An Assessment of Zimbabwean Merchant Banks Conformity to International Best practices in risk management

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Abstract. A study on the assessment of Zimbabwean Merchant banks conformity to international best practices in risk management was driven by the new trend in the form of the globalization of financial markets and the recent move by Zimbabwean financial institutions to expand regionally. The specific risk management practices which were considered include, risk capital determination approaches, risk infrastructure and stress-testing practices. A survey research design was used to carry out the research through use of questionnaires and interviews; additionally the Basic Indicator approach was used to quantitatively assess the adequacy of the risk capital. The main objective of the research was to check if Zimbabwean Merchant bank practices are in conformity with international best practices in risk management, covering the above mentioned areas. There is a lack of momentum towards Basel II implementation despite calls by the Central Bank since 2006. Risk management infrastructure of Merchant Banks in the form of operational and credit risk technology lacks capabilities recommended by the BIS ,operational risk capital set-aside by Merchant banks is insufficient to cover operational risk, less benefits are being derived from risk management investments and this retard their desire by banks to conform to international best practices in risk management, majority of banks' ORM practices are placed between foundation and intermediate stage of capco framework, whereas CRM practices are placed on the intermediate stage, stress testing approach on credit risk is disastrous considering the integrated nature of risk exposures. Basel II implementation challenges were identified and their magnitude explains non-conformity to international best practices in risk management.

Key Words ; risk management, best practices

CHAPTER 1

1.0 Introduction

Best-practices in risk management philosophy consist of: best-practice methodologies; best-practice policies; and best-practice infrastructure. The ultimate objective is to manage risks actively in a portfolio context. Best-practices in risk management are also referred to as sound risk management practices. The research focused on best practices in risk infrastructure, stress-testing and risk capital determination approaches, the researcher is of the view that previous researches dwelled much on risk measurement.

1.1 Background
1.1.1 Bank Failures in Zimbabwe

In the past ten years the Zimbabwe's financial sector experienced a very challenging financial crises characterized by bank closures and liquidations. Among the banks which were closed include: United Merchant Bank; Universal Merchant Bank; Trust Banking Corporation; Intermarket Banking Corporation; Time Bank; Barbican Bank Limited; and Royal Bank Limited.

1.1.2 Investment in Information Systems and Technology by Merchant Banks

In the past five years most banks embarked on information systems implementations and upgrading focused on improving their risk management processes. The popular core-banking systems implemented by merchant banks include; flexi-cube, equinox and equation, these systems were implemented among other objectives to improve the risk management function of the Merchant banks involved.

1.2 Statement of the Problem

Published financial statements of banks, merchant banks included have a section which discloses how risks facing a bank were managed during the period under review. An analysis of most of the published financial statements portray a picture of adherence to best-practices in risk management, According to the foreword by the RBZ Governor in the RBZ 2005 annual report he indicated that the "The banking system operated in conformity with international best practices of prudence, alert risk management, as well as sound corporate governance norms, among many other various standards".

Research Objectives:
Primary objective
1. To assess whether there is conformity between risk management practices in Merchant Banks and the international best practices in risk management

Secondary objectives
2. Checking conformity of Zimbabwean Merchant Banks risk management infrastructure with international best practices in risk management infrastructure.
3. Evaluating credit and operational risks stress-testing practices conformity to international best practices in stress-testing.
4. To assess the extent of implementing Basel II by Zimbabwean Merchant   Banks.
5. Assessing adequacy of risk economic capital set aside by Merchant Banks.

1.3 Research Questions:

The project addressed the following specific questions:
1. Is there conformity between the risk management practices of Merchant Banks with the international best-practices in risk management?
2. Is there conformity between risk management infrastructures of Zimbabwean Merchant Banks with international best practices in risk management infrastructure?
3. Does credit and operational risk stress-testing practices conforming to international best practices in risk stress-testing?
4. What is the extent of Zimbabwean Merchant Banks in implementing Basel II?
5. How adequate is the risk economic capital set-aside by Merchant Banks

CHAPTER 2
LITERATURE REVIEW

2.1 Definition of risk management

Robert(2002) defined risk management as a two-step process - determining what risks exist in an investment and then handling those risks in a way best-suited to your investment.

2.2 Description of Best-Practices in Risk Management

Crouhy(2001) explained that best-practices in risk management philosophy consist of: best-practice methodologies; best-practice policies; and best-practice infrastructure. Best-practices in Risk management are referred to as International best-practices in risk management, firstly when an international organization, like Bank of International Settlements recognize them.

2.3 Operational Risk Management

2.4 Goals of Operational Risk Management

Operational risk management serves essentially two goals: the avoidance of catastrophic events, and the reduction of medium and small losses. Some techniques are efficient to serve the first goal, while others better serve the second according to Chapelle(2005)

2.5 Operational Risk Stress-testing Framework

BCBS(2009) reviewed that operational risk stress testing should form an integral part of the overall governance and risk management culture of the bank.

