



# **Applying the Basel Committee on Banking Supervision risk culture guidelines: a credit risk investigation**

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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 on 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**

Significant investments to improve risk management practices could be wasted unless organisations establish and monitor sound risk cultures. Although the Basel Committee on Banking Supervision (BCBS) provides valuable risk culture guidelines, the benefits and challenges of implementing these guiding principles are unclear. This study focused on management's understanding and perception of the BCBS risk culture principles within a credit risk-related area of a South African bank. This qualitative study was based on a review of relevant literature followed by semi-structured interviews with executives and senior and middle managers. The interview data were analysed using a risk culture codebook based on the Financial Stability Board (FSB)'s risk culture approach adopted by the BCBS, combined with the Central Bank of the Netherlands' principles used for cultural supervision. Participants' awareness of the BCBS risk culture guidelines was lower than expected. However, even though they may not have known the guidelines, their knowledge and insights relating to the concepts covered by the guidelines were high.

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## RESEARCH PROJECT OVERVIEW

The term 'risk culture' is a behavioural concept that refers to the general awareness, attitudes, and behaviours of a financial organisation's board of directors, senior management, and employees toward risk as defined by the International Finance Corporation (IFC, 2015). Although difficult to measure, the level of risk culture maturity is viewed by industry bodies as a good indicator of how widely risk management policies and practices have been accepted and adopted within financial firms (FSB, 2014; IRM, 2012; IRMSA, 2018). However, I could not find any published academic studies that examined manager perception and understanding of the Basel Committee on Banking Supervision (BSBS) risk culture guidelines. This exploratory study on the topic is therefore expected to add value to the risk culture application body of knowledge.

As this was an exploratory study, the data gathered allowed for many different possible storylines on this topic. For this article, I decided to tell the following story:

1. The BCBS risk culture guidelines provide a valuable structure against which to evaluate and improve the integration of risk into organisational management;
2. Despite this possible value, organisational managers may not be aware of these guidelines;
3. However, this does not necessarily mean that they are unaware of risk-culture-related concepts as evidenced in their views on the benefits and challenges of implementing the concepts discussed in the guidelines;
4. Ultimately, greater knowledge of these guidelines is expected to allow organisations to consciously improve their risk cultures.

The risk culture indicators used in this work are based on the Risk Culture Indicator (RCI) model developed at the Centre for Applied Risk Management (UARM) of the North-West University in South Africa (Appendix A). Should the article be submitted for publication, it will be further reworked according to the selected journal's length requirements.

The *Southern African Business Review* was the journal chosen for potential publication of this article because it seeks to illuminate issues within the fields of economic and management sciences. The present investigation provides insight into the application and understanding of the 2015 BCBS risk culture guidelines and thereby contributes to the body of knowledge in the risk management space at a practical level. This work is expected to be of interest to financial institutions, boards, risk committees, risk practitioners and academic scholars. The author guidelines for the *Southern African Business Review* are available at <http://www.unisa.ac.za/sites/corporate/default/Colleges/Economic-and-Management-Sciences/Journals/Southern-African-Business-Review/Guidelines-for-contributors>

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# ARTICLE

## Applying the Basel Committee on Banking Supervision risk culture guidelines: a credit risk investigation

### 1. Abstract

Significant investments to improve risk management practices could be wasted unless organisations establish and monitor sound risk cultures. Although the Basel Committee on Banking Supervision (BCBS) provides valuable risk culture guidelines, the benefits and challenges of implementing these guiding principles are unclear. This study focused on management's understanding and perception of the BCBS risk culture principles within a credit risk-related area of a South African bank. This qualitative study was based on a review of relevant literature followed by semi-structured interviews with executives and senior and middle managers. The interview data were analysed using a risk culture codebook based on the Financial Stability Board (FSB)'s risk culture approach adopted by the BCBS, combined with the Central Bank of the Netherlands' principles used for cultural supervision. Participants' awareness of the BCBS risk culture guidelines was lower than expected. However, even though they may not have known the guidelines, their knowledge and insights relating to the concepts covered by the guidelines were high.

**Keywords:** Risk culture, Risk culture guidelines, Risk culture indicators, Basel Committee on Banking Supervision, Financial Stability Board, De Nederlandsche Bank

## 2. Introduction

The international Basel Committee on Banking Supervision (BCBS) consists of 45 central bank and supervisory authority members with formal responsibility for supervision of the banks under their jurisdictions. The BCBS mandate is 'to strengthen the regulation, supervision and practices of banks worldwide with the purpose of enhancing financial stability' (BIS, 2018a). In 2015, the BCBS adopted the Financial Stability Board (FSB)'s risk culture guidelines, thereby adding emphasis on risk culture to their corporate governance principles for banks (BIS, 2015a; FSB, 2014). However, adoption of such post-crisis guidelines has been slow as shown by Wright, Sheedy, and Magee (2018). After completing the Basel III post-financial crisis regulatory reform framework in 2017, the chairman of the BCBS announced that banks' behavioural responses to its reforms will be a further BCBS focus area. Such attention includes the development of further corporate governance guidelines and an updated set of core principles for effective banking supervision (BIS, 2018b). Based on the BCBS's risk culture work in 2015, its renewed focus on the behavioural aspects of governance is expected to include continued attention to risk culture as part of global bank governance and supervision processes. However, banking regulations based on the Basel regulation requirements do not guarantee suitable behaviour (Foggitt, Heymans, van Vuuren, & Pretorius, 2017). A recent South African credit risk example is the unravelling of African Bank, a company that too aggressively grew its loan book (Myburgh, 2016). Myburgh's findings on the demise of African Bank raise the question whether poor risk culture placed its risk management practices in jeopardy, preventing it from anticipating potential corporate governance failures.

A study of the application of the BCBS risk culture guidelines in banks is therefore topical. The study described in this article focused on management awareness and understanding of the BCBS risk culture principles in a credit risk area of a large bank. Credit risk was selected based on the criticality of sound credit risk management for the financial stability of banks, owing to credit's inherent significant risk exposure, with resultant impact on regulatory capital requirements (BIS, 2017). The Basel III approach to banking supervision means that credit risk management should go beyond merely satisfying the Basel III technical requirements and that it should also include behavioural aspects in credit risk governance. However, no published academic study on applying the BCBS risk culture guidelines in a credit risk area was found in the current academic literature. Therefore, to provide a starting point for future work on this topic, the present qualitative study aimed to discover how managers at different levels in a credit-risk-related area of a financial organisation perceived and understood the benefits and challenges related to applying the BCBS risk culture guidelines in their working environment. The BCBS guidance on risk culture is not research-based and more research on the role of regulatory documents on embedding risk culture is needed.

This investigation into the understanding and application of the 2015 BCBS risk culture guidelines contributes a practice-based view to the behavioural risk management body of knowledge. The findings are of interest to financial institutions, boards, risk committees, risk practitioners and

academic scholars. Comparing participant responses with a risk culture code book based on the BCBS guidelines provided a basis for interpreting their understanding of the concepts related to these guidelines as well as their perceptions of potential benefits and challenges of applying the BCBS risk culture guidelines in the organisation.

### **3. Background**

One of the aims of the BCBS regulatory recommendations is to ensure that banks hold enough capital reserves to mitigate unexpected losses (BIS, 2017; Sheedy & Griffin, 2017). To this end, regulators have established stringent capital requirement standards based on the Basel credit risk requirements (BIS, 2017, 2018b). The BCBS defines credit risk as ‘the risk that a counterparty will fail to perform fully its financial obligations, and can arise from multiple activities across sectors’, for example, the risk of default of a bond obligation or loan (BIS, 2015b). Credit risk was selected as the focus of this research project as credit risk is a main contributor to potential capital losses, and is obliged to adhere to related stringent regulatory capital requirements (BIS, 2015c).

Financial institutions worldwide have to comply with regulatory requirements to build risk cultures appropriate to their risk management strategies (Power, Ashby, & Palermo, 2013). The BCBS defines risk culture as ‘a bank’s norms, attitudes and behaviours related to risk awareness, risk-taking and risk management, and controls that shape decisions on risks’ (BIS, 2015a). The BCBS-adopted FSB risk culture guidelines are intended to assist banks to improve risk-based decision making. However, despite resources spent on improving risk culture and practices, credit risk management will not be effective unless all employees involved in risk decision making are aware of the relevant risks and contribute to making appropriate risk-based decisions. Staff members may differ in their conceptualisation and awareness of these guidelines, resulting in inadequate common understanding of the drivers of the risk culture indicators in the organisation.

#### **3.1. Risk Culture**

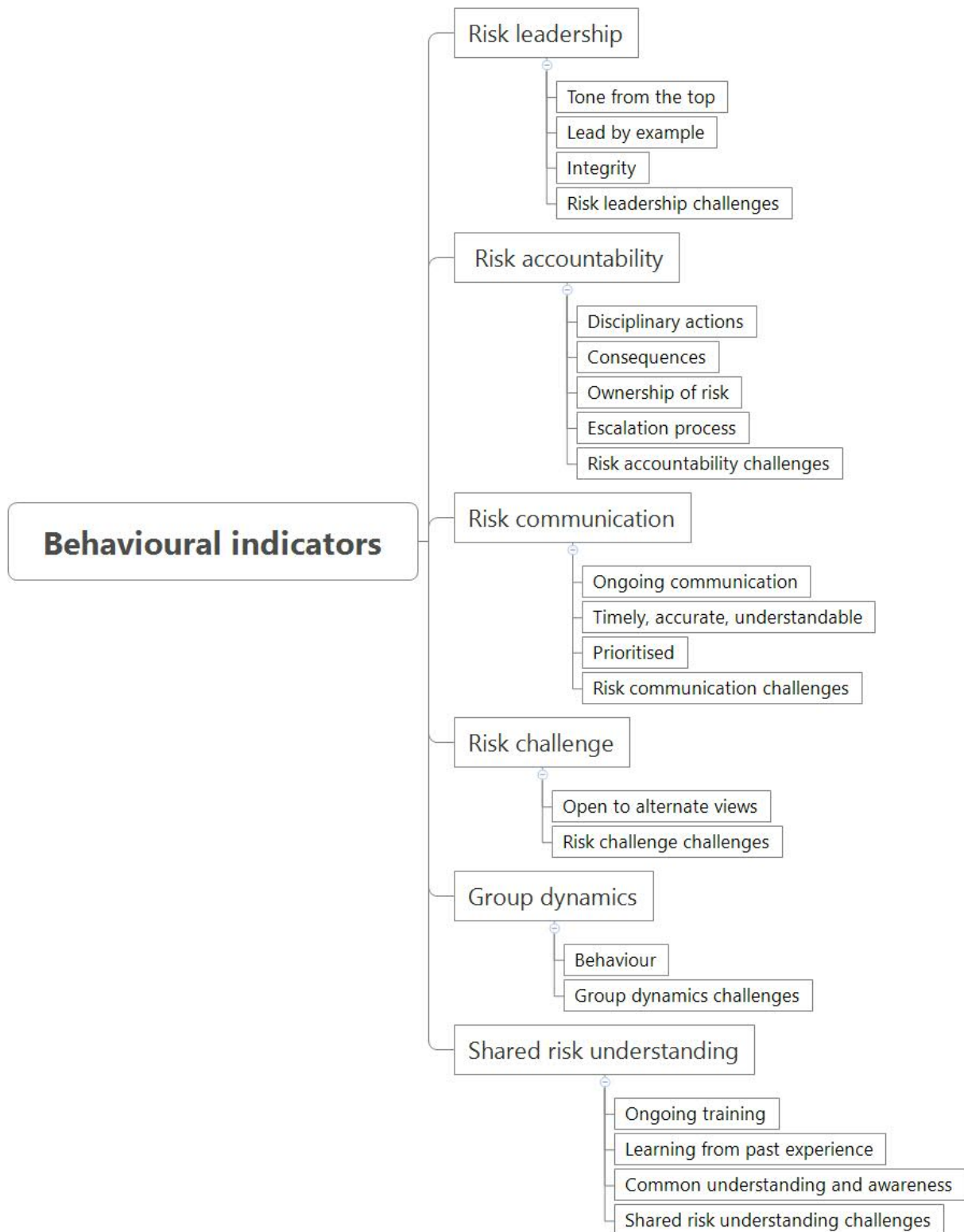
Risk concerns uncertainties related to meeting organisational objectives. Taking risk could have positive (e.g. profit) or negative (e.g. loss) effects on reaching objectives (Purdy, 2010). The term ‘risk management’ refers to activities to control these risks (CIMA, 2008; ISO, 2009). Risk taking and management are influenced by risk culture based on the behavioural risk-taking norms and traditions of organisational groups. These norms and traditions influence risk-based decision-making related to organisational objectives (APRA, 2016; Ashby, Palermo, & Power, 2013; IRM, 2012; Roeschmann, 2014).

The importance of a strong risk culture to a bank's risk management process is to ensure that the risk decisions are enhanced by risk mitigation processes (IFC, 2015). Though oversight of risk culture is not normally a legislative requirement, financial supervisors encourage the leaders of financial institutions to strive towards establishing robust risk cultures (G30, 2015). The intention of supervisory

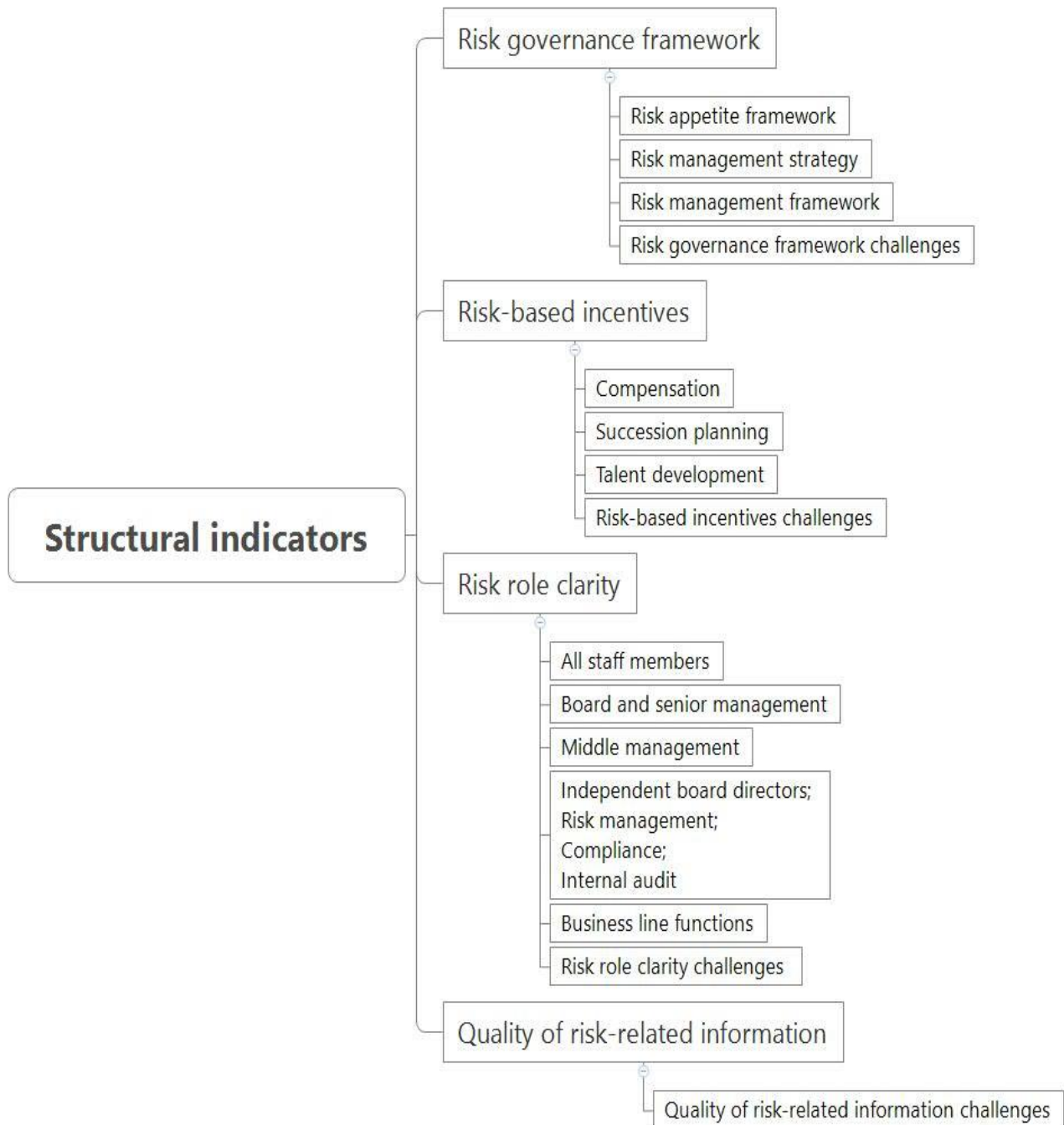
guidelines is to increase transparency and disclosure of corporate governance, thereby encouraging better risk-taking behaviour (BIS, 2011b; DNB, 2015; IIF, 2009; OECD, 2014).

### **3.2. Risk culture indicators**

The risk culture indicators used in this study were based on an expanded view of the four FSB indicators of sound risk culture: 'tone from the top'; 'accountability'; 'effective communication and challenge'; and 'incentives' (FSB, 2014; Zaaiman, Appendix A). In this view, 'tone from the top' was renamed 'risk leadership: tone'; the 'effective communication and challenge' indicator was split into a 'risk communication' indicator and a 'risk challenge' indicator. 'Shared risk understanding' covered under 'tone from the top' in the FSB approach was elevated to a separate main indicator. A separate 'risk management framework' indicator was introduced, and 'group dynamics', 'risk role clarity' and 'quality of information' indicators were added from the Central Bank of the Netherlands (DNB, 2015)'s work on culture. This indicator view was used as the basis for the present study as presented in the behavioural and structural groups illustrated in Figures 1 and 2. Each of these indicators is now explained in more detail.



**Figure 1: Behavioural risk culture indicators and sub-indicators used in this study**



**Figure 2: Structural risk culture indicators used in this study**

### **3.3. Behavioural indicators**

#### **3.3.1. Risk leadership**

Risk leadership is defined by the FSB in terms of the concept of tone from the top, where organisational leaders exhibit desired behaviours, ensure staff are held accountable for their behaviour, and continuously oversee behaviour at all levels of the organisation (FSB, 2014). A sound risk culture requires leaders to set the risk-taking management tone in the organisation by promoting a shared understanding and awareness of risks, thereby avoiding excessive risk-taking. The BCBS further emphasises that all employees are responsible for ensuring that the bank 'operates within the agreed risk appetite and limits' (BIS, 2015a). In this regard, leaders (senior management and the board) contribute significantly to the bank's governance through setting the 'tone at the top' (BIS, 2015a). Reinforcing a strong risk culture requires that leadership tone cascades down into the business in the way employees consider and understand their responsibilities (FSB, 2014). Risk leadership sub-indicators used in this study were:

- Tone from the top
- Lead by example
- Integrity
- Risk leadership challenges.

#### **3.3.2. Risk accountability**

Accountability requires that employees at all levels within the bank understand the core values of the institution and its approach to risk. Clear expectations ensure that all employees at all levels of the organisation have a clear understanding of their prescribed roles and responsibilities, and make them aware that they are held accountable for 'their actions and decision in relation to the institution's risk-taking behaviour' (BIS, 2011b; FSB, 2014). Risk accountability sub-indicators used in this study were:

- Disciplinary actions
- Consequences
- Ownership of risk
- Escalation process
- Risk accountability challenges.

#### **3.3.3. Risk communication**

A clear, well communicated risk strategy demonstrates a strong risk culture and assists in the coordination of risk-based decision-making (BIS, 2015a). A successful risk culture requires transparent and timely communication of risk throughout the organisation without fear of being blamed for errors (BIS, 2015a; IRM, 2012). To allow for a sound culture, organisations also need a common language to define what key terms mean, thereby aiding in the understanding of communication

(Schein, 2004, p. 73). A common language can create a way for staff to deal with, describe, and report on risk in a 'uniform fashion' (IIF, 2012), thereby assisting risk managers to avoid a 'policeman' approach to risk, but to rather become challengers, building partnerships and implementing training programmes that create accountability and shared risk ownership (Ashby et al., 2013; IIF, 2012). It is therefore necessary that risk managers adopt and understand the risk languages used within organisations to enhance their authority and credibility. Risk communication sub-indicators used in this study were:

- Ongoing communication
- Timely, accurate, understandable communication
- Prioritised communication
- Risk communication challenges.

