



# **Retail banking risk culture: a comparison of South African and Kenyan operations**

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requirements for the degree  
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## **PREFACE**

This mini-dissertation is the final deliverable in the Centre for Applied Risk Management (UARM)'s taught master's degree programme. The mini-dissertation was written in article format and consists of three sections: Research project overview, Article and Reflection.

This mini-dissertation is the student's work. The student was responsible for the final concept, set up, execution of the research project and writing of the mini-dissertation. The members of the supervisory team contributed in an advisory and technical support capacity to study conception and design, analysis and interpretation of data and critical revision of the manuscript. The mini-dissertation was language edited before submission.

The main study supervisor gave the student permission to submit this mini-dissertation for examination.

## **ABSTRACT**

The 2008 global financial crisis prompted renewed interest by prudential regulators, consultants and academic researchers in organisational behaviour including attitudes of global financial institutions to risk-taking. However, the evidence from the existing literature suggests that risk culture studies on African financial institutions and risk culture studies on organisations operating in multiple jurisdictions are scarce. The objective of this study was to contribute to risk culture studies in Africa by comparing the retail banking risk cultures of divisions based in South Africa and Kenya but owned by the same South African financial institution.

This research project followed a quantitative approach based on a risk culture survey that was employed to collect data from participants in South African and Kenyan divisions of the same parent company headquartered in South Africa. The data were analysed using descriptive and inferential statistics using the SAS® statistical package.

Treating the two divisions as part of one entity, the survey evidence indicated a high maturity level in the integration of risk management in decision-making and a high maturity level of comfort in own individual roles including management and non-management staff. However, when treating the two divisions separately and comparing them, the South African and Kenyan divisions and employment levels differed significantly in terms of the integration of risk management in decision-making and the perceived comfort regarding their own individual risk roles. Effective communication and challenges regarding decision-related risks were highlighted as needing improvement concerning the inclusion of risk decision-making in the organisation, and indicated a need for increased dialogue on risk management in the divisions. The most highly ranked item for which the answers "I do not know or "I do not understand" were selected was "The organisation rewards members who take responsible risks" option, implying uncertainty among the participants with regard to the risk-based incentives of the divisions. Given the challenges of operating in different markets, the organisation would need to ensure that there is effective communication of its risk strategy at its different operations. In addition, the inclusion of risk in decision-making would need to be embedded. This could be done through risk awareness, training and development.

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I am grateful to my supervisor Mr Emmanuel Mulambya for his guidance and patience during this research project; without your devoted involvement in this research project, it would not have been a success. I am humbly thankful to the Kerlick team that assisted with the editorial polishing of this research study. I unpretentiously thank you for the assistance.

Finally, I take this opportunity to thank all my colleagues in South Africa and Kenya for their support and participation in the survey.

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## **RESEARCH PROJECT OVERVIEW**

This research project was motivated by the increased focus by prudential regulators and consultants on the risk culture of financial institutions post the 2008 global financial crisis. However, there is a scarcity of literature on the risk culture of financial institutions in Africa. The exceptions that could be traced include unpublished dissertations that focused on South African financial institutions (Kalima, 2016; Mazula, 2016; Padayachee, 2016).

Using a cross-country study in a large financial institution operating in multiple jurisdictions in Africa, I undertook this study to contribute to the academic literature on risk culture in Africa, with a particular emphasis on financial institutions. The objective was to compare the retail banking risk cultures of divisions in South Africa and Kenya owned by the same South African financial institution. A survey method was employed. This comparison of two distinct divisions owned by the same institution in Africa appears to be the first of its kind on the continent. In order to achieve the study's objective the following research question was formulated: How does the risk culture of a South African retail division compare with a Kenyan retail division of the same South African financial institution?

The audience for this paper includes:

- Researchers interested in risk culture in financial institutions, specifically in Africa;
- Regulators, especially regulators of financial institutions;
- Executives or senior management of financial institutions; and
- Risk practitioners.

### **Expected contribution of the study**

The present study contributes to the body of knowledge that benefits researchers and practitioners in the field of risk culture as applied in financial institution, specifically through a study of retail banking risk culture in the banking sector. A formal risk culture assessment seems not to have been conducted previously in a retail bank operating in multiple jurisdictions. Furthermore, no published academic research could be found that dealt with an African financial institution operating in different countries. The results of this study could inform the divisions under study about their risk culture maturity and set a precedent on risk culture studies in African financial institutions.

The research journey included selecting a suitable topic for the research; conducting a literature review on risk culture in financial institutions; formulating a research proposal which outlined the

research problem, objectives, and questions; obtaining permission to conduct the research in the organisation; sampling the participants to complete the survey; analysing the data and interpreting the results; and ultimately preparing the final document for examination.

### **The justification for a selected journal**

The accredited *South African Journal of Economic and Management Sciences* (ISN 2222-3436) was selected as a suitable journal in which to publish this paper. However, more work may be required before the submission of the article for publication. This journal was selected because it aims to inform the interaction between economic, environmental and social perspectives as applicable to the broader management sciences in an African environment. The journal publishes at least one issue each year with a global targeted audience interested in economics, finance, accounting, human capital, marketing and related studies of interest. The requirements and scope of the selected journal are in line with the objective of this paper to inform the academic literature in Africa on risk culture. More details about the selected journal are available on the following link: <https://sajems.org/index.php/sajems/pages/view/journal-information>.

# ARTICLE

## Retail banking risk culture: a comparison of South African and Kenyan operations

### 1. Abstract

The 2008 global financial crisis prompted renewed interest by prudential regulators, consultants and academic researchers in organisational behaviour including attitudes of global financial institutions to risk-taking. However, the evidence from the existing literature suggests that risk culture studies on African financial institutions and risk culture studies on organisations operating in multiple jurisdictions are scarce. The objective of this study was to contribute to risk culture studies in Africa by comparing the retail banking risk cultures of divisions based in South Africa and Kenya but owned by the same South African financial institution.