2.6 Operational Risk Capital Determination Approaches

2.7 Goals of Credit Risk Management

Klerk(2003) explained that the goal of credit risk management is to reduce expected and unexpected losses due to failure by borrowers to repay borrowed funds, including both interest and principal. This is achieved through use of credit enhancements and proper assessment of credit

2.8   Credit Risk Stress Testing Practices

BCBS(2009) explained that Stress tests should cover a range of risks and business area, including at the firm-wide level .A bank should be able to integrate effectively , in a meaningful fashion , across the range of its stress testing activities to deliver a complete picture of firm-wide risk. A stress testing programme should consistently and comprehensively cover product-, business and entity-specific views

2.9   Credit risk Capital Approaches

2.10   Best-Practice Risk Management Infrastructure

2.10.1 BIS Required Risk Technology

2.11   FSI Survey on Basel II Economic Capital Approaches in Africa

2.11.1 Operational Risk Economic Capital Determination Approaches

The 2008 survey indicates that the Basic Indicator Approach is expected to be the most widely employed by 84% of respondents adopting Basel II, followed by the Standardised Approach at 73%.

2.11.2 Study on the Review of Basel II Implementation in Africa and Caribbean

Gottschalk and Jones(2006) carried a review of Basel II implementation involving 8 countries in total, all from Sub-Saharan Africa. These were: Botswana, Ethiopia, Ghana, Kenya, Lesotho, Tanzania, Uganda and Zambia.

2.11.3 Survey on External and Internal drivers of strengthening risk management in Europe

In February 2007, The Economist Intelligence Unit surveyed 218 executives around the world about their approach to risk management and their perception of the key challenges and opportunities facing the function. The survey was sponsored by ACE, IBM and KPMG.

2.11.4 Challenges against conformity to international best practices in risk management

A Research carried out by FSI(2006) identified the factors below as forces affecting the pace of implementation of Basel II, the findings of the research were presented at a conference organized by UNCTAD in 2006..

2.11.5 A survey by SAS and Risk Magazine in USA

2.11.6 Survey by Economic Intelligence Unit on Risk Management in USA (SAP and Oliver Wayman ,2004)

2.12   A survey on Benefits from Basel II Implementation in Europe

CHAPTER 3:
RESEARCH METHODOLOGY

3.1   Research Design

This research was conducted using a Survey Research Design where questionnaires were sent out to target individuals working in Merchant Banks. Questions on the questionnaire were focussed on some overarching best practices in risk management being applied globally and confirmed by BIS. A framework suggested by Nagelmackers(2006) published in the capco transformation journal was adopted to assess ORM practices, and the researcher modified the framework to assess CRM practices. Purposeful sampling was used to select the entire population into a sample since the population of four Merchant banks was very small. Respondents were senior managers from the Audit, IT, Risk Management, Lending and credit, and Treasury Departments

3.1.1   Quantitative Assessment using the Basic Indicator Approach

On the other hand, the Basic Indicator approach will be used to assess the adequacy of the operational risk capital provided by Merchant Banks. The Basic indicator approach is a technique recommended under Basel II.

KBIA =OR BIA= α x EI………………………………………………………………..3.1

Where KBIA= capital charge under Basic Indicator Approach, EI =annual gross income, positive over the previous three years, α=15%, which is set by the Basel Committee.

CHAPTER 4:
DATA PRESENTATION AND ANALYSIS

4.1   Risk Economic Capital Approaches

4.1.1   Operational Risk Economical Capital Determination Approaches

The following responses were obtained on the use of the various techniques: The majority indicated that none of the above techniques are used; 5% indicated that they are using the Basic Indicator approach; and lastly there are zero response rates on the non-use of the Advanced Measurement and the Internal Measurement approaches.

4.2   Stress-testing

Results on stress-testing reveal non-conformity when they are compared to the international best practices provided for operational and credit risk stress-testing, particularly on credit risk stress-testing where 60% of the respondents strongly agree that credit risk stress-testing should be concentrated on the bank's lending activities, a reflection of the out of sync with the best practice that encompass all areas of the bank that may indirectly or directly give rise to credit risk. Views on operational risk stress-testing framework were very varied and hence making it impossible for a conclusive position.