#### **3.3.4. Risk challenge**

A sound risk culture promotes an environment of effective challenge that encourages alternative views in decision-making processes, and it further promotes an environment for open and honest debates (FSB, 2014; Gupta & Leech, 2015). Effective challenge is expected to positively influence accountability for decision-making in an organisation. Where organisations experience an engaged culture, people feel comfortable about challenging their peers, including leadership (IFC, 2015; IRM, 2012). Furthermore, challenge should be seen as constructive, where people welcome challenge without fear of reprisal (IFC, 2015). Risk challenge sub-indicators were:

- Open to alternative views
- Risk challenge challenges.

#### **3.3.5. Group dynamics**

The FSB acknowledges that sub-cultures can contribute to an organisation's diversity. Sub-cultures affect organisations in many ways by, for example: strengthening, perpetuating, or opposing expected and existing cultures (FSB, 2014; IIF, 2009; IRM, 2012). Group dynamics sub-indicators for this indicator used in this study were:

- Behaviour
- Group dynamics challenges.

#### **3.3.6. Shared risk understanding**

Shared understanding of risks related to decisions is a critical prerequisite for decision-making. A strong risk culture does not always mean risk is minimised but implies a clear understanding and awareness of acceptable risk-taking by staff committed to respecting risk-taking boundaries. An organisation's risk culture therefore relies on shared risk understanding as a preventive tool (Barbour, Griffin, & Sheedy, 2017; Bianchi, Farina, & Fiordelisi, 2016). The shared risk understanding sub-indicators used in this study were:

- Learning from past experience
- Ongoing training
- Common understanding and awareness
- Shared risk understanding challenges.

### **3.4. Structural indicators**

#### **3.4.1. Risk governance framework**

A sound risk culture is dependent on a robust risk governance framework covering risk identification, assessment, measurement, monitoring, treatment, and reporting as stipulated by the regulatory guidelines (BIS, 2015a; EBA, 2016; FSB, 2014). The FSB states that 'risk governance collectively refers to the role and responsibilities of the board, the firm-wide Chief Risk Officer and risk management function, and the independent assessment of the risk governance framework' (FSB, 2013). The board has a responsibility to set, communicate and enforce a risk culture that consistently influences, directs and aligns with the strategy and objectives of the business and thereby supports embedding its risk management framework and processes (IRM, 2012). The BCBS indicates that 'An effective risk governance framework includes a strong risk culture, a well-developed risk appetite articulated through the risk appetite statement, and well-defined responsibilities for risk management in particular and control functions in general' (BIS, 2015a). The risk governance framework sub-indicators used in this study were:

- Risk appetite framework
- Risk management strategy
- Risk management framework
- Risk governance framework challenges.

#### **3.4.2. Risk-based incentives**

The FSB (2014) proposes that employee compensation should take into account individual risk-taking performance against the organisation's stated core values, combined with compliance with risk management policies and procedures. Accordingly, the organisation's board of directors is responsible for the design and operation of the bank's incentive compensation programmes (IFC, 2015). Awareness should be created around incentive compensation programmes to accelerate support for risk management from people in the business (IFC, 2015). Accordingly, transparent reporting on incentives should disclose how the board, senior management and employees are paid in relation to the bank's performance by shaping employees' attitudes towards risk decision-making (IFC, 2015). The risk-based incentives sub-indicators used in this study were:

- Compensation
- Talent development
- Succession planning

- Risk-based incentives challenges.

### **3.4.3. Risk role clarity**

Although De Nederlandsche Bank (DNB, 2015) role clarity indicators refer specifically to board members' understanding of their roles and responsibilities, business lines, the risk management function, compliance, internal audit and other control functions should also have clearly delineated responsibilities regarding risk monitoring, identification, management and mitigation (FSB, 2014). Risk-related roles should be specified as part of setting the organisation's risk management strategy to ensure that everybody in the organisation understands their role in establishing the risk culture of the institution (APRA, 2016). The role clarity sub-indicators used in this study were:

- All staff members
- Board and senior management
- Middle management
- Business line functions
- Independent board directors; risk management; compliance; internal audit
- Risk role clarity challenges.

### **3.4.4. Quality of risk-related information**

Risk-related information refers to the information communicated across the organisation that forms part of effective decision-making (IRM, 2012). Information should be provided to the board to keep them informed of possible strategic changes within the organisation or of potential risks of failure (BIS, 2015a). According to the FSB, risk management functions should have access to risk information as part of risk governance frameworks (FSB, 2014). The risk management functions should provide comprehensive risk-related information to the board and risk committee to assist with decision-making (FSB, 2014). According to the DNB, quantitative and qualitative information must provide comprehensive and concise contextual information needed by those involved in the decision-making process to deepen their understanding of the issue at hand and to enhance constructive challenge (DNB, 2015). Decision-orientated information should clearly describe the problem, include alternative options, and explain the nature and likelihood of potential positive and negative consequences of the decision (DNB, 2015). The sub-indicators for this indicator used in this study were:

- Quality of risk-related information
- Quality of risk-related information challenges.

## **4. Method**

The intention of this exploratory study was to explore perceptions related to the understanding of the BCBS risk culture guidelines by executives and senior and middle managers. Exploratory research aims to clarify information in an under-investigated research topic to establish a basis for further investigation (Lewis & Saunders, 2012, p. 110; Zikmund, Babin, Carr, & Griffin, 2010, p. 16). I created an interview guide to achieve the research objectives (Appendix D) and conducted qualitative, semi-structured interviews with the study participants. Semi-structured interviews enable the researcher to probe for broader themes as they arise (Lewis & Saunders, 2012, p. 151). The initial interview questions for each interview aimed to establish participant experience and exposure to risk management within the credit-related area under investigation. The remaining questions focused on 1) the participants' understanding of the term risk culture; 2) whether or not they were familiar with the BCBS risk culture guidelines; 3) and what they believed the benefits and challenges of implementing the guidelines are to the organisation. To code the interview data, a risk culture codebook (Appendix G) was developed based on the risk culture indicators described in the Background section.

### **4.1. Sampling and data collection**

The population selected for this research consisted of executives and senior and middle managers occupying diverse positions in a credit-risk-related area in a single financial institution. Purposive snowball sampling was used, and the researcher applied judgement to select the participants based on an expectation that the person chosen should have an in-depth knowledge of the concepts of risk culture and the BCBS risk culture guidelines to be able to fulfil his/her role. A total of 16 interviews were conducted and analysed.

## Participant demographics

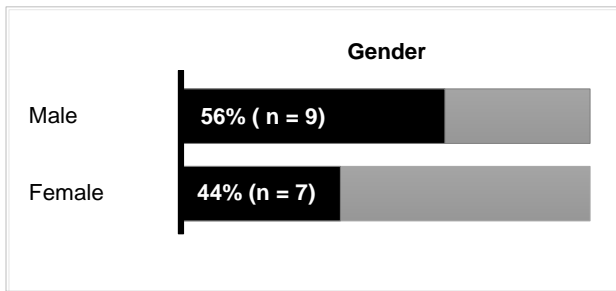


Figure 3: Participant gender

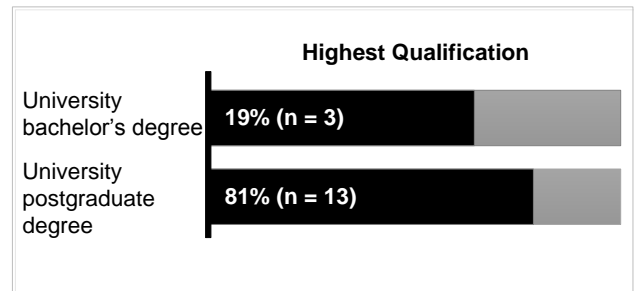


Figure 4: Participant qualifications

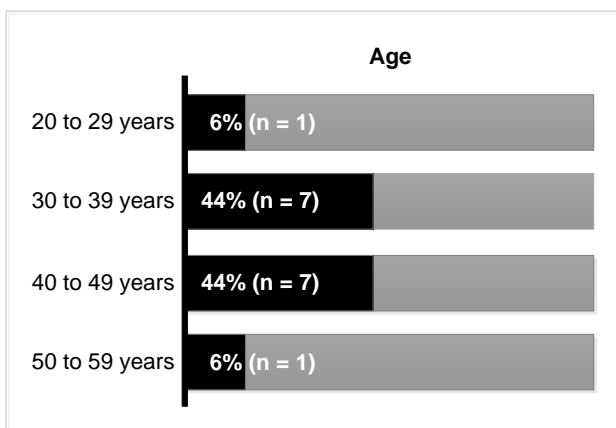


Figure 5: Participant age

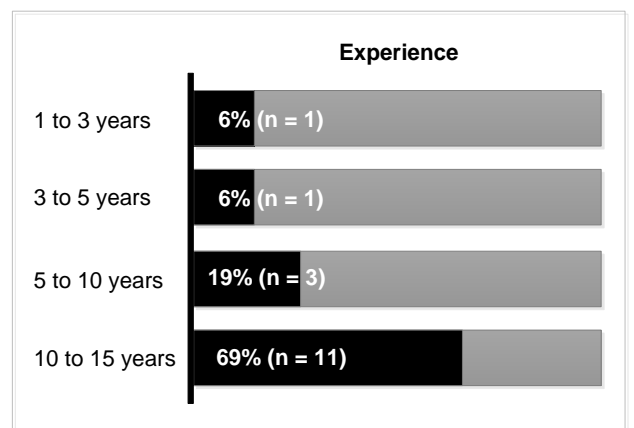


Figure 6: Participant credit risk experience

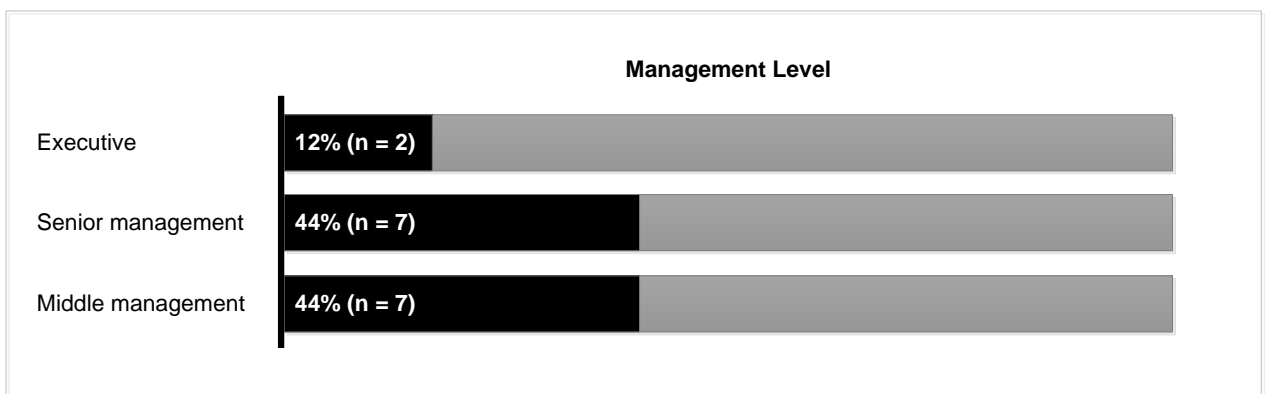


Figure 7: Participant management levels

An overview of the sample characteristics is shown in Table 1. This sample provided suitable coverage of the population for the purposes of this exploratory study. Most participants were aged between 30 and 49 years. All participants were fluent in English. Most (81%; n = 13) held postgraduate qualifications and had oversight body involvement within credit risk. Regarding participant credit risk management skills, 68% (n = 11) had experience in excess of more than 10 years', 19% (n = 3) had 5–10 years' experience, and 6% (n = 1), 3–5 and 1–3 years' experience, respectively. Detailed study participant profiles are included in Appendix F.

**Table 1: Overview of participant characteristics**

Position in organisation	Participant number	Age in years	Level of highest qualification	Level of experience in or exposure to credit risk	Gender	Total
Executive	P15	40–49	University postgraduate degree	10 years+	Female	1
	P16	50–59	University postgraduate degree	10 years+	Male	1
Executive total						2
Senior management	P2	40–49	University postgraduate degree	10 years+	Male	1
	P7	40–49	University bachelor's degree	10 years+	Male	1
	P8	40–49	University postgraduate degree	5–10 years	Male	1
	P10	30–39	University postgraduate degree	10 years+	Male	1
	P12	30–39	University postgraduate degree	5–10 years	Female	1
	P13	30–39	University postgraduate degree	10 years+	Male	1
	P14	30–39	University bachelor's degree	3–5 years	Male	1
Senior management total						7
Middle management	P1	40–49	University postgraduate degree	10 years+	Male	1
	P3	30–39	University postgraduate degree	10 years+	Female	1
	P4	40–49	University postgraduate degree	10 years+	Female	1
	P5	30–39	University postgraduate degree	10 years+	Female	1
	P6	20–29	University postgraduate degree	1–3 years	Male	1
	P9	30–39	University bachelor's degree	5–10 years	Female	1
	P11	40–49	University postgraduate degree	10 years+	Female	1
Middle management total						7
Grand total						16

## **4.2. Interview process**

Prior to the interview, the participants were provided with a consent letter informing them that their details as well as those of the company would be kept confidential and that they could withdraw from the interview at any stage (Appendix B). A brief background regarding the purpose and aim of the research was provided. Recording the interviews provided an accurate record and made it possible to re-listen to the interviews and re-analyse the data in more detail (Lewis & Saunders, 2012, p. 154). The expected duration of the interviews was 30 minutes. However, this was flexible so as not to rush the interview or cut the participant short.

## **4.3. Data analysis**

The BCBS and FSB documents provide an ideal view of what a sound risk culture should look like. The interviews provided information about the interviewee's perceptions of the actual risk culture in the organisation. The interview data were transcribed to create a full-script verbatim version of each interview. The data were coded and analysed to identify patterns in the participants' responses. A breakdown of the allocated codes is provided in Appendix H. The codes were then analysed leading to the conclusions presented in the Results and Discussion section of this article.

## **4.4. Research ethics**

Ethics approval of the research design and interview protocol was obtained from the Faculty of Economic and Management Science of the North-West University. Ensuring the confidentiality of the organisation and study participants was included in this approval. In addition, consent was obtained from the organisation to conduct the research.

## **5. Results and discussion**

This section reports and discusses the findings of the study with reference to the existing literature and in the context of the research aims.

### **5.1. Interview data analysis**

The indicators described in the Background section were used to code the interview data according to the codes explained in the codebooks in Tables 3–22 and shown in Figures 1 and 2. Some, but not all, of the codes were directly addressed by the interview questions. However, the open-ended questions allowed for expansive answers, which included information often related to the other codes in the model. All information was coded according to meaning allocated to what the participant said. The coding showed that information on the full set of codes was obtained from the full set of interviews. This means that where I did not have a specific interview question for the sub-codes, the information related to the code was obtained from relevant responses to the other interview questions. Selected

illustrative quotations from participants, as well as the number of participants who alluded to a particular code during the interviews, are provided. Each codebook therefore contains the code name, description and example quotations. Summarised research findings related to the study aims are now presented and discussed. More details of the interview data are provided in Appendix G.

## 5.2. Participant awareness of the BCBS risk culture guidelines

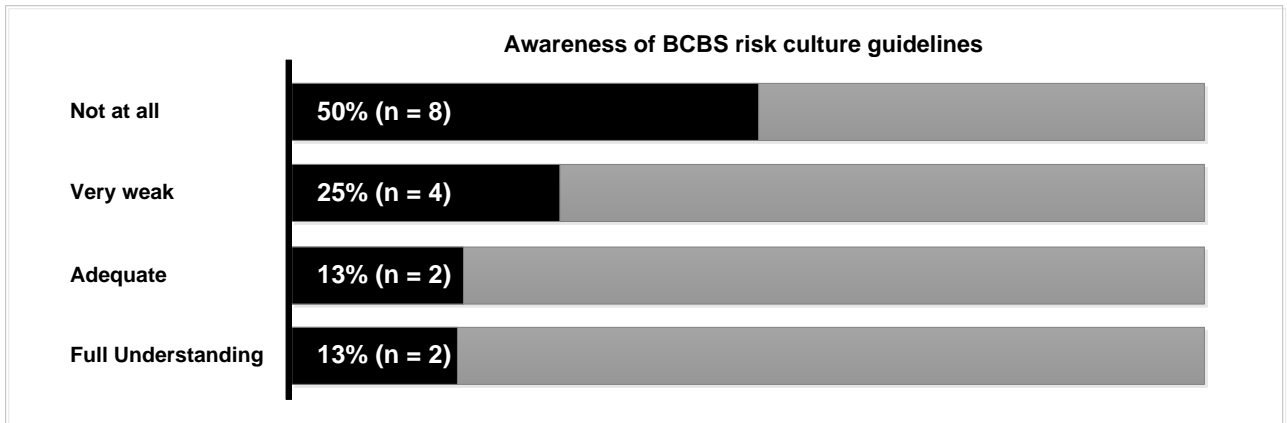
The participants were asked two questions to assess their understanding of the term ‘risk culture’ and their awareness of the BCBS risk culture guidelines:

- What do you think the term risk culture means?
- What do you know about the requirements of the Basel Committee on Banking Supervision (BCBS) risk culture guidelines?

The responses to these questions indicated that the participants had a good understanding of the terms generally associated with culture, risk and risk management (Table 2). Their awareness of the BCBS risk culture guidelines was lower than expected, considering the importance given to the concept risk culture by international financial supervisory bodies (Figure 8). However, this does not necessarily mean that they were unaware of, or unexposed to, risk-culture-related concepts in their daily roles. The participants’ experiences of risk-culture-related concepts were assessed in the remaining interview questions and are discussed next.

**Table 2: Frequency mentioned of elements of understanding the term risk culture, coded in response to the question: ‘What do you think the term risk culture means?’**

Elements of risk culture	Number of quotations	Number of quotations as a percentage of the total number of quotations
Risk management	43	41%
Organisational values	27	26%
Behaviour	19	18%
Attitude	15	14%
Total number of risk culture quotations	104	100%



**Figure 8: Awareness of BCBS risk culture guidelines based on the participant answers to the question ‘How familiar are you with the requirements of the Basel Committee on Banking Supervision (BCBS) risk culture guidelines?’**

The rounded percentages indicate the proportion of participants who fell in a specific category.

### 5.3. Behavioural risk culture indicators

The participant responses to the guideline benefit-related questions were coded against the relevant risk culture indicator. The guideline challenge questions were analysed separately under the related challenge indicator. The results are now described per indicator and sub-indicator.

#### 5.3.1. Risk leadership

The interview questions related to this section were:

- What do you think the benefits of risk leadership are in the context of these BCBS risk culture guidelines specifically within your business area?
- In terms of establishing a risk culture how would you say management is leading by example?
- What is your opinion on what management’s role is in fostering and maintaining a sound risk culture?

The risk leadership indicator was coded according to the sub-codes shown in Table 3.