This research project followed a quantitative approach based on a risk culture survey that was employed to collect data from participants in South African and Kenyan divisions of the same parent company headquartered in South Africa. The data were analysed using descriptive and inferential statistics using the SAS<sup>®</sup> statistical package.

Treating the two divisions as part of one entity, the survey evidence indicated a high maturity level in the integration of risk management in decision-making and a high maturity level of comfort in own individual roles including management and non-management staff. However, when treating the two divisions separately and comparing them, the South African and Kenyan divisions and employment levels differed significantly in terms of the integration of risk management in decision-making and the perceived comfort regarding their own individual risk roles. Effective communication and challenges regarding decision-related risks were highlighted as needing improvement concerning the inclusion of risk decision-making in the organisation, and indicated a need for increased dialogue on risk management in the divisions. The most highly ranked item for which the answers "I do not know or "I do not understand" were selected was "The organisation rewards members who take responsible risks" option, implying uncertainty among the participants with regard to the risk-based incentives of the divisions. Given the challenges of operating in different markets, the organisation would need to ensure that there is effective communication of its risk strategy at its different operations. In addition, the inclusion of risk in decision-making would need to be embedded. This could be done through risk awareness, training and development.

**Keywords:** Africa, retail banking, organisational culture, risk culture

## 2. Introduction

Many banks have large foreign footprints in a variety of countries, and retail banking institutions have established subsidiary businesses in multiple jurisdictions outside their domiciled country (BIS, 2010). These subsidiaries operate in different national cultures, different legal systems, and different sectoral regulatory frameworks, with potentially different levels of and attitudes towards risk. Although studies are available that are related to risk culture in a variety of organisations, no published academic research could be found on risk culture in African financial institutions, nor on the differences between the risk culture of different subsidiaries on the continent of the same financial institution. As an initial attempt to investigate whether or not such differences exist, especially across multiple jurisdictions, this study compared the retail banking risk cultures of South African and Kenyan divisions of the same South African financial institution.

The Bank for International Settlements (BIS) (2010) suggests that retail banks operating in multiple jurisdictions had operated according to a complex business model, which they had to reconsider after the 2008 global financial crisis (2008 GFC). The group of 30 most economically developed nations (G30, 2015) declared in a report following the crisis that financial institutions, specifically banks, “stand in disrepute”, thereby displaying the state of affairs in the sector at that point. This situation initiated a strongly proactive regulatory approach directed at organisational behaviour and risk-taking behaviour including the risk cultures of organisations. Echoing Power, Ashby, and Palermo (2013), the Financial Stability Board (2014), the G30 (2015) and the Australian Prudential Regulation Authority (2016) all concluded that the 2008 GFC was attributable to weak risk management and a reduced risk culture in financial institutions. As a result, there has been an increased focus from prudential regulators, notably from the Netherlands, Australia and the United Kingdom, to regulate the risk culture of financial institutions (APRA, 2016; DNB, 2009; FSB, 2014).

Studies published by Bozeman and Kingsley (1998), Power et al. (2013), Ernst and Young (2015), Deloitte (2018), all examined risk culture in international financial institutions but did not include Africa. To fill this gap, this study used a quantitative approach to specifically assess and compare two African entities based in separate countries. A limited number of cross-industry risk culture studies within financial institutions, with a focus on peer comparisons in the same country and peer comparisons across nations, are publicly available. Three unpublished Africa-based studies were found, but these focused exclusively on risk culture in South African financial institutions (Kalima, 2016; Mazula, 2016; Padayachee, 2016).

The primary objective of this study was to compare the retail banking risk cultures of a South African and a Kenyan division of the same South African financial institution. The secondary objective was to establish whether there were differences in risk culture at management and non-management employee levels in the two divisions. Statistical analyses of the responses to the

UARM RCS-2018 survey instrument enabled the comparison of the retail bank's risk cultures in South Africa and Kenya. Cronbach's Alpha of 0.97 indicated the high reliability of the items used in the scale and factor analysis yielded two factors to assess the risk culture in the organisation: (1) Perceived level of integration of risk in decision-making processes; and (2) Perceived comfort with own risk management role.

### **3. Background**

According to the International Monetary Fund (IMF), the primary role of a bank is to “take in funds – called deposits from those with money, pool them, and lend them to those who need funds” and thereby act as an intermediary between depositors and borrowers (IMF, 2012). However, complexities in banking practice have evolved (OFR, 2017) and, following the 2008 GFC, there has been renewed interest in regulating the risk cultures of banking institutions.

Retail banks are essential in a country's economy because they create economic development through the facilitation of business and they enable governments' implementation of monetary policies through savings and monetary instruments to foster economic development.

The divisions of the retail bank studied here have operations in South Africa and Kenya, with the parent organisation (holding company) headquartered in South Africa.

#### **Overview of the retail banking divisions**

The two retail banking divisions operating in South Africa and Kenya are owned by the same financial institution but operate in two jurisdictions. The differences in their operating environments imply differences in the national, legislative and regulatory environments in which they conduct their business.

#### **South African division**

The retail banking division in South Africa is a subsidiary of a South African-based holding company that has operated for 27 years. During that time the bank merged with various other financial services providers in South Africa and across Africa. The retail bank encompasses business units including card payments, home loans, personal loans, transactional banking, deposits, vehicle finance and asset finance, and it employs over 20,000 members of staff in its revenue-generating business segments.

#### **Kenyan division**

The retail banking division in Kenya has been operating there for 100 years. Over its lifetime, it has been wholly owned by different holding companies from different countries including South Africa and the United Kingdom. Its retail banking business is similar to its South African counterpart but

with more limited product offerings. It employs more than 1,000 members of staff in its revenue-generating business segments.

### Literature review

The literature review for this study contextualises national and organisational culture as well as risk culture (see Figure 1).



