

MDPI

Article

# Disclosure of Risks and Opportunities in the Integrated Reports of South African Banks

Khuthadzo Ramabulana and Riyad Moosa \*

School of Accounting, University of Johannesburg, Johannesburg 2092, South Africa

\* Correspondence: rmoosa@uj.ac.za; Tel.: +27-(11)-559-4345

Abstract: This study examined the disclosure of risks and opportunities in the integrated reports (IRs) of the top five banks in South Africa. It assesses whether the risk and opportunity disclosures provided comply with the requirements of the International Integrated Reporting Framework (IIRF), as well as the nature of the risks and opportunities disclosed in the IR. This study takes a qualitative approach and employs an interpretivist paradigm. The information for this study was obtained through content analysis of the individual banks' latest available IRs. A checklist was created as a measuring tool to evaluate disclosure practices. The findings showed that three of the selected banks disclosed all the requirements contained in the IIRF regarding risks and opportunities, while two banks only partially complied as they did not provide disclosures about their opportunities. The findings concerning the nature of risk disclosures show that the selected banks disclosed 38 themes related to risks, and the findings concerning the nature of opportunity disclosures show that the selected banks disclosed 14 themes related to opportunities. Furthermore, the results show that those in charge of preparing the IRs provide a thorough disclosure of risks, while there is room for improvement concerning disclosure of opportunities.

Keywords: corporate risk reporting; content analysis; qualitative research; financial institutions



Citation: Ramabulana, Khuthadzo, and Riyad Moosa. 2022. Disclosure of Risks and Opportunities in the Integrated Reports of South African Banks. *Journal of Risk and Financial Management* 15: 551. https://doi.org/10.3390/jrfm15120551

Academic Editor: James R. Barth

Received: 6 October 2022 Accepted: 21 November 2022 Published: 24 November 2022

**Publisher's Note:** MDPI stays neutral with regard to jurisdictional claims in published maps and institutional affiliations.



Copyright: © 2022 by the authors. Licensee MDPI, Basel, Switzerland. This article is an open access article distributed under the terms and conditions of the Creative Commons Attribution (CC BY) license (https://creativecommons.org/licenses/by/4.0/).

## 1. Introduction

After a string of corporate failures over the last decade, the importance and credibility of information contained within an organisation's annual financial reports have been called into question (International Integrated Reporting Council 2011). This is because stakeholders could not develop a complete picture of an organisation's performance and ability to produce and sustain value (International Integrated Reporting Council 2011).

According to Ernst and Young (2022), integrated reporting offers background information on monetary and non-monetary data and goals. It offers stakeholders a brief picture of an organisation by integrating and combining critical information regarding strategy, risk, and opportunity, and comparing it to social, environmental, economic, and financial challenges. Stubbs and Higgins (2014) state that integrated reporting helps firms make better financial and non-financial decisions by improving resource allocation decisions, breaking down operational and reporting silos, and improving systems and procedures.

Moolman (2015) states that companies can gain from adhering to the content elements relating to 'risk and opportunity' in the IIRF. Roth (2014) says that one component of risk management is enhanced communications; as such, providing disclosures about specific hazards may benefit an organisation's image. Furthermore, managers can strengthen the transparency and reliability of the IR by communicating risks (Hohls-du Preez 2016). Before making an investment decision, investors gather as much risk information as feasible (Amran et al. 2008). Clear, accessible, and understandable information is more appealing to investors. When there is good news, more positive reactions occur, and more negative reactions occur when there is terrible news (Rennekamp 2012). According to Marx and

Hohls-du Preez (2017), disclosures of risk should be performed with great care and consultation. As a result of management's apprehension about probable negative consequences, risk disclosure may not receive appropriate attention (Marx and Hohls-du Preez 2017).

The consequences of current risks and opportunities on future performance continue to be limited in IRs (Marx and Mohammadali-Haji 2014). More data on market conditions, trends, and position, as well as the consequences for management's goals are required (PricewaterhouseCoopers 2013). In this regard, disclosure on risks and opportunities must be supplemented by specific details related to quantifiable measures, key performance indicators, remuneration strategies, and an organisation's future prospects (Marx and Mohammadali-Haji 2014; Raemaekers et al. 2016). It is critical that stakeholders get the information they need to understand the risk profile of any financial organisation in which they're interested (Giner et al. 2020).

Research on risk disclosures by banks located outside South Africa has received attention in the literature. Studies have focused on a variety of issues—for example, the importance of risk disclosures to investors (Giner et al. 2020), risk disclosures and profitability (Lipunga 2014), governance issues and their impact on risk reporting (Barakat and Hussainey 2013), credit risk of banks (Choenyana 2020), the relationship between risk disclosures, cost of equity and financial performance (Nahar et al. 2016), the relationship of risk disclosure and risk committees on performance (Nahar and Jahan 2021) risk disclosures and risk-taking behaviour (Naz and Ayub 2017), and risk disclosure procedures (Linsley et al. 2006).

In South Africa, Duvenhage (2020) assessed the cyber risk disclosures of South African and Chinese banks. Moolman et al. (2016) examined the risk and opportunity disclosures for the top 100 companies listed on the Johannesburg Securities Exchange (JSE) based on the requirements of the first version on the IIRF released in December 2013. Subsequent to this, the IIRC issued a revised IIRF in January 2021.

To date, studies in South Africa have not exclusively focused on the banking sector for compliance with the IIRF, specifically the risk and opportunity disclosure requirements based on the revised version of the IIRF. In addition, more research is needed in South Africa to explore the nature of the disclosures provided in IRs (Marchbank 2016). As a consequence of the gap identified, the purpose of the research is to examine the disclosure of risks and opportunities in the latest available IRs of the top five banks in South Africa. Thus, the following research questions are posed for this study:

RQ1: Does the risk and opportunity disclosures comply with the requirements of the IIRF? RQ2: What is the nature of the risks and opportunity disclosed in the IRs?

Following from the research questions above, the resulting research objectives are formulated as, (1) to determine if disclosure of risks and opportunities complies with the requirements in the IIRF, and (2) to determine the nature of the risks and opportunities disclosed in the IR. As such, the finding of this study will shed light on the disclosure practices and compliance of selected South African banks with respect to their risk and opportunity disclosures as stipulated in the IIRF.

The remainder of this article is structured as follows: Section 2 provides a review of the literature, while Section 3 details the research methodology employed in this study. Sections 4 and 5 presents the findings and resulting discussions as they pertain to the research objectives as stated in the previous paragraph. In Section 6, the theoretical and practical implications of this study are presented, and in Section 7, this study concludes with a summary of the key findings, limitations, and areas for potential research.

### 2. Literature Review

## 2.1. Defining Risk

The term "risk" refers to "a situation where an event may happen, and the frequency of occurrence can be evaluated based on a probability distribution of past occurrences or environmental considerations" (Pritchard 2015, p. 7). Van Vuuren (2006) states that risk focuses on possible losses, making risk a negative notion. However, IoDSA (2016) and

Hopkin (2012) state that risk consists of three parts: (1) event uncertainty; (2) the probability of such events occurring; and (3) their impact, both good and bad, on the attainment of the organisation's goals.

