.

## C.1.4 Cronbach's Alpha Coefficient for measuring scale for tools or activities which are used to manage risks in SMEs

Stat	tements	Variable no.	Correlation with total	Cronbach's Alpha Coefficient	
Statement 11:					
1.	Risks transferred	Q11_a	0.7738	0.0182	
2.	Risk avoidance	Q11_b	-0.8940	0.9609	
3.	Risk mitigation	Q11_c	0.8247	0.0246	
4.	Risk acceptance	Q11_d	0.9220	-0.0413	
5.	Risk exploitation	Q11_e	0.9256	-0.0325	
Cronbach's Coefficient Alpha for raw variables				0.5042	
Cro	able	0.5262			

According to the Cronbach's Alpha Coefficients (Annexure C.2.4) for all the items entered to the test:

- 0.5042 for raw variables; and
- $\succ$  0.5262 for standardized variables;

which are less than the acceptable level of 0.70, these items proves not to be reliable and consistent. As previously mentioned, if statement Q11\_b (Risk avoidance) is removed then the instrument will be reliable and consistent (See next table).

Sta	tements	Variable no.	Correlation with total	Cronbach's Alpha Coefficient
Sta	tement 11:			
1.	Risks transferred	Q11_a	0.8594	0.9650
3.	Risk mitigation	Q11_c	0.8923	0.9518
4.	Risk acceptance	Q11_d	0.9371	0.9341
5.	Risk exploitation	Q11_e	0.9406	0.9390
Cronbach's Coefficient Alpha for raw variables				0.9609
Cro	Cronbach's Coefficient Alpha for standardised variable			

According to the Cronbach's Alpha Coefficients (Annexure C.2.4.1) for all the items entered to the test:



0.9609 for raw variables; and

0.9632 for standardized variables;

which are more than the acceptable level of 0.70, these items prove to be reliable and consistent. This can be due to the fact that risk avoidance implicates a positive measure (elimination) whilst the other risk management tools implicate the negative measure (transference, reduction, acceptance and value realisation).

# C.1.5 Cronbach's Alpha Coefficient for measuring scale for tools or activities which are used to monitor risks in SMEs

Stat	ements	Variable no.	Correlation with total	Cronbach's Alpha Coefficient
Stat	ement 12:			
1.	Risk reassessment	Q12_a	0.9276	0.8523
2.	Risk audits	Q12_b	0.9364	0.8501
3.	Variance and trend analysis	Q12_c	0.6902	0.9095
4.	Performance measurement	Q12_d	0.7167	0.9065
5.	Reserve analysis	Q12_e	0.6947	0.9087
Cro	0.9090			
Cronbach's Coefficient Alpha for standardised variable				0.9175

According to the Cronbach's Alpha Coefficients (Annexure C.2.5) for all the items entered to the test:

- 0.9090 for raw variables; and
- 0.9175 for standardized variables;

which are more than the acceptable level of 0.70, these items prove to be reliable and consistent.

# C.1.6 Cronbach's Alpha Coefficient for measuring scale for the main barriers to effective risks management in SMEs

Stat	tements	Variable no.	Correlation with total	Cronbach's Alpha Coefficient
Stat	tement 13:			
1.	Lack of risk knowledge	Q13_a	0.8936	0.9744
2.	Lack of financial resources	Q13_b	0.9347	0.9729
3.	Cost exceeds the benefit	Q13_c	0.9472	0.9716
4.	Lack of holistic risk management models relevant to the SMEs	Q13_d	0.9377	0.9721
5.	Difficulty of measuring the performance of risk management	Q13_e	0.9566	0.9712
6.	Insufficient record keeping	Q13_f	0.8832	0.9752
7.	Reluctance from employees	Q13_g	0.7956	0.9807
8.	Low profit margin	Q13_h	0.9511	0.9719
Cro	0.9769			
Cro	nbach's Coefficient Alpha for standardised var	iable		0.9791

According to the Cronbach's Alpha Coefficients (Annexure C.2.6) for all the items entered to the test:

- 0.9769 for raw variables; and
- 0.9791 for standardized variables;

which are more than the acceptable level of 0.70, these items prove to be reliable and consistent.