**Table 3: Risk leadership codebook – code descriptions and examples of participant quotations**

Code	Code description	Level of awareness n (%)	Quoted examples
Risk leadership	'The central role of leadership in shaping and driving both organisational and risk culture' (APRA, 2016).	n = 16 (100%)	'The tone that is set by leadership is a useful mechanism for influencing the culture of the business. For instance, senior executives set the tone through demonstrating risk awareness and risk culture' (P7).
Tone from the top	The FSB states that tone from the top is where 'The board and senior management are the starting point for setting the financial institution's core values and expectations for the risk culture of the institution, and their behaviour must reflect the values being espoused' (FSB, 2014).	n = 15 (94%)	'...leader's role is not just to manage but it is to lead and ensure the tone is set' (P10).
Lead by example	'The board and senior management, consistently within their specific roles and responsibilities, promote through behaviours, actions and words, a risk culture that expects integrity and a sound approach to risk management as well as promotes an open exchange of views, challenge and debate' (FSB, 2014).	n = 14 (88%)	'...leaders leading by example it reflects that risk is everybody's responsibility and not just the risk division looking after risks' (P15).
Integrity	'A key value that should be espoused is the expectation that staff act with integrity (doing the right thing) and promptly escalate observed non-compliance within or outside the organisation (no surprises approach)' (FSB, 2014).	n = 7 (44%)	'Risk culture is an encompassing word of how we behave in the organisation with the view of protecting the interest of all our stakeholders and act with integrity' (P15).
Risk leadership challenges	'Managers have an immediate negative or positive impact on behaviours both through communication and role modelling' (APRA, 2016).	n = 14 (88%)	'A challenge for leaders is to keep the balance between managing risk and taking balanced risk decisions. If a leader has a different type of culture than what the organisation has the challenge is how to convey what is required from people within the organisation if the leader is not capable in getting the right message across' (P6).

*Note: n = number of participants who discussed an aspect related to the code; % = percentage of all participants who addressed this code.*

The coded data showed that all 16 participants discussed a risk-culture-related aspect of 'risk leadership'. Per sub-indicator, 15 (94% of participants) referred to an aspect of 'tone from the top'; 14 (88%) to 'lead by example'; and 7 (44%) to 'integrity'. This shows that the participants were

aware of the important elements connected to risk leadership, which will influence the risk culture of the organisation. Several participants noted that culture is driven by leadership and is one of the most important leadership responsibilities. Furthermore, participants explained that risk culture is based on a risk conscious environment, cast-iron integrity and ensuring that people understand the risk-related values of the organisation.

**Table 4: Risk leadership – summary of sub-indicator quotations**

<b>Risk leadership indicators</b>	<b>Total number of sub-code quotations across participants</b>	<b>Number of quotations as a percentage of the total number of quotations related to the sub-code</b>
Lead by example	49	51%
Tone from the top	29	31%
Integrity	17	18%
Risk leadership total	95	100%

Table 4 shows that most of the participants mentioned aspects of ‘leading by example’ (51%) as most beneficial towards risk leadership and risk culture. This was supported by 31% of the participants indicating that ‘tone from the top’ contributes towards risk leadership and risk culture. Executive and senior managers, rather than middle managers, indicated that integrity is important for risk leadership and risk culture within the organisation.

In terms of risk leadership challenges, participants indicated that a generic leadership conflict exists between the responsibility of making money, and responsibility for risk management and being sensible. What’s more, participants noted that leaders can sometime lose perspective of what the benefits are of taking risk because of their accountability for the risks taken. Finally, participants pointed out that employees reporting to that leader cannot place reliance on a manager who does not align with the values and culture of the organisation.

### **5.3.2. Risk accountability**

The interview questions related to this section were:

- What do you think the benefits of risk accountability are in the context of the BCBS risk culture guidelines within your specific business area?
- How does the organisation establish sufficiently clear accountabilities for those managing risks and hold them accountable?

The risk accountability indicator was coded according to the sub-codes shown in Table 5.

**Table 5: Risk accountability codebook – code descriptions and examples of participant quotations**

Code	Code description	Level of awareness n (%)	Quoted examples
Risk accountability	The FSB refers to accountability as 'Relevant employees at all levels understand the core values of the institution and its approach to risk, can perform their prescribed roles, and are aware that they are held accountable for their actions in relation to the institution's risk-taking behaviour' (FSB, 2014).	n = 16 (100%)	'...defining people's roles and making people aware of their involvement in risks through their decision-making that can have an impact on the bank but also ensuring people understand the organisation's core values by taking accountability and own the risk' (P6+P8).
Disciplinary actions	'In order to promote a sound corporate culture, the board should reinforce the 'tone at the top' by confirming that employees, including senior management, are aware that appropriate disciplinary or other actions will follow unacceptable behaviours and transgressions' (BIS, 2015a).	n = 8 (50%)	...if a person does not share the organisation's values around risk consciousness, and to the extent that the person does not have high moral ethics and integrity the necessary disciplinary actions will be taken' (P17).
Consequences	'Consequences are clearly established, articulated and applied for anyone engaged in, or supporting, risk-taking that is excessive relative to the financial institution's risk appetite statement, regardless of whether positive revenue or net income was generated' (FSB, 2014).	n = 11 (69%)	'...credit risk officers also have to understand the consequences of the risk decisions being made and the risks they could cause to the bank due to incorrect decision-making' (P10).
Ownership of risk	'Clear expectations are set in the monitoring and reporting of, and response to risk information' (FSB, 2014). Every person in the business is held accountable for their actions and understand the consequences if they are not aligned with the institution's core values, risk appetite and risk culture' (BIS, 2015a; DNB, 2015; FSB, 2014).	n = 14 (88%)	'...people have taken ownership and not just at leadership level but also every employee level that they are partly accountable to hold their peers or team members accountable to act appropriately' (P11).
Escalation process	'Appropriate escalation processes are established to support risk management and clear consequences for non-compliance with escalation procedures are defined' (BIS, 2015a; FSB, 2014).	n = 8 (50%)	'...from a control aspect the impact on risk management is to ensure escalation process are followed and proper controls and process is [sic] in place to ensure reporting of risks is happening' (P5).
Risk accountability challenges	'If accountabilities for managing risks are not consistently defined, it is not possible to be sure who is accountable for managing which risk. The implication is that risk management is ill-defined and ownership for the process is unclear' (IRM, 2012).	n = 16 (100%)	'...if one look at credit risk the accountability does not just belong to one person, it has an impact on multiple people' (P12). 'People shift the accountability and no one wants to take ownership of risks as it sometimes causes extra work' (P9).

Note: n = number of participants who discussed an aspect related to the code; % = percentage of all participants who addressed this code.

The coded data showed that each participant discussed a risk-culture-related aspect of ‘risk accountability’. Per sub-indicator, 8 (50%) referred to an aspect of ‘disciplinary action’; 11 (69%) to ‘consequences’; 14 (88%) to ‘ownership of risk’ and 8 (50%) to ‘escalation process’. This shows that the participants were aware of the important elements connected to risk accountability linked to the risk culture of the organisation. Participants pointed out that if clear expectations are set relating to people’s particular role responsibilities, risks are taken more seriously and clear accountability is established. Furthermore, participants explained that risk ownership policies reinforce the reality that management, risk, compliance, and independent assurance functions each have specific responsibilities in the organisation’s risk management process. All participants agreed that employees are accountable for the consequences of their risk actions and for behaviours that diverge from their organisation’s risk-related values, risk appetite, and risk processes. Participants emphasised that rigorous escalation processes embedded in the business reinforce risk management activities by encouraging elevation of organisation-wide concerns to leadership without fear of message-filtering or reprisal.

**Table 6: Risk accountability – summary of sub-indicator quotations**

<b>Risk accountability indicators</b>	<b>Total number of sub-code quotations across participants</b>	<b>Number of quotations as a percentage of the total number of quotations related to the sub-code</b>
Ownership of risk	39	50%
Consequences	19	24%
Disciplinary actions	11	14%
Escalation process	9	12%
Risk accountability total	78	100%

Table 6 shows that about half of the participants agreed that the main benefit from risk accountability is grounded in ‘ownership of risk’ (50%) and that a solid understanding of ‘consequences’ (24%) is important. These statistics support the participants’ view that culture within the organisation is that of a ‘non-blame’ organisation around ‘disciplinary actions’ (14%) and ‘escalation process’ (12%) and that the organisation follows an approach of allowing open and honest engagement to ensure risk issues get identified and corrected.

In terms of risk accountability challenges, participants pointed to the difficulty of enforcing accountability in general or on ad hoc basis. In order to understand people’s reluctance to take accountability, we first need to understand if it relates to teams, individual or education challenges before disciplinary actions can be taken. Participants emphasised that people need to be held accountable in terms of the quantitative and qualitative aspects of their roles and functions.

### 5.3.3. Group dynamics

The interview questions related to this section were:

- How do we satisfy ourselves that new staff members will quickly absorb our desired cultural values?
- How do we satisfy ourselves that existing staff members continue to demonstrate expected attitudes and behaviours consistent with our desired cultural values?

The group dynamics indicator was coded according to the sub-codes shown in Table 7.

**Table 7: Group dynamics codebook – code descriptions and examples of participant quotations**

Code	Code description	Level of awareness n (%)	Quoted examples
Group dynamics	'Group dynamics refers to the interaction between different positions or forces within a group, interrelationships between individuals in a group or patterns within group behaviour which affect the overall group result' (DNB, 2017). 'Group dynamics is defined as the interaction between different positions and patterns within a group or between groups, which affect overall group effectiveness' (DNB, 2015).	n = 14 (88%)	'The tone that is set by leadership is a useful mechanism for influencing the culture of the business. For instance, senior executives set the tone through demonstrated risk awareness and risk culture. Further it is expected of other officers to demonstrate the same behaviour and to be focused on the risks' (P7).
Behaviour	'Group behaviours and the underlying organisational culture also influence risk culture' (IRM, 2012). 'The behaviour of the group and its constituent individuals is shaped by their underlying attitudes. Both Behaviour and Attitudes are influenced by the prevailing culture of the group' (IRM, 2012).	n = 13 (81%)	'Continuous reiterating how important risks are and the importance of a good risk culture will ensure that new and established staff demonstrate attitudes and behaviours that is consistent with the organisation's values' (P2).
Group dynamics challenges	'If management tend to display dominant leadership styles, it could weaken group dynamics and constructive challenge. In turn, an erosion of deliberative checks tended to erode the quality of decisions' (FSB, 2017).	n = 3 (19%)	'When wrong people get employed they struggle to adapt due to the internal process and people, and the challenge then is that the people cannot create diversity in the business, they are not operationally inclined, and risk inclined. From a leadership perspective one needs to be aware of the gaps and spot it [sic] in time' (P14).

*Note: n = number of participants who discussed an aspect related to the code; % = percentage of all participants who addressed this code.*

The coded data showed that each participant discussed a risk-culture-related aspect of ‘group dynamics’. Per sub-indicator, 14 (88%) referred to an aspect of ‘group dynamic interaction’; and 13 (81%) to ‘behaviour’. This shows that the participants were aware of the important elements connected to group dynamics. Such risk-related group dynamic characteristics will influence the risk culture of the organisation. Participants pointed out that establishing an effective risk culture in the organisation is dependent on 1) encouraging and developing a common language; 2) demonstrating attitudes and behaviours that are consistent with the organisation’s values; and 3) applying risk procedures to make credit decisions for solving probable problems.

**Table 8: Group dynamics – summary of sub-indicator quotations**

<b>Group dynamics indicators</b>	<b>Total number of sub-code quotations across participants</b>	<b>Number of quotations as a percentage of the total number of quotations related to the sub-code</b>
Group dynamic interaction	33	60%
Behaviour	22	40%
Group dynamics total	55	100%

Table 8 indicates that almost two-thirds of the participants agreed that the main benefit resulting from group dynamics is the relationships created by ‘group dynamic interaction’ (60%) and that ‘behaviour’ (40%) influence risk culture.

Group-dynamics-related challenges identified by participants referred to the fact that people are not being ‘machines’ and that they have to perform day-to-day tasks within a work environment in which their personal circumstances may affect overall group behaviour. Since people are hired for their specific skills and experience, recruitment plays an important role to ensure that there is no misalignment between what is required and who is employed, as there could be an impact on the business, people and culture.

#### **5.3.4. Risk communication**

The interview questions related to this section were:

- What do you think the benefits of risk communication are in the context of these BCBS risk culture guidelines, specifically within your business area?
- How do management communicate the importance of a good risk culture within the bank?

The risk communication indicator was coded according to the sub-codes shown in Table 9.

**Table 9: Risk Communication codebook – code descriptions and examples of participant quotations**

Code	Code description	Level of awareness n (%)	Quoted examples
Risk communication	The BCBS states that ‘ongoing communication about risk issues, including the bank’s risk strategy, throughout the bank is a key tenet of a strong risk culture. A strong risk culture should promote risk awareness and encourage open communication and challenge about risk-taking across the organisation as well as vertically to and from the board and senior management’ (BIS, 2015a).	n = 16 (100%)	‘Proper communication will ensure people understand what the organisation’s appetite is, and what their role and responsibilities are and advise people of process failures but also challenge wrong risk taking behaviour’ (P16).
Ongoing communication	‘Ongoing communication about risk issues, including the bank’s risk strategy, throughout the bank is a key tenet of a strong risk culture’ (BIS, 2015a).	n = 7 (44%)	‘Communication is also about the formal but also informal communication that provides that continuous component of learning and conversations of risk awareness’ (P17).
Timely, accurate, understandable	‘Information should be communicated to the board and senior management in a timely, accurate and understandable manner so that they are equipped to take informed decisions’ (BIS, 2015a).	n = 9 (56%)	‘Communicating timeously and accurately is essential as it has a direct impact in how we adapt to the organisation’s risk appetite over time’ (P11).
Prioritised	‘Information should be prioritised and presented in a concise, fully contextualised manner. The board should assess the relevance and the process for maintaining the accuracy of the information it receives and determine if additional or less information is needed’ (BIS, 2015a).	n = 9 (56%)	‘...create the platform and forums for the various meetings to happen that the right conversation could happen for the risk issues that require discussion’ (P17).
Communication challenges	‘Organisations should avoid organisational “silos” that can impede effective sharing of information across an organisation and can result in decisions being taken in isolation from the rest of organisation. Overcoming these information-sharing obstacles may require the board, senior management and control functions to re-evaluate established practices in order to encourage greater communication’ (BIS, 2015a).	n = 15 (94%)	‘If management make decisions they need to communicate it to the people who is doing the work, and explain as to ‘why’, as by not doing it people are not being empowered and are not taught to make risk decisions and management are making these decisions solely by themselves’ (P9).

*Note: n = number of participants who discussed an aspect related to the code; % = percentage of all participants who addressed this code.*

The coded data showed that all participants discussed a risk-culture-related aspect of ‘risk communication’. Per sub-indicator, 9 (56% of participants) referred to an aspect of ‘timely, accurate, understandable’ and ‘prioritised’, respectively, and 7 (44%) referred to ‘ongoing communication’. The participants believed that fostering and maintaining a sound risk culture is essential to enable managers within an organisation to communicate the organisation’s values and to ensure clear understanding and expectations of risk-related behaviour. They further indicated

that two-way communication allows people to speak up when assistance is required with regard to upskilling in terms of risk awareness and risk culture. The participants believed that clear communication of the organisation’s risk profile will ensure that employees have a working knowledge of key risks, allowing them to manage the threats and opportunities that directly impact their role functions. A majority of the participants also indicated that all employees should contribute to risk discussions by presenting alternative views, sharing risk experiences and challenging traditional thinking practices and decisions.

**Table 10: Risk communication – summary of sub-indicator quotations**

<b>Risk communication indicators</b>	<b>Total number of sub-code quotations across participants</b>	<b>Number of quotations as a percentage of the total number of quotations related to the sub-code</b>
Timely, accurate, understandable	18	44%
Ongoing communication	13	32%
Prioritised	10	24%
Risk communication total	41	100%

Table 10 shows that close to half (44%) of the participants mentioned aspects of ‘timely, accurate, understandable’ communication required to equip leaders in making informed risk decisions. This was supported by 32% of the participants indicating that ‘ongoing communication’ contributes towards risk communication by highlighting key risk points and fostering a sound risk culture. A quarter (24%) of participants indicated that e-mail communication of information from leaders should be presented concisely and prioritised because of mail overload.

In terms of risk communication challenges, participants indicated that people tend to speak more rather than listen when spoken to. Further, participants noted that technical jargon related to specific areas need to be simplified as it could lead to misunderstanding of what is being communicated.

### **5.3.5. Risk challenge**

The present interview question related to this section was:

- What is your opinion of whether people can talk openly without fear of consequences or being ignored?

The risk challenge indicator was coded according to the sub-codes shown in Table 11.

**Table 11: Risk challenge codebook – code descriptions and examples of participant quotations**

Code	Code description	Level of awareness n (%)	Quoted examples
Risk challenge	‘Staff should have the ability and willingness to effectively challenge business operations regarding all aspects of risk arising from the bank’s activities. Staff should have access to regular training’ (BIS, 2015a). ‘A sound risk culture promotes an environment of open communication and effective challenge in which decision-making processes encourage a range of views; allow for testing of current practices; stimulate a positive, critical attitude among employees; and promote an environment of open and constructive engagement’ (FSB, 2014).	n = 16 (100%)	‘If there is a team environment that is open and has the ability to question and challenge one will get a much richer decision-making process and get to the right answer whether it is in terms of appetite statements, risk approvals, dealing with workouts or dealing with breaches’ (P15).
Open to alternate views	‘A culture of open communication and collaboration is constantly promoted to ensure that the institution works together to strengthen risk-related decision making’. ‘Alternate views or questions from individuals and groups are encouraged, valued and respected and occur in practice’. ‘A culture of open communication and collaboration is constantly promoted to ensure that each employee’s view is valued, and the institution works together to strengthen risk-related decision making’ (FSB, 2014).	n = 16 (100%)	‘An environment and culture have been created for openness and transparency in the business for people to speak openly and freely without fear around risk issues or even broadly’ (P14).
Risk challenge challenges	‘In a bank environment where employees are not free to discuss risk situations, major risks within the bank’s critical functions may not be timely identified and mitigated’ (IFC, 2015).	n = 4 (25%)	‘If people are afraid to speak about risk issues or if they have a great idea that could be novel to the business, it could be limitation due to not having an open communication structure and opportunities could potentially be lost’ (P8).

*Note: n = number of participants who discussed an aspect related to the code; % = percentage of all participants who addressed this code.*

The coded data showed that all participants discussed a risk-culture-related aspect of ‘risk challenge’. Per sub-indicator, 16 (100% of participants) referred to an aspect of ‘open and alternative views’. This shows that the participants were aware of the important elements connected to risk challenge that lead to a successful risk culture, and that include sufficient diversity of perspectives, values and ethics that allow challenges to the status quo of the organisation. Participants agreed that within a team environment open and alternative views as well as open dialogue create an environment for people to engage openly and ask questions. This further encourages challenge by enhancing decision making processes, which can lead to the right answers in terms of appetite statements, risk approvals, dealing with workouts or dealing with breaches.

**Table 12: Risk challenge – summary of sub-indicator quotations**

<b>Risk challenge indicators</b>	<b>Total number of sub-code quotations across participants</b>	<b>Number of quotations as a percentage of the total number of quotations related to the sub-code</b>
Open to alternative views	41	100%
Risk challenge total	41	100%

Table 12 shows that all participants pointed out that the organisation tends to be ‘open to alternative views’ (100%), supported by a culture of promoting open honest debate, thereby ensuring that people work together to influence decision-making.

In terms of challenges related to ‘risk challenge’, participants confirmed that if open dialogue is not allowed and encouraged, this could negatively impact decision-making. Another challenge identified by participants relates to people being afraid to speak up about risks or possible solutions, thereby potentially negatively impacting the risk culture of the organisation.

### **5.3.6. Shared risk understanding**

The interview questions related to this section were:

- How do we satisfy ourselves that new staff members will quickly absorb our desired cultural values?
- How do we satisfy ourselves that existing staff members continue to demonstrate expected attitudes and behaviours consistent with our desired cultural values?

The shared risk understanding indicator was coded according to the sub-codes shown in Table 13.