Andersen et al. (2014) notes that risk can also encompass unclear occurrences that have the potential to have a beneficial impact regarding the organisation. Organisations that are wise "take opportunity-based risks every day, and such organisations are creative, inventive, and continue to succeed despite the changing environment" (Spencer and Hyman 2011, p. 1). According to The World Bank (2013), opportunity-based risk is defined as taking risks to capitalise on growth opportunities. Most actions and decisions are taken by organisations to improve their fortunes by incorporating both risks and opportunities, since this permits the entity to capitalise on an opportunity while also managing the inherent risks in the model of the business (Andersen et al. 2014).

## 2.2. COVID-19 and Financial Institution Risk

On 11 March 2020, the World Health Organisation declared COVID-19 a global pandemic. The World Health Organisation estimates that South Africa had more than 100,000 fatalities from COVID-19 as of October 2022, with more than four million confirmed cases (World Health Organisation 2022). Since COVID-19 was declared a global pandemic, and global lockdowns were announced, both the financial and non-financial sectors have been in shock. Lockdowns were the first measure taken by authorities and regulatory bodies in the face of this pandemic. The lockdowns, however, hurt all macroeconomic indicators (such as unemployment and inflation rates), and negatively impacted the stability and liquidity of the stock market (Assous and Al-Najjar 2021). The stock market indices, in general, and sector-specific indices, in particular, were affected by this pandemic. The banking sector index, which has the highest volume, is one of the essential sector indices. It is regarded as the main driver of the financial market index, and significantly affects both the financial markets and the economy as a whole (Assous and Al-Najjar 2021). Uncertainty about the path of economic recovery poses significant risks to banks' financial soundness (Dunbar 2022). The Basel Committee on Banking Supervision implemented banking reforms after the 2008-2009 global financial crisis to get ready for another financial crisis such as the one brought on by the COVID-19 pandemic. These reforms required banks to implement capital buffers. The requirement for a countercyclical capital buffer is essential to the stability of banks' finances (Dunbar 2022). Furthermore, the study by Yazdi et al. (2022) sought to evaluate the performance of banks in Iran during the pandemic using a range of statistical techniques. The authors reported that measures such as profit, investment, and loans had the strongest impact on performance measurement, while the rate of new customers was given the least priority.

## 2.3. Risks in the Banking Industry

Mismatching is a common cause of several dangers in banking. If a bank's assets and obligations were precisely matched (i.e., equal maturities, interest rate circumstances, and currencies), the only risk it would face would be credit risk (Jonson n.d.). Saunders and Cornett (2006) and Jonson (n.d.) present common examples of potential risks that a bank can face, including:

Credit risk: The most visible risk in banking is credit risk, and it is also the most crucial in terms of possible loss. Failure of a few key clients may lead to a substantial loss and, in the worst-case situation, result in a bank's collapse. This threat indicates that it is possible that loans will not be paid back, or that investments may deteriorate or collapse, because of which the bank suffers a loss. This risk covers more than just the possibility of borrowers defaulting on payments, but also the likelihood of instalments being late, causing issues for the banks.

Liquidity risk: This risk is well defined as the risk of not being able to fulfil obligations of the depositor without incurring intolerable charges or fund asset increases as needed (Abdul-Rahman et al. 2018). Liquidity issues typically arise because of large withdrawals

when a bank's cash reserves are insufficient (Iqbal 2012). Liquidity risk can be further separated into two groups: liquidity market risk and liquidity financing risk (Ruozi and Ferrari 2013; Iskandar 2014).

Drehmann and Nikolaou (2013) define financing liquidity as the capacity to satisfy commitments as soon as possible. As a result, if a bank is unable to satisfy commitments on time, it is illiquid. As a result, financing liquidity risk is the probability that the bank may become unable to fulfil commitments with immediate effect over a certain time horizon (Drehmann and Nikolaou 2013). Tian (2009) explains that the risk of funding liquidity is that a bank will be unable to satisfy its cash flow and collateral need commitments. Market liquidity risk is the loss experienced when a market player wishes to make a deal or liquidate a position instantly, but does not get the optimal price.

Interest rate risk: This risk reflects the vulnerability of a bank's profitability to interest rate swings, which impact liabilities and assets in many ways, as banks have unbalanced balance sheets. Investors have a vested interest in the bank's performance in a given way if they predict interest rates will go in that direction in the future. When interest rates are forecast to rise, assets will be even more interest-sensitive than liabilities, and vice versa when rates are expected to fall (Jonson n.d.). "Interest rate risk in the banking book", though, is described as the existing or potential risk to a bank's capital and profitability because of unfavourable interest rate changes impacting the banks' book assets. When interest rates fluctuate, so do the present value and timing of future cash flows.

Market risk: Market risk is the danger of losing money because of negative changes in the value of a trading portfolio caused by changes in interest rates, stock prices, and currency exchange rates. When banks store financial instruments in their trading books, or hold shares as collateral, market risk occurs.

Country risk: This is the capacity and incentive of debtors inside a country to repay their obligations. Because of this, cross-border obligations are exposed to credit risk.

Solvency risk: This is the risk that the capital of a bank will be inadequate to cover losses incurred owing to a variety of risks, and consequently the risk of a bank's collapse. Appropriate capital is essential for the financial system's stability from a regulatory perspective.

#### 2.4. Risk Governance

As the 2008 economic slump raged across the industrialised world, it became evident that something had gone badly wrong with how banks and other businesses handled risk. The issues at corporations such as Citibank, the Royal Bank of Scotland, and the Union Bank of Switzerland, showed common faults in how boards of directors managed risk in their enterprises (Andersen et al. 2014).

According to Principle 11 of the King IV Report on Corporate Governance, "The governing body should govern risk in a way that supports the organisation in setting and achieving its strategic objectives" (IoDSA 2016, p. 61). Consequently, the governing body is responsible for the implementation and management of risk. Furthermore, risk management should be entrenched in a business's daily operations (IoDSA 2016).

Moreover, risk supervision is the responsibility of the whole board of directors (IoDSA 2016). Risk committees are specifically used by certain boards to help them oversee risks. A risk committee can be established independently, or merged with the audit committee and allocated to a combined audit and risk committee (Andersen et al. 2014).

Lundqvist (2015, p. 442) defines risk governance as the "marriage of corporate governance and risk management, and it is the identifying component of an enterprise risk management system". Importantly, the International Finance Corporation (2015) concurs with Lundqvist (2015) that risk governance is concerned with the identification, management, and communication of risk using the principles of good corporate governance. Risk governance responsibilities include overseeing and managing the degree of risk accepted by banks. Therefore, if risk governance is unable to appreciate and analyse the returns associated with management's risky decisions throughout the monitoring process, it may

exert undue pressure on management, compelling them to make risk-return investments that are incorrect (Aljughaiman and Salama 2019).

## 2.5. Disclosure of Risk by Organisations

The IoDSA (2016) recommends in the King IV Report on Corporate Governance that companies should disclose their risks and opportunities. According to Gao (2010), properly disclosed risks reduce potential investor confusion about the organisation's future cash flows. Miihkinen (2012) states that risk disclosure can benefit customers, employees, and other stakeholders. Miihkinen (2012) further states that disclosure of risk includes not only reporting on the risk, but also providing data on how the risks are handled to maximise the wealth of shareholders and reduce the potential of economic tragedy.