**Figure 1.** A diagrammatic representation of the literature review in this study

### National culture and organisational culture

National culture influences organisational culture, which in turn influences the risk culture of an organisation. For Westrum (1993), culture is to an organisation what personality is to an individual, and every organisation develops a characteristic way of doing things. Therefore, the organisational culture is influenced by the organisation's unique set of collective behaviours. Schein (2009, p. 21) broadens this narrative by warning that organisational culture should not be defined in a simplified way in an organisation. Culture is relative to differences at different levels of the organisation. All of these contribute to the overall organisational culture, which has been described as beliefs, values and behaviours that influence and make unique the social and psychological environment of an organisation (Schein, 2009). G. Hofstede, Hofstede, and Minkov (2010, p. 344) define organisational culture as "the collective programming of the mind that distinguishes the members of one organisation from others". This definition sets the tone of organisational culture for the present research paper because one needs to understand what culture is before drawing conclusions about cultural differences. G. H. Hofstede (2001) refers to the differences in social and cultural aspects that exist in organisations that operate in multiple jurisdictions. Specifically,

Trompenaars and Hampden-Turner (2011) focus on how organisations can link their operating environments to the cultural aspects that exist in the organisations.

In order to analyse the principles, knowledge, and experiences that guide the attitudes and behaviours of employees towards risk management, the organisational culture needs to be understood and contextualised (Carretta, Fiordelisi, & Schwizer, 2017). The present study does not consider the organisational culture of the retail banking divisions in Kenya and South Africa, but an overview of the literature of organisational culture was explored for an understanding of risk culture. To manage their subsidiaries, organisations that operate in multiple jurisdictions need to understand the individual cultures of their various geographically dispersed divisions.

The literature makes it clear that organisational culture influences employee behaviour and risk-taking activities and plays a role in the way in which employees in the organisation operate. Risk culture is viewed as a subset of organisational culture.

### **Risk culture**

Table 1 provides definitions of risk culture as used in the literature.

Table 1: *Risk culture definitions*

<b>Definitions</b>	<b>Sources</b>
"Risk culture is the norms, attitudes and behaviours related to risk awareness, risk-taking and risk management, and controls that shape decision on risks. Risk culture influences the decisions of management and employees during the day-to-day activities and has an impact on the risks they assume."	Basel Committee on Banking Supervision (BCBS, 2015a).
"While various definitions of culture exist, supervisors are focusing on the institution's norms, attitudes and behaviours related to risk awareness, risk-taking and risk management, or the institution's risk culture."	Financial Stability Board (FSB, 2014).
"Risk culture can be defined as the norms and traditions of the behaviour of individuals and of groups within an organisation that determine the way they identify, understand, discuss, and act on the risks the organisation confronts and the risks it takes."	The Institute of International Finance (IIF, 2009).
"Our view on risk culture is to identify, assess and mitigate behavioural patterns that have a detrimental impact on decisions on risk awareness, risk taking and risk management."	Dutch National Bank (DNB, 2009)
"Risk culture can be defined as the financial institution's norms and the collective attitudes and behaviours of its people that influence risks and impact outcomes."	Ernst and Young (EY, 2015)

Based on existing and commonly used definitions (Table 1), retail banking risk culture may be defined as the norms, attitudes and behaviours of individuals and groups in retail banking environments. However, this study adopted the more specific decision-focused definition of risk culture: *'The risk culture of an organisational group is manifested by the importance given to considering risk when the group makes decisions. The level of explicit inclusion of risk in decision-making represents the inherent, subjective value afforded to risk by the group.'* (Refer to Appendix A).

The need to understand the importance of connecting risk management policy and practice with an organisational culture has been highlighted (Jondle, Maines, Burke, & Young, 2013). Risk culture is accepted as an element of organisational culture that encompasses the management of risk and promotion of sound risk-taking by organisations (Banks, 2012; BCBS, 2015a; FSB, 2014). The BCBS (2015a) elaborates that risk culture influences the decisions of management and employees during their day-to-day activities. The APRA (2016) supports the definition of the BCBS (2015a) and highlights concepts that are important for this study, which include views that: risk culture is the impact of the organisation's culture on risk management and is multifaceted and exists throughout an organisation; risk culture entails shared norms and behaviours on risk in a single organisation including subsidiaries; and subcultures exist in an organisation and could have an overall impact on the entire organisational culture, subsequently including its risk culture, thereby introducing a risk culture complexity within the organisation.

### **Indicators of a sound risk culture**

Supervisory bodies provide guidelines for the assessment of the risk culture of organisations. The most notable are from the APRA (2016), Dutch National Bank (2009) and FSB (2014). However, there is disregard by consultants for the existing supervisory guidelines on risk culture because of their lack of practical application. This is supported by the statement from Paradigm Risk Consulting (2014) and from Power et al. (2013) that there is an "erroneous" approach by supervisory bodies to the application of risk culture and the assumptions made on how to assess risk culture in financial institutions. Power et al. (2013) point to the lack of academic literature to inform the application of risk culture by supervisory bodies. There is, however, consensus among supervisory bodies, professional institutions and consultants on the indicators of a sound risk culture within financial institutions (FSB, 2014; IRM, 2012). The risk culture indicators are used for guidance on measuring risk culture and should be used to measure the maturity of risk culture in an organisation. However, the FSB (2014) states that measuring risk culture can be a complicated exercise. Therefore, given the latter statement, measuring risk culture in a large organisation operating in multiple jurisdictions would be expected to have a high level of complexity.

## **4. Method**

### **Research approach**

This study followed a quantitative approach based on a survey that employed the UARM RCS-2018 to collect data from participants in South Africa and Kenya. The objective was to analyse the perceptions of risk culture in divisions and employment levels in the two retail banking divisions in these two countries.

### **Sampling**

Convenience sampling was used in this study. Riley, Wood, Clark, Wilkie, and Szivas (2000, p. 87) define a convenience sample as one that focuses on participants who are available to receive the administration of a survey. The participants of the present study were employees in the first line of defence (refer to Appendix B) in South African and Kenyan retail banking divisions who are responsible for managing end-to-end risks and controls in their daily processes to achieve their objectives.

