

## **Faculty of commerce**

## **Department of Insurance and Actuarial science**

Modelling, Measuring and quantifying Operational Risks in

Banks

Prepared by

Student Number

Kurainashe Victor Manyenyere

N005 264 R



NUST Library

## Supervisor

NATIONAL UNIVERSITY OF SCIENCE
AND TECHNOLOGY
P.O. BOX 346 BULAWAYO
ZIMBABWE

DATE ACCESSION CLASS No

T Chowa

August 2009 Bulawayo, Zimbabwe

SUBMITTED IN PARTIAL FULFILMENT OF THE REQUIREMENTS OF B.COM (HONS) DEGREE IN ACTUARIAL SCIENCE

## Abstract

The research studies quantitative risk analysis by applying Actuarial tools in the modelling and measuring of operational risks within a financial context, in particular, banks. The research suggest how, in light of the current Zimbabwean macroeconomic environment especially dollarisation, banks can use actuarial techniques in measuring and hence provide a basis for managing Operational risks. The research is inspired by the recent developments in the measurement as proposed by Basel Committee of Banking Supervision of Basel (Bank of International Settlements). In 1988 the Basel 1 accord was adopted to make a standard method for measuring credit risk losses. Basel 11, a revision of Basel 1, of June 2004 was even more widely accepted internationally including in Zimbabwe. Basel 1 emphasizes among other things the importance of allowing for operational risk losses in risk based capital calculations. It applies actuarial and statistical models. Consideration is also made of the factors that need to be considered in the entire modelling process which have a considerable impact on the distribution of Operational risk.