**Table 13: Shared risk understanding codebook – code descriptions and examples of participant quotations**

Code	Code description	Level of awareness n (%)	Quoted examples
Shared risk understanding	'Effective risk management and challenge are only possible if the participants in the process have a shared understanding of risk, the value of risk to the organisation, and the risk management framework of the organisation. The risk culture and risk management framework determine the quality of risk information available to make risk-informed decisions' (FSB, 2014).	n = 16 (100%)	'Management communicates on every possible platform, from a cell level, and elevate it to team meetings where risk subject matter experts get invited to communicate the importance of data integrity, risk management, risk issues and risk awareness. Further there is a training piece that is ongoing. Lastly when there is formal update on a regional or national forum to emphasise the importance of risk management. Leaders and risk management are also working very closely together in ensuring people are more risk averse' (P14).
Ongoing training	'A common conceptual risk culture model and language' (DNB, 2015) including the meaning of basic terms such as risk, risk culture and risk management. 'Ensure that members participate in induction programs and have access to ongoing training on relevant issues which may involve internal or external resources' (BIS, 2015a).	n = 15 (94%)	'The more embedded a person ends up from a risk culture perspective the easier it is to achieve those things. If everyone talks the same language the quicker new joiners will pick up the language. A lot of training materials are being done and from an embedding perspective that is where there should be concentration on. If everybody is risk aware and risk focused it will be pick up by new joiners very quickly' (P13).
Learning from past experience	'Assessment and communication of lessons learnt from past events, both failures and successes, are seen as an opportunity to enhance the institution's risk culture, and to enact real changes for the future' (FSB, 2014).	n = 12 (75%)	'The communications around 'WHY' we do what we do and pulling people into debates where things are not always clear-cut and where people with different backgrounds sit around a table with different views debating what the right outcome should be. And although not necessarily the outcome you might have chosen but the process in itself provides the learning especially for the younger people in how to think about the credit processes and apply it in the future' (P15).
Common understanding and awareness	'Appropriate mechanisms are in place to ensure the risk appetite, risk management strategy, and business strategy are effectively aligned and embedded in decision-making and operations at all appropriate levels of the institution' (FSB, 2014).	n = 16 (100%)	'Leadership should be explaining to people, the appropriate mechanisms that are in place in terms of risk appetite and business strategy by ensuring they are effectively aligned with decision making and how risk is mitigated' (P8).
Shared risk understanding challenges	'In a bank environment where employees are not free to discuss risk situations, major risks within the bank's critical functions may not be timely identified and mitigated' (IFC, 2015). 'Employees who do not have sufficient understanding of the risks associated with the bank are likely to expose the bank to imprudent risk taking' (IFC, 2015).	n = 8 (50%)	'If there is lack of communication one will observe that people do not have an understanding of the processes and do not take ownership of it. If there is no communication people will not understand what our risk appetite is and will not be factored in to our credit risk to ensure the appropriate client is onboard within the applicable market and segment' (P9).

Note: n = number of participants who discussed an aspect related to the code; % = percentage of all participants who addressed this code.

The coded data showed that all participants discussed a risk-culture-related aspect of ‘shared risk understanding’. Per sub-indicator, 16 (100% of participants) referred to an aspect of ‘common understanding and awareness’; 15 (94%) to ‘ongoing training’ and 12 (75%) to ‘learning from past experience’. This shows that the participants were aware of the important elements connected to shared risk understanding of risk, which is a prerequisite for making risk-decision.

Participants agreed that when people within the organisation speak the same business language, this enhances risk awareness leading to a common understanding of risk. Furthermore, participants noted that good communication bridges the risk-awareness gap in helping people to learn from past experiences related to risk. In addition, participants confirmed that leaders should explain to people which appropriate mechanisms are available to get an understanding and learning of risk appetite and business strategy, thus ensuring that staff members are effectively aligned with decision-making and how risk is mitigated.

**Table 14: Shared risk understanding – summary of sub-indicator quotations**

<b>Shared risk understanding indicators</b>	<b>Total number of sub-code quotations across participants</b>	<b>Number of quotations as a percentage of the total number of quotations related to the sub-code</b>
Common understanding and awareness	56	45%
Ongoing training	35	28%
Learning from past experience	33	27%
Shared risk understanding total	124	100%

Table 14 shows that nearly half (45%) of participants mentioned aspects of ‘common understanding and awareness’ in the context of risk and risk management. This was supported by 27% of the participants indicating that ‘ongoing training’ creates the opportunity to understand risk, and uniformly report on risk. Some 27% of participants indicated that ‘learning from past experience’ creates the opportunity to enhance the organisation’s risk culture.

In terms of shared risk understanding challenges, some participants were concerned that people do not have the confidence to speak up or to take ownership for risk decisions owing to a lack of sufficient knowledge and understanding, which could be linked to insufficient communication within the bank. Further, a lack in communication could lead to inadequate understanding of the organisation’s risk appetite, which could influence credit risk decision-making, for example when onboarding clients.

## **5.4. Structural risk culture indicators.**

### **5.4.1. Risk governance framework**

The interview questions related to this section were:

- What do you think the benefits of formal risk management strategy are in the context of these BCBS risk culture guidelines specifically within your business area?
- What do you think the benefits of a risk appetite framework are in the context of these BCBS risk culture guidelines specifically within your business area?
- What do you think the benefits of a risk appetite statement are in the context of these BCBS risk culture guidelines specifically within your business area?
- What do you think the benefits of a risk management functions are in the context of these BCBS risk culture guidelines specifically within your business area?

The risk governance framework indicator was coded according to the sub-codes shown in Table 15.

**Table 15: Risk governance framework codebook – code descriptions and examples of participant quotations**

Code	Code description	Level of awareness n (%)	Quoted examples
Risk governance framework	'As part of the overall corporate governance framework, the framework through which the board and management establish and make decisions about the bank's strategy and risk approach; articulate and monitor adherence to risk appetite and risk limits vis-à-vis the bank's strategy; and identify, measure, manage and control risks' (BIS, 2015a). 'A key element of any risk governance framework is ensuring that the right information is provided to management and boards to enable informed decision making with respect to risk issues' (IRM, 2012).	n = 16 (100%)	'Management communicates on every possible platform, from a cell level, and elevate it to team meetings where risk subject matter experts get invited to communicate the importance of data integrity, risk management, risk issues and risk awareness. Further, there is a training piece that is ongoing. Lastly, when there is formal update on a regional or national forum to emphasise the importance of risk management. Leaders and risk management are also working very closely together in ensuring people are more risk averse' (P14).
Risk appetite framework (RAF)	'Regulatory requirements for risk appetite frameworks focus on structures and approaches for communicating, understanding, assessing and monitoring the types and levels of risk across regulated institutions, and on how well this is embedded in day-to-day operations' (APRA, 2016).	n = 12 (75%)	'A risk continuous environment is the one side, but it has to be enabled and backed up by an actual framework and the reason for it is that peoples understanding of risk and risk appetite are different' (P15). 'But because the bank operates in a very complex environment the organisation requires set policies as to what the business and people can and cannot do. What the risk appetite of the organisation and credit risk will be' (P16).
Risk management strategy	'The board and senior management are committed to establishing, monitoring, and adhering to an effective risk appetite framework, supported by appropriate risk appetite statement(s) that underpin the financial institution's risk management strategy, and is integrated with the overall business strategy' (FSB, 2014).	n = 16 (100%)	'From a top management perspective, risk management strategy is key, and it should be monitored on various levels, but it should be brought closer to people which already have a culture of accountability and a culture of open and honest communication as well as a strong culture' (P4).
Risk management framework	'An organisation's risk culture is influenced by both formal elements (such as governance and risk management frameworks and structures), as well as informal elements (such as expectations and behavioural norms)' (APRA, 2016). 'A bank should disclose its operational risk management framework in a manner that will allow stakeholders to determine whether the bank identifies, assesses, monitors and controls/mitigates operational risk effectively' (BIS, 2011a).	n = 16 (100%)	'Having proper risk management functions comes down to having the right qualified people, right systems, the processes, all the measurements and testing, through to the approval processes' (P16). 'It is important to risk managers who implement the rules and guidelines as the organisation requires the process and rules to be in place' (P15).
Risk governance framework challenges	'Operating through complex or non-transparent structures may pose financial, legal, reputational and other risks to the bank. It may impede the ability of the board and senior management to conduct appropriate business oversight and could hinder effective banking supervision' (BIS, 2015a).	n = 15 (94%)	'A challenge could be that the policies, process and guidelines are too strict and force people to follow it by the letter of the law or not at all and the problem is that the organisation is there to make a profit. In order to make a profit people sometimes have to be allowed to bend the rules and move between the policies' (P9). 'Due to the business being complex and that being a challenge in terms of accounting, legal, tax, compliance and regulatory one needs to have specialists that understands these functions' (P16).

Note: n = number of participants who discussed an aspect related to the code; % = percentage of all participants who addressed this code.

The coded data showed that all participants discussed a risk-culture-related aspect of the concept of ‘risk governance framework’. Per sub-indicator, 16 (100%) of participants referred to an aspect of ‘risk management strategy’ and ‘risk management framework’, respectively, and 12 (75%) referred to ‘risk appetite framework’. This shows that the participants were aware of the important elements connected to a risk governance framework, which reinforces the values, policies and procedures within the organisation. The participants agreed that a complex environment such as a bank’s depends on governance, risk management and compliance to guide business and staff, especially regarding the risk appetite of the organisation and credit risk. According to the participants, this should be effected by first applying the organisation’s culture and values and then the rules satisfying stakeholder requirements. Furthermore, participants acknowledged that formally articulated risk management strategies should be driven by the organisation’s leadership and be aligned with the risk management frameworks of the organisation by ensuring all the stakeholders are aware and held accountable to these strategies. Leaders should have in-depth understanding of the organisation’s risk processes to educate staff, as leaders are accountable for risk (management) at a leadership level.

**Table 16: Risk governance framework – summary of sub-indicator quotations**

<b>Risk governance framework indicators</b>	<b>Total number of sub-code quotations across participants</b>	<b>Number of quotations as a percentage of the total number of quotations related to the sub-code</b>
Risk management strategy	72	41%
Risk management framework	67	38%
Risk appetite framework	36	21%
Risk governance framework total	175	100%

Table 16 shows that 41% of participants mentioned aspects of ‘risk management strategy’ as most beneficial for helping management in risk identification, measurement, monitoring and control. This was supported by 38% of the participants indicating that a ‘risk management framework’ is important to identify, measure, mitigate, report and monitor risks, which in turn improves long-term performance. One-fifth of participants indicated that ‘risk appetite framework’ (21%) contributes towards understanding the types of risks across the organisation.

In terms of risk governance framework challenges, participants pointed out, that regulatory requirements, policies, process, and guidelines might sometimes be too strict, which could hamper people’s actions and restrict business profits. Participants indicated that compliance with all the regulatory requirements is very costly. They also pointed out that ever-changing processes and controls challenge what people think they are accountable for as distinct what other functions are

accountable for. Further challenges in this regard relate to the training and understanding of the compliance requirements and the man-hours spent ensuring that people comply with these guidelines. However, the participants believed that even though regulatory requirements are costly and time consuming, adherence to them provides investors and shareholders with the assurance and comfort that the bank is run properly and complies with the regulations.

#### **5.4.2. Risk-based incentives**

The interview questions related to this section were:

- What do you think the benefits of risk-based incentives are in the context of these BCBS risk culture guidelines, specifically within your business area?
- How do we reward and encourage appropriate risk-taking behaviours and challenge unbalanced risk behaviours?
- What are the incentives and penalties for officers who identify risk in the organisation?

The risk-based incentives indicator was coded according to the sub-codes shown in Table 17.

**Table 17: Risk-based incentives codebook – code descriptions and examples of participant quotations**

Code	Code description	Level of awareness n (%)	Quoted examples
Risk-based Incentives	The BCBS states that 'remuneration systems form a key component of the governance and incentive structure through which the board and senior management promote good performance, convey acceptable risk-taking behaviour and reinforce the bank's operating and risk culture' (BIS, 2015a). The FSB proposes that 'employees' compensation should take into account individual performance in taking risks against the organisation's stated core values, compliance with risk management policies and procedures and compliance review reports' (FSB, 2014).	n = 16 (100%)	'There are not penalties for officers who do not follow process, but it is expected that people's work ethic needs to be good and be in line with peers and that is why there are KRI's to identify if there are inconsistencies within the team. It is more about the quality of work and not the quantity of transactions that people look at and ensuring proper decisions are being made' (P11). 'To reward and encourage appropriate risk-taking is to make accountability part of the people's day to day role in owning the risk-taking through managing the risk and taking better risk decisions and further through making incentives part of risk-taking behaviour' (P6).
Compensation	'Remuneration systems form a key component of the governance and incentive structure through which the board and senior management promote good performance, convey acceptable risk-taking behaviour and reinforce the bank's operating and risk culture' (BIS, 2015a). 'Remuneration and performance metrics consistently support and drive the desired risk-taking behaviours, risk appetite and risk culture of the financial institution, and encourage employees to act in the interest of the greater good of the company, rather than for themselves or their business line' (FSB, 2014).	n = 15 (94%)	'Incentives is not just driven by the quantitative elements of a person's role and one needs to ensure the right behaviour is instilled by ensuring the appropriate risk decisions are being made. But incentives is also a qualitative piece that refers to the risk measures and collaboration within the organisation. Further to continue in ensuring that the rhetoric is understood by people within the business. It is important that people realise they do not get rewarded just on the quantitative elements as it could drive the wrong behaviour. In other words, people get rewarded based on quantitative and qualitative behaviour' (P8).
Succession planning	'Succession planning processes for key management positions include risk management experience and not only revenue-based accomplishments; for instance, individuals with responsibilities consistent with the chief risk officer, chief compliance officer, and chief audit executive can be considered as potential candidates for executive positions, including the chief executive officer' (FSB, 2014).	n = 4 (25%)	'Due to credit being very desk bound roles you need to invest time in these people in how to grow them in terms of expertise and to become thought leaders as you require people with experience to share the knowledge with people within the business. That is another way in investing in people by focusing on people's talents and develop them' (P11).
Talent development	'Training programs are available for all staff to develop risk management competencies and, more broadly, the elements supporting a sound risk culture, including effective challenge and open communication' (FSB, 2014).	n = 4 (25%)	'Within Credit what the business is good at is to retain in their key talent over time in building a very strong base of experienced credit officers which is essential to be able to have a function that is able to identify good risk from bad risk' (P10).
Risk-based incentives challenges	'Breaches in internal policies, procedures and risk limits, as well as non-adherence to internal codes of conduct, are understood to have a potential impact on an individual's compensation and responsibilities, can affect career progression and, depending on severity, may result in termination' (FSB, 2014). 'Failing to reward good risk management and/or apply consequences for poor management of risks' (APRA, 2016). 'The effect of incentivising staff to take significant risks to secure high returns without due consideration of the impact on balance sheet and long term reputation' (IRM, 2012).	n = 15 (94%)	'By not educating people around bad risk decisions they will never understand the financial implication on the business in terms of the bottom line and further they will never care and will not feel the impact in terms not being incentives' (P6). 'If people are not held accountable by not disincentivise by i.e. zero bonus or warning letter and not being consistent with that kind of treatment taking into account the individual, context, fairness and severity the incentive have to be tapered as people have to be held accountable in terms of quantitative and qualitative aspects' (P8).

Note: n = number of participants who discussed an aspect related to the code; % = percentage of all participants who addressed this code.

The coded data showed that all participants discussed a risk-culture-related aspect of ‘risk-based incentives’. Per sub-indicator, 15 (94% of participants) referred to an aspect of ‘compensation’; 4 (25%) referred to ‘talent development’ and ‘succession planning’, respectively. This shows that the participants were aware of the important elements connected to risk-based incentives, which confirms that a good risk culture enables and rewards people for making appropriate risk decisions in an informed manner. The participants linked the organisation’s remuneration philosophy to a high sense of ownership, encouraging people not just to view risk management as a job, but as working in a meritocracy where people take ownership for the work they do, which the organisation recognises in a real way. Participants highlighted accountability as a requirement for people’s day-to-day roles, by owning risk-taking through risk management that leads to better risk decisions as distinct from treating risk management merely as a box-ticking exercise. Remuneration-based incentives should therefore encourage risk-taking behaviour that leads to risk ownership.

**Table 18: Risk-based incentives – summary of sub-indicator quotations**

<b>Risk-based incentives indicators</b>	<b>Total number of sub-code quotations across participants</b>	<b>Number of quotations as a percentage of the total number of quotations related to the sub-code</b>
Compensation	71	86%
Succession planning	7	8%
Talent development	5	6%
Risk-based incentives total	83	100%

Table 18 shows that a large majority of participants (86%) mentioned aspects of ‘compensation’ in the context of incentives where managers take into account individual risk-taking performance in terms of the organisation’s values and risk management policies when determining remuneration and bonuses. Only four senior managers indicated that ‘succession planning’ (8%) and ‘talent development’ (6%) are important for developing staff’s risk management expertise and, more broadly, for enhancing a sound risk culture.

In terms of risk-based incentives, participants indicated that it is challenging to meet the needs of a generation that is continuously looking after instant gratification when the organisation is trying to build a long-term sustainable business. Another challenge noted by participants concerns the difficulty to directly apply measurable incentives or penalties within an organisation. Participants also mentioned challenges concerning succession planning, where the business fails to develop people adequately through experience, communication and knowledge building.

### **5.4.3. Risk role clarity**

The interview questions related to this section were as follows:

- Risk role clarity information was obtained from the leadership-specific question, 'What do you think the benefits of risk leadership are in the context of these BCBS risk culture guidelines specifically within your business area?'
- Risk role clarity information was obtained from the accountability-specific question, 'What do you think the benefits of risk accountability are in the context of these BCBS risk culture guidelines specifically within your business area?'

The risk role clarity indicator was coded according to the sub-codes shown in Table 19.

**Table 19: Risk role clarity codebook – code descriptions and examples of participant quotations**

Code	Code description	Level of awareness n (%)	Quoted examples
Risk role clarity	'Each board, management and other staff member must have a clear view and understanding of their role in management risk in the organisation, including for what they are responsible and accountable' (DNB, 2015).	n = 16 (100%)	'By determining responsibility and accountability by clearly defining the roles upfront ensures people understand the values of the business and its approach to risk' (P8, P10).
All staff members	Have clearly delineated responsibilities to risk: Identification, Management, Mitigation, Monitoring, Reporting, Response, Inclusion in decision-making (DNB, 2015; FSB, 2014).	n = 16 (100%)	'To clearly define organisational structures of the roles that each of the risk disciplines play and to ensure people understand what each of their roles are to essentially achieve that clarity' (P10).
Board and senior management	'The board should set the "tone at the top" and oversee management's role in fostering and maintaining a sound corporate and risk culture. Management should develop a written code of ethics or a code of conduct. The board should take an active role in defining the risk appetite and ensuring its alignment with the bank's strategic, capital and financial plans and compensation practices' (BIS, 2015a).	n = 10 (63%)	'The organisation is very specific in making sure the business has a risk appetite that is well defined, and leadership ensures that people understand and know what is within the appetite' (P10). 'The organisation expects the leaders to hold themselves and each other accountable but also hold their team members accountable' (P15).
Middle management	Lead by example: 'Transfer the risk culture that is derived from leadership to the business line' (FSB, 2014). 'Challenge risk-related decisions and actions' (FSB, 2014). 'Challenge the risk tone from the top when necessary' (FSB, 2014). 'Report issues on risk culture to Senior Management' (FSB, 2014).	n = 15 (94%)	'Further by leading by example by not just saying how things should be done but by showing a person how it should be done' (P7). 'If leaders thus have the mindset of building a sustainable business it will filter into the organisation that the bank is not there for short term gain but for long-term stakeholder value creation' (P10).
Independent board directors; risk management; compliance; Internal audit	'Countervailing power is enhanced through increasing and earlier involvement of key control functions, and by reinforcing the role of independent directors on the board and of the second and third lines of defense' (DNB, 2015). 'Risk management and compliance considerations have a say in compensation, promotion, hiring, and performance evaluation within the business units' (FSB, 2014).	n = 6 (38%)	'And further to partner with leaders that is involved in the day to day execution of the business to ensure we stay within those risk management strategy guidelines and to ensure we don't just implement the actual rule of law but rather the spirit of it' (P15). 'From an audit perspective the leader needs to be independent and objective and it is about forming relationships (partnership) but having integrity within the relationship to identify issues' (P9).
Business line functions	'Risk-related tasks undertake risk management within the assigned limits of risk exposure and further manage (identifying, assessing and controlling) their businesses risks' (FSB, 2014). 'Report and respond to current and emerging risk information' (FSB, 2014).	n = 7 (44%)	'One needs a driver that takes responsibility and are accountable to look after risk elements of the business, but this is dependent on the people within the business to provide information to enable the management in decision making' (P4).
Risk role clarity challenges	'Failure to involve relevant disciplines when making decisions' (DNB, 2015).	n = 9 (56%)	'Due to the risk environment and regulation environment changing frequently there needs to be an ability to be more agile and it is challenging for leaders as well for bank to be more agile' (P14). 'People have to be accountable at every stage of their roles for risk decisions they make as they have a plan and they have stakeholders, and suitable assurance has to be given that accountability is taken for risks that is within your business area and whether it is mitigated for or not, and if you have not done that you have not given the assurance that you can be held accountable for your actions' (P12).

