

# THE SIGNIFICANCE OF PRICING OF A GROUP LIFE ASSURANCE PRODUCT FOR A KENYAN MASS MARKET SETTING

# A PROJECT PRESENTED IN PARTIAL FULFILMENT FOR THE REQUIREMENTS OF A DEGREE IN POST GRADUATE DIPLOMA IN ACTUARIAL SCIENCE TO THE SCHOOL OF MATHEMATICS UNIVERSITY OF NAIROBI

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### **DECLARATION**

This research project is my original work and has not been submitted or presented for examination in any other institution.
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#### **ABSTRACT**

Group life Insurance uptake in Kenya is very minimal due to the fact that the available group life products are highly priced and hence not accessible by most individuals. There is great need for the introduction of a group life insurance product in the Kenyan mass market that is much cheaper as compared to taking individual life policies. The aim of this is mainly to act as security to the beneficiaries upon the policyholder's death. In this project, I aim to design and price a group life insurance product that will be affordable, sustainable and profitable in the end. A detailed background of the origin of life insurance, both in general and in Kenya is discussed. An outline of the general objective and the specific objectives I intend to cover in the scope of the project is also given. I then give a statement of the problem I intend to solve and give a justification for undertaking this project.

I take a critical overview on group life insurance, its effectiveness and efficiency as studied and presented by other research studies from academic scholars, supported by findings from published books, journals, reports and opinions. I then discuss in detail the methodology applied in my project which mainly uses the Credibility Theory approach to price the group life product. Further I get into detail about the Binomial model and the Normal-Normal model as well as other models which can be used to price the same product.

In the data analysis chapter, I studied the data obtained from NSSF, since this gave me a good reflection of the working population numbers. This data enabled me to capture a large percentage of the mass market which I need to price an affordable premium. I later present the results obtained that took into account the Kenyan Mortality Table since age was our major rating factor.

Based on my findings, conclusions and recommendations shall then be presented in the final chapters as well as the limitations of the study.

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#### **DEDICATION**

I dedicate this to first and foremost to the Almighty God for good health throughout this research process. Secondly we dedicate this to our parents, brothers and sister for their support both socially and financially and thirdly to management of University of Nairobi, School of Mathematics, and actuarial science department. In particular Professor Weke (Director; School of Mathematics, University of Nairobi) and Professor Simwa for their constant advice, consultation, direction and time to make this project a success. And lastly to the University of Nairobi fraternity and those people who directly or indirectly help us to achieve our objectives.

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