### **Data collection**

The UARM RCS-2018 of the North-West University was used as the research instrument. This instrument has been developed over some years and has shown itself to be a credible instrument to collect risk culture information from participants being studied. The details of this instrument are provided in Appendix A. The UARM RCS-2018 was distributed electronically via email as an online survey to participants, who encompassed management and non-management employees in the South African and Kenyan retail banking divisions owned by a single South African parent financial institution. The main aim of the survey was to collect data that would form the basis for comparing the perceptions of risk culture in the South African and Kenyan retail banking divisions. The survey was left open for two months and multiple electronic follow-up reminders were sent to potential participants. The first part of the UARM RCS-2018 sought demographical information. The second part of the UARM RCS-2018 included 43 risk-related items.

### **Data analysis**

The data collected from the South African and Kenyan divisions were analysed by means of descriptive and inferential statistics using the SAS<sup>®</sup> statistical package. Since the parametric assumption of normality did not hold, non-parametric tests were employed to test for differences between the distributions of the groups based on the factor scores. To attain the Wilcoxon rank sum test results for two independent groups, the Wilcoxon mean scores were obtained. The results were then tabulated and are discussed in the Results section.

## Ethical considerations

The ethical requirements prescribed by the Faculty of Economic and Management Sciences of the North-West University were adhered to. In addition, permission was obtained from the South African and Kenyan divisions to undertake the research.

## 5. Results and Discussion

This study compared the retail banking risk cultures of divisions and employment levels in Kenya and South Africa by employing a questionnaire survey. The results of the study are discussed below.

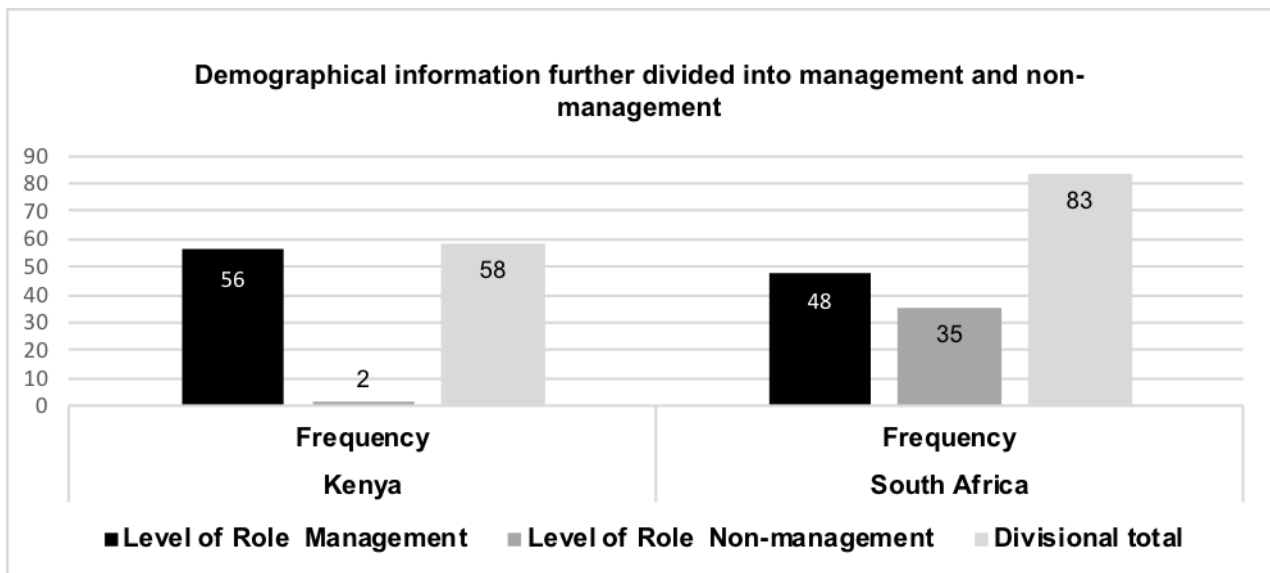
### Demographical information of the sample

Table 2 provides the demographical information of the sample and response rates of the participants in the questionnaire survey.

Table 2: *Demographical information about the sample participants*

<b>Division</b>	<b>Number of participants</b>	<b>Responses</b>	<b>Response rate (%)</b>
Kenya	540	58	11
South Africa	500	83	17
<b>Total</b>	<b>1 040</b>	<b>141</b>	<b>14</b>

A response rate of 50% or higher is generally regarded as being acceptable for analysing and reporting results. Thus, results from this study should be generalised with care (Rubin & Babbie, 2009, p. 117). Figure 2 further divides the demographical information in Table 2 into management and non-management levels of employment.



**Figure 2.** The demographical information further divided into management and non-management

### Risk culture factors

The factor analyses of the survey data produced two risk culture factors:

- Perceived level of integration of risk in decision-making
- Perceived comfort with own risk management role

Table 3: Risk culture factors as produced by the factor analysis

Risk culture factor	Number of Items
1. Perceived level of integration of risk in decision-making processes	24 risk-related items
2. Perceived comfort with own risk management role	18 risk-related items

### Reliability of scale

Cronbach's alpha coefficient of 0.97 indicates that there is a high reliability of risk-related items in the RCS. The risk culture factors and the reliability of the RCS are not based on the data of the present study.

## Risk culture maturity

The risk culture factor scores are calculated as the mean of the responses over the items making up the factor. Table 4 provides the factor maturity scores of all the participants in Kenya and South Africa combined (refer to Appendix A for risk-culture-maturity scale).

Table 4: *Factor maturity scores of all participants in South Africa and Kenya*

Factor	Kenya and South Africa combined
Factor 1 - Perceived level of integration of risk in decision-making process	3.9
Factor 2 - Perceived comfort with own risk management role	4.1

The maturity score of Factor 1 (Perceived level of integration of risk in decision-making) indicates that there is a high level of perceived integration of risk in decision-making processes in the organisation by all participants in both South Africa and Kenya. Similarly, the score for Factor 2 (Perceived comfort with own risk management role) suggests a high level of perceived comfort with own risk management role by all participants in South Africa and Kenya (see Table 4).