Note: n = number of participants who discussed an aspect related to the code; % = percentage of all participants who addressed this code.

The coded data showed that all participants discussed a risk-culture-related aspect of 'risk role clarity'. Per sub-indicator, 16 (100% of participants) referred to an aspect of 'all staff members'; 15 (94%) to 'middle management'; 10 (63%) to 'board and senior management'; 7 (44%) to 'business line functions'; and 6 (38%) to 'independent board directors; risk management, compliance, internal audit'. This shows that the participants were aware of the important elements connected to risk role clarity, and confirms that they understood the expectations and accountability associated with their roles and responsibility with regards to tasks at hand. The participants also indicated, by linking role clarity and responsibility with accountability, that leaders are responsible for showing and educating people to be more risk aware by highlighting the consequences of inadequate risk decisions and risk taking. Additionally, participants noted that leaders are responsible for ensuring that credit risk is top of mind at all levels by ensuring good communication and relationships with business and by partnering with credit risk.

**Table 20: Risk role clarity – summary of sub-indicator quotations**

<b>Risk role clarity indicators</b>	<b>Total number of sub-code quotations across participants</b>	<b>Number of quotations as a percentage of the total number of quotations related to the sub-code</b>
All staff members	73	43%
Middle management	52	31%
Board and senior management	17	10%
Business line functions	14	8%
Independent board directors; Risk management; Compliance; Internal audit	13	8%
<b>Risk role clarity total</b>	<b>169</b>	<b>100%</b>

Table 20 shows that nearly half of the participants (43%) mentioned aspects of 'all staff members' and that one-third (31%) saw 'middle management' as an important as risk culture driver to allow business and all staff to understand their risk-related roles and responsibilities clearly. This view was supplemented by 10% of the participants who indicated that board and senior management are important in setting the risk-related tone from the top and fostering a culture of honesty and accountability around risk taking and management. A few participants (8%) indicated that 'business line functions' and 'independent board directors; risk management; compliance; internal audit' all contributed proactively by responding to risk reporting and being involved in decisions and activities within the organisation.

In terms of risk-role clarity challenges, participants indicated that people sometimes need to be more agile regarding risk management, given a frequently changing business risk and regulatory environment. Participants stated that the bank has capable credit risk specialists but identified a gap as to how these specialities get aligned to risk requirements in the business. Participants indicated

that employees need to be held accountable at every stage of their role function with regard to decision-making. If suitable assurance cannot be provided to shareholders regarding accountability, risk management, and decision-making, the organisation will not be seen as a trusted bank that ensures shareholder value.

#### 5.4.4. Quality of risk-related information

The interview question related to this section was:

- Quality of risk-related information was obtained from the risk-communication-specific question: 'What do you think the benefits of risk communication are in the context of these BCBS risk culture guidelines specifically within your business area?'

The quality of risk-related information indicator was coded according to the sub-codes shown in Table 21.

**Table 21: Quality of risk-related information codebook – code descriptions and examples of participant quotations**

Code	Code description	Level of awareness n (%)	Quoted examples
Quality of risk-related information	'Material risk-related ad hoc information that requires immediate decisions or reactions should be promptly presented to senior management' (BIS, 2015a). 'A culture of open communication and collaboration is constantly promoted to ensure that each employee's view is valued, and the institution works together to strengthen risk-related decision making' (FSB, 2014).	n = 7 (44%)	'If reporting is done it needs to be factual and one is accountable for the information being provided to the stakeholders' (P9). 'We need to ensure that information is correct and the organisation report correctly on it' (P3).
Quality of risk-related information challenges	'Information must be sufficient and accurate, it must also be presented so that all group members can understand it, and it should include a summary of various decision alternatives and their consequences. It should however be noted, that even if information requirements are satisfactory, impending group behavioural patterns and insufficient challenge may still result in poor decision-making' (DNB, 2015).	n = 3 (19%)	'Reporting is a challenge as risk culture, behaviour and attitude cannot be measured' (P4).

*Note: n = number of participants who discussed an aspect related to the code; % = percentage of all participants who addressed this code.*

The coded data showed that only 7 (44%) of participants discussed a risk-culture-related aspect of 'quality risk-related information'. To be fair, they were not directly asked about this in the interview and one can expect more participants to have an opinion in this area if asked for it directly. The participants indicated that quality of risk-related information is important to assist senior management to make better decisions and carry out their roles effectively, all of which requires tools, information and

resources. They felt that risk data related to risk reporting requirements have to be factual, accurate, timely and complete since the bank is accountable for the information provided to the stakeholders.

**Table 22: Quality of risk-related information – summary of sub-indicator quotations**

<b>Quality of risk-related information indicators</b>	<b>Total number of sub-code quotations across participants</b>	<b>Number of quotations as a percentage of the total number of quotations related to the sub-code</b>
Quality of risk-related information	16	100%
Quality of risk-related information total	16	100%

Table 22 shows that all the participants (100%) mentioned aspects of ‘quality of risk related information’, which were supported by management that risk reporting should clearly describe the problem, present alternative options, and explain the nature and likelihood of potential consequences. In terms of risk-related information challenges, participants indicated that the organisation needs to improve their risk indicator reporting systems by adding tangible methods that measure risk-culture-related behaviour. Including a measure of the integration of risk in organisational decision-making was expected to enhance the organisation’s risk management culture and accountability. Participants explained that reporting is a challenge, as risk culture, behaviour, and attitude cannot currently be measured. Furthermore, participants noted that the organisation needed to improve its reporting and data analytics on unwanted risk-related behaviour. On the other hand, participants acknowledged that the regulatory guidelines are open to interpretation, which makes it difficult to understand exactly what it is that the regulators are trying to achieve.

### **5.5. Summary of indicator findings**

Key organisational values identified in the participants’ responses relate to openness, honesty, integrity, tolerance of people’s views, and high moral standards in the working environment. Evaluating the executives’ and senior and middle managers’ perceived understanding and awareness of the BCBS risk culture guidelines within this organisational context led to results that showed that the participants may not have known the guidelines directly, but that their knowledge and insights regarding the concepts covered by the guidelines were at a high level. However, even though the participants were aware of the practical benefits and challenges of paying attention to related risk culture indicators in their work environments, this does not necessarily mean that the BCBS risk culture guidelines have been adequately employed from a risk management perspective. I would expect that more conscious and greater in-depth knowledge of the BCBS risk culture guidelines would allow employees in this and similar organisations to consciously and systematically improve their risk cultures.

## 5.6. Interview findings mapped to the literature

Table 23 provides a comparison between the three main supervisory documents used in this study and the interview results. This indicates how comprehensively each of these information sources covered the risk culture concepts discussed in this article. The finding that each of the indicators and sub-indicators was coded in the interviews provides further comfort that the managers who participated in this study were aware of the risk management concepts related to risk culture.

**Table 23: Interview findings mapped to the literature**

Code	BCBS	FSB	DNB	Number of participants n (%)
<b>Risk governance framework</b>	✓	✓		<b>n = 16 (100%)</b>
Risk appetite framework	✓	✓		n = 12 (75%)
Risk management strategy	✓	✓		n = 16 (100%)
Risk management framework		✓		n = 16 (100%)
Risk governance framework challenges	✓			n = 15 (94%)
<b>Risk-based incentives</b>	✓	✓	✓	<b>n = 16 (100%)</b>
Compensation	✓	✓		n = 15 (94%)
Talent development	✓	✓	✓	n = 4 (25%)
Succession planning		✓	✓	n = 4 (25%)
Risk-based incentives challenges		✓		n = 15 (94%)
<b>Risk role clarity</b>	✓	✓	✓	<b>n = 16 (100%)</b>
All staff members			✓	n = 16 (100%)
Board and senior management	✓	✓		n = 10 (63%)
Middle management		✓		n = 15 (94%)
Business line functions	✓	✓		n = 7 (44%)
Independent board directors; risk management; compliance; internal audit	✓	✓	✓	n = 6 (38%)
Risk role clarity challenges	✓	✓		n = 9 (56%)
<b>Quality of risk-related information</b>	✓	✓	✓	<b>n = 7 (44%)</b>
Quality of risk-related information challenges			✓	n = 5 (19%)
Tone from the top	✓	✓	✓	n = 15 (94%)
Lead by example		✓	✓	n = 14 (88%)
Integrity	✓	✓	✓	n = 7 (44%)
Risk leadership challenges			✓	n = 14 (88%)
<b>Risk accountability</b>	✓	✓	✓	<b>n = 16 (100%)</b>
Consequences	✓	✓		n = 11 (69%)
Disciplinary actions	✓	✓	✓	n = 8 (50%)
Escalation process	✓	✓		n = 8 (50%)
Ownership of risk	✓	✓	✓	n = 14 (88%)
Risk accountability challenges			✓	n = 16 (100%)
<b>Group dynamics</b>	✓		✓	<b>n = 14 (88%)</b>
Behaviour	✓		✓	n = 13 (81%)
Group dynamics challenges			✓	n = 3 (19%)

Code	BCBS	FSB	DNB	Number of participants n (%)
<b>Risk communication</b>	✓	✓	✓	<b>n = 16 (100%)</b>
Ongoing communication	✓		✓	n = 7 (44%)
Prioritised	✓			n = 9 (56%)
Timely, accurate, understandable	✓			n = 9 (56%)
Communication challenges	✓			n = 15 (94%)
<b>Risk challenge</b>		✓		<b>n = 16 (100%)</b>
Open to alternate views		✓		n = 16 (100%)
Risk challenge				n = 4 (25%)
<b>Shared risk understanding</b>	✓	✓		<b>n = 16 (100%)</b>
Learning from past experience	✓	✓		n = 12 (75%)
Ongoing training	✓	✓	✓	n = 15 (94%)
Common understanding and awareness	✓	✓		n = 16 (100%)
Shared risk understanding challenges				n = 8 (50%)
<b>Risk culture</b>	✓	✓	✓	<b>n = 15 (94%)</b>
Attitude	✓	✓		n =11 (69%)
Behaviour	✓	✓	✓	n =11 (69%)
Risk awareness, risk-taking and risk management, and controls	✓	✓	✓	n =16 (100%)
Values of organisation	✓	✓		n =13 (81%)

Note: ✓ = code / code description raised within the literature documents; n = number of participants who discussed the code / code explanation; % = percentage of all participants who discussed the code / code description

## 6. Conclusion

Since the 2008 financial crisis there have been extensive improvements in critical areas of capital holding and liquidity. However, subsequent financial scandals, such as that at African Bank, raise the question of how the BCBS focus on risk culture could be leveraged to further improve financial risk management. This research is expected to assist banks by providing guidance on assessing and understanding their own organisational risk culture in light of the BCBS risk culture guidelines. Ultimately, this study aims to provide greater knowledge of these guidelines to allow organisations to consciously improve their risk cultures.

Relying on the BCBS, FSB, and DNB risk culture models, owing to their comprehensive coverage of all factors contributing to an effective risk management in an organisation, this study examined management awareness of risk culture and the BCBS risk culture guidelines within a financial banking organisation.

Interview-based research provides a good exploratory base for possible trends even though sampling limitations prevents generalisation of the results to the entire population. This study provides clear indications that the managers of one area within the financial institution were inadequately aware of the BCBS risk culture guidelines, even though they were clearly aware of the practical benefits and challenges of giving attention to related risk culture indicators in their work environments. This could also be the case in other areas in the organisation and may also hold for the rest of the financial

sector. This possibility provides opportunities for further research in this field. It is especially appropriate in managerial- level studies, where there may not be enough possible participants for a meaningful larger-scale survey-type study.

Number of words in article is as follows including headings:

Abstract	203
Article text excluding tables	7574
Tables	6463

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## REFLECTION

Risk culture is currently a topical issue within the risk environment. Existing literature on risk culture was used to define risk culture for the purposes of this study. Risk culture was defined to include awareness, attitude, norms and behaviour of employees within an organisation and the influence of that risk culture on taking risk-related decisions on a day-to-day basis.

Embedding a sound risk culture within an organisation plays a critical role in the success of risk management. The research journey commenced with a comprehensive literature review about risk culture and the benefits and challenges of the BCBS risk culture guidelines.

Various online databases were accessed to identify studies previously done in the area under investigation. Local and international journals were reviewed. The literature review revealed that only a limited number of studies could be found on the topic of the benefits and challenges of applying the BCBS risk culture guidelines in organisations. It became clear that this study could add to the body of knowledge in the risk management space, and could be useful to financial institutions, academics, boards, risk committees, and risk practitioners. During this process I have learnt to critically analyse journal articles and I developed my research skills.

Although this study was done in only one South African financial organisation, the approach and findings are expected to be useful to any other financial organisation.

Being a part-time student is always challenging and managing my time effectively was crucial in the development of this study. Time management and continuously maintaining a holistic view of the end goal proved challenging, as this study consisted of many smaller projects that had to be combined to reach the end result.

Although the literature on risk culture is not vast, I was nonetheless taken aback by the amount and the extent that has already been investigated and achieved in this ever-growing field. I find myself extremely privileged to have been afforded this opportunity to contribute in a small way to the body of work by like-minded individuals that is currently available on risk culture.

From an organisational viewpoint the learning I obtained from this study has been huge. Based on my learning during this project, I may have started with a different research question. This forms part of learning how to do research and I believe that my approach was suitable for an exploratory study such as this one. Not only have I concluded that the risk culture within the management levels of the organisation that I studied is quite mature, but I was also able to provide research-based advice on ways in which risk management can be further investigated and improved.

## **APPENDICES**

### **Appendix A: UARM Risk culture indicator model**

#### **UARM Risk Culture Indicator Model**

##### **An Overview**

**Hermien Zaaiman**

### **Aims**

This document provides a brief summary of the Risk Culture Indicator (RCI) Model under development at the Centre for Applied Risk Management (UARM) of the North-West University (NWU) in South Africa. This information is being written up as an academic article and this summary is intended to provide the reader of the dissertation with the necessary background to understand the student's work. The intellectual property of the model belongs to NWU.

### **The model**

A coherent model of risk culture indicators has been developed based on the Financial Stability Board's risk culture indicators (FSB, 2014), and De Nederlandsche Bank (DNB)'s approach to the supervision of behaviour and culture (DNB, 2015). The model shows a dynamic and interlinked view of 10 risk culture indicators (listed in alphabetical order):

- 1) Group dynamics
- 2) Quality of risk-related information
- 3) Risk accountability
- 4) Risk-based incentives
- 5) Risk challenge
- 6) Risk communication
- 7) Risk leadership – tone
- 8) Risk management framework
- 9) Risk role clarity
- 10) Shared understanding of risk

The model has been translated into an RCI codebook intended to be used in qualitative risk culture assessments.

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

[hermien.zaaiman@nwu.ac.za](mailto:hermien.zaaiman@nwu.ac.za)

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

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FSB. (2014). Guidance on supervisory interaction with financial institutions on risk culture: a

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## Appendix B: Interview protocol and informed consent form



## UARM Mini-dissertation

### Letter of Introduction and Consent-to-Participate

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Dear participant

You are invited to participate in a research study on perceived benefits and challenges of the Basel Committee on Banking Supervision (BCBS) risk culture guidelines. The information below is provided for you to decide whether you are willing to participate in the study. We will appreciate your participation because the information from your participation will assist in providing insight into the perceived benefits and challenges of the BCBS risk culture guidelines in the financial organisation. The study has been approved by the Research Ethics Committee of the Faculty of Economic Sciences of the North-West University.

#### **Title of the study**

Applying the Basel Committee on Banking Supervision risk culture guidelines: a credit risk investigation.

#### **Researcher**

Corne' Maritz

Centre for Applied Risk Management (UARM)

North-West University, Vaal Triangle Campus, Hendrik van Eck Boulevard, Vanderbijlpark, 1900

Mobile: +27 496 0245

Email: corne@webhelp.co.za

**Purpose of the research**

The purpose of this study is to assist the organisation's leadership to appreciate possible benefits of applying the BCBS risk culture guidelines within a credit risk area of a South African bank.

**The research questions**

The interview consists of four open-ended questions and should take about 30 minutes of your time.

**Risks**

There are no risks anticipated from your participation in the study.

**Benefits**

You will have access to the findings of the study after the research is completed.

**Voluntary participation**

Your participation in this study is voluntary and you may choose to withdraw from the study at any time. Your decision to withdraw from the study will not influence your relationship with the researcher or with the North-West University.

**Confidentiality**

Confidentiality is guaranteed. No personal information collected during the study will be disclosed. The researcher will mainly use aggregated data in the research study report. Your name or the name of your organisation will not be associated with published research findings.

**Queries about the research**

Should you have any queries about the research study, kindly contact the researcher. The contact details of the researcher can be found earlier in this document.

**Agreement and signatures of the Participant and the Researcher****Participant**

\_\_\_\_\_  
Name of Participant

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Date

**Researcher**

\_\_\_\_\_  
Name of Researcher

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Date

## Appendix C: Background or classification questions

Date	
Place	
Interviewer	
Interviewee	
Gender	<input type="checkbox"/> Male <input type="checkbox"/> Female
Age in years	<input type="checkbox"/> < 20 <input type="checkbox"/> 20 – 29 <input type="checkbox"/> 30 – 39 <input type="checkbox"/> 40 – 49 <input type="checkbox"/> 50 – 59 <input type="checkbox"/> > 60
Highest qualification	<input type="checkbox"/> No formal education <input type="checkbox"/> Primary school <input type="checkbox"/> High school <input type="checkbox"/> College <input type="checkbox"/> University bachelor's degree <input type="checkbox"/> University postgraduate degree <input type="checkbox"/> Other [specify]
Level of experience in or exposure to risk management in years	<input type="checkbox"/> Less than or equal to 1 year <input type="checkbox"/> More than 1 and less than or equal to 3 years <input type="checkbox"/> More than 3 and less than or equal to 5 years <input type="checkbox"/> More than 5 and less than or equal to 10 years <input type="checkbox"/> More than 10 years
Role or position in the organisation	<input type="checkbox"/> Board <input type="checkbox"/> Executive <input type="checkbox"/> Senior management <input type="checkbox"/> Middle management <input type="checkbox"/> Non-management

## Appendix D: Research methodology and questions

The interview consists of the following questions:

### Question 1:

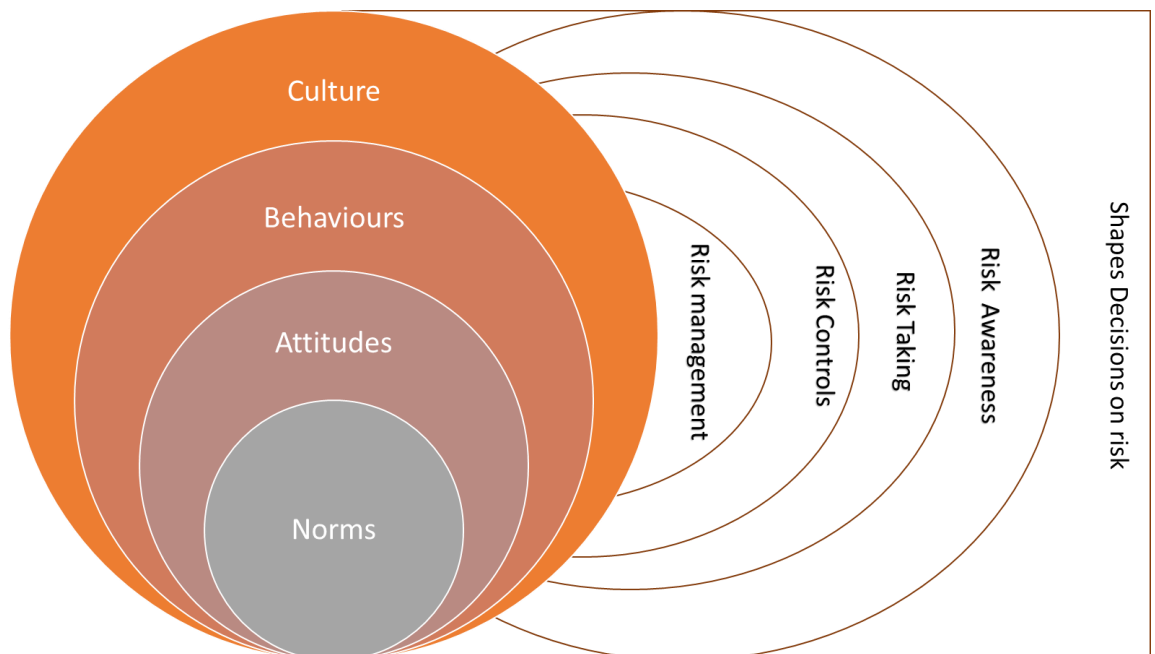
General questions to assess how much the interviewee knows of:

- a) What is your understanding of the term risk culture?
- b) How familiar are you with the requirements of the Basel Committee on Banking Supervision (BCBS) risk culture guidelines?

