

**CHAPTER 1**  
**THE APPLICATION OF HOLISTIC RISK**  
**MANAGEMENT IN THE BANKING INDUSTRY**  
**ORIENTATION**

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**CHAPTER 1**  
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**SYNOPSIS**

In this chapter, the reader is provided with background information into risk management in general and holistic risk management in particular. The research process is explained, which leads into the statement of the problem. The importance of the study was stated and the demarcation of the study was set. The research design and methodology was introduced. The empirical research was introduced, quantitative procedures were stated and the qualitative research component was introduced. The limitations of the study were stated.

The thesis structure was introduced and the relevant chapters were briefly explained in order to give a bird's eye view of the research study. The chapter concluded with a detailed chapter and content analysis, whereby the contents of each chapter were listed in order to provide the reader with the sequence of events.

# CHAPTER 1

## THE APPLICATION OF HOLISTIC RISK

### MANAGEMENT IN THE BANKING INDUSTRY

## ORIENTATION

*“To laugh is to risk appearing the fool. To weep is to risk appearing sentimental. To reach for another is to risk involvement. To love is to risk not being loved in return. To live is to risk dying. To believe is to risk failure. The people, who risk nothing, do nothing, have nothing, and are nothing. Only a person who risks is free” (Adams, 1983).*

### 1.1 BACKGROUND



The South African Reserve Bank, (2002 : 48) describe banks as custodians of people’s money. According to the Reserve Bank, banks are money creators, by helping the reserve bank in determining the speed and the amount of money in circulation on a daily basis. They furthermore manage the payment system, through the Automated Clearing Bureau (ACB), a clearing and payment system that is jointly owned and managed by the big four commercial banks in South Africa, namely Absa, First National Bank, Nedbank, and Standard Bank. Banks are also creators of indirect financial securities such as bonds, credit guarantees, fidelity guarantees, advance payment bonds, bid bonds, and supply bonds. They furthermore supply vital financial information to the Banking Association, the South African Receiver of Revenue and Credit Bureaus. Banks are the main dealers in foreign currencies and provide services such as cheque account facilities and lines of local and international credit. They also raise capital from investors in the form of

fixed deposits and pass it on as capital to investors. From the above mentioned it is clear that banks are the custodians of money.

Prior to 1989 the policy of the South African Reserve bank was to restrict the entry of new foreign banks into the country. This policy was reversed by the Deposit-Taking Act 90 of 1989 when the shareholding restriction on foreign banks was repealed. In 1995 the regulation that restricted foreign banks' opening of branches in South Africa was abolished. This was done to attract new foreign investors into the South African banking industry. As a result, this action has not only increased the competition between banks, but more importantly the risk levels South African and foreign banks take (South African Reserve Bank, 2003 : 35).

Banks are highly geared financial risk takers. It is therefore imperative that proper control procedures and rules for understanding and controlling of commercial and other risks in the banking industry are assessed properly and managed proactively. When this is not done properly the problem can easily spread from one bank to the whole industry or from one country to the global financial industry. For example: In 1987 Merrill Lynch lost \$377 million through trading mortgage-backed securities in an innovative form. In 1989 the international bond market collapsed, and with it the fortunes of Drexel Burnham Lambert. In 1989 Midland Bank lost a reported \$116 million by focusing incorrectly on interest rate movement. In 1991 Bank of New England made a huge bad debt provisions, suffered a run on deposits and had to be supported by government to the amount of some \$2 billion. In 1992 Barclays Bank provided \$2.5 billion for bad and doubtful debts and declared the first loss in its history. In 1993 Credit Lyonnais succumbed to similar troubles and registered a net loss of \$834 million precipitating a state rescue package of \$44 billion, this proved to be merely the prelude to a further and much larger bail out in 1995 (Risk Analysis International Journal, 2002 : 19).

In South Africa the demise of Trust Bank, Fidelity Bank Corporation (FBC), African Bank, BOE, Saambou Bank and the near collapse of Nedcor are best-known recent banking problems (Chibayambuya, 2005 : 65). From the aforementioned examples it is evident that banks need to be aware of the risks they incur and that the success and survival of individual banks depend to a great extent on how effective they can manage risk. As South African banks conduct their business in an environment of complex risks and as they do not operate in isolation, being influenced by changes in technology, regulations, and economic cycles, the ultimate aim of risk management should be to achieve an acceptable balance between risk and reward in order to enhance earnings while the cost of risk management process is kept to a minimum.

