DISABILITY INCOME INSURANCE IN A DECLING LIFE EXPECTANCY.

(The Impact of H.I.V in Sub-Saharan Africa)

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BACKGROUND.

The Disability Income Insurance (DII) product providing cover against various risks of accident and sickness has developed globally over a period of well over 100 years. The first policies date back to 1850 in the United States and 1890 in United Kingdom. Throughout the early 1900's the benefits provided by the cover increased from plain accident cover to include various forms of illnesses and by 1950, Group DII's were available. The 1970's were marked by the expansion of comprehensive DII covers which are still in use today with some improvements.

THE PROBLEM.

Disability among populations the world over is an increasingly major issue to be considered in demography, public policy and economic studies. There is need for provision of equal opportunities, work participation and social security benefits to ensure that the disabled populace remains a functional part of society. One of the major impacts of disability on a previously able-bodied person is the inability to make a living. There exists a need for people to protect themselves from a loss of income occurring as a result of disability.

Global statistics indicate that an individual aged between 20 and 60 years is approximately 60% more likely to suffer from disability (due to accidents or ill-health) than die. It is therefore interesting to note that disability income insurance is negligible in Kenya's insurance industry compared to other types of covers.

In 2005, Kenya's population was estimated to be 33,829,590 people. According to the Kenya Demographic Health Survey (2003), more than 10% of this population have some form of disability.
The major causes of disability in adults (aged 20 and above) in Kenya is mainly due to the following factors:
- The HIV / AIDS pandemic.
- Road accidents.
- Insecurity. Work-related injuries.
- Inadequate preventive and rehabilitation services in cases of illness.

**H.I.V / AIDS.**

HIV was declared a national disaster in Kenya the year 2005 by the present president, it is still a major cause of death and disability in sub-Saharan Africa, in Kenya recent statistics show that new cases of HIV infection are high among married couples as compared to the singles. This causes an alarm in case of dismay or inability to work, for there are dependants relying on the deceased who still need his support.

Various avenues of compensation in the event of disability exist in Kenya, each having its own advantages and shortcomings some of them include:
- The national social security
- Workmen’s compensation
- Insurance companies

In developed countries, the need for income to fall back on during disability is covered by the availability of government welfare systems that provide some income in the event of disability. The employer is also required to assume some of the compensation, but the amount of risk assumed is dependent upon whether the employer or employee is at fault. The individual may also decide to take out additional insurance against unforeseen events such as ill health and disability if they believe the state or employer will not provide adequately for them.

In Kenya, the government's compensation is defined under the National Social Security Fund (NSSF) Act, but due to mismanagement and past economic decline, the Fund is currently in deficit and may experience difficulties paying out future claims. Furthermore, the Act specifies exclusion of some types of casual workers, non-manual employees earning more than 4,000 shillings a month and family labour.

The employer only compensates according to the directive of the Workmen's Compensation Act, and as such may provide only a small amount of income. As a result, disability support systems in Kenya are concentrated within the family or the community. In the event that this system does not exist or cannot provide the necessary support, the individual is left without alternatives for the
duration of disability. This is where the need for a disability income insurance scheme arises. However, this need has not yet been dealt with sufficiently.

Kenya's insurance industry comprises 41 insurance companies and over 3000 insurance brokers and agents, making it a highly competitive industry. New and innovative products aimed at untapped market niches would provide any company with some leverage over its competitors. However, the various types of covers provided by the insurance companies have remained anchored around the same risks. These include marine, motor vehicle, life, medical, personal accident, fire and education covers. New products in the market consist of improvements made upon old, existing products.

Disability income insurance schemes are not available in Kenya as pure packages. Companies that do underwrite disability risks normally package them as riders on other insurance schemes, such as the Group Medical Scheme for outpatient and in-patient treatments. Industry participants suggest that this is due to lack of demand for the product, and as such the scheme would not be a financially viable product for any company.

Kenya's labour force consists of over 11.5 million Kenyans; approximately 80% are employed in blue-collar occupations (manual work such as *jua kali* artisans, construction workers, miners, drivers) with low-medium incomes (Library of Congress). This would provide a large target population for any company seeking to provide a disability income insurance.

**OBJECTIVES OF THE STUDY.**

1. **MAIN OBJECTIVE.**

This study is aimed at modeling an optimal disability income insurance package that will be both a viable financial contributor to the insurance company and also provide adequate cover to the insured party in the event that the insured becomes disabled during the term of the policy.
This will include calculation of premiums, reserves and profit levels to measure the risk in disability income insurance portfolios.

2 OTHER OBJECTIVES

a) The study will also determine the feasibility of a disability income insurance package in the Kenyan insurance market, based on the current economic conditions, salary and wage scales of Kenyan workers, target population considerations and other influential variables. The feasibility will be considered from both the insurer's and the insured's perspectives.

b) On the insured party's side, we seek to establish whether the average Kenyan with an income would be able to afford to invest in such a product to guard against future unforeseen events that may affect his/her ability to earn a sustainable income.

c) The study will investigate what progress the Kenyan insurance industry has made as concerns disability income insurance, and the challenges facing this particular brand of insurance. We also seek to find out what efforts, if any, have been made to establish such a product.

SIGNIFICANCE OF THE STUDY

As the modern financial world continues to grow and evolve, little or no effort has been made to ensure that developments in innovative products and technology have provisions for the less fortunate and disabled members of our society.

This study aims to investigate the progress being made in disability income insurance as a viable contributor to any company's business. It will explore the disabled populace as an untapped sector of the insurance industry, which, with adequate research and subsequent development, can further boost the financial sector of the insurance and subsequently, the national economy.

The study eventually aims to develop an innovative and optimal disability income insurance product that weeds out the hindering characteristics and further enhances the benefit to the insured by ensuring more accurate calculation of probabilities of disability events.
Disability/ income protection insurance has great potential to enhance the financial sector of any economy and while the Kenyan market has made some progress by introducing the product under the Group Life/ Personal Accident cover as a rider, the benefits are insufficient. Disability/ Income protection Insurance has great potential to enhance the financial sector of any economy and while the to cushion the policyholders in the event of disability (resulting from illness or accident). There is a gap in the insurance industry for affordable innovative products and the Individual DII product is an excellent place to start.

Out of the various types of distribution classified under the generalized standardized F-Family of distributions, I choose the weibull distribution as the best suited for my calculations as most of the functions require the left hand tail of the distribution to be long to cater for the extreme values, the weibull distribution caters for this by allowing creation of various forms of the same distribution by varying the shape parameter. Am able to estimate the calculation of premiums and benefits using the stochastic method for a person who was previously healthy and working and is currently disabled.