# 2.6. Integrated Reporting

The International Integrated Reporting Council (2021, p. 10) defines an integrated report as "a concise communication about how an organisation's strategy, governance, performance, and prospects, in the context of its external environment, lead to the creation, preservation, or erosion of value over the short, medium, and long term". The IoDSA (2016) reiterates this definition. It is important to note that long-term success can be realised by firms if they can convert risks into opportunities to produce value.

According to Moolman (2015), companies cannot just state that they have a risk management plan and consider this to be adequate, since they must actively participate in risk management procedures. The International Integrated Reporting Council (2021, p. 56) explains that, "An integrated report should answer the question: What are the specific risks and opportunities that affect the organisation's ability to create value over the short, medium, and long term, and how is the organisation dealing with them?" An emphasis is placed on risk and opportunity disclosure in the framework (Moolman et al. 2016). For example, according to the International Integrated Reporting Council (2021), risk and opportunity disclosures should contain:

- The distinct opportunities and risks that affect the organisations' ability to create value;
- Opportunities and risks that affect the availability, quality, and pricing of relevant capitals;
- Particular external risk sources;
- Particular internal risk sources;
- The organisation's evaluation of the chance of risk or opportunity materialising, and the degree of its impact if it occurs;
- Actions made to mitigate or manage significant hazards; and
- The organisation's attitude to any real risks that are critical to the organisation's ability to produce value in the long run, and which could have disastrous effects.

The International Integrated Reporting Council (2013) states that an organisation should communicate the risks and opportunities present, as well as how it plans to reduce those risks, and capitalise on those opportunities. It is critical for a business to understand which elements have the most influence on its long-term value creation. Users can benefit from integrated reporting, because it provides a more in-depth understanding of business risks and how the firm will respond to them.

By connecting the concerns across the report, the disclosure may be narrowed down to the most crucial concerns. If an issue is recognised as a major risk or opportunity, the approach and performance in dealing with it, as well as the future prognosis and governance process, should be presented or given (International Integrated Reporting Council 2013).

### 2.7. Empirical Studies on Integrated Reporting and Risk Disclosures

A growing body of literature demonstrates the relevance of conducting research on integrated reporting. A number of studies entailed the performance of a systematic literature review to provide insights on the current scholarship of integrated reporting.

For instance, Jayasiri et al. (2022) reviewed 210 journal articles, and report that current research efforts on integrated reporting focuses more on practice as compared to normative issues, and that the array of research topics have increased over time. On the other hand, Hossain et al. (2022) reviewed 219 journal articles on integrated reporting, and reveal that a majority of studies are focused at the organisational level, while a limited but inconclusive body of work relates to the economic consequences of integrated reporting and integrated reporting quality. Furthermore, the reported results indicate that there is no consensus on the determinants of either integrated reporting or integrated reporting quality, and that more research is needed on the assurance of IRs. Lastly, the study by De Villiers et al. (2014) highlights that because companies understand the requirements of integrated reporting differently, a number of theoretical and empirical challenges exist in conducting future research. The foregoing discussion has highlighted some challenges associated with the existing and future scholarship on integrated reporting; however, the discussion also shows a growing body of literature—for instance, studies that have considered issues related to integrated reporting quality.

Donkor et al. (2022) used content analysis and regression analysis to examine the relationship between the quality of IRs produced by firms listed on the JSE and corporate tax avoidance (CTA). The authors report a negative association between integrated reporting quality and CTA. Additionally, the findings show that the relationship changes between various CTA quantiles—for instance, at high levels of CTA, no relationship exists. Using a similar method to the previous study, Songini et al. (2022) analysed 212 IRs by 53 companies located across Anglo-Saxon, European, and other countries to understand the relationship between board of director characteristics and the compliance of disclosures according to the requirements of the IIRF. The authors report that the quality rather than the quantity of board of director members is important when increasing the quality of IRs, as the level of education of board members and profitability as a control variable were found to have a positive association, while gender and leverage as a control variable has a negative association with integrated reporting quality. Najihah (2022) also examined the relationship between the quality of IRs and institutional investors with the lowering of information asymmetry by companies listed on the JSE. The findings show a negative association between the proportion of stock ownership and the quality of integrated reporting with information asymmetry.

The research on integrated reporting and risk disclosures has also provided varying results. Elshandidy et al. (2022) conducted research to determine whether textual disclosures of risk provided in the IRs of firms located in South Africa and the United Kingdom differ from disclosures provided in the annual reports. Furthermore, the research sought to examine whether the introduction of integrated reporting had an impact on a firm's market value. Using archival data, the authors report that risk disclosures provided in the IR were significantly lower than risks disclosed in the annual reports. Additionally, using time series differences, the authors observe that the textual risk disclosures had a statistically insignificant impact on a firm's market value. Conway (2019) used regression analysis, and found that the provision of quality IRs by firms in South Africa is associated with a decrease in risk and financial performance and an increase in environmental, social, and governance (ESG) scores, including an increase in institutional investors. Manes-Rossi et al. (2017) used content to explore the risk and opportunity disclosures contained within the IRs of Italian companies. They report that disclosures provided are extensive, particularly disclosures pertaining to the risks and opportunities of the six capitals. Similarly, Guthrie et al. (2020) identified the types of risk disclosures provided by companies in Italy using content analysis. The authors report that Italian companies provide a wide array of financial and non-financial risks, using both textual and graphical representations in their IRs.

## 3. Materials and Methods

This study has followed an interpretivist paradigm, which is largely qualitative in nature, since it involves the collection and interpretation of non-numerical data. This study

is based on a cross-sectional research design because data were collected from the latest IRs of the selected South African banks at a single point in time.

The population of interest selected for the empirical study comprised all banks in South Africa. South Africa has a varied banking system that includes commercial banks, mutual and cooperative banks, and foreign-owned branches (International Monetary Fund 2022). Recent reports indicate that 31 banks comprising of 18 local banks and 13 local branches of foreign banks operate within South Africa (BusinessTech 2021). A purposive non-probability sampling technique was used to select the sampling units for this study. Purposive sampling is a type of non-probability sampling procedure in which participants are not chosen at random. Instead, participants, are chosen according to the type of information they can supply (Clark et al. 2021). In South Africa, the five biggest banks control about 90 percent of total banking industry assets, dominating the financial scene (BusinessTech 2021; International Monetary Fund 2022). Because of this, the sample comprised the top five commercial banks in South Africa, namely, Absa, First National Bank, Nedbank, Standard Bank, and Investec Bank, since they have the most significant market share in terms of customer and total asset worth (Norrestad 2020). Additionally, although the top five banks have been identified, when the findings are reported, the banks have been anonymised and labelled as Banks A-E to ensure their rights are protected and not violated in compliance with the ethics approval received for this study.

The data used in this study comprised the risk and opportunity disclosures contained in the IRs of the selected banks in South Africa. The latest available IRs at the time this study was conducted were downloaded in May 2022 from the publicly available information contained on the website of each bank. Thereafter, the IR for each bank was assessed to confirm that disclosures about risks and opportunities were provided to ensure that the data set is valid and complete for subsequent data analysis.

Qualitative content analysis is one of the qualitative methodologies used for evaluating and interpreting data (Elo et al. 2014; Hsieh and Shannon 2005). The use of qualitative content analysis to analyse the data was ideal for this study, since it does not require human participants and gives considerable and frequently unique insight into organisational policy and practice such as the disclosures provided in the IR (Zikmund et al. 2019).