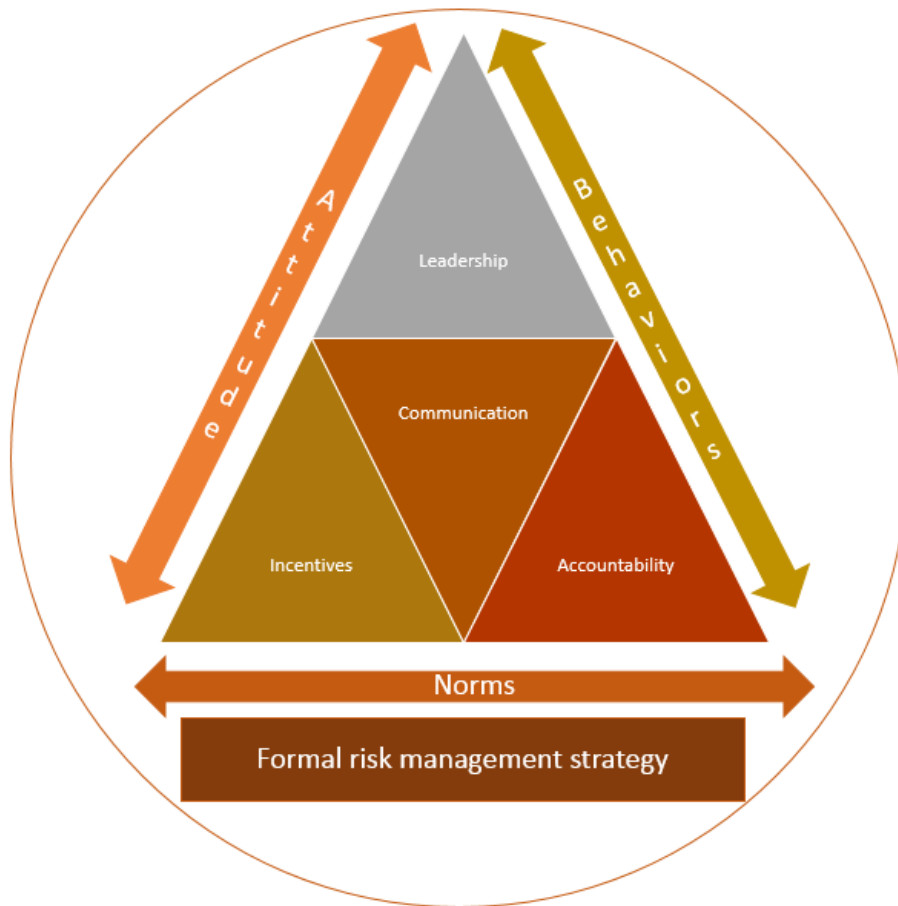
After the interviewee discussed points under question one a description of the main components of the BCBS risk culture guidelines (written) were provided:

#### a) BCBS Definition of risk culture:

A bank's norms, attitudes and behaviours 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 (BIS, 2015).



**b) Guidelines - high level – diagram**



In context of the BCBS risk culture guidelines give an explanation to the interviewee by using the diagram that this study is focusing on risk culture in terms of how risk is included in decision-making in the organisation.

**Question 2:**

**2.1 What do you think the benefits of risk leadership are in context to these BCBS risk culture guidelines specifically within your business area? (e.g. Front-line business line/Credit risk /audit)**

- a) In terms of establishing a risk culture how would you say management is leading by example?
- b) What is your opinion on what management's role is in fostering and maintaining a sound risk culture?

**2.2 What do you think the benefits of risk communication are in context to these BCBS risk culture guidelines, specifically within your business area? (e.g. Front-line business line/Credit risk /audit)**

- a) How do management communicate the importance of a good risk culture with in the bank?
- b) What is your opinion of whether people can talk openly without fear of consequences or being ignored?

**2.3 What do you think the benefits of risk accountability are in context to the BCBS risk culture guidelines within your specific business area? (e.g. Front-line business line/Credit risk /audit)**

- a) How do the organisation establish sufficiently clear accountabilities for those managing risks and hold them accountable?

**2.4 What do you think the benefits of risk-based incentives are in context to these BCBS risk culture guidelines, specifically within your business area? (e.g. Front-line business line/Credit risk /audit)**

- a) How do we reward and encourage appropriate risk-taking behaviours and challenge unbalanced risk behaviours (either overly risk averse or risk seeking)?
- b) How do we satisfy ourselves that new staff members will quickly absorb our desired cultural values?
- c) How do we satisfy ourselves that existing staff members continue to demonstrate expected attitudes and behaviours consistent with our desired cultural values?
- d) What are the incentives and penalties for officers who identify risk in the organisation?

**2.5 What do you think the benefits of our formal risk management strategy are in context to these guidelines within your business area? (e.g. Front-line business line/Credit risk /audit)**

- a) Risk appetite framework – Process, policies, system, controls
- b) Risk appetite statement – Risk limits
- c) Risk management functions - Roles and responsibilities – Resources, Effective, Independent, Objective, Authority, Necessary access, Understanding/knowledge, Training, Risk awareness, Stature (how perceived), Overseeing risk-taking activities, Monitoring risk-taking activities

**Question 3:**

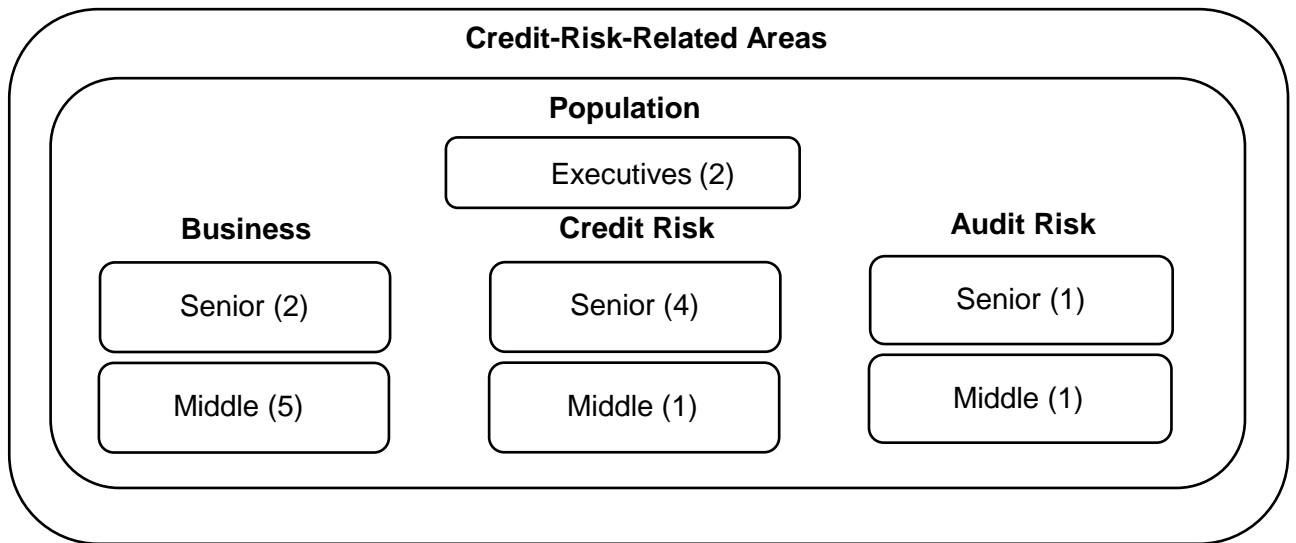
**3.1 What do you think the challenges is in context to these guidelines within your business area (e.g. Front-line business line/Credit risk /audit) with reference to the following:**

- a) Leadership,
- b) Communication,
- c) Accountability,
- d) Incentives,
- e) Formal Risk management strategy?

**Question 4:**

**4.1 What would allow yourself and staff to put these guidelines into practice within the business?**

**Appendix E: Population sample**



## Appendix F: Participant profiles

Gender	Position in organisation	Ethnic group	Age in years	Level of Highest Qualification	Participant credit risk experience	Awareness of BCBS risk culture guidelines	Total
Female	Executive	White	40–49	University postgraduate degree	10 years+	Adequately	1
Female	Senior management	Indian	30–39	University postgraduate degree	5–10 years	Adequately	1
Female	Middle management	White	30–39	University postgraduate degree	10 years+	Very Weak	1
Female	Middle management	White	40–49	University postgraduate degree	10 years+	Not at all	2
Female	Middle management	Black	30–39	University postgraduate degree	10 years+	Not at all	1
Female	Middle management	Indian	30–39	University bachelor's degree	10 years+	Not at all	1
<b>Female Total</b>							<b>7</b>
Male	Executive	White	50–59	University postgraduate degree	10 years+	Full understanding	1
Male	Senior management	White	30–39	University bachelor's degree	10 years+	Full understanding	1
Male	Senior management	White	30–39	University postgraduate degree	10 years+	Not at all	1
Male	Senior management	White	40–49	University bachelor's degree	10 years+	Not at all	1
Male	Senior management	White	40–49	University postgraduate degree	5–10 years	Very Weak	1
Male	Senior management	White	40–49	University postgraduate degree	10 years+	Not at all	1
Male	Senior management	Indian	30–39	University postgraduate degree	10 years+	Full understanding	1
Male	Middle management	White	40–49	University postgraduate degree	10 years+	Very Weak	1
Male	Middle management	Black	20–29	University postgraduate degree	1–3 years	Not at all	1
<b>Male Total</b>							<b>9</b>
<b>Grand Total</b>							<b>16</b>

## Appendix G: Detailed codebook

Main Code	Sub-Code	Sub-sub-Code	Code Description	Total quotes quoted by participants
Structure-based incentives	Structure-based incentives	Structure-based incentives	The risk indicators described in this section relate to formal structural incentives to incorporate risk in organisational decision-making and management	999
Structure-based incentives	Risk governance framework	Risk governance framework	'As part of the overall corporate governance framework, the framework through which the board and management establish and make decisions about the bank's strategy and risk approach; articulate and monitor adherence to risk appetite and risk limits vis-à-vis the bank's strategy; and identify, measure, manage and control risks' (BIS, 2015a). 'A key element of any risk governance framework is ensuring that the right information is provided to management and boards to enable informed decision making with respect to risk issues' (IRM, 2012).	162
Structure-based incentives		Risk appetite framework	'The overall approach, including policies, processes, controls and systems, through which risk appetite is established, communicated and monitored. It includes a risk appetite statement, risk limits and an outline of the roles and responsibilities of those overseeing the implementation and monitoring of the RAF' (BIS, 2015a). 'Regulatory requirements for risk appetite frameworks focus on structures and approaches for communicating, understanding, assessing and monitoring the types and levels of risk across regulated institutions, and on how well this is embedded in day-to-day operations' (APRA, 2016).	36
Structure-based incentives		Risk management strategy	'The board and senior management are committed to establishing, monitoring, and adhering to an effective risk appetite framework, supported by appropriate risk appetite statement(s) that underpin the financial institution's risk management strategy, and is integrated with the overall business strategy' (FSB, 2014).	72
Structure-based incentives		Risk management framework	'An organisation's risk culture is influenced by both formal elements (such as governance and risk management frameworks and structures), as well as informal elements (such as expectations and behavioural norms). Formal governance structures provide an important framework through which appropriate behaviours can be encouraged and supported (and through which poor behaviours can be detected and acted upon)' (APRA, 2016). 'A bank should disclose its operational risk management framework in a manner that will allow stakeholders to determine whether the bank identifies, assesses, monitors and controls/mitigates operational risk effectively' (BIS, 2011a). Section 2, Chapter 1, paragraph 11 of the King II report which states, 'Sound risk management and internal control frameworks, tailored to the specific circumstances of the company, should be part of the daily operational activities of a company, and should not be viewed independently of normal business activities' (IoDSA, 2002). According to ISO 31000, a risk management framework is 'a set of components that support and sustain risk management throughout an organisation. There are two types of components: foundations and arrangements. Foundations include your risk management policy, objectives, mandate, and commitment. And arrangements include the plans, relationships, accountabilities, resources, processes, and activities you use to manage your organisation's risk' (ISO, 2009).	67
Structure-based incentives		Risk governance framework challenges	'Operating through complex or non-transparent structures may pose financial, legal, reputational and other risks to the bank. It may impede the ability of the board and senior management to conduct appropriate business oversight and could hinder effective banking supervision' (BIS, 2015a). 'Senior management - and the board, as appropriate - should be cognisant of these challenges and avoid or mitigate them by: 1) avoid setting up complicated structures; 2) continually maintain and reviewing policies, procedures and processes; 3) establishing adequate procedures and processes to identify and manage all material risks; 4) ensuring that activities and structures are subject to regular internal and external audit reviews' (BIS, 2015a).	44

Main Code	Sub-Code	Sub-sub-Code	Code Description	Total quotes quoted by participants
Structure-based incentives	Risk-Based Incentives	Risk-based incentives	The BCBS states that 'remuneration systems form a key component of the governance and incentive structure through which the board and senior management promote good performance, convey acceptable risk-taking behaviour and reinforce the bank's operating and risk culture' (BIS, 2015a). The FSB proposes that 'employees' compensation should take into account individual performance in taking risks against the organisation's stated core values, compliance with risk management policies and procedures and compliance review reports' (FSB, 2014).	123
Structure-based incentives		Compensation	'Remuneration systems form a key component of the governance and incentive structure through which the board and senior management promote good performance, convey acceptable risk-taking behaviour and reinforce the bank's operating and risk culture' (BIS, 2015a). 'Remuneration and performance metrics consistently support and drive the desired risk-taking behaviours, risk appetite and risk culture of the financial institution, and encourage employees to act in the interest of the greater good of the company, rather than for themselves or their business line' (FSB, 2014).	71
Structure-based incentives		Succession planning	'Succession planning processes for key management positions include risk management experience and not only revenue-based accomplishments; for instance, individuals with responsibilities consistent with the chief risk officer, chief compliance officer, and chief audit executive can be considered as potential candidates for executive positions, including the chief executive officer' (FSB, 2014).	7
Structure-based incentives		Talent development	'Training programs are available for all staff to develop risk management competencies and, more broadly, the elements supporting a sound risk culture, including effective challenge and open communication' (FSB, 2014).	5
Structure-based incentives		Risk-based incentives challenges	'Breaches in internal policies, procedures and risk limits, as well as non-adherence to internal codes of conduct, are understood to have a potential impact on an individual's compensation and responsibilities, can affect career progression and, depending on severity, may result in termination' (FSB, 2014). 'Failing to reward good risk management and/or apply consequences for poor management of risks' (APRA, 2016). 'The effect of incentivising staff to take significant risks to secure high returns without due consideration of the impact on balance sheet and long term reputation' (IRM, 2012).	39

Main Code	Sub-Code	Sub-sub-Code	Code Description	Total quotes quoted by participants
Structure-based incentives	Risk Role Clarity	Risk role clarity	'Each board, management and other staff member must have a clear view and understanding of their role in management risk in the organisation, including for what they are responsible and accountable' (DNB, 2015).	245
Structure-based incentives		All staff members	'Have clearly delineated responsibilities to risk: Identification, Management, Mitigation, Monitoring, Reporting, Response, Inclusion in decision-making' (DNB, 2015; FSB, 2014)	73
Structure-based incentives		Board and senior management	'The board should set the "tone at the top" and oversee management's role in fostering and maintaining a sound corporate and risk culture. Management should develop a written code of ethics or a code of conduct. Either code is intended to foster a culture of honesty and accountability to protect the interest of its customers and shareholders' (BIS, 2015a). 'The board should take an active role in defining the risk appetite and ensuring its alignment with the bank's strategic, capital and financial plans and compensation practices' (BIS, 2015a).	17
Structure-based incentives		Middle management	Lead by example: 'Transfer the risk culture that is derived from leadership to the business line (FSB, 2014). Challenge risk-related decisions and actions' (FSB, 2014). 'Challenge the risk tone from the top when necessary' (FSB, 2014). Report issues on risk culture to Senior Management' (FSB, 2014).	52
Structure-based incentives		Independent board directors; Risk management; Compliance; Internal audit	'Countervailing power is enhanced through increasing and earlier involvement of key control functions, and by reinforcing the role of independent directors on the board and of the second and third lines of defense' (DNB, 2015). 'Share the same stature as the business lines; Operate independently; Have sufficient stature not only to act as advisors, but to effectively exert control tasks with respect to the institution; Have appropriate direct access to the board and senior management; Actively participate in committees; Risk management and compliance considerations have a say in compensation, promotion, hiring, and performance evaluation within the business units' (FSB, 2014). 'Risk culture-related tasks are proactively involved in all relevant risk decisions and activities, which report and respond to current and emerging risk information' (FSB, 2014).	13
Structure-based incentives		Business line functions	'Risk-related tasks undertake risk management within the assigned limits of risk exposure and further manage (identifying, assessing and controlling) their businesses risks' (FSB, 2014). 'Report and respond to current and emerging risk information' (FSB, 2014).	14
Structure-based incentives		Risk role clarity challenges	'Failure to involve relevant disciplines when making decisions' (DNB, 2015).	16
Structure-based incentives	Quality of risk-related information	Quality of risk-related information	'Material risk-related ad hoc information that requires immediate decisions or reactions should be promptly presented to senior management' (BIS, 2015a). 'A culture of open communication and collaboration is constantly promoted to ensure that each employee's view is valued, and the institution works together to strengthen risk-related decision making' (FSB, 2014).	16
Structure-based incentives		Quality of risk-related information challenges	'Information must be sufficient and accurate, it must also be presented so that all group members can understand it, and it should include a summary of various decision alternatives and their consequences. It should however be noted, that even if information requirements are satisfactory, impending group behavioural patterns and insufficient challenge may still result in poor decision-making' (DNB, 2015).	6

Main Code	Sub-Code	Sub-sub-Code	Code Description	Total quotes quoted by participants
Behaviour-based incentives	Behaviour-based incentives	Behaviour-based incentives	The risk indicators described the behavioural incentives to incorporate risk in organisational decision-making and management	1366
Behaviour-based incentives	Risk leadership	Risk leadership	'The central role of leadership in shaping and driving both organisational and risk culture' (APRA, 2016).	154
Behaviour-based incentives		Tone from the top	The FSB states that tone from the top is where 'The board and senior management are the starting point for setting the financial institution's core values and expectations for the risk culture of the institution, and their behaviour must reflect the values being espoused' (FSB, 2014).	29
Behaviour-based incentives		Lead by example	'The board and senior management, consistently within their specific roles and responsibilities, promote through behaviours, actions and words, a risk culture that expects integrity and a sound approach to risk management as well as promotes an open exchange of views, challenge and debate' (FSB, 2014).	49
Behaviour-based incentives		Integrity	'A key value that should be espoused is the expectation that staff act with integrity (doing the right thing) and promptly escalate observed non-compliance within or outside the organisation (no surprises approach)' (FSB, 2014).	17
Behaviour-based incentives		Risk leadership challenges	'Managers have an immediate negative or positive impact on behaviours both through communication and role modelling' (APRA, 2016).	35