The factor maturity scores in Table 5 are further divided into management and non-management employees (using the level of the role played or employment level). Table 4 provides these maturity scores.

Table 5: *Factor maturity scores of participants in South Africa and Kenya by role level*

Factor	Role level	Kenya	South Africa
Factor 1 Perceived level of integration of risk in decision-making processes	Management	3.7	3.9
	Non-management	3.5	4.2
Factor 2 Perceived comfort with own risk management role	Management	4.0	4.2
	Non-management	3.8	4.2

The scores for Factor 1 indicate a high level of perceived integration of risk in the decision-making processes in the organisation by management and non-management both in South Africa and Kenya. This could imply high risk awareness, mature risk integration in processes, and successful embedding of standards, policies and frameworks in both divisions. Similarly, the score for Factor 2 suggests a high level of comfort with own risk management role by management and non-management staff in both South Africa and Kenya (see Table 5 ), indicating high personal understanding of risk, risk management, acknowledgement of accountability and responsibility for

risk management and risk events. It should be noted that there is a tendency for individuals to overestimate their competency and attributes, therefore further research would have to be conducted to confirm these findings. Furthermore, due to the low response rate among non-management staff in Kenya (see Figure 2), the result may not reflect the true maturity level of the overall population.

**The differences in risk culture perceptions between retail banking divisions and level of role (management and non-management)**

The non-parametric test was used to obtain the Mann-Whitney test results. If the p-value is less than the level of significance ( $\alpha$ ) ( $p < \alpha$ ) then there is a significant difference between the distributions. The level of significance  $\alpha$  was set at  $\alpha = 0.05$  or 5%.

**Retail banking divisions**

**Factor 1 – Perceived level of integration of risk in decision-making processes**

There was a significant difference between the South African division and Kenyan division (Table 6). The Wilcoxon mean score of the Kenya division was 58, compared to the South African division’s score of 81, indicating a higher level of perceived level of risk integration in the South African division than in the Kenyan division. This could imply a high level of risk awareness and risk integration in the South African division compared to the Kenyan division. In addition, standards, policies and frameworks could be well embedded in the South African division to help ensure awareness of and accountability for risks taken. The South African regulatory environment could be more mature than the Kenyan environment, which the latter could require more attention and disclosure.

Table 6: *Differences in perceived level of integration of risk between the South Africa and Kenyan divisions*

<b>Factor 1: Perceived level of integration of risk in decision-making processes</b>	<b>n</b>	<b>Wilcoxon Mean Score</b>	<b>Chi-square test statistic</b>	<b>p-value</b>	<b>Significant difference at <math>\alpha=0.05</math></b>
Kenyan retail banking division	58	58	11.098	0.001	Yes
South African retail banking division	84	81			

**Factor 2 – Perceived comfort with own risk management role**

There was a significant difference for this factor between the South African division and Kenyan division (see Table 7). The Wilcoxon mean score of Kenya divisions was 60, compared to the South African divisions of 80, indicating that the latter had a higher level of individuals’ perceived comfort with their own risk management role. This could imply that the individuals in the South

African division were more comfortable with their risk management roles than their counterparts in the Kenyan division.

Table 7: Differences in perceived comfort with own risk management role between the South African and Kenyan divisions

<b>Factor 2: Perceived comfort with own risk management role</b>	<b>n</b>	<b>Wilcoxon Mean Score</b>	<b>Chi-square test statistic</b>	<b>p-value</b>	<b>Significant difference at <math>\alpha=0.05</math></b>
Kenyan retail banking division	58	60	7.872	0.005	Yes
South African retail banking division	84	80			

### **Management and non-management**

#### **Factor 1 – Perceived level of risk integration of risk in decision-making processes**

There was no significant difference in the perceived level of risk integration in decision-making processes in the organisation between South African and Kenyan management and non-management employees.

#### **Factor 2 – Perceived comfort with own risk management role**

There was a significant difference between management employees in South Africa and management employees in Kenya (see Table 8). The Wilcoxon mean score of management employees in Kenya was 47, compared to 60 for management employees in South Africa, indicating a higher level of perceived comfort with own risk management role by management employees in South Africa than in Kenya. This result appears to support the view that there is a high integration of risk management in the South African division. Consequently, management in the South African division would be expected to be more comfortable with their risk management role because risk management is well embedded in the organisation.

There was no significant difference in the perceived comfort with own risk management role between South African and Kenyan non-management employees. This result could be attributed to the low response rate from non-management employees in both divisions (see Figure 2).

Table 8 Differences between management employees' perceived comfort with own risk management role in Kenya and South Africa

Factor 2: Perceived comfort with own risk management role	n	Mean Wilcoxon Score	Chi-square test statistic	p-value	Significant difference at $\alpha=0.05$
Management - Kenya	56	47	4.835	0.028	Yes
Management - South Africa	49	60			

### Areas of improvement

Participants were invited to select what could be done to include risk decision-making in the organisation from a list of choices.

Figure 3 indicates what participants believed could be done to improve the inclusion of risk in decision-making in the organisation in the South African and Kenyan divisions. The participants in both divisions considered that effective communications and challenge on decision-related risks needed to be improved first, in order to include risk decision making in the organisation. However, there were differences in the selection of the other options (see Table 9 ).