4.3   Stages of ORM and CRM practices

Questions on the questionnaire were indexed to the ORM assessment framework suggested by Nagelmackers(2006) and the modified CRM framework revealed that ORM practices of banks are placed between the foundation and intermediate stages, whereas CRM practices are at the intermediate stage, the results confirm that risk management practices of merchant banks are not placed in the best practice stage .
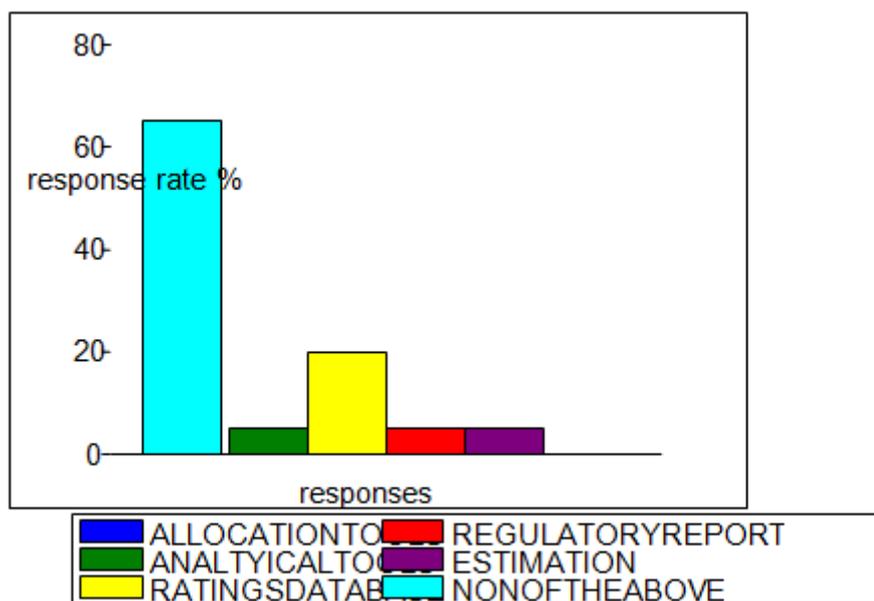
4.4   Best Practices in Risk Management Infrastructure
4.4.1 Risk Technology Capabilities

It is important for a Merchant bank to have in place a robust risk technology that will ensure conformity to risk management practices provided under Basel II. The research considered it necessary to assess the risk technology of Merchant banks against the required technology recommended by the Bank of International Settlements (2002)

4.4.1.1   Credit Risk Technology Capabilities

Responses on the credit risk technology were as follows: 5% of the respondents indicated that the system has the following: Analytical tools; Regulatory reporting and estimation tools. At the extreme 65% indicated that their technology has none of the capabilities above. Fig 4.1 overleaf gives a reflection of the responses.
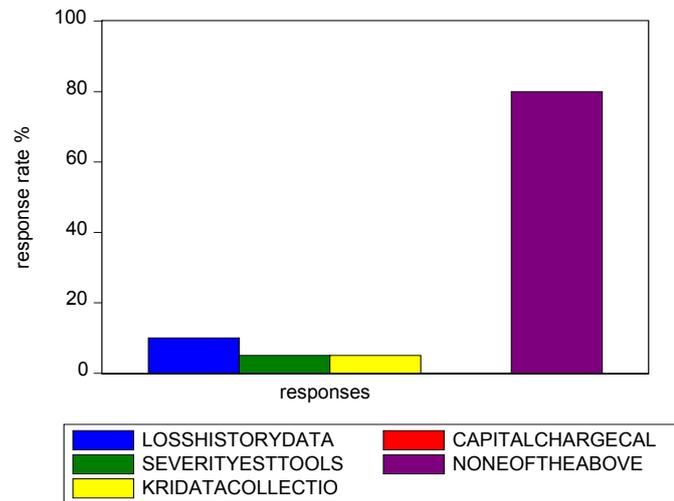

Fig 4.1 Credit Risk Technology Capabilities

4.4.1.2   Operational Risk Technology Capabilities

With regard to operational risk technology, the majority (80%) agrees that the operational risk technology lack the capabilities listed above

Source :Primary Data

Fig 4.2 Operational Risk Technology Capabilities

4.5 Assessment using the Basic Indicator Approach

According to Basel II, Banks using the Basic Indicator Approach must hold capital for operational risk equal to the average over the previous three years of a fixed percentage (denoted alpha) of positive annual gross income. Figures for any year in which annual gross income is negative or zero should be excluded from both the numerator and denominator when calculating the average. The charge may be expressed as follows:

Basic Indicator Formula

$$K_{BIA} = [\sum (G I_{t...n} \ x \ \alpha)] \ /n \qquad\qquad 4.1$$

Table 4.1 Operational Risk Capital Determination through use of the Basic Indicator Approach

	$(ZW)
TOTAL BIA IMPLIED OREC	1,259,197,790,238,780,000,000.00
TOTAL OREC SET ASIDE BY MERCHANT BANKS IN 2008	250,757,885,052,000,000,000.00
OREC SHORTFALL	1,008,439,905,186,780,000,000.00

Source: Secondary data (see appendix 2 and 3)

Table 4.1 above reveal that Merchant Banks' set-aside less operational risk capital than was implied by the Basic Indicator Approach, there is a shortfall of $1,008,439,905,186,780,000,000.00 which is higher than the actual amount set-aside of $250,757,885,052,000,000,000.00.(See Appendix 2 and 3 for workings and extracts from published financial statements)

4.6 Basel II Implementation challenges

Basel II implementation in Zimbabwe is being hampered mostly by the ; lack of technical support from relevant authorities, lack of skilled manpower, data inadequacy i.e. credit ratings, lack of enough capital on the back of the economic problems facing the country.

4.7 Benefits from risk management investments

Merchant Banks are not deriving much benefits from their investment in risk management related systems, the highly regulated environment does not favour systems developed for efficient markets. Unavailability of key data like credit ratings for counterparties, probability for default (PDL) makes it impossible for banks to derive value from already implemented risk management systems and technologies, this create a cost in the form of non-conformity.

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