Bernstein (1998 : 138) states that the basis for risk management concepts have been developed over centuries. Examples such as Pascal's probability theory, Bernoulli's utility theory, and Bernoulli's Law of Large Numbers, De Moivre's standard deviation, Gauss's normal distribution, Galton's regression to the mean, and Quetelet's bell curve, to name a few. Yet, it is only in the last ten years that a large part of the global financial community developed robust risk modelling methodologies and technologies to reduce the likelihood of systemic losses. This is primarily in response to the huge expansion of the financial marketplace with the increased volatility of financial and commodity products. In addition, the advent of a liquid derivative market now provides financial managers with an abundance of risk management tools. Utilization of these tools in conjunction with sophisticated risk management processes and technology can enhance capital value by reducing the likelihood of losses and by providing the basis for risk adjusted measures for optimally allocating capital between instruments and strategies.

Conventional risk management has been around since the 1960s with the focus on lending and the management of credit risk. Other risks that need management's attention include risks associated with political

changes, currency dealings, changing markets and legislation, fraud, mismanagement, strategic, business, market, operational, interest rate fluctuations, communication risks associated with the internet, the intranet, e-banking, e-business, internet viruses and others.

In recent years the corporate governance framework was designed to manage risk through, inter alia, the accountability mechanisms of financial reporting, audit and internal control (Spira and Page, 2003 : 640-661). However, notions of risk are mutable and continue to evolve. Different risks are furthermore subject to different, and hitherto un-integrated regimes with little consensus about appropriate ways to manage it. The adverse consequences of risk are also likely to result from a complex chain of events and circumstances rather than from isolated occurrences. Within the broad conceptualisation of risk as manageable, perspectives also differ, ranging from the objective quantifiable to the socially constructed (Lupton 1999 : 35). Current thinking thus underscores the importance of developing a new approach to the management of risk, embracing the full span of management philosophies. This study deliberates the concept of holistic risk management (HRM) as a meaningful approach to risk management. It ultimately suggests a framework of holistic risk management for the effective and strategic management of risk in a holistic manner.

## **1.2 STATEMENT OF THE PROBLEM**

The problem of managing risk in the banking industry, as referred to in the previous section, manifests itself as a need for research into a possible strategy for managing risk in a holistic manner. Broadly speaking the problem to be addressed in this study can be posed in the form of the following questions:

- What are the existing strategies used in the banking industry to manage risk?
- What role can holistic risk management play as a strategy to manage risk in the banking industry?

- What are the critical success factors for the implementation of holistic risk management in the banking industry?
- How can holistic risk management be implemented to effectively and efficiently manage risk in the banking industry?

### **1.3 OBJECTIVES OF THE STUDY**

This research study essentially centred on the gaining of insights into the management of risk in the banking industry in general and holistic management in particular. To achieve this purpose the following objectives were set:

- Objective 1: To attain an understanding of the existing strategies used by South African banks to manage risk and to ascertain whether these strategies are relevant in managing risk efficiently.
- Objective 2: To explore the concept of holistic risk management as a means of efficiently managing risk in the banking industry.
- Objective 3: To gain an understanding of the critical success factors for the implementation of holistic risk management in the banking industry.
- Objective 4: To suggest a framework for the implementation of holistic risk management in the banking industry.

### **1.4 IMPORTANCE OF THE STUDY**

Given the dynamic and changing global and international environment of the banking industry in South Africa, e.g. Barclays and ABSA into which the added dimension of risk intrude, an evaluation of the management of risk may contribute to the body of literature on risk management in general and holistic risk management in particular. The importance of

this study furthermore lies in its attempt to provide a model on how a strategic re-alliance to holistic risk management can effectively be implemented.

## **1.5 DEMARCATION OF THE STUDY**

The study was aimed at the banking industry in South Africa. The sample frame consisted of managers in private banks and the public banking sector in Johannesburg and Pretoria. These two cities were chosen because they are considered to be the heart of the South African economy. All banks in South Africa have their head offices in either Johannesburg or Pretoria. The South African Reserve Bank operates from Pretoria. The Land Bank has its head office in Pretoria. The big four commercial banks in South Africa, namely ABSA, Nedbank, First National Bank, and Standard Bank have their head offices in Johannesburg. There are 34 locally controlled and 8 foreign-controlled banks, 15 local branches of foreign banks, 61 representative offices of foreign banks, and 2 registered mutual banks. All these banks have representatives in Johannesburg and Pretoria. In the light of all this, it was decided that the study would be concentrated in Johannesburg and Pretoria. However, the South African banking industry is dominated by four big commercial banks, namely ABSA, Standard Bank, Nedbank and First national Bank. These big four commercial banks command 75% collective market share in the banking industry (South Africa South African Reserve Bank, 2005 : 119).

## **1.6 RESEARCH METHODOLOGY**

Research involves the application of various methods and techniques in order to create scientifically obtained knowledge by using objective methods and procedures (Welman and Kruger, 2004 : 2). Research is furthermore based on two pillars, namely the research design and the research methods used, also called research methodology.