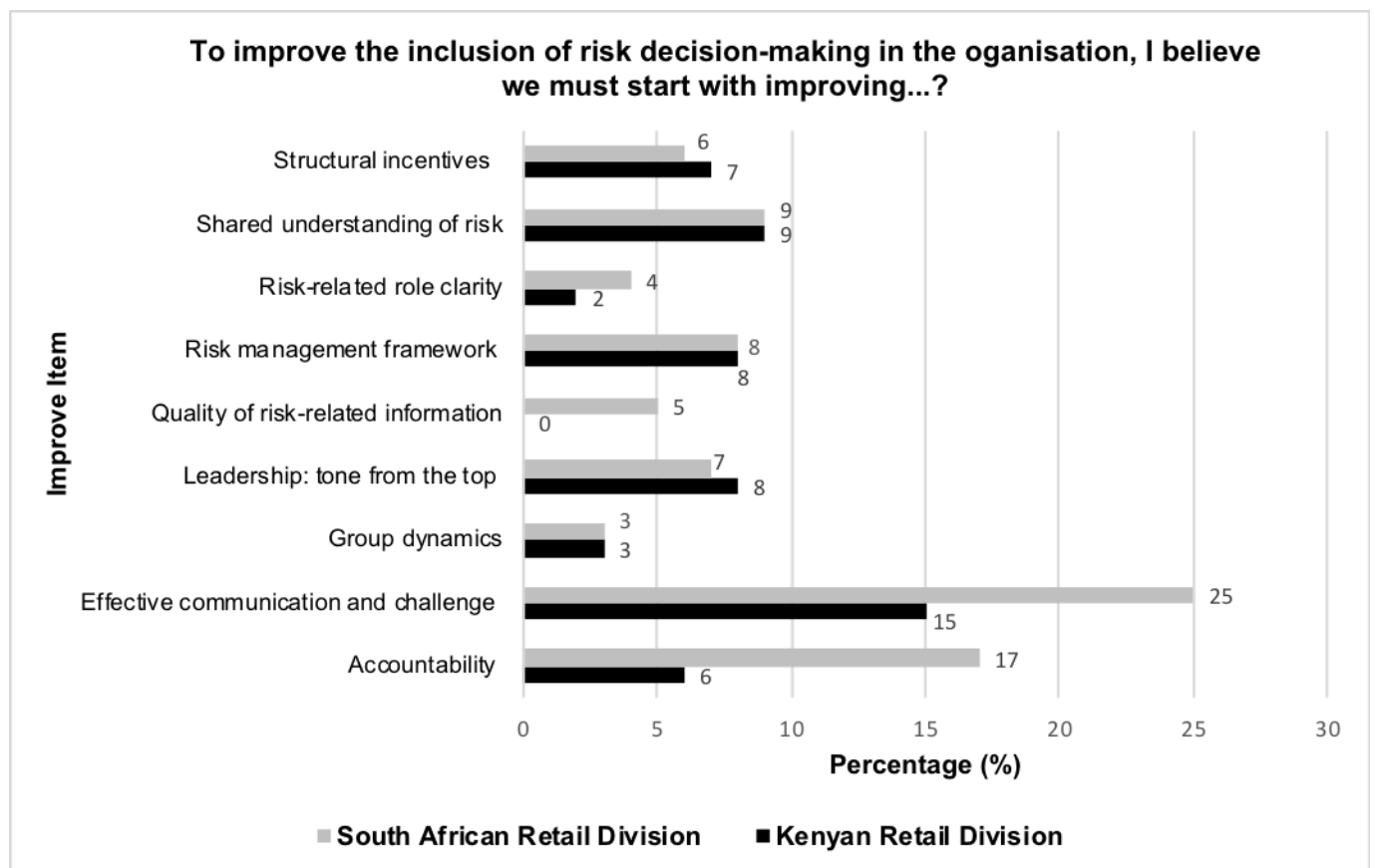


Figure 3. Participants' responses to 'To improve the inclusion of risk decision-making in the organisation, I believe that we must start with improving...'

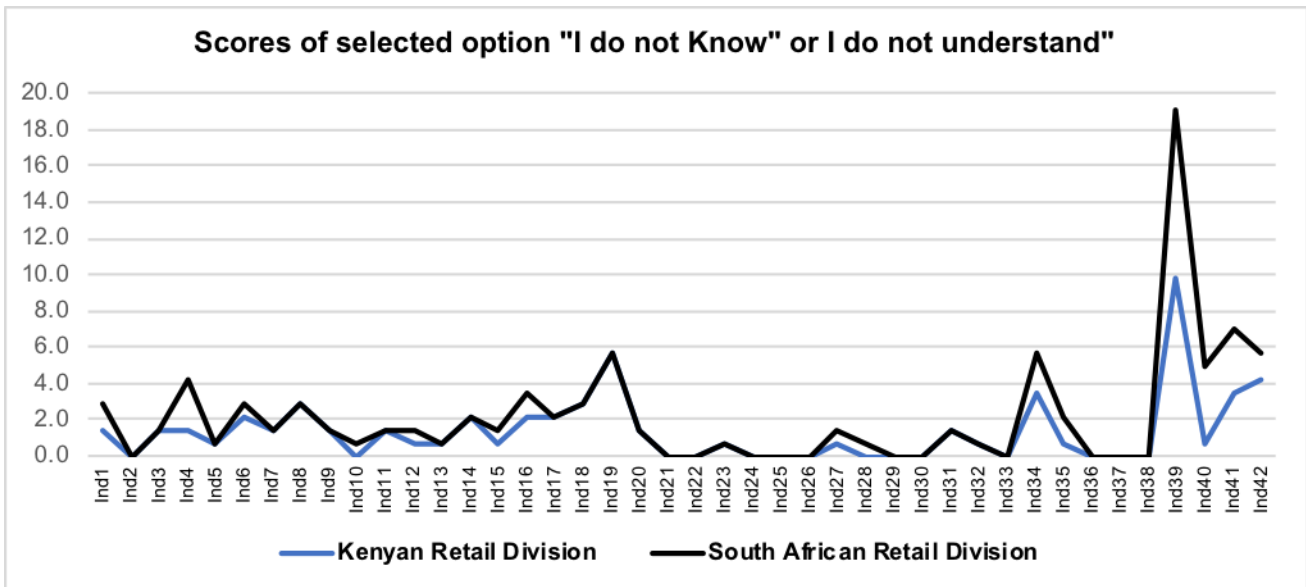
Table 9 provides an overview of the ranking of the selected options for improving the inclusion of risk decision-making in the organisation. Effective communication and challenge on decision-related risks was ranked first, implying that evident transparency and dialogue on risk-related decisions in the divisions may be lacking (the sample encompassed mainly employees at first line management level; see Figure 2). It is possible that senior executives may not be seen as open to alternative views on risk-related decisions from management, and there could be a lack of a statute of control functions in the divisions. Ideally, the role of senior executives is to assist in influencing the risk culture of the organisation by influencing the behaviour of employees. The shared understanding of risk was ranked third in the South African division, implying uncertainty with regard to the management of risk in the division (it was ranked second in Kenya).