Main Code	Sub-Code	Sub-sub-Code	Code Description	Total quotes quoted by participants
Behaviour-based incentives	Risk accountability	Risk accountability	The FSB refers to accountability as 'Relevant employees at all levels understand the core values of the institution and its approach to risk, can perform their prescribed roles, and are aware that they are held accountable for their actions in relation to the institution's risk-taking behaviour' (FSB, 2014).	153
Behaviour-based incentives		Disciplinary actions	'All limit breaches, deviations from established policies, and operational incidents are thoroughly followed up with proportionate disciplinary actions when necessary' (FSB, 2014). In order to promote a sound corporate culture, the board should reinforce the 'tone at the top' by confirming that employees, including senior management, are aware that appropriate disciplinary or other actions will follow unacceptable behaviours and transgressions' (BIS, 2015a).	11
Behaviour-based incentives		Consequences	'Consequences are clearly established, articulated and applied for anyone engaged in, or supporting, risk-taking that is excessive relative to the financial institution's risk appetite statement, regardless of whether positive revenue or net income was generated' (FSB, 2014). 'Breaches in internal policies, procedures and risk limits, as well as non-adherence to internal codes of conduct, are understood to have a potential impact on an individual's compensation and responsibilities, can affect career progression and, depending on severity, may result in termination' (FSB, 2014). 'The board should provide oversight of senior management. It should hold members of senior management accountable for their actions and enumerate the possible consequences (including dismissal) if those actions are not aligned with the board's performance expectations. This includes adhering to the bank's values, risk appetite and risk culture, under all circumstances' (BIS, 2015a).	19
Behaviour-based incentives		Ownership of risk	'Clear expectations are set in the monitoring and reporting of, and response to risk information' (FSB, 2014). Every person in the business are held accountable for their actions and understand the consequences if they are not aligned with the institution's core values, risk appetite and risk culture (BIS, 2015a; DNB, 2015; FSB, 2014).	39
Behaviour-based incentives		Escalation process	'Appropriate escalation processes are established to support risk management and clear consequences for non-compliance with escalation procedures are defined' (BIS, 2015a; FSB, 2014).	9
Behaviour-based incentives		Risk accountability challenges	'If accountabilities for managing risks are not consistently defined, it is not possible to be sure who is accountable for managing which risk. The implication is that risk management is ill-defined and ownership for the process is unclear' (IRM, 2012).	44
Behaviour-based incentives		Group dynamics	Group dynamics	'Group dynamics refers to the interaction between different positions or forces within a group, interrelationships between individuals in a group or patterns within group behaviour which affect the overall group result' (DNB, 2017). 'Group dynamics is defined as the interaction between different positions and patterns within a group or between groups, which affect overall group effectiveness' (DNB, 2015).
Behaviour-based incentives	Behaviour		'Group behaviours and the underlying organisational culture also influence risk culture' (IRM, 2012). 'The behaviour of the group and its constituent individuals is shaped by their underlying attitudes. Both Behaviour and Attitudes are influenced by the prevailing Culture of the group' (IRM, 2012).	22
Heroes & Rituals	Group dynamics challenges		'If management tend to display dominant leadership styles, it could weaken group dynamics and constructive challenge. In turn, an erosion of deliberative checks tended to erode the quality of decisions' (FSB, 2017).	5

Main Code	Sub-Code	Sub-sub-Code	Code Description	Total quotes quoted by participants
Behaviour-based incentives	Risk communication	Risk communication	The BCBS states that 'ongoing communication about risk issues, including the bank's risk strategy, throughout the bank is a key tenet of a strong risk culture. A strong risk culture should promote risk awareness and encourage open communication and challenge about risk-taking across the organisation as well as vertically to and from the board and senior management' (BIS, 2015a).	165
Behaviour-based incentives		Ongoing communication	'Ongoing communication about risk issues, including the bank's risk strategy, throughout the bank is a key tenet of a strong risk culture' (BIS, 2015a).	13
Behaviour-based incentives		Timely, accurate, understandable	'Information should be communicated to the board and senior management in a timely, accurate and understandable manner so that they are equipped to take informed decisions' (BIS, 2015a).	18
Behaviour-based incentives		Prioritised	'Information should be prioritised and presented in a concise, fully contextualised manner. The board should assess the relevance and the process for maintaining the accuracy of the information it receives and determine if additional or less information is needed' (BIS, 2015a).	10
Behaviour-based incentives		Risk communication challenges	'Organisations should avoid organisational "silos" that can impede effective sharing of information across an organisation and can result in decisions being taken in isolation from the rest of organisation. Overcoming these information-sharing obstacles may require the board, senior management and control functions to re-evaluate established practices in order to encourage greater communication' (BIS, 2015a).	44
Behaviour-based incentives	Risk challenge	Risk challenge	'Staff should have the ability and willingness to effectively challenge business operations regarding all aspects of risk arising from the bank's activities. Staff should have access to regular training' (BIS, 2015a). 'A sound risk culture promotes an environment of open communication and effective challenge in which decision-making processes encourage a range of views; allow for testing of current practices; stimulate a positive, critical attitude among employees; and promote an environment of open and constructive engagement' (FSB, 2014).	38
Behaviour-based incentives		Open to alternate views	'A culture of open communication and collaboration is constantly promoted to ensure that the institution works together to strengthen risk-related decision making'. 'Alternate views or questions from individuals and groups are encouraged, valued and respected and occur in practice'. 'A culture of open communication and collaboration is constantly promoted to ensure that each employee's view is valued, and the institution works together to strengthen risk-related decision making' (FSB, 2014).	41
Behaviour-based incentives		Risk challenge challenges	'In a bank environment where employees are not free to discuss risk situations, major risks within the bank's critical functions may not be timely identified and mitigated' (IFC, 2015).	4

Main Code	Sub-Code	Sub-sub-Code	Code Description	Total quotes quoted by participants
Behaviour-based incentives	Shared risk understanding	Shared risk understanding	'Effective risk management and challenge are only possible if the participants in the process have a shared understanding of risk, the value of risk to the organisation, and the risk management framework of the organisation. The risk culture and risk management framework determine the quality of risk information available to make risk-informed decisions' (FSB, 2014).	127
Behaviour-based incentives		Ongoing training	'A common conceptual risk culture model and language' (DNB, 2015) including the meaning of basic terms such as risk, risk culture and risk management. 'Ensure that members participate in induction programs and have access to ongoing training on relevant issues which may involve internal or external resources' (BIS, 2015a).	35
Behaviour-based incentives		Learning from past experience	'Assessment and communication of lessons learnt from past events, both failures and successes, are seen as an opportunity to enhance the institution's risk culture, and to enact real changes for the future' (FSB, 2014).	33
Behaviour-based incentives		Common understanding and awareness	'Appropriate mechanisms are in place to ensure the risk appetite, risk management strategy, and business strategy are effectively aligned and embedded in decision-making and operations at all appropriate levels of the institution' (FSB, 2014).	56
Behaviour-based incentives		Shared risk understanding challenges	'In a bank environment where employees are not free to discuss risk situations, major risks within the bank's critical functions may not be timely identified and mitigated' (IFC, 2015). 'Employees who do not have sufficient understanding of the risks associated with the bank are likely to expose the bank to imprudent risk taking' (IFC, 2015).	14
Risk Culture	Risk Culture	Risk Culture	'A bank's norms, attitudes and behaviours 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' (BIS, 2015a). Risk culture is 'the values, beliefs, knowledge and understanding about risk, shared by a group of people with a common purpose (IRM, 2012).	45
Risk Culture		Attitude	Risk attitude is 'the chosen position adopted by an individual or group towards risk, influenced by risk perception' (IRM, 2012).	15
Risk Culture		Behaviour	'Risk behaviour comprises external observable risk-related actions, including risk-based decision-making, risk processes, risk communications etc.' (IRM, 2012).	19
Risk Culture		Values of organisation	Ensure common understanding and awareness of risk, relevant employees at all levels need to understand the core values of the organisation (FSB, 2014).	27
Risk Culture		Risk awareness, risk-taking and risk management, and controls	'Risk awareness, risk-taking and risk management, and controls shapes decisions around risks on a day-to-day basis. Risk culture influences the decisions of management and employees during the day-to-day activities and has an impact on the risks they assume' (BIS, 2015a). 'A sound risk culture consistently supports appropriate risk awareness, behaviours and judgements about risk-taking within a strong risk governance framework. A sound risk culture bolsters effective risk management, promotes sound risk-taking, and ensures that emerging risks or risk-taking activities beyond the institution's risk appetite are recognised, assessed, escalated and addressed in a timely manner' (FSB, 2014).	43

## Appendix H: Codes derived from literature study

Main code Title	Risk Culture Indicators	Incentive	Total
<b>Structural indicators</b>	<b>Key</b>	<b>Structure</b>	<b>999</b>
Risk governance framework	Risk governance framework	Structure	162
Risk governance framework	Risk appetite framework	Structure	36
Risk governance framework	Risk management strategy	Structure	72
Risk governance framework	Risk management framework	Structure	67
Risk governance framework	Risk governance framework challenges	Structure	44
Risk-based incentives	Risk-based incentives	Structure	123
Risk-based incentives	Compensation	Structure	71
Risk-based incentives	Talent development	Structure	5
Risk-based incentives	Succession planning	Structure	7
Risk-based incentives	Risk-based incentives challenges	Structure	39
Risk role clarity	Risk role clarity	Structure	167
Risk role clarity	All staff members	Structure	73
Risk role clarity	Board and senior management	Structure	17
Risk role clarity	Middle management	Structure	52
Risk role clarity	Business line functions	Structure	14
Risk role clarity	Independent board directors; risk management; compliance; internal audit	Structure	13
Risk role clarity	Risk role clarity challenges	Structure	16
Quality of risk-related information	Quality of risk-related information	Structure	16
Quality of risk-related information	Quality of risk-related information challenges	Structure	5
<b>Behavioural indicators</b>	<b>Key</b>	<b>Behaviour</b>	<b>1432</b>
Risk leadership	Risk leadership	Behaviour	154
Risk leadership	Tone from the top	Behaviour	29
Risk leadership	Lead by example	Behaviour	49
Risk leadership	Integrity	Behaviour	17
Risk leadership	Risk leadership challenges	Behaviour	35
Risk accountability	Risk accountability	Behaviour	153
Risk accountability	Consequences	Behaviour	19
Risk accountability	Disciplinary actions	Behaviour	11
Risk accountability	Escalation process	Behaviour	9
Risk accountability	Ownership of risk	Behaviour	39
Risk accountability	Risk accountability challenges	Behaviour	44
Group dynamics	Group dynamics	Behaviour	33
Group dynamics	Behaviour	Behaviour	22
Group dynamics	Group dynamics challenges	Behaviour	5
Risk communication	Risk communication	Behaviour	165
Risk communication	Ongoing communication	Behaviour	13
Risk communication	Prioritised	Behaviour	10
Risk communication	Timely, accurate, understandable	Behaviour	18
Risk communication	Risk communication challenges	Behaviour	44
Risk challenge	Risk challenge	Behaviour	38
Risk challenge	Open to alternate views	Behaviour	41
Risk challenge	Risk challenge challenges	Behaviour	4

Main code title	Risk culture indicators	Incentive	Total
Shared risk understanding	Shared risk understanding	Behaviour	127
Shared risk understanding	Learning from past experience	Behaviour	34
Shared risk understanding	Ongoing training	Behaviour	34
Shared risk understanding	Common understanding and awareness	Behaviour	56
Shared risk understanding	Challenge for shared risk understanding	Behaviour	14
Risk culture	Risk culture key	Risk culture	45
Risk culture	Attitude	Risk culture	15
Risk culture	Behaviour	Risk culture	19
Risk culture	Risk awareness, risk-taking and risk management, and controls	Risk culture	43
Risk culture	Values of organisation	Risk culture	27
How to put these guidelines into practice	How to put these guidelines into practice	Practice	62
New	New	New	4
<b>Grand total</b>			<b>2431</b>

## Appendix I: Participant responses

### Risk culture guideline – Risk leadership codes and participant responses

#### Risk leadership – participants responses

Risk leadership indicators	P 1	P 2	P 3	P 4	P 5	P 6	P 7	P 8	P 9	P 10	P 11	P 12	P 13	P 14	P 15	P 16	% of interview quotes	Total participant (n)	% of all participants discussing codes
Risk leadership	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	100%	16	62%
Tone from the top	✓	✓	✓	✓	✓	✓	✓		✓	✓	✓	✓	✓	✓	✓	✓	94%	15	12%
Lead by example	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		✓		88%	14	20%
Integrity	✓	✓				✓		✓	✓		✓				✓		44%	7	7%
Risk leadership challenge		✓	✓	✓	✓	✓	✓	✓	✓	✓		✓	✓	✓	✓	✓	88%	14	

Note: ✓ = code / code description raised by participant; n = number of participants who discussed the code / code explanation; % = percentage of all participants who discussed code / code description

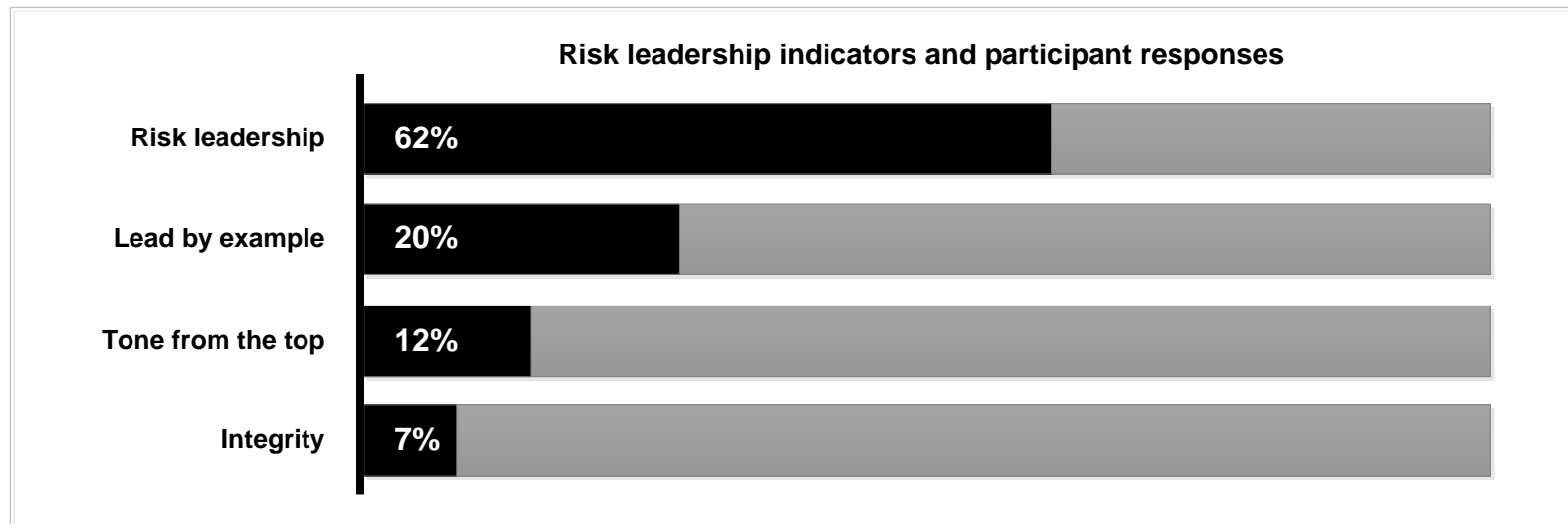


Figure 9: Risk leadership indicators and participants' responses on quotes

## Risk culture guideline – Risk accountability codes and participant responses

### Risk accountability – participants responses

Risk accountability indicators	P 1	P 2	P 3	P 4	P 5	P 6	P 7	P 8	P 9	P 10	P 11	P 12	P 13	P 14	P 15	P 16	% of interview quotes	Total participant (n)	% of all participants discussing codes
Risk accountability	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	100%	16	66%
Disciplinary actions		✓	✓	✓		✓		✓		✓				✓	✓		50%	8	5%
Consequences	✓	✓	✓			✓	✓	✓			✓	✓	✓	✓	✓		69%	11	8%
Ownership of risk		✓	✓	✓	✓	✓	✓		✓	✓	✓	✓	✓	✓	✓	✓	88%	14	17%
Escalation process	✓			✓	✓			✓		✓	✓		✓	✓			50%	8	4%
Risk accountability challenges	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	100%	16	

Note: ✓ = code / code description raised by participants; n = number of participants who discussed the code / code explanation; % = percentage of all participants who discussed code / code description

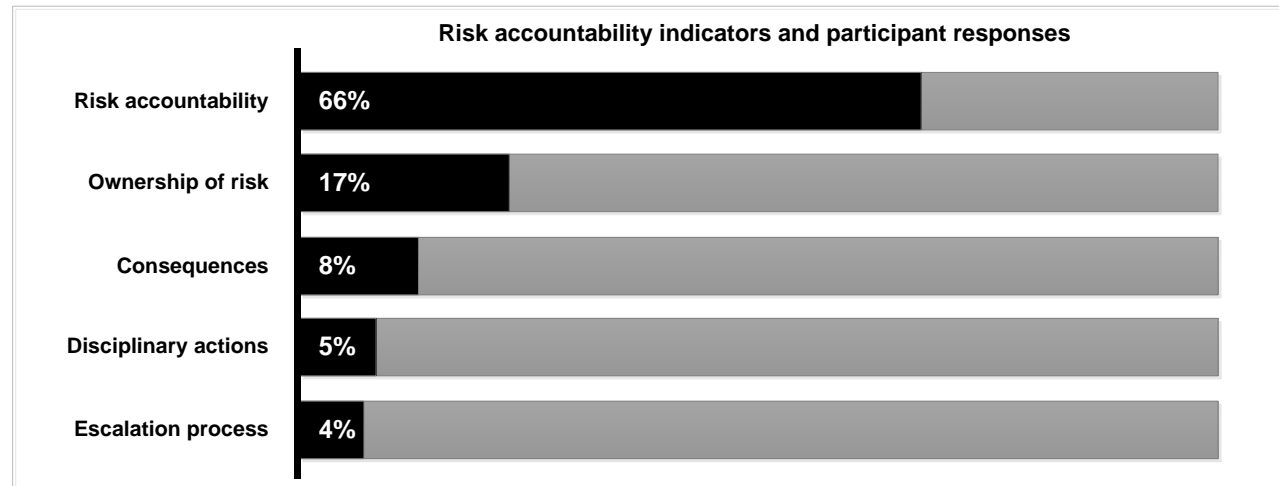


Figure 10: Risk accountability indicators and participants' responses on quotes

## Risk culture guideline – Group dynamics codes and participant responses

### Group dynamics – participants responses

Group dynamics indicators	P 1	P 2	P 3	P 4	P 5	P 6	P 7	P 8	P 9	P 10	P 11	P 12	P 13	P 14	P 15	P 16	% of interview quotes	Total participant (n)	% of all participants discussing codes
Group dynamics		✓	✓		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	88%	33	60%
Behaviour		✓	✓		✓	✓	✓	✓	✓	✓	✓	✓			✓	✓	81%	22	40%
Group dynamics challenges									✓			✓		✓			19%	5	

Note: ✓ = code / code description raised by participants; n = number of participants who discussed the code / code explanation; % = percentage of all participants who discussed code / code description