### **1.6.1 Research design**

The research design according to Babbie and Mouton (2004 : 75) focuses on the end product: What kind of study is being planned and what kind of results are aimed at. The point of departure for designing appropriate research is the research problem. From the research questions stated in Section 1.2 it is evident that that a literature review would have been necessary to obtain the necessary background to this study. Qualitative and quantitative measurement of data were furthermore required to address the research questions adequately.

### **1.6.2 Research methods**

The research methods used in this study comprised of a literature review as well as an empirical study of qualitative and quantitative data.

#### **1.6.2.1 Literature review**

A literature review on conventional and holistic risk management in the banking environment provided the necessary background information for this study.

The first theoretical focus was on conventional risk management in the banking industry of South Africa. Theoretical aspects from a conventional risk management perspective, which are directly relevant to this study were the concept of risk, the risk management culture in the banking industry and the role of corporate governance to manage corporate risks. A literature review of conventional risk management will be provided in Chapter 2.

The second theoretical emphasis on the current status of holistic risk management and the need for the application of holistic risk management framework for the effective management of risk in the banking industry. These concepts will be addressed in detail in Chapter 3.

The researcher used the following framework to place the theoretical research in the context of the general body of scientific knowledge:

**EXHIBIT: 1:1 THE RESEARCH FRAMEWORK**

DATA REQUIRED	DATA SOURCES	PRIMARY/SECONDARY DATA	DATA ACQUISITION TECHNIQUES	DATA APPLICATION & INTERPRETATION
Published information on marketing	Books	Secondary	Literature Survey	Comprehensive understanding Comparison & Recommendation
	Magazines	Secondary	Literature Survey	
	Newspapers	Secondary	Literature Survey	
	Videos	Secondary	Literature Survey	
Company Specific Information	Internal Newsletters	Primary	Case Study: Background Information	Banks Direction & Promotions
Company Specific Information	Manuals	Primary	Case Study	Policy
G30	Report	Secondary	Literature Survey	Policy
BIS	Report	Secondary	Literature Survey	Policy
RWG	Report	Secondary	Literature Survey	Policy
Company Specific Information	Questionnaire	Primary	Questionnaire	Quantitative
Company Specific Information	Emotions & Perceptions	Primary	Interviews	Probing root of problem: qualitative research
Company Specific Information	Emotions & Perceptions	Primary	Questionnaire	Qualitative research

**Source: Own research**

The G30 Global Derivatives study referred to in Exhibit 1 is a document compiled by thirty developed countries. It focuses on the risks associated with derivative instruments. BIS refers to the Bank of International Settlement, BIS is the banker to all the reserve banks of the world. RWG refers to the Risk Working Group, an association of risk

managers and a think-tank for risk managers in the banking industry throughout the banking industry. The framework as illustrated in Exhibit 1 was used as a guide for achieving the desired research results.

### **1.6.2.2 Empirical research**

Empirical research refers to the methods being used to investigate the world of observations and experiences (Babbie and Mouton, 2004 : 64). The empirical research in this study involves the employment of procedures for the measurement of quantitative and qualitative data as indicated in Sections 1.6.2.3 and 1.6.2.4.

### **1.6.2.3 Quantitative research component**

Quantitative analysis refers the numerical representation and manipulation of observations for the purpose of describing and explaining the phenomena that those observations reflect (Babbie & Mouton, 2004 : 78).

The data obtained for this study was collected by means of structured questionnaire using more than two variables (see Annexure A). In order to establish and investigate relationships between the variables, multivariate analysis statistical techniques was used. After discussing the techniques, the extent of the relationships between the variables was determined. Descriptive statistical techniques are a means of inspecting the data before testing formal research questions (Dillon, 2000 : 458). This approach was also followed in this study. The most common descriptive statistics are those that provide the researcher with measures of central tendency and measures of variability (Dillon, 2000 : 458), as indicated in Chapter 4 and Chapter 5.

### **1.6.2.4 Qualitative research component**

The objective of the qualitative research component was to confirm or reject the results of the quantitative research study conducted earlier in

this industry. A discussion guide was designed and was reduced to a number of information subsets. These information subsets were then expanded to nine specific interview questions (refer Annexure K). Babbie and Mouton (2004 : 86) define qualitative analysis as the non-numeric examination and interpretations of observations, for the purpose of discovering underlying meanings and patterns of relationships. Bless and Higson-Smith (1995 : 39) define qualitative methods as 'an array of interpretative techniques which seek to describe, decode translate and otherwise come to terms with the meaning, not frequency, of certain more or less naturally occurring phenomena in the social world. The importance of interviews is summarised by Burgess (1982 : 107) "The interview is an opportunity for the researcher to probe deeply to uncover new clues, open up new dimensions of a problem and to secure vivid, accurate inclusive accounts that are based on personal experience. The distinction between quantitative and qualitative techniques is not always clear. Techniques, such as interviews, can be used to gather data in either a quantitative or qualitative way; similarly, a single piece of data, such as an interview transcript, can be analysed in either way. One important feature of qualitative techniques is that the process of data collection becomes distinct from analysis." Semi-structured interviews were used for data collection. See Chapter 6 for further qualitative details.