## C.1.7 Cronbach's Alpha Coefficient for measuring scale for the elements of risks management existing in SMEs

Stat	ements	Variable no.	Correlation with total	Cronbach's Alpha Coefficient
Stat				
1.	A risk appetite is set	Q14_a	0.8481	0.9400
2.	A credit risk policy is developed and implemented	Q14_b	0.6639	0.9449
3.	Offer employee development programs and continuing education	Q14_c	0.8446	0.9394
4.	A system of budgeting and cost control is implemented to reduce the risk of continued unfavourable cost variances	Q14_d	0.7791	0.9419
5.	A contingency fund is set aside for responding to identified risks	Q14_e	0.7875	0.9417
6.	A risk management plan exists	Q14_f	0.8073	0.9406
7.	A risk response strategy is developed and implemented	Q14_g	0.8154	0.9402
8.	All staff levels are involved in risk management	Q14_h	0.8321	0.9401
9.	A risk management framework is developed or adopted	Q14_i	0.8183	0.9400
10.	Effective mechanisms of internal controls are developed	Q14_j	0.7778	0.9413
11.	Risk management is incorporated into operating process and systems design	Q14_k	0.6463	0.9463
12.	The risk management process is regularly monitored, reported and kept up to date	Q14_I	0.6316	0.9467
13.	Risks are actively identified, categorised, prioritised and documented before being treated	Q14_m	0.5284	0.9496
Cro	nbach's Coefficient Alpha for raw variables			0.9467
Cro	nbach's Coefficient Alpha for standardised vari	iable		0.9514

According to the Cronbach's Alpha Coefficients for all the items entered to the test:

- 0.9467 for raw variables; and
- 0.9514 for standardized variables;

which are more than the acceptable level of 0.70, these items prove to be reliable and consistent.

## C.1.8 Cronbach's Alpha Coefficient for measuring scale for the effects of the following components on the sustainability of SMEs

Stat	ements	Variable no.	Correlation with total	Cronbach's Alpha Coefficient
Stat	ement 15:			
A: S	Social			
1.	Customers	Q15_a1	0.5008	0.6991
2.	Suppliers	Q15_a2	0.2585	0.7404
3.	Government	Q15_a3	-0.0271	0.7712
B: E	nvironmental			
4.	Packaging	Q15_b1	0.5120	0.7044
5.	Water usage	Q15_b2	0.5556	0.6873
6.	Energy usage	Q15_b3	0.5897	0.6799
C: E	conomic			
7.	Level of inflation	Q15_c1	0.7591	0.6458
8.	Changes in interest rate	Q15_c2	0.0029	0.7814
9.	Financial strength	Q15_c3	0.6403	0.6678
Cronbach's Coefficient Alpha for raw variables				0.7372
Cronbach's Coefficient Alpha for standardised variable				0.7285

According to the Cronbach's Alpha Coefficients for all the items entered to the test:

0.7372 for raw variables; and

0.7285 for standardized variables;

which are more than the acceptable level of 0.70, these items prove to be reliable and consistent.

C.1.9 Cronbach's Alpha Coefficient for measuring scale for the statements on sustainability in SMEs

Statements		Variable no.	Correlation with total	Cronbach's Alpha Coefficient
Stat	ement 17:			
1.	We are concerned about sustainability issues when making risk management decisions in my business	Q17_a	0.9447	0.9610
2.	We have integrated sustainability into our business risk management agenda	Q17_b	0.9018	0.9650
3.	In my business, we have implemented an on- going risk management process that includes as evaluation of critical components of sustainability	Q17_c	0.8751	0.9709
4.	Critical components of sustainability are considered as important aspects when assessing risks in my business	Q17_d	0.9077	0.9654
5.	We have identified critical components of sustainability and the risk they can pose on our business	Q17_e	0.9248	0.9633
6.	We periodically collect risk information from the critical components of sustainability	Q17_f	0.9310	0.9623
Cronbach's Coefficient Alpha for raw variables				0.9467
Cronbach's Coefficient Alpha for standardised variable				0.9514

According to the Cronbach's Alpha Coefficients for all the items entered to the test:

- 0.9705 for raw variables; and
- 0.9739 for standardized variables;

which are more than the acceptable level of 0.70, these items prove to be reliable and consistent.