For the first research objective, a checklist was utilised to analyse the content disclosed in the IRs of the selected South African banks. The checklist, as shown in Section 4, was developed according to the requirements contained in the IIRF, Part 2: *The Integrated Report* under Section 4, *Content Elements*, specifically content element 4D which deals with *Risks and Opportunities* as discussed in Section 2.6 above. In order to determine the extent of the risk and opportunity disclosures provided by each of the selected banks, the requirements on the checklist were either "ticked  $\sqrt{"}$  if *disclosed*, or indicated as a "plus sign +" if *partially disclosed*, or "crossed X" if *not disclosed*. It must be pointed out that there are limitations to using checklists when analysing disclosures such as the subjective nature of coding, and the focus on the existence rather than the quality of disclosures (Leuz and Wysocki 2016).

For the second research objective, the data were analysed as follows. Firstly, all the risk and opportunity disclosures provided by the selected banks in their IRs were identified. After the identification of the risks and opportunity disclosures, the second step involved the categorisation of the risks and opportunities into themes in order to assess the nature of the disclosures. Then, once all the themes were identified, each theme was mapped to the respective banks' disclosures in their IRs, and indicated with a tick ( $\sqrt{}$ ) if the theme appears or a cross (X) if the theme does not appear. In this way, themes that are common amongst the banks were identified, and analysed according to their occurrence both individually and across the selected banks. Finally, some examples are provided related to the risk and opportunity disclosures provided in the IRs in order to showcase the manner in which these disclosures are communicated to users.

## 4. Presentation of Findings

The findings as shown in Table 1 relate to the first research objective for this study. The findings indicate that two banks (Banks B and D) only partially complied with the requirements, because they only provided disclosures about their risks and no disclosures about their opportunities. The findings also indicate that three of the banks (Bank A, Bank C, and Bank E) provided disclosures concerning both risks and opportunities in conformance with the requirements of the IIRF. These findings suggest that the selected banks do comply with the requirements in the IIRF; however, there are areas of improvement in some banks, particularly related to the disclosure of opportunities.

**Table 1.** Disclosures of Risk and Opportunity in the Integrated Reports.

Disclosure Requirements from the International Integrated Reporting Framework		Bank A	Bank B	Bank C	Bank D	Bank E
1.	The unique risks and opportunities that have an impact on the company's capacity to create value.	$\checkmark$	+	V	+	V
2.	Risks and opportunities affecting the availability, quality, and cost of relevant capitals.	$\checkmark$	+	V	+	$\checkmark$
3.	Particular external risk sources.	$\sqrt{}$	$\checkmark$	√	<b>√</b>	$\checkmark$
4.	Particular internal risks and opportunities sources.	$\sqrt{}$	+	√	+	$\checkmark$
5.	The organisation's assessment of the likelihood of the danger or opportunity materialising, as well as the degree of its impact if it occurs.	√	$\checkmark$	V	$\checkmark$	$\checkmark$
6.	Actions made to mitigate or manage significant hazards.	$\sqrt{}$	$\sqrt{}$	$\sqrt{}$	$\checkmark$	$\checkmark$
7.	The organisation's attitude to any real risks that are critical to the organisation's ability to produce value in the long run which could have disastrous effects.	V	$\checkmark$	V	$\checkmark$	$\sqrt{}$

Source: Compiled by authors ( $\sqrt{=\text{disclosed}}$ ; + = partially disclosed).

The findings with respect to the second research objective, specifically the nature of the risk disclosures, are reported in Table 2. According to the findings of the investigation, the nature of the risks disclosed by all banks can be summed up according to 38 themes. On further analysis, some of the most common risks disclosed by all banks include risks concerning: ESG risk, credit risk, funding and liquidity risk, cyber risk, information technology and technology risk, compliance risk, fraud risk, market risk, insurance risk, country risk, and legal risk. Some of the least common risks when comparing the disclosures across all banks include back-to-back extreme weather events; ransomware attacks; payment risk; security risk; vendor risk; financial accounting risk; transaction processing risk; information risk; financial crime risk; information risk; business risk; and physical assets, safety, and security risk. While 38 themes of risk disclosures were identified, there are instances where themes may overlap—for instance, cyber risk versus ransomware attacks—suggesting differences in terminology used by banks to describe the same or similar risks.

Table 2. Nature of Risk Disclosures.

	Nature of Risks Disclosed	Bank A	Bank B	Bank C	Bank D	Bank E
1.	Environmental, social, and governance (ESG) risk	<b>√</b>	√	√	<b>√</b>	$\sqrt{}$
2.	Credit risk	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$
3.	Market risk	$\sqrt{}$	$\checkmark$	Χ	$\checkmark$	$\checkmark$
4.	Reputation risk	$\checkmark$	$\checkmark$	Χ	Χ	$\checkmark$
5.	Insurance risk	$\checkmark$	$\checkmark$	Χ	$\sqrt{}$	$\checkmark$
6.	Operational risk	X	$\checkmark$	Χ	$\sqrt{}$	$\checkmark$
7.	Resilience and business continuity risk	X	$\checkmark$	Χ	$\sqrt{}$	$\checkmark$
8.	Risks relating to emerging markets	Χ	Χ	Χ	$\sqrt{}$	$\checkmark$
9.	Impact of COVID-19-related regulatory changes risk	$\checkmark$	$\checkmark$	Х	Х	$\checkmark$
10.	Funding and liquidity risk	$\sqrt{}$	$\sqrt{}$	$\checkmark$	$\sqrt{}$	$\sqrt{}$
11.	Country risk	$\sqrt{}$	$\checkmark$	$\checkmark$	Χ	$\checkmark$
12.	Cyber risk	$\sqrt{}$	$\checkmark$	$\checkmark$	$\checkmark$	$\sqrt{}$
13.	Capital risk	Χ	Χ	$\checkmark$	Χ	$\sqrt{}$
14.	Legal risk	$\checkmark$	$\checkmark$	X	$\sqrt{}$	$\sqrt{}$
15.	Back-to-back extreme weather events	$\checkmark$	X	Χ	Χ	X
16.	Ransomware attacks	$\checkmark$	X	Χ	Χ	X
17.	People risk	$\checkmark$	X	Χ	$\checkmark$	$\checkmark$
18.	Payment risk	X	Χ	Χ	$\checkmark$	X
19.	Information technology and technology risk	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$
20.	Treasury risk	$\checkmark$	$\checkmark$	X	Χ	X
21.	Tax risk	$\checkmark$	Χ	Χ	Χ	$\checkmark$
22.	Financial crime risk	X	Χ	Χ	X	$\checkmark$
23.	Business disruption risk	$\checkmark$	X	Χ	X	X
24.	Conduct and compliance risk	$\checkmark$	Χ	Χ	$\checkmark$	X
25.	Security risk	$\checkmark$	Χ	Χ	X	X
26.	Strategy position and execution risk	$\sqrt{}$	Χ	$\checkmark$	$\sqrt{}$	X
27.	Vendor risk	X	X	Χ	$\checkmark$	X
28.	Equity investment risk	X	Χ	Χ	$\sqrt{}$	$\checkmark$
29.	Financial accounting risk	$\sqrt{}$	Χ	Χ	X	X
30.	Third-party risk	$\sqrt{}$	X	X	X	$\checkmark$
31.	Transaction processing risk	$\sqrt{}$	X	X	X	X
32.	Financial crime risk	$\sqrt{}$	X	X	X	X
33.	Information risk	$\sqrt{}$	Х	Х	Х	Х
34.	Compliance risk	√	$\checkmark$	$\checkmark$	$\sqrt{}$	√
35.	Fraud risk	√	$\checkmark$	√	√	√
36.	Model risk	√	$\checkmark$	Х	Х	$\sqrt{}$
37.	Business risk	Х	Х	Х	Х	
38.	Physical assets safety risk	<b>√</b>	Х	Х	Х	Х

Source: Compiled by authors ( $\sqrt{\ }$  = disclosed; X = not disclosed).