## **1.7 LIMITATIONS OF THE STUDY**

The research was subjected to the following constraints:

### **1.7.1 Limitations of theoretical research**

Guy, Edgley, Arafat and Allen (1987 : 97) emphasize the following possible pitfalls when assessing the literature: The literature is out of date. Generally only current references were used unless the work was considered a relevant "classic" in its area. The literature of Kloman (2000), Shimpi (2002), Lam (2003), Regester and Larkin (2005), and Global Association of Risk Professional (GARP) (2005) was considered

to be very important to this study on risk management. In an attempt to surmount some of the literature constraints, the internet and risk management journals were used as research sources. The researcher furthermore attended three conferences in USA, United Kingdom and Canada in 1999, 2000 and 2002 respectively. Information obtained at the conferences provided valuable information on the topic. The researcher also worked in the banking industry for fifteen years, and is a banking senior lecturer at the University of Johannesburg. This hands-on knowledge provided the researcher with an insight into the application of holistic risk management in the banking industry.

### **1.7.2 Relevance of the time factor**

Time limits had to be adhered to and deadlines had to be met. As certain information could not be obtained from some banks and the researcher had to do without some information, as the research could not go on *ad infinitum*. This study, thus, provides a slice of reality regarding the management of risk, at the time the research began. The validity of the research in terms of whether holistic risk management can, or can not be used as a strategy to manage risk in the banking industry will, however, not be affected even if risk factors should change over a period of time towards the end of this decade.

### **1.7.3 Reluctance of respondents to participate**

Some respondents were not eager to respond to the questionnaires because of the confidentiality of information. An attempt to surmount the reluctance of respondents to participate was done by means of follow-up letters and faxes. Respondents were furthermore not directly identified in this study.

The aforementioned limitations did, however, not influence the validity of the study, nor did it negatively impact on the practical applications as suggested in the study.

## 1.8 STRUCTURE OF THE STUDY

In pursuing the objectives of the research, the remainder of this study is divided into the following chapters:

**Chapter 2: Conventional risk management in the banking industry**, elaborates on the aspects pertaining to risk, the definition of various categories of risk, risk management culture in South African banks, the role of risk management, risk management process and procedures and corporate governance in the banking industry of South Africa. This chapter thus focuses on achieving objective one as listed in Section 1.3.

**Chapter 3: Holistic risk management in the banking industry** provides an understanding of the application of holistic risk management in the banking industry and explores the concept of strategy as a pre-selected means of managing risk within the banking industry. The emphasis in this Chapter is a study of relevant literature in order to conceptualise the application of holistic risk management. Relevance is also made to selected overseas literature on the application of holistic risk management. In this chapter the emphasis is on achieving objective two as listed in Section 1.3.

**Chapter 4: Quantitative research method** provides an overview of the quantitative research methods that were used to obtain answers to the research questions in the questionnaire. The methodology analysis, the questionnaire design, the questionnaire analysis, data collection procedures and data processing methods receive particular attention.

**Chapter 5: Quantitative data analysis** provides an analysis of the research data obtained from the quantitative research. Preliminary findings, and interpretations as well as conclusions are noted.

**Chapter 6: Qualitative research method and analysis**, the purpose of this Chapter is to merge the quantitative research and the qualitative

research in order to confirm the results of the quantitative research with the qualitative research. The results of the quantitative research are briefly stated and the qualitative research component is introduced.

**Chapter 7: Conclusion and recommendations**, concludes the study with a summary of findings drawn from the study. Final conclusions are drawn with regard to the four objectives set for this study in Section 1.3. Recommendations are also made with the view of further study and the quantitative and theoretical contribution of the study is finally considered. This Chapter concentrates on achieving the final two objectives of this study, namely objectives three and four as listed in Section 1.3.

## **1.9 CONCLUSION**

In this Chapter the problem and its setting was briefly discussed. The theoretical background emphasised the need for the banking industry to be proactive in the management of risk. The problem statement centred around the existing strategies in the banking industry to manage risk, the role that holistic risk management can play as a strategy to manage risk, the critical success factors for the implementation of holistic risk management in the banking industry, and a possible holistic risk management framework to effectively and efficiently manage risk in the banking industry? Theoretical and quantitative methods of investigations were proposed in order to research the problem. In this regard four objectives were set. The constraints to the study were briefly explained and the Chapter concluded with a proposed structure of seven Chapters to complete the study.

The next Chapter provides a brief overview of the history of risk management in the banking industry in South Africa and the developed world and explores different management concepts and processes from the conventional risk management perspective.