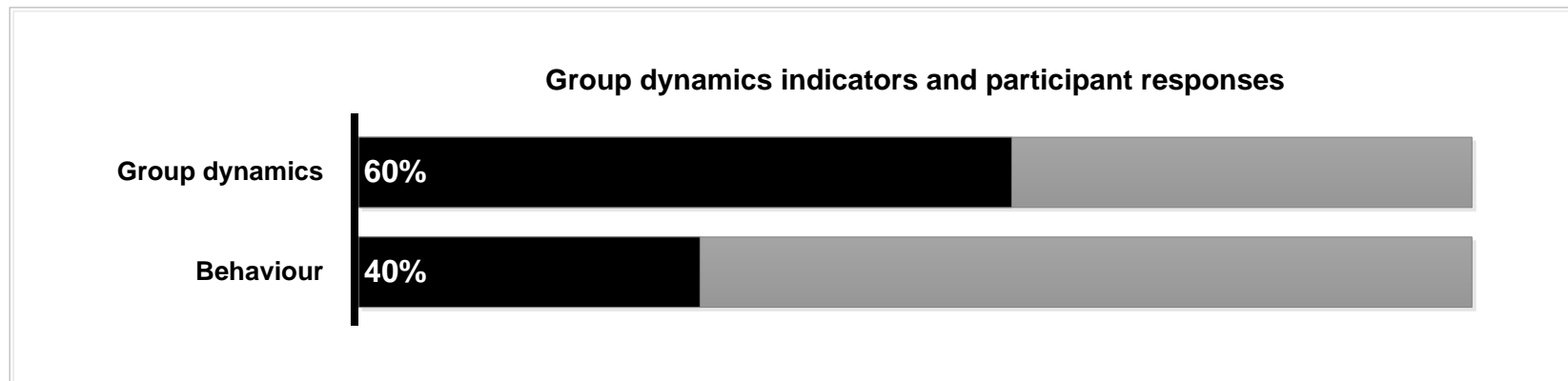


Figure 11: Group dynamics indicators and participants' responses on quotes

## Risk culture guideline – Risk communication codes and participant responses

### Risk communication– participants responses

Risk communication indicators	P 1	P 2	P 3	P 4	P 5	P 6	P 7	P 8	P 9	P 10	P 11	P 12	P 13	P 14	P 15	P 16	% of interview quotes	Total participant (n)	% of all participants discussing codes
Risk communication	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	100%	16	80%
Ongoing communication	✓	✓	✓	✓	✓		✓	✓									44%	7	6%
Timely, accurate, understandable			✓	✓						✓	✓	✓	✓	✓	✓	✓	56%	9	9%
Prioritised	✓			✓	✓		✓	✓		✓		✓			✓	✓	56%	9	5%
Risk communication challenges	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		✓	✓	✓	✓	✓	94%	15	

Note: ✓ = code / code description raised by participants; n = number of participants who discussed the code / code explanation; % = percentage of all participants who discussed code / code description

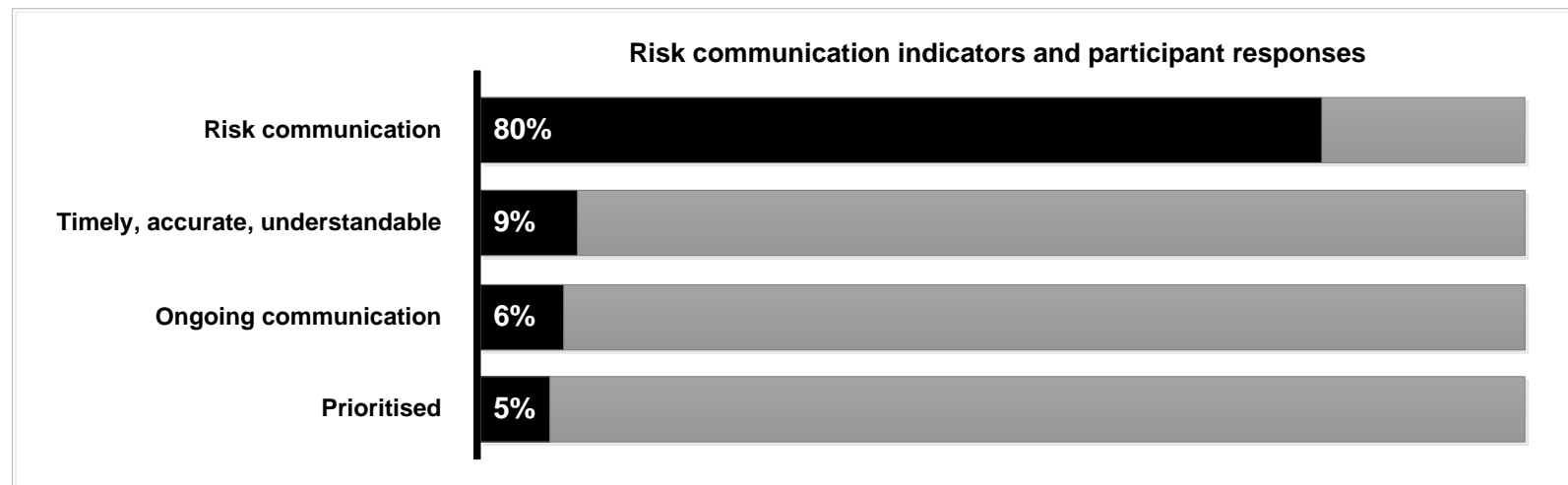


Figure 12: Risk communication indicators and participants' responses on quotes

## Risk culture guideline – Risk challenge codes and participant responses

### Risk challenge– participants responses

Risk challenge indicators	P 1	P 2	P 3	P 4	P 5	P 6	P 7	P 8	P 9	P 10	P 11	P 12	P 13	P 14	P 15	P 16	% of interview quotes	Total participant (n)	% of all participants discussing codes
Risk challenge	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	100%	16	13%
Open to alternate views	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	100%	16	48%
Risk challenge challenges		✓	✓					✓	✓								25%	4	

Note: ✓ = code / code description raised by participants; n = number of participants who discussed the code / code explanation; % = percentage of all participants who discussed code / code description



Figure 13: Risk challenge indicators and participants' responses on quotes

## Risk culture guideline – Shared risk understanding codes and participant responses

### Shared risk understanding– participants responses

Shared risk understanding indicators	P 1	P 2	P 3	P 4	P 5	P 6	P 7	P 8	P 9	P 10	P 11	P 12	P 13	P 14	P 15	P 16	% of interview quotes	Total participant (n)	% of all participants discussing codes
Shared risk understanding	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	100%	16	51%
Ongoing training		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	94%	15	14%
Learning from past experience	✓	✓	✓	✓	✓	✓		✓	✓	✓	✓				✓	✓	75%	12	14%
Common understanding and awareness	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	100%	16	22%
Shared risk understanding challenges		✓	✓	✓					✓		✓	✓		✓		✓	50%	8	

Note: ✓ = code / code description raised by participants; n = number of participants who discussed the code / code explanation; % = percentage of all participants who discussed code / code description

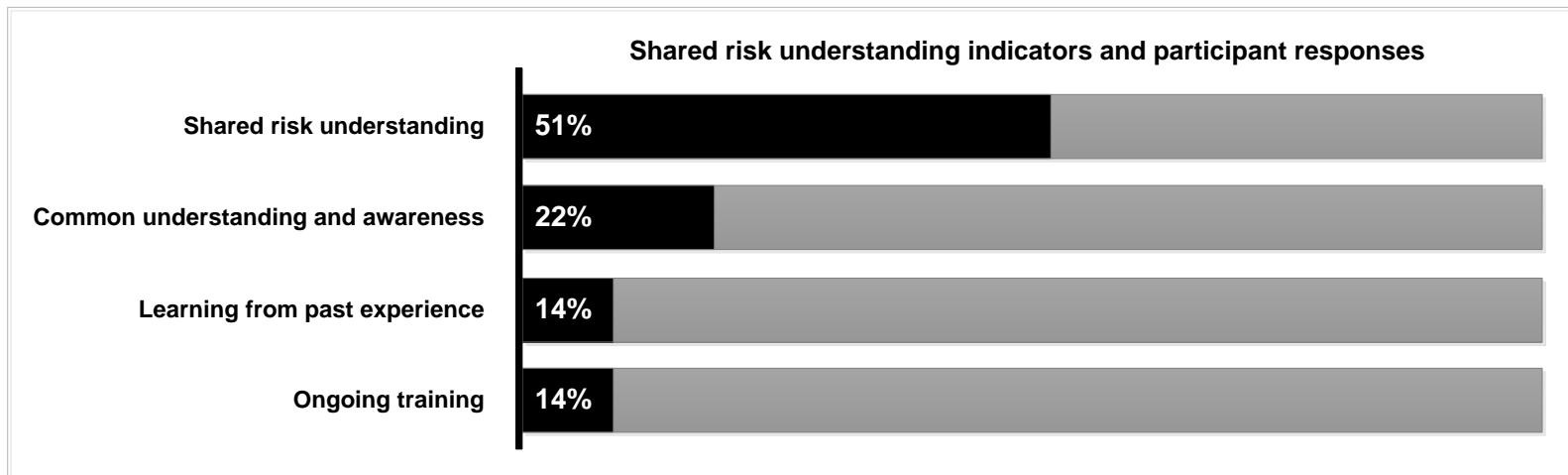


Figure 14: Shared risk understanding indicators and participants' responses on quotes

## Structural risk culture guideline – Risk governance framework

### Risk governance framework– participants responses

Note: ✓ = code / code description raised by participants; n = number of participants who discussed the code / code explanation; % = percentage of all participants who discussed code / code description

Risk governance framework indicators	P 1	P 2	P 3	P 4	P 5	P 6	P 7	P 8	P 9	P 10	P 11	P 12	P 13	P 14	P 15	P 16	% of interview quotes	Total participant (n)	% of all participants discussing codes
Risk governance framework	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	100%	16	48%
Risk appetite framework		✓	✓		✓		✓	✓	✓	✓	✓	✓			✓	✓	75%	12	11%
Risk management strategy	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	100%	16	21%
Risk management framework	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	100%	16	20%
Risk governance framework challenges	✓		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	94%	15	

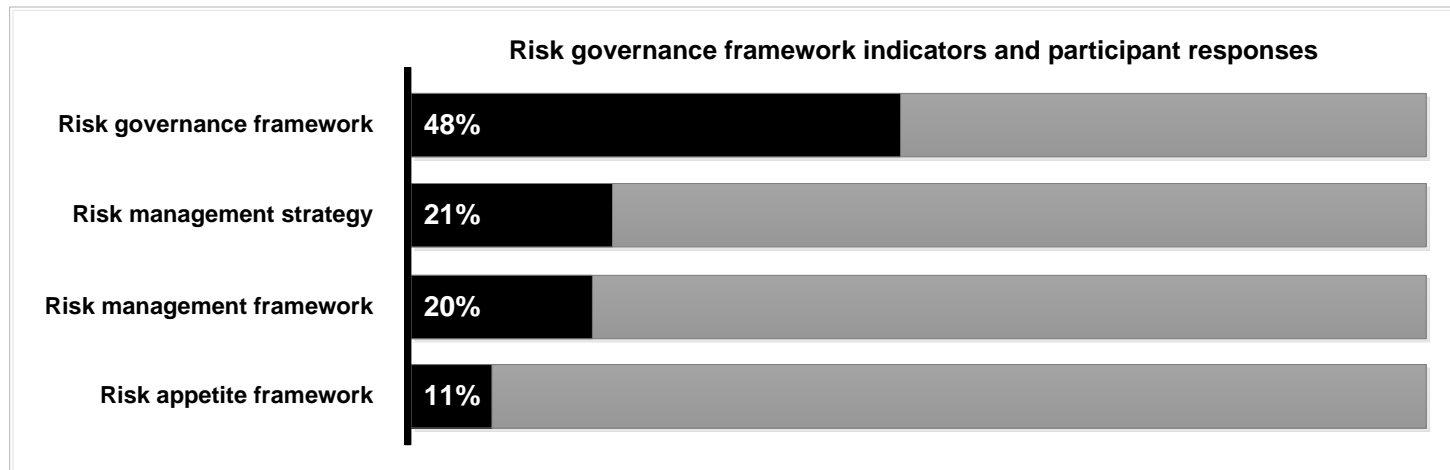


Figure 15: Risk governance framework indicators and participants' responses on quotes

## Structural risk culture guideline – Risk-based incentives

### Risk-based incentives– participants responses

Risk-based incentives indicators	P 1	P 2	P 3	P 4	P 5	P 6	P 7	P 8	P 9	P 10	P 11	P 12	P 13	P 14	P 15	P 16	% of interview quotes	Total participant (n)	% of all participants discussing codes
Risk-based incentives	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	100%	16	60%
Compensation	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		✓	✓	✓	94%	15	34%
Succession planning								✓		✓	✓				✓		25%	4	3%
Talent development										✓	✓			✓	✓		25%	4	2%
Risk-based incentives challenges	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		✓	✓	✓	✓	✓	94%	15	

Note: ✓ = code / code description raised by participants; n = number of participants who discussed the code / code explanation; % = percentage of all participants who discussed code / code description

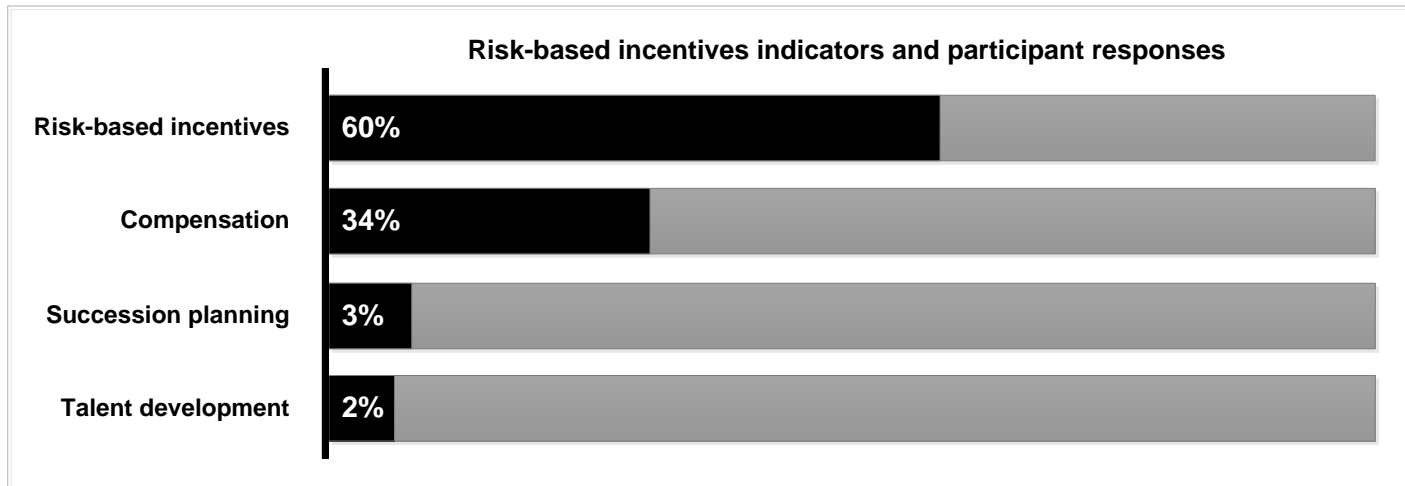


Figure 16: Risk-based incentives indicators and participants' responses on quotes

## Structural risk culture guideline – Risk role clarity

### Risk role clarity – participants responses

Risk role clarity indicators	P 1	P 2	P 3	P 4	P 5	P 6	P 7	P 8	P 9	P 10	P 11	P 12	P 13	P 14	P 15	P 16	% of interview quotes	Total participant (n)	% of all participants discussing codes
Risk role clarity	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	100%	16	50%
All staff members	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	100%	16	22%
Board and senior management	✓	✓		✓			✓		✓	✓	✓	✓			✓		63%	10	5%
Middle management	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	94%	15	15%
Independent board directors; Risk management; Compliance; Internal audit				✓				✓	✓	✓		✓			✓		38%	6	4%
Business line functions				✓	✓			✓	✓				✓		✓	✓	44%	7	4%
Risk role clarity challenges			✓	✓	✓		✓		✓	✓		✓	✓	✓			56%	9	

Note: ✓ = code / code description raised by participants; n = number of participants who discussed the code / code explanation; % = percentage of all participants who discussed code / code description

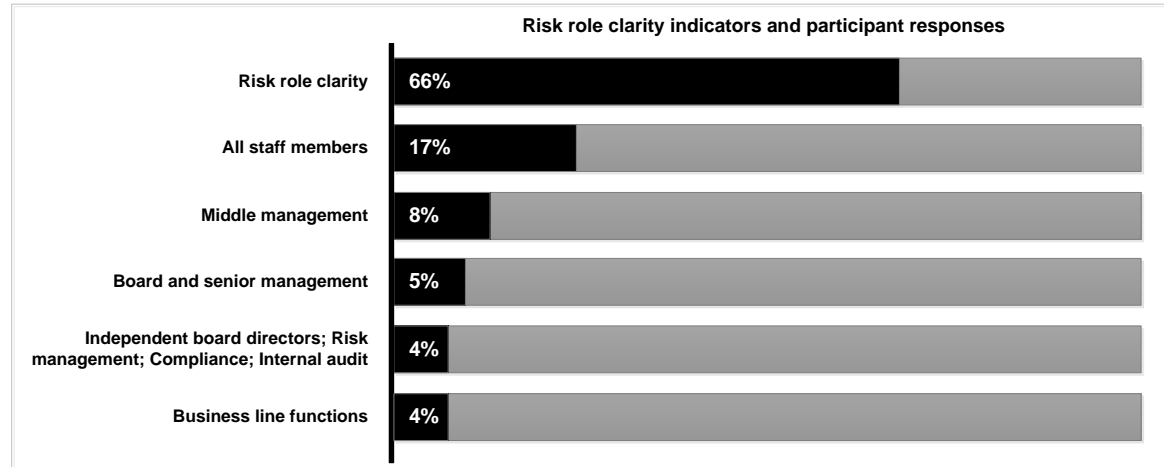


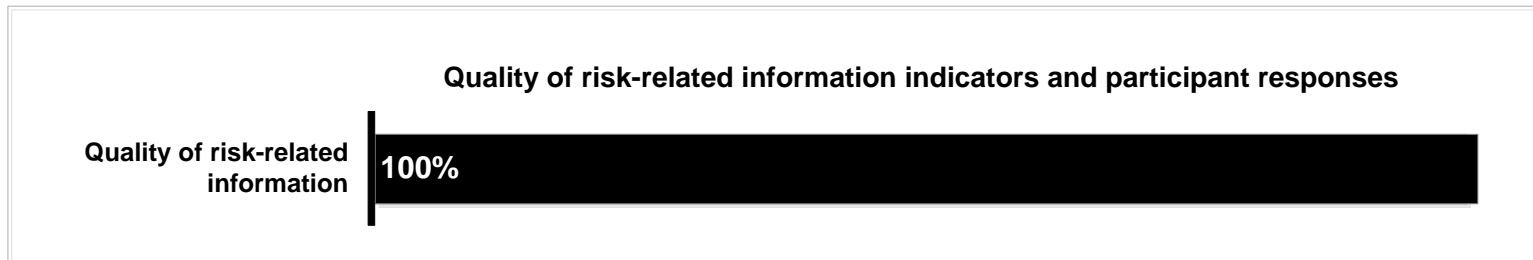
Figure 17: Risk role clarity indicators and participants' responses on quotes

**Structural risk culture guideline – Quality of risk-related information**

**Quality of risk-related information – participants responses**

Quality of risk-related indicators	P 1	P 2	P 3	P 4	P 5	P 6	P 7	P 8	P 9	P 10	P 11	P 12	P 13	P 14	P 15	P 16	% of interview quotes	Total participant (n)	% of all participants discussing codes
Quality of risk-related information			✓	✓		✓			✓			✓	✓	✓			44%	7	100%
Quality of risk-related information challenges				✓									✓	✓			19%	3	

Note: ✓ = code / code description raised by participants; n = number of participants who discussed the code / code explanation; % = percentage of all participants who discussed code / code description



**Figure 18: Quality of risk-related information indicators and participants’ responses on quotes**