The manner in which the selected banks have chosen to disclose their risks in their IRs are generally similar, notwithstanding some differences. The majority of banks (Banks A, B, D, and E) provided disclosures about each risk, with accompanying explanations regarding the impact of the risks and mitigating strategies to reduce or eliminate the risks. Other information was also provided by Banks A and D, such as risk tolerance levels and the link between the risks with the six capitals or strategy of the banks. The risk disclosures provided by Bank C differed somewhat from the above approach, in that the risks were identified with accompanying explanations, but without any additional information such as mitigating strategies, risk tolerance levels, or any links to the capital or strategies of the bank. These examples demonstrate that while all the banks comply with the IIRF,

the manner in which risks are disclosed is not uniform or standardised. An example is provided in Table 3 of how risk disclosures are presented in the IR.

Table 3. Example of Risk Disclosure.

People Risk	Mitigating Strategies	Links to Six Capitals
Human capital risk is increasing concerning the health and well-being of employees. These risks have come about because of changes brought about by COVID-19.	<ul> <li>Implementing a hybrid working environment.</li> <li>Focus on mental, physical, and financial well-being of employees.</li> <li>Leadership to be human centred.</li> </ul>	Human capital Intellectual capital

Source: Adapted from sampled bank.

The findings with respect to the nature of the opportunity disclosures are reported in Table 4. According to the findings of the investigation, the nature of the opportunities disclosed by all banks can be summed up according to 14 themes. On closer inspection, opportunities disclosed by banks are generally not similar, as the majority of disclosures appeared only once. It was noted that two of the five banks, that is Bank B and Bank D in the analysis below, did not provide any disclosures pertaining to opportunities in their IR. These findings indicate that some preparers of IRs do not disclose all their opportunities, suggesting a hesitancy to reveal future opportunities to competitors.

Table 4. Nature of Opportunity Disclosures.

	Nature of Opportunities Disclosed	Bank A	Bank B	Bank C	Bank D	Bank E
1.	Trusted brand	$\sqrt{}$	X		X	X
2.	Growth and expansion into Africa	$\sqrt{}$	X		X	Х
3.	Drive financial inclusion across the continent and portfolio resilience	$\checkmark$	Х	Х	Х	Х
4.	Strong client interest in the sustainable finance product and client engagement	$\checkmark$	Х	Х	Х	Х
5.	Exponential growth in global sustainable finance market across sectors	$\checkmark$	Х	Х	Х	X
6.	Climate change and renewable energy opportunities and stakeholder engagement	$\checkmark$	Х	Х	Х	Х
7.	Direct environmental impact management	$\checkmark$	Х	Х	Х	Х
8.	South African economic recovery—An improvement in socioeconomic conditions, under both 'base case' and 'positive' scenarios	х	х	$\checkmark$	Х	х
9.	Revenue growth and cost optimisation	X	Х		X	Х
10.	Accelerating innovation in a client-centred manner	Х	Х	$\checkmark$	X	Х
11.	The launch of a digital learning platform and learning offerings to grow and mobilise talent internally, while ensuring a steady supply of scarce and critical skills when needed	Х	Х	V	Х	Х
12.	The strength of client franchises	X	Х	Х	X	
13.	Strong client interest in the sustainable finance product	Х	Х	Х	Х	$\checkmark$
14.	Exponential growth in global sustainable finance market across sectors	Х	Х	X	Х	$\checkmark$

Source: Compiled by authors ( $\sqrt{=\text{disclosed}}$ ; X = not disclosed).

On inspection of the opportunity disclosures provided by Banks A, C, and E in their IRs, all these banks have provided narrative or textual disclosures to describe their opportunities. For example, the textual disclosures provided by some of the sampled banks about their opportunities related to "trusted brand" and "growth and expansion into Africa" is paraphrased as follows:

The strength and legitimacy of our brand is unmatched and distinguishable in South Africa. The strength of our franchise, physical distribution networks, and digital platforms are all fortified by the strength of our brand.

We will continue to exploit opportunities to support our clients who are expanding into African markets by utilising all available resources.

## 5. Discussion of Findings

Regarding the first research objective in this study, we sought to determine whether disclosure of risks and opportunities by the selected banks complies with the requirements in the IIRF. The findings indicate that three of the banks (Bank A, Bank C, and Bank E) provided a full set of disclosures concerning both risks and opportunities. However, we also found that two banks (Banks B and D) only partially complied with the requirements, because they only provided disclosures about their risks and no disclosures about their opportunities. The implications of these findings are that banks in South Africa generally take their responsibility seriously when producing an IR, as they have ensured that most of the disclosure requirements concerning risks and opportunities have been met, as specified in the IIRF. These findings answer the calls by Pistoni et al. (2018) and Hossain et al. (2022) to examine the quality of integrated reporting across industries and organisations, as this study provides insights into the quality of the integrated reporting practices by South African banks. Additionally, these findings suggest that, notwithstanding some exceptions, companies in South Africa generally prepare their IRs according to the guidance contained in the IIRF. The previous statement is supported in the study by Moolman et al. (2016) as they found that the top 100 JSE-listed companies provided disclosures about risk and opportunity according to the requirements of the IIRF, except for disclosures about risk evaluations

Regarding the second research objective in this study, we sought to determine the nature of the risks and opportunities disclosed by the selected banks in their IRs. The main findings show that risk disclosures can be summed up according to 38 themes, while opportunity disclosures can be summed up according to 14 themes, as shown in Tables 2 and 4 of this study. The implications of these findings are that banks provide more disclosures related to risks as compared to opportunities, while some banks need to improve their disclosure practices regarding their opportunities. The findings related to the nature of risk disclosures demonstrate that while risks may be common within an industry, there are individual risks that may impact some banks more than others (Woods and Dowd 2008). Many of the common risks, as detailed in the literature, such as credit risk, liquidity risk, market risk, and country risk have been disclosed by the banks in the study (Saunders and Cornett 2006). In addition, a number of other risks for banks falling outside of what is normally included in the literature have been disclosed—for example, ESG risk, insurance risk, and cyber risk. This indicates the dynamic nature of conducting business, and the potential for both external and internal factors to drive risks and influence the risk management processes put in place by the selected banks (Saunders and Cornett 2006; Walker 2013). The varied nature of the risk disclosures by banks in South Africa shows agreement with the study by Guthrie et al. (2020), as various types of risks were disclosed by Italian companies in their IRs. Nevertheless, the findings show a potential for themes on risk to overlap, which aligns with the opinion of Hossain et al. (2022) for the development of a dictionary targeted towards disclosures included in the IRs. The findings related to the nature of opportunity disclosures show that a majority of the banks did disclose their opportunities in their IRs, which provides evidence that the banks do consider and disclose circumstances that could have a potential beneficial impact on

creating value (Andersen et al. 2014). The disclosure of these opportunities also indicates that the majority of the selected banks do intend capitalising on growth opportunities (The World Bank 2013). However, some banks did not provide any disclosures about their opportunities, supporting prior findings in the literature on limited disclosures of forward-looking information in IRs (Melloni 2015). Overall, the findings of this study provide an answer to the question raised by Cheng et al. (2014) for a greater understanding of the various performance metrics as reported by companies in their IR.