## C.1.10 Cronbach's Alpha Coefficient for measuring scale for the risk posed to the business by components of sustainability

Statements		Variable no.	Correlation with total	Cronbach's Alpha Coefficient	
Sta	Statement 18:				
A: Social					
1.	Loss of customers	Q18_a1	0.5126	0.5955	
2.	Loss of key suppliers	Q18_a2	0.2790	0.6489	
3.	Heavy fines	Q18_a3	0.1776	0.6647	
4.	Withdrawal/suspension of trade license	Q18_a4	0.1793	0.6644	
B: Environmental					
5.	Pollution	Q18_b1	0.4459	0.6174	
6.	High municipal cost	Q18_b2	0.5464	0.5856	
7.	Violating water restrictions	Q18_b3	0.4657	0.6013	
C: Economic					
8.	Unexpected increase in finance cost	Q18_c1	-0.0228	0.7160	
9.	Decrease in sales and profit volumes	Q18_c2	0.5349	0.5849	
Cronbach's Coefficient Alpha for raw variables				0.6617	
Cronbach's Coefficient Alpha for standardised variable				0.6635	

According to the Cronbach's Alpha Coefficients for all the items entered to the test:

• 0.6617 for raw variables; and

• 0.6635 for standardized variables;

which are less than the acceptable level of 0.70, these items proves not to be reliable and consistent. If statement Q18\_c1 (Unexpected increase in finance cost) is removed, then the instrument will be reliable and consistent (See next table).

Statements		Variable no.	Correlation with total	Cronbach's Alpha Coefficient
Sta				
A: Social				
1.	Loss of customers	Q18_a1	0.5164	0.6645
2.	Loss of key suppliers	Q18_a2	0.2617	0.7208
3.	Heavy fines	Q18_a3	0.2023	0.7243
4.	Withdrawal/suspension of trade license	Q18_a4	0.2022	0.7244
B: Environmental				
5.	Pollution	Q18_b1	0.4687	06794
6.	High municipal cost	Q18_b2	0.5869	0.6474
7.	Violating water restrictions	Q18_b3	0.4975	0.6667
C: Economic				
9.	Decrease in sales and profit volumes	Q18_c2	0.5363	0.6572
Cronbach's Coefficient Alpha for raw variables				0.7160
Cronbach's Coefficient Alpha for standardised variable				0.7118

According to the Cronbach's Alpha Coefficients for all the items entered to the test:

0.7160 for raw variables; and

0.7118 for standardized variables;

which are more than the acceptable level of 0.70, these items prove to be reliable and consistent.

### C.1.11 Summaries of reliability analysis

Short names for each construct measured are as follows:

Risk on Performance -	What are the effects of risks on the performance of your
	business? (Statement 7)
Identifying Risks -	What tools or methods do you use to identify risks in your
	business? (Statement 9)
Evaluating Risks -	What tools or activities do you use to evaluate risks identified in
	your business? (Statement 10)
Manage Risks -	What tools or activities do you use to manage risks identified in
	your business? (Statement 11)

Monitoring Risks -	What tools or activities do you use to monitor risks in your		
	business? (Statement 12)		
Main Barriers -	What do you regard as the main barriers to effective risk		
	management in your business? (Statement 13)		
Elements of Risk Exist -	Do the following elements of risk management exist in your		
	business? (Statement 14)		
Effects on Sustainability -	What effects do the following components have on the		
	sustainability of your business? (Statement 15)		
General Statements -	How do you agree or disagree to the following statements?		
	General statements. (Statement 17)		
Risk Posed Business -	Risks posed to my business by components of sustainability.		
	(Statement 18)		

The following table summarises above-mentioned reliable analyses. The constructs for measuring "tools or activities which are used to manage risks identified in the business" (point 4 in the next table) and "Risks posed to business by components of sustainability" (point 11 in

the next table) are not reliable and when removing one item in each of these constructs (points 5 and 12 in the next table) they become reliable.

### **Reliability Analysis**

No.	Constructs	Number of	Cronbach Alpha	Comments
	Short names	items	Coefficients	
1.	Risk on Performance	20	0.8619	Strong reliability
2.	Identifying Risks	9	0.8763	Strong reliability
3.	Evaluating Risks	7	0.7732	Reliable
4.	Manage Risks (original)	5	0.5042	Not reliable
5.	Manage Risks (after an item is	4	0.9609	Strong reliability
	removed)			
6.	Monitoring Risks	5	0.9090	Strong reliability
7.	Main Barriers	8	0.9769	Strong reliability
8.	Elements Risks Exist	13	0.9467	Strong reliability
9.	Effects on Sustainability	9	0.7372	Reliable
10.	General Statements	6	0.9467	Strong reliability
11.	Risk Posed Business (original)	9	0.6617	Not reliable
12.	Risk Posed Business (After an item is	8	0.7160	Reliable
	removed)			

## ANNEXURE D: INTERVIEW GUIDE

### **1. INTRODUCTION**

Researcher: Oscar Chakabva, DCom student

The primary objective of the study: To determine whether adequate plans are put in place by South African SME owner-managers to effectively manage traditional risks and sustainability risks.