Table 9: *The ranking of the selected options to improve the inclusion of risk decision-making in the organisation*

<b>Ranking</b>	<b>Kenyan division</b>	<b>South African division</b>
1	Effective communication and challenge on decision related risks	Effective communication and challenge on decision related risks
2	Shared understanding of risk	Accountability or including risk when making decisions
3	Risk management framework	Shared understanding of risk
4	Leadership: tone from the top	Risk management framework
5	Structural incentives for including risk when making decisions	Leadership: tone from the top
6	Accountability for including risk when making decisions	Structural incentives for including risk when making decisions
7	Group dynamics	Quality of risk-related information
8	Risk-related role clarity	Risk-related role clarity
9	Quality of risk-related information	Group dynamics

#### **Discussion of the selected option “I do not know” or “I do not understand”**

Figure 4 provides a view of the percentage of participants in the Kenyan and South African divisions who answered “I do not know” or “I do not understand”.



**Figure 4.** Percentages of "I do not know" or "I do not understand" responses in the Kenyan retail division and in the South African division

Figure 4 suggests that both the South African and Kenyan divisions had high scores for Item 39. This indicates that participants did not know if "The organisation rewards staff members who take responsible risks", implying uncertainty with regard to risk-based incentives, performance and remuneration in the divisions. The second highest score was for Item 34, "The organisation's risk training initiatives have prepared me to manage the risks connected to my role" for the divisions in both South Africa and Kenya. This could indicate that the both divisions had not provided adequate training towards risk related roles to participants. The third highest score was for Item 19, "We have constructive discussions on risk when making business decisions", for both the South African and Kenyan divisions, indicating that risk management was not discussed or embedded at every level in the divisions. In addition, risk management was not considered an enabler of decision-making in the divisions. The fourth highest score was for Item 4, "The organisation manages its risk within its risk appetite limits", in the South African division, suggesting poor communication of the division's business and risk strategy.

## 6. Conclusion

The objective of this study was to compare the risk culture maturity of two retail banking divisions in South Africa and Kenya, both owned by the same South African financial institution.

The survey results indicated a high level of risk culture maturity level with regard to the integration of risk in both divisions. Management and non-management employees in South Africa and Kenya appeared to agree that there was a high level of risk integration in decision-making and that they were comfortable with their own risk management roles and responsibilities. However, there were

differences in the risk culture perception between South Africa and Kenya at country level, suggesting the possible influence of factors such as national culture and regulatory environment, including different sectoral frameworks. Furthermore, the integration of risk management in decision-making was more mature in the South African division than in the Kenyan one.

The participants in both divisions considered that effective communication and challenge relating to decision-related risk needed to be improved first, in order to include risk management in decision-making in the organisation. Both the divisions in South Africa and in Kenya indicated strongly that the divisions did not know that “The organisation rewards staff members who take responsible risks”, implying that there is insufficiently clear communication about the rewarding of managing risk in the divisions. This exploratory study achieved its objective in setting a precedent for future risk culture studies on African financial institutions operating in multiple jurisdictions.

### **Limitations of the study**

The study had the following limitations:

- The administration of the survey encountered problems. The response rates (83 responses from a possible 500 in South Africa, and 58 responses from a possible 540 in Kenya) were low. The low response rate could be attributed to survey fatigue in the organisation. Survey fatigue refers to the hesitancy of many people to respond to questionnaire surveys because they are flooded with requests by post, email, telephone, and in the street (Collis & Hussey, 2014, p. 207). During this period of the present study the organisation had been distributing a high number of surveys to employees.
- The study depended specifically on items in the UARM RCS-2018 scale and did not take into account other, broader, contextual factors that could affect risk culture in the different divisions selected for this study, such as differing national cultures, regulatory environments, and operating environments.

### **Recommendations for future studies**

The following recommendations for future studies were formulated based on the results of my study.

- The scope of the study could be broadened to include the overall organisation rather than being limited to specific operations;
- Organisational culture could be explored more broadly and how it influences risk culture in the context of the organisations studied;
- Additional African jurisdictions could be considered in the study;

- The influence of national culture, government rules and the regulatory environment could be contextualised in detail to reveal their effect on the overall risk culture of the organisation.

***Number of words in article: 7279***

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## **REFLECTION**

### **What did I learn?**

This research project has been a blessing and a great learning experience. Academically, I have gained a good foundation from the literature on organisational culture and how the literature is connected to the overall risk culture of an organisation. In the sphere of practice, I was able to link the risk culture literature back to the organisation being studied, and observe how multiple factors played a role in the risk culture of the organisation.

### **What went well?**

The selection of the research topic was a natural decision because no research could be found on risk culture in the organisation, and no specific risk culture study was found that compared two divisions in different jurisdictions. The initial support received from the organisation, specifically from the chief risk officers of the divisions, made it easy to distribute the UARM RCS-2018 to the appropriate audience. The patience and support received from my supervisor, and the Kerlick editorial and article writing team was invaluable.

### **What could I have done better?**

Although numerous follow up emails were sent to the participants in time, this could have been done better with the involvement of relevant senior management in the divisions. Planning and keeping to required timeframes could have eased the writing pressure. However, owing to unforeseen circumstances, this was out of my control. One can only try to manage time better in future by factoring in the possibility of uncertainties.