## 6. Theoretical and Practical Implications of Findings

With respect to the theoretical implications of this study, our findings extend the research undertaken by Moolman et al. (2016) in that it focuses attention exclusively on the risk and opportunity disclosures provided by banks within South Africa based on the revised version of the IIRF. Furthermore, this study also answers the call by Marchbank (2016) for more studies to explore the nature of disclosures provided in the IRs. In so doing, the findings shed light on the disclosure practices and nature of risks and opportunity disclosures by South African banks. The findings compliment and extend the conventional risks faced by banks as reported in the literature, in addition to highlighting risks that are pertinent within an African context. These findings also provide a basis for comparison between other sectors in the financial industry within South Africa, and for similar studies conducted abroad. Finally, the findings of this study can also be used in future studies as a basis when developing a framework or checklist to assess risk and opportunity disclosures provided by banks or other financial institutions.

Regarding the practical implications, the findings offer a risk and opportunity universe from which preparers of IRs can refer to as part of their risk and opportunity identification process, and subsequent reporting thereof. This is notable because disclosures about opportunities were found to be lacking in some instances, so we recommended that those responsible for preparing the IRs have control systems in place to ensure that disclosures about the banks' opportunities are provided in the IR to be compliant with the requirements in the IIRF. These findings are important to academics, as it extends their knowledge concerning the level of compliance by South Africa banks with integrated reporting requirements, and also extends their knowledge concerning the risk and opportunity universe applicable to banks in an African context. These findings may be relevant to standard-setters, as they offer a basis for developing guidelines regarding risk and opportunity disclosures. The findings from a practical perspective address the need identified by Arora et al. (2022) for a holistic view of the risk and opportunity disclosures provided by banks.

# 7. Conclusions

The purpose of this research was to examine the disclosure of risks and opportunities in the IRs of the top five banks in South Africa. The findings demonstrate that while all the banks are generally fully compliant with the IIRF requirements as they pertain to disclosures of risks and opportunities, two of the banks did not provide disclosures related to opportunities. The findings concerning the nature of risk disclosures show that 38 themes related to risks were disclosed, while the nature of opportunities disclosed show that 14 themes were disclosed by the selected banks.

This study was not without limitations. The scope of this study was limited to the top five banks in South Africa, and may therefore not be representative of other banks that are required to disclose risks and opportunities in their IRs. Consequently, we suggest that future studies incorporate the remaining banks operating in South Africa, and the findings thereof should be compared to the findings of this study. In addition, this study only focused on the disclosure of risks and opportunities in the IR for one year, and no comparison was made between different years. As such, we suggest that future studies extend the analysis to periods of between three and five years, in order to determine the consistency and importance of risk and opportunity disclosures provided. To conclude, this study made use of content analysis and manual checklists, which have a number of

disadvantages, so future studies should consider using software programmes to analyse the textual disclosures.

**Author Contributions:** Conceptualisation, K.R.; methodology, K.R.; formal analysis, K.R.; discussion, R.M.; writing—original draft preparation, K.R.; writing—review and editing, R.M.; supervision, R.M.; project administration, R.M.; funding acquisition, R.M. All authors have read and agreed to the published version of the manuscript.

Funding: This research received no external funding.

Informed Consent Statement: All data used in this study are available in the public domain.

Data Availability Statement: Data is available upon request by emailing kramabulana@uj.ac.za.

**Acknowledgments:** We would like to express gratitude and thanks to the two anonymous referees for their valuable comments and suggestions.

**Conflicts of Interest:** The authors declare no conflict of interest.

#### References

Abdul-Rahman, Aisyah, Ahmad A. Sulaiman, and Noor L. H. Mohd Said. 2018. Does financing structure affects bank liquidity risk? *Pacific-Basin Finance Journal* 52: 26–39. [CrossRef]

Aljughaiman, Abdullah A., and Aly Salama. 2019. Do banks effectively manage their risks? The role of risk governance in the MENA region. *Journal of Accounting and Public Policy* 38: 1–31. [CrossRef]

Amran, Azlan, Abdul Manaf Rosli Bin, and Bin Che Haat Mohd Hassan. 2008. Risk reporting: An exploratory study on risk management disclosure in Malaysian annual reports. *Managerial Auditing Journal* 24: 39–57. [CrossRef]

Andersen, Torben J., Maxine Garvey, and Oliviero Roggi. 2014. *Managing Risk and Opportunity: The Governance of Strategic Risk-Taking*. Oxford: Oxford University Press.

Arora, Mitali P., Sumit Lodhia, and Gerard W. Stone. 2022. Preparers' perceptions of integrated reporting: A global study of integrated reporting adopters. *Accounting Finance* 62: 1381–420. [CrossRef]

Assous, Hamzeh F., and Dania Al-Najjar. 2021. Consequences of COVID-19 on banking sector index: Artificial neural network model. *International Journal of Financial Studies* 9: 67. [CrossRef]

Barakat, Ahmed, and Khaled Hussainey. 2013. Bank governance, regulation, supervision, and risk reporting: Evidence from operational risk disclosures in European banks. *International Review of Financial Analysis* 30: 254–73. [CrossRef]

BusinessTech. 2021. These Are South Africa's Biggest Banks in 2021. Available online: https://businesstech.co.za/news/banking/5025 41/these-are-south-africas-biggest-banks-in-2021/ (accessed on 10 May 2022).

Cheng, Mandy, Wendy Green, Pieter Conradie, Noriyuki Konishi, and Andrea Romi. 2014. The international integrated reporting framework: Key issues and future research opportunities. *Journal of International Financial Management Accounting* 25: 90–119. [CrossRef]

Choenyana, Kgapyane S. 2020. An Investigation into the Influence of Credit Ratings on Credit Risk of the South African Banking Industry. Master's thesis, University of South Africa, Pretoria, South Africa. Available online: https://uir.unisa.ac.za/bitstream/handle/10500/26735/dissertation\_choenyana\_ks.pdf?sequence=1&isAllowed=y (accessed on 10 January 2022).