Inform the participant that the information provided is intended for purely academic purposes only and the anonymity of the participant is guaranteed.

Assure the participant that his/her identities will remain anonymous throughout the study and that any information he/she discloses will be treated in a confidential manner.

Explain the data collection process including the permission to record the interview

2. GENERAL QUESTIONS

Validate the information obtained from LinkedIn and ensure that the interviewee meets the delineation criteria

For bank officials:

What is your current position and for how long have you been working in

that position?

For business risk consultants:

Tell me about your experience and current involvement in the field of risk management?

3. IN-DEPTH QUESTIONS For bank officials:

Does your bank open accounts for SMEs?

Does your bank grant loan facilities to SMEs?

For business risk consultants:

Taking into account your experience and knowledge in managing risks: in brief, what would you say are the major risks affecting the performance of FMCG SMEs in South Africa?

Taking into account your experience and knowledge in managing risks; in brief, what would you say are the current risk management practices deployed by FMCG SME owner-managers in their businesses? Taking into account your experience and knowledge in managing risks; in brief, what do you regard as the main barriers to effective risk management within FMCG SMEs?

In this study, business sustainability is defined as the management and coordination of environmental, social and economic factors to ensure a responsible, moral and ongoing success. With reference to this definition, what do you think are the risks, if any, posed to FMCG SMEs by sustainability factors?

Based on your perception of the risks posed to FMCG SMEs by sustainability factors, to what extent could risk management contribute towards enhancing the sustainability of FMCG SMEs?

In your opinion, do you think the risk processes of SMEs in general; incorporate robust analysis of sustainability factors?

#### 4. WRAPPING UP THE INTERVIEW

Do you have any other insights you would like to share on the risk management practices in SMEs?

#### **5. THANKING INTERVIEWEE**

Thank interviewee and share the insights gained in the interview process to create a room for any follow-ups during interview analysis.

#### 6. POST INTERVIEW SUMMARY

Organise the notes and produce transcript of the relevant parts of the interview.

### **ANNEXURE E: INTERVIEW RESPONSES**

## 1. What is your current position and for how long have you been working in that position?

"I am a credit risk manager and I have been in this position for about 5 and half years." (Participant – BE1)

*"I'm the senior credit risk analyst, I have worked as a credit risk analyst for this bank since March 2010."* (Participant – BE2)

#### 2. Does your bank open accounts for SMEs?

"Yes, we do, for as long as they meet the requirements. We're getting a lot of small business owners saying that they want to open bank accounts for their businesses, but a perennial issue with this is that many of them find the monthly service fees too high and end up keeping cash on their business premises which is a risky practice." (Participant – BE1)

"Yes, this is an incredibly important area for our business banking although most entrepreneurs usually think that banks like ours are only for big companies". (Participant – BE2)

### 3. Does your bank grant loan facilities to SMEs?

"Yes, we do but the quality of applications we receive is the biggest challenge. Like I said before, a number of small businesses keep cash on their business premises even those with accounts, very few deposit all their proceeds into the bank account yet the most important source of financials is the bank statement, so by not depositing all their proceeds in the bank account, they may be disadvantaged when they ask for funding because their statements do not show all their revenue". (Participant – BE1)

"Yes, but often you will find that because these entrepreneurs have no credit history, they get turned away when they apply for loans, only around 15% of our small to medium enterprise clients get their loan applications approved". (Participant – BE2)

## 4. Tell me about your experience and current involvement in the field of risk management?

"I am a certified Internal auditor with more than 15 years' experience in the development of risk-based audit plans, audit execution, governance reporting, risk governance and enterprise risk management. I'm currently the Senior Risk Officer at an insurance company here in Cape Town responsible for 2nd line risk role in that company's institutional business. In my spare time, I provide risk management guidance to small and large organisations at a fee". (Participant – BRE1)

"I am an Associate Member of the Institute of Risk Management South Africa with over 10 years' experience in risk identification, risk assessment which include operational risk, strategic risk and risk scenario assessments in line with the risk management principles as defined in the document created by the International Organization for Standardization commonly known as ISO 31000. I also offer risk management consulting services to several sectors most notably retail, transport, manufacturing and many others". (Participant – BRE2)

## 5. Taking into account your experience and knowledge in managing risks: in brief, what would you say are the major risks affecting the performance of FMCG SMEs in South Africa?

"They face many risks, firstly, there are so many big players in the retail industry and attaining competitive advantage is one of the most challenging issues facing small retailers. Cash flow is also a challenging issue in small and medium retail industry, the owners must decide where money should come from to keep up operations, pay their workers et cetera, failure of which may lead to cash deficit. Load-shedding which has now been raised to Stage 4 is also posing significant risks to the retail industry especially to small retailers without backup power, for example the spoiling of refrigerated products, damage to appliances as a result of sudden power surge et cetera. Lastly, compliance with laws and regulations is a greater hindrance on small and medium retailers than on large retailers; it hinders their formation and growth". (Participant – BRE1)

"The major risks facing several retail SMEs are essentially financial. Founders in most cases have invested their life savings or obtained a significant loan to get the business off the ground, so there is too much pressure to be successful. Apart from this, retail SMEs often find regulation challenging mainly because they lack the capacity to deal with regulation requirements making compliance difficult to achieve for them. Also, employee theft is at an alarming stage in retail SMEs, most of the employees indulge in retail stock theft for their private use or reselling the products as means of making extra cash. Also, in light of today's digital era, retail SMEs are now becoming more susceptible to cyber risks like hacking and online scams than before due to the use of weak passwords, downloading malicious applications and clicking links from untrusted sources. Because of this, retail SMEs now requires an online protection". (Participant – BRE2)

6. Taking into account your experience and knowledge in managing risks; in brief, what would you say are the current risk management practices deployed by FMCG SME owner-managers in their businesses?

"SMEs generally don't have specific risk management plans in place, their approach is to wait for problems to take place and then look for solutions to solve them as soon as possible. This would mean waiting for a cash register machine to break and then hire an expert to fix it or assuming workers are satisfied till one of them lodges a complaint". (Participant – BRE1)

"Risk management practices in retail SMEs are mostly informal due to ignorance and lack of understanding of proper risk management, for example, most of them do not take out insurance, they either increase the price or use their personal funds to rescue their business when a risk has taken place, some even employ their friends or relatives as a way of avoiding risks like employee theft. Moreover, credit facilities are in most cases given to clients based on friendship, trust and customer loyalty" (Participant – BRE2)

# 7. Taking into account your experience and knowledge in managing risks; in brief, what do you regard as the main barriers to effective risk management within FMCG SMEs?

"Lack of competent employees who can identify and manage risks is a big one and what makes it even worse is the fact that they don't have the required cash to outsource services of experienced risk professionals, so risk management remains problematic within small retailers". (Participant – BRE1)

"I think the absence of expertise and knowledge in retail SMEs is a huge obstacle for them to implement effective risk management. Most of them are managed by people with low level of education who could be the owners. Also, most of them view risk management as additional cost which could have a huge impact on their profit, they actually don't see the need to have it". (Participant – BRE2) 8. In this study, business sustainability is defined as the management and coordination of environmental, social and economic factors to ensure a responsible, moral and ongoing success. With reference to this definition, what do you think are the risks, if any, posed to FMCG SMEs by sustainability factors?

"All the areas you have mentioned pose many risks to every business, for example, the environmental part may cause the business to experience higher costs for energy, water and other resources, extreme water restrictions due to climate changes may also affect businesses. Then for the economic part, circumstances like inflation and the general government regulations may result in significant loss for any business. Lastly, for the social part, if the business doesn't properly manage its actions that affect the community around it including customers, it is likely to be faced with public outcry and damage to reputation". (Participant – BRE1)

"A retail SME's economic, environmental and social performance is likely to have financial impacts, legal impacts and reputational impacts. It is important that these factors are understood and considered when preparing a risk management plan and in subsequent risk assessment activities, in order to minimise and manage the risks caused by them". (Participant – BRE2)

9. Based on your perception of the risks posed to FMCG SMEs by sustainability factors, to what extent could risk management contribute towards enhancing the sustainability of FMCG SMEs?

*"If risks from sustainability factors are proactively identified and monitored, risk management* can make a significant contribution to the achievement of sustainability" *(Participant – BRE1)* 

*"Well, adequate risk management can improve economic, environmental and social performance of the retail industry so yes risk management may improve the sustainability of retail SMEs to a very large extent". (Participant – BRE2)* 

## In your opinion, do you think the risk processes of SMEs in general; incorporate robust analysis of sustainability factors?

"Risk management in SMEs is not well developed and it would be an overstatement to say that their risk assessment activities incorporate a robust analysis of sustainability factors". (Participant – BRE1)

*"Well, the risk processes of SMEs are too simple and informal, and I therefore strongly believe that they do not include a robust analysis of sustainability factors".* **(Participant – BRE2)**