## **APPENDICES**

### **APPENDIX A: UARM RISK CULTURE SCALE (UARM RCS-2018)**

#### **An Overview**

**Hermien Zaaiman and Hedré Pretorius**

##### **Aims**

This document provides a summary of the North-West University (NWU)'s Centre of Applied Risk Management (UARM) Risk Culture Scale (UARM RCS). Current approaches to risk culture tend to be qualitative, using a general view of what risk culture is. Where risk culture questionnaires are applied, it is important to ascertain the validity and reliability of the resulting information against the broad construct of risk culture. The UARM Risk Culture Scale (UARM RCS) was developed to meet the need for an academically validated instrument to measure the risk culture in organisations.

##### **Approach**

Multiple definitions of risk culture exist in regulatory papers and risk standards. One of the more comprehensive definitions is that of the Basel Committee on Banking Supervision (BCBS) defining risk culture as: "A bank's norms, attitudes and behaviors related to risk awareness, risk-taking and risk management, and controls that shape decisions on risks. Risk culture influences the decisions of management and employees during the day-to-day activities and has an impact on the risks they assume" (BCBS, 2015b, p. 2).

However, applying such broad definitions to evaluate and improve the risk cultures of organisations is complex. This process requires the development of instruments to assess and measure specific aspects of risk culture. The UARM RCS was developed using our decision-focused view of risk culture as a basis for the development and testing of its items:

*'The risk culture of an organisational group is manifested by the importance given to considering risk when the group makes decisions. The level of explicit inclusion of risk in decision-making represents the implicit, subjective value afforded to risk by the group.'*

The scale items were therefore developed to represent aspects of the integration of items in risk culture based on our Risk Culture Indicator (RCI) model, described by Zaaiman in the Appendix: 'Risk Culture Indicator Model – An Overview'.

## Status

The UARM RCS provides three sets of results that can be used to assess the

### 1) Two risk-culture-related factors

The 42-item five-point Likert scale has been developed and piloted over 3 years (2016-2018). The scale is now mature and can be regarded as valid, as the scale items map to the RCI model and has shown in multiple studies to work well across sectors, functions and management levels (content validity). The scale also shows a high Cronbach  $\alpha$  reliability coefficient of 0.97 (internal consistency).

The scale measures two risk-culture-related factors:

- Perceived level of integration of risk in decision-making processes (24 items)  
*Note: Although the items cover the indicators in the RCI Model, only one factor is found in the answer data. This can be ascribed to the interlinked nature of the indicators and provides an indication of the validity of the scale for the study of this aspect of risk culture.*
- Comfort with own risk management role (18 items)

The factor scores are calculated as the average of the responses over the items making up the factor. This translates to the following risk-culture-maturity scale for the decision-based view of risk culture used in this study.

		UARM RCS-2018 (FS = Factor Score)				
		1.0 $\leq$ FS < 1.5	1.5 $\leq$ FS < 2.5	2.5 $\leq$ FS < 3.5	3.5 $\leq$ FS < 4.5	4.5 $\leq$ FS $\leq$ 5.0
Factor 1	Perceived level of integration of risk in decision-making processes	Very low level of perceived integration	Low level of perceived integration	Medium level of perceived integration	High level of perceived integration	Very high level of perceived integration
Factor 2	Comfort with own risk management role	Very low level of comfort	Low level of comfort	Medium level of comfort	High level of comfort	Very high level of comfort

### 2) The I-do-not-know/I-do-not-understand-the-statement answer option

Item response options include an 'I do not know' or "I do not understand the statement" option to mitigate possible spurious effects of respondents who truly do not know the answer to an item. The I-do-not-know answers were not included in the scale's factor analysis, and only participants with fewer than 30% of I-do-not-know answers (per factor) were included in the calculation of the factor scores. This means that the participant had to have answered at least 16 of the items in factor 1 and 12 items in factor 2 to be included in the calculation of the factor score.

Also, the full set of the study's I-do-not-know answers are analysed separately, thereby providing valuable information on the levels of uncertainty about risk-culture-related aspects in the study sample(s) that could be indicative of possible risk-related knowledge in the study population(s).

### 3) The what-needs-to-change-first diagnostic question

The scale also contains a further RCI model-based diagnostic question:

*'To improve the inclusion of risk in decision-making in the organisation, I believe that we must start with improving....'*

Evaluating the responses to this question allow for suggestions on the way forward on improving the risk culture of the organisation.

#### **Interpretation of results**

When the scale is applied, the results have to be interpreted in the context of the study for which the results were obtained.

To keep in mind when analysing and interpreting the scale results:

- 1) In a questionnaire like this, only the group response makes sense and the individual's factor score cannot be used as an indication of the individual's 'risk culture' as culture is always a group concept.
- 2) Maturity levels of the measured factor could be inflated by response biases (e.g. social desirability influence).
- 3) The results of the scale are valid at factor level. As the scale-based factor is based on the coherence for the group of items that make up the factor. These items were designed based on the measurement aims of the scale but do not contain every possible item that could have been used. Other items that refer to the construct may have shown the same result, implying that focusing on differences at item level could divert the user's attention to inadequately tested aspects of the underlying construct, while not considering the validated construct. The scale is able to provide indications of where risk culture-related issues lie in the organisation and was not designed to identify macro-level issues. Other scales and research methods are required to do detailed follow-up investigations.

For more information on the UARM RCS, please contact: Hermien Zaaiman at

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<http://commerce.nwu.ac.za/uarm>

## **APPENDIX B: THREE LINES OF DEFENSE DEFINITION**

The BIS (2015) defines the first line of defence as "the revenue-generating business units" in a banking institution that is part of the three lines of defence model.

## APPENDIX C: LIKERT SCALES TYPE USED

The survey instrument is a five-point Likert scale to test the level of how much respondents agreed or disagreed with a particular item and questions (with an option to select "I do not know"). The table below provides an example of the two Likert scale types.

Type of Likert Scale
I don't know, Not at all, Not well, Moderately well, Well, Perfectly
I don't know, Never, Infrequently, Sometimes, Usually, Always