Clark, Tom, Liam Foster, Luke Sloan, and Alan Bryman. 2021. *Bryman's Social Research Methods*. Oxford: Oxford University Press. Conway, Elaine. 2019. Quantitative impacts of mandatory integrated reporting. *Journal of Financial Reporting and Accounting* 17: 604–34. [CrossRef]

De Villiers, Charl, Leonardo Rinaldi, and Jeffrey Unerman. 2014. Integrated Reporting: Insights, gaps and an agenda for future research. *Accounting, Auditing Accountability Journal* 27: 1042–67. [CrossRef]

Donkor, Augustine, Hadrian G. Djajadikerta, Saiyidi M. Roni, and Terri Trireksani. 2022. Integrated reporting quality and corporate tax avoidance practices in South Africa's listed companies. *Sustainability Accounting, Management and Policy Journal* 13: 899–928. [CrossRef]

Drehmann, Mathias, and Kleopatra Nikolaou. 2013. Funding liquidity risk: Definition and measurement. *Journal of Banking Finance* 37: 2173–82. [CrossRef]

Dunbar, Kwamie. 2022. Impact of the COVID-19 event on US banks' financial soundness. *Research in International Business and Finance* 59: 101520. [CrossRef]

Duvenhage, Frans J. 2020. A Comparison of Cyber Risk Disclosure in the Banking Sector between South Africa and China. Master's thesis, North-West University, Potchefstroom, South Africa. Available online: <a href="https://repository.nwu.ac.za/bitstream/handle/10394/36655/Duvenhage\_FJ.pdf?sequence=1&isAllowed=y">https://repository.nwu.ac.za/bitstream/handle/10394/36655/Duvenhage\_FJ.pdf?sequence=1&isAllowed=y</a> (accessed on 10 January 2022).

Elo, Satu, Maria Kääriäinen, Outi Kanste, Tarja Pölkki, Kati Utriainen, and Helvi Kyngäs. 2014. Qualitative Content Analysis: A Focus on Trustworthiness. SAGE Open 4: 1–10. [CrossRef]

Elshandidy, Tamer, Moataz Elmassri, and Mohamed Elsayed. 2022. Integrated reporting, textual risk disclosure and market value. *Corporate Governance* 22: 173–93. [CrossRef]

- Ernst and Young. 2022. Excellence in Integrated Reporting. Available online: https://assets.ey.com/content/dam/ey-sites/ey-com/en\_za/topics/assurance/ey-com-2022-ey-excellence-in-integrated-reporting-report.pdf (accessed on 7 November 2022).
- Gao, Pingyang. 2010. Disclosure quality, cost of capital and investor welfare. The Accounting Review 85: 1–29. [CrossRef]
- Giner, Begoña, Alessandra Allini, and Annamaria Zampell. 2020. The value relevance of risk disclosure: An analysis of the banking sector. *Accounting in Europe* 17: 129–57. [CrossRef]
- Guthrie, James, Francesca Manes Rossi, Rebecca Levy Orelli, and Giuseppe Nicolò. 2020. Investigating risk disclosures in Italian integrated reports. *Meditari Accountancy Research* 28: 1149–78. [CrossRef]
- Hohls-du Preez, Covanni. 2016. IT Risk Management Disclosure in the Integrated Reports of the Top 40 Listed Companies on the JSE Limited. Master's thesis, University of Johannesburg, Johannesburg, South Africa. Available online: <a href="https://ujcontent.uj.ac.za/vital/%20access/manager/Repository/uj:25469?view=grid&f0=sm\_creator%3A%22Hohls-du+Preez%2C+Covanni%22&sort=sort\_ss\_sm\_creator+desc (accessed on 10 January 2022).">https://ujcontent.uj.ac.za/vital/%20access/manager/Repository/uj:25469?view=grid&f0=sm\_creator%3A%22Hohls-du+Preez%2C+Covanni%22&sort=sort\_ss\_sm\_creator+desc (accessed on 10 January 2022).</a>
- Hopkin, Paul. 2012. Fundamentals of Risk Management: Understanding, Evaluating and Implementing Effective Risk Management. London: Kogan Page Publishers.
- Hossain, Amir, Sudipta Bose, and Abul Shamsuddin. 2022. Diffusion of Integrated Reporting, Insights, and Potential Avenues for Future Research. *Accounting Finance*, 1–53. [CrossRef]
- Hsieh, Hsiu-Fang, and Sarah E. Shannon. 2005. Three Approaches to Qualitative Content Analysis. *Qualitative Health Research* 15: 1277–88. [CrossRef]
- International Finance Corporation. 2015. Risk Culture, Risk Governance, and Balanced Incentives: Recommendations for Strengthening Risk Management in Emerging Market Banks. Available online: https://www.ifc.org/wps/wcm/connect/fe5f3a6f-1241--46cc-89b9-c4be75e62a7c/IFC+Risk+Culture+Governance+Incentives+report.pdf?MOD=AJPERES&CVID=lw9GOEh (accessed on 7 November 2022).
- International Integrated Reporting Council. 2011. Towards Integrated Reporting. Communicating Value in the 21st Century. Available online: https://www.integratedreporting.org/wp-content/uploads/2011/09/IR-Discussion-Paper-2011\_spreads.pdf (accessed on 20 June 2021).
- International Integrated Reporting Council. 2013. The International Framework. Available online: https://www.integratedreporting.org/wp-content/uploads/2013/12/13--12-08-THE-INTERNATIONAL-IR-FRAMEWORK-2--1.pdf (accessed on 15 August 2022).
- International Integrated Reporting Council. 2021. International <IR> Framework. Available online: https://www.integratedreporting.org/wp-content/uploads/2021/01/InternationalIntegratedReportingFramework.pdf (accessed on 30 August 2021).
- International Monetary Fund. 2022. South Africa: Financial Sector Assessment Program—Financial System Stability Assessment. Available online: https://www.imf.org/en/Publications/CR/Issues/2022/02/11/South-Africa-Financial-Sector-Assessment-Program-Financial-System-Stability-Assessment-513014 (accessed on 12 May 2022).
- IoDSA. 2016. Institute of Directors Southern Africa: King Iv Report on Corporate Governance for South Africa 2016. Available online: https://cdn.ymaws.com/www.iodsa.co.za/resource/collection/684B68A7-B768--465C-8214-E3A007F15A5A/IoDSA\_King\_IV\_Report\_-\_WebVersion.pdf (accessed on 10 July 2021).
- Iqbal, Anjum. 2012. Liquidity risk management: A comparative study between conventional and Islamic banks of Pakistan. *Global Journal of Management and Business Research* 12: 55–64.
- Iskandar, Khadijah. 2014. Risk Management in Islamic Financial Institutions. Kuala Lumpur: Islamic Banking & Finance Institute Malaysia.
- Jayasiri, Nuradhi K., Sriyalatha Kumarasinghe, and Rakesh Pandey. 2022. 12 years of integrated reporting: A review of research. *Accounting Finance*, 1–57. [CrossRef]
- Jonson, H. n.d. Chapter 3: Risks in Banking. Available online: https://wabankers.com/images/wba/pdfs/Johnson\_H.pdf (accessed on 10 January 2022).
- Leuz, Christian, and Peter D. Wysocki. 2016. The economics of disclosure and financial reporting regulation: Evidence and suggestions for future research. *Journal of Accounting Research* 54: 525–622. [CrossRef]
- Linsley, Philip M., Phillip J. Shrives, and Mandy Crumpton. 2006. Risk disclosure: An exploratory study of UK and Canadian banks. *Journal of Banking Regulation* 7: 268–82. [CrossRef]
- Lipunga, Andrew M. 2014. Risk disclosure practices of Malawian commercial banks. *Journal of Contemporary Issues in Business Research* 3: 154–67.
- Lundqvist, Sara A. 2015. Why firms implement risk governance—Stepping beyond traditional risk management to enterprise risk management. *Journal of Accounting and Public Policy* 34: 441–66. [CrossRef]
- Manes-Rossi, Franscesca, Giuseppe Nicolo, and Rebecca L. Orelli. 2017. Reshaping risk disclosure through integrated reporting: Evidence from Italian early adopters. *International Journal of Business and Management* 12: 11–23. [CrossRef]
- Marchbank, Melanie S. 2016. An Investigation of the Integrated Reporting Disclosure Practices of the Top 40 Listed South African Companies. Master's thesis, University of Johannesburg, Johannesburg, South Africa. Available online: http://hdl.handle.net/10210/215623 (accessed on 10 January 2022).
- Marx, Ben, and Covanni Hohls-du Preez. 2017. IT risk management disclosure in the integrated reports of the top 40 listed companies on the JSE Limited. *Risk Governance Control: Financial Markets Institutions* 7: 27–34. [CrossRef]

Marx, Ben, and Ahmed Mohammadali-Haji. 2014. Emerging trends in reporting: An analysis of integrated reporting practices by South African top 40 listed companies. *Journal of Economic and Financial Sciences* 7: 231–50. [CrossRef]

Melloni, Gaia. 2015. Intellectual capital disclosure in integrated reporting: An impression management analysis. *Journal of Intellectual Capital* 16: 661–80. [CrossRef]

Miihkinen, Antii. 2012. What drives quality of firm risk disclosure? The impact of a national disclosure standard and reporting incentives under IFRS. *The International Journal of Accounting* 47: 437–68. [CrossRef]

Moolman, Jaco. 2015. The Impact of Integrated Reporting on Risk Management and Strategic Decision-Making for Jse-Listed Companies. Master's thesis, North West University, Potchefstroom, South Africa. Available online: http://repository.nwu.ac.za/bitstream/handle/10394/20385/Moolman\_J\_2015.pdf?sequence=1 (accessed on 30 August 2021).

Moolman, Jaco, Merwe Oberholzer, and M. Steyn. 2016. The effect of integrated reporting on integrated thinking between risk, opportunity, and strategy and the disclosure of risks and opportunities. *Southern African Business Review* 20: 600–27. [CrossRef]

Nahar, Shamsun, and Mosammet A. Jahan. 2021. Do Risk Disclosures Matter for Bank Performance? A Moderating Effect of Risk Committee. *Accounting in Europe* 18: 378–406. [CrossRef]

Nahar, Shamsun, Mohammad Azim, and Christine A. Jubb. 2016. Risk disclosure, cost of capital and bank performance. *International Journal of Accounting Information Management* 24: 476–94. [CrossRef]

Najihah, N. 2022. The Role of Institutional Investors in Lowering Information Asymmetry: Study on Mandatory Regulation of Integrated Reporting Implementation. In *Computational Intelligence in Security for Information Systems Conference*. Cham: Springer, pp. 393–403. [CrossRef]

Naz, Mamoona, and Huma Ayub. 2017. Impact of Risk-Related Disclosure on the Risk-Taking Behavior of Commercial Banks in Pakistan. *Journal of Independent Studies Research: Management Social Sciences Economics* 15: 125–46. [CrossRef]

Norrestad, F. 2020. Leading Banks Registered in South Africa in 2017, by Assets. Available online: https://www.statista.com/statistics/915616/leading-banks-registered-south-africa-by-assets/ (accessed on 12 February 2022).

Pistoni, Anna, Lucrezia Songini, and Francesco Bavagnoli. 2018. Integrated Reporting Quality: An Empirical Analysis. *Corporate Social Responsibility and Environmental Management* 25: 489–507. [CrossRef]

PricewaterhouseCoopers. 2013. The Value Creation Journey: A Survey of Jse Top-40 Companies' Integrated Reports. Available online: <a href="https://www.pwc.co.za/en/assets/pdf/integrated-reporting-august-2013.pdf">https://www.pwc.co.za/en/assets/pdf/integrated-reporting-august-2013.pdf</a> (accessed on 22 February 2022).

Pritchard, Carl L. 2015. Risk Management: Concepts and Guidance. Boca Raton: Auerbach Publications.

Raemaekers, Kim, Warren Maroun, and Nirupa Padia. 2016. Risk disclosures by South African listed companies post-King III. *South African Journal of Accounting Research* 30: 41–60. [CrossRef]

Rennekamp, Kristina. 2012. Processing fluency and investors' reactions to disclosure readability. *Journal of Accounting Research* 50: 1319–54. [CrossRef]

Roth, Harold P. 2014. Is Integrated Reporting in the Future? Available online: https://insurancenewsnet.com/oarticle/Is-Integrated-Reporting-in-the-Future-a-493109 (accessed on 7 November 2022).

Ruozi, Roberto, and Pierpaolo Ferrari. 2013. Liquidity Risk Management in Banks: Economic and Regulatory Issues. Cham: Springer.

Saunders, Anthony, and Marcia M. Cornett. 2006. Financial Institutions Management: A Risk Management Approach. New York: Mcgraw Hill Education.

Songini, Lucrezia, Anna Pistoni, Patrizia Tettamanzi, Fabrizio Fratini, and Valentina Minutiello. 2022. Integrated reporting quality and BoD characteristics: An empirical analysis. *Journal of Management and Governance* 26: 579–620. [CrossRef]

Spencer, K., and V. Hyman. 2011. Your Role as Board Members. Hershey: First Nonprofit Foundation.

Stubbs, Wendy, and Colin Higgins. 2014. Integrated reporting and internal mechanisms of change. *Accounting, Auditing Accountability Journal* 27: 1068–89. [CrossRef]

The World Bank. 2013. Risk and Opportunity—Managing Risk for Development. Available online: https://openknowledge.worldbank.org/handle/10986/16092 (accessed on 2 April 2021).

Tian, Yu. 2009. Market Liquidity Risk and Market Risk Measurement. Master's thesis, Delft University of Technology, Delft, The Netherlands. Available online: https://www.icmagroup.org/assets/documents/Regulatory/Secondary-markets/Bond-Market-Liquidity-Library/Tian-Y---2009---Market-Liquidity-Risk-and-Market-Risk-Measurement-290118.pdf (accessed on 12 May 2022).

Van Vuuren, Heleen. 2006. Disclosing Risk Management Policies in Financial Statements. Master's thesis, North West University, Potchefstroom, South Africa. Available online: https://dspace.nwu.ac.za/handle/10394/2507 (accessed on 10 May 2022).

Walker, Russell. 2013. Winning with Risk Management. Singapore: World Scientific.

Woods, Margaret, and Kevin Dowd. 2008. Financial Risk Management for Management Accountants. London: CIMA.

World Health Organisation. 2022. South Africa Situation. Available online: https://covid19.who.int/region/afro/country/za (accessed on 7 November 2022).

Yazdi, Amir K., Cristi Spulbar, Thomas Hanne, and Ramona Birau. 2022. Ranking performance indicators related to banking by using hybrid multicriteria methods in an uncertain environment: A case study for Iran under COVID-19 conditions. *Systems Science Control Engineering* 10: 166–80. [CrossRef]

Zikmund, William G., Barry J. Babin, Jon C. Carr, and Mitch Griffin. 2019. Business Research Methods. Boston: